

Hose Connectors



High-Pressure Hose Connectors



## Germany

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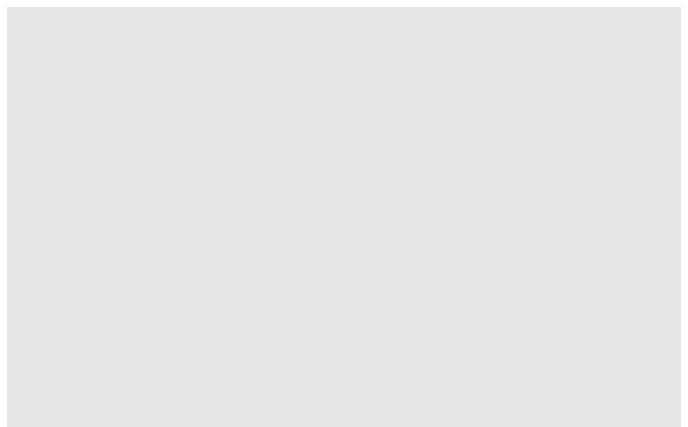
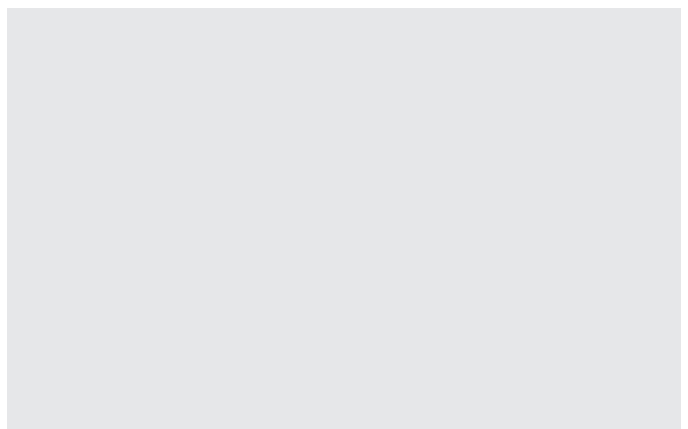
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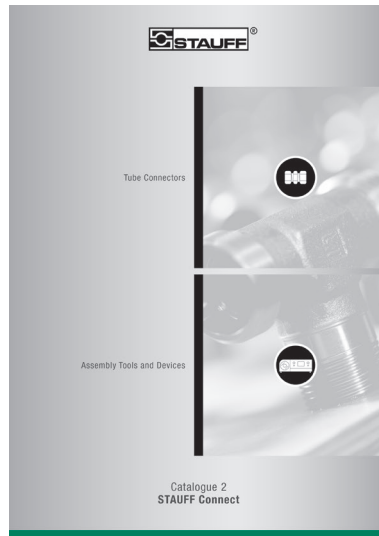
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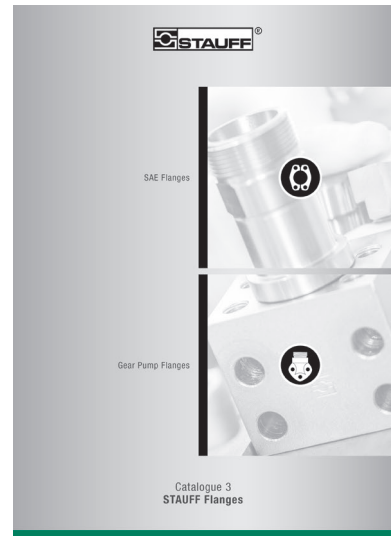
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- Block Clamps
- Special Clamps
- Light Series Clamps
- Saddle Clamps
- U-Bolt Clamps
- Metal Clamps
- Construction Series



**Catalogue 2  
STAUFF Connect**

- Tube Connectors
- Assembly Tools and Devices



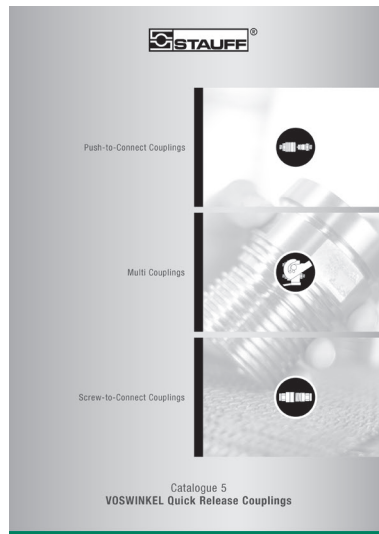
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- SAE Flanges
- Gear Pump Flanges



**Catalogue 4  
VOSWINKEL  
Hose Connectors**

- Hose Connectors
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**Catalogue 5  
VOSWINKEL  
Quick Release Couplings**

- Push-to-Connect Couplings
- Multi Couplings
- Screw-to-Connect Couplings



**Catalogue 6  
STAUFF Valves**

- Two-Way Ball Valves
- Multi-Way Ball Valves
- Flow Control and Check Valves
- Gauge Isolator Valves







### Catalogue 7 STAUFF Test

- Test Couplings
- Test Adaptors
- Test Hoses and Connectors



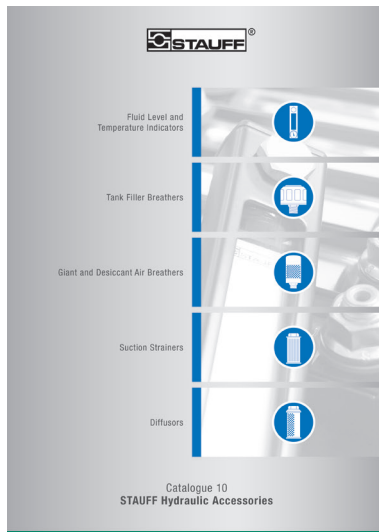
### Catalogue 8 STAUFF Diagtronics

- Pressure Gauges
- Hydraulic Testers
- Oil Analysis Equipment



### Catalogue 9 STAUFF Filtration Technology

- Replacement Filter Elements
- Pressure Filters
- Return-Line Filters
- In-Line Filters
- Spin-On Filters
- Offline and Bypass Filters
- Filtration Systems



### Catalogue 10 STAUFF Hydraulic Accessories

- Fluid Level and Temperature Indicators
- Tank Filler Breathers
- Giant and Desiccant Air Breathers
- Suction Strainers
- Diffusers



For more than 50 years, the companies of STAUFF Group have been developing, manufacturing and distributing pipework equipment and hydraulic components for mechanical and plant engineering and for service and industrial maintenance.

In addition to mobile and industrial hydraulic machinery, typical applications also include commercial and special purpose vehicles, rail transportation and energy technology. Likewise, STAUFF products are used in marine, oil and gas applications and in the process, food and chemical industries.

The overall range currently includes about 40000 standard products as well as numerous special and system solutions according to customer's specifications or based on our in-house development.

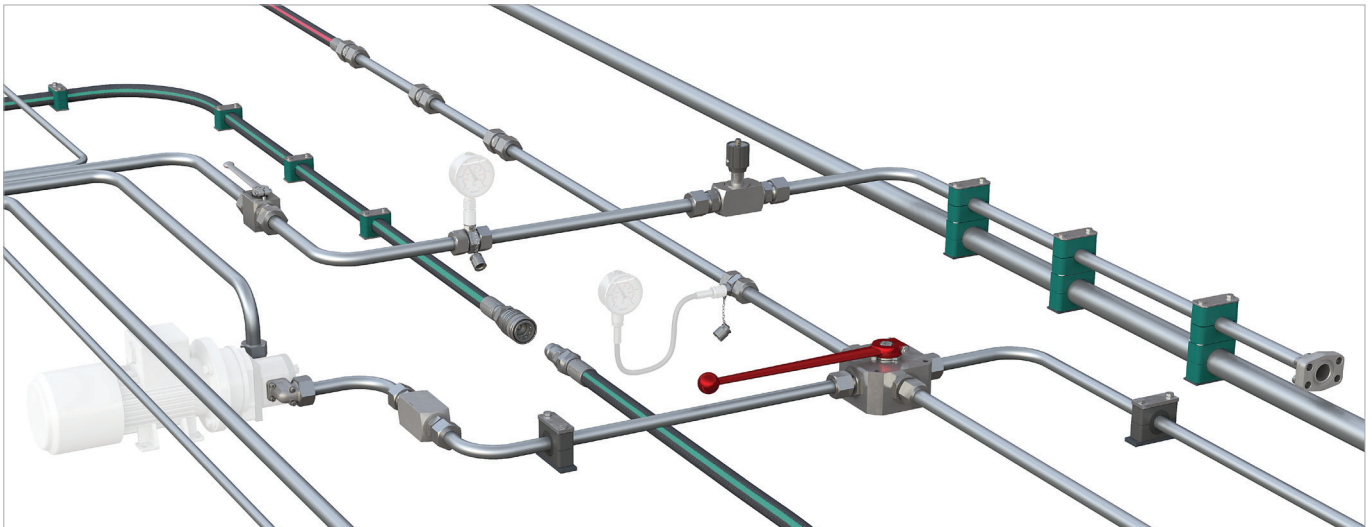
All STAUFF products undergo relevant testing in accordance with international regulations and are governed by the high standards of the in-house quality management system. Furthermore, many items have received certifications and approvals from various international institutes, organisations and authorities who have independently confirmed the quality and performance of the products.

Wholly-owned manufacturing, sales and service facilities in 18 countries and a tight global network of authorised distribution partners ensure high presence and service paired with a maximum of availability.



Quality Management – ISO 9001:2015  
Environmental Management – ISO 14001:2015  
Safety Management OHSAS – 18001:2007

## STAUFF LINE Components



With the seven dedicated **STAUFF Line** product groups

- **STAUFF Clamps**
- **STAUFF Connect**
- **STAUFF Flanges**
- **VOSWINKEL Hose Connectors**
- **VOSWINKEL Quick Release Couplings**
- **STAUFF Valves**
- **STAUFF Test**

from own, in-house development and manufacturing, the companies of the STAUFF Group provide a comprehensive range of components for fastening and connecting pipes, tubes and hoses for mobile and industrial hydraulic applications and many other industries.

The portfolio is completed by components for shutting-off, regulating, throttling and measuring fluid media.

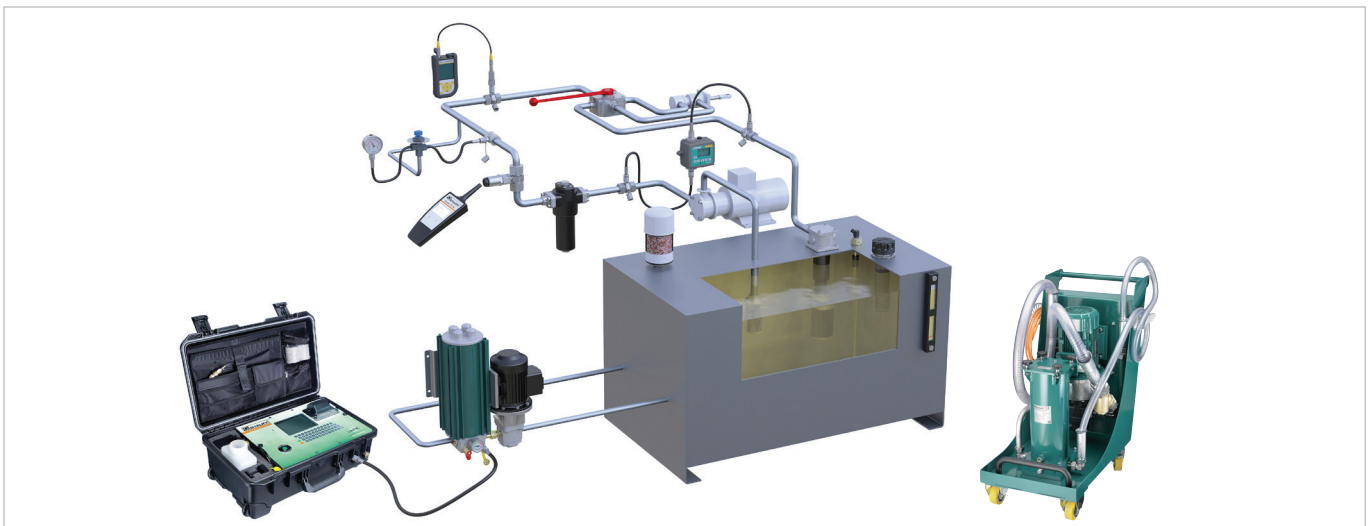
In order to perfectly match each other, STAUFF Line products are designed and offered on a high, uniform level of quality. A large proportion of the range made from steel comes as standard with the premium STAUFF Zinc/Nickel surface coating, which is also optionally available for many of the other components.

This coating offers the most reliable surface protection far beyond the previous market standards – even after transport, handling and assembly of the components – and meets all current legal requirements.

If desired, Original Equipment Manufacturers can be supported with value-added services, from **technical consultation to pre-assembly, assembly and kitting** as well as **logistics services**:

- Support with the **selection of suitable standard components** and ordering options; provision of **customised solutions** according to customer's specifications or based on our in-house development – from prototyping to large scale production
- **Analysis and optimization** of existing and design and developments of new systems aimed at increasing the efficiency and performance of machines and equipment and creating value for customers by reducing the total cost
- **Pre-assembly, assembly and kitting** of individual components to customer-specific system modules
- Individually coordinated **procurement solutions** (e.g. web shop and electronic data interchange) and **supply models** (e.g. from warehousing of customised components to Kanban logistics and just-in-time delivery of pre-fabricated system modules to the assembly lines of the customers) aimed at optimising material flows





Aligned with the needs of the market, the product groups

- **STAUFF Test**
- **STAUFF Diagtronics**
- **STAUFF Filtration Technology**
- **STAUFF Hydraulic Accessories**

include a comprehensive range of analogue and digital measuring equipment and devices, filtration systems and replacement filter elements as well as accessories for the construction of tanks, reservoirs, power packs and gear boxes in mobile and industrial hydraulics.

The offer is completed by relevant value-added services:

- Support with the **selection of suitable components** and ordering options; provision of **customised solutions** according to customer's specifications or based on our in-house development – from prototyping to large scale production
- Analysis of existing hydraulic circuits aimed at filtration systems, tank components and monitoring devices that perfectly match to the specific requirements, and developing integrated concepts to increase the efficiency and performance of machines and equipment
- Individually coordinated **procurement solutions** and **supply models**





## VOSWINKEL Hose Connectors

The VOSWINKEL **ECOVOS** system of hose connectors enables crimping of many different hose types with only one hose insert profile, which results in an immense reduction of endless product varieties.

The use of identical parts with **ECOVOS** means a reduction of individual components by approximately 45 per cent.

**ECOVOS<sup>+</sup>**, the mobile interlocking protection from VOSWINKEL, turns standard ECOVOS components into interlock hose connectors in no time at all, thereby saving inventory costs and increasing economical efficiency.

For larger requirements, **ECOVOS** hose connectors with interlocking protection can also be manufactured as single parts with integrated securing rings.

The **ECOVOS VA** range provides the system of hose connectors in Stainless Steel.

**MULTIVOS** is the name of the VOSWINKEL range of high-pressure hose connectors which offers customers the opportunity to use two types of hoses (R15 and 4SH) with only one hose insert profile.

**POWERVOS** is an advanced development of the **MULTIVOS** range. This product series was designed especially for hammer/breaker operation in construction equipment for use in quarries.

**POWERVOS** is especially designed and constructed using high-performance materials to withstand high impulses. The hose connectors are suitable for use with hose types 4SH/AS and R15/AS.







### VOSWINKEL Zinc/Nickel Coating $\Delta plus$



#### Layers

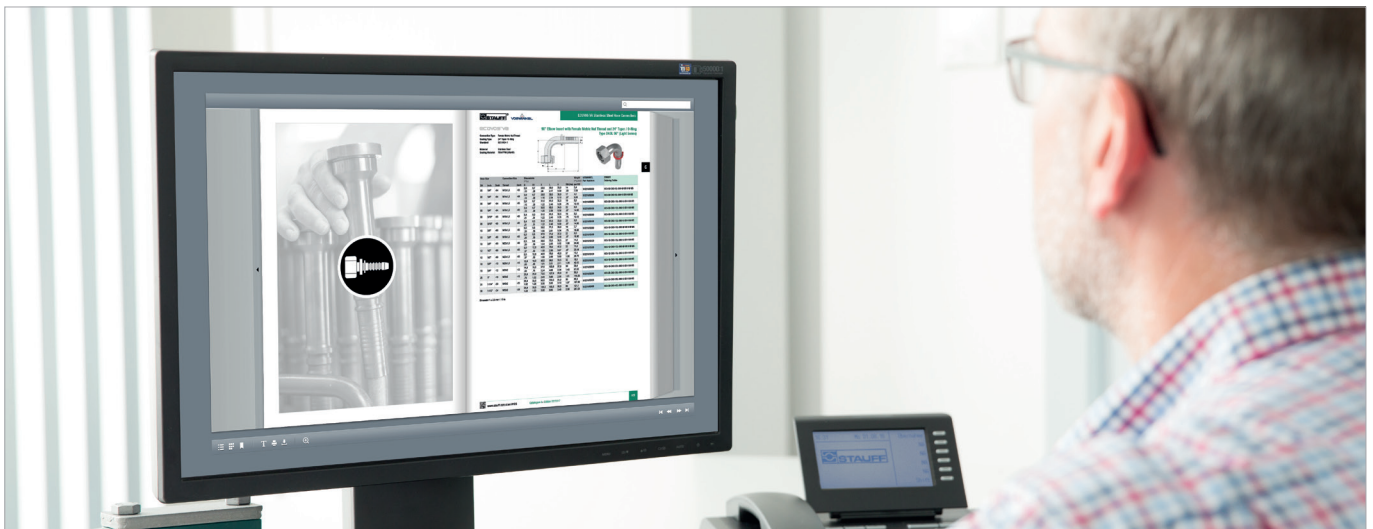
- Sealing
- Passivation
- Zinc/Nickel
- Steel

The VOSWINKEL Zinc/Nickel Coating  $\Delta plus$  offers excellent surface protection – even after transport, handling and assembly. This was confirmed by testing in the salt-spray chamber according to DIN EN ISO 9227.

Users across all industries and applications benefit from sophisticated technology, which has been developed for and used by the very demanding automotive industry for many years now and that is already the proven standard for a large proportion of VOSWINKEL hose connectors since 2007.

- At least 720 hours (**before crimping**) and 500 hours (**after crimping**) resistance to red rust / base metal corrosion in the salt-spray chamber according to DIN EN ISO 9227
- White rust occurs only by way of a slight grey haze
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- Appealing colour scheme with a bright semi-gloss surface finish
- Significantly reduced tendency to corrosion by contact with other metals (such as Aluminium and Stainless Steel)
- Improved abrasion resistance due to the ductility / plastic deformability of the coating
- Little to no risk of triggering allergies – nickel release is down to only a fraction of the statutory limits relating to objects which come into direct and prolonged contact with the skin (independent results of the reference test method according to DIN EN 1811 are available on request)
- Good paint adhesion properties
- Resistance against all commonly used hydraulic media





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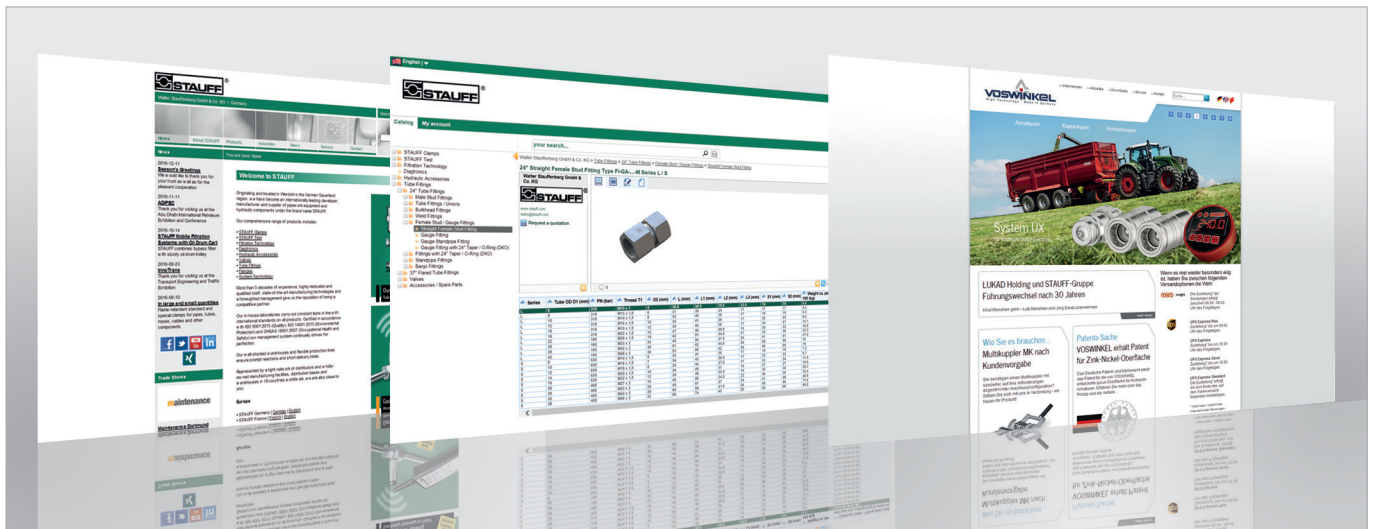
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**ecovos™**

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### UVOS Skive/Non-Skive Swage Ferrule for Braided and Spiral Hose

The patented VOSWINKEL UVOS system contains a comprehensive range of skive/non-skive swage ferrules for braided and spiral hose according to EN 853, EN 854, EN 857 and EN 856.

It is available for standard hose sizes from DN 06 to DN 12 (equals 1/4" to 1/2" and -04 to -08) with only one swage ferrule required per nominal size.

- Convincingly simple and extremely easy use
- Flow cross section enlarged by the patented "self-adjusting" design of the ferrule
- Preventing the hose insert from collapsing and constricting the flow due to the ability to adapt to the hose and hose insert parameters
- Providing the prerequisite for reducing the wall thickness of the hose insert and consequently achieving a substantially larger clear flow cross section in the constriction zone
- Resulting in a significant improvement in hydraulic output while achieving excellent connection stability without creating tension in the connection zone which exceeds the yield strength of the hose insert material

Skive



Non-Skive



EN 853  
1SN/2SN  
1ST/2ST (skive)

EN 854  
2TE/3TE

EN 857  
1SC/2SC

EN 856  
4SP



**ECOVS™**
**VOS**
**UVOS Skive/Non-Skive Swage Ferrule for Braided and Spiral Hose Series 15000**

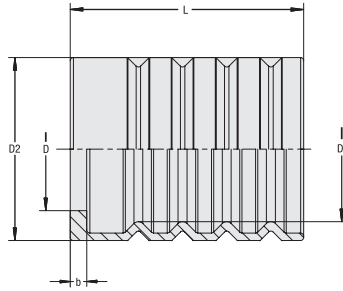
**Suitable for** 1SN, 2SN, 1ST, 2ST, 1SC, 2SC,  
1SN-K, 2SN-K, 2TE, 3TE, 4SP

**Standards** EN 853, EN 854, EN 856, EN 857

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Maximum working pressures depending on the type of the hose connector and the hose type.

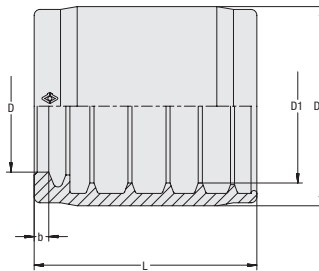

**A**

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
06	1/4"	-04	12,5	15,6	20,6	31,0	2,4	1,9	15000N06	HF-2000-06-W3
			.49	.61	.81	1.22	.09	4.19		
08	5/16"	-05	14,0	17,5	22,5	31,0	2,4	2,2	15000N08	HF-2000-08-W3
			.55	.69	.89	1.22	.09	4.85		
10	3/8"	-06	15,0	20,0	26,0	34,0	2,6	3,3	15000N10	HF-2000-10-W3
			.59	.79	1.02	1.34	.10	7.28		
12	1/2"	-08	19,5	23,0	29,0	37,0	2,6	3,9	15000N12	HF-2000-12-W3
			.77	.91	1.14	1.46	.10	8.60		



**Non-Skive Swage Ferrule for Braided Hose Series 15011**

ecovos™



**Suitable for Standards** 1SN, 2SN, 2SC, 2SN-K  
EN 853, EN 857

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Maximum working pressures depending on the type of the hose connector and the hose type.

Hose Size			Dimensions (mm/in)					Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
05	1/8"	-03	9,8	12,5	17,0	27,3	2,0	1,7	15110N05 1SN	HF-1001-05-W3
			.39	.49	.67	1.07	.08	3.64		
05	1/8"	-03	9,8	14,0	18,6	27,3	2,0	2,0	15220N05 2SN	HF-1002-05-W3
			.39	.55	.73	1.07	.08	4.30		
06	1/4"	-04	11,8	15,7	21,0	31,0	2,5	2,6	15011N06	HF-1000-06-W3
			.46	.62	.83	1.22	.10	5.62		
08	5/16"	-05	13,2	17,3	22,5	31,0	2,5	2,7	15011N08	HF-1000-08-W3
			.52	.68	.89	1.22	.10	5.84		
10	3/8"	-06	15,5	19,8	26,5	33,0	2,5	4,7	15011N10	HF-1000-10-W3
			.61	.78	1.04	1.30	.10	10.25		
12	1/2"	-08	19,2	23,0	30,0	36,0	2,5	5,7	15011N12	HF-1000-12-W3
			.76	.91	1.18	1.42	.10	12.57		
16	5/8"	-10	22,5	26,2	34,0	38,0	2,5	7,8	15011N16	HF-1000-16-W3
			.89	1.03	1.34	1.50	.10	17.09		
19	3/4"	-12	25,5	30,1	38,0	44,0	3,0	10,4	15011N20	HF-1000-19-W3
			1.00	1.19	1.50	1.73	.12	22.82		
25	1"	-16	32,8	38,8	47,0	52,0	3,7	16,4	15011N25	HF-1000-25-W3
			1.29	1.53	1.85	2.05	.15	36.16		
31	1 1/4"	-20	40,5	49,3	57,0	60,0	4,0	21,1	15011N32	HF-1000-31-W3
			1.59	1.94	2.24	2.36	.16	46.53		
38	1 1/2"	-24	46,6	55,8	65,0	73,0	4,3	37,5	15011N40	HF-1000-38-W3
			1.83	2.20	2.56	2.87	.17	82.58		
51	2"	-32	58,9	68,5	78,0	80,0	4,3	50,0	15011N50	HF-1000-51-W3
			2.32	2.70	3.07	3.15	.17	110.25		

**Related Products and Accessories**



DORNVOS Test Mandrels Pages 185-187

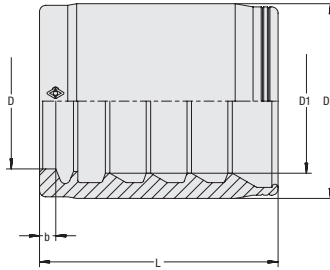


**ecovos™**
**Skive/Non-Skive Swage Ferrule for Braided Hose Series 15021**

**Suitable for Standards** 1SN, 2SC, 2SN-K, 1SC, 1SN-K  
EN 853, EN 857

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Maximum working pressures depending on the type of the hose connector and the hose type.


**A**

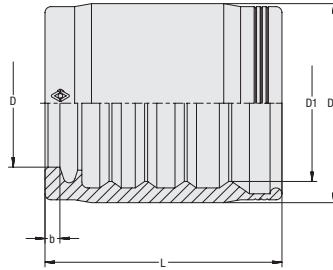
Hose Size			Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	D	D1	D2	L	b	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
05	1/8"	-03	9,4	10,9	17,3	27,3	2,0	2,4	15100N05 1ST	HF-3001-05-W3
			.37	.43	.68	1.07	.08	5.29		
06	1/4"	-04	11,0	13,2	20,0	31,0	2,5	3,1	15021N06	HF-2001-06-W3
			.43	.52	.79	1.22	.10	6.84		
08	5/16"	-05	12,6	15,5	20,6	31,0	2,6	2,55	15021N08	HF-2001-08-W3
			.50	.61	.81	1.22	.10	5.62		
10	3/8"	-06	14,1	16,6	23,6	33,0	2,5	4,3	15021N10	HF-2001-10-W3
			.56	.65	.93	1.30	.10	9.37		
12	1/2"	-08	17,6	19,5	27,0	35,0	2,5	5,6	15021N12	HF-2001-12-W3
			.69	.77	1.06	1.38	.10	12.35		
16	5/8"	-10	21,6	23,0	31,0	38,0	2,6	7,5	15021N16	HF-2001-16-W3
			.85	.91	1.22	1.50	.10	16.54		
19	3/4"	-12	24,5	26,8	35,0	44,0	3,0	10,3	15021N20	HF-2001-19-W3
			.96	1.06	1.38	1.73	.12	22.60		
25	1"	-16	30,4	34,1	42,0	52,0	3,7	14,3	15021N25	HF-2001-25-W3
			1.20	1.34	1.65	2.05	.15	31.42		
38	1 1/2"	-24	44,4	51,3	62,0	68,0	4,3	42,4	15021N40	HF-2001-38-W3
			1.75	2.02	2.44	2.68	.17	93.38		
51	2"	-32	56,7	64,0	75,0	80,0	4,3	62,0	15021N50	HF-2001-51-W3
			2.23	2.52	2.95	3.15	.17	136.60		

**Related Products and Accessories**

**DORNVOS Test Mandrels** Pages 185-187


**Skive Swage Ferrule for Braided and Spiral Hose Series 15031**

ecovos™



**Suitable for** 2SN, SPC3, 4SP  
4SH (DN 19 to DN 31)  
**Standards** EN 853, EN 856  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Maximum working pressures depending on the type of the hose connector and the hose type.

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
05	1/8"	-03	9,4	12,3	19,0	27,3	2,0	2,8	15200N05 2ST	HF-3002-05-W3
			.37	.48	.75	1.07	.08	6.17		
06	1/4"	-04	10,2	15,5	22,0	34,0	2,5	4,1	15031N06	HF-3000-06-W3
			.40	.61	.87	1.34	.10	8.93		
08	5/16"	-05	12,7	17,2	23,0	31,0	2,5	3,45	15031N08	HF-3000-08-W3
			.50	.68	.91	1.22	.10	7.61		
10	3/8"	-06	14,5	18,9	26,0	38,0	2,5	5,5	15031N10	HF-3000-10-W3
			.57	.74	1.02	1.50	.10	12.13		
12	1/2"	-08	18,5	22,2	30,0	40,0	2,5	7,5	15031N12	HF-3000-12-W3
			.73	.87	1.18	1.57	.10	16.54		
16	5/8"	-10	21,6	26,4	33,6	40,0	2,5	8,3	15031N16	HF-3000-16-W3
			.85	1.04	1.32	1.57	.10	18.30		
19	3/4"	-12	25,0	30,2	39,0	50,0	3,0	15,3	15031N20	HF-3000-19-W3 <sup>1</sup>
			.98	1.19	1.54	1.97	.12	33.63		
25	1"	-16	30,9	36,7	46,0	60,0	3,7	21,8	15031N25	HF-3000-25-W3 <sup>1</sup>
			1.22	1.44	1.81	2.36	.15	48.07		
31	1 1/4"	-20	38,8	47,0	57,0	65,0	4,0	33,4	15031N32	HF-3000-31-W3 <sup>1</sup>
			1.53	1.85	2.24	2.56	.16	73.54		
38	1 1/2"	-24	44,4	53,7	65,0	73,0	4,3	51,9	15031N40	HF-3000-38-W3
			1.75	2.11	2.56	2.87	.17	114.33		
51	2"	-32	57,3	66,6	78,0	80,0	4,3	68,4	15031N50	HF-3000-51-W3
			2.26	2.62	3.07	3.15	.17	150.71		

<sup>1</sup> Approved for use with spiral hose 4SH according to EN 856.

**Related Products and Accessories**



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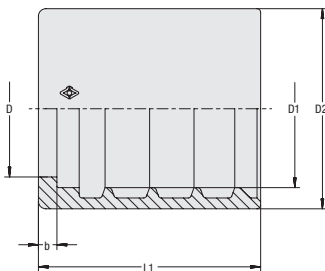


**ECOVS™**
**AGRIVOS**
**AGRIVOS Non-Skive Swage Ferrule for Compact Braided Hose Series 15211**

**Suitable for** 2SC, 2SN-K  
**Standard** EN 857  
**Pressure Level** Isobaric 250 bar / 25 MPa / 3625 PSI

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Maximum working pressures depending on the type of the hose connector and the hose type.


**A**

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
06	1/4"	-04	11,4	14	18,8	25,0	2,5	1,95	15211N06	HF-1003-06-W3
			.45	.55	.74	.98	.10	4.30		
08	5/16"	-05	13,6	15,8	20,6	25,0	2,5	2,1	15211N08	HF-1003-08-W3
			.54	.62	.81	.98	.10	4.63		
10	3/8"	-06	15,0	18,0	23,6	26,5	2,5	3,1	15211N10	HF-1003-10-W3
			.59	.71	.93	1.04	.10	6.84		
12	1/2"	-08	18,4	21,3	27,0	30,0	2,5	3,8	15211N12	HF-1003-12-W3
			.72	.84	1.06	1.18	.10	8.27		

**Related Products and Accessories**

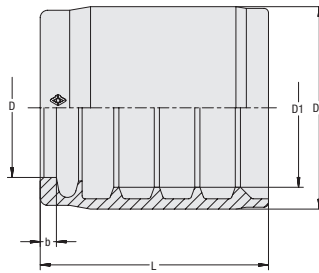
**DORNVOS Test Mandrels** Pages 185-187


**CVOS Non-Skive Swage Ferrule for Compact Braided Hose Series 15311**

CVOS

ecovos™

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**Suitable for Standard** 1SC, 2SC, 1SN-K, 2SN-K  
EN 857

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Maximum working pressures depending on the type of the hose connector and the hose type.

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
06	1/4"	-04	11,2	14,5	19,0	26,0	2,2	1,7	15311N06	HF-1004-06-W3
			.44	.57	.75	1.02	.09	3.75		
08	5/16"	-05	13,2	16,4	21,0	26,0	2,2	2,0	15311N08	HF-1004-08-W3
			.52	.65	.83	1.02	.09	4.30		
10	3/8"	-06	15,0	18,0	24,0	27,5	2,2	3,2	15311N10	HF-1004-10-W3
			.59	.71	.94	1.08	.09	7.06		
12	1/2"	-08	18,9	21,6	27,5	31,0	2,2	3,6	15311N12	HF-1004-12-W3
			.74	.85	1.08	1.22	.09	7.83		

**Related Products and Accessories**



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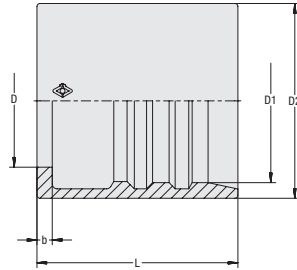




**ecovos™**
**Non-Skive Swage Ferrule for Hose with Textile Insert  
Series 15330**
**Suitable for** 2TE, 3TE  
**Standard** EN 854

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Maximum working pressures depending on the type of the hose connector and the hose type.


**A**

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
05	1/8"	-03	9,8	12,5	17,0	27,3	2,0	1,65	15110N05 2TE	HF-1001-05-W3
			.39	.49	.67	1.07	.08	3.64		
05	1/8"	-03	9,8	14,0	18,6	27,3	2,0	2,0	15220N05 3TE	HF-1002-05-W3
			.39	.55	.73	1.07	.08	4.30		
06	1/4"	-04	11,6	15,3	19,0	28,0	2,4	1,85	15330N06	HF-1005-06-W3
			.46	.60	.75	1.10	.09	4.08		
08	5/16"	-05	12,8	17,2	22,3	30,2	2,5	2,9	15330N08	HF-1005-08-W3
			.50	.68	.88	1.19	.10	6.39		
10	3/8"	-06	14,9	19,2	23,0	29,5	2,4	2,5	15330N10	HF-1005-10-W3
			.59	.76	.91	1.16	.09	5.51		
12	1/2"	-08	18,5	23,0	27,0	31,0	2,5	3,1	15330N12	HF-1005-12-W3
			.73	.91	1.06	1.22	.10	6.84		
16	5/8"	-10	21,8	26,9	32,0	33,0	2,5	5,3	15330N16	HF-1005-16-W3
			.86	1.06	1.26	1.30	.10	11.69		
19	3/4"	-12	24,6	29,9	35,0	37,5	3,0	6,7	15330N20	HF-1005-19-W3
			.97	1.18	1.38	1.48	.12	14.66		
25	1"	-16	30,8	37,2	42,0	45,5	3,4	9,8	15330N25	HF-1005-25-W3
			1.21	1.46	1.65	1.79	.13	21.50		
31	1 1/4"	-20	37,9	43,5	48,0	55,0	3,8	12,8	15330N32	HF-1005-31-W3
			1.49	1.71	1.89	2.17	.15	28.22		
51	2"	-32	56,8	64,5	75,9	78,5	4,0	61,5	15330N50 3TE	HF-1005-51-W3
			2.24	2.54	2.99	3.09	.16	135.50		

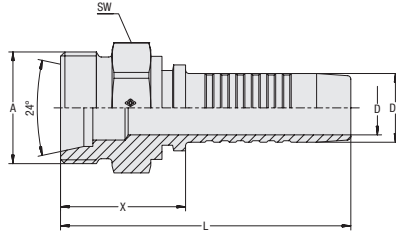
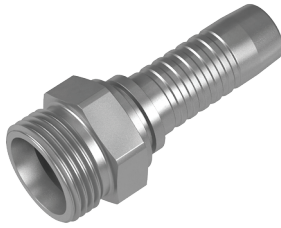
**Related Products and Accessories**

**DORNVOS Test Mandrels** Pages 185-187


**Straight Insert with Male Metric Thread and 24° Conical Bore**  
**Type CEL (Light Series)**

ecovos™

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**Connection Type** Male Metric Thread  
**Sealing Type** 24° Conical Bore  
 (Shape W acc. to DIN 3861)  
**Standard** ISO 8434-1  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	( <sup>kg</sup> /lbs) ca. per 100	Part Numbers	Ordering Codes
05	1/8"	-03	M12x1,5	-03	2,9 .11	5,1 .20	22,0 .87	47,0 1.85	14,0 .55	1,8 3.97	11101N05	HCS-05-CE-6L-M-W3
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	23,5 .93	53,5 2.11	14 .55	2,3 5.07	11101N06	HCS-06-CE-8L-M-W3
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	23,5 .93	53,5 2.11	14 .55	2,2 4.85	11101N0605	HCS-06-CE-6L-M-W3
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	25,5 1.00	55,5 2.19	17 .67	3,1 6.73	11101N0608	HCS-06-CE-10L-M-W3
06	1/4"	-04	M18x1,5	-06	3,9 .15	6,7 .26	25,5 1.00	55,5 2.19	19,0 .75	3,4 7.50	11101N0610	HCS-06-CE-12L-M-W3
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,2 .32	24,5 .96	54,5 2.15	17,0 .67	3,1 6.84	11101N08	HCS-08-CE-10L-M-W3
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,2 .32	25,5 1.00	55,5 2.19	19,0 .75	3,6 7.83	11101N0810	HCS-08-CE-12L-M-W3
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,9 .39	25,5 .96	59,0 2.32	19,0 .75	4,1 9.04	11101N10	HCS-10-CE-12L-M-W3
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,9 .39	24,5 .96	58,0 2.28	17,0 .67	3,7 8.05	11101N1008	HCS-10-CE-10L-M-W3
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,9 .39	27,5 1.08	61,0 2.40	22,0 .87	5,8 12.79	11101N1012	HCS-10-CE-15L-M-W3
12	1/2"	-08	M22x1,5	-08	9,5 .37	13,0 .51	28,0 1.10	63,5 2.50	22,0 .87	6,6 14.55	11101N12	HCS-12-CE-15L-M-W3
12	1/2"	-08	M18x1,5	-06	9,5 .37	13,0 .51	26,5 1.04	62,0 2.44	19,0 .75	5,1 11.14	11101N1210	HCS-12-CE-12L-M-W3
12	1/2"	-08	M26x1,5	-10	9,5 .37	13,0 .51	29,5 1.16	65,0 2.56	27,0 1.06	9,1 19.96	11101N1216	HCS-12-CE-18L-M-W3
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	29,0 1.14	67,5 2.66	27,0 1.06	9,3 20.51	11101N16	HCS-16-CE-18L-M-W3
19	3/4"	-12	M30x2	-12	12,6 .50	16,0 .63	32,0 1.26	70,5 2.78	30,0 1.18	11,2 24.70	11101N1620	HCS-16-CE-22L-M-W3
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	32,5 1.28	78,5 3.09	30,0 1.18	13,2 29.00	11101N20	HCS-19-CE-22L-M-W3
25	1"	-16	M36x2	-16	20,0 .79	25,9 1.02	34,5 1.36	89,5 3.52	36,0 1.42	23,0 50.60	11101N25	HCS-25-CE-28L-M-W3
19	3/4"	-12	M30x2	-12	20,0 .79	25,9 1.02	34,5 1.36	89,5 3.52	30,0 1.18	18,1 39.91	11101N2520	HCS-25-CE-22L-M-W3
31	1 1/4"	-20	M45x2	-20	26,0 1.02	32,5 1.28	39,5 1.56	99,5 3.92	46,0 1.81	38,5 84.89	11101N32	HCS-31-CE-35L-M-W3
38	1 1/2"	-24	M52x2	-24	31,0 1.22	38,9 1.53	42,5 1.67	110,0 4.33	55,0 2.17	58,3 128.44	11101N40	HCS-38-CE-42L-M-W3

**Related Products and Accessories**



Swage Ferrules

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ECOVOS VA Version

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MULTIVOS Version

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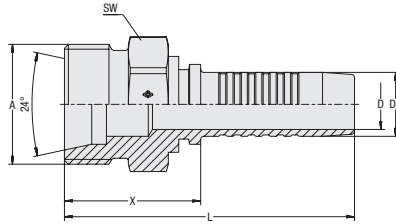


**ecoVOS™**
**Straight Insert with Male Metric Thread and 24° Conical Bore Type CES (Heavy Series)**

**Connection Type** Male Metric Thread  
**Sealing Type** 24° Conical Bore  
 (Shape W acc. to DIN 3861)  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
05	1/8"	-03	M16x1,5	-03	2,9 .11	5,1 .20	24,0 .94	49,0 1.93	17,0 .67	2,9 6.39	11111N05	HCS-05-CE-8S-M-W3
06	1/4"	-04	M18x1,5	-04	3,9 .15	6,7 .26	26,5 1.04	56,5 2.22	19 .75	4,0 8.82	11111N06	HCS-06-CE-10S-M-W3
06	1/4"	-04	M16x1,5	-03	3,9 .15	6,7 .26	25,5 1.00	55,5 2.19	17 .67	3,3 7.28	11111N0605	HCS-06-CE-8S-M-W3
06	1/4"	-04	M20x1,5	-05	3,9 .15	6,7 .26	27,5 1.08	57,5 2.26	22 .87	5,2 11.36	11111N0608	HCS-06-CE-12S-M-W3
08	5/16"	-05	M20x1,5	-05	5,4 .21	8,2 .32	27,5 1.08	57,5 2.26	22,0 .87	5,3 11.69	11111N08	HCS-08-CE-12S-M-W3
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,9 .39	29,5 1.16	63,0 2.48	22,0 .87	6,5 14.22	11111N10	HCS-10-CE-14S-M-W3
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,9 .39	27,5 1.08	61,0 2.40	22,0 .87	5,9 13.01	11111N1008	HCS-10-CE-12S-M-W3
12	1/2"	-08	M24x1,5	-08	9,5 .37	13,0 .51	30,0 1.18	65,5 2.58	24,0 .94	8,0 17.53	11111N12	HCS-12-CE-16S-M-W3
12	1/2"	-08	M20x1,5	-05	9,5 .37	13,0 .51	28,0 1.10	63,5 2.50	22,0 .87	6,6 14.44	11111N1208	HCS-12-CE-12S-M-W3
12	1/2"	-08	M22x1,5	-06	9,5 .37	13,0 .51	30,0 1.18	65,5 2.58	22,0 .87	7,3 16.10	11111N1210	HCS-12-CE-14S-M-W3
12	1/2"	-08	M30x2	-10	9,5 .37	13,0 .51	34,0 1.34	70,0 2.76	30,0 1.18	13,1 28.89	11111N1216	HCS-12-CE-20S-M-W3
16	5/8"	-10	M30x2	-10	12,6 .50	16,0 .63	34,0 1.34	72,5 2.85	30,0 1.18	12,9 28.33	11111N16	HCS-16-CE-20S-M-W3
16	5/8"	-10	M36x2	-12	12,6 .50	16,0 .63	37,0 1.46	75,5 2.97	36,0 1.42	19,7 43.44	11111N1620	HCS-16-CE-25S-M-W3
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	37,5 1.48	83,5 3.29	36,0 1.42	20,4 44.87	11111N20	HCS-19-CE-25S-M-W3
19	3/4"	-12	M30x2	-10	14,8 .58	19,1 .75	34,5 1.36	80,5 3.17	30,0 1.18	14,8 32.63	11111N2016	HCS-19-CE-20S-M-W3
25	1"	-16	M42x2	-16	20,0 .79	25,9 1.02	42,5 1.67	97,5 3.84	46,0 1.81	36,4 80.26	11111N25	HCS-25-CE-30S-M-W3
25	1"	-16	M36x2	-12	20,0 .79	25,9 1.02	38,5 1.52	93,5 3.68	36,0 1.42	25,5 56.23	11111N2520	HCS-25-CE-25S-M-W3
25	1"	-16	M52x2	-20	20,0 .79	25,9 1.02	46,5 1.83	101,5 4.00	55,0 2.17	55,7 122.71	11111N2532	HCS-25-CE-38S-M-W3
31	1 1/4"	-20	M52x2	-20	26,0 1.02	32,5 1.28	47,5 1.87	107,5 4.23	55,0 2.17	57,30 126.35	11111N32	HCS-31-CE-38S-M-W3
25	1"	-16	M52x2	-20	20,0 .79	25,9 1.02	46,5 1.83	101,5 4.00	55,0 2.17	55,7 122.71	11111N2532	HCS-25-CE-38S-M-W3

**Related Products and Accessories**

**Swage Ferrules**

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**Mobile Interlocking Protection**

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**ECOVS VA Version**

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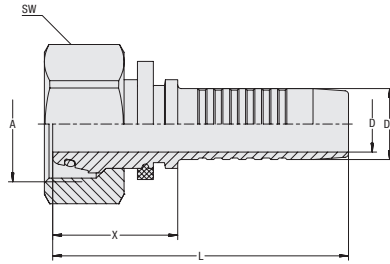
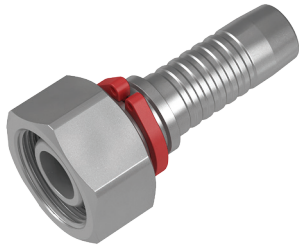

**MULTIVOS Version**

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**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL (Light Series)**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
05	1/8"	-03	M12x1,5	-03	2,9 .11	5,1 .20	24,5 .96	49,0 1.93	14,0 .55	2,1 4.63	11221N05	HCS-05-DKO-6L-S-OR-B-M-W3
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	24,5 .96	54,0 2.13	17,0 .67	3,3 7.17	11221N06	HCS-06-DKO-8L-S-OR-B-M-W3
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	21,0 .83	51,0 2.01	14,0 .55	2,3 5.07	11221N0605	HCS-06-DKO-6L-W-OR-B-M-W3
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	21,0 .83	51,0 2.01	17,0 .67	3,2 7.06	11221N0605-SW17	HCS-06-DKO-6L-W-OR-B-M-W3-SW17
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	26,0 1.02	55,5 2.19	19,0 .75	4,0 8.82	11221N0608	HCS-06-DKO-10L-S-OR-B-M-W3
06	1/4"	-04	M18x1,5	-08	3,9 .15	6,7 .26	29,0 1.14	59,0 2.32	22,0 .87	5,3 11.69	11221N0610	HCS-06-DKO-12L-S-OR-B-M-W3
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,2 .32	26,0 1.02	55,5 2.19	19,0 .75	4,2 9.26	11221N08	HCS-08-DKO-10L-S-OR-B-M-W3
08	5/16"	-05	M14x1,5	-04	5,4 .21	8,2 .32	22,0 .87	52,0 2.05	17,0 .67	3,3 7.28	11221N0806	HCS-08-DKO-8L-W-OR-B-M-W3
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,2 .32	30,0 1.18	60,0 2.36	22,0 .87	5,7 12.46	11221N0810	HCS-08-DKO-12L-S-OR-B-M-W3
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,9 .39	26,0 1.02	59,0 2.32	22,0 .87	6,0 13.12	11221N10	HCS-10-DKO-12L-S-OR-B-M-W3
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,9 .39	22,5 .89	56,0 2.20	19,0 .75	4,6 10.14	11221N1008	HCS-10-DKO-10L-W-OR-B-M-W3
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,9 .39	25,0 .98	58,5 2.30	27,0 1.06	8,7 19.18	11221N1012	HCS-10-DKO-15L-S-OR-B-M-W3
12	1/2"	-08	M22x1,5	-08	9,5 .37	13,0 .51	25,5 1.00	61,0 2.40	27,0 1.06	8,9 19.51	11221N12	HCS-12-DKO-15L-S-OR-B-M-W3
12	1/2"	-08	M18x1,5	-06	9,5 .37	13,0 .51	24,0 .94	59,5 2.34	22,0 .87	6,50 14.33	11221N1210	HCS-12-DKO-12L-W-OR-B-M-W3
12	1/2"	-08	M26x1,5	-10	9,5 .37	13,0 .51	34,5 1.36	70,0 2.76	32,0 1.26	13,15 29.00	11221N1216	HCS-12-DKO-18L-S-OR-B-M-W3
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	28,0 1.10	66,5 2.62	32,0 1.26	12,5 27.56	11221N16	HCS-16-DKO-18L-S-OR-B-M-W3
16	5/8"	-10	M30x2	-12	12,6 .50	16,0 .63	34,5 1.36	73,0 2.87	36,0 1.42	17,1 37.71	11221N1620	HCS-16-DKO-22L-S-OR-B-M-W3
16	5/8"	-10	M22x1,5	-08	12,6 .50	16,0 .63	44,5 1.75	83,0 3.27	27,0 1.06	13,8 30.43	21221N1612	HCS-16-DKO-15L-S-OR-B-B-W3
12	1/2"	-08	M26x1,5	-10	9,5 .37	13,0 .51	34,5 1.36	70,0 2.76	32,0 1.26	13,15 29.00	11221N1216	HCS-12-DKO-18L-S-OR-B-M-W3
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	28,0 1.10	66,5 2.62	32,0 1.26	12,5 27.56	11221N16	HCS-16-DKO-18L-S-OR-B-M-W3
16	5/8"	-10	M30x2	-12	12,6 .50	16,0 .63	34,5 1.36	73,0 2.87	36,0 1.42	17,1 37.71	11221N1620	HCS-16-DKO-22L-S-OR-B-M-W3
16	5/8"	-10	M22x1,5	-08	12,6 .50	16,0 .63	44,5 1.75	83,0 3.27	27,0 1.06	13,8 30.43	21221N1612	HCS-16-DKO-15L-S-OR-B-B-W3

**Related Products and Accessories**

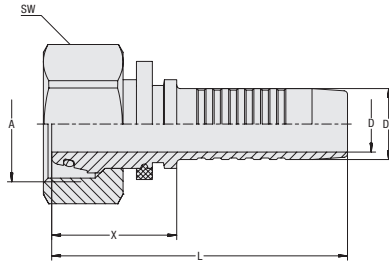
	<b>Swage Ferrules</b>	Pages 14-21		<b>45° Version</b>	Pages 26-27		<b>ECOVOS VA Version</b>	Page 107
	<b>Version with Block Stop</b>	Page 38		<b>90° Version</b>	Pages 28-29		<b>MULTIVOS Version</b>	Page 144



**ecoVOS™**
**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL (Light Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)


**A**

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/16) ca. per 100	Part Numbers	Ordering Codes
19	3/4"	-05	M30x2	-12	14,8	19,1	30,0	76,0	36,0	18,4	11221N20	HCS-19-DK0-22L-S-OR-B-M-W3
					.58	.75	1.18	2.99	1.42	40.57		
19	3/4"	-05	M22x1,5	-08	14,8	19,1	24,0	70,0	27,0	11,9	11221N2012	HCS-19-DK0-15L-W-OR-B-M-W3
					.58	.75	.94	2.76	1.06	26.13		
19	3/4"	-05	M26x1,5	-10	14,8	19,1	25,5	71,5	32,0	14,4	11221N2016	HCS-19-DK0-18L-W-OR-B-M-W3
					.58	.75	1.00	2.81	1.26	31.64		
19	3/4"	-05	M36x2	-16	14,8	19,1	34,0	78,0	41,0	25,0	11221N2025	HCS-19-DK0-28L-S-OR-B-M-W3
					.58	.75	1.34	3.07	1.61	55.13		
25	1"	-16	M36x2	-16	20,0	25,9	33,0	88,0	41,0	28,0	11221N25	HCS-25-DK0-28L-S-OR-B-M-W3
					.79	1.02	1.30	3.46	1.61	61.74		
25	1"	-16	M45x2	-20	20,0	25,9	36,0	91,0	50,0	42,2	11221N2532	HCS-25-DK0-35L-S-OR-B-M-W3
					.79	1.02	1.42	3.58	1.97	92.94		
25	1"	-16	M30x2	-12	20,0	25,9	45,0	100,0	36,0	32,7	21221N2520	HCS-25-DK0-22L-S-OR-B-B-W3
					.79	1.02	1.77	3.94	1.42	72.10		
31	1 1/4"	-20	M45x2	-20	26,0	32,5	37,0	97,0	50,0	43,8	11221N32	HCS-31-DK0-35L-S-OR-B-M-W3
					1.02	1.28	1.46	3.82	1.97	96.47		
31	1 1/4"	-20	M30x2	-16	26,0	32,5	47,5	107,5	50,0	47,3	21221N3225	HCS-31-DK0-28L-S-OR-B-B-W3
					1.02	1.28	1.87	4.23	1.97	104.30		
31	1 1/4"	-20	M52x2	-24	26,0	32,5	55,0	115,0	60,0	73,8	21221N3240	HCS-31-DK0-42L-S-OR-B-B-W3
					1.02	1.28	2.17	4.53	2.36	162.73		
38	1 1/2"	-24	M52x2	-24	31,0	38,9	35,5	103,0	60,0	66,0	11221N40	HCS-38-DK0-42L-S-OR-B-M-W3
					1.22	1.53	1.40	4.06	2.36	145.53		
38	1 1/2"	-24	M45x2	-20	31,0	38,9	56,0	123,5	50,0	71,5	21221N4032	HCS-38-DK0-35L-S-OR-B-B-W3
					1.22	1.53	2.20	4.86	1.97	157.66		
51	2"	-32	M52x2	-24	40,0	51,6	59,5	134,5	60,0	132,8	21221N5040	HCS-51-DK0-42L-S-OR-B-B-W3
					1.57	2.03	2.34	5.30	2.36	292.82		

**Related Products and Accessories**

**Swage Ferrules**

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**45° Version**

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**Version with Block Stop**

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**90° Version**

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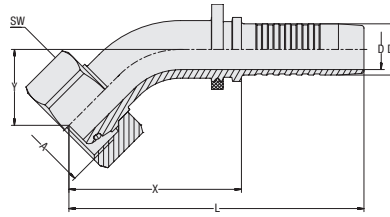
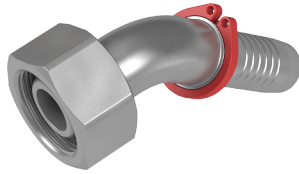

**MULTIVOS Version**

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**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL 45° (Light Series)**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
05	1/8"	-03	M12x1,5	-03	2,9 .11	5,1 .20	31,8 1.25	56,5 2.22	15,0 .59	14,0 .55	2,3 5.07	11221N05054	HCS-05-DKO-6L-045-S-OR-B-M-W3	
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	36,5 1.44	66,5 2.62	18,0 .71	14,0 .55	3,1 6.73	11221N06054	HCS-06-DKO-6L-045-W-OR-B-M-W3	
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	36,0 1.42	66,0 2.60	16,0 .63	17,0 .67	3,6 7.94	11221N06064	HCS-06-DKO-8L-045-S-OR-B-M-W3	
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	38,5 1.52	68,5 2.70	18,5 .73	19,0 .75	4,9 10.69	11221N06084	HCS-06-DKO-10L-045-S-OR-B-M-W3	
06	1/4"	-04	M18x1,5	-06	3,9 .15	6,7 .26	39,5 1.56	69,5 2.74	18,5 .73	22,0 .87	6,0 13.23	11221N06104	HCS-06-DKO-12L-045-S-OR-B-M-W3	
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,2 .32	38,5 1.52	68,5 2.70	18,5 .73	19,0 .75	5,0 10.91	11221N08084	HCS-08-DKO-10L-045-S-OR-B-M-W3	
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,2 .32	40,0 1.57	70,0 2.76	18,0 .71	22,0 .87	6,3 13.89	11221N08104	HCS-08-DKO-12L-045-S-OR-B-M-W3	
08	5/16"	-05	M14x1,5	-04	5,4 .21	8,2 .32	50,0 1.97	80,0 3.15	20,0 .79	17,0 .67	5,7 12.57	21221N08064	HCS-08-DKO-8L-045-S-OR-B-B-W3	
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,9 .39	44,0 1.73	77,0 3.03	19,5 .77	19,0 .75	6,5 14.33	11221N10084	HCS-10-DKO-10L-045-W-OR-B-M-W3	
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,9 .39	41,5 1.63	74,5 2.93	17,5 .69	22,0 .87	7,2 15.88	11221N10104	HCS-10-DKO-12L-045-S-OR-B-M-W3	
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,9 .39	48,0 1.89	82,0 3.23	19,5 .77	27,0 1.06	11,4 25.14	21221N10124	HCS-10-DKO-15L-045-S-OR-B-B-W3	
12	1/2"	-08	M22x1,5	-08	9,5 .37	13,0 .51	46,0 1.81	81,5 3.21	21,0 .83	27,0 1.06	11,1 24.48	11221N12124	HCS-12-DKO-15L-045-S-OR-B-M-W3	
12	1/2"	-08	M18x1,5	-06	9,5 .37	13,0 .51	49,5 1.95	85,0 3.35	19,5 .77	22,0 .87	11,0 24.26	21221N12104	HCS-12-DKO-12L-045-W-OR-B-B-W3	
12	1/2"	-08	M26x1,5	-10	9,5 .37	13,0 .51	67,0 2.64	102,5 4.04	27,5 1.08	32,0 1.26	20,5 45.20	21221N12164	HCS-12-DKO-18L-045-S-OR-B-B-W3	
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	54,0 2.13	92,0 3.62	24,0 .94	32,0 1.26	15,9 35.06	11221N16164	HCS-16-DKO-18L-045-S-OR-B-M-W3	
16	5/8"	-10	M22x1,5	-08	12,6 .50	16,0 .63	56,5 2.22	95,0 3.74	22,0 .87	27,0 1.06	16,2 35.72	21221N16124	HCS-16-DKO-15L-045-S-OR-B-B-W3	
16	5/8"	-10	M30x2	-12	12,6 .50	16,0 .63	72,0 2.83	110,5 4.35	29,5 1.16	36,0 1.42	29,20 64.39	21221N16204	HCS-16-DKO-22L-045-S-OR-B-B-W3	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

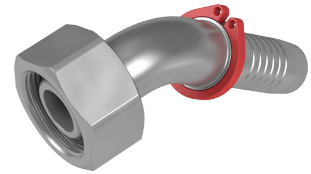
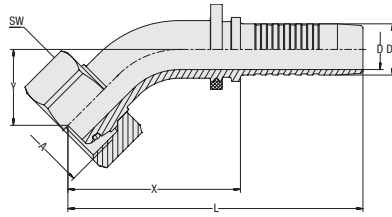
	<b>Swage Ferrules</b>	Pages 14-21		<b>Straight Version</b>	Pages 24-25		<b>ECOVOS VA Version</b>	Page 108
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**ecoVOS™**
**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL 45° (Light Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta$ plus  
**Sealing Material** NBR (Buna-N®)


**A**

Hose Size			Connection Size		Dimensions (mm/in)								Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	67,0 2.64	113,0 4.45	25,5 1.00	36,0 1.42	25,70 56.67	11221N20204	HCS-19-DKO-22L-045-S-OR-B-M-W3		
19	3/4"	-12	M26x1,5	-10	14,8 .58	19,1 .75	67,5 2.66	113,5 4.47	27,5 1.08	32,0 1.26	24,20 53.36	21221N20164	HCS-19-DKO-18L-045-S-OR-B-B-W3		
19	3/4"	-12	M36x2	-16	14,8 .58	19,1 .75	73,5 2.89	119,5 4.70	29,5 1.16	41,0 1.61	34,80 76.73	21221N20254	HCS-19-DKO-28L-045-S-OR-B-B-W3		
25	1"	-16	M36x2	-16	20,0 .79	25,9 1.02	80,0 3.15	135,0 5.31	33,0 1.30	41,0 1.61	41,80 92.17	11221N25254	HCS-25-DKO-28L-045-S-OR-B-M-W3		
25	1"	-16	M30x2	-12	20,0 .79	25,9 1.02	74,5 2.93	129,5 5.10	29,5 1.16	36,0 1.42	39,03 86.06	21221N25204	HCS-25-DKO-22L-045-S-OR-B-B-W3		
25	1"	-16	M45x2	-20	20,0 .79	25,9 1.02	82,5 3.25	138,0 5.43	34,5 1.36	50,0 1.97	58,00 127.89	21221N25324	HCS-25-DKO-35L-045-S-OR-B-B-W3		
31	1 1/4"	-20	M45x2	-20	26,0 1.02	32,5 1.28	99,5 3.92	159,5 6.28	39,5 1.56	50,0 1.97	70,70 155.89	11221N32324	HCS-31-DKO-35L-045-S-OR-B-M-W3		
31	1 1/4"	-20	M36x2	-16	26,0 1.02	32,5 1.28	85,0 3.35	145,0 5.71	33,0 1.30	41,0 1.61	59,05 130.21	21221N32254	HCS-31-DKO-28L-045-S-OR-B-B-W3		
31	1 1/4"	-20	M52x2	-24	26,0 1.02	32,5 1.28	117,0 4.61	177,0 6.97	47,5 1.87	60,0 2.36	101,35 223.48	21221N32404	HCS-31-DKO-42L-045-S-OR-B-B-W3		
38	1 1/2"	-24	M52x2	-24	31,0 1.22	38,9 1.53	107,5 4.23	175,0 6.89	38,5 1.52	60,0 2.36	102,30 225.57	11221N40404	HCS-38-DKO-42L-045-S-OR-B-M-W3		
38	1 1/2"	-24	M45x2	-20	31,0 1.22	38,9 1.53	106,5 4.19	174,5 6.87	43,0 1.69	50,0 1.97	91,75 202.31	21221N40324	HCS-38-DKO-35L-045-S-OR-B-B-W3		

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

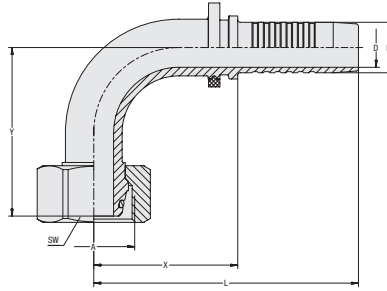
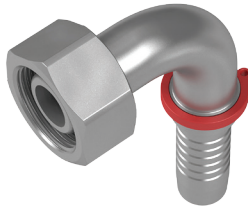
	<b>Swage Ferrules</b>	Pages 14-21		<b>Straight Version</b>	Pages 24-25		<b>ECOVS VA Version</b>	Page 108
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**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL 90° (Light Series)**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
05	1/8"	-03	M12x1,5	-03	2,9 .11	5,1 .20	23,5 .93	48,0 1.89	27,0 1.06	14,0 .55	2,5 5.51	11221N05059	HCS-05-DK0-6L-090-S-OR-B-M-W3	
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	25,0 .98	55,0 2.17	32,5 1.28	14 .55	3,3 7.28	11221N06059	HCS-06-DK0-6L-090-W-OR-B-M-W3	
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	29,5 1.16	59,5 2.34	29,0 1.14	17 .67	3,9 8.60	11221N06069	HCS-06-DK0-8L-090-S-OR-B-M-W3	
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	31,0 1.22	61,0 2.40	31,5 1.24	19 .75	5,4 11.91	11221N06089	HCS-06-DK0-10L-090-S-OR-B-M-W3	
06	1/4"	-04	M18x1,5	-06	3,9 .15	6,7 .26	30,5 1.20	60,5 2.38	33,0 1.30	22 .87	6,5 14.33	11221N06109	HCS-06-DK0-12L-090-S-OR-B-M-W3	
08	5/16"	-05	M14x1,5	-04	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	35,5 1.40	17 .67	5,2 11.47	11221N08069	HCS-08-DK0-08L-090-W-OR-B-M-W3	
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	31,5 1.24	19 .75	5,5 12.02	11221N08089	HCS-08-DK0-10L-090-S-OR-B-M-W3	
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	33,0 1.30	22 .87	6,8 14.99	11221N08109	HCS-08-DK0-12L-090-S-OR-B-M-W3	
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,9 .39	38,5 1.52	71,5 2.81	39,0 1.54	19 .75	7,7 16.98	11221N10089	HCS-10-DK0-10L-090-W-OR-B-M-W3	
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,9 .39	37,5 1.48	71,0 2.80	36,0 1.42	22 .87	8,4 18.41	11221N10109	HCS-10-DK0-12L-090-S-OR-B-M-W3	
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,9 .39	39,0 1.54	72,5 2.85	38,5 1.52	27 1.06	12,3 27.01	21221N10129	HCS-10-DK0-15L-090-S-OR-B-B-W3	
12	1/2"	-08	M22x1,5	-08	9,5 .37	13,0 .51	40,5 1.59	76,0 2.99	42,5 1.67	27 1.06	12,9 28.42	11221N12129	HCS-12-DK0-15L-090-S-OR-B-M-W3	
12	1/2"	-08	M26x1,5	-10	9,5 .37	13,0 .51	55,5 2.19	91,0 3.58	54,0 2.13	32 1.26	22,8 50.27	21221N12169	HCS-12-DK0-18L-090-S-OR-B-B-W3	
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	46,0 1.81	84,0 3.31	53,5 2.11	32 1.26	18,4 40.57	11221N16169	HCS-16-DK0-18L-090-S-OR-B-M-W3	
16	5/8"	-10	M22x1,5	-08	12,6 .50	16,0 .63	46,5 1.83	85,0 3.35	44,5 1.75	27 1.06	17,7 38.92	21221N16129	HCS-16-DK0-15L-090-S-OR-B-B-W3	
16	5/8"	-10	M30x2	-12	12,6 .50	16,0 .63	62,5 2.46	101,0 3.98	61,0 2.40	36 1.42	33,3 73.43	21221N16209	HCS-16-DK0-22L-090-S-OR-B-B-W3	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

	<b>Swage Ferrules</b>	Pages 14-21		<b>Straight Version</b>	Pages 24-25		<b>ECOVOS VA Version</b>	Page 109
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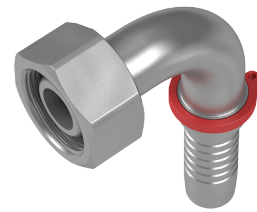
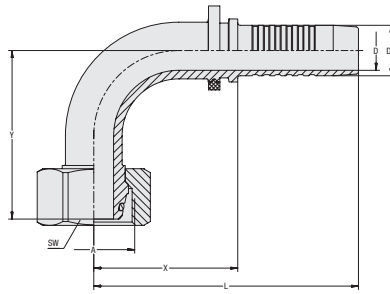




**ecovos™**
**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL 90° (Light Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	57,5 2.26	103,0 4.06	57,0 2.24	36 1.42	29,6 65.16	11221N20209	HCS-19-DKO-22L-090-S-OR-B-M-W3	
19	3/4"	-12	M26x1,5	-10	14,8 .58	19,1 .75	56,0 2.20	102,0 4.02	54,0 2.13	32 1.26	26,5 58.43	21221N20169	HCS-19-DKO-18L-090-S-OR-B-B-W3	
19	3/4"	-12	M36x2	-16	14,8 .58	19,1 .75	63,0 2.48	109,0 4.29	61,0 2.40	41 1.61	38,9 85.77	21221N20259	HCS-19-DKO-28L-090-S-OR-B-B-W3	
19	3/4"	-12	M36x2	-16	14,8 .58	19,1 .75	63,0 2.48	109,0 4.29	61,0 2.40	41 1.61	38,9 85.77	21221N20259	HCS-19-DKO-28L-090-S-OR-B-B-W3	
25	1"	-16	M36x2	-16	20,0 .79	25,9 1.02	72,0 2.83	127,0 5.00	63,0 2.48	41 1.61	48,2 106.17	11221N25259	HCS-25-DKO-28L-090-S-OR-B-M-W3	
25	1"	-16	M30x2	-12	20,0 .79	25,9 1.02	64,0 2.52	119,0 4.69	61,0 2.40	36 1.42	43,2 95.15	21221N25209	HCS-25-DKO-22L-090-S-OR-B-B-W3	
25	1"	-16	M45x2	-20	20,0 .79	25,9 1.02	74,0 2.91	129,0 5.08	73,0 2.87	50 1.97	65,9 145.20	21221N25329	HCS-25-DKO-35L-090-S-OR-B-B-W3	
31	1 1/4"	-20	M45x2	-20	26,0 1.02	32,5 1.28	90,5 3.56	150,5 5.93	81,0 3.19	50 1.97	82,6 182.13	11221N32329	HCS-31-DKO-35L-090-S-OR-B-M-W3	
31	1 1/4"	-20	M36x2	-16	26,0 1.02	32,5 1.28	76,5 3.01	136,5 5.37	71,0 2.80	41 1.61	66,8 147.29	21221N32259	HCS-31-DKO-28L-090-S-OR-B-B-W3	
31	1 1/4"	-20	M52x2	-24	26,0 1.02	32,5 1.28	104,5 4.11	164,5 6.48	102,0 4.02	60 2.36	118,0 260.08	21221N32409	HCS-31-DKO-42L-090-S-OR-B-B-W3	
38	1 1/2"	-24	M52x2	-24	31,0 1.22	38,9 1.53	101,0 3.98	168,5 6.63	88,0 3.46	60 2.36	117,9 259.97	11221N40409	HCS-38-DKO-42L-090-S-OR-B-M-W3	
38	1 1/2"	-24	M45x2	-20	31,0 1.22	38,9 1.53	94,5 3.72	162,5 6.40	91,0 3.58	50 1.97	104,3 229.98	21221N40329	HCS-38-DKO-35L-090-S-OR-B-B-W3	

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

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**45° Version**

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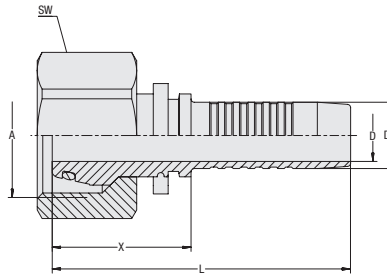
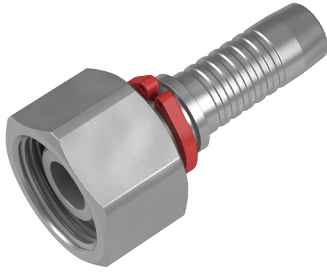

**MULTIVOS Version**

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**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS (Heavy Series)**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
05	1/8"	-03	M16x1,5	-03	2,9 .11	5,1 .20	26,0 1.02	50,5 1.99	19,0 .75	3,6 7.94	11231N05	HCS-05-DKO-8S-S-OR-B-M-W3
06	1/4"	-04	M18x1,5	-04	3,9 .15	6,7 .26	26,0 1.02	55,5 2.19	22,0 .87	5,3 11.69	11231N06	HCS-06-DKO-10S-S-OR-B-M-W3
06	1/4"	-04	M14x1,5	-02	3,9 .15	6,7 .26	26,0 1.02	56,0 2.20	17,0 .67	3,5 7.72	11231N0603	HCS-06-DKO-6S-W-OR-B-M-W3
06	1/4"	-04	M16x1,5	-03	3,9 .15	6,7 .26	24,5 .96	54,0 2.13	19,0 .75	3,9 8.49	11231N0605	HCS-06-DKO-8S-S-OR-B-M-W3
06	1/4"	-04	M20x1,5	-05	3,9 .15	6,7 .26	44,5 1.75	74,5 2.93	24,0 .94	8,2 17.97	21231N0608	HCS-06-DKO-12S-S-OR-B-B-W3
08	5/16"	-05	M20x1,5	-05	5,4 .21	8,2 .32	30,0 1.18	60,0 2.36	24 .94	6,6 14.55	11231N08	HCS-08-DKO-12S-S-OR-B-M-W3
08	5/16"	-05	M18x1,5	-04	5,4 .21	8,2 .32	26,0 1.02	55,5 2.19	22 .87	5,4 11.91	11231N0806	HCS-08-DKO-10S-S-OR-B-M-W3
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,2 .32	30,0 1.18	60,0 2.36	22,0 .87	5,7 12.46	11221N0810	HCS-08-DKO-12L-S-OR-B-M-W3
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,9 .39	30,5 1.20	64,0 2.52	27 1.06	9,7 21.39	11231N10	HCS-10-DKO-14S-S-OR-B-M-W3
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,9 .39	26,0 1.02	59,0 2.32	24 .94	6,9 15.21	11231N1008	HCS-10-DKO-12S-S-OR-B-M-W3
10	3/8"	-06	M24x1,5	-08	6,5 .26	9,9 .39	32,0 1.26	65,5 2.58	30 1.18	11,7 25.80	11231N1012	HCS-10-DKO-16S-S-OR-B-M-W3
10	3/8"	-06	M18x1,5	-04	6,5 .26	9,9 .39	44,0 1.73	77,5 3.05	22 .87	8,3 18.30	21231N1006	HCS-10-DKO-10S-S-OR-B-B-W3
12	1/2"	-08	M24x1,5	-08	9,5 .37	13,0 .51	32,0 1.26	67,5 2.66	30 1.18	12,5 27.56	11231N12	HCS-12-DKO-16S-S-OR-B-M-W3
12	5/16"	-05	M20x1,5	-05	9,5 .37	13,0 .51	24,5 .96	60,0 2.36	24 .94	7,2 15.88	11231N1208	HCS-12-DKO-12S-W-OR-B-M-W3
12	1/2"	-08	M22x1,5	-06	9,5 .37	13,0 .51	26,5 1.04	62,0 2.44	27 1.06	9,8 21.61	11231N1210	HCS-12-DKO-14S-W-OR-B-M-W3
12	1/2"	-08	M30x2	-10	9,5 .37	13,0 .51	63,5 2.50	99,0 3.90	36 1.42	25,1 55.24	21231N1216	HCS-12-DKO-20S-S-OR-B-B-W3
16	5/8"	-10	M30x2	-10	12,6 .50	16,0 .63	33,5 1.32	72,0 2.83	36 1.42	18,7 41.12	11231N16	HCS-16-DKO-20S-S-OR-B-M-W3
16	5/8"	-10	M24x1,5	-08	12,6 .50	16,0 .63	26,5 1.04	65,0 2.56	30 1.18	12,5 27.56	11231N1612	HCS-16-DKO-16S-W-OR-B-M-W3
16	5/8"	-10	M36x2	-12	12,6 .50	16,0 .63	52,0 2.05	90,5 3.56	46 1.81	40,1 88.31	21231N1620	HCS-16-DKO-25S-S-OR-B-B-W3

**Related Products and Accessories**



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**POWERVOS Version**

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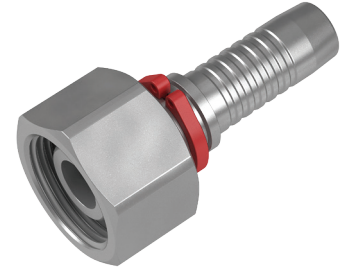
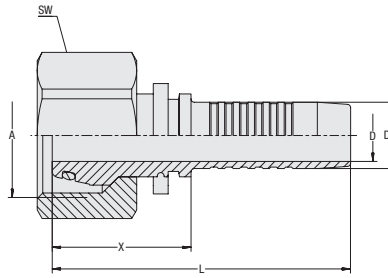


**ecovos™**
**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS (Heavy Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	37,0 1.46	83,0 3.27	41 1.61	27,2 59.98	11231N20	HCS-19-DKO-25S-S-OR-B-M-W3	
19	3/4"	-12	M30x2	-10	14,8 .58	19,1 .75	32,0 1.26	78,0 3.07	36 1.42	20,9 46.08	11231N2016	HCS-19-DKO-20S-W-OR-B-M-W3	
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	37,0 1.46	83,0 3.27	46 1.81	35,0 77.18	11231N20-SW46	HCS-19-DKO-25S-S-OR-B-M-W3-SW46	
19	3/4"	-12	M42x2	-16	14,8 .58	19,1 .75	53,0 2.09	99,0 3.90	50 1.97	46,6 102.64	21231N2025	HCS-19-DKO-30S-S-OR-B-B-W3	
25	1"	-16	M42x2	-16	20,0 .79	25,9 1.02	40,0 1.57	95,0 3.74	50 1.97	45,4 100.11	11231N25	HCS-25-DKO-30S-S-OR-B-M-W3	
25	1"	-16	M36x2	-12	20,0 .79	25,9 1.02	53,5 2.11	108,5 4.27	41 1.61	42,1 92.72	21231N2520	HCS-25-DKO-25S-S-OR-B-B-W3	
25	1"	-16	M52x2	-20	20,0 .79	25,9 1.02	56,5 2.22	111,5 4.39	60 2.36	73,3 161.63	21231N2532	HCS-25-DKO-38S-S-OR-B-B-W3	
31	1 1/4"	-20	M52x2	-20	26,0 1.02	32,5 1.28	47,0 1.85	107,0 4.21	60 2.36	69,0 152.15	11231N32	HCS-31-DKO-38S-S-OR-B-M-W3	
31	1 1/4"	-20	M42x2	-16	26,0 1.02	32,5 1.28	66,5 2.62	126,5 4.98	50 1.97	68,8 151.59	21231N3225	HCS-31-DKO-30S-S-OR-B-B-W3	
38	1 1/2"	-24	M52x2	-20	31,0 1.22	38,9 1.53	72,0 2.83	139,5 5.49	60 2.36	101,6 224.03	21231N4032	HCS-38-DKO-35S-S-OR-B-B-W3	

