





REFRIGERATION PRODUCT RANGE

INTRODUCTION

THE OFFER

The offer consists of reinforced rubber hoses, fittings, hose assemblies and kits. The Refrigeration **offer** is designed specifically to satisfy the most restricted requirements aimed to the development of:

Bus air conditioning and mobile refrigeration systems for "on-road industrial vehicles"

Air conditioning systems applied on off-highway industrial vehicles such as: agricultural machines, earth-moving machines, forestry machines, etc.

The above systems are supplied both directly to manufacturers which need significant product volumes and through specialized.









Bus Air Conditioning

Off Highway Air Conditioning

Mobile Refrigeration

"FIELD-ATTACHABLE" FITTING

The "field-attachable" fitting technology allows a convenient mounting and disassembly operation, in particular:

- Frigoclic® fitting range technology
- Reusable fitting range technology

Furthermore crimped fitting solution is completely integrated on all hose lines.

The following pages describe the main steps to correctly assembly our products.

- Refrimaster with clamp
- Refrimaster with ferrule
- Refristar with reusable fittings
- Refristar with crimped fittings
- Refrifast with one-piece crimped fittings

Please browse through the above procedures before consulting our catalogue and selecting the most suitable product for your need.



REFRIMASTER WITH CLAMP

The fitting operations are extremely simple, and consist of the following procedures:



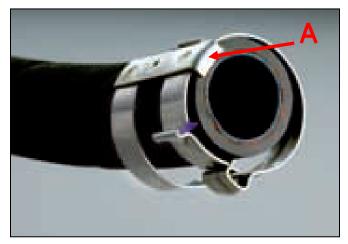
1 Check the dimensions of the components.



2 Cut the end of the hose in a perpendicular direction, using the manual cutter.



3 Verify the end of the hose to be cut in a perpendicular direction.



4 Place the double clamp on the flexible hose in such a way that the tooth of bar A comes into contact with the end of the hose that has been cut





5 Grease the end of the fitting joint with the same oil used in the air conditioning system.



6 Find the correct orientation and insert completely the fitting into the hose.



7 A = Round nose **B** = Thin nose **8**, **9 & 10** To place the fitting, position the round nose of the pliers (A) at the hook shaped end of the clamp and the thin nose (B) at the end with the hooked teeth.

Tighten the double clamp until the click using the special "CLICK" open-close pliers.

To disassemble, just reverse the position of the ends of the pliers on the clamp.



8 Closing



9 Tighten the double clamp until click to close. Reverse the position of the pliers to open.



10 Opening

WARNING: Do not reuse the clamp





11 Verify the parallelism of the two clamps.

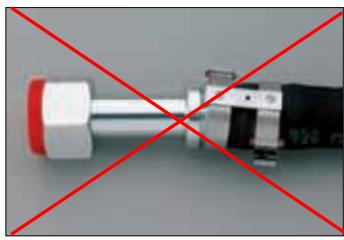
12 Pay attention in tightening clamp in the right way.

13, 14, 15 & 16

WARNING: Position correctly the clamp



13 Right - Solution with brazed insert



14 Wrong



15 Right - Solution with insert obtained by deformation





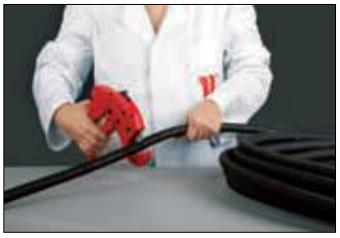


REFRIGERATION PRODUCT RANGE

ASSEMBLING INSTRUCTIONS - REFRIMASTER PROCEDURE

REFRIMASTER MOUNTING KIT





2 Manual cutter.



3 "CLIC" open-close pliers.

The offer consists of:

 A practical mounting kit containing all tools necessary for the correct assembly of the Frigoclic® coupling • The separate supply of hose in rolls, relevant fitting and complete kits according to customer specifications



REFRIMASTER WITH FERRULE



1 Check the dimensions of the components.



2 Cut the end of the hose in a perpendicular direction, using the manual cutter.



3 Verify the end of the hose to be cut in a perpendicular direction.



4 Place the ferrule on the flexible hose so that the ferrule tooth touches the end of the cut hose.



5 Grease the end of the fitting joint with the same oil used in the air conditioning system.



6 Find the correct orientation and insert completely the fitting into the hose.





7 Set up the crimping machine selecting the die set that is closest to the specified dimension. Crimp to the specified diameter (table a). Ensure the dies fully cover the ferrule length.



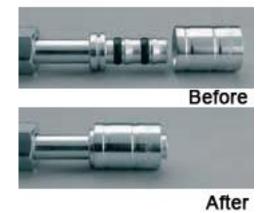
Before



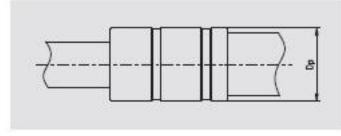
Solution with insert obtained by deformation



9 Inspect the crimping dimension using a calibrated vernier. Check the diameter at the centre of the ferrule following the values in table A.



Solution with brazed insert



8 Pay attention in coupling insert and ferrule.

HOSE SIZE		Dp (± 0,1 mm)	
DN	Dash	Inch	mm
8	- 06	5/16"	16,9
10	- 08	13/32"	19,9
13	- 10	1/2"	21,8
16	- 12	5/8"	26,0



REFRISTAR WITH REUSABLE FITTINGS



1 Check the dimensions of the components.





4 Cut the hose by using a proper sharpened disc (see fig. 4), **do not use an abrasive disc.** The hose must be square and clean cut. Avoid cutting the hose not perpendicularly or cutting the hose causing damages on its wire braid (see fig. 2, 3) for a proper cutting hose operation. Clean the hose carefully from any cutting residue.



5 Secure in position the socket i.e. by using a bench vice. Screw the hose counter clockwise into the socket until it reaches the bottom. Unscrew 1/4 turn to prevent damage in screwing.





6 Mark the socket and the hose using an indelible felt tip pen, to verify any absence of hose rotation inside the socket during the fittings crewing.



7 Position the hose complete with socket i.e. by using a bench vise. Grease with a lot of oil the threading and the taper of the fitting as well as the inside of hose.

WARNING: Use the same lubricant used in the A/C system.



8 Insert the fitting into the hose. Press slightly and screw by hand turning clockwise the first threads. Then by using an appropriate spanner or a screw spanner on the hexagon, screw the fitting into the socket with a continuous and constant rotation motion and verify any absence of hose rotation inside the socket during the fitting screwing. Complete the screwing until the fitting reaches the bottom against the socket. Never over tighten. Assembling is now finished.



9 You can leave a margin of max 3 mm between the hexagon of the fitting and the socket. Verify alignment.



REFRISTAR WITH CRIMPED FITTINGS

It is important that hose assemblies for A/C vehicles (for instance off highway), A/C Buses and Mobile Refrigeration using Manuli Hose, Ferrules & Fittings are manufactured to the procedures below:



1 Check the dimensions of the components.





4 Cut the hose by using a proper sharpened disc (see fig. 4), **do not use an abrasive disc**. The hose must be square and clean cut. Avoid cutting the hose not perpendicularly or cutting the hose causing damages on its wire braid (see fig. 2, 3) for a proper cutting hose operation. Clean the hose carefully from any cutting residue.



5 Place the ferrule on the flexible hose so that the ferrule tooth touches the end of the cut hose





6 Grease the end of the fitting joint with the same oil used in the air conditioning system.



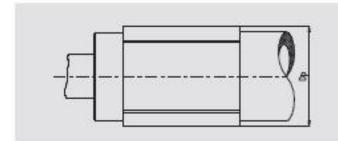
7 Find the correct orientation and insert completely the fitting into the hose.



8 Set up the crimping machine selecting the die set that is closed to the specified dimension. Crimp to the specified diameter. Ensure the dies fully cover the ferrule length.



9 Inspect the crimping dimension using a calibrated vernier Check the diameter at the centre of the ferrule following the values on the table B.



	HOSE SIZE		Dp (±0,1 mm)
DN	Dash	Inch	mm
5	- 04	3/16"	15,2
8	- 06	5/16"	20,2
10	- 08	13/32"	21,3
12	- 10	1/2*	26,0
16	- 12	5/8"	30,8
22	- 16	7/8"	34,4
28	- 20	1.1/8"	42,5



Table B

REFRIFAST WITH ONE-PIECE CRIMPED FITTINGS

The fitting operations are extremely simple, and consist of the following procedures:



1 Check the dimensions of the components.



2 Cut the end of the hose in a perpendicular direction, using the manual cutter.



3 Verify the end of the hose to be cut in a perpendicular direction.



4 Grease the end of the fitting joint with the same oil used in the air conditioning system.





5 Find the correct orientation and insert completely the fitting the hose.



6 Check the correct position of the hose through the proper into hole in the ferrule.



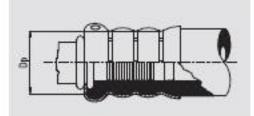
7 Set up the criping machine selecting the die set that is closed to the dimension specified diameter. Place the fitting on the proper positioner to ensure that it is in the correct position (table c).



8 Inspect the crimping dimension using the proper calibrated vernier. Check the dimensions following the values in table c.



Strictly use Manuli die sets bubble crimping.



HOSE SIZE			Dp ±0,2 m
DN	Dash	Inch	mm
8	- 06	5/16"	14,8
10	- 08	13/32"	16,3
12	- 10	1/2*	18,8
16	- 12	5/8"	21,1



Refrigeration Hoses



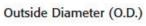


REFRIGERATION HOSES LEGEND OF SYMBOL



Inside Diameter (I.D.)







Working pressure



Burst pressure



Weight





Crimp ferrule for Refristar

Refrimaster clamp

Refrimaster ferrule

Reusable ferrule for Refristar



One piece fitting for Refrifast



Minimum bend radius

All dimension given in this catalogue can be modified at any moment without notice. No responsibility is undertaken when our products are used incorrectly or wrongly fitted.

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SAE J2064 TYPE E

STANDARD PART. REF.	HOSE SIZE		() LD.	• O • 0.D.	WORKING PRESSURE	BURST PRESSURE	WEIGHT	MIN. BEND RADIUS	
	DN	Dash	inch	mm	mm	bar	bar	g/m	mm
H09002008*	8	- 06	5/16"	8,0	12,7	35	> 250	90	40,0
H09002010*	10	- 08	13/32"	10,5	16,0	35	> 250	140	50,0
H09002013*	13	- 10	1/2"	13,0	18,1	35	> 150	160	80,0
H09002016*	16	- 12	5/8"	16,0	21,7	35	> 150	200	90,0

Standard packaging: coil
The complete code for each item is composed by 13 digits, the last 4 digits indicate the type of packaging.

