

HYDRAULIC HOSES



CHARVÁT®

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HYDRAULIC HOSES

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HYDRAULIC HOSES

general information

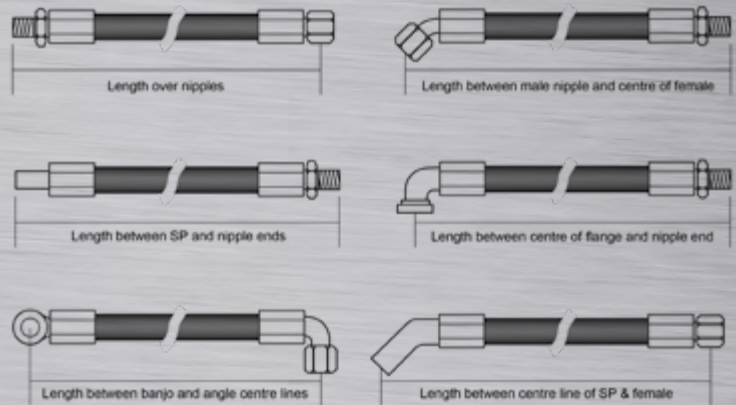
HOW TO ORDER AND DETERMINE CORRECT ASSEMBLY LENGTH



2SN	10	1.250	CEL-M18x1,5	DKOL-M16x1,5	xxx	GT-45
Type of hoses	DN - inside diameter	Length	Type of coupling - left side	Type of couplings - right side	Angle with elbow fittings	Protection

For most assemblies, the correct assembly length may be determined by direct measurement of the equipment or a drawing. Minimum bend radius as shown in the hose specification tables should be observed.

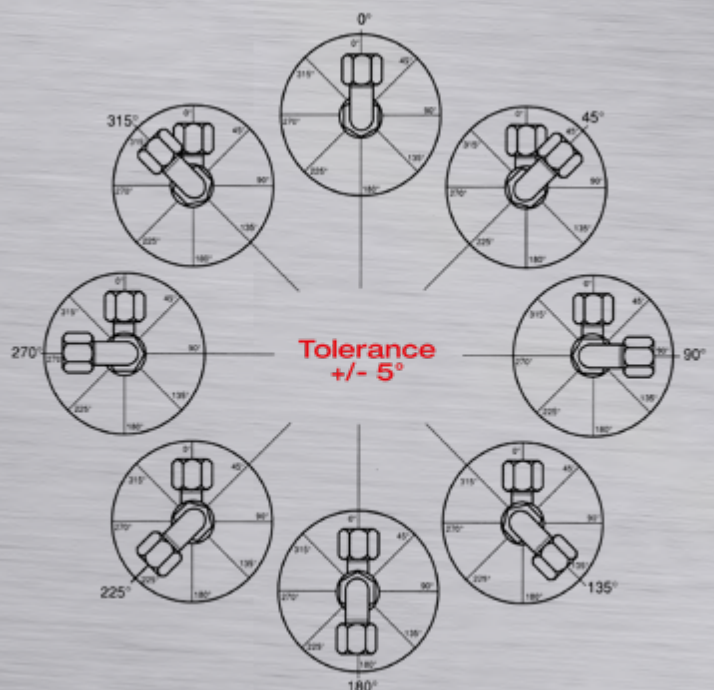
To determine the length of hose needed in making assemblies with permanent or reusable couplings, subtract Dimension „B“ (Cut off factor) for each coupling from the required overall assembly length. Dimension „B“ may be found in the coupling specification tables.



CALCULATING THE ANGLE SETTINGS

The angle settings of hose assemblies with elbow connectors at either end needs to be very carefully determined. Use the following instructions and illustration guidelines to ensure accurate measurement

- Look along the hose assembly, with the rear connector away from the body and pointing upwards.
- Now specify how many degrees the front connector is rotated in a clockwise direction.
- Acceptable Tolerance +/- 5°.



HYDRAULIC HOSES

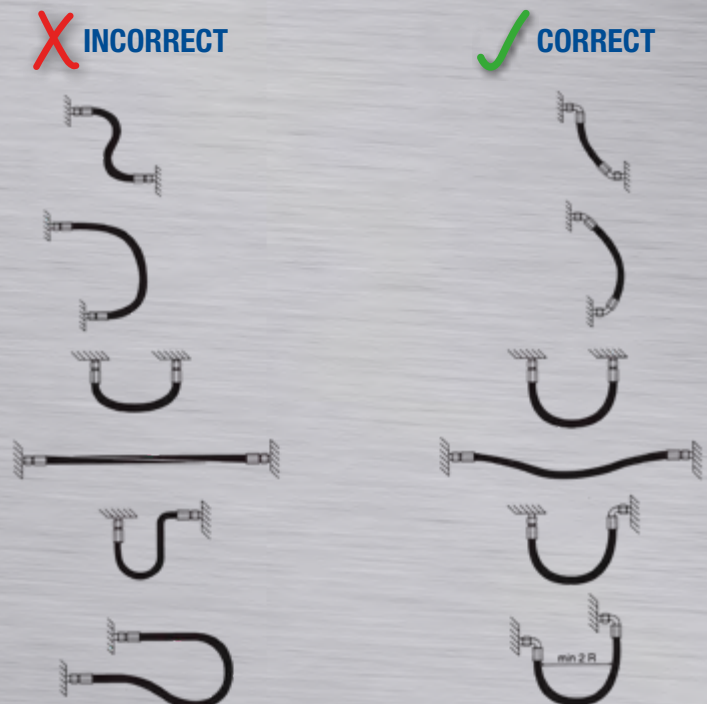
general information

TOLERANCES OF LENGHT OF HOSE ASSEMBLIES (ACC. TO DIN 20066)

Lenght mm	Tolerance		
	Up to and including DN25	Over DN25 and including DN51	Over DN51
up to and including 630	+7 mm	+12 mm	+25 mm
	-3 mm	-4 mm	-6 mm
over 630 and including 1.250	+12 mm	+20 mm	+25 mm
	-4 mm	-6 mm	-6 mm
over 1.250 and including 2.500	+ 20 mm	+ 25 mm	+ 25 mm
	-6 mm	-6 mm	-6 mm
over 2.500 and including 8.000	+1,5%		
	-0,5%		
over 8.000	+3%		
	-1%		

CORRECT INSTALLATION TECHNIQUES

- Under pressure, alterations of +2 % to +4 % can occur in the length of hose assemblies.
- Hoses should therefore be installed with slack or curves.
- Hose assemblies should never be installed twisted (no torsion).
- Hose assemblies should not be bent excessively – use elbow connectors instead
- Note minimum bend radius.
- If vertical displacement occurs, allow for amount of travel.
- Protect from external damage (use protective spirals).



HYDRAULIC HOSES

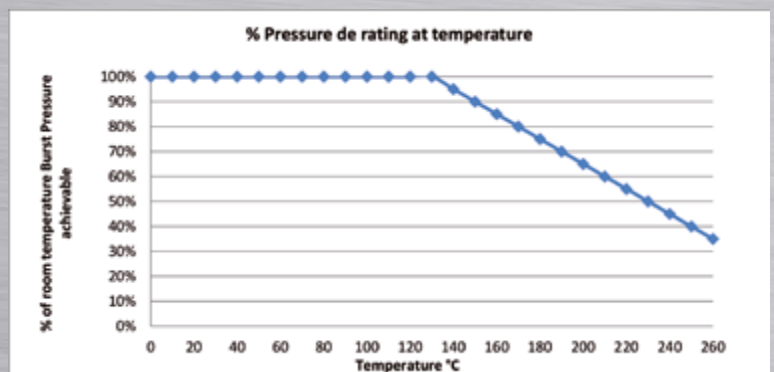
general information

WORKING PRESSURES (BAR)

DN	05	06	08	10	12	16	19	25	31	38	51
inch	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1.1/4	1.1/2	2
Dash	-03	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32
1SN		225	215	180	160	130	105	88	63	50	40
2SN		400	350	330	275	250	215	165	125	90	80
1SN EHT		225	215	180	160	130	105	88	63	50	40
1SC		225	215	180	160	130	105	88		52	
2SC		400	350	330	275	350	215	165		100	90
SAE100R16S		400	350	330	275	250	215	165			
SAE100R17		210	210	210	210	210	210	210			
1SN-K		290	250	230	200	150	125	110	100		
2SN-K		450	420	385	350	290	280	200	175		
1TE	25	25	20	20	16	16	12	12			
2TE	80	75	68	63	58	50	45	40	35	30	
3TE	160	145	130	110	93	80	70	55	45	40	33
MTH1	325	300	240	225	190	150	130	105	70		
MTH2		400	350	330	275	350	215	165			
OL5	200	145	120	115	80						
OL7	210	200	190	175	140	105	90	70			
OL8	350	350	325	280	245	195	165	145			
SAE100R4							21	17	14	10,5	7
SAE100R4-FLEX							21	17	14	10	7
PTFE *		224	218	183	161	114	103	80			
PTFE-VRAP *		172		138	103	83	69	46	34	30	23
1SN-SEMPERJET		250	220	220	220	130					
2SN-SEMPERJET		400	400	400	400						
4SP		450	445	425	350	350	320	210	185	165	
3SPC				500	470	410	375	310			
4SH							420	380	350	290	250
SAE100R15							420	420	420	420	420
FLEXLINE5000							380	350	350	350	350
FLEXLINE6000							420	420	420	420	420

* Temperature - Pressure PTFE hoses

The chart below gives a general estimated de-rating of pressure of a PTFE lined stainless braided hose as temperature increases.



HYDRAULIC HOSES

general information

MODULAR SYSTEM FOR HYDRAULIC HOSES

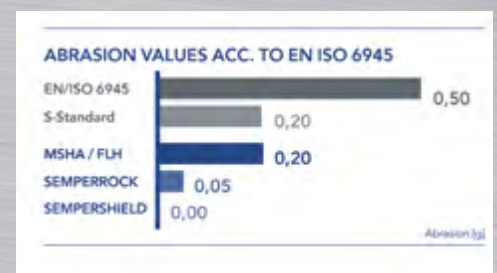


1 HOSES	2 COVERS	3 BRANDINGS
ONE WIRE BRAID	STANDARD COVER	EMBOSSSED BRANDING
TWO WIRE BRAID	Improved wear and abrasion resistance compared to EN/ISO requirements	Standard for Wire Braid Hoses (Except Shield cover), Pressure Washer Hoses, Spiral Hoses with DSK Cover.
SPECIALITIES WIRE BRAID	Improved ozone resistance compared to EN/ISO requirements	MYLAR TAPE BRANDING
MULTISPIRAL	MSHA COVER	Standard for spiral hoses, Wire braid Hoses with Shield Cover.
SPECIALITIES MULTISPIRAL	Mine Safety and Health Administration Standard Cover for Spiral Hoses	INKJET BRANDING
	Flame retardant	Standard for 1SN EHT, Agrofex, Semperpilot
	ROCK COVER	
	Very high wear and abrasion resistance	
	Very high ozone resistance	
	Very high weather and salt water resistance	
	Flame retardant	
	MSHA approved	
	SHIELD COVER	
	Double layer construction - rubber cover with UHMPE foil	
	Outstanding wear and abrasion resistance	
	Outstanding ozone and UV resistance	
	MSHA approved	

HIGH ABRASION RESISTANT HOSES

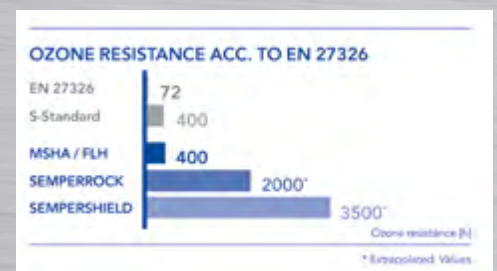
COVER ROCK - 1SN, 2SN, 1SC, 2SC, R16, R17, 1SN-K, 2SN-K, 3SPC, 4SP, 4SH

Benefits from excellent ozone, UV, high temperature and salt water resistance. In addition this high specification product meets the demanding requirements of the underground coal mining industry.



COVER SHIELD - 1SSK, SSC, SSP, SSH

Hose is known for its excellent wear and ozone resistance. This is achieved by a double layer construction with rubber cover and UHMW foil.



*) tested at medium Hose Dimension at 2000 cycles

HYDRAULIC HOSES

general information

THREAD TYPES

Thread Outside - Ø (mm)	Thread pitch	Thread types					Minor diameter off nut tread - Ø (mm)
		BSP (G/R)	Metric	UN (DKJ)	UN (ORFS)	NPT	
		DKR, AGR	DKOL, CEL, DKOS, CES	DKJ, AGJ	ORFS, ORS	AGN	
9,3-9,7	28 TPI	1/8"					8,6-8,8
9,7-9,9	x1,5		M10x1,5				8,4-8,7
9,9-10,2	27 TPI					1/8"	8,4-8,8
10,9-11,1	20 TPI			7/16"-20			9,7-10,0
11,6-11,9	x1,5		M12x1,5				10,4-10,7
12,5-12,7	20 TPI			1/2"-20			11,3-11,6
12,9-13,1	19 TPI	1/4"					11,4-11,9
13,4-13,7	18 TPI					1/4"	10,9-11,3
13,6-13,9	x1,5		M14x1,5				12,4-12,7
14,0-14,3	18 TPI			9/16"-18	9/16"-18		12,8-13,1
15,6-15,9	x1,5		M16x1,5				14,4-14,7
16,3-16,6	19 TPI	3/8"					14,9-15,4
16,8-17,1	18 TPI					3/8"	14,2-14,6
17,2-17,4	16 TPI				11/16"-16		15,7-16,1
17,6-17,9	x1,5		M18x1,5				16,4-16,7
18,8-19,0	16 TPI			3/4"-16			17,3-17,7
19,6-19,9	x1,5		M20x1,5				18,4-18,7
20,4-20,6	16 TPI				13/16"-16		18,9-19,3
20,5-20,9	14 TPI	1/2"					18,6-19,1
21,0-21,3	14 TPI					1/2"	17,8-18,2
21,6-21,9	x1,5		M22x1,5				20,4-20,7
21,9-22,2	14 TPI			7/8"-14			20,3-20,7
22,6-22,9	14 TPI	5/8"				5/8"	20,6-21,1
23,6-23,9	x1,5		M24x1,5				22,4-22,7
25,1-25,4	14 TPI				1"-14		23,4-23,8
25,6-25,9	x1,5		M26x1,5				24,4-24,7
26,3-26,6	14 TPI	3/4"					24,1-24,6
26,6-26,9	14 TPI					3/4"	23,1-23,5

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Thread Outside - Ø (mm)	Thread pitch	Thread types					Minor diameter off nut tread - Ø (mm)
		BSP (G/R)	Metric	UN (DKJ)	UN (ORFS)	NPT	
		DKR, AGR	DKOL, CEL, DKOS, CES	DKJ, AGJ	ORFS, ORS	AGN	
26,7-26,9	12 TPI			1.1/16"-12			24,7-25,2
29,6-29,9	x2		M30x2				27,8-28,2
29,6-29,9	x1,5		M30x1,5				28,4-28,7
29,8-30,1	12 TPI			1.3/16"-12	1.3/16"-12		27,9-28,3
33,0-33,2	11 TPI	1"					30,3-30,9
33,0-33,3	12 TPI			1.5/16"-12			31,0-31,5
33,0-33,4	11,5 TPI					1"	29,0-29,3
33,6-25,9	x2		M36x2				33,8-34,2
35,6-35,9	x1,5		M36x1,5				34,4-34,7
36,2-36,5	12 TPI				1.7/16"-12		34,2-34,7
37,6-37,9	x1,5		38x1,5				36,4-36,7
40,9-41,2	12 TPI			1.5/8"-12			39,0-39,4
41,6-41,9	11 TPI	1.1/4"					39,0-39,6
41,6-41,9	x2		M42x2				39,8-40,2
41,8-42,1	11,5 TPI					1.1/4"	37,7-38,0
42,5-42,8	12 TPI				1.11/16"-12		40,6-41,0
44,6-44,9	x2		M45x2				42,8-43,2
44,6-44,9	x1,5		M45x1,5				43,4-43,7
47,3-47,6	12 TPI			1.7/8"-12			45,3-45,8
47,4-47,8	11 TPI	1.1/2"					44,8-45,5
47,8-48,2	11,5 TPI					1.1/2"	43,8-43,1
50,5-50,8	12 TPI				2"-12		48,5-49,0
51,6-51,9	x2		M52x2				49,8-50,2
51,6-51,9	x1,5		M52x1,5				50,4-50,7
59,3-59,6	11 TPI	2"					56,7-57,3
60,0-60,3	11,5 TPI					2"	55,8-56,2
63,2-63,5	12 TPI			2.1/2"-12			61,2-61,7
64,6-64,9	x2		M65x2				62,8-63,2

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SURFACE COATINGS

CHROMIUM (VI)-FREE STANDARD SURFACE COATING Fe//Zn8//Cn/T2

- Standard corrosion protection for the outer surfaces of all product in accordance with DIN EN ISO 19598 Fe//Zn8//Cn/T2
- The surface coating is based on the electroplating of the base material followed by chromium (IV)-free thick-film passivation and an additional seal
- Coat thickness: min. 8µm, appearance of the surface: silvery, iridescent
- Resistant against base metal corrosion (red rust) at least in line with 264h as per DIN EN ISO 19598

ZINC/NICKEL SURFACE COATING Fe//ZnNi8//Cn/T2

- Corrosion protection for the outer surfaces of the products in accordance with DIN EN ISO 19598 Fe//ZnNi8//Cn/T2
- The surface coating is based on an electrolytically deposited zinc-nickel alloy of the base material followed by chromium (IV)-free thick-film passivation and an additional wax-free seal
- Coat thickness: min. 8µm, appearance of the surface: metallic grey, matte
- Resistant against base metal corrosion (red rust) at least in line with 720h according to DIN EN ISO 19598



THE SPECIAL FEATURES OF THE SURFACE PROPERTIES INDICATED BELOW ARE TECHNOLOGICAL PHENOMENA, CHARACTERISTICS AND QUALITIES THAT DO NOT REPRESENT A PRODUCT DEFECT AND ARE THEREFORE NOT CONSIDERED EQUIVALENT TO A MATERIAL DEFECT

1. The interior of our metallic, electroplated products is not coated as part of the process. As a result, corrosion may arise depending on transport and storage, but this does not have any technical influence on the product properties and their use. Products, which are galvanized on the rack may display imperfections in the suspension area.
2. The crimping of ferrules may result in surface spalling of the galvanic coatings which has no significant effect on corrosion protection.
3. Excess solder on the exterior and interior do not restrict the functional characteristics of the product, are permanently and metallurgically bonded to the component and do not reduce the quality of the surface coating.
4. Silica residues may arise on weld seams as a result of the process used. These do not reduce the quality of the surface coating.
5. Bent or formed products, such as pipelines, may contain impressions of the tools, which do not represent products defects.

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CLEANLINESS SPECIFICATIONS ACCORDING TO ISO 16232/ VDA19

Cleanliness Specifications ISO 16232 is a standard published by the International Organization for Standardization (ISO), which covers the methods to be used for extracting, analyzing and expressing results for cleanliness levels. Some of these methods include: agitation, pressure rinsing, ultrasonic techniques, utilization of a test bench, gravimetric and microscopic analysis. VDA-19 is the European counterpart to ISO 16232 as it relates to automotive manufacturing. Companies in the automotive, agricultural and construction machine industry apply and use these procedures to determine the technical cleanliness.

PARTICLE CONCENTRATION CLASSES (TABLE I)

Concentration class	Number of particles per 1.000 cm ² (A) or per 100 cm ³ (V)	
	More than	up to
00	-	0
0	0	1
1	1	2
2	2	4
3	4	8
4	8	16
5	16	32
6	32	64
7	64	130
8	130	250
9	250	500
10	500	1 x 10 ³
11	1 x 10 ³	2 x 10 ³
12	2 x 10 ³	4 x 10 ³
13	4 x 10 ³	8 x 10 ³
14	8 x 10 ³	16 x 10 ³
15	16 x 10 ³	32 x 10 ³
16	32 x 10 ³	64 x 10 ³
17	64 x 10 ³	130 x 10 ³
18	130 x 10 ³	250 x 10 ³
19	250 x 10 ³	500 x 10 ³
20	500 x 10 ³	1 x 10 ⁶
21	1 x 10 ⁶	2 x 10 ⁶
22	2 x 10 ⁶	4 x 10 ⁶
23	4 x 10 ⁶	8 x 10 ⁶
24	8 x 10 ⁶	16 x 10 ⁶

PARTICLE SIZE CLASSES (TABLE II)

Size class	Size x [µm]
B	5 ≤ x < 15
C	15 ≤ x < 25
D	25 ≤ x < 50
E	50 ≤ x < 100
F	100 ≤ x < 150
G	150 ≤ x < 200
H	200 ≤ x < 400
I	400 ≤ x < 600
J	600 ≤ x < 1.000
K	1.000 ≤ x < 1.500
L	1.500 ≤ x < 2.000
M	2.000 ≤ x < 3.000
N	3.000 ≤ x

COMPONENT CLEANLINESS CODE (CCC)

Indication of the Component Cleanliness Code CCC with regard to wetted volume V or wetted surface A.

V = wetted volume, A = wetted surface

Size class according to table II

Concentration class according to table I

$$CCC = A (F-H12/ I6/ J4/ K00)$$

HYDRAULIC HOSES



HOSES SN, 
SC, TE, PTFE,
THERMOPLASTIC
HOSES, R4

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,

1SN

Wire Braid Hydraulic Hose meets EN 853 1 SN, SAE 100R1 and ISO 1436 1SNR1

2SN

Wire Braid Hydraulic Hose meets EN 853 2 SN, SAE 100R2 and ISO 1436 2SNR2

1SN EHT

Wire Braid Hydraulic Hose meets EN 853 1 SN, with Hot Oil Resistant Hose Liner

1SC

Compact Hydraulic Hose Construction acc. To EN857 1SC

2SC

Compact Hydraulic Hose Construction acc. To EN857 2SC

SAE 100 R16S

Compact Hydraulic Hose Construction acc. to SAE 100 R16 S

SAE 100 R17

Compact Hydraulic Hose Isobaric Construction acc. to SAE 100 R17

1SN-K

Compact Hydraulic Hose Construction SEMPERPAC 1SN-K

2SN-K

Compact Hydraulic Hose Construction SEMPERPAC 2SN-K

1TE

Textile Braid Hydraulic Hose meets EN 854 1TE, ISO 4079-1

2TE

Textile Braid Hydraulic Hose meets EN 854 2TE, ISO 4079-1

3TE

Textile Braid Hydraulic Hose meets EN 854 3TE, ISO 4079-1

MTH1

Thermoplastic Hydraulic Hose MTH1

MTH2

Thermoplastic Hydraulic Hose MTH2

OL5

Thermoplastic Medium Pressure Hydraulic Hose

OL7

Thermoplastic Medium Pressure Hydraulic Hose exceeds SAE 100 R7

OL8

Thermoplastic High Pressure Hydraulic Hose exceeds SAE 100 R8

SAE 100 R4

Oil Return Low Pressure Hose meets SAE 100 R4

SAE 100 R4 FLEX

Flexible Oil Return Low Pressure Hose meets SAE 100 R4

PTFE

Smoothbore PTFE Tube With High Tensile SS304 Braid

PTFE-CONVO

Helically Convoluted PTFE Tube with High Tensile SS304 Braid

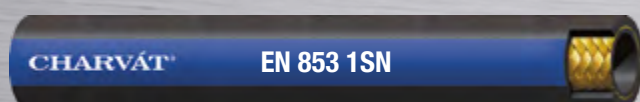
SEMPERJET 1SN

High Pressure Hose for Pressure Washer Applications, exceeds EN 1829-2

SEMPERJET 2SN

High Pressure Hose for Pressure Washer Applications, exceeds EN 1829-2

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



1SN

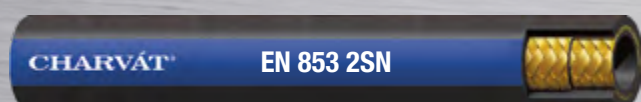
WIRE BRAID HYDRAULIC HOSE MEETS

EN 853 1 SN, SAE 100R1 and ISO 1436 1SNR1

Standard	EN 853 1SN, SAE 100 R1AT, ISO 1436-1
Tube	Black synthetic rubber resistant to oils
Reinforcement	One high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover ROCK (1SN-ROCK)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	13,0	225	3 265	900	13 000	100	0,19	1SN-06
08	5/16"	-05	8,3	14,7	215	3 120	860	12 500	115	0,22	1SN-08
10	3/8"	-06	9,9	16,8	180	2 610	720	10 500	125	0,28	1SN-10
12	1/2"	-08	13,0	20,0	160	2 320	640	9 280	180	0,36	1SN-12
16	5/8"	-10	16,4	23,2	130	1 885	520	7 560	200	0,44	1SN-16
19	3/4"	-12	19,5	27,1	105	1 525	420	6 000	240	0,56	1SN-19
25	1"	-16	26,0	35,1	88	1 275	352	5 100	300	0,83	1SN-25
31	1.1/4"	-20	32,5	42,5	63	915	252	3 680	420	1,07	1SN-31
38	1.1/2"	-24	38,7	50,1	50	725	200	2 900	500	1,42	1SN-38
51	2"	-32	51,1	64,1	40	580	160	2 320	630	2,01	1SN-51

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



2SN

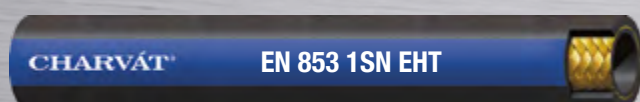
WIRE BRAID HYDRAULIC HOSE MEETS

EN 853 2 SN, SAE 100R2 and ISO 1436 2SNR2

Standard	EN 853 2SN, SAE 100 R2AT, ISO 1436-2
Tube	Black synthetic rubber resistant to oils
Reinforcement	Two high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (2SN-ROCK) and MSHA (2SN-MSHA)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	14,4	400	5 800	1600	23 200	100	0,31	2SN-06
08	5/16"	-05	8,3	16,0	350	5 075	1400	20 000	115	0,37	2SN-08
10	3/8"	-06	9,9	18,4	330	4 785	1320	19 200	125	0,44	2SN-10
12	1/2"	-08	13,0	21,4	275	4 000	1100	16 000	180	0,53	2SN-12
16	5/8"	-10	16,4	24,6	250	3 625	1000	14 520	200	0,66	2SN-16
19	3/4"	-12	19,5	28,6	215	3 120	860	12 480	240	0,84	2SN-19
25	1"	-16	26,0	37,1	165	2 395	660	9 600	300	1,23	2SN-25
31	1.1/4"	-20	32,5	46,7	125	1 815	500	7 280	420	1,77	2SN-31
38	1.1/2"	-24	38,7	54,5	90	1 305	360	5 240	500	2,18	2SN-38
51	2"	-32	61,1	66,7	80	1 160	320	4 640	630	2,79	2SN-51

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



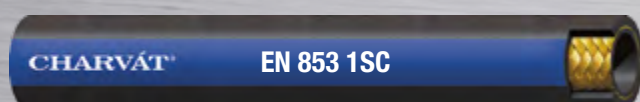
1SN EHT

WIRE BRAID HYDRAULIC HOSE MEETS EN 853 1 SN, WITH HOT OIL RESISTANT HOSE LINER

Standard	EN 853 1SN
Tube	Black synthetic rubber resistant to hot oils
Reinforcement	One high tensile steel braid
Cover	Black, synthetic rubber resistant to hot oils, abrasion and weather condition
Temperature range	-40 °C to +135 °C (-40 °F to +275 °F) up to 150 °C (300 °F) peak temperatures

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	13,5	225	3 265	900	13 000	100	0,23	1SN-EHT-06
08	5/16"	-05	8,3	15,1	215	3 120	860	12 500	115	0,27	1SN-EHT-08
10	3/8"	-06	9,9	17,5	180	2 610	720	10 500	125	0,36	1SN-EHT-10
12	1/2"	-08	13,0	20,6	160	2 320	640	9 280	180	0,44	1SN-EHT-12
16	5/8"	-10	16,4	23,5	130	1 885	520	7 560	200	0,50	1SN-EHT-16
19	3/4"	-12	19,5	27,8	105	1 525	420	6 000	240	0,66	1SN-EHT-19
25	1"	-16	26,0	35,6	88	1 275	352	5 100	300	0,93	1SN-EHT-25
31	1.1/4"	-20	32,5	42,2	63	915	250	3 680	420	1,14	1SN-EHT-31
38	1.1/2"	-24	38,7	51,1	50	725	200	2 900	500	1,80	1SN-EHT-38
51	2"	-32	51,1	63,3	40	580	160	2 320	630	2,01	1SN-EHT-51

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



1SC

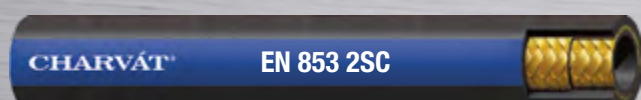
COMPACT HYDRAULIC HOSE CONSTRUCTION ACC. TO EN857 1SC

Standard	EN 857 1SC, ISO 11237
Tube	Black synthetic rubber resistant to oils
Reinforcement	One high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (1SC-ROCK)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	11,9	225	3 265	900	13 000	75	0,16	1SC-06
08	5/16"	-05	8,3	13,7	215	3 120	860	12 400	85	0,21	1SC-08
10	3/8"	-06	9,9	15,7	180	2 610	720	12 000	90	0,26	1SC-10
12	1/2"	-08	13,0	19,5	160	2 320	340	9 150	130	0,34	1SC-12
16	5/8"	-10	16,4	22,3	130	1 885	520	7 560	150	0,39	1SC-16
19	3/4"	-12	19,5	26,0	105	1 525	420	6 120	180	0,50	1SC-19
25	1"	-16	26,0	33,2	88	1 275	352	5 120	230	0,74	1SC-25
38	1.1/2"	-24	38,8	50,8	52	755	208	3 020	300	1,45	1SC-38

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,

2SC



COMPACT HYDRAULIC HOSE CONSTRUCTION ACC. TO EN857 2SC

Standard	EN 857 2SC, ISO 11237
Tube	Black synthetic rubber resistant to oils
Reinforcement	Two high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (2SC-ROCK) and Shield (SSC)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	13,0	400	5 800	1 600	23 200	75	0,25	2SC-06
08	5/16"	-05	8,3	14,6	350	5 075	1 400	20 000	85	0,3	2SC-08
10	3/8"	-06	9,9	16,6	330	4 785	1 320	19 200	90	0,37	2SC-10
12	1/2"	-08	13,0	20,0	275	3 990	1 100	16 000	130	0,45	2SC-12
16	5/8"	-10	16,4	23,9	350	3 625	1 000	14 520	170	0,61	2SC-16
19	3/4"	-12	19,5	27,6	215	3 120	860	12 480	200	0,76	2SC-19
25	1"	-16	26,0	35,6	165	2 395	660	9 600	250	1,15	2SC-25
38	1.1/2"	-24	38,8	50,3	100	1 450	400	5 800	300	1,97	2SC-38
51	2"	-32	51,3	63,6	90	1 305	360	5 220	400	2,49	2SC-51

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



SAE 100 R16S

COMPACT HYDRAULIC HOSE CONSTRUCTION ACC. TO SAE 100 R16 S

Standard	SAE 100 R16S
Tube	Black synthetic rubber resistant to oils
Reinforcement	two high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (R16-ROCK)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	13,7	400	5 800	1 600	23 200	50	0,25	SAE100R16S-06
08	5/16"	-05	8,3	15,0	350	5 075	1 400	20 000	55	0,27	SAE100R16S-08
10	3/8"	-06	9,9	17,0	330	4 780	1 320	19 200	65	0,36	SAE100R16S-10
12	1/2"	-08	13,0	20,5	275	3 980	1 100	16 000	90	0,46	SAE100R16S-12
16	5/8"	-10	16,4	23,9	250	3 620	1 000	14 520	100	0,63	SAE100R16S-16
19	3/4"	-12	19,5	27,7	215	3 110	860	12 480	120	0,78	SAE100R16S-19
25	1"	-16	26,0	35,3	165	2 390	660	9 600	150	1,16	SAE100R16S-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



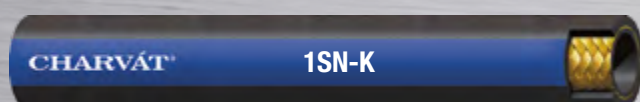
SAE 100 R17

COMPACT HYDRAULIC HOSE ISOBARIC CONSTRUCTION ACC. TO SAE 100 R17

Standard	SAE 100 R17
Tube	Black synthetic rubber resistant to oils
Reinforcement	One high tensile steel braid (DN06 - DN12) Two high tensile steel braid (DN16 - DN25)
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (R17-ROCK)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	12,4	210	3 000	840	12 180	50	0,16	SAE100R17-06
08	5/16"	-05	8,3	14,1	210	3 000	840	12 180	55	0,22	SAE100R17-08
10	3/8"	-06	9,9	16,0	210	3 000	840	12 180	65	0,27	SAE100R17-10
12	1/2"	-08	13,0	19,5	210	3 000	840	12 180	90	0,39	SAE100R17-12
16	5/8"	-10	16,4	23,8	210	3 000	840	12 180	100	0,61	SAE100R17-16
19	3/4"	-12	19,5	27,6	210	3 000	840	12 180	120	0,76	SAE100R17-19
25	1"	-16	26,0	36,2	210	3 000	840	12 180	150	1,27	SAE100R17-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



1SN-K

COMPACT HYDRAULIC HOSE CONSTRUCTION SEMPERPAC 1SN-K

Standard	exceeds EN 857 1SC, SAE 100 R17 higher pressure at reduced bend radius
Tube	Black synthetic rubber resistant to oils
Reinforcement	One high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (1SNK-ROCK) a Shield (1SSK)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Impulse tested up to 700.000 Cycles

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	12,1	290	4 205	1 160	16 820	40	0,17	1SN-K-06
08	5/16"	-05	8,3	13,7	250	3 625	1 000	14 500	55	0,21	1SN-K-08
10	3/8"	-06	9,9	15,9	230	3 335	920	13 340	65	0,26	1SN-K-10
12	1/2"	-08	13,0	19,2	200	2 900	800	11 600	80	0,34	1SN-K-12
16	5/8"	-10	16,4	22,3	150	2 175	600	8 700	105	0,39	1SN-K-16
19	3/4"	-12	19,5	26,1	125	1 815	500	7 250	120	0,50	1SN-K-19
25	1"	-16	26,0	33,2	110	1 595	440	6 380	160	0,74	1SN-K-25
31	1.1/4"	-20	32,5	43,7	100	1 450	400	5 800	300	1,28	1SN-K-31

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



2SN-K

COMPACT HYDRAULIC HOSE CONSTRUCTION SEMPERPAC 2SN-K

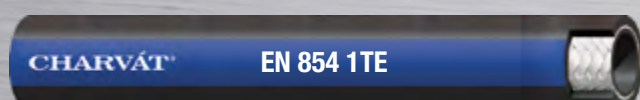
Standard	exceeds EN 857 2SC, SAE 100 R16S higher pressure at reduced bend radius
Tube	Black synthetic rubber resistant to oils
Reinforcement	Two high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (2SN-ROCK) and Shield (2SSK)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Impulse tested up to 1.000.000 Cycles

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	13,4	450	6 525	1 800	26 100	45	0,27	2SN-K-06
08	5/16"	-05	8,3	15,0	420	6 090	1 680	24 360	60	0,31	2SN-K-08
10	3/8"	-06	9,9	17,0	385	5 585	1 540	22 330	70	0,39	2SN-K-10
12	1/2"	-08	13,0	20,7	350	5 075	1 400	20 300	90	0,52	2SN-K-12
16	5/8"	-10	16,4	23,6	290	4 205	1 160	16 820	130	0,61	2SN-K-16
19	3/4"	-12	19,5	27,7	280	4 060	1 120	16 240	160	0,79	2SN-K-19
25	1"	-16	26,0	35,6	200	2 900	800	11 600	210	1,15	2SN-K-25
31	1.1/4"	-20	32,5	43,5	175	2 545	700	10 150	300	1,57	2SN-K-31