**Related Products and Accessories**

**Swage Ferrules**

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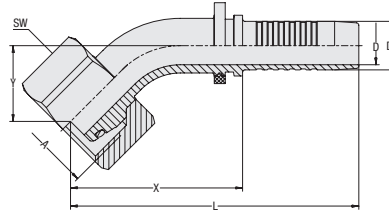
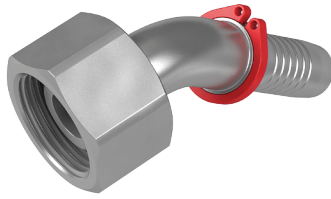

**POWERVOS Version**

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**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 45° (Heavy Series)**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
05	1/8"	-03	M16x1,5	-03	2,9 .11	5,1 .20	34,0 1.34	58,5 2.30	14,0 .55	19 .75	3,8 8.38	11231N05054	HCS-05-DKO-8S-045-S-OR-B-M-W3	
06	1/4"	-04	M16x1,5	-03	3,9 .15	6,7 .26	36,0 1.42	66,0 2.60	16,0 .63	19 .75	4,3 9.37	11231N06054	HCS-06-DKO-8S-045-S-OR-B-M-W3	
06	1/4"	-04	M18x1,5	-04	3,9 .15	6,7 .26	38,5 1.52	68,5 2.70	18,5 .73	22 .87	6,2 13.67	11231N06064	HCS-06-DKO-10S-045-S-OR-B-M-W3	
06	1/4"	-04	M14x1,5	-02	3,9 .15	6,7 .26	43,0 1.69	73,0 2.87	17,0 .67	17 .67	6,8 14.99	21231N06034	HCS-06-DKO-6S-045-S-OR-B-B-W3	
06	1/4"	-04	M20x1,5	-05	3,9 .15	6,7 .26	44,5 1.75	74,5 2.93	19,0 .75	24 .94	8,5 18.63	21231N06084	HCS-06-DKO-12S-045-S-OR-B-B-W3	
08	5/16"	-05	M18x1,5	-04	5,4 .21	8,2 .32	38,5 1.52	68,5 2.70	18,5 .73	22 .87	6,3 13.78	11231N08064	HCS-08-DKO-10S-045-S-OR-B-M-W3	
08	5/16"	-05	M20x1,5	-05	5,4 .21	8,2 .32	40,0 1.57	70,0 2.76	18,0 .71	24 .94	7,2 15.88	11231N08084	HCS-08-DKO-12S-045-S-OR-B-M-W3	
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,9 .39	41,5 1.63	74,5 2.93	17,5 .69	24 .94	8,2 18.08	11231N10084	HCS-10-DKO-12S-045-S-OR-B-M-W3	
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,9 .39	46,0 1.81	79,0 3.11	20,0 .79	27 1.06	11,1 24.37	11231N10104	HCS-10-DKO-14S-045-S-OR-B-M-W3	
10	3/8"	-06	M18x1,5	-04	6,5 .26	9,9 .39	44,0 1.73	77,5 3.05	19,0 .75	22 .87	8,6 18.96	21231N10064	HCS-10-DKO-10S-045-S-OR-B-B-W3	
10	3/8"	-06	M24x1,5	-08	6,5 .26	9,9 .39	58,5 2.30	92,0 3.62	24,0 .94	30 1.18	17,7 39.03	21231N10124	HCS-10-DKO-16S-045-S-OR-B-B-W3	
12	1/2"	-08	M24x1,5	-08	9,5 .37	13,0 .51	50,5 1.99	86,0 3.39	24,0 .94	30 1.18	14,7 32.41	11231N12124	HCS-12-DKO-16S-045-S-OR-B-M-W3	
12	1/2"	-08	M22x1,5	-06	9,5 .37	13,0 .51	51,5 2.03	87,0 3.43	22,0 .87	27 1.06	14,8 32.52	21231N12104	HCS-12-DKO-14S-045-S-OR-B-B-W3	
12	1/2"	-08	M30x2	-10	9,5 .37	13,0 .51	69,5 2.74	105,0 4.13	30,0 1.18	36 1.42	27,0 59.42	21231N12164	HCS-12-DKO-20S-045-S-OR-B-B-W3	
16	5/8"	-10	M30x2	-10	12,6 .50	16,0 .63	56,5 2.22	95,0 3.74	25,0 .98	36 1.42	21,8 47.96	11231N16164	HCS-16-DKO-20S-045-S-OR-B-M-W3	
16	5/8"	-10	M24x1,5	-08	12,6 .50	16,0 .63	57,0 2.24	95,5 3.76	23,5 .93	30 1.18	19,6 43.22	21231N16124	HCS-16-DKO-16S-045-S-OR-B-B-W3	
16	5/8"	-10	M36x2	-12	12,6 .50	16,0 .63	74,5 2.93	113,0 4.45	32,0 1.26	41 1.61	37,7 83.13	21231N16204	HCS-16-DKO-25S-045-S-OR-B-B-W3	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**Version with Block Stop**

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**ECOVOS VA Version**

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**Mobile Interlocking Protection**

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**Straight Version**

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**MULTIVOS Version**

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**90° Version**

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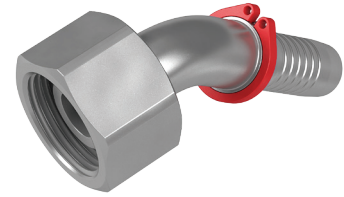
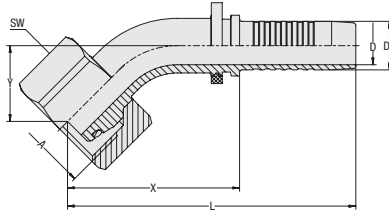


**ecoivos™**
**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 45° (Heavy Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)								Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	66,0 2.60	111,5 4.39	29,0 1.14	41 1.61	33,0 72.65	11231N20204	HCS-19-DKO-25S-045-S-OR-B-M-W3		
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	66,0 2.60	111,5 4.39	29,0 1.14	46 1.81	33,0 72.77	11231N202040001	HCS-19-DKO-25S-045-S-OR-B-M-W3-SW46		
19	3/4"	-12	M30x2	-10	14,8 .58	19,1 .75	71,5 2.81	117,5 4.63	30,5 1.20	36 1.42	30,8 67.91	21231N20164	HCS-19-DKO-20S-045-S-OR-B-B-W3		
19	3/4"	-12	M42x2	-16	14,8 .58	19,1 .75	75,0 2.95	121,0 4.76	32,0 1.26	50 1.97	52,0 114.66	21231N20254	HCS-19-DKO-30S-045-S-OR-B-B-W3		
25	1"	-16	M42x2	-16	20,0 .79	25,9 1.02	83,0 3.27	138,0 5.43	36,5 1.44	50 1.97	58,6 129.10	11231N25254	HCS-25-DKO-30S-045-S-OR-B-M-W3		
25	1"	-16	M36x2	-12	20,0 .79	25,9 1.02	75,5 2.97	131,0 5.16	32,0 1.26	41 1.61	47,5 104.74	21231N25204	HCS-25-DKO-25S-045-S-OR-B-B-W3		
25	1"	-16	M52x2	-20	20,0 .79	25,9 1.02	86,0 3.39	141,0 5.55	37,5 1.48	60 2.36	83,6 184.23	21231N25324	HCS-25-DKO-38S-045-S-OR-B-B-W3		
31	1 1/4"	-20	M52x2	-20	26,0 1.02	32,5 1.28	101,5 4.00	161,5 6.36	41,5 1.63	60 2.36	92,6 204.18	11231N32324	HCS-31-DKO-38S-045-S-OR-B-M-W3		
31	1 1/4"	-20	M42x2	-16	26,0 1.02	32,5 1.28	86,5 3.41	146,5 5.77	35,5 1.40	50 1.97	76,6 168.90	21231N32254	HCS-31-DKO-30S-045-S-OR-B-B-W3		
38	1 1/2"	-24	M52x2	-20	31,0 1.22	38,9 1.53	107,0 4.21	174,5 6.87	44,5 1.75	60 2.36	117,3 258.65	21231N40324	HCS-38-DKO-38S-045-S-OR-B-B-W3		

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**ECOIVOS VA Version**

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**Mobile Interlocking Protection**

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**Straight Version**

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**MULTIVOS Version**

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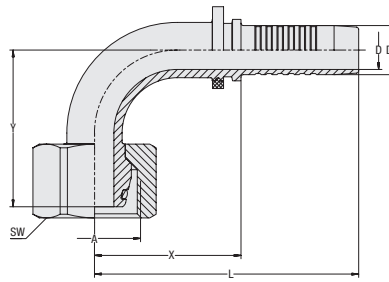
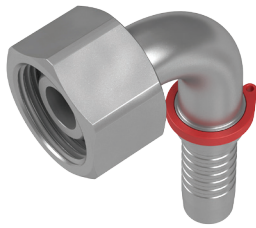

**90° Version**

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**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 90° (Heavy Series)**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
05	1/8"	-03	M16x1,5	-03	2,9 .11	5,1 .20	26,5 1.04	51,0 2.01	27,5 1.08	19 .75	4,0 8.82	11231N05059	HCS-05-DKO-8S-090-S-OR-B-M-W3	
06	1/4"	-04	M14x1,5	-02	3,9 .15	6,7 .26	33,5 1.32	63,5 2.50	29,0 1.14	17 .67	4,2 9.26	11231N06039	HCS-06-DKO-6S-090-W-OR-B-M-W3	
06	1/4"	-04	M16x1,5	-03	3,9 .15	6,7 .26	29,5 1.16	59,5 2.34	29,0 1.14	19 .75	4,5 9.92	11231N06059	HCS-05-DKO-8S-090-S-OR-B-M-W3	
06	1/4"	-04	M18x1,5	-04	3,9 .15	6,7 .26	31,0 1.22	61,0 2.40	31,5 1.24	22 .87	6,6 14.44	11231N06069	HCS-06-DKO-10S-090-S-OR-B-M-W3	
06	1/4"	-04	M20x1,5	-05	3,9 .15	6,7 .26	34,5 1.36	64,5 2.54	35,0 1.38	24 .94	8,9 19.62	21231N06089	HCS-06-DKO-12S-090-S-OR-B-B-W3	
08	5/16"	-05	M18x1,5	-04	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	31,5 1.24	22 .87	6,7 14.77	11231N08069	HCS-08-DKO-10S-090-S-OR-B-M-W3	
08	5/16"	-05	M20x1,5	-05	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	33,0 1.30	24 .94	7,8 17.09	11231N08089	HCS-08-DKO-12S-090-S-OR-B-M-W3	
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,9 .39	37,5 1.48	71,0 2.80	36,0 1.42	24 .94	9,3 20.51	11231N10089	HCS-10-DKO-12S-090-S-OR-B-M-W3	
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,9 .39	38,5 1.52	72,0 2.83	40,0 1.57	27 1.06	12,2 26.79	11231N10109	HCS-10-DKO-14S-090-S-OR-B-M-W3	
10	3/8"	-06	M18x1,5	-04	6,5 .26	9,9 .39	34,0 1.34	67,5 2.66	35,0 1.38	22 .87	9,1 19.96	21231N10069	HCS-10-DKO-10S-090-S-OR-B-B-W3	
10	3/8"	-06	M24x1,5	-08	6,5 .26	9,9 .39	46,0 1.81	80,0 3.15	47,5 1.87	30 1.18	19,2 42.34	21231N10129	HCS-10-DKO-16S-090-S-OR-B-B-W3	
12	1/2"	-08	M24x1,5	-08	9,5 .37	13,0 .51	40,0 1.57	75,5 2.97	47,0 1.85	30 1.18	16,1 35.50	11231N12129	HCS-12-DKO-16S-090-S-OR-B-M-W3	
12	1/2"	-08	M22x1,5	-06	9,5 .37	13,0 .51	40,5 1.59	76,0 2.99	41,0 1.61	27 1.06	15,6 34.40	21231N12109	HCS-12-DKO-14S-090-S-OR-B-B-W3	
12	1/2"	-08	M30x2	-10	9,5 .37	13,0 .51	55,5 2.19	91,0 3.58	58,0 2.28	36 1.42	29,3 64.61	21231N12169	HCS-12-DKO-20S-090-S-OR-B-B-W3	
16	5/8"	-10	M30x2	-10	12,6 .50	16,0 .63	49,0 1.93	86,5 3.41	52,0 2.05	36 1.42	23,9 52.70	11231N16169	HCS-16-DKO-20S-090-S-OR-B-M-W3	
16	5/8"	-10	M24x1,5	-08	12,6 .50	16,0 .63	45,5 1.79	84,0 3.31	46,5 1.83	30 1.18	21,1 46.42	21231N16129	HCS-16-DKO-16S-090-S-OR-B-B-W3	
16	5/8"	-10	M36x2	-12	12,6 .50	16,0 .63	61,5 2.42	100,0 3.94	64,5 2.54	41 1.61	41,8 92.17	21231N16209	HCS-16-DKO-25S-090-S-OR-B-B-W3	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**ECOVOS VA Version**

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**Mobile Interlocking Protection**

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**Straight Version**

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**MULTIVOS Version**

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**45° Version**

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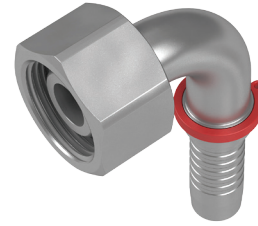
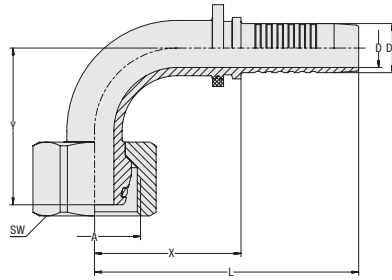


**ecoivos™**
**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 90° (Heavy Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)								Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	57,0 2.24	102,5 4.04	58,5 2.30	41 1.61	37,5 82.69	11231N20209	HCS-19-DKO-25S-090-S-OR-B-M-W3		
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	57,0 2.24	102,5 4.04	58,5 2.30	46 1.81	37,5 82.69	11231N202090001	HCS-19-DKO-25S-090-S-OR-B-M-W3-SW46		
19	3/4"	-12	M30x2	-10	14,8 .58	19,1 .75	56,0 2.20	102,0 4.02	58,0 2.28	36 1.42	33,1 72.88	21231N20169	HCS-20-DKO-20S-090-S-OR-B-B-W3		
19	3/4"	-12	M42x2	-16	14,8 .58	19,1 .75	62,0 2.44	108,0 4.25	65,0 2.56	50 1.97	56,1 123.70	21231N20259	HCS-20-DKO-25S-090-S-OR-B-B-W3		
25	1"	-16	M42x2	-16	20,0 .79	25,9 1.02	70,5 2.78	125,5 4.94	74,0 2.91	50 1.97	66,2 145.86	11231N25259	HCS-25-DKO-30S-090-S-OR-B-M-W3		
25	1"	-16	M36x2	-12	20,0 .79	25,9 1.02	63,0 2.48	118,0 4.65	64,5 2.54	41 1.61	51,6 113.78	21231N25209	HCS-25-DKO-25S-090-S-OR-B-B-W3		
25	1"	-16	M52x2	-20	20,0 .79	25,9 1.02	73,0 2.87	128,0 5.04	77,5 3.05	60 2.36	91,3 201.32	21231N25329	HCS-25-DKO-38S-090-S-OR-B-B-W3		
31	1 1/4"	-20	M52x2	-16	26,0 1.02	32,5 1.28	88,0 3.46	147,5 5.81	87,0 3.43	60 2.36	105,6 232.74	11231N32329	HCS-31-DKO-38S-090-S-OR-B-M-W3		
31	1 1/4"	-20	M42x2	-16	26,0 1.02	32,5 1.28	75,5 2.97	135,5 5.33	75,0 2.95	50 1.97	84,4 186.10	21231N32259	HCS-31-DKO-30S-090-S-OR-B-B-W3		
38	1 1/2"	-24	M52x2	-20	31,0 1.22	38,9 1.53	93,5 3.68	161,0 6.34	93,5 3.68	60 2.36	129,8 286.21	21231N40329	HCS-38-DKO-38S-090-S-OR-B-B-W3		

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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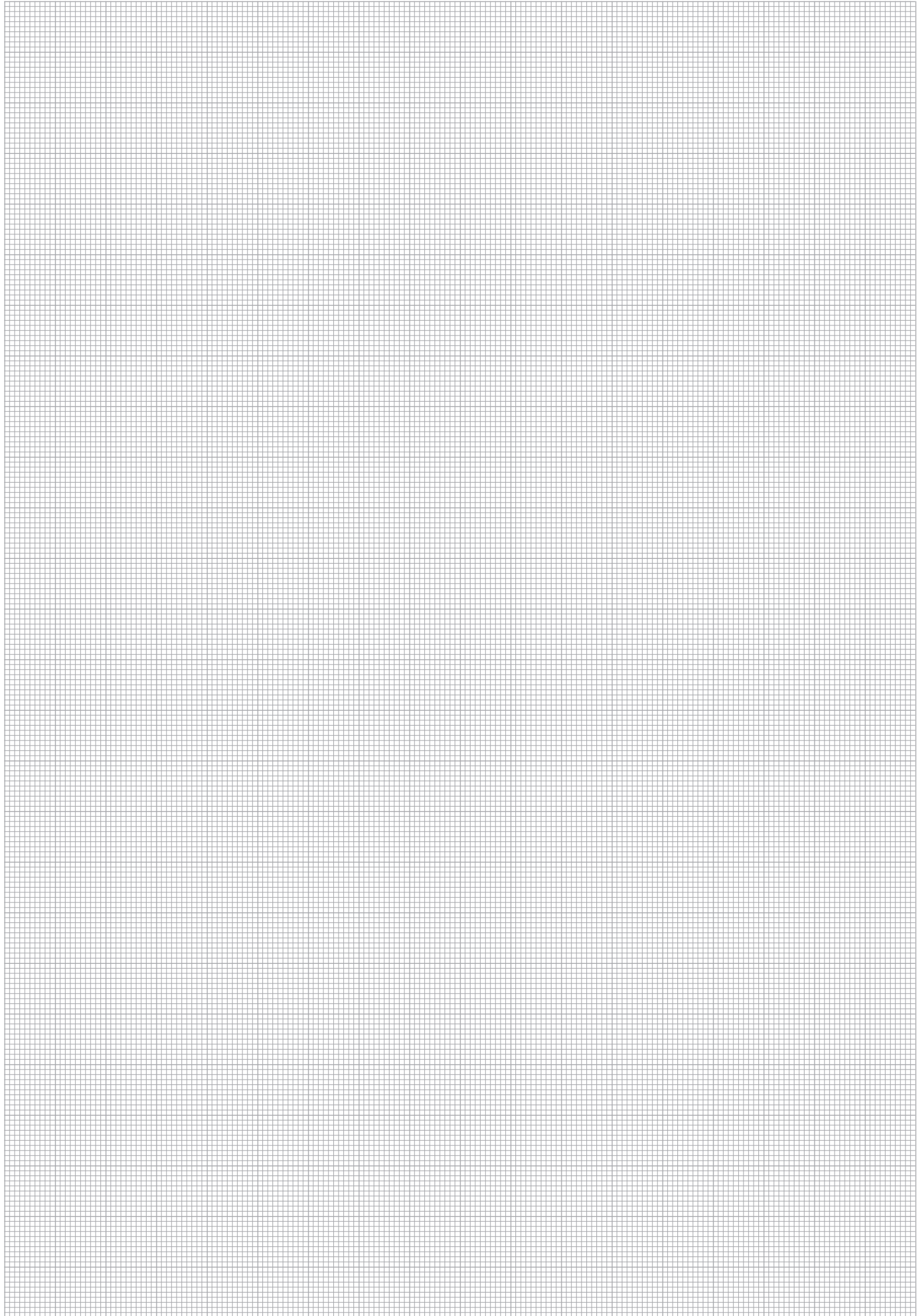
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**45° Version**

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A





**ecovos™**
**Hose Inserts with 24° Taper / O-Ring and Block Stop**
**A**

- Permanent plastic deformation of both the 24° cone and the 24° taper caused by over-tightening during assembly and re-assembly will be prevented
- The necessary pretension is present and thus the risk of leakage will be avoided
- Prevents potential problems caused by threaded connections made from different materials (with different tensile strengths) being assembled using identical parameters

In practical use, leaks can occur in the sealing area of the assembled threaded hydraulic components. The reason for this is that the permitted tightening torque is often exceeded during the initial assembly or the scheduled replacement of hoses.

This results in permanent deformation of the metal sealing surface on the weaker component in the area of the sealing cone, increasing the risk of leaks during operation. The damaged components have to be replaced to ensure a permanently reliable connection.

VOSWINKEL is the first manufacturer of hose connectors to ultimately solve this problem: The new ECOVOS hose connectors with block stop feature clearly indicate when mounting is completed.

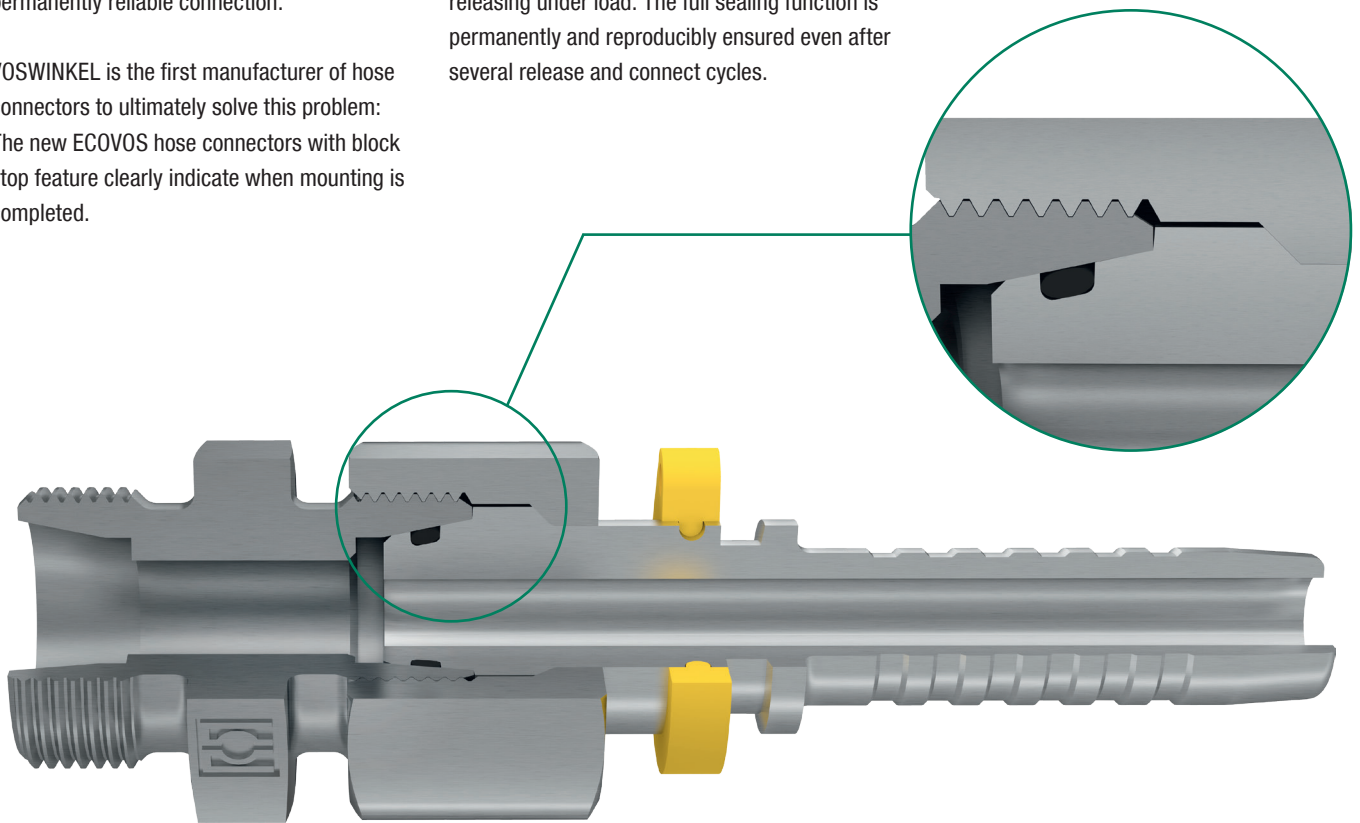
The essential difference to conventional hose connectors with 24° taper and o-ring is the predefined width of the gap between the two faces of the components to be joined.

This gap prevents excessive tightening torque, ensuring the required pre-tension for a reliable and permanently tight connection in the thread pairing.

The pre-tension created in the thread prevents the hose connectors from independently releasing under load. The full sealing function is permanently and reproducibly ensured even after several release and connect cycles.

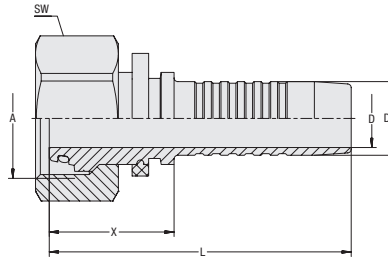
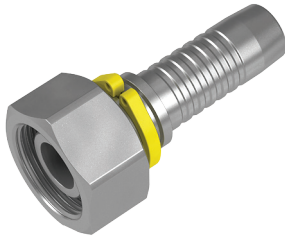
When replacing a hose, the counterpart can usually be reused without problems.

Another great advantage is that the block stop works independently of the material pairing: The user does not have to adapt the torque, for example when pairing the hose connector with forged or turned connectors. This ensures additional leak protection, particularly in mobile hydraulics.



**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOBL (Light Series) with Block Stop**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/163) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	M14x1,5	-04	3,9	6,7	24,5	54,0	17	3,3	11261N06	HCS-06-DKOB-8L-S-OR-B-M-W3
					.15	.26	.96	2.13	.67	7.23		
06	1/4"	-04	M16x1,5	-05	3,9	6,7	26,0	55,5	19	4,0	11261N0608	HCS-06-DKOB-10L-S-OR-B-M-W3
					.15	.26	1.02	2.19	.75	.16		
08	5/16"	-05	M16x1,5	-05	5,4	8,2	26,0	55,5	19	4,3	11261N08	HCS-08-DKOB-10L-S-OR-B-M-W3
					.21	.32	1.02	2.19	.75	.17		
08	5/16"	-05	M18x1,5	-06	5,4	8,2	28,5	58,5	22	5,6	11261N0810	HCS-08-DKOB-12L-S-OR-B-M-W3
					.21	.32	1.12	2.30	.87	.22		
10	3/8"	-06	M18x1,5	-06	6,5	9,9	26,0	59,0	22	6,0	11261N10	HCS-10-DKOB-12L-S-OR-B-M-W3
					.26	.39	1.02	2.32	.87	.24		
12	1/2"	-08	M22x1,5	-08	9,5	13,0	26,0	61,5	27	9,0	11261N12	HCS-12-DKOB-15L-S-OR-B-M-W3
					.37	.51	1.02	2.42	1.06	.36		
16	5/8"	-10	M26x1,5	-10	12,6	16,0	27,0	65,5	32	12,6	11261N16	HCS-16-DKOB-18L-S-OR-B-M-W3
					.50	.63	1.06	2.58	1.26	.49		

**Related Products and Accessories**



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MULTIVOS Version

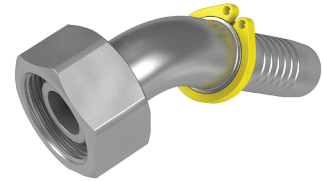
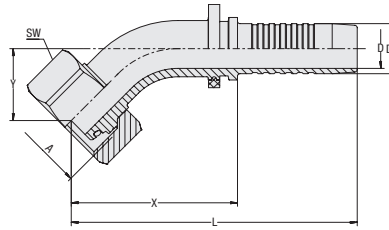
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**ecovos™**
**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOBL 45° (Light Series) with Block Stop**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)


**A**

Hose Size			Connection Size		Dimensions (mm/in)								Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	36,0 1.42	66,0 2.60	16,0 .63	17 .67	3,7 8.09	11261N06064	HCS-06-DKOB-8L-045-S-OR-B-M-W3		
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	38,5 1.52	68,5 2.70	18,5 .73	19 .75	4,9 10.89	11261N06084	HCS-06-DKOB-10L-045-S-OR-B-M-W3		
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,2 .32	38,5 1.52	68,5 2.70	18,5 .73	19 .75	5,1 11.14	11261N08084	HCS-08-DKOB-10L-045-S-OR-B-M-W3		
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,2 .32	39,0 1.54	69,0 2.72	17,0 .67	22 .87	6,2 13.67	11261N08104	HCS-08-DKOB-12L-045-S-OR-B-M-W3		
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,9 .39	41,5 1.63	74,5 2.93	17,5 .69	22 .87	7,3 16.07	11261N10104	HCS-10-DKOB-12L-045-S-OR-B-M-W3		
12	1/2"	-08	M22x1,5	-08	9,5 .37	13,0 .51	46,5 1.83	81,5 3.21	21,0 .83	27 1.06	11,3 24.83	11261N12124	HCS-12-DKOB-15L-045-S-OR-B-M-W3		
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	53,0 2.09	91,5 3.60	23,0 .91	32 1.26	16,0 35.19	11261N16164	HCS-16-DKOB-18L-045-S-OR-B-M-W3		

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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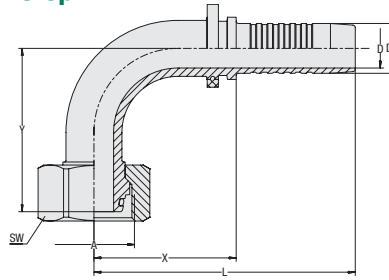
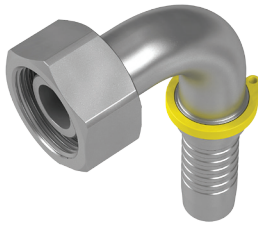

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**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOBL 90° (Light Series) with Block Stop**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta$ plus  
**Sealing Material** NBR (Buna-N®)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	M14x1,5	-04	3,9	6,7	29,5	59,5	29,0	17	4,0	11261N06069	HCS-06-DKOB-8L-090-S-OR-B-M-W3	
					.15	.26	1.16	2.34	1.14	.67	8.71			
06	1/4"	-04	M16x1,5	-05	3,9	6,7	31,0	61,0	31,5	19	5,4	11261N06089	HCS-06-DKOB-10L-090-S-OR-B-M-W3	
					.15	.26	1.22	2.40	1.24	.75	11.84			
08	5/16"	-05	M16x1,5	-05	5,4	8,2	31,0	61,0	31,5	19	5,5	11261N08089	HCS-08-DKOB-10L-090-S-OR-B-M-W3	
					.21	.32	1.22	2.40	1.24	.75	12.15			
08	5/16"	-05	M18x1,5	-06	5,4	8,2	31,0	61,0	31,5	22	6,7	11261N08109	HCS-08-DKOB-12L-090-S-OR-B-M-W3	
					.21	.32	1.22	2.40	1.24	.87	14.73			
10	3/8"	-06	M18x1,5	-06	6,5	9,9	37,5	71,0	36,0	22	8,4	11261N10109	HCS-10-DKOB-12L-090-S-OR-B-M-W3	
					.26	.39	1.48	2.80	1.42	.87	18.52			
12	1/2"	-08	M22x1,5	-08	9,5	13,0	40,5	76,0	42,5	27	12,9	11261N12129	HCS-12-DKOB-15L-090-S-OR-B-M-W3	
					.37	.51	1.59	2.99	1.67	1.06	28.42			
16	5/8"	-10	M26x1,5	-10	12,6	16,0	45,5	84,0	52,5	32	18,5	11261N16169	HCS-16-DKOB-18L-090-S-OR-B-M-W3	
					.50	.63	1.79	3.31	2.07	1.26	40.81			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



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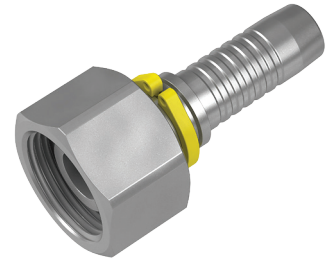
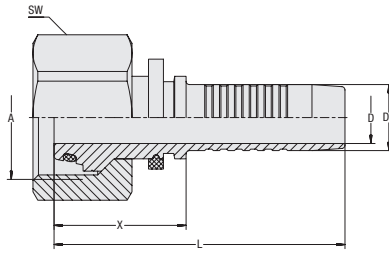


**ecovos™**
**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOBS (Heavy Series) with Block Stop**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta$ plus  
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal size DN 16)


**A**

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	M18x1,5	-04	3,9	6,7	26,0	55,5	22	5,5	11271N06	HCS-06-DKOB-10S-S-OR-B-M-W3
					.15	.26	1.02	2.19	.87	12.13		
06	1/4"	-04	M16x1,5	-03	3,9	6,7	24,5	54,0	19	4,0	11271N0605	HCS-06-DKOB-8S-S-OR-B-M-W3
					.15	.26	.96	2.13	.75	8.84		
08	5/16"	-05	M20x1,5	-05	5,4	8,2	28,5	58,5	24	6,7	11271N08	HCS-08-DKOB-12S-S-OR-B-M-W3
					.21	.32	1.12	2.30	.94	14.73		
08	5/16"	-05	M18x1,5	-04	5,4	8,2	26,0	55,5	22	5,6	11271N0806	HCS-08-DKOB-10S-S-OR-B-M-W3
					.21	.32	1.02	2.19	.87	12.44		
10	3/8"	-06	M20x1,5	-05	6,5	9,9	26,0	59,0	24	7,1	11271N1008	HCS-10-DKOB-12S-S-OR-B-M-W3
					.26	.39	1.02	2.32	.94	15.59		
12	1/2"	-08	M24x1,5	-08	9,5	13,0	29,5	65,0	30	12,3	11271N12	HCS-12-DKOB-16S-S-OR-B-M-W3
					.37	.51	1.16	2.56	1.18	27.06		
16	5/8"	-10	M30x2	-10	12,6	16,0	32,0	70,5	36	18,7	11271N16	HCS-16-DKOB-20S-S-OR-B-M-W3
					.50	.63	1.26	2.78	1.42	41.19		

**Related Products and Accessories**

**Swage Ferrules**

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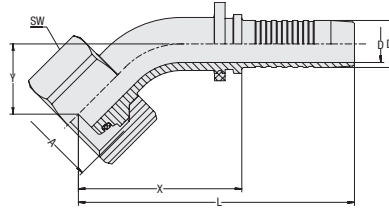
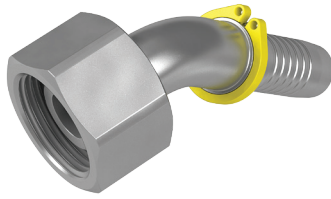

**POWERVOS Version**

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**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOBS 45° (Heavy Series) with Block Stop**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal size DN 16)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	M16x1,5	-03	3,9	6,7	36,0	66,0	16,0	19	4,4	11271N06054	HCS-06-DKOB-8S-045-S-OR-B-M-W3	
					.15	.26	1.42	2.60	.63	.75	9.70			
06	1/4"	-04	M18x1,5	-04	3,9	6,7	38,5	68,5	18,5	22	6,3	11271N06064	HCS-06-DKOB-10S-045-S-OR-B-M-W3	
					.15	.26	1.52	2.70	.73	.87	13.91			
08	5/16"	-05	M18x1,5	-04	5,4	8,2	38,5	68,5	18,5	22	6,4	11271N08064	HCS-08-DKOB-10S-045-S-OR-B-M-W3	
					.21	.32	1.52	2.70	.73	.87	14.18			
08	5/16"	-05	M20x1,5	-05	5,4	8,2	39,0	69,0	18,0	24	7,3	11271N08084	HCS-08-DKOB-12S-045-S-OR-B-M-W3	
					.21	.32	1.54	2.72	.71	.94	16.12			
10	3/8"	-06	M20x1,5	-05	6,5	9,9	41,5	74,5	17,5	24	8,4	11271N10084	HCS-10-DKOB-12S-045-S-OR-B-M-W3	
					.26	.39	1.63	2.93	.69	.94	18.48			
12	1/2"	-08	M24x1,5	-08	9,5	13,0	49,0	84,0	22,0	30	14,4	11271N12124	HCS-12-DKOB-16S-045-S-OR-B-M-W3	
					.37	.51	1.93	3.31	.87	1.18	31.82			
16	5/8"	-10	M30x2	-10	12,6	16,0	55,5	94,0	24,0	36	21,8	11271N16164	HCS-16-DKOB-20S-045-S-OR-B-M-W3	
					.50	.63	2.19	3.70	.94	1.42	48.02			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



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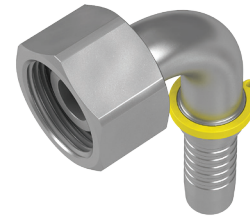
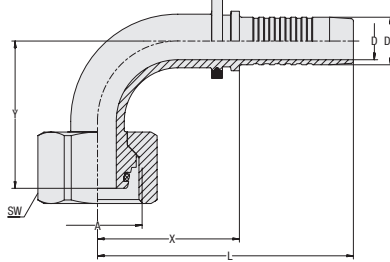


**ecovos™**
**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOBS 90° (Heavy Series) with Block Stop**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)

Suitable for use with mobile interlocking protection (nominal size DN 16)


**A**

Hose Size			Connection Size		Dimensions (mm/in)								Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
06	1/4"	-04	M16x1,5	-03	3,9 .15	6,7 .26	29,5 1.16	59,5 2.34	29,0 1.14	19 .75	4,7 10.32	11271N06059	HCS-06-DKOB-8S-090-S-OR-B-M-W3		
06	1/4"	-04	M18x1,5	-04	3,9 .15	6,7 .26	31,0 1.22	61,0 2.40	32,0 1.26	22 .87	7,8 17.13	11271N06069	HCS-06-DKOB-10S-090-S-OR-B-M-W3		
08	5/16"	-05	M18x1,5	-04	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	32,0 1.26	22 .87	7,8 17.13	11271N08069	HCS-08-DKOB-10S-090-S-OR-B-M-W3		
08	5/16"	-05	M20x1,5	-05	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	31,5 1.24	24 .94	6,8 14.88	11271N08089	HCS-08-DKOB-12S-090-S-OR-B-M-W3		
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,9 .39	37,5 1.48	71,0 2.80	36,0 1.42	24 .94	9,5 20.93	11271N10089	HCS-10-DKOB-12S-090-S-OR-B-M-W3		
12	1/2"	-08	M24x1,5	-08	9,5 .37	13,0 .51	40,0 1.57	75,5 2.97	44,5 1.75	30 1.18	15,9 35.08	11271N12129	HCS-12-DKOB-16S-090-S-OR-B-M-W3		
16	5/8"	-10	M30x2	-10	12,6 .50	16,0 .63	48,0 1.89	86,0 3.39	49,5 1.95	36 1.42	24,0 52.83	11271N16169	HCS-16-DKOB-20S-090-S-OR-B-M-W3		

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Mobile Interlocking Protection**

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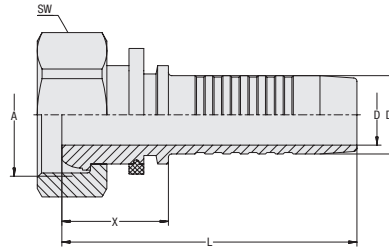
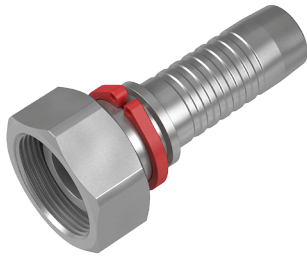
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**Straight Insert with Female Metric Nut Thread  
Type DKK**

ecovos™

A



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Metal Seat (suitable for bore type Y)  
**Standard** DIN 3863-B  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
19	3/4"	-12	M30x1,5	-12	14,8	19,1	26,0	72,0	36	16,5	11241N20	HCS-19-DKK-22LL-S-M-W3
					.58	.75	1.02	2.83	1.42	36.38		
25	1"	-16	M38x1,5	-16	20,0	25,9	27,0	82,0	46	29,8	11241N25	HCS-25-DKK-28LL-S-M-W3
					.79	1.02	1.06	3.23	1.81	65.71		
31	1 1/4"	-20	M45x1,5	-20	26,0	32,5	28,0	88,0	50	37,1	11241N32	HCS-31-DKK-35LL-S-M-W3
					1.02	1.28	1.10	3.46	1.97	81.81		
38	1 1/2"	-24	M52x1,5	-24	31,0	38,9	28,5	96,0	60	56,0	11241N40	HCS-38-DKK-42LL-S-M-W3
					1.22	1.53	1.12	3.78	2.36	123.48		
51	2"	-32	M65x2	-32	40,0	51,6	32,5	107,5	75	113,2	11241N50	HCS-51-DKK-50LL-S-M-W3
					1.57	2.03	1.28	4.23	2.95	249.61		

**Related Products and Accessories**



Swage Ferrules

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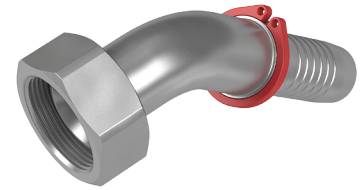
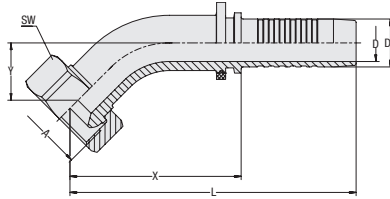
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**ecoivos™**
**45° Elbow Insert with Female Metric Thread and Metal Seat  
Type DKK 45°**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Metal Seat (suitable for bore type Y)  
**Standard** DIN 3863-B

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (*9/163) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
19	3/4"	-12	M30x1,5	-12	14,8	19,1	68,0	114,0	26,0	36	24,4	11241N20204	HCS-19-DKK-22LL-045-S-M-W3	
					.58	.75	2.68	4.49	1.02	1.42	53.80			
25	1"	-16	M38x1,5	-16	20,0	25,9	88,5	143,5	32,5	46	46,4	11241N25254	HCS-25-DKK-28LL-045-S-M-W3	
					.79	1.02	3.48	5.65	1.28	1.81	102.31			
31	1 1/4"	-20	M45x1,5	-20	26,0	32,5	109,5	169,0	36,0	50	68,7	11241N32324	HCS-31-DKK-35LL-045-S-M-W3	
					1.02	1.28	4.31	6.65	1.42	1.97	151.48			
38	1 1/2"	-24	M52x1,5	-24	31,0	38,9	131,5	199,0	52,0	60	116,7	11241N40404	HCS-38-DKK-42LL-045-S-M-W3	
					1.22	1.53	5.18	7.83	2.05	2.36	257.32			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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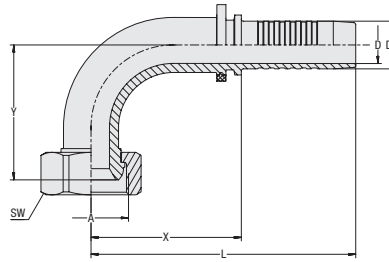
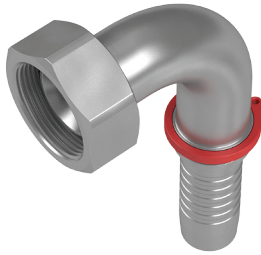

**90° Version**

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**90° Elbow Insert with Female Metric Thread and Metal Seat  
Type DKK 90°**

ecoVOS™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Metal Seat (suitable for bore type Y)  
**Standard** DIN 3863-B  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
19	3/4"	-12	M30x1,5	-12	14,8	19,1	60,2	106,0	54,0	36	28,0	11241N20209	HCS-19-DKK-22LL-090-S-M-W3	
					.58	.75	2.37	4.17	2.13	1.42	61.74			
25	1"	-16	M38x1,5	-16	20,0	25,9	78,0	133,0	70,9	46	53,9	11241N25259	HCS-25-DKK-28LL-090-S-M-W3	
					.79	1.02	3.07	5.24	2.79	1.81	118.85			
31	1 1/4"	-20	M45x1,5	-20	26,0	32,5	102,0	162,0	81,0	50	81,5	11241N32329	HCS-31-DKK-35LL-090-S-M-W3	
					1.02	1.28	4.02	6.38	3.19	1.97	179.71			
38	1 1/2"	-24	M52x1,5	-24	31,0	38,9	112,5	180,0	108,5	60	138,0	11241N40409	HCS-38-DKK-42LL-090-S-M-W3	
					1.22	1.53	4.43	7.09	4.27	2.36	304.29			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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ECOVOS VA Version

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45° Version

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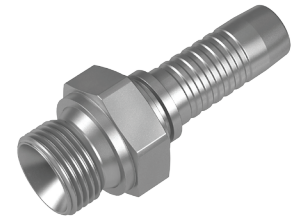
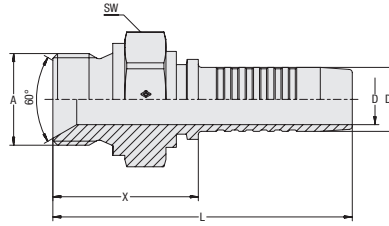


**ecovos™**
**Straight Insert with Male BSPP Thread and 60° Conical Bore  
Type AGR**

**Connection Type** Male BSPP Thread  
**Sealing Type** 60° Conical Bore  
**Standard** ISO 8434-6, BS 5200

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)						Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/16) ca. per 100	Part Numbers	Ordering Codes	
06	1/4"	-04	G 1/4"	-04	3,9	6,7	29,0	59,0	19	3,9	11301N06	HCS-06-AGR-04-M-W3	
					.15	.26	1.14	2.32	.75	8.49			
06	1/4"	-04	G 3/8"	-06	3,9	6,7	30,5	60,5	22	5,3	11301N0610	HCS-06-AGR-06-M-W3	
					.15	.26	1.20	2.38	.87	11.69			
06	1/4"	-04	G 1/2"	-08	3,9	6,7	33,5	64,0	27	8,8	11301N0612	HCS-06-AGR-08-M-W3	
					.15	.26	1.32	2.52	1.06	19.29			
08	5/16"	-05	G 1/4"	-04	5,4	8,2	28,5	59,0	19	4,0	11301N0806	HCS-08-AGR-04-M-W3	
					.21	.32	1.12	2.32	.75	8.82			
08	5/16"	-05	G 3/8"	-06	5,4	8,2	30,0	60,5	22	5,5	11301N0810	HCS-08-AGR-06-M-W3	
					.21	.32	1.18	2.38	.87	12.13			
08	5/16"	-05	G 1/2"	-08	5,4	8,2	33,5	64,0	27	9,0	11301N0812	HCS-08-AGR-08-M-W3	
					.21	.32	1.32	2.52	1.06	19.85			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	30,0	63,5	22	6,3	11301N10	HCS-10-AGR-06-M-W3	
					.26	.39	1.18	2.50	.87	13.78			
10	3/8"	-06	G 1/2"	-08	6,5	9,9	33,5	67,0	27	9,0	11301N1012	HCS-10-AGR-08-M-W3	
					.26	.39	1.32	2.64	1.06	19.85			
12	5/16"	-05	G 1/2"	-08	9,5	13,0	34,5	70,0	27	10,1	11301N12	HCS-12-AGR-08-M-W3	
					.37	.51	1.36	2.76	1.06	22.27			
12	5/16"	-05	G 3/8"	-06	9,5	13,0	31,0	66,5	22	6,7	11301N1210	HCS-12-AGR-06-M-W3	
					.26	.38	1.10	2.74	.87	14.99			
12	5/16"	-05	G 5/8"	-10	9,5	13,0	36,5	72,0	28	11,7	11301N1216	HCS-12-AGR-10-M-W3	
					.37	.51	1.44	2.83	1.10	25.69			
12	5/16"	-05	G 3/4"	-12	9,5	13,0	37,0	72,6	32	13,3	11301N1220	HCS-12-AGR-12-M-W3	
					.37	.51	1.46	2.86	1.26	29.33			
16	5/8"	-10	G 5/8"	-10	12,6	16,0	36,5	75,0	30	12,4	11301N16	HCS-16-AGR-10-M-W3	
					.50	.63	1.44	2.95	1.18	27.34			
16	5/8"	-10	G 3/4"	-12	12,6	16,0	37,5	76,0	32	13,9	11301N1620	HCS-16-AGR-12-M-W3	
					.50	.63	1.48	2.99	1.26	30.65			
19	3/4"	-12	G 3/4"	-12	14,8	19,1	38,0	84,0	32	16,6	11301N20	HCS-19-AGR-12-M-W3	
					.58	.75	1.50	3.31	1.26	36.60			
19	3/4"	-12	G 1"	-16	14,8	19,1	42,0	88,0	41	24,4	11301N2025	HCS-19-AGR-16-M-W3	
					.58	.75	1.65	3.46	1.61	53.69			
25	5/16"	-05	G 1"	-16	20,0	25,9	43,0	98,5	41	30,8	11301N25	HCS-25-AGR-16-M-W3	
					.79	1.02	1.69	3.88	1.61	67.91			
25	5/16"	-05	G 1 1/4"	-20	20,0	25,9	45,5	100,5	50	40,2	11301N2532	HCS-25-AGR-20-M-W3	
					.79	1.02	1.79	3.96	1.97	88.64			
31	1 1/4"	-20	G 1 1/4"	-20	26,0	32,5	46,5	106,5	50	47,1	11301N32	HCS-31-AGR-20-M-W3	
					1.02	1.28	1.83	4.19	1.97	103.90			
38	1 1/2"	-24	G 1 1/2"	-24	31,0	38,9	52,5	120,5	55	69,3	11301N40	HCS-38-AGR-24-M-W3	
					1.22	1.53	2.07	4.74	2.17	152.81			
51	2"	-32	G 2"	-32	40,0	51,6	60,0	135,5	70	134,6	11301N50	HCS-51-AGR-32-M-W3	
					1.57	2.03	2.36	5.33	2.76	296.79			

**Related Products and Accessories**

**Swage Ferrules**

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**ECOVOS VA Version**

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**MULTIVOS Version**

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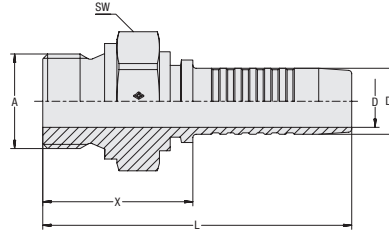
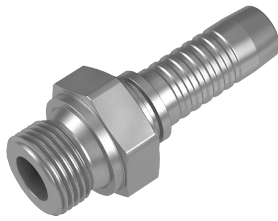

**Mobile Interlocking Protection**

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**Straight Insert with Male BSPP Thread  
Type AGRF**

ecovos™



**Connection Type** Male BSPP Thread  
**Sealing Type** Sealing Surface

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions ( <sup>mm</sup> / <sub>in</sub> )						Weight ( <sup>kg</sup> / <sub>lbs</sub> ) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
06	1/4"	-04	G 1/4"	-04	3,9 .15	6,7 .26	19,5 .77	54,5 2.15	19 .75	3,1 6.90	11301N0606F	HCS-06-AGRF-04-M-W3	
10	3/8"	-06	G 1/4"	-04	6,5 .26	9,9 .39	20,0 .79	58,3 2.30	19 .75	3,7 8.16	11301N1006F	HCS-10-AGRF-04-M-W3	
10	3/8"	-06	G 3/8"	-06	6,5 .26	9,9 .39	23,3 .92	61,6 2.43	22 .87	5,6 12.35	11301N1010F	HCS-10-AGRF-06-M-W3	
10	3/8"	-06	G 1/2"	-08	6,5 .26	9,9 .39	25,9 1.02	64,2 2.53	27 1.06	8,5 18.74	11301N1012F	HCS-10-AGRF-08-M-W3	
12	1/2"	-08	G 3/8"	-06	9,5 .37	13,0 .51	22,7 .89	63,7 2.51	22 .87	5,8 12.79	11301N1210F	HCS-12-AGRF-06-M-W3	
12	1/2"	-08	G 1/2"	-08	9,5 .37	13,0 .51	25,3 1.00	66,3 2.61	27 1.06	8,5 18.74	11301N1212F	HCS-12-AGRF-08-M-W3	
12	1/2"	-08	G 3/4"	-12	9,5 .37	13,0 .51	30,6 1.20	71,6 2.82	32 1.26	14,5 31.97	11301N1220F	HCS-12-AGRF-12-M-W3	
16	5/8"	-10	G 3/4"	-12	12,6 .50	16,0 .63	30,6 1.20	74,6 2.94	32 1.26	14,0 30.87	11301N1620F	HCS-16-AGRF-12-M-W3	
19	3/4"	-12	G 3/4"	-12	14,8 .58	19,1 .75	30,7 1.21	82,7 3.26	32 1.26	15,0 33.08	11301N2020F	HCS-19-AGRF-12-M-W3	
19	3/4"	-12	G 1"	-16	14,8 .58	19,1 .75	36,5 1.44	88,5 3.48	41 1.61	28,5 62.84	11301N2025F	HCS-19-AGRF-16-M-W3	
25	1"	-16	G 1"	-16	20,0 .79	25,9 1.02	37,8 1.49	99,8 3.93	41 1.61	30,9 68.13	11301N2525F	HCS-25-AGRF-16-M-W3	
25	1"	-16	G 1 1/4"	-20	20,0 .79	25,9 1.02	40,2 1.58	102,2 4.02	50 1.97	48,7 107.38	11301N2532F	HCS-25-AGRF-20-M-W3	
31	1 1/4"	-20	G 1 1/4"	-20	26,0 1.02	32,5 1.28	48,2 1.90	108,2 4.26	50 1.97	48,6 107.16	11301N3232F	HCS-31-AGRF-20-M-W3	

**Related Products and Accessories**



Swage Ferrules

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Mobile Interlocking Protection

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ECOVOS VA Version

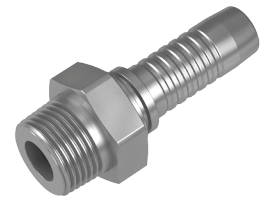
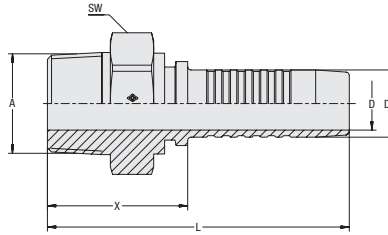
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**ecoVOS™**
**Straight Insert with Male BSPT Thread  
Type AGRK**
**Connection Type** Male BSPT Thread  
**Sealing Type** Tapered Thread

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

 Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

**A**

Hose Size			Connection Size		Dimensions ( <sup>mm</sup> / <sub>in</sub> )					Weight ( <sup>kg</sup> / <sub>lbs</sub> ) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
06	1/4"	-04	R 1/8"	-03	3,9	6,7	23,4	53,6	14	2,0	11301N0605K	HCS-06-AGRK-03-M-W3
					.15	.26	.92	2.11	.55	4.41		
06	1/4"	-04	R 1/4"	-04	3,9	6,7	30,8	61,0	17	3,1	11301N0606K	HCS-06-AGRK-04-M-W3
					.15	.26	1.21	2.40	.67	6.84		
06	1/4"	-04	R 3/8"	-06	3,9	6,7	30,5	60,7	19	4,8	11301N0610K	HCS-06-AGRK-06-M-W3
					.15	.26	1.20	2.39	.75	10.58		
08	5/16"	-05	R 3/8"	-06	5,4	8,0	30,9	61,1	19	4,5	11301N0810K	HCS-08-AGRK-06-M-W3
					.21	.31	1.22	2.41	.75	9.92		
10	3/8"	-06	R 3/8"	-06	6,5	9,6	30,3	63,8	19	5,1	11301N1010K	HCS-10-AGRK-06-M-W3
					.26	.38	1.19	2.51	.75	11.25		
10	3/8"	-06	R 1/2"	-08	6,5	9,6	36,7	70,2	22	8,6	11301N1012K	HCS-10-AGRK-08-M-W3
					.26	.38	1.44	2.76	.87	18.96		
12	1/2"	-08	R 1/2"	-08	9,5	12,8	37,4	72,9	22	8,6	11301N1212K	HCS-12-AGRK-08-M-W3
					.37	.50	1.47	2.87	.87	18.96		
16	5/8"	-10	R 5/8"	-10	12,6	16,0	39,3	77,8	27	11,3	11301N1616K	HCS-16-AGRK-10-M-W3
					.50	.63	1.55	3.06	1.06	24.92		
16	5/8"	-10	R 3/4"	-12	12,6	16,0	41,6	80,1	30	15,0	11301N1620K	HCS-16-AGRK-12-M-W3
					.50	.63	1.64	3.15	1.18	33.08		
19	3/4"	-12	R 3/4"	-12	14,8	19,1	40,6	86,6	30	15,8	11301N2020K	HCS-19-AGRK-12-M-W3
					.58	.75	1.60	3.41	1.18	34.84		
25	1"	-16	R 1"	-16	20,0	25,9	55,2	104,3	36	28,6	11301N2525K	HCS-25-AGRK-16-M-W3
					.79	1.02	2.17	4.11	1.42	63.06		
31	1 1/4"	-20	R 1 1/4"	-20	26,0	32,5	60,0	116,0	46	50,0	11301N3232K	HCS-31-AGRK-20-M-W3
					1.02	1.28	2.36	4.57	1.81	110.25		
38	1 1/2"	-24	R 1 1/2"	-24	31,0	38,9	57,8	125,5	50	66,5	11301N4040K	HCS-38-AGRK-24-M-W3
					1.22	1.53	2.28	4.94	1.97	146.63		

**Related Products and Accessories**

**Swage Ferrules**

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**Mobile Interlocking Protection**

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**ECOVS VA Version**

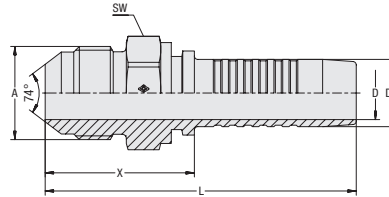
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**Straight Insert with Male UN/UNF Thread and 74° Taper Type AGJ**

ecovos™

A



**Connection Type** Male UN/UNF Thread  
**Sealing Type** 74° Taper  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta$ plus

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)						Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	per 100	Part Numbers	Ordering Codes	
06	1/4"	-04	7/16"-20 UNF	-04	3,9 .15	6,7 .26	28,0 1.10	58,0 2.28	14 .55	2,4 .09	11311N06	HCS-06-AGJ-04-M-W3	
06	1/4"	-04	1/2"-20 UNF	-05	3,9 .15	6,7 .26	28,0 1.10	58,0 2.28	14 .55	2,5 .10	11311N0608	HCS-06-AGJ-05-M-W3	
06	1/4"	-04	9/16"-18 UNF	-06	3,9 .15	6,7 .26	28,0 1.10	58,0 2.28	17 .67	3,1 .12	11311N0610	HCS-06-AGJ-06-M-W3	
08	5/16"	-05	1/2"-20 UNF	-05	5,4 .21	8,2 .32	28,0 1.10	58,0 2.28	14 .55	2,7 .11	11311N08	HCS-08-AGJ-05-M-W3	
08	5/16"	-05	9/16"-18 UNF	-06	5,4 .21	8,2 .32	28,0 1.10	58,0 2.28	17 .67	3,2 .12	11311N0810	HCS-08-AGJ-06-M-W3	
08	5/16"	-05	3/4"-16 UNF	-08	5,4 .21	8,2 .32	31,5 1.24	62,0 2.44	22 .87	5,3 .21	11311N0812	HCS-08-AGJ-08-M-W3	
10	3/8"	-06	9/16"-18 UNF	-06	6,5 .26	9,9 .39	28,0 1.10	61,5 2.42	17 .67	3,9 .15	11311N10	HCS-10-AGJ-06-M-W3	
10	3/8"	-06	1/2"-20 UNF	-05	6,5 .26	9,9 .39	29,0 1.14	62,5 2.46	14 .55	3,1 .12	11311N1008	HCS-10-AGJ-05-M-W3	
10	3/8"	-06	3/4"-16 UNF	-08	6,5 .26	9,9 .39	31,5 1.24	65,0 2.56	22 .87	5,9 .23	11311N1012	HCS-10-AGJ-08-M-W3	
10	3/8"	-06	7/8"-14 UNF	-10	6,5 .26	9,9 .39	35,0 1.38	68,5 2.70	24 .94	7,5 .29	11311N1016	HCS-10-AGJ-10-M-W3	
12	1/2"	-08	3/4"-16 UNF	-08	9,5 .37	13,0 .51	32,5 1.28	68,0 2.68	22 .87	6,7 .26	11311N12	HCS-12-AGJ-08-M-W3	
12	1/2"	-08	7/8"-14 UNF	-10	9,5 .37	13,0 .51	35,5 1.40	71,0 2.80	24 .94	8,3 .32	11311N1216	HCS-12-AGJ-10-M-W3	
12	1/2"	-08	1 1/16"-12 UN	-12	9,5 .37	13,0 .51	40,0 1.57	75,5 2.97	30 1.18	13,0 .51	11311N1220	HCS-12-AGJ-12-M-W3	
16	5/8"	-10	7/8"-14 UNF	-10	12,6 .50	16,0 .63	35,5 1.40	74,0 2.91	24 .94	8,8 .34	11311N16	HCS-16-AGJ-10-M-W3	
16	5/8"	-10	1 1/16"-12 UN	-12	12,6 .50	16,0 .63	40,0 1.57	78,5 3.09	30 1.18	13,2 .52	11311N1620	HCS-16-AGJ-12-M-W3	
19	3/4"	-12	1 1/16"-12 UN	-12	14,8 .58	19,1 .75	40,5 1.59	86,5 3.41	30 1.18	15,5 .61	11311N20	HCS-19-AGJ-12-M-W3	
19	3/4"	-12	1 5/16"-12 UN	-16	14,8 .58	19,1 .75	43,0 1.69	89,0 3.50	36 1.42	20,4 .80	11311N2025	HCS-19-AGJ-16-M-W3	
25	1"	-16	1 5/16"-12 UN	-16	20,0 .79	25,9 1.02	44,5 1.75	99,5 3.92	36 1.42	22,6 .89	11311N25	HCS-25-AGJ-16-M-W3	
25	1"	-16	1 5/8"-12 UN	-20	20,0 .79	25,9 1.02	48,0 1.89	103,0 4.06	46 1.81	44,0 1.73	11311N2532	HCS-25-AGJ-20-M-W3	
31	1 1/4"	-20	1 5/8"-12 UN	-20	26,0 1.02	32,5 1.28	49,0 1.93	109,0 4.29	46 1.81	43,6 1.72	11311N32	HCS-31-AGJ-20-M-W3	
31	1 1/4"	-20	1 7/8"-12 UN	-24	26,0 1.02	32,5 1.28	54,0 2.13	114,0 4.49	50 1.97	60,3 2.37	11311N3240	HCS-31-AGJ-24-M-W3	
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0 1.22	38,9 1.53	55,5 2.19	123,0 4.84	50 1.97	61,1 2.41	11311N40	HCS-38-AGJ-24-M-W3	
51	2"	-32	2 1/2"-12 UN	-32	40,0 1.57	51,6 2.03	67,0 2.64	142,0 5.59	65 2.56	129,0 5.08	11311N50	HCS-51-AGJ-32-M-W3	

**Related Products and Accessories**



**Swage Ferrules**

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**MULTIVOS Version**

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**Mobile Interlocking Protection**

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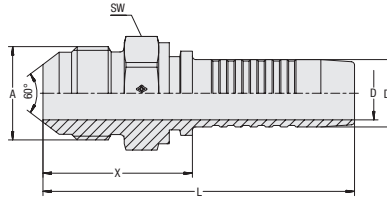


**ecovos™**
**Straight Insert with Male BSPP Thread and 60° Taper  
Type AGJG**

**Connection Type** Male BSPP Thread  
**Sealing Type** 60° Taper  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal size DN 19)


**A**

Hose Size			Connection Size		Dimensions ( <sup>mm</sup> / <sub>in</sub> )						Weight ( <sup>kg</sup> / <sub>lbs</sub> ) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
06	1/4"	-04	G 1/4"	-04	3,9 .15	6,7 .26	28,3 1.11	58,5 2.30	17 .67	3,2 .12	11311N06060G	HCS-06-AGJG-04-M-W3-KOM	
08	5/16"	-05	G 3/8"	-06	5,4 .21	8,2 .32	31,3 1.23	61,5 2.42	19 .75	4,0 .16	11311N08100G	HCS-08-AGJG-06-M-W3-KOM	
10	3/8"	-06	G 3/8"	-06	6,5 .26	9,9 .39	31,3 1.23	64,8 2.55	19 .75	5,3 .21	11311N10100G	HCS-10-AGJG-06-M-W3-KOM	
12	1/2"	-08	G 1/2"	-08	9,5 .37	13,0 .51	35,6 1.40	71,1 2.80	22 .87	5,9 .23	11311N12120G	HCS-12-AGJG-08-M-W3-KOM	
19	3/4"	-12	G 3/4"	-12	14,8 .58	19,1 .75	39,7 1.56	85,7 3.37	30 1.18	13,1 .52	11311N20200G	HCS-19-AGJG-12-M-W3-KOM	

**Related Products and Accessories**

**Swage Ferrules**

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**45° Version**

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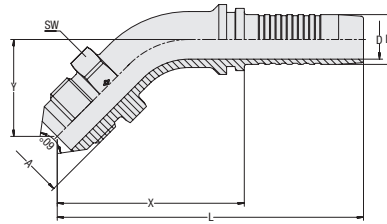
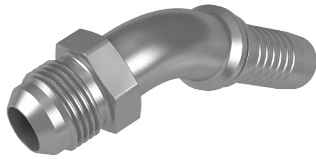

**90° Version**

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**45° Elbow Insert with Male BSPP Thread and 60° Taper  
Type AGJG 45°**

ecovos™



**Connection Type** Male BSPP Thread  
**Sealing Type** 60° Taper  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection  
 (nominal size DN 19)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (*9/163) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	G 1/4"	-04	3,9	6,7	50,4	80,6	26,5	17	3,6	11311N06064G	HCS-06-AGJG-04-045-M-W3-KOM	
					.15	.26	1.98	3.17	1.04	.67	7.94			
08	5/16"	-05	G 3/8"	-06	5,4	8,2	51,3	81,5	28,0	19	5,0	11311N08104G	HCS-08-AGJG-06-045-M-W3-KOM	
					.21	.32	2.02	3.21	1.10	.75	10.91			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	53,4	87,2	25,5	19	6,5	11311N10104G	HCS-10-AGJG-06-045-M-W3-KOM	
					.26	.39	2.10	3.43	1.00	.75	14.33			
12	1/2"	-08	G 1/2"	-08	9,5	13,0	55,4	90,9	29,0	22	7,2	11311N12124G	HCS-12-AGJG-08-045-M-W3-KOM	
					.37	.51	2.18	3.58	1.14	.87	15.88			
19	3/4"	-12	G 3/4"	-12	14,8	19,1	72,2	118,7	39,5	30	15,9	11311N20204G	HCS-19-AGJG-12-045-M-W3-KOM	
					.58	.75	2.84	4.67	1.56	1.18	35.06			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**Mobile Interlocking Protection**

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**Straight Version**

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**90° Version**

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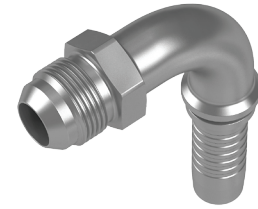
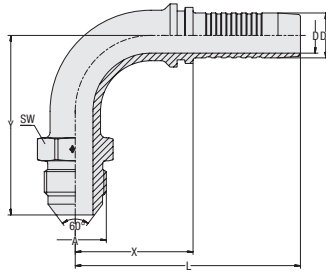


**ecovos™**
**90° Elbow Insert with Male BSPP Thread and 60° Taper  
Type AGJG 90°**

**Connection Type** Male BSPP Thread  
**Sealing Type** 60° Taper  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
 (nominal size DN 19)


**A**

Hose Size			Connection Size		Dimensions ( <sup>mm</sup> / <sub>in</sub> )								Weight ( <sup>kg</sup> / <sub>lbs</sub> ) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
06	1/4"	-04	G 1/4"	-04	3,9	6,7	32,8	63,0	46,1	17	3,9	11311N06069G	HCS-06-AGJG-04-090-M-W3-KOM		
					.15	.26	1.29	2.48	1.81	.67	8.60				
08	5/16"	-05	G 3/8"	-06	5,4	8,2	32,3	62,5	48,0	19	5,4	11311N08109G	HCS-08-AGJG-06-090-M-W3-KOM		
					.21	.32	1.27	2.46	1.89	.75	11.91				
10	3/8"	-06	G 3/8"	-06	6,5	9,9	37,0	70,5	51,9	19	7,7	11311N10109G	HCS-10-AGJG-06-090-M-W3-KOM		
					.26	.39	1.46	2.78	2.04	.75	16.98				
12	1/2"	-08	G 1/2"	-08	9,5	13,0	38,5	74,0	53,6	22	8,4	11311N12129G	HCS-12-AGJG-08-090-M-W3-KOM		
					.37	.51	1.52	2.91	2.11	.87	18.41				
19	3/4"	-12	G 3/4"	-12	14,8	19,1	62,8	108,8	74,9	30	18,4	11311N20209G	HCS-19-AGJG-12-090-M-W3-KOM		
					.58	.75	2.47	4.28	2.95	1.18	40.57				

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Mobile Interlocking Protection**

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**Straight Version**

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**45° Version**

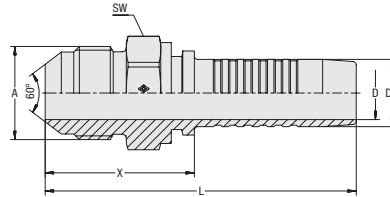
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**Straight Insert with Male Metric Thread and 60° Taper  
Type AGJM**

ecovos™

A



**Connection Type** Male Metric Thread  
**Sealing Type** 60° Taper  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	D	D1	X	L	SW (Hex)				
06	1/4"	-04	M14x1,5	3,9	6,7	29,6	59,8	14	2,7	11311N06000M14	HCS-06-AGJM-M14-M-W3-KOM	
				.15	.26	1.17	2.35	.55	5.95			
06	1/4"	-04	M16x1,5	3,9	6,7	30,6	60,8	17	4,0	11311N06000M16	HCS-06-AGJM-M16-M-W3-KOM	
				.15	.26	1.20	2.39	.67	8.82			
10	3/8"	-06	M16x1,5	6,5	9,9	30,6	69,1	17	4,0	11311N10000M16	HCS-10-AGJM-M16-M-W3-KOM	
				.26	.39	1.20	2.72	.67	8.82			
10	3/8"	-06	M18x1,5	6,5	9,9	31,4	64,9	19	5,0	11311N10000M18	HCS-10-AGJM-M18-M-W3-KOM	
				.26	.39	1.24	2.56	.75	11.03			
10	3/8"	-06	M20x1,5	6,5	9,9	34,6	68,1	22	7,0	11311N10000M20	HCS-10-AGJM-M20-M-W3-KOM	
				.26	.39	1.36	2.68	.87	15.44			
12	1/2"	-08	M22x1,5	9,5	13,0	36,2	71,7	22	8,2	11311N12000M22	HCS-12-AGJM-M22-M-W3-KOM	
				.37	.51	1.43	2.82	.87	18.08			
12	1/2"	-08	M24x1,5	9,5	13,0	38,4	73,9	24	10,2	11311N12000M24	HCS-12-AGJM-M24-M-W3-KOM	
				.37	.51	1.51	2.91	.94	22.49			
16	5/8"	-10	M24x1,5	12,6	16,0	39,0	77,5	24	9,7	11311N16000M24	HCS-16-AGJM-M24-M-W3-KOM	
				.50	.63	1.54	3.05	.94	21.39			
16	5/8"	-10	M28x1,5	12,6	16,0	42,2	80,7	30	15,3	11311N16000M28	HCS-16-AGJM-M28-M-W3-KOM	
				.50	.63	1.66	3.18	1.18	33.74			
19	3/4"	-12	M30x1,5	14,8	19,1	44,8	90,8	30	18,3	11311N20000M30	HCS-19-AGJM-M30-M-W3-KOM	
				.58	.75	1.76	3.57	1.18	40.35			
25	1"	-16	M33x1,5	20,0	25,9	53,5	108,7	36	28,2	11311N25000M33	HCS-25-AGJM-M33-M-W3-KOM	
				.79	1.02	2.11	4.28	1.42	62.18			
31	1 1/4"	-20	M36x1,5	26,0	32,5	58,2	118,2	41	42,1	11311N32000M36	HCS-31-AGJM-M36-M-W3-KOM	
				1.02	1.28	2.29	4.65	1.61	92.83			
38	1 1/2"	-24	M42x1,5	31,0	38,9	60,6	128,3	46	52,7	11311N40000M42	HCS-38-AGJM-M42-M-W3-KOM	
				1.22	1.53	2.39	5.05	1.81	116.20			

**Related Products and Accessories**



Swage Ferrules

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Mobile Interlocking Protection

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90° Version

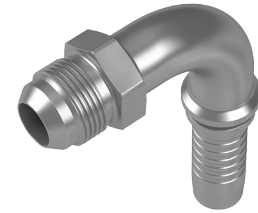
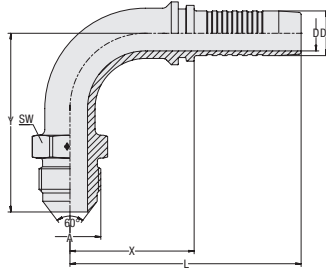
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**ecovos™**
**90° Elbow Insert with Male Metric Thread and 60° Taper  
Type AGJM 90°**

**Connection Type** Male Metric Thread  
**Sealing Type** 60° Taper  
**Standard** JIS 8363 (KOMATSU)  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$


**A**

Hose Size			Connection Size	Dimensions ( <sup>mm</sup> / <sub>in</sub> )							Weight ( <sup>kg</sup> / <sub>lbs</sub> ) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	D	D1	X	L	Y	SW (Hex)				
10	3/8"	-06	M18x1,5	6,5	9,9	37,0	70,5	52,5	19	8,3	11311N10009M18	HCS-10-AGJM-M18-090-M-W3-KOM	
				.26	.39	1.46	2.78	2.07	.75	18.30			
10	3/8"	-06	M20x1,5	6,5	9,9	37,0	70,5	55,7	22	10,2	11311N10009M20	HCS-10-AGJM-M20-090-M-W3-KOM	
				.26	.39	1.46	2.78	2.19	.87	22.49			
12	1/2"	-08	M20x1,5	9,5	13,0	38,5	74,0	55,7	22	11,4	11311N12009M20	HCS-12-AGJM-M20-090-M-W3-KOM	
				.37	.51	1.52	2.91	2.19	.87	25.14			

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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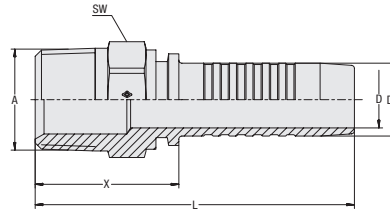

**Straight Version**

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**Straight Insert with Male NPTF Thread and 60° Conical Bore**  
**Type AGN**

ecovos™



**Connection Type** Male NPTF Thread  
**Sealing Type** Tapered Thread and 60° Conical Bore  
**Standard** SAE J 516

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta$ plus

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)		
06	1/4"	-04	1/4"-18 NPTF	-04	3,9	6,7	28,0	58,0	14	2,8	
					.15	.26	1.10	2.28	.55	6.06	
06	1/4"	-04	1/8"-27 NPTF	-03	3,9	6,7	23,0	53,0	12	1,9	
					.15	.26	.91	2.09	.47	4.08	
06	1/4"	-04	3/8"-18 NPTF	-06	3,9	6,7	28,5	58,5	19	3,9	
					.15	.26	1.12	2.30	.75	8.49	
08	5/16"	-05	1/4"-18 NPTF	-04	5,4	8,2	28,0	58,0	14	3,0	
					.21	.32	1.10	2.28	.55	6.50	
08	5/16"	-05	3/8"-18 NPTF	-06	5,4	8,2	28,5	59,0	19	4,1	
					.21	.32	1.12	2.32	.75	8.93	
10	3/8"	-06	3/8"-18 NPTF	-06	6,5	9,9	28,5	62,0	19	4,6	
					.26	.39	1.12	2.44	.75	10.14	
10	3/8"	-06	1/4"-18 NPTF	-04	6,5	9,9	29,0	62,5	14	3,6	
					.26	.39	1.14	2.46	.55	7.83	
10	3/8"	-06	1/2"-14 NPTF	-08	6,5	9,9	34,5	68,0	22	6,7	
					.26	.39	1.36	2.68	.87	14.77	
12	5/16"	-05	1/2"-14 NPTF	-08	9,5	13,0	35,0	70,5	22	7,5	
					.37	.51	1.38	2.78	.87	16.54	
12	5/16"	-05	3/8"-18 NPTF	-06	9,5	13,0	29,5	65,0	19	5,6	
					.37	.51	1.16	2.56	.75	12.35	
12	5/16"	-05	3/4"-14 NPTF	-12	9,5	13,0	37,0	72,5	27	10,4	
					.37	.51	1.46	2.85	1.06	22.82	
16	5/8"	-10	1/2"-14 NPTF	-08	12,6	16,0	36,0	74,5	22	8,4	
					.50	.63	1.42	2.93	.87	18.52	
16	5/8"	-10	3/4"-14 NPTF	-12	12,6	16,0	37,0	75,5	27	11,1	
					.50	.63	1.46	2.97	1.06	24.37	
19	3/4"	-12	3/4"-14 NPTF	-12	14,8	19,1	37,5	83,5	27	13,0	
					.58	.75	1.48	3.29	1.06	28.67	
19	3/4"	-12	1"-11,5 NPTF	-16	14,8	19,1	42,5	88,5	36	20,6	
					.58	.75	1.67	3.48	1.42	45.42	
25	5/16"	-05	1"-11,5 NPTF	-16	20,0	25,9	44,0	99,0	36	24,8	
					.79	1.02	1.73	3.90	1.42	54.68	
25	1"	-16	3/4"-14 NPTF	-12	20,0	25,9	39,0	94,0	32	20,4	
					.79	1.02	1.54	3.70	1.26	44.98	
25	5/16"	-05	1 1/4"-11,5 NPTF	-20	20,0	25,9	46,0	101,0	46	33,4	
					.79	1.02	1.81	3.98	1.81	73.65	
31	1 1/4"	-20	1 1/4"-11,5 NPTF	-20	26,0	32,5	47,0	107,0	46	39,1	
					1.02	1.28	1.85	4.21	1.81	86.11	
38	1 1/2"	-24	1 1/2"-11,5 NPTF	-24	31,0	38,9	51,0	118,5	50	53,7	
					1.22	1.53	2.01	4.67	1.97	118.41	
51	2"	-32	2"-11,5 NPTF	-32	40,0	51,6	56,0	131,0	65	119,6	
					1.57	2.03	2.20	5.16	2.56	263.61	