KEY PERFORMANCE

Universal hose, compatible with the most common refrigerants and compressor lubricants - Low permeability to refrigerant fluid = Compact dimensions = Low weight and high flexibility = Field attachable and crimped solutions available with Frigoclic® insert

SPECIFICATIONS: SAE J2064 Type E Class I MAIN APPLICATIONS: Mobile refrigeration and air conditioning systems: bus, off highway equipment CONSTRUCTION:

- TUBE: high temperature resistant thermoplastic (PA) veneer
 REINFORCEMENT: one textile braid
 COVER: high temperature and environmental resistant
- syntethic rubber (EPDM)
- REFRIGERANTS: Compatibility with a wide range of refrigerants (eg. R134a, R404A, R407C) LUBRICANTS: Compatibility with the most common compressor lubricants (e.g. PAG, POE, Mineral Oils)

- CONTINUOUS WORKING TEMPERATURE: -40°C / +125°C -40°F / +257°F
- MAX. PEAK TEMPERATURE: +140°C +284°F

				U B
	HOSE SIZ		REFRIMASTER FERRULE	REFRIMASTER
DN	DASH	INCH	CODE	CODE
8	- 06	5/16"	C00700-06	C01000-06
10	- 08	13/32"	C00700-08	C01000-08
13	- 10	1/2"	C00700-10	C01000-10
16	- 12	5/8"	C00700-12	C01000-12

A Tomas

Fittings compatible with Refrimaster



field attachable clamp

crimped ferrule



TWO coupling solutions for any applications

NOTE: Guaranteed performance only with our fittings WARNING: Ask MRI about other refrigerants and lubricants



SAE J2064 TYPE B



STANDARD PART. REF.	HOSE SIZE		HOSE SIZE	•O• 0.D.	WORKING PRESSURE	BURST PRESSURE	WEIGHT	MIN. BEND RADIUS	
	DN	Dash	inch	mm	mm	bar	bar	g/m	mm
H01110005*	5	- 04	3/16"	4,8	13,0	35	> 150	210	85,0
H01110008*	8	- 06	5/16"	8,0	17,2	35	> 150	320	85,0
H01110010*	10	- 08	13/32"	10,5	19,3	35	> 150	370	95,0
H01110012*	12	- 10	1/2"	12,7	23,4	35	> 150	530	115,0
H01110016*	16	- 12	5/8"	16,0	27,3	35	> 150	675	135,0
H01110022*	22	- 16	7/8"	22,0	31,2	35	> 150	705	155,0
H01110028	28	- 20	1.1/8"	28,0	38,0	35	> 150	930	190,0
H01110035*	35	- 24	1.3/8"	35,0	45,0	35	> 150	980	230,0

Standard packaging: coil

* The complete code for each item is composed by 13 digits, the last 4 digits indicate the type of packaging.

KEY PERFORMANCE

Low permeability - High flexibility - Compatible with the most common refrigerant and compressor lubricants

SPECIFICATIONS: SAE J2064 Type B Class I MAIN APPLICATIONS: Bus and off-highway equipments air

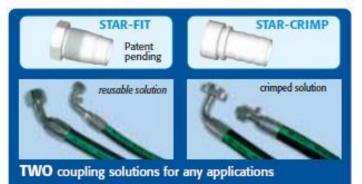
conditioning systems CONSTRUCTION:

- TUBE: low permeability to the refrigerant fluid and wide compatibility with the most common compressor lubricant (IIR)
- REINFORCEMENT: one steel wire braid
- COVER: high temperature and environmental resistant syntethic rubber (CSM)
- REFRIGERANTS: Compatibility with a wide range of refrigerants

(eg. R134a, R404A, R407C) LUBRICANTS: Compatibility with the most common compressor lubricants (e.g. PAG, POE, Mineral Oils) CONTINUOUS WORKING TEMPERATURE:

-40°C / +125°C -40°F / +257°F

(HOSE SIZ	1	STAR-FIT FERRULE (Reusable solution)	STAR-CRIMP FERRULE (Crimped solution)
I	DN	DASH	INCH	CODE	CODE
1	5	- 04	3/16"	K00400-04	C00300-04
-1	8	- 06	5/16"	K00400-06	C00300-06
	10	- 08	13/32"	K00400-08	C00300-08
-1	12	- 10	1/2"	K00400-10	C00300-10
-1	16	- 12	5/8"	K00400-12	C00300-12
-1	22	- 16	7/8"	K00400-16	C00300-16
- 1	28	- 20	1.1/8"	K00400-20	C00300-20
-1	35	- 24	1.3/8"	K00400-24	



WARNING: Ask MRI about other refrigerants and lubrificants

NOTE: Guaranteed performance only with our fittings.





SAE J2064 TYPE A

STANDARD PART. REF.		ZE	C) LD.	•O• 0.D.	WORKING PRESSURE	BURST PRESSURE	WEIGHT	MIN. BEND RADIUS	
	DN	Dash	inch	mm	mm	bar	bar	g/m	mm
H09068008*	8	6	5/16"	8,2	15,5	35	>150	165	30
H09068010*	10	8	13/32"	10,5	18,0	35	>150	200	50
H09068012*	12	10	1/2"	12,7	20,0	35	>150	250	60
H09068016*	16	12	5/8"	16	23,5	35	>150	290	80

Standard packaging: reel

The complete code for each item is composed by 13 digits, the last 4 digits indicate the type of packaging.

KEY PERFORMANCE

Higher compact dimensions within type A hoses and outside diameter comparable with reduced barrier hoses • Low weight • Easy installation in space constraints • High flexibility and low bend radius • Compatible with a wide range of refrigerants and lubricants • Low refrigerants permeability and moisture ingression

Specifications: SAE J2064 Type A Class I

MAIN APPLICATIONS: A/C system for off-highway vehicles, small/medium busses and special vehicles such as recreation vehicles, ambulances and military vehicles. CONSTRUCTION:

- TUBE: low refrigerant fluid permeability and wide compatibility with the most common compressor lubricant (IIR)
- REINFORCEMENT: one textile braid

 COVER: high temperature (max 125°C) and environmental (ozone resistance) resistant synthetic rubber (EPDM)
 REFRIGERANTS: compatibility with a wide range of refrigerants, such as R134a, R404A, R407C

LUBRICANTS: compatibility with the most common compressor lubricants, such as PAG, POE and mineral oils CONTINUOUS WORKING TEMPERATURE -40°C / +125°C • -40°F / +257°F

	HOSE SIZE		FERRULE EXTERNAL DIAMETER
DN	DASH	INCH	mm
8	- 06	5/16"	22,0
10	- 08	13/32"	22,0
12	- 10	1/2"	25,8
16	- 12	5/8"	28,4

NOTE: Guaranteed performance only with our fittings **WARNING:** Ask MRI about other refrigerants and lubricants







Refrigeration Fittings





REFRIGERATION FITTINGS SUMMARY

Description FRIGOCLIC	Reference	Page
TRIGOCEIC		
STRAIGHT CONNECTION FITTINGS	C30010	56
STRAIGHT CONNECTION FITTING 1/4" SAE CHARGE VALVE	C30012	58
STRAIGHT CONNECTION FITTING WITH HIGH PRESSURE VALVE	C30015	57
STRAIGHT CONNECTION FITTING WITH LOW PRESSURE VALVE	C30016	57
CONNECTION FITTING 45 DEGREE ELBOW	C30040	58
CONNECTION FITTING 90 DEGREE ELBOW	C30090	59
"H' CONNECTION FITTINGS	C300h0	57
3 WAYS CONNECTION FITTINGS	С300Т0	56
"Y" CONNECTION FITTINGS	C300Y0	56
STRAIGHT MALE WITH O-RING SEAT	C37910	60
MALE WITH O-RING SEAT 90 DEGREE ELBOW	C37990	60
STRAIGHT O-RING MALE	C38010	54
O-RING MALE 45 DEGREE ELBOW	C38040	54
O-RING MALE 90 DEGREE ELBOW	C38090	54
O-RING MALE 90 DEGREE ELBOW WITH 1/4" SAE CHARGE VALVE	C38092	55
STRAIGHT ORS FLAT SEAL FEMALE	C42410	59
ORS FLAT SEAL FEMALE 45 DEGREE ELBOW	C42440	59
ORS FLAT SEAL FEMALE 90 DEGREE ELBOW	C42490	60
45 DEGREE SAE STRAIGHT FEMALE	C42610	47
45 DEGREES SAE FEMALE 45 DEGREE ELBOW	C42640	48
SHORT VERSION 45 DEGREE SAE FEMALE 90 DEGREE ELBOW	C42680	48
45 DEGREE FEMALE 90 DEGREE ELBOW	C42690	48



Description	Reference	Page
STRAIGHT SITTING FOR EXPANSION VALVE	C47610	55
FITTING FOR EXPANSION VALVE 45 DEGREE ELBOW	C47640	55
FITTING FOR EXPANSION VALVE 90 DEGREE ELBOW	C47690	55
STRAIGHT O-RING FEMALE	C47910	49
STRAIGHT O-RING FEMALE 1/4" SAE CHARGE VALVE	C47912	50
STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE	C47915	49
STRAIGHT O-RING FEMALE WITH LOW PRESSRE VALVE	C47916	50
O-RING FEMALE 45 DEGREE ELBOW	C47940	50
O-RING FEMALE 45 DEGREE ELBOW WITH HIGH PRESSURE VALVE	C47945	51
O-RING FEMALE 45 DEGREE ELBOE WITH LOW PRESSURE VALVE	C47946	51
SHORT VERSION O-RING FEMALE 90 DEGREE ELBOW	C47980	53
SHORT VRSION O-RING FEMALE 90 DEGREE ELBOW WITH HIGH PRESSURE VALVE	C47985	53
SHORT VRSION O-RING FEMALE 90 DEGREE ELBOW WITH LOW PRESSURE VALVE	C47986	53
O-RING FEMALE 90 DEGREE ELBOW	C47990	51
O-RING FEMALE 90 DEGREE ELBOW WITH 1/4" SAE CHARGE VALVE	C47992	52
O-RING FEMALE 90 DEGREE ELBOW WITH HIGH PRESSURE VALVE	C47995	52
O-RING FEMALE 90 DEGREE ELBOW WITH LOW PRESSURE VALVE	C47996	52
CTAD FIT		
STAR-FIT		
STRAIGHT CONNECTION FITTING	K30010	71
STRAIGHT CONNECTION FITTING WITH HIGH PRESSURE VALVE	K30015	71
STRAIGHT CONNECTION FITTING WITH LOW PRESSURE VALVE	K30016	71
STRAIGHT 24 DEGREE MALE DIN	K31110	72



Description	Reference K32610	Page
STRAIGHT 45 DEGREE SAE FLARE MALE	K32610	63
STRAIGHT O-RING MALE	K38010	66
O-RING MALE 45 DEGREE ELBOW	K38040	67
O-RING MALE 90 DEGREE ELBOW	K38090	67
STRAIGHT 24 DEGREE DIN FLARE O-RING OGIVAL FEMALE	K41510	67
24 DEGREE DIN FLARE O-RING OGIVAL FEMALE 45 DEGREE ELBOW	K41540	68
24 DEGREE DIN FLARE O-RING OGIVAL FEMALE 90 DEGREE ELBOW	K41590	68
STRAIGHT ORS FLAT SEAL FEMALE	K42410	69
ORS FLAT SEAL FEMALE 45 DEGREE ELBOW	K42440	70
ORS FLAT SEAL FEMALE 90 DEGREE ELBOW	K42490	70
JIC 37 DEGREE STRAIGHT FEMALE FITTING	K42510	72
JIC 37 DEGREE FEMALE FITTING 45 DEGREE ELBOW	K42540	72
JIC 37 DEGREES FEMALE FITTING 90 DEGREE ELBOW	K42590	72
45 DEGREE SAE STRAIGHT FEMALE	K42610	61
45 DEGREE SAE FEMALE 45 DEGREE ELBOW	K42640	62
45 DEGREE SAE FEMALE 90 DEGREE ELBOW	K42690	62
STRAIGHT FLANGE FITTING	K43710	68
FLANGE FITTING 45 DEGREE ELBOW	K43740	69
FLANGE FITTING 90 DEGREE ELBOW	K43970	69
STRAIGHT O-RING FEMALE	K47910	63
STRAIGHT O-RING FEMALE WITH 1/4" SAE CHARGE VALVE	K47912	64
STRAIGHT O-RING FEMALE WITH HIGH PRESURE VALVE	K47915	64
STRAIGHT O-RING FEMALE WITH LOW PRESSURE VALVE	K47916	63