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,

1TE



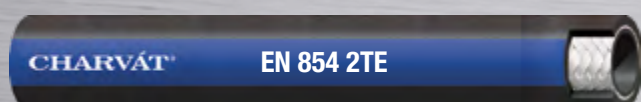
TEXTILE BRAID HYDRAULIC HOSE MEETS EN 854 1TE, ISO 4079-1

Standard	EN 854 1TE, ISO 4079-1
Tube	Black synthetic rubber resistant to oils
Reinforcement	One high resistant textile braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
05	3/16"	-03	4,8	10,7	25	363	230	3 335	35	0,095	1TE-05
06	1/4"	-04	6,4	12,3	25	363	180	2 610	45	0,115	1TE-06
08	5/16"	-05	8,0	13,9	20	290	180	2 610	65	0,130	1TE-08
10	3/8"	-06	9,5	15,5	20	290	170	2 465	75	0,155	1TE-10
12	1/2"	-08	12,7	19,0	16	232	160	2 320	90	0,205	1TE-12
16	5/8"	-10	16,0	22,6	16	232	130	1 885	115	0,265	1TE-16
19	3/4"	-12	19,0	25,8	12	174	120	1 740	140	0,315	1TE-19
25	1"	-16	25,4	33,2	12	174	95	1 378	150	0,475	1TE-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,

2TE

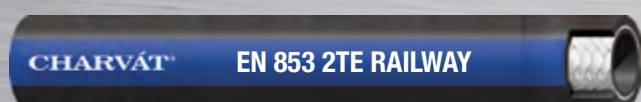


TEXTILE BRAID HYDRAULIC HOSE MEETS EN 854 2TE, ISO 4079-1

Standard	EN 854 2TE, ISO 4079-1
Tube	Black synthetic rubber resistant to oils
Reinforcement	One high resistant textile braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
05	3/16"	-03	4,8	11,8	80	1 160	410	5 945	25	0,115	2TE-05
06	1/4"	-04	6,4	13,4	75	1 088	400	5 800	40	0,150	2TE-06
08	5/16"	-05	8,0	14,9	68	986	380	5 510	50	0,170	2TE-08
10	3/8"	-06	9,5	16,5	63	914	310	4 495	60	0,195	2TE-10
12	1/2"	-08	12,7	19,7	58	841	280	4 060	70	0,240	2TE-12
16	5/8"	-10	16,0	23,9	50	725	260	3 770	90	0,325	2TE-16
19	3/4"	-12	19,0	27,0	45	653	230	3 335	110	0,380	2TE-19
25	1"	-16	25,4	34,4	40	580	200	2 900	150	0,545	2TE-25
31	1.1/4"	-20	31,8	41,4	35	508	180	2 610	170	0,740	2TE-31
38	1.1/2"	-24	38,1	48,1	30	435	180	2 610	190	0,870	2TE-38

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



2TE RAILWAY

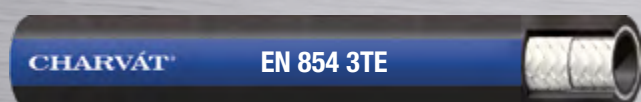
TEXTILE BRAID HYDRAULIC HOSE MEETS EN 854 2TE, ISO 4079-1 VERSION 2TE-RAILWAY, EN45545-2 CONFORMING RAILWAY HOSE

Standard	EN 854 2TE, ISO 4079-1 EN 45545-2
Tube	Black synthetic rubber resistant to oils
Reinforcement	one high resistant textile braid
Cover	Black, FIRE RETARDANT synthetic rubber cover
Temperature range	-40 °C to +125 °C (-40 °F to +250 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
05	3/16"	-03	4,8	12,6	80	1 160	320	4 640	35	0,12	2TE-RAILWAY-05
06	1/4"	-04	6,4	14,2	75	1 088	300	4 350	40	0,15	2TE-RAILWAY-06
08	5/16"	-05	7,9	15,7	68	986	270	3 920	50	0,17	2TE-RAILWAY-08
10	3/8"	-06	9,5	17,3	63	914	250	3 630	60	0,20	2TE-RAILWAY-10
12	1/2"	-08	12,7	20,7	58	841	230	3 340	70	0,24	2TE-RAILWAY-12
16	5/8"	-10	15,9	24,9	50	725	200	4 350	90	0,33	2TE-RAILWAY-16
19	3/4"	-12	19,0	28,0	45	653	180	2 610	110	0,38	2TE-RAILWAY-19
25	1"	-16	25,4	35,9	40	580	160	2 320	150	0,55	2TE-RAILWAY-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,

3TE



TEXTILE BRAID HYDRAULIC HOSE MEETS EN 854 3TE, ISO 4079-1

Standard	EN 854 3TE, ISO 4079-1
Tube	Black synthetic rubber resistant to oils
Reinforcement	Two high resistant textile braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
05	3/16"	-03	4,8	12,8	160	2 320	700	10 150	40	0,135	3TE-05
06	1/4"	-04	6,4	14,4	145	2 103	630	9 135	45	0,165	3TE-06
08	5/16"	-05	8,0	16,9	130	1 885	580	8 410	55	0,215	3TE-08
10	3/8"	-06	9,5	18,5	110	1 595	500	7 250	70	0,245	3TE-10
12	1/2"	-08	12,7	21,7	93	1 349	440	6 380	85	0,305	3TE-12
16	5/8"	-10	16,0	25,9	80	1 160	380	5 510	105	0,41	3TE-16
19	3/4"	-12	19,0	29,0	70	1 015	330	4 785	130	0,465	3TE-19
25	1"	-16	25,4	35,9	55	798	280	4 060	150	0,63	3TE-25
31	1.1/4"	-20	31,8	42,3	45	653	220	3 190	190	0,755	3TE-31
38	1.1/2"	-24	38,1	49,6	40	580	190	2 755	240	0,965	3TE-38
51	2"	-32	50,8	62,3	33	479	160	2 320	300	1,280	3TE-51

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



MTH1

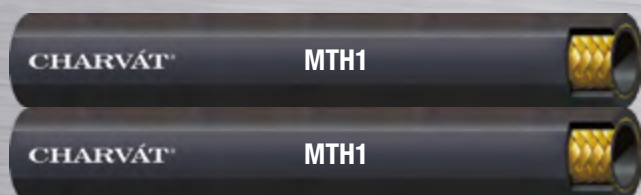
THERMOPLASTIC HYDRAULIC HOSE MTH1

Standard	ZEC construction
Tube	Black thermoplastic polyester
Reinforcement	One high tensile steel braid
Cover	Black, polyurethane resistant to oils, abrasion and weather condition micro perforated on request for the conduction of air and compatible gases
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F) -40 °C to +100 °C (-40 °F to +212 °F) air, water and water-based fluids

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
05	3/16"	-03	4,8	10,0	325	4 710	1 300	18 850	30	0,133	MTH1-05
06	1/4"	-04	6,4	11,9	300	4 350	1 200	17 400	40	0,170	MTH1-06
08	5/16"	-05	8,0	14,0	240	3 480	960	13 920	50	0,216	MTH1-08
10	3/8"	-06	9,7	16,0	225	3 260	900	13 050	60	0,260	MTH1-10
12	1/2"	-08	13,0	19,2	190	2 760	760	11 020	75	0,326	MTH1-12
16	5/8"	-10	16,3	23,3	150	2 180	600	8 700	110	0,412	MTH1-16
19	3/4"	-12	19,2	25,5	130	1 890	520	7 540	150	0,454	MTH1-19
25	1"	-16	25,6	32,5	105	1 520	420	6 090	185	0,590	MTH1-25
32	1.1/4"	-20	32,0	40	70	1 020	280	4 060	290	0,886	MTH1-32

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HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



MTH1 DOUBLE

THERMOPLASTIC HYDRAULIC HOSE MTH1

Standard	ZEC construction
Tube	Black thermoplastic polyester
Reinforcement	One high tensile steel braid
Cover	Black, polyurethane resistant to oils, abrasion and weather condition micro perforated on request for the conduction of air and compatible gases
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F) -40 °C to +100 °C (-40 °F to +212 °F) air, water and water-based fluids

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
05	3/16"	-03	4,8	10,0	325	4 710	1 300	18 850	30	0,133	MTH1-DOUBLE-05
06	1/4"	-04	6,4	11,9	300	4 350	1 200	17 400	40	0,170	MTH1-DOUBLE-06
08	5/16"	-05	8,0	14,0	240	3 480	960	13 920	50	0,216	MTH1-DOUBLE-08
10	3/8"	-06	9,7	16,0	225	3 260	900	13 050	60	0,260	MTH1-DOUBLE-10
12	1/2"	-08	13,0	19,2	190	2 760	760	11 020	75	0,326	MTH1-DOUBLE-12

Version MTH1 double (double hoses suitable for lift platforms)

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



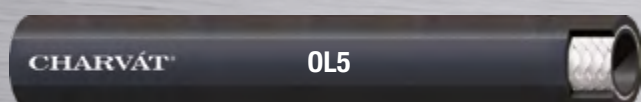
MTH2

THERMOPLASTIC HYDRAULIC HOSE MTH2

Standard	ZEC construction (pressure as 2SN, SAE100 R2)
Tube	Black thermoplastic polyester
Reinforcement	Two high tensile steel braid
Cover	Black, polyurethane resistant to oils, abrasion and weather condition micro perforated on request for the conduction of air and compatible gases
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F) -40 °C to +100 °C (-40 °F to +212 °F) air, water and water-based fluids

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,4	13,5	400	5 800	1 600	23 200	40	0,294	MTH2-06
08	5/16"	-05	8,0	15,1	350	5 080	1 400	20 300	50	0,346	MTH2-08
10	3/8"	-06	9,7	17,0	330	4 790	1 320	19 140	60	0,418	MTH2-10
12	1/2"	-08	13,0	21,5	275	4 000	1 100	15 950	75	0,583	MTH2-12
16	5/8"	-10	16,3	24,5	250	3 630	1 000	14 500	110	0,660	MTH2-16
19	3/4"	-12	19,2	27,5	215	3 120	860	12 470	150	0,788	MTH2-19
25	1"	-16	25,6	35,0	165	2 400	660	9 570	185	1,053	MTH2-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



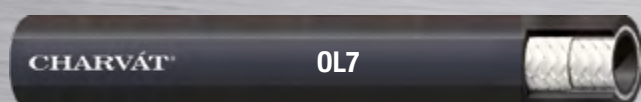
OL5

THERMOPLASTIC MEDIUM PRESSURE HYDRAULIC HOSE

Tube	Black thermoplastic polyester
Reinforcement	One polyester textile braid
Cover	Black, polyurethane resistant to oils, abrasion and weather condition micro perforated on request for the conduction of air and compatible gases
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F) -40 °C to +100 °C (-40 °F to +212 °F) air, water and water-based fluids

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
03	1/8"	-02	3,5	7,5	200	2 900	800	11 600	25	0,037	OL5-03
04	5/32"	-02,5	4,0	8,0	200	2 900	800	11 600	30	0,045	OL5-04
05	3/16"	-03	4,8	9,2	200	2 900	800	11 600	30	0,059	OL5-05
06	1/4"	-04	6,4	10,8	145	2 100	580	8 410	45	0,070	OL5-06
08	5/16"	-05	8,0	13,0	120	1 740	480	6 960	50	0,087	OL5-08
10	3/8"	-06	9,7	14,8	115	1 670	460	6 670	55	0,114	OL5-10
12	1/2"	-08	13,0	18,7	80	1 160	320	4 640	90	0,169	OL5-12

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



OL7

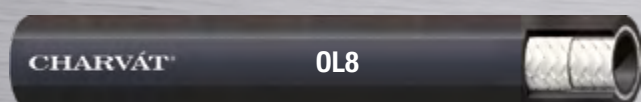
THERMOPLASTIC MEDIUM PRESSURE HYDRAULIC HOSE EXCEEDS SAE 100 R7

Standard	SAE 100 R7, ISO 3949
Tube	Black thermoplastic polyester
Reinforcement	Two polyester textile braid
Cover	Black, polyurethane resistant to oils, abrasion and weather condition micro perforated on request for the conduction of air and compatible gases
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F) -40 °C to +100 °C (-40 °F to +212 °F) air, water and water-based fluids

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
03	1/8"	-02	3,5	8,5	230	3 335	920	13 340	12	0,057	OL7-03
04	5/32"	-02,5	4,0	8,9	250	3 625	1 000	14 500	25	0,058	OL7-04
05	3/16"	-03	4,8	10,0	210	3 045	840	12 180	30	0,073	OL7-05
06	1/4"	-04	6,4	11,8	200	2 900	800	11 600	35	0,090	OL7-06
08	5/16"	-05	8,0	14,3	190	2 755	760	11 020	45	0,128	OL7-08
10	3/8"	-06	9,7	16,0	175	2 537	700	10 150	55	0,155	OL7-10
12	1/2"	-08	13,0	20,3	140	2 030	560	8 120	75	0,219	OL7-12
16	5/8"	-10	16,0	23,5	105	1 522	420	6 090	120	0,277	OL7-16
19	3/4"	-12	19,2	26,5	90	1 305	360	5 220	145	0,330	OL7-19
25	1"	-16	25,6	33,6	70	1 015	280	4 060	200	0,403	OL7-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,

OL8



THERMOPLASTIC HIGH PRESSURE HYDRAULIC HOSE EXCEEDS SAE 100 R8

Standard	SAE 100 R8, ISO 3949
Tube	Black thermoplastic polyester
Reinforcement	Two high toughness textile fiber
Cover	Black, polyurethane resistant to oils, abrasion and weather condition micro perforated on request for the conduction of air and compatible gases
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F) -40 °C to +100 °C (-40 °F to +212 °F) air, water and water-based fluids

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
03	1/8"	-02	3,5	7,1	420	6 090	1 680	24 360	30	0,037	OL8-03
04	5/32"	-02,5	4,0	8,0	420	6 090	1 680	24 360	35	0,044	OL8-04
05	3/16"	-03	4,8	10,0	350	5 075	1 400	20 300	35	0,072	OL8-05
06	1/4"	-04	6,4	11,8	350	5 075	1 400	20 300	50	0,085	OL8-06
08	5/16"	-05	8,0	14,3	325	4 710	1 300	18 850	60	0,126	OL8-08
10	3/8"	-06	9,7	16,0	280	4 060	1 120	16 240	70	0,146	OL8-10
12	1/2"	-08	13,0	20,3	245	3 550	980	14 210	95	0,225	OL8-12
16	5/8"	-10	16,0	23,5	195	2 830	780	11 310	125	0,265	OL8-16
19	3/4"	-12	19,2	26,5	165	2 390	660	9 570	150	0,352	OL8-19
25	1"	-16	25,6	34,7	145	2 100	580	8 410	200	0,505	OL8-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



SAE 100 R4

OIL RETURN LOW PRESSURE HOSE MEETS SAE 100 R4

Standard	SAE 100 R4, SAE J517
Tube	Black, NBR
Reinforcement	Textile wrapped, zinc plated double steel wire helix
Cover	Black, SBR/EPDM resistant to oils, abrasion and weather condition
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
19	3/4"	-12	19,0	29,0	21	305	84	1 218	95	0,60	SAE100R4-19
25	1"	-16	25,4	35,4	17	247	68	986	125	0,72	SAE100R4-25
31	1.1/4"	-20	31,8	41,8	14	203	56	812	160	0,90	SAE100R4-31
38	1.1/2"	-24	38,1	49,0	10,5	152	42	609	200	1,10	SAE100R4-38
51	2"	-32	51,0	62,0	7	102	28	406	255	1,35	SAE100R4-51
63	2.1/2"	-40	63,5	76,5	5	73	20	290	315	1,90	SAE100R4-63
76	3"	-48	76,2	89,2	5	73	20	290	380	2,50	SAE100R4-76

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



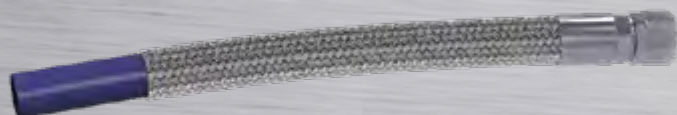
SAE 100 R4 FLEX

FLEXIBLE OIL RETURN LOW PRESSURE HOSE MEETS SAE 100 R4

Standard	SAE 100 R4, SAE J517
Tube	Black, NBR
Reinforcement	Textile wrapped, zinc plated double steel wire helix
Cover	Black, SBR/EPDM resistant to oils, abrasion and weather condition approved MSHA IC-8/19
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
19	3/4"	-12	19,0	29,0	21	305	84	1 218	40	0,40	SAE100R4-FLEX-19
25	1"	-16	25,0	35,0	17	247	68	986	45	0,45	SAE100R4-FLEX-25
31	1.1/4"	-20	32,0	42,0	14	203	56	812	60	0,60	SAE100R4-FLEX-31
38	1.1/2"	-24	38,1	49,1	10	145	40	580	65	0,75	SAE100R4-FLEX-38
51	2"	-32	51,0	62,0	7	102	28	406	160	0,90	SAE100R4-FLEX-51

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



PTFE

SMOOTHBORE PTFE TUBE WITH HIGH TENSILE SS304 BRAID

Standard	PTFE according ISO12086
Tube	Medium wall smoothbore PTFE tube, metric line
Cover	High tensile 304 Stainless Steel braid
Temperature range	-60 °C to +260 °C (-76 °F to +500 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,77	9,35	224	3 250	672	9 750	76		PTFE-06
08	5/16"	-05	8,4	11,3	218	3 160	655	9 500	102		PTFE-08
10	3/8"	-06	10,3	12,65	183	2 660	552	8 000	127		PTFE-10
12	1/2"	-08	13,2	16,55	161	2 330	483	7 000	152		PTFE-12
16	5/8"	-10	16,6	19,75	114	1 660	345	5 000	178		PTFE-16
19	3/4"	-12	19,8	22,96	103	1 500	310	4 500	203		PTFE-19
25	1"	-16	25,4	29,75	80	1 160	240	3 480	305		PTFE-25

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



PTFE-CONVO

HELICALLY CONVOLUTED PTFE TUBE WITH HIGH TENSILE SS304 BRAID

Standard	PTFE according ASTM D4895
Tube	Helically convoluted PTFE tube, EASYFLEX ® type
Cover	High tensile 304 Stainless Steel braid
Temperature range	-60 °C to +260 °C (-76 °F to +500 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	7,1	12,3	172	2 500	517	7 500	18		PTFE-CONVO-06
10	3/8"	-06	9,5	14,75	138	2 000	414	6 000	20		PTFE-CONVO-10
12	1/2"	-08	12,83	18,8	103	1 500	310	4 500	25		PTFE-CONVO-12
16	5/8"	-10	15,88	22,1	83	1 200	248	3 600	51		PTFE-CONVO-16
19	3/4"	-12	19,05	24,65	69	1 000	207	3 000	64		PTFE-CONVO-19
25	1"	-16	25,4	32,77	46	667	138	2 000	89		PTFE-CONVO-25
31	1"1/4	-20	32,2	40,72	34	500	103	1 500	127		PTFE-CONVO-31
38	1"1/2	-24	38,1	47	30	435	90	1 305	152		PTFE-CONVO-38
51	2"	-32	51,4	60	23	333	69	1 000	200		PTFE-CONVO-51

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



SEMPERJET 1SN

HIGH PRESSURE HOSE FOR PRESSURE WASHER APPLICATIONS, EXCEEDS EN 1829-2

Standard	EN 1829-2, dimension acc.to DIN EN853 1SN
Tube	Synthetic rubber, resistant against cold and hot water with usual detergents
Reinforcement	One high tensile steel braid
Cover	Abrasion and ozone resistant synthetic rubber Colours of Cover: Black, Blue and Grey
Temperature range	-40 °C to +155 °C (-40 °F to +310 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	13,0	250	3 625	900	13 050	100	0,19	1SN-SEMPERJET-06-xx*
08	5/16"	-05	8,3	14,7	220	3 190	860	12 470	115	0,22	1SN-SEMPERJET-08-xx*
10	3/8"	-06	9,9	16,8	220	3 190	720	10 440	125	0,28	1SN-SEMPERJET-10-xx*
12	1/2"	-08	13,0	20,0	220	3 190	640	9 280	180	0,36	1SN-SEMPERJET-12-xx*
16	5/8"	-10	16,4	23,2	130	1 885	520	7 540	200	0,42	1SN-SEMPERJET-16-xx*

* **BLACK, BLUE** and **GREY** cover available

HOSES SN, SC, TE, PTFE, R4 THERMOPLASTIC HOSES,



SEMPERJET 2SN

HIGH PRESSURE HOSE FOR PRESSURE WASHER APPLICATIONS, EXCEEDS EN 1829-2

Standard	EN 1829-2, dimension acc.to DIN EN853 2SN
Tube	Synthetic rubber, resistant against cold and hot water with usual detergents
Reinforcement	Two high tensile steel braid
Cover	Abrasion and ozone resistant synthetic rubber Colours of Cover: Black, Blue and Grey
Temperature range	-40 °C to +155 °C (-40 °F to +310 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,6	14,4	400	5 800	1 600	23 200	100	0,31	2SN-SEMPERJET-06-xx*
08	5/16"	-05	8,3	16,0	400	5 800	1 400	20 300	115	0,37	2SN-SEMPERJET-08-xx*
10	3/8"	-06	9,9	18,4	400	5 800	1 320	19 140	125	0,44	2SN-SEMPERJET-10-xx*
12	1/2"	-08	13,0	21,4	400	5 800	1 100	15 950	180	0,56	2SN-SEMPERJET-12-xx*

* **BLACK, BLUE** and **GREY** cover available

HYDRAULIC HOSES

HYDRAULIC HOSES



HOSES 4SP 

HOSES 4SP

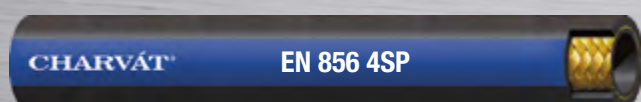
4SP

Multispiral Hydraulic Hose acc.to
EN856 4SP/ SAE 100 R9R

SPC3

Compact Hydraulic Hose Construction
With Enhanced Technical Performance

HOSES 4SP



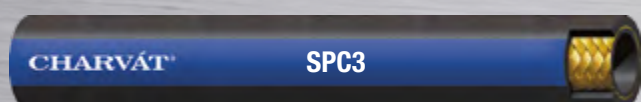
4SP

MULTISPIRAL HYDRAULIC HOSE ACC.TO EN856 4SP/ SAE 100 R9R

Standard	EN 856 4SP, SAE 100 R9R
Tube	Black synthetic rubber resistant to oils
Reinforcement	Four spiral layers of high tensile steel wire
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition approved MSHA IC-8/17 on request cover Rock (4SP-ROCK) and Shield (SSP)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
06	1/4"	-04	6,4	17,9	450	6 550	1 800	26200	150	0,58	4SP-06
10	3/8"	-06	9,9	21,1	445	6 455	1 780	25 810	180	0,70	4SP-10
12	1/2"	-08	13,0	24,2	425	6 165	1 700	24 650	230	0,85	4SP-12
16	5/8"	-10	16,4	27,9	350	5 075	1 400	20 300	250	1,11	4SP-16
19	3/4"	-12	19,5	32,0	350	5 075	1 400	20 300	300	1,41	4SP-19
25	1"	-16	26,0	38,9	320	4 640	1 280	18 560	340	1,86	4SP-25
31	1.1/4"	-20	32,5	51,3	210	3 045	840	12 180	460	3,33	4SP-31
38	1.1/2"	-24	38,7	56,8	185	2 685	740	10 730	560	3,86	4SP-38
51	2"	-32	51,1	70,2	165	2 395	660	9 570	660	5,09	4SP-51

HOSES 4SP



SPC3

COMPACT HYDRAULIC HOSE CONSTRUCTION WITH ENHANCED TECHNICAL PERFORMANCE

Standard	Semperflex construction
Tube	Black synthetic rubber resistant to oils
Reinforcement	Three high tensile steel braid
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition on request cover Rock (SPC3-ROCK)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
10	3/8"	-06	9,9	20,9	500	7 250	2 000	29 000	120	0,66	SPC3-10
12	1/2"	-08	13,0	24,1	470	6 820	1 880	27 260	160	0,89	SPC3-12
16	5/8"	-10	16,4	27,8	410	5 950	1 640	23 780	210	1,10	SPC3-16
19	3/4"	-12	19,5	31,1	375	5 440	1 500	21 750	260	1,33	SPC3-19
25	1"	-16	26,0	38,8	310	4 500	1 240	17 980	310	1,87	SPC3-25

HYDRAULIC HOSES



HOSES 
4SH, R15,
FLEXLINE

HOSES 4SH, R15, FLEXLINE

4SH

Multispiral Hydraulic Hose acc.to
EN856 4SH

SAE 100 R15

Multispiral Hydraulic Hose acc.to
SAE 100 R15

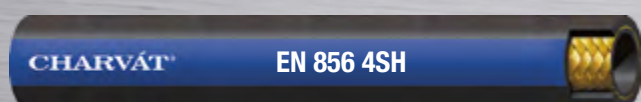
FLEXLINE 5000

Multispiral Hydraulic Hose with
Reduced Bend meets ISO 18752-CC

FLEXLINE 6000

Multispiral Hydraulic Hose with
Reduced Bend meets ISO 18752-CC

HOSES 4SH, R15, FLEXLINE



4SH

MULTISPIRAL HYDRAULIC HOSE ACC.TO EN856 4SH

Standard	EN 856 4SH
Tube	Black synthetic rubber resistant to oils
Reinforcement	Four spiral layers of high tensile steel wire
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition approved MSHA IC-8/17 on request cover Rock (4SH-ROCK) and Shield (SSH)
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVAT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
19	3/4"	-12	19,5	31,9	420	6 090	1 680	24 360	280	1,43	4SH-19
25	1"	-16	26,0	38,7	380	5 510	1 520	22 040	340	1,98	4SH-25
31	1.1/4"	-20	32,5	46,4	350	5 075	1 400	20 300	460	2,55	4SH-31
38	1.1/2"	-24	38,7	53,4	290	4 200	1 160	16 820	560	3,26	4SH-38
51	2"	-32	51,1	68,0	250	3 625	1 000	14 500	700	4,70	4SH-51

HOSES 4SH, R15, FLEXLINE



SAE 100 R15

MULTISPIRAL HYDRAULIC HOSE ACC.TO SAE 100 R15

Standard	SAE 100 R15
Tube	Black synthetic rubber resistant to oils
Reinforcement	Four spiral layers DN19 - DN25 and six spiral layers DN31-DN51 of high tensile steel wire
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition approved MSHA IC-8/17
Temperature range	-40 °C to +100 °C (-40 °F to +212 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
19	3/4"	-12	19,5	31,9	420	6 090	1 680	24 360	265	1,43	SAE100R15-19
25	1"	-16	26,0	38,7	420	6 090	1 680	24 360	330	2,16	SAE100R15-25
31	1.1/4"	-20	32,5	50,5	420	6 090	1 680	24 360	445	3,77	SAE100R15-31
38	1.1/2"	-24	38,7	57,4	420	6 090	1 680	24 360	530	4,79	SAE100R15-38
51	2"	-32	51,1	71,5	420	6 090	1 680	24 360	600	6,90	SAE100R15-51

HOSES 4SH, R15, FLEXLINE



FLEXLINE 5000

MULTISPIRAL HYDRAULIC HOSE WITH REDUCED BEND MEETS ISO 18752-CC

Standard	ISO 18752-CC exceeds SAE 100 R13, reduced bend radius and bending force meets ISO 18752 – CC
Tube	Black synthetic rubber resistant to oils, suitable with bio-degradable hydraulic fluids
Reinforcement	Four spiral layers DN19-DN38 and six spiral layers DN38-DN51 of high tensile steel wire
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition approved MSHA IC-8/17
Temperature range	-40 °C to +121 °C (-40 °F to +250 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
19	3/4"	-12	19,5	30,5	380	5 510	1 520	22 040	120	1,32	FLEXLINE5000-19
25	1"	-16	26,0	37,9	350	5 075	1 400	20 300	150	1,77	FLEXLINE5000-25
31	1.1/4"	-20	32,5	45,9	350	5 075	1 400	20 300	210	2,55	FLEXLINE5000-31
38	1.1/2"	-24	38,7	53,4	350	5 075	1 400	20 300	250	3,26	FLEXLINE5000-38x4
38	1.1/2"	-24	38,7	57,4	350	5 075	1 400	20 300	460	4,79	FLEXLINE5000-38x6
51	2"	-32	51,1	71,5	350	5 075	1 400	20 300	540	6,75	FLEXLINE5000-51

Impulse tested up to 500.000 Cycles

HOSES 4SH, R15, FLEXLINE



FLEXLINE 6000

MULTISPIRAL HYDRAULIC HOSE WITH REDUCED BEND MEETS ISO 18752-CC

Standard	ISO 18752-CC exceeds SAE 100 R15, reduced bend radius and bending force meets ISO 18752 – CC
Tube	Black synthetic rubber resistant to oils suitable with bio-degradable hydraulic fluids
Reinforcement	Four spiral layers DN19-DN31 and six spiral layers DN31-DN51 of high tensile steel wire
Cover	Black, synthetic rubber resistant to oils, abrasion and weather condition approved MSHA IC-8/17
Temperature range	-40 °C to +121 °C (-40 °F to +250 °F)

Hose I. D.				Horse O. D.	Working pressure		Burst pressure		Bend radius	Weight	CHARVÁT
DN	inch	Dash	mm	mm	bar	PSI	bar	PSI	mm	kg/m	Ordering Codes
19	3/4"	-12	19,5	30,7	420	6 090	1 680	24 360	120	1,46	FLEXLINE6000-19
25	1"	-16	26,0	37,5	420	6 090	1 680	24 360	150	1,94	FLEXLINE6000-25
31	1.1/4"	-20	32,5	47,3	420	6 090	1 680	24 360	400	3,01	FLEXLINE6000-31x4
31	1.1/4"	-20	32,5	50,5	420	6 090	1 680	24 360	400	3,77	FLEXLINE6000-31x6
38	1.1/2"	-24	38,7	57,4	420	6 090	1 680	24 360	160	4,79	FLEXLINE6000-38
51	2"	-32	51,1	71,5	420	6 090	1 680	24 360	540	6,75	FLEXLINE6000-51

Impulse tested up to 500.000 Cycles

HYDRAULIC HOSES



PROTECTION



PROTECTION

GS

Protection Spirals

GT

Textile Protection Sheaths

GFVS

Silicone Glass Fiber Protection
Sheaths

GWS

Protection Carbon Steel

**Shrinking Cover
for Colour Coding**

PROTECTION



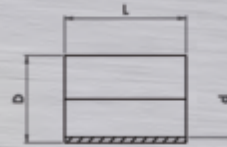

PROTECTION SPIRALS

Technical features: The spiral is made of high-density polyethylene HDPE that is practical, quick and simple to fit. Suitable for the protection or containment of one or more hoses. The raw material used has good resistance to abrasion and UV rays.

Temperature range -20 °C to +100 °C (-4 °F to +212 °F)

Protection Size (mm)				Hose diameter	Weight	Lenght in Box	CHARVAT
I.D.	O.D.	Wall Thickness	Strip Width	mm	g/m	m	Ordering Codes
9,5	12,0	1,7	10,0	10 ÷ 17	46,0	50	GS-128
12,5	16,0	1,8	12,0	13 ÷ 22	76,0	50	GS-1612
16	20,0	1,8	14,5	16 ÷ 27	86,0	50	GS-2016
21	25,0	2,0	21,0	21 ÷ 35	112,0	50	GS-2520
27	32,0	2,0	24,0	27 ÷ 44	177,0	50	GS-3227
34	40,0	2,5	30,0	34 ÷ 55	217,0	50	GS-4036
44	50,0	3,0	35,0	44 ÷ 70	278,0	50	GS-5044
55	63,0	3,5	40,0	55 ÷ 87	588,0	20	GS-6356
66	75,0	3,4	40,0	67 ÷ 103	813,0	20	GS-7567
79	90,0	5,0	45,0	80 ÷ 122	1 033,0	20	GS-9080
99	110,0	5,5	55,0	100 ÷ 152	1 200,0	12	GS-110100
114	125,0	5,6	55,0	115 ÷ 174	1 638,0	12	GS-125114
129	140,0	5,6	55,0	130 ÷ 196	1 807,0	8	GS-140129
148	160,0	6,0	60,0	150 ÷ 224	2 031,0	6	GS-160148

PROTECTION



GT

TEXTILE PROTECTION SHEATHS

Technical features: ZEC GT Textile Sleeves are particularly suitable for hydraulic and pneumatic applications, containing single and multiple tubings/hoses. These sheaths show an excellent mechanical resistance and they are compatible with many oils and organic products. GT Textile Sleeves are made in high tensile textile fiber and they guarantee a high resistance to abrasion.

Standard Safety standard ISO 3457:2004
Tensile braking test ASTM D885
UV stabilization
approved MSHA IC332-06

Temperature range -40 °C to +100 °C (-40 °F to +212 °F), softening Point at 150 °C

Protection Size (mm)		Weight g/m	CHARVAT Ordering Codes
I.D.	Strip Width		
20,0	35,0	27,0	GT-35
22,0	40,0	32,0	GT-40
25,0	45,0	34,0	GT-45
28,0	50,0	38,0	GT-50
32,0	55,0	42,0	GT-55
35,0	60,0	45,0	GT-60
38,0	65,0	48,0	GT-65
45,0	80,0	60,0	GT-80
50,0	90,0	65,0	GT-90
70,0	120,0	96,0	GT-120
90,0	150,0	112,0	GT-150

Ferrule Size (mm)			CHARVAT Ordering Codes
D	d	L	
22,0	19,0	25,0	BPL-1922
25,0	22,0	30,0	BPL-2225
28,0	25,0	30,0	BPL-2528
30,0	27,0	33,0	BPL-2730
32,0	29,0	34,0	BPL-2932
35,0	32,0	36,0	BPL-3235
38,0	35,0	36,0	BPL-3538
40,0	37,0	38,0	BPL-3740
42,0	39,0	40,0	BPL-3942
45,0	42,0	42,0	BPL-4245
50,0	46,0	45,0	BPL-4650
55,0	51,0	48,0	BPL-5155
60,0	56,0	50,0	BPL-5660
70,0	66,0	54,0	BPL-6670
83,0	77,0	64,0	BPL-7783

PROTECTION



GFVS

SILICONE GLASS FIBER PROTECTION SHEATHS

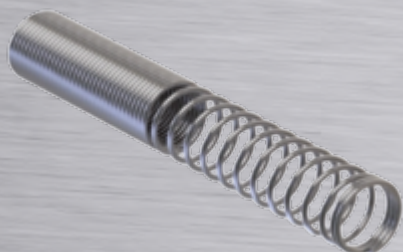
Technical features: Fiberglass sleeving covered with red silicon in uses where is required high insulation and temperatures resistance

Standard UL 1441 VW-I-EN 45545-1, EN 45545-2

Temperature range -40 °C to +350 °C (-40 °F to +662 °F)

Protection Size (mm)		Lenght in Box	CHARVAT
I.D.	Wall Silicone Thickness	m	Ordering Codes
12,0	1,0	15	GFVS-12
15,0	1,0	15	GFVS-15
20,0	1,0	15	GFVS-20
25,0	1,0	15	GFVS-25
30,0	1,0	15	GFVS-30
38,0	1,0	15	GFVS-38
40,0	1,0	15	GFVS-40
45,0	1,0	15	GFVS-45
50,0	1,0	15	GFVS-50
60,0	1,0	15	GFVS-60
65,0	1,0	15	GFVS-65

PROTECTION



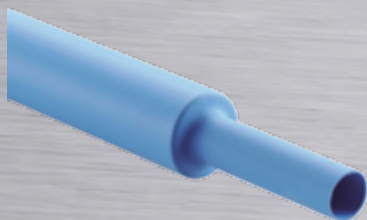
GWS

PROTECTION CARBON STEEL

Technical features: Steel spiral with galvanized finish for extremely mechanically stressed hoses

Protection Size (mm)				Lenght	CHARVAT
I.D.	O.D.	Wall Thickness	Pitch of Spring	m	Ordering Codes
14,00	18,0	2,0	5,0	5,0	GWS-14x2
18,00	22,0	2,0	5,0	5,0	GWS-18x2
20,00	24,0	2,0	5,0	5,0	GWS-20x2
23,00	27,0	2,0	5,0	5,0	GWS-23x2
25,00	29,0	2,0	5,0	5,0	GWS-25x2
27,00	31,0	2,0	5,0	5,0	GWS-27x2
27,00	33,0	3,0	7,0	5,0	GWS-27x3
30,00	34,0	2,0	5,0	5,0	GWS-30x2
34,00	40,0	3,0	7,0	5,0	GWS-34x3
41,00	47,0	3,0	8,0	5,0	GWS-41x3
48,00	54,0	3,0	8,0	5,0	GWS-48x3
51,00	57,0	3,0	8,0	5,0	GWS-51x3
52,00	58,0	3,0	8,0	5,0	GWS-52x3
54,00	60,0	3,0	10,0	5,0	GWS-54x3
56,00	62,0	3,0	10,0	5,0	GWS-56x3
68,00	74,0	3,0	10,0	5,0	GWS-68x3

PROTECTION



Shrinking Cover

SHRINKING COVER FOR COLOUR CODING

Colour options: Black, White, Red, Blue, Yellow

Technical features: Universal flexible shrinking tube, ideal for colour coding, bundling and protection. Tubes are from fire-resistant material and also serves as an insulator.