**Related Products and Accessories**



**Swage Ferrules**

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**ECOVOS VA Version**

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**MULTIVOS Version**

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**Mobile Interlocking Protection**

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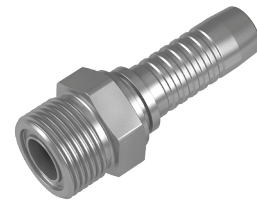
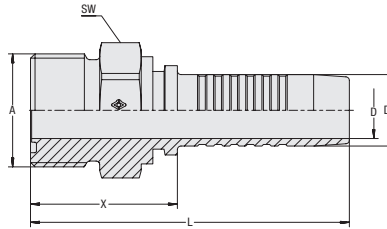


**ecoVOS™**
**Straight Insert with O-Ring Face Seal Connection  
Type ORFS**

**Connection Type** Male UN/UNF Thread  
**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)  
**Standard** ISO 8434-3

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)				Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
06	1/4"	-04	9/16-18 UNF	-04	3,9	6,7	24,5	54,5	17	3,0	11351N06	HCS-06-ORFS-04-M-W3
					.15	.26	.96	2.15	.67	6.62		
10	3/8"	-06	11/16-16 UN	-06	6,5	9,9	26,5	60,0	22	5,8	11351N10	HCS-10-ORFS-06-M-W3
					.26	.39	1.04	2.36	.87	12.79		
10	3/8"	-06	13/16-16 UN	-08	6,5	9,9	28,0	61,5	22	6,8	11351N1012	HCS-10-ORFS-08-M-W3
					.26	.39	1.10	2.42	.87	14.99		
10	3/8"	-06	1-14 UNS	-10	6,5	9,9	32,0	65,5	27	9,9	11351N1016	HCS-10-ORFS-10-M-W3
					.26	.39	1.26	2.58	1.06	21.72		
12	1/2"	-08	13/16-16 UN	-08	9,5	13,0	30,5	66,0	24	7,1	11351N12	HCS-12-ORFS-08-M-W3
					.37	.51	1.20	2.60	.94	15.66		
16	5/8"	-10	1-14 UNS	-10	12,6	16,0	35,0	73,5	30	12,5	11351N16	HCS-16-ORFS-10-M-W3
					.50	.63	1.38	2.89	1.18	27.56		
16	5/8"	-10	1 3/16-12 UN	-12	12,6	16,0	35,0	73,5	32	16,7	11351N1620	HCS-16-ORFS-12-M-W3
					.50	.63	1.38	2.89	1.26	36.71		
19	3/4"	-12	1 3/16-12 UN	-12	14,8	19,1	37,5	81,8	36	17,2	11351N20	HCS-19-ORFS-12-M-W3
					.58	.75	1.48	3.22	1.42	37.93		
25	1"	-16	1 7/16-12 UN	-16	20,0	25,9	43,0	98,5	41	28,5	11351N25	HCS-25-ORFS-16-M-W3
					.79	1.02	1.69	3.88	1.61	62.84		
31	1 1/4"	-20	1 11/16-12 UN	-20	26,0	32,5	43,5	103,5	46	44,6	11351N32	HCS-31-ORFS-20-M-W3
					1.02	1.28	1.71	4.07	1.81	98.23		
38	1 1/2"	-24	2-12 UN	-24	31,0	38,9	44,0	111,5	55	65,6	11351N40	HCS-38-ORFS-24-M-W3
					1.22	1.53	1.73	4.39	2.17	144.54		

**Related Products and Accessories**

**Swage Ferrules**

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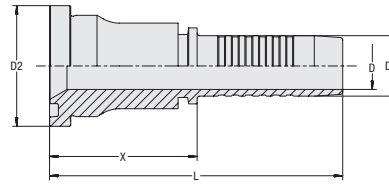

**Mobile Interlocking Protection**

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**Straight Insert with SAE Flange Adaptor  
Type SFL (3000 PSI Series)**

ecovos™



**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-1  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
 Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
12	1/2"	-8	1/2"	-08	9,5 .37	13,0 .51	30,2 1.19	45,5 1.79	81,0 3.19	11,7 25.80	11401N12	HCS-12-SFL-08-M-W3
12	1/2"	-8	3/4"	-12	9,5 .37	13,0 .51	38,1 1.50	57,5 2.26	93,0 3.66	19,4 42.78	21401N1220	HCS-12-SFL-12-B-W3
12	1/2"	-8	1"	-16	9,5 .37	13,0 .51	44,5 1.75	57,5 2.26	93,0 3.66	24,8 54.68	21401N1225	HCS-12-SFL-16-B-W3
16	5/8"	-10	3/4"	-12	12,6 .50	16,0 .63	38,1 1.50	46,0 1.81	84,5 3.33	17,8 39.25	11401N1620	HCS-16-SFL-12-M-W3
16	5/8"	-10	1/2"	-08	12,6 .50	16,0 .63	30,2 1.19	54,5 2.15	93,0 3.66	14,4 31.75	21401N1612	HCS-16-SFL-08-B-W3
16	5/8"	-10	1"	-16	12,6 .50	16,0 .63	44,5 1.75	45,5 1.79	84,0 3.31	25,1 55.35	21401N1625	HCS-16-SFL-16-B-W3
19	3/4"	-12	3/4"	-12	14,8 .58	19,1 .75	38,1 1.50	46,5 1.83	92,5 3.64	21,2 46.75	11401N20	HCS-19-SFL-12-M-W3
19	3/4"	-12	1"	-16	14,8 .58	19,1 .75	44,5 1.75	49,0 1.93	95,0 3.74	29,4 64.72	11401N2025	HCS-19-SFL-16-M-W3
19	3/4"	-12	1 1/4"	-20	14,8 .58	19,1 .75	50,8 2.00	44,0 1.73	90,0 3.54	29,0 63.95	21401N2032	HCS-19-SFL-20-B-W3
25	1"	-16	1"	-16	20,0 .79	25,9 1.02	44,5 1.75	48,0 1.89	103,0 4.06	32,9 72.54	11401N25	HCS-25-SFL-16-M-W3
25	1"	-16	1 1/4"	-20	20,0 .79	25,9 1.02	50,8 2.00	68,0 2.68	123,5 4.86	49,0 108.05	11401N2532	HCS-25-SFL-20-M-W3
25	1"	-16	3/4"	-12	20,0 .79	25,9 1.02	38,1 1.50	57,0 2.24	112,0 4.41	31,7 69.79	21401N2520	HCS-25-SFL-12-B-W3
25	1"	-16	1 1/2"	-24	20,0 .79	25,9 1.02	60,3 2.37	58,0 2.28	113,0 4.45	50,2 110.69	21401N2540	HCS-25-SFL-24-B-W3
31	1 1/4"	-20	1 1/4"	-20	26,0 1.02	32,5 1.28	50,8 2.00	69,5 2.74	129,5 5.10	49,9 110.03	11401N32	HCS-31-SFL-20-M-W3
31	1 1/4"	-20	1"	-16	26,0 1.02	32,5 1.28	44,5 1.75	59,5 2.34	119,5 4.70	47,8 105.29	21401N3225	HCS-31-SFL-16-B-W3
31	1 1/4"	-20	1 1/2"	-24	26,0 1.02	32,5 1.28	60,3 2.37	50,5 1.99	110,5 4.35	55,1 121.50	21401N3240	HCS-31-SFL-24-B-W3
38	1 1/2"	-24	1 1/2"	-24	31,0 1.22	38,9 1.53	60,3 2.37	59,5 2.34	127,0 5.00	64,6 142.44	11401N40	HCS-38-SFL-24-M-W3
38	1 1/2"	-24	1 1/4"	-20	31,0 1.22	38,9 1.53	71,4 2.81	64,5 2.54	132,0 5.20	65,40 144.21	21401N4032	HCS-38-SFL-20-B-W3
38	1 1/2"	-24	2"	-32	31,0 1.22	38,9 1.53	71,4 2.81	51,5 2.03	119,0 4.69	83,20 183.46	21401N4050	HCS-38-SFL-32-B-W3
51	2"	-32	2"	-32	40,0 1.57	51,6 2.03	71,4 2.81	72,0 2.83	147,0 5.79	127,85 281.91	11401N50	HCS-51-SFL-32-M-W3
51	2"	-32	1 1/2"	-24	40,0 1.57	51,6 2.03	60,3 2.37	69,5 2.74	144,5 5.69	120,30 265.26	21401N5040	HCS-51-SFL-24-B-W3

**Related Products and Accessories**



**Swage Ferrules**

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**Mobile Interlocking Protection**

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**90° Version**

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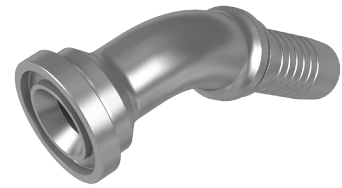
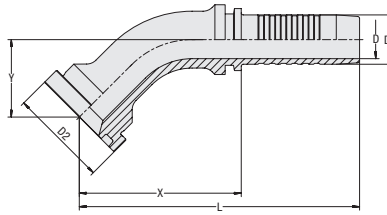


**ecoVOS™**
**45° Elbow Insert with SAE Flange Adaptor  
Type SFL 45° (3000 PSI Series)**

**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
12	1/2"	-08	1/2"	-08	9,5	13,0	30,2	50,0	85,5	20,5	10,6	11401N12124	HCS-12-SFL-08-045-M-W3	
					.37	.51	1.19	1.97	3.37	.81	23.26			
12	1/2"	-08	3/4"	-12	9,5	13,0	38,1	55,0	90,5	26,0	15,7	11401N12204	HCS-12-SFL-12-045-M-W3	
					.37	.51	1.50	2.17	3.56	1.02	34.62			
16	5/8"	-10	3/4"	-12	12,6	16,0	38,1	60,5	99,0	28,5	18,5	11401N16204	HCS-16-SFL-12-045-M-W3	
					.50	.63	1.50	2.38	3.90	1.12	40.79			
16	5/8"	-10	1/2"	-08	12,6	16,0	30,2	63,0	101,5	24,5	16,4	21401N16124	HCS-16-SFL-08-045-B-W3	
					.50	.63	1.19	2.48	4.00	.96	36.05			
16	5/8"	-10	1"	-16	12,6	16,0	44,5	69,5	108,0	27,0	30,6	21401N16254	HCS-16-SFL-16-045-B-W3	
					.50	.63	1.75	2.74	4.25	1.06	67.47			
19	3/4"	-12	3/4"	-12	14,8	19,1	38,1	62,5	108,5	30,0	22,3	11401N20204	HCS-19-SFL-12-045-M-W3	
					.58	.75	1.50	2.46	4.27	1.18	49.17			
19	3/4"	-12	1"	-16	14,8	19,1	44,5	66,5	112,5	29,0	28,8	11401N20254	HCS-19-SFL-16-045-M-W3	
					.58	.75	1.75	2.62	4.43	1.14	63.50			
19	3/4"	-12	1 1/4"	-20	14,8	19,1	50,8	72,5	118,5	29,5	35,3	21401N20324	HCS-19-SFL-20-045-B-W3	
					.58	.75	2.00	2.85	4.67	1.16	77.73			
25	1"	-16	1"	-16	20,0	25,9	44,5	82,5	137,5	35,0	40,7	11401N25254	HCS-25-SFL-16-045-M-W3	
					.79	1.02	1.75	3.25	5.41	1.38	89.74			
25	1"	-16	1 1/4"	-20	20,0	25,9	50,8	92,5	147,5	37,5	48,5	11401N25324	HCS-25-SFL-20-045-M-W3	
					.79	1.02	2.00	3.64	5.81	1.48	106.94			
25	1"	-16	3/4"	-12	20,0	25,9	38,1	71,0	126,0	27,0	35,5	21401N25204	HCS-25-SFL-12-045-B-W3	
					.79	1.02	1.50	2.80	4.96	1.06	78.28			
25	1"	-16	1 1/2"	-24	20,0	25,9	60,3	79,5	135,0	31,5	58,1	21401N25404	HCS-25-SFL-24-045-B-W3	
					.79	1.02	2.37	3.13	5.31	1.24	128.11			
31	1 1/4"	-20	1 1/4"	-20	26,0	32,5	50,8	97,0	157,0	35,0	60,4	11401N32324	HCS-31-SFL-20-045-M-W3	
					1.02	1.28	2.00	3.82	6.18	1.38	133.07			
31	1 1/4"	-20	1"	-16	26,0	32,5	44,5	81,5	141,5	30,5	55,6	21401N32254	HCS-31-SFL-16-045-B-W3	
					1.02	1.28	1.75	3.21	5.57	1.20	122.60			
31	1 1/4"	-20	1 1/2"	-24	26,0	32,5	60,3	102,5	162,5	40,0	75,4	21401N32404	HCS-31-SFL-24-045-B-W3	
					1.02	1.28	2.37	4.04	6.40	1.57	166.15			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,9	60,3	127,5	195,0	44,0	105,5	11401N40404	HCS-38-SFL-24-045-M-W3	
					1.22	1.53	2.37	5.02	7.68	1.73	232.52			
38	1 1/2"	-24	1 1/4"	-20	31,0	38,9	50,8	101,5	169,0	39,0	81,1	21401N40324	HCS-38-SFL-20-045-B-W3	
					1.22	1.53	2.00	4.00	6.65	1.54	178.72			
38	1 1/2"	-24	2"	-32	31,0	38,9	71,4	113,0	180,5	44,5	110,75	21401N40504	HCS-38-SFL-32-045-B-W3	
					1.22	1.53	2.81	4.45	7.11	1.75	244.20			
51	2"	-32	2"	-32	40,0	51,6	71,4	149,0	224,0	67,0	173,20	11401N50504	HCS-51-SFL-32-045-M-W3	
					1.57	2.03	2.81	5.87	8.82	2.64	381.91			
51	2"	-32	1 1/2"	-24	40,0	51,6	60,3	116,0	191,5	44,0	142,50	21401N50404	HCS-51-SFL-24-045-B-W3	
					1.57	2.03	2.37	4.57	7.54	1.73	314.21			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**90° Version**

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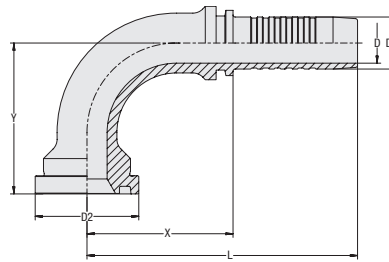

**MULTIVOS Version**

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**90° Elbow Insert with SAE Flange Adaptor  
Type SFL 90° (3000 PSI Series)**

ecoPOS™



**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
12	1/2"	-08	1/2"	-08	9,5	13,0	30,2	41,2	76,5	44,5	12,1	11401N12129	HCS-12-SFL-08-090-M-W3	
12	1/2"	-08	3/4"	-12	9,5	13,0	38,1	40,7	76,0	50,5	17,1	11401N12209	HCS-12-SFL-12-090-M-W3	
16	5/8"	-10	3/4"	-12	12,6	16,0	38,1	49,2	87,5	55,5	20,7	11401N16209	HCS-16-SFL-12-090-M-W3	
16	5/8"	-10	1/2"	-08	12,6	16,0	30,2	54,5	93,0	50,0	18,7	21401N16129	HCS-16-SFL-08-090-B-W3	
16	5/8"	-10	1"	-16	12,6	16,0	44,5	61,5	100,0	58,0	34,7	21401N16259	HCS-16-SFL-16-090-B-W3	
19	3/4"	-12	3/4"	-12	14,8	19,1	38,1	53,7	99,5	55,5	25,8	11401N20209	HCS-19-SFL-12-090-M-W3	
19	3/4"	-12	1"	-16	14,8	19,1	44,5	66,0	112,0	61,5	34,7	11401N20259	HCS-19-SFL-16-090-M-W3	
19	3/4"	-12	1 1/4"	-20	14,8	19,1	50,8	62,0	108,0	61,0	39,4	21401N20329	HCS-19-SFL-20-090-B-W3	
25	1"	-16	1"	-16	20,0	25,9	44,5	70,0	125,0	72,0	47,4	11401N25259	HCS-25-SFL-16-090-M-W3	
25	1"	-16	1 1/4"	-20	20,0	25,9	50,8	82,0	137,0	79,0	58,0	11401N25329	HCS-25-SFL-20-090-M-W3	
25	1"	-16	3/4"	-12	20,0	25,9	38,1	63,0	118,0	58,0	39,6	21401N25209	HCS-25-SFL-12-090-B-W3	
25	1"	-16	1 1/2"	-24	20,0	25,9	60,3	73,0	128,0	69,0	65,9	21401N25409	HCS-25-SFL-24-090-B-W3	
31	1 1/4"	-20	1 1/4"	-20	26,0	32,5	50,8	88,5	148,5	76,5	72,7	11401N32329	HCS-31-SFL-20-090-M-W3	
31	1 1/4"	-20	1"	-16	26,0	32,5	44,5	75,5	135,5	68,0	63,4	21401N32259	HCS-31-SFL-16-090-B-W3	
31	1 1/4"	-20	1 1/2"	-24	26	32,5	60,3	93,5	153,5	87,0	87,9	21401N32409	HCS-31-SFL-24-090-B-W3	
38	1 1/2"	-24	1 1/2"	-24	31	38,9	60,3	116,0	178,5	110,0	130,8	11401N40409	HCS-38-SFL-24-090-M-W3	
38	1 1/2"	-24	1 1/4"	-20	31	38,9	50,8	93	161	86	93,6	21401N40329	HCS-38-SFL-20-090-B-W3	
38	1 1/2"	-24	2"	-32	31	38,9	71,4	103,5	171	98	127,35	21401N40509	HCS-38-SFL-32-090-B-W3	
51	2"	-32	2"	-32	40	51,6	71,4	127,5	200	140	205,8	11401N50509	HCS-51-SFL-32-090-M-W3	
51	2"	-32	1 1/2"	-24	40	51,6	60,3	107,5	182,5	97	159,1	21401N50409	HCS-51-SFL-24-090-B-W3	

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**Straight Version**

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**ECOPOS VA Version**

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**Mobile Interlocking Protection**

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**45° Version**

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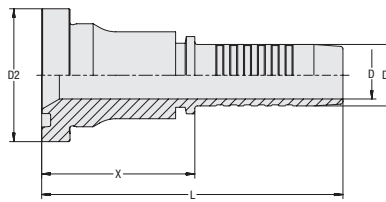


**ecoVOS™**

**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**Straight Insert with SAE Flange Adaptor  
Type SFS (6000 PSI Series)**

**A**

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
12	1/2"	-08	1/2"	-08	9,5 .37	13,0 .51	31,8 1.25	45,5 1.79	81,0 3.19	11,3 24.92	11411N12	HCS-12-SFS-08-M-W3
12	1/2"	-08	3/4"	-12	9,5 .37	13,0 .51	41,3 1.63	49,0 1.93	84,5 3.33	18,9 41.67	11411N1220	HCS-12-SFS-12-M-W3
16	5/8"	-10	1/2"	-08	12,6 .50	16,0 .63	31,8 1.25	51,5 2.03	90,0 3.54	13,4 29.55	11411N1612	HCS-16-SFS-08-M-W3
16	5/8"	-10	3/4"	-12	12,6 .50	16,0 .63	41,3 1.63	45,5 1.79	84,0 3.31	20,9 46.08	11411N1620	HCS-16-SFS-12-M-W3
16	5/8"	-10	1"	-16	12,6 .50	16,0 .63	47,6 1.87	46,5 1.83	85,0 3.35	25,9 57.11	11411N1625	HCS-16-SFS-16-M-W3
19	3/4"	-12	3/4"	-12	14,8 .58	19,1 .75	41,3 1.63	47,5 1.87	93,5 3.68	23,7 52.26	11411N20	HCS-19-SFS-12-M-W3
19	3/4"	-12	1/2"	-08	14,8 .58	19,1 .75	31,8 1.25	55,0 2.17	101,0 3.98	18,4 40.57	21411N2012	HCS-19-SFS-08-B-W3
19	3/4"	-12	1"	-16	14,8 .58	19,1 .75	47,6 1.87	50,0 1.97	96,0 3.78	32,8 72.32	11411N2025	HCS-19-SFS-16-M-W3
19	3/4"	-12	1 1/4"	-20	14,8 .58	19,1 .75	54,0 2.13	65,0 2.56	111,0 4.37	43,2 95.26	21411N2032	HCS-19-SFS-20-B-W3
25	1"	-16	1"	-16	20,0 .79	25,9 1.02	47,6 1.87	47,8 1.88	103,0 4.06	35,1 77.40	11411N25	HCS-25-SFS-16-M-W3
25	1"	-16	3/4"	-12	20,0 .79	25,9 1.02	41,3 1.63	60,0 2.36	115,0 4.53	35,0 77.18	21411N2520	HCS-25-SFS-12-B-W3
25	1"	-16	1 1/4"	-20	20,0 .79	25,9 1.02	54,0 2.13	60,5 2.38	116,0 4.57	49,6 109.37	11411N2532	HCS-25-SFS-20-M-W3
25	1"	-16	1 1/2"	-24	20,0 .79	25,9 1.02	63,5 2.50	73,0 2.87	128,0 5.04	73,6 162.29	21411N2540	HCS-25-SFS-24-B-W3
31	1 1/4"	-20	1 1/4"	-20	26,0 1.02	32,5 1.28	54,0 2.13	72,5 2.85	132,5 5.22	54,9 121.05	11411N32	HCS-31-SFS-20-M-W3
31	1 1/4"	-20	1"	-16	26,0 1.02	32,5 1.28	47,6 1.87	64,5 2.54	124,5 4.90	54,4 119.95	21411N3225	HCS-31-SFS-16-B-W3
31	1 1/4"	-20	1 1/2"	-24	26,0 1.02	32,5 1.28	63,5 2.50	78,5 3.09	138,5 5.45	81,0 178.61	21411N3240	HCS-31-SFS-24-B-W3
38	1 1/2"	-24	1 1/2"	-24	31,0 1.22	38,9 1.53	63,5 2.50	72,5 2.85	140,0 5.51	83,8 184.78	11411N40	HCS-38-SFS-24-M-W3
38	1 1/2"	-24	1 1/4"	-20	31,0 1.22	38,9 1.53	54,0 2.13	73,5 2.89	141,0 5.55	74,4 164.05	21411N4032	HCS-38-SFS-20-B-W3
38	1 1/2"	-24	2"	-32	31,0 1.22	38,9 1.53	79,4 3.13	71,5 2.81	139,0 5.47	138,8 306.05	21411N4050	HCS-38-SFS-32-B-W3
51	2"	-32	2"	-32	40,0 1.57	51,6 2.03	79,4 3.13	75,0 2.95	150,0 5.91	159,7 352.14	11411N50	HCS-51-SFS-32-M-W3

**Related Products and Accessories**

**Swage Ferrules**

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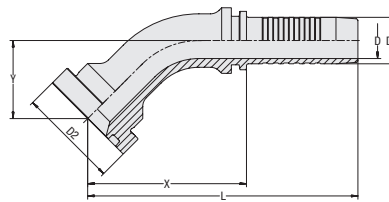
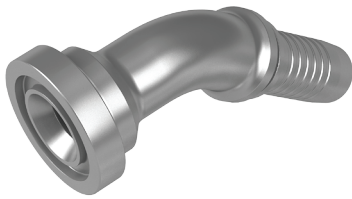




**45° Elbow Insert with SAE Flange Adaptor  
Type SFS 45° (6000 PSI Series)**

ecovos™

A



**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)						Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
12	1/2"	-08	1/2"	-08	9,5	13,0	31,8	45,5	81,0	23,0	11,5	11411N12124	HCS-12-SFS-08-045-M-W3
					.37	.51	1.25	1.79	3.19	.91	25.36		
12	1/2"	-08	3/4"	-12	9,5	13,0	41,3	55,0	90,5	27,0	18,0	11411N12204	HCS-12-SFS-12-045-M-W3
					.37	.51	1.63	2.17	3.56	1.06	39.69		
16	5/8"	-10	1/2"	-08	12,6	16,0	31,8	60,5	99,0	26,0	14,4	11411N16124	HCS-16-SFS-08-045-M-W3
					.50	.63	1.25	2.38	3.90	1.02	31.75		
16	5/8"	-10	3/4"	-12	12,6	16,0	41,3	60,5	99,0	28,0	20,3	11411N16204	HCS-16-SFS-12-045-M-W3
					.50	.63	1.63	2.38	3.90	1.10	44.76		
16	5/8"	-10	1"	-16	12,6	16,0	47,6	67,5	106,0	29,0	31,9	21411N16254	HCS-16-SFS-16-045-B-W3
					.50	.63	1.87	2.66	4.17	1.14	70.34		
19	3/4"	-12	1/2"	-08	14,8	19,1	31,8	63,5	109,5	24,5	20,3	21411N20124	HCS-19-SFS-08-045-B-W3
					.58	.75	1.25	2.50	4.31	.96	44.76		
19	3/4"	-12	3/4"	-12	14,8	19,1	41,3	65,0	111,0	32,0	25,8	11411N20204	HCS-19-SFS-12-045-M-W3
					.58	.75	1.63	2.56	4.37	1.26	56.89		
19	3/4"	-12	1"	-16	14,8	19,1	47,6	64,2	114,0	30,5	32,3	11411N20254	HCS-19-SFS-16-045-M-W3
					.58	.75	1.87	2.53	4.49	1.20	71.22		
19	3/4"	-12	1 1/4"	-20	14,8	19,1	54,0	76,5	122,5	33,5	47,1	21411N20324	HCS-19-SFS-20-045-B-W3
					.58	.75	2.13	3.01	4.82	1.32	103.86		
25	1"	-16	3/4"	-12	20,0	25,9	41,3	73,0	128,5	29,5	38,8	21411N25204	HCS-25-SFS-12-045-B-W3
					.79	1.02	1.63	2.87	5.06	1.16	85.55		
25	1"	-16	1"	-16	20,0	25,9	47,6	83,5	138,5	36,0	43,7	11411N25254	HCS-25-SFS-16-045-M-W3
					.79	1.02	1.87	3.29	5.45	1.42	96.36		
25	1"	-16	1 1/4"	-20	20,0	25,9	54,0	97,0	152,0	41,0	58,2	11411N25324	HCS-25-SFS-20-045-M-W3
					.79	1.02	2.13	3.82	5.98	1.61	128.33		
25	1"	-16	1 1/2"	-24	20,0	25,9	63,5	90,5	145,5	42,0	81,5	21411N25404	HCS-25-SFS-24-045-B-W3
					.79	1.02	2.50	3.56	5.73	1.65	179.71		
31	1 1/4"	-20	1"	-16	26,0	32,5	47,6	85,5	145,5	34,5	62,3	21411N32254	HCS-31-SFS-16-045-B-W3
					1.02	1.28	1.87	3.37	5.73	1.36	137.37		
31	1 1/4"	-20	1 1/4"	-20	26,0	32,5	54,0	101,5	161,0	40,0	67,8	11411N32324	HCS-31-SFS-20-045-M-W3
					1.02	1.28	2.13	4.00	6.34	1.57	149.50		
31	1 1/4"	-20	1 1/2"	-24	26,0	32,5	63,5	111,5	171,5	49,0	96,7	21411N32404	HCS-31-SFS-24-045-B-W3
					1.02	1.28	2.50	4.39	6.75	1.93	213.22		
38	1 1/2"	-24	1 1/4"	-20	31,0	38,9	54,0	108,0	175,5	45,5	90,0	21411N40324	HCS-38-SFS-20-045-B-W3
					1.22	1.53	2.13	4.25	6.91	1.79	198.45		
38	1 1/2"	-24	1 1/2"	-24	31,0	38,9	63,5	119,5	187,0	53,5	113,9	11411N40404	HCS-38-SFS-24-045-M-W3
					1.22	1.53	2.50	4.70	7.36	2.11	251.15		
38	1 1/2"	-24	2"	-32	31,0	38,9	79,4	127,0	195,0	59,0	166,4	21411N40504	HCS-38-SFS-32-045-B-W3
					1.22	1.53	3.13	5.00	7.68	2.32	366.91		
51	2"	-32	2"	-32	40,0	51,6	79,4	150,0	223,5	65,5	207,7	11411N50504	HCS-51-SFS-32-045-M-W3
					1.57	2.03	3.13	5.91	8.80	2.58	457.98		

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



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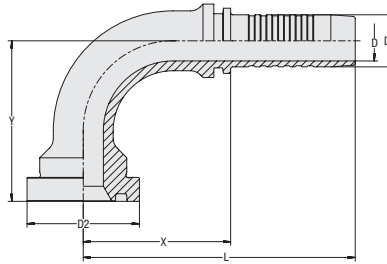


**ecoVOS™**
**90° Elbow Insert with SAE Flange Adaptor  
Type SFS 90° (6000 PSI Series)**

**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
12	1/2"	-08	1/2"	-08	9,5	13,0	31,8	39,0	74,5	46,5	13,0	11411N12129	HCS-12-SFS-08-090-M-W3	
					.37	.51	1.25	1.54	2.93	1.83	28.67			
12	1/2"	-08	3/4"	-12	9,5	13,0	41,3	43,2	78,5	50,0	20,8	11411N12209	HCS-12-SFS-12-090-M-W3	
					.37	.51	1.63	1.70	3.09	1.97	45.86			
16	5/8"	-10	1/2"	-08	12,6	16,0	31,8	52,0	90,5	52,5	16,7	11411N16129	HCS-16-SFS-08-090-M-W3	
					.50	.63	1.25	2.05	3.56	2.07	36.82			
16	5/8"	-10	3/4"	-12	12,6	16,0	41,3	47,5	86,0	57,0	23,2	11411N16209	HCS-16-SFS-12-090-M-W3	
					.50	.63	1.63	1.87	3.39	2.24	51.16			
16	5/8"	-10	1"	-16	12,6	16,0	47,6	54,5	93,0	56,0	34,3	21411N16259	HCS-16-SFS-16-090-B-W3	
					.50	.63	1.87	2.15	3.66	2.20	75.63			
19	3/4"	-12	1/2"	-08	14,8	19,1	31,8	55,0	101,0	50,0	22,6	21411N20129	HCS-19-SFS-08-090-B-W3	
					.58	.75	1.25	2.17	3.98	1.97	49.83			
19	3/4"	-12	3/4"	-12	14,8	19,1	41,3	54,0	100,0	59,0	29,3	11411N20209	HCS-19-SFS-12-090-M-W3	
					.58	.75	1.63	2.13	3.94	2.32	64.61			
19	3/4"	-12	1"	-16	14,8	19,1	47,6	61,5	107,5	68,0	38,2	11411N20259	HCS-19-SFS-16-090-M-W3	
					.58	.75	1.87	2.42	4.23	2.68	84.23			
19	3/4"	-12	1 1/4"	-20	14,8	19,1	54,0	62,0	108,0	67,0	51,2	21411N20329	HCS-19-SFS-20-090-B-W3	
					.58	.75	2.13	2.44	4.25	2.64	112.90			
25	1"	-16	3/4"	-12	20,0	25,9	41,3	63,0	118,0	61,0	43,0	21411N25209	HCS-25-SFS-12-090-B-W3	
					.79	1.02	1.63	2.48	4.65	2.40	94.82			
25	1"	-16	1"	-16	20,0	25,9	47,6	70,5	125,5	73,0	47,4	11411N25259	HCS-25-SFS-16-090-M-W3	
					.79	1.02	1.87	2.78	4.94	2.87	104.52			
25	1"	-16	1 1/4"	-20	20,0	25,9	54,0	81,0	136,0	80,5	65,6	11411N25329	HCS-25-SFS-20-090-M-W3	
					.79	1.02	2.13	3.19	5.35	3.17	144.65			
25	1"	-16	1 1/2"	-24	20,0	25,9	63,5	73,0	128,0	84,0	89,3	21411N25409	HCS-25-SFS-24-090-B-W3	
					.79	1.02	2.50	2.87	5.04	3.31	196.91			
31	1 1/4"	-20	1"	-16	26,0	32,5	47,6	75,5	135,5	73,0	70,0	21411N32259	HCS-31-SFS-16-090-B-W3	
					1.02	1.28	1.87	2.97	5.33	2.87	154.35			
31	1 1/4"	-20	1 1/4"	-20	26,0	32,5	54,0	88,5	148,5	84,0	79,5	11411N32329	HCS-31-SFS-20-090-M-W3	
					1.02	1.28	2.13	3.48	5.85	3.31	175.30			
31	1 1/4"	-20	1 1/2"	-24	26,0	32,5	63,5	93,5	153,5	100,0	109,2	21411N32409	HCS-31-SFS-24-090-B-W3	
					1.02	1.28	2.50	3.68	6.04	3.94	240.79			
38	1 1/2"	-24	1 1/4"	-20	31,0	39,9	54,0	93,5	161,0	95,0	102,6	21411N40329	HCS-38-SFS-20-090-B-W3	
					1.22	1.57	2.13	3.68	6.34	3.74	226.23			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,9	63,5	100,5	168,0	109,5	135,6	11411N40409	HCS-38-SFS-24-090-M-W3	
					1.22	1.53	2.50	3.96	6.61	4.31	299.00			
38	1 1/2"	-24	2"	-32	31,0	38,9	79,4	103,5	171,0	118,0	183,0	21411N40509	HCS-38-SFS-32-090-B-W3	
					1.22	1.53	3.13	4.07	6.73	4.65	403.52			
51	2"	-32	2"	-32	40,0	51,6	79,4	126,0	201,0	137,5	240,4	11411N50509	HCS-51-SFS-32-090-M-W3	
					1.57	2.03	3.13	4.96	7.91	5.41	530.08			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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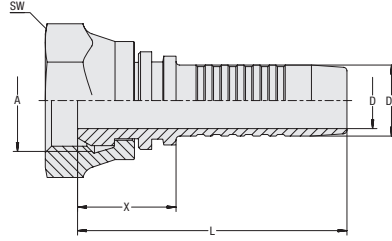

**MULTIVOS Version**

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**Straight Insert with Female BSPP Thread and 60° Taper Type DKR**

ecovos™



**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			(kg/lbs) ca. per 100
05	1/8"	-03	G 1/4"	-04	2,9	5,1	24,0	49,0	19	3,6	11501N0506	HCS-05-DKR-04-S-M-W3
					.11	.20	.94	1.93	.75	7.94		
06	1/4"	-04	G 1/4"	-04	3,9	6,7	22,5	52,5	19	4,0	11501N06	HCS-06-DKR-04-S-M-W3
					.15	.26	.89	2.07	.75	8.82		
06	1/4"	-04	G 1/8"	-03	3,9	6,7	15,5	46,0	17	2,6	11501N0605	HCS-06-DKR-03-C-M-W3
					.15	.26	.61	1.81	.67	5.73		
06	1/4"	-04	G 3/8"	-06	3,9	6,7	25,5	56,0	22	5,4	11501N0610	HCS-06-DKR-06-S-M-W3
					.15	.26	1.00	2.20	.87	11.91		
08	5/16"	-05	G 1/4"	-04	5,4	8,2	18,0	48,0	19	3,5	11501N0806	HCS-08-DKR-04-C-M-W3
					.21	.32	.71	1.89	.75	7.72		
08	5/16"	-05	G 3/8"	-06	5,4	8,2	26,5	57,0	22	5,7	11501N0810	HCS-08-DKR-06-S-M-W3
					.21	.32	1.04	2.24	.87	12.57		
10	3/8"	-06	G 3/8"	-06	6,5	9,9	23,5	57,0	22	6,2	11501N10	HCS-10-DKR-06-S-M-W3
					.26	.39	.93	2.24	.87	13.56		
10	3/8"	-06	G 1/4"	-04	6,5	9,9	20,0	53,5	19	4,3	11501N1006	HCS-10-DKR-04-C-M-W3
					.26	.39	.79	2.11	.75	9.37		
10	3/8"	-06	G 1/2"	-08	6,5	9,9	22,0	55,5	27	8,2	11501N1012	HCS-10-DKR-08-C-M-W3
					.26	.39	.87	2.19	1.06	18.08		
12	1/2"	-08	G 1/2"	-08	9,5	13,0	27,0	62,5	27	10,2	11501N12	HCS-12-DKR-08-S-M-W3
					.37	.51	1.06	2.46	1.06	22.38		
12	1/2"	-08	G 3/8"	-06	9,5	13,0	21,0	56,5	22	6,4	11501N1210	HCS-12-DKR-06-C-M-W3
					.37	.51	.83	2.22	.87	14.00		
12	1/2"	-08	G 5/8"	-10	9,5	13,0	26,0	61,5	30	12,4	11501N1216	HCS-12-DKR-10-C-M-W3
					.37	.51	1.02	2.42	1.18	27.23		
12	1/2"	-08	G 3/4"	-12	9,5	13,0	30,0	65,5	32	14,2	11501N1220	HCS-12-DKR-12-C-M-W3
					.37	.51	1.18	2.58	1.26	31.20		
16	5/8"	-10	G 5/8"	-10	12,6	16,0	22,0	60,5	30	10,5	11501N16	HCS-16-DKR-10-C-M-W3
					.50	.63	.87	2.38	1.18	23.15		
16	5/8"	-10	G 1/2"	-08	12,6	16,0	23,0	61,5	27	10,2	11501N1612	HCS-16-DKR-08-C-M-W3
					.50	.63	.91	2.42	1.06	22.38		
16	5/8"	-10	G 3/4"	-12	12,6	16,0	24,0	62,5	32	13,1	11501N1620	HCS-16-DKR-12-C-M-W3
					.50	.63	.94	2.46	1.26	28.89		
19	3/4"	-12	G 3/4"	-12	14,8	19,1	24,5	70,5	32	14,5	11501N20	HCS-19-DKR-12-C-M-W3
					.58	.75	.96	2.78	1.26	31.86		
19	3/4"	-12	G 1"	-16	14,8	19,1	29,0	75,0	41	27,6	11501N2025	HCS-19-DKR-16-C-M-W3
					.58	.75	1.14	2.95	1.61	60.86		
25	1"	-16	G 1"	-16	20,0	25,9	25,0	80,5	41	22,5	11501N25	HCS-25-DKR-16-C-M-W3
					.79	1.02	.98	3.17	1.61	49.61		
25	1"	-16	G 1 1/4"	-20	20,0	25,9	31,5	87,0	50	42,2	11501N2532	HCS-25-DKR-20-W-M-W3
					.79	1.02	1.24	3.43	1.97	92.94		
31	1 1/4"	-20	G 1 1/4"	-20	26,0	32,5	32,0	92,0	50	48,7	11501N32	HCS-31-DKR-20-W-M-W3
					1.02	1.28	1.26	3.62	1.97	107.38		
38	1 1/2"	-24	G 1 1/2"	-24	31,0	38,9	33,5	101,0	55	65,0	11501N40	HCS-38-DKR-24-W-M-W3
					1.22	1.53	1.32	3.98	2.17	143.21		
51	2"	-32	G 2"	-32	40,0	51,6	31,0	106,0	70	118,7	11501N50	HCS-51-DKR-32-W-M-W3
					1.57	2.03	1.22	4.17	2.76	261.62		

**Related Products and Accessories**



**Swage Ferrules**

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**45° Version**

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**Mobile Interlocking Protection**

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**90° Version**

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**MULTIVOS Version**

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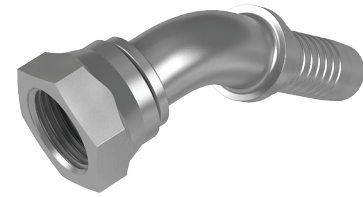
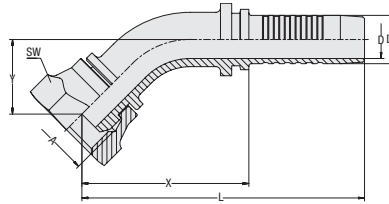


**ecoVOS™**
**45° Elbow Insert with Female BSPP Thread and 60° Taper Type DKR 45°**

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca.	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	per 100			
05	1/8"	-03	G 1/4"	-04	2,9	5,1	33,0	57,5	13,5	19	3,9	11501N05064	HCS-05-DKR-04-045-C-M-W3	
					.11	.20	1.30	2.26	.53	.75	8.60			
06	1/4"	-04	G 1/4"	-04	3,9	6,7	36,0	66,0	15,5	19	4,3	11501N06064	HCS-06-DKR-04-045-C-M-W3	
					.15	.26	1.42	2.60	.61	.75	9.48			
06	1/4"	-04	G 3/8"	-06	3,9	6,7	37,5	67,5	16,0	22	6,4	11501N06104	HCS-06-DKR-06-045-C-M-W3	
					.15	.26	1.48	2.66	.63	.87	14.11			
08	5/16"	-05	G 3/8"	-06	5,4	8,2	38,0	68,0	16,0	22	6,4	11501N08104	HCS-08-DKR-06-045-C-M-W3	
					.21	.32	1.50	2.68	.63	.87	14.00			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	41,0	74,5	18,0	22	7,2	11501N10104	HCS-10-DKR-06-045-C-M-W3	
					.26	.39	1.61	2.93	.71	.87	15.88			
10	3/8"	-06	G 1/2"	-08	6,5	9,9	40,5	74,0	19,5	27	10,5	11501N10124	HCS-10-DKR-08-045-C-M-W3	
					.26	.39	1.59	2.91	.77	1.06	23.15			
12	1/2"	-08	G 3/8"	-06	9,5	13,0	53,5	89,0	23,5	22	10,1	11501N12104	HCS-12-DKR-06-045-C-M-W3	
					.37	.51	2.11	3.50	.93	.87	22.27			
12	1/2"	-08	G 1/2"	-08	9,5	13,0	50,5	85,5	20,0	27	12,2	11501N12124	HCS-12-DKR-08-045-C-M-W3	
					.37	.51	1.99	3.37	.79	1.06	26.79			
12	1/2"	-08	G 5/8"	-10	9,5	13,0	45,5	81,0	19,5	30	14,4	11501N12164	HCS-12-DKR-10-045-C-M-W3	
					.37	.51	1.79	3.19	.77	1.18	31.64			
12	1/2"	-08	G 3/4"	-12	9,5	13,0	46,0	81,5	23,5	32	16,3	11501N12204	HCS-12-DKR-12-045-C-M-W3	
					.37	.51	1.81	3.21	.93	1.26	35.83			
16	5/8"	-10	G 5/8"	-10	12,6	16,0	55,5	93,5	24,5	30	15,6	11501N16164	HCS-16-DKR-10-045-C-M-W3	
					.50	.63	2.19	3.68	.96	1.18	34.40			
16	5/8"	-10	G 3/4"	-12	12,6	16,0	55,5	94,0	25,0	32	18,7	11501N16204	HCS-16-DKR-12-045-C-M-W3	
					.50	.63	2.19	3.70	.98	1.26	41.12			
19	3/4"	-12	G 3/4"	-12	14,8	19,1	63,5	109,5	31,0	32	24,8	11501N20204	HCS-19-DKR-12-045-C-M-W3	
					.58	.75	2.50	4.31	1.22	1.26	54.57			
19	3/4"	-12	G 1"	-16	14,8	19,1	63,0	109,0	30,0	41	35,4	11501N20254	HCS-19-DKR-16-045-C-M-W3	
					.58	.75	2.48	4.29	1.18	1.61	78.06			
25	1"	-16	G 1"	-16	20,0	25,9	89,0	144,0	38,0	41	48,0	11501N25254	HCS-25-DKR-16-045-C-M-W3	
					.79	1.02	3.50	5.67	1.50	1.61	105.73			
25	1"	-16	G 1 1/4"	-20	20,0	25,9	89,5	144,5	40,0	50	59,1	11501N25324	HCS-25-DKR-20-045-W-M-W3	
					.79	1.02	3.52	5.69	1.57	1.97	130.32			
31	1 1/4"	-20	G 1 1/4"	-20	26,0	32,5	102,0	161,5	39,5	50	82,9	11501N32324	HCS-31-DKR-20-045-W-M-W3	
					1,02	1.28	4.02	6.36	1.56	1.97	182.79			
38	1 1/2"	-24	G 1 1/2"	-24	31,0	38,9	129,5	197,0	50,0	55	122,4	11501N40404	HCS-38-DKR-24-045-W-M-W3	
					1,22	1.53	5.10	7.76	1.97	2.17	269.89			
51	2"	-32	G 2"	-32	40,0	51,6	135,0	210,0	60,5	70	195,1	11501N50504	HCS-51-DKR-32-045-W-M-W3	
					1,57	2.03	5.31	8.27	2.38	2.76	430.20			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Mobile Interlocking Protection**

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**90° Version**

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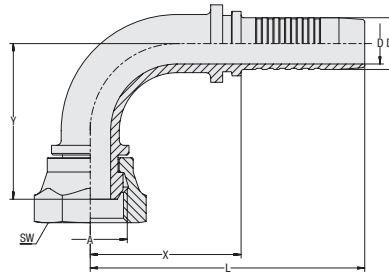

**MULTIVOS Version**

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**90° Elbow Insert with Female BSPP Thread and 60° Taper  
Type DKR 90°**

ecovos™



**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta$ plus

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
05	1/8"	-03	G 1/4"	-04	2,9	5,1	26,5	51,0	26,0	19	4,1	11501N05069	HCS-03-DKR-04-090-C-M-W3	
					.11	.20	1.04	2.01	1.02	.75	9.04			
06	1/4"	-04	G 1/8"	-03	3,9	6,7	28,0	58,0	30,5	17	4,1	11501N06059	HCS-06-DKR-03-090-C-M-W3	
					.15	.26	1.10	2.28	1.20	.67	9.04			
06	1/4"	-04	G 1/4"	-04	3,9	6,7	27,0	57,0	28,5	19	4,6	11501N06069	HCS-06-DKR-04-090-C-M-W3	
					.15	.26	1.06	2.24	1.12	.75	10.14			
06	1/4"	-04	G 3/8"	-06	3,9	6,7	29,0	59,0	31,0	22	6,9	11501N06109	HCS-06-DKR-06-090-C-M-W3	
					.15	.26	1.14	2.32	1.22	.87	15.10			
08	5/16"	-05	G 3/8"	-06	5,4	8,2	29,5	59,5	31,5	22	6,8	11501N08109	HCS-10-DKR-06-090-C-M-W3	
					.21	.32	1.16	2.34	1.24	.87	14.99			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	33,0	66,5	40,5	22	8,3	11501N10109	HCS-10-DKR-06-090-C-M-W3	
					.26	.39	1.30	2.62	1.59	.87	18.30			
10	3/8"	-06	G 1/2"	-08	6,5	9,9	35,5	69,0	38,0	27	11,6	11501N10129	HCS-10-DKR-08-090-C-M-W3	
					.26	.39	1.40	2.72	1.50	1.06	25.47			
12	1/2"	-08	G 3/8"	-06	9,5	13,0	42,0	77,5	42,5	22	14,5	11501N12109	HCS-12-DKR-06-090-C-M-W3	
					.37	.51	1.65	3.05	1.67	.87	31.97			
12	1/2"	-08	G 1/2"	-08	9,5	13,0	41,0	76,5	42,0	27	13,7	11501N12129	HCS-12-DKR-08-090-C-M-W3	
					.37	.51	1.61	3.01	1.65	1.06	30.21			
12	1/2"	-08	G 5/8"	-10	9,5	13,0	41,0	76,5	40,5	30	16,0	11501N12169	HCS-12-DKR-10-090-C-M-W3	
					.37	.51	1.61	3.01	1.59	1.18	35.17			
12	1/2"	-08	G 3/4"	-12	9,5	13,0	38,0	73,5	45,5	32	17,9	11501N12209	HCS-12-DKR-12-090-C-M-W3	
					.37	.51	1.50	2.89	1.79	1.26	39.36			
16	5/8"	-10	G 5/8"	-10	12,6	16,0	46,5	85,0	48,0	30	17,5	11501N16169	HCS-16-DKR-10-090-C-M-W3	
					.50	.63	1.83	3.35	1.89	1.18	38.59			
16	5/8"	-10	G 3/4"	-12	12,6	16,0	45,0	84,0	54,0	32	20,2	11501N16209	HCS-16-DKR-12-090-C-M-W3	
					.50	.63	1.77	3.31	2.13	1.26	44.54			
19	3/4"	-12	G 3/4"	-12	14,8	19,1	50,0	94,3	52,0	32	22,2	11501N20209	HCS-19-DKR-12-090-C-M-W3	
					.58	.75	1.97	3.71	2.05	1.26	48.95			
19	3/4"	-12	G 1"	-16	14,8	19,1	54,0	100,0	56,0	41	39,1	11501N20259	HCS-19-DKR-16-090-C-M-W3	
					.58	.75	2.13	3.94	2.20	1.61	86.22			
25	1"	-16	G 1"	-16	20,0	25,9	75,5	130,5	73,5	41	58,1	11501N25259	HCS-25-DKR-16-090-C-M-W3	
					.79	1.02	2.97	5.14	2.89	1.61	128.11			
25	1"	-16	G 1 1/4"	-20	20,0	25,9	76,0	131,0	79,5	50	67,2	11501N25329	HCS-25-DKR-20-090-W-M-W3	
					.79	1.02	2.99	5.16	3.13	1.97	148.18			
31	1 1/4"	-20	G 1 1/4"	-20	26,0	32,5	92,2	152,0	88,5	50	96,5	11501N32329	HCS-31-DKR-20-090-W-M-W3	
					1.02	1.28	3.63	5.98	3.48	1.97	212.78			
38	1 1/2"	-24	G 1 1/2"	-24	31,0	38,9	117,0	184,5	105,5	55	146,3	11501N40409	HCS-38-DKR-24-090-W-M-W3	
					1.22	1.53	4.61	7.26	4.15	2.17	322.48			
51	2"	-32	G 2"	-32	40,0	51,6	121,5	196,5	125,0	70	227,1	11501N50509	HCS-51-DKR-32-090-W-M-W3	
					1.57	2.03	4.78	7.74	4.92	2.76	500.65			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**Straight Version**

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**ECOVOS VA Version**

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**Mobile Interlocking Protection**

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**45° Version**

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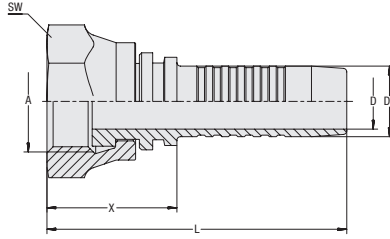


**ecoVOS™**
**Straight Insert with Female BSPP Thread  
Type DKRF**

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** Flat-Sealing

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL	STAUFF	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	G 1/4"	-04	3,9	6,7	14,0	44,2	19	2,9	11501N06060F	HCS-06-DKRF-04-C-M-W3
					.15	.26	.55	1.74	.75	6.39		
08	5/16"	-05	G 3/8"	-06	5,4	8,2	19,3	49,5	22	4,8	11501N08100F	HCS-08-DKRF-06-C-M-W3
					.21	.32	.76	1.95	.87	10.58		
08	5/16"	-05	G 1/2"	-08	5,4	8,2	20,9	51,1	27	7,5	11501N08120F	HCS-08-DKRF-08-C-M-W3
					.21	.32	.82	2.01	1.06	16.54		
10	3/8"	-06	G 1/4"	-04	6,5	9,9	16,4	49,9	19	3,8	11501N10060F	HCS-10-DKRF-04-C-M-W3
					.26	.39	.65	1.96	.75	8.38		
10	3/8"	-06	G 3/8"	-06	6,5	9,9	16,3	49,8	22	4,9	11501N10100F	HCS-10-DKRF-06-C-M-W3
					.26	.39	.64	1.96	.87	10.80		
10	3/8"	-06	G 1/2"	-08	6,5	9,9	20,3	53,8	27	8,1	11501N10120F	HCS-10-DKRF-08-C-M-W3
					.26	.39	.80	2.12	1.06	17.86		
12	1/2"	-08	G 3/8"	-06	9,5	13,0	19,4	54,9	22	5,8	11501N12100F	HCS-12-DKRF-06-C-M-W3
					.37	.51	.76	2.16	.87	12.79		
12	1/2"	-08	G 1/2"	-08	9,5	13,0	18,6	54,1	27	8,2	11501N12120F	HCS-12-DKRF-08-C-M-W3
					.37	.51	.73	2.13	1.06	18.08		
12	1/2"	-08	G 3/4"	-12	9,5	13,0	20,1	55,6	32	11,6	11501N12200F	HCS-12-DKRF-12-C-M-W3
					.37	.51	.79	2.19	1.26	25.58		
16	5/8"	-10	G 3/4"	-12	12,6	16,0	20,2	58,7	32	11	11501N16200F	HCS-16-DKRF-12-C-M-W3
					.50	.63	.80	2.31	1.26	24.26		
19	3/4"	-12	G 3/4"	-12	14,8	19,1	18,2	64,2	32	12,4	11501N20200F	HCS-19-DKRF-12-C-M-W3
					.58	.75	.72	2.53	1.26	27.34		
19	3/4"	-12	G 1"	-16	14,8	19,1	25,3	71,3	41	22,5	11501N20250F	HCS-19-DKRF-16-C-M-W3
					.58	.75	1.00	2.81	1.61	49.61		
25	1"	-16	G 1"	-16	20,0	25,9	23,6	78,8	41	30,2	11501N25250F	HCS-25-DKRF-16-C-M-W3
					.79	1.02	.93	3.10	1.61	66.59		
31	1 1/4"	-20	G 1 1/4"	-20	26,0	32,5	23,4	83,4	50	39	11501N32320F	HCS-31-DKRF-20-W-M-W3
					1.02	1.28	.92	3.28	1.97	86.00		

**Related Products and Accessories**

**Swage Ferrules**

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**90° Version**

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**ECOVS VA Version**

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**Mobile Interlocking Protection**

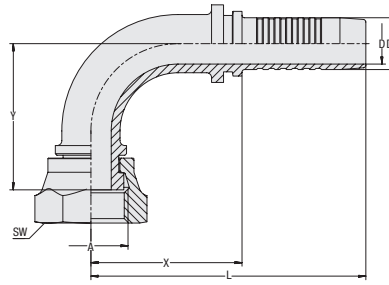
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**90° Elbow Insert with Female BSPP Thread  
Type DKRF 90°**

ecovos™



**Connection Type** Female BSPP Nut Thread  
**Sealing Type** Flat-Sealing  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	G 1/4"	-04	3,9	6,7	32,8	63,0	35,2	19	4,5	11501N06069F	HCS-06-DKRF-04-090-C-M-W3	
					.15	.26	1.29	2.48	1.39	.75	9.92			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	42,5	74,0	36,5	22	8,3	11501N10109F	HCS-10-DKRF-06-090-C-M-W3	
					.26	.39	1.67	2.91	1.44	.87	18.30			
12	1/2"	-08	G 1/2"	-08	9,5	13,0	48,0	83,5	41,0	27	13,3	11501N12129F	HCS-12-DKRF-08-090-C-M-W3	
					.37	.51	1.89	3.29	1.61	1.06	29.33			
12	1/2"	-08	G 3/4"	-12	9,5	13,0	48,0	83,5	41,0	32	17,9	11501N12209F	HCS-12-DKRF-12-090-C-M-W3	
					.37	.51	1.89	3.29	1.61	1.26	39.47			
16	5/8"	-10	G 3/4"	-12	12,6	16,0	45,0	83,5	51,1	32	20,2	11501N16209F	HCS-16-DKRF-12-090-C-M-W3	
					.50	.63	1.77	3.29	2.01	1.26	44.54			
19	3/4"	-12	G 3/4"	-12	14,8	19,1	60,6	106,6	54,0	32	24,0	11501N20209F	HCS-19-DKRF-12-090-C-M-W3	
					.58	.75	2.39	4.20	2.13	1.26	52.92			
25	1"	-16	G 1"	-16	20,0	25,9	61,4	116,6	70,3	41	45,5	11501N25259F	HCS-25-DKRF-16-090-C-M-W3	
					.79	1.02	2.42	4.59	2.77	1.61	100.33			
31	1 1/4"	-20	G 1 1/4"	-20	26,0	32,5	76,3	136,3	79,9	50	82,0	11501N32329F	HCS-31-DKRF-20-090-W-M-W3	
					1.02	1.28	3.00	5.37	3.15	1.97	180.81			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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ECOVOS VA Version

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Mobile Interlocking Protection

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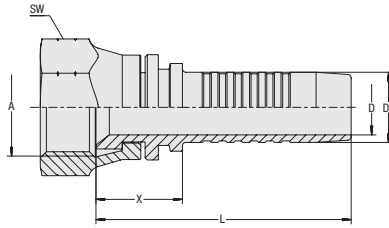


**ecoVOS™**
**Straight Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ**

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			(kg/lbs) ca. per 100
06	1/4"	-04	7/16"-20 UNF	-04	3,9	6,7	15,5	45,5	14	2,1	11511N06	HCS-06-DKJ-04-C-M-W3
					.15	.26	.61	1.79	.55	4.63		
06	1/4"	-04	1/2"-20 UNF	-05	3,9	6,7	14,5	41,0	17	2,4	11511N0608	HCS-06-DKJ-05-C-M-W3
					.15	.26	.57	1.61	.67	5.29		
06	1/4"	-04	9/16"-18 UNF	-06	3,9	6,7	17,0	47,0	19	3,5	11511N0610	HCS-06-DKJ-06-C-M-W3
					.15	.26	.67	1.85	.75	7.61		
06	1/4"	-04	3/4"-16 UNF	-08	3,9	6,7	22,0	52,0	24	5,8	11511N0612	HCS-06-DKJ-08-C-M-W3
					.15	.26	.87	2.05	.94	12.79		
08	5/16"	-05	1/2"-20 UNF	-05	5,4	8,2	15,0	45,0	17	2,9	11511N08	HCS-08-DKJ-05-C-M-W3
					.21	.32	.59	1.77	.67	6.39		
08	5/16"	-05	9/16"-18 UNF	-06	5,4	8,2	19,0	49,0	19	4,0	11511N0810	HCS-08-DKJ-06-C-M-W3
					.21	.32	.75	1.93	.75	8.82		
08	5/16"	-05	3/4"-16UNF	-08	5,4	8,2	16,0	42,5	24	5,1	11511N0812	HCS-08-DKJ-08-C-M-W3
					.21	.32	.63	1.67	.94	11.25		
10	3/8"	-06	9/16"-18 UNF	-06	6,5	9,9	17,0	50,5	19	4,1	11511N10	HCS-10-DKJ-06-C-M-W3
					.26	.39	.67	1.99	.75	9.04		
10	3/8"	-06	1/2"-20 UNF	-05	6,5	9,9	17,0	50,5	17	3,5	11511N1008	HCS-10-DKJ-05-C-M-W3
					.26	.39	.67	1.99	.67	7.72		
10	3/8"	-06	3/4"-16 UNF	-08	6,5	9,9	17,0	50,5	24	5,9	11511N1012	HCS-10-DKJ-08-C-M-W3
					.26	.39	.67	1.99	.94	12.90		
10	3/8"	-06	7/8"-14 UNF	-10	6,5	9,9	19,0	52,5	27	7,7	11511N1016	HCS-10-DKJ-10-C-M-W3
					.26	.39	.75	2.07	1.06	16.98		
12	1/2"	-08	3/4"-16 UNF	-08	9,5	13,0	19,5	55,0	22	6,0	11511N12	HCS-12-DKJ-08-C-M-W3
					.37	.51	.77	2.17	.87	13.23		
12	1/2"	-08	7/8"-14 UNF	-10	9,5	13,0	20,0	55,5	27	7,4	11511N1216	HCS-12-DKJ-10-C-M-W3
					.37	.51	.79	2.19	1.06	16.32		
12	1/2"	-08	1 1/16"-12 UN	-12	9,5	13,0	24,5	60,0	32	12,7	11511N1220	HCS-12-DKJ-12-C-M-W3
					.37	.51	.96	2.36	1.26	28.00		
16	5/8"	-10	7/8"-14 UNF	-10	12,6	16,0	19,5	58,0	27	8,9	11511N16	HCS-16-DKJ-10-C-M-W3
					.50	.63	.77	2.28	1.06	19.62		
16	5/8"	-10	1 1/16"-12 UN	-12	12,6	16,0	23,0	61,5	32	13,2	11511N1620	HCS-16-DKJ-12-C-M-W3
					.50	.63	.91	2.42	1.26	29.11		
19	3/4"	-12	1 1/16"-12 UN	-12	14,8	19,1	22,6	66,9	32	12,9	11511N20	HCS-19-DKJ-12-C-M-W3
					.58	.75	.89	2.63	1.26	28.44		
19	3/4"	-12	7/8"-14 UNF	-10	14,8	19,1	22,3	66,6	27	13,5	11511N2016	HCS-19-DKJ-10-C-M-W3
					.58	.75	.88	2.62	1.06	29.77		
19	3/4"	-12	1 5/16"-12 UN	-16	14,8	19,1	24,3	68,6	41	20,0	11511N2025	HCS-19-DKJ-16-C-M-W3
					.58	.75	.96	2.70	1.61	44.10		
25	1"	-16	1 5/16"-12 UN	-16	20,0	25,9	24,8	79,1	41	24,0	11511N25	HCS-25-DKJ-16-C-M-W3
					.79	1.02	.98	3.11	1.61	52.92		
25	1"	-16	1 1/16"-12UN	-12	20,0	25,9	25,5	80,5	32	21,3	11511N2520	HCS-25-DKJ-12-C-M-W3
					.79	1.02	1.00	3.17	1.26	46.97		
25	1"	-16	1 5/8"-12UN	-20	20,0	25,9	41,5	96,5	50	46,3	11511N2532	HCS-25-DKJ-20-W-M-W3
					.79	1.02	1.63	3.80	1.97	101.98		
31	1 1/4"	-20	1 5/8"-12UN	-20	26,0	32,5	28,1	86,0	50	43,2	11511N32	HCS-31-DKJ-20-W-M-W3
					1.02	1.28	1.11	3.39	1.97	95.26		
31	1 1/4"	-20	1 7/8"-12 UN	-24	26,0	32,5	47,5	107,5	60	77,6	11511N3240	HCS-31-DKJ-24-W-M-W3
					1.02	1.28	1.87	4.23	2.36	171.11		
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0	38,9	36,0	103,5	60	81,4	11511N40	HCS-38-DKJ-24-W-M-W3
					1.22	1.53	1.42	4.07	2.36	179.38		
51	2"	-32	2 1/2"-12 UN	-32	40,0	51,6	43,5	118,5	75	153,7	11511N50	HCS-51-DKJ-32-W-M-W3
					1.57	2.03	1.71	4.67	2.95	338.80		

**Related Products and Accessories**

**Swage Ferrules**

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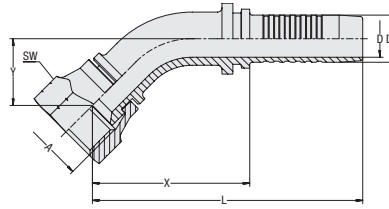

**POWERVOS Version**

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**45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ 45°**

ecoPOS™



**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca.	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	per 100			
06	1/4"	-04	7/16"-20 UNF	-04	3,9	6,7	35,0	65,0	16,5	14	2,9	11511N06064	HCS-06-DKJ-04-045-C-M-W3	
					.15	.26	1.38	2.56	.65	.55	6.28			
06	1/4"	-04	1/2"-20 UNF	-05	3,9	6,7	33,5	63,5	14,0	19	2,1	11511N06084	HCS-06-DKJ-05-045-C-M-W3	
					.15	.26	1.32	2.50	.55	.75	4.63			
06	1/4"	-04	9/16"-18 UNF	-06	3,9	6,7	33,5	63,5	14,0	19	4,3	11511N06104	HCS-06-DKJ-06-045-C-M-W3	
					.15	.26	1.32	2.50	.55	.75	9.48			
08	5/16"	-05	1/2"-20 UNF	-05	5,4	8,2	38,5	68,5	16,5	17	4,4	11511N08084	HCS-08-DKJ-05-045-C-M-W3	
					.21	.32	1.52	2.70	.65	.67	9.59			
08	5/16"	-05	9/16"-18 UNF	-06	5,4	8,2	52,0	78,5	16,0	19	4,9	11511N08104	HCS-08-DKJ-06-045-C-M-W3	
					.21	.32	2.05	3.09	.63	.75	10.80			
10	3/8"	-06	9/16"-18 UNF	-06	6,5	9,9	40,0	73,5	16,5	19	6,2	11511N10104	HCS-10-DKJ-06-045-C-M-W3	
					.26	.39	1.57	2.89	.65	.75	13.56			
10	3/8"	-06	3/4"-16 UNF	-08	6,5	9,9	42,0	75,0	15,5	24	8,2	11511N10124	HCS-10-DKJ-08-045-C-M-W3	
					.26	.39	1.65	2.95	.61	.94	17.97			
10	3/8"	-06	7/8"-14 UNF	-10	6,5	9,9	39,5	73,0	17,5	27	9,9	11511N10164	HCS-10-DKJ-10-045-C-M-W3	
					.26	.39	1.56	2.87	.69	1.06	21.72			
12	1/2"	-08	3/4"-16 UNF	-08	9,5	13,0	45,0	80,5	21,5	22	9,2	11511N12124	HCS-12-DKJ-08-045-C-M-W3	
					.37	.51	1.77	3.17	.85	.87	20.18			
12	1/2"	-08	7/8"-14 UNF	-10	9,5	13,0	64,0	96,5	21,0	27	11,8	11511N12164	HCS-12-DKJ-10-045-C-M-W3	
					.37	.51	2.52	3.80	.83	1.06	26.02			
12	1/2"	-08	1 1/16"-12 UN	-12	9,5	13,0	47,0	82,5	21,5	32	15,3	11511N12204	HCS-12-DKJ-12-045-C-M-W3	
					.37	.51	1.85	3.25	.85	1.26	33.63			
16	5/8"	-10	7/8"-14 UNF	-10	12,6	16,0	53,5	91,5	22,5	27	13,6	11511N16164	HCS-16-DKJ-10-045-C-M-W3	
					.50	.63	2.11	3.60	.89	1.06	29.99			
16	5/8"	-10	1 1/16"-12 UN	-12	12,6	16,0	58,5	96,5	27,0	32	18,9	11511N16204	HCS-16-DKJ-12-045-C-M-W3	
					.50	.63	2.30	3.80	1.06	1.26	41.56			
19	3/4"	-12	1 1/16"-12 UN	-12	14,8	19,1	60,2	106,0	27,5	32	23,8	11511N20204	HCS-19-DKJ-12-045-C-M-W3	
					.58	.75	2.37	4.17	1.08	1.26	52.37			
19	3/4"	-12	1 5/16"-12 UN	-16	14,8	19,1	64,0	110,0	25,5	41	32,6	11511N20254	HCS-19-DKJ-16-045-C-M-W3	
					.58	.75	2.52	4.33	1.00	1.66	71.88			
25	1"	-16	1 5/16"-12 UN	-16	20,0	25,9	83,5	138,5	32,5	41	46,5	11511N25254	HCS-25-DKJ-16-045-C-M-W3	
					.79	1.02	3.29	5.45	1.28	1.61	102.53			
25	1"	-16	1 5/8"-12 UN	-20	20,0	25,9	90,0	144,5	35,0	50	60,5	11511N25324	HCS-25-DKJ-20-045-W-M-W3	
					.79	1.02	3.54	5.69	1.38	1.97	133.40			
31	1 1/4"	-20	1 5/8"-12UN	-20	26,0	32,5	109,0	168,5	45,5	50	88,1	11511N32324	HCS-31-DKJ-20-045-W-M-W3	
					1.02	1.28	4.29	6.63	1.79	1.97	194.15			
31	1 1/4"	-20	1 7/8"-12 UN	-24	26,0	32,5	110,0	170,0	46,5	60	104,0	11511N32404	HCS-31-DKJ-24-045-W-M-W3	
					1.02	1.28	4.33	6.69	1.83	2.36	229.32			
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0	38,9	134,5	202,0	58,5	60	141,8	11511N40404	HCS-38-DKJ-24-045-W-M-W3	
					1.22	1.53	5.30	7.95	2.30	2.36	312.67			
51	2"	-32	2 1/2"-12 UN	-32	40,0	51,6	151,0	226,0	67,0	75	235,0	11511N50504	HCS-51-DKJ-32-045-W-M-W3	
					1.57	2.03	5.94	8.90	2.64	2.95	518.18			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**ECOPOS VA Version**

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**Mobile Interlocking Protection**

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**90° Version**

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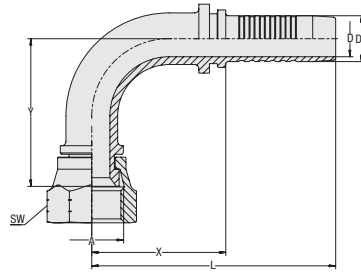


**ecoVOS™**
**90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore Type DKJ 90°**

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca.	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	per 100			
06	1/4"	-04	7/16"-20 UNF	-04	3,9	6,7	25,5	55,5	31,5	14	3,2	11511N06069	HCS-06-DKJ-04-090-C-M-W3	
					.15	.26	1.00	2.19	1.24	.55	6.95			
06	1/4"	-04	1/2"-20 UNF	-05	3,9	6,7	27,0	57,0	27,5	17	4,0	11511N06089	HCS-06-DKJ-05-090-C-M-W3	
					.15	.26	1.06	2.24	1.08	.67	8.71			
06	1/4"	-04	9/16"-18 UNF	-06	3,9	6,7	32,5	62,5	30,0	19	4,7	11511N06109	HCS-06-DKJ-06-090-C-M-W3	
					.15	.26	1.28	2.46	1.18	.75	10.36			
08	5/16"	-05	1/2"-20 UNF	-05	5,4	8,2	28,5	58,5	30,0	17	4,7	11511N08089	HCS-08-DKJ-05-090-C-M-W3	
					.21	.32	1.12	2.30	1.18	.67	10.25			
08	5/16"	-05	9/16"-18 UNF	-06	5,4	8,2	33,0	59,5	30,0	19	4,9	11511N08109	HCS-08-DKJ-06-090-C-M-W3	
					.21	.32	1.30	2.34	1.18	.75	10.80			
08	5/16"	-05	3/4"-16 UNF	-08	5,4	8,2	33,0	59,5	33,0	24	0,0	11511N08129	HCS-08-DKJ-08-090-C-M-W3	
					.21	.32	1.30	2.34	1.30	.94	.00			
10	3/8"	-06	9/16"-18 UNF	-06	6,5	9,9	35,0	69,0	36,5	19	7,3	11511N10109	HCS-10-DKJ-06-090-C-M-W3	
					.26	.39	1.38	2.72	1.44	.75	16.10			
10	3/8"	-06	3/4"-16 UNF	-08	6,5	9,9	37,0	70,0	33,0	24	9,2	11511N10129	HCS-10-DKJ-08-090-C-M-W3	
					.26	.39	1.46	2.76	1.30	.94	20.18			
10	3/8"	-06	7/8"-14 UNF	-10	6,5	9,9	38,5	72,0	38,5	27	11,2	11511N10169	HCS-10-DKJ-10-090-C-M-W3	
					.26	.39	1.52	2.83	1.52	1.06	24.70			
12	1/2"	-08	3/4"-16 UNF	-08	9,5	13,0	39,5	75,0	42,0	22	10,7	11511N12129	HCS-12-DKJ-08-090-C-M-W3	
					.37	.51	1.56	2.95	1.65	.87	23.59			
12	1/2"	-08	7/8"-14 UNF	-10	9,5	13,0	39,0	77,0	43,5	27	13,6	11511N12169	HCS-12-DKJ-10-090-C-M-W3	
					.37	.51	1.54	3.03	1.71	1.06	29.99			
12	1/2"	-08	1 1/16"-12 UN	-12	9,5	13,0	40,0	75,5	43,0	32	16,8	11511N12209	HCS-12-DKJ-12-090-C-M-W3	
					.37	.51	1.57	2.97	1.69	1.26	37.04			
16	5/8"	-10	7/8"-14 UNF	-10	12,6	16,0	46,5	85,0	51,5	27	16,2	11511N16169	HCS-16-DKJ-10-090-C-M-W3	
					.50	.63	1.83	3.35	2.03	1.06	35.61			
16	5/8"	-10	1 1/16"-12 UN	-12	12,6	16,0	45,0	83,5	48,5	32	20,3	11511N16209	HCS-16-DKJ-12-090-C-M-W3	
					.50	.63	1.77	3.29	1.91	1.26	44.76			
19	3/4"	-12	1 1/16"-12 UN	-12	14,8	19,1	54,0	100,0	54,5	32	28,1	11511N20209	HCS-19-DKJ-12-090-C-M-W3	
					.58	.75	2.13	3.94	2.15	1.26	61.85			
19	3/4"	-12	1 5/16"-12 UN	-16	14,8	19,1	54,0	100,0	55,0	41	36,3	11511N20259	HCS-19-DKJ-16-090-C-M-W3	
					.58	.75	2.13	3.94	2.17	1.61	79.93			
25	1"	-16	1 5/16"-12 UN	-16	20,0	25,9	72,0	126,3	67,0	41	43,0	11511N25259	HCS-25-DKJ-16-090-C-M-W3	
					.79	1.02	2.83	4.97	2.64	1.61	94.82			
25	1"	-16	1 5/8"-12 UN	-20	20,0	25,9	82,0	137,0	74,0	50	68,9	11511N25329	HCS-25-DKJ-20-090-W-M-W3	
					.79	1.02	3.23	5.39	2.91	1.97	151.92			
31	1 1/4"	-20	1 5/8"-12UN	-20	26,0	32,5	91,5	151,5	99,0	50	102,7	11511N32329	HCS-31-DKJ-20-090-W-M-W3	
					1.02	1.28	3.60	5.96	3.90	1.97	226.34			
31	1 1/4"	-20	1 7/8"-12 UN	-24	26,0	32,5	91,0	151,0	93,0	60	115,7	11511N32409	HCS-31-DKJ-24-090-W-M-W3	
					1.02	1.28	3.58	5.94	3.66	2.36	255.01			
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0	38,9	116,5	184,0	110,0	60	163,4	11511N40409	HCS-38-DKJ-24-090-W-M-W3	
					1.22	1.53	4.59	7.24	4.33	2.36	360.19			
51	2"	-32	2 1/2"-12 UN	-32	40,0	51,6	122,0	197,0	140,0	75	261,0	11511N50509	HCS-51-DKJ-32-090-W-M-W3	
					1.57	2.03	4.80	7.76	5.51	2.95	575.39			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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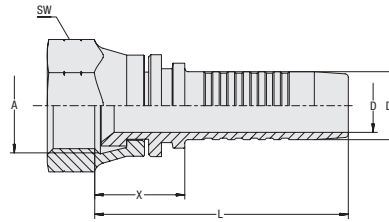

**MULTIVOS Version**

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**Straight Insert with Female BSPP Thread and 60° Conical Bore  
Type DKJG**

ecovos™



**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Conical Bore  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection  
 (nominal size DN 19 to DN 25)

Hose Size			Connection Size		Dimensions (mm/in)						Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	per 100	Part Numbers	Ordering Codes	
06	1/4"	-04	G 1/4"	-04	3,9	6,7	14,1	44,3	19	2,9	11511N06060G	HCS-06-DKJG-04-M-W3-KOM	
					.15	.26	.56	1.74	.75	6.39			
08	5/16"	-05	G 3/8"	-06	5,4	8,2	19,3	49,5	22	4,8	11511N08100G	HCS-08-DKJG-06-M-W3-KOM	
					.21	.32	.76	1.95	.87	10.58			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	16,3	49,8	22	4,9	11511N10100G	HCS-10-DKJG-06-M-W3-KOM	
					.26	.39	.64	1.96	.87	10.80			
12	1/2"	-08	G 1/2"	-08	9,5	13,0	18,6	54,1	27	8,2	11511N12120G	HCS-12-DKJG-08-M-W3-KOM	
					.37	.51	.73	2.13	1.06	18.08			
19	3/4"	-12	G 3/4"	-12	14,8	19,1	18,7	64,7	32	12,4	11511N20200G	HCS-19-DKJG-12-M-W3-KOM	
					.58	.75	.74	2.55	1.26	27.34			
25	1"	-16	G 1"	-16	20,0	25,9	22,7	77,9	41	22,5	11511N25250G	HCS-25-DKJG-16-M-W3-KOM	
					.79	1.02	.89	3.07	1.61	49.61			

**Related Products and Accessories**



Swage Ferrules

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Mobile Interlocking Protection

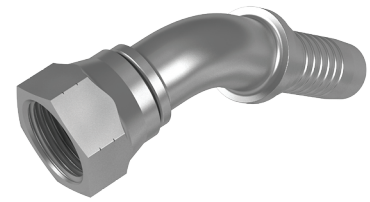
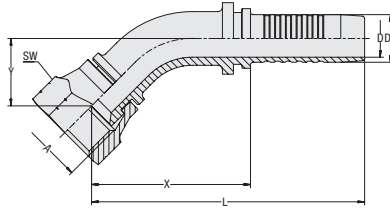
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**ecovos™**
**45° Elbow Insert with Female BSPP Thread and 60° Conical Bore  
Type DKJG 45°**

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Conical Bore  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	G 1/4"	-04	3,9	6,7	42,8	73,0	18,8	19	2,9	11511N06064G	HCS-06-DKJG-04-045-M-W3-KOM	
					.15	.26	1.69	2.87	.74	.75	6.39			
08	5/16"	-05	G 3/8"	-06	5,4	8,2	44,3	73,7	14,0	22	5,6	11511N08104G	HCS-08-DKJG-06-045-M-W3-KOM	
					.21	.32	1.74	2.90	.55	.87	12.35			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	34,5	78,0	20,1	22	6,2	11511N10104G	HCS-10-DKJG-06-045-M-W3-KOM	
					.26	.39	1.36	3.07	.79	.87	13.67			
12	1/2"	-08	G 1/2"	-08	9,5	13,0	45,9	81,4	19,5	27	11,6	11511N12124G	HCS-12-DKJG-08-045-M-W3-KOM	
					.37	.51	1.81	3.20	.77	1.06	25.58			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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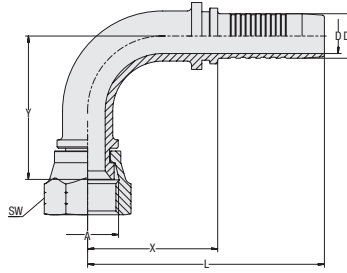