Description	Reference	Page
O-RING FFMALF 45 DEGREE ELBOW	K47940	64
	11/3/10	01
O-RING FEMALE 45 DEGREE ELBOW WITH HIGH PRESSURE VALVE	K47945	66
SHORT VERSION O-RING FEMALE 90 DEGREE ELBOW	K47980	73
SHORT VERSION O-RING FEMALE 90 DEGREE ELBOW WITH 1/4" SAE CHARGE VALVE	K47982	73
SHORT VERSION O-RING FEMALE 90 DEGREE ELBOW WITH HIGH PRESSURE VALVE	K47985	73
SHORT VERSION O-RING FEMALE 90 DEGREE ELBOW WITH LOW PRESSURE VALVE	K47986	73
O-RING FEMALE 90 DEGREE ELBOW	K47990	65
O-RING FEMALE 90 DEGREE ELBOW WITH 1/4" SAE CHARGE VALVE	K47992	65
O-RING FEMALE 90 DEGREE ELBOW WITH HIGH PRESSURE VALVE	K47995	65
O-RING FEMALE 90 DEGREE ELBOW WITH LOW PRESSURE VALVE	K47996	66

STAR-CRIMP

CONNECTION 90 DEGREE ELBOW	C10090	81
STRAIGHT MALE WITH O-RING SEAT	C17910	78
STRAIGHT O-RING MALE	C18010	78
O-RING MALE 45 DEGREE ELBOW	C18040	78
O-RING MALE 90 DEGREE ELBOW	C18090	78
STRAIGHT 24 DEGREE DIN FLARE O-RING OGIVAL FEMALE	C21510	79
24 DEGREE DIN FLARE O-RING OGIVAL FEMALE 45 DEGREE ELBOW	C21540	79
24 DEGREE DIN FLARE O-RING OGIVAL FEMALE 90 DEGREE ELBOW	C21590	79
STRAIGHT ORS FLAT SEAL FEMALE	C22410	80
	C22410	
ORS FLAT SEAL FEMALE 45 DEGREE ELBOW		81
ORS FLAT SEAL FEMALE 90 DEGREE ELBOW	C22490	81



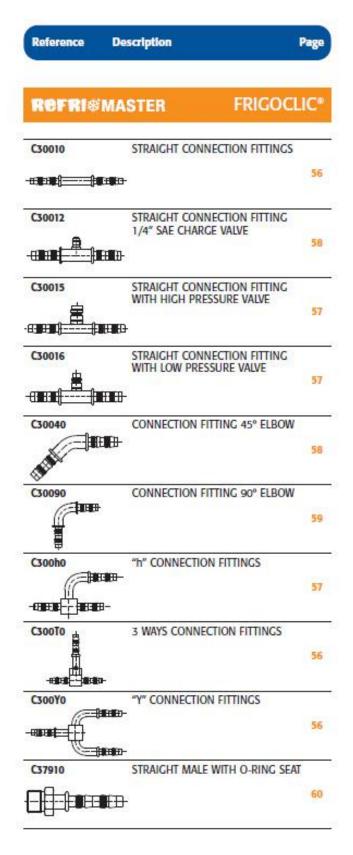
Description	Reference	Page
45 DEGREE SAE STRAIGHT FEMALE	C2261	74
45 DEGREE FEMALE 45 DEGREE ELBOW	C22640	74
45 DEGREE SAE FEMALE 90 DEGREE ELBOW	C22690	75
STRAIGHT FLANGE FITTING	C23710	79
FLANGE FITTING 45 DEGREE ELBOW	C12740	80
FLANGE FITTING 90 DEGREE ELBOW	C23790	80
STRAIGHT O-RING FEMALE	C27910	75
STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE	C27915	75
STRAIGHT O-RING FEMALE WITH LOW PRESSURE VALVE	C27916	76
O-RING FEMALE 45 DEGREE ELBOW	C27940	76
O-RING FEMALE 45 DEGREE ELBOW WITH LOW PRESSURE VALVE	C27946	76
O-RING FEMALE 90 DEGREE ELBOW	C27990	77
O-RING FEMALE 90 DEGREE ELBOW WITH HIGH PRESSURE VALVE	C27995	77
O-RING FEMALE 90 DEGREE ELBOW WITH LOW PRESSURE VALVE	C27996	77
FAST-CRIMP		
CONNECTION FITTING	OPC10010	90
CONNECTION FITTING WITH HIGH PRESSURE VALVE	OPC10015	91
CONNECTION FITTING WITH LOW PRESSURE VALVE	OPC10016	91
CONNECTION FITTING 90 DEGREE ELBOW	OPC10090	90
STRAIGHT MALE WITH O-RING SEAT WITH COUNTER NUT AND Q-RING	OPC17910HQ	92
STRAIGHT MALE WITH O-RING SEAT WITH COUNTER NUT	OPC17910H	92
STRAIGHT MALE WITH O-RING SEAT	OPC17910	91



Description	Reference	Page
STRAIGHT MALE WITH O-RING SEAT WITH COUNTER NUT AND Q-RING 90 DEGREE ELBOW	OPC17990HQ	92
STRAIGHT O-RING MALE	OPC18010	88
O-RING MALE 45 DEGREE ELBOW	OPC18040	88
O-RING MALE 90 DEGREE ELBOW	OPC18090	88
45 DEGREE SAE STRAIGHT FEMALE	OPC22610	82
45 DEGREE SAE FEMALE 45 DEGREE ELBOW	OPC22640	83
45 DEGREE SAE FEMALE 90 DEGREE ELBOW	OPC22690	83
STRAIGHT FITTING FOR EXPANSION VALVE	OPC27610	89
FITTING FOR EXPANSION VALVE 45 DEGREE ELBOW	OPC27640	89
FITTING FOR EXPANSION VALVE 90 DEGREE ELBOW	OPC27690	89
FITTING FOR EXPANSION VALVE WITH HIGH PRESSURE VALVE 90 DEGREE ELBOW	OPC27695	90
STRAIGHT O-RING FEMALE	OPC27910	84
STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE	OPC27915	84
STRAIGHT O-RING FEMALE WITH LOW PRESSURE VALVE	OPC27916	84
O-RING FEMALE 45 DEGREE ELBOW	OPC27940	85
O-RING FEMALE WITH HIGH PRESSURE VALVE 45 DEGREE ELBOW	OPC27945	85
O-RING FEMALE WITH LOW PRESSURE VALVE 45 DEGREE ELBOW	OPC27980	85
SHORT VERSION O-RING FEMALE	OPC27985	87
SHORT VERSION O-RING FEMALE WITH HIGH PRESSURE VALVE	OPC27980	87
SHORT VERSION O-RING FEMALE WITH LOW PRESSURE VALVE	OPC27986	87
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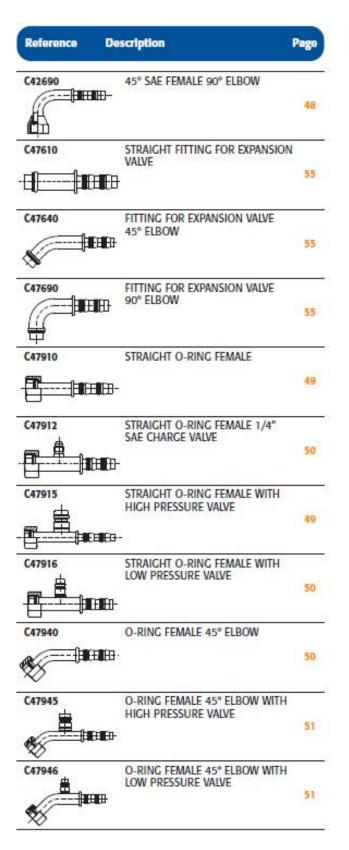


REFRIGERATION FITTINGS VISUAL INDEX



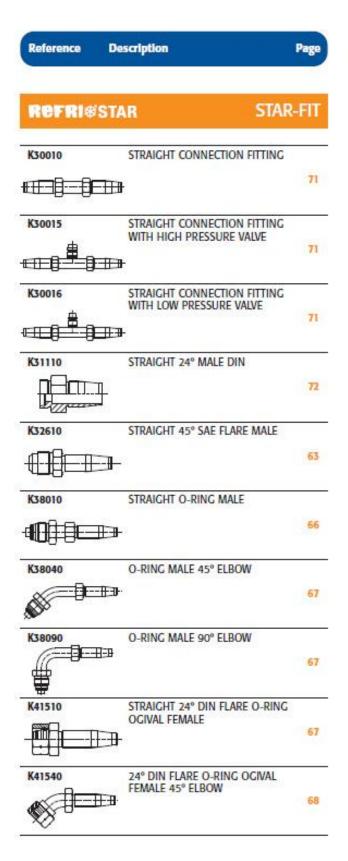
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C38040	O-RING MALE 45° ELBOW	54
C38090	O-RING MALE 90° ELBOW	54
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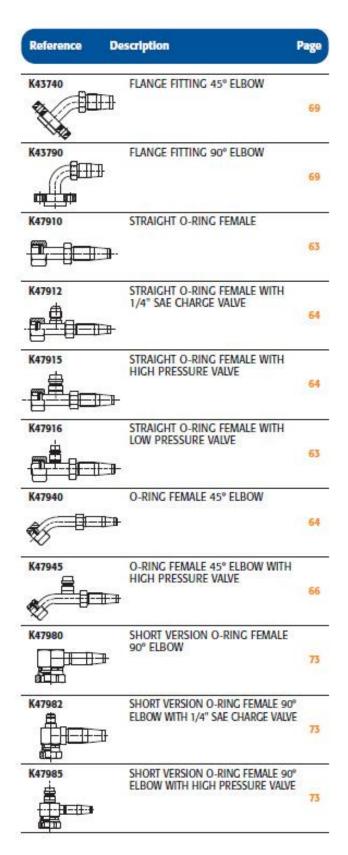
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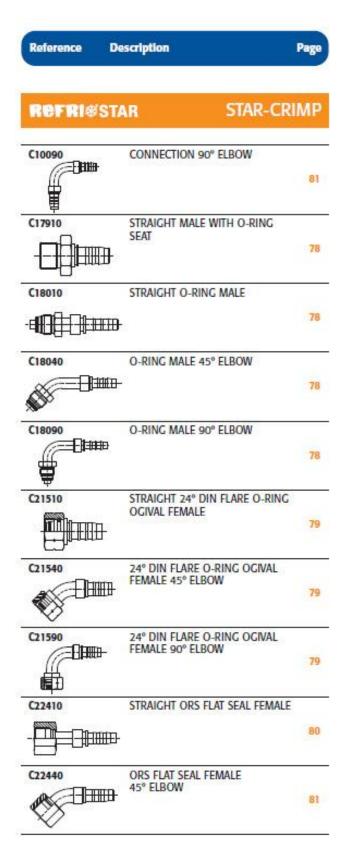
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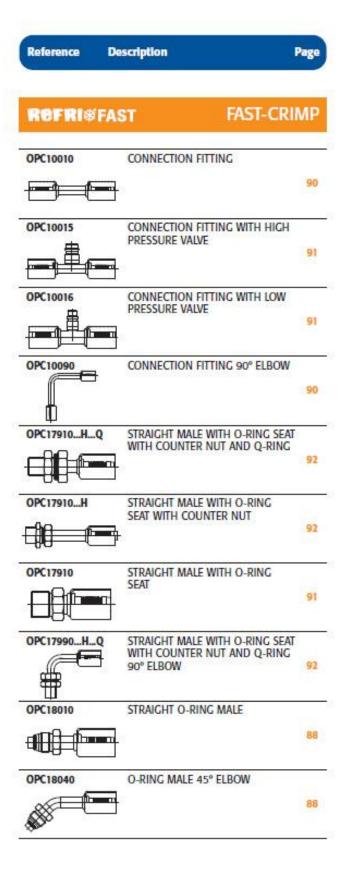