Material: Polyolefin

Temperature range: -55 °C to +135 °C (-48 °F to +275 °F)

Protection Size (mm)			Lenght in Box	CHARVAT
O.D.	O.D. after heat shrinkage	Wall Thickness	m	Ordering Codes
19,0	9,5	0,8	30	RCACS-19/9,5-xx*
25,4	12,7	0,9	30	RCACS-25,4/12,7-xx*
32,0	16,0	0,9	30	RCACS-32/16-xx*
38,0	19,0	1,0	30	RCACS-38/19-xx*
51,0	25,4	1,1	30	RCACS-51/25,4-xx*

* **BLACK, WHITE, RED, BLUE** and **YELLOW** colour available

HYDRAULIC HOSES

HYDRAULIC HOSES



FITTINGS FOR
HOSES SN, 
SC, TE, PTFE,
THERMOPLASTIC
HOSES, R4

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

OB 1SN

Skive Swage Ferrule for Braided Hose

OB 2SN

Skive Swage Ferrule for Braided Hose

OB 1+2SN NZ

Non-Skive Swage Ferrule for Braided Hose

OB 1SN/2SC NZ

Non-Skive Swage Ferrule for Braided Hose CH - NEW construction

OB SAE100 R4

Non-Skive Swage Ferrule for Suction and low-pressure hose

OB PTFE

Non-Skive Swage Ferrule for flat PTFE hose

OB PTFE CONVO

Non-Skive Swage Ferrule for convoluted PTFE hose

OB 1TE

Non-Skive Swage Ferrule for low-pressure hose 1TE

OB 2TE

Non-Skive Swage Ferrule for low-pressure hose 2TE

OB 3TE

Non-Skive Swage Ferrule for low-pressure hose 3TE

OB MTH1

Non-Skive Swage Ferrule for Thermoplastic hose MTH1

OB OL5

Non-Skive Swage Ferrule for Thermoplastic hose OL5

OB OL7+OL8

Non-Skive Swage Ferrule for Thermoplastic hose OL7, OL8

DKL (Light series)

Straight Insert with Female Metric Nut Thread and 24°, 60° Taper

DKL 45° (Light series)

45° Elbow Insert with Female Metric Nut Thread and 24°, 60° Taper

DKL 90° (Light series)

90° Elbow Insert with Female Metric Nut Thread and 24°, 60° Taper

DKOL (Light series)

Straight Insert with Female Metric Nut Thread and 24° Taper/ O-ring

DKOL 45° (Light series)

45° Elbow Insert with Female Metric Nut Thread and 24° Taper/ O-ring

DKOL 90° (Light series)

90° Elbow Insert with Female Metric Nut Thread and 24° Taper/ O-ring

CEL (Light series)

Straight Insert with Metric Thread and 24° Conical Bore

BEL (Light Series)

Straight Insert for Cutting Ring Coupling

BEL 45° (Light Series)

45° Elbow Insert for Cutting Ring Coupling

BEL 90° (Light Series)

90° Elbow Insert for Cutting Ring Coupling

BES (Heavy Series)

Straight Insert for Cutting Ring Coupling

BES 45° (Heavy Series)

45° Elbow Insert for Cutting Ring Coupling

BES 90° (Heavy Series)

90° Elbow Insert for Cutting Ring Coupling

DKOS (Heavy series)

Straight Insert with Female Metric Nut Thread and 24° Taper/ O-ring

DKOS 45° (Heavy series)

45° Elbow Insert with Female Metric Nut Thread and 24° Taper/ O-ring

DKOS 90° (Heavy series)

90° Elbow Insert with Female Metric Nut Thread and 24° Taper/ O-ring

CES (Heavy series)

Straight Insert with Metric Thread and 24° Conical Bore

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

SFL (3000 PSI Series)

Straight Insert with SAE Flange
Adaptor

SFL 45° (3000 PSI Series)

45° Elbow Insert with SAE Flange
Adaptor

SFL 90° (3000 PSI Series)

90° Elbow Insert with SAE Flange
Adaptor

SFS (6000 PSI Series)

Straight Insert with SAE Flange
Adaptor

SFS 45° (6000 PSI Series)

45° Elbow Insert with SAE Flange
Adaptor

SFS 90° (6000 PSI Series)

90° Elbow Insert with SAE Flange
Adaptor

1.001 HOSE COUPLING

Straight Hose Coupling

1.021 WASHER COUPLING

Straight Insert with Pressure Washer
Connector

1.023 WASHER COUPLING

1.024 WASHER COUPLING

Straight Insert with Pressure Washer
for Pistol Application

DKR

Straight Insert with Female BSPP
Thread and 60° Taper

DKR 45°

45° Elbow Insert with Female BSPP
Thread and 60° Taper

DKR 90°

90° Elbow Insert with Female BSPP
Thread and 60° Taper

AGR

Straight Insert with Male BSPP Thread
and 60° Conical Bore

AGRK

Straight Insert with Male BSPT Thread

AGN

Straight Insert with Male NPTF Thread
and 60° Conical Bore

DKR FLD

Straight Insert with Female BSPP
Thread

DKJ

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

DKJ 45°

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

DKJ 90°

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

AGJ

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

ORFS

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

ORFS HEX

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

ORFS 45°

45° Elbow Insert with Female UN/
UNF Thread for O-Ring Face Seal
Connection

ORFS 90°

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

ORS

Straight Insert with O-Ring Face
Seal Connection

RN

Straight Metric Banjo Insert

RNR

Straight Imperial Banjo Insert

DKL KOM

Straight Insert with Female Metric
Thread and 60° Conical Bore

DKJ TO

Straight Insert with Female BSPP
Thread and 60° Conical Bore

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

STECK

Stecko male for 1 - 2 braided hoses
in mining industry

WEO

WEO Plug-In nipples with straight
hose connections

WEO 45°

WEO Plug-In nipples with 45° Elbow
hose connections

WEO 90°

WEO Plug-In nipples with 90° Elbow
hose connections

WEO C

WEO Plug-In Couplings with straight
hose connections

BOLTS

Metric and BSP Bolts for Banjo

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



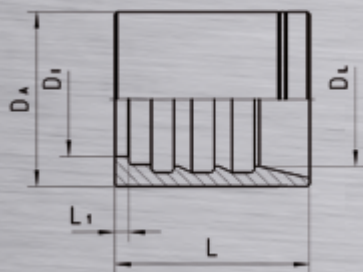
OB 1SN

SKIVE SWAGE FERRULE FOR BRAIDED HOSE

Ferrule Type	Skive
Suitable for	1SN, 2SC, 2SN-K, 1SC, 1SN-K
Standard	EN 853, EN 857
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	28,0	17,0	10,9	OB-1SN-06
08	5/16"	-05	30,0	20,0	12,4	OB-1SN-08
10	3/8"	-06	32,0	22,0	14,4	OB-1SN-10
12	1/2"	-08	33,5	27,0	18,4	OB-1SN-12
16	5/8"	-10	36,0	30,0	21,5	OB-1SN-16
19	3/4"	-12	42,5	36,0	24,4	OB-1SN-20
25	1"	-16	50,5	42,0	30,8	OB-1SN-25
31	1.1/4"	-20	59,0	51,0	37,8	OB-1SN-32
38	1.1/2"	-24	59,0	58,0	43,7	OB-1SN-40

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



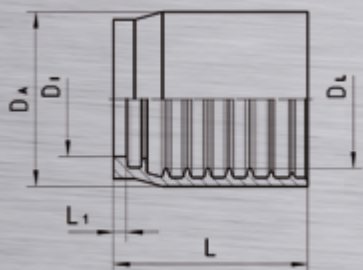
OB 2SN

SKIVE SWAGE FERRULE FOR BRAIDED HOSE

Ferrule Type	Skive
Suitable for	2SN
Standard	EN 853
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	30,0	20,0	10,9	OB-2SN-06
08	5/16"	-05	31,5	22,0	12,4	OB-2SN-08
10	3/8"	-06	32,0	24,0	14,4	OB-2SN-10
12	1/2"	-08	33,0	28,0	18,4	OB-2SN-12
16	5/8"	-10	36,0	32,0	21,5	OB-2SN-16
19	3/4"	-12	42,5	38,0	24,4	OB-2SN-20
25	1"	-16	50,5	45,0	31,0	OB-2SN-25
31	1.1/4"	-20	59,0	56,0	38,0	OB-2SN-32
38	1.1/2"	-24	62,0	62,0	44,2	OB-2SN-40
51	2"	-32	78,5	75,0	57,3	OB-2SN-50

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



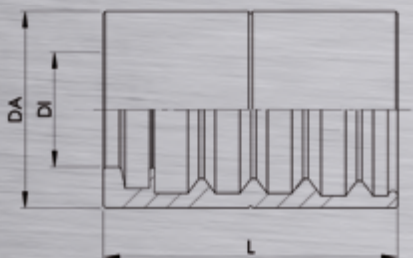
OB 1+2SN NZ

NON-SKIVE SWAGE FERRULE FOR BRAIDED HOSE

Ferrule Type	Non-Skive
Suitable for	1SN, 2SN, 2SC
Standard	EN 853, EN 857
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	31,0	21,0	11,3	OB-1+2SN-06-NZ
08	5/16"	-05	31,0	22,5	12,7	OB-1+2SN-08-NZ
10	3/8"	-06	33,0	26,5	15,0	OB-1+2SN-10-NZ
12	1/2"	-08	36,0	30,0	18,5	OB-1+2SN-12-NZ
16	5/8"	-10	38,0	34,0	22,0	OB-1+2SN-16-NZ
19	3/4"	-12	44,0	38,0	25,0	OB-1+2SN-20-NZ
25	1"	-16	51,0	48,0	30,7	OB-1+2SN-25-NZ

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



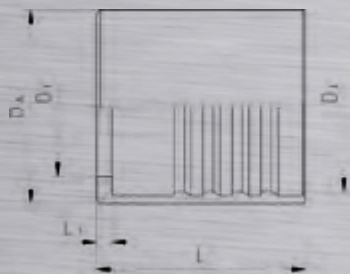
OB 1SN/2SC NZ

NON-SKIVE SWAGE FERRULE FOR BRAIDED HOSE CH - NEW CONSTRUCTION

Ferrule Type	Non-Skive
Suitable for	1SN, 1SC, 1SN-K, 2SC, 2SN-K, SSC
Standard	EN 853, EN 857
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	30,0	18,0	11,0	OB-1SC-06NZ
06	1/4"	-04	30,0	20,0	11,7	OB-1SN/2SC-06NZ
08	5/16"	-05	30,0	22,0	13,2	OB-1SN/2SC-08NZ

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



OB SAE100 R4

NON-SKIVE SWAGE FERRULE FOR SUCTION AND LOW-PRESSURE HOSE

Ferrule Type	Non-Skive
Suitable for	SAE 100R4, SAE 100R4 - FLEX
Standard	SAE 100R4
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
16	5/8"	-10	36,0	34,0	21,5	OB-SAE100R4-16
19	3/4"	-12	42,5	36,0	25,0	OB-SAE100R4-20
25	1"	-16	46,0	42,0	30,3	OB-SAE100R4-25
31	1.1/4"	-20	54,0	50,0	38,0	OB-SAE100R4-32
38	1.1/2"	-24	57,0	56,5	43,9	OB-SAE100R4-40
51	2"	-32	74,0	70,0	59,5	OB-SAE100R4-50
60	2.3/8"	-36	75,0	82,0	69,3	OB-SAE100R4-60
63	2.1/2"	-40	81,0	84,0	73,0	OB-SAE100R4-63
76	3"	-48	88,0	100,5	81,0	OB-SAE100R4-76

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



OB PTFE

NON-SKIVE SWAGE FERRULE FOR GLAT PTFE HOSE

Ferrule Type	Non-Skive
Suitable for	PTFE
Standard	
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	28,0	15,0	11,4	OB-PTFE-06
08	5/16"	-05	32,0	19,0	14,2	OB-PTFE-08
10	3/8"	-06	32,0	19,0	14,2	OB-PTFE-10
12	1/2"	-08	32,0	25,0	18,5	OB-PTFE-12
16	5/8"	-10	36,0	30,0	23,0	OB-PTFE-16
19	3/4"	-12	38,5	33,0	26,0	OB-PTFE-20
25	1"	-16	47,0	42,0	35,0	OB-PTFE-25

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



OB PTFE CONVO

NON-SKIVE SWAGE FERRULE FOR CONVOLUTED PTFE HOSE

Ferrule Type	Non-Skive
Suitable for	PTFE VRAP
Standard	
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	28,0	15,0	11,4	OB-PTFE-06
08	5/16"	-05	32,0	19,0	14,2	OB-PTFE-08
10	3/8"	-06	32,0	19,0	14,2	OB-PTFE-10
12	1/2"	-08	32,0	25,0	18,5	OB-PTFE-12
16	5/8"	-10	36,0	30,0	23,0	OB-PTFE-16
19	3/4"	-12	38,5	33,0	26,0	OB-PTFE-20
25	1"	-16	47,0	42,0	35,0	OB-PTFE-25
31	1.1/4"	-20	54,0	47,5	42,0	OB-PTFE-32
38	1.1/2"	-24	65,0	55,0	47,5	OB-PTFE-40
51	2"	-32	75,0	68,5	62,0	OB-PTFE-50

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



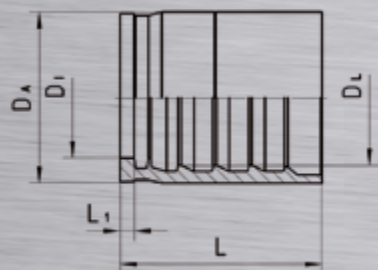
OB 1TE

NON-SKIVE SWAGE FERRULE FOR LOW-PRESSURE HOSE 1TE

Ferrule Type	Non-Skive
Suitable for	1TE
Standard	EN 854
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	30,2	19,5		OB-1+2TE-06
08	5/16"	-05	30,2	20,6		OB-1+2TE-08
10	3/8"	-06	32,0	23,2		OB-1+2TE-10
12	1/2"	-08	34,0	27,0		OB-MTH1-12

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



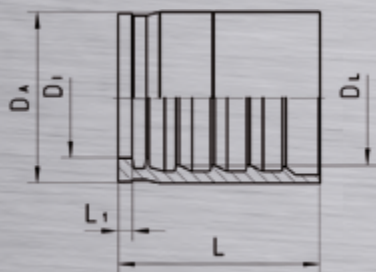
OB 2TE

NON-SKIVE SWAGE FERRULE FOR LOW-PRESSURE HOSE 2TE

Ferrule Type	Non-Skive
Suitable for	2TE
Standard	EN 854
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
06	1/4"	-04	30,2	19,5		OB-1+2TE-06
08	5/16"	-05	30,2	20,6		OB-1+2TE-08
10	3/8"	-06	32,0	23,2		OB-1+2TE-10
12	1/2"	-08	34,0	27,0		OB-MTH1-12
16	5/8"	-10	37,0	32,0	22,0	OB-2TE-16
19	3/4"	-12	42,5	36,0	25,4	OB-2TE-20
25	1"	-16	49,0	44,0	31,3	OB-2TE-25
31	1.1/4"	-20	59,0	50,0	37,6	OB-2TE-32

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



OB 3TE

NON-SKIVE SWAGE FERRULE FOR LOW-PRESSURE HOSE 3TE

Ferrule Type	Non-Skive
Suitable for	3TE
Standard	EN 854
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
25	1"	-16	50,5	45,0		OB-3TE-25
31	1.1/4"	-20	59,0	55,0	37,6	OB-3TE-32
38	1.1/2"	-24	62,8	62,0	44,2	OB-3TE-40
51	2"	-32	78,5	75,0	57,2	OB-3TE-50

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



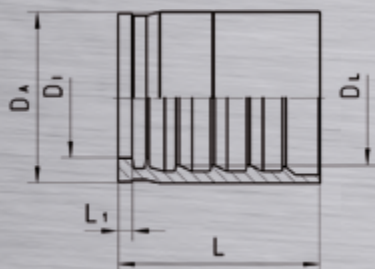
OB MTH1

NON-SKIVE SWAGE FERRULE FOR THERMOPLASTIC HOSE MTH1

Ferrule Type	Non-Skive
Suitable for	MTH1, OL7, OL8
Standard	
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
05	3/16"	-03	26,0	15,0		OB-MTH1-05
06	1/4"	-04	29,0	18,0		OB-MTH1-06
08	5/16"	-05	30,0	20,0		OB-MTH1-08
10	3/8"	-06	32,0	22,0		OB-MTH1-10
12	1/2"	-08	34,0	27,0		OB-MTH1-12
16	5/8"	-10	36,0	29,0		OB-MTH1-16
19	3/4"	-12	40,0	34,0		OB-MTH1-20
25	1"	-16	50,0	42,0		OB-MTH1-25

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



OB OL5

NON-SKIVE SWAGE FERRULE FOR THERMOPLASTIC HOSE OL5

Ferrule Type	Non-Skive
Suitable for	OL5
Standard	
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
03	1/8"	-02	18,0	12,0		OB-OL5-03
04	5/32"	-02,5	20,0	12,0		OB-OL5-04
05	3/16"	-03	22,0	14,0		OB-OL5-05
06	1/4"	-04	26,0	15,0		OB-OL5-06
08	5/16"	-05	29,0	18,0		OB-OL5-08
10	3/8"	-06	31,0	19,0		OB-OL5-10
12	1/2"	-08	33,5	23,0		OB-OL5-12

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



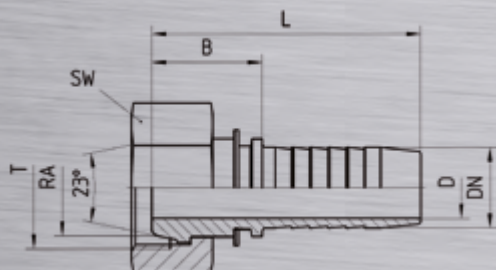
OB OL7, OL8

NON-SKIVE SWAGE FERRULE FOR THERMOPLASTIC HOSE OL7, OL8

Ferrule Type	Non-Skive
Suitable for	MTH1, OL7, OL8
Standard	
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)			CHARVAT
DN	inch	Dash	L	DA	DI	Ordering Codes
05	3/16"	-03	26,0	15,0		OB-MTH1-05
06	1/4"	-04	29,0	17,0		OB-OL7+OL8-06
08	5/16"	-05	30,0	20,0		OB-MTH1-08
10	3/8"	-06	32,0	22,0		OB-MTH1-10
12	1/2"	-08	34,0	27,0		OB-MTH1-12
16	5/8"	-10	36,0	29,0		OB-MTH1-16
19	3/4"	-12	40,0	34,0		OB-MTH1-20
25	1"	-16	50,0	42,0		OB-MTH1-25

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKL

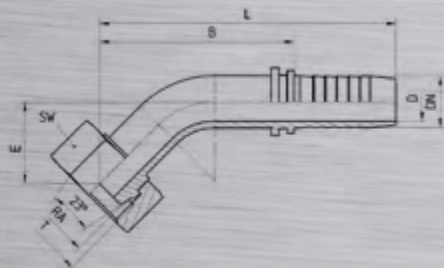
 (Light series)

STRAIGHT INSERT WITH FEMALE METRIC NUT THREAD AND 24°, 60° TAPER

Connection Type	Female Metric Nut Thread
Sealing Type	24°, 60° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes	
06	1/4"	-04	M12x1.5	-03	51,0	24,0	14,0	DKL-06-M12x1,5	
06	1/4"	-04	M14x1.5	-04	47,0	20,0	17,0	DKL-06-M14x1,5	
06	1/4"	-04	M16x1.5	-05	48,0	20,0	19,0	DKL-06-M16x1,5	
08	5/16"	-05	M14x1.5	-04	51,0	24,0	17,0	DKL-08-M14x1,5	
08	5/16"	-05	M16x1.5	-05	48,0	20,0	19,0	DKL-08-M16x1,5	
08	5/16"	-05	M18x1.5	-06	48,0	20,0	22,0	DKL-08-M18x1,5	
10	3/8"	-06	M16x1.5	-05	55,0	25,0	19,0	DKL-10-M16x1,5	
10	3/8"	-06	M18x1.5	-06	51,0	21,0	22,0	DKL-10-M18x1,5	
10	3/8"	-06	M22x1.5	-08	52,0	22,0	27,0	DKL-10-M22x1,5	
12	1/2"	-08	M18x1.5	-06	59,0	28,0	22,0	DKL-12-M18x1,5	
12	1/2"	-08	M22x1.5	-08	54,0	23,0	27,0	DKL-12-M22x1,5	
12	1/2"	-08	M26x1.5	-10	57,0	26,0	32,0	DKL-12-M26x1,5	
16	5/8"	-10	M22x1.5	-08	62,0	28,0	27,0	DKL-16-M22x1,5	
16	5/8"	-10	M26x1.5	-10	59,0	25,0	32,0	DKL-16-M26x1,5	
19	3/4"	-12	M30x2	-12			36,0	DKL-20-M30x2	
25	1"	-16	M36x2	-16			41,0	DKL-25-M36x2	
31	1.1/4"	-20	M45x2	-20			50,0	DKL-32-M45x2	
38	1.1/2"	-24	M52x2	-24			60,0	DKL-40-M52x2	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



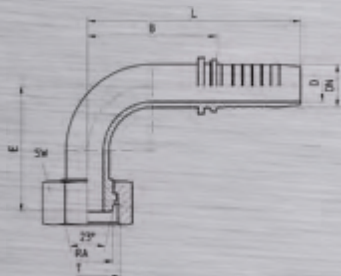
DKL 45° (Light series)

45 ° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24 °, 60 ° TAPER

Connection Type	Female Metric Nut Thread
Sealing Type	24°, 60° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
06	1/4"	-04	M12x1.5	-03	62,0	35,0	16,0	14,0	DKL-06-45-M12x1,5
06	1/4"	-04	M14x1.5	-04	62,0	35,0	16,0	17,0	DKL-06-45-M14x1,5
06	1/4"	-04	M16x1.5	-05	63,0	36,0	17,0	19,0	DKL-06-45-M16x1,5
08	5/16"	-05	M14x1.5	-04	65,0	38,0	18,0	17,0	DKL-08-45-M14x1,5
08	5/16"	-05	M16x1.5	-05	65,0	38,0	18,0	19,0	DKL-08-45-M16x1,5
08	5/16"	-05	M18x1.5	-06	66,0	39,0	18,0	22,0	DKL-08-45-M18x1,5
10	3/8"	-06	M16x1.5	-05	67,0	37,0	18,0	19,0	DKL-10-45-M16x1,5
10	3/8"	-06	M18x1.5	-06	67,0	37,0	18,0	22,0	DKL-10-45-M18x1,5
10	3/8"	-06	M22x1.5	-08	66,0	36,0	18,0	27,0	DKL-10-45-M22x1,5
12	1/2"	-08	M18x1.5	-06	83,0	52,0	21,0	22,0	DKL-12-45-M18x1,5
12	1/2"	-08	M22x1.5	-08	82,0	51,0	20,0	27,0	DKL-12-45-M22x1,5
12	1/2"	-08	M26x1.5	-10	81,0	50,0	22,0	32,0	DKL-12-45-M26x1,5
16	5/8"	-10	M22x1.5	-08	97,0	63,0	27,0	27,0	DKL-16-45-M22x1,5
16	5/8"	-10	M26x1.5	-10	96,0	62,0	26,0	32,0	DKL-16-45-M26x1,5

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKL 90°

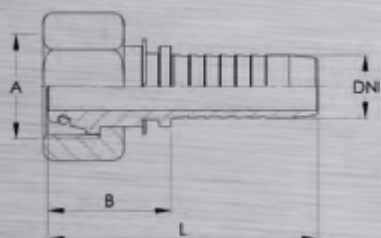
(Light series)

90° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24°, 60° TAPER

Connection Type	Female Metric Nut Thread
Sealing Type	24°, 60° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
06	1/4"	-04	M12x1.5	-03	53,0	26,0	28,0	14,0	DKL-06-90-M12x1,5
06	1/4"	-04	M14x1.5	-04	53,0	26,0	28,0	17,0	DKL-06-90-M14x1,5
06	1/4"	-04	M16x1.5	-05	53,0	26,0	29,0	19,0	DKL-06-90-M16x1,5
08	5/16"	-05	M14x1.5	-04	57,0	30,0	31,0	17,0	DKL-08-90-M14x1,5
08	5/16"	-05	M16x1.5	-05	57,0	30,0	32,0	19,0	DKL-08-90-M16x1,5
08	5/16"	-05	M18x1.5	-06	57,0	30,0	32,0	22,0	DKL-08-90-M18x1,5
10	3/8"	-05	M16x1.5	-05	60,0	30,0	32,0	19,0	DKL-10-90-M16x1,5
10	3/8"	-06	M18x1.5	-06	60,0	30,0	31,0	22,0	DKL-10-90-M18x1,5
10	3/8"	-06	M22x1.5	-08	60,0	30,0	30,0	27,0	DKL-10-90-M22x1,5
12	1/2"	-08	M18x1.5	-06	73,0	42,0	42,0	22,0	DKL-12-90-M18x1,5
12	1/2"	-08	M22x1.5	-08	73,0	42,0	40,0	27,0	DKL-12-90-M22x1,5
12	1/2"	-08	M26x1.5	-10	73,0	42,0	43,0	32,0	DKL-12-90-M26x1,5
16	5/8"	-10	M22x1.5	-08	86,0	52,0	53,0	27,0	DKL-16-90-M22x1,5
16	5/8"	-10	M26x1.5	-10	86,0	52,0	49,0	32,0	DKL-16-90-M26x1,5

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKOL (Light series)

STRAIGHT INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

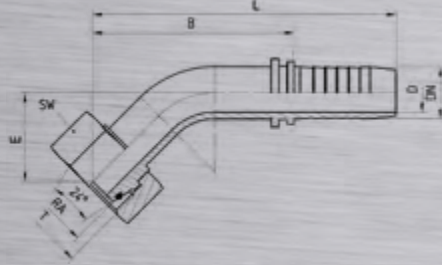
Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	SW (Hex)	Ordering Codes
06	1/4"	-04	M12x1.5	-03	52,00	25,00	14,00	DKOL-06-M12x1,5
06	1/4"	-04	M14x1.5	-04	50,00	22,00	17,00	DKOL-06-M14x1,5
06	1/4"	-04	M16x1.5	-05	51,00	23,00	19,00	DKOL-06-M16x1,5
06	1/4"	-04	M18x1.5	-06	51,00	23,00	22,00	DKOL-06-M18x1,5
08	5/16"	-05	M12x1.5	-03	52,00	25,00	14,00	DKOL-08-M12x1,5
08	5/16"	-05	M14x1.5	-04	53,00	26,00	17,00	DKOL-08-M14x1,5
08	5/16"	-05	M16x1.5	-05	50,00	23,00	19,00	DKOL-08-M16x1,5
08	5/16"	-05	M18x1.5	-06	50,00	23,00	22,00	DKOL-08-M18x1,5
10	3/8"	-06	M14x1.5	-04	56,00	26,00	17,00	DKOL-10-M14x1,5
10	3/8"	-06	M16x1.5	-05	57,00	27,00	19,00	DKOL-10-M16x1,5
10	3/8"	-06	M18x1.5	-06	54,00	24,00	22,00	DKOL-10-M18x1,5
10	3/8"	-06	M22x1.5	-08	55,00	25,00	27,00	DKOL-10-M22x1,5

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B		SW (Hex)	Ordering Codes
12	1/2"	-08	M18x1.5	-06	61,00	30,00		22,00	DKOL-12-M18x1,5
12	1/2"	-08	M22x1.5	-08	57,00	26,00		27,00	DKOL-12-M22x1,5
12	1/2"	-08	M26x1.5	-10	59,00	28,00		32,00	DKOL-12-M26x1,5
16	5/8"	-10	M22x1.5	-08	63,00	29,00		27,00	DKOL-16-M22x1,5
16	5/8"	-10	M26x1.5	-10	62,00	28,00		32,00	DKOL-16-M26x1,5
16	5/8"	-10	M30x2.0	-12	65,00	31,00		34,00	DKOL-16-M30x2
19	3/4"	-12	M26x1.5	-10	71,00	32,00		32,00	DKOL-20-M26x1,5
19	3/4"	-12	M30x2.0	-12	69,00	30,00		36,00	DKOL-20-M30x2
19	3/4"	-12	M36x2.0	-16	72,00	33,00		41,00	DKOL-20-M36x2
25	1"	-16	M30x2.0	-12	84,00	37,00		36,00	DKOL-25-M30x2
25	1"	-16	M36x2.0	-16	79,00	32,00		41,00	DKOL-25-M36x2
25	1"	-16	M45x2.0	-20	83,00	37,00		50,00	DKOL-25-M45x2
31	1.1/4"	-20	M36x2.0	-16	94,00	39,00		41,00	DKOL-32-M36x2
31	1.1/4"	-20	M45x2.0	-20	90,00	35,00		50,00	DKOL-32-M45x2
31	1.1/4"	-20	M52x2.0	-24	94,00	40,00		60,00	DKOL-32-M52x2
38	1.1/2"	-24	M45x2.0	-20	98,00	41,00		50,00	DKOL-40-M45x2
38	1.1/2"	-24	M52x2.0	-24	95,00	38,00		60,00	DKOL-40-M52x2
51	2"	-32	M52x2.0	-24	111,00	36,00		60,00	DKOL-50-M52x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKOL 45° (Light series)

45° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

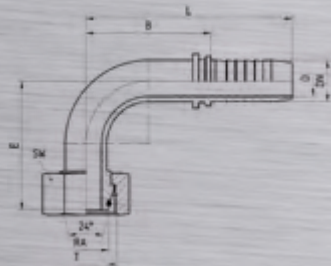
Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	M12x1.5	-03	63,0	40,0	15,0	14,0	DKOL-06-45-M12x1,5
06	1/4"	-04M	M14x1.5	-04	64,0	37,0	18,0	17,0	DKOL-06-45-M14x1,5
06	1/4"	-04	M16x1.5	-05	65,0	38,0	19,0	19,0	DKOL-06-45-M16x1,5
08	5/16"	-05	M14x1.5	-04	68,0	44,0	18,0	17,0	DKOL-08-45-M14x1,5
08	5/16"	-05M	M16x1.5	-05	68,0	41,0	18,0	19,0	DKOL-08-45-M16x1,5
08	5/16"	-05	M18x1.5	-06	69,0	45,0	20,0	22,0	DKOL-08-45-M18x1,5
10	3/8"	-06	M16x1.5	-05	70,0	40,0	19,0	19,0	DKOL-10-45-M16x1,5
10	3/8"	-06M	M18x1.5	-06	70,0	40,0	18,0	22,0	DKOL-10-45-M18x1,5
10	3/8"	-06	M22x1.5	-08	66,0	36,0	19,0	27,0	DKOL-10-45-M22x1,5
12	1/2"	-08	M18x1.5	-06	83,0	52,0	23,0	22,0	DKOL-12-45-M18x1,5
12	1/2"	-08M	M22x1.5	-08	83,0	52,0	23,0	27,0	DKOL-12-45-M22x1,5
12	1/2"	-08	M26x1.5	-10	81,0	50,0	23,0	32,0	DKOL-12-45-M26x1,5

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
16	5/8"	-10	M22x1.5	-08	99,0	65,0	28,0	27,0	DKOL-16-45-M22x1,5
16	5/8"	-10M	M26x1.5	-10	98,0	64,0	25,0	32,0	DKOL-16-45-M26x1,5
16	5/8"	-10	M30x2.0	-12	98,0	64,0	28,0	36,0	DKOL-16-45-M30x2
19	3/4"	-12	M26x1.5	-10	116,0	77,0	34,0	32,0	DKOL-20-45-M26x1,5
19	3/4"	-12	M30x2.0	-12	116,0	77,0	34,0	36,0	DKOL-20-45-M30x2
19	3/4"	-12	M36x2.0	-16	114,0	75,0	32,0	41,0	DKOL-20-45-M36x2
25	1"	-16	M30x2.0	-12	129,0	83,0	38,0	36,0	DKOL-25-45-M30x2
25	1"	-16	M36x2.0	-16	128,0	82,0	37,0	41,0	DKOL-25-45-M36x2
25	1"	-16	M45x2.0	-20	129,0	83,0	39,0	50,0	DKOL-25-45-M45x2
31	1.1/4"	-20	M36x2.0	-16	169,0	115,0	40,0	41,0	DKOL-32-45-M36x2
31	1.1/4"	-20	M45x2.0	-20	162,0	107,0	45,0	50,0	DKOL-32-45-M45x2
31	1.1/4"	-20	M52x2.0	-24	163,0	115,0	39,0	60,0	DKOL-32-45-M52x2
38	1.1/2"	-24	M45x2.0	-20	170,0	112,0	51,0	50,0	DKOL-40-45-M45x2
38	1.1/2"	-24	M52x2.0	-24	181,0	120,0	58,0	60,0	DKOL-40-45-M52x2
50	2"	-32	M52x2.0	-24	210,0	135,3	55,0	60,0	DKOL-50-45-M52x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKOL 90° (Light series)

90° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

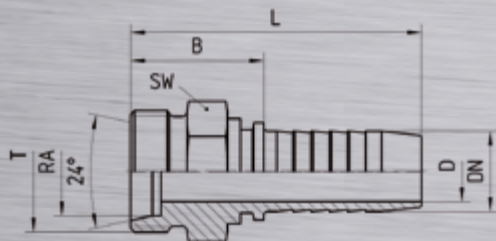
Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
06	1/4"	-04	M12x1.5	-03	53,0	26,0	28,0	14,0	DKOL-06-90-M12x1,5
06	1/4"	-04M	M14x1.5	-04	50,0	23,0	31,0	17,0	DKOL-06-90-M14X1,5
06	1/4"	-04	M16x1.5	-05	53,0	26,0	33,0	19,0	DKOL-06-90-M16x1,5
08	5/16"	-05	M14x1.5	-04	57,0	30,0	33,0	17,0	DKOL-08-90-M14x1,5
08	5/16"	-05M	M16x1.5	-05	57,0	30,0	36,0	19,0	DKOL-08-90-M16x1,5
08	5/16"	-05	M18x1.5	-06	57,0	30,0	35,0	22,0	DKOL-08-90-M18x1,5
10	3/8"	-06	M16x1.5	-05	60,0	30,0	35,0	19,0	DKOL-10-90-M16x1,5
10	3/8"	-06M	M18x1.5	-06	60,0	30,0	34,0	22,0	DKOL-10-90-M18x1,5
10	3/8"	-06	M22x1.5	-08	62,0	32,0	35,0	27,0	DKOL-10-90-M22x1,5
12	1/2"	-08	M18x1.5	-06	73,0	42,0	44,0	22,0	DKOL-12-90-M18x1,5
12	1/2"	-08M	M22x1.5	-08	73,0	42,0	43,0	27,0	DKOL-12-90-M22x1,5
12	1/2"	-08	M26x1.5	-10	73,0	42,0	42,0	32,0	DKOL-12-90-M26x1,5