**90° Version**

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**90° Elbow Insert with Female BSPP Thread and 60° Conical Bore  
Type DKJG 90°**

ecovos™



**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Conical Bore  
**Standard** JIS 8363 (KOMATSU)  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	G 1/4"	-04	3,9	6,7	32,8	63,0	35,5	19	4,3	11511N06069G	HCS-06-DKJG-04-090-M-W3-KOM	
					.15	.26	1.29	2.48	1.40	.75	9.48			
08	5/16"	-05	G 3/8"	-06	5,4	8,2	32,3	62,5	36,0	22	5,2	11511N08109G	HCS-08-DKJG-06-090-M-W3-KOM	
					.21	.32	1.27	2.46	1.42	.87	11.47			
10	3/8"	-06	G 3/8"	-06	6,5	9,9	36,0	69,5	40,9	22	7,3	11511N10109G	HCS-10-DKJG-06-090-M-W3-KOM	
					.26	.39	1.42	2.74	1.61	.87	16.10			
12	1/2"	-08	G 1/2"	-08	9,5	13,0	45,5	81,0	40,0	27	13,3	11511N12129G	HCS-12-DKJG-08-090-M-W3-KOM	
					.37	.51	1.79	3.19	1.57	1.06	29.33			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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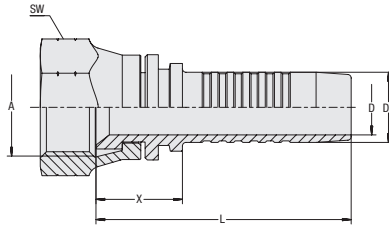


**ecoVOS™**
**Straight Insert with Female Metric Thread and 60° Conical Bore Type DKJM**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Conical Bore  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size	Dimensions (mm/in)				Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	D	D1	X	L	SW (Hex)			
06	1/4"	-04	M14x1,5	3,9 .15	6,7 .26	16,7 .66	46,9 1.85	19 .75	3,1 6.84	11511N06000M14	HCS-06-DKJM-M14-C-M-W3-KOM
06	1/4"	-04	M16x1,5	3,9 .15	6,7 .26	19,8 .78	50,0 1.97	19 .75	3,4 7.50	11511N06000M16	HCS-06-DKJM-M16-C-M-W3-KOM
10	3/8"	-06	M16x1,5	6,5 .26	9,9 .39	17,3 .68	50,8 2.00	19 .75	3,6 7.94	11511N10000M16	HCS-10-DKJM-M16-C-M-W3-KOM
10	3/8"	-06	M18x1,5	6,5 .26	9,9 .39	17,5 .69	51,0 2.01	22 .87	5,3 11.69	11511N10000M18	HCS-10-DKJM-M18-C-M-W3-KOM
10	3/8"	-06	M20x1,5	6,5 .26	9,9 .39	17,6 .69	51,1 2.01	24 .94	6,0 13.23	11511N10000M20	HCS-10-DKJM-M20-C-M-W3-KOM
12	1/2"	-08	M22x1,5	9,5 .37	13,0 .51	21,0 .83	56,5 2.22	27 1.06	8,5 18.74	11511N12000M22	HCS-12-DKJM-M22-C-M-W3-KOM
12	1/2"	-08	M24x1,5	9,5 .37	13,0 .51	24,2 .95	59,7 2.35	30 1.18	11,2 24.70	11511N12000M24	HCS-12-DKJM-M24-C-M-W3-KOM
16	5/8"	-10	M24x1,5	12,6 .50	16,0 .63	21,8 .86	60,3 2.37	30 1.18	11,0 24.26	11511N16000M24	HCS-16-DKJM-M24-C-M-W3-KOM
16	5/8"	-10	M28x1,5	12,6 .50	16,0 .63	23,0 .91	61,5 2.42	36 1.42	16,0 35.28	11511N16000M28	HCS-16-DKJM-M28-C-M-W3-KOM
19	3/4"	-12	M30x1,5	14,8 .58	19,1 .75	22,2 .87	68,2 2.69	36 1.42	17,6 38.81	11511N20000M30	HCS-19-DKJM-M30-C-M-W3-KOM
25	1"	-16	M33x1,5	20,0 .79	25,9 1.02	24,6 .97	79,8 3.14	41 1.61	0,0 .00	11511N25000M33	HCS-25-DKJM-M33-C-M-W3-KOM
31	1 1/4"	-20	M36x1,5	26,0 1.02	32,5 1.28	27,4 1.08	87,4 3.44	46 1.81	37,3 82.25	11511N32000M36	HCS-31-DKJM-M36-C-M-W3-KOM
38	1 1/2"	-24	M42x1,5	31,0 1.22	38,9 1.53	26,5 1.04	94,2 3.71	50 1.97	51,5 113.56	11511N40000M42	HCS-38-DKJM-M42-C-M-W3-KOM

**Related Products and Accessories**

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**Mobile Interlocking Protection**

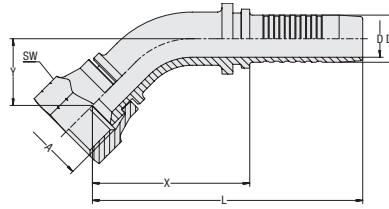
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**45° Elbow Insert with Female Metric Thread and 60° Conical Bore  
Type DKJM 45°**

ecovos™



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Conical Bore  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection  
 (nominal sizes DN 16 to DN 25)

Hose Size			Connection Size	Dimensions (mm/in)							Weight (kg/lbs) ca.	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	D	D1	X	L	Y	SW (Hex)	per 100			
06	1/4"	-04	M14x1,5	3,9	6,7	44,6	74,8	20,6	19	4,5	11511N06004M14	HCS-06-DKJM-M14-045-C-M-W3-KOM	
				.15	.26	1.76	2.94	.81	.75	9.92			
10	3/8"	-06	M14x1,5	6,5	9,9	46,2	79,7	20,5	19	6,1	11511N10004M14	HCS-10-DKJM-M14-045-C-M-W3-KOM	
				.26	.39	1.82	3.14	.81	.75	13.45			
10	3/8"	-06	M16x1,5	6,5	9,9	44,8	78,3	20,5	19	6,0	11511N10004M16	HCS-10-DKJM-M16-045-C-M-W3-KOM	
				.26	.39	1.76	3.08	.81	.75	13.23			
10	3/8"	-06	M18x1,5	6,5	9,9	45,7	79,2	21,4	22	7,8	11511N10004M18	HCS-10-DKJM-M18-045-C-M-W3-KOM	
				.26	.39	1.80	3.12	.84	.87	17.20			
12	1/2"	-08	M22x1,5	9,5	13,0	50,0	85,5	24,5	27	12,3	11511N12004M22	HCS-12-DKJM-M22-045-C-M-W3-KOM	
				.37	.51	1.97	3.37	.96	1.06	27.12			
16	5/8"	-10	M24x1,5	12,6	16,0	54,4	92,9	25,0	30	16,3	11511N16004M24	HCS-16-DKJM-M24-045-C-M-W3-KOM	
				.50	.63	2.14	3.66	.98	1.18	35.94			
19	3/4"	-12	M30x1,5	14,8	19,1	64,1	110,1	31,0	36	25,7	11511N20004M30	HCS-19-DKJM-M30-045-C-M-W3-KOM	
				.58	.75	2.52	4.33	1.22	1.42	56.67			
25	1"	-16	M33x1,5	20,0	25,9	71,8	127,0	34,0	41	39,5	11511N25004M33	HCS-25-DKJM-M33-045-C-M-W3-KOM	
				.79	1.02	2.83	5.00	1.34	1.61	87.10			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



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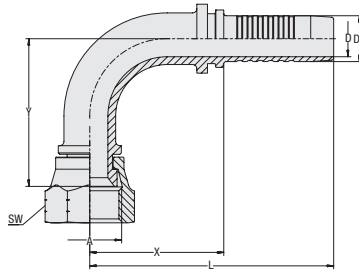


**ecovos™**
**90° Elbow Insert with Female Metric Thread and 60° Conical Bore  
Type DKJM 90°**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Conical Bore  
**Standard** JIS 8363 (KOMATSU)

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 25)


**A**

Hose Size			Connection Size		Dimensions (mm/in)						Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	M14x1,5	3,9	6,7	32,8	63,0	37,9	19	4,9	11511N06009M14	HCS-06-DKJM-M14-090-C-M-W3-KOM	
				.15	.26	1.29	2.48	1.49	.75	10.80			
10	3/8"	-06	M14x1,5	6,5	9,9	37,0	70,5	41,4	19	7,1	11511N10009M14	HCS-10-DKJM-M14-090-C-M-W3-KOM	
				.26	.39	1.46	2.78	1.63	.75	15.66			
10	3/8"	-06	M16x1,5	6,5	9,9	36,0	69,5	40,8	19	6,9	11511N10009M16	HCS-10-DKJM-M16-090-C-M-W3-KOM	
				.26	.39	1.42	2.74	1.61	.75	15.21			
10	3/8"	-06	M18x1,5	6,5	9,9	40,5	74,0	37,4	22	8,8	11511N10009M18	HCS-10-DKJM-M18-090-C-M-W3-KOM	
				.26	.39	1.59	2.91	1.47	.87	19.40			
10	3/8"	-06	M20x1,5	6,5	9,9	40,5	74,0	43,0	24	9,6	11511N10009M20	HCS-10-DKJM-M20-090-C-M-W3-KOM	
				.26	.39	1.59	2.91	1.69	.94	21.17			
10	3/8"	-06	M22x1,5	6,5	9,9	51,0	84,5	46,8	27	11,8	11511N10009M22	HCS-10-DKJM-M22-090-C-M-W3-KOM	
				.26	.39	2.01	3.33	1.84	1.06	26.02			
12	1/2"	-08	M22x1,5	9,5	13,0	49,0	84,5	43,2	27	13,7	11511N12009M22	HCS-12-DKJM-M22-090-C-M-W3-KOM	
				.37	.51	1.93	3.33	1.70	1.06	30.21			
16	5/8"	-10	M24x1,5	12,6	16,0	55,0	93,5	54,2	30	18,2	11511N16009M24	HCS-16-DKJM-M24-090-C-M-W3-KOM	
				.50	.63	2.17	3.68	2.13	1.18	40.13			
19	3/4"	-12	M30x1,5	14,8	19,1	63,4	109,4	62,6	36	29,3	11511N20009M30	HCS-19-DKJM-M30-090-C-M-W3-KOM	
				.58	.75	2.50	4.31	2.46	1.42	64.61			
25	1"	-16	M33x1,5	20,0	25,9	77,8	133,0	71,3	41	45,5	11511N25009M33	HCS-25-DKJM-M33-090-C-M-W3-KOM	
				.79	1.02	3.06	5.24	2.81	1.61	100.33			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

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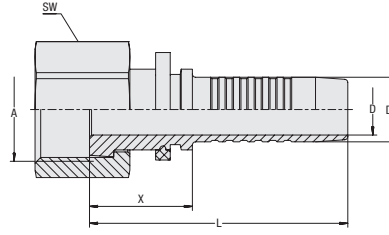
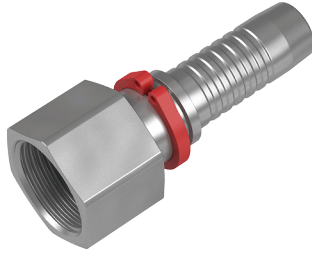

**Mobile Interlocking Protection**

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**Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection Type ORS**

ecoVOS™



**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** O-Ring Face Seal  
**Standard** ISO 8434-3

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			(kg/lbs) ca. per 100
06	1/4"	-04	9/16"-18 UNF	-04	3,9 .15	6,7 .26	24,5 .96	54,5 2.15	17 .67	3,2 .13	11521N06	HCS-06-ORS-04-S-M-W3
06	1/4"	-04	11/16"-16 UN	-06	3,9 .15	6,7 .26	30,0 1.18	60,0 2.36	22 .87	6,4 .25	11521N0610	HCS-06-ORS-06-S-M-W3
08	5/16"	-05	11/16"-16 UN	-06	5,4 .21	8,2 .32	31,0 1.22	61,0 2.40	22 .87	6,3 .25	11521N0810	HCS-08-ORS-06-S-M-W3
10	3/8"	-06	11/16"-16 UN	-06	6,5 .26	9,9 .39	21,5 .85	55,0 2.17	22 .87	6,1 .24	11521N10	HCS-10-ORS-06-S-M-W3
10	3/8"	-06	13/16"-16 UN	-08	6,5 .26	9,9 .39	28,5 1.12	62,0 2.44	24 .94	7,7 .30	11521N1012	HCS-10-ORS-08-S-M-W3
12	1/2"	-08	13/16"-16 UN	-08	9,5 .37	13,0 .51	28,0 1.10	59,0 2.32	24 .94	8,1 .32	11521N12	HCS-12-ORS-08-S-M-W3
12	1/2"	-08	1"-14 UNS	-10	9,5 .37	13,0 .51	33,0 1.30	68,5 2.70	30 1.18	13,5 .53	11521N1216	HCS-12-ORS-10-S-M-W3
16	5/8"	-10	1"-14 UNS	-10	12,6 .50	16,0 .63	25,5 1.00	64,0 2.52	30 1.18	12,7 .50	11521N16	HCS-16-ORS-10-S-M-W3
16	5/8"	-10	1 3/16"-12 UN	-12	12,6 .50	16,0 .63	25,5 1.00	64,0 2.52	36 1.42	19,3 .76	11521N1620	HCS-16-ORS-12-S-M-W3
19	3/4"	-12	1 3/16"-12 UN	-12	14,8 .58	19,1 .75	41,6 1.64	87,6 3.45	36 1.42	22,8 .90	11521N20	HCS-19-ORS-12-S-M-W3
19	3/4"	-12	1 7/16"-12 UN	-16	14,8 .58	19,1 .75	37,5 1.48	83,5 3.29	41 1.61	30,1 1.19	11521N2025	HCS-19-ORS-16-S-M-W3
25	1"	-16	1 7/16"-12 UN	-16	20,0 .79	25,9 1.02	40,3 1.59	95,5 3.76	41 1.61	33,2 1.31	11521N25	HCS-25-ORS-16-S-M-W3
25	1"	-16	1 11/16"-12 UN	-20	20,0 .79	25,9 1.02	38,5 1.52	93,5 3.68	50 1.97	46,3 1.82	11521N2532	HCS-25-ORS-20-S-M-W3
31	1 1/4"	-20	1 11/16"-12 UN	-20	26,0 1.02	32,5 1.28	41,5 1.63	101,5 4.00	50 1.97	50,0 1.97	11521N32	HCS-31-ORS-20-S-M-W3
38	1 1/2"	-24	2"-12 UN	-24	31,0 1.22	38,9 1.53	41,8 1.65	109,5 4.31	60 2.36	71,8 2.83	11521N40	HCS-38-ORS-24-S-M-W3

**Related Products and Accessories**



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**MULTIVOS Version**

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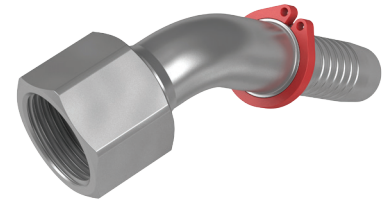
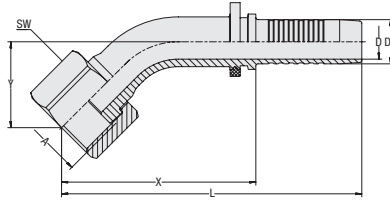


**ecoVOS™**
**45° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection  
Type ORS 45°**

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** O-Ring Face Seal  
**Standard** ISO 8434-3

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Suitable for use with mobile interlocking protection  
(nominal sizes DN 16 to DN 31)


**A**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	9/16"-18 UNF	-04	3,9	6,7	41,2	71,4	17,2	17	3,7	11521N06064	HCS-06-ORS-04-045-S-M-W3	
					.15	.26	1.62	2.81	.68	.67	8.16			
06	1/4"	-04	11/16"-16 UN	-06	3,9	6,7	43,4	73,6	19,4	22	5,9	11521N06104	HCS-06-ORS-06-045-S-M-W3	
					.15	.26	1.71	2.90	.76	.87	13.01			
08	5/16"	-05	11/16"-16 UN	-06	5,4	8,2	42,1	72,3	18,6	22	0,0	11521N08104	HCS-08-ORS-06-045-S-M-W3	
					.21	.32	1.66	2.85	.73	.87	.00			
10	3/8"	-06	11/16"-16 UN	-06	6,5	9,9	43,0	76,5	18,0	22	7,6	11521N10104	HCS-10-ORS-06-045-S-M-W3	
					.26	.39	1.69	3.01	.71	.87	16.76			
10	3/8"	-06	13/16"-16 UN	-08	6,5	9,9	44,5	78,0	19,5	22	8,9	11521N10124	HCS-10-ORS-08-045-S-M-W3	
					.26	.39	1.75	3.07	.77	.87	19.62			
12	1/2"	-08	13/16"-16 UN	-08	9,5	13,0	47,5	82,5	21,0	27	10,2	11521N12124	HCS-12-ORS-08-045-S-M-W3	
					.37	.51	1.87	3.25	.83	1.06	22.49			
12	1/2"	-08	1"-14 UNS	-10	9,5	13,0	45,3	80,8	19,1	30	14,4	11521N12164	HCS-12-ORS-10-045-S-M-W3	
					.37	.51	1.78	3.18	.75	1.18	31.75			
16	5/8"	-10	1"-14 UNS	-10	12,6	16,0	52,5	91,0	23,5	30	16,0	11521N16164	HCS-16-ORS-10-045-S-M-W3	
					.50	.63	2.07	3.58	.93	1.18	35.28			
19	3/4"	-12	1 3/16"-12 UN	-12	14,8	19,1	60,8	106,8	27,3	36	26,9	11521N20204	HCS-19-ORS-12-045-S-M-W3	
					.58	.75	2.39	4.20	1.07	1.42	59.29			
25	1"	-16	1 7/16"-12 UN	-16	20,0	25,9	68,4	123,6	30,4	41	0,0	11521N25254	HCS-25-ORS-16-045-S-M-W3	
					.79	1.02	2.69	4.87	1.20	1.61	.00			
25	1"	-16	1 11/16"-12 UN	-20	20,0	25,9	80,5	135,5	34,0	50	55,6	11521N25324	HCS-25-ORS-20-045-S-M-W3	
					.79	1.02	3.17	5.33	1.34	1.97	122.60			
31	1 1/4"	-20	1 11/16"-12 UN	-20	26,0	32,5	79,8	139,8	33,5	50	72,3	11521N32324	HCS-31-ORS-20-045-S-M-W3	
					1.02	1.28	3.14	5.50	1.32	1.97	159.42			
38	1 1/2"	-24	2"-12 UN	-24	31,0	38,9	79,8	147,5	32,6	60	108,1	11521N40404	HCS-38-ORS-24-045-S-M-W3	
					1.22	1.53	3.14	5.81	1.28	2.36	238.36			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**MULTIVOS Version**

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**Mobile Interlocking Protection**

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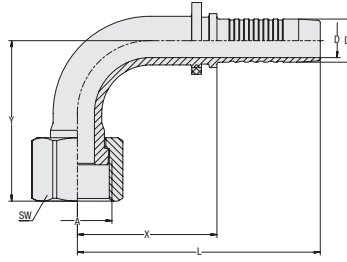
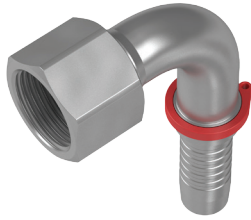

**90° Version**

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**90° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection  
Type ORS 90°**

ecoVOS™



**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** O-Ring Face Seal  
**Standard** ISO 8434-3

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Suitable for use with mobile interlocking protection (nominal sizes DN 16 to DN 31)

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
06	1/4"	-04	9/16"-18 UNF	-04	3,9	6,7	32,8	63,0	33,1	17	3,7	11521N06069	HCS-06-ORS-04-090-S-M-W3	
					.15	.26	1.29	2.48	1.30	.67	8.16			
06	1/4"	-04	11/16"-16 UN	-06	3,9	6,7	32,8	63,0	36,3	22	0,0	11521N06109	HCS-06-ORS-06-090-S-M-W3	
					.15	.26	1.29	2.48	1.43	.87	.00			
08	5/16"	-05	11/16"-16 UN	-06	5,4	8,2	32,3	62,5	35,1	22	0,0	11521N08109	HCS-08-ORS-06-090-S-M-W3	
					.21	.32	1.27	2.46	1.38	.87	.00			
10	3/8"	-06	11/16"-16 UN	-06	6,5	9,9	37,0	70,5	37,0	22	8,9	11521N10109	HCS-10-ORS-06-090-S-M-W3	
					.26	.39	1.46	2.78	1.46	.87	19.51			
10	3/8"	-06	13/16"-16 UN	-08	6,5	9,9	37,0	70,5	39,5	24	9,3	11521N10129	HCS-10-ORS-08-090-S-M-W3	
					.26	.39	1.46	2.78	1.56	.94	20.51			
12	1/2"	-08	13/16"-16 UN	-08	9,5	13,0	40,5	76,0	43,5	27	14,6	11521N12129	HCS-12-ORS-08-090-S-M-W3	
					.37	.51	1.59	2.99	1.71	1.06	32.08			
12	1/2"	-08	1"-14 UNS	-10	9,5	13,0	38,5	74,0	39,4	30	14,5	11521N12169	HCS-12-ORS-10-090-S-M-W3	
					.37	.51	1.52	2.91	1.55	1.18	31.97			
16	5/8"	-10	1"-14 UNS	-10	12,6	16,0	45,0	83,5	49,0	30	18,8	11521N16169	HCS-16-ORS-10-090-S-M-W3	
					.50	.63	1.77	3.29	1.93	1.18	41.34			
19	3/4"	-12	1 3/16"-12 UN	-12	14,8	19,1	52,8	98,8	58,0	36	29,4	11521N20209	HCS-19-ORS-12-090-S-M-W3	
					.58	.75	2.08	3.89	2.28	1.42	64.83			
25	1"	-16	1 7/16"-12 UN	-16	20,0	25,9	61,4	116,6	66,5	41	0,0	11521N25259	HCS-25-ORS-16-090-S-M-W3	
					.79	1.02	2.42	4.59	2.62	1.61	.00			
25	1"	-16	1 11/16"-12 UN	-20	20,0	25,9	70,5	125,5	70,5	50	62,8	11521N25329	HCS-25-ORS-20-090-S-M-W3	
					.79	1.02	2.78	4.94	2.78	1.97	138.36			
31	1 1/4"	-20	1 11/16"-12 UN	-20	26,0	32,5	76,3	136,3	78,2	50	67,1	11521N32329	HCS-31-ORS-20-090-S-M-W3	
					1.02	1.28	3.00	5.37	3.08	1.97	147.96			
38	1 1/2"	-24	2"-12 UN	-24	31,0	38,9	82,3	150,0	81,3	60	132,1	11521N40409	HCS-38-ORS-24-090-S-M-W3	
					1.22	1.53	3.24	5.91	3.20	2.36	291.28			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**Straight Version**

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**MULTIVOS Version**

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**Mobile Interlocking Protection**

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**45° Version**

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**ecoVOS™**

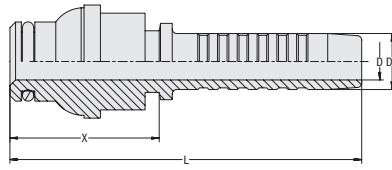
**Connection Type** Pressure Washer Connector  
(without Slip Nut)

**Sealing Type** Spherical Head

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

**Sealing Material** NBR (Buna-N®)


**A**

Hose Size			Dimensions (mm/in)				Weight (*90/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	X	L			
06	1/4"	-04	3,9	6,7	32,5	63,0	4,8	11701N06	HCS-06-WCS-14-04-OR-B-M-W3
			.15	.26	1.28	2.48	10.47		
08	5/16"	-05	5,4	8,2	32,5	63,0	4,8	11701N08	HCS-08-WCS-14-05-OR-B-M-W3
			.21	.32	1.28	2.48	10.47		
10	3/8"	-06	6,5	9,9	28,5	62,0	4,7	11701N10	HCS-10-WCS-14-06-OR-B-M-W3
			.26	.39	1.12	2.44	10.25		

**Straight Insert with Pressure Washer Connector Type WCC**

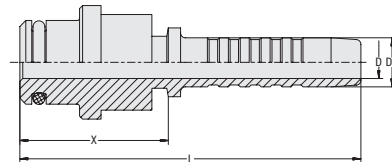
**Connection Type** Pressure Washer Connector  
(without Slip Nut)

**Sealing Type** Cylindrical

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

**Sealing Material** NBR (Buna-N®)



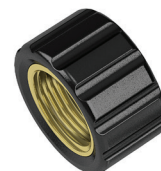
Hose Size			Dimensions (mm/in)				Weight (*90/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	X	L			
06	1/4"	-04	3,9	6,7	29,5	59,5	3,9	11711N06	HCS-06-WCC-14-04-OR-B-M-W3
			.15	.26	1.16	2.34	8.60		
08	5/16"	-05	5,4	8,2	27,0	57,0	3,7	11711N08	HCS-08-WCC-14-05-OR-B-M-W3
			.21	.32	1.06	2.24	8.05		

**Slip Nut for Straight Insert with Pressure Washer Connector Type SN-WC**

**Thread** M22x1,5

**Material** Brass / Plastic

VOSWINKEL Part Numbers	STAUFF Ordering Codes
11700-UEM	SN-WC-M22x1.5-W69

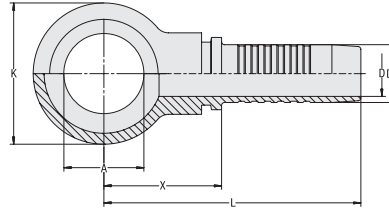

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Metric Banjo Insert  
Type RGN**



**Connection Type** Banjo for Metric Banjo Bolts  
**Sealing Type** Copper Ring  
**Standard** DIN 7642  
**Material** Carbon Steel  
**Surface Finishing** Zinc-Plating and Thick-Film-Passivation

Hose Size			Banjo Bolt		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	AØ	D	D1	K	X	L			
05	1/8"	-03	M10	-03	10,1 .40	3,0 .12	5,1 .20	17,0 .67	24,8 .98	47,8 1.88	1,5 3.31	16001B05	HCS-05-RGN-03-M-W66V
05	1/8"	-03	M12	-04	12,1 .48	3,0 .12	5,1 .20	20,0 .79	21,5 .85	44,5 1.75	1,6 3.53	16001B0506	HCS-05-RGN-04-M-W66V
06	1/4"	-04	M12	-04	12,1 .48	4,0 .16	6,8 .27	20,0 .79	28,3 1.11	54,8 2.16	2,7 5.95	16001B06	HCS-06-RGN-04-M-W66V
06	1/4"	-04	M10	-03	10,1 .40	4,0 .16	6,8 .27	17,0 .67	24,8 .98	51,3 2.02	1,6 3.53	16001B0605	HCS-06-RGN-03-M-W66V
06	1/4"	-04	M14	-05	14,1 .56	4,0 .16	6,8 .27	24,0 .94	24,8 .98	51,3 2.02	2,9 6.39	16001B0608	HCS-06-RGN-05-M-W66V
06	1/4"	-04	M16	-06	16,1 .63	4,0 .16	6,8 .27	28,0 1.10	26,7 1.05	53,2 2.09	3,2 7.06	16001B0610	HCS-06-RGN-06-M-W66V
06	1/4"	-04	M18	-08	18,1 .71	4,0 .16	6,8 .27	32,0 1.26	31,9 1.26	58,4 2.30	3,4 7.50	16001B0612	HCS-06-RGN-08-M-W66V
08	5/16"	-05	M14	-05	14,1 .56	5,5 .22	8,3 .33	24,0 .94	23,3 .92	49,8 1.96	3,2 7.06	16001B08	HCS-08-RGN-05-M-W66V
08	5/16"	-05	M12	-04	12,1 .48	5,5 .22	8,3 .33	20,0 .79	28,1 1.11	54,6 2.15	2,8 6.17	16001B0806	HCS-08-RGN-04-M-W66V
08	5/16"	-05	M16	-06	16,1 .63	5,5 .22	8,3 .33	28,0 1.10	26,8 1.06	53,3 2.10	4,6 10.14	16001B0810	HCS-08-RGN-06-M-W66V
08	5/16"	-05	M18	-08	18,1 .71	5,5 .22	8,3 .33	32,0 1.26	31,7 1.25	58,2 2.29	8,1 17.86	16001B0812	HCS-08-RGN-08-M-W66V
10	3/8"	-06	M16	-06	16,1 .63	7,0 .28	9,9 .39	28,0 1.10	26,9 1.06	57,4 2.26	4,9 10.80	16001B10	HCS-10-RGN-06-M-W66V
10	3/8"	-06	M14	-05	14,1 .56	7,0 .28	9,9 .39	24,0 .94	25,4 1.00	55,9 2.20	3,5 7.72	16001B1008	HCS-10-RGN-05-M-W66V
10	3/8"	-06	M18	-08	18,1 .71	7,0 .28	9,9 .39	32,0 1.26	32,3 1.27	62,8 2.47	8,0 17.64	16001B1012	HCS-10-RGN-08-M-W66V
10	3/8"	-06	M22	-10	22,1 .87	7,0 .28	9,9 .39	36,0 1.42	32,3 1.27	62,8 2.47	9,5 20.95	16001B1016	HCS-10-RGN-10-M-W66V
12	1/2"	-08	M18	-08	18,1 .71	9,5 .37	13,1 .52	32,0 1.26	29,3 1.15	61,8 2.43	8,5 18.74	16001B12	HCS-12-RGN-08-M-W66V
12	1/2"	-08	M22	-10	22,1 .87	9,5 .37	13,1 .52	36,0 1.42	29,6 1.17	62,1 2.44	9,6 21.17	16001B1216	HCS-12-RGN-10-M-W66V
16	5/8"	-10	M22	-10	22,1 .87	12,0 .47	16,2 .64	36,0 1.42	30,5 1.20	70,5 2.78	10,9 24.03	16001B16	HCS-16-RGN-10-M-W66V
16	5/8"	-10	M26	-12	26,1 1.03	12,0 .47	16,2 .64	45,0 1.77	38,0 1.50	78,0 3.07	16,0 35.28	16001B1620	HCS-16-RGN-12-M-W66V
19	3/4"	-12	M26	-12	26,1 1.03	15,0 .59	19,3 .76	45,0 1.77	38,0 1.50	82,3 3.24	17,5 38.59	16001B20	HCS-19-RGN-12-M-W66V

**Related Products and Accessories**



Swage Ferrules

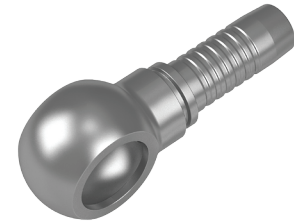
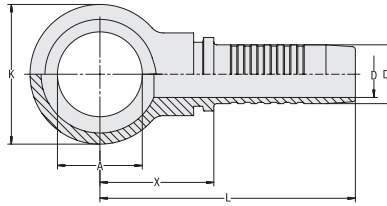
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**ecovos™**
**Straight Imperial Banjo Insert  
Type RGNG**

**Connection Type** Banjo for Imperial Banjo Bolts  
**Sealing Type** Copper Ring  
**Standard** DIN 7642  
  
**Material** Carbon Steel  
**Surface Finishing** Zinc-Plating and Thick-Film-Passivation


**A**

Hose Size			Banjo Bolt		Dimensions ( <sup>mm</sup> / <sub>in</sub> )						Weight ( <sup>kg</sup> / <sub>lbs</sub> ) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	AØ	D	D1	K	X	L			
05	1/8"	-03	R 1/8"	-03	10,1 .40	3,0 .12	5,1 .20	17,0 .67	24,8 .98	47,8 1.88	1,45 3.20	16011B05	HCS-06-RGNG-03-M-W66V
06	1/4"	-04	R 1/4"	-04	13,2 .52	4,0 .16	6,8 .27	24,0 .94	23,3 .92	49,8 1.96	3,20 7.06	16011B06	HCS-06-RGNG-04-M-W66V
06	1/4"	-04	R 3/8"	-06	16,7 .66	4,0 .16	6,8 .27	28,0 1.10	26,8 1.06	53,3 2.10	4,95 10.91	16011B0610	HCS-06-RGNG-06-M-W66V
08	5/16"	-05	R 1/4"	-04	13,2 .52	5,5 .22	8,3 .33	24,0 .94	28,1 1.11	54,6 2.15	3,50 7.72	16011B0806	HCS-08-RGNG-04-M-W66V
08	5/16"	-05	R 3/8"	-06	16,7 .66	5,5 .22	8,3 .33	28,0 1.10	26,8 1.06	53,3 2.10	5,05 11.14	16011B0810	HCS-08-RGNG-06-M-W66V
08	5/16"	-05	R 1/2"	-08	21 .83	5,5 .22	8,3 .33	36,0 1.42	28,9 1.14	55,4 2.18	8,85 19.51	16011B0812	HCS-10-RGNG-08-M-W66V
10	3/8"	-06	R 3/8"	-06	16,7 .66	7,0 .28	9,9 .39	28,0 1.10	26,9 1.06	57,4 2.26	5,50 12.13	16011B10	HCS-10-RGNG-06-M-W66V
10	3/8"	-06	R 1/4"	-04	13,2 .52	7,0 .28	9,9 .39	24,0 .94	23,4 .92	53,9 2.12	4,00 8.82	16011B1006	HCS-10-RGNG-04-M-W66V
10	3/8"	-06	R 1/2"	-08	21 .83	7,0 .28	9,9 .39	36,0 1.42	29,0 1.14	59,5 2.34	9,25 20.40	16011B1012	HCS-10-RGNG-08-M-W66V
12	1/2"	-08	R 1/2"	-08	21 .83	9,5 .37	13,1 .52	36,0 1.42	29,6 1.17	62,1 2.44	9,60 21.17	16011B12	HCS-12-RGNG-08-M-W66V
12	1/2"	-08	R 3/8"	-06	16,7 .66	9,5 .37	13,1 .52	28,0 1.10	27,5 1.08	60,0 2.36	6,35 14.00	16011B1210	HCS-12-RGNG-06-M-W66V
12	1/2"	-08	R 3/4"	-12	26,35 1.04	9,5 .37	13,1 .52	45,0 1.77	39,0 1.54	71,5 2.81	15,65 34.51	16011B1220	HCS-12-RGNG-12-M-W66V
16	5/8"	-10	R 5/8"	-10	23 .91	12,0 .47	16,2 .64	45,0 1.77	37,0 1.46	77,0 3.03	10,65 23.48	16011B16	HCS-16-RGNG-10-M-W66V
16	5/8"	-10	R 1/2"	-08	21 .83	12,0 .47	16,2 .64	on request				16011B1612	HCS-16-RGNG-08-M-W66V
16	5/8"	-10	R 3/4"	-12	26,5 1.04	12,0 .47	16,2 .64	45,0 1.77	39,0 1.54	79,0 3.11	20,40 44.98	16011B1620	HCS-16-RGNG-12-M-W66V
19	3/4"	-12	R 3/4"	-12	26,5 1.04	15,0 .59	19,3 .76	45,0 1.77	40,0 1.57	84,3 3.32	17,20 37.93	16011B20	HCS-19-RGNG-12-M-W66V
19	3/4"	-12	R 1"	-16	33,3 1.31	15,0 .59	19,3 .76	58,0 2.28	46,6 1.83	90,9 3.58	34,70 76.51	16011B2025	HCS-19-RGNG-16-M-W66V
25	1"	-16	R 1"	-16	33,3 1.31	20,0 .79	25,6 1.01	58,0 2.28	47,0 1.85	101,3 3.99	39,85 87.87	16011B25	HCS-25-RGNG-16-M-W66V

**Related Products and Accessories**




**Swage Ferrules**

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ecovos+

	<b>Introduction</b>	<b>86</b>
	<b>Skive Swage Ferrule for Spiral Hose</b> Series 15037	<b>88</b>
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**B**



B

- Maximum coverage with few standard components
- Reduction in investments costs for initial equipment and warehouse
- More space in the warehouse and hydraulic express service vehicles
- No need to duplicate stock-keeping of similar components with a high likelihood of confusion
- Gain in flexibility and rapidity to the customer's advantage

The mobile interlocking protection from VOSWINKEL turns a regular ECOVOS hose insert into an interlock connector in no time at all, thereby avoiding double warehouse-keeping.

Up to now, special accessories have been required for interlocking hose connections. In order to ensure rapid delivery, all nominal widths had to be kept available in duplicate, one as a standard version and a second as an interlock version.

With the mobile interlocking protection from VOSWINKEL, only standard ECOVOS hose inserts are now required.

The number of components now to be kept on hand is thereby reduced by more than 50 %.

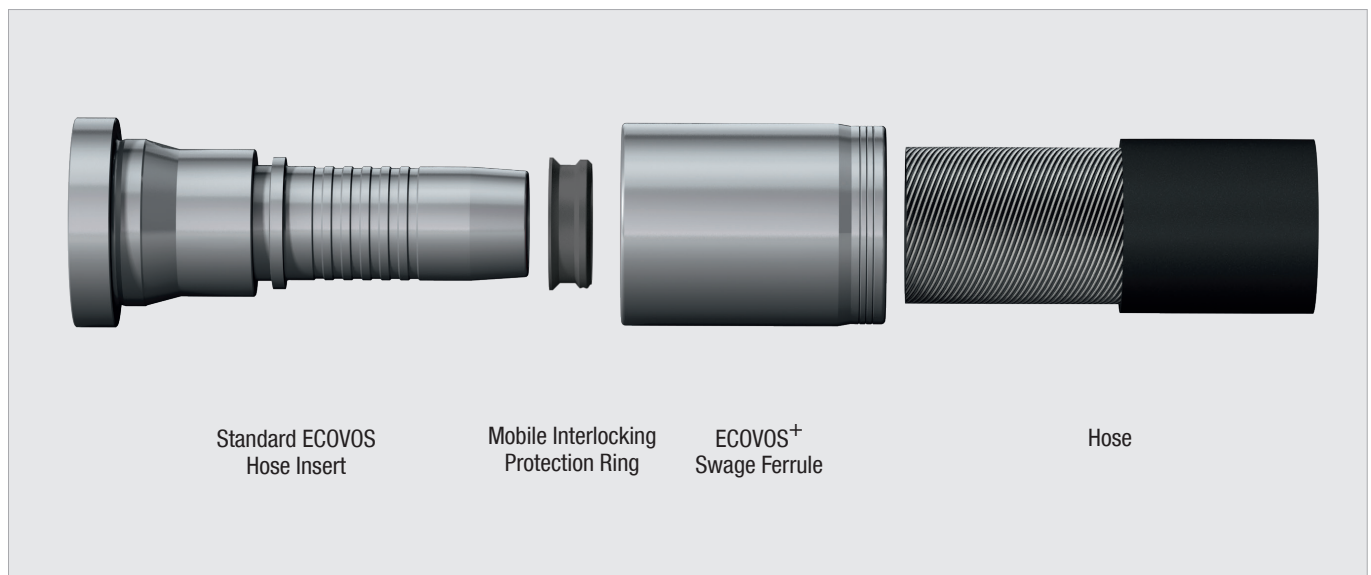
Ranging from textile hoses, including skived and non-skived hoses with wire mesh to interlock applications with a multispiral hose, the same now applies: a single hose connector system for all applications.

For the initial equipment of new sites, this means: maximum coverage with fewer components, reduction in investments costs for initial equipment and warehouse.

Hydraulic express service with mobile workshops particularly benefits from the new system: On the one hand as a result of the gain in space in the emergency vehicles, on the other hand through the ability to cover with the modular system a product range that was hitherto inconceivable.

A gain in flexibility and rapidity to the customer's advantage is guaranteed.

With a standard ECOVOS hose insert, the mobile interlocking protection ring and the appropriate swage ferrule from the ECOVOS<sup>+</sup> range, you can configure your own interlocking hose connection while remaining flexible.



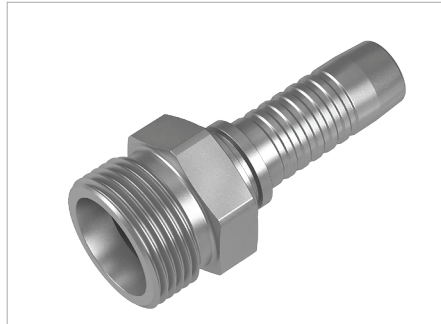
ecovos<sup>+</sup>

**B**

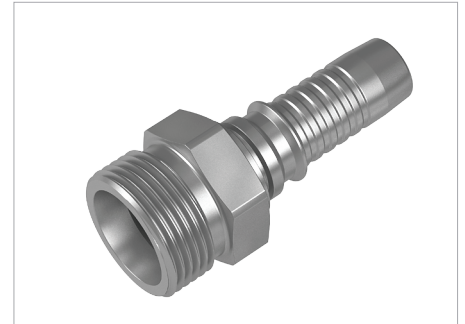
For large-scale applications for which particularly rational manufacture is essential, ECOVOS<sup>+</sup> hose insert with integrated interlocking protection rings are also available upon request.

The swage ferrule used from the ECOVOS<sup>+</sup> range is the same for both versions.

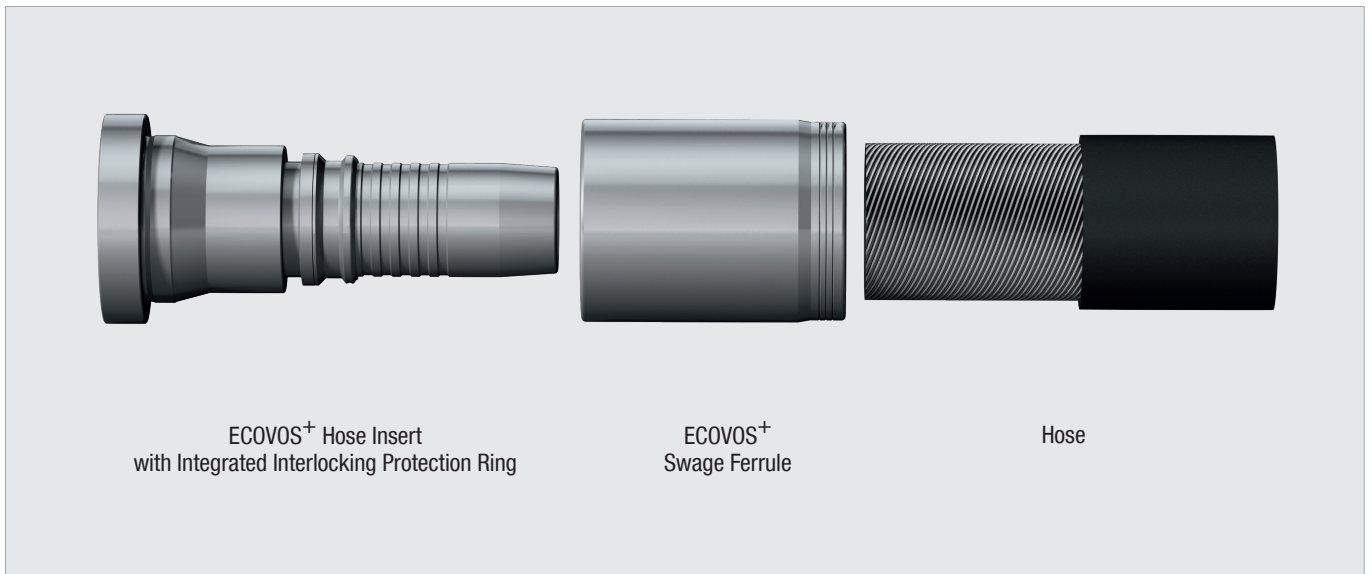
Whatever version you decide on: the result is always interlocking hose connections of highest quality and reliability.



ECOVOS Straight Hose Insert without Interlocking Protection



ECOVOS<sup>+</sup> Straight Hose Insert with Integrated Interlocking Protection Ring



ECOVOS<sup>+</sup> Hose Insert with Integrated Interlocking Protection Ring

ECOVOS<sup>+</sup> Swage Ferrule

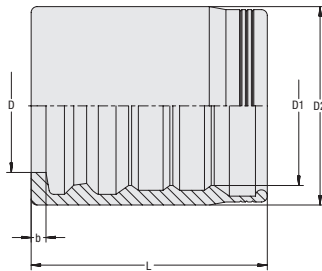
Hose





### Internal & External Skive Swage Ferrule for Spiral Hose Series 15037

ecovos<sup>+</sup>

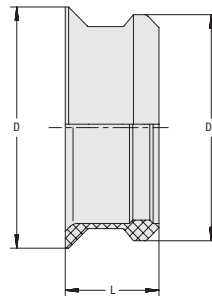


**Ferrule Type** with Pull-Out Protection (Interlock)  
**Suitable for** 4SP, 4SH, R15 (DN 19 / DN 25)  
**Standards** EN 856, SAE 100 R15  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Maximum working pressures depending on the type of the hose connector and the hose type.

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
16	5/8"	-10	22,6	27	33,6	40,0	2,5	7,55	15037N16	HF-5002-16-W3
			.89	1.06	1.32	1.57	.10	16.65		
19	3/4"	-12	25,5	30,2	39,0	50,0	3,0	15,5	15037N20	HF-5002-19-W3
			1.00	1.19	1.54	1.97	.12	34.18		
25	1"	-16	31,0	36,7	46,0	60,0	3,7	22,9	15037N25	HF-5002-25-W3
			1.22	1.44	1.81	2.36	.15	50.49		
31	1 1/4"	-20	39,2	47,0	57,0	65,0	4,0	34,1	15037N32	HF-5002-31-W3
			1.54	1.85	2.24	2.56	.16	75.19		
38	1 1/2"	-24	45,0	53,7	65,0	73,0	4,3	52,1	15037N40	HF-5002-38-W3
			1.77	2.11	2.56	2.87	.17	114.88		
51	2"	-32	58,5	66,0	78,0	80,0	4,3	70,2	15037N50	HF-5002-51-W3
			2.30	2.60	3.07	3.15	.17	154.79		

### Mobile Interlocking Protection Ring Type AS

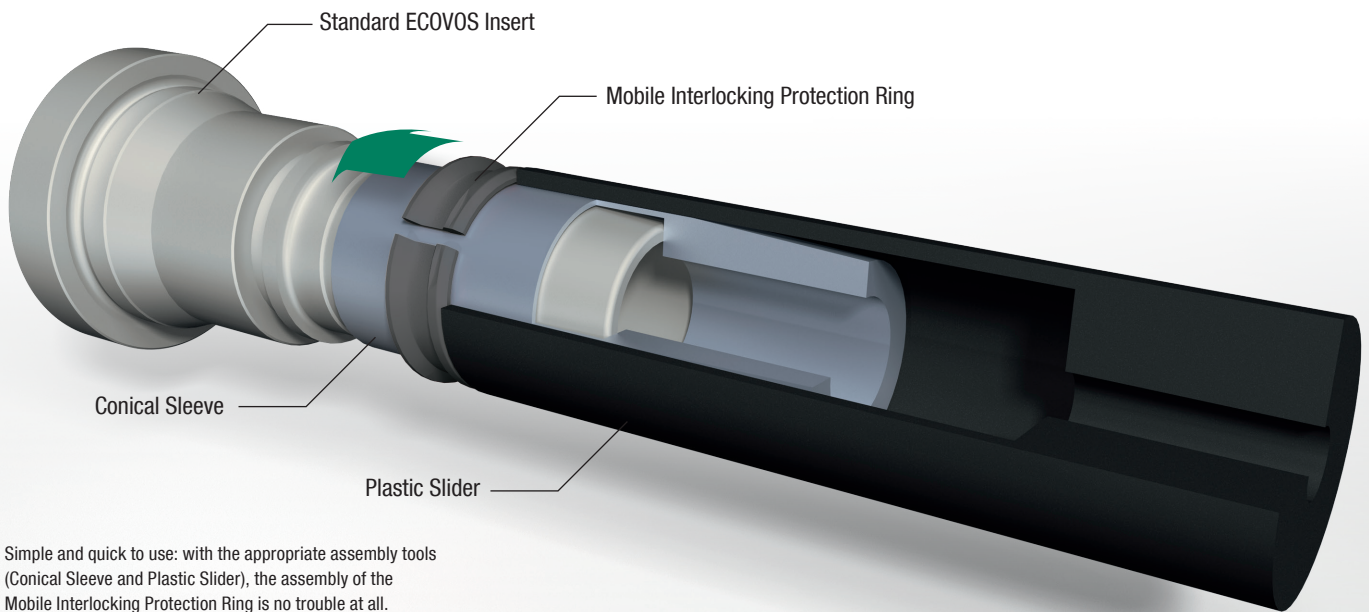


Hose Size			Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	D3	L	L1			
16	5/8"	-10	20,0	16,8	15,3	19,5	7,5	5,0	5,5	10037K16	HCE-AS-16-PEK
			.79	.66	.60	.77	.30	.20	12.13		
19	3/4"	-12	24,0	20,1	18,5	22,5	9,5	5,9	9,6	10037K20	HCE-AS-19-PEK
			.94	.79	.73	.89	.37	.23	21.17		
25	1"	-16	30,0	26,7	25,2	29,1	9,5	5,9	11,9	10037K25	HCE-AS-25-PEK
			1.18	1.05	.99	1.15	.37	.23	26.24		
31	1 1/4"	-20	37,5	33,4	31,8	36,1	11,5	7,8	20,2	10037K32	HCE-AS-31-PEK
			1.48	1.31	1.25	1.42	.45	.31	44.54		
38	1 1/2"	-24	43,8	39,5	37,9	42,4	15,5	10,8	33,8	10037K40	HCE-AS-38-PEK
			1.72	1.56	1.49	1.67	.61	.43	74.53		
51	2"	-32	56,0	53,1	50,6	52,6	15,5	10,8	51,0	10037K50	HCE-AS-51-PEK
			2.20	2.09	1.99	2.07	.61	.43	112.46		




**B**

Hose Size			VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash		
16	5/8"	-10	10137-16	HCE-AS-16-AT
19	3/4"	-12	10137-20	HCE-AS-19-AT
25	1"	-16	10137-25	HCE-AS-25-AT
31	1 1/4"	-20	10137-32	HCE-AS-31-AT
38	1 1/2"	-24	10137-40	HCE-AS-38-AT
51	2"	-32	10137-50	HCE-AS-51-AT

**Assembly Instructions**


Simple and quick to use: with the appropriate assembly tools (Conical Sleeve and Plastic Slider), the assembly of the Mobile Interlocking Protection Ring is no trouble at all.

The Mobile Interlocking Protection Ring is pushed over the Conical Sleeve using the Plastic Slider until it reaches the end position where it engages securely with a positive fit.

Swaging with a skived spiral hose and ferrule is subsequently performed as usual with the same tools and machines.







**Non-Skive Swage Ferrule for Braided Hose**

Series 15011

92



**Skive/Non-Skive Swage Ferrule for Braided Hose**

Series 15021

93



**Skive Swage Ferrule for Braided and Spiral Hose**

Series 15031

94



**Non-Skive Swage Ferrule for Hose with Textile Insert**

Series 15330

95

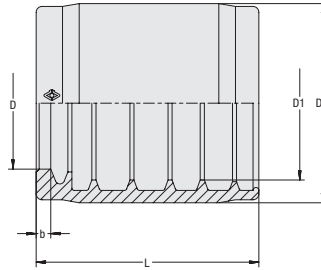
**ecovos™ va**

	<b>Straight Insert with Standpipe BEL (Light Series)</b>	96		<b>Straight Insert with Male BSPP Thread and 60° Conical Bore AGR</b>	116
	<b>45° Elbow Insert with Standpipe BEL 45° (Light Series)</b>	97		<b>Straight Insert with Male UN/UNF Thread and 74° Taper AGJ</b>	117
	<b>90° Elbow Insert with Standpipe BEL 90° (Light Series)</b>	98		<b>Straight Insert with Male BSPP Thread AGRF</b>	118
	<b>Straight Insert with Standpipe BES (Heavy Series)</b>	99		<b>Straight Insert with Male BSPT Thread AGRK</b>	119
	<b>45° Elbow Insert with Standpipe BES 45° (Heavy Series)</b>	100		<b>Straight Insert with Male NPTF Thread and 60° Conical Bore AGN</b>	120
	<b>90° Elbow Insert with Standpipe BES 90° (Heavy Series)</b>	101		<b>Straight Insert with SAE Flange Adaptor SFL (3000 PSI Series)</b>	121
	<b>Straight Insert with Male Metric Thread and 24° Conical Bore CEL (Light Series)</b>	102		<b>45° Elbow Insert with SAE Flange Adaptor SFL 45° (3000 PSI Series)</b>	122
	<b>Straight Insert with Male Metric Thread and 24° Conical Bore CES (Heavy Series)</b>	103		<b>90° Elbow Insert with SAE Flange Adaptor SFL 90° (3000 PSI Series)</b>	123
	<b>Straight Insert with Female Metric Nut Thread and 24° Taper DKL (Light Series)</b>	104		<b>Straight Insert with SAE Flange Adaptor SFS (6000 PSI Series)</b>	124
	<b>45° Elbow Insert with Female Metric Nut Thread and 24° Taper DKL 45° (Light Series)</b>	105		<b>45° Elbow Insert with SAE Flange Adaptor SFS 45° (6000 PSI Series)</b>	125
	<b>90° Elbow Insert with Female Metric Nut Thread and 24° Taper DKL 90° (Light Series)</b>	106		<b>90° Elbow Insert with SAE Flange Adaptor SFS 90° (6000 PSI Series)</b>	126
	<b>Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring DKOL (Light Series)</b>	107		<b>Straight Insert with Female BSPP Thread and 60° Taper DKR</b>	127
	<b>45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring DKOL 45° (Light Series)</b>	109		<b>45° Elbow Insert with Female BSPP Thread and 60° Taper DKR 45°</b>	128
	<b>90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring DKOL 90° (Light Series)</b>	109		<b>90° Elbow Insert with Female BSPP Thread and 60° Taper DKR 90°</b>	129
	<b>Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring DKOS (Heavy Series)</b>	110		<b>Straight Insert with Female BSPP Thread DKRF</b>	130
	<b>45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring DKOS 45° (Heavy Series)</b>	111		<b>90° Elbow Insert with Female BSPP Thread DKRF 90°</b>	131
	<b>90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring DKOS 90° (Heavy Series)</b>	112		<b>Straight Insert with Female UN/UNF Thread and 74° Conical Bore DKJ</b>	132
	<b>Straight Insert with Female Metric Nut Thread and Metal Seat DKK</b>	113		<b>45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore DKJ 45°</b>	133
	<b>90° Elbow Insert with Female Metric Thread and Metal Seat DKK 90°</b>	114		<b>90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore DKJ 90°</b>	134
				<b>Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection ORS</b>	135
				<b>Straight Insert with Female BSPP Thread and 60° Taper / O-Ring DKOR</b>	136

**C**


**Non-Skive Swage Ferrule for Braided Hose  
Series 15011**

ecovos™ VA



**Suitable for Standards** 1SN, 2SN, 2SC, 2SN-K  
EN 853, EN 857

**Material** Stainless Steel

Maximum working pressures depending on the type of the hose connector and the hose type.

C

Hose Size			Dimensions (mm/in)					Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
06	1/4"	-04	11,3	15,7	21,0	31,0	2,5	2,7	15011V06	HF-1000-06-W5
			-.16	.62	.83	1.22	.10	5.93		
08	5/16"	-05	12,7	17,3	22,5	31,0	2,5	2,9	15011V08	HF-1000-08-W5
			-.20	.68	.89	1.22	.10	6.28		
10	3/8"	-06	15,0	19,8	26,5	33,0	2,6	5,0	15011V10	HF-1000-10-W5
			-.24	.78	1.04	1.30	.10	10.91		
12	1/2"	-08	18,3	23,0	30,0	36,0	2,6	6,2	15011V12	HF-1000-12-W5
			-.31	.91	1.18	1.42	.10	13.67		
16	5/8"	-10	22,0	26,2	34,0	38,0	2,6	8,2	15011V16	HF-1000-16-W5
			-.39	1.03	1.34	1.50	.10	17.97		
19	3/4"	-12	25,0	30,1	38,0	44,0	3,0	10,8	15011V20	HF-1000-19-W5
			-.47	1.19	1.50	1.73	.12	23.81		
25	1"	-16	32,3	38,8	47,0	52,0	3,8	17,3	15011V25	HF-1000-25-W5
			-.63	1.53	1.85	2.05	.15	38.15		
31	1 1/4"	-20	40,0	49,3	57,0	60,0	4,1	23,0	15011V32	HF-1000-31-W5
			-.79	1.94	2.24	2.36	.16	50.72		
38	1 1/2"	-24	46,6	55,8	65,0	73,0	4,2	41,1	15011V40	HF-1000-38-W5
			-.94	2.20	2.56	2.87	.17	90.52		
51	2"	-32	58,9	68,5	78,0	80,0	4,4	52,5	15011V50	HF-1000-51-W5
			-1.26	2.70	3.07	3.15	.17	115.76		

**Related Products and Accessories**



DORNVOS Test Mandrels Pages 185-187

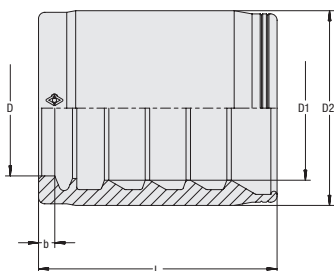


**ecovos™ va**
**Skive/Non-Skive Swage Ferrule for Braided Hose Series 15021**

**Suitable for Standards** 1SN, 2SC, 2SN-K, 1SC, 1SN-K  
EN 853, EN 857

**Material** Stainless Steel

Maximum working pressures depending on the type of the hose connector and the hose type.


**C**

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
06	1/4"	-04	11,0	13,2	20,0	31,0	2,5	3,1	15021V06	HF-2001-06-W5
			.43	.52	.79	1.22	.10	6.84		
08	5/16"	-05	12,6	15,5	20,6	31,0	2,5	8,3	15021V08	HF-2001-08-W5
			.50	.61	.81	1.22	.10	18.30		
10	3/8"	-06	14,1	16,6	23,6	33,0	2,5	4,4	15021V10	HF-2001-10-W5
			.56	.65	.93	1.30	.10	9.59		
12	1/2"	-08	17,6	19,5	27,0	35,0	2,5	5,7	15021V12	HF-2001-12-W5
			.69	.77	1.06	1.38	.10	12.57		
16	5/8"	-10	21,6	23,0	31,0	38,0	2,5	7,7	15021V16	HF-2001-16-W5
			.85	.91	1.22	1.50	.10	17.04		
19	3/4"	-12	24,5	26,8	35,0	44,0	3,0	10,4	15021V20	HF-2001-19-W5
			.96	1.06	1.38	1.73	.12	22.82		
25	1"	-16	30,4	34,1	42,0	52,0	3,7	28,6	15021V25	HF-2001-25-W5
			1.20	1.34	1.65	2.05	.15	62.95		
38	1 1/2"	-24	44,4	51,3	62,0	68,0	4,3	41,9	15021V40	HF-2001-38-W5
			1.75	2.02	2.44	2.68	.17	92.28		
51	2"	-32	56,7	64,0	75,0	80,0	4,3	62,9	15021V50	HF-2001-51-W5
			2.23	2.52	2.95	3.15	.17	138.69		

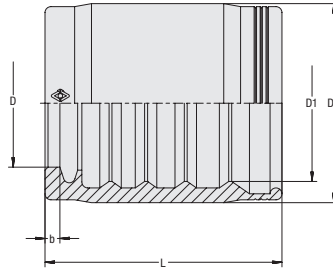
**Related Products and Accessories**


**DORNVOS Test Mandrels** Pages 185-187



**Skive Swage Ferrule for Braided and Spiral Hose  
Series 15031**

ecovos™ VA



**Suitable for Standards** 2SN, SPC3, 4SP  
EN 853, EN 856

**Material** Stainless Steel

Maximum working pressures depending on the type of the hose connector and the hose type.

C

Hose Size			Dimensions (mm/in)					Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
06	1/4"	-04	11,0	15,5	22,0	34,0	2,5	4,0	15031V06	HF-3000-06-W5
			.43	.61	.87	1.34	.10	.16		
08	5/16"	-05	12,1	17,2	23,0	31,0	2,5	3,7	15031V08	HF-3000-08-W5
			.48	.68	.91	1.22	.10	.14		
10	3/8"	-06	14,2	18,9	26,0	38,0	2,5	5,7	15031V10	HF-3000-10-W5
			.56	.74	1.02	1.50	.10	.22		
12	1/2"	-08	18,5	22,2	30,0	40,0	2,5	7,7	15031V12	HF-3000-12-W5
			.73	.87	1.18	1.57	.10	.30		
16	5/8"	-10	21,6	26,4	33,6	40,0	2,5	8,6	15031V16	HF-3000-16-W5
			.85	1.04	1.32	1.57	.10	.34		
19	3/4"	-12	24,6	30,2	39,0	50,0	3,0	15,7	15031V20	HF-3000-19-W5
			.97	1.19	1.54	1.97	.12	.62		
25	1"	-16	30,9	37,3	45,5	60,0	3,7	19,7	15031V25	HF-3000-25-W5
			1.22	1.47	1.79	2.36	.15	.77		
31	1 1/4"	-20	38,7	46,8	58,0	70,0	4,0	42,6	15031V32	HF-3000-31-W5
			1.52	1.84	2.28	2.76	.16	1.68		
38	1 1/2"	-24	44,2	53,7	65,0	73,0	4,3	53,5	15031V40	HF-3000-38-W5
			1.74	2.11	2.56	2.87	.17	2.10		
51	2"	-32	57,3	66,6	78,0	80,0	4,3	72,2	15031V50	HF-3000-51-W5
			2.26	2.62	3.07	3.15	.17	2.84		

**Related Products and Accessories**



DORNVOS Test Mandrels Pages 185-187

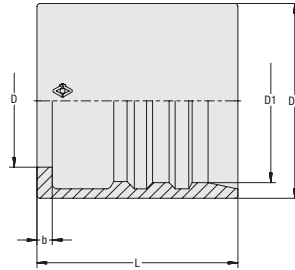


**ecovos™ va**
**Non-Skive Swage Ferrule for Hose with Textile Insert  
Series 15330**

**Suitable for Standard** 2TE, 3TE  
EN 854

**Material** Stainless Steel

Maximum working pressures depending on the type of the hose connector and the hose type.


**C**

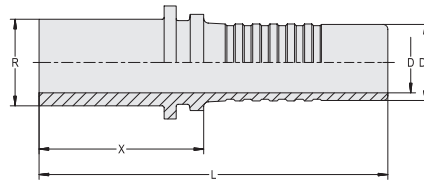
Hose Size			Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	D	D1	D2	L	b	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
05	1/8"	-03	9,8	12,5	17,0	27,3	2,5	1,7	15110V05 2TE	HF-1001-05-W5
			.39	.49	.67	1.07	.10	.07		
05	1/8"	-03	9,8	14,0	18,6	27,3	2,5	2,0	15220V05 3TE	HF-1002-05-W5
			.39	.55	.73	1.07	.10	.08		
06	1/4"	-04	11,6	15,3	19,0	28,0	2,5	2,7	15011V06	HF-1000-06-W5
			.46	.60	.75	1.10	.10	.11		
08	5/16"	-05	13,0	17,2	22,3	31,0	2,5	3,3	15330V08	HF-1005-08-W5
			.51	.68	.88	1.22	.10	.13		
10	3/8"	-06	14,2	19,2	24,0	33,0	2,5	3,7	15330V10	HF-1005-10-W5
			.56	.76	.94	1.30	.10	.15		
12	1/2"	-08	17,8	23,0	28,0	36,0	2,5	5,0	15330V12	HF-1005-12-W5
			.70	.91	1.10	1.42	.10	.20		
16	5/8"	-10	21,8	26,9	33,0	38,0	2,5	7,8	15330V16	HF-1005-16-W5
			.86	1.06	1.30	1.50	.10	.31		
19	3/4"	-12	24,6	29,9	36,0	44,0	3,0	9,8	15330V20	HF-1005-19-W5
			.97	1.18	1.42	1.73	.12	.39		
25	1"	-16	30,8	37,2	43,0	52,0	3,7	15,6	15330V25	HF-1005-25-W5
			1.21	1.46	1.69	2.05	.15	.61		
31	1 1/4"	-20	37,7	43,5	49,0	60,0	4,0	16,7	15330V32 3TE	HF-1005-31-W5
			1.48	1.71	1.93	2.36	.16	.66		

**Related Products and Accessories**


**DORN VOS Test Mandrels** Pages 185-187



**Straight Insert with Standpipe  
Type BEL (Light Series)**



**Connection Type** Standpipe  
**Sealing Type** 24° Cutting Ring  
**Standard** ISO 8434-1, DIN 3861  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)				Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	R (mm/in)	Dash	D	D1	D2	X			
06	1/4"	-04	08	-04	3,9	6,7	29,5	59,5	1,6	11001V06	HCS-06-BE-8L-M-W5
			.31		.15	.26	1.16	2.34	.06		
06	1/4"	-04	06	-03	3,9	6,7	29,5	59,5	1,3	11001V0605	HCS-06-BE-6L-M-W5
			.24		.15	.26	1.16	2.34	.05		
08	5/16"	-05	10	-05	5,4	8,0	30,5	60,5	2,1	11001V08	HCS-08-BE-10L-M-W5
			.39		.21	.31	1.20	2.38	.08		
08	5/16"	-05	08	-04	5,4	8,0	29,5	59,5	1,6	11001V0806	HCS-08-BE-8L-M-W5
			.31		.21	.31	1.16	2.34	.06		
10	3/8"	-06	12	-06	6,5	9,6	30,5	64,0	3,1	11001V10	HCS-10-BE-12L-M-W5
			.47		.26	.38	1.20	2.52	.12		
10	3/8"	-06	10	-05	6,5	9,6	30,5	64,0	2,5	11001V1008	HCS-10-BE-10L-M-W5
			.39		.26	.38	1.20	2.52	.10		
10	3/8"	-06	15	-08	6,5	9,6	30,5	64,0	4,3	11001V1012	HCS-10-BE-15L-M-W5
			.59		.26	.38	1.20	2.52	.17		
12	1/2"	-08	15	-08	9,5	12,8	33,5	69,0	4,7	11001V12	HCS-12-BE-15L-M-W5
			.59		.37	.50	1.32	2.72	.19		
12	1/2"	-08	12	-06	9,5	12,8	33,0	68,5	4,1	11001V1210	HCS-12-BE-12L-M-W5
			.47		.37	.50	1.30	2.70	.16		
16	5/8"	-10	18	-10	12,6	16,0	34,0	72,5	6,2	11001V16	HCS-16-BE-18L-M-W5
			.71		.50	.63	1.34	2.85	.24		
19	3/4"	-12	22	-12	14,8	19,1	36,5	82,5	10,3	11001V20	HCS-19-BE-22L-M-W5
			.87		.58	.75	1.44	3.25	.41		
25	1"	-16	28	-16	20,0	25,9	39,5	94,5	19,0	11001V25	HCS-25-BE-28L-M-W5
			1.10		.79	1.02	1.56	3.72	.75		
31	1 1/4"	-20	35	-20	26,0	32,5	46,5	106,5	30,7	11001V32	HCS-31-BE-35L-M-W5
			1.38		1.02	1.28	1.83	4.19	1.21		
38	1 1/2"	-24	42	-24	31,0	38,9	48,5	116,0	47,9	11001V40	HCS-38-BE-42L-M-W5
			1.65		1.22	1.53	1.91	4.57	1.89		

**Related Products and Accessories**



Swage Ferrules

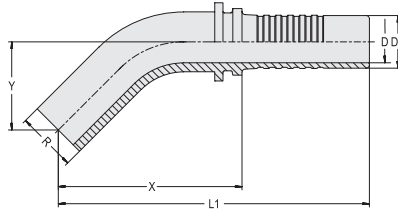
Pages 92-95





**ecoivos™ va**
**45° Elbow Insert with Standpipe  
Type BEL 45° (Light Series)**

**Connection Type** Standpipe  
**Sealing Type** 24° Cutting Ring  
**Standard** ISO 8434-1, DIN 3861  
  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	R (mm/in)	Dash	D	D1	X	L	Y				
06	1/4"	-04	8	-04	3,9	6,7	43,5	73,5	19,0	1,8	11001V06064	HCS-06-BE-8L-045-M-W5	
			.31		.15	.26	1.71	2.89	.75	3.97			
08	5/16"	-05	10	-05	5,4	8,0	52,5	82,5	23,0	3,4	11001V08084	HCS-08-BE-10L-045-M-W5	
			.39		.21	.31	2.07	3.25	.91	7.50			
10	3/8"	-06	12	-06	6,5	9,8	58,5	92,0	25,0	4,6	11001V10104	HCS-10-BE-12L-045-M-W5	
			.47		.26	.39	2.30	3.62	.98	10.14			
12	1/2"	-08	15	-08	9,5	12,8	68,5	104,0	27,0	7,1	11001V12124	HCS-12-BE-15L-045-M-W5	
			.59		.37	.50	2.70	4.09	1.06	15.66			
16	5/8"	-10	18	-10	12,6	16,0	69,5	108,0	41,0	9,1	11001V16164	HCS-16-BE-18L-045-M-W5	
			.71		.50	.63	2.74	4.25	1.61	20.07			
19	3/4"	-12	22	-12	14,8	19,1	73,0	119,0	29,0	18,9	11001V20204	HCS-19-BE-22L-045-M-W5	
			.87		.58	.75	2.87	4.69	1.14	41.67			
25	1"	-16	28	-16	20,0	25,9	83,0	138,0	34,0	36,3	11001V25254	HCS-25-BE-28L-045-M-W5	
			1.10		.79	1.02	3.27	5.43	1.34	80.04			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

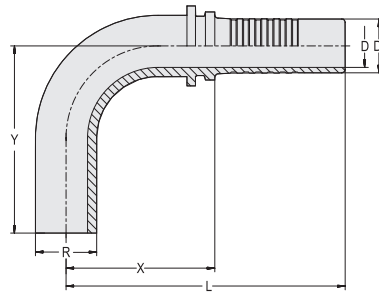
**Swage Ferrules**

Pages 92-95



90° Elbow Insert with Standpipe  
Type BEL 90° (Light Series)

ECOVOS™ VA



**Connection Type** Standpipe  
**Sealing Type** 24° Cutting Ring  
**Standard** ISO 8434-1, DIN 3861  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	R (mm/in)	Dash	D	D1	X	L	Y			
06	1/4"	-04	8	-04	3,9	6,7	27,2	56,5	31,0	2,0	11001V06069	HCS-06-BE-8L-090-M-W5
			.31		.15	.26	1.07	2.22	1.22	4.41		
08	5/16"	-05	10	-05	5,4	8,0	31,5	61,5	37,5	31,0	11001V08089	HCS-08-BE-10L-090-M-W5
			.39		.21	.31	1.24	2.42	1.48	68.36		
10	3/8"	-06	12	-06	6,5	9,8	33,0	66,5	43,5	4,6	11001V10109	HCS-10-BE-12L-090-M-W5
			.47		.26	.39	1.30	2.62	1.71	10.14		
12	1/2"	-08	15	-08	9,5	12,8	41,0	76,5	51,0	9,5	11001V12129	HCS-12-BE-15L-090-M-W5
			.59		.37	.50	1.61	3.01	2.01	20.95		
16	5/8"	-10	18	-10	12,6	16,0	44,0	82,5	55,0	11,0	11001V16169	HCS-16-BE-18L-090-M-W5
			.71		.50	.63	1.73	3.25	2.17	24.26		
19	3/4"	-12	22	-12	14,8	19,1	63,0	109,0	61,0	23,0	11001V20209	HCS-19-BE-22L-090-M-W5
			.87		.58	.75	2.48	4.29	2.40	50.72		
25	1"	-16	28	-16	20,0	25,9	74,0	129,0	72,0	40,7	11001V25259	HCS-25-BE-28L-090-M-W5
			1.10		.79	1.02	2.91	5.08	2.83	89.74		

Dimension Y ± 2,5 mm / .10 in

Related Products and Accessories



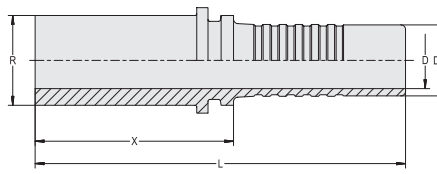
Swage Ferrules

Pages 92-95



**ecovos™ va**

**Connection Type** Standpipe  
**Sealing Type** 24° Cutting Ring  
**Standard** ISO 8434-1, DIN 3861  
  
**Material** Stainless Steel

**Straight Insert with Standpipe  
Type BES (Heavy Series)**

**C**

Hose Size			Connection Size		Dimensions (mm/in)				Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	R (mm/m)	Dash	D	D1	D2	X			
06	1/4"	-04	10	-04	3,9	6,7	33,5	63,5	2,1	11011V06	HCS-06-BE-10S-M-W5
			.39		.15	.26	1.32	2.50	4.63		
06	1/4"	-04	08	-03	3,9	6,7	33,5	63,5	1,7	11011V0605	HCS-06-BE-8S-M-W5
			.31		.15	.26	1.32	2.50	3.75		
06	1/4"	-04	12	-05	3,9	6,7	33,5	63,5	2,8	11011V0608	HCS-06-BE-12S-M-W5
			.47		.15	.26	1.32	2.50	6.17		
08	5/16"	-05	12	-05	5,4	8,0	33,5	63,5	2,6	11011V08	HCS-08-BE-12S-M-W5
			.47		.21	.31	1.32	2.50	5.73		
10	3/8"	-06	14	-06	6,5	9,6	36,5	70,0	4,1	11011V10	HCS-10-BE-14S-M-W5
			.55		.26	.38	1.44	2.76	9.04		
10	3/8"	-06	12	-05	6,5	9,6	33,5	67,0	2,9	11011V1008	HCS-10-BE-12S-M-W5
			.47		.26	.38	1.32	2.64	6.39		
10	3/8"	-06	16	-08	6,5	9,6	37,5	71,0	5,1	11011V1012	HCS-10-BE-16S-M-W5
			.63		.26	.38	1.48	2.80	11.25		
12	1/2"	-08	16	-08	9,5	12,8	38,0	73,5	5,7	11011V12	HCS-12-BE-16S-M-W5
			.63		.37	.50	1.50	2.89	12.57		
16	5/8"	-10	20	-10	12,6	16,0	44,0	82,5	9,0	11011V16	HCS-16-BE-20S-M-W5
			.79		.50	.63	1.73	3.25	19.85		
16	5/8"	-10	16	-08	12,6	16,0	38,0	76,5	6,7	11011V1612	HCS-16-BE-16S-M-W5
			.63		.50	.63	1.50	3.01	14.77		
19	3/4"	-12	25	-12	14,8	19,1	48,5	94,5	15,9	11011V20	HCS-19-BE-25S-M-W5
			.98		.58	.75	1.91	3.72	35.06		
19	3/4"	-12	20	-10	14,8	19,1	44,5	90,5	9,8	11011V2016	HCS-19-BE-20S-M-W5
			.79		.58	.75	1.75	3.56	21.61		
19	3/4"	-12	30	-16	14,8	19,1	52,5	98,5	20,3	11011V2025	HCS-19-BE-30S-M-W5
			1.18		.58	.75	2.07	3.88	44.76		
25	1"	-16	30	-16	20,0	25,9	53,5	108,5	25,6	11011V25	HCS-25-BE-30S-M-W5
			1.18		.79	1.02	2.11	4.27	56.45		
31	1 1/4"	-20	38	-20	26,0	32,5	58,5	118,5	41,5	11011V32	HCS-31-BE-38S-M-W5
			1.50		1.02	1.28	2.30	4.67	91.51		

**Related Products and Accessories**

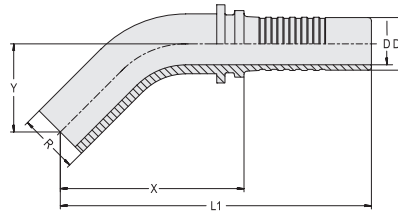
**Swage Ferrules**

Pages 92-95



**45° Elbow Insert with Standpipe  
Type BES 45° (Heavy Series)**

ecovos™ VA



**Connection Type** Standpipe  
**Sealing Type** 24° Cutting Ring  
**Standard** ISO 8434-1, DIN 3861  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	R (mm/in)	Dash	D	D1	X	L	Y			
06	1/4"	-04	10	-04	3,9	6,7	52,0	82,0	23,5	3,2	11011V06064	HCS-06-BE-10S-045-M-W5
			.39		.15	.26	2.05	3.23	.93	7.06		
08	5/16"	-05	12	-06	5,4	8,0	62,0	92,0	25,0	4,8	11011V08084	HCS-08-BE-12S-045-M-W5
			.47		.21	.31	2.44	3.62	.98	10.58		
10	3/8"	-06	14	-06	6,5	9,8	53,0	86,5	27,0	5,7	11011V10104	HCS-10-BE-14S-045-M-W5
			.55		.26	.39	2.09	3.41	1.06	12.57		
12	1/2"	-08	16	-08	9,5	12,8	67,5	103,0	30,0	9,6	11011V12124	HCS-12-BE-16S-045-M-W5
			.63		.37	.50	2.66	4.06	1.18	21.17		
16	5/8"	-10	20	-10	12,6	16,0	72,0	111,0	34,0	14,6	11011V16164	HCS-16-BE-20S-045-M-W5
			.79		.50	.63	2.83	4.37	1.34	32.19		
19	3/4"	-12	25	-12	14,8	19,1	87,0	133,0	39,0	24,6	11011V20204	HCS-19-BE-25S-045-M-W5
			.98		.58	.75	3.43	5.24	1.54	54.24		
25	1"	-16	30	-16	20,0	25,9	99,0	154,0	44,0	40,2	11011V25254	HCS-25-BE-30S-045-M-W5
			1.18		.79	1.02	3.90	6.06	1.73	88.64		