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C22610	45° SAE STRAIGHT FEMALE	74
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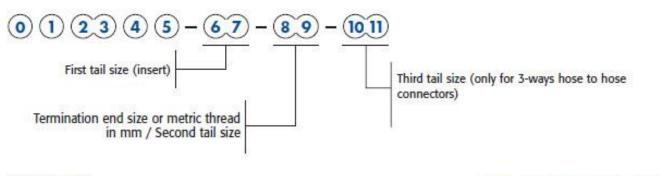
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PC27690	FITTING FOR EXPANSION VALVE 90° ELBOW	89
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PC27915	STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE	84
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Reference	Description
0PC27940	O-RING FEMALE 45° ELBOW
0PC27945	O-RING FEMALE WITH HIGH PRES SURE VALVE 45° ELBOW
0PC27946	O-RING FEMALE WITH LOW PRESSURE VALVE 45° ELBOW
OPC27980	SHORT VERSION O-RING FEMALE
0PC27985	SHORT VERSION O-RING FEMALE WITH HIGH PRESSURE VALVE
0PC27986	SHORT VERSION O-RING FEMALE WITH LOW PRESSURE VALVE
0PC27990	O-RING FEMALE 90° ELBOW
0PC27995	O-RING FEMALE WITH HIGH PRESSURE VALVE 90° ELBOW
OPC27996	O-RING FEMALE WITH LOW PRESSURE VALVE 90° ELBOW



REFRIGERATION FITTINGS FITTINGS - PART NUMBERING SYSTEM

TWO PIECES (CRIMPED AND CLAMP SOLUTIONS) & "HOSE TO HOSE" A/C AND REFRI CONNECTORS



DIGIT "0"

С Always

DIGIT "1"

- Male or "Hose to hose" Connectors type Star-crimp 1
- 2 Female or Flange type Star-crimp
- 3 Male or "Hose to hose" Connectors type Frigoclic®
- 4 Female or Flange type Frigoclic*

DIGIT "2-3"

The numbers stated in these positions refer to the termination end or to the second tail. For the coding, see table "Termination Ends Type".

DIGIT "4"

- 1
- Straight 22,5° Swept 30° Swept 2
- 3
- 45° Swept 4
- 60° Swept 6
- 7 67,5° Swept
- 8 Compact type
- 9 90° Swept
- н 3-ways connector with "h" configuration
- 3-ways connector with "T" configuration т
- 3-ways connector with "Y" configuration Y
- S Pipe with more than one bend

DIGIT "5"

- 0 No charge valve
- 1/4" SAE charge valve (thread 7/16"-20-UNF) 2
- 5 High Pressure charge valve
- 6 Low Pressure charge valve



0(1)(23)(4)(5)









REFRIGERATION FITTINGS - PART NUMBERING SYSTEM

PRIORITY OF THE TAILS FOR "HOSE TO HOSE" CONNECTORS

Double connectors

One tail takes priority respect to the other tail (different family) following this order:

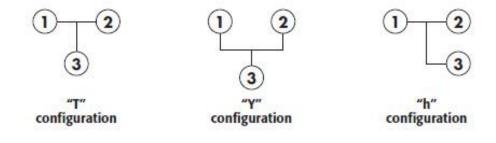
ONE PIECE tail —> refer to ONE PIECE CODING REUSABLE tail —> refer to REUSABLE CODING FRIGOCLIC[®] tail —> refer to TWO PIECES CODING STAR-CRIMP tail —> refer to TWO PIECES CODING

RULES FOR THE SIZE INDICATION IN THE HOSE TO HOSE CONNECTORS

In the double connectors, when the tails are part of the same family, the first size is the smallest. If the tails have the same size, this is repeated two times.

In the double connectors, when the tails are part of different families, the size sequence is the same of the tails sequence (the first size indicates the first tail, the second size indicates the second tail).

In the 3-ways connectors, tails in position "1" and "2" must be part of the same family. All the sizes are indicated following this order:



CONNECTORS SUPPLIED WITH FERRULE OR CLAMP

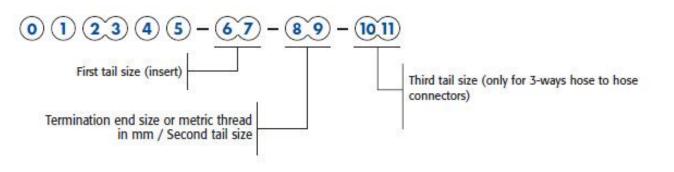


For connectors supplied with ferrule or clamp, the second dash is replaced by a letter referring to the type of ferrule or clamp:

- A Ferrule type C00700
- C Ferrule type C00300
- R Clamp type C01000



REUSABLE & "HOSE TO HOSE" CONNECTORS



DIGIT "0"

K Always

DIGIT "1"

- Male or "Hose to hose" Connectors (A/C and REFRI application) 3
- Female or Flange (A/C and REFRI application) 4

DIGIT "2-3"

The numbers stated in these positions refer to the termination end or to the second tail. For the coding, see table "Termination Ends Type".

DIGIT "4"

- Straight 1
- 22,5° Swept 2
- 30° Swept 3
- 4 45° Swept
- 60° Swept 6
- 7 67,5° Swept 8
- Compact type 9 90° Swept
- 3-ways connector with "h" configuration н
- т
- 3-ways connector with "T" configuration 3-ways connector with "Y" configuration Y
- Pipe with more than one bend S

DIGIT "5"

- 0 No charge valve
- 1/4" SAE charge valve (thread 7/16"-20-UNF) 2
- 5 High Pressure charge valve
- 6 Low Pressure charge valve



hermal Mark

0 1 23 4 5

1234

(1) (2) (3) (4)

0 1 2 3 4 5

0 1 2 3 4 5

(5

(5)

 $(\mathbf{0})$

0)

PRIORITY OF THE TAILS FOR "HOSE TO HOSE" CONNECTORS (A/C AND REFRI APPLICATION)

Double connectors

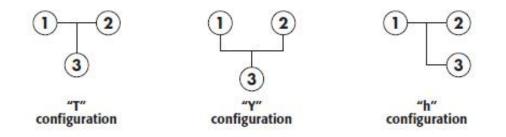
One tail takes priority respect to the other tail (different family) following this order:

RULES FOR THE SIZE INDICATION IN THE HOSE TO HOSE CONNECTORS

In the double connectors, when the tails are part of the same family, the first size is the smallest. If the tails have the same size, this is repeated two times.

In the double connectors, when the tails are part of different families, the size sequence is the same of the tails sequence (the first size indicates the first tail, the second size indicates the second tail).

In the 3-ways connectors, tails in position "1" and "2" must be part of the same family. All the sizes are indicated following this order:



CONNECTORS SUPPLIED WITH FERRULE (A/C AND REFRI APPLICATION)

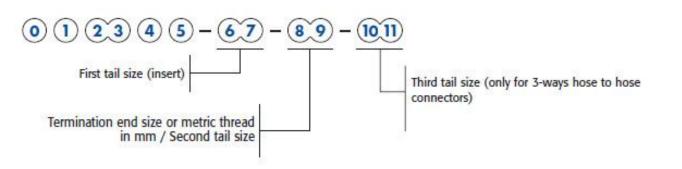


For connectors supplied with ferrule, the second dash is replaced by a letter referring to the type of ferrule or clamp:

B Ferrule type K00400



ONE PIECE & "HOSE TO HOSE" A/C AND REFRI CONNECTORS



DIGIT "0"

OPC Always

DIGIT "1"

- 1 Male or "Hose to hose" Connectors obtained by deformation
- 2 Female or flange obtained by deformation
- 3 Male or "Hose to hose" Connectors obtained by brazing
- 4 Female or flange obtained by brazing

DIGIT "2-3"

The numbers stated in these positions refer to the termination end or to the second tail. For the coding, see table "Termination Ends Type".

DIGIT "4"

- Straight 1
- 22,5° Swept 2
- 30° Swept 3
- 45° Swept 4
- 60° Swept 6
- 67,5° Swept 7
- Compact type 8
- 9 90° Swept
- н 3-ways connector with "h" configuration
- 3-ways connector with "T" configuration 3-ways connector with "Y" configuration т
- Y
- S Pipe with more than one bend

DIGIT "5"

- 0 No charge valve
- 2 1/4" SAE charge valve (thread 7/16"-20-UNF)
- High Pressure charge valve 5
- 6 Low Pressure charge valve











PRIORITY OF THE TAILS FOR "HOSE TO HOSE" CONNECTORS

Double connectors

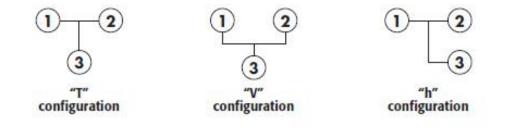
One tail takes priority respect to the other tail (different family) following this order: ONE PIECE tail —> refer to ONE PIECE CODING REUSABLE tail —> refer to REUSABLE CODING FRIGOCLIC[®] tail —> refer to TWO PIECES CODING STAR-CRIMP tail —> refer to TWO PIECES CODING

3-ways connectors

Two tails must be always part of the same family. The first tail refers to the family with two tails.