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
16	5/8"	-10	M22x1.5	-08	84,0	50,0	55,0	27,0	DKOL-16-90-M22x1,5
16	5/8"	-10M	M26x1.5	-10	81,0	47,0	48,0	32,0	DKOL-16-90-M26x1,5
16	5/8"	-10	M30x2.0	-12	86,0	52,0	54,0	36,0	DKOL-16-90-M30x2
19	3/4"	-12	M26x1.5	-10	99,0	60,0	64,0	32,0	DKOL-20-90-M26x1,5
19	3/4"	-12	M30x2.0	-12	100,0	61,0	62,0	36,0	DKOL-20-90-M30x2
19	3/4"	-12	M36x2.0	-16	99,0	60,0	63,0	41,0	DKOL-20-90-M36x2
25	1"	-16	M30x2.0	-12	114,0	68,0	72,0	36,0	DKOL-25-90-M30x2
25	1"	-16	M36x2.0	-16	112,0	66,0	74,0	41,0	DKOL-25-90-M36x2
25	1"	-16	M45x2.0	-20	114,0	68,0	74,0	50,0	DKOL-25-90-M45x2
31	1.1/4"	-20	M36x2.0	-16	148,0	94,0	78,0	41,0	DKOL-32-90-M36x2
31	1.1/4"	-20	M45x2.0	-20	141,0	87,0	90,0	50,0	DKOL-32-90-M45x2
31	1.1/4"	-20	M52x2.0	-24	141,0	87,0	89,0	60,0	DKOL-32-90-M52x2
38	1.1/2"	-24	M45x2.0	-20	162,0	105,0	106,0	50,0	DKOL-40-90-M45x2
38	1.1/2"	-24	M52x2.0	-24	162,0	105,0	103,0	60,0	DKOL-40-90-M52x2
51	2"	-32	M52x2.0	-24	205,0	130,0	130,0	60,0	DKOL-50-90-M52x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



CEL

 (Light series)

STRAIGHT INSERT WITH METRIC THREAD AND 24° CONICAL BORE

Connection Type	Male Metric Thread
Sealing Type	24° Conical Bore
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	SW (Hex)	Ordering Codes
05	1/8"	-03	M12x1,5	-03	50,0	23,0	14,0	CEL-05-M12x1,5
06	1/4"	-04	M12x1.5	-03	51,0	23,0	14,0	CEL-06-M12x1,5
06	1/4"	-04	M14x1.5	-04	50,0	22,0	14,0	CEL-06-M14x1,5
06	1/4"	-04	M16x1.5	-05	51,0	23,0	17,0	CEL-06-M16x1,5
08	5/16"	-05	M14x1.5	-04	57,0	30,0	14,0	CEL-08-M14x1,5
08	5/16"	-05	M16x1.5	-05	52,0	24,0	17,0	CEL-08-M16x1,5
08	5/16"	-05	M18x1.5	-06	52,0	24,0	19,0	CEL-08-M18x1,5
10	3/8"	-06	M16x1.5	-05	54,0	24,0	17,0	CEL-10-M16x1,5
10	3/8"	-06	M18x1.5	-06	57,0	27,0	19,0	CEL-10-M18x1,5
10	3/8"	-06	M22x1.5	-08	55,0	25,0	22,0	CEL-10-M22x1,5
12	1/2"	-08	M18x1.5	-06	64,0	33,0	19,0	CEL-12-M18x1,5
12	1/2"	-08	M22x1.5	-08	61,0	30,0	22,0	CEL-12-M22x1,5
12	1/2"	-08	M26x1.5	-10	64,0	33,0	27,0	CEL-12-M26x1,5

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B		SW (Hex)	Ordering Codes
16	5/8"	-10	M22x1.5	-08	70,0	36,0		22,0	CEL-16-M22x1,5
16	5/8"	-10	M26x1.5	-10	64,0	30,0		27,0	CEL-16-M26x1,5
16	5/8"	-10	M30x2.0	-12	71,0	37,0		30,0	CEL-16-M30x2
19	3/4"	-12	M26x1.5	-10	76,0	37,0		27,0	CEL-20-M26x1,5
19	3/4"	-12	M30x2.0	-12	72,0	33,0		32,0	CEL-20-M30x2
19	3/4"	-12	M36x2.0	-16	78,0	39,0		36,0	CEL-20-M36x2
25	1"	-16	M30x2.0	-12	88,0	42,0		30,0	CEL-25-M30x2
25	1"	-16	M36x2.0	-16	81,0	34,0		36,0	CEL-25-M36x2
25	1"	-16	M45x2.0	-20	90,0	44,0		46,0	CEL-25-M45x2
31	1.1/4"	-20	M36x2.0	-16	100,0	45,0		36,0	CEL-32-M36x2
31	1.1/4"	-20	M45x2.0	-20	93,0	38,0		46,0	CEL-32-M45x2
38	1.1/2"	-24	M45x2.0	-20	105,0	47,0		46,0	CEL-40-M45x2
38	1.1/2"	-24	M52x2.0	-24	99,0	41,0		55,0	CEL-40-M52x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



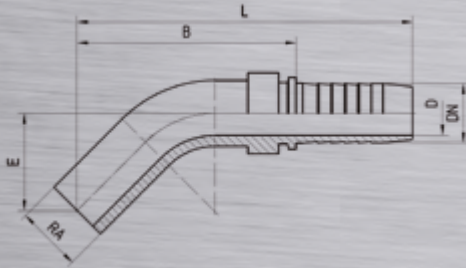
BEL (Light series)

STRAIGHT INSERT FOR CUTTING RING COUPLING

Connection Type	Ready for Cutting Ring and Metric Nut
Sealing Type	Cutting Ring 24° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes
06	1/4"	-04	6L	-03	31,0	34,0		BEL-06-06L
06	1/4"	-04	8L	-04	61,0	34,0		BEL-06-08L
06	1/4"	-04	10L	-05	63,0	36,0		BEL-06-10L
08	5/16"	-05	8L	-04	57,0	30,0		BEL-08-08L
08	5/16"	-05	10L	-05	57,0	30,0		BEL-08-10L
08	5/16"	-05	12L	-06	59,0	32,0		BEL-08-12L
10	3/8"	-06	10L	-05	60,0	30,0		BEL-10-10L
10	3/8"	-06	12L	-06	62,0	32,0		BEL-10-12L
10	3/8"	-06	15L	-08	64,0	34,0		BEL-10-15L
12	1/2"	-08	12L	-06	65,0	34,0		BEL-12-12L
12	1/2"	-08	15L	-08	67,0	36,0		BEL-12-15L
12	1/2"	-08	18L	-10	70,0	39,0		BEL-12-18L
16	5/8"	-10	18L	-10	72,0	38,0		BEL-16-18L
19	3/4"	-12	22L	-12	80,0	41,0		BEL-20-22L
25	1"	-16	28L	-16	93,0	47,0		BEL-25-28L
31	1.1/4"	-20	35L	-20	101,0	47,0		BEL-32-35L
38	1.1/2"	-24	42L	-24	130,0	47,0		BEL-40-42L

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



BEL 45°

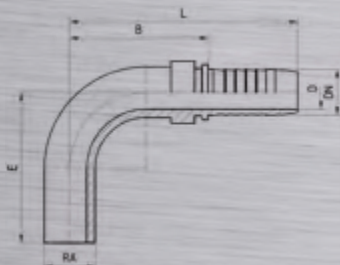
(Light series)

45° ELBOW INSERT FOR CUTTING RING COUPLING

Connection Type	Ready for Cutting Ring and Metric Nut
Sealing Type	Cutting Ring 24° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	Ordering Codes
06	1/4"	-04	6L	-03	78,0	51,0	20,0	BEL-06-45-06L
06	1/4"	-04	8L	-04	80,0	53,0	20,0	BEL-06-45-08L
06	1/4"	-04	10L	-05	81,0	54,0	22,0	BEL-06-45-10L
08	5/16"	-05	8L	-04	80,0	53,0	20,0	BEL-08-45-8L
08	5/16"	-05	10L	-05	80,0	53,0	22,0	BEL-08-45-10L
08	5/16"	-05	12L	-06	84,0	57,0	22,0	BEL-08-45-12L
10	3/8"	-06	10L	-05	82,0	52,0	22,0	BEL-10-45-10L
10	3/8"	-06	12L	-06	87,0	57,0	22,0	BEL-10-45-12L
10	3/8"	-06	15L	-08	91,0	61,0	22,5	BEL-10-45-15L
12	1/2"	-08	12L	-06	91,0	60,0	22,0	BEL-12-45-12L
12	1/2"	-08	15L	-08	94,0	63,0	22,5	BEL-12-45-15L
12	1/2"	-08	18L	-10	708,0	77,0	31,0	BEL-12-45-18L
16	5/8"	-10	18L	-10	110,0	76,0	31,0	BEL-16-45-18L
19	3/4"	-12	22L	-12	123,0	84,0	32,0	BEL-20-45-22L
25	1"	-16	28L	-16	141,0	95,0	40,0	BEL-25-45-28L
31	1.1/4"	-20	35L	-20	158,0	104,0	34,0	BEL-32-45-35L
38	1.1/2"	-24	42L	-24	169,0	112,0	46,0	BEL-40-45-42L

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



BEL 90°

(Light series)

90° ELBOW INSERT FOR CUTTING RING COUPLING

Connection Type	Ready for Cutting Ring and Metric Nut
Sealing Type	Cutting Ring 24° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	Ordering Codes
06	1/4"	-04	6L	-03	63,0	36,0	35,0	BEL-06-90-06L
06	1/4"	-04	8L	-04	65,0	38,0	38,0	BEL-06-90-08L
06	1/4"	-04	10L	-05	67,0	40,0	40,0	BEL-06-90-10L
08	5/16"	-05	8L	-04	69,0	42,0	35,0	BEL-08-90-08L
08	5/16"	-05	10L	-05	68,0	41,0	40,0	BEL-08-90-10L
08	5/16"	-05	12L	-06	74,0	47,0	42,0	BEL-08-90-12L
10	3/8"	-06	10L	-05	68,0	38,0	40,0	BEL-10-90-10L
10	3/8"	-06	12L	-06	75,0	45,0	42,0	BEL-10-90-12L
10	3/8"	-06	15L	-08	81,0	51,0	45,0	BEL-10-90-15L
12	1/2"	-08	12L	-06	79,0	48,0	42,0	BEL-12-90-12L
12	1/2"	-08	15L	-08	85,0	54,0	45,0	BEL-12-90-15L
12	1/2"	-08	18L	-10	93,0	62,0	60,0	BEL-12-90-18L
16	5/8"	-10	18L	-10	95,0	61,0	60,0	BEL-16-90-18L
19	3/4"	-12	22L	-12	110,0	71,0	65,0	BEL-20-90-22L
25	1"	-16	25L	-16	125,0	79,0	80,0	BEL-25-90-25L
31	1.1/4"	-20	35L	-20	145,0	91,0	90,0	BEL-32-90-35L
38	1.1/2"	-24	42L	-24	158,0	101,0	100,0	BEL-40-90-42L

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



BES

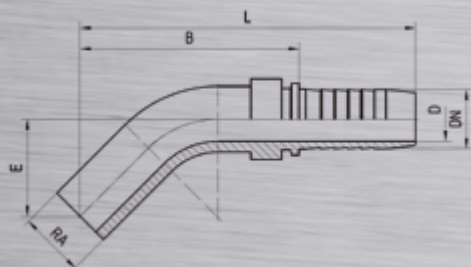
 (Heavy series)

STRAIGHT INSERT FOR CUTTING RING COUPLING

Connection Type	Ready for Cutting Ring and Metric Nut
Sealing Type	Cutting Ring 24° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes
06	1/4"	-04	06S	-02	61,0	34,0		BES-06-06S
06	1/4"	-04	08S	-03	61,0	34,0		BES-06-08S
06	1/4"	-04	10S	-04	63,0	36,0		BES-06-10S
08	5/16"	-04	08S	-03	57,0	30,0		BES-08-08S
08	5/16"	-05	10S	-04	57,0	30,0		BES-08-10S
08	5/16"	-05	12S	-05	59,0	32,0		BES-08-12S
10	3/8"	-05	12S	-05	62,0	32,0		BES-10-12S
10	3/8"	-06	14S	-06	67,0	37,0		BES-10-14S
10	3/8"	-06	16S	-08	67,0	37,0		BES-10-16S
12	1/2"	-08	14S	-06	67,0	36,0		BES-12-14S
12	1/2"	-08	16S	-08	69,0	38,0		BES-12-16S
12	1/2"	-08	20S	-10	84,0	53,0		BES-12-20S
16	5/8"	-10	20S	-10	72,0	38,0		BES-16-20S
19	3/4"	-12	25S	-12	80,0	41,0		BES-20-25S
25	1"	-16	30S	-16	93,0	47,0		BES-25-30S
31	1.1/4"	-20	38S	-20	93,0	39,0		BES-32-38S

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



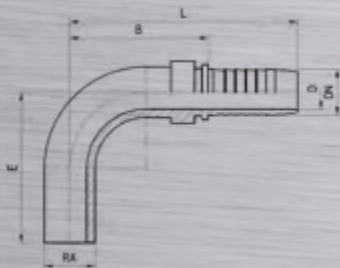
BES 45° (Heavy series)

45° ELBOW INSERT FOR CUTTING RING COUPLING

Connection Type	Ready for Cutting Ring and Metric Nut
Sealing Type	Cutting Ring 24° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	Ordering Codes
06	1/4"	-04	06S	-05	78,0	51,0	20,0	BES-06-45-06S
06	1/4"	-04	08S	-03	80,0	53,0	20,0	BES-06-45-08S
06	1/4"	-04	10S	-04	81,0	54,0	22,0	BES-06-45-10S
08	5/16"	-05	08S	-03	80,0	53,0	20,0	BES-08-45-08S
08	5/16"	-05	10S	-04	80,0	53,0	22,0	BES-08-45-10S
08	5/16"	-05	12S	-05	84,0	57,0	22,0	BES-08-45-12S
10	3/8"	-06	12S	-05	87,0	57,0	22,0	BES-10-45-12S
10	3/8"	-06	14S	-06	91,0	61,0	22,5	BES-10-45-14S
10	3/8"	-06	16S	-08	104,0	74,0	31,0	BES-10-45-16S
12	1/2"	-08	14S	-06	94,0	63,0	22,5	BES-12-45-45S
12	1/2"	-08	16S	-08	108,0	77,0	31,0	BES-12-45-16S
12	1/2"	-08	20S	-10	111,0	80,0	32,0	BES-12-45-20S
16	5/8"	-10	20S	-10	115,0	81,0	32,0	BES-16-45-20S
19	3/4"	-12	25S	-12	130,0	91,0	40,0	BES-20-45-25S
25	1"	-16	30S	-16	147,0	101,0	43,0	BES-25-45-30S
31	1.1/4"	-20	38S	-20	164,0	110,0	46,0	BES-32-45-38S

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



BES 90°

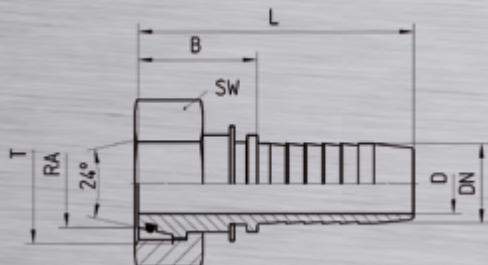
(Heavy series)

90° ELBOW INSERT FOR CUTTING RING COUPLING

Connection Type	Ready for Cutting Ring and Metric Nut
Sealing Type	Cutting Ring 24° Taper
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	Ordering Codes
06	1/4"	-04	6S	-02	63,0	36,0	35,0	BES-06-90-06S
06	1/4"	-04	8S	-03	65,0	38,0	38,0	BES-06-90-08S
06	1/4"	-04	10S	-04	67,0	40,0	40,0	BES-06-90-10S
08	5/16"	-05	8S	-03	69,0	42,0	35,0	BES-08-90-08S
08	5/16"	-05	10S	-04	68,0	41,0	40,0	BES-08-90-10S
08	5/16"	-05	12S	-05	74,0	47,0	42,0	BES-08-90-12S
10	3/8"	-06	12S	-05	75,0	45,0	42,0	BES-10-90-12S
10	3/8"	-06	14S	-06	81,0	51,0	45,0	BES-10-90-14S
10	3/8"	-06	16S	-08	89,0	59,0	60,0	BES-10-90-16S
12	1/2"	-08	14S	-06	85,0	54,0	45,0	BES-12-90-14S
12	1/2"	-08	16S	-08	93,0	62,0	60,0	BES-12-90-16S
12	1/2"	-08	20S	-10	98,0	67,0	65,0	BES-12-90-20S
16	5/8"	-10	20S	-10	102,0	68,0	65,0	BES-16-90-20S
19	3/4"	-12	25S	-12	113,0	74,0	80,0	BES-20-90-25S
25	1"	-16	30S	-16	133,0	87,0	90,0	BES-25-90-30S
31	1.1/4"	-20	28S	-20	154,0	100,0	100,0	BES-32-90-28S

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKOS (Heavy series)

STRAIGHT INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

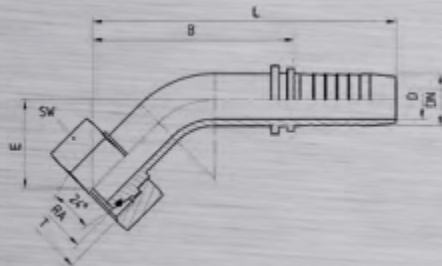
Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	SW (Hex)	Ordering Codes
6	1/4"	-04	M14x1.5	-02	52,0	25,0	17,0	DKOS-06-M14x1,5
06	1/4"	-04	M16x1.5	-03	53,0	25,0	19,0	DKOS-06-M16x1,5
06	1/4"	-04	M18x1.5	-04	53,0	25,0	22,0	DKOS-06-M18x1,5
06	1/4"	-04	M20x1.5	-05	55,0	27,0	24,0	DKOS-06-M20x1,5
08	5/16"	-05	M18x1.5	-04	52,0	25,0	22,0	DKOS-08-M18x1,5
08	5/16"	-05	M20x1.5	-05	52,0	25,0	24,0	DKOS-08-M20x1,5
08	5/16"	-05	M22x1.5	-06	57,0	29,0	27,0	DKOS-08-M22x1,5
10	3/8"	-06	M20x1.5	-05	56,0	26,0	24,0	DKOS-10-M20x1,5
10	3/8"	-06	M22x1.5	-06	56,0	27,0	27,0	DKOS-10-M22x1,5
10	3/8"	-06	M24x1.5	-08	58,0	28,0	30,0	DKOS-10-M24x1,5
12	1/2"	-08	M22x1.5	-06	63,0	32,0	27,0	DKOS-12-M22x1,5
12	1/2"	-08	M24x1.5	-08	61,0	30,0	30,0	DKOS-12-M24x1,5
12	1/2"	-08	M30x2.0	-10	64,0	33,0	36,0	DKOS-12-M30x2

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B		SW (Hex)	Ordering Codes
16	5/8"	-10	M24x1.5	-08	66,0	32,0		30,0	DKOS-16-M24x1,5
16	5/8"	-10	M30x2.0	-10	69,0	35,0		36,0	DKOS-16-M30x2
16	5/8"	-10/SW41	M36x2.0	-12	68,0	34,0		41,0	DKOS-16-M36x2
16	5/8"	-10/SW46	M36x2.0	-12	68,0	34,0		46,0	DKOS-16-M36x2
19	3/4"	-12	M30x2.0	-10	74,0	35,0		36,0	DKOS-20-M30x2
19	3/4"	-12/SW41	M36x2.0	-12	78,0	39,0		41,0	DKOS-20-M36x2
19	3/4"	-12/SW46	M36x2.0	-12	78,0	39,0		46,0	DKOS-20-M36x2
19	3/4"	-12	M42x2.0	-16	77,0	38,0		50,0	DKOS-20-M42x2
25	1"	-16/SW46	M36x2.0	-12	87,0	41,0		46,0	DKOS-25-M36x2
25	1"	-16	M42x2.0	-16	90,0	44,0		50,0	DKOS-25-M42x2
25	1"	-16	M52x2.0	-20	84,0	37,0		60,0	DKOS-25-M52x2
31	1.1/4"	-20	M42x2.0	-16	95,0	41,0		50,0	DKOS-32-M42x2
31	1.1/4"	-20	M52x2.0	-20	106,0	51,0		60,0	DKOS-32-M52x2
38	1.1/2"	-24	M52x2.0	-20	99,0	41,0		60,0	DKOS-40-M52x2
38	1.1/2"	-24	M68x2.0	-24	111,0	53,0		80,0	DKOS-40-M68x2
51	2"	-32	M68x2.0	-24	119,0	44,0		80,0	DKOS-50-M68x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKOS 45° (Heavy series)

45° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

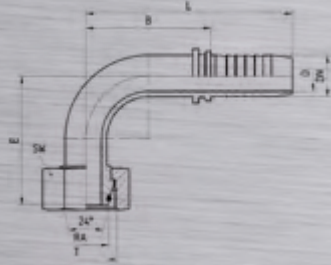
Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	M16x1.5	-03	65,0	38,0	18,0	19,0	DKOS-06-45-M16x1,5
06	1/4"	-04	M18x1.5	-04	68,0	41,0	17,0	22,0	DKOS-06-45-M18x1,5
06	1/4"	-04	M20x1.5	-05	68,0	41,0	17,0	24,0	DKOS-06-45-M20x1,5
08	5/16"	-05	M18x1.5	-04	69,0	42,0	19,0	22,0	DKOS-08-45-M18x1,5
08	5/16"	-05	M20x1.5	-05	68,0	41,0	19,0	24,0	DKOS-08-45-M20x1,5
08	5/16"	-05	M22x1.5	-06	73,0	46,0	18,0	27,0	DKOS-08-45-M22x1,5
10	3/8"	-06	M20x1.5	-05	71,0	41,0	18,0	24,0	DKOS-10-45-M20x1,5
10	3/8"	-06	M22x1.5	-06	72,0	42,0	18,0	27,0	DKOS-10-45-M22x1,5
10	3/8"	-06	M24x1.5	-08	72,0	42,0	19,0	30,0	DKOS-10-45-M24X1,5
12	1/2"	-08	M22x1.5	-06	85,0	54,0	24,0	27,0	DKOS-12-45-M22x1,5
12	1/2"	-08	M24x1.5	-08	85,0	54,0	24,0	30,0	DKOS-12-45-M24x1,5
12	1/2"	-08	M30x2.0	-10	101,0	70,0	27,0	36,0	DKOS-12-45-M30x2

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
16	5/8"	-10	M24x1.5	-08	101,0	67,0	28,0	30,0	DKOS-16-45-M24x1,5
16	5/8"	-10	M30x2.0	-10	102,0	68,0	32,0	36,0	DKOS-16-45-M30x2
16	5/8"	-10/SW41	M36x2.0	-12	103,0	69,0	32,0	41,0	DKOS-16-45-M36x2
16	5/8"	-10/SW46	M36x2.0	-12	103,0	69,0	32,0	46,0	DKOS-16-45-M36x2
19	3/4"	-12	M30x2.0	-10	117,0	78,0	34,0	36,0	DKOS-20-45-M30x2
19	3/4"	-12/SW41	M36x2.0	-12	118,0	79,0	36,0	41,0	DKOS-20-45-M36x2
19	3/4"	-12/SW46	M36x2.0	-12	118,0	79,0	36,0	46,0	DKOS-20-45-M36x2
19	3/4"	-12	M42x2.0	-16	113,0	74,0	34,0	50,0	DKOS-20-45-M42x2
25	1"	-16/SW46	M36x2.0	-12	133,0	87,0	41,0	46,0	DKOS-25-45-M36x2
25	1"	-16	M42x2.0	-16	134,0	88,0	40,0	50,0	DKOS-25-45-M42x2
25	1"	-16	M52x2.0	-20	129,0	83,0	39,0	60,0	DKOS-25-45-M52x2
31	1.1/4"	-20	M42x2.0	-16	169,0	115,0	40,0	50,0	DKOS-32-45-M42x2
31	1.1/4"	-20	M52x2.0	-20	163,0	109,0	39,0	60,0	DKOS-32-45-M52x2
38	1.1/2"	-24	M52x2.0	-20	172,0	115,0	53,0	60,0	DKOS-40-45-M52x2
38	1.1/2"	-24	M68x2.0	-24	174,0	117,0	49,0	80,0	DKOS-40-45-M68x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKOS 90° (Heavy series)

90° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

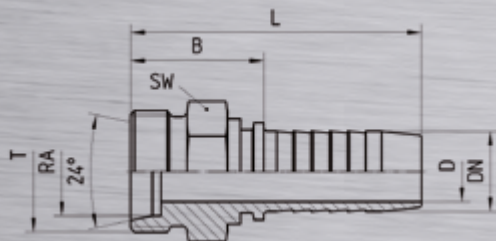
Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	M16x1.5	-03	53,0	26,0	32,0	19,0	DKOS-06-90-M16x1,5
06	1/4"	-04	M18x1.5	-04	52,0	25,0	33,0	22,0	DKOS-06-90-M18x1,5
06	1/4"	-04	M20x1.5	-05	53,0	26,0	33,0	24,0	DKOS-06-90-M20x1,5
08	5/16"	-08	M18x1.5	-04	57,0	30,0	35,0	22,0	DKOS-08-90-M18x1,5
08	5/16"	-05	M20x1.5	-05	57,0	30,0	35,0	24,0	DKOS-08-90-M20x1,5
08	5/16"	-05	M22x1.5	-06	58,0	31,0	36,0	27,0	DKOS-08-90-M22x1,5
10	3/8"	-06	M20x1.5	-05	60,0	30,0	34,0	24,0	DKOS-10-90-M20x1,5
10	3/8"	-06	M22x1.5	-06	60,0	30,0	35,0	27,0	DKOS-10-90-M22x1,5
10	3/8"	-06	M24x1.5	-08	60,0	30,0	36,0	30,0	DKOS-10-90-M24x1,5
12	1/2"	-08	M22x1.5	-06	73,0	42,0	45,0	27,0	DKOS-12-90-M22x1,5
12	1/2"	-08	M24x1.5	-08	74,0	43,0	46,0	30,0	DKOS-12-90-M24x1,5
12	1/2"	-08	M30x2.0	-10	73,0	42,0	48,0	36,0	DKOS-12-90-M30x2

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
16	5/8"	-10	M24x1.5	-08	86,0	52,0	56,0	30,0	DKOS-16-90-M24x1,5
16	5/8"	-10	M30x2.0	-10	86,0	52,0	56,0	36,0	DKOS-16-90-M30x2
16	5/8"	-10/SW41	M36x2.0	-12	87,0	53,0	55,0	41,0	DKOS-16-90-M36x2
16	5/8"	-10/SW46	M36x2.0	-12	87,0	53,0	55,0	46,0	DKOS-16-90-M36x2
19	3/4"	-12	M30x2.0	-10	99,0	60,0	68,0	36,0	DKOS-20-90-M30x2
19	3/4"	-12/SW41	M36x2.0	-12	100,0	61,0	68,0	41,0	DKOS-20-90-M36x2
19	3/4"	-12/SW46	M36x2.0	-12	100,0	61,0	68,0	46,0	DKOS-20-90-M36x2
19	3/4"	-12	M42x2.0	-16	98,0	59,0	65,0	50,0	DKOS-20-90-M42x2
25	1"	-16/SW46	M36x2.0	-12	114,0	68,0	64,0	46,0	DKOS-25-90-M36x2
25	1"	-16	M42x2.0	-16	114,0	68,0	79,0	50,0	DKOS-25-90-M42x2
25	1"	-16	M52x2.0	-20	114,0	68,0	74,0	60,0	DKOS-25-90-M52x2
31	1.1/4"	-20	M42x2.0	-16	148,0	94,0	87,0	50,0	DKOS-32-90-M42x2
31	1.1/4"	-20	M52x2.0	-20	145,0	81,0	87,0	60,0	DKOS-32-90-M52x2
38	1.1/2"	-24	M52x2.0	-20	162,0	105,0	106,0	60,0	DKOS-40-90-M52x2
38	1.1/2"	-24	M68x2.0	-24	162,0	105,0	115,0	80,0	DKOS-40-90-M68x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



CES

(Heavy series)

STRAIGHT INSERT WITH METRIC THREAD AND 24° CONICAL BORE

Connection Type	Male Metric Thread
Sealing Type	24° Conical Bore
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

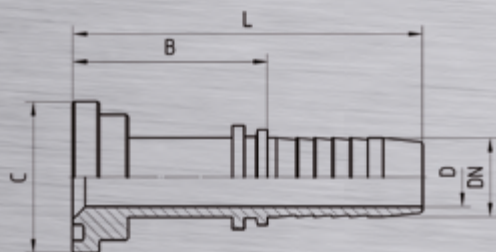
Hose Size			Connection Size		Dimensions (mm)			CHARVAT	
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	M16x1.5	-03	55,0	28,0		17,0	CES-06-M16x1,5
06	1/4"	-04	M18x1.5	-04	55,0	28,0		19,0	CES-06-M18x1,5
06	1/4"	-04	M20x1.5	-05	56,0	29,0		22,0	CES-06-M20x1,5
08	5/16"	-05	M18x1.5	-04	56,0	29,0		19,0	CES-08-M18x1,5
08	5/16"	-05	M20x1.5	-05	55,0	28,0		22,0	CES-08-M20x1,5
08	5/16"	-05	M22x1.5	-06	56,0	29,0		22,0	CES-08-M22x1,5
10	3/8"	-06	M20x1.5	-05	57,0	27,0		22,0	CES-10-M20x1,5
10	3/8"	-06	M22x1.5	-06	63,0	33,0		22,0	CES-10-M22x1,5
10	3/8"	-06	M24x1.5	-08	62,0	32,0		24,0	CES-10-M24x1,5
12	1/2"	-08	M22x1.5	-06	65,0	34,0		22,0	CES-12-M22x1,5
12	1/2"	-08	M24x1.5	-08	64,0	33,0		27,0	CES-12-M24x1,5
12	1/2"	-08	M30x2.0	-10	66,0	35,0		30,0	CES-12-M30x2

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
16	5/8"	-10	M24x1.5	-08	70,0	36,0		24,0	CES-16-M24x1,5
16	5/8"	-10	M30x2.0	-10	72,0	38,0		30,0	CES-16-M30x2
16	5/8"	-10	M36x2.0	-12	71,0	37,0		36,0	CES-16-M36x2
19	3/4"	-12	M30x2.0	-12	75,0	36,0		30,0	CES-20-M30x2
19	3/4"	-12	M36x2.0	-12	80,0	41,0		36,0	CES-20-M36x2
19	3/4"	-12	M42x2.0	-16	81,0	42,0		46,0	CES-20-M42x2
25	1"	-16	M36x2.0	-12	95,0	79,0		36,0	CES-25-M36x2
25	1"	-16	M42x2.0	-16	90,0	44,0		46,0	CES-25-M42x2
25	1"	-16	M52x2.0	-20	98,0	52,0		55,0	CES-25-M52x2
31	1.1/4"	-20	M42x2.0	-16	109,0	55,0		46,0	CES-32-M45x2
31	1.1/4"	-20	M52x2.0	-20	99,0	45,0		55,0	CES-32-M52x2
38	1.1/2"	-24	M52x2.0	-20	106,0	49,0		55,0	CES-40-M52x2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



SFL (3000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

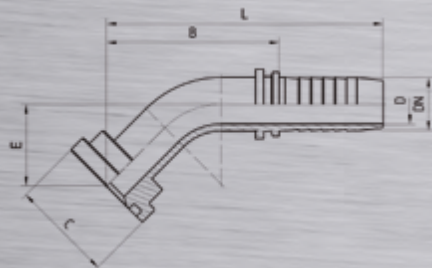
Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	Ordering Codes		
12	1/2"	-08	1/2"	-08	76,0	45,0	30,2	SFL-12-1/2	
12	1/2"	-08	3/4"	-12	79,0	48,0	38,1	SFL-12-3/4	
16	5/8"	-10	1/2"	-08	79,0	45,0	30,2	SFL-16-1/2	
16	5/8"	-10	3/4"	-12	78,0	44,0	38,1	SFL-16-3/4	
19	3/4"	-12	1/2"	-08	91,0	52,0	30,2	SFL-20-1/2	
19	3/4"	-12	3/4"	-12	88,0	49,0	38,1	SFL-20-3/4	
19	3/4"	-12	1"	-16	91,0	52,0	44,5	SFL-20-1	
25	1"	-16	3/4"	-12	100,0	54,0	38,1	SFL-25-3/4	
25	1"	-16	1"	-16	98,0	52,0	44,5	SFL-25-1	
25	1"	-16	1.1/4"	-20	98,0	52,0	50,8	SFL-25-1.1/4	
31	1.1/4"	-20	1"	-16	116,0	62,0	44,5	SFL-32-1	
31	1.1/4"	-20	1.1/4"	-20	114,0	60,0	50,8	SFL-32-1.1/4	
31	1.1/4"	-20	1.1/2"	-24	116,0	62,0	60,3	SFL-32-1.1/2	

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B		C	Ordering Codes
38	1.1/2"	-24	1.1/4"	-20	118,0	61,0		50,8	SFL-40-1.1/4
38	1.1/2"	-24	1.1/2"	-24	119,0	62,0		60,3	SFL-40-1.1/2
38	1.1/2"	-24	2"	-32	120,0	63,0		71,4	SFL-40-2
51	2"	-32	1.1/2"	-24	139,0	64,0		60,3	SFL-50-1.1/2
51	2"	-32	2"	-32	137,0	62,0		71,4	SFL-50-2
51	2"	-32	2.1/2"	-40	139,0	64,0		84,1	SFL-50-2.1/2
60	2.3/8"	-36	2"	-32	160,0	80,0		71,4	SFL-60-2
60	2.3/8"	-36	2.1/2"	-40	158,0	79,0		84,1	SFL-60-2.1/2
60	2.3/8"	-36	3"	-48	160,0	80,0		101,6	SFL-60-3
63	2.1/2"	-40	2"	-32	159,0	79,0		71,4	SFL-63-2
63	2.1/2"	-40	2.1/2"	-40	156,0	76,0		84,1	SFL-63-2.1/2
63	2.1/2"	-40	3"	-48	157,0	77,0		101,6	SFL-63-3
76	3"	-48	2.1/2"	-40	165,0	90,0		84,1	SFL-76-2.1/2
76	3"	-48	3"	-48	165,0	90,0		101,6	SFL-76-3
76	3"	-48	3.1/2"	-56	176,0	101,0		114,3	SFL-76-3.1/2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



SFL 45°

(3000 PSI Series)

45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

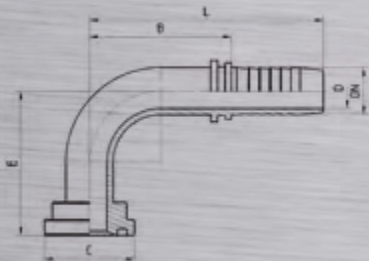
Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	80,0	49,0	21,0	30,2	SFL-12-45-1/2
12	1/2"	-08	3/4"	-12	82,0	51,0	23,0	38,1	SFL-12-45-3/4
16	5/8"	-10	1/2"	-08	95,0	61,0	27,0	30,2	SFL-16-45-1/2
16	5/8"	-10	3/4"	-12	97,0	63,0	25,0	38,1	SFL-16-45-3/4
19	3/4"	-12	1/2"	-08	115,0	76,0	31,0	30,2	SFL-20-45-1/2
19	3/4"	-12	3/4"	-12	115,0	76,0	31,0	38,1	SFL-20-45-3/4
19	3/4"	-12	1"	-16	114,0	75,0	31,0	44,5	SFL-20-45-1
25	1"	-16	3/4"	-12	127,0	81,0	36,0	38,1	SFL-25-45-3/4
25	1"	-16	1"	-16	128,0	82,0	32,0	44,5	SFL-25-45-1
25	1"	-16	1.1/4"	-20	127,0	81,0	34,0	50,8	SFL-25-45-1.1/4
31	1.1/4"	-20	1"	-16	170,0	116,0	45,0	44,5	SFL-32-45-1
31	1.1/4"	-20	1.1/4"	-20	158,0	104,0	44,0	50,8	SFL-32-45-1.1/4
31	1.1/4"	-20	1.1/2"	-24	160,0	106,0	45,0	60,3	SFL-32-45-1.1/2