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



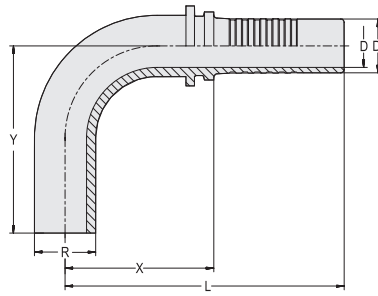
Swage Ferrules

Pages 92-95



**ecovos™ va**

**Connection Type** Standpipe  
**Sealing Type** 24° Cutting Ring  
**Standard** ISO 8434-1, DIN 3861  
  
**Material** Stainless Steel


**90° Elbow Insert with Standpipe  
Type BES 90° (Heavy Series)**

**C**

Hose Size			Connection Size		Dimensions (mm/in)					Weight (*9/163) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	R (mm/in)	Dash	D	D1	X	L	Y			
06	1/4"	-04	10	-04	3,9	6,7	30,0	60,0	38,0	3,0	11011V06069	HCS-06-BE-10S-090-M-W5
			.39		.15	.26	1.18	2.36	1.50	6.62		
08	5/16"	-05	12	-06	5,4	8,0	38,0	68,0	41,5	4,8	11011V08089	HCS-08-BE-12S-090-M-W5
			.47		.21	.31	1.50	2.68	1.63	10.58		
10	3/8"	-06	14	-06	6,5	9,8	38,0	77,5	41,5	7,0	11011V10109	HCS-10-BE-14S-090-M-W5
			.55		.26	.39	1.50	3.05	1.63	15.44		
12	1/2"	-08	16	-08	9,5	12,8	60,5	94,0	58,5	8,2	11011V12129	HCS-12-BE-16S-090-M-W5
			.63		.37	.50	2.38	3.70	2.30	18.08		
16	5/8"	-10	20	-10	12,6	16,0	56,5	95,0	66,0	16,7	11011V16169	HCS-16-BE-20S-090-M-W5
			.79		.50	.63	2.22	3.74	2.60	36.82		
19	3/4"	-12	25	-12	14,8	19,1	69,5	115,0	77,0	24,6	11011V20209	HCS-19-BE-25S-090-M-W5
			.98		.58	.75	2.74	4.53	3.03	54.24		
25	1"	-16	30	-16	20,0	25,9	81,0	136,0	89,0	40,2	11011V25259	HCS-25-BE-30S-090-M-W5
			1.18		.79	1.02	3.19	5.35	3.50	88.64		

Abmessung Y ± 2,5 mm / .10 in

**Related Products and Accessories**

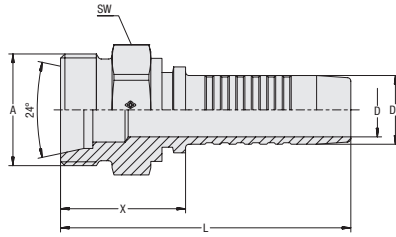
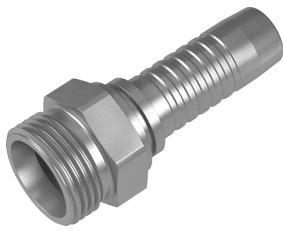
**Swage Ferrules**

Pages 92-95



**Straight Insert with Male Metric Thread and 24° Conical Bore  
Type CEL (Light Series)**

ecovos™ VA



**Connection Type** Male Metric Thread  
**Sealing Type** 24° Conical Bore  
 (Shape W acc. to DIN 3861)  
**Standard** ISO 8434-1  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	23,5 .93	53,5 2,11	14 .55	2,4 5,29	11101V06	HCS-06-CE-8L-M-W5
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	23,5 .93	53,5 2,11	14 .55	2,3 4,96	11101V0605	HCS-06-CE-6L-M-W5
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	23,5 .93	53,5 2,11	14 .55	3,2 6,95	11101V0605	HCS-06-CE-6L-M-W5
06	1/4"	-04	M18x1,5	-06	3,9 .15	6,7 .26	25,5 1,00	55,5 2,19	19 .75	3,5 7,61	11101V0610	HCS-06-CE-12L-M-W5
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,0 .31	24,5 .96	54,5 2,15	17 .67	3,1 6,84	11101V08	HCS-08-CE-10L-M-W5
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,0 .31	25,5 1,00	55,5 2,19	19 .75	3,6 7,87	11101V0810	HCS-08-CE-12L-M-W5
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,6 .38	25,5 1,00	59,0 2,32	19 .75	4,1 9,04	11101V10	HCS-10-CE-12L-M-W5
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,6 .38	24,5 .96	58,0 2,28	17 .67	3,7 8,05	11101V1008	HCS-10-CE-10L-M-W5
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,6 .38	27,5 1,08	61,0 2,40	22 .87	5,9 12,90	11101V1012	HCS-10-CE-15L-M-W5
12	1/2"	-08	M22x1,5	-08	9,5 .37	12,8 .50	28,5 1,12	63,5 2,50	22 .87	6,7 14,66	11101V12	HCS-12-CE-15L-M-W5
12	1/2"	-08	M18x1,5	-06	9,5 .37	12,8 .50	26,5 1,04	62,0 2,44	19 .75	5,0 11,03	11101V1210	HCS-12-CE-12L-M-W5
12	1/2"	-08	M26x1,5	-10	9,5 .37	12,8 .50	29,5 1,16	65,0 2,56	27 1,06	9,2 20,18	11101V1216	HCS-12-CE-18L-M-W5
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	29,5 1,16	67,5 2,66	27 1,06	9,6 21,17	11101V16	HCS-16-CE-18L-M-W5
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	33,0 1,30	78,5 3,09	30 1,18	13,5 29,77	11101V20	HCS-19-CE-22L-M-W5
25	1"	-16	M36x2	-16	20,0 .79	25,9 1,02	34,5 1,36	89,5 3,52	36 1,42	23,7 52,26	11101V25	HCS-25-CE-28L-M-W5
31	1 1/4"	-20	M45x2	-20	26,0 1,02	32,5 1,28	39,5 1,56	99,5 3,92	46 1,81	39,9 87,98	11101V32	HCS-31-CE-35L-M-W5
38	1 1/2"	-24	M52x2	-24	31,0 1,22	38,9 1,53	42,5 1,67	110,0 4,33	55 2,17	60,1 132,52	11101V40	HCS-38-CE-42L-M-W5

**Related Products and Accessories**



Swage Ferrules

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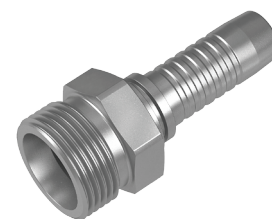
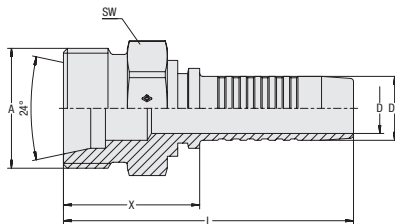
MULTIVOS Version

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**ecovos™ va**
**Straight Insert with Male Metric Thread and 24° Conical Bore  
Type CES (Heavy Series)**

**Connection Type** Male Metric Thread  
**Sealing Type** 24° Conical Bore  
 (Shape W acc. to DIN 3861)  
**Standard** ISO 8434-1  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)					Weight ( <sup>kg</sup> /lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
06	1/4"	-04	M18x1,5	-04	3,9	6,7	26,5	56,5	19	4,1	11111V06	HCS-06-CE-10S-M-W5
					.15	.26	1.04	2.22	.75	9.04		
06	1/4"	-04	M16x1,5	-03	3,9	6,7	25,5	55,5	17	3,4	11111V0605	HCS-06-CE-8S-M-W5
					.15	.26	1.00	2.19	.67	7.50		
08	5/16"	-05	M20x1,5	-05	5,4	8,0	27,5	57,5	22	5,4	11111V08	HCS-08-CE-12S-M-W5
					.21	.31	1.08	2.26	.87	11.91		
08	5/16"	-05	M18x1,5	-04	5,4	8,0	26,5	56,5	22	4,3	11111V0806	HCS-08-CE-10S-M-W5
					.21	.31	1.04	2.22	.87	9.37		
10	3/8"	-06	M22x1,5	-06	6,5	9,6	29,5	63,0	22	6,5	11111V10	HCS-10-CE-14S-M-W5
					.26	.38	1.16	2.48	.87	14.33		
10	3/8"	-06	M20x1,5	-05	6,5	9,6	27,5	61,0	22	5,9	11111V1008	HCS-10-CE-12S-M-W5
					.26	.38	1.08	2.40	.87	13.01		
10	3/8"	-06	M24x1,5	-08	6,5	9,6	29,5	63,0	24	7,2	11111V1012	HCS-10-CE-16S-M-W5
					.26	.38	1.16	2.48	.94	15.88		
12	1/2"	-08	M24x1,5	-08	9,5	12,8	30,5	65,5	24	8,1	11111V12	HCS-12-CE-16S-M-W5
					.37	.50	1.20	2.58	.94	17.75		
12	1/2"	-08	M30x2	-10	9,5	12,8	34,5	70,0	30	13,4	11111V1216	HCS-12-CE-20S-M-W5
					.37	.50	1.36	2.76	1.18	29.44		
16	5/8"	-10	M30x2	-10	12,6	16,0	34,5	72,5	30	13,2	11111V16	HCS-16-CE-20S-M-W5
					.50	.63	1.36	2.85	1.18	29.11		
19	3/4"	-12	M36x2	-12	14,8	19,1	38,0	83,5	36	20,9	11111V20	HCS-19-CE-25S-M-W5
					.58	.75	1.50	3.29	1.42	46.08		
19	3/4"	-12	M30x2	-10	14,8	19,1	35,0	80,5	30	15,3	11111V2016	HCS-19-CE-20S-M-W5
					.58	.75	1.38	3.17	1.18	33.63		
25	1"	-16	M42x2	-16	20,0	25,9	42,5	97,5	46	37,50	11111V25	HCS-25-CE-30S-M-W5
					.79	1.02	1.67	3.84	1.81	82.69		
25	1"	-16	M36x2	-12	20,0	25,9	38,5	93,5	36	26,30	11111V2520	HCS-25-CE-25S-M-W5
					.79	1.02	1.52	3.68	1.42	57.99		
25	1"	-16	M52x2	-20	20,0	25,9	46,5	101,5	55	57,15	11111V2532	HCS-25-CE-38S-M-W5
					.79	1.02	1.83	4.00	2.17	126.02		

**Related Products and Accessories**

**Swage Ferrules**

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**MULTIVOS Version**

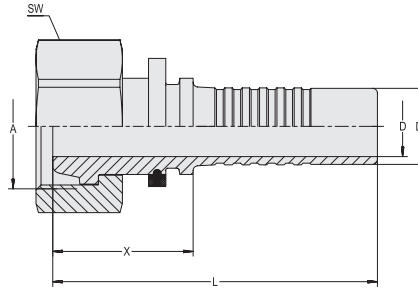
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**Straight Insert with Female Metric Nut Thread and 24° Taper Type DKL (Light Series)**

ecovos™ VA



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper  
**Standard** ISO 8434-1  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/16) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	25,0 .98	55,0 2.17	17 .67	3,5 7.61	11201V06	HCS-06-DK-8L-S-M-W5
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	19,5 .77	49,5 1.95	17 .67	2,4 5.18	11201V0605	HCS-06-DK-6L-W-M-W5
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	26,0 1.02	56,0 2.20	19 .75	4,2 9.26	11201V0608	HCS-06-DK-10L-S-M-W5
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,0 .31	26,0 1.02	56,0 2.20	19 .75	4,4 9.59	11201V08	HCS-08-DK-10L-S-M-W5
08	5/16"	-05	M14x1,5	-04	5,4 .21	8,0 .31	20,0 .79	50,0 1.97	17 .67	3,3 7.17	11201V0806	HCS-08-DK-8L-W-M-W5
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,6 .38	26,5 1.04	60,0 2.36	22 .87	6,2 13.67	11201V10	HCS-10-DK-12L-S-M-W5
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,6 .38	20,0 .79	53,5 2.11	19 .75	4,4 9.70	11201V1008	HCS-10-DK-10L-W-M-W5
12	1/2"	-08	M22x1,5	-08	9,5 .37	12,8 .50	26,5 1.04	62,0 2.44	27 1.06	9,4 20.62	11201V12	HCS-12-DK-15L-S-M-W5
12	1/2"	-08	M18x1,5	-06	9,5 .37	12,8 .50	22,0 .87	57,5 2.26	22 .87	6,6 14.44	11201V1210	HCS-12-DK-12L-W-M-W5
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	29,0 1.14	67,5 2.66	32 1.26	13,5 29.66	11201V16	HCS-16-DK-18L-S-M-W5
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	33,0 1.30	78,5 3.09	36 1.42	19,8 43.55	11201V20	HCS-19-DK-22L-S-M-W5
25	1"	-16	M36x2	-16	20,0 .79	25,9 1.02	34,5 1.36	89,5 3.52	41 1.61	29,7 65.49	11201V25	HCS-25-DK-28L-S-M-W5
31	1 1/4"	-20	M45x2	-20	26,0 1.02	32,5 1.28	41,0 1.61	100,5 3.96	50 1.97	47,9 105.51	11201V32	HCS-31-DK-35L-S-M-W5
38	1 1/2"	-24	M52x2	-24	31,0 1.22	38,9 1.53	31,0 1.22	98,5 3.88	60 2.36	66,6 146.85	11201V40	HCS-38-DK-42L-S-M-W5

**Related Products and Accessories**



Swage Ferrules

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45° Version

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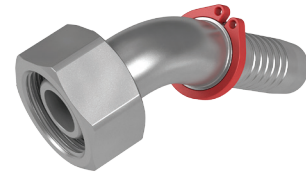
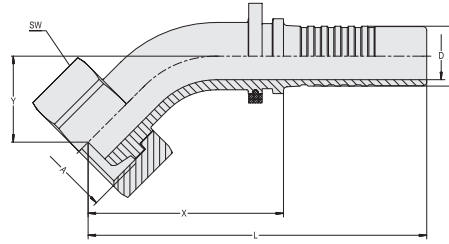
90° Version

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**ecovos™ va**
**45° Elbow Insert with Female Metric Nut Thread and 24° Taper Type DKL 45° (Light Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper  
**Standard** ISO 8434-1  
  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	36,0 1.42	66,0 2.60	15,0 .59	17 .67	3,8 8.38	11201V06064	HCS-06-DK-8L-045-S-M-W5	
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,0 .31	37,5 1.48	67,5 2.66	17,0 .67	19 .75	5,0 11.03	11201V08084	HCS-08-DK-10L-045-S-M-W5	
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,6 .38	40,5 1.59	74,0 2.91	17,5 .69	22 .87	7,4 16.21	11201V10104	HCS-10-DK-12L-045-S-M-W5	
12	1/2"	-08	M22x1,5	-08	9,5 .37	12,8 .50	45,0 1.77	80,5 3.17	20,0 .79	27 1.06	11,4 25.03	11201V12124	HCS-12-DK-15L-045-S-M-W5	
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	52,0 2.05	90,5 3.56	23,0 .91	32 1.26	16,5 36.38	11201V16164	HCS-16-DK-18L-045-S-M-W5	
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	68,0 2.68	113,5 4.47	26,0 1.02	36 1.42	26,7 58.87	11201V20204	HCS-19-DK-22L-045-S-M-W5	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

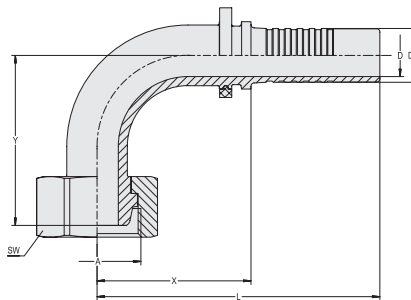
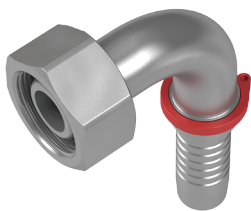
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**90° Version**

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**90° Elbow Insert with Female Metric Nut Thread and 24° Taper  
Type DKL 90° (Light Series)**



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper  
**Standard** ISO 8434-1  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	M12x1,5	-03	3,9	6,7	25,0	55,0	32,5	14	3,5	11201V06059	HCS-06-DK-6L-090-W-M-W5	
					.15	.26	.98	2.17	1.28	.55	7.61			
06	1/4"	-04	M14x1,5	-04	3,9	6,7	29,0	59,0	29,0	17	4,1	11201V06069	HCS-06-DK-8L-090-S-M-W5	
					.15	.26	1.14	2.32	1.14	.67	8.93			
08	5/16"	-05	M16x1,5	-05	5,4	8,0	31,5	61,5	29,0	19	5,5	11201V08089	HCS-08-DK-10L-090-S-M-W5	
					.21	.31	1.24	2.42	1.14	.75	12.13			
10	3/8"	-06	M18x1,5	-06	6,5	9,6	36,5	70,0	36,0	22	8,5	11201V10109	HCS-10-DK-12L-090-S-M-W5	
					.26	.38	1.44	2.76	1.42	.87	18.74			
12	1/2"	-08	M22x1,5	-08	9,5	12,8	41,0	76,5	41,0	27	13,1	11201V12129	HCS-12-DK-15L-090-S-M-W5	
					.37	.50	1.61	3.01	1.61	1.06	28.89			
16	5/8"	-10	M26x1,5	-10	12,6	16,0	45,5	84,0	50,5	32	19,0	11201V16169	HCS-16-DK-18L-090-S-M-W5	
					.50	.63	1.79	3.31	1.99	1.26	41.78			
19	3/4"	-12	M30x2	-12	14,8	19,1	57,0	103,0	58,0	36	30,8	11201V20209	HCS-19-DK-22L-090-S-M-W5	
					.58	.75	2.24	4.06	2.28	1.42	67.80			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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45° Version

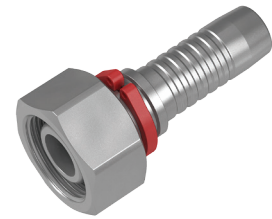
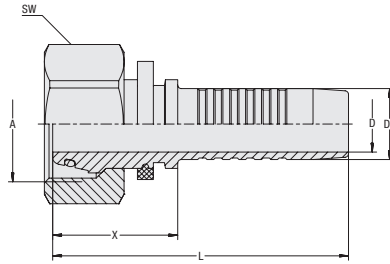
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**ecoVOS™ VA**
**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL (Light Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper / O-Ring  
**Standard** ISO 8434-1

**Material** Stainless Steel  
**Sealing Material** FKM (Viton®)


**C**

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	27,0 1.06	57,0 2.24	17 .67	3,5 7.72	11221V06	HCS-06-DK0-8L-S-OR-V-M-W5
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	21,0 .83	51,0 2.01	14 .55	2,35 5.18	11221V0605	HCS-06-DK0-6L-W-OR-V-M-W5
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	28,5 1.12	58,5 2.30	19 .75	4,3 9.48	11221V0608	HCS-06-DK0-10L-S-OR-V-M-W5
06	1/4"	-04	M18x1,5	-06	3,9 .15	6,7 .26	29,0 1.14	59,0 2.32	22 .87	5,5 12.13	11221V0610	HCS-06-DK0-12L-S-OR-V-M-W5
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,0 .31	28,5 1.12	58,5 2.30	19 .75	4,4 9.70	11221V08	HCS-08-DK0-10L-S-OR-V-M-W5
08	5/16"	-05	M14x1,5	-04	5,4 .21	8,0 .31	22,0 .87	52,0 2.05	17 .67	3,3 7.28	11221V0806	HCS-08-DK0-8L-W-OR-V-M-W5
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,0 .31	30,0 1.18	60,0 2.36	22 .87	5,8 12.68	11221V0810	HCS-08-DK0-12L-S-OR-V-M-W5
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,8 .39	29,0 1.14	62,5 2.46	22 .87	6,3 13.89	11221V10	HCS-10-DK0-12L-S-OR-V-M-W5
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,8 .39	22,5 .89	56,0 2.20	19 .75	4,6 10.14	11221V1008	HCS-10-DK0-10L-W-OR-V-M-W5
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,8 .39	30,5 1.20	64,0 2.52	27 1.06	8,9 19.51	11221V1012	HCS-10-DK0-15L-S-OR-V-M-W5
12	1/2"	-08	M22x1,5	-08	9,5 .37	12,8 .50	28,5 1.12	64,0 2.52	27 1.06	9,4 20.62	11221V12	HCS-12-DK0-15L-S-OR-V-M-W5
12	1/2"	-08	M18x1,5	-06	9,5 .37	12,8 .50	24,0 .94	59,5 2.34	22 .87	6,6 14.55	11221V1210	HCS-12-DK0-12L-W-OR-V-M-W5
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	31,5 1.24	70,0 2.76	32 1.26	13,6 29.88	11221V16	HCS-12-DK0-18L-S-OR-V-M-W5
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	33,0 1.30	78,5 3.09	36 1.42	18,0 39.58	11221V20	HCS-19-DK0-22L-S-OR-V-M-W5
19	3/4"	-12	M26x1,5	-10	14,8 .58	19,1 .75	25,5 1.00	71,5 2.81	32 1.26	14,6 32.19	11221V2016	HCS-19-DK0-18L-W-OR-V-M-W5
19	3/4"	-12	M36x2	-16	14,8 .58	19,1 .75	34,0 1.34	80,0 3.15	41 1.61	26,8 58.98	11221V2025	HCS-19-DK0-28L-S-OR-V-M-W5
25	1"	-16	M36x2	-16	20,0 .79	25,9 1.02	36,5 1.44	91,5 3.60	41 1.61	30,4 66.92	11221V25	HCS-25-DK0-28L-S-OR-V-M-W5
31	1 1/4"	-20	M45x2	-20	26,0 1.02	32,5 1.28	41,0 1.61	100,5 3.96	50 1.97	45,20 99.67	11221V32	HCS-31-DK0-35L-S-OR-V-M-W5
38	1 1/2"	-24	M52x2	-24	31,0 1.22	38,9 1.53	35,5 1.40	103,0 4.06	60 2.36	68,35 150.71	11221V40	HCS-38-DK0-42L-S-OR-V-M-W5

**Related Products and Accessories**

**Swage Ferrules**

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**45° Version**

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**ECOVS Version**

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**90° Version**

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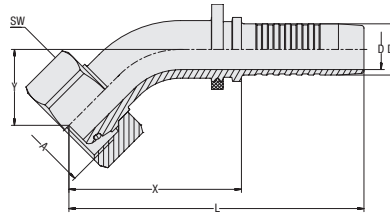
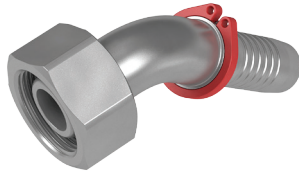

**MULTIVOS Version**

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**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL 45° (Light Series)**

ecovos™ va



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper / O-Ring  
**Standard** ISO 8434-1  
**Material** Stainless Steel  
**Sealing Material** FKM (Viton®)

C

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	36,5 1.44	66,5 2.62	18,0 .71	14 .55	3,2 6.95	11221V06054	HCS-06-DK0-6L-045-W-OR-V-M-W5	
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	37,0 1.46	67,0 2.64	17,0 .67	17 .67	3,8 8.38	11221V06064	HCS-06-DK0-8L-045-S-OR-V-M-W5	
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	39,0 1.54	69,0 2.72	19,0 .75	19 .75	5,0 11.03	11221V06084	HCS-06-DK0-10L-045-S-OR-V-M-W5	
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,0 .31	39,0 1.54	69,0 2.72	19,0 .75	19 .75	5,1 11.25	11221V08084	HCS-08-DK0-10L-045-S-OR-V-M-W5	
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,0 .31	40,0 1.57	70,0 2.76	18,0 .71	22 .87	6,3 13.89	11221V08104	HCS-08-DK0-12L-045-S-OR-V-M-W5	
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,8 .39	43,5 1.71	77,0 3.03	19,5 .77	19 .75	6,6 14.44	11221V10084	HCS-10-DK0-10L-045-W-OR-V-M-W5	
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,8 .39	41,5 1.63	74,5 2.93	17,5 .69	22 .87	7,4 16.21	11221V10104	HCS-10-DK0-12L-045-S-OR-V-M-W5	
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,8 .39	41,5 1.63	74,5 2.93	17,5 .69	27 1.06	9,8 21.65	11221V10124	HCS-10-DK0-15L-045-S-OR-V-M-W5	
12	1/2"	-08	M22x1,5	-08	9,5 .37	12,8 .50	47,0 1.85	82,0 3.23	21,5 .85	27 1.06	11,3 24.81	11221V12124	HCS-12-DK0-15L-045-S-OR-V-M-W5	
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	54,0 2.13	92,0 3.62	24,0 .94	32 1.26	16,5 36.38	11221V16164	HCS-16-DK0-18L-045-S-OR-V-M-W5	
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	67,0 2.64	113,0 4.45	25,5 1.00	36 1.42	26,4 58.21	11221V20204	HCS-19-DK0-22L-045-S-OR-V-M-W5	
25	1"	-16	M36x2	-16	20,0 .79	25,9 1.02	80,0 3.15	135,0 5.31	33,0 1.30	41 1.61	43,4 95.59	11221V25254	HCS-25-DK0-28L-045-S-OR-V-M-W5	
31	1 1/4"	-20	M45x2	-20	26,0 1.02	32,5 1.28	99,5 3.92	159,5 6.28	39,5 1.56	50 1.97	72,3 159.31	11221V32324	HCS-31-DK0-35L-045-S-OR-V-M-W5	
38	1 1/2"	-24	M52x2	-24	31,0 1.22	38,9 1.53	108,5 4.27	176,0 6.93	41,0 1.61	60 2.36	103,7 228.66	11221V40404	HCS-38-DK0-42L-045-S-OR-V-M-W5	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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**Straight Version**

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**ECOVOS Version**

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**90° Version**

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**MULTIVOS Version**

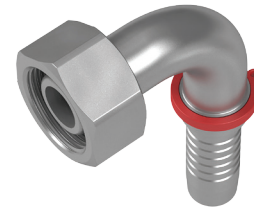
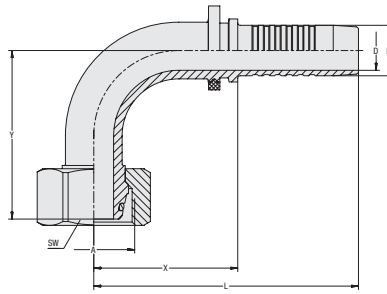
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**ecoVOS™ VA**
**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL 90° (Light Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper / O-Ring  
**Standard** ISO 8434-1

**Material** Stainless Steel  
**Sealing Material** FKM (Viton®)


**C**

Hose Size			Connection Size		Dimensions (mm/in)								Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
06	1/4"	-04	M12x1,5	-03	3,9 .15	6,7 .26	25,0 .98	55,0 2.17	33,0 1.30	14 .55	3,4 7.50	11221V06059	HCS-06-DKO-6L-090-W-OR-V-M-W5		
06	1/4"	-04	M14x1,5	-04	3,9 .15	6,7 .26	29,5 1.16	59,5 2.34	30,0 1.18	17 .67	4,1 9.04	11221V06069	HCS-06-DKO-8L-090-S-OR-V-M-W5		
06	1/4"	-04	M16x1,5	-05	3,9 .15	6,7 .26	31,0 1.22	61,0 2.40	32,5 1.28	19 .75	5,5 12.13	11221V06089	HCS-06-DKO-10L-090-S-OR-V-M-W5		
06	1/4"	-04	M18x1,5	-06	3,9 .15	6,7 .26	30,5 1.20	60,5 2.38	34,5 1.36	22 .87	6,8 14.99	11221V06109	HCS-06-DKO-12L-090-S-OR-V-M-W5		
08	5/16"	-05	M16x1,5	-05	5,4 .21	8,0 .31	31,0 1.22	61,0 2.40	32,5 1.28	19 .75	5,5 12.13	11221V08089	HCS-08-DKO-10L-090-S-OR-V-M-W5		
08	5/16"	-05	M18x1,5	-06	5,4 .21	8,0 .31	31,0 1.22	61,0 2.40	33,0 1.30	22 .87	6,8 14.99	11221V08109	HCS-08-DKO-12L-090-S-OR-V-M-W5		
10	3/8"	-06	M16x1,5	-05	6,5 .26	9,8 .39	38,0 1.50	71,5 2.81	39,0 1.54	19 .75	7,7 16.98	11221V10089	HCS-10-DKO-10L-090-W-OR-V-M-W5		
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,8 .39	37,5 1.48	71,0 2.80	37,5 1.48	22 .87	8,6 18.96	11221V10109	HCS-10-DKO-12L-090-S-OR-V-M-W5		
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,8 .39	39,0 1.54	72,5 2.85	38,5 1.52	27 1.06	11,3 24.92	11221V10129	HCS-10-DKO-15L-090-S-OR-V-M-W5		
12	1/2"	-08	M18x1,5	-06	9,5 .37	12,8 .50	40,5 1.59	76,0 2.99	47,5 1.87	22 .87	11,4 25.14	11221V12109	HCS-12-DKO-12L-090-W-OR-V-M-W5		
12	1/2"	-08	M22x1,5	-08	9,5 .37	12,8 .50	40,5 1.59	76,0 2.99	43,0 1.69	27 1.06	13,1 28.78	11221V12129	HCS-12-DKO-15L-090-S-OR-V-M-W5		
16	5/8"	-10	M26x1,5	-10	12,6 .50	16,0 .63	46,0 1.81	84,0 3.31	53,5 2.11	32 1.26	19,1 42.12	11221V16169	HCS-16-DKO-18L-090-S-OR-V-M-W5		
19	3/4"	-12	M30x2	-12	14,8 .58	19,1 .75	57,0 2.24	103,0 4.06	57,0 2.24	36 1.42	30,4 67.03	11221V20209	HCS-19-DKO-22L-090-S-OR-V-M-W5		
25	1"	-16	M36x2	-16	20,0 .79	25,9 1.02	72,0 2.83	127,0 5.00	65,0 2.56	41 1.61	50,0 110.25	11221V25259	HCS-25-DKO-28L-090-S-OR-V-M-W5		
31	1 1/4"	-20	M45x2	-20	26,0 1.02	32,5 1.28	90,5 3.56	150,5 5.93	81,0 3.19	50 1.97	85,3 187.98	11221V32329	HCS-31-DKO-35L-090-S-OR-V-M-W5		
38	1 1/2"	-24	M52x2	-24	31,0 1.22	38,9 1.53	101,0 3.98	168,5 6.63	88,0 3.46	60 2.36	121,1 267.03	11221V40409	HCS-38-DKO-42L-090-S-OR-V-M-W5		

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVS Version**

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**45° Version**

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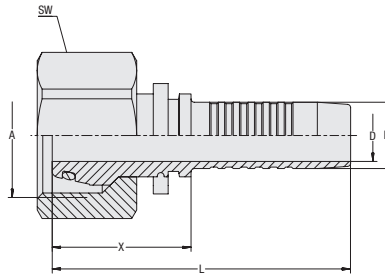
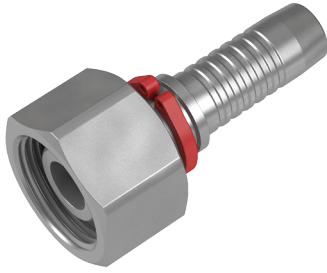

**MULTIVOS Version**

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**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS (Heavy Series)**

ecoVOS™ VA



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper / O-Ring  
**Standard** ISO 8434-1

**Material** Stainless Steel  
**Sealing Material** FKM (Viton®)

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/163) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	M18x1,5	-04	3,9	6,7	28,5	58,5	22	5,6	11231V06	HCS-06-DKO-10S-S-OR-V-M-W5
					.15	.26	1.12	2.30	.87	12.35		
06	1/4"	-04	M14x1,5	-02	3,9	6,7	26,0	56,0	17	3,6	11231V0603	HCS-06-DKO-6S-S-OR-V-M-W5
					.15	.26	1.02	2.20	.67	7.94		
06	1/4"	-04	M16x1,5	-03	3,9	6,7	27,0	57,0	19	4,1	11231V0605	HCS-06-DKO-8S-W-OR-V-M-W5
					.15	.26	1.06	2.24	.75	9.04		
06	1/4"	-04	M20x1,5	-05	3,9	6,7	29,0	59,0	24	6,5	11231V0608	HCS-06-DKO-12S-S-OR-V-M-W5
					.15	.26	1.14	2.32	.94	14.33		
08	5/16"	-05	M20x1,5	-05	5,4	8,0	30,0	60,0	24	6,8	11231V08	HCS-08-DKO-12S-S-OR-V-M-W5
					.21	.31	1.18	2.36	.94	14.88		
08	5/16"	-05	M16x1,5	-03	5,4	8,0	23,0	53,0	19	4,3	11231V0805	HCS-08-DKO-8S-W-OR-V-M-W5
					.21	.31	.91	2.09	.75	9.37		
08	5/16"	-05	M18x1,5	-04	5,4	8,0	28,5	58,5	22	5,7	11231V0806	HCS-08-DKO-10S-W-OR-V-M-W5
					.21	.31	1.12	2.30	.87	12.57		
10	3/8"	-06	M22x1,5	-06	6,5	9,6	30,5	64,0	27	9,8	11231V10	HCS-10-DKO-14S-S-OR-V-M-W5
					.26	.38	1.20	2.52	1.06	21.61		
10	3/8"	-06	M18x1,5	-04	6,5	9,6	25,0	58,5	22	6,2	11231V1006	HCS-10-DKO-10S-W-OR-V-M-W5
					.26	.38	.98	2.30	.87	13.56		
10	3/8"	-06	M20x1,5	-05	6,5	9,8	29,0	62,5	24	7,3	11231V1008	HCS-10-DKO-12S-W-OR-V-M-W5
					.26	.39	1.14	2.46	.94	16.10		
10	3/8"	-06	M24x1,5	-08	6,5	9,6	32,0	65,5	30	11,9	11231V1012	HCS-10-DKO-16S-S-OR-V-M-W5
					.26	.38	1.26	2.58	1.18	26.24		
12	1/2"	-08	M24x1,5	-08	9,5	12,8	32,0	67,5	30	12,7	11231V12	HCS-12-DKO-16S-S-OR-V-M-W5
					.37	.50	1.26	2.66	1.18	28.00		
12	1/2"	-08	M20x1,5	-05	9,5	12,8	25,0	60,5	24	7,8	11231V1208	HCS-12-DKO-12S-W-OR-V-M-W5
					.37	.50	.98	2.38	.94	17.09		
12	1/2"	-08	M30x2	-10	9,5	12,8	35,5	71,0	36	19,6	11231V1216	HCS-12-DKO-20S-S-OR-V-M-W5
					.37	.50	1.40	2.80	1.42	43.22		
16	5/8"	-10	M30x2	-10	12,6	16,0	35,5	74,0	36	19,5	11231V16	HCS-16-DKO-20S-S-OR-V-M-W5
					.50	.63	1.40	2.91	1.42	42.89		
16	5/8"	-10	M24x1,5	-08	12,6	16,0	26,5	65,0	30	13,1	11231V1612	HCS-16-DKO-16S-W-OR-V-M-W5
					.50	.63	1.04	2.56	1.18	28.89		
16	5/8"	-10	M36x2	-12	12,6	16,0	36,5	75,0	41	34,6	11231V1620	HCS-16-DKO-25S-S-OR-V-M-W5
					.50	.63	1.44	2.95	1.61	76.29		
19	3/4"	-12	M36x2	-12	14,8	19,1	37,0	83,0	41	35,50	11231V20	HCS-19-DKO-25S-S-OR-V-M-W5
					.58	.75	1.46	3.27	1.61	78.28		
19	3/4"	-12	M30x2	-10	14,8	19,1	32,0	78,0	36	22,15	11231V2016	HCS-19-DKO-20S-W-OR-V-M-W5
					.58	.75	1.26	3.07	1.42	48.84		
19	3/4"	-12	M42x2	-16	14,8	19,1	41,0	87,0	50	45,55	11231V2025	HCS-19-DKO-30S-S-OR-V-M-W5
					.58	.75	1.61	3.43	1.97	100.44		
25	1"	-16	M42x2	-16	20,0	25,9	42,0	97,0	50	47,25	11231V25	HCS-25-DKO-30S-S-OR-V-M-W5
					.79	1.02	1.65	3.82	1.97	104.19		
25	1"	-16	M36x2	-12	20,0	25,9	34,0	89,0	41	34,45	11231V2520	HCS-25-DKO-25S-W-OR-V-M-W5
					.79	1.02	1.34	3.50	1.61	75.96		
31	1 1/4"	-20	M52x2	-20	26,0	32,5	47,0	107,0	60	72,35	11231V32	HCS-31-DKO-38S-S-OR-V-M-W5
					1.02	1.28	1.85	4.21	2.36	159.53		

**Related Products and Accessories**



Swage Ferrules

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90° Version

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ECOVOS Version

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POWERVOS Version

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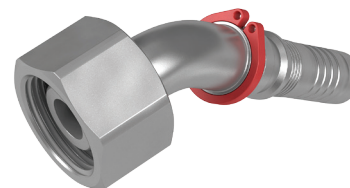
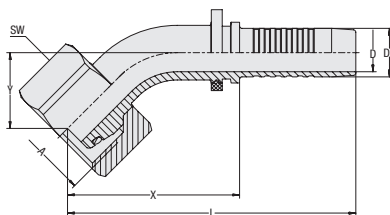




**ecovos™ va**
**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 45° (Heavy Series)**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper / O-Ring  
**Standard** ISO 8434-1

**Material** Stainless Steel  
**Sealing Material** FKM (Viton®)


**C**

Hose Size			Connection Size		Dimensions (mm/in)								Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)					
06	1/4"	-04	M14x15	-02	3,9 .15	6,7 .26	37,0 1.46	67,0 2.64	17,0 .67	17 .67	4,0 8.82		11231V06034	HCS-06-DKO-6S-045-W-OR-V-M-W5	
06	1/4"	-04	M16x1,5	-03	3,9 .15	6,7 .26	37,0 1.46	67,0 2.64	17,0 .67	19 .75	4,4 9.70		11231V06054	HCS-06-DKO-8S-045-S-OR-V-M-W5	
06	1/4"	-04	M18x1,5	-04	3,9 .15	6,7 .26	39,0 1.54	69,0 2.72	19,0 .75	22 .87	6,3 13.89		11231V06064	HCS-06-DKO-10S-045-S-OR-V-M-W5	
08	5/16"	-05	M20x1,5	-05	5,4 .21	8,0 .31	40,0 1.57	70,0 2.76	18,0 .71	24 .94	7,4 16.32		11231V08084	HCS-08-DKO-12S-045-S-OR-V-M-W5	
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,8 .39	41,5 1.63	74,5 2.93	17,5 .69	24 .94	8,4 18.41		11231V10084	HCS-10-DKO-12S-045-S-OR-V-M-W5	
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,8 .39	46,0 1.81	79,0 3.11	20,0 .79	27 1.06	11,2 24.70		11231V10104	HCS-10-DKO-14S-045-S-OR-V-M-W5	
12	1/2"	-08	M24x1,5	-08	9,5 .37	12,8 .50	50,5 1.99	86,0 3.39	24,0 .94	30 1.18	14,9 32.85		11231V12124	HCS-12-DKO-16S-045-S-OR-V-M-W5	
16	5/8"	-10	M30x2	-10	12,6 .50	16,0 .63	56,5 2.22	95,0 3.74	25,0 .98	36 1.42	22,3 49.17		11231V16164	HCS-16-DKO-20S-045-S-OR-V-M-W5	
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	66,0 2.60	111,5 4.39	29,0 1.14	46 1.81	41,4 91.29		11231V20204	HCS-19-DKO-25S-045-S-OR-V-M-W5	
25	1"	-16	M42x2	-16	20,0 .79	25,9 1.02	83,0 3.27	138,0 5.43	36,5 1.44	50 1.97	60,1 132.52		11231V25254	HCS-25-DKO-30S-045-S-OR-V-M-W5	
31	1 1/4"	-20	M52x2	-20	26,0 1.02	32,5 1.28	101,5 4.00	161,5 6.36	41,5 1.63	60 2.36	93,8 206.72		11231V32324	HCS-31-DKO-38S-045-S-OR-V-M-W5	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVOS Version**

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**90° Version**

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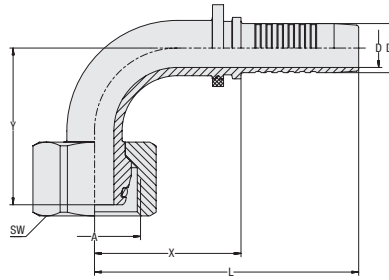
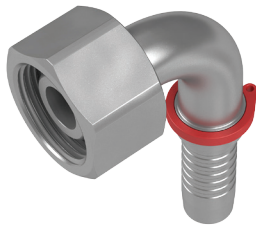

**MULTIVOS Version**

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**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 90° (Heavy Series)**

ecovos™ VA



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper / O-Ring  
**Standard** ISO 8434-1  
**Material** Stainless Steel  
**Sealing Material** FKM (Viton®)

C

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	M14x1,5	-02	3,9 .15	6,7 .26	33,5 1.32	63,5 2.50	29,0 1.14	17 .67	4,3 9.48	11231V06039	HCS-06-DKO-6S-090-W-OR-V-M-W5	
06	1/4"	-04	M16x1,5	-03	3,9 .15	6,7 .26	29,5 1.16	59,5 2.34	30,0 1.18	19 .75	4,7 10.36	11231V06059	HCS-06-DKO-8S-090-S-OR-V-M-W5	
06	1/4"	-04	M18x1,5	-04	3,9 .15	6,7 .26	31,0 1.22	61,0 2.40	32,5 1.28	22 .87	6,8 14.99	11231V06069	HCS-06-DKO-10S-090-S-OR-V-M-W5	
06	1/4"	-04	M20x1,5	-05	3,9 .15	6,7 .26	30,5 1.20	60,5 2.38	34,5 1.36	24 .94	7,8 17.09	11231V06089	HCS-06-DKO-12S-090-S-OR-V-M-W5	
08	5/16"	-05	M20x1,5	-05	5,4 .21	8,0 .31	31,0 1.22	61,0 2.40	33,0 1.30	24 .94	7,9 17.42	11231V08089	HCS-08-DKO-12S-090-S-OR-V-M-W5	
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,8 .39	37,5 1.48	71,0 2.80	37,5 1.48	24 .94	9,6 21.17	11231V10089	HCS-10-DKO-12S-090-S-OR-V-M-W5	
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,8 .39	38,5 1.52	72,0 2.83	40,0 1.57	27 1.06	12,4 27.23	11231V10109	HCS-10-DKO-14S-090-S-OR-V-M-W5	
12	1/2"	-08	M24x1,5	-08	9,5 .37	12,8 .50	40,0 1.57	75,5 2.97	47,0 1.85	30 1.18	16,4 36.16	11231V12129	HCS-12-DKO-16S-090-S-OR-V-M-W5	
12	1/2"	-08	M30x2	-10	9,5 .37	12,8 .50	40,0 1.57	75,5 2.97	48,5 1.91	30 1.18	22,8 50.16	11231V12169	HCS-12-DKO-20S-090-S-OR-V-M-W5	
16	5/8"	-10	M30x2	-10	12,6 .50	16,0 .63	48,0 1.89	86,0 3.39	53,0 2.09	36 1.42	24,5 54.02	11231V16169	HCS-16-DKO-20S-090-S-OR-V-M-W5	
19	3/4"	-12	M30x2	-10	14,8 .58	19,1 .75	57,0 2.24	103,0 4.06	61,0 2.40	36 1.42	34,8 76.62	11231V20169	HCS-19-DKO-20S-090-W-OR-V-M-W5	
19	3/4"	-12	M36x2	-12	14,8 .58	19,1 .75	57,0 2.24	102,5 4.04	58,5 2.30	46 1.81	45,6 100.44	11231V20209	HCS-19-DKO-25S-090-S-OR-V-M-W5	
25	1"	-16	M42x2	-16	20,0 .79	25,9 1.02	70,5 2.78	125,5 4.94	74,0 2.91	50 1.97	67,9 149.61	11231V25259	HCS-25-DKO-30S-090-S-OR-V-M-W5	
31	1 1/4"	-20	M52x2	-20	26,0 1.02	32,5 1.28	88,0 3.46	147,5 5.81	87,0 3.43	60 2.36	106,7 235.27	11231V32329	HCS-31-DKO-38S-090-S-OR-V-M-W5	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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ECOVOS Version

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45° Version

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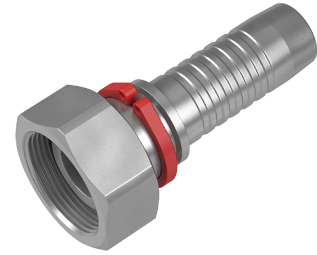
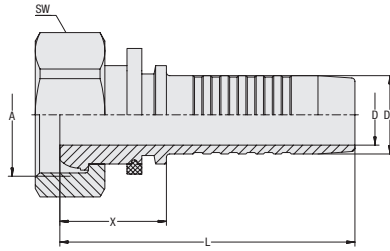
MULTIVOS Version

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**ecovos™ va**
**Straight Insert with Female Metric Nut Thread and Metal Seat  
Type DKK**

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Metal Seat (suitable for bore type Y)  
**Standard** DIN 3863-B  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)					Weight (*49/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
19	3/4"	-12	M30x1,5	-12	14,8	19,1	26,0	72,0	36	18,3	11241V20	HCS-19-DKK-22LL-S-M-W5
					.58	.75	1.02	2.83	1.42	40.35		
19	3/4"	-12	M38x1,5	-16	14,8	19,1	26,0	72,0	46	25,3	11241V2025	HCS-19-DKK-28LL-S-M-W5
					.58	.75	1.02	2.83	1.81	55.79		
25	1"	-16	M38x1,5	-16	20,0	25,9	27,0	82,0	46	30,0	11241V25	HCS-25-DKK-28LL-S-M-W5
					.79	1.02	1.06	3.23	1.81	66.15		
31	1 1/4"	-20	M45x1,5	-20	26,0	32,5	28,0	88,0	50	37,5	11241V32	HCS-31-DKK-35LL-S-M-W5
					1.02	1.28	1.10	3.46	1.97	82.69		
38	1 1/2"	-24	M52x1,5	-24	31,0	38,9	28,5	96,0	60	57,8	11241V40	HCS-38-DKK-42LL-S-M-W5
					1.22	1.53	1.12	3.78	2.36	127.45		
51	2"	-32	M65x2	-32	40,0	51,6	32,5	107,5	75	116,4	11241V50	HCS-51-DKK-50LL-S-M-W5
						2.03	1.28	4.23	2.95	256.66		

**Related Products and Accessories**

**Swage Ferrules**

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**90° Version**

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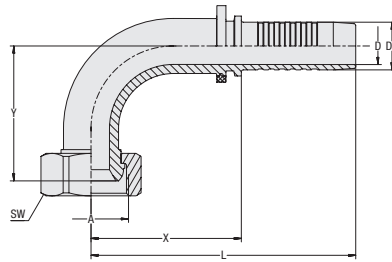
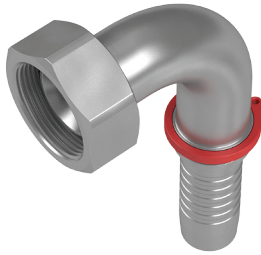

**ECOVOS Version**

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**90° Elbow Insert with Female Metric Thread and Metal Seat  
Type DKK 90°**

ECOVOS™ VA



**Connection Type** Female Metric Nut Thread  
**Sealing Type** 60° Metal Seat (suitable for bore type Y)  
**Standard** DIN 3863-B  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
19	3/4"	-12	M30x1,5	-12	14,8	19,1	60,0	106,0	54,0	36	30,4	11241V20209	HCS-19-DKK-22LL-090-S-M-W5	
					.58	.75	2.36	4.17	2.13	1.42	67.03			
25	1"	-16	M38x1,5	-16	20,0	25,9	78,0	133,0	71,0	46	55,3	11241V25259	HCS-25-DKK-28LL-090-S-M-W5	
					.79	1.02	3.07	5.24	2.80	1.81	121.83			
31	1 1/4"	-20	M45x1,5	-20	26,0	32,5	102,0	162,0	81,0	50	83,7	11241V32329	HCS-31-DKK-35LL-090-S-M-W5	
					1.02	1.28	4.02	6.38	3.19	1.97	184.56			
38	1 1/2"	-24	M52x1,5	-24	31,0	38,9	112,5	180,0	108,5	60	141,7	11241V40409	HCS-38-DKK-42LL-090-S-M-W5	
					1.22	1.53	4.43	7.09	4.27	2.36	312.34			
51	2"	-32	M65x2	-32	40,0	51,6	134,0	209,0	122,0	75	226,1	11241V50509	HCS-51-DKK-50LL-090-S-M-W5	
					1.57	2.03	5.28	8.23	4.80	2.95	498.55			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

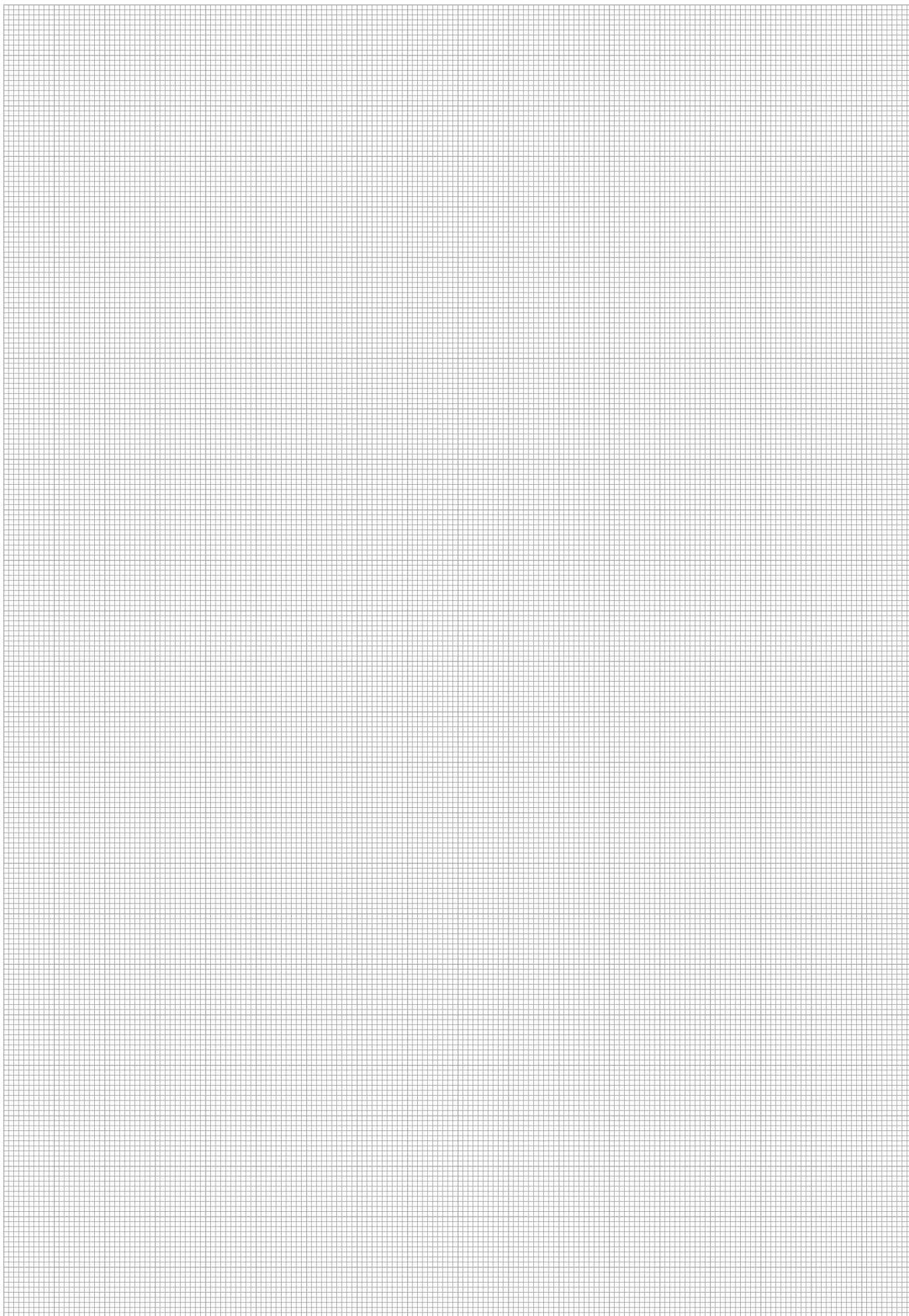
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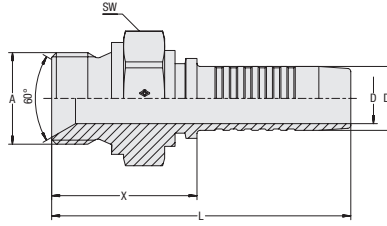
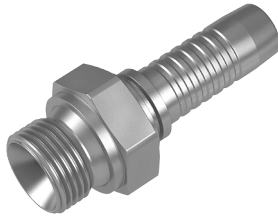
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**Straight Insert with Male BSPP Thread and 60° Conical Bore  
Type AGR**

ecoVOS™ VA



**Connection Type** Male BSPP Thread  
**Sealing Type** 60° Conical Bore  
**Standard** ISO 8434-6, BS 5200  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/163) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-03	G1/4"	-04	3,9	6,7	29,0	59,0	19	3,9	11301V06	HCS-06-AGR-04-M-W5
					.15	.26	1.14	2.32	.75	8.60		
06	1/4"	-03	G1/8"	-03	3,9	6,7	23,5	53,5	14	2,2	11301V0605	HCS-06-AGR-03-M-W5
					.15	.26	.93	2.11	.55	4.85		
06	1/4"	-03	G3/8"	-06	3,9	6,7	30,5	60,5	22	5,4	11301V0610	HCS-06-AGR-06-M-W5
					.15	.26	1.20	2.38	.87	11.91		
08	5/16"	-05	G1/4"	-04	5,4	8,0	29,0	59,0	19	4,1	11301V0806	HCS-08-AGR-04-M-W5
					.21	.31	1.14	2.32	.75	9.04		
08	5/16"	-05	G3/8"	-06	5,4	8,0	30,5	60,5	22	5,6	11301V0810	HCS-08-AGR-06-M-W5
					.21	.31	1.20	2.38	.87	12.35		
10	3/8"	-06	G3/8"	-06	6,5	9,6	30,5	63,5	22	6,3	11301V10	HCS-10-AGR-06-M-W5
					.26	.38	1.20	2.50	.87	13.89		
10	3/8"	-06	G1/4"	-04	6,5	9,6	29,0	62,0	19	4,6	11301V1006	HCS-10-AGR-04-M-W5
					.26	.38	1.14	2.44	.75	10.14		
10	3/8"	-06	G1/2"	-08	6,5	9,6	34,0	67,0	27	9,1	11301V1012	HCS-10-AGR-08-M-W5
					.26	.38	1.34	2.64	1.06	20.07		
12	1/2"	-06	G1/2"	-08	9,5	12,8	34,5	70,0	27	10,3	11301V12	HCS-12-AGR-08-M-W5
					.37	.50	1.36	2.76	1.06	22.60		
12	1/2"	-08	G3/8"	-06	9,5	12,8	31,5	66,5	22	6,8	11301V1210	HCS-12-AGR-06-M-W5
					.37	.50	1.24	2.62	.87	14.99		
12	1/2"	-08	G3/4"	-12	9,5	12,8	37,5	72,5	32	13,5	11301V1220	HCS-12-AGR-12-M-W5
					.37	.50	1.48	2.85	1.26	29.77		
16	5/8"	-10	G1/2"	-08	12,6	16,0	34,5	73,0	30	10,3	11301V1612	HCS-16-AGR-08-M-W5
					.50	.63	1.36	2.87	1.18	22.71		
16	5/8"	-10	G3/4"	-12	12,6	16,0	37,5	76,0	32	14,2	11301V1620	HCS-16-AGR-12-M-W5
					.50	.63	1.48	2.99	1.26	31.31		
19	3/4"	-12	G3/4"	-12	14,8	19,1	38,0	84,0	32	17,0	11301V20	HCS-19-AGR-12-M-W5
					.58	.75	1.50	3.31	1.26	37.49		
19	3/4"	-12	G1"	-16	14,8	19,1	42,0	88,0	41	24,8	11301V2025	HCS-19-AGR-16-M-W5
					.58	.75	1.65	3.46	1.61	54.68		
25	1"	-16	G1"	-16	20,0	25,9	43,5	98,5	41	31,7	11301V25	HCS-25-AGR-16-M-W5
					.79	1.02	1.71	3.88	1.61	69.90		
25	1"	-16	G1 1/4"	-20	20,0	25,9	45,5	100,5	50	41,0	11301V2532	HCS-25-AGR-20-M-W5
					.79	1.02	1.79	3.96	1.97	90.41		
31	1 1/4"	-20	G1 1/4"	-20	26,0	32,5	46,5	106,5	50	48,7	11301V32	HCS-31-AGR-20-M-W5
					1.02	1.28	1.83	4.19	1.97	107.38		
31	1 1/4"	-20	G1"	-16	26,0	32,5	44,0	104,0	41	38,0	11301V3225	HCS-31-AGR-16-M-W5
					1.02	1.28	1.73	4.09	1.61	83.79		
38	1 1/2"	-24	G1 1/2"	-24	31,0	38,9	53,0	120,5	55	71,0	11301V40	HCS-38-AGR-24-M-W5
					1.22	1.53	2.09	4.74	2.17	156.56		
51	2"	-32	G2"	-32	40,0	51,6	60,5	135,5	70	138,3	11301V50	HCS-51-AGR-32-M-W5
					1.57	2.03	2.38	5.33	2.76	304.95		

**Related Products and Accessories**



Swage Ferrules

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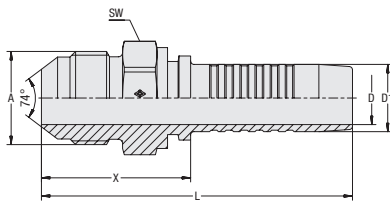
MULTIVOS Version

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**ecovos™ va**
**Straight Insert with Male UN/UNF Thread and 74° Taper Type AGJ**

**Connection Type** Male UN/UNF Thread  
**Sealing Type** 74° Taper  
**Standard** ISO 8434-2  
  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
06	1/4"	-04	7/16"-20 UNF	-04	3,9 .15	6,7 .26	28,0 1.10	58,0 2.28	14 .55	2,4 5.29	11311V06	HCS-06-AGJ-04-M-W5	
06	1/4"	-04	9/16"-18 UNF	-06	3,9 .15	6,7 .26	28,0 1.10	58,0 2.28	17 .67	3,2 7.06	11311V0610	HCS-06-AGJ-06-M-W5	
08	5/16"	-05	1/2"-20 UNF	-05	5,4 .21	8,0 .31	28,0 1.10	58,0 2.28	14 .55	2,7 5.95	11311V08	HCS-08-AGJ-05-M-W5	
08	5/16"	-05	9/16"-18 UNF	-06	5,4 .21	8,0 .31	28,0 1.10	58,0 2.28	17 .67	3,2 7.06	11311V0810	HCS-08-AGJ-06-M-W5	
10	3/8"	-06	9/16"-18 UNF	-06	6,5 .26	9,6 .38	28,0 1.10	61,5 2.42	17 .67	3,8 8.38	11311V10	HCS-10-AGJ-06-M-W5	
10	3/8"	-06	3/4"-16 UNF	-08	6,5 .26	9,6 .38	32,0 1.26	64,0 2.52	22 .87	5,9 13.01	11311V1012	HCS-10-AGJ-08-M-W5	
12	1/2"	-08	3/4"-16 UNF	-08	9,5 .37	12,8 .50	32,5 1.28	68,0 2.68	22 .87	6,8 14.99	11311V12	HCS-12-AGJ-08-M-W5	
12	1/2"	-08	7/8"-14 UNF	-10	9,5 .37	12,8 .50	35,5 1.40	71,0 2.80	24 .94	8,4 18.52	11311V1216	HCS-12-AGJ-10-M-W5	
16	5/8"	-10	7/8"-14 UNF	-10	12,6 .50	16,0 .63	35,5 1.40	74,0 2.91	24 .94	9,0 19.85	11311V16	HCS-16-AGJ-10-M-W5	
19	3/4"	-12	1 1/16"-12 UN	-12	14,8 .58	19,1 .75	41,0 1.61	86,5 3.41	30 1.18	15,9 35.06	11311V20	HCS-19-AGJ-12-M-W5	
25	1"	-16	1 5/16"-12 UN	-16	20,0 .79	25,9 1.02	44,5 1.75	99,5 3.92	36 1.42	27,5 60.64	11311V25	HCS-25-AGJ-16-M-W5	
31	1 1/4"	-20	1 5/8"-12 UN	-20	26,0 1.02	32,5 1.28	49,0 1.93	109,0 4.29	46 1.81	45,0 99.23	11311V32	HCS-31-AGJ-20-M-W5	
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0 1.22	38,9 1.53	55,5 2.19	123,0 4.84	50 1.97	62,8 138.47	11311V40	HCS-38-AGJ-24-M-W5	

**Related Products and Accessories**

**Swage Ferrules**

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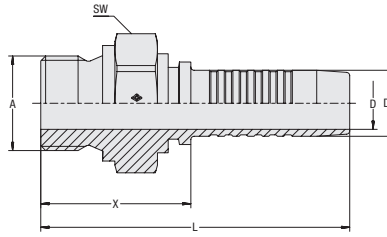
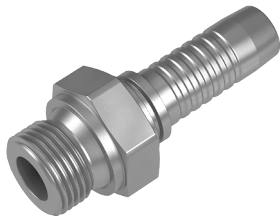
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**Straight Insert with Male BSPP Thread  
Type AGRF**

ecovos™ VA



**Connection Type** Male BSPP Thread  
**Sealing Type** Sealing Surface  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/16) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	G1/4"	-04	3,9	6,7	29,0	59,0	19	4,2	11301V0606F	HCS-06-AGRF-04-090-S-M-W5
					.15	.26	1.14	2.32	.75	9.26		
08	5/16"	-05	G1/2"	-08	5,4	8,0	34,0	64,0	27	8,9	11301V0812F	HCS-08-AGRF-08-090-S-M-W5
					.21	.31	1.34	2.52	1.06	19.62		
10	3/8"	-06	G3/8"	-06	6,5	9,6	30,5	63,5	22	6,3	11301V1010F	HCS-10-AGRF-06-090-S-M-W5
					.26	.38	1.20	2.50	.87	13.89		
10	3/8"	-06	G1/2"	-08	6,5	9,6	34,0	67,0	27	9,1	11301V1012F	HCS-10-AGRF-08-090-S-M-W5
					.26	.38	1.34	2.64	1.06	20.07		
12	1/2"	-08	G3/8"	-06	9,5	12,8	31,5	66,5	22	6,9	11301V1210F	HCS-12-AGRF-06-090-W-M-W5
					.37	.50	1.24	2.62	.87	15.21		
12	1/2"	-08	G1/2"	-08	9,5	12,8	34,5	70,0	27	10,7	11301V1212F	HCS-12-AGRF-08-090-S-M-W5
					.37	.50	1.36	2.76	1.06	23.59		
16	5/8"	-10	G3/4"	-12	12,6	16,0	37,5	76,0	32	14,6	11301V1620F	HCS-16-AGRF-12-090-S-M-W5
					.50	.63	1.48	2.99	1.26	32.19		
16	5/8"	-10	G1"	-16	12,6	16,0	41,5	79,5	41	25,1	11301V1625F	HCS-16-AGRF-16-090-S-M-W5
					.50	.63	1.63	3.13	1.61	55.35		
19	3/4"	-12	G3/4"	-12	14,8	19,1	38,0	84,0	32	17,6	11301V2020F	HCS-19-AGRF-12-090-W-M-W5
					.58	.75	1.50	3.31	1.26	38.81		
25	1"	-16	G1"	-16	20,0	25,9	43,5	98,5	41	32,6	11301V2525F	HCS-25-AGRF-16-090-W-M-W5
					.79	1.02	1.71	3.88	1.61	71.88		
31	1 1/4"	-20	G1 1/4"	-20	26,0	32,5	46,5	106,5	50	50,5	11301V3232F	HCS-31-AGRF-20-090-W-M-W5
					1.02	1.28	1.83	4.19	1.97	111.35		
38	1 1/2"	-24	G1 1/2"	-24	31,0	38,9	53,0	120,5	55	71,0	11301V4040F	HCS-38-AGRF-24-090-W-M-W5
					1.22	1.53	2.09	4.74	2.17	156.56		
51	2"	-32	G2"	-32	40,0	51,6	60,5	135,5	70	138,3	11301V5050F	HCS-51-AGRF-32-090-W-M-W5
					1.57	2.03	2.38	5.33	2.76	304.95		

**Related Products and Accessories**



Swage Ferrules

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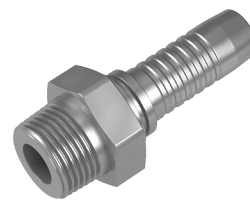
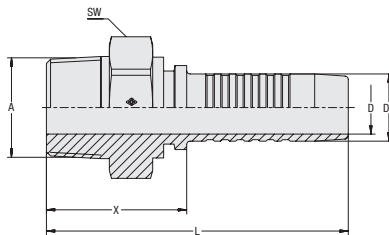
ECOVOS Version

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**ecovos™ va**
**Straight Insert with Male BSPT Thread  
Type AGRK**

**Connection Type** Male BSPT Thread  
**Sealing Type** Tapered Thread  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
06	1/4"	-04	R1/8"	-03	3,9	6,7	21,5	51,5	12	1,7	11301V0605K	HCS-06-AGRK-03-M-W5	
					.15	.26	.85	2.03	.47	3.75			
06	1/4"	-04	R1/4"	-04	3,9	6,7	26,0	56,0	14	2,9	11301V0606K	HCS-06-AGRK-04-M-W5	
					.15	.26	1.02	2.20	.55	6.39			
08	5/16"	-05	R1/4"	-04	5,4	8,0	26,0	56,0	14	2,9	11301V0806K	HCS-08-AGRK-04-M-W5	
					.21	.31	1.02	2.20	.55	6.39			
08	5/16"	-05	R3/8"	-06	5,4	8,0	26,5	56,5	17	4,2	11301V0810K	HCS-08-AGRK-06-M-W5	
					.21	.31	1.04	2.22	.67	9.26			
10	3/8"	-06	R1/4"	-04	6,5	9,6	25,5	59,0	14	4,6	11301V1006K	HCS-10-AGRK-04-M-W5	
					.26	.38	1.00	2.32	.55	10.14			
10	3/8"	-06	R3/8"	-06	6,5	9,6	26,5	59,8	17	6,3	11301V1010K	HCS-10-AGRK-06-M-W5	
					.26	.38	1.04	2.35	.67	13.89			
12	1/2"	-08	R1/2"	-08	9,5	12,8	30,5	65,5	22	7,8	11301V1212K	HCS-12-AGRK-08-M-W5	
					.37	.50	1.20	2.58	.87	17.20			
16	5/8"	-10	R3/4"	-12	12,6	16,0	34,5	72,5	27	14,2	11301V1620K	HCS-16-AGRK-12-M-W5	
					.50	.63	1.36	2.85	1.06	31.31			
19	3/4"	-12	R3/4"	-12	14,8	19,1	35,0	80,5	27	17,0	11301V2020K	HCS-19-AGRK-12-M-W5	
					.58	.75	1.38	3.17	1.06	37.49			
19	3/4"	-12	R1"	-16	14,8	19,1	37,0	82,5	36	24,8	11301V2025K	HCS-19-AGRK-16-M-W5	
					.58	.75	1.46	3.25	1.42	54.68			
25	1"	-16	R1"	-16	20,0	25,9	38,0	93,0	36	31,7	11301V2525K	HCS-25-AGRK-16-M-W5	
					.79	1.02	1.50	3.66	1.42	69.90			
31	1 1/4"	-20	R1 1/4"	-20	26,0	32,5	43,0	103,0	46	48,7	11301V3232K	HCS-31-AGRK-20-M-W5	
					1.02	1.28	1.69	4.06	1.81	107.38			
38	1 1/2"	-24	R1 1/2"	-24	31,0	38,9	47,5	115,0	50	71,0	11301V4040K	HCS-38-AGRK-24-M-W5	
					1.22	1.53	1.87	4.53	1.97	156.56			
51	2"	-32	R2"	-32	40,0	51,6	54,0	129,0	65	138,3	11301V5050K	HCS-51-AGRK-32-M-W5	
					1.57	2.03	2.13	5.08	2.56	304.95			

**Related Products and Accessories**

**Swage Ferrules**

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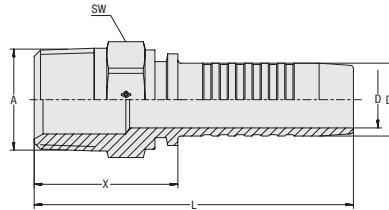

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**Straight Insert with Male NPTF Thread and 60° Conical Bore  
Type AGN**

ecoVOS™ VA



**Connection Type** Male NPTF Thread  
**Sealing Type** Tapered Thread and 60° Conical Bore  
**Standard** SAE J 516  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	1/4"-18 NPT	-04	3,9	6,7	28,0	58,0	14	2,8	11321V06	HCS-06-AGN-04-M-W5
					.15	.26	1.10	2.28	.55	6.17		
06	1/4"	-04	1/8"-18 NPT	-03	3,9	6,7	23,0	53,0	12	1,9	11321V0605	HCS-06-AGN-03-M-W5
					.15	.26	.91	2.09	.47	4.19		
06	1/4"	-04	3/8"-18 NPT	-06	3,9	6,7	28,5	58,5	19	3,9	11321V0610	HCS-06-AGN-06-M-W5
					.15	.26	1.12	2.30	.75	8.60		
08	5/16"	-05	3/8"-18 NPT	-06	5,4	8,0	29,0	59,0	19	4,1	11321V0810	HCS-08-AGN-06-M-W5
					.21	.31	1.14	2.32	.75	9.04		
10	3/8"	-06	3/8"-18 NPT	-06	6,5	9,6	29,0	62,0	19	4,6	11321V10	HCS-10-AGN-06-M-W5
					.26	.38	1.14	2.44	.75	10.14		
10	3/8"	-06	1/4"-18 NPT	-04	6,5	9,6	29,0	62,5	14	3,5	11321V1006	HCS-10-AGN-04-M-W5
					.26	.38	1.14	2.46	.55	7.72		
10	3/8"	-06	1/2"-14 NPT	-08	6,5	9,6	34,5	68,0	22	6,7	11321V1012	HCS-10-AGN-08-M-W5
					.26	.38	1.36	2.68	.87	14.77		
12	1/2"	-08	1/2"-14 NPT	-08	9,5	12,8	35,5	70,5	22	7,6	11321V12	HCS-12-AGN-08-M-W5
					.37	.50	1.40	2.78	.87	16.76		
16	5/8"	-10	1/2"-14 NPT	-08	12,6	16,0	36,5	74,5	22	8,6	11321V1612	HCS-16-AGN-08-M-W5
					.50	.63	1.44	2.93	.87	18.96		
16	5/8"	-10	3/4"-14 NPT	-12	12,6	16,0	37,5	75,5	27	11,4	11321V1620	HCS-16-AGN-12-M-W5
					.50	.63	1.48	2.97	1.06	25.14		
19	3/4"	-12	3/4"-14 NPT	-12	14,8	19,1	38,0	83,5	27	13,3	11321V20	HCS-19-AGN-12-M-W5
					.58	.75	1.50	3.29	1.06	29.33		
19	3/4"	-12	1"-11,5 NPT	-16	14,8	19,1	43,0	88,5	36	19,7	11321V2025	HCS-19-AGN-16-M-W5
					.58	.75	1.69	3.48	1.42	43.44		
25	1"	-16	1"-11,5 NPT	-16	20,0	25,9	44,0	99,0	36	25,6	11321V25	HCS-25-AGN-16-M-W5
					.79	1.02	1.73	3.90	1.42	56.45		
25	1"	-16	1 1/4"-11,5 NPT	-20	20,0	25,9	46,0	101,0	46	34,4	11321V2532	HCS-25-AGN-20-M-W5
					.79	1.02	1.81	3.98	1.81	75.85		
31	1 1/4"	-20	1 1/4"-11,5 NPT	-20	26,0	32,5	47,0	107,0	46	40,4	11321V32	HCS-31-AGN-20-M-W5
					1.02	1.28	1.85	4.21	1.81	89.08		
38	1 1/2"	-24	1 1/2"-11,5 NPT	-24	31,0	38,9	51,0	118,5	50	55,5	11321V40	HCS-38-AGN-24-M-W5
					1.22	1.53	2.01	4.67	1.97	122.38		
51	2"	-32	2"-11,5 NPT	-32	40,0	51,6	57,0	132,0	65	125,0	11321V50	HCS-51-AGN-32-M-W5
					1.57	2.03	2.24	5.20	2.56	275.63		

**Related Products and Accessories**



Swage Ferrules

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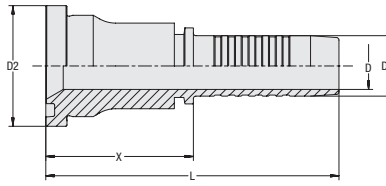
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**ecoVOS™ VA**
**Straight Insert with SAE Flange Adaptor  
Type SFL (3000 PSI Series)**

**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-1  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
12	1/2"	-08	1/2"	-08	9,5 .37	12,8 .50	30,2 1.19	45,5 1.79	81,0 3.19	11,9 26.24	11401V12	HCS-12-SFL-08-M-W5
12	1/2"	-08	3/4"	-12	9,5 .37	12,8 .50	38,1 1.50	46,5 1.83	81,5 3.21	18,4 40.57	11401V1220	HCS-12-SFL-12-M-W5
16	5/8"	-10	3/4"	-12	12,6 .50	16,0 .63	38,1 1.50	46,5 1.83	84,5 3.33	18,6 40.90	11401V1620	HCS-16-SFL-12-M-W5
19	3/4"	-12	3/4"	-12	14,8 .58	19,1 .75	38,1 1.50	47,0 1.85	92,5 3.64	21,8 48.07	11401V20	HCS-19-SFL-12-M-W5
19	3/4"	-12	1"	-16	14,8 .58	19,1 .75	44,5 1.75	49,5 1.95	95,0 3.74	28,0 61.74	11401V2025	HCS-19-SFL-16-M-W5
25	1"	-16	1"	-16	20,0 .79	25,9 1.02	44,5 1.75	48,0 1.89	103,0 4.06	34,0 74.97	11401V25	HCS-25-SFL-16-M-W5
25	1"	-16	1 1/4"	-20	20,0 .79	25,9 1.02	50,8 2.00	68,5 2.70	123,5 4.86	47,5 104.74	11401V2532	HCS-25-SFL-20-M-W5
31	1 1/4"	-20	1 1/4"	-20	26,0 1.02	32,5 1.28	50,8 2.00	69,5 2.74	129,5 5.10	53,5 117.97	11401V32	HCS-31-SFL-20-M-W5
38	1 1/2"	-24	1 1/2"	-24	31,0 1.22	38,9 1.53	60,3 2.37	59,5 2.34	127,0 5.00	66,6 146.85	11401V40	HCS-38-SFL-24-M-W5
38	1 1/2"	-24	2"	-32	31,0 1.22	38,9 1.53	71,4 2.81	72,0 2.83	139,5 5.49	111,2 245.20	11401V4050	HCS-38-SFL-32-M-W5
51	2"	-32	2"	-32	40,0 1.57	51,6 2.03	71,4 2.81	72,0 2.83	147,0 5.79	131,4 289.74	11401V50	HCS-51-SFL-32-M-W5

**Related Products and Accessories**

**Swage Ferrules**

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**45° Version**

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**90° Version**

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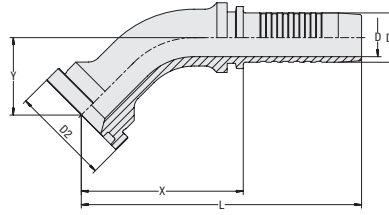

**MULTIVOS Version**

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**45° Elbow Insert with SAE Flange Adaptor  
Type SFL 45° (3000 PSI Series)**

ecovos™ VA



**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-1  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)						Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y			
12	1/2"	-08	1/2"	-08	9,5 .37	12,8 .50	30,2 1.19	50,0 1.97	85,5 3.37	20,5 .81	10,9 24.03	11401V12124	HCS-12-SFL-08-045-M-W5
12	1/2"	-08	3/4"	-12	9,5 .37	12,8 .50	38,1 1.50	55,0 2.17	90,5 3.56	26,0 1.02	16,0 35.17	11401V12204	HCS-12-SFL-12-045-M-W5
16	5/8"	-12	3/4"	-12	12,6 .50	16,0 .63	38,1 1.50	60,5 2.38	99,0 3.90	28,5 1.12	19,0 41.90	11401V16204	HCS-16-SFL-12-045-M-W5
19	3/4"	-12	3/4"	-12	14,8 .58	19,1 .75	38,1 1.50	62,5 2.46	108,5 4.27	30,0 1.18	22,9 50.49	11401V20204	HCS-19-SFL-12-045-M-W5
19	3/4"	-12	1"	-16	14,8 .58	19,1 .75	44,5 1.75	66,5 2.62	112,5 4.43	29,0 1.14	29,6 65.27	11401V20254	HCS-19-SFL-16-045-M-W5
25	1"	-16	1"	-16	20,0 .79	25,9 1.02	44,5 1.75	82,5 3.25	137,5 5.41	35,0 1.38	41,9 92.28	11401V25254	HCS-25-SFL-16-045-M-W5
31	1 1/4"	-20	1 1/4"	-20	26,0 1.02	32,5 1.28	50,8 2.00	98,5 3.88	158,5 6.24	36,5 1.44	63,0 138.80	11401V32324	HCS-31-SFL-20-045-M-W5
38	1 1/2"	-24	1 1/2"	-24	31,0 1.22	38,9 1.53	60,3 2.37	130,5 5.14	198,0 7.80	47,0 1.85	110,6 243.76	11401V40404	HCS-38-SFL-24-045-M-W5
51	2"	-32	2"	-32	40,0 1.57	51,6 2.03	71,4 2.81	149,0 5.87	224,0 8.82	67,0 2.64	177,8 392.05	11401V50504	HCS-51-SFL-32-045-M-W5

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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90° Version