RULES FOR THE SIZE INDICATION IN THE HOSE TO HOSE CONNECTORS

In the double connectors, when the tails are part of the same family, the first size is the smallest. If the tails have the same size, this is repeated two times. In the double connectors, when the tails are part of different families, the size sequence is the same of the tails sequence (the first size indicates the first tail, the second size indicates the second tail). In the 3-ways connectors, tails in position "1" and "2" must be part of the same family. All the sizes are indicated following this order:



HOSE TO HOSE CONNECTORS (DIFFERENT FAMILIES) WITH FERRULE OR CLAMP



For hose to hose connectors, having at least one tail (different from one-piece tail) supplied with ferrule or clamp, the second dash is replaced by a letter referring to the type of ferrule or clamp:

- A Ferrule type C00700
- B Ferrule type K00400
- C Ferrule type C00300
- R Clamp type C01000



TERMINATION ENDS TYPE

DIGIT	DESCRIPTION / DESCRIPCIÓN
00	Double connector (same tail in two-ends connectors) / No end (plug) Conector doble (mismo terminal en los conectores de dos puntas) / No final (tapón
10	Metric Thread (60° cone superlight) Rosca métrico (asiento a 60° cono super ligero)
11	Male Metric Thread (24° cone light type) Rosca métrico macho (asiento a 24° super ligero)
15	Female Metric Thread (24° cone O-ring light type) Rosca métrico hembra (asiento a 24° tipo O-ring ligero)
24	ORFS type / Tipo ORFS
25	JIC Thread (37° cone) / Rosca JIC (asiento a 37°)
26	SAE Thread (45° cone) / Rosca SAE (asiento a 45°)
27	JIC Thread double exag. 37° cone / ORFS type Bulkhead Rosca JIC doble hexágono 37° / tipo ORFS con manparo
29	ORFS male type long / Flanged Block for compressor connection (A/C and Refri application) Macho para Conexión Rápida cono 30° (aplicación A/C y Refri)
37	Flange (A/C and Refri application) Flange (aplicación en aire acondicionado y refrigeración)
53	Manometer Port / Male for Quick Connection 30° cone seat (A/C and Refri application) Macho tipo largo/ Brida de Bloque para conexión al compresor (aplicación A/C y Refri)
76	Expansion valve (A/C and Refri application) Válvula de expansión (aplicación en aire acondicionado y refrigeración)
79	Female O-ring and Fixed male O-ring seat (A/C and Refri application) O-ring hembra y asiento fijo O-ring macho (aplicación en aire acondicionado y refrigeración)
80	Male Swivel O-ring (A/C and Refri application) Macho giratorio con O-ring (aplicación en aire acondicionado y refrigeración)

"HOSE TO HOSE" CONNECTORS / CONECTORES "MANGUERA A MANGUERA"

C1	"STAR-CRIMP" tail (A/C and Refri application) Terminal STAR-CRIP (aplicación en aire acondicionado y refrigeración)	
C3	"FRIGOCLIC [®] " tail (A/C and Refri application) Terminal FRIGOCLIC [®] (aplicación en aire acondicionado y refrigeración)	
K3	"REUSABLE" tail (A/C and Refri application) Terminal REUSABLE (aplicación en aire acondicionado y refrigeración)	

FITTINGS - PART NUMBERING SYSTEM - SPECIAL SUFFIX

The special suffix allows the identification of special features not included in the standard coding and must be placed at the end of the code.

El sufijo especial permite la identificación de aditamentos especiales no incluidos en la codificación estándar y debe estar colocado al final del código.

SPECIAL SUFFIX

O O DROP OF THE ELBOW (in mm)

LONGITUD DEL CODO (en mm)

(S)(C)

0

Q

SOLID CONE (for special termination ends generally supplied with O-ring) ASIENTO SOLIDO (para terminal especial generalmente suministrado con O-ring)

SPECIAL QUADRING GASKET (only refrigeration)



SIZE DETERMINATION

The first two digits identify the flexible size, the second two digits identify the connection size.

CONNECTION SIZE

DASH	SAE	SAE 45° FLARE FITTING THREAD	JIC 37° FLARE FITTING THREAD	FEMALE O-RING AND MALE O-RING SEAT FITTING THREAD	MALE O-RING FITTING THREAD	O-RING METRIC FITTING THREAD	ORS FACE SEAL FITTING	DIN 3901/3902 FITTING THREAD
- 04	1/4″	7/16"-20-UNF	7/16"-20-UNF	1.	121	<u>.</u>	9/16"-18-UNF	2
- 06	3/8"	5/8"-18-UNF	9/16"-18-UNF	5/8"-18-UNF	5/8"-18-UNF	22	11/16"-16-UN	2
- 08	1/2″	3/4"-16-UNF	3/4"-16-UNF	3/4"-16-UNF	3/4"-18-UNS	M20x1.5	13/16"-16-UN	
- 10	5/8"	7/8"-14-UNF	7/8"-14-UNF	7/8"-14-UNF	7/8"-18-UNS	M24x1.5	1"-14-UNS	M22x1.5
- 11		-		1"-14-UNS	-			-
- 12	3/4"	1.1/16"-14-UNS	1.1/16"-12-UNF	1.1/16"-14-UNS	1.1/16"-16-UN	M27x2	1.1/16"-14-UN	M26x1.5
- 16	1"	1.5/16"-14-UNF	1.5/16"-12-UNF	1.5/16"-14-UNF	(8	1.7/16"-12-UN	M30x2
- 18	(1 4 5)	-	-				-	M36x2
- 20	1.1/4″	2	1.5/8"-12-UN	243	840	32	1.11/16"-12-UN	
- 22	1	1	-	143	323	3 .	1	M45x2
- 24	1.1/2"		1.7/8"-12-UN	- 72	270			

NOTE: The size for expansion valve fittings and for SDB compressor fittings is replaced by the bulge diameter: 14 and 23 for expansion valve; 26 and 30 for SDB compressor.

FLEXIBLE HOSE SIZE

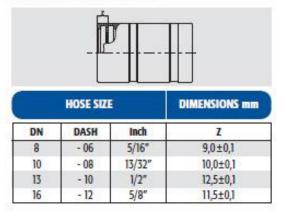
	HOSE SIZE						
DN	DASH	INCH					
5	- 04	3/16″	1/4"				
8	- 06	5/16″	3/8"				
10	- 08	13/32"	1/2"				
(12) 13	- 10	1/2″	5/8″				
16	- 12	5/8"	3/4"				
22	- 16	7/8"	1"				
28	- 20	1.1/8″	1.1/4"				
35	- 24	1.3/8"	1.1/2"				



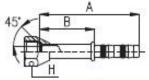
ON REQUEST fittings for special applications can be manufactured (codesign with the customer will be very appreciate)



FRIGOCLIC® WITH FERRULE CUT-OFF DIMENSION



			TTT	Œ
	HOSE SIZE	1	REFRIMASTER FERRULE	REFRIMASTEI
DN	DASH	Inch	CODE	CODE
8	- 06	5/16"	C00700-06	C01000-06
10	- 08	13/32"	C00700-08	C01000-08
13	- 10	V2"	C00700-10	C01000-10
16	- 12	5/8"	C00700-12	C01000-12



C42610

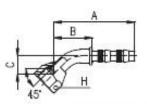
45° SAE STRAIGHT FEMALE

INSERT CODE ONLY		HOSE SIZE		THREAD		DIMENSIONS	
	DN	Dash	Inch		A±2.5	B±2.5	Н
C42610-06-04	8	- 06	5/16"	7/16"-20-UNF-2B	78,5	39,9	14
C42610-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	77,8	39,2	19
C42610-08-06	10	- 08	13/32"	5/8"-18-UNF-2B	78,0	39,4	19
C42610-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	86,1	47,5	22
C42610-10-08	13	- 10	1/2"	3/4"-16-UNF-2B	84,0	45,4	22
C42610-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	86,3	47,7	27
C42610-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	87,0	48,4	27



C42640

45° SAE FEMALE 45° ELBOW



INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H
C42640-06-04	8	- 06	5/16"	7/16"-20-UNF-2B	82,5	43,9	18,0	14
C42640-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	83,6	45,0	14,0	19
C42640-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	91,3	52,7	16,0	22
C42640-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	102,3	63,7	16,0	27
C42640-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	100,5	61,9	16,0	27
C42640-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	95,7	57,1	26,5	32

C42690

45° SAE FEMALE 90° ELBOW

INSERT CODE ONLY	HOSE SIZE		THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н
C42690-06-04	8	- 06	5/16"	7/16"-20-UNF-2B	70,5	31,9	33,0	14
C42690-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	81,8	43,2	26,0	19
C42690-08-06	10	- 08	13/32"	5/8"-18-UNF-2B	77,0	38,4	26,0	19
C42690-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	82,7	44,1	34,0	22
C42690-10-08	13	- 10	1/2"	3/4"-16-UNF-2B	86,0	47,4	34,0	22
C42690-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	103,1	64,5	37,0	27
C42690-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	99,0	60,4	37,0	27
C42690-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	85,1	46,5	53,0	32

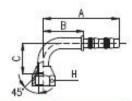
C42680

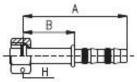
SHORT VERSION 45° SAE FEMALE 90° ELBOW

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 IENGLONG	

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н
			1/2"	7/8"-14-UNF-2B	65,0	27,0	20,0	27

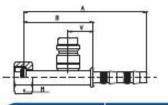






C47910 STRAIGHT O-RING FEMALE

INSERT CODE ONLY	HOSE SIZE		THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	н	
C47910-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	68,9	30,3	19	
C47910-06-08	8	- 06	5/16"	3/4"-16-UNF-2B	83,5	44,9	22	
C47910-08-06	10	- 08	13/32"	5/8"-18-UNF-2B	74,0	35,4	19	
C47910-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	85,0	46,4	22	
C47910-08-08105	10	- 08	13/32"	3/4"-16-UNF-2B	105,0	66,4	22	
C47910-08-11	10	- 08	13/32"	1"-14-UNS-2B	86,0	44,4	25	
C47910-10-08	13	- 10	1/2"	3/4"-16-UNF-2B	103,0	64,4	22	
C47910-10-08103	13	- 10	1/2"	3/4"-16-UNF-2B	103,0	64,4	22	
C47910-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	85,0	46,5	27	
C47910-10-11	13	- 10	1/2"	1"-14-UNS-2B	82,4	43,8	29	
C47910-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	87,6	49,0	27	
C47910-12-11	16	- 12	5/8"	1"-14-UNS-2B	86,0	47,4	29	
C47910-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	94,2	55,6	32	



C47915

STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE	E	THREAD		DIMEN		
	DN	Dash	Inch		A±2.5	B±2.5	Н	V±1
C47915-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	88,9	50,3	19	18,1
C47915-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	95,0	56,5	22	24,0
C47915-08-11	10	- 08	13/32"	1"-14-UNS-2B	86,0	47,4	29	26,9
C47915-10-08	13	- 10	1/2"	3/4"-16-UNF-2B	97,0	58,4	22	26,0
C47915-12-10	16	- 10	5/8"	7/8"-14-UNF-2B	94,0	55,4	27	26,0



C47916

STRAIGHT O-RING FEMALE WITH LOW PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE		THREAD		DIMEN		
	DN	Dash	Inch		A±2.5	B±2.5	н	V±1
C47916-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	95,0	56,4	27	27,0
C47916-10-11	13	- 10	1/2"	1"-14-UNS-2B	82,4	43,8	29	22,3
C47916-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	94,0	55,4	27	26,0

C47912

- 10

1/2"

INSERT CODE HOSE SIZE THREAD DIMENSIONS	NSERT CODE ONLY	THREAD	HOSE SIZE	DIMENSIONS			
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7/8"-14-UNF-2B