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
38	1.1/2"	-24	1.1/4"	-20	168,0	111,0	43,0	50,8	SFL-40-45-1.1/4
38	1.1/2"	-24	1.1/2"	-24	169,0	112,0	53,0	60,3	SFL-40-45-1.1/2
38	1.1/2"	-24	2"	-32	172,0	115,0	48,0	32,8	SFL-40-45-2
51	2"	-32	1.1/2"	-34	205,0	130,0	52,0	60,3	SFL-50-45-1.1/2
51	2"	-32	2"	-32	205,0	130,0	52,0	71,4	SFL-50-45-2
51	2"	-32	2.1/2"	-40	205,0	130,0	52,0	84,1	SFL-50-45-2.1/2
60	2.3/8"	-36	2"	-32	241,0	161,0	55,0	71,4	SFL-50-45-2
60	2.3/8"	-36	2.1/2"	-40	240,0	160,0	54,0	84,1	SFL-60-45-2.1/2
60	2.3/8"	-36	3"	-48	241,0	161,0	54,0	101,6	SFL-60-45-3
63	2.1/2"	-40	2"	-32	199,0	119,0	55,0	71,4	SFL-63-45-2
63	2.1/2"	-40	2.1/2"	-40	228,0	148,0	53,0	84,1	SFL-63-45-2.1/2
76	3"	-48	2.1/2"	-40	222,0	147,0	53,0	84,1	SFL-76-45-2.1/2
76	3"	-48	3"	-48	224,0	149,0	52,0	101,6	SFL-76-45-3
76	3"	-48	3.1/2"	-56	241,0	166,0	70,0	114,3	SFL-76-45-3.1/2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



SFL 90°

(3000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

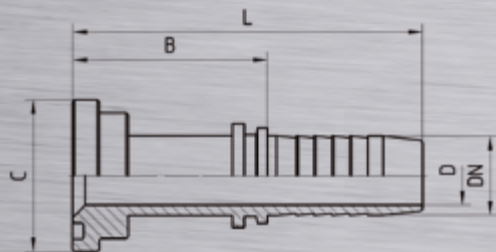
Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	73,0	42,0	39,0	30,2	SFL-12-90-1/2
12	1/2"	-08	3/4"	-12	93,0	42,0	39,0	38,1	SFL-12-90-3/4
16	5/8"	-10	1/2"	-08	87,0	53,0	49,0	30,2	SFL-16-90-1/2
16	5/8"	-10	3/4"	-12	87,0	53,0	49,0	38,1	SFL-16-90-3/4
19	3/4"	-12	1/2"	-08	100,0	61,0	61,0	30,2	SFL-20-90-1/2
19	3/4"	-12	3/4"	-12	101,0	62,0	61,0	38,1	SFL-20-90-3/4
19	3/4"	-12	1"	-16	101,0	62,0	61,0	44,5	SFL-20-90-1
25	1"	-16	3/4"	-12	114,0	68,0	68,0	38,1	SFL-25-90-3/4
25	1"	-16	1"	-16	114,0	68,0	70,0	44,5	SFL-25-90-1
25	1"	-16	1.1/4"	-20	114,0	68,0	70,0	50,8	SFL-25-90-1.1/4
31	1.1/4"	-20	1"	-16	148,0	94,0	82,0	44,5	SFL-32-90-1
31	1.1/4"	-20	1.1/4"	-20	144,0	90,0	83,0	50,8	SFL-32-90-1.1/4
31	1.1/4"	-20	1.1/2"	-24	144,0	90,0	84,0	60,3	SFL-32-90-1.1/2

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FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
38	1.1/2"	-24	1.1/4"	-20	162,0	105,0	109,0	50,8	SFL-40-90-1.1/4
38	1.1/2"	-24	1.1/2"	-24	163,0	106,0	108,0	60,3	SFL-40-90-1.1/2
38	1.1/2"	-24	2"	-32	162,0	105,0	108,0	71,4	SFL-40-90-2
51	2"	-32	1.1/2"	-24	205,0	130,0	118,0	60,3	SFL-50-90-1.1/2
51	2"	-32	2"	-32	205,0	130,0	114,0	71,4	SFL-50-90-2
51	2"	-32	2.1/2"	-40	205,0	130,0	117,0	84,1	SFL-50-90-2.1/2
60	2.3/8"	-36	2"	-32	153,0	173,0	128,0	71,4	SFL-60-90-2
60	2.3/8"	-36	2.1/2"	-40	253,0	173,0	129,0	84,1	SFL-60-90-2.1/2
60	2.3/8"	-36	3"	-48	253,0	173,0	130,0	101,6	SFL-60-90-3
63	2.1/2"	-40	2"	-32	190,0	110,0	122,0	71,4	SFL-63-90-2
63	2.1/2"	-40	2.1/2"	-40	235,0	155,0	120,0	84,1	SFL-63-90-2.1/2
76	3"	-48	2.1/2"	-40	225,0	150,0	132,0	84,1	SFL-76-90-2.1/2
76	3"	-48	3"	-48	225,0	150,0	132,0	101,6	SFL-76-90-3
76	3"	-48	3.1/2"	-56	246,0	170,0	165,0	114,3	SFL-76-90-3.1/2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



SFS

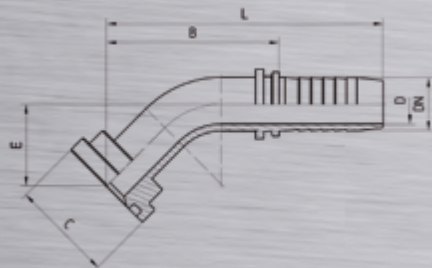
 (6000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	Ordering Codes		
12	1/2"	-08	1/2"	-08	77,0	46,0	31,7	SFS-12-1/2	
12	1/2"	-08	3/4"	-12	78,0	47,0	41,3	SFS-12-3/4	
16	5/8"	-10	1/2"	-08	80,0	46,0	31,7	SFS-16-1/2	
16	5/8"	-10	3/4"	-12	78,0	44,0	41,3	SFS-16-3/4	
19	3/4"	-12	1/2"	-08	92,0	54,0	31,7	SFS-20-1/2	
19	3/4"	-12	3/4"	-12	91,0	52,0	41,3	SFS-20-3/4	
19	3/4"	-12	1"	-16	92,0	53,0	47,6	SFS-20-1	
25	1"	-16	3/4"	-12	101,0	55,0	41,3	SFS-25-3/4	
25	1"	-16	1"	-16	103,0	56,0	47,6	SFS-25-1	
25	1"	-16	1.1/4"	-20	98,0	52,0	54,0	SFS-25-1.1/4	
31	1.1/4"	-20	1"	-16	118,0	64,0	47,6	SFS-32-1	
31	1.1/4"	-20	1.1/4"	-20	115,0	61,0	54,0	SFS-32-1.1/4	
31	1.1/4"	-20	1.1/2"	-24	120,0	66,0	63,5	SFS-32-1.1/2	
38	1.1/2"	-24	1.1/4"	-20	120,0	63,0	54,0	SFS-40-1.1/4	
38	1.1/2"	-24	1.1/2"	-24	121,0	64,0	63,5	SFS-40-1.1/2	
38	1.1/2"	-24	2"	-32	132,0	75,0	79,4	SFS-40-2	
51	2"	-32	1.1/2"	-24	144,0	69,0	63,5	SFS-50-1.1/2	
51	2"	-32	2"	-32	151,0	76,0	79,4	SFS-50-2	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



SFS 45°

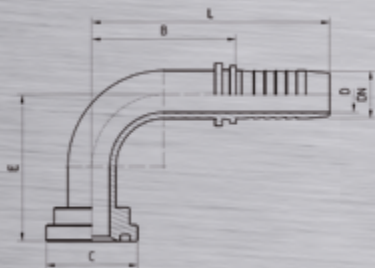
(6000 PSI Series)

45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	80,0	49,0	24,0	31,7	SFS-12-45-1/2
12	1/2"	-08	3/4"	-12	82,0	51,0	23,0	41,3	SFS-12-45-3/4
16	5/8"	-10	1/2"	-08	96,0	62,0	29,0	31,7	SFS-16-45-1/2
16	5/8"	-10	3/4"	-12	97,0	63,0	27,0	41,3	SFS-16-45-3/4
19	3/4"	-12	1/2"	-08	115,0	76,0	32,0	31,7	SFS-20-45-1/2
19	3/4"	-12	3/4"	-12	113,0	74,0	33,0	41,3	SFS-20-45-3/4
19	3/4"	-12	1"	-16	114,0	75,0	33,0	47,6	SFS-20-45-1
25	1"	-16	3/4"	-12	121,0	75,0	34,0	41,3	SFS-25-45-3/4
25	1"	-16	1"	-16	129,0	83,0	36,0	47,6	SFS-25-45-1
25	1"	-16	1.1/4"	-20	130,0	84,0	35,0	54,0	SFS-25-45-1.1/4
31	1.1/4"	-20	1"	-16	160,0	106,0	50,0	47,6	SFS-32-45-1
31	1.1/4"	-20	1.1/4"	-20	159,0	105,0	44,0	54,0	SFS-32-45-1.1/4
31	1.1/4"	-20	1.1/2"	-24	157,0	103,0	49,0	63,5	SFS-32-45-1.1/2
38	1.1/2"	-24	1.1/4"	-20	161,0	104,0	47,0	54,0	SFS-40-45-1.1/4
38	1.1/2"	-24	1.1/2"	-24	169,0	112,0	53,0	63,5	SFS-40-45-1.1/2
38	1.1/2"	-24	2"	-32	172,0	115,0	54,0	79,4	SFS-40-45-2
51	2"	-32	1.1/2"	-24	187,0	112,0	53,0	63,5	SFS-50-45-1.1/2
51	2"	-32	2"	-32	214,0	139,0	62,0	79,4	SFS-50-45-2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



SFS 90°

(6000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	73,0	42,0	41,0	31,7	SFS-12-90-1/2
12	1/2"	-08	3/4"	-12	71,0	40,0	42,0	41,3	SFS-12-90-3/4
16	5/8"	-10	1/2"	-08	87,0	53,0	50,0	31,7	SFS-16-90-1/2
16	5/8"	-10	3/4"	-12	86,0	52,0	52,0	41,3	SFS-16-90-3/4
19	3/4"	-12	1/2"	-08	99,0	60,0	64,0	31,7	SFS-20-90-1/2
19	3/4"	-12	3/4"	-12	99,0	60,0	62,0	41,3	SFS-20-90-3/4
19	3/4"	-12	1"	-16	99,0	60,0	65,0	47,6	SFS-20-90-1
25	1"	-16	3/4"	-12	114,0	68,0	72,0	41,3	SFS-25-90-3/4
25	1"	-16	1"	-16	114,0	68,0	73,0	47,6	SFS-25-90-1
25	1"	-16	1.1/4"	-20	114,0	68,0	71,0	54,0	SFS-25-90-1.1/4
31	1.1/4"	-20	1"	-16	148,0	94,0	86,0	47,6	SFS-32-90-1
31	1.1/4"	-20	1.1/4"	-20	1448,0	94,0	88,0	54,0	SFS-32-90-1.1/4
31	1.1/4"	-20	1.1/2"	-24	148,0	94,0	88,0	63,5	SFS-32-90-1.1/2
38	1.1/2"	-24	1.1/4"	-20	162,0	105,0	104,0	54,0	SFS-40-90-1.1/4
38	1.1/2"	-24	1.1/2"	-24	162,0	105,0	104,0	63,5	SFS-40-90-1.1/2
38	1.1/2"	-24	2"	-32	162,0	105,0	104,0	79,4	SFS-40-90-2
51	2"	-32	1.1/2"	-24	205,0	130,0	124,0	63,5	SFS-50-90-1.1/2
51	2"	-32	2"	-32	205,0	130,0	124,0	79,4	SFS-50-90-2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



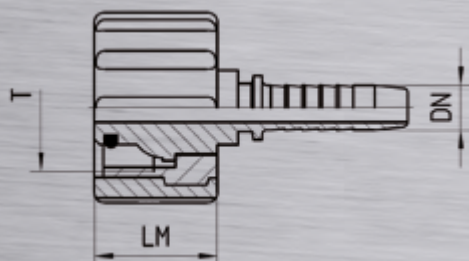
1.001 HOSE COUPLING

STRAIGHT HOSE COUPLING

Insert Type	Flexible Tube Connectors
Connection Type	for pressing with sleeves
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)				CHARVAT
DN	inch	Dash		L			Ordering Codes
06	1/4"	-04		69,0			1.001-04-04
08	5/16"	-05		68,0			1.001-05-05
10	3/8"	-06		74,0			1.001-06-06
12	1/2"	-08		79,0			1.001-08-08
16	5/8"	-10		84,0			1.001-10-10
19	3/4"	-12		96,0			1.001-12-12
25	1"	-16		112,0			1.001-16-16
31	1.1/4"	-20		129,0			1.001-20-20
38	1.1/2"	-24		136,0			1.001-24-24
51	2"	-32		176,0			1.001-32-32
60	2.3/8"	-36		197,0			1.001-36-36
76	3"	-48		180,0			1.001-48-48

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



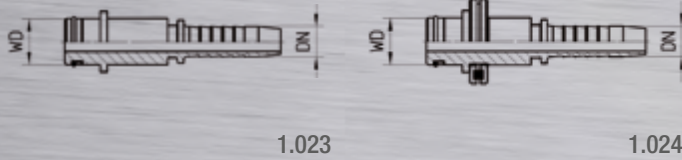
1.021 WASHER COUPLING

STRAIGHT INSERT WITH PRESSURE WASHER CONNECTOR

Connection Type	Pressure Washer Connector
Sealing Type	Spherical Head
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread		LM			Ordering Codes
06	1/4"	-04	M22x1,5		19,5			1.021-04
06	1/4"	-04	M21x1,5		19,5			1.021-04/M21x1,5
06	1/4"	-04	M22x1,5		21,6			1.022-04
08	5/16"	-05	M22x1,5		19,5			1.021-05
08	5/16"	-05	M21x1,5		19,5			1.021-05/M21x1,5
08	5/16"	-05	M22x1,5		21,6			1.022-05
10	3/8"	-06	M22x1,5		19,5			1.021-06
10	3/8"	-06	M21x1,5		19,5			1.021-06/M21x1,5
10	3/8"	-06	M22x1,5		21,6			1.022-06

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



1.023 WASHER COUPLING
1.024 WASHER COUPLING

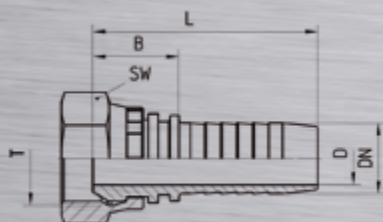
STRAIGHT INSERT WITH PRESSURE WASHER FOR PISTOL APPLICATION

Connection Type	Washer Connector for Pistol installation
Sealing Type	Pistol Connector (Pistol Connector with axial Bearing)
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

Hose Size			Dimensions (mm)					CHARVAT
DN	inch	Dash			L	B		Ordering Codes
06	1/4"	-04						1.023-04
08	5/16"	-05						1.023-05

Hose Size			Dimensions (mm)					CHARVAT
DN	inch	Dash			L	B		Ordering Codes
06	1/4"	-04						1.024-04
08	5/16"	-05						1.024-05

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



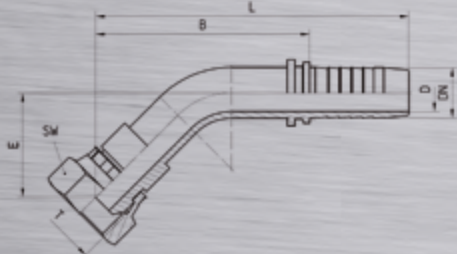
DKR

STRAIGHT INSERT WITH FEMALE BSPP THREAD AND 60° TAPER

Connection Type	Female BSPP Nut Thread
Sealing Type	60° Taper
Standard	ISO 8434-6, BS 5200
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
06	1/4"	-04	G 1/4"	-04	48,5	16,7	19,0	DKR-06-1/4	
06	1/4"	-04	G 3/8"	-06	52,0	18,7	22,0	DKR-06-3/8	
08	5/16"	-05	G 3/8"	-06	54,5	20,0	22,0	DKR-08-3/8	
10	3/8"	-06	G 3/8"	-06	54,5	20,0	22,0	DKR-10-3/8	
10	3/8"	-06	G 1/2"	-08	57,0	22,0	27,0	DKR-10-1/2	
12	1/2"	-08	G 1/2"	-08	59,0	22,5	27,0	DKR-12-1/2	
16	5/8"	-10	G 5/8"	-10	66,5	24,0	28,0	DKR-16-5/8	
16	5/8"	-10	G 3/4"	-12	65,5	24,0	32,0	DKR-16-3/4	
19	3/4"	-12	G 3/4"	-12	73,0	25,5	32,0	DKR-20-3/4	
19	3/4"	-12	G 1"	-16	75,5	26,0	38,0	DKR-20-1	
25	1"	-16	G 1"	-16	89,5	26,5	38,0	DKR-25-1	
25	1"	-16	G 1 1/4"	-20	95,0	32,5	50,0	DKR-25-1.1/4	
31	1.1/4"	-20	G 1 1/4"	-20	103,0	33,0	50,0	DKR-32-1.1/4	
31	1.1/4"	-20	G 1 1/2"	-24	107,0	35,0	55,0	DKR-32-1.1/2	
38	1.1/2"	-24	G 1 1/2"	-24	117,0	35,0	55,0	DKR-40-1.1/2	
38	1.1/2"	-24	G 2"	-32	117,0	31,0	70,0	DKR-40-2	
51	2"	-32	G 2"	-32	121,5	31,0	70,0	DKR-50-2	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



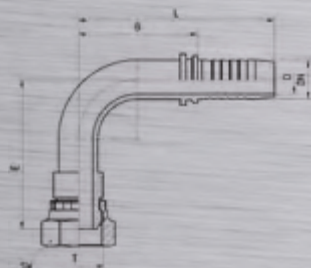
DKR 45°

45° ELBOW INSERT WITH FEMALE BSPP THREAD AND 60° TAPER

Connection Type	Female BSPP Nut Thread
Sealing Type	60° Taper
Standard	ISO 8434-6, BS 5200
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
06	1/4"	-04	G 1/4"	-04	65,0	37,5	14,5	19,0	DKR-06-45-1/4
06	1/4"	-04	G 3/8"	-06	67,0	39,5	17,0	22,0	DKR-06-45-3/8
08	5/16"	-05	G 3/8"	-06	72,5	44,0	17,0	22,0	DKR-08-45-3/8
10	3/8"	-06	G 3/8"	-06	78,5	50,0	19,0	22,0	DKR-10-45-3/8
10	3/8"	-06	G 1/2"	-08	80,5	52,0	20,5	27,0	DKR-10-45-1/2
12	1/2"	-08	G 1/2"	-08	92,0	62,0	21,5	27,0	DKR-12-45-1/2
16	5/8"	-10	G 5/8"	-10	105,5	72,5	25,5	28,0	DKR-16-45-5/8
16	5/8"	-10	G 3/4"	-12	105,5	72,5	25,5	32,0	DKR-16-45-3/4
19	3/4"	-12	G 3/4"	-12	103,0	64,0	28,0	32,0	DKR-20-45-3/4
19	3/4"	-12	G 1"	-16	104,5	65,5	30,0	38,0	DKR-20-45-1
25	1"	-16	G 1"	-16	137,5	85,0	33,0	38,0	DKR-25-45-1
25	1"	-16	G 1 1/4"	-20	143,0	90,5	39,0	50,0	DKR-25-45-1.1/4
31	1.1/4"	-20	G 1 1/4"	-20	159,5	99,5	42,0	50,0	DKR-32-45-1.1/4
38	1.1/2"	-24	G 1 1/2"	-24	182,0	112,0	48,0	55,0	DKR-40-45-1.1/2
51	2"	-32	G 2"	-32	207,0	132,5	52,5	70,0	DKR-50-45-2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



DKR 90°

90° ELBOW INSERT WITH FEMALE BSPP THREAD AND 60° TAPER

Connection Type	Female BSPP Nut Thread
Sealing Type	60° Taper
Standard	ISO 8434-6, BS 5200
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
06	1/4"	-04	G 1/4"	-04	50,5	23,0	28,0	19,0	DKR-06-90-1/4
06	1/4"	-04	G 3/8"	-06	50,5	23,0	31,0	22,0	DKR-06-90-3/8
08	5/16"	-05	G 3/8"	-06	54,5	26,0	32,5	22,0	DKR-08-90-3/8
10	3/8"	-06	G 3/8"	-06	59,0	30,5	37,0	22,0	DKR-10-90-3/8
10	3/8"	-06	G 1/2"	-08	59,0	30,5	39,5	27,0	DKR-10-90-1/2
12	1/2"	-08	G 1/2"	-08	68,0	38,0	43,5	27,0	DKR-12-90-1/2
16	5/8"	-10	G 5/8"	-10	77,5	44,5	51,5	28,0	DKR-16-90-5/8
16	5/8"	-10	G 3/4"	-12	77,5	44,5	51,5	32,0	DKR-16-90-3/4
19	3/4"	-12	G 3/4"	-12	93,0	54,0	58,0	32,0	DKR-20-90-3/4
19	3/4"	-12	G 1"	-16	93,0	54,0	60,5	38,0	DKR-20-90-1
25	1"	-16	G 1"	-16	126,5	74,0	70,5	38,0	DKR-20-90-1
25	1"	-16	G 1 1/4"	-20	126,5	74,0	78,5	50,0	DKR-25-90-1.1/4
31	1.1/4"	-20	G 1 1/4"	-20	140,0	80,0	88,5	50,0	DKR-32-90-1.1/4
31	1.1/4"	-20	G 1 1/2"	-24	140,0	80,0	91,5	55,0	DKR-32-90-1.1/2
38	1.1/2"	-24	G 1 1/2"	-24	163,0	93,0	103,5	55,0	DKR-40-90-1.1/2
51	2"	-32	G 2"	-32	203,5	129,0	124,0	70,0	DKR-50-90-2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



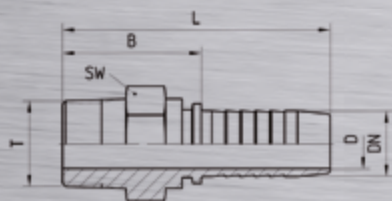
AGR

STRAIGHT INSERT WITH MALE BSPP THREAD AND 60° CONICAL BORE

Connection Type	Male BSPP Thread
Sealing Type	60° Conical Bore
Standard	ISO 8434-6, BS 5200
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
06	1/4"	-04	G 1/4"	-04	53,0	25,7	19,0	AGR-06-1/4	
06	1/4"	-04	G 3/8"	-06	54,5	27,2	22,0	AGR-06-3/8	
08	5/16"	-05	G 3/8"	-06	56,5	28,0	22,0	AGR-08-3/8	
10	3/8"	-06	G 3/8"	-06	56,5	28,0	22,0	AGR-10-3/8	
12	1/2"	-08	G 3/8"	-06	58,0	28,0	22,0	AGR-12-3/8	
10	3/8"	-06	G 1/2"	-08	59,5	31,0	27,0	AGR-10-1/2	
12	1/2"	-08	G 1/2"	-08	61,5	31,5	27,0	AGR-12-1/2	
16	5/8"	-10	G 5/8"	-10	66,5	33,5	30,0	AGR-16-5/8	
16	5/8"	-10	G 3/4"	-12	67,5	34,5	32,0	AGR-16-3/4	
19	3/4"	-12	G 3/4"	-12	74,5	35,5	32,0	AGR-20-3/4	
19	3/4"	-12	G 1"	-16	78,5	39,5	41,0	AGR-20-1	
25	1"	-16	G 1"	-16	92,5	40,0	41,0	AGR-25-1	
25	1"	-16	G 1"1/4	-20	96,5	44,0	50,0	AGR-25-1.1/4	
31	1.1/4"	-20	G 1"1/4	-20	105,5	45,5	50,0	AGR-32-1.1/4	
31	1.1/4"	-20	G 1"1/2	-24	107,5	47,5	55,0	AGR-32-1.1/2	
38	1.1/2"	-24	G 1"1/2	-24	117,5	47,5	55,0	AGR-40-1.1/2	
51	2"	-32	G 2"	-32	126,5	52,0	70,0	AGR-50-2	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



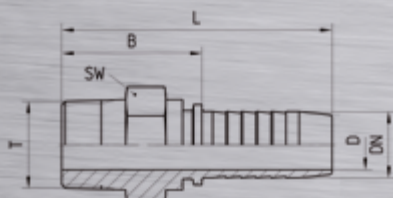
AGRK

STRAIGHT INSERT WITH MALE BSPT THREAD

Connection Type	Male BSPP Thread
Sealing Type	Tapered Thread
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
06	1/4"	-04	R 1/4"	-04	53,3	26,0	14,0	AGRK-06-1/4	
06	1/4"	-04	R 3/8"	-06	54,3	27,0	19,0	AGRK-06-3/8	
08	5/16"	-05	R 3/8"	-06	56,0	27,5	19,0	AGRK-08-3/8	
10	3/8"	-06	R 3/8"	-06	56,5	28,0	19,0	AGRK-10-3/8	
10	3/8"	-06	R 1/2"	-08	60,0	31,5	22,0	AGRK-10-1/2	
12	1/2"	-08	R 1/2"	-08	62,0	32,0	22,0	AGRK-12-1/2	
19	3/4"	-12	R 3/4"	-12	77,0	38,0	27,0	AGRK-20-3/4	
25	1"	-16	R 1"	-16	93,5	41,0	36,0	AGRK-25-1	
31	1.1/4"	-20	R 1"1/4	-20	105,5	45,5	45,0	AGRK-32-1.1/4	
38	1.1/2"	-24	R 1"1/2	-24	119,0	59,0	50,0	AGRK-40-1.1/2	
51	2"	-32	R 2	-32	128,0	53,5	65,0	AGRK-50-2	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



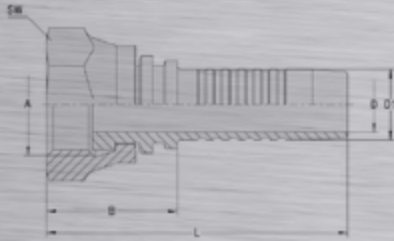
AGN

STRAIGHT INSERT WITH MALE NPTF THREAD AND 60° CONICAL BORE

Connection Type	Male NPTF Thread
Sealing Type	Tapered Thread and 60° Conical Bore
Standard	SAE J 516
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes	
06	1/4"	-04	1/8" - 27 NPTF	-02	48,8	21,5		AGN-06-1/8	
06	1/4"	-04	1/4" - 18 NPTF	-04	53,8	26,5		AGN-06-1/4	
06	1/4"	-04	3/8" - 18 NPTF	-06	54,8	27,5		AGN-06-3/8	
10	3/8"	-06	3/8" - 18 NPTF	-06	56,5	28,0		AGN-10-3/8	
10	3/8"	-06	1/2" - 14 NPTF	-08	62,5	34,0		AGN-10-1/2	
13	1/2"	-08	3/8" - 18 NPTF	-06	58,5	28,5		AGN-12-3/8	
13	1/2"	-08	1/2" - 14 NPTF	-08	64,5	34,5		AGN-12-1/2	
16	5/8"	-10	1/2" - 14 NPTF	-08	67,5	34,5		AGN-16-1/2	
16	5/8"	-10	3/4" - 14 NPTF	-12	69,5	36,5		AGN-16-3/4	
19	3/4"	-12	3/4" - 14 NPTF	-12	76,5	37,5		AGN-20-3/4	
25	1"	-16	1" - 11,5 NPTF	-16	96,0	43,5		AGN-25-1	
32	1.1/4"	-20	1"1/4 - 11,5 NPTF	-20	106,5	46,5		AGN-32-1.1/4	
38	1.1/2"	-24	1"1/2 - 11,5 NPTF	-24	120,0	50,0		AGN-40-1.1/2	
50	2"	-32	2" - 11,5 NPTF	32	129,0	54,5		AGN-50-2	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



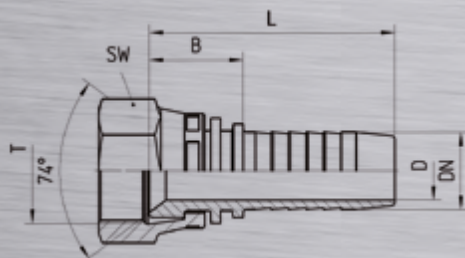
DKR FLD

STRAIGHT INSERT WITH FEMALE BSPP THREAD

Connection Type	Female BSPP Nut Thread
Sealing Type	Flat-Sealing
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
06	1/4"	-04	G 1/4"	-04	49,8	14,5		19,0	DKR-FLD-06-1/4
10	3/8"	-06	G 3/8"	-06	55,0	17,5		11,0	DKR-FLD-10-3/8
12	1/2"	-08	G 1/2"	-08	59,0	19,0		27,0	DKR-FLD-12-1/2
12	1/2"	-08	G 3/4"	-12	61,5	20,0		21,0	DKR-FLD-12-3/4
19	3/4"	-12	G 3/4"	-12	72,0	21,5		32,0	DKR-FLD-20-3/4

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



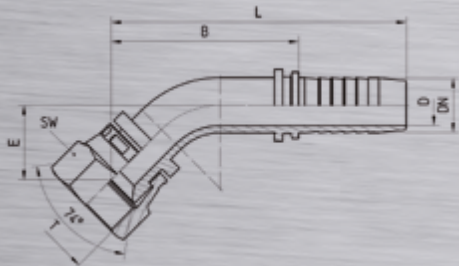
DKJ

STRAIGHT INSERT WITH FEMALE UN/UNF THREAD AND 74° CONICAL BORE

Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	SW (Hex)	Ordering Codes
06	1/4"	-04	1/2" -20 UNF	-05	52,5	16,7	19,0	DKJ-06-1/2
06	1/4"	-04	7/16"-20 UNF	-04	49,5	14,7	17,0	DKJ-06-7/16
06	1/4"	-04	9/16" -18 UNF	-06	53,5	16,7	19,0	DKJ-06-9/16
08	5/16"	-05	1/2" -20 UNF	-05	43,7	16,7	19,0	DKJ-08-1/2
08	5/16"	-05	9/16" -18 UNF	-06	56,0	18,0	19,0	DKJ-08-9/16
10	3/8"	-06	3/4" - 16 UNF	-08	60,0	20,0	24,0	DKJ-10-3/4
10	3/8"	-06	7/8" - 14 UNF	-10	62,0	19,5	27,0	DKJ-10-7/8
10	3/8"	-06	9/16" -18 UNF	-06	56,0	18,0	19,0	DKJ-10-9/16
12	1/2"	-08	1"1/16 - 12 UN	-12	66,0	21,5	32,0	DKJ-12-1.1/16
12	1/2"	-08	3/4" - 16 UNF	-08	62,5	21,0	24,0	DKJ-12-3/4
12	1/2"	-08	7/8" - 14 UNF	-10	64,5	20,5	27,0	DKJ-12-7/8
16	5/8"	-10	1"1/16 - 12 UN	-12	69,5	22,0	32,0	DKJ-16-1.1/16
16	5/8"	-10	7/8" - 14 UNF	-10	67,5	20,5	27,0	DKJ-16-7/8
19	3/4"	-12	1"1/16 - 12 UN	-12	77,0	23,5	32,0	DKJ-20-1.1/16
19	3/4"	-12	1"5/16 -12 UN	-16	78,0	24,5	38,0	DKJ-20-1.5/16
25	1"	-16	1"5/16 -12 UN	-16	92,0	25,0	38,0	DKJ-25-1.5/16
31	1.1/4"	-20	1"5/8 - 12 UN	-20	105,5	29,0	50,0	DKJ-32-1.5/8
38	1.1/2"	-24	1"7/8 - 12 UN	-24	117,5	29,5	55,0	DKJ-40-1.7/8
51	2"	-32	2"1/2 - 12 UN	-32	134,0	35,5	75,0	DKJ-50-2.1/2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



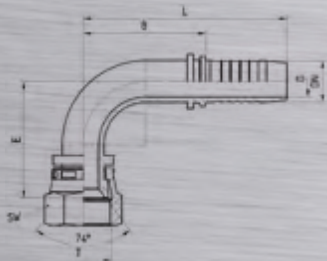
DKJ 45°

45° ELBOW INSERT WITH FEMALE UN/UNF THREAD AND 74° CONICAL BORE

Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT	
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	9/16" - 18 UNF	-06	65,5	38,0	15,0	19,0	DKJ-06-45-9/16
06	1/4"	-04	7/16"-20 UNF	-04	63,5	36,0	13,5	17,0	DKJ-06-45-7/16
06	1/4"	-04	1/2" - 20 UNF	-05	65,5	38,0	15,0	19,0	DKJ-06-45-1/2
08	5/16"	-05	9/16" - 18 UNF	-06	71,0	42,5	15,5	19,0	DKJ-08-45-9/16
10	3/8"	-06	9/16" - 18 UNF	-06	77,5	49,0	17,5	19,0	DKJ-10-45-9/16
10	3/8"	-06	3/4" - 16 UNF	-08	79,5	51,0	19,5	24,0	DKJ-10-45-3/4
12	1/2"	-08	7/8 - 14 UNF	-10	90,5	60,5	20,0	27,0	DKJ-12-45-7/8
12	1/2"	-08	3/4" - 16 UNF	-08	90,5	60,5	20,5	24,0	DKJ-12-45-3/4
16	5/8"	-10	7/8 - 14 UNF	-10	103,0	70,0	23,0	27,0	DKJ-16-45-7/8
16	5/8"	-10	1"1/16 - 12 UN	-12	104,0	71,0	24,0	32,0	DKJ-16-45-1.1/16
19	3/4"	-12	1"1/16 - 12 UN	-12	101,5	62,5	26,5	32,0	DKJ-20-45-1.1/16
25	1"	-16	1"5/16 - 12 UN	-16	137,0	84,5	32,0	38,0	DKJ-25-45-1.5/16
31	1.1/4"	-20	1"5/8 - 12 UN	-20	157,0	97,0	39,5	50,0	DKJ-32-45-1.5/8
38	1.1/2"	-24	1"7/8 - 12 UN	-24	180,0	110,0	44,5	55,0	DKJ-40-45-1.7/8

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



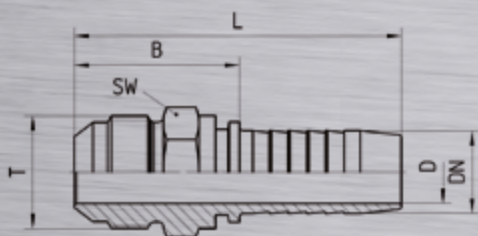
DKJ 90°

90° ELBOW INSERT WITH FEMALE UN/UNF THREAD AND 74° CONICAL BORE

Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT	
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	9/16" - 18 UNF	-06	50,5	23,0	28,5	19,0	DKJ-06-90-9/16
06	1/4"	-04	7/16"-20 UNF	-04	50,5	23,0	26,0	17,0	DKJ-06-90-7/16
06	1/4"	-04	1/2" -20 UNF	-05	50,5	23,0	28,5	19,0	DKJ-06-90-1/2
08	5/16"	-05	9/16" - 18 UNF	-06	54,5	26,0	30,5	19,0	DKJ-08-90-9/16
10	3/8"	-06	9/16" - 18 UNF	-06	59,0	30,5	35,0	19,0	DKJ-10-90-9/16
10	3/8"	-06	7/8" -14 UNF	-10	59,0	30,5	37,5	27,0	DKJ-10-90-7/8
10	3/8"	-06	3/4" - 16 UNF	-08	59,0	30,5	38,0	24,0	DKJ-10-90-3/4
12	1/2"	-08	7/8" -14 UNF	-10	68,0	38,0	41,5	27,0	DKJ-12-90-7/8
12	1/2"	-08	3/4" - 16 UNF	-08	68,0	38,0	42,0	24,0	DKJ-12-90-3/4
16	5/8"	-10	7/8" -14 UNF	-10	77,5	44,5	48,0	27,0	DKJ-16-90-7/8
16	5/8"	-10	1"1/16 - 12 UN	-12	77,5	44,5	49,5	32,0	DKJ-16-90-1.1/16
19	3/4"	-12	1"5/16 - 12 UN	-16	93,0	54,0	59,0	38,0	DKJ-20-90-1.5/16
19	3/4"	-12	1"1/16 - 12 UN	-12	93,0	54,0	56,0	32,0	DKJ-20-90-1.1/16
25	1"	-16	1"5/16 - 12 UN	-16	127,0	74,5	69,0	38,0	DKJ-25-90-1.5/16
31	1.1/4"	-20	1"5/8 - 12 UN	-20	140,0	80,0	84,5	50,0	DKJ-32-90-1.5/8
38	1.1/2"	-24	1"7/8 - 12 UN	-24	174,0	104,0	98,0	55,0	DKJ-40-90-1.7/8