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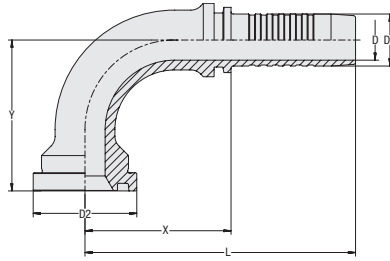
MULTIVOS Version

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**ecovos™ va**
**90° Elbow Insert with SAE Flange Adaptor  
Type SFL 90° (3000 PSI Series)**

**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-1  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)						Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
12	1/2"	-08	1/2"	-08	9,5	12,8	30,2	41,0	76,5	44,5	12,3	11401V12129	HCS-12-SFL-08-090-M-W5
					.37	.50	1.19	1.61	3.01	1.75	27.12		
16	5/8"	-10	3/4"	-12	12,6	16,0	38,1	49,0	87,5	55,5	21,2	11401V16209	HCS-16-SFL-12-090-M-W5
					.50	.63	1.50	1.93	3.44	2.19	46.75		
16	5/8"	-10	1"	-16	12,6	16,0	44,5	48,5	87,0	59,0	27,2	11401V16259	HCS-16-SFL-16-090-M-W5
					.50	.63	1.75	1.91	3.43	2.32	59.87		
19	3/4"	-12	3/4"	-12	14,8	19,1	38,1	53,5	99,5	55,5	26,5	11401V20209	HCS-19-SFL-12-090-M-W5
					.58	.75	1.50	2.11	3.92	2.19	58.32		
19	3/4"	-12	1"	-16	14,8	19,1	44,5	66,0	112,0	61,5	35,6	11401V20259	HCS-19-SFL-16-090-M-W5
					.58	.75	1.75	2.60	4.41	2.42	78.50		
25	1"	-16	1"	-16	20,0	25,9	44,5	70,0	125,0	72,0	48,6	11401V25259	HCS-25-SFL-16-090-M-W5
					.79	1.02	1.75	2.76	4.92	2.83	107.16		
31	1 1/4"	-20	1 1/4"	-20	26,0	32,5	50,8	88,5	148,5	84,0	77,4	11401V32329	HCS-31-SFL-20-090-M-W5
					1.02	1.28	2.00	3.48	5.85	3.31	170.67		
38	1 1/2"	-24	1 1/2"	-24	31,0	38,9	60,3	111,0	178,5	110,0	134,3	11401V40409	HCS-38-SFL-24-090-M-W5
					1.22	1.53	2.37	4.37	7.03	4.33	296.13		
51	2"	-32	2"	-32	40,0	51,6	71,4	125,0	200,0	138,0	211,4	11401V50509	HCS-51-SFL-32-090-M-W5
					1.57	2.03	2.81	4.92	7.87	5.43	466.14		

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVS Version**

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**45° Version**

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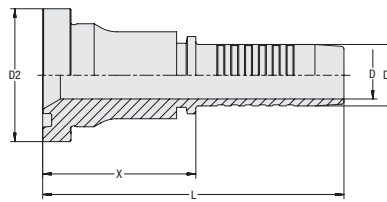

**MULTIVOS Version**

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**Straight Insert with SAE Flange Adaptor  
Type SFS (6000 PSI Series)**

ecovos™ VA



**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	D2	X	L			
12	1/2"	-08	1/2"	-08	9,5 .37	12,8 .50	31,8 1.25	45,5 1.79	81,0 3.19	11,5 25.25	11411V12	HCS-12-SFS-08-M-W5
12	1/2"	-08	3/4"	-12	9,5 .37	12,8 .50	41,3 1.63	49,0 1.93	84,5 3.33	19,2 42.34	11411V1220	HCS-12-SFS-12-M-W5
16	5/8"	-10	1/2"	-08	12,6 .50	16,0 .63	31,8 1.25	51,5 2.03	90,0 3.54	13,7 30.21	11411V1612	HCS-16-SFS-08-M-W5
16	5/8"	-10	3/4"	-12	12,6 .50	16,0 .63	41,3 1.63	45,5 1.79	84,0 3.31	21,4 47.19	11411V1620	HCS-16-SFS-12-M-W5
19	3/4"	-12	3/4"	-12	14,8 .58	19,1 .75	41,3 1.63	48,0 1.89	93,5 3.68	24,3 53.47	11411V20	HCS-19-SFS-12-M-W5
19	3/4"	-12	1"	-16	14,8 .58	19,1 .75	47,6 1.87	51,0 2.01	96,5 3.80	31,4 69.24	11411V2025	HCS-19-SFS-16-M-W5
25	1"	-16	1"	-16	20,0 .79	25,9 1.02	47,6 1.87	48,0 1.89	103,0 4.06	36,2 79.82	11411V25	HCS-25-SFS-16-M-W5
25	1"	-16	1 1/4"	-20	20,0 .79	25,9 1.02	54,0 2.13	70,5 2.78	125,5 4.94	53,0 116.87	11411V2532	HCS-25-SFS-20-M-W5
31	1 1/4"	-20	1 1/4"	-20	26,0 1.02	32,5 1.28	54,0 2.13	73,2 2.88	133,2 5.24	59,0 130.10	11411V32	HCS-31-SFS-20-M-W5
38	1 1/2"	-24	1 1/2"	-24	31,0 1.22	38,9 1.53	63,5 2.50	72,5 2.85	140,0 5.51	88,0 194.04	11411V40	HCS-38-SFS-24-M-W5
51	2"	-32	2"	-32	40,0 1.57	51,6 2.03	79,4 3.13	75,0 2.95	150,0 5.91	162,4 358.09	11411V50	HCS-51-SFS-32-M-W5

**Related Products and Accessories**



Swage Ferrules

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90° Version

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MULTIVOS Version

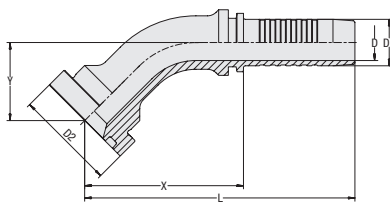
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**ecovos™ va**

**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2  
**Material** Stainless Steel

**45° Elbow Insert with SAE Flange Adaptor  
Type SFS 45° (6000 PSI Series)**

**C**

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
12	1/2"	-08	1/2"	-08	9,5	12,8	31,8	49,5	85,0	23,0	11,7	11411V12124	HCS-12-SFS-08-045-M-W5	
					.37	.50	1.25	1.95	3.35	.91	25.69			
12	1/2"	-08	3/4"	-12	9,5	12,8	41,3	55,0	90,5	27,0	18,4	11411V12204	HCS-12-SFS-12-045-M-W5	
					.37	.50	1.63	2.17	3.56	1.06	40.46			
16	5/8"	-10	1/2"	-08	12,6	16,0	31,8	60,5	99,0	26,0	14,8	11411V16124	HCS-16-SFS-08-045-M-W5	
					.50	.63	1.25	2.38	3.90	1.02	32.52			
16	5/8"	-10	3/4"	-12	12,6	16,0	41,3	60,5	99,0	28,0	20,9	11411V16204	HCS-16-SFS-12-045-M-W5	
					.50	.63	1.63	2.38	3.90	1.10	45.97			
19	3/4"	-12	3/4"	-12	14,8	19,1	41,3	65,0	111,0	32,0	26,5	11411V20204	HCS-19-SFS-12-045-M-W5	
					.58	.75	1.63	2.56	4.37	1.26	58.32			
19	3/4"	-12	1"	-16	14,8	19,1	47,6	68,0	114,0	30,5	33,1	11411V20254	HCS-19-SFS-16-045-M-W5	
					.58	.75	1.87	2.68	4.49	1.20	72.88			
25	1"	-16	1"	-16	20,0	25,9	47,6	83,5	138,5	36,0	44,9	11411V25254	HCS-25-SFS-16-045-M-W5	
					.79	1.02	1.87	3.29	5.45	1.42	98.89			
25	1"	-16	1 1/4"	-20	20,0	25,9	54,0	97,0	152,0	41,0	59,8	11411V25324	HCS-25-SFS-20-045-M-W5	
					.79	1.02	2.13	3.82	5.98	1.61	131.75			
31	1 1/4"	-20	1 1/4"	-20	26,0	32,5	54,0	101,5	161,0	40,0	69,9	11411V32324	HCS-31-SFS-20-045-M-W5	
					1.02	1.28	2.13	4.00	6.34	1.57	154.13			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,9	63,5	127,5	195,0	53,5	121,2	11411V40404	HCS-38-SFS-24-045-M-W5	
					1.22	1.53	2.50	5.02	7.68	2.11	267.14			
51	2"	-32	2"	-32	40,0	51,6	79,4	150,0	223,5	65,5	213,1	11411V50504	HCS-51-SFS-32-045-M-W5	
					1.57	2.03	3.13	5.91	8.80	2.58	469.78			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**90° Version**

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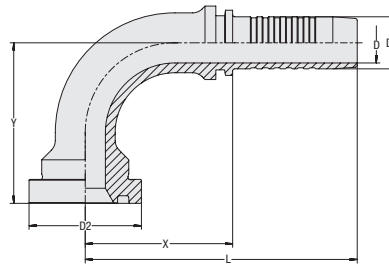

**MULTIVOS Version**

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**90° Elbow Insert with SAE Flange Adaptor  
Type SFS 90° (6000 PSI Series)**

ecoVOS™ VA



**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
12	1/2"	-08	1/2"	-08	9,5	12,8	31,8	39,0	74,5	46,5	13,2	11411V12129	HCS-12-SFS-08-090-M-W5	
					.37	.50	1.25	1.54	2.93	1.83	29.11			
12	1/2"	-08	3/4"	-12	9,5	12,8	41,3	43,2	78,5	50,0	21,2	11411V12209	HCS-12-SFS-12-090-M-W5	
					.37	.50	1.63	1.70	3.09	1.97	46.64			
16	5/8"	-10	1/2"	-08	12,6	16,0	31,8	52,0	90,5	52,5	17,2	11411V16129	HCS-16-SFS-08-090-M-W5	
					.50	.63	1.25	2.05	3.56	2.07	37.82			
16	5/8"	-10	3/4"	-12	12,6	16,0	41,3	47,5	86,0	57,0	23,8	11411V16209	HCS-16-SFS-12-090-M-W5	
					.50	.63	1.63	1.87	3.39	2.24	52.48			
19	3/4"	-12	3/4"	-12	14,8	19,1	41,3	54,0	100,0	59,0	30,1	11411V20209	HCS-19-SFS-12-090-M-W5	
					.58	.75	1.63	2.13	3.94	2.32	66.37			
19	3/4"	-12	1"	-16	14,8	19,1	47,6	61,5	107,5	68,0	39,1	11411V20259	HCS-19-SFS-16-090-M-W5	
					.58	.75	1.87	2.42	4.23	2.68	86.22			
25	1"	-16	1"	-16	20,0	25,9	47,6	70,5	125,5	73,0	48,7	11411V25259	HCS-25-SFS-16-090-M-W5	
					.79	1.02	1.87	2.78	4.94	2.87	107.27			
25	1"	-16	1 1/4"	-20	20,0	25,9	54,0	81,0	136,0	80,5	67,3	11411V25329	HCS-25-SFS-20-090-M-W5	
					.79	1.02	2.13	3.19	5.35	3.17	148.40			
31	1 1/4"	-20	1 1/4"	-20	26,0	32,5	54,0	92,0	152,0	84,0	83,1	11411V32329	HCS-31-SFS-20-090-M-W5	
					1.02	1.28	2.13	3.62	5.98	3.31	183.24			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,9	63,5	108,5	176,0	109,5	143,5	11411V40409	HCS-38-SFS-24-090-M-W5	
					1.22	1.53	2.50	4.27	6.93	4.31	316.31			
51	2"	-32	2"	-32	40,0	51,6	79,4	126,0	201,0	137,5	246,5	11411V50509	HCS-51-SFS-32-090-M-W5	
					1.57	2.03	3.13	4.96	7.91	5.41	543.53			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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45° Version

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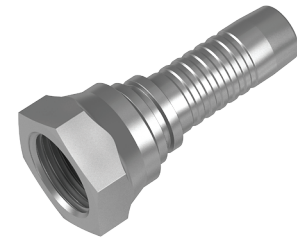
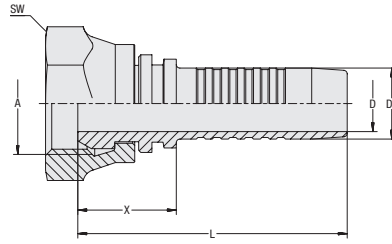
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**ecovos™ va**
**Straight Insert with Female BSPP Thread and 60° Taper Type DKR**

**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL	STAUFF	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
06	1/4"	-04	G1/4"	-04	3,9	6,7	22,5	52,5	19	4,1	11501V06	HCS-06-DKR-04-C-M-W5
					.15	.26	.89	2,07	.75	9,04		
06	1/4"	-04	G1/8"	-03	3,9	6,7	18,0	48,0	17	3,3	11501V0605	HCS-06-DKR-03-C-M-W5
					.15	.26	.71	1,89	.67	7,28		
06	1/4"	-04	G3/8"	-06	3,9	6,7	26,0	56,0	22	5,5	11501V0610	HCS-06-DKR-06-C-M-W5
					.15	.26	1,02	2,20	.87	12,13		
08	5/16"	-05	G1/4"	-04	5,4	8,0	19,5	49,5	19	4,2	11501V0806	HCS-08-DKR-04-C-M-W5
					.21	.31	.77	1,95	.75	9,26		
08	5/16"	-05	G3/8"	-06	5,4	8,0	27,0	57,0	22,0	5,8	11501V0810	HCS-08-DKR-06-C-M-W5
					.21	.31	1,06	2,24	.87	12,79		
08	5/16"	-05	G1/2"	-08	5,4	8,0	24,5	54,5	27,0	9,1	11501V0812	HCS-08-DKR-08-C-M-W5
					.21	.31	.96	2,15	1,06	20,07		
10	3/8"	-06	G3/8"	-06	6,5	9,6	24,0	57,0	22,0	6,2	11501V10	HCS-10-DKR-06-C-M-W5
					.26	.38	.94	2,24	.87	13,67		
10	3/8"	-06	G1/4"	-04	6,5	9,6	19,5	53,0	19,0	4,7	11501V1006	HCS-10-DKR-04-C-M-W5
					.26	.38	.77	2,09	.75	10,36		
10	3/8"	-06	G1/2"	-08	6,5	9,6	30,0	63,5	27,0	9,9	11501V1012	HCS-10-DKR-08-C-M-W5
					.26	.38	1,18	2,50	1,06	21,83		
12	1/2"	-08	G1/2"	-08	9,5	12,8	27,5	62,5	27,0	10,3	11501V12	HCS-12-DKR-08-C-M-W5
					.37	.50	1,08	2,46	1,06	22,71		
12	1/2"	-08	G3/8"	-06	9,5	12,8	21,5	57,0	22,0	8,3	11501V1210	HCS-12-DKR-06-C-M-W5
					.37	.50	.85	2,24	.87	18,30		
12	1/2"	-08	G3/4"	-12	9,5	12,8	30,5	65,5	32,0	14,4	11501V1220	HCS-12-DKR-12-C-M-W5
					.37	.50	1,20	2,58	1,26	31,75		
16	5/8"	-10	G5/8"	-10	12,6	16,0	24,0	62,5	30,0	13,8	11501V16	HCS-16-DKR-10-C-M-W5
					.50	.63	.94	2,46	1,18	30,43		
16	5/8"	-10	G1/2"	-08	12,6	16,0	22,5	60,5	27,0	11,0	11501V1612	HCS-16-DKR-08-C-M-W5
					.50	.63	.89	2,38	1,06	24,26		
16	5/8"	-10	G3/4"	-12	12,6	16,0	24,0	62,5	32,0	14,4	11501V1620	HCS-16-DKR-12-C-M-W5
					.50	.63	.94	2,46	1,26	31,64		
19	3/4"	-12	G3/4"	-12	14,8	19,1	28,0	74,0	32,0	22,5	11501V20	HCS-19-DKR-12-C-M-W5
					.58	.75	1,10	2,91	1,26	49,61		
19	3/4"	-12	G1"	-16	14,8	19,1	29,0	75,0	41,0	28,2	11501V2025	HCS-19-DKR-16-C-M-W5
					.58	.75	1,14	2,95	1,61	62,18		
25	1"	-16	G1"	-16	20,0	25,9	31,5	86,5	41,0	33,40	11501V25	HCS-25-DKR-16-C-M-W5
					.79	1,02	1,24	3,41	1,61	73,65		
25	1"	-16	G1 1/4"	-20	20,0	25,9	31,5	86,5	50,0	43,30	11501V2532	HCS-25-DKR-20-W-M-W5
					.79	1,02	1,24	3,41	1,97	95,48		
31	1 1/4"	-20	G1 1/4"	-20	26,0	32,5	36,5	96,5	50,0	52,00	11501V32	HCS-31-DKR-20-W-M-W5
					1,02	1,28	1,44	3,80	1,97	114,66		
31	1 1/4"	-20	G1 1/2"	-24	26,0	32,5	39,0	99,0	55,0	66,90	11501V3240	HCS-31-DKR-24-W-M-W5
					1,02	1,28	1,54	3,90	2,17	147,51		
38	1 1/2"	-24	G1 1/2"	-24	31,0	38,9	35,5	103,0	55,0	68,50	11501V40	HCS-38-DKR-24-W-M-W5
					1,22	1,53	1,40	4,06	2,17	151,04		
38	1 1/2"	-24	G2"	-32	31,0	38,9	35,5	106,0	70,0	118,55	11501V4050	HCS-38-DKR-32-W-M-W5
					1,22	1,53	1,40	4,17	2,76	261,40		
51	2"	-32	G2"	-32	40,0	51,6	37,5	112,5	70,0	135,70	11501V50	HCS-51-DKR-32-W-M-W5
					1,57	2,03	1,48	4,43	2,76	299,22		

**Related Products and Accessories**

**Swage Ferrules**

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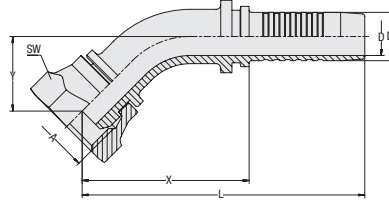
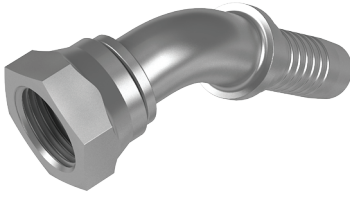
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**45° Elbow Insert with Female BSPP Thread and 60° Taper  
Type DKR 45°**

ecoVOS™ VA

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200  
**Material** Stainless Steel



C

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	per 100	Part Numbers	Ordering Codes	
06	1/4"	-04	G1/4"	-04	3,9	6,7	33,0	63,0	16,0	19	4,5	11501V06064	HCS-06-DKR-04-045-S-M-W5	
					.15	.26	1.30	2.48	.63	.75	9.81			
06	1/4"	-04	G3/8"	-06	3,9	6,7	36,0	66,0	16,5	22	6,6	11501V06104	HCS-06-DKR-06-045-S-M-W5	
					.15	.26	1.42	2.60	.65	.87	14.44			
08	5/16"	-05	G3/8"	-06	5,4	8,0	38,0	68,0	16,0	22	6,5	11501V08104	HCS-08-DKR-06-045-S-M-W5	
					.21	.31	1.50	2.68	.63	.87	14.22			
10	3/8"	-06	G3/8"	-06	6,5	9,6	40,0	73,5	16,0	22	7,6	11501V10104	HCS-10-DKR-06-045-S-M-W5	
					.26	.38	1.57	2.89	.63	.87	16.65			
10	3/8"	-06	G1/2"	-08	6,5	9,6	40,5	74,0	19,5	27	10,7	11501V10124	HCS-10-DKR-08-045-S-M-W5	
					.26	.38	1.59	2.91	.77	1.06	23.48			
12	1/2"	-08	G3/8"	-06	9,5	12,8	52,0	87,0	22,0	22	11,8	11501V12104	HCS-12-DKR-06-045-S-M-W5	
					.37	.50	2.05	3.43	.87	.87	25.91			
12	1/2"	-08	G1/2"	-08	9,5	12,8	48,0	81,5	20,0	27	12,4	11501V12124	HCS-12-DKR-08-045-S-M-W5	
					.37	.50	1.89	3.21	.79	1.06	27.23			
12	1/2"	-08	G5/8"	-10	9,5	12,8	45,5	81,0	19,5	30	14,6	11501V12164	HCS-12-DKR-10-045-S-M-W5	
					.37	.50	1.79	3.19	.77	1.18	32.08			
16	5/8"	-10	G5/8"	-10	12,6	16,0	57,0	95,0	27,0	30	19,4	11501V16164	HCS-16-DKR-10-045-W-M-W5	
					.50	.63	2.24	3.74	1.06	1.18	42.67			
16	5/8"	-10	G3/4"	-12	12,6	16,0	56,5	95,0	23,0	32	18,5	11501V16204	HCS-16-DKR-12-045-S-M-W5	
					.50	.63	2.22	3.74	.91	1.26	40.68			
19	3/4"	-12	G3/4"	-12	14,8	19,1	62,5	108,5	30,0	36	31,2	11501V20204	HCS-19-DKR-12-045-W-M-W5	
					.58	.75	2.46	4.27	1.18	1.42	68.69			
19	3/4"	-12	G1"	-16	14,8	19,1	62,5	108,5	30,0	41	36,3	11501V20254	HCS-19-DKR-16-045-S-M-W5	
					.58	.75	2.46	4.27	1.18	1.61	79.93			
25	1"	-16	G1"	-16	20,0	25,9	88,0	143,0	37,0	41	51,5	11501V25254	HCS-25-DKR-16-045-W-M-W5	
					.79	1.02	3.46	5.63	1.46	1.61	113.56			
31	1 1/4"	-20	G1 1/4"	-20	26,0	32,5	103,0	163,0	42,0	50	84,4	11501V32324	HCS-31-DKR-20-045-W-M-W5	
					1.02	1.28	4.06	6.42	1.65	1.97	186.10			
38	1 1/2"	-24	G1 1/2"	-24	31,0	38,9	131,0	198,0	51,5	55	128,6	11501V40404	HCS-38-DKR-24-045-W-M-W5	
					1.22	1.53	5.16	7.80	2.03	2.17	283.45			
51	2"	-32	G2"	-32	40,0	51,6	139,5	214,5	65,0	75	238,1	11501V50504	HCS-51-DKR-32-045-W-M-W5	
					1.57	2.03	5.49	8.44	2.56	2.95	525.01			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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90° Version

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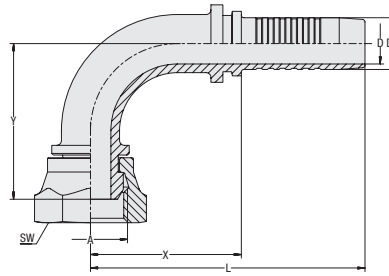
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**ecoVOS™ VA**

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200  
  
**Material** Stainless Steel

**90° Elbow Insert with Female BSPP Thread and 60° Taper Type DKR 90°**

**C**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
06	1/4"	-04	G1/4"	-04	3,9	6,7	27,0	57,0	28,5	19	4,8	11501V06069	HCS-06-DKR-04-090-S-M-W5	
					.15	.26	1.06	2.24	1.12	.75	10.47			
06	1/4"	-04	G3/8"	-06	3,9	6,7	28,0	58,0	31,0	22	7,1	11501V06109	HCS-06-DKR-06-090-S-M-W5	
					.15	.26	1.10	2.28	1.22	.87	15.55			
08	5/16"	-05	G3/8"	-06	5,4	8,0	28,0	58,0	31,5	22	6,9	11501V08109	HCS-08-DKR-06-090-S-M-W5	
					.21	.31	1.10	2.28	1.24	.87	15.21			
10	3/8"	-06	G3/8"	-06	6,5	9,6	34,0	67,5	37,0	22	8,7	11501V10109	HCS-10-DKR-06-090-S-M-W5	
					.26	.38	1.34	2.66	1.46	.87	19.07			
10	3/8"	-06	G1/2"	-08	6,5	9,6	35,5	69,0	38,0	27	11,7	11501V10129	HCS-10-DKR-08-090-S-M-W5	
					.26	.38	1.40	2.72	1.50	1.06	25.80			
12	1/2"	-08	G3/8"	-06	9,5	12,8	42,0	77,5	44,0	24	13,7	11501V12109	HCS-12-DKR-06-090-W-M-W5	
					.37	.50	1.65	3.05	1.73	.94	30.10			
12	1/2"	-08	G1/2"	-08	9,5	12,8	41,0	76,5	40,5	27	14,0	11501V12129	HCS-12-DKR-08-090-S-M-W5	
					.37	.50	1.61	3.01	1.59	1.06	30.76			
12	1/2"	-08	G5/8"	-10	9,5	12,8	41,0	76,5	40,0	30	16,3	11501V12169	HCS-12-DKR-10-090-S-M-W5	
					.37	.50	1.61	3.01	1.57	1.18	35.83			
16	5/8"	-10	G5/8"	-10	12,6	16,0	46,5	85,0	53,0	30	21,6	11501V16169	HCS-16-DKR-10-090-W-M-W5	
					.50	.63	1.83	3.35	2.09	1.18	47.63			
16	5/8"	-10	G3/4"	-12	12,6	16,0	46,5	85,0	50,0	32	20,5	11501V16209	HCS-16-DKR-12-090-S-M-W5	
					.50	.63	1.83	3.35	1.97	1.26	45.20			
19	3/4"	-12	G3/4"	-12	14,8	19,1	54,0	100,0	59,5	36	35,8	11501V20209	HCS-19-DKR-12-090-W-M-W5	
					.58	.75	2.13	3.94	2.34	1.42	78.83			
19	3/4"	-12	G1"	-16	14,8	19,1	54,0	100,0	57,0	41	40,1	11501V20259	HCS-19-DKR-16-090-S-M-W5	
					.58	.75	2.13	3.94	2.24	1.61	88.31			
25	1"	-16	G1"	-16	20,0	25,9	75,5	130,5	71,5	41	59,0	11501V25259	HCS-25-DKR-16-090-W-M-W5	
					.79	1.02	2.97	5.14	2.81	1.61	129.98			
31	1 1/4"	-20	G1 1/4"	-20	26,0	32,5	92,0	152,0	87,0	50	98,7	11501V32329	HCS-31-DKR-20-090-W-M-W5	
					1.02	1.28	3.62	5.98	3.43	1.97	217.52			
38	1 1/2"	-24	G1 1/2"	-24	31,0	38,9	117,5	185,0	105,0	55	151,8	11501V40409	HCS-38-DKR-24-090-W-M-W5	
					1.22	1.53	4.63	7.28	4.13	2.17	334.61			
51	2"	-32	G2"	-32	40,0	51,6	121,5	196,5	131,5	70	249,4	11501V50509	HCS-51-DKR-32-090-W-M-W5	
					1.57	2.03	4.78	7.74	5.18	2.76	549.93			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVS Version**

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**45° Version**

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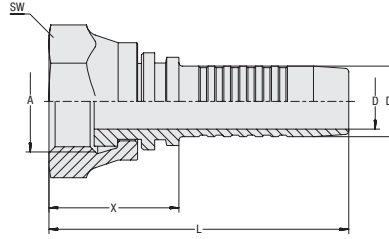

**MULTIVOS Version**

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**Straight Insert with Female BSPP Thread  
Type DKRF**

ecoVOS™ VA



**Connection Type** Female BSPP Nut Thread  
**Sealing Type** Flat-Sealing  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)		
06	1/4"	-04	G1/4"	-04	3,9	6,7	17,5	47,5	19	3,9	
					.15	.26	.69	1.87	.75	8.49	
08	5/16"	-05	G1/4"	-04	5,4	8,0	16,0	46,0	19	4,1	
					.21	.31	.63	1.81	.75	9.04	
10	3/8"	-06	G1/2"	-08	6,5	9,6	25,5	59,0	27	9,3	
					.26	.38	1.00	2.32	1.06	20.40	
12	1/2"	-08	G1/2"	-08	9,5	12,8	20,5	56,0	27	9,6	
					.37	.50	.81	2.20	1.06	21.06	
12	1/2"	-08	G3/4"	-12	9,5	12,8	25,5	61,0	32	13,3	
					.37	.50	1.00	2.40	1.26	29.22	
16	5/8"	-10	G3/4"	-12	12,6	16,0	19,5	57,5	32	13,5	
					.50	.63	.77	2.26	1.26	29.66	
19	3/4"	-12	G3/4"	-12	14,8	19,1	23,5	69,0	32	21,7	
					.58	.75	.93	2.72	1.26	47.85	
25	1"	-16	G1"	-16	20,0	25,9	26,5	81,5	41	32,2	
					.79	1.02	1.04	3.21	1.61	71.00	
31	1 1/4"	-20	G1 1/4"	-20	26,0	32,5	28,0	87,5	50	49,6	
					1.02	1.28	1.10	3.44	1.97	109.37	
38	1 1/2"	-24	G1 1/2"	-24	31,0	38,9	28,5	96,0	55	65,4	
					1.22	1.53	1.12	3.78	2.17	144.21	
51	2"	-32	G2"	-32	40,0	51,6	31,5	106,5	70	130,9	
					1.57	2.03	1.24	4.19	2.76	288.63	

**Related Products and Accessories**



Swage Ferrules

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90° Version

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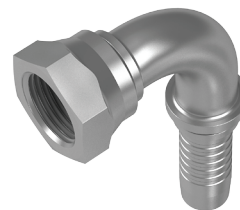
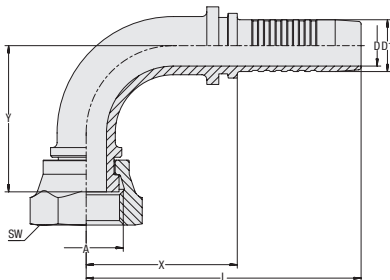
ECOVOS Version

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**ecovos™ va**
**90° Elbow Insert with Female BSPP Thread  
Type DKRF 90°**

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** Flat-Sealing  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
06	1/4"	-04	G1/4"	-04	3,9	6,7	27,0	57,0	25,0	19	4,6	11501V06069F	HCS-06-DKRF-04-090-S-M-W5	
					.15	.26	1.06	2.24	.98	.75	10.14			
08	5/16"	-05	G3/8"	-06	5,4	8,0	28,0	58,0	27,5	22	6,6	11501V08109F	HCS-08-DKRF-06-090-S-M-W5	
					.21	.31	1.10	2.28	1.08	.87	14.44			
10	3/8"	-06	G3/8"	-06	6,5	9,6	34,0	67,5	33,0	22	8,4	11501V10109F	HCS-10-DKRF-06-090-S-M-W5	
					.26	.38	1.34	2.66	1.30	.87	18.41			
10	3/8"	-06	G1/2"	-08	6,5	9,6	35,5	69,0	33,5	27	11,2	11501V10129F	HCS-10-DKRF-08-090-S-M-W5	
					.26	.38	1.40	2.72	1.32	1.06	24.59			
12	1/2"	-08	G1/2"	-08	9,5	12,8	41,0	76,5	36,0	27	13,5	11501V12129F	HCS-12-DKRF-08-090-S-M-W5	
					.37	.50	1.61	3.01	1.42	1.06	29.66			
12	1/2"	-08	G3/4"	-12	9,5	12,8	38,0	73,5	41,0	32	17,1	11501V12209F	HCS-12-DKRF-12-090-S-M-W5	
					.37	.50	1.50	2.89	1.61	1.26	37.60			
16	5/8"	-10	G3/4"	-12	12,6	16,0	46,5	85,0	45,5	32	19,5	11501V16209F	HCS-16-DKRF-12-090-S-M-W5	
					.50	.63	1.83	3.35	1.79	1.26	42.89			
19	3/4"	-12	G3/4"	-12	14,8	19,1	54,0	100,0	54,5	36	35,1	11501V20209F	HCS-19-DKRF-12-090-W-M-W5	
					.58	.75	2.13	3.94	2.15	1.42	77.29			
25	1"	-16	G1"	-16	20,0	25,9	75,5	130,5	66,5	41	57,8	11501V25259F	HCS-25-DKRF-16-090-W-M-W5	
					.79	1.02	2.97	5.14	2.62	1.61	127.45			
31	1 1/4"	-20	G1 1/4"	-20	26,0	32,5	92,0	152,0	80,0	50	96,3	11501V32329F	HCS-31-DKRF-20-090-W-M-W5	
					1.02	1.28	3.62	5.98	3.15	1.97	212.23			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVS Version**

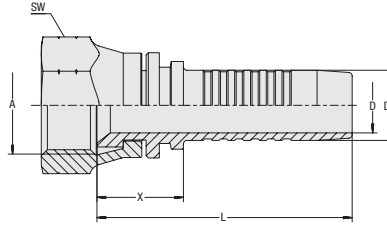
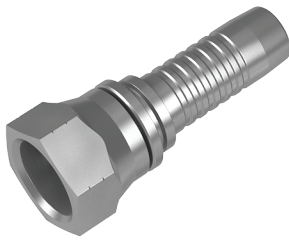
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**Straight Insert with Female UN/UNF Thread and 74° Conical Bore Type DKJ**

ecoVOS™ VA



**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			(kg/lbs) ca. per 100
06	1/4"	-04	7/16"-20 UNF	-04	3,9	6,7	17,5	47,5	17	3,7	11511V06	HCS-06-DKJ-04-W-M-W5
					.15	.26	.69	1.87	.67	8.16		
06	1/4"	-04	1/2"-20 UNF	-05	3,9	6,7	19,0	49,0	17	3,2	11511V0608	HCS-06-DKJ-05-S-M-W5
					.15	.26	.75	1.93	.67	7.06		
06	1/4"	-04	9/16"-18 UNF	-06	3,9	6,7	19,0	49,0	19	4,0	11511V0610	HCS-06-DKJ-06-S-M-W5
					.15	.26	.75	1.93	.75	8.82		
06	1/4"	-04	3/4"-16 UNF	-08	3,9	6,7	22,0	52,0	24	6,0	11511V0612	HCS-06-DKJ-08-S-M-W5
					.15	.26	.87	2.05	.94	13.23		
08	5/16"	-05	1/2"-20 UNF	-05	5,4	8,0	17,0	47,0	19	4,4	11511V08	HCS-08-DKJ-05-W-M-W5
					.21	.31	.67	1.85	.75	9.70		
08	5/16"	-05	9/16"-18 UNF	-06	5,4	8,0	19,0	49,0	22	4,1	11511V0810	HCS-08-DKJ-06-S-M-W5
					.21	.31	.75	1.93	.87	9.04		
10	3/8"	-06	9/16"-18 UNF	-06	6,5	9,6	18,5	52,0	22	6,5	11511V10	HCS-10-DKJ-06-W-M-W5
					.26	.38	.73	2.05	.87	14.33		
10	3/8"	-06	3/4"-16 UNF	-08	6,5	9,6	22,0	55,5	24	6,7	11511V1012	HCS-10-DKJ-08-S-M-W5
					.26	.38	.87	2.19	.94	14.66		
10	3/8"	-06	7/8"-14 UNF	-10	6,5	9,6	23,5	57,0	27	8,6	11511V1016	HCS-10-DKJ-10-S-M-W5
					.26	.38	.93	2.24	1.06	18.96		
12	1/2"	-08	3/4"-16 UNF	-08	9,5	12,8	21,5	56,5	24	10,8	11511V12	HCS-12-DKJ-08-W-M-W5
					.37	.50	.85	2.22	.94	23.81		
12	1/2"	-08	7/8"-14 UNF	-10	9,5	12,8	24,0	59,5	27	9,5	11511V1216	HCS-12-DKJ-10-S-M-W5
					.37	.50	.94	2.34	1.06	20.84		
12	1/2"	-08	1 1/16"-12 UN	-12	9,5	12,8	24,5	60,0	32	12,9	11511V1220	HCS-12-DKJ-12-S-M-W5
					.37	.50	.96	2.36	1.26	28.44		
16	5/8"	-10	7/8"-14 UNF	-10	12,6	16,0	21,5	59,5	27	13,6	11511V16	HCS-16-DKJ-10-W-M-W5
					.50	.63	.85	2.34	1.06	29.99		
16	5/8"	-10	3/4"-16 UNF	-08	12,6	16,0	21,5	59,5	27	11,8	11511V1612	HCS-16-DKJ-08-W-M-W5
					.50	.63	.85	2.34	1.06	26.02		
16	5/8"	-10	1 1/16"-12 UN	-12	12,6	16,0	24,5	63,0	32	13,7	11511V1620	HCS-16-DKJ-12-S-M-W5
					.50	.63	.96	2.48	1.26	30.21		
19	3/4"	-12	1 1/16"-12 UN	-12	14,8	19,1	23,0	68,5	36	21,3	11511V20	HCS-19-DKJ-12-W-M-W5
					.58	.75	.91	2.70	1.42	46.97		
19	3/4"	-12	7/8"-14 UNF	-10	14,8	19,1	22,0	67,5	27	15,9	11511V2016	HCS-19-DKJ-10-W-M-W5
					.58	.75	.87	2.66	1.06	35.06		
19	3/4"	-12	1 5/16"-12 UN	-16	14,8	19,1	27,0	72,5	41	24,6	11511V2025	HCS-19-DKJ-16-S-M-W5
					.58	.75	1.06	2.85	1.61	54.24		
25	1"	-16	1 5/16"-12 UN	-16	20,0	25,9	27,0	82,0	41	32,1	11511V25	HCS-25-DKJ-16-W-M-W5
					.79	1.02	1.06	3.23	1.61	70.78		
31	1 1/4"	-20	1 5/8"-12 UN	-20	26,0	32,5	32,0	92,0	50	53,1	11511V32	HCS-31-DKJ-20-W-M-W5
					1.02	1.28	1.26	3.62	1.97	117.09		
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0	38,9	33,5	101,0	60	70,8	11511V40	HCS-38-DKJ-24-W-M-W5
					1.22	1.53	1.32	3.98	2.36	156.11		
51	2"	-32	2 1/2"-12 UN	-32	40,0	51,6	40,0	115,0	75	163,5	11511V50	HCS-51-DKJ-32-W-M-W5
					1.57	2.03	1.57	4.53	2.95	360.52		

**Related Products and Accessories**



Swage Ferrules

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45° Version

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ECOVS Version

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90° Version

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MULTIVOS Version

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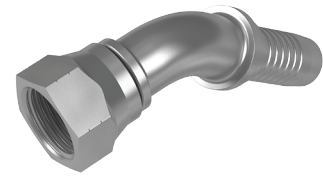
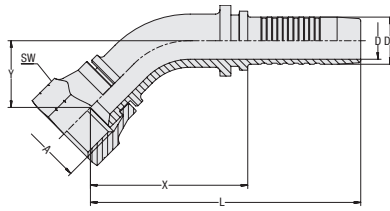
POWERVOS Version

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**ecovos™ va**
**45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ 45°**

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	D2	X	L	Y	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
06	1/4"	-04	7/16"-20 UNF	-04	3,9 .15	6,7 .26	35,5 1.40	65,5 2.58	18,0 .71	17 .67	4,45 .18	11511V06064	HCS-06-DKJ-04-045-W-M-W5	
06	1/4"	-04	1/2"-20 UNF	-05	3,9 .15	6,7 .26	33,5 1.32	63,5 2.50	13,5 .53	17 .67	3,8 .15	11511V06084	HCS-06-DKJ-05-045-S-M-W5	
06	1/4"	-04	9/16"-18 UNF	-06	3,9 .15	6,7 .26	33,5 1.32	63,5 2.50	13,5 .53	19 .75	4,4 .17	11511V06104	HCS-06-DKJ-06-045-S-M-W5	
08	5/16"	-05	1/2"-20 UNF	-05	5,4 .21	8,0 .31	40,0 1.57	70,0 2.76	18,0 .71	19 .75	5,9 .23	11511V08084	HCS-08-DKJ-05-045-W-M-W5	
08	5/16"	-05	9/16"-18 UNF	-06	5,4 .21	8,0 .31	31,0 1.22	65,0 2.56	17,0 .67	19 .75	5,5 .22	11511V08104	HCS-08-DKJ-06-045-S-M-W5	
10	3/8"	-06	9/16"-18 UNF	-06	6,5 .26	9,6 .38	40,0 1.57	73,5 2.89	20,5 .81	22 .87	8,65 .34	11511V10104	HCS-10-DKJ-06-045-W-M-W5	
10	3/8"	-06	3/4"-16 UNF	-08	6,5 .26	9,6 .38	42,0 1.65	75,0 2.95	15,5 .61	24 .94	8,2 .32	11511V10124	HCS-10-DKJ-08-045-S-M-W5	
12	1/2"	-08	3/4"-16 UNF	-08	9,5 .37	12,8 .50	46,5 1.83	82,0 3.23	23,0 .91	27 1.06	9,95 .39	11511V12124	HCS-12-DKJ-08-045-W-M-W5	
12	1/2"	-08	7/8"-14 UNF	-10	9,5 .37	12,8 .50	43,5 1.71	79,0 3.11	17,5 .69	27 1.06	13,95 .55	11511V12164	HCS-12-DKJ-10-045-S-M-W5	
16	5/8"	-10	7/8"-14 UNF	-10	12,6 .50	16,0 .63	54,0 2.13	92,0 3.62	26,5 1.04	30 1.18	19,0 .75	11511V16164	HCS-16-DKJ-10-045-W-M-W5	
19	3/4"	-12	1 1/16"-12 UN	-12	14,8 .58	19,1 .75	59,0 2.32	105,0 4.13	26,0 1.02	36 1.42	29,9 1.18	11511V20204	HCS-19-DKJ-12-045-W-M-W5	
25	1"	-16	1 5/16"-12 UN	-16	20,0 .79	25,9 1.02	83,0 3.27	138,0 5.43	32,0 1.26	41 1.61	49,8 1.96	11511V25254	HCS-25-DKJ-16-045-W-M-W5	
31	1 1/4"	-20	1 5/8"-12 UN	-20	26,0 1.02	32,5 1.28	107,0 4.21	166,5 6.56	43,5 1.71	50 1.97	91,95 3.62	11511V32324	HCS-31-DKJ-20-045-W-M-W5	
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0 1.22	38,9 1.53	133,0 5.24	200,5 7.89	57,0 2.24	55 2.17	131,85 5.19	11511V40404	HCS-38-DKJ-24-045-W-M-W5	
51	2"	-32	2 1/2"-12 UN	-32	40,0 1.57	51,6 2.03	142,5 5.61	217,5 8.56	59,0 2.32	75 2.95	241,7 9.52	11511V50504	HCS-51-DKJ-32-045-W-M-W5	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVS Version**

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**90° Version**

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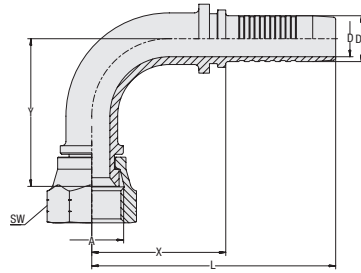

**MULTIVOS Version**

Page 166



**90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ 90°**

ecoVOS™ VA



**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2  
**Material** Stainless Steel

C

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	D2	X	L	Y				
06	1/4"	-04	7/16"-20	-04	3,9	6,7	25,5	55,5	33,5	17	4,8	11511V06069	HCS-06-DKJ-04-090-W-M-W5	
					.15	.26	1.00	2.19	1.32	.67	10.47			
06	1/4"	-04	1/2"-20	-05	3,9	6,7	28,0	58,0	27,5	17	4,1	11511V06089	HCS-06-DKJ-05-090-S-M-W5	
					.15	.26	1.10	2.28	1.08	.67	8.93			
06	1/4"	-04	9/16"-18	-06	3,9	6,7	28,0	58,0	27,5	19	4,7	11511V06109	HCS-06-DKJ-06-090-S-M-W5	
					.15	.26	1.10	2.28	1.08	.75	10.25			
08	5/16"	-05	1/2"-20	-05	5,4	8,0	28,5	58,5	32,0	19	6,2	11511V08089	HCS-08-DKJ-05-090-W-M-W5	
					.21	.31	1.12	2.30	1.26	.75	13.67			
08	5/16"	-05	9/16"-18	-06	5,4	8,0	30,0	60,0	27,0	22	5,5	11511V08109	HCS-08-DKJ-06-090-S-M-W5	
					.21	.31	1.18	2.36	1.06	.87	12.02			
10	3/8"	-06	9/16"-18	-06	6,5	9,6	35,0	68,5	38,0	22	9,8	11511V10109	HCS-10-DKJ-06-090-W-M-W5	
					.26	.38	1.38	2.70	1.50	.87	21.50			
10	3/8"	-06	3/4"-16	-08	6,5	9,6	38,0	71,5	34,5	24	9,3	11511V10129	HCS-10-DKJ-08-090-S-M-W5	
					.26	.38	1.50	2.81	1.36	.94	20.40			
12	1/2"	-08	3/4"-16	-08	9,5	12,8	39,5	75,0	44,0	27	15,5	11511V12129	HCS-12-DKJ-08-090-S-M-W5	
					.37	.50	1.56	2.95	1.73	1.06	34.18			
12	1/2"	-08	7/8"-14	-10	9,5	12,8	40,5	76,0	41,0	27	13,3	11511V12169	HCS-12-DKJ-10-090-S-M-W5	
					.37	.50	1.59	2.99	1.61	1.06	29.22			
16	5/8"	-10	7/8"-14	-10	12,6	16,0	45,5	84,0	52,5	30	21,5	11511V16169	HCS-16-DKJ-10-090-W-M-W5	
					.50	.63	1.79	3.31	2.07	1.18	47.30			
19	3/4"	-12	1 1/16"-12	-12	14,8	19,1	54,0	100,0	53,5	36	34,5	11511V20209	HCS-19-DKJ-12-090-W-M-W5	
					.58	.75	2.13	3.94	2.11	1.42	75.96			
19	3/4"	-12	1 5/16"-12	-16	14,8	19,1	54,0	100,0	55,0	41	37,2	11511V20259	HCS-19-DKJ-16-090-S-M-W5	
					.58	.75	2.13	3.94	2.17	1.61	81.92			
25	1"	-16	1 5/16"-12	-16	20,0	25,9	75,0	130,0	68,5	41	57,3	11511V25259	HCS-25-DKJ-16-090-W-M-W5	
					.79	1.02	2.95	5.12	2.70	1.61	126.35			
31	1 1/4"	-20	1 5/8"-12	-20	26,0	32,5	91,5	151,5	93,5	50	107,3	11511V32329	HCS-31-DKJ-20-090-W-M-W5	
					1.02	1.28	3.60	5.96	3.68	1.97	236.60			
38	1 1/2"	-24	1 7/8"-12	-24	31,0	38,9	116,5	184,0	107,5	55	156,2	11511V40409	HCS-38-DKJ-24-090-W-M-W5	
					1.22	1.53	4.59	7.24	4.23	2.17	344.42			
51	2"	-32	2 1/2"-12	-32	40,0	51,6	121,5	196,5	134,0	75	275,5	11511V50509	HCS-51-DKJ-32-090-W-M-W5	
					1.57	2.03	4.78	7.74	5.28	2.95	607.48			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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ECOPOS Version

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45° Version

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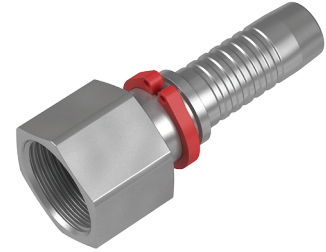
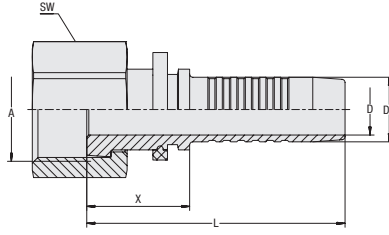
MULTIVOS Version

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**ecovos™ va**
**Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection  
Type ORS**

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** O-Ring Face Seal  
**Standard** ISO 8434-3  
**Material** Stainless Steel


**C**

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			per 100
10	3/8"	-06	11/16"-16 UN	-06	6,5	9,6	21,5	55,0	22	6,1	11521V10	HCS-10-ORS-06-S-M-W5
					.26	.38	.85	2.17	.87	13.45		
10	3/8"	-06	13/16"-16 UN	-08	6,5	9,6	23,0	56,5	27	10,3	11521V1012	HCS-10-ORS-08-S-M-W5
					.26	.38	.91	2.22	1.06	22.71		
12	1/2"	-08	13/16"-16 UN	-08	9,5	12,8	23,5	59,0	27	10,5	11521V12	HCS-12-ORS-08-S-M-W5
					.37	.50	.93	2.32	1.06	23.15		
16	5/8"	-10	1"-14 UNF	-10	12,6	16,0	25,5	64,0	30	13,1	11521V16	HCS-16-ORS-10-S-M-W5
					.50	.63	1.00	2.52	1.18	28.78		

**Related Products and Accessories**

**Swage Ferrules**

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**ECOVOS Version**

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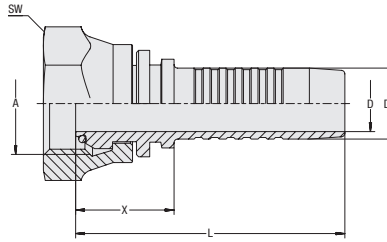

**MULTIVOS Version**

Page 168



**Straight Insert with Female BSPP Thread and 60° Taper / O-Ring Type DKOR**

ecovos™ VA



**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper with O-Ring  
**Standard** ISO 8434-6, BS 5200  
**Material** Stainless Steel  
**Sealing Material** FKM (Viton®)

C

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
06	1/4"	-04	G1/4"	-04	3,9 .15	6,7 .26	22,5 .89	52,5 2.07	19 .75	4,1 9.04	11551V06	HSS-06-DKOR-04-S-OR-V-M-W5
08	5/16"	-05	G3/8"	-06	5,4 .21	8,0 .31	27,0 1.06	57,0 2.24	22 .87	5,8 12.68	11551V0810	HSS-08-DKOR-06-S-OR-V-M-W5
10	3/8"	-06	G3/8"	-06	6,5 .26	9,6 .38	24,0 .94	57,0 2.24	22 .87	6,2 13.56	11551V10	HSS-10-DKOR-06-S-OR-V-M-W5
12	1/2"	-08	G1/2"	-08	9,5 .37	12,8 .50	27,5 1.08	62,5 2.46	27 1.06	10,2 22.49	11551V12	HSS-12-DKOR-08-S-OR-V-M-W5
16	5/8"	-10	G5/8"	-10	12,6 .50	16,0 .63	24,0 .94	62,5 2.46	30 1.18	13,6 29.99	11551V16	HSS-16-DKOR-10-S-OR-V-M-W5
16	5/8"	-10	G3/4"	-12	12,6 .50	16,0 .63	24,0 .94	62,5 2.46	32 1.26	14,2 31.20	11551V1620	HCS-16-DKOR-12-W-OR-V-M-W5
20	3/4"	-12	G3/4"	-12	14,8 .58	19,1 .75	28,0 1.10	74,0 2.91	32 1.26	22,4 49.28	11551V20	HCS-19-DKOR-12-W-OR-V-M-W5
25	1"	-16	G1"	-16	14,8 .58	19,1 .75	31,5 1.24	86,5 3.41	41 1.61	33,1 72.99	11551V25	HCS-25-DKOR-16-W-OR-V-M-W5
32	1 1/4"	-20	G1 1/4"	-20	26,0 1.02	32,5 1.28	35,0 1.38	94,5 3.72	50 1.97	51,9 114.44	11551V32	HCS-31-DKOR-20-W-OR-V-M-W5
40	1 1/2"	-24	G1 1/2"	-24	31,0 1.22	38,9 1.53	35,5 1.40	103,0 4.06	55 2.17	68,3 150.60	11551V40	HCS-38-DKOR-24-W-OR-V-M-W5
50	1 1/2"	-24	G2"	-32	40,0 1.57	51,6 2.03	37,5 1.48	112,5 4.43	70 2.76	135,4 298.45	11551V50	HCS-51-DKOR-32-W-OR-V-M-W5

**Related Products and Accessories**



Swage Ferrules

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MULTIVOS Version

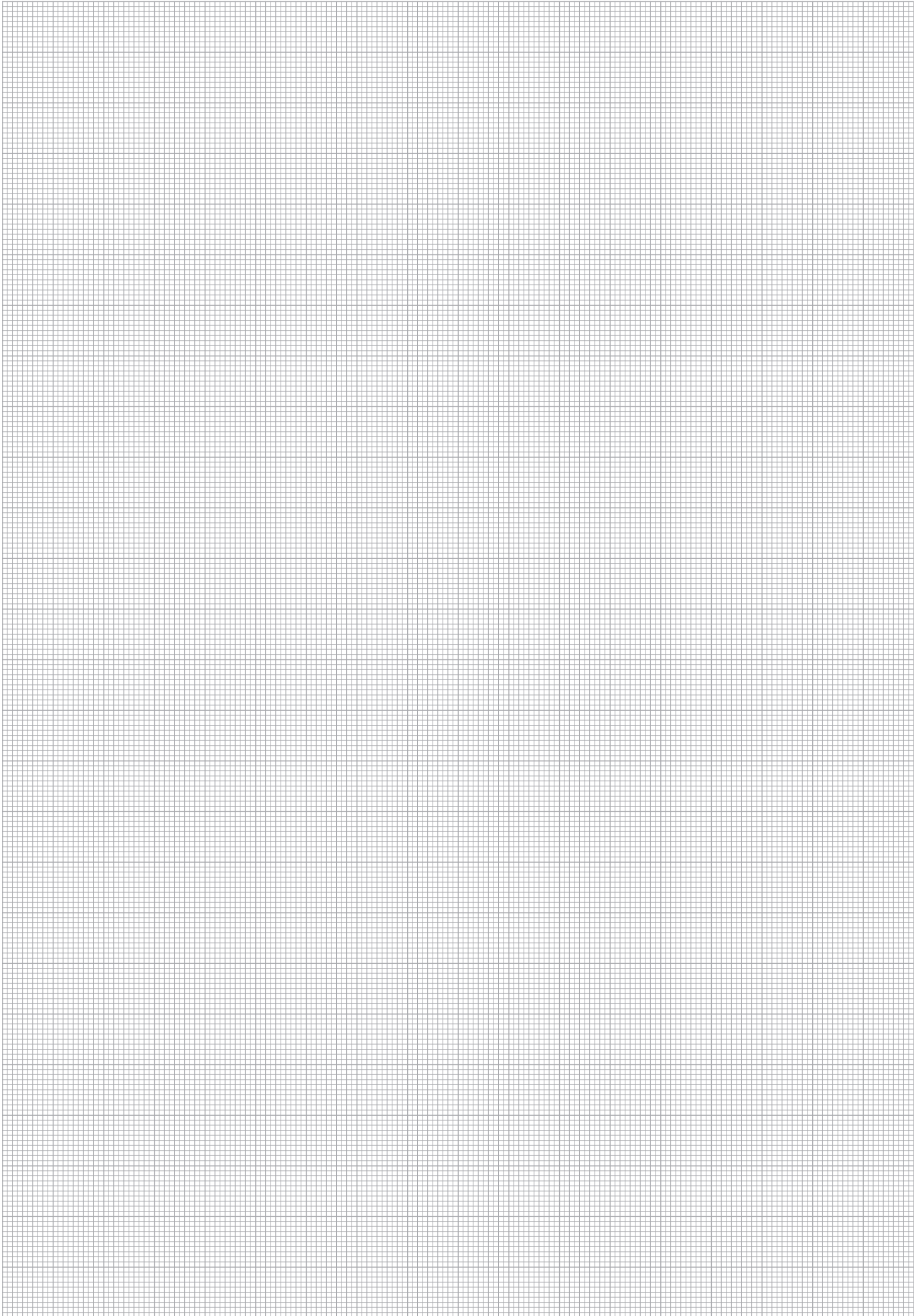
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POWERVOS Version

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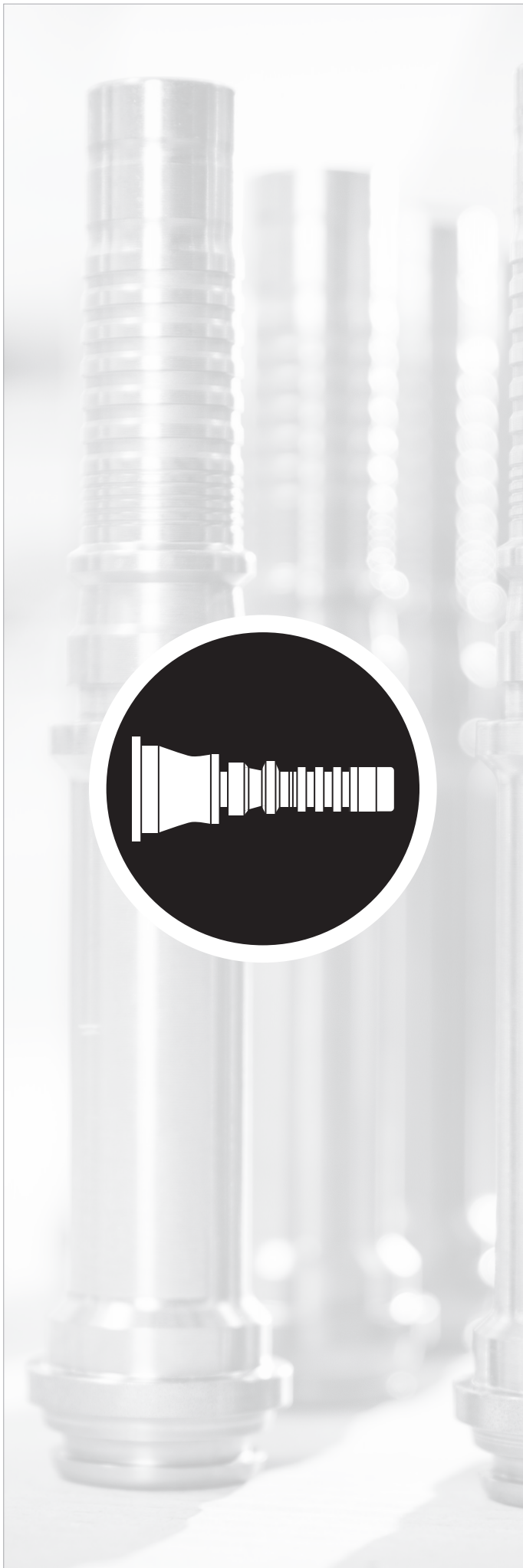




**C**







**Skive Swage Ferrule for Spiral Hose**

Suitable for Spiral Hose 4SP and 4SH

140



**Skive Swage Ferrule for Spiral Hose**

Suitable for Spiral Hose R15

141



**Straight Insert  
with Male Metric Thread and 24° Conical Bore  
CEL (Light Series)**

142



**Straight Insert  
with Male Metric Thread and 24° Conical Bore  
CES (Heavy Series)**

143



**Straight Insert  
with Female Metric Nut Thread and 24° Taper / O-Ring  
DKOL (Light Series)**

144



**45° Elbow Insert  
with Female Metric Nut Thread and 24° Taper / O-Ring  
DKOL 45° (Light Series)**

145



**90° Elbow Insert  
with Female Metric Nut Thread and 24° Taper / O-Ring  
DKOL 90° (Light Series)**

146



**Straight Insert  
with Female Metric Nut Thread and 24° Taper / O-Ring  
DKOS (Heavy Series)**

147



**45° Elbow Insert  
with Female Metric Nut Thread and 24° Taper / O-Ring  
DKOS 45° (Heavy Series)**

148



**90° Elbow Insert  
with Female Metric Nut Thread and 24° Taper / O-Ring  
DKOS 90° (Heavy Series)**

149



**MULTIVOS™**

	<b>Straight Insert with Male BSPP Thread and 60° Conical Bore</b> AGR	150		<b>Straight Insert with Female BSPP Thread and 60° Taper</b> DKR	162
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	<b>Straight Insert with SAE Flange Adaptor</b> SFL (3000 PSI Series)	153		<b>Straight Insert with Female UN/UNF Thread and 74° Conical Bore</b> DKJ	165
	<b>45° Elbow Insert with SAE Flange Adaptor</b> SFL 45° (3000 PSI Series)	154		<b>45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore</b> DKJ 45°	166
	<b>90° Elbow Insert with SAE Flange Adaptor</b> SFL 90° (3000 PSI Series)	155		<b>90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore</b> DKJ 90°	167
	<b>Straight Insert with SAE Flange Adaptor</b> SFS (6000 PSI Series)	156		<b>Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection</b> ORS	168
	<b>45° Elbow Insert with SAE Flange Adaptor</b> SFS 45° (6000 PSI Series)	157		<b>45° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection</b> ORS 45°	169
	<b>90° Elbow Insert with SAE Flange Adaptor</b> SFS 90° (6000 PSI Series)	158		<b>90° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection</b> ORS 90°	170
	<b>Straight Insert with SAE Flange Adaptor</b> SFC (9000 PSI Series)	159		<b>Straight Insert with Female BSPP Thread and 60° Taper / O-Ring</b> DKOR	171
	<b>45° Elbow Insert with SAE Flange Adaptor</b> SFC 45° (9000 PSI Series)	160		<b>45° Elbow Insert with Female BSPP Thread and 60° Taper / O-Ring</b> DKOR 45°	172
	<b>90° Elbow Insert with SAE Flange Adaptor</b> SFC 90° (9000 PSI Series)	161		<b>90° Elbow Insert with Female BSPP Thread and 60° Taper / O-Ring</b> DKOR 90°	173

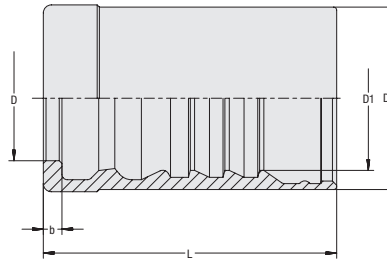
**D**
**MULTIVOS-8™**

	<b>Skive Swage Ferrule for Spiral Hose</b> Suitable for Spiral Hose R15	174		<b>Straight Insert with SAE Flange Adaptor</b> SFS (6000 PSI Series)	176
	<b>Straight Insert with Male UN/UNF Thread and 74° Taper</b> AGJ	174		<b>45° Elbow Insert with SAE Flange Adaptor</b> SFS 45° (6000 PSI Series)	176
	<b>Straight Insert with SAE Flange Adaptor</b> SFL (3000 PSI Series)	175		<b>90° Elbow Insert with SAE Flange Adaptor</b> SFS 90° (6000 PSI Series)	176
	<b>45° Elbow Insert with SAE Flange Adaptor</b> SFL 45° (3000 PSI Series)	175		<b>Straight Insert with Female UN/UNF Thread and 74° Taper / O-Ring</b> DKOJ	177
	<b>90° Elbow Insert with SAE Flange Adaptor</b> SFL 90° (3000 PSI Series)	175		<b>45° Elbow Insert with Female UN/UNF Thread and 74° Taper / O-Ring</b> DKOJ 45°	177
				<b>90° Elbow Insert with Female UN/UNF Thread and 74° Taper / O-Ring</b> DKOJ 90°	177



Internal & External Skive Swage Ferrule for Spiral Hose 4SP and 4SH

MULTIVOS™



**Ferrule Type** with Pull-Out Protection (Interlock)

**Suitable for Standards** 4SP, 4SH  
EN 856

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Maximum working pressures depending on the type of the hose connector and the hose type.

D

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
10	3/8"	-06	14,4	19,8	27,0	41,0	3,0	6,9	15425N10	HF-5000-10-W3
			.57	.78	1.06	1.61	.12	15.21		
12	1/2"	-08	16,8	21,7	29,0	47,0	3,0	8,8	15425N12	HF-5000-12-W3
			.66	.85	1.14	1.85	.12	19.40		
16	5/8"	-10	23,4	27,0	34,2	55,0	3,5	11,45	15425N16	HF-5000-16-W3
			.92	1.06	1.35	2.17	.14	25.25		
19	3/4"	-12	26,0	30,6	38,8	68,0	4,4	17,3	15435N20	HF-6000-19-W3
			1.02	1.20	1.53	2.68	.17	38.15		
25	1"	-16	31,9	39,0	50,0	73,0	4,4	33,9	15435N25	HF-6000-25-W3
			1.26	1.54	1.97	2.87	.17	74.75		
31	1 1/4"	-20	37,5	44,8	55,6	81,0	4,9	44,6	15425N32	HF-5000-31-W3
			1.48	1.76	2.19	3.19	.19	98.34		
38	1 1/2"	-24	44,0	51,6	62,4	96,0	4,9	58,4	15425N40	HF-5000-38-W3
			1.73	2.03	2.46	3.78	.19	128.77		
51	2"	-32	58,0	66,0	77,4	98,5	5,9	85,1	15415N50	HF-5001-51-W3
			2.28	2.60	3.05	3.88	.23	187.65		

Related Products and Accessories



DORN VOS Test Mandrels Pages 185-187

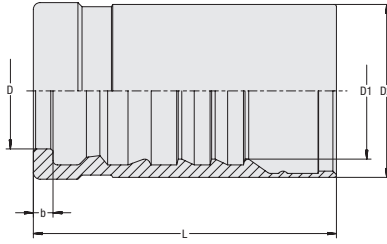


**MULTIVOS™**
**Internal & External Skive Swage Ferrule for Spiral Hose R15**
**Ferrule Type** with Pull-Out Protection (Interlock)

**Suitable for Standards** R15  
SAE 100 R15

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

Maximum working pressures depending on the type of the hose connector and the hose type.



Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
19	3/4"	-12	26	30,6	38,8	68,0	4,4	17,3	15435N20	HF-6000-19-W3
			1.02	1.20	1.53	2.68	.17	38.15		
25	1"	-16	31,9	39,0	50,0	73,0	4,4	33,9	15435N25	HF-6000-25-W3
			1.26	1.54	1.97	2.87	.17	74.75		
31	1 1/4"	-20	41,3	48,6	61,4	81,0	4,9	43,3	15445N32	HF-6001-31-W3
			1.63	1.91	2.42	3.19	.19	95.48		
38	1 1/2"	-24	46,7	58,5	69,5	92,0	4,9	68,9	15435N40	HF-6000-38-W3
			1.84	2.30	2.74	3.62	.19	151.92		
51	2"	-32	58,0	71,1	82,5	98,5	5,9	92,9	15445N50	HF-6001-51-W3 <sup>1</sup>
			2.28	2.80	3.25	3.88	.23	204.73		

<sup>1</sup> Designed for use with spiral hose R13 according to SAE 100 R13.

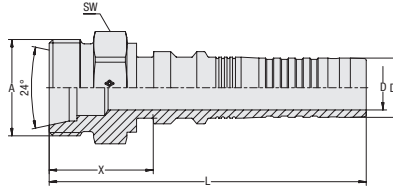
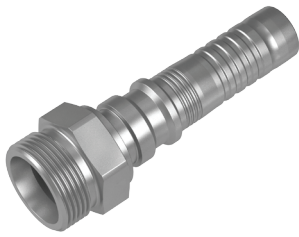
Please see pages 174-177 for the MULTIVOS-8 range in DN 51, designed for use with spiral hose R15 according to SAE 100 R15.