95,0

56,4

C47940

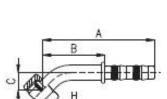
C47912-10-10

O-RING FEMALE 45° ELBOW

13

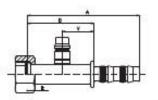
INSERT CODE ONLY				THREAD		DIMEN		
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H
C47940-06-06	8	- 06	5/16"	5/8"-18-UNF-28	84,9	46,3	12,5	19
C47940-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	91,3	52,7	13,5	22
C47940-08-11	10	- 08	13/32"	1"-14-UNS-2B	106,0	67,4	22,0	25
C47940-10-08	13	- 10	1/2"	3/4"-16-UNF-2B	87,0	48,4	13,5	22
C47940-10-10	13	- 10	1/2"	7/8"-14-UNF-28	107,7	69,1	24,0	27
C47940-10-11	13	- 10	1/2"	1"-14-UNS-2B	105,2	67,3	22,0	29
C47940-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	108,5	69,9	24,0	27
C47940-12-11	16	- 12	5/8"	1"-14-UNS-2B	106,5	67,9	22,0	29
C47940-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	115,9	77,3	27,0	32





27,0

27



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C47945

O-RING FEMALE 45° ELBOW WITH HIGH PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	V±1
							1000		

C47946

O-RING FEMALE 45° ELBOW WITH LOW PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	V±1	
C47946-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	107,7	69,1	24,0	27	25,2	
C47946-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	108,5	69,9	24,0	27	26,0	

C47990

O-RING FEMALE 90° ELBOW

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
-	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	
C47990-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	72,9	34,3	24,0	19	
C47990-06-08	8	- 06	5/16"	3/4"-16-UNF-2B	88,0	49,4	30,0	22	
C47990-08-06	10	- 08	13/32"	5/8"-18-UNF-2B	79,0	40,4	24,0	19	
C47990-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	85,6	47,0	30,0	22	
C47990-08-08037	10	- 08	13/32"	3/4"-16-UNF-2B	89,1	50,5	36,5	22	
C47990-08-11	10	- 08	13/32"	1"-14-UNS-2B	84,0	45,4	39,0	25	
C47990-10-08	13	- 10	1/2"	3/4"-16-UNF-2B	90,5	51,9	36,5	22	
C47990-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	104,0	65,4	45,0	27	
C47990-10-11	13	- 10	1/2"	1"-14-UNS-2B	107,2	68,6	39,0	29	
C47990-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	101,0	62,4	45,0	27	
C47990-12-11	16	- 12	5/8"	1"-14-UNS-2B	99,1	60,5	39,0	29	
C47990-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	104,9	66,3	54,5	32	





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C47995

O-RING FEMALE 90° ELBOW WITH HIGH PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	V±1	
C47995-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	82,9	44,3	24,0	19	16,0	
C47995-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	89,1	50,5	36,5	22	24,5	
C47995-10-08	13	- 10	1/2"	3/4"-16-UNF-2B	90,5	51,9	36,5	22	26,0	

C47996

O-RING FEMALE 90° ELBOW WITH LOW PRESSURE VALVE

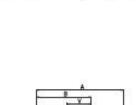
INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	V±1	
C47996-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	103,9	65,3	45,0	27	28,8	
	16	- 12	5/8"	7/8"-14-UNF-2B	101,0	62,4	45,0	27	26.0	

C47992

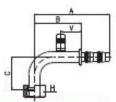
O-RING FEMALE 90° ELBOW WITH 1/4" SAE CHARGE VALVE

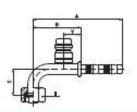
INSERT CODE ONLY		HOSE SIZE	1	THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	V±1	
C47992-08-08	8	- 08	13/32"	3/4"-16-UNF-2B	89,1	50,5	36,5	22	24,6	
C47992-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	103,8	65,2	45,0	27	28,8	





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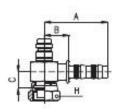
C47980

SHORT VERSION O-RING FEMALE 90° ELBOW

INSERT CODE ONLY		HOSE SIZE	•	THREAD		DIMEN	ISIONS m	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H
C47980-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	56,0	18,0	16,0	22
C47980-08-11	10	- 08	13/32"	1"-14-UNS-2B	59,5	21,5	16,4	29
C47980-10-10	13	- 10	1/2"	7/8"-14-UNF-2B	58,5	20,5	16,4	27
C47980-10-11	13	- 10	1/2"	1"-14-UNS-2B	59,5	21,5	16,4	29
C47980-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	65,0	26,5	16,4	27
C47980-12-11	16	- 12	5/8"	1"-14-UNS-2B	65,0	26,5	24,2	29

C47985

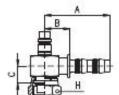
SHORT VERSION O-RING FEMALE 90° ELBOW WITH HIGH PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE	1	THREAD		DIMEN	ISIONS m	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н
C47985-08-11	10	- 08	13/32"	1"-14-UNS-2B	59,5	21,5	16,4	29

C47986

SHORT VERSION O-RING FEMALE 90° ELBOW WITH LOW PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE		THREAD		DIMEN	m m	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н
C47986-10-11	13	- 10	12"	1"-14-UNS-2B	59,5	21,5	16,4	29
C47986-12-11	16	- 12	5/8"	1"-14-UNS-2B	65,0	26,5	24,2	25



C38010

STRAIGHT O-RING MALE

NSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	H	
C38010-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	70,2	31,6	17	
C38010-08-06	10	- 08	13/32"	5/8"-18-UNF-2A	74,0	35,4	17	
C38010-08-08	10	- 08	13/32"	3/4"-18-UNS-2A	89,4	50,8	22	
C38010-10-10	13	- 10	1/2"	7/8"-18-UNS-2A	91,6	53,0	22	
C38010-12-10	16	- 12	5/8"	7/8"-18-UNS-2A	86,0	47,4	22	

C38040

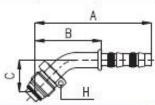
O-RING MALE 45° ELBOW

INSERT CODE ONLY		HOSE SIZE	2	THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	
C38040-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	92,7	54,1	21,5	17	
C38040-08-06	10	- 08	13/32"	5/8"-18-UNF-2A	94,0	55,4	21,4	17	
C38040-08-08	10	- 08	13/32"	3/4"-18-UNS-2A	100,9	62,3	25,0	22	
C38040-10-10	13	- 10	1/2"	7/8"-18-UNS-2A	112,4	73,8	28,5	22	
C38040-12-10	16	- 12	5/8"	7/8"-18-UNS-2A	113,0	74,4	28,5	22	
C38040-12-12	16	- 12	5/8"	1.1/16"-16-UN-2A	123,0	84,3	33,4	27	

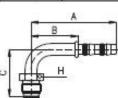
C38090

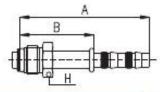
O-RING MALE 90° ELBOW

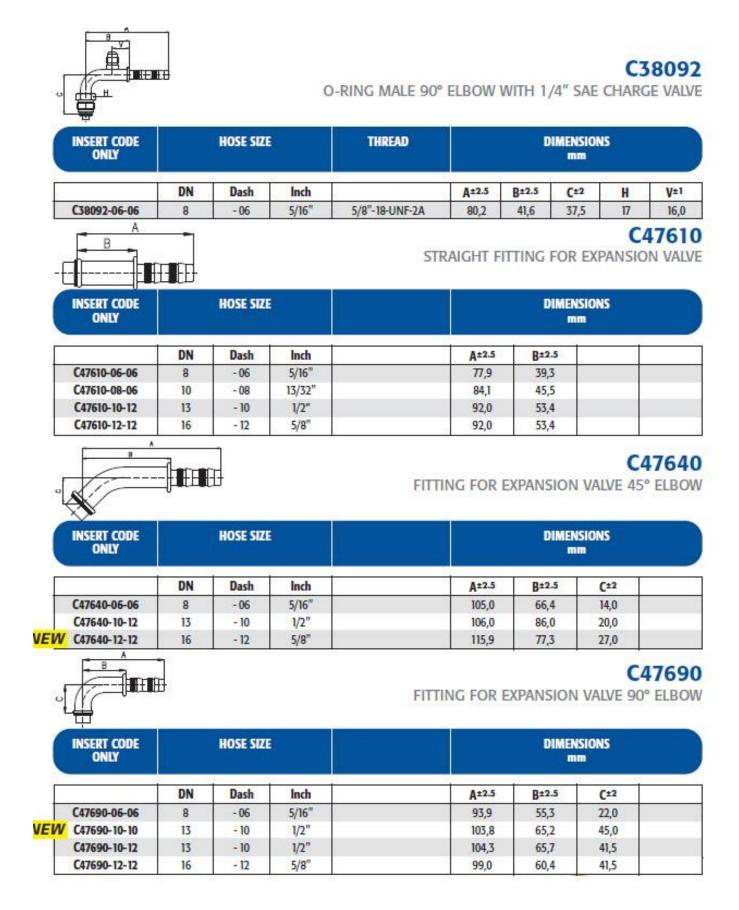
INSERT CODE ONLY		HOSE SIZE	1	THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	
C38090-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	80,6	42,0	37,5	17	
C38090-08-06	10	- 08	13/32"	5/8"-18-UNF-2A	77,0	38,4	37,5	17	
C38090-08-08	10	- 08	13/32"	3/4"-18-UNS-2A	83,0	44,4	47,0	22	
C38090-10-10	13	- 10	1/2"	7/8"-18-UNS-2A	100,9	62,3	54,5	22	
C38090-12-10	16	- 12	5/8"	7/8"-18-UNS-2A	99,0	60,4	54,5	22	













C30010

STRAIGHT CONNECTION FITTINGS

INSERT CODE ONLY		HOSE SIZE		DIMENSIONS			
	DN	Dash	Inch	A±2.5	B±2.5		
C30010-06-06	8	- 06	5/16"	120,0	42,8		
C30010-08-08	10	- 08	13/32"	124,0	47,0		
C30010-10-10	13	- 10	1/2"	124,0	47,0		
C30010-12-12	16	- 12	5/8"	124,0	47,0		

C300T0

3 WAYS CONNECTION FITTINGS



For clamp solution only Unicamente para uso con abrazadera

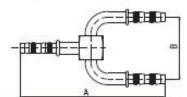
INSERT CODE ONLY		HOSE SIZE T			HOSE SIZE 2			HOSE SIZE 3		DIMENSIONS		
	DN	Dash	Inch	DN	Dash	Inch	DN	Dash	Inch	A±2.5	B±2.5	C±2
C300T0-06-06-06	08	- 06	5/16"	08	- 06	5/16"	08	- 06	5/16"	22,8	100,0	85,5
C300T0-06-06-08	08	-06	5/16"	08	- 06	5/16"	08	- 06	5/16"	22,8	100,0	85,5
C300T0-08-08-08	08	-06	5/16"	08	-06	5/16"	08	- 06	5/16"	22,8	100,0	86,5
C300T0-08-08-10	10	- 08	13/32"	10	- 08	13/32"	12	- 10	1/2"	22,8	100,0	86,5
C300T0-08-10-10	13	- 10	1/2"	10	- 08	13/32"	10	-08	13/32"	22,8	100,0	86,5
C300T0-08-10-12	10	- 08	13/32"	10	- 08	13/32"	16	- 12	5/8"	22,8	100,0	86,5
C300T0-10-10-10	13	- 10	1/2"	12	- 10	1/2"	12	- 10	1/2"	22,8	100,0	86,5
C300T0-10-10-12	13	- 10	1/2"	12	- 10	1/2"	16	- 12	5/8"	22,8	100,0	86,5
C300T0-10-12-12	16	- 12	5/8"	12	- 10	1/2"	16	- 12	5/8"	22,8	100,0	86,5
C300T0-12-12-12	16	- 12	5/8"	16	- 12	5/8"	16	- 12	5/8"	22,8	100,0	88,5