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



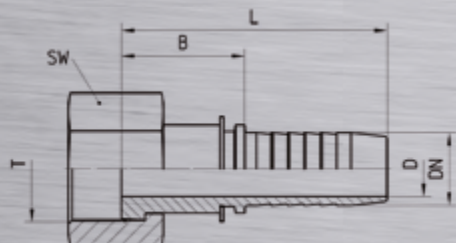
AGJ

STRAIGHT INSERT WITH MALE UN/UNF THREAD AND 74° TAPER

Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes	
06	1/4"	-04	9/16" - 18 UNF	-06	55,0	27,7	17,0	AGJ-06-1/4	
06	1/4"	-04	7/16" - 20 UNF	-04	54,8	27,5	14,0	AGJ-06-7/16	
06	1/4"	-04	1/2" - 20 UNF	-05	54,8	27,5	14,0	AGJ-06-1/2	
08	5/16"	-05	9/16" - 18 UNF	-06	57,0	28,5	17,0	AGJ-08-9/16	
10	3/8"	-06	9/16" - 18 UNF	-06	57,0	28,5	17,0	AGJ-10-9/16	
10	3/8"	-06	7/8" - 14 UNF	-10	64,5	36,0	24,0	AGJ-10-7/8	
10	3/8"	-06	3/4" - 16 UNF	-08	60,5	32,0	19,0	AGJ-10-3/4	
12	1/2"	-08	7/8" - 14 UNF	-10	66,5	36,5	24,0	AGJ-12-7/8	
12	1/2"	-08	3/4" - 16 UNF	-08	62,5	32,5	19,0	AGJ-12-3/4	
12	1/2"	-08	1"1/16 - 12 UN	-12	68,5	38,5	27,0	AGJ-12-1.1/16	
16	5/8"	-10	7/8" - 14 UNF	-10	69,5	36,5	24,0	AGJ-16-7/8	
16	5/8"	-10	1"1/16 - 12 UN	-12	71,0	38,5	27,0	AGJ-16-1.1/16	
19	3/4"	-12	1"5/16 - 12 UN	-16	80,5	41,5	36,0	AGJ-20-1.5/16	
19	3/4"	-12	1"1/16 - 12 UN	-12	78,5	39,5	27,0	AGJ-20-1.1/16	
25	1"	-16	1"5/16 - 12 UN	-16	94,5	42,0	36,0	AGJ-25-1.5/16	
31	1.1/4"	-20	1"5/8 - 12 UN	-20	108,5	48,5	46,0	AGJ-32-1.5/8	
38	1.1/2"	-24	1"7/8 - 12 UN	-24	123,5	53,5	50,0	AGJ-40-1.7/8	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



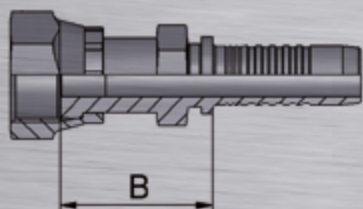
ORFS

STRAIGHT INSERT WITH FEMALE UN/UNF THREAD FOR O-RING FACE SEAL CONNECTION

Connection Type	Female UN/UNF Nut Thread
Sealing Type	O-Ring Face Seal
Standard	ISO 8434-3
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes	
06	1/4"	-04	9/16-18	-04		20,5	17,0	ORFS-06-9/16	
06	1/4"	-04	11/16-16	-06		21,9	22,0	ORFS-06-11/16	
08	5/16"	-05	11/16-16	-06		21,9	22,0	ORFS-08-11/16	
10	3/8"	-06	11/16-16	-06		22,0	22,0	ORFS-10-11/16	
10	3/8"	-06	13/16-16	-08		25,0	24,0	ORFS-10-13/16	
12	1/2"	-08	13/16-16	-08		25,6	24,0	ORFS-12-13/16	
12	1/2"	-08	1"-14	-10		29,9	30,0	ORFS-12-1	
12	1/2"	-08	1"3/16-12	-12		32,1	36,0	ORFS-12-1.3/16	
16	5/8"	-10	1"-14	-10		29,9	30,0	ORFS-16-1	
16	5/8"	-10	1"3/16-12	-12		32,1	36,0	ORFS-16-1.3/16	
19	3/4"	-12	1"3/16-12	-12		33,0	36,0	ORFS-20-1.3/16	
19	3/4"	-12	1"7/16-12	-16		33,6	41,0	ORFS-20-1.7/16	
25	1"	-16	1"7/16-12	-16		34,1	41,0	ORFS-25-1.7/16	
32	1.1/4"	-20	1"11/16-12	-20		35,5	50,0	ORFS-32-1.11/16	
38	1.1/2"	-24	2"-12	-24		37,0	60,0	ORFS-40-2	

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



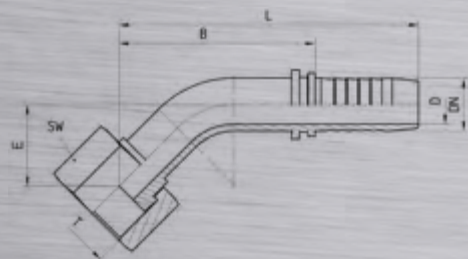
ORFS HEX

STRAIGHT INSERT WITH FEMALE UN/UNF THREAD FOR O-RING FACE SEAL CONNECTION

Connection Type	Female UN/UNF Nut Thread
Sealing Type	O-Ring Face Seal
Standard	ISO 8434-3
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	SW 2 (Hex)	SW (Hex)	Ordering Codes
06	1/4"	-04	9/16-18 UNF	-04		28,0	14,0	19,0	ORFS-06-9/16-HEX
06	1/4"	-04	11/16-16 UN	-06		30,8	17,0	22,0	ORFS-06-11/16-HEX
08	5/16"	-05	9/16-18 UNF	-04		28,0	14,0	19,0	ORFS-08-9/16-HEX
10	3/8"	-06	11/16-16 UN	-06		32,0	17,0	22,0	ORFS-10-11/16-HEX
10	3/8"	-06	13/16-16 UN	-08		35,3	19,0	24,0	ORFS-10-13/16-HEX
12	1/2"	-08	11/16-16 UN	-06		32,5	19,0	22,0	ORFS-12-11/16-HEX
12	1/2"	-08	13/16-16 UN	-08		33,4	19,0	24,0	ORFS-12-13/16-HEX
12	1/2"	-08	1"-14 UNS	-10		39,6	24,0	30,0	ORFS-12-1-HEX
16	5/8"	-10	1"-14 UNS	-10		39,6	24,0	30,0	ORFS-16-1-HEX
19	3/4"	-12	1"-14 UNS	-10		40,5	27,0	30,0	ORFS-20-1-HEX
19	3/4"	-12	1 3/16-12 UN	-12		43,0	27,0	36,0	ORFS-20-1.3/16-HEX
25	1"	-16	1 7/16-12 UN	-16		46,1	36,0	41,0	ORFS-25-1.7/16-HEX
32	1.1/4"	-20	1 11/16-12 UN	-20		48,0	41,0	50,0	ORFS-32-1.11/16-HEX
38	1.1/2"	-24	2"-12 UN	-24		50,6	50,0	60,0	ORFS-40-2-HEX

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



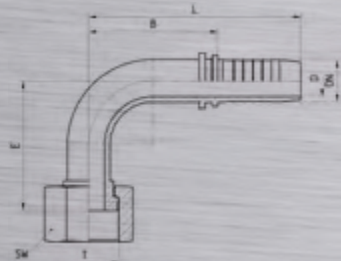
ORFS 45°

45° ELBOW INSERT WITH FEMALE UN/UNF THREAD FOR O-RING FACE SEAL CONNECTION

Connection Type	Female UN/UNF Nut Thread
Sealing Type	O-Ring Face Seal
Standard	ISO 8434-3
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT	
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	9/16-18 UNF	-04		47,0	12,0	17,0	ORFS-06-45-9/16
06	1/4"	-04	11/16-16 UN	-06		48,0	13,0	22,0	ORFS-06-45-11/16
08	5/16"	-05	11/16-16 UN	-06		52,0	13,0	22,0	ORFS-08-45-11/16
10	3/8	-06	11/16-16 UN	-06		54,0	14,0	22,0	ORFS-10-45-11/16
10	3/8"	-06	13/16-16 UN	-08		56,0	16,0	24,0	ORFS-10-45-13/16
12	1/2"	-08	13/16-16 UN	-08		61,0	17,0	24,0	ORFS-12-45-13/16
12	1/2"	-08	1"-14 UNS	-10		64,0	20,0	30,0	ORFS-12-45-1
12	1/2"	-08	1"3/16-12 UN	-12		66,0	22,0	36,0	ORFS-12-45-1.3/16
16	5/8"	-10	1"-14 UNS	-10		71,0	20,0	30,0	ORFS-16-45-1
16	5/8"	-10	1"3/16-12 UN	-12		73,0	22,0	36,0	ORFS-16-45-1.3/16
19	3/4"	-12	1"-14 UNS	-10		85,0	35,0	30,0	ORFS-20-45-1
19	3/4"	-12	1"3/16-12 UN	-12		78,0	21,0	36,0	ORFS-20-45-1.3/16
19	3/4"	-12	1"7/16-12 UN	-16		82,0	26,0	41,0	ORFS-20-45-1.7/16
25	1"	-16	1"7/16-12 UN	-16		108,0	29,0	41,0	ORFS-25-45-1.7/16
32	1.1/4"	-20	1"11/16-12 UN	-20		129,0	32,0	50,0	ORFS-32-45-1.11/16
38	1.1/2"	-24	2"-12 UN	-24		151,0	35,0	60,0	ORFS-40-45-2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



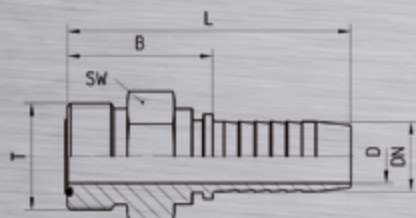
ORFS 90°

90° ELBOW INSERT WITH FEMALE UN/UNF THREAD FOR O-RING FACE SEAL CONNECTION

Connection Type	Female UN/UNF Nut Thread
Sealing Type	O-Ring Face Seal
Standard	ISO 8434-3
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT	
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
06	1/4"	-04	9/16-18 UNF	-04		33,0	24,0	17,0	ORFS-06-90-9/16
06	1/4"	-04	11/16-16 UN	-06		33,0	26,0	22,0	ORFS-06-90-11/16
08	5/16"	-05	11/16-16 UN	-06		32,0	27,0	22,0	ORFS-08-90-11/16
10	3/8"	-06	11/16-16 UN	-06		38,0	29,0	22,0	ORFS-10-90-11/16
10	3/8"	-06	13/16-16 UN	-08		38,0	29,0	24,0	ORFS-10-90-13/16
12	1/2"	-08	13/16-16 UN	-08		40,0	36,0	24,0	ORFS-12-90-13/16
12	1/2"	-08	1"-14 UNS	-10		40,0	41,0	30,0	ORFS-12-90-1
12	1/2"	-08	1"3/16-12 UN	-12		40,0	46,0	36,0	ORFS-12-90-1.3/16
16	5/8"	-10	1"-14 UNS	-10		46,0	45,0	30,0	ORFS-16-90-1
16	5/8"	-10	1"3/16-12 UN	-12		46,0	46,0	36,0	ORFS-16-90-1.3/16
19	3/4"	-12	1"3/16-12 UN	-12		52,0	50,0	36,0	ORFS-20-90-1.3/16
19	3/4"	-12	1"7/16-12 UN	-16		52,0	52,0	41,0	ORFS-20-90-1.7/16
25	1"	-16	1"7/16-12 UN	-16		72,0	63,0	41,0	ORFS-25-90-1.7/16
32	1.1/4"	-20	1"11/16-12 UN	-20		88,0	73,0	50,0	ORFS-32-90-1.11/16
38	1.1/2"	-24	2"-12 UN	-24		105,0	98,0	60,0	ORFS-40-90-2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



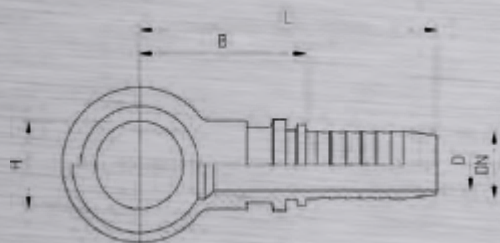
ORS

STRAIGHT INSERT WITH O-RING FACE SEAL CONNECTION

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	SW (Hex)	Ordering Codes
06	1/4"	-04	9/16-18 UNF	-04		24,6	17,0	ORS-06-9/16
06	1/4"	-04	11/16-16 UN	-06		26,8	19,0	ORS-06-11/16
08	5/16"	-05	11/16-16 UN	-06		26,8	19,0	ORS-08-11/16
10	3/8"	-06	11/16-16 UN	-06		27,4	19,0	ORS-10-11/16
10	3/8"	-06	13/16-16 UN	-08		30,1	22,0	ORS-10-13/16
12	1/2"	-08	13/16-16 UN	-08		30,7	22,0	ORS-12-13/16
12	1/2"	-08	1"-14 UNS	-10		35,2	27,0	ORS-12-1
12	1/2"	-08	1"3/16-12 UN	-12		38,2	32,0	ORS-12-1.3/16
16	5/8"	-10	1"-14 UNS	-10		35,2	27,0	ORS-16-1
16	5/8"	-10	1"3/16-12 UN	-12		38,2	32,0	ORS-16-1.3/16
19	3/4"	-12	1"-14 UNS	-10		36,2	27,0	ORS-20-1
19	3/4"	-12	1"3/16-12 UN	-12		39,2	32,0	ORS-20-1.3/16
19	3/4"	-12	1"7/16-12 UN	-16		40,9	38,0	ORS-20-1.7/16
25	1"	-16	1"7/16-12 UN	-16		41,9	38,0	ORS-25-1.7/16
32	1.1/4"	-20	1"11/16-12 UN	-20		45,3	46,0	ORS-32-1.11/16
38	1.1/2"	-24	2"-12 UN	-24		47,6	55,0	ORS-40-2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



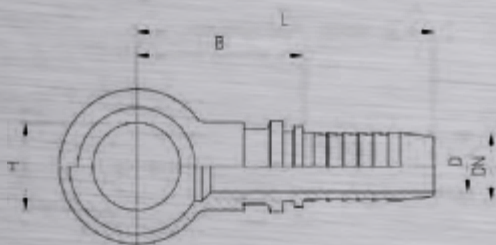
RN

STRAIGHT METRIC BANJO INSERT

Connection Type	Banjo for Metric Banjo Bolts
Sealing Type	Copper Ring
Standard	DIN 7642
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B		S	Ordering Codes
06	1/4"	-04	M12x1,5	-04	48,0	21,0		12,0	RN-06-M12x1,5
06	1/4"	-04	M14x1,5	-05	50,0	23,0		14,0	RN-06-M14x1,5
08	5/16"	-05	M14x1,5	-05	52,0	23,5		14,0	RN-08-M14x1,5
08	5/16"	-05	M16x1,5	-06	55,0	26,5		16,0	RN-08-M16x1,5
10	3/8"	-06	M16x1,5	-06	55,0	26,5		16,0	RN-10-M16x1,5
10	3/8"	-06	M18x1,5	-08	57,0	28,5		20,0	RN-10-M18x1,5
12	1/2"	-08	M18x1,5	-08	59,0	29,0		20,0	RN-12-M18x1,5
12	1/2"	-08	M20x1,5		59,0	29,0		22,0	RN-12-M20x1,5
12	1/2"	-08	M22x1,5	-10	59,0	29,0		22,0	RN-12-M22x1,5

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



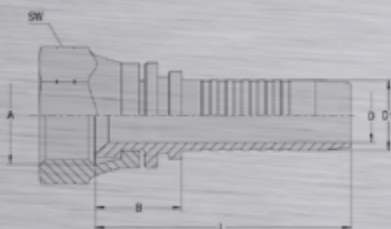
RNR

STRAIGHT IMPERIAL BANJO INSERT

Connection Type	Banjo for Imperial Banjo Bolts
Sealing Type	Copper Ring
Standard	DIN 7642
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B		S	Ordering Codes
06	1/4"	-04	R 1/4"	-04	50,0	23,0		14,0	RNR-06-1/4
06	1/4"	-04	R 3/8"	-06	50,0	23,0		17,0	RNR-06-3/8
08	5/16"	-05	R 3/8"	-06	55,0	26,5		17,0	RNR-08-3/8
10	3/8"	-06	R 3/8"	-06	57,0	28,5		22,0	RNR-10-3/8
12	1/2"	-08	R 1/2"	-08	59,0	29,0		22,0	RNR-12-1/2
16	5/8"	-10	R 3/4"	-12	67,5	34,5		30,0	RNR-16-3/4
19	3/4"	-12	R 3/4"	-12	74,5	35,5		30,0	RNR-20-3/4
25	1"	-16	R 1"	-16	94,0	41,5		36,0	RNR-25-1

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



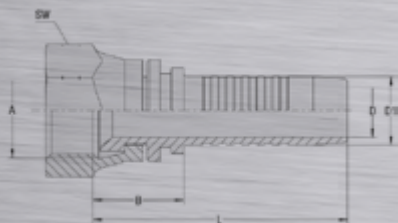
DKL KOM

STRAIGHT INSERT WITH FEMALE METRIC THREAD AND 60° CONICAL BORE

Connection Type	Female Metric Nut Thread
Sealing Type	60° Conical Bore
Standard	JIS 8363 (KOMATSU)
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread		L	B	SW 2 (Hex)	SW (Hex)	Ordering Codes
06	1/4"	-04	M12x1,5			10,5	17,0	no	DKL-KOM-06-M12x1,5
06	1/4"	-04	M14x1,5			21,5	19,0	17,0	DKL-KOM-06-M14x1,5
08	5/16"	-05	M14x1,5			11,0	19,0	no	DKL-KOM-08-M14x1,5
08	5/16"	-05	M16x1,5			22,0	22,0	17,0	DKL-KOM-08-M16x1,5
10	3/8"	-06	M14x1,5			21,5	19,0	17,0	DKL-KOM-10-M14x1,5
10	3/8"	-06	M16x1,5			22,0	22,0	17,0	DKL-KOM-10-M16x1,5
10	3/8"	-06	M18x1,5			22,5	24,0	19,0	DKL-KOM-10-M18x1,5
12	1/2"	-08	M20x1,5			13,0	27,0	no	DKL-KOM-12-M20x1,5
12	1/2"	-08	M22x1,5			26,0	27,0	22,0	DKL-KOM-12-M22x1,5
12	1/2"	-08	M24x1,5			30,0	32,0	27,0	DKL-KOM-12-M24x1,5
16	5/8"	-10	M24x1,5			60,0	32,0	27,0	DKL-KOM-16-M24x1,5
19	3/4"	-12	M30x1,5			33,5	36,0	32,0	DKL-KOM-20-M30x1,5
25	1"	-16	M33x1,5			36,0	41,0	36,0	DKL-KOM-25-M33x1,5
32	1.1/4"	-20	M36x1,5			40,0	46,0	41,0	DKL-KOM-32-M36x1,5
38	1.1/2"	-24	M42x1,5			42,5	50,0	46,0	DKL-KOM-40-M42x1,5

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



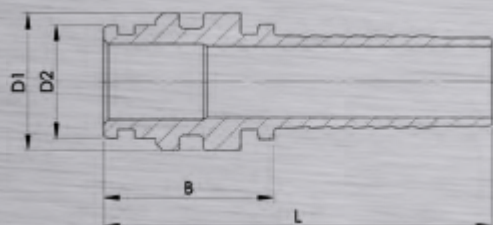
DKJ TO

STRAIGHT INSERT WITH FEMALE BSPP THREAD AND 60° CONICAL BORE

Connection Type	Female BSPP Nut Thread
Sealing Type	60° Conical Bore
Standard	JIS 8363 (TOYOTA, KOMATSU)
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	SW 2 (Hex)	SW (Hex)	Ordering Codes
06	1/4"	-04	G 1/4"	-04		21,5	19,0	17,0	DKJ-T0-06-1/4
10	3/8"	-06	G 3/8"	-06		22,5	22,0	19,0	DKJ-T0-10-3/8
12	1/2"	-08	G 1/2"	-08		26,0	27,0	22,0	DKJ-T0-12-1/2
19	3/4"	-12	G 3/4"	-12		31,0	32,0	27,0	DKJ-T0-20-3/4
25	1"	-16	G 1"	-16		36,0	41,0	36,0	DKJ-T0-25-1
31	1.1/4"	-20	G 1.1/4"	-20		40,5	50,0	46,0	DKJ-T0-32-1.1/4
38	1.1/2"	-24	G 1.1/4"	-24		42,5	55,0	50,0	DKJ-T0-40-1.1/2

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



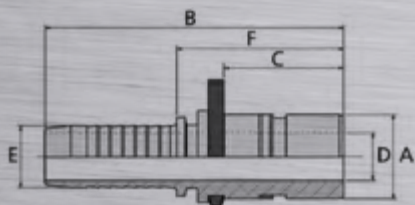
STECK

STECKO MALE FOR 1 - 2 BRAIDED HOSES IN MINING INDUSTRY

Connection Type	Quick-Disconnect O-Nipples
Sealing Type	O ring + PA ring
Standard	DIN 20043
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	D1	D2	L	B		Ordering Codes
06	1/4"	-04	15,0	10,0	55,6	30,0		STECK-6
06	1/4"	-04	20,0	14,0	59,6	37,6		STECK-6-10
10	3/8"	-06	20,0	14,0	68,0	38,0		STECK-10
12	1/2"	-08	24,0	18,0	68,8	37,3		STECK-12
16	5/8"	-10	26,0	21,0	69,2	34,9		STECK-16
19	3/4"	-12	29,0	24,0	79,2	39,7		STECK-20
25	1"	-16	39,0	31,0	90,6	46,6		STECK-25
31	1.1/4"	-20	46,0	38,0	101,0	46,4		STECK-32
38	1.1/2"	-24	65,0	47,0	116,0	58,0		STECK-40
51	2"	-32	64,0	56,0	126,0	53,0		STECK-50

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



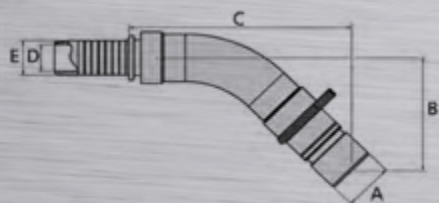
WEO

WEO PLUG-IN NIPPLES WITH STRAIGHT HOSE CONNECTIONS

Connection Type	WEO system
Sealing Type	
Standard	
Material	Carbon Steel
Surface Finishing	Chromium (VI)-free

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	A	Dash	B	F		Ordering Codes
05	3/16"	-03	10	-04	54,5	29,2		WEO-05-10
06	1/4"	-04	10	-04	58,0	30,0		WEO-06-10
06	1/4"	-04	13	-06	61,0	33,0		WEO-06-13
08	5/16"	-05	13	-06	61,0	33,0		WEO-08-13
10	3/8"	-06	13	-06	63,0	33,0		WEO-10-13
10	3/8"	-06	16	-08	63,0	33,0		WEO-10-16
12	1/2"	-08	16	-08	64,0	33,0		WEO-12-16
12	1/2"	-08	23	-12	73,5	42,5		WEO-12-23
16	5/8"	-10	16	-08	68,5	34,3		WEO-16-16
16	5/8"	-10	23	-12	77,5	43,3		WEO-16-23
19	3/4"	-12	23	-12	82,0	43,0		WEO-20-23
25	1"	-16	30	-16	100,5	54,0		WEO-25-30

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



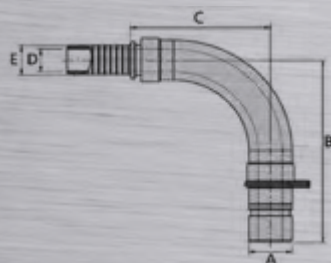
WEO 45°

WEO PLUG-IN NIPPLES WITH 45° ELBOW HOSE CONNECTIONS

Connection Type	WEO system
Sealing Type	
Standard	
Material	Carbon Steel
Surface Finishing	Chromium (VI)-free

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	A	Dash		C	B	Ordering Codes
06	1/4"	-04	10	-04		51,0	28,0	WEO-06-45-10
06	1/4"	-04	13	-06		55,0	32,0	WEO-06-45-13
08	5/16"	-05	13	-06		54,5	33,0	WEO-08-45-13
10	3/8"	-06	13	-06		59,0	33,0	WEO-10-45-13
10	3/8"	-06	16	-08		60,0	34,0	WEO-10-45-16
12	1/2"	-08	16	-08		66,0	36,0	WEO-12-45-16
12	1/2"	-08	23	-12		73,0	44,0	WEO-12-45-23
16	5/8"	-10	23	-12		103,0	55,0	WEO-16-45-23
19	3/4"	-12	23	-12		103,0	55,0	WEO-20-45-23

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



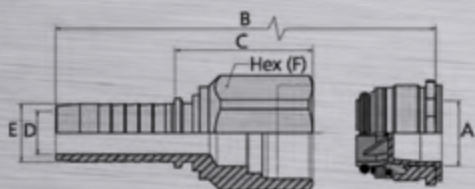
WEO 90°

WEO PLUG-IN NIPPLES WITH 90° ELBOW HOSE CONNECTIONS

Connection Type	WEO system
Sealing Type	
Standard	
Material	Carbon Steel
Surface Finishing	Chromium (VI)-free

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	A	Dash		B	C	Ordering Codes
06	1/4"	-04	10	-04		51,0	34,0	WEO-06-90-10
06	1/4"	-04	13	-06		56,0	34,0	WEO-06-90-13
08	5/16"	-05	13	-06		60,0	39,0	WEO-08-90-13
08	5/16"	-05	16	-08		62,0	39,0	WEO-08-90-16
10	3/8"	-06	13	-06		60,0	39,0	WEO-10-90-13
10	3/8"	-06	16	-08		61,0	39,0	WEO-10-90-16
12	1/2"	-08	16	-08		69,0	48,0	WEO-12-90-16
12	1/2"	-08	23	-12		79,0	48,0	WEO-12-90-23
16	5/8"	-10	23	-12		105,5	75,0	WEO-16-90-23
19	3/4"	-12	23	-12		104,5	75,0	WEO-20-90-23

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



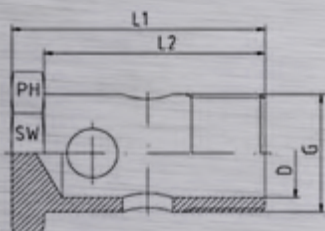
WEO C

WEO PLUG-IN COUPLINGS WITH STRAIGHT HOSE CONNECTIONS

Connection Type	WEO system
Sealing Type	
Standard	
Material	Carbon Steel
Surface Finishing	Chromium (VI)-free

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	A	Dash	B	C		Ordering Codes
06	1/4"	-04	10	-04	58,5	33,2		WEO-C-06-10
10	3/8"	-06	13	-06	66,9	36,0		WEO-C-10-13
12	1/2"	-08	16	-08	67,0	36,3		WEO-C-12-16
19	3/4"	-12	23	-12	87,0	48,0		WEO-C-20-23
25	1"	-16	30	-16	105,0	58,5		WEO-C-25-30

FITTINGS FOR HOSES SN, SC, TE, PTFE, THERMOPLASTIC HOSES, R4



BOLTS

METRIC AND BSP BOLTS FOR BANJO

Connection Type	metric/ BSP
Sealing Type	usit Ring
Standard	metric (DIN 7643)/ BSP
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

			Connection Size		Dimensions (mm)			CHARVAT	
			Thread		L1	L2	D	SW (Hex)	Ordering Codes
			M10x1		26,0	21,0		14,0	PRUTOK.SROUB-M10x1
			M12x1,5			24,0	6,0	17,0	PRUTOK.SROUB-M12x1,5
			M14x1,5			27,0	8,0	19,0	PRUTOK.SROUB-M14x1,5
			M16x1,5			31,0	9,0	22,0	PRUTOK.SROUB-M16x1,5
			M18x1,5			36,0	10,0	24,0	PRUTOK.SROUB-M18x1,5
			M20x1,5			39,0	13,0	27,0	PRUTOK.SROUB-M20x1,5
			M22x1,5			39,0	13,0	27,0	PRUTOK.SROUB-M22x1,5
			G 1/8"		26,0	21,0		14,0	PRUTOK.SROUB-G1/8
			G 1/4"			27,0	7,0	19,0	PRUTOK.SROUB-G1/4
			G 3/8"			31,0	9,0	22,0	PRUTOK.SROUB-G3/8
			G 1/2"			38,5	12,0	27,0	PRUTOK.SROUB-G1/2
			G 5/8"			42,0	13,0	30,0	PRUTOK.SROUB-G5/8
			G 3/4"			47,5	17,5	32,0	PRUTOK.SROUB-G3/4
			G 1"			58,0	22,0	40,0	PRUTOK.SROUB-G1

HYDRAULIC HOSES



FITTINGS FOR
HOSES 4SP



FITTINGS FOR HOSES 4SP

OB 4SP

Skive Swage Ferrule for Braided and Spiral Hose

DKOS (Heavy series)

Straight Insert with Female Metric Nut Thread and 24° Taper/ O-ring

DKOS 45° (Heavy series)

45° Elbow Insert with Female Metric Nut Thread and 24° Taper/ O-ring

DKOS 90° (Heavy series)

90° Elbow Insert with Female Metric Nut Thread and 24° Taper/ O-ring

SFL (3000 PSI Series)

Straight Insert with SAE Flange Adaptor

SFL 45° (3000 PSI Series)

45° Elbow Insert with SAE Flange Adaptor

SFL 90° (3000 PSI Series)

90° Elbow Insert with SAE Flange Adaptor

SFS (6000 PSI Series)

Straight Insert with SAE Flange Adaptor

SFS 45° (6000 PSI Series)

45° Elbow Insert with SAE Flange Adaptor

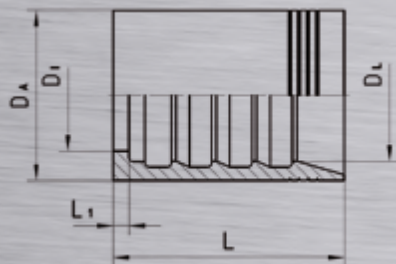
SFS 90° (6000 PSI Series)

90° Elbow Insert with SAE Flange Adaptor

STECK

Stecko male for 4 spiral hoses in mining industry

FITTINGS FOR HOSES 4SP



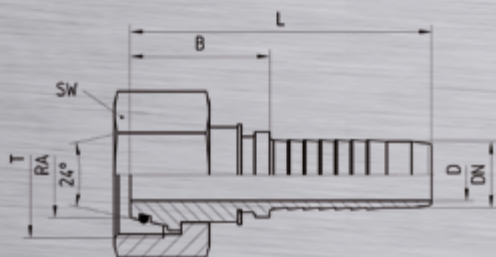
OB 4SP

SKIVE SWAGE FERRULE FOR BRAIDED AND SPIRAL HOSE

Ferrule Type	External Skive
Suitable for	4SP, SPC3
Standard	EN 853, EN 856
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)					CHARVAT
DN	inch	Dash			L	DA	DI	Ordering Codes
10	3/8"	-06			39,0	25,5	14,6	OB-4SP-10
12	1/2"	-08			41,5	29,0	18,0	OB-4SP-12
16	5/8"	-10			43,5	32,0	21,2	OB-4SP-16
19	3/4"	-12			51,2	38,0	24,5	OB-4SP-20
25	1"	-16			63,0	45,0	31,5	OB-4SP-25
31	1.1/4"	-20			70,0	57,5	39,0	OB-4SP-32
38	1.1/2"	-24			76,7	67,0	45,5	OB-4SP-40
51	2"	-32			80,2	80,0	57,8	OB-4SP-50

FITTINGS FOR HOSES 4SP



DKOS

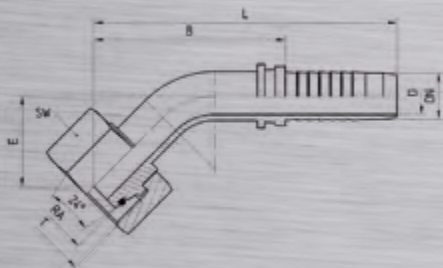
 (Heavy series)

STRAIGHT INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes	
06	1/4"	-04	M16x1.5	-03	62,0	29,0	19,0	DKOS-4SP-06-M16x1,5	
06	1/4"	-04	M18x1.5	-04	64,0	30,0	22,0	DKOS-4SP-06-M18x1,5	
06	1/4"	-04	M20x1.5	-05	63,0	29,0	24,0	DKOS-4SP-06-M20x1,5	
10	3/8"	-06	M20x1.5	-05	63,0	29,0	24,0	DKOS-4SP-10-M20x1,5	
10	3/8"	-06	M22x1.5	-06	65,0	30,0	27,0	DKOS-4SP-10-M22x1,5	
10	3/8"	-06	M24x1.5	-08	64,0	30,0	30,0	DKOS-4SP-10-M24x1,5	
12	1/2"	-08	M22x1.5	-06	73,0	35,0	27,0	DKOS-4SP-12-M22x1,5	
12	1/2"	-08	M24x1.5	-08	68,0	30,0	30,0	DKOS-4SP-12-M24x1,5	
12	1/2"	-08	M30x2.0	-10	74,0	36,0	36,0	DKOS-4SP-12-M30x2	
16	5/8"	-10	M24x1.5	-08	76,0	34,0	30,0	DKOS-4SP-16-M24x1,5	
16	5/8"	-10	M30x2.0	-10	78,0	36,0	36,0	DKOS-4SP-16-M30x2	
16	5/8"	-10/SW41	M36x2.0	-12	78,0	36,0	41,0	DKOS-4SP-16-M36x2	
16	5/8"	-10/SW46	M36x2.0	-12	78,0	36,0	46,0	DKOS-4SP-16-M36x2	
19	3/4"	-12	M30x2.0	-10	83,0	37,0	36,0	DKOS-4SP-20-M30x2	
19	3/4"	-12/SW41	M36x2.0	-12	86,0	40,0	41,0	DKOS-4SP-20-M36x2	
19	3/4"	-12/SW46	M36x2.0	-12	86,0	40,0	46,0	DKOS-4SP-20-M36x2	
19	3/4"	-12	M42x2.0	-16	85,0	50,0	50,0	DKOS-4SP-20-M42x2	
25	1"	-16/SW46	M36x2.0	-12	98,0	46,0	46,0	DKOS-4SP-25-M36x2	
25	1"	-16	M42x2.0	-16	101,0	50,0	50,0	DKOS-4SP-25-M42x2	
25	1"	-16	M52x2.0	-20	99,0	60,0	60,0	DKOS-4SP-25-M52x2	

FITTINGS FOR HOSES 4SP



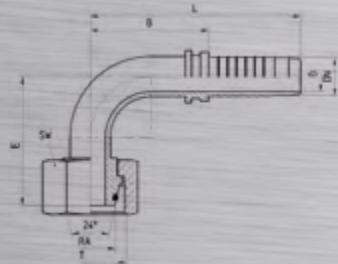
DKOS 45° (Heavy series)

45° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
06	1/4"	-04	M16x1,5	-03	72,0	38,0	18,0	19,0	DKOS-4SP-06-45-M16x1,5
06	1/4"	-04	M18x1,5	-04	73,0	39,0	19,0	22,0	DKOS-4SP-06-45-M18x1,5
06	1/4"	-04	M20x1,5	-05	72,0	38,0	18,0	24,0	DKOS-4SP-06-45-M20x1,5
10	3/8"	-06	M20x1,5	-05	75,0	41,0	20,0	24,0	DKOS-4SP-10-45-M20x1,5
10	3/8"	-06	M22x1,5	-06	76,0	42,0	21,0	27,0	DKOS-4SP-10-45-M22x1,5
10	3/8"	-06	M24x1,5	-08	75,0	41,0	20,0	30,0	DKOS-4SP-10-45-M24x1,5
12	1/2"	-08	M22x1,5	-06	91,0	53,0	26,0	27,0	DKOS-4SP-12-45-M22x1,5
12	1/2"	-08	M24x1,5	-08	91,0	53,0	25,0	30,0	DKOS-4SP-12-45-M24x1,5
12	1/2"	-08	M30x2,0	-10	93,0	55,0	27,0	36,0	DKOS-4SP-12-45-M30x2
16	5/8"	-10	M24x1,5	-08	110,0	68,0	32,0	30,0	DKOS-4SP-16-45-M24x1,5
16	5/8"	-10	M30x2,0	-10	112,0	70,0	29,0	36,0	DKOS-4SP-16-45-M30x2
16	5/8"	-10/SW41	M36x2,0	-12	111,0	69,0	32,0	41,0	DKOS-4SP-16-45-M36x2
16	5/8"	-10/SW46	M36x2,0	-12	111,0	69,0	32,0	46,0	DKOS-4SP-16-45-M36x2
19	3/4"	-12	M30x2,0	-10	122,0	76,0	34,0	36,0	DKOS-4SP-20-45-M30x2
19	3/4"	-12/SW41	M36x2,0	-12	123,0	77,0	36,0	41,0	DKOS-4SP-20-45-M36x2
19	3/4"	-12/SW46	M36x2,0	-12	123,0	77,0	36,0	46,0	DKOS-4SP-20-45-M36x2
19	3/4"	-12	M42x2,0	-16	118,0	72,0	35,0	50,0	DKOS-4SP-20-45-M42x2
25	1"	-16/SW46	M36x2,0	-12	142,0	87,0	40,0	46,0	DKOS-4SP-25-45-M36x2
25	1"	-16	M42x2,0	-16	144,0	89,0	42,0	50,0	DKOS-4SP-25-45-M42x2
25	1"	-16	M52x2,0	-20	139,0	84,0	36,0	60,0	DKOS-4SP-25-45-M52x2

FITTINGS FOR HOSES 4SP



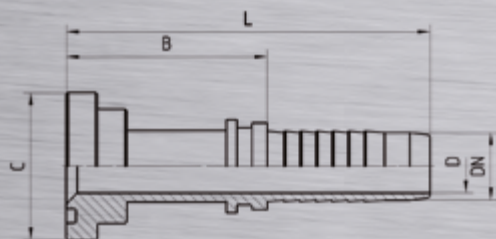
DKOS 90° (Heavy series)

90° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

Connection Type	Female Metric Nut Thread
Sealing Type	24° Taper with O-ring
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
06	1/4"	-04	M16x1,5	-03	61,0	27,0	33,0	19,0	DKOS-4SP-06-90-M16x1,5
06	1/4"	-04	M18x1,5	-04	61,0	27,0	33,0	22,0	DKOS-4SP-06-90-M18x1,5
06	1/4"	-04	M20x1,5	-05	61,0	27,0	32,0	24,0	DKOS-4SP-06-90-M20x1,5
10	3/8"	-06	M20x1,5	-05	65,0	31,0	35,0	24,0	DKOS-4SP-10-90-M20x1,5
10	3/8"	-06	M22x1,5	-06	65,0	31,0	36,0	27,0	DKOS-4SP-10-90-M22x1,5
10	3/8"	-06	M24x1,5	-08	65,0	31,0	36,0	30,0	DKOS-4SP-10-90-M24x1,5
12	1/2"	-08	M22x1,5	-06	81,0	43,0	45,0	27,0	DKOS-4SP-12-90-M22x1,5
12	1/2"	-08	M24x1,5	-08	80,0	42,0	46,0	30,0	DKOS-4SP-12-90-M24x1,5
12	1/2"	-08	M30x2,0	-10	81,0	43,0	47,0	36,0	DKOS-4SP-12-90-M30x2,0
16	5/8"	-10	M24x1,5	-08	94,0	52,0	56,0	30,0	DKOS-4SP-16-90-M24x1,5
16	5/8"	-10	M30x2,0	-10	95,0	53,0	57,0	36,0	DKOS-4SP-16-90-M30x2,0
16	5/8"	-10/SW41	M36x2,0	-12	93,0	51,0	59,0	41,0	DKOS-4SP-16-90-M36x2,0
16	5/8"	-10/SW46	M36x2,0	-12	93,0	51,0	59,0	46,0	DKOS-4SP-16-90-M36x2,0
19	3/4"	-12	M30x2,0	-10	104,0	58,0	65,0	36,0	DKOS-4SP-20-90-M30x2,0
19	3/4"	-12/SW41	M36x2,0	-12	106,0	60,0	65,0	41,0	DKOS-4SP-20-90-M36x2,0
19	3/4"	-12/SW46	M36x2,0	-12	106,0	60,0	65,0	46,0	DKOS-4SP-20-90-M36x2,0
19	3/4"	-12	M42x2,0	-16	106,0	60,0	65,0	50,0	DKOS-4SP-20-90-M42x2,0
25	1"	-16/SW46	M36x2,0	-12	120,0	65,0	78,0	46,0	DKOS-4SP-25-90-M36x2,0
25	1"	-16	M42x2,0	-16	122,0	67,0	76,0	50,0	DKOS-4SP-25-90-M42x2,0
25	1"	-16	M52x2,0	-20	120,0	65,0	76,0	60,0	DKOS-4SP-25-90-M52x2,0

FITTINGS FOR HOSES 4SP



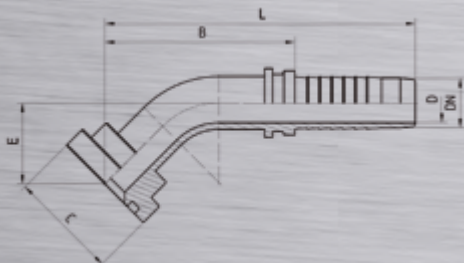
SFL (3000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	Ordering Codes		
12	1/2"	-08	1/2"	-08	89,0	51,0	30,2	SFL-4SP-12-1/2	
12	1/2"	-08	3/4"	-12	90,0	52,0	38,1	SFL-4SP-12-3/4	
16	5/8"	-10	1/2"	-08	94,0	52,0	30,2	SFL-4SP-16-1/2	
16	5/8"	-10	3/4"	-12	91,0	49,0	38,1	SFL-4SP-16-3/4	
19	5/8"	-12	1/2"	-08	101,0	55,0	30,2	SFL-4SP-20-1/2	
19	5/8"	-12	3/4"	-12	103,0	57,0	38,1	SFL-4SP-20-3/4	
19	5/8"	-12	1"	-16	103,0	57,0	44,5	SFL-4SP-20-1	
25	1"	-16	3/4"	-12	110,0	55,0	38,1	SFL-4SP-25-3/4	
25	1"	-16	1"	-16	111,0	56,0	44,5	SFL-4SP-25-1	
25	1"	-16	1.1/4"	-20	111,0	56,0	50,8	SFL-4SP-25-1.1/4	

FITTINGS FOR HOSES 4SP



SFL 45°

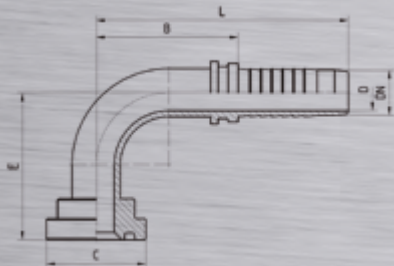
(3000 PSI Series)

45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	89,0	44,0	23,0	30,2	SFL-4SP-12-45-1/2
12	1/2"	-08	3/4"	-12	87,0	45,0	23,0	38,1	SFL-4SP-12-45-3/4
16	5/8"	-10	1/2"	-08	108,0	66,0	27,0	30,2	SFL-4SP-16-45-1/2
16	5/8"	-10	3/4"	-12	108,0	66,0	28,0	38,1	SFL-4SP-16-45-3/4
19	3/4"	-12	1/2"	-08	120,0	74,0	29,0	30,2	SFL-4SP-20-45-1/2
19	3/4"	-12	3/4"	-12	120,0	74,0	33,0	38,1	SFL-4SP-20-45-3/4
19	3/4"	-12	1"	-16	119,0	73,0	31,0	44,5	SFL-4SP-20-45-1
25	1"	-16	3/4"	-12	131,0	76,0	32,0	38,1	SFL-4SP-25-45-3/4
25	1"	-16	1"	-16	137,0	82,0	32,0	44,5	SFL-4SP-25-45-1
25	1"	-16	1.1/4"	-20	127,0	72,0	31,0	50,8	SFL-4SP-25-45-1.1/4

FITTINGS FOR HOSES 4SP



SFL 90°

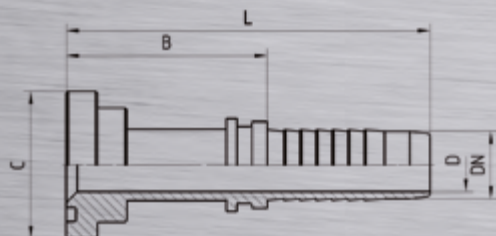
(3000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	80,0	42,0	42,0	30,2	SFL-4SP-12-90-1/2
12	1/2"	-08	3/4"	-12	80,0	42,0	41,0	38,1	SFL-4SP-12-90-3/4
16	5/8"	-10	1/2"	-08	94,0	52,0	54,0	30,2	SFL-4SP-16-90-1/2
16	5/8"	-10	3/4"	-12	94,0	52,0	54,0	38,1	SFL-4SP-16-90-3/4
19	3/4"	-12	1/2"	-08	106,0	60,0	60,0	30,2	SFL-4SP-20-90-1/2
19	3/4"	-12	3/4"	-12	106,0	60,0	58,0	38,1	SFL-4SP-20-90-3/4
19	3/4"	-12	1"	-16	107,0	61,0	60,0	44,5	SFL-4SP-20-90-1
25	1"	-16	3/4"	-12	120,0	65,0	69,0	38,1	SFL-4SP-25-90-3/4
25	1"	-16	1"	-16	120,0	65,0	69,0	44,5	SFL-4SP-25-90-1
25	1"	-16	1.1/4"	-20	120,0	65,0	69,0	50,8	SFL-4SP-25-90-1.1/4

FITTINGS FOR HOSES 4SP



SFS

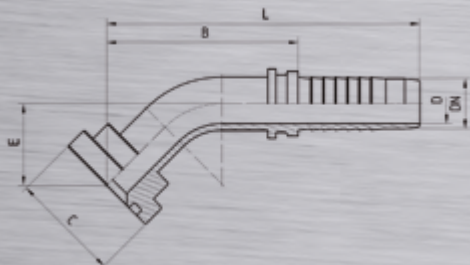
(6000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	Ordering Codes		
12	1/2"	-08	1/2"	-08	91,0	53,0	31,7	SFS-4SP-12-1/2	
12	1/2"	-08	3/4"	-12	91,0	53,0	41,3	SFS-4SP-12-3/4	
16	5/8"	-10	1/2"	-08	95,0	53,0	31,7	SFS-4SP-16-1/2	
16	5/8"	-10	3/4"	-12	92,0	50,0	41,3	SFS-4SP-16-3/4	
19	3/4"	-12	1/2"	-08	102,0	56,0	31,7	SFS-4SP-20-1/2	
19	3/4"	-12	3/4"	-12	104,0	58,0	41,3	SFS-4SP-20-3/4	
19	3/4"	-12	1"	-16	104,0	58,0	47,6	SFS-4SP-20-1	
25	1"	-16	3/4"	-12	112,0	57,0	41,3	SFS-4SP-25-3/4	
25	1"	-16	1"	-16	112,0	57,0	47,6	SFS-4SP-25-1	
25	1"	-16	1.1/4"	-20	113,0	58,0	54,0	SFS-4SP-25-1.1/4	

FITTINGS FOR HOSES 4SP



SFS 45°

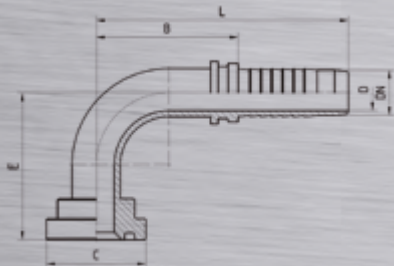
(6000 PSI Series)

45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	88,0	50,0	22,0	31,7	SFS-4SP-12-45-1/2
12	1/2"	-08	3/4"	-12	88,0	50,0	22,0	41,3	SFS-4SP-12-45-3/4
16	5/8"	-10	1/2"	-08	109,0	67,0	28,0	31,7	SFS-4SP-16-45-1/2
16	5/8"	-10	3/4"	-12	106,0	64,0	29,0	41,3	SFS-4SP-16-45-3/4
19	3/4"	-12	1/2"	-08	120,0	74,0	31,0	31,7	SFS-4SP-20-45-1/2
19	3/4"	-12	3/4"	-12	119,0	73,0	32,0	41,3	SFS-4SP-20-45-3/4
19	3/4"	-12	1"	-16	119,0	73,0	32,0	47,6	SFS-4SP-20-45-1
25	1"	-16	3/4"	-12	142,0	87,0	36,0	41,3	SFS-4SP-25-45-3/4
25	1"	-16	1"	-16	139,0	84,0	37,0	47,6	SFS-4SP-25-45-1
25	1"	-16	1.1/4"	-20	140,0	85,0	34,0	54,0	SFS-4SP-25-45-1.1/4

FITTINGS FOR HOSES 4SP



SFS 90°

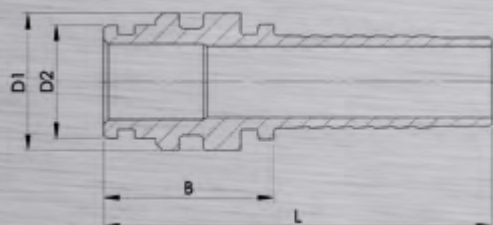
(6000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
12	1/2"	-08	1/2"	-08	77,0	39,0	44,0	31,7	SFS-4SP-12-90-1/2
12	1/2"	-08	3/4"	-12	79,0	39,0	42,0	41,3	SFS-4SP-12-90-3/4
16	5/8"	-10	1/2"	-08	94,0	52,0	55,0	31,7	SFS-4SP-16-90-1/2
16	5/8"	-10	3/4"	-12	94,0	52,0	55,0	41,3	SFS-4SP-16-90-3/4
19	3/4"	-12	1/2"	-08	106,0	60,0	61,0	31,7	SFS-4SP-20-90-1/2
19	3/4"	-12	3/4"	-12	106,0	60,0	60,0	41,3	SFS-4SP-20-90-3/4
19	3/4"	-12	1"	-16	106,0	60,0	60,0	47,6	SFS-4SP-20-90-1
25	1"	-16	3/4"	-12	120,0	65,0	72,0	41,3	SFS-4SP-25-90-3/4
25	1"	-16	1"	-16	120,0	65,0	72,0	47,6	SFS-4SP-25-90-1
25	1"	-16	1.1/4"	-20	120,0	65,0	71,0	54,0	SFS-4SP-25-90-1.1/4

FITTINGS FOR HOSES 4SP



STECK

STECKO MALE FOR 4 SPIRAL HOSES IN MINING INDUSTRY

Connection Type	Quick-Disconnect O-Nipples
Sealing Type	O ring + PA ring
Standard	DIN 20043
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

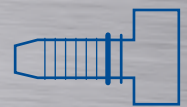
Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	D1	D2	L	B		Ordering Codes
10	3/8"	-06	20,0	14,0	74,9	39,4		STECK-4SP-10
12	1/2"	-08	24,0	18,0	75,6	37,8		STECK-4SP-12
19	3/4"	-12	29,0	24,0	86,4	40,2		STECK-4SP-20
25	1"	-16	39,0	31,0	102,4	46,4		STECK-4SP-25
31	1.1/4"	-20	46,0	38,0	108,2	44,2		STECK-4SP-32
38	1.1/2"	-24	65,0	47,0	116,0	58,0		STECK-4SP-40
51	2"	-32	64,0	56,0	126,0	53,0		STECK-4SP-50

HYDRAULIC HOSES

HYDRAULIC HOSES



FITTINGS FOR
HOSES 4SH
(5000 LINE)



FITTINGS FOR HOSES 4SH (5000 LINE)

OB 4SH

Internal & External Skive Swage
Ferrule for Spiral Hose

DKOS (Heavy series)

Straight Insert with Female Metric
Nut Thread and 24° Taper/ O-ring

DKOS 45° (Heavy series)

45° Elbow Insert with Female Metric
Nut Thread and 24° Taper/ O-ring

DKOS 90° (Heavy series)

90° Elbow Insert with Female Metric
Nut Thread and 24° Taper/ O-ring

SFL (3000 PSI Series)

Straight Insert with SAE Flange
Adaptor

SFL 45° (3000 PSI Series)

45° Elbow Insert with SAE Flange
Adaptor

SFL 90° (3000 PSI Series)

90° Elbow Insert with SAE Flange
Adaptor

SFS (6000 PSI Series)

Straight Insert with SAE Flange
Adaptor

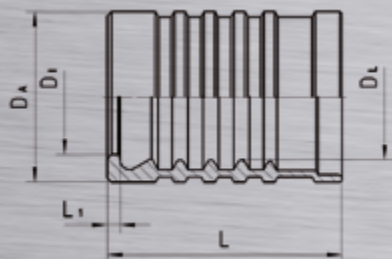
SFS 45° (6000 PSI Series)

45° Elbow Insert with SAE Flange
Adaptor

SFS 90° (6000 PSI Series)

90° Elbow Insert with SAE Flange
Adaptor

FITTINGS FOR HOSES 4SH (5000 LINE)



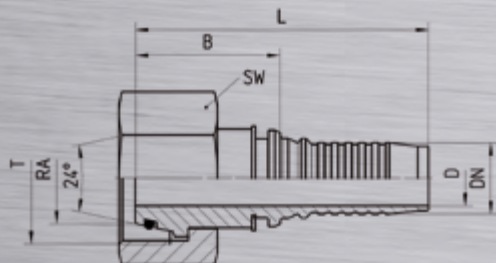
OB 4SH

INTERNAL & EXTERNAL SKIVE SWAGE FERRULE FOR SPIRAL HOSE

Ferrule Type	Interlock
Suitable for	4SH, R15 (DN 19 / DN 25)
Standard	EN 856, SAE 100 R15
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)					CHARVAT
DN	inch	Dash			L	DA	DI	Ordering Codes
19	3/4"	-12			55,0	40,0	27,1	OB-4SH-20
25	1"	-16			68,5	48,6	33,5	OB-4SH-25
31	1.1/4"	-20			75,1	57,0	40,0	OB-4SH-32
38	1.1/2"	-24			75,6	62,0	43,2	OB-4SH-40
51	2"	-32			75,0	78,2	57,9	OB-4SH-50

FITTINGS FOR HOSES 4SH (5000 LINE)



DKOS

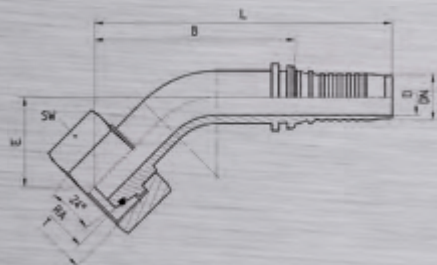
 (Heavy series)

STRAIGHT INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	M30x2	-10	79,0	38,0		36,0	DKOS-4SH-20-M30x2
19	3/4"	-12/SW41	M36x2	-12	80,0	39,0		41,0	DKOS-4SH-20-M36x2
19	3/4"	-12/SW46	M36x2	-12	80,0	39,0		46,0	DKOS-4SH-20-M36x2
19	3/4"	-12	M42x2	-16	78,0	40,0		50,0	DKOS-4SH-20-M42x2
25	1"	-15/SW46	M36x2	-12	92,0	42,0		46,0	DKOS-4SH-25-M36x2
25	1"	-16	M42x2	-16	94,0	40,0		50,0	DKOS-4SH-25-M42x2
25	1"	-16	M52x2	-20	89,0	37,0		60,0	DKOS-4SH-25-M52x2
31	1.1/4"	-20	M42x2	-16	105,0	36,0		50,0	DKOS-4SH-32-M42x2
31	1.1/4"	-20	M52x2	-16	110,0	41,0		60,0	DKOS-4SH-32-M52x2
38	1.1/2"	-24	M52x2	-20	108,0	39,0		60,0	DKOS-4SH-40-M52x2

FITTINGS FOR HOSES 4SH (5000 LINE)



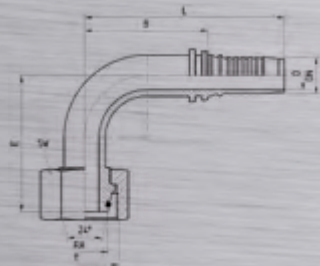
DKOS 45° (Heavy series)

45° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainles Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	M30x2	-10	122,0	81,0	37,0	36,0	DKOS-4SH-20-45-M30x2
19	3/4"	-12/SW46	M36x2	-12	125,0	84,0	36,0	46,0	DKOS-4SH-20-45-M36x2
19	3/4"	-12	M42x2	-16	118,0	77,0	34,0	50,0	DKOS-4SH-20-45-M42x2
25	1"	-16/SW46	M36x2	-12	149,0	97,0	40,0	46,0	DKOS-4SH-25-45-M36x2
25	1"	-16	M42x2	-16	148,0	96,0	41,0	50,0	DKOS-4SH-25-45-M42x2
25	1"	-16	M52x2	-20	149,0	97,0	40,0	60,0	DKOS-4SH-25-45-M52x2
31	1.1/4"	-20	M42x2	-16	195,0	126,0	58,0	50,0	DKOS-4SH-32-45-M42x2
31	1.1/4"	-20	M52x2	-20	195,0	126,0	58,0	60,0	DKOS-4SH-32-45-M52x2
38	1.1/2"	-24	M52x2	-20	195,0	126,0	55,0	60,0	DKOS-4SH-40-45-M52x2

FITTINGS FOR HOSES 4SH (5000 LINE)



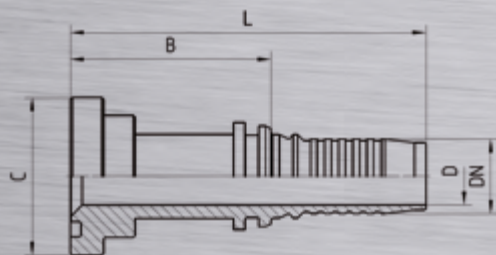
DKOS 90° (Heavy series)

90° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)	Ordering Codes
19	3/4"	-12	M30x2	-10	101,0	60,0	68,0	36,0	DKOS-4SH-20-90-M30x2
19	3/4"	-12/SW46	M36x2	-12	101,0	60,0	70,0	46,0	DKOS-4SH-20-90-M36x2
19	3/4"	-12	M42x2	-16	101,0	60,0	67,0	50,0	DKOS-4SH-20-90-M42x2
25	1"	-16/SW46	M36x2	-12	133,0	81,0	76,0	46,0	DKOS-4SH-25-90-M36x2
25	1"	-16	M45x2	-16	134,0	82,0	76,0	50,0	DKOS-4SH-25-90-M45x2
25	1"	-16	M52x2	-20	133,0	81,0	75,0	60,0	DKOS-4SH-25-90-M52x2
31	1.1/4"	-20	M42x2	-16	171,0	102,0	108,0	50,0	DKOS-4SH-32-90-M42x2
31	1.1/4"	-20	M52x2	-20	171,0	102,0	108,0	60,0	DKOS-4SH-32-90-M52x2
38	1.1/2"	-24	M52x2	-20	190,0	121,0	108,0	60,0	DKOS-4SH-40-90-M52x2

FITTINGS FOR HOSES 4SH (5000 LINE)



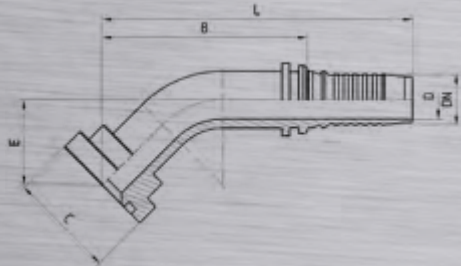
SFL (3000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	E		Ordering Codes
19	3/4"	-12	1/2"	-08	92,0	51,0		30,2	SFL-4SH-20-1/2
19	3/4"	-12	3/4"	-12	93,0	52,0		38,1	SFL-4SH-20-3/4
19	3/4"	-12	1"	-16	93,0	52,0		44,5	SFL-4SH-20-1
25	1"	-16	3/4"	-12	108,0	56,0		38,1	SFL-4SH-25-3/4
25	1"	-16	1"	-16	108,0	56,0		44,5	SFL-4SH-25-1
25	1"	-16	1.1/4"	-20	107,0	55,0		50,8	SFL-4SH-25-1.1/4
31	1.1/4"	-20	1"	-16	129,0	60,0		44,5	SFL-4SH-32-1
31	1.1/4"	-20	1.1/4"	-20	128,0	59,0		50,8	SFL-4SH-32-1.1/4
31	1.1/4"	-20	1.1/2"	-24	130,0	61,0		60,3	SFL-4SH-32-1.1/2
38	1.1/2"	-24	1.1/4"	-20	129,0	60,0		50,8	SFL-4SH-40-1.1/4
38	1.1/2"	-24	1.1/2"	-24	131,0	62,0		60,3	SFL-4SH-40-1.1/2
38	1.1/2"	-24	2"	-32	131,0	62,0		71,4	SFL-4SH-40-2
51	2"	-32	1.1/2"	-24	145	76,0		60,3	SFL-4SH-50-1.1/2
51	2"	-32	2"	-32	144,0	79,0		71,4	SFL-4SH-50-2

FITTINGS FOR HOSES 4SH (5000 LINE)



SFL 45°

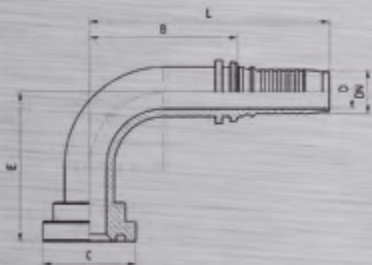
(3000 PSI Series)

45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	1/2"	-08	118,0	77,0	34,0	30,2	SFL-4SH-20-45-1/2
19	3/4"	-12	3/4"	-12	120,0	79,0	30,0	38,1	SFL-4SH-20-45-3/4
19	3/4"	-12	1"	-16	118,0	77,0	34,0	44,5	SFL-4SH-20-45-1
25	1"	-16	3/4"	-12	140,0	88,0	32,0	38,1	SFL-4SH-25-45-3/4
25	1"	-16	1"	-16	140,0	88,0	32,0	44,5	SFL-4SH-25-45-1
25	1"	-16	1.1/4"	-20	140,0	88,0	32,0	50,8	SFL-4SH-25-45-1.1/4
31	1.1/4"	-20	1"	-16	184,0	115,0	44,0	44,5	SFL-4SH-32-45-1
31	1.1/4"	-20	1.1/4"	-20	182,0	113,0	42,0	50,8	SFL-4SH-32-45-1.1/4
31	1.1/4"	-20	1.1/2"	-24	187,0	118,0	50,0	60,3	SFL-4SH-32-45-1.1/2
38	1.1/2"	-24	1.1/4"	-20	182,0	113,0	50,0	50,8	SFL-4SH-40-45-1.1/4
38	1.1/2"	-24	1.1/2"	-24	171,0	102,0	50,0	60,3	SFL-4SH-40-45-1.1/2
38	1.1/2"	-24	2"	-32	185,0	116,0	45,0	71,4	SFL-4SH-40-45-2
51	2"	-32	1.1/2"	-24	192,0	127,0	52,0	60,3	SFL-4SH-50-45-1.1/2
51	2"	-32	2"	-32	203,0	138,0	65,0	71,4	SFL-4SH-50-45-2

FITTINGS FOR HOSES 4SH (5000 LINE)



SFL 90°

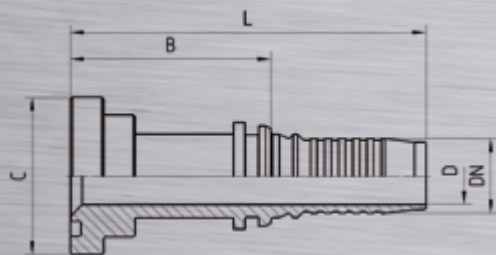
(3000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	1/2"	-08	101,0	60,0	61,0	30,2	SFL-4SH-20-90-1/2
19	3/4"	-12	3/4"	-12	97,0	56,0	64,0	38,1	SFL-4SH-20-90-3/4
19	3/4"	-12	1"	-16	101,0	60,0	65,0	44,5	SFL-4SH-20-90-1
25	1"	-16	3/4"	-12	133,0	81,0	62,0	38,1	SFL-4SH-25-90-3/4
25	1"	-16	1"	-16	133,0	81,0	62,0	44,5	SFL-4SH-25-90-1
25	1"	-16	1.1/4"	-20	133,0	81,0	62,0	50,8	SFL-4SH-25-90-1.1/4
31	1.1/4"	-20	1"	-16	171,0	102,0	103,0	44,5	SFL-4SH-32-90-1
31	1.1/4"	-20	1.1/4"	-20	171,0	102,0	101,0	50,8	SFL-4SH-32-90-1.1/4
31	1.1/4"	-20	1.1/2"	-24	171,0	102,0	109,0	60,3	SFL-4SH-32-90-1.1/2
38	1.1/2"	-24	1.1/4"	-20	190,0	121,0	109,0	50,8	SFL-4SH-40-90-1.1/4
38	1.1/2"	-24	1.1/2"	-24	190,0	121,0	109,0	60,3	SFL-4SH-40-90-1.1/2
38	1.1/2"	-24	2"	-32	190,0	121,0	111,0	71,4	SFL-4SH-40-90-2
51	2"	-32	1.1/2"	-24	188,0	123,0	120,0	60,3	SFL-4SH-50-90-1.1/2
51	2"	32	2"	-32	188,0	123,0	140,0	71,4	SFL-4SH-50-90-2

FITTINGS FOR HOSES 4SH (5000 LINE)



SFS

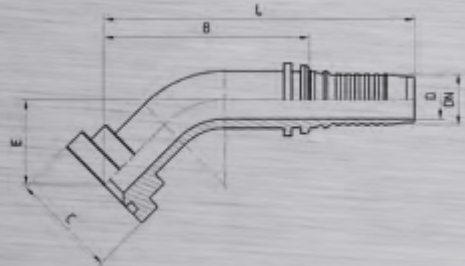
 (6000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	Ordering Codes		
19	3/4"	-12	1/2"	-08	93,0	52,0	31,7	SFS-4SH-20-1/2	
19	3/4"	-12	3/4"	-12	93,0	52,0	41,3	SFS-4SH-20-3/4	
19	3/4"	-12	1"	-16	95,0	54,0	47,6	SFS-4SH-20-1	
25	1"	-16	3/4"	-12	109,0	57,0	41,3	SFS-4SH-25-3/4	
25	1"	-16	1"	-16	110,0	58,0	47,6	SFS-4SH-25-1	
25	1"	-16	1.1/4"	-20	111,0	59,0	54,0	SFS-4SH-25-1.1/4	
31	1.1/4"	-20	1"	-16	129,0	60,0	47,6	SFS-4SH-32-1	
31	1.1/4"	-20	1.1/4"	-20	134,0	65,0	54,0	SFS-4SH-32-1.1/4	
31	1.1/4"	-20	1.1/2"	-24	134,0	65,0	63,5	SFS-4SH-32-1.1/2	
38	1.1/2"	-24	1.1/4"	-20	133,0	64,0	54,0	SFS-4SH-40-1.1/2	
38	1.1/2"	-24	1.1/2"	-24	135,0	66,0	63,5	SFS-4SH-40-1.1/2	
38	1.1/2"	-24	2"	-32	144,0	75,0	79,4	SFS-4SH-40-2	
51	2"	-32	1.1/2"	-24	152,0	87,0	63,5	SFS-4SH-50-1.1/2	
51	2"	-32	2"	-32	158,0	93,0	79,4	SFS-4SH-50-2	

FITTINGS FOR HOSES 4SH (5000 LINE)



SFS 45°

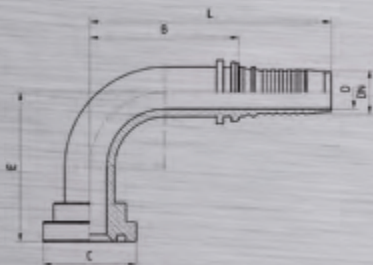
(6000 PSI Series)

45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	1/2"	-08	120,0	79,0	33,0	31,7	SFS-4SH-20-45-1/2
19	3/4"	-12	3/4"	-12	119,0	78,0	32,0	41,3	SFS-4SH-20-45-3/4
19	3/4"	-12	1"	-16	117,0	76,0	36,0	47,6	SFS-4SH-20-45-1
25	1"	-16	3/4"	-12	140,0	93,0	35,0	41,3	SFS-4SH-25-45-3/4
25	1"	-16	1"	-16	144,0	92,0	38,0	47,6	SFS-4SH-25-45-1
25	1"	-16	1.1/4"	-20	145,0	93,0	35,0	54,0	SFS-4SH-25-45-1.1/4
31	1.1/4"	-20	1"	-16	185,0	116,0	45,0	47,6	SFS-4SH-32-45-1
31	1.1/4"	-20	1.1/4"	-20	185,0	116,0	45,0	54,0	SFS-4SH-32-45-1.1/4
31	1.1/4"	-20	1.1/2"	-24	190,0	121,0	53,0	63,5	SFS-4SH-32-45-1.1/2
38	1.1/2"	-24	1.1/4"	-20	200,0	131,0	53,0	54,0	SFS-4SH-40-45-1.1/4
38	1.1/2"	-24	1.1/2"	-24	185,0	116,0	53,0	63,5	SFS-4SH-40-45-1.1/2
38	1.1/2"	-24	2"	-32	195,0	126,0	55,0	79,4	SFS-4SH-40-45-2
51	2"	-32	1.1/2"	-24	195,0	130,0	55,0	63,5	SFS-4SH-50-45-1.1/2
51	2"	-32	2"	-32	195,0	130,0	55,0	79,4	SFS-4SH-50-45-2

FITTINGS FOR HOSES 4SH (5000 LINE)



SFS 90°

(6000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	1/2"	-08	101,0	60,0	66,0	31,7	SFS-4SH-20-90-1/2
19	3/4"	-12	3/4"	-12	101,0	60,0	65,0	41,3	SFS-4SH-20-90-3/4
19	3/4"	-12	1"	-16	101,0	60,0	70,0	47,6	SFS-4SH-20-90-1
25	1"	-16	3/4"	-12	133,0	81,0	72,0	41,3	SFS-4SH-25-90-3/4
25	1"	-16	1"	-16	133,0	81,0	72,0	47,6	SFS-4SH-25-90-1
25	1"	-16	1.1/4"	-20	133,0	81,0	90,0	54,0	SFS-4SH-25-90-1.1/4
31	1.1/4"	-20	1	-16	171,0	102,0	105,0	47,6	SFS-4SH-32-90-1
31	1.1/4"	-20	1.1/4"	-20	171,0	102,0	105,0	54,0	SFS-4SH-32-90-1.1/4
31	1.1/4"	-20	1.1/2"	-24	171,0	102,0	113,0	63,5	SFS-4SH-32-90-1.1/2
38	1.1/2"	-24	1.1/4"	-20	190,0	121,0	113,0	54,0	SFS-4SH-40-90-1.1/4
38	1.1/2"	-24	1.1/2"	-24	190,0	121,0	113,0	63,5	SFS-4SH-40-90-1.1/2
38	1.1/2"	-24	2"	-32	190,0	121,0	124,0	79,4	SFS-4SH-40-90-2
51	2"	-32	1.1/2"	-24	188,0	123,0	124,0	63,5	SFS-4SH-50-90-1.1/2
51	2"	-32	2"	-32	188,0	123,0	124,0	79,4	SFS-4SH-50-90-2

HYDRAULIC HOSES

FITTINGS FOR HOSES 4SH R15, FLEXLINE CH-LOCK (7000 LINE)



FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)

OB 4SH/R15

Internal & External Skive Swage
Ferrule for Spiral Hose R15

DKOS (Heavy series)

Straight Insert with Female Metric
Nut Thread and 24° Taper/ O-ring

DKOS 45° (Heavy series)

45° Elbow Insert with Female Metric
Nut Thread and 24° Taper/ O-ring

DKOS 90° (Heavy series)

90° Elbow Insert with Female Metric
Nut Thread and 24° Taper/ O-ring

CES (Heavy series)