**Related Products and Accessories**

**DORNVOS Test Mandrels** Pages 185-187


**Straight Insert with Male Metric Thread and 24° Conical Bore  
Type CEL (Light Series)**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Male Metric Thread  
**Sealing Type** 24° Conical Bore (Shape W acc. to DIN 3861)  
**Standard** ISO 8434-1  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

D

Hose Size			Connection Size		Dimensions (mm/in)					Weight (*9/10) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
10	3/8"	-06	M18X1,5	-06	6,5 .26	9,6 .38	24,5 .96	66,0 2,60	19,0 .75	4,5 9,81	11105N10	HCI-10-CE-12L-M-W3
12	1/2"	-08	M22X1,5	-08	9,0 .35	12,5 .49	26,0 1,02	73,0 2,87	22,0 .87	7,4 16,21	11105N12	HCI-12-CE-15L-M-W3
16	5/8"	-10	M26x1,5	-10	12,0 .47	16,0 .63	28,0 1,10	85,5 3,37	27,0 1,06	11,6 25,58	11105N16	HCI-16-CE-18L-M-W3
19	3/4"	-12	M30x2	-12	14,8 .58	18,8 .74	31,5 1,24	104,0 4,09	30,0 1,18	17,4 38,26	11105N20	HCI-19-CE-22L-M-W3
25	1"	-16	M36x2	-16	19,5 .77	25,1 .99	32,0 1,26	111,5 4,39	36,0 1,42	27,7 61,08	11105N25	HCI-25-CE-28L-M-W3
25	1"	-16	M45x2	20	19,5 .77	25,1 .99	36,0 1,42	115,5 4,55	46,0 1,81	38,7 85,33	11105N2532	HCI-25-CE-35L-M-W3
31	1 1/4"	-20	M45x2	-20	25,0 .98	31,8 1,25	37,0 1,46	115,0 4,53	46,0 1,81	45,4 100,00	11105N32	HCI-31-CE-35L-M-W3

**Related Products and Accessories**



Swage Ferrules

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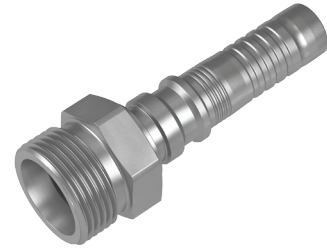
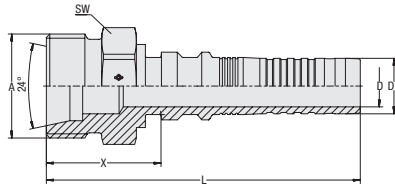
ECOVOS VA Version

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**MULTIVOS™**
**Straight Insert with Male Metric Thread and 24° Conical Bore  
Type CES (Heavy Series)**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Male Metric Thread  
**Sealing Type** 24° Conical Bore  
 (Shape W acc. to DIN 3861)  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$ 


Hose Size			Connection Size		Dimensions (mm/in)					Weight ( <sup>kg</sup> /lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,6 .38	28,0 1.10	69,5 2.74	22,0 .87	6,8 14.99	11115N10	HCI-10-CE-14S-M-W3
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,6 .38	26,0 1.02	67,5 2.66	22 .87	6,2 13.67	11115N1008	HCI-10-CE-12S-M-W3
12	1/2"	-08	M24x1,5	-08	9,0 .35	12,5 .49	28,0 1.10	75,0 2.95	24 .94	8,7 19.18	11115N12	HCI-12-CE-16S-M-W3
12	1/2"	-08	M30x2	-10	9,0 .35	12,5 .49	32,0 1.26	79,0 3.11	30 1.18	13,0 28.67	11115N1216	HCI-12-CE-20S-M-W3
16	5/8"	-10	M30x2	-10	12,0 .47	16,0 .63	33,0 1.30	90,5 3.56	30,0 1.18	15,2 33.52	11115N16	HCI-16-CE-20S-M-W3
19	3/4"	-12	M36x2	-12	14,8 .58	18,8 .74	36,5 1.44	109,0 4.29	36,0 1.42	23,5 51.82	11115N20	HCI-19-CE-25S-M-W3
19	3/4"	-12	M30x2	-10	14,8 .58	18,8 .74	33,5 1.32	106,0 4.17	30,0 1.18	17,9 39.47	11115N2016	HCI-19-CE-20S-M-W3
25	1"	-16	M42x2	-16	19,5 .77	25,1 .99	39,5 1.56	119,0 4.69	46,0 1.81	39,6 87.32	11115N25	HCI-25-CE-30S-M-W3
31	1 1/4"	-20	M52x2	-20	25,0 .98	31,8 1.25	45,0 1.77	123,0 4.84	55,0 2.17	64,1 141.34	11115N32	HCI-31-CE-38S-M-W3

**D**
**Related Products and Accessories**

**Swage Ferrules**

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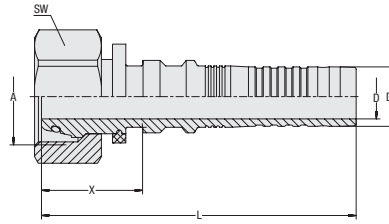
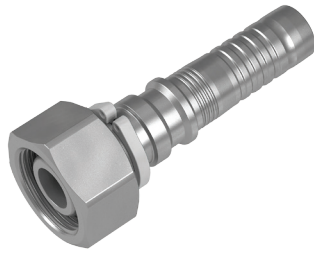

**ECOVOS VA Version**

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**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL (Light Series)**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)

D

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/163) ca. per 100	Part Numbers	Ordering Codes
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,6 .38	25,0 .98	66,5 2.62	22,0 .87	6,3 13.78	11225N10	HCI-10-DKO-12L-S-OR-B-M-W3
12	1/2"	-08	M22x1,5	-08	9,0 .35	12,5 .49	23,5 .93	70,5 2.78	27,0 1.06	9,7 21.28	11225N12	HCI-12-DKO-15L-S-OR-B-M-W3
16	5/8"	-10	M26x1,5	-10	12,0 .47	16,0 .63	27,0 1.06	84,5 3.33	32,0 1.26	14,9 32.85	11225N16	HCI-16-DKO-18L-S-OR-B-M-W3
16	5/8"	-10	M30x2	-12	12,0 .47	16,0 .63	28,5 1.12	86,0 3.39	36,0 1.42	19,3 42.56	11225N1620	HCI-16-DKO-22L-S-OR-B-M-W3
31	1 1/4"	-20	M45x2	-20	25,0 .98	31,8 1.25	34,0 1.34	112,0 4.41	50,0 1.97	50,9 112.12	11225N32	HCI-31-DKO-35L-S-OR-B-M-W3

**Related Products and Accessories**



Swage Ferrules

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45° Version

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ECOPOS Version

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90° Version

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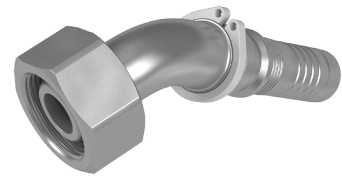
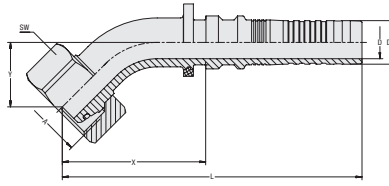
ECOPOS VA Version

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**MULTIVOS™**
**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOL 45° (Light Series)**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)


Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
10	3/8"	-06	M18x1,5	-06	6,5	9,6	40,0	81,5	17,5	22,0	7,6	11225N10104	HCI-10-DKO-12L-045-S-OR-B-M-W3	
					.26	.38	1.57	3.21	.69	.87	16.65			
10	3/8"	-06	M22x1,5	-08	6,5	9,6	40,0	81,5	18,5	27	10,0	11225N10124	HCI-10-DKO-15L-045-S-OR-B-M-W3	
					.26	.38	1.57	3.21	.73	1.06	21.94			
12	1/2"	-08	M22x1,5	-08	9,0	12,5	44	91	21,0	27	12,1	11225N12124	HCI-12-DKO-15L-045-S-OR-B-M-W3	
					.35	.49	1.73	3.58	.83	1.06	26.57			
16	5/8"	-10	M26x1,5	-10	12,0	16,0	52,5	110,0	24,0	32	18,7	11225N16164	HCI-16-DKO-18L-045-S-OR-B-M-W3	
					.47	.63	2.07	4.33	.94	1.26	41.12			

 Dimension Y  $\pm$  2,5 mm / .10 in

**D**
**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVS Version**

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**90° Version**

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**ECOVS VA Version**

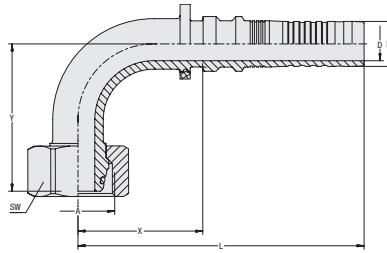
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**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring  
Type DKOL 90° (Light Series)**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)

D

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
10	3/8"	-06	M18x1,5	-06	6,5 .26	9,6 .38	36,0 1.42	77,5 3.05	36,0 1.42	22,0 .87	8,7 19.07	11225N10109	HCI-10-DKO-12L-090-S-OR-B-M-W3	
10	3/8"	-06	M22x1,5	-08	6,5 .26	9,6 .38	36,0 1.42	77,5 3.05	36,0 1.42	27 1.06	11,1 24.37	11225N10129	HCI-10-DKO-15L-090-S-OR-B-M-W3	
12	1/2"	-08	M22x1,5	-08	9,0 .35	12,5 .49	38,5 1.52	85,5 3.37	42,0 1.65	27 1.06	13,8 30.43	11225N12129	HCI-12-DKO-15L-090-S-OR-B-M-W3	
16	5/8"	-10	M26x1,5	-10	12,0 .47	16,0 .63	49,0 1.93	102,0 4.02	52,5 2.07	32 1.26	21,3 46.97	11225N16169	HCI-16-DKO-18L-090-S-OR-B-M-W3	
19	3/4"	-12	M30x2	-12	14,8 .58	18,8 .74	55,5 2.19	128,0 5.04	57,0 2.24	36 1.42	32,5 71.66	11225N20209	HCI-19-DKO-22L-090-S-OR-B-M-W3	
31	1 1/4"	-20	M45x2	-20	25,0 .98	31,8 1.25	87,5 3.44	165,5 6.52	81,0 3.19	50 1.97	93,3 205.62	11225N32329	HCI-31-DKO-35L-090-S-OR-B-M-W3	

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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ECOVS Version

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45° Version

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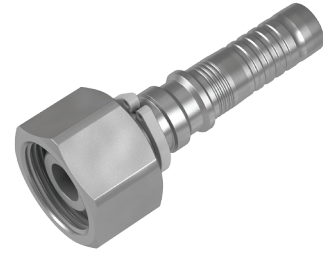
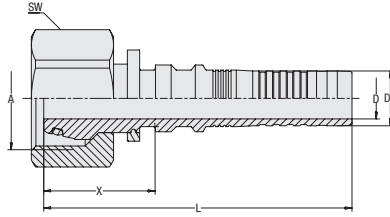
ECOVS VA Version

Page



**MULTIVOS™**
**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS (Heavy Series)**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)


Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,6 .38	29,0 1.14	70,5 2.78	27 1.06	10,0 22.05	11235N10	HCI-10-DKO-14S-S-OR-B-M-W3
10	3/8"	-06	M18x1,5	-04	6,5 .26	9,6 .38	27,0 1.06	68,5 2.70	22 .87	6,6 14.44	11235N1006	HCI-10-DKO-10S-W-OR-B-M-W3
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,6 .38	25,0 .98	66,5 2.62	24 .94	7,3 15.99	11235N1008	HCI-10-DKO-12S-S-OR-B-M-W3
12	1/2"	-08	M24x1,5	-08	9,0 .35	12,5 .49	30,0 1.18	77,0 3.03	30 1.18	13,4 29.44	11235N12	HCI-12-DKO-16S-S-OR-B-M-W3
12	1/2"	-08	M30x2	-10	9,0 .35	12,5 .49	31,5 1.24	78,5 3.09	36 1.42	20,1 44.21	11235N1216	HCI-12-DKO-20S-S-OR-B-M-W3
16	5/8"	-10	M30x2	-10	12,0 .47	16,0 .63	32,5 1.28	90,0 3.54	36 1.42	21,2 46.64	11235N16	HCI-16-DKO-20S-S-OR-B-M-W3
16	5/8"	-10	M24x1,5	-08	12,0 .47	16,0 .63	26,0 1.02	83,5 3.29	30 1.18	15,0 33.08	11235N1612	HCI-16-DKO-16S-W-OR-B-M-W3
16	5/8"	-10	M36x2	-12	12,0 .47	16,0 .63	31,5 1.24	89,0 3.50	41 1.61	28,9 63.61	11235N1620	HCI-16-DKO-25S-S-OR-B-M-W3
19	3/4"	-12	M36x2	-12	14,8 .58	18,8 .74	31,5 1.24	104,0 4.09	41 1.61	30,1 66.37	11235N20	HCI-19-DKO-25S-S-OR-B-M-W3
19	3/4"	-12	M30x2	-10	14,8 .58	18,8 .74	30,5 1.20	103,0 4.06	36 1.42	23,9 52.59	11235N2016	HCI-19-DKO-20S-W-OR-B-M-W3
19	3/4"	-12	M42x2	-16	14,8 .58	18,8 .74	37,5 1.48	110,0 4.33	50 1.97	46,6 102.75	11235N2025	HCI-19-DKO-30S-S-OR-B-M-W3
19	3/4"	-12	M36x2	-12	14,8 .58	18,8 .74	31,5 1.24	104,0 4.09	46 1.81	38,0 83.68	11235N20-SW46	HCI-19-DKO-25S-S-OR-B-M-W3-SW46
25	1"	-16	M42x2	-16	19,5 .77	25,1 .99	37,5 1.48	117,0 4.61	50 1.97	49,9 110.03	11235N25	HCI-25-DKO-30S-S-OR-B-M-W3
25	1"	-16	M36x2	-12	19,5 .77	25,1 .99	31,5 1.24	111,0 4.37	41 1.61	37,0 81.47	11235N2520	HCI-25-DKO-25S-W-OR-B-M-W3
25	1"	-16	M52x2	-20	19,5 .77	25,1 .99	41,0 1.61	120,5 4.74	60 2.36	74,5 164.27	11235N2532	HCI-25-DKO-38S-S-OR-B-M-W3
31	1 1/4"	-20	M52x2	-20	25,0 .98	31,8 1.25	41,5 1.63	119,5 4.70	60 2.36	76,5 168.57	11235N32	HCI-31-DKO-38S-S-OR-B-M-W3
31	1 1/4"	-20	M42x2	-16	25,0 .98	31,8 1.25	33,5 1.32	111,5 4.39	50 1.97	58,1 128.11	11235N3225	HCI-31-DKO-30S-W-OR-B-M-W3
19	3/4"	-12	M42x2	-16	14,8 .58	18,8 .74	48,5 1.91	121,0 4.76	50 1.97	47,3 104.30	21235N2025	HCI-19-DKO-30S-S-OR-B-B-W3
25	1"	-16	M36x2	-12	19,5 .77	25,1 .99	64,0 2.52	143,5 5.65	46 1.81	61,5 135.61	21235N2520	HCI-25-DKO-25S-S-OR-B-B-W3
25	1"	-16	M52x2	-20	19,5 .77	25,1 .99	55,0 2.17	134,5 5.30	60 2.36	76,3 168.24	21235N2532	HCI-25-DKO-38S-S-OR-B-B-W3
31	1 1/4"	-20	M42x2	-16	25,0 .98	31,8 1.25	72,0 2.83	150,0 5.91	50 1.97	86,2 190.07	21235N3225	HCI-31-DKO-30S-S-OR-B-B-W3
38	1 1/2"	-24	M52x2	-20	31,0 1.22	38,3 1.51	70,5 2.78	163,5 6.44	60 2.36	118,0 260.08	21235N4032	HCI-38-DKO-38S-S-OR-B-B-W3

**Related Products and Accessories**

**Swage Ferrules**

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**45° Version**

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**ECOVOS Version**

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**90° Version**

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**ECOVOS VA Version**

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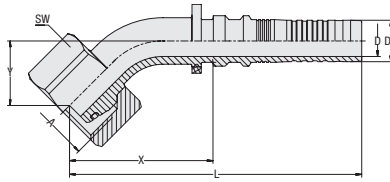
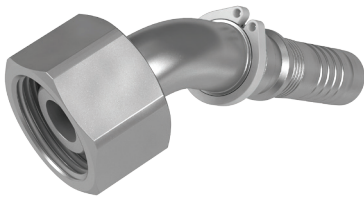

**POWERVOS Version**

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**45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 45° (Heavy Series)**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female Metric Nut Thread  
**Sealing Type** 24° Taper with O-Ring  
**Standard** ISO 8434-1  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)

D

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,6 .38	40,0 1.57	81,5 3.21	17,5 .69	24 .94	8,5 18.74	11235N10084	HCI-10-DKO-12S-045-S-OR-B-M-W3	
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,6 .38	43,5 1.71	85,0 3.35	21,0 .83	27 1.06	11,4 25.03	11235N10104	HCI-10-DKO-14S-045-S-OR-B-M-W3	
12	1/2"	-08	M24x1,5	-08	9,0 .35	12,5 .49	49,0 1.93	95,0 3.74	22,5 .89	30 1.18	15,7 34.51	11235N12124	HCI-12-DKO-16S-045-S-OR-B-M-W3	
12	1/2"	-08	M30x2	-10	9,0 .35	12,5 .49	52,5 2.07	99,5 3.92	27,5 1.08	30 1.18	22,5 49.61	11235N12164	HCI-12-DKO-20S-045-W-OR-B-M-W3	
16	5/8"	-10	M30x2	-10	12,0 .47	16,0 .63	55,5 2.19	113,0 4.45	25,0 .98	36 1.42	24,6 54.13	11235N16164	HCI-16-DKO-20S-045-S-OR-B-M-W3	
19	3/4"	-12	M30x2	-10	14,8 .58	18,8 .74	70,0 2.76	142,5 5.61	30,5 1.20	36 1.42	36,0 79.38	21235N20164	HCI-19-DKO-20S-045-S-OR-B-B-W3	
19	3/4"	-12	M36x2	-12	14,8 .58	18,8 .74	64,5 2.54	137,5 5.41	29,0 1.14	46 1.81	43,9 96.69	11235N20204	HCI-19-DKO-25S-045-S-OR-B-M-W3	
19	3/4"	-12	M42x2	-16	14,8 .58	18,8 .74	80,5 3.17	153,0 6.02	35,0 1.38	50 1.97	60,0 132.30	21235N20254	HCI-19-DKO-30S-045-S-OR-B-B-W3	
19	3/4"	-12	M36x2	-12	14,8 .58	18,8 .74	64,5 2.54	137,5 5.41	29,0 1.14	41 1.61	36,0 79.38	11235N20204SW41	HCI-19-DKO-25S-045-S-OR-B-M-W3-SW41	
25	1"	-16	M36x2	-12	19,5 .77	25,1 .99	83,0 3.27	162,5 6.40	35,0 1.38	46 1.81	68,2 150.27	21235N25204	HCI-25-DKO-25S-045-S-OR-B-B-W3	
25	1"	-16	M42x2	-16	19,5 .77	25,1 .99	80,5 3.17	160,0 6.30	36,5 1.44	50 1.97	63,9 140.79	11235N25254	HCI-25-DKO-30S-045-S-OR-B-M-W3	
25	1"	-16	M52x2	-20	19,5 .77	25,1 .99	94,0 3.70	173,5 6.83	39,5 1.56	60 2.36	100,1 220.72	21235N25324	HCI-25-DKO-38S-045-S-OR-B-B-W3	
31	1 1/4"	-20	M42x2	-16	25,0 .98	31,8 1.25	96,0 3.78	174,0 6.85	39,0 1.54	50 1.97	98,1 216.20	21235N32254	HCI-31-DKO-30S-045-S-OR-B-B-W3	
31	1 1/4"	-20	M52x2	-20	25,0 .98	31,8 1.25	98,5 3.88	176,5 6.95	41,5 1.63	60 2.36	102,3 225.46	11235N32324	HCI-31-DKO-38S-045-S-OR-B-M-W3	
38	1 1/2"	-24	M52x2	-20	31,0 1.22	38,3 1.51	113,5 4.47	206,0 8.11	47,5 1.87	60 2.36	147,0 324.14	21235N40324	HCI-38-DKO-38S-045-S-OR-B-B-W3	

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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Straight Version

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90° Version

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**MULTIVOS™**
**90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS 90° (Heavy Series)**

**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female Metric Nut Thread

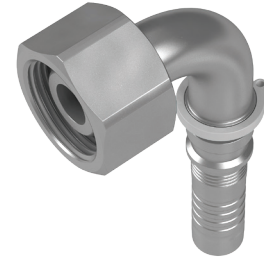
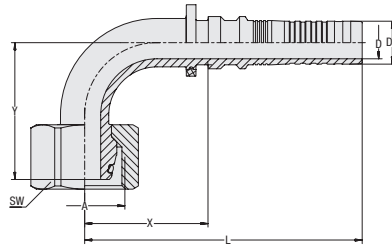
**Sealing Type** 24° Taper with O-Ring

**Standard** ISO 8434-1

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating *Δplus*

**Sealing Material** NBR (Buna-N®)



Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
10	3/8"	-06	M20x1,5	-05	6,5 .26	9,6 .38	36,0 1.42	77,5 3.05	36,0 1.42	24 .94	9,6 21.17	11235N10089	HCI-10-DKO-12S-090-S-OR-B-M-W3	
10	3/8"	-06	M22x1,5	-06	6,5 .26	9,6 .38	37,0 1.46	77,5 3.05	41,0 1.61	27 1.06	12,5 27.56	11235N10109	HCI-10-DKO-14S-090-S-OR-B-M-W3	
12	1/2"	-08	M24x1,5	-08	9,0 .35	12,5 .49	40,0 1.57	87,0 3.43	46,0 1.81	30 1.18	17,4 38.26	11235N12129	HCI-12-DKO-16S-090-S-OR-B-M-W3	
12	1/2"	-08	M30x2	-10	9,0 .35	12,5 .49	39,5 1.56	86,5 3.41	51,5 2.03	36 1.42	24,1 53.14	11235N12169	HCI-12-DKO-20S-090-S-OR-B-M-W3	
16	5/8"	-10	M30x2	-10	12,0 .47	16,0 .63	46,0 1.81	103,5 4.07	51,5 2.03	36 1.42	26,8 59.09	11235N16169	HCI-16-DKO-20S-090-S-OR-B-M-W3	
19	3/4"	-12	M36x2	-12	14,8 .58	18,8 .74	54,5 2.15	127,0 5.00	58,5 2.30	46 1.81	47,7 105.18	11235N20209	HCI-19-DKO-25S-090-S-OR-B-M-W3	
19	3/4"	-12	M36x2	-12	14,8 .58	18,8 .74	54,5 2.15	127,0 5.00	58,5 2.30	41 1.61	39,8 87.76	11235N20209SW41	HCI-19-DKO-25S-090-S-OR-B-M-W3-SW41	
19	3/4"	-12	M30x2	-10	14,8 .58	18,8 .74	54,5 2.15	127,0 5.00	58,0 2.28	36 1.42	38,3 84.45	21235N20169	HCI-19-DKO-20S-090-S-OR-B-B-W3	
19	3/4"	-12	M42x2	-16	14,8 .58	18,8 .74	67,0 2.64	139,5 5.49	71,5 2.81	50 1.97	66,1 145.75	21235N20259	HCI-19-DKO-30S-090-S-OR-B-B-W3	
25	1"	-16	M42x2	-16	19,5 .77	25,1 .99	68,0 2.68	147,5 5.81	74,0 2.91	50 1.97	71,9 158.43	11235N25259	HCI-25-DKO-30S-090-S-OR-B-M-W3	
25	1"	-16	M36x2	-12	19,5 .77	25,1 .99	70,0 2.76	149,5 5.89	71,0 2.80	46 1.81	74,1 163.39	21235N25209	HCI-25-DKO-25S-090-S-OR-B-B-W3	
25	1"	-16	M52x2	-20	19,5 .77	25,1 .99	80,5 3.17	160,0 6.30	82,5 3.25	60 2.36	111,0 244.64	21235N25329	HCI-25-DKO-38S-090-S-OR-B-B-W3	
31	1 1/4"	-20	M52x2	-20	25,0 .98	31,8 1.25	84,5 3.33	162,5 6.40	87,0 3.43	60 2.36	115,2 254.02	11235N32329	HCI-31-DKO-38S-090-S-OR-B-M-W3	
31	1 1/4"	-20	M42x2	-16	25,0 .98	31,8 1.25	83,0 3.27	161,0 6.34	82,0 3.23	50 1.97	108,9 240.12	21235N32259	HCI-31-DKO-30S-090-S-OR-B-B-W3	
38	1 1/2"	-24	M52x2	-20	31,0 1.22	38,3 1.51	99,0 3.90	192,0 7.56	100,5 3.96	60 2.36	168,2 370.88	21235N40329	HCI-38-DKO-38S-090-S-OR-B-B-W3	

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOPOS Version**

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**45° Version**

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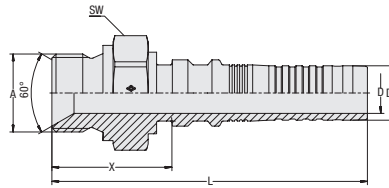
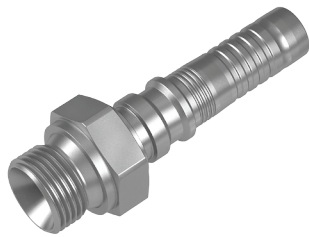

**ECOPOS VA Version**

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**Straight Insert with Male BSPP Thread and 60° Conical Bore  
Type AGR**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Male BSPP Thread  
**Sealing Type** 60° Conical Bore  
**Standard** ISO 8434-6, BS 5200  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

**D**

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/16) ca. per 100	Part Numbers	Ordering Codes
10	3/8"	-06	G 3/8"	-06	6,5 .26	9,6 .38	29,0 1.14	70,5 2.78	22 .87	6,6 14.55	11305N10	HCI-10-AGR-06-M-W3
12	1/2"	-08	G 1/2"	-08	9,0 .35	12,5 .49	32,5 1.28	79,5 3.13	27 1.06	11,0 24.14	11305N12	HCI-12-AGR-08-M-W3
16	5/8"	-10	G 5/8"	-10	12,0 .47	16,0 .63	35,5 1.40	93,0 3.66	30 1.18	15,0 33.08	11305N16	HCI-16-AGR-10-M-W3
19	3/4"	-12	G 3/4"	-12	14,8 .58	18,8 .74	37,0 1.46	109,5 4.31	32 1.26	19,7 43.44	11305N20	HCI-19-AGR-12-M-W3
25	1"	-16	G 1"	-16	19,5 .77	25,1 .99	41,5 1.63	121,0 4.76	41 1.61	35,7 78.61	11305N25	HCI-25-AGR-16-M-W3
31	1 1/4"	-20	G 1 1/4"	-20	25,0 .98	31,8 1.25	44,0 1.73	122,0 4.80	50 1.97	54,5 120.17	11305N32	HCI-31-AGR-20-M-W3
38	1 1/2"	-24	G 1 1/2"	-24	31,0 1.22	38,3 1.51	49,5 1.95	142,5 5.61	55 2.17	73,9 162.84	11305N40	HCI-38-AGR-24-M-W3
51	2"	-32	G 2"	-32	40,0 1.57	50,6 1.99	58,0 2.28	154,0 6.06	70 2.76	140,3 309.25	11305N50	HCI-51-AGR-32-M-W3

**Related Products and Accessories**



Swage Ferrules

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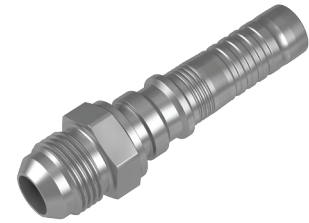
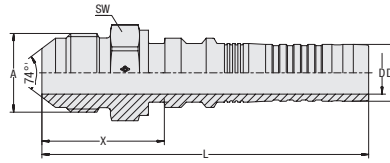
ECOVOS VA Version

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**MULTIVOS™**
**Straight Insert with Male UN/UNF Thread and 74° Taper Type AGJ**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Male UN/UNF Thread  
**Sealing Type** 74° Taper  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$ 


Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
10	3/8"	-06	9/16"-18UNF	-06	6,5 .26	9,6 .38	26,5 1.04	68,0 2.68	17 .67	4,2 .16	11315N10	HCI-10-AGJ-06-M-W3	
10	3/8"	-06	3/4"-16 UNF	-08	6,5 .26	9,6 .38	30,5 1.20	72,0 2.83	22 .87	6,4 .25	11315N1012	HCI-10-AGJ-08-M-W3	
12	1/2"	-08	3/4"-16 UNF	-08	9,0 .35	12,5 .49	30,5 1.20	77,0 3.03	22 .87	7,6 .30	11315N12	HCI-12-AGJ-08-M-W3	
12	1/2"	-08	7/8"-14 UNF	-10	9,0 .35	12,5 .49	33,5 1.32	80,5 3.17	24 .94	10,0 .39	11315N1216	HCI-12-AGJ-10-M-W3	
16	5/8"	-10	7/8"-14 UNF	-10	12,0 .47	16,0 .63	34,5 1.36	92,0 3.62	24 .94	11,3 .44	11315N16	HCI-16-AGJ-10-M-W3	
16	5/8"	-10	1.1/16"-12 UN	-12	12,0 .47	16,0 .63	39,5 1.56	97,0 3.82	30 1.18	17,6 .69	11315N1620	HCI-16-AGJ-12-M-W3	
19	3/4"	-12	1.1/16"-12 UN	-12	14,8 .58	18,8 .74	39,5 1.56	112,0 4.41	30 1.18	18,6 .73	11315N20	HCI-19-AGJ-12-M-W3	
25	1"	-16	1.5/16"-12 UN	-16	19,5 .77	25,1 .99	42,0 1.65	121,5 4.78	36 1.42	31,3 1.23	11315N25	HCI-25-AGJ-16-M-W3	
31	1 1/4"	-20	1.5/8"-12 UN	-20	25,0 .98	31,8 1.25	46,5 1.83	124,5 4.90	46 1.81	51,4 2.02	11315N32	HCI-31-AGJ-20-M-W3	
38	1 1/2"	-24	1.7/8"-12 UN	-24	31,0 1.22	38,3 1.51	52,0 2.05	145,0 5.71	50 1.97	69,0 2.72	11315N40	HCI-38-AGJ-24-M-W3	
51	2"	-32	2 1/2"-12 UN	-32	40,0 1.57	50,6 1.99	64,5 2.54	160,5 6.32	65 2.56	143,4 5.65	11315N50	HCI-51-AGJ-32-M-W3	

**D**
**Related Products and Accessories**

**Swage Ferrules**

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**ECOVOS Version**

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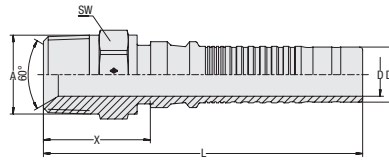

**ECOVOS VA Version**

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**Straight Insert with Male NPTF Thread and 60° Conical Bore  
Type AGN**

MULTIVOS™



- Insert Type** with Pull-Out Protection (Interlock)
- Connection Type** Male NPTF Thread
- Sealing Type** Tapered Thread and 60° Conical Bore
- Standard** SAE J 516
- Material** Carbon Steel
- Surface Finishing** Zinc/Nickel-Plating *Δplus*

D

Hose Size			Connection Size		Dimensions (mm/in)				Weight	VOSWINKEL Part Numbers	STAUFF Ordering Codes	
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			per 100
19	3/4"	-12	3/4"-14 NPTF	-12	14,8	18,8	36,5	109,0	27	17,5	11325N20	HCI-19-AGN-12-M-W3
					.58	.74	1.44	4.29	1.06	38.59		
25	1"	-16	1"-11,5 NPTF	-16	19,5	25,1	41,5	121,0	36	32,1	11325N25	HCI-25-AGN-16-M-W3
					.77	.99	1.63	4.76	1.42	70.67		
25	1"	-16	1 1/4"-11,5 NPTF	-20	19,5	25,1	45,5	125,0	46	48,7	11325N2532	HCI-25-AGN-20-M-W3
					.77	.99	1.79	4.92	1.81	107.38		
31	1 1/4"	-20	1 1/4"-11,5 NPTF	-20	25,0	31,8	44,5	122,5	46	52,1	11325N32	HCI-31-AGN-20-M-W3
					.98	1.25	1.75	4.82	1.81	114.77		
31	1 1/4"	-20	2"-11,5 NPTF	-32	25,0	31,8	53,5	131,5	65	102,6	11325N3250	HCI-31-AGN-32-M-W3
					.98	1.25	2.11	5.18	2.56	226.12		
38	1 1/2"	-24	1 1/2"-11,5 NPTF	-24	31,0	38,3	47,5	140,5	50	67,3	11325N40	HCI-38-AGN-24-M-W3
					1.22	1.51	1.87	5.53	1.97	148.29		
51	2"	-32	2"-11,5 NPTF	-32	40,0	50,6	53,5	149,5	65	134,0	11325N50	HCI-51-AGN-32-M-W3
					1.57	1.99	2.11	5.89	2.56	295.47		

**Related Products and Accessories**



Swage Ferrules

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**MULTIVOS™**
**Straight Insert with SAE Flange Adaptor  
Type SFL (3000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

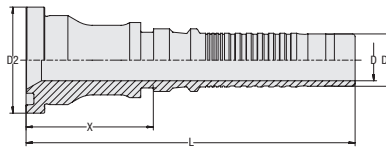
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-1

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$



Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
12	1/2"	-08	1/2"	-08	9,0 .35	12,5 .49	30,2 1.19	43,5 1.71	90,5 3.56	12,7 27.89	11405N12	HCI-12-SFL-08-M-W3
12	1/2"	-08	3/4"	-12	9,0 .35	12,5 .49	38,1 1.50	44,0 1.73	91,0 3.58	18,9 41.67	11405N1220	HCI-12-SFL-12-M-W3
16	5/8"	-10	3/4"	-12	12,0 .47	16,0 .63	38,1 1.50	45,5 1.77	102,5 4.04	20,6 45.42	11405N1620	HCI-16-SFL-12-M-W3
16	5/8"	-10	1"	-16	12,0 .47	16,0 .63	44,5 1.75	45,5 1.79	103,0 4.06	26,2 57.77	11405N1625	HCI-16-SFL-16-M-W3
19	3/4"	-12	3/4"	-12	14,8 .58	18,8 .74	38,1 1.50	45,5 1.79	118,0 4.65	23,4 51.49	11405N20	HCI-19-SFL-12-M-W3
19	3/4"	-12	1"	-16	14,8 .58	18,8 .74	44,5 1.75	40,5 1.59	113,0 4.45	25,1 55.35	21405N2025	HCI-19-SFL-16-B-W3
25	1"	-16	1"	-16	19,5 .77	25,1 .99	44,5 1.75	50,0 1.97	129,5 5.10	37,2 81.92	11405N25	HCI-25-SFL-16-M-W3
25	1"	-16	3/4"	-12	19,5 .77	25,1 .99	38,1 1.50	57,5 2.26	137,0 5.39	31,7 69.90	21405N2520	HCI-25-SFL-12-B-W3
25	1"	-16	1 1/4"	-20	19,5 .77	25,1 .99	50,8 2.00	46,5 1.83	126,0 4.96	39,1 86.22	21405N2532	HCI-25-SFL-20-B-W3
31	1 1/4"	-20	1 1/4"	-20	25,0 .98	31,8 1.25	50,8 2.00	66,5 2.62	144,5 5.69	57,9 127.56	11405N32	HCI-31-SFL-20-M-W3
31	1 1/4"	-20	1"	-16	25,0 .98	31,8 1.25	44,5 1.75	64,0 2.52	142,0 5.59	49,7 109.59	21405N3225	HCI-31-SFL-16-B-W3
31	1 1/4"	-20	1 1/2"	-24	25,0 .98	31,8 1.25	60,3 2.37	49,0 1.93	127,0 5.00	58,9 129.76	21405N3240	HCI-31-SFL-24-B-W3
38	1 1/2"	-24	1 1/2"	-24	31,0 1.22	38,3 1.51	60,3 2.37	56,0 2.20	149,0 5.87	70,1 154.46	11405N40	HCI-38-SFL-24-M-W3
38	1 1/2"	-24	1 1/4"	-20	31,0 1.22	38,3 1.51	50,8 2.00	62,0 2.44	155,0 6.10	66,4 146.41	21405N4032	HCI-38-SFL-20-B-W3
38	1 1/2"	-24	2"	-32	31,0 1.22	38,3 1.51	71,4 2.81	50,0 1.97	143,0 5.63	85,7 188.97	21405N4050	HCI-38-SFL-32-B-W3
51	2"	-32	2"	-32	40,0 1.57	50,6 1.99	71,4 2.81	69,5 2.74	165,5 6.52	138,4 305.06	11405N50	HCI-51-SFL-32-M-W3

**D**
**Related Products and Accessories**

**Swage Ferrules**

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**45° Version**

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**90° Version**

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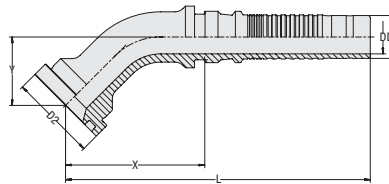

**ECOVS VA Version**

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**45° Elbow Insert with SAE Flange Adaptor  
Type SFL 45° (3000 PSI Series)**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-1  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

D

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
12	1/2"	-08	1/2"	-08	9,0	12,5	30,2	48,0	95,0	20,5	11,7	11405N12124	HCI-12-SFL-08-045-M-W3	
					.35	.49	1.19	1.89	3.74	.81	25.80			
12	1/2"	-08	3/4"	-12	9,0	12,5	38,1	53,5	100,5	26,0	16,7	11405N12204	HCI-12-SFL-12-045-M-W3	
					.35	.49	1.50	2.11	3.96	1.02	36.71			
16	5/8"	-10	3/4"	-12	12,0	16,0	38,1	59,5	117,0	28,5	21,3	11405N16204	HCI-16-SFL-12-045-M-W3	
					.47	.63	1.50	2.34	4.61	1.12	46.97			
19	3/4"	-12	3/4"	-12	14,8	18,8	38,1	61,0	133,5	30,0	25,3	11405N20204	HCI-19-SFL-12-045-M-W3	
					.58	.74	1.50	2.40	5.26	1.18	55.68			
19	3/4"	-12	1"	-16	14,8	18,8	44,5	74,5	147,0	29,5	37,9	21405N20254	HCI-19-SFL-16-045-B-W3	
					.58	.74	1.75	2.93	5.79	1.16	83.57			
25	1"	-16	1"	-16	19,5	25,1	44,5	80,5	160,0	35,0	46,0	11405N25254	HCI-25-SFL-16-045-M-W3	
					.77	.99	1.75	3.17	6.30	1.38	101.32			
25	1"	-16	3/4"	-12	19,5	25,1	38,1	78,0	157,5	30,0	48,1	21405N25204	HCI-25-SFL-12-045-B-W3	
					.77	.99	1.50	3.07	6.20	1.18	106.06			
25	1"	-16	1 1/4"	-20	19,5	25,1	50,8	88,0	167,5	33,5	62,9	21405N25324	HCI-25-SFL-20-045-B-W3	
					.77	.99	2.00	3.46	6.59	1.32	138.69			
31	1 1/4"	-20	1 1/4"	-20	25,0	31,8	50,8	106,0	184,0	38,5	78,9	11405N32324	HCI-31-SFL-20-045-M-W3	
					.98	1.25	2.00	4.17	7.24	1.52	173.97			
31	1 1/4"	-20	1"	-16	25,0	31,8	44,5	90,5	168,5	33,5	75,3	21405N32254	HCI-31-SFL-16-045-B-W3	
					.98	1.25	1.75	3.56	6.63	1.32	166.04			
31	1 1/4"	-20	1 1/2"	-24	25,0	31,8	60,3	108,5	186,5	43,0	104,0	21405N32404	HCI-31-SFL-24-045-B-W3	
					.98	1.25	2.37	4.27	7.34	1.69	229.32			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,3	60,3	125,0	218,0	52,5	113,2	11405N40404	HCI-38-SFL-24-045-M-W3	
					1.22	1.51	2.37	4.92	8.58	2.07	249.50			
38	1 1/2"	-24	1 1/4"	-20	31,0	38,3	50,8	107,0	200,0	41,5	112,4	21405N40324	HCI-38-SFL-20-045-B-W3	
					1.22	1.51	2.00	4.21	7.87	1.63	247.84			
38	1 1/2"	-24	2"	-32	31,0	38,3	71,4	117,0	209,5	46,5	145,9	21405N40504	HCI-38-SFL-32-045-B-W3	
					1.22	1.51	2.81	4.61	8.25	1.83	321.60			
51	2"	-32	2"	-32	40,0	50,6	71,4	162,5	258,5	72,5	245,4	11405N50504	HCI-51-SFL-32-045-M-W3	
					1.57	1.99	2.81	6.40	10.18	2.85	541.00			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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**MULTIVOS™**
**90° Elbow Insert with SAE Flange Adaptor  
Type SFL 90° (3000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

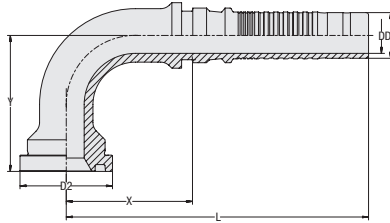
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-1

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$



Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
12	1/2"	-08	1/2"	-08	9,0	12,5	30,2	40,5	87,5	42,5	13,1	11405N12129	HCI-12-SFL-08-090-M-W3	
					.35	.49	1.19	1.59	3.44	1.67	28.89			
12	1/2"	-08	3/4"	-12	9,0	12,5	38,1	49,0	96,0	51,0	19,1	11405N12209	HCI-12-SFL-12-090-M-W3	
					.35	.49	1.50	1.93	3.78	2.01	42.12			
16	5/8"	-10	3/4"	-12	12,0	16,0	38,1	48,0	105,5	55,5	23,7	11405N16209	HCI-16-SFL-12-090-M-W3	
					.47	.63	1.50	1.89	4.15	2.19	52.26			
19	3/4"	-12	3/4"	-12	14,8	18,8	38,1	52,0	124,5	56,0	29,1	11405N20209	HCI-19-SFL-12-090-M-W3	
					.58	.74	1.50	2.05	4.90	2.20	64.17			
19	3/4"	-12	1"	-16	14,8	18,8	44,5	67,0	139,5	63,5	44,0	21405N20259	HCI-19-SFL-16-090-B-W3	
					.58	.74	1.75	2.64	5.49	2.50	96.91			
25	1"	-16	1"	-16	19,5	25,1	44,5	69,0	148,5	72,0	53,8	11405N25259	HCI-25-SFL-16-090-M-W3	
					.77	.99	1.75	2.72	5.85	2.83	118.63			
25	1"	-16	3/4"	-12	19,5	25,1	38,1	70,0	149,5	64,5	53,9	21405N25209	HCI-25-SFL-12-090-B-W3	
					.77	.99	1.50	2.76	5.89	2.54	118.85			
25	1"	-16	1 1/4"	-20	19,5	25,1	50,8	80,5	160,0	74,0	74,1	21405N25329	HCI-25-SFL-20-090-B-W3	
					.77	.99	2.00	3.17	6.30	2.91	163.39			
31	1 1/4"	-20	1 1/4"	-20	25,0	31,8	50,8	95,0	173,0	86,0	95,0	11405N32329	HCI-31-SFL-20-090-M-W3	
					.98	1.25	2.00	3.74	6.81	3.39	209.48			
31	1 1/4"	-20	1"	-16	25,0	31,8	44,5	83,0	161,0	74,0	86,1	21405N32259	HCI-31-SFL-16-090-B-W3	
					.98	1.25	1.75	3.27	6.34	2.91	189.85			
31	1 1/4"	-20	1 1/2"	-24	25,0	31,8	60,3	99,0	177,0	94,0	125,2	21405N32409	HCI-31-SFL-24-090-B-W3	
					.98	1.25	2.37	3.90	6.97	3.70	276.07			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,3	60,3	108,0	201,0	108,0	135,4	11405N40409	HCI-38-SFL-24-090-M-W3	
					1.22	1.51	2.37	4.25	7.91	4.25	298.56			
38	1 1/2"	-24	1 1/4"	-20	31,0	38,3	50,8	99,0	192,0	92,0	133,6	21405N40329	HCI-38-SFL-20-090-B-W3	
					1.22	1.51	2.00	3.90	7.56	3.62	294.59			
38	1 1/2"	-24	2"	-32	31,0	38,3	71,4	107,0	200,0	103,0	172,3	21405N40509	HCI-38-SFL-32-090-B-W3	
					1.22	1.51	2.81	4.21	7.87	4.06	379.92			
51	2"	-32	2"	-32	40,0	50,6	71,4	141,0	237,0	150,0	303,9	11405N50509	HCI-51-SFL-32-090-M-W3	
					1.57	1.99	2.81	5.55	9.33	5.91	669.99			

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**45° Version**

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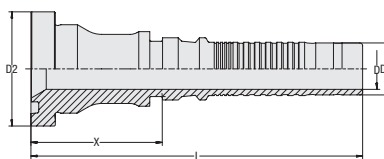

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**Straight Insert with SAE Flange Adaptor  
Type SFS (6000 PSI Series)**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

D

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes
12	1/2"	-08	1/2"	-08	9,0 .35	12,5 .49	31,8 1.25	43,5 1.71	90,5 3.56	13,4 29.55	11415N12	HCI-12-SFS-08-M-W3
12	1/2"	-08	3/4"	-12	9,0 .35	12,5 .49	41,3 1.63	47,0 1.85	94,0 3.70	21,4 47.19	11415N1220	HCI-12-SFS-12-M-W3
16	5/8"	-10	1/2"	-08	12,0 .47	16,0 .63	31,8 1.25	50,5 1.99	108,0 4.25	16,0 35.28	11415N1612	HCI-16-SFS-08-M-W3
16	5/8"	-10	3/4"	-12	12,0 .47	16,0 .63	41,3 1.63	44,5 1.75	102,0 4.02	23,5 51.71	11415N1620	HCI-16-SFS-12-M-W3
16	5/8"	-10	1"	-16	12,0 .47	16,0 .63	47,6 1.87	45,5 1.79	103,0 4.06	28,4 62.62	11415N1625	HCI-16-SFS-16-M-W3
19	3/4"	-12	3/4"	-12	14,8 .58	18,8 .74	41,3 1.63	47,5 1.87	120,0 4.72	26,1 57.55	11415N20	HCI-19-SFS-12-M-W3
19	3/4"	-12	1"	-16	14,8 .58	18,8 .74	47,6 1.87	48,5 1.91	121,0 4.76	35,7 78.61	11415N2025	HCI-19-SFS-16-M-W3
25	1"	-16	1"	-16	19,5 .77	25,1 .99	47,6 1.87	51,5 2.03	131,0 5.16	40,2 88.64	11415N25	HCI-25-SFS-16-M-W3
25	1"	-16	3/4"	-12	19,5 .77	25,1 .99	41,3 1.63	50,5 1.99	130,0 5.12	35,8 78.83	11415N2520	HCI-25-SFS-12-M-W3
25	1"	-16	1 1/4"	-20	19,5 .77	25,1 .99	54,0 2.13	58,0 2.28	137,5 5.41	54,3 119.62	11415N2532	HCI-25-SFS-20-M-W3
31	1 1/4"	-20	1 1/4"	-20	25,0 .98	31,8 1.25	54,0 2.13	69,5 2.74	147,5 5.81	63,0 138.80	11415N32	HCI-31-SFS-20-M-W3
31	1 1/4"	-20	1"	-16	25,0 .98	31,8 1.25	47,6 1.87	70,0 2.76	148,0 5.83	59,8 131.75	11415N3225	HCI-31-SFS-16-M-W3
31	1 1/4"	-20	1 1/2"	-24	25,0 .98	31,8 1.25	63,5 2.50	74,0 2.91	152,0 5.98	93,5 206.06	11415N3240	HCI-31-SFS-24-M-W3
38	1 1/2"	-24	1 1/2"	-24	31,0 1.22	38,3 1.51	63,5 2.50	69,0 2.72	162,0 6.38	89,2 196.69	11415N40	HCI-38-SFS-24-M-W3
38	1 1/2"	-24	1 1/4"	-20	31,0 1.22	38,3 1.51	54,0 2.13	69,0 2.72	162,0 6.38	76,9 169.45	11415N4032	HCI-38-SFS-20-M-W3
38	1 1/2"	-24	2"	-32	31,0 1.22	38,3 1.51	79,4 3.13	69,0 2.72	162,0 6.38	131,0 288.74	11415N4050	HCI-38-SFS-32-M-W3
51	2"	-32	2"	-32	40,0 1.57	50,6 1.99	79,4 3.13	72,5 2.85	168,5 6.63	174,6 384.88	11415N50	HCI-51-SFS-32-M-W3

**Related Products and Accessories**



Swage Ferrules

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**MULTIVOS™**
**45° Elbow Insert with SAE Flange Adaptor  
Type SFS 45° (6000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

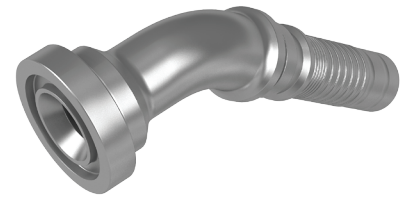
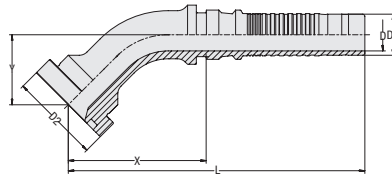
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-2

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$



Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
12	1/2"	-08	1/2"	-08	9,0	12,5	31,8	48,0	95,0	22,5	12,6	11415N12124	HCI-12-SFS-08-045-M-W3	
					.35	.49	1.25	1.89	3.74	.89	27.78			
12	1/2"	-08	3/4"	-12	9,0	12,5	41,3	53,5	100,5	27,0	20,3	11415N12204	HCI-12-SFS-12-045-M-W3	
					.35	.49	1.63	2.11	3.96	1.06	44.76			
16	5/8"	-10	1/2"	-08	12,0	16,0	31,8	57,5	115,0	22,5	16,3	11415N16124	HCI-16-SFS-08-045-M-W3	
					.47	.63	1.25	2.26	4.53	.89	35.94			
16	5/8"	-10	3/4"	-12	12,0	16,0	41,3	60,0	117,5	25,0	23,1	11415N16204	HCI-16-SFS-12-045-M-W3	
					.47	.63	1.63	2.36	4.63	.98	50.83			
16	5/8"	-10	1"	-16	12,0	16,0	47,6	63,5	121,0	29,0	29,3	11415N16254	HCI-16-SFS-16-045-M-W3	
					.47	.63	1.87	2.50	4.76	1.14	64.61			
20	3/4"	-12	3/4"	-12	14,8	18,8	41,3	63,0	135,5	32,0	28,6	11415N20204	HCI-19-SFS-12-045-M-W3	
					.58	.74	1.63	2.48	5.33	1.26	63.06			
20	3/4"	-12	1"	-16	14,8	18,8	47,6	67,5	140,0	31,0	35,6	11415N20254	HCI-19-SFS-16-045-M-W3	
					.58	.74	1.87	2.66	5.51	1.22	78.50			
25	1"	-16	3/4"	-12	19,5	25,1	41,3	90,0	169,0	37,0	45,6	11415N25204	HCI-25-SFS-12-045-M-W3	
					.77	.99	1.63	3.54	6.65	1.46	100.55			
25	1"	-16	1"	-16	19,5	25,1	47,6	81,5	161,5	36,0	49,0	11415N25254	HCI-25-SFS-16-045-M-W3	
					.77	.99	1.87	3.21	6.36	1.42	108.05			
25	1"	-16	1 1/4"	-20	19,5	25,1	54,0	88,0	167,5	42,5	60,9	11415N25324	HCI-25-SFS-20-045-M-W3	
					.77	.99	2.13	3.46	6.59	1.67	134.28			
31	1 1/4"	-20	1"	-16	25,0	31,8	47,6	107,0	185,0	47,0	78,6	11415N32254	HCI-31-SFS-16-045-M-W3	
					.98	1.25	1.87	4.21	7.28	1.85	173.31			
31	1 1/4"	-20	1 1/4"	-20	25,0	31,8	54,0	98,5	176,5	41,5	80,9	11415N32324	HCI-31-SFS-20-045-M-W3	
					.98	1.25	2.13	3.88	6.95	1.63	178.38			
31	1 1/4"	-20	1 1/2"	-24	25,0	31,8	63,5	108,0	186,0	47,5	101,0	11415N32404	HCI-31-SFS-24-045-M-W3	
					.98	1.25	2.50	4.25	7.32	1.87	222.59			
38	1 1/2"	-24	1 1/4"	-20	31,0	38,3	54,0	126,0	219,0	51,5	108,2	11415N40324	HCI-38-SFS-20-045-M-W3	
					1.22	1.51	2.13	4.96	8.62	2.03	238.58			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,3	63,5	120,0	213,0	47,0	120,0	11415N40404	HCI-38-SFS-24-045-M-W3	
					1.22	1.51	2.50	4.72	8.39	1.85	264.60			
38	1 1/2"	-24	2"	-32	31,0	38,3	79,4	131,5	224,5	53,5	161,2	11415N40504	HCI-38-SFS-32-045-M-W3	
					1.22	1.51	3.13	5.18	8.84	2.11	355.45			
51	2"	-32	2"	-32	40,0	50,6	79,4	160,0	256,0	70,0	272,0	11415N50504	HCI-51-SFS-32-045-M-W3	
					1.57	1.99	3.13	6.30	10.08	2.76	599.76			

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**90° Version**

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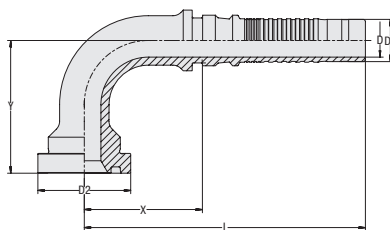

**ECOVS VA Version**

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**90° Elbow Insert with SAE Flange Adaptor  
Type SFS 90° (6000 PSI Series)**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** SAE Flange Adaptor  
**Sealing Type** O-Ring Face Seal  
 (O-Ring not included in delivery.)  
**Standard** SAE J 518, ISO 6162-2  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

D

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
12	1/2"	-08	1/2"	-08	9,0	12,5	31,8	39,0	86,0	45,0	14,2	11415N12129	HCI-12-SFS-08-090-M-W3	
					.35	.49	1.25	1.54	3.39	1.77	31.31			
12	1/2"	-08	3/4"	-12	9,0	12,5	41,3	41,5	88,5	50,0	22,0	11415N12209	HCI-12-SFS-12-090-M-W3	
					.35	.49	1.63	1.63	3.48	1.97	48.51			
16	5/8"	-10	1/2"	-08	12,0	16,0	31,8	50,5	108,0	48,0	18,7	11415N16129	HCI-16-SFS-08-090-M-W3	
					.47	.63	1.25	1.99	4.25	1.89	41.12			
16	5/8"	-10	3/4"	-12	12,0	16,0	41,3	50,5	108,0	52,5	25,5	11415N16209	HCI-16-SFS-12-090-M-W3	
					.47	.63	1.63	1.99	4.25	2.07	56.23			
16	5/8"	-10	1"	-16	12,0	16,0	47,6	50,5	108,0	57,0	31,7	11415N16259	HCI-16-SFS-16-090-M-W3	
					.47	.63	1.87	1.99	4.25	2.24	69.90			
19	3/4"	-12	3/4"	-12	14,8	18,8	41,3	52,5	125,0	59,0	32,6	11415N20209	HCI-19-SFS-12-090-M-W3	
					.58	.74	1.63	2.07	4.92	2.32	71.77			
19	3/4"	-12	1"	-16	14,8	18,8	47,6	54,5	127,0	61,5	39,7	11415N20259	HCI-19-SFS-16-090-M-W3	
					.58	.74	1.87	2.15	5.00	2.42	87.54			
25	1"	-16	3/4"	-12	19,5	25,1	41,3	69,0	148,5	70,5	50,2	11415N25209	HCI-25-SFS-12-090-M-W3	
					.77	.99	1.63	2.72	5.85	2.78	110.69			
25	1"	-16	1"	-16	19,5	25,1	47,6	69,0	148,5	73,0	56,2	11415N25259	HCI-25-SFS-16-090-M-W3	
					.77	.99	1.87	2.72	5.85	2.87	123.92			
25	1"	-16	1 1/4"	-20	19,5	25,1	54,0	68,5	148,0	81,5	67,8	11415N25329	HCI-25-SFS-20-090-M-W3	
					.77	.99	2.13	2.70	5.83	3.21	149.50			
31	1 1/4"	-20	1"	-16	25,0	31,8	47,6	93,0	171,0	95,0	95,4	11415N32259	HCI-31-SFS-16-090-M-W3	
					.98	1.25	1.87	3.66	6.73	3.74	210.36			
31	1 1/4"	-20	1 1/4"	-20	25,0	31,8	54,0	91,0	169,0	85,0	97,2	11415N32329	HCI-31-SFS-20-090-M-W3	
					.98	1.25	2.13	3.58	6.65	3.35	214.33			
31	1 1/4"	-20	1 1/2"	-24	25,0	31,8	63,5	89,5	167,5	97,0	116,7	11415N32409	HCI-31-SFS-24-090-M-W3	
					.98	1.25	2.50	3.52	6.59	3.82	257.21			
38	1 1/2"	-24	1 1/4"	-20	31,0	38,3	54,0	111,2	204,0	108,0	131,7	11415N40329	HCI-38-SFS-20-090-M-W3	
					1.22	1.51	2.13	4.38	8.03	4.25	290.40			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,3	63,5	105,0	198,0	99,0	141,5	11415N40409	HCI-38-SFS-24-090-M-W3	
					1.22	1.51	2.50	4.13	7.80	3.90	312.01			
38	1 1/2"	-24	2"	-32	31,0	38,3	79,4	105,0	198,0	113,0	182,5	11415N40509	HCI-38-SFS-32-090-M-W3	
					1.22	1.51	3.13	4.13	7.80	4.45	402.41			
51	2"	-32	2"	-32	40,0	50,6	79,4	136,0	234,0	150,0	326,2	11415N50509	HCI-51-SFS-32-090-M-W3	
					1.57	1.99	3.13	5.35	9.21	5.91	719.27			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



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**MULTIVOS™**
**Straight Insert with SAE Flange Adaptor  
Type SFC (9000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

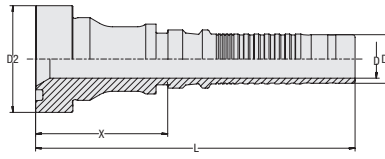
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** Caterpillar

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating *Δplus*



Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L			
19	3/4"	-12	3/4"	-12	14,8	18,8	41,3	51,0	123,5	30,4	11425N20	HCI-19-SFC-12-M-W3
					.58	.74	1.63	2.01	4.86	67.03		
19	3/4"	-12	1"	-16	19,5	25,1	47,6	56,5	129,0	40,0	11425N2025	HCI-19-SFC-16-M-W3
					.77	.99	1.87	2.22	5.08	88.20		
25	1"	-16	1"	-16	19,5	25,1	47,6	55,0	134,5	45,0	11425N25	HCI-25-SFC-16-M-W3
					.77	.99	1.87	2.17	5.30	99.23		
25	1"	-16	3/4"	-12	19,5	25,1	41,3	56,5	136,0	40,5	11425N2520	HCI-25-SFC-12-M-W3
					.77	.99	1.63	2.22	5.35	89.30		
25	1"	-16	1 1/4"	-20	25,0	31,8	54,0	51,5	131,0	55,4	11425N2532	HCI-25-SFC-20-M-W3
					.98	1.25	2.13	2.03	5.16	122.05		
31	1 1/4"	-20	1 1/4"	-20	25,0	31,8	54,0	72,5	150,5	67,9	11425N32	HCI-31-SFC-20-M-W3
					.98	1.25	2.13	2.85	5.93	149.61		
31	1 1/4"	-20	1"	-16	19,5	25,1	47,6	73,0	151,0	63,7	11425N3225	HCI-31-SFC-16-M-W3
					.77	.99	1.87	2.87	5.94	140.35		
31	1 1/4"	-20	1 1/2"	-24	25,0	31,8	63,5	75,5	153,5	95,6	11425N3240	HCI-31-SFC-24-M-W3
					.98	1.25	2.50	2.97	6.04	210.69		
38	1 1/2"	-24	1 1/2"	-24	31,0	38,3	63,5	71,0	164,0	92,7	11425N40	HCI-38-SFC-24-M-W3
					1.22	1.51	2.50	2.80	6.46	204.29		
38	1 1/2"	-24	1 1/4"	-20	31,0	38,3	54,0	70,0	163,0	78,1	21425N4032	HCI-38-SFC-20-B-W3
					1.22	1.51	2.13	2.76	6.42	172.10		

**D**
**Related Products and Accessories**

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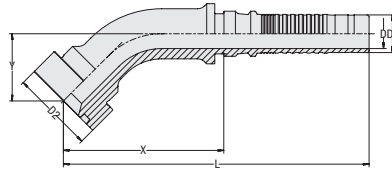
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**45° Elbow Insert with SAE Flange Adaptor  
Type SFC 45° (9000 PSI Series)**

MULTIVOS™



- Insert Type** with Pull-Out Protection (Interlock)
- Connection Type** SAE Flange Adaptor
- Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)
- Standard** Caterpillar
- Material** Carbon Steel
- Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

**D**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
19	3/4"	-12	3/4"	-12	14,8	18,8	41,3	80,0	152,5	33,5	41,4	11425N20204	HCI-19-SFC-12-045-M-W3	
					.58	.74	1.63	3.15	6.00	1.32	91.29			
19	3/4"	-12	1"	-16	14,8	18,8	47,6	82,0	154,5	35,0	48,6	11425N20254	HCI-19-SFC-16-045-M-W3	
					.58	.74	1.87	3.23	6.08	1.38	107.05			
25	1"	-16	3/4"	-12	19,5	25,1	41,3	96,0	175,5	37,5	54,9	11425N25204	HCI-25-SFC-12-045-M-W3	
					.77	.99	1.63	3.78	6.91	1.48	121.05			
25	1"	-16	1"	-16	19,5	25,1	47,6	94,5	174,0	37,0	62,3	11425N25254	HCI-25-SFC-16-045-M-W3	
					.77	.99	1.87	3.72	6.85	1.46	137.37			
25	1"	-16	1 1/4"	-20	19,5	25,1	54,0	97,5	177,0	40,0	71,3	11425N25324	HCI-25-SFC-20-045-M-W3	
					.77	.99	2.13	3.84	6.97	1.57	157.11			
31	1 1/4"	-20	1"	-16	25,0	31,8	47,6	107,0	185,0	45,0	80,2	11425N32254	HCI-31-SFC-16-045-M-W3	
					.98	1.25	1.87	4.21	7.28	1.77	176.84			
31	1 1/4"	-20	1 1/4"	-20	25,0	31,8	54,0	105,5	183,5	46,5	88,0	11425N32324	HCI-31-SFC-20-045-M-W3	
					.98	1.25	2.13	4.15	7.22	1.83	194.04			
31	1 1/4"	-20	1 1/2"	-24	25,0	31,8	63,5	117,5	185,5	52,0	104,1	11425N32404	HCI-31-SFC-24-045-M-W3	
					.98	1.25	2.50	4.63	7.30	2.05	229.43			
38	1 1/2"	-24	1 1/2"	-24	31,0	38,3	63,5	127,0	220,0	52,0	128,2	11425N40404	HCI-38-SFC-24-045-M-W3	
					1.22	1.51	2.50	5.00	8.66	2.05	282.68			

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**



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**MULTIVOS™**
**90° Elbow Insert with SAE Flange Adaptor  
Type SFC 90° (9000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

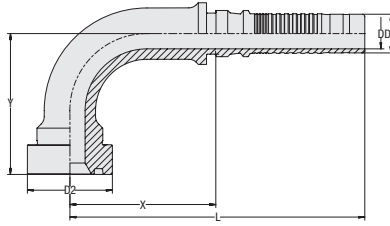
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** Caterpillar

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$



Hose Size			Connection Size		Dimensions (mm/in)						Weight (%/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y			
19	3/4"	-12	3/4"	-12	14,8	18,8	41,3	71,0	143,5	68,5	49,2	11425N20209	HCI-19-SFC-12-090-M-W3
					.58	.74	1.63	2.80	5.65	2.70	108.49		
19	3/4"	-12	1"	-16	14,8	18,8	47,6	71,5	144,0	71,0	56,5	11425N20259	HCI-19-SFC-16-090-M-W3
					.58	.74	1.87	2.81	5.67	2.80	124.47		
25	1"	-16	3/4"	-12	19,5	25,1	41,3	82,5	162,0	81,5	66,1	11425N25209	HCI-25-SFC-12-090-M-W3
					.77	.99	1.63	3.25	6.38	3.21	145.75		
25	1"	-16	1"	-16	19,5	25,1	47,6	82,5	162,0	82,0	74,0	11425N25259	HCI-25-SFC-16-090-M-W3
					.77	.99	1.87	3.25	6.38	3.23	163.17		
25	1"	-16	1 1/4"	-20	19,5	25,1	54,0	85,5	165,0	83,5	83,3	11425N25329	HCI-25-SFC-20-090-M-W3
					.77	.99	2.13	3.37	6.50	3.29	183.57		
31	1 1/4"	-20	1"	-16	25,0	31,8	47,6	92,5	170,5	95,5	97,4	11425N32259	HCI-31-SFC-16-090-M-W3
					.98	1.25	1.87	3.64	6.71	3.76	214.66		
31	1 1/4"	-20	1 1/4"	-20	25,0	31,8	54,0	91,5	169,5	96,0	105,6	11425N32329	HCI-31-SFC-20-090-M-W3
					.98	1.25	2.13	3.60	6.67	3.78	232.74		
31	1 1/4"	-20	1 1/2"	-24	25,0	31,8	63,5	93,0	171,0	96,0	120,3	11425N32409	HCI-31-SFC-24-090-M-W3
					.98	1.25	2.50	3.66	6.73	3.78	265.15		
38	1 1/2"	-24	1 1/4"	-20	31,0	38,3	54,0	99,0	192,0	100,0	142,2	21425N40329	HCI-38-SFC-20-090-B-W3
					1.22	1.51	2.13	3.90	7.56	3.94	313.55		

Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**


**Swage Ferrules**

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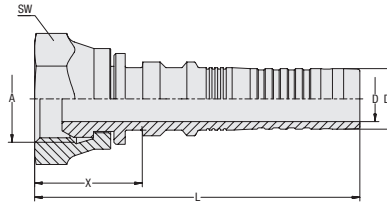
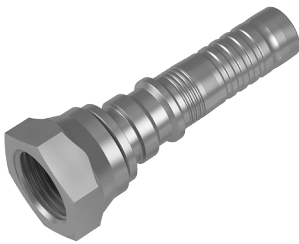
**45° Version**

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**Straight Insert with Female BSPP Thread and 60° Taper  
Type DKR**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

D

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
16	5/8"	-10	G 5/8"	-10	12,0	16,0	24,0	81,5	30	14,7	11505N16	HCI-16-DKR-10-C-M-W3
					.47	.63	.94	3.21	1.18	32.41		
16	5/8"	-10	G 1/2"	-08	12,0	16,0	22,0	79,5	27	12,4	11505N1612	HCI-16-DKR-08-C-M-W3
					.47	.63	.87	3.13	1.06	27.34		
16	5/8"	-10	G 3/4"	-12	12,0	16,0	23,0	80,5	32	16,4	11505N1620	HCI-16-DKR-12-C-M-W3
					.47	.63	.91	3.17	1.26	36.05		
19	3/4"	-12	G 3/4"	-12	14,8	18,8	28,0	100,5	32	19,2	11505N20	HCI-19-DKR-12-C-M-W3
					.58	.74	1.10	3.96	1.26	42.34		
25	1"	-16	G 1"	-16	19,5	25,1	31,0	110,5	41	34,7	11505N25	HCI-25-DKR-16-C-M-W3
					.77	.99	1.22	4.35	1.61	76.51		
31	1 1/4"	-20	G 1 1/4"	-20	25,0	31,8	33,5	111,5	50	55,0	11505N32	HCI-31-DKR-20-W-M-W3
					.98	1.25	1.32	4.39	1.97	121.28		

**Related Products and Accessories**



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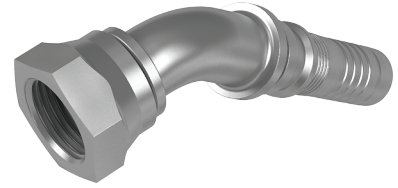
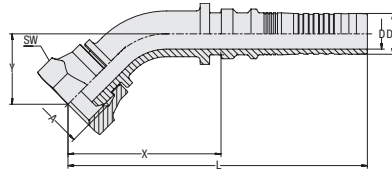
ECOVS VA Version

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**MULTIVOS™**
**45° Elbow Insert with Female BSPP Thread and 60° Taper  
Type DKR 45°**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*


Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
16	5/8"	-10	G 5/8"	-10	12,0	16,0	59,5	117,0	26,5	30	20,8	11505N16164	HCI-16-DKR-10-045-C-M-W3	
					.47	.63	2.34	4.61	1.04	1.18	45.75			
16	5/8"	-10	G 3/4"	-12	12,0	16,0	56,5	114,0	23,5	32	21,0	11505N16204	HCI-16-DKR-12-045-C-M-W3	
					.47	.63	2.22	4.49	.93	1.26	46.19			
19	3/4"	-12	G 3/4"	-12	14,8	18,8	67,0	139,5	35,5	32	28,7	11505N20204	HCI-19-DKR-12-045-C-M-W3	
					.58	.74	2.64	5.49	1.40	1.26	63.28			
25	1"	-16	G 1"	-16	19,5	25,1	84,5	164,0	45,5	41	53,5	11505N25254	HCI-25-DKR-16-045-C-M-W3	
					.77	.99	3.33	6.46	1.79	1.61	117.97			
31	1 1/4"	-20	G 1 1/4"	-20	25,0	31,8	104,0	182,0	53,0	50	95,1	11505N32324	HCI-31-DKR-20-045-W-M-W3	
					.98	1.25	4.09	7.17	2.09	1.97	209.70			

Dimension Y ± 2,5 mm / .10 in

**D**
**Related Products and Accessories**

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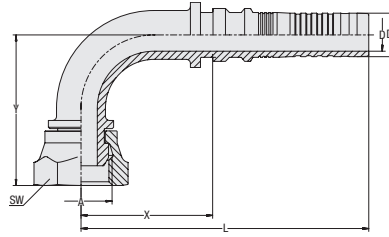
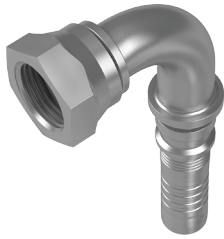

**ECOVS VA Version**

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**90° Elbow Insert with Female BSPP Thread and 60° Taper  
Type DKR 90°**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper  
**Standard** ISO 8434-6, BS 5200  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

**D**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
16	5/8"	-10	G 5/8"	-10	12,0	16,0	48,0	105,5	54,0	30	23,1	11505N16169	HCI-16-DKR-10-090-C-M-W3	
					.47	.63	1.89	4.15	2.13	1.18	50.94			
16	5/8"	-10	G 3/4"	-12	12,0	16,0	44,0	101,5	52,0	32	23,1	11505N16209	HCI-16-DKR-12-090-C-M-W3	
					.47	.63	1.73	4.00	2.05	1.26	50.94			
19	3/4"	-12	G 3/4"	-12	14,8	18,8	52,5	125,0	63,5	32	32,4	11505N20209	HCI-19-DKR-12-090-C-M-W3	
					.58	.74	2.07	4.92	2.50	1.26	71.44			
25	1"	-16	G 1"	-16	19,5	25,1	65,0	144,5	83,0	41	60,6	11505N25259	HCI-25-DKR-16-090-C-M-W3	
					.77	.99	2.56	5.69	3.27	1.61	133.62			
31	1 1/4"	-20	G 1 1/4"	-20	25,0	31,8	84,5	162,5	101,0	50	111,0	11505N32329	HCI-31-DKR-20-090-W-M-W3	
					.98	1.25	3.33	6.40	3.98	1.97	244.64			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



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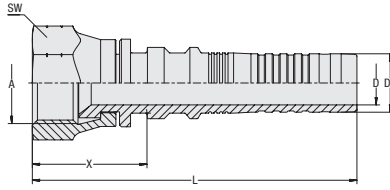
**ECOPOS VA Version**

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**MULTIVOS™**
**Straight Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$ 


Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
10	3/8"	-06	9/16"-18 UNF	-06	6,5 .26	9,6 .38	15,5 .61	57,0 2.24	19 .75	4,5 9.92	11515N10	HCI-10-DKJ-06-C-M-W3
10	3/8"	-06	3/4"-16 UNF	-08	6,5 .26	9,6 .38	21,0 .83	62,5 2.46	24 .94	6,9 15.21	11515N1012	HCI-10-DKJ-08-C-M-W3
12	1/2"	-08	3/4"-16 UNF	-08	9,0 .35	12,5 .49	17,5 .69	64,0 2.52	24 .94	6,8 14.99	11515N12	HCI-12-DKJ-08-C-M-W3
12	1/2"	-08	7/8"-14 UNF	-10	9,0 .35	12,5 .49	22,0 .87	69,0 2.72	27 1.06	10,0 22.05	11515N1216	HCI-12-DKJ-10-C-M-W3
16	5/8"	-10	7/8"-14 UNF	-10	12,0 .47	16,0 .63	21,5 .85	79,0 3.11	27 1.06	12,3 27.01	11515N16	HCI-16-DKJ-10-C-M-W3
16	5/8"	-10	1.1/16"-12 UN	-12	12,0 .47	16,0 .63	23,5 .93	81,0 3.19	32 1.26	15,6 34.29	11515N1620	HCI-16-DKJ-12-C-M-W3
19	3/4"	-12	1.1/16"-12 UN	-12	14,8 .58	18,8 .74	23,0 .91	95,5 3.76	32 1.26	18,3 40.24	11515N20	HCI-19-DKJ-12-C-M-W3
25	1"	-16	1.5/16"-12 UN	-16	19,5 .77	25,1 .99	22,5 .89	102,5 4.04	41 1.61	32,0 70.56	11515N25	HCI-25-DKJ-16-C-M-W3
31	1 1/4"	-20	1.5/8"-12 UN	-20	25,0 .98	31,8 1.25	25,5 1.00	103,5 4.07	50 1.97	55,2 121.72	11515N32	HCI-31-DKJ-20-W-M-W3
38	1 1/2"	-24	1.7/8"-12 UN	-24	31,0 1.22	38,3 1.51	32,5 1.28	125,5 4.94	60 2.36	86,7 191.17	11515N40	HCI-38-DKJ-24-W-M-W3
51	2"	-32	2.1/2"-12 UN	-32	40,0 1.57	50,6 1.99	41,0 1.61	137,0 5.39	75 2.95	168,3 371.10	11515N50	HCI-51-DKJ-32-W-M-W3

**D**
**Related Products and Accessories**

**Swage Ferrules**

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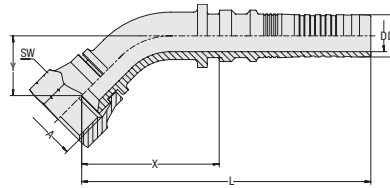
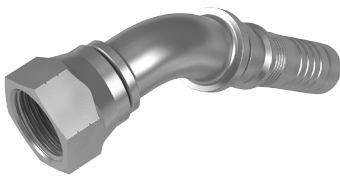

**POWERVOS Version**

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**45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ 45°**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

**D**

Hose Size			Connection Size		Dimensions (mm/in)							Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	per 100	Part Numbers	Ordering Codes	
12	1/2"	-08	3/4"-16 UNF	-08	9,0	12,5	44,5	91,5	20,0	24	10,3	11515N12124	HCI-12-DKJ-08-045-C-M-W3	
					.35	.49	1.75	3.60	.79	.94	22.71			
12	1/2"	-08	7/8"-14 UNF	-10	9,0	12,5	44,0	91,0	18,0	27	12,8	11515N12164	HCI-12-DKJ-10-045-C-M-W3	
					.35	.49	1.73	3.58	.71	1.06	28.11			
16	5/8"	-10	7/8"-14 UNF	-10	12,0	16,0	59,0	116,5	25,0	27	18,5	11515N16164	HCI-16-DKJ-10-045-C-M-W3	
					.47	.63	2.32	4.59	.98	1.06	40.79			
16	5/8"	-10	1 1/16"-12 UN	-12	12,0	16,0	56,5	114,0	23,5	32	20,4	11515N16204	HCI-16-DKJ-12-045-C-M-W3	
					.47	.63	2.22	4.49	.93	1.26	44.87			
19	3/4"	-12	1 1/16"-12 UN	-12	14,8	18,8	64,5	136,5	31,0	32	28,3	11515N20204	HCI-19-DKJ-12-045-C-M-W3	
					.58	.74	2.54	5.37	1.22	1.26	62.29			
25	1"	-16	1 5/16"-12 UN	-16	19,5	25,1	83,5	163,0	33,0	41	51,1	11515N25254	HCI-25-DKJ-16-045-C-M-W3	
					.77	.99	3.29	6.42	1.30	1.61	112.68			
31	1 1/4"	-20	1 5/8"-12 UN	-20	25,0	31,8	107,5	185,5	44,0	50	93,4	11515N32324	HCI-31-DKJ-20-045-W-M-W3	
					.98	1.25	4.23	7.30	1.73	1.97	205.95			
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0	38,3	132,0	225,0	52,0	60	146,3	11515N40404	HCI-38-DKJ-24-045-W-M-W3	
					1.22	1.51	5.20	8.86	2.05	2.36	322.59			
51	2"	-32	2 1/2"-12 UN	-32	40,0	50,6	167,5	263,5	79,5	70	303,6	11515N50504	HCI-51-DKJ-32-045-W-M-W3	
					1.57	1.99	6.59	10.37	3.13	2.76	669.44			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

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90° Version

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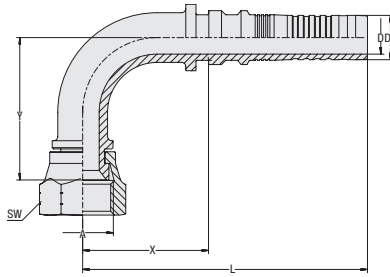
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**MULTIVOS™**
**90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ 90°**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$ 


Hose Size			Connection Size		Dimensions (mm/in)							Weight (%/lbs) ca.	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)	per 100			
12	1/2"	-08	3/4"-16 UNF	-08	9,0	12,5	38,5	85,5	41,5	24	12,0	11515N12129	HCI-12-DKJ-08-090-C-M-W3	
					.35	.49	1.52	3.37	1.63	.94	26.46			
12	1/2"	-08	7/8"-14 UNF	-10	9,0	12,5	38,5	85,5	41,0	27	14,5	11515N12169	HCI-12-DKJ-10-090-C-M-W3	
					.35	.49	1.52	3.37	1.61	1.06	31.97			
16	5/8"	-10	7/8"-14 UNF	-10	12,0	16,0	51,5	109,0	51,0	27	21,0	11515N16169	HCI-16-DKJ-10-090-C-M-W3	
					.47	.63	2.03	4.29	2.01	1.06	46.31			
16	5/8"	-10	1 1/16"-12 UN	-12	12,0	16,0	50,0	107,5	50,0	32	22,9	11515N16209	HCI-16-DKJ-12-090-C-M-W3	
					.47	.63	1.97	4.23	1.97	1.26	50.49			
19	3/4"	-12	1 1/16"-12 UN	-12	14,8	18,8	52,5	125,0	58,5	32	31,7	11515N20209	HCI-19-DKJ-12-090-C-M-W3	
					.58	.74	2.07	4.92	2.30	1.26	69.79			
25	1"	-16	1 5/16"-12 UN	-16	19,5	25,1	73,0	152,5	69,0	41	58,1	11515N25259	HCI-25-DKJ-16-090-C-M-W3	
					.77	.99	2.87	6.00	2.72	1.61	128.11			
31	1 1/4"	-20	1 5/8"-12 UN	-20	25,0	31,8	88,5	166,5	96,0	50	113,4	11515N32329	HCI-31-DKJ-20-090-W-M-W3	
					.98	1.25	3.48	6.56	3.78	1.97	249.94			
38	1 1/2"	-24	1 7/8"-12 UN	-24	31,0	38,3	113,0	206,0	110,5	60	168,9	11515N40409	HCI-38-DKJ-24-090-W-M-W3	
					1.22	1.51	4.45	8.11	4.35	2.36	372.42			
51	2"	-32	2 1/2"-12 UN	-32	40,0	50,6	140,5	236,5	158,5	75	362,2	11515N50509	HCI-51-DKJ-32-090-W-M-W3	
					1.57	1.99	5.53	9.31	6.24	2.95	798.65			

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOPOS Version**

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**45° Version**

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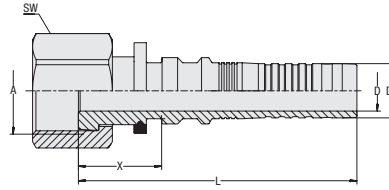
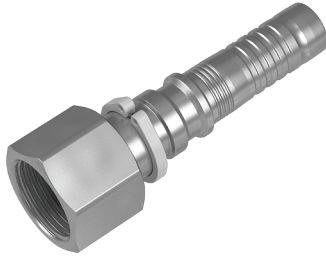

**ECOPOS VA Version**

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**Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection  
Type ORS**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** O-Ring Face Seal  
**Standard** ISO 8434-3  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

**D**

Hose Size			Connection Size		Dimensions (mm/in)					Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(*9/163) ca. per 100	Part Numbers	Ordering Codes
10	3/8"	-06	11/16"-16 UN	-06	6,5 .26	9,6 .38	20,0 .79	61,5 2.42	22 .87	6,4 .25	11525N10	HCI-10-ORS-06-S-M-W3
10	3/8"	-06	13/16"-16 UN	-08	6,5 .26	9,6 .38	21,5 .85	63,0 2.48	27 1.06	10,1 .40	11525N1012	HCI-10-ORS-08-S-M-W3
12	1/2"	-08	13/16"-16 UN	-08	9,0 .35	12,5 .49	19,0 .75	66,0 2.60	27 1.06	8,8 .35	11525N12	HCI-12-ORS-08-S-M-W3
16	5/8"	-10	1"-14 UN	-10	12,0 .47	16,0 .63	24,5 .96	82,0 3.23	30 1.18	15,1 .59	11525N16	HCI-16-ORS-10-S-M-W3
16	5/8"	-10	1 3/16"-12 UN	-12	12,0 .47	16,0 .63	24,5 .96	82,0 3.23	36 1.42	21,5 .84	11525N1620	HCI-16-ORS-12-S-M-W3
19	3/4"	-12	1 3/16"-12 UN	-12	14,8 .58	18,8 .74	34,5 1.36	107,0 4.21	36 1.42	25,3 1.00	11525N20	HCI-19-ORS-12-S-M-W3
19	3/4"	-12	1 7/16"-12 UN	-16	14,8 .58	18,8 .74	36,0 1.42	108,5 4.27	41 1.61	33,1 1.30	11525N2025	HCI-19-ORS-16-S-M-W3
25	1"	-16	1 7/16"-12 UN	-16	19,5 .77	25,1 .99	36,0 1.42	115,5 4.55	41 1.61	36,5 1.44	11525N25	HCI-25-ORS-16-S-M-W3
31	1 1/4"	-20	1 11/16"-12 UN	-20	25,0 .98	31,8 1.25	36,5 1.44	114,5 4.51	50 1.97	55,2 2.17	11525N32	HCI-31-ORS-20-S-M-W3

**Related Products and Accessories**



Swage Ferrules

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90° Version

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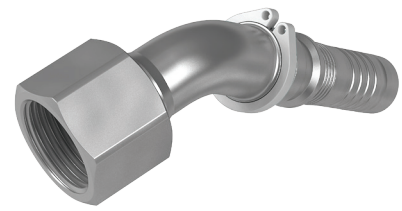
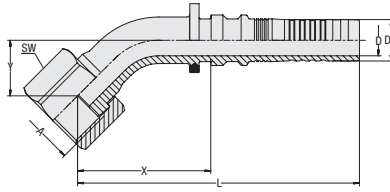
ECOVS VA Version

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**MULTIVOS™**
**45° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection  
Type ORS 45°**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** O-Ring Face Seal  
**Standard** ISO 8434-3

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$ 


Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
12	1/2"	-08	13/16"-16 UN	-08	9,0	12,5	44,5	91,5	21,5	27	13,9	11525N12124	HCI-12-ORS-08-045-S-M-W3	
					.35	.49	1.75	3.60	.85	1.06	30.65			
16	5/8"	-10	1"-14 UN	-10	12,0	16,0	51,5	109,0	21,5	30	19,0	11525N16164	HCI-16-ORS-10-045-S-M-W3	
					.47	.63	2.03	4.29	.85	1.18	41.90			
19	3/4"	-12	1 3/16"-12 UN	-12	14,8	18,8	71,0	143,5	29,5	36	29,6	11525N20204	HCI-19-ORS-12-045-S-M-W3	
					.58	.74	2.80	5.65	1.16	1.42	65.16			
25	1"	-16	1 7/16"-12 UN	-16	19,5	25,1	86,5	166,0	37,5	41	47,4	11525N25254	HCI-25-ORS-16-045-S-M-W3	
					.77	.99	3.41	6.54	1.48	1.61	104.41			
31	1 1/4"	-20	1 11/16"-12 UN	-20	25,0	31,8	106,5	184,5	46,0	50	75,1	11525N32324	HCI-31-ORS-20-045-S-M-W3	
					.98	1.25	4.19	7.26	1.81	1.97	165.60			

 Dimension Y  $\pm$  2,5 mm / .10 in

**D**
**Related Products and Accessories**

**Swage Ferrules**

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**Straight Version**

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**ECOVOS Version**

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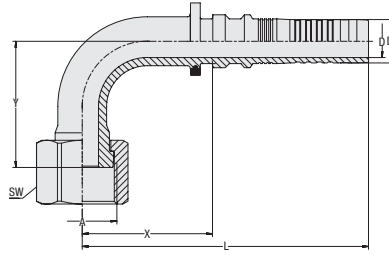

**90° Version**

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**90° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection  
Type ORS 90°**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** O-Ring Face Seal  
**Standard** ISO 8434-3  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*

**D**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
12	1/2"	-08	13/16"-16 UN	-08	9,0	12,5	38,5	85,5	42,5	27	15,6	11525N12129	HCI-12-ORS-08-090-S-M-W3	
					.35	.49	1.52	3.37	1.67	1.06	34.29			
16	5/8"	-10	1"-14 UN	-10	12,0	16,0	48,0	105,5	46,5	30	21,9	11525N16169	HCI-16-ORS-10-090-S-M-W3	
					.47	.63	1.89	4.15	1.83	1.18	48.29			
19	3/4"	-12	1 3/16"-12 UN	-12	14,8	18,8	57,5	130,0	59,5	36	32,1	11525N20209	HCI-19-ORS-12-090-S-M-W3	
					.58	.74	2.26	5.12	2.34	1.42	70.67			
25	1"	-16	1 7/16"-12 UN	-16	19,5	25,1	75,5	155,0	75,0	41	53,4	11525N25259	HCI-25-ORS-16-090-S-M-W3	
					.77	.99	2.97	6.10	2.95	1.61	117.75			
31	1 1/4"	-20	1 11/16"-12 UN	-20	25,0	31,8	88,0	166,0	94,0	50	84,4	11525N32329	HCI-31-ORS-20-090-S-M-W3	
					.98	1.25	3.46	6.54	3.70	1.97	186.10			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



**Swage Ferrules**

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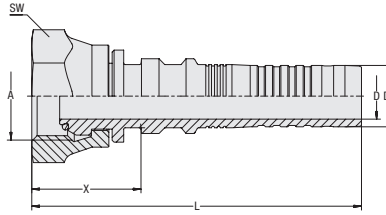
**45° Version**

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**MULTIVOS™**
**Straight Insert with Female BSPP Thread and 60° Taper / O-Ring Type DKOR**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper with O-Ring  
**Standard** ISO 8434-6, BS 5200

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)


Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
10	3/8"	-06	G 3/8"	-06	6,5 .26	9,6 .38	22,5 .89	64,0 2.52	22 .87	6,4 14.11	11555N10	HCI-10-DKOR-06-C-OR-B-M-W3	
12	1/2"	-08	G 1/2"	-08	9,0 .35	12,5 .49	25,0 .98	72,0 2.83	27 1.06	10,9 24.03	11555N12	HCI-12-DKOR-08-C-OR-B-M-W3	
16	5/8"	-10	G 5/8"	-10	12,0 .47	16,0 .63	24,0 .94	81,5 3.21	30 1.18	14,5 31.97	11555N16	HCI-16-DKOR-10-C-OR-B-M-W3	
19	3/4"	-12	G 3/4"	-12	14,8 .58	18,8 .74	28,0 1.10	100,5 3.96	32 1.26	19,1 42.12	11555N20	HCI-19-DKOR-12-C-OR-B-M-W3	
25	1"	-16	G 1"	-16	19,5 .77	25,1 .99	31,0 1.22	110,5 4.35	41 1.61	34,5 76.07	11555N25	HCI-25-DKOR-16-C-OR-B-M-W3	
31	1 1/4"	-20	G 1 1/4"	-20	25,0 .98	31,8 1.25	33,5 1.32	111,5 4.39	50 1.97	54,8 120.83	11555N32	HCI-31-DKOR-20-W-OR-B-M-W3	
38	1 1/2"	-24	G 1 1/2"	-24	31,0 1.22	38,3 1.51	38,0 1.50	131,0 5.16	55 2.17	76,9 169.56	11555N40	HCI-38-DKOR-24-W-OR-B-M-W3	
38	1 1/2"	-24	G 2"	-32	31,0 1.22	38,3 1.51	46,5 1.83	144,5 5.69	70 2.76	131,5 289.96	11555N4050	HCI-38-DKOR-32-W-OR-B-M-W3	
51	2"	-32	G 2"	-32	40,0 1.57	50,6 1.99	41,0 1.61	137,0 5.39	70 2.76	152,5 336.15	11555N50	HCI-51-DKOR-32-W-OR-B-M-W3	

**D**
**Related Products and Accessories**

**Swage Ferrules**

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**ECOPOS VA Version**

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**90° Version**

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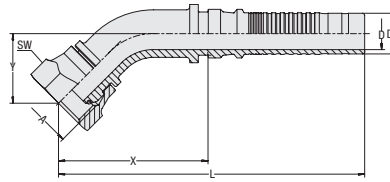
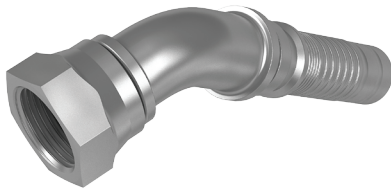

**POWERS Version**

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**45° Elbow Insert with Female BSPP Thread and 60° Taper / O-Ring  
Type DKOR 45°**

MULTIVOS™



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper with O-Ring  
**Standard** ISO 8434-6, BS 5200  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

**D**

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
10	3/8"	-06	G 3/8"	-06	6,5	9,6	36,5	78,0	18,0	22	7,7	11555N10104	HCI-10-DKOR-06-045-C-OR-B-M-W3	
					.26	.38	1.44	3.07	.71	.87	16.87			
12	1/2"	-08	G 1/2"	-08	9,0	12,5	44,5	91,5	20,0	27	13,1	11555N12124	HCI-12-DKOR-08-045-C-OR-B-M-W3	
					.35	.49	1.75	3.60	.79	1.06	28.89			
19	3/4"	-12	G 3/4"	-12	14,8	18,8	67,0	141,0	30,5	32	28,6	11555N20204	HCI-19-DKOR-12-045-C-OR-B-M-W3	
					.58	.74	2.64	5.55	1.20	1.26	63.06			
25	1"	-16	G 1"	-16	19,5	25,1	93,0	172,5	42,5	41	55,3	11555N25254	HCI-25-DKOR-16-045-C-OR-B-M-W3	
					.77	.99	3.66	6.79	1.67	1.61	121.83			
31	1 1/4"	-20	G 1 1/4"	-20	25,0	31,8	109,0	187,0	47,5	50	98,9	11555N32324	HCI-31-DKOR-20-045-W-OR-B-M-W3	
					.98	1.25	4.29	7.36	1.87	1.97	218.07			
38	1 1/2"	-24	G 1 1/2"	-24	31,0	38,3	138,0	231,0	53,0	55	138,4	11555N40404	HCI-38-DKOR-24-045-W-OR-B-M-W3	
					1.22	1.51	5.43	9.09	2.09	2.17	305.17			
51	2"	-32	G 2"	-32	40,0	50,6	167,0	263,0	77,0	70	289,4	11555N50504	HCI-51-DKOR-32-045-W-OR-B-M-W3	
					1.57	1.99	6.57	10.35	3.03	2.76	638.02			

Dimension Y ± 2,5 mm / .10 in

**Related Products and Accessories**



Swage Ferrules

Pages 140-141



Straight Version

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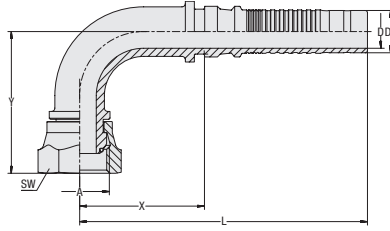
90° Version

Page 173



**MULTIVOS™**
**90° Elbow Insert with Female BSPP Thread and 60° Taper / O-Ring Type DKOR 90°**
**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper with O-Ring  
**Standard** ISO 8434-6, BS 5200

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)


Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)				
10	3/8"	-06	G 3/8"	-06	6,5	9,6	31,5	73,0	37,0	22	8,8	11555N10109	HCI-10-DKOR-06-090-C-OR-B-M-W3	
					.26	.38	1.24	2.87	1.46	.87	19.29			
12	1/2"	-08	G 1/2"	-08	9,0	12,5	38,5	85,5	41,5	27	14,8	11555N12129	HCI-12-DKOR-08-090-C-OR-B-M-W3	
					.35	.49	1.52	3.37	1.63	1.06	32.52			
19	3/4"	-12	G 3/4"	-12	14,8	18,8	55,0	127,5	60,5	32	32,5	11555N20209	HCI-19-DKOR-12-090-C-OR-B-M-W3	
					.58	.74	2.17	5.02	2.38	1.26	71.66			
25	1"	-16	G 1"	-16	19,5	25,1	75,5	155,0	85,0	41	63,7	11555N25259	HCI-25-DKOR-16-090-C-OR-B-M-W3	
					.77	.99	2.97	6.10	3.35	1.61	140.35			
31	1 1/4"	-20	G 1 1/4"	-20	25,0	31,8	92,0	170,0	96,5	50	114,0	11555N32329	HCI-31-DKOR-20-090-W-OR-B-M-W3	
					.98	1.25	3.62	6.69	3.80	1.97	251.37			
38	1 1/2"	-24	G 1 1/2"	-24	31,0	38,3	118,0	211,0	116,0	55	160,4	11555N40409	HCI-38-DKOR-24-090-W-OR-B-M-W3	
					1.22	1.51	4.65	8.31	4.57	2.17	353.57			
51	2"	-32	G 2"	-32	40,0	50,6	143,0	239,0	157,0	70	351,4	11555N50509	HCI-51-DKOR-32-090-W-OR-B-M-W3	
					1.57	1.99	5.63	9.41	6.18	2.76	774.84			

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrules**

Pages 140-141


**Straight Version**

Page 171


**45° Version**

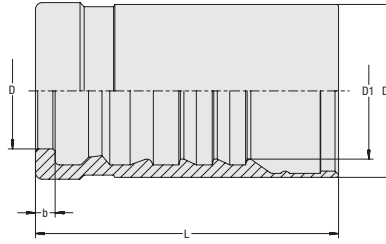
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Internal & External Skive Swage Ferrule for Spiral Hose R15

MULTIVOS™8



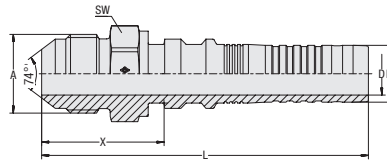
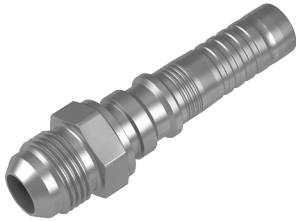
**Ferrule Type** with Pull-Out Protection (Interlock)  
**Suitable for Standards** R15  
 SAE 100 R15  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Maximum working pressures depending on the type of the hose connector and the hose type.