C300Y0

"Y" CONNECTION FITTING

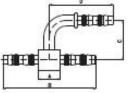


For clamp solution only Unicamente para uso con abrazadera



INSERT CODE ONLY		HOSE SIZE	1		DIMENSIONS	
	DN	Dash	Inch	A±2.5	B±2.5	
C300Y0-08-08-08	8	- 08	13/32"	152,5	65,0	
C300Y0-12-12-12	16	- 12	5/8"	152.0	83.0	



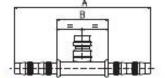


For clamp solution only Unicamente para uso con abrazadera C300h0

"h" CONNECTION FITTINGS

INSERT CODE ONLY	HOSE SIZE 1		J	105E SIZ 2	al de la companya de		HOSE SU 3	DSE SIZE		DIMENSIONS			
	DN	Dash	Inch	DN	Dash	Inch	DN	Dash	Inch	A±2.5	B±2.5	C±2	D±2.5
C300h0-06-06-10	08	- 06	5/16"	08	- 06	5/16"	12	- 10	1/2"	22,8	100,0	62,5	78,0
C300h0-08-08-08	10	- 08	13/32"	10	- 08	13/32"	10	- 08	13/32"	22,8	100,0	42,5	68,0
C300h0-08-08-06	10	- 08	13/32"	10	- 08	13/32"	80	- 06	5/16"	22,8	100,0	42,5	72,0
C300h0-06-10-06	13	- 10	1/2"	80	- 06	5/16"	08	-06	5/16"	22,8	100,0	48,5	65,0
C300h0-10-10-06	13	- 10	1/2"	12	- 10	1/2"	08	-06	5/16"	22,8	100,0	48,5	65,0
C300h0-10-10-12	13	- 10	1/2"	12	- 10	1/2"	16	- 12	5/8"	22,8	100,0	62,5	75,0
C300h0-10-12-10	16	- 12	5/8"	12	- 10	1/2"	12	- 10	1/2"	22,8	100,0	62,5	78,0
C300h0-12-12-10	16	- 12	5/8"	16	- 12	5/8"	12	- 10	1/2"	22,8	100,0	42,5	68,5
C300h0-12-12-12	16	- 12	5/8"	16	- 12	5/8"	16	- 12	5/8"	22,8	100,0	62,5	75,0

C30015



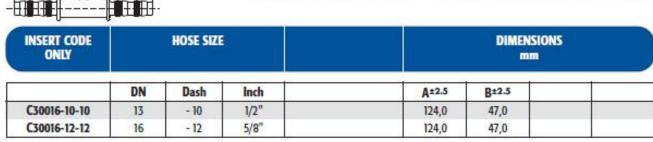
B =

STRAIGHT CONNECTION FITTING WITH HIGH PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZI			DIMENSIONS		
	DN	Dash	Inch	A±2.5	B±2.5		
C30015-06-06	8	- 06	5/16"	124,0	46,8		
C30015-08-08	10	- 08	13/32"	124,0	47,0		
C30015-10-10	13	- 10	1/2"	124,0	47,0		
C30015-12-12	16	- 12	5/8"	124,0	47,0		

C30016

STRAIGHT CONNECTION FITTING WITH LOW PRESSURE VALVE



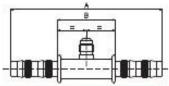


FRIGOCLIC[®] FITTINGS REFRI®MASTER

SAE J2064 TYPE E

C30012

STRAIGHT CONNECTION FITTING 1/4" SAE CHARGE VALVE



INSERT CODE ONLY		HOSE SIZE		DIMENSIONS			
	DN	Dash	Inch	A±2.5	B±2.5	0	
C30012-06-06	8	- 06	5/16"	120,0	43,0		
C30012-08-08	10	- 08	13/32"	124,0	47,0		
C30012-10-10	13	- 10	1/2"	124,0	47,0		
C30012-12-12	16	- 12	5/8"	124,0	47,0		

C30040

CONNECTION FITTING 45° ELBOW

NSERT CODE ONLY		HOSE SIZE			DIMENSIONS			
	DN	Dash	Inch	A±2.5	B±2.5	Ē		
C30040-06-06	8	- 06	5/16"	113,5	47,0			
C30040-08-08	10	- 08	13/32"	121,0	50,0			
C30040-10-10	13	- 10	1/2"	118,5	49,0			
C30040-12-12	16	- 12	5/8"	106,0	44,0			



C30090

CONNECTION FITTING 90° ELBOW

NSERT CODE ONLY		HOSE SIZE			DIMENSIONS	ý.
	DN	Dash	Inch	A±2.5	B±2.5	1
30090-06-06	8	- 06	5/16"	70,0	70,0	
30090-08-08	10	- 08	13/32"	75,0	75,0	
30090-10-10	13	- 10	1/2"	75,0	75,0	
30090-12-12	16	- 12	5/8"	75,0	75,0	

C42410

STRAIGHT ORS FLAT SEAL FEMALE

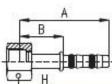
INSERT CODE		HOSE SIZI	i (THREAD		DIMENSIONS mm			
	DN	Dash	Inch		A±2.5	B±2.5	H		
C42410-06-04	8	- 06	5/16"	9/16"-18-UNF-2B	72,0	33,4	19		
C42410-06-06	8	- 06	5/16"	11/16"-16-UN-2B	70,0	31,4	22		
C42410-08-08	10	- 08	13/32"	13/16"-16-UN-2B	74,5	35,9	27		
C42410-10-08	10	- 08	13/32"	13/16"-16-UN-2B	74,5	35,9	27		
C42410-10-10	13	- 10	1/2"	1"-14-UNS-2B	85,0	46,4	30		
C42410-12-12	16	- 12	5/8"	1.3/16"-12-UN-2B	85,0	46,4	36		

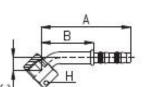
C42440

ORS FLAT SEAL FEMALE 45° ELBOW

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
C42440-06-04	8	- 06	5/16"	9/16"-18-UNF	64,0	25,4	10,0	19	
C42440-06-06	8	- 06	5/16"	11/16"-16-UN-2B	65,0	26,4	10,5	22	
C42440-08-08	10	- 08	13/32"	13/16"-16-UN-2B	93,0	54,4	13,0	27	
C42440-10-08	10	- 10	1/2"	13/16"-16-UN	93,0	54,4	13,0	27	
C42440-10-10	13	- 10	1/2"	1"-14-UNS-2B	82,0	43,4	18,0	30	
C42440-12-12	16	- 12	5/8"	1.3/16"-12-UN-2B	94,0	55,4	30,5	36	







13

C42490

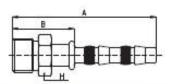
ORS FLAT SEAL FEMALE 90° ELBOW

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INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS mm				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
C42490-06-04	8	- 06	5/16"	9/16"-18-UNF-2B	61,5	22,9	22,5	19	
C42490-06-06028	8	- 06	5/16"	11/16"-16-UN-2B	72,0	33,4	27,5	22	
C42490-06-08	8	- 06	5/16"	13/16"-16-UN-2B	81,0	42,2	29,0	27	
C42490-08-08	10	- 08	13/32"	13/16"-16-UN-2B	78,0	39,4	29,0	27	
C42490-10-08	13	- 10	1/2"	13/16"-16-UN-2B	78,0	34,9	29,0	27	
C42490-10-10	13	- 10	1/2"	1"-14-UNS-2B	75,0	36,4	36,0	30	
C42490-12-10	16	- 12	5/8"	1"-14-UNS-2B	75,0	36,4	36,0	30	
C42490-12-12	16	- 12	5/8"	1.3/16"-12-UN-2B	84,0	45,4	45,0	36	

C37910

STRAIGHT MALE WITH O-RING SEAT



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	H	
C37910-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	67,7	29,1	17	
C37910-08-10	10	- 08	13/32"	7/8"-14-UNF-2A	75,0	36,4	24	
C37910-10-10	13	- 10	1/2"	7/8"-14-UNF-2A	77,8	36,6	24	

C37990

MALE WITH O-RING SEAT 90° ELBOW

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н
C37990-08-06	10	- 08	13/32"	5/8"-18-UNF-2A	86,0	47,4	36,5	17
C37990-10-08	13	- 10	1/2"	3/4"-16-UNF-2A	87,0	48,4	41,5	22



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SAE J2064 TYPE B

			S
	HOSE SIZE		STAR-FIT FERRULE (reusable solut
DN	DASH	INCH	CODE
5	- 04	3/16"	K00400-04
8	- 06	5/16"	K00400-06
10	- 08	13/32"	K00400-08
12	- 10	1/2"	K00400-10
16	- 12	5/8"	K00400-12
22	- 16	7/8"	K00400-16
28	- 20	L1/8"	K00400-20
35	- 24	1.3/8"	K00400-24

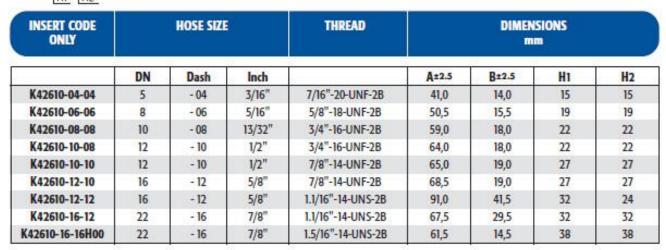
CUT-OFF DIMENSION

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	HOSE SIZE	DIMENSIONS m			
DN	DASH	INCH	Z	H	
5	- 04	3/16*	9,0±0,1	16	
8	- 06	5/16*	10,0±0,1	21	
10	- 08	13/32"	12,5±0,1	24	
12	- 10	1/2"	9,0±0,1	28	
16	- 12	5/8"	11,5±0,1	32	
22	- 16	7/8"	10,0±0,1	38	
28	- 20	1.1/8"	10,0±0,1	46	
35	- 24	1.3/8"	10,0±0,1	50	

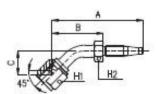
45° SAE STRAIGHT FEMALE





K42640

45° SAE FEMALE 45° ELBOW



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2	
K42640-04-04	5	- 04	3/16"	7/16"-20-UNF-2B	68,5	41,5	16,0	15	12	
K42640-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	88,0	53,3	16,5	19	15	
K42640-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	94,7	53,7	16,5	22	18	
K42640-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	94,5	48,5	23,5	27	21	
K42640-12-08	16	- 12	5/8"	3/4"-16-UNF-2B	113,0	63,5	26,5	22	24	
K42640-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	99,5	50,0	23,5	27	24	
K42640-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	104,5	55,0	26,5	32	24	
K42640-16-10	22	- 16	7/8"	7/8"-14-UNF-2B	97,0	50,0	23,5	27	30	
K42640-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	101,5	54,5	26,5	32	30	
K42640-16-16	22	- 16	7/8"	1.5/16"-14-UNS-2B	115,0	68,0	32,5	38	30	