Straight Insert with Metric Thread
and 24° Conical Bore

SFL (3000 PSI Series)

Straight Insert with SAE Flange
Adaptor

SFL 45° (3000 PSI Series)

45° Elbow Insert with SAE Flange
Adaptor

SFL 90° (3000 PSI Series)

90° Elbow Insert with SAE Flange
Adaptor

SFS (6000 PSI Series)

Straight Insert with SAE Flange
Adaptor

SFS 45° (6000 PSI Series)

45° Elbow Insert with SAE Flange
Adaptor

SFS 90° (6000 PSI Series)

90° Elbow Insert with SAE Flange
Adaptor

DKOR

Straight Insert with Female BSPP
Thread and 60° Taper/ O-ring

DKOR 45°

45° Elbow Insert with Female BSPP
Thread and 60° Taper/ O-ring

DKOR 90°

90° Elbow Insert with Female BSPP
Thread and 60° Taper/ O-ring

AGR

Straight Insert with Male BSPP Thread
and 60° Conical Bore

AGN

Straight Insert with Male NPTF Thread
and 60° Conical Bore

DKJ

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

DKJ 45°

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

DKJ 90°

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

AGJ

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

ORFS

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

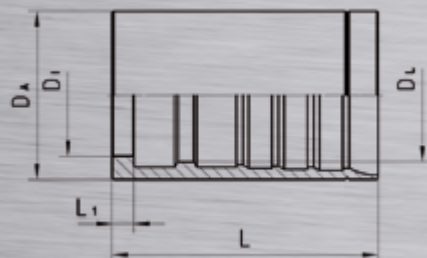
ORFS 45°

45° Elbow Insert with Female UN/
UNF Thread for O-Ring Face Seal
Connection

ORFS 90°

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

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



OB 4SH/R15

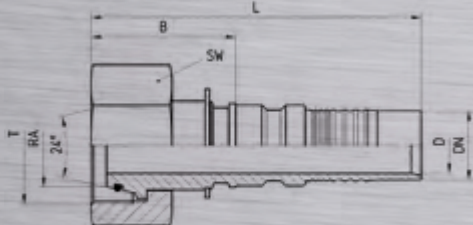
INTERNAL & EXTERNAL SKIVE SWAGE FERRULE FOR SPIRAL HOSE R15

Ferrule Type	Interlock
Suitable for	4SH, R15, FL5000, FL6000
Standard	EN 856, SAE 100 R15
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Dimensions (mm)					CHARVAT
DN	inch	Dash	L	DA	DI		Ordering Codes	
19	3/4"	-12	68,0	38,8	30,6		OB-4SH/R15-20-CHLock	
25	1"	-16	73,0	50,0	39,0		OB-4SH/R15-25-CHLock	
31	1.1/4"	-20	81,0	55,6	44,8		OB-4SH-32-CHLock	
31	1.1/4"	-20	81,0	61,4	48,6		OB-R15-32-CHLock	
38	1.1/2"	-24	96,0	62,4	51,6		OB-4SH-40-CHLock	
38	1.1/2"	-24	92,0	69,5	58,5		OB-R15-40-CHLock	
51	2"	-32	98,5	82,5	71,1		OB-R15-50-CHLock	

CHARVAT	Skive Length (mm)		Recommended Crimping Dimension (mm)			
Ordering Codes	Outside	Inside	FLEXLINE 5000	FLEXLINE 6000	4SH	R15
OB-4SH/R15-20-CHLock	48,0	17,0		33,8	34,0	33,8
OB-4SH/R15-25-CHLock	52,0	17,0		43,4	43,5	43,6
OB-4SH-32-CHLock	56,0	21,0	50,0		50,0	
OB-R15-32-CHLock	56,0	21,0		54,2 (6x layers)		54,2
OB-4SH-40-CHLock	69,0	27,0			57,1	
OB-R15-40-CHLock	69,0	27,0		62,0		62,0
OB-R15-50-CHLock	72,0	29,0				76,0

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



DKOS

 (Heavy series)

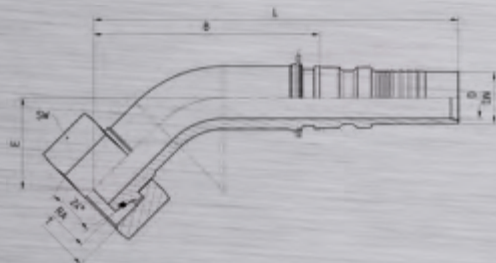
STRAIGHT INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
19	3/4"	-12	M30x2	-10	103,0	30,5	36,0	DKOS-4SH/R15-20-M30x2	
19	3/4"	-12	M36x2	-12	104,0	31,5	46,0	DKOS-4SH/R15-20-M36x2	
25	1"	-16	M36x2	-12	111,0	31,5	41,0	DKOS-4SH/R15-25-M36x2	
25	1"	-16	M42x2	-16	117,0	37,5	50,0	DKOS-4SH/R15-25-M42x2	
31	1.1/4"	-20	M42x2	-16	111,5	33,5	50,0	DKOS-4SH/R15-32-M42x2	
31	1.1/4"	-20	M52x2	-20	119,5	41,5	60,0	DKOS-4SH/R15-32-M52x2	
38	1.1/2"	-24	M52x2	-20	163,5	70,5	60,0	DKOS-4SH/R15-40-M52x2	

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



DKOS 45°

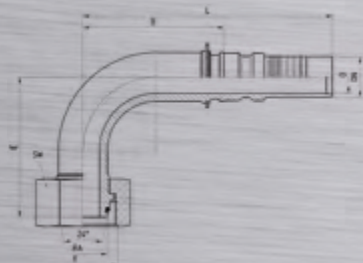
(Heavy series)

45° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	M30x2	-10	142,5	70,0	30,5	36,0	DKOS-4SH/R15-20-45-M30x2
19	3/4"	-12	M36x2	-12	137,5	64,5	29,0	46,0	DKOS-4SH/R15-20-45-M36x2
25	1"	-16	M36x2	-12	162,5	83,0	35,0	46,0	DKOS-4SH/R15-25-45-M36x2
25	1"	-16	M42x2	-16	160,0	80,5	36,5	50,0	DKOS-4SH/R15-25-45-M42x2
31	1.1/4"	-20	M52x2	-20	176,5	98,5	41,5	60,0	DKOS-4SH/R15-32-45-M52x2
38	1.1/2"	-24	M52x2	-20	206,0	113,5	47,5	60,0	DKOS-4SH/R15-40-45-M52x2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



DKOS 90° (Heavy series)

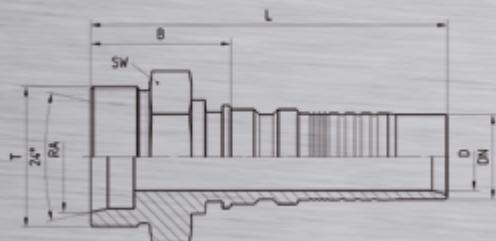
90° ELBOW INSERT WITH FEMALE METRIC NUT THREAD AND 24° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	M30x2	-10	127,0	54,5	58,0	36,0	DKOS-4SH/R15-20-90-M30x2
19	3/4"	-12	M36x2	-12	127,0	54,5	58,5	46,0	DKOS-4SH/R15-20-90-M36x2
25	1"	-16	M36x2	-12	149,5	70,0	71,0	46,0	DKOS-4SH/R15-25-90-M36x2
25	1"	-16	M42x2	-16	147,5	68,0	74,0	50,0	DKOS-4SH/R15-25-90-M42x2
31	1.1/4"	-20	M52x2	-20	162,5	84,5	87,0	60,0	DKOS-4SH/R15-32-90-M52x2
38	1.1/2"	-24	M52x2	-20	192,0	99,0	100,5	60,0	DKOS-4SH/R15-40-90-M52x2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



CES

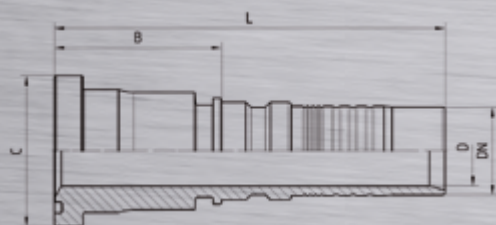
(Heavy series)

STRAIGHT INSERT WITH METRIC THREAD AND 24° CONICAL BORE

Insert Type	with Pull-Out Protection (Interlock)
Connection Type	Male Metric Thread
Sealing Type	24° Conical Bore
Standard	ISO 8434-1
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
19	3/4"	-12	M36x2	-12	109,0	36,5	36,0	CES-4SH/R15-20-M36x2	
25	1"	-16	M42x2	-16	119,0	39,5	46,0	CES-4SH/R15-25-M42x2	
31	1.1/4"	-20	M52x2	-20	123,0	45,0	55,0	CES-4SH/R15-32-M52x2	

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



SFL (3000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	Ordering Codes		
19	3/4"	-12	3/4"	-12	118,0	45,5	38,1	SFL-4SH/R15-20-3/4	
19	3/4"	-12	1"	-16	113,0	40,5	44,5	SFL-4SH/R15-20-1	
25	1"	-16	1"	-16	129,5	50,0	44,5	SFL-4SH/R15-25-1	
25	1"	-16	1.1/4"	-20	126,0	46,5	50,8	SFL-4SH/R15-25-1.1/4	
31	1.1/4"	-20	1.1/4"	-20	144,5	66,5	50,8	SFL-4SH/R15-32-1.1/4	
31	1.1/4"	-20	1.1/2"	-24	127,0	49,0	60,3	SFL-4SH/R15-32-1.1/2	
38	1.1/2"	-24	1.1/2"	-24	149,0	56,0	60,3	SFL-4SH/R15-40-1.1/2	
38	1.1/2"	-24	2"	-32	143,0	50,0	71,4	SFL-4SH/R15-40-2	
51	2"	-32	2"	-32	165,5	69,5	71,4	SFL-4SH/R15-50-2	

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



SFL 45°

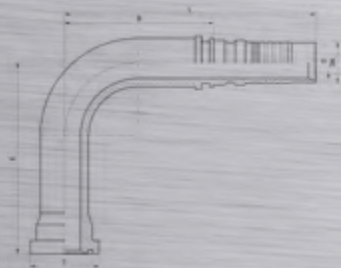
(3000 PSI Series)

45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	3/4"	-12	133,5	61,0	30,0	38,1	SFL-4SH/R15-20-45-3/4
19	3/4"	-12	1"	-16	147,0	74,5	29,5	44,5	SFL-4SH/R15-20-45-1
25	1"	-16	1"	-16	160,0	80,5	35,0	44,5	SFL-4SH/R15-25-45-1
25	1"	-16	1.1/4"	-20	167,5	88,0	33,5	50,8	SFL-4SH/R15-25-45-1.1/4
31	1.1/4"	-20	1.1/4"	-20	184,0	106,0	38,5	50,8	SFL-4SH/R15-32-45-1.1/4
31	1.1/4"	-20	1.1/2"	-24	186,5	108,5	43,0	60,3	SFL-4SH/R15-32-45-1.1/2
38	1.1/2"	-24	1.1/2"	-24	218,0	125,0	52,5	60,3	SFL-4SH/R15-40-45-1.1/2
38	1.1/2"	-24	2"	-32	209,5	117,0	46,5	71,4	SFL-4SH/R15-40-45-2
51	2"	-32	2"	-32	258,5	162,5	72,5	71,4	SFL-4SH/R15-50-45-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



SFL 90°

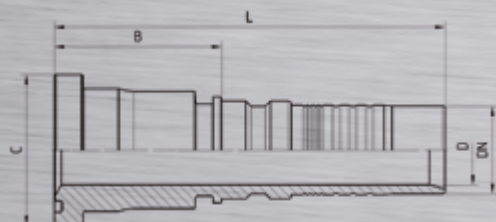
(3000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	3/4"	-12	124,5	52,0	56,0	38,1	SFL-4SH/R15-20-90-3/4
19	3/4"	-12	1"	-16	139,5	67,0	63,5	44,5	SFL-4SH/R15-20-90-1
25	1"	-16	1"	-16	148,5	69,0	72,0	44,5	SFL-4SH/R15-25-90-1
25	1"	-16	1.1/4"	-20	160,0	80,5	74,0	50,8	SFL-4SH/R15-25-90-1.1/4
31	1.1/4"	-20	1.1/4"	-20	173,0	95,0	86,0	50,8	SFL-4SH/R15-32-90-1.1/4
31	1.1/4"	-20	1.1/2"	-24	177,0	99,0	94,0	60,3	SFL-4SH/R15-32-90-1.1/2
38	1.1/2"	-24	1.1/2"	-24	201,0	108,0	108,0	60,3	SFL-4SH/R15-40-90-1.1/2
38	1.1/2"	-24	2"	-32	200,0	107,0	103,0	71,4	SFL-4SH/R15-40-90-2
51	2"	-32	2"	-32	237,0	141,0	150,0	71,4	SFL-4SH/R15-50-90-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



SFS

 (6000 PSI Series)

STRAIGHT INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			C	CHARVAT
DN	inch	Dash	inch	Dash	L	B	Ordering Codes		
19	3/4"	-12	3/4"	-12	120,0	47,5	41,3	SFS-4SH/R15-20-3/4	
19	3/4"	-12	1"	-16	121,0	48,5	47,6	SFS-4SH/R15-20-1	
25	1"	-16	3/4"	-12	130,0	50,5	41,3	SFS-4SH/R15-25-3/4	
25	1"	-16	1"	-16	131,0	51,5	47,6	SFS-4SH/R15-25-1	
25	1"	-16	1.1/4"	-20	137,5	58,0	54,0	SFS-4SH/R15-25-1.1/4	
31	1.1/4"	-20	1"	-16	148,0	70,0	47,6	SFS-4SH/R15-32-1	
31	1.1/4"	-20	1.1/4"	-20	147,5	69,5	54,0	SFS-4SH/R15-32-1.1/4	
31	1.1/4"	-20	1.1/2"	-24	152,0	74,0	63,5	SFS-4SH/R15-32-1.1/2	
38	1.1/2"	-24	1.1/4"	-20	162,0	69,0	54,0	SFS-4SH/R15-40-1.1/4	
38	1.1/2"	-24	1.1/2"	-24	162,0	69,0	63,5	SFS-4SH/R15-40-1.1/2	
38	1.1/2"	-24	2"	-32	162,0	69,0	79,4	SFS-4SH/R15-40-2	
51	2"	-32	2"	-32	168,5	72,5	79,4	SFS-4SH/R15-50-2	

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



SFS 45°

(6000 PSI Series)

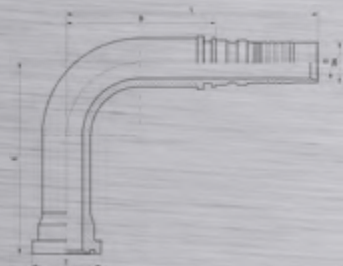
45° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	3/4"	-12	135,5	63,0	32,0	41,3	SFS-4SH/R15-20-45-3/4
19	3/4"	-12	1"	-16	140,0	67,5	31,0	47,6	SFS-4SH/R15-20-45-1
25	1"	-16	3/4"	-12	169,0	90,0	37,0	41,3	SFS-4SH/R15-25-45-3/4
25	1"	-16	1"	-16	161,5	81,5	36,0	47,6	SFS-4SH/R15-25-45-1
25	1"	-16	1.1/4"	-20	167,5	88,0	42,5	54,0	SFS-4SH/R15-25-45-1.1/4
31	1.1/4"	-20	1"	-16	185,0	107,0	47,0	47,6	SFS-4SH/R15-32-45-1
31	1.1/4"	-20	1.1/4"	-20	176,5	98,5	41,5	54,0	SFS-4SH/R15-32-45-1.1/4
31	1.1/4"	-20	1.1/2"	-24	186,0	108,0	47,5	63,5	SFS-4SH/R15-32-45-1.1/2
38	1.1/2"	-24	1.1/2"	-24	213,0	120,0	47,0	63,5	SFS-4SH/R15-40-45-1.1/2
38	1.1/2"	-24	2"	-32	224,5	131,5	53,5	79,4	SFS-4SH/R15-40-45-2
51	2"	-32	2"	-32	256,0	160,0	70,0	79,4	SFS-4SH/R15-50-45-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



SFS 90°

(6000 PSI Series)

90° ELBOW INSERT WITH SAE FLANGE ADAPTOR

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)				CHARVAT
DN	inch	Dash	inch	Dash	L	B	E	C	Ordering Codes
19	3/4"	-12	3/4"	-12	125,0	52,5	59,0	41,3	SFS-4SH/R15-20-90-3/4
19	3/4"	-12	1"	-16	127,0	54,5	61,5	47,6	SFS-4SH/R15-20-90-1
25	1"	-16	3/4"	-12	148,5	69,0	70,5	41,3	SFS-4SH/R15-25-90-3/4
25	1"	-16	1"	-16	148,5	69,0	73,0	47,6	SFS-4SH/R15-25-90-1
25	1"	-16	1.1/4"	-20	148,0	68,5	81,5	54,0	SFS-4SH/R15-25-90-1.1/4
31	1.1/4"	-20	1.1/4"	-20	169,0	91,0	85,0	54,0	SFS-4SH/R15-32-90-1.1/4
31	1.1/4"	-20	1.1/2"	-24	167,5	89,5	97,0	63,5	SFS-4SH/R15-32-90-1.1/2
38	1.1/2"	-24	1.1/2"	-24	198,0	105,0	99,0	63,5	SFS-4SH/R15-40-90-1.1/2
38	1.1/2"	-24	2"	-32	198,0	105,0	113,0	79,4	SFS-4SH/R15-40-90-2
51	2"	-32	2"	-32	234,0	136,0	150,0	79,4	SFS-4SH/R15-50-90-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



DKOR

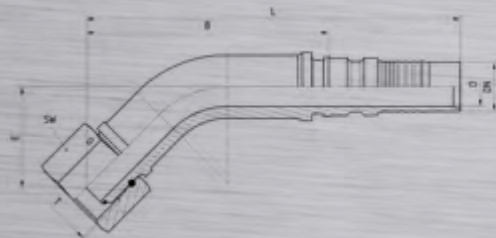
STRAIGHT INSERT WITH FEMALE BSPP THREAD AND 60° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
19	3/4"	-12	3/4"	-12	100,5	28,0		32,0	DKOR-4SH/R15-20-3/4
25	1"	-16	1"	-16	110,5	31,0		41,0	DKOR-4SH/R15-25-1
32	1.1/4"	-20	1.1/4"	-20	111,5	33,5		50,0	DKOR-4SH/R15-32-1.1/4
38	1.1/2"	-24	1.1/2"	-24	131,0	38,0		55,0	DKOR-4SH/R15-40-1.1/2
51	2"	-32	2"	-32	137,0	41,0		70,0	DKOR-4SH/R15-50-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



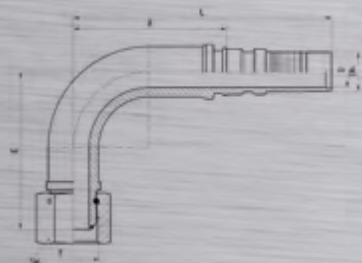
DKOR 45°

45° ELBOW INSERT WITH FEMALE BSPP THREAD AND 60° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	3/4"	-12	141,0	67,0	30,5	32,0	DKOR-4SH/R15-20-45-3/4
25	1"	-16	1"	-16	172,5	93,0	42,5	41,0	DKOR-4SH/R15-25-45-1
32	1.1/4"	-20	1.1/4"	-20	187,0	109,0	47,5	50,0	DKOR-4SH/R15-32-45-1.1/4
38	1.1/2"	-24	1.1/2"	-24	231,0	138,0	53,0	55,0	DKOR-4SH/R15-40-45-1.1/2
50	2"	-32	2"	-32	263,0	167,0	77,0	70,0	DKOR-4SH/R15-50-45-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



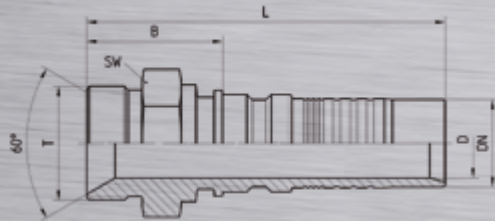
DKOR 90°

90° ELBOW INSERT WITH FEMALE BSPP THREAD AND 60° TAPER/ O-RING

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)
Sealing Material	NBR - Carbon Steel, FPM - Stainless Steel

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	3/4"	-12	127,5	55,0	60,5	32,0	DKOR-4SH/R15-20-90-3/4
25	1"	-16	1"	-16	155,0	75,5	85,0	41,0	DKOR-4SH/R15-25-90-1
32	1.1/4"	-20	1.1/4"	-20	170,0	92,0	96,5	50,0	DKOR-4SH/R15-32-90-1.1/4
38	1.1/2"	-24	1.1/2"	-24	211,0	118,0	116,0	55,0	DKOR-4SH/R15-40-90-1.1/2
50	2"	-32	2"	-32	239,0	143,0	157,0	70,0	DKOR-4SH/R15-50-90-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



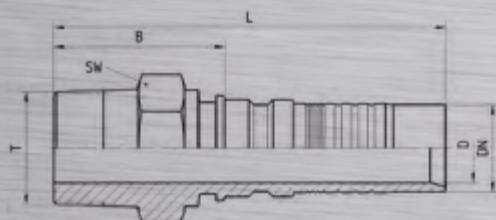
AGR

STRAIGHT INSERT WITH MALE BSPP THREAD AND 60° CONICAL BORE

Connection Type	Male BSPP Thread
Sealing Type	60° Conical Bore
Standard	ISO 8434-6, BS 5200
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
19	3/4"	-12	3/4"	-12	109,5	37,0		32,0	AGR-4SH/R15-20-3/4
25	1"	-16	1"	-16	121,0	41,5		41,0	AGR-4SH/R15-25-1
32	1.1/4"	-20	1.1/4"	-20	122,0	44,0		50,0	AGR-4SH/R15-32-1.1/4
38	1.1/2"	-24	1.1/2"	-24	142,5	49,5		55,0	AGR-4SH/R15-40-1.1/2
50	2"	-32	2"	-32	154,0	58,0		70,0	AGR-4SH/R15-50-2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



AGN

STRAIGHT INSERT WITH MALE NPTF THREAD AND 60° CONICAL BORE

Connection Type	Male NPTF Thread
Sealing Type	Tapered Thread and 60° Conical Bore
Standard	SAE J 516
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
19	3/4"	-12	3/4"	-12	109,0	36,5	27,0	AGN-4SH/R15-20-3/4	
25	1"	-16	1"	-16	121,0	41,5	36,0	AGN-4SH/R15-25-1	
32	1.1/4"	-20	1.1/4"	-20	122,5	44,5	46,0	AGN-4SH/R15-32-1.1/4	
38	1.1/2"	-24	1.1/2"	-24	140,5	47,5	50,0	AGN-4SH/R15-40-1.1/2	
50	2"	-32	2"	-32	149,5	53,5	65,0	AGN-4SH/R15-50-2	

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



DKJ

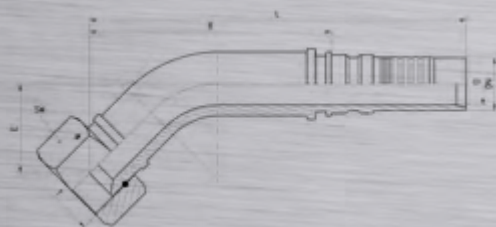
STRAIGHT INSERT WITH FEMALE UN/UNF THREAD AND 74° CONICAL BORE

Insert Type	with Pull-Out Protection (Interlock)
Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	Ordering Codes		
19	3/4"	-12	1.1/16" - 12 UN	-12	95,5	23,0		32,0	DKJ-4SH/R15-20-1.1/16
25	1"	-16	1.5/16" - 12 UN	-16	102,5	22,5		41,0	DKJ-4SH/R15-25-1.5/16
31	1.1/4"	-20	1.5/8" - 12 UN	-20	103,5	25,5		50,0	DKJ-4SH/R15-32-1.5/8
38	1.1/2"	-24	1.7/8" - 12 UN	-24	125,5	32,5		60,0	DKJ-4SH/R15-40-1.7/8
51	2"	-32	2.1/2" - 12 UN	-32	137,0	41,0		75,0	DKJ-4SH/R15-50-2.1/2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



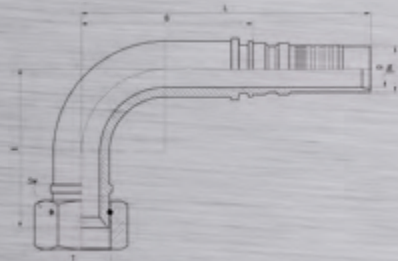
DKJ 45°

45° ELBOW INSERT WITH FEMALE UN/UNF THREAD AND 74° CONICAL BORE

Insert Type	with Pull-Out Protection (Interlock)
Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	1.1/16" - 12 UN	-12	136,5	64,5	31,0	32,0	DKJ-4SH/R15-20-45-1.1/16
25	1"	-16	1.5/16" - 12 UN	-16	163,0	83,5	33,0	41,0	DKJ-4SH/R15-25-45-1.5/16
31	1.1/4"	-20	1.5/8" - 12 UN	-20	185,5	107,5	44,0	50,0	DKJ-4SH/R15-32-45-1.5/8
38	1.1/2"	-24	1.7/8" - 12 UN	-24	225,0	132,0	52,0	60,0	DKJ-4SH/R15-40-45-1.7/8
51	2"	-32	2.1/2" - 12 UN	-32	263,5	167,5	79,5	70,0	DKJ-4SH/R15-50-45-2.1/2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



DKJ 90°

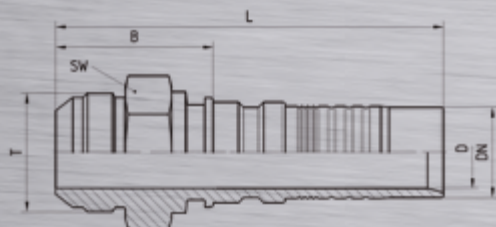
90° ELBOW INSERT WITH FEMALE UN/UNF THREAD AND 74° CONICAL BORE

Insert Type	with Pull-Out Protection (Interlock)
Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	1.1/16" - 12 UN	-12	125,0	52,5	58,5	32,0	DKJ-4SH/R15-20-90-1.1/16
25	1"	-16	1.5/16" - 12 UN	-16	152,5	73,0	69,0	41,0	DKJ-4SH/R15-25-90-1.5/16
31	1.1/4"	-20	1.5/8" - 12 UN	-20	166,5	88,5	96,0	50,0	DKJ-4SH/R15-32-90-1.5/8
38	1.1/2"	-24	1.7/8" - 12 UN	-24	206,0	113,0	110,5	55,0	DKJ-4SH/R15-40-90-1.7/8
51	2"	-32	2.1/2" - 12 UN	-32	236,5	140,5	158,5	70,0	DKJ-4SH/R15-50-90-2.1/2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



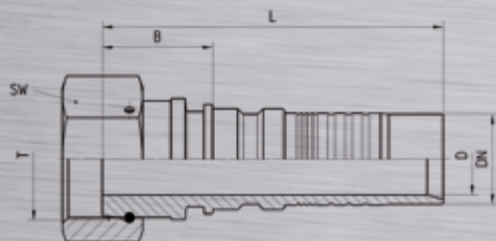
AGJ

STRAIGHT INSERT WITH MALE UN/UNF THREAD AND 74° TAPER

Insert Type	with Pull-Out Protection (Interlock)
Connection Type	Male UN/UNF Thread
Sealing Type	74° Taper
Standard	ISO 8434-2
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash		B	SW (Hex)	Ordering Codes
19	3/4"	-12	1.1/16" - 12 UN	-12	112,0	39,5	30,0	AGJ-4SH/R15-20-1.1/16
25	1"	-16	1.5/16" - 12 UN	-16	121,5	42,0	36,0	AGJ-4SH/R15-25-1.5/16
31	1.1/4"	-20	1.5/8" - 12 UN	-20	124,5	46,5	46,0	AGJ-4SH/R15-32-1.5/8
38	1.1/2"	-24	1.7/8" - 12 UN	-24	145,0	52,0	50,0	AGJ-4SH/R15-40-1.7/8
51	2"	-32	2.1/2" - 12 UN	-32	160,5	64,5	65,0	AGJ-4SH/R15-50-2.1/2

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



ORFS

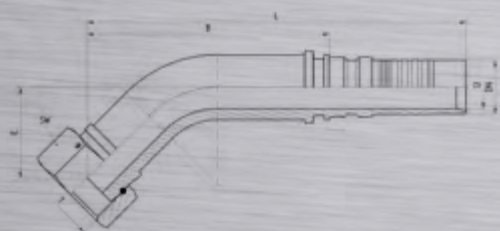
STRAIGHT INSERT WITH FEMALE UN/UNF THREAD FOR O-RING FACE SEAL CONNECTION

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B		Ordering Codes	
19	3/4"	-12	1 3/16"-12 UN	-12	107,0	34,5		36,0	ORFS-4SH/R15-20-1.3/16
19	3/4"	-12	1 7/16"-12 UN	-16	108,5	36,0		41,0	ORFS-4SH/R15-20-1.7/16
25	1"	-16	1 7/16"-12 UN	-16	115,5	36,0		41,0	ORFS-4SH/R15-25-1.7/16
31	1.1/4"	-20	1 11/16"-12 UN	-20	114,5	36,5		50,0	ORFS-4SH/R15-32-1.11/16

FITTINGS FOR HOSES 4SH, R15, FLEXLINE

CH-LOCK (7000 LINE)



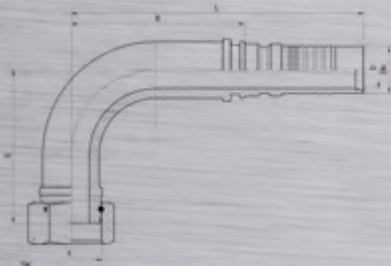
ORFS 45°

45° ELBOW INSERT WITH FEMALE UN/UNF THREAD FOR O-RING FACE SEAL CONNECTION

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			SW (Hex)	CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E		Ordering Codes
19	3/4"	-12	1 3/16"-12 UN	-12	143,5	71,0	29,5	36,0	ORFS-4SH/R15-20-45-1.3/16
25	1"	-16	1 7/16"-12 UN	-16	166,0	86,5	37,5	41,0	ORFS-4SH/R15-25-45-1.7/16
31	1.1/4"	-20	1 11/16"-12 UN	-20	184,5	106,5	46,0	50,0	ORFS-4SH/R15-32-45-1.11/16

FITTINGS FOR HOSES 4SH, R15, FLEXLINE CH-LOCK (7000 LINE)



ORFS 90°

90° ELBOW INSERT WITH FEMALE UN/UNF THREAD FOR O-RING FACE SEAL CONNECTION

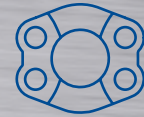
Insert Type	with Pull-Out Protection (Interlock)
Connection Type	Female UN/UNF Nut Thread
Sealing Type	O-Ring Face Seal
Standard	ISO 8434-3
Material	Carbon Steel (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

Hose Size			Connection Size		Dimensions (mm)			CHARVAT
DN	inch	Dash	Thread	Dash	L	B	E	SW (Hex)
19	3/4"	-12	1 3/16"-12 UN	-12	130,0	57,5	59,5	36,0
25	1"	-16	1 7/16"-12 UN	-16	155,0	75,5	75,0	41,0
31	1.1/4"	-20	1 11/16"-12 UN	-20	166,0	88,0	94,0	50,0
								Ordering Codes
								ORFS-4SH/R15-20-90-1.3/16
								ORFS-4SH/R15-25-90-1.7/16
								ORFS-4SH/R15-32-90-1.11/16

HYDRAULIC HOSES

HYDRAULIC HOSES

HOSE ACCESSORIES



HOSE ACCESSORIES

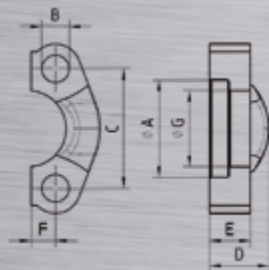
480, 481

Flange half for SAE 3000 PSI and
SAE 6000 PSI

490, 491

Flange solid for SAE 3000 PSI and
SAE 6000 PSI

HOSE ACCESSORIES



480, 481

FLANGE HALF FOR SAE 3000 PSI AND SAE 6000 PSI

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

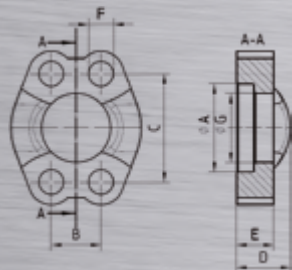
SAE 3000 PSI

Flange Head size			Dimension		Srews	O-ring		CHARVAT
Flange O.D.	inch	Dash	C	F	metric		NBR 90 Sh	Ordering Codes
30,2	1/2"	-08	38,1	8,7	M8x25		18,64x3,53	480-8
38,1	3/4"	-12	47,6	11,1	M10x30		24,99x3,53	480-12
44,5	1"	-16	52,4	13,1	M10x30		32,92x3,53	480-16
50,8	1.1/4"	-20	58,7	15,1	M10x35		37,69x3,53	480-20
60,3	1.1/2"	-24	69,9	17,9	M12x35		47,22x3,53	480-24
71,4	2"	-32	77,8	21,4	M12x35		56,74x3,53	480-32

SAE 6000 PSI

Flange Head size			Dimension		Srews	O-ring		CHARVAT
Flange O.D.	inch	Dash	C	F	metric		NBR 90 Sh	Ordering Codes
31,8	1/2"	-08	40,5	8,8	M8x30		18,64x3,53	481-8
41,3	3/4"	-12	50,8	11,0	M10x35		24,99x3,53	481-12
47,6	1"	-16	57,2	13,0	M12x45		32,92x3,53	481-16
54,0	1.1/4"	-20	66,7	15,0	M14x50		37,69x3,53	481-20
63,5	1.1/2"	-24	79,4	17,0	M16x55		47,22x3,53	481-24
79,4	2"	-32	96,8	21,0	M20x65		56,74x3,53	481-32

HOSE ACCESSORIES



490, 491

FLANGE SOLID FOR SAE 3000 PSI AND SAE 6000 PSI

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 (available also in Stainless Steel)
Surface Finishing	Chromium (VI)-free (on request Zinc/ Nickel-Plating)

SAE 3000 PSI

Flange Head size			Dimension		Srews	O-ring		CHARVAT
Flange O.D.	inch	Dash	C	F	metric		NBR 90 Sh	Ordering Codes
30,2	1/2"	-08	38,1	17,5	M8x25		18,64x3,53	490-8
38,1	3/4"	-12	47,6	22,2	M10x30		24,99x3,53	490-12
44,5	1"	-16	52,4	26,2	M10x35		32,92x3,53	490-16
50,8	1.1/4"	-20	58,7	30,2	M10x35		37,69x3,53	490-20
60,3	1.1/2"	-24	69,9	35,7	M12x35		47,22x3,53	490-24
71,4	2"	-32	77,8	42,9	M12x35		56,74x3,53	490-32

SAE 6000 PSI

Flange Head size			Dimension		Srews	O-ring		CHARVAT
Flange O.D.	inch	Dash	C	F	metric		NBR 90 Sh	Ordering Codes
31,8	1/2"	-08	40,5	18,2	M8x30		18,64x3,53	491-8
41,3	3/4"	-12	50,8	23,8	M10x35		24,99x3,53	491-12
47,6	1"	-16	57,2	27,8	M12x45		32,92x3,53	491-16
54,0	1.1/4"	-20	66,7	31,8	M14x50		37,69x3,53	491-20
63,5	1.1/2"	-24	79,4	36,5	M16x55		47,22x3,53	491-24
79,4	2"	-32	96,8	44,5	M20x65		56,74x3,53	491-32

HOSE ACCESSORIES



M8

SREW METRIC

							Srews		CHARVAT
							metric		Ordering Codes
							M8x25		MS-8x25
							M8x30		MS-8x30
							M10x30		MS-10x30
							M10x35		MS-10x35
							M12x35		MS-12x35
							M12x45		MS-12x45
							M14x50		MS-14x50
							M16x55		MS-16x55
							M20x65		MS-20x65

HYDRAULIC HOSES

ADDRESS

BRANCHES

SLOVAKIA

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