D

Hose Size			Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	D	D1	D2	L	b			
51	2"	-32	87,0	59,5	71,7	107,0	6,4	127,0	15468N50	HF-8000-51-W3
			3,43	2,34	2,82	4,21	.25	279,92		

Straight Insert with Male UN/UNF Thread and 74° Taper Type AGJ



**Insert Type** with Pull-Out Protection (Interlock)  
**Connection Type** Male UN/UNF Thread  
**Sealing Type** 74° Taper  
**Standard** ISO 8434-2  
**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
51	2"	-32	2 1/2"-12 UN	-32	40,0	50,8	65,0	173,0	65	160,3	11318N50	HCM-51-AGJ-32-M-W3
					1,57	2,00	2,56	6,81	2,56	353,35		



**MULTIVOS™-8**
**Straight Insert with SAE Flange Adaptor  
Type SFL (3000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

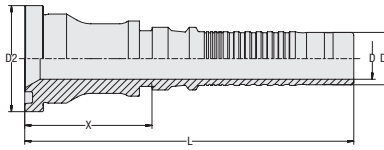
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-1

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$



Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L				
51	2"	-32	2"	-32	40,0 1.57	50,8 2.00	71,4 2.81	70,0 2.76	177,5 6.99		143,9 317.19	11408N50	HCM-51-SFL-32-M-W3

**D**
**45° Elbow Insert with SAE Flange Adaptor  
Type SFL 45° (3000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

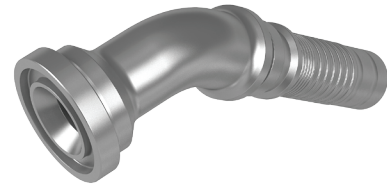
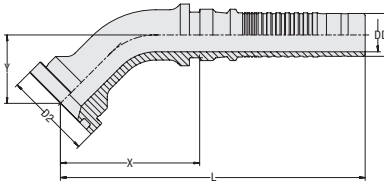
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-1

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$



Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y			
51	2"	-32	2"	-32	40,0 1.57	50,8 2.00	71,4 2.81	163,0 6.42	207,5 8.17	72,5 2.85	250,8 553.01	11408N50504	HCM-51-SFL-32-045-M-W3

 Dimension Y  $\pm$  2,5 mm / .10 in

**90° Elbow Insert with SAE Flange Adaptor  
Type SFL 90° (3000 PSI Series)**

**Insert Type** with Pull-Out Protection (Interlock)

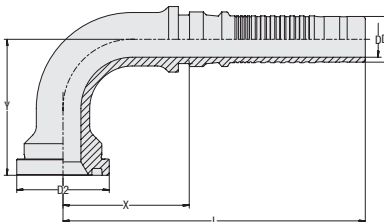
**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-1

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$



Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y			
51	2"	-32	2"	-32	40,0 1.57	50,8 2.00	79,4 3.13	138,5 5.45	246,0 9.69	150,0 5.91	336,5 741.87	11418N50509	HCM-51-SFS-32-090-M-W3

 Dimension Y  $\pm$  2,5 mm / .10 in

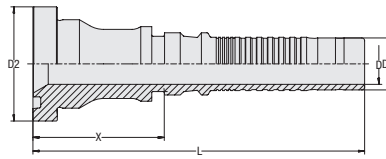
**Related Products and Accessories**

**Swage Ferrule**

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### Straight Insert with SAE Flange Adaptor Type SFS (6000 PSI Series)



**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

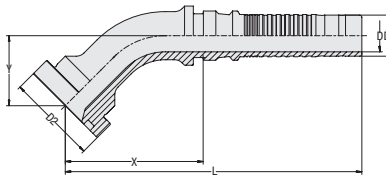
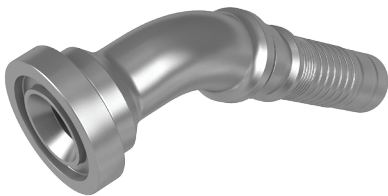
**Standard** SAE J 518, ISO 6162-2

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L				
51	2"	-32	2"	-32	40,0 1.57	50,8 2.00	79,4 3.13	73,5 2.89	181,0 7.13		180,3 397.56	11418N50	HCM-51-SFS-32-M-W3

### 45° Elbow Insert with SAE Flange Adaptor Type SFS 45° (6000 PSI Series)



**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-2

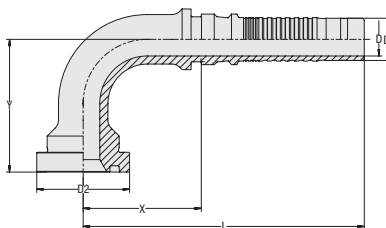
**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
51	2"	-32	2"	-32	40,0 1.57	50,8 2.00	79,4 3.13	160,5 6.32	268,0 10.55	70,0 2.76	277,5 611.78	11418N50504	HCM-51-SFS-32-045-M-W3	

Dimension Y  $\pm$  2,5 mm / .10 in

### 90° Elbow Insert with SAE Flange Adaptor Type SFS 90° (6000 PSI Series)



**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** SAE Flange Adaptor

**Sealing Type** O-Ring Face Seal  
(O-Ring not included in delivery.)

**Standard** SAE J 518, ISO 6162-2

**Material** Carbon Steel

**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$

Hose Size			Connection Size		Dimensions (mm/in)							Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	inch	Dash	D	D1	D2	X	L	Y				
51	2"	-32	2"	-32	40,0 1.57	50,8 2.00	79,4 3.13	138,5 5.45	246,0 9.69	150,0 5.91	336,5 741.87	11418N50509	HCM-51-SFS-32-090-M-W3	

Dimension Y  $\pm$  2,5 mm / .10 in

#### Related Products and Accessories



Swage Ferrule

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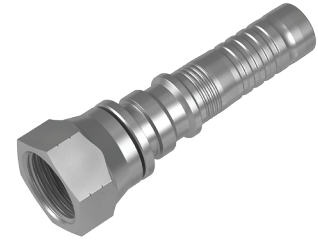
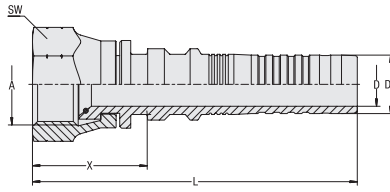


**MULTIVOS™-8**
**Straight Insert with Female UN/UNF Thread and 74° Conical Bore/ O-Ring Type DKOJ**

**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)



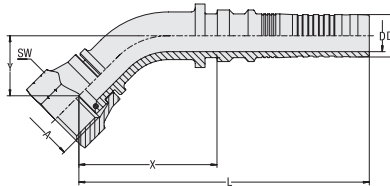
Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)				
51	2"	-32	2 1/2"-12 UN	-32	40,0 1.57	50,8 2.00	28,0 1.10	135,5 5.33	70 2.76	135,1 297.79	11568N50	HCM-51-DKOJ-32-W-OR-B-M-W3	

**D**
**45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore / O-Ring Type DKOJ 45°**

**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)



Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)			
51	2"	-32	2 1/2"-12 UN	-32	40,0 1.57	50,8 2.00	156,0 6.14	263,5 10.37	67,5 2.66	70 2.76	268,6 592.26	11568N50504	HCM-51-DKOJ-32-045-W-OR-B-M-W3

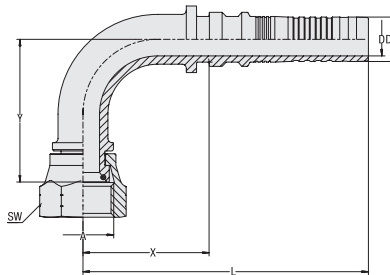
 Dimension Y  $\pm$  2,5 mm / .10 in

**90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore / O-Ring Type DKOJ 90°**

**Insert Type** with Pull-Out Protection (Interlock)

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** Carbon Steel  
**Surface Finishing** Zinc/Nickel-Plating  $\Delta plus$   
**Sealing Material** NBR (Buna-N®)



Hose Size			Connection Size		Dimensions (mm/in)						Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	Y	SW (Hex)			
51	2"	-32	2 1/2"-12 UN	-32	40,0 1.57	50,8 2.00	141,0 5.55	248,5 9.78	144,0 5.67	70 2.76	329,4 726.33	11568N50509	HCM-51-DKOJ-32-090-W-OR-B-M-W3

 Dimension Y  $\pm$  2,5 mm / .10 in

**Related Products and Accessories**

**Swage Ferrule**

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**POWERVOS™**



**Straight Insert**  
with Female Metric Nut Thread and 24° Taper  
DKOS (Heavy Series)

180



**Straight Insert**  
with Female UN/UNF Thread and 74° Conical Bore  
DKJ

181



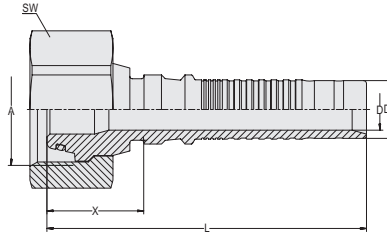
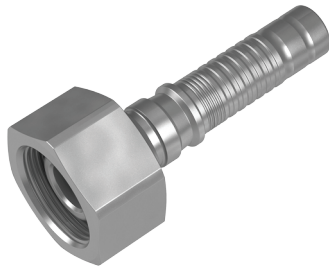
**Straight Insert**  
with Female BSPP Thread and 60° Taper / O-Ring  
DKOR

182

**E**



**Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring Type DKOS (Heavy Series)**



**Insert Type** with Pull-Out Protection (Interlock) for Hammer/Breaker Operation

**Connection Type** Female Metric Nut Thread

**Sealing Type** 24° Taper with O-Ring

**Standard** ISO 8434-1

**Material** High-Performance Steel

**Surface Finishing** Zinc/Nickel-Plating *Δplus*

**Sealing Material** NBR (Buna-N®)

Hose Size			Connection Size		Dimensions (mm/in)					Weight (*9/16) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
19	3/4"	-12	M36x2	-12	13,5	18,8	31,5	104,0	46	39,6	11235W20	HCP-19-DK0-25S-S-OR-B-M-W3-VP
					.53	.74	1.24	4.09	1.81	87.32		
25	1"	-16	M42x2	-16	17,8	25,1	31,5	111,0	50	52,3	11235W25	HCP-25-DK0-30S-S-OR-B-M-W3-VP
					.70	.99	1.24	4.37	1.97	115.32		
31	1 1/4"	-20	M52x2	-20	23,0	31,8	36,0	114,0	60	81,5	11235W32	HCP-31-DK0-38S-S-OR-B-M-W3-VP
					.91	1.25	1.42	4.49	2.36	179.60		

E

**Related Products and Accessories**



**MULTIVOS Swage Ferrules** Pages 140-141



**ECOVOS Version** Pages 30-31



**ECOVOS VA Version** Page 108



**MULTIVOS Version** Page 147



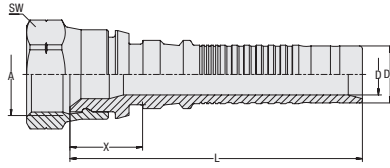


**POWERVOS™**
**Straight Insert with Female UN/UNF Thread and 74° Conical Bore  
Type DKJ**

**Insert Type** with Pull-Out Protection (Interlock)  
for Hammer/Breaker Operation

**Connection Type** Female UN/UNF Nut Thread  
**Sealing Type** 74° Conical Bore  
**Standard** ISO 8434-2

**Material** High-Performance Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*



Hose Size			Connection Size		Dimensions (mm/in)						Weight	VOSWINKEL	STAUFF
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)	(kg/lbs) ca. per 100	Part Numbers	Ordering Codes	
19	3/4"	-12	1 1/16"-12 UN	-12	13,5	18,8	24,0	96,5	32	20,2	11515W20	HCP-19-DKJ-12-C-M-W3-VP	
					.53	.74	.94	3,80	1,26	44,54			
25	1"	-16	1 5/16"-12 UN	-16	17,8	25,1	25,5	105,0	41	36,3	11515W25	HCP-25-DKJ-16-C-M-W3-VP	
					.70	.99	1,00	4,13	1,61	79,93			
25	1"	-16	1 5/8"-12 UN	-20	17,8	25,1	38,5	118,0	50	54,2	11515W2532	HCP-25-DKJ-20-W-M-W3-VP	
					.70	.99	1,52	4,65	1,97	119,40			
31	1 1/4"	-20	1 5/8"-12 UN	-20	23,0	31,8	34,0	112,0	50	60,9	11515W32	HCP-31-DKJ-20-W-M-W3-VP	
					.91	1,25	1,34	4,41	1,97	134,28			

**E**
**Related Products and Accessories**

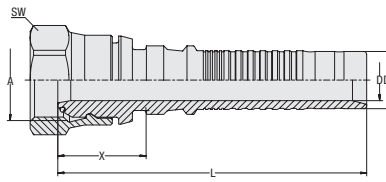
**MULTIVOS Swage Ferrules** Pages 140-141

**ECOVOS Version** Page 69

**ECOVOS VA Version** Page 132

**MULTIVOS Version** Page 165


**Straight Insert with Female BSPP Thread and 60° Taper / O-Ring Type DKOR**



**Insert Type** with Pull-Out Protection (Interlock) for Hammer/Breaker Operation

**Connection Type** Female BSPP Nut Thread  
**Sealing Type** 60° Taper with O-Ring  
**Standard** ISO 8434-6, BS 5200

**Material** High-Performance Steel  
**Surface Finishing** Zinc/Nickel-Plating *Δplus*  
**Sealing Material** NBR (Buna-N®)

Hose Size			Connection Size		Dimensions (mm/in)					Weight (kg/lbs) ca. per 100	VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash	Thread	Dash	D	D1	X	L	SW (Hex)			
19	3/4"	-12	G 3/4"	-12	13,5	18,8	29,0	101,5	32	21,75	11555W20	HCP-19-DKOR-12-C-OR-B-M-W3-VP
					.53	.74	1.14	4.00	1.26	47.96		
25	1"	-16	G 1"	-16	17,8	25,1	30,5	110,0	41	37,55	11555W25	HCP-25-DKOR-16-C-OR-B-M-W3-VP
					.70	.99	1.20	4.33	1.61	82.80		
31	1 1/4"	-20	G 1 1/4"	-20	23,0	31,8	36,0	114,0	50	61,40	11555W32	HCP-31-DKOR-20-W-OR-B-M-W3-VP
					.91	1.25	1.42	4.49	1.97	135.39		

E

**Related Products and Accessories**



**MULTIVOS Swage Ferrules** Pages 140-141



**ECOVOS VA Version**

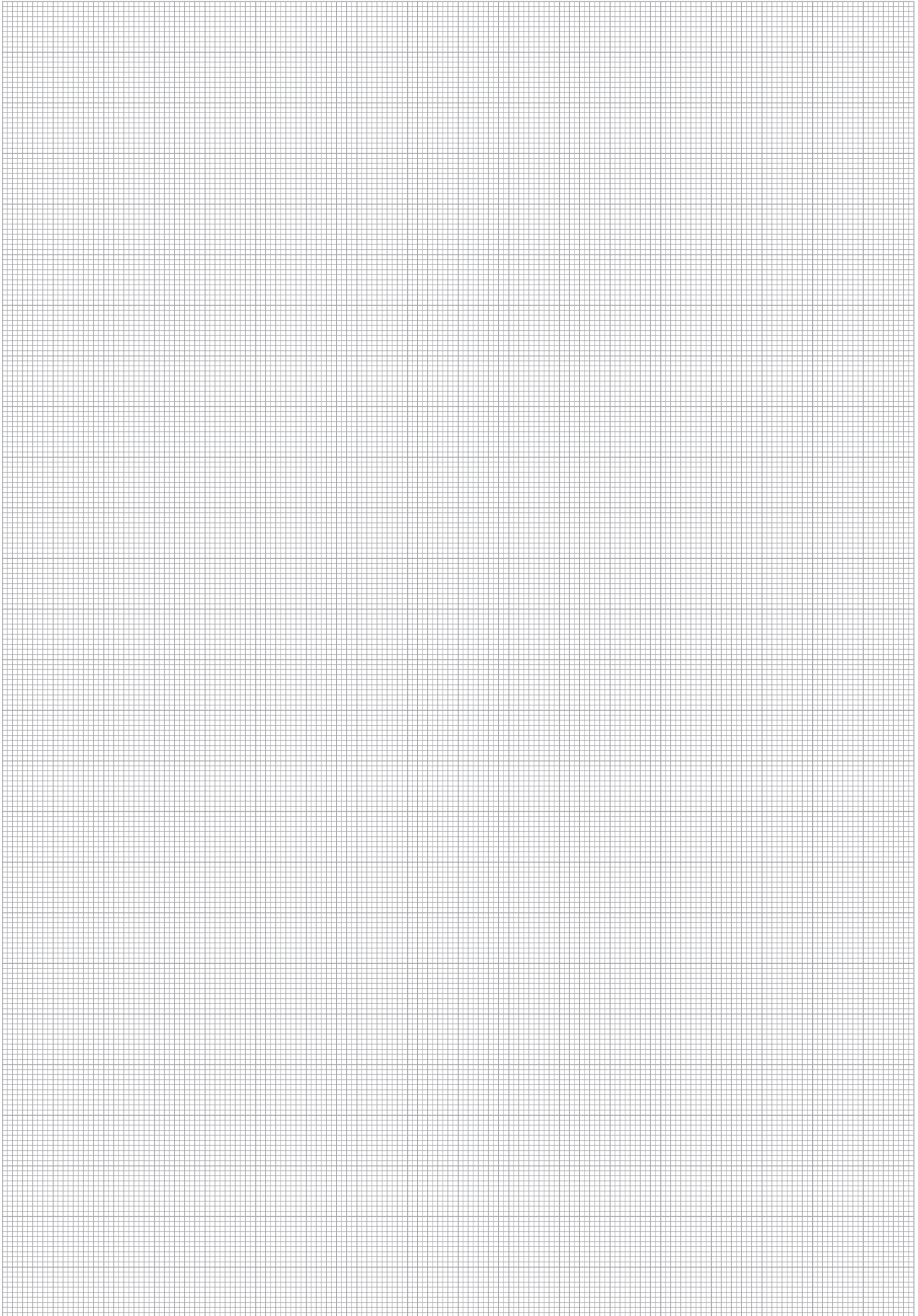
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**MULTIVOS Version**

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**E**





DORNVOS™

<b>Checking the Operability of Crimped Hose Connectors by Measuring the Reduction of the Nipple Diameter</b>	<b>186</b>
<b>DORNVOS Test Mandrel Kits for the ECOVOS Hose Connector System</b>	<b>187</b>
<b>DORNVOS Test Mandrel Kits for the MULTIVOS Hose Connector System</b>	<b>187</b>



## Checking the Operability of Crimped Hose Connectors by Measuring the Reduction of the Nipple Diameter

Fig. 1: Excessive crimping, maximum reduction of nipple diameter exceeded

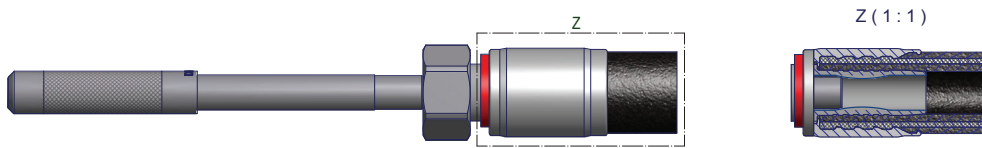


Fig. 1:

The inside nipple diameter is reduced excessively in the sealing zone through the crimp dimension, which is too tight. ATTENTION: This crimped connector is not functional. This error might result in premature failure of the hose line. The crimp diameter must be increased by several tenths of a millimeter!

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Fig. 2: Maximum reduction of nipple diameter reached

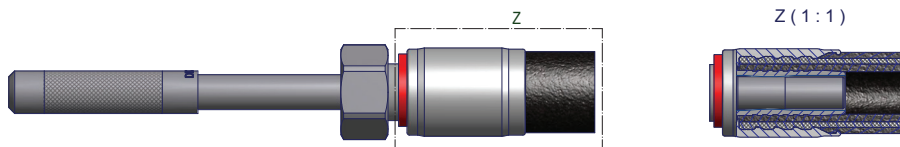


Fig. 2:

This illustration shows the maximum permissible reduction of the inside nipple. The crimp diameter should not be reduced any further, since otherwise there might be the risk of a premature failure of the hose line!

Fig. 3: Ideal reduction of nipple diameter

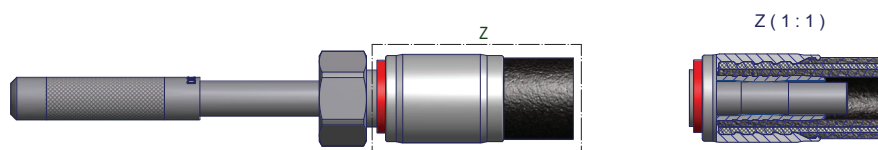
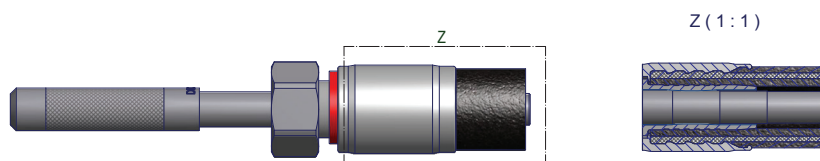


Fig. 3:

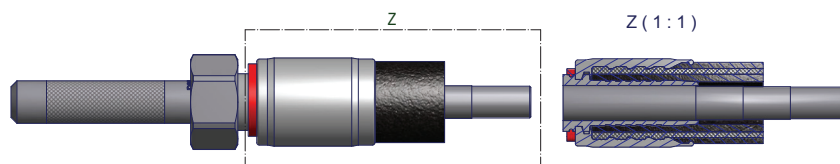
The perfect reduction of the nipple diameter has been reached. The crimp diameter should not be changed any more. It must, however, be checked prior to any change of the hose batch. The reached crimp dimension will correspond to the standard crimp dimension as determined from the press dimension table.



**Checking the Operability of Crimped Hose Connectors by Measuring the Reduction of the Nipple Diameter**
**Fig. 4: Minimum reduction of nipple diameter**

**Fig. 4:**

This illustration shows the minimum permissible reduction of the inside nipple diameter.

In this case, it is still possible to reduce the crimping diameter by a few tenths of a millimeter!

**Fig. 5: No reduction of nipple diameter**

**Fig. 5:**

Crimping did not cause any reduction of the inside nipple diameter. The crimping diameter is too large.

**ATTENTION:** This crimped connector is not functional. There is a risk of a leak or of the hose slipping off the crimped connector.

It is necessary to decrease the crimping diameter by several tenths of a millimeter!

**DORNVOS Test Mandrel Kits  
for the ECOVOS Hose Connector System  
(Hose standards EN 853, EN 856, EN 857)**
**DORNVOS Test Mandrel Kits  
for the MULTIVOS Hose Connector System  
(Hose standards EN 856, SAE 100 R13, SAE 100 R15)**

Hose Size			VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash		
6	1/4"	-4	1DOR1-0625	HCS-DOR-0625
8	5/16"	-5		
10	3/8"	-6		
12	1/2"	-8		
16	5/8"	-10		
19	3/4"	-12		
25	1"	-16		
31	1 1/4"	-20	1DOR1-3250	HCS-DOR-3151
38	1 1/2"	-24		
51	2"	-32		

Hose Size			VOSWINKEL Part Numbers	STAUFF Ordering Codes
DN	inch	Dash		
6	1/4"	-4	1DOR5-0650	HCI-DOR-0651
10	3/8"	-6		
12	1/2"	-8		
16	5/8"	-10		
19	3/4"	-12		
25	1"	-16		
31	1 1/4"	-20		
38	1 1/2"	-24		
51	2"	-32		



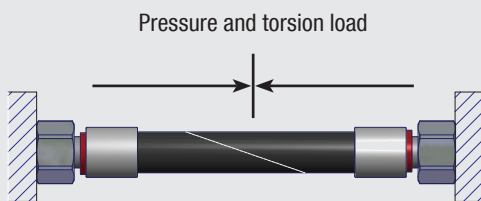




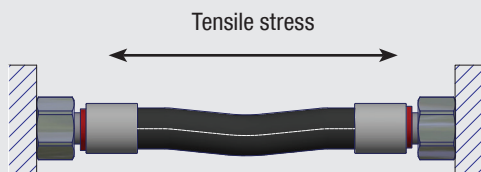
<b>Correct Installation Techniques</b>	<b>190</b>
<b>Pulse Testing</b>	<b>194</b>
<b>Pressure Testing</b>	<b>195</b>
<b>Working Pressures for Hose Connectors</b>	<b>196</b>



Correct Installation Techniques

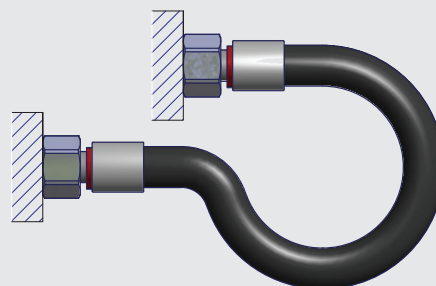


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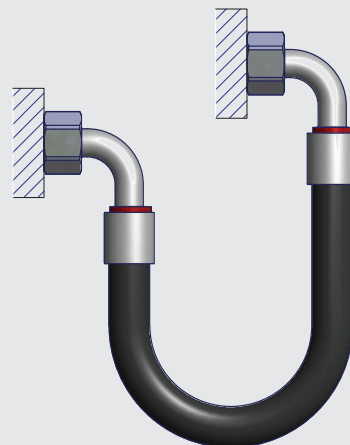


correct

Fig. 1



incorrect



correct

Fig. 2

Avoid twisting the hose. Hoses must be installed in such a way there is no resultant tensile stress except from the own weight of hose (see Fig. 1).

Wherever possible, hoses should be installed in accordance with their natural position, whereby the bending radius must not be less than the minimum permitted bending radius (see Fig. 2).

**Hose assemblies – requirements, installation according to DIN 20066**

Hose assemblies must conform to the requirements of the relevant hose and hose connector standards.

However, if the hose and the hose connectors have different nominal pressures, only the lower nominal pressure may be used as the maximum permitted working pressure.

All hose connectors used must conform to the requirements of the dynamic pressure test as per ISO 6803 when interconnected with the hoses to be used in the application.

Hose connectors must conform to the requirements stipulated in DIN 20066 Part 1.

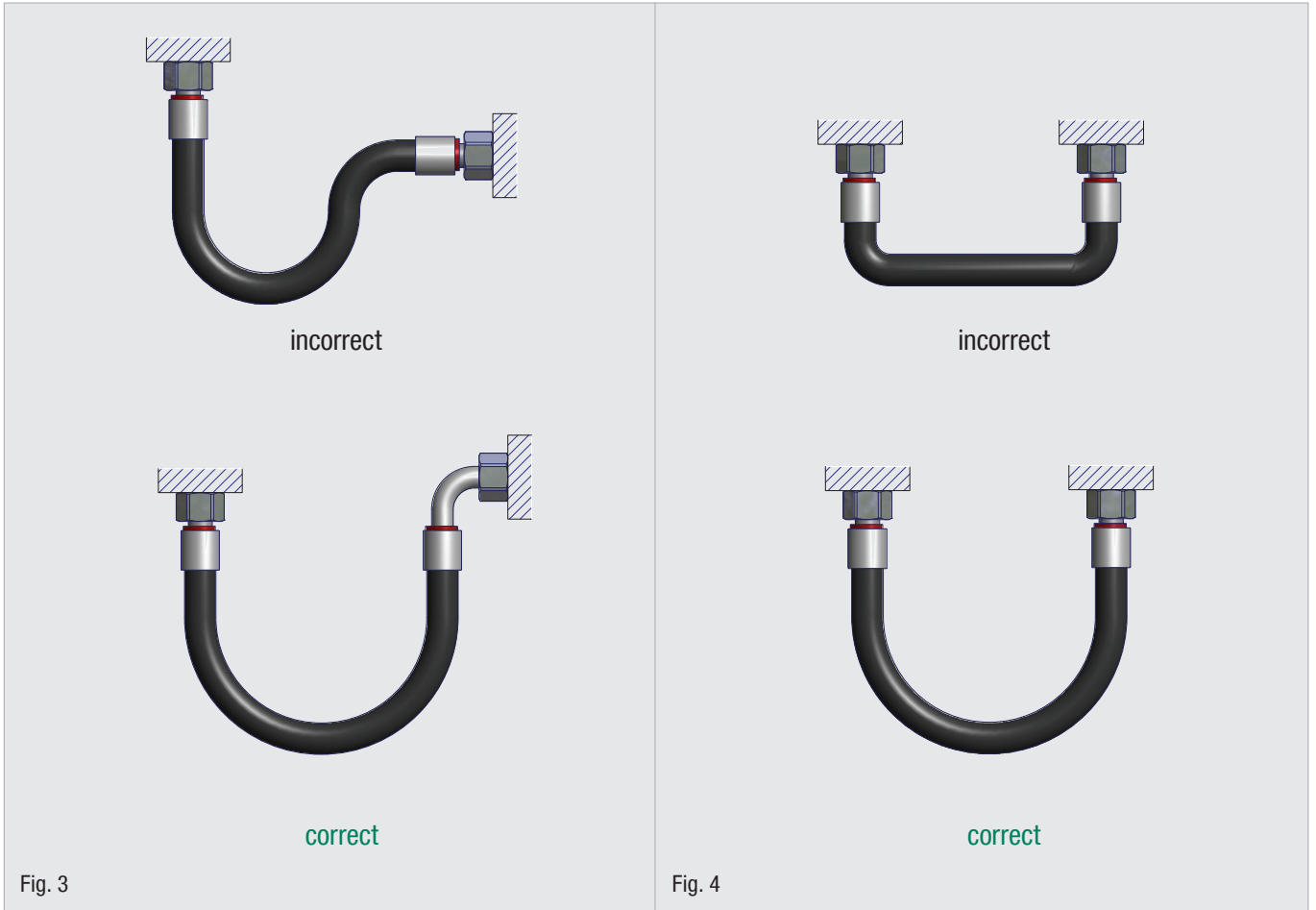
Ready assembled hose assemblies must not display any defects during a test in accordance with ISO 6803. Temporary drip formation between the insert and the socket is permitted during a pressure test with the prescribed test pressure.

All hose assemblies must display the markings of the hose manufacturer, the date of manufacture (year and month) and the max. permitted working pressure for the assembly.

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Correct Installation Techniques



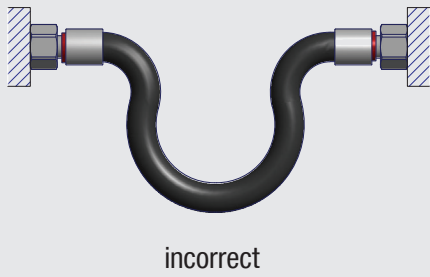
If the hose is to be installed bent, select a length that prevents the design bending of the hose from starting until after a length of approximately 1.5 d.

If necessary, install an anti-kinking device (see Fig 3 and 4).

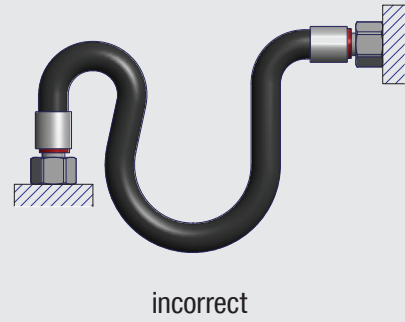
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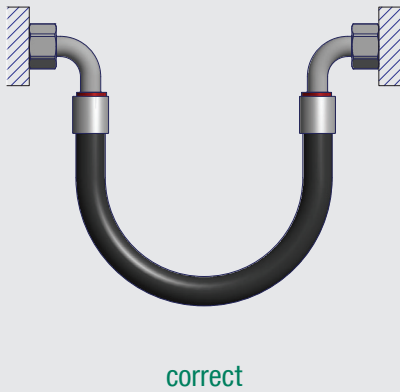
Correct Installation Techniques



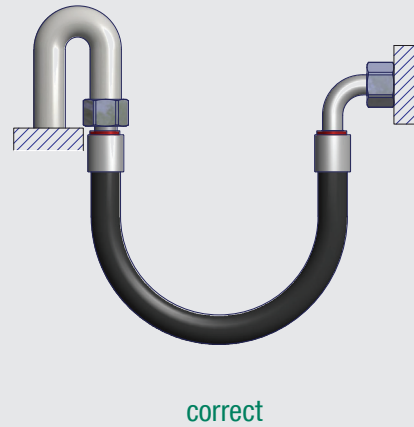
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correct



correct

Fig. 5

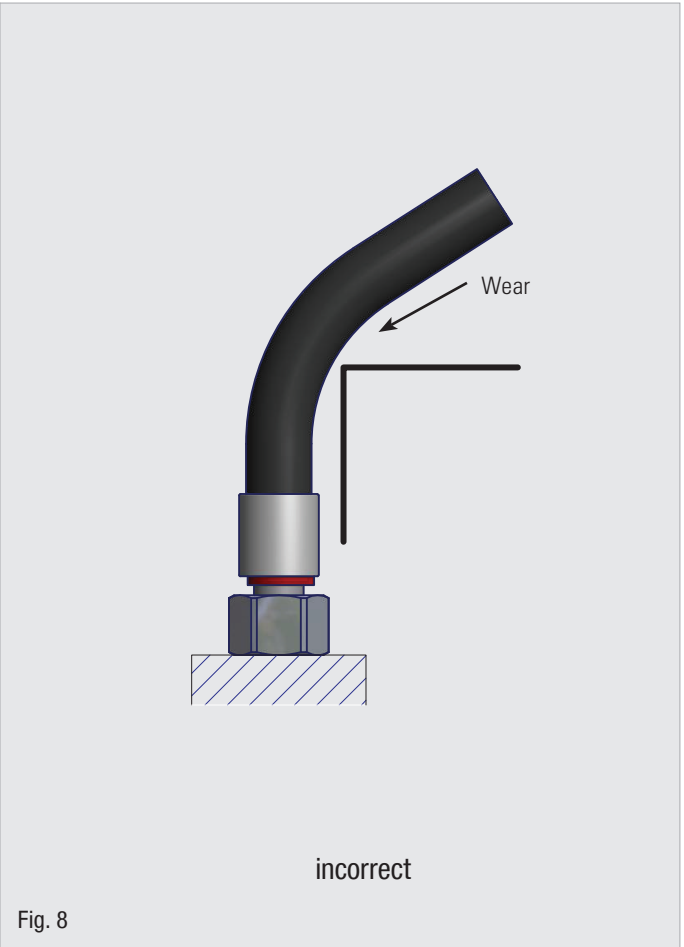
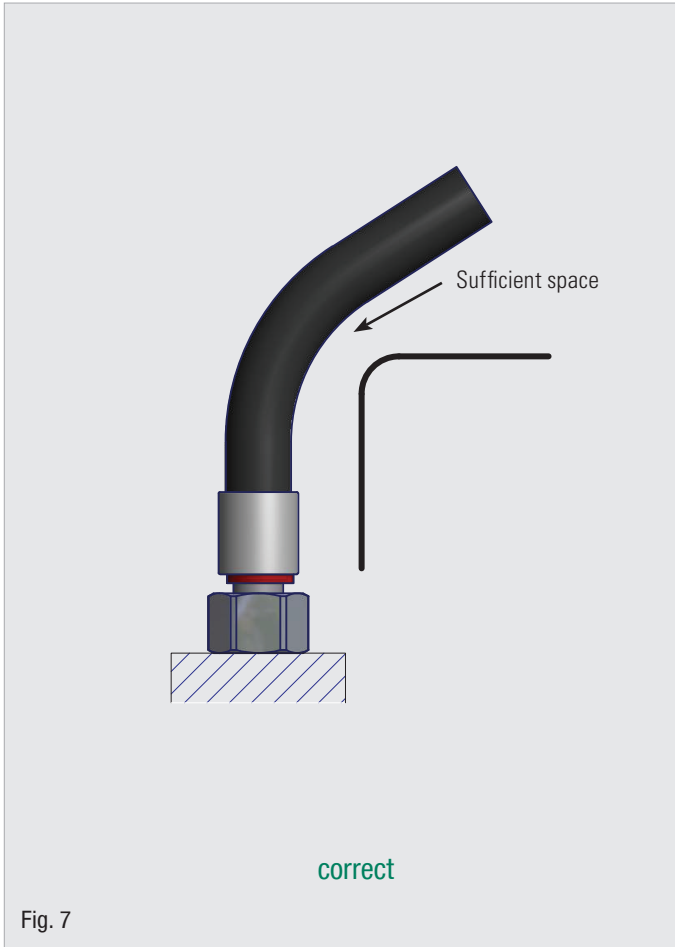
Fig. 6

Use suitable hose connectors or connection pieces to prevent additional loads on the hose (see Fig. 5 and 6).

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Correct Installation Techniques



Avoid external mechanical effects on the hose, and prevent the hoses from rubbing against each other or other components, by installing and attaching them correctly (see Fig. 7).

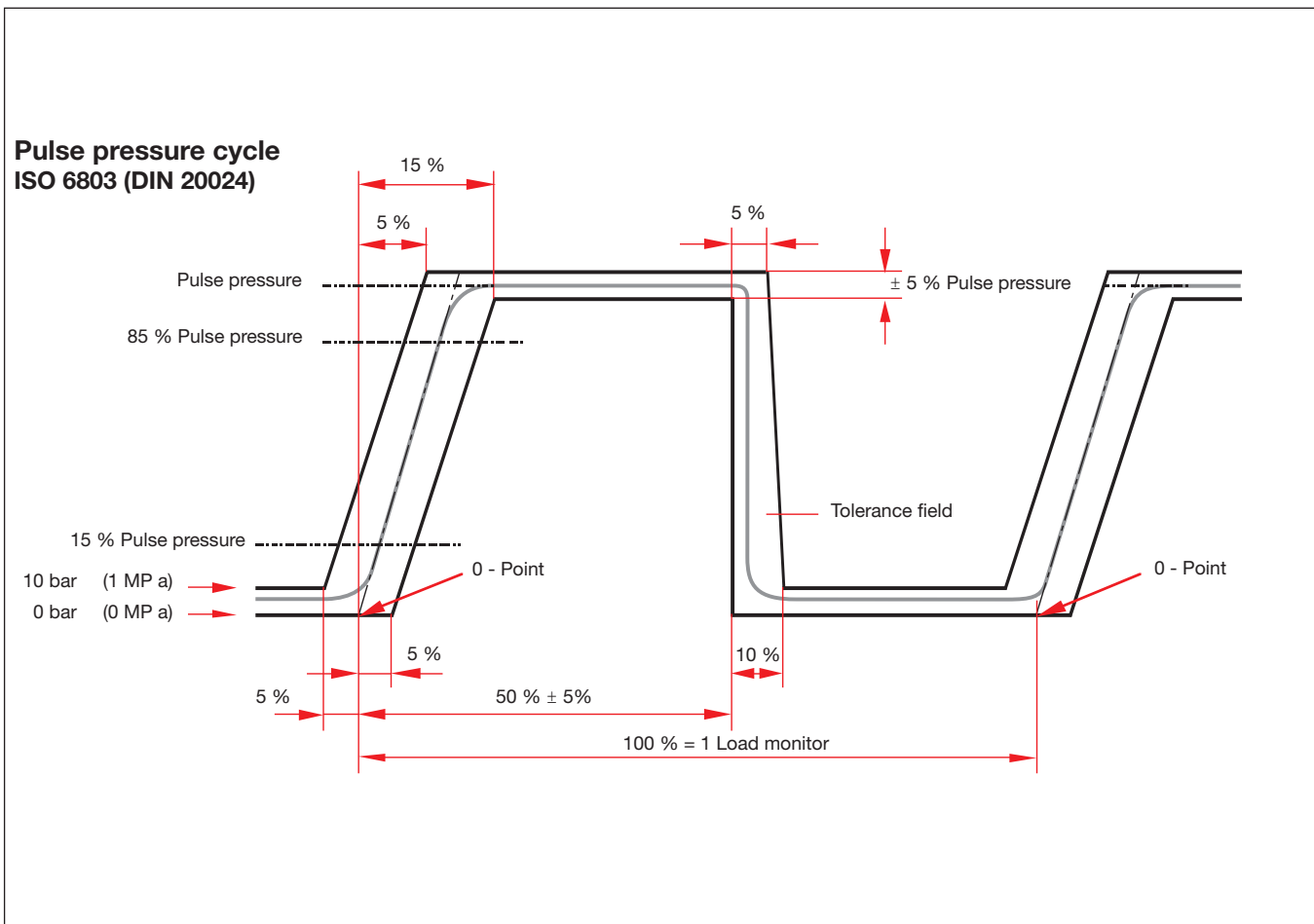
The above requirements, shown here as extracts, must be complied with to guarantee the reliability of hoses and to ensure that their service life is not reduced by additional stress.

If necessary, secure the hoses with protective coverings. Always cover sharp edges (see Fig. 8).

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Pulse Testing



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The pulse test is a service life test for hose assemblies. It comes very close to conditions encountered in practice. VOSWINKEL hose connectors are mounted on hoses of various manufactures and pulse tested in order to guarantee the best possible production quality.

During the test, the test samples are exposed – usually under static bending loads and installation at 90° or 180° - to continually increasing loads between almost zero pressure and a value, depending on the type of hose, of 20% to 33% above working pressure. The load change frequency is 1±0,25 Hz. The decisive statement of the pulse test is the number of load changes until failure of the hose assembly occurs.

The pulse pressure test is made with a testing liquid according to the

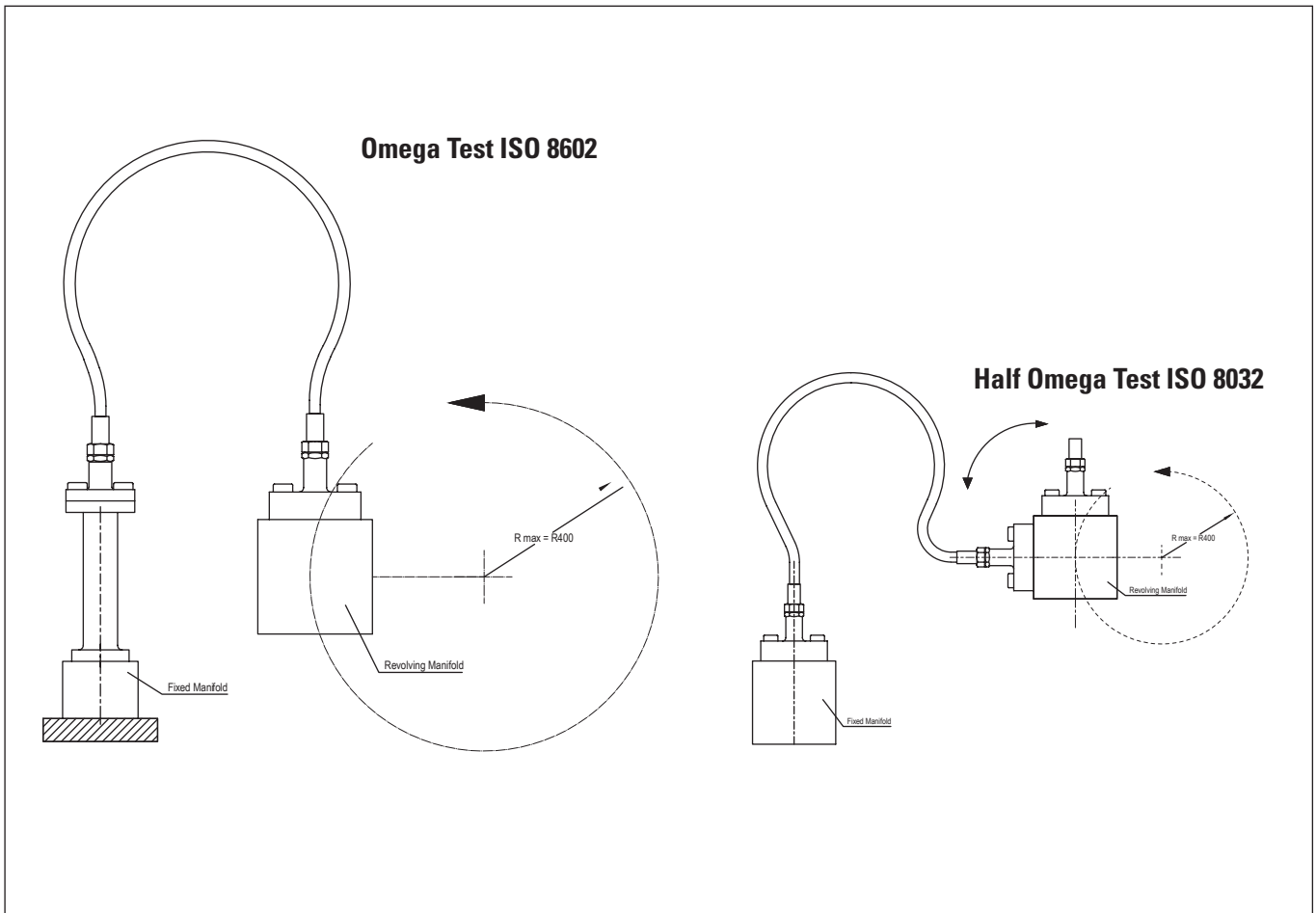
ISO viscosity class 46 and at a test temperature of 100°C or 120°C according to the displayed trapezoid curve.

VOSWINKEL is not only able to realize pulse tests according to ISO 6803 but also pursuant to ISO 6802 (OMEGA TEST), ISO 8032 (HALF OMEGA TEST) with dynamic alternating bending loads, and there is also the opportunity to realize the well known KOMATSU TEST. These dynamic tests can be performed according to customers' requests.

Standard values and other information on pulse test methods can be found in the standards SAE J343, ISO S1436, ISO 8032, ISO 6802 and ISO 6803.






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### Working and Test Pressure

The working pressure corresponds to about 25% of the specified bursting pressure, achieving a safety factor of 4. In case of special hoses or very large nominal diameters the safety factor may be somewhat reduced, but should never be lower than safety factor 3. However, this falls under the responsibility of the hose manufacturers.

The test pressure that every finished hose assembly should be subjected to is generally 70% of the bursting pressure, so that the hose is required to prove a sufficient safety factor during the test.

### Burst Pressure

The burst pressure of a hose line is a theoretic value without use for the operator. The burst pressure indication itself is not very informative due to its various definition types. In practice this value must never be reached - even not approximately - due to the security specifications for each installation.

The test procedures for the hydrostatic test pressure and for the burst pressure test are defined in the standards EN ISO 1402 and SAE J343.



## Working Pressures for Hose Connectors (bar)

Hose Size											
DN	05	06	08	10	12	16	19	25	31	38	51
Dash	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32
Standard Connection Size											
BSP	1/8"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"
UN/UNF	3/8"-24 UNF	7/16"-20 UNF	1/2"-20 UNF	9/16"-18 UNF	3/4"-16 UNF	7/8"-14 UNF	1 1/16"-12 UN	1 5/16"-12 UN	1 5/8"-12 UN	1 7/8"-12 UN	2 1/2"-12 UN
ORFS			9/16"-18 UNF		11/16"-16 UN	13/16"-16 UN	1"-14 UNS	1 3/16"-12 UN	1 7/16"-12 UN	1 11/16"-12 UN	2"-12 UN
NPT	1/8"-27 NPTF	1/4"-18 NPTF		3/8"-18 NPTF	1/2"-14 NPTF		3/4"-14 NPTF	1"-12.5 NPTF	1 1/4"-11.5 NPTF	1 1/2"-11.5 NPTF	2"-11.5 NPTF
Metr. (L)	M12x1,5 Tube Ø 6 mm	M14x1,5 Tube Ø 8 mm	M16x1,5 Tube Ø 10 mm	M18x1,5 Tube Ø 12 mm	M22x1,5 Tube Ø 15 mm	M26x1,5 Tube Ø 18 mm	M30x2 Tube Ø 22 mm	M36x2 Tube Ø 28 mm	M45x2 Tube Ø 35 mm	M52x2 Tube Ø 42 mm	
Metr. (S)	M16x1,5 Tube Ø 8 mm	M18x1,5 Tube Ø 10 mm	M20x1,5 Tube Ø 12 mm	M20x1,5 <sup>1</sup> Tube Ø 12 mm	M24x1,5 Tube Ø 16 mm	M30x2 Tube Ø 20 mm	M36x2 Tube Ø 25 mm	M42x2 Tube Ø 30 mm	M52x2 Tube Ø 38 mm		
Connection Type and Working Pressure (bar)											
CEL	415	400	350	330	275	250	215	165	125	100	
DKOL	415	400	350	330	275	250	215	165	125	100	
CES	630	630	630	630	400	400	400	250	250		
DKOS	630	630	630	630	400	400	400	250	250		
DKK							M30x1,5 63	M38x1,5 63	M45x1,5 63	M52x1,5 63	M65x2 40
SFL					345	345	345	345	272	207	207
SFS					413	413	413	413	413	413	413
AGR	350	350	350	350	315	315	250	200	180	125	80
DKR	350	350	350	350	315	315	250	200	180	125	80
DKOR	400	400	400	400	350	350	315	250	200	160	125
AGJ	345	310	276	276	276	210	210	170	140	105	80
DKJ	345	310	276	276	276	210	210	170	140	105	80
AGN	345	310	276	276	276	210	210	170	140	105	80
ORFS	413	413	413	413	413	413	413	345	345	275	207
RGN(G) <sup>2</sup>	300	270	250	200	180	165	150	135			
Hose Type and Working Pressure (bar)											
2TE EN 854	80	75	68	63	58	50	45	40			
3TE EN 854	160	145	130	110	93	80	70	55	45	40	33
1ST / 1SN / 1SC EN 853 / EN 857	250	225	215	180	180	130	105	88	63	50	40
2ST / 2SN / 2SC EN 853 / EN 857	415	400	350	330	275	250	215	165	125	90	80
4SP EN 856		450		445	415	350	350	280	210	185	165
4SH EN 856						450	420	380	325	290	250
R15 SAE 100 R15						414	414	414	414	414	414

<sup>1</sup> Connection size 14S (M22x1,5) has been replaced by connection size 12S (M20x1,5) in DIN EN 20066.

<sup>2</sup> The indicated working pressure has been determined empirically and under laboratory conditions respectively (burst pressure : 4 x 0,9).



## Working Pressures for Hose Connectors (PSI)

Hose Size											
DN	05	06	08	10	12	16	19	25	31	38	51
Dash	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32
Standard Connection Size											
BSP	1/8"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"
UN/UNF	3/8"-24 UNF	7/16"-20 UNF	1/2"-20 UNF	9/16"-18 UNF	3/4"-16 UNF	7/8"-14 UNF	1 1/16"-12 UN	1 5/16"-12 UN	1 5/8"-12 UN	1 7/8"-12 UN	2 1/2"-12 UN
ORFS			9/16"-18 UNF		11/16"-16 UN	13/16"-16 UN	1"-14 UNS	1 3/16"-12 UN	1 7/16"-12 UN	1 11/16"-12 UN	2"-12 UN
NPT	1/8"-27 NPTF	1/4"-18 NPTF		3/8"-18 NPTF	1/2"-14 NPTF		3/4"-14 NPTF	1"-12.5 NPTF	1 1/4"-11.5 NPTF	1 1/2"-11.5 NPTF	2"-11.5 NPTF
Metr. (L)	M12x1,5 Tube Ø 6 mm	M14x1,5 Tube Ø 8 mm	M16x1,5 Tube Ø 10 mm	M18x1,5 Tube Ø 12 mm	M22x1,5 Tube Ø 15 mm	M26x1,5 Tube Ø 18 mm	M30x2 Tube Ø 22 mm	M36x2 Tube Ø 28 mm	M45x2 Tube Ø 35 mm	M52x2 Tube Ø 42 mm	
Metr. (S)	M16x1,5 Tube Ø 8 mm	M18x1,5 Tube Ø 10 mm	M20x1,5 Tube Ø 12 mm	M20x1,5 <sup>1</sup> Tube Ø 12 mm	M24x1,5 Tube Ø 16 mm	M30x2 Tube Ø 20 mm	M36x2 Tube Ø 25 mm	M42x2 Tube Ø 30 mm	M52x2 Tube Ø 38 mm		
Connection Type and Working Pressure (PSI)											
CEL	6018	5800	5075	4785	3988	3625	3118	2393	1813	1450	
DKOL	6018	5800	5075	4785	3988	3625	3118	2393	1813	1450	
CES	9135	9135	9135	9135	5800	5800	5800	3625	3625		
DKOS	9135	9135	9135	9135	5800	5800	5800	3625	3625		
DKK							M30x1,5 914	M38x1,5 914	M45x1,5 914	M52x1,5 914	M65x2 580
SFL					5000	5000	5000	5000	4000	3000	3000
SFS					6000	6000	6000	6000	6000	6000	6000
AGR	5075	5075	5075	5075	4568	4568	3625	2900	2610	1813	1160
DKR	5075	5075	5075	5075	4568	4568	3625	2900	2610	1813	1160
DKOR	5800	5800	5800	5800	5075	5075	4568	3625	2900	2320	1813
AGJ	5000	5000	4000	4000	4000	3000	3000	2500	2000	1500	1160
DKJ	5000	5000	4000	4000	4000	3000	3000	2500	2000	1500	1160
AGN	5000	5000	4000	4000	4000	3000	3000	2500	2000	1500	1160
ORFS	6000	6000	6000	6000	6000	6000	6000	5000	5000	4000	3000
RGN(G) <sup>2</sup>	4350	3915	3625	2900	2610	2393	2175	1958			
Hose Type and Working Pressure (PSI)											
2TE EN 854	1160	1088	986	914	841	725	653	580			
3TE EN 854	2320	2103	1885	1595	1349	1160	1015	798	653	580	479
1ST / 1SN / 1SC EN 853 / EN 857	3625	3263	3118	2610	2610	1885	1523	1276	914	725	580
2ST / 2SN / 2SC EN 853 / EN 857	6018	5800	5075	4785	3988	3625	3118	2393	1813	1305	1160
4SP EN 856		6525		6453	6018	5075	5075	4060	3045	2683	2393
4SH EN 856						6525	6090	5510	4713	4205	3625
R15 SAE 100 R15						6000	6000	6000	6000	6000	6000

<sup>1</sup> Connection size 14S (M22x1,5) has been replaced by connection size 12S (M20x1,5) in DIN EN 20066.

<sup>2</sup> The indicated working pressure has been determined empirically and under laboratory conditions respectively (burst pressure : 4 x 0,9).





<b>Product-Specific Abbreviations</b>	200
<b>Global Contact Directory</b>	202



## Product-Specific Abbreviations

Abbreviation	Product Category	Product Description	Page
15000	ECOPOS Carbon Steel Hose Connectors	UVOS Skive/Non-Skive Swage Ferrule for Braided and Spiral Hose	14
15011	ECOPOS Carbon Steel Hose Connectors	Non-Skive Swage Ferrule for Braided Hose	16
15011	ECOPOS VA Stainless Steel Hose Connectors	Non-Skive Swage Ferrule for Braided Hose	92
15021	ECOPOS Carbon Steel Hose Connectors	Skive/Non-Skive Swage Ferrule for Braided Hose	17
15021	ECOPOS VA Stainless Steel Hose Connectors	Skive/Non-Skive Swage Ferrule for Braided Hose	93
15031	ECOPOS Carbon Steel Hose Connectors	Skive Swage Ferrule for Braided and Spiral Hose	18
15031	ECOPOS VA Stainless Steel Hose Connectors	Skive Swage Ferrule for Braided and Spiral Hose	94
15037	ECOPOS <sup>+</sup> Interlocking Protection for Hose Connectors	Skive Swage Ferrule for Spiral Hose	88
15211	ECOPOS Carbon Steel Hose Connectors	AGRIVOS Non-Skive Swage Ferrule for Compact Braided Hose	19
15311	ECOPOS Carbon Steel Hose Connectors	CVOS Non-Skive Swage Ferrule for Compact Braided Hose	20
15330	ECOPOS Carbon Steel Hose Connectors	Non-Skive Swage Ferrule for Hose with Textile Insert	21
15330	ECOPOS VA Stainless Steel Hose Connectors	Non-Skive Swage Ferrule for Hose with Textile Insert	95
15415	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Skive Swage Ferrule for Spiral Hose	140
15425	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Skive Swage Ferrule for Spiral Hose	140
15435	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Skive Swage Ferrule for Spiral Hose	141
15445	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Skive Swage Ferrule for Spiral Hose	141
15468	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Skive Swage Ferrule for Spiral Hose	174
AGJ	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male UN/UNF Thread and 74° Taper	50
AGJ	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Male UN/UNF Thread and 74° Taper	117
AGJ	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Male UN/UNF Thread and 74° Taper	151 / 174
AGJG	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male BSPP Thread and 60° Taper	51
AGJG 45°	ECOPOS Carbon Steel Hose Connectors	45° Elbow Insert with Male BSPP Thread and 60° Taper	52
AGJG 90°	ECOPOS Carbon Steel Hose Connectors	90° Elbow Insert with Male BSPP Thread and 60° Taper	53
AGJM	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male Metric Thread and 60° Taper	54
AGJM 90°	ECOPOS Carbon Steel Hose Connectors	90° Elbow Insert with Male Metric Thread and 60° Taper	55
AGN	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male NPTF Thread and 60° Conical Bore	56
AGN	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Male NPTF Thread and 60° Conical Bore	120
AGN	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Male NPTF Thread and 60° Conical Bore	152
AGR	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male BSPP Thread and 60° Conical Bore	47
AGR	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Male BSPP Thread and 60° Conical Bore	116
AGR	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Male BSPP Thread and 60° Conical Bore	150
AGRF	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male BSPP Thread	48
AGRF	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Male BSPP Thread	118
AGRK	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male BSPT Thread	49
AGRK	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Male BSPT Thread	119
AS	ECOPOS <sup>+</sup> Interlocking Protection for Hose Connectors	Mobile Interlocking Protection Ring	88
BEL	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Standpipe	96
BEL 45°	ECOPOS VA Stainless Steel Hose Connectors	45° Elbow Insert with Standpipe	97
BEL 90°	ECOPOS VA Stainless Steel Hose Connectors	90° Elbow Insert with Standpipe	98
BES	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Standpipe	99
BES 45°	ECOPOS VA Stainless Steel Hose Connectors	45° Elbow Insert with Standpipe	100
BES 90°	ECOPOS VA Stainless Steel Hose Connectors	90° Elbow Insert with Standpipe	101
CEL	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male Metric Thread and 24° Conical Bore	22
CEL	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Male Metric Thread and 24° Conical Bore	102
CEL	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Male Metric Thread and 24° Conical Bore	142
CES	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Male Metric Thread and 24° Conical Bore	23
CES	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Male Metric Thread and 24° Conical Bore	103
CES	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Male Metric Thread and 24° Conical Bore	143
DKJ	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Female UN/UNF Thread and 74° Conical Bore	69
DKJ	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Female UN/UNF Thread and 74° Conical Bore	132
DKJ	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Female UN/UNF Thread and 74° Conical Bore	165
DKJ	POWERVOS High-Performance Steel Hose Connectors	Straight Insert with Female UN/UNF Thread and 74° Conical Bore	181
DKJ 45°	ECOPOS Carbon Steel Hose Connectors	45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore	70
DKJ 45°	ECOPOS VA Stainless Steel Hose Connectors	45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore	133
DKJ 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore	166
DKJ 90°	ECOPOS Carbon Steel Hose Connectors	90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore	71
DKJ 90°	ECOPOS VA Stainless Steel Hose Connectors	90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore	134
DKJ 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with Female UN/UNF Thread and 74° Conical Bore	167
DKJG	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Female BSPP Thread and 60° Conical Bore	72
DKJG 45°	ECOPOS Carbon Steel Hose Connectors	45° Elbow Insert with Female BSPP Thread and 60° Conical Bore	73
DKJG 90°	ECOPOS Carbon Steel Hose Connectors	90° Elbow Insert with Female BSPP Thread and 60° Conical Bore	74
DKJM	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Female Metric Thread and 60° Conical Bore	75
DKJM 45°	ECOPOS Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Thread and 60° Conical Bore	76
DKJM 90°	ECOPOS Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Thread and 60° Conical Bore	77
DKK	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and Metal Seat	44
DKK	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and Metal Seat	113
DKK 45°	ECOPOS Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Thread and Metal Seat	45
DKK 90°	ECOPOS Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Thread and Metal Seat	46
DKK 90°	ECOPOS VA Stainless Steel Hose Connectors	90° Elbow Insert with Female Metric Thread and Metal Seat	115
DKL	ECOPOS VA Stainless Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper	104
DKL 45°	ECOPOS VA Stainless Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper	105
DKL 90°	ECOPOS VA Stainless Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper	106
DKOBL	ECOPOS Carbon Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring (with Block Stop)	38
DKOBL 45°	ECOPOS Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring (with Block Stop)	39
DKOBL 90°	ECOPOS Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring (with Block Stop)	40





**Product-Specific Abbreviations**

Abbreviation	Product Category	Product Description	Page
DKOBS	ECOVS Carbon Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring (with Block Stop)	41
DKOBS 45°	ECOVS Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring (with Block Stop)	42
DKOBS 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring (with Block Stop)	43
DKOJ	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Female UN/UNF Thread and 74° Taper / O-Ring	177
DKOJ 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with Female UN/UNF Thread and 74° Taper / O-Ring	177
DKOJ 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with Female UN/UNF Thread and 74° Taper / O-Ring	177
DKOL	ECOVS Carbon Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring	24
DKOL	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring	107
DKOL	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring	144
DKOL 45°	ECOVS Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	26
DKOL 45°	ECOVS VA Stainless Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	108
DKOL 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	145
DKOL 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	28
DKOL 90°	ECOVS VA Stainless Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	109
DKOL 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	146
DKOR	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with Female BSPPP Thread and 60° Taper / O-Ring	136
DKOR	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Female BSPPP Thread and 60° Taper / O-Ring	171
DKOR	POWERVOS High-Performance Steel Hose Connectors	Straight Insert with Female BSPPP Thread and 60° Taper / O-Ring	183
DKOR 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with Female BSPPP Thread and 60° Taper / O-Ring	172
DKOR 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with Female BSPPP Thread and 60° Taper / O-Ring	173
DKOS	ECOVS Carbon Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring	30
DKOS	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring	110
DKOS	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring	147
DKOS	POWERVOS High-Performance Steel Hose Connectors	Straight Insert with Female Metric Nut Thread and 24° Taper / O-Ring	184
DKOS 45°	ECOVS Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	32
DKOS 45°	ECOVS VA Stainless Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	111
DKOS 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	148
DKOS 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	34
DKOS 90°	ECOVS VA Stainless Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	112
DKOS 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with Female Metric Nut Thread and 24° Taper / O-Ring	149
DKR	ECOVS Carbon Steel Hose Connectors	Straight Insert with Female BSPPP Thread and 60° Taper	64
DKR	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with Female BSPPP Thread and 60° Taper	127
DKR	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Female BSPPP Thread and 60° Taper	162
DKR 45°	ECOVS Carbon Steel Hose Connectors	45° Elbow Insert with Female BSPPP Thread and 60° Taper	65
DKR 45°	ECOVS VA Stainless Steel Hose Connectors	45° Elbow Insert with Female BSPPP Thread and 60° Taper	128
DKR 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with Female BSPPP Thread and 60° Taper	163
DKR 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with Female BSPPP Thread and 60° Taper	66
DKR 90°	ECOVS VA Stainless Steel Hose Connectors	90° Elbow Insert with Female BSPPP Thread and 60° Taper	129
DKR 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with Female BSPPP Thread and 60° Taper	164
DKRF	ECOVS Carbon Steel Hose Connectors	Straight Insert with Female BSPPP Thread	67
DKRF	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with Female BSPPP Thread	130
DKRF 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with Female BSPPP Thread	68
DKRF 90°	ECOVS VA Stainless Steel Hose Connectors	90° Elbow Insert with Female BSPPP Thread	131
ORFS	ECOVS Carbon Steel Hose Connectors	Straight Insert with O-Ring Face Seal Connection	57
ORS	ECOVS Carbon Steel Hose Connectors	Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection	78
ORS	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection	135
ORS	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with Female UN/UNF Thread for O-Ring Face Seal Connection	168
ORS 45°	ECOVS Carbon Steel Hose Connectors	45° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection	79
ORS 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection	169
ORS 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection	80
ORS 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with Female UN/UNF Thread for O-Ring Face Seal Connection	170
RGN	ECOVS Carbon Steel Hose Connectors	Straight Metric Banjo Insert	82
RNGG	ECOVS Carbon Steel Hose Connectors	Straight Imperial Banjo Insert	83
SFC	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with SAE Flange Adaptor (9000 PSI Series)	159
SFC 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with SAE Flange Adaptor (9000 PSI Series)	160
SFC 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with SAE Flange Adaptor (9000 PSI Series)	161
SFL	ECOVS Carbon Steel Hose Connectors	Straight Insert with SAE Flange Adaptor (3000 PSI Series)	58
SFL	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with SAE Flange Adaptor (3000 PSI Series)	121
SFL	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with SAE Flange Adaptor (3000 PSI Series)	153 / 175
SFL 45°	ECOVS Carbon Steel Hose Connectors	45° Elbow Insert with SAE Flange Adaptor (3000 PSI Series)	59
SFL 45°	ECOVS VA Stainless Steel Hose Connectors	45° Elbow Insert with SAE Flange Adaptor (3000 PSI Series)	122
SFL 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with SAE Flange Adaptor (3000 PSI Series)	154 / 175
SFL 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with SAE Flange Adaptor (3000 PSI Series)	60
SFL 90°	ECOVS VA Stainless Steel Hose Connectors	90° Elbow Insert with SAE Flange Adaptor (3000 PSI Series)	123
SFL 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with SAE Flange Adaptor (3000 PSI Series)	155 / 175
SFS	ECOVS Carbon Steel Hose Connectors	Straight Insert with SAE Flange Adaptor (6000 PSI Series)	61
SFS	ECOVS VA Stainless Steel Hose Connectors	Straight Insert with SAE Flange Adaptor (6000 PSI Series)	124
SFS	MULTIVOS High-Pressure Carbon Steel Hose Connectors	Straight Insert with SAE Flange Adaptor (6000 PSI Series)	156 / 176
SFS 45°	ECOVS Carbon Steel Hose Connectors	45° Elbow Insert with SAE Flange Adaptor (6000 PSI Series)	62
SFS 45°	ECOVS VA Stainless Steel Hose Connectors	45° Elbow Insert with SAE Flange Adaptor (6000 PSI Series)	125
SFS 45°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	45° Elbow Insert with SAE Flange Adaptor (6000 PSI Series)	157 / 176
SFS 90°	ECOVS Carbon Steel Hose Connectors	90° Elbow Insert with SAE Flange Adaptor (6000 PSI Series)	63
SFS 90°	ECOVS VA Stainless Steel Hose Connectors	90° Elbow Insert with SAE Flange Adaptor (6000 PSI Series)	126
SFS 90°	MULTIVOS High-Pressure Carbon Steel Hose Connectors	90° Elbow Insert with SAE Flange Adaptor (6000 PSI Series)	158 / 176
SN-WC	ECOVS Carbon Steel Hose Connectors	Union Nut for Straight Insert with Pressure Washer Connector	81
WCC	ECOVS Carbon Steel Hose Connectors	Straight Insert with Pressure Washer Connector	81
WCS	ECOVS Carbon Steel Hose Connectors	Straight Insert with Pressure Washer Connector	81





## Global Contact Directory

STAUFF products and services are globally available through wholly-owned subsidiaries and a tight network of authorised distributors and representatives in all major industrial regions of the world.

Contact information on this page may be subject to changes and additions over time. Frequently updated and complete contact information can always be found at [www.stauff.com](http://www.stauff.com).

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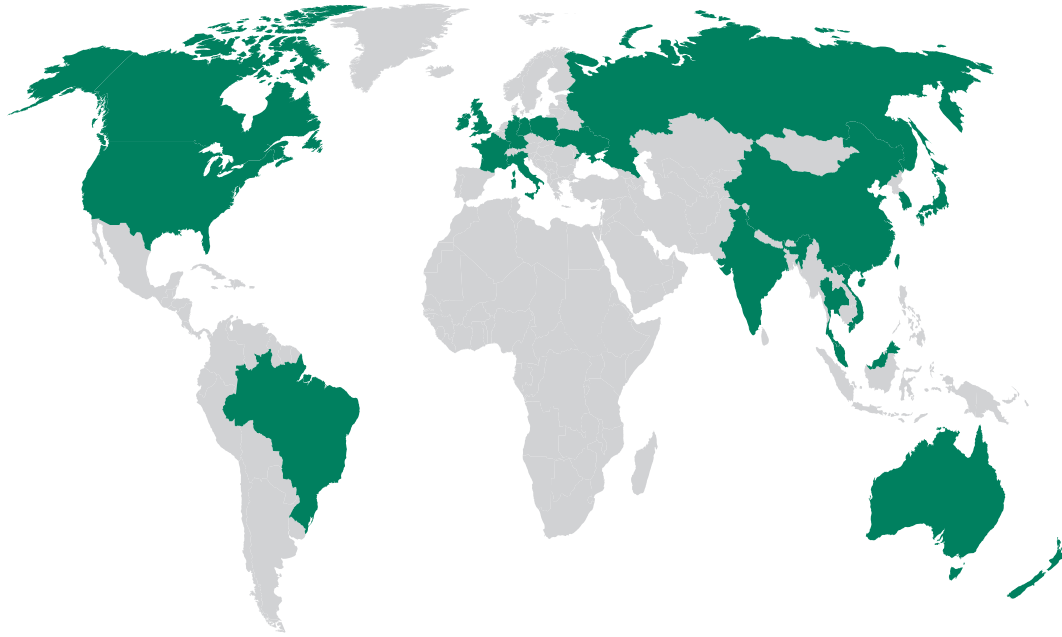
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Introduction

## ECOVOS™

Carbon Steel Hose Connectors

## ECOVOS+

Mobile Interlocking Protection

## ECOVOS™ VA

Stainless Steel Hose Connectors

## MULTIVOS™

High-Pressure Carbon Steel Hose Connectors

## POWERS™

High-Pressure High-Performance Steel Hose Connectors

## DORNVOS™

Test Mandrels and Mandrel Kits

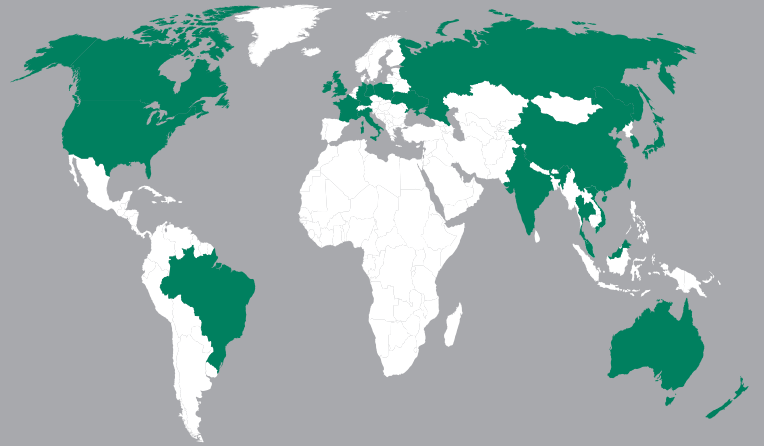
Technical Appendix

Appendix



## Catalogue 4

## VOSWINKEL Hose Connectors



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You can find detailed contact information on the last two pages of this product catalogue or at

[www.stauff.com](http://www.stauff.com)