K42690

45° SAE FEMALE 90° ELBOW

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS					
	DN	Dash	Inch	5	A±2.5	B±2.5	C±2	H1	H2	
K42690-04-04	5	- 04	3/16"	7/16"-20-UNF-2B	55,0	28,0	25,5	15	12	
K42690-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	72,5	37,5	30,5	19	15	
K42690-08-06	10	- 08	13/32"	5/8"-18-UNF-2B	73,5	32,5	37,5	19	18	
K42690-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	73,5	32,5	37,5	22	18	
K42690-10-08	12	- 10	1/2"	3/4"-16-UNF-2B	79,5	33,5	42,5	22	21	
K42690-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	83,5	37,5	46,5	27	21	
K42690-12-08	16	- 12	5/8"	3/4"-16-UNF-2B	84,0	34,5	42,5	22	24	
K42690-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	89,0	39,5	46,5	27	24	
K42690-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	94,0	44,5	53,0	32	24	
K42690-16-10	22	- 16	7/8"	7/8"-14-UNF-2B	86,5	39,5	46,5	27	30	
K42690-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	90,5	43,5	53,0	32	30	
K42690-16-16	22	- 16	7/8"	1.5/16"-14-UNS-2B	101,5	54,5	66,5	38	30	



K32610

STRAIGHT 45° SAE FLARE MALE

INSERT CODE THREAD DIMENSIONS HOSE SIZE ONLY mm DN Dash Inch A±2.5 B±2.5 HI K32610-04-04 5 - 04 3/16" 7/16"-20-UNF-2B 47,5 18,7 12 K32610-06-06 - 06 5/16" 5/8"-18-UNF-2B 22,7 8 57,7 16 19 K32610-08-08 - 08 13/32" 3/4"-16-UNF-2B 10 68,0 27,0 K32610-10-10 12 - 10 1/2" 7/8"-14-UNF-2B 24 78,4 32,4 - 12 5/8" K32610-12-12 16 1.1/16"-14-UNS-2B 85,9 36,4 27 K32610-16-16 22 7/8" 1.5/16"-14-UNS-2B 85,0 39,0 - 16 36

K47910

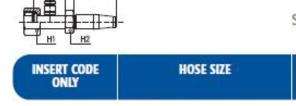
STRAIGHT O-RING FEMALE

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS mm				
	DN	Dash	Inch	8	A±2.5	B±2.5	H1	H2	
K47910-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	69,0	34,0	19	14	
K47910-08-06	10	- 08	13/32"	5/8"-18-UNF-2B	76,5	35,5	19	18	
K47910-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	85,5	44,5	22	18	
K47910-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	96,0	50,0	27	21	
K47910-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	101,5	52,0	27	24	
K47910-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	110,0	60,5	32	24	
K47910-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	107,5	60,5	32	30	

K47916

STRAIGHT O-RING FEMALE WITH LOW PRESSURE VALVE

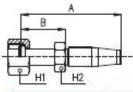
DIMENSIONS



	DN	Dash	Inch		A±2.5	B±2.5	V±1	H1	H2
K47916-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	101,5	52,0	16,0	27	24
K47916-16-12	22	- 16	7/8"	1.1/16"-14-UNF-2B	107,5	60,5	16,0	32	30

THREAD





H1

K47915

STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE

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INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS					
	DN	Dash	Inch	24	A±2.5	B±2.5	V±1	H1	H2	
K47915-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	85,5	44,5	16,0	22	18	

K47912

STRAIGHT O-RING FEMALE WITH 1/4" SAE CHARGE VALVE



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H1

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	V±1	H1	H2	
K47912-06-06	-	- 06	5/16"	5/8"-18-UNF-2B	67,3	32,3	9,0	19	14	

K47940

O-RING FEMALE 45° ELBOW

INSERT CODE ONLY	HOSE SIZE				DIMENSIONS						
	DN	Dash	Inch		A±0.10	B±0.10	C±0.08	H1	H2		
K47940-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	82,0	47,0	12,5	19	14		
K47940-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	90,5	49,5	13,5	22	18		
K47940-10-08	12	- 10	1/2"	3/4"-16-UNF-2B	95,5	49,5	13,5	22	21		
K47940-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	117,0	71,0	24,0	27	21		
K47940-10-11	12	- 10	1/2"	1"-14-UNF-2B	115,0	69,0	22,0	29	21		
K47940-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	122,5	73,0	24,0	27	24		
K47940-12-11	16	- 12	5/8"	1"-14-UNS-2B	120,5	71,0	22,0	29	24		
K47940-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	130,5	81,0	27,0	32	24		
K47940-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	128,0	81,0	27,0	32	30		



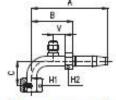
K47990

O-RING FEMALE 90° ELBOW

INSERT CODE ONLY	HOSE SIZE			THREAD		DIMENSIONS					
-	DN	Dash	Inch		A±0.10	B±0.10	C±0.08	H1	H2		
K47990-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	74,0	39,0	24,0	19	14		
K47990-08-06	10	- 08	13/32"	5/8"-18-UNF-2B	81,5	40,5	24,0	19	18		
K47990-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	89,5	48,5	30,0	22	18		
K47990-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	109,5	63,5	45,0	27	21		
K47990-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	115,0	65,5	45,0	27	24		
K47990-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	119,5	70,0	54,5	32	24		
K47990-16-10	22	- 16	7/8"	7/8"-14-UNF-2B	112,5	65,5	45,0	27	30		
K47990-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	117,0	70,0	54,5	32	30		
K47990-20-12	28	-20	1.1/8"	1.1/16"-14-UNS-2B	115,0	69,0	54,5	32	36		

K47992

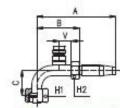
O-RING FEMALE 90° ELBOW WITH 1/4" SAE CHARGE VALVE



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS mm						
	DN	Dash	Inch		A±2.5	B±2.5	C±2	V±1	H1	H2	

K47995

O-RING FEMALE 90° ELBOW WITH HIGH PRESSURE VALVE



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS						
				2							
	DN	Dash	Inch		A±2.5	B±2.5	C±2	V±1	H1	H2	



K47996

O-RING FEMALE 90° ELBOW WITH LOW PRESSURE VALVE

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INSERT CODE ONLY	HOSE SIZE			THREAD			10 M	m		
	DN	Dash	Inch		A±2.5	B±2.5	C±2	V±1	H1	H2
K47996-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	109,5	63,5	45,0	16,0	27	21
K47996-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	115,0	65,5	45,0	16,0	27	24
K47996-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	116,0	69,0	54,5	16,0	32	30

K47945

O-RING FEMALE 45° ELBOW WITH HIGH PRESSURE VALVE

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS						
	DN	Dash	Inch		A±2.5	B±2.5	C±2	V±1	H1	H2	
K47945-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	106,8	65,3	13,5	16,0	22	18	

K38010

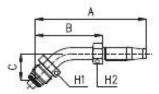
STRAIGHT O-RING MALE

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H		
K38010-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	69,4	34,4	17	14		
K38010-08-08	10	- 08	13/32"	3/4"-18-UNS-2B	85,5	44,5	22	18		
K38010-10-10	12	- 10	1/2"	7/8"-18-UNS-2B	94,5	48,5	22	21		





H2 H1



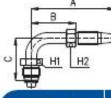
K38040

O-RING MALE 45° ELBOW

INSERT CODE ONLY	HOSE SIZE				DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2	
K38040-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	89,5	54,5	21,5	17	14	
K38040-08-08	10	- 08	13/32"	3/4"-18-UNS-2B	106,5	65,5	25,0	22	18	
K38040-10-10	12	- 10	1/2"	7/8"-18-UNS-2B	121,5	75,5	28,5	22	21	

K38090

O-RING MALE 90° ELBOW



INSERT CODE ONLY		HOSE SIZE		THREAD		D	IMENSION	ls	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2
K38090-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	74,5	39,5	37,5	17	14
K38090-08-08	10	- 08	13/32"	3/4"-18-UNS-2B	89,5	48,5	47,0	22	18
K38090-10-10	12	- 10	1/2"	7/8"-18-UNS-2B	109,0	63,0	54,5	22	21

K41510

STRAIGHT 24° DIN FLARE O-RING OGIVAL FEMALE

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INSERT CODE ONLY		HOSE SIZE		THREAD		I	mm	VS	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2
K41510-12-26	16	- 12	5/8"	M 26x1.5	92,0	42,5	32	27	
K41510-12-30	16	- 12	5/8"	M 30x2	94,5	45,0	36	24	
K41510-16-30	22	- 16	7/8"	M 30x2	74,0	27,0	36	36	
K41510-16-36	22	- 16	7/8"	M 36x2	75,8	28,8	41	36	
K41510-20-36	28	- 20	1.1/8"	M 36x2	76,8	30,8	41	41	



K41540

24° DIN FLARE O-RING OGIVAL FEMALE 45° ELBOW

INSERT CODE ONLY		HOSE SIZE		THREAD		DIMENSIONS						
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2			
K41540-12-26	16	- 12	5/8"	M 26x1.5	107,0	57,2	28,7	32	24			
K41540-12-30	16	- 12	5/8"	M 30x2	107,0	57,5	29,0	36	34			
K41540-16-30	22	- 16	7/8"	M 30x2	104,0	57,1	29,4	36	30			
K41540-16-36	22	- 16	7/8"	M 36x2	117,0	69,9	30,0	41	30			
K41540-20-36	28	- 20	1.1/8"	M 36x2	115,0	68,9	34,0	41	36			

K41590

24° DIN FLARE O-RING OGIVAL FEMALE 90° ELBOW

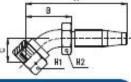
INSERT CODE ONLY	HOSE SIZE		1	THREAD		D	IMENSION mm	IS	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2
K41590-08-26	10	- 08	13/32"	M 26x1.5	86,5	45,5	60,0	32	24
K41590-12-26	16	- 12	5/8"	M 26x1.5	94,0	44,5	56,0	32	24
K41590-12-30	16	- 12	5/8"	M 30x2	91,0	41,5	56,5	36	30
K41590-16-30	22	- 16	7/8"	M 30x2	91,0	43,5	56,5	36	30
K41590-16-36	22	- 16	7/8"	M 36x2	101,5	54,5	69,3	41	30
K41590-20-30	28	- 20	1.1/8"	M 30x2	89,4	43,5	48,5	36	36
K41590-20-36	28	- 20	1.1/8"	M 36x2	101,0	54,5	69,3	41	36

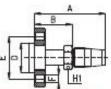
K43710

STRAIGHT FLANGE FITTING

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS						
	DN	Dash	Inch		A±2.5	B±2.5	D	E	F	HI	
K43710-16-16	22	- 16	7/8"		108,5	61,5	41,8	60,0	Ø 11,0	30	
K43710-20-16	28	- 20	1.1/8"		102,5	56,5	41,8	60,0	Ø 11,0	3	







В

INSERT CODE ONLY		HOSE SIZE				DI	MENSIONS	5				
8	DN	Dash	Inch	A±2.5	B±2.5	C±2	D	E	F	H1		
K43740-16-16	22	- 16	7/8"	119,0	72,0	44,0	41,8	60,0	Ø 11,0	30		
K43740-20-16	28	-20	1.1/8"	122,5	76,5	44,0	41,8	60,0	Ø 11,0	36		
							FLAM	NGE FIT	K4 TING 90°			
		HOSE SIZE	1			DI	FLAM MENSIONS mm		and the second	37 ELB		

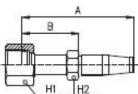
	DN	Dash	Inch	A±2.5	B±2.5	C±2	D	E	F	H1
K43790-16-16	22	- 16	7/8"	90,5	43,5	79,5	41,8	60,0	Ø 11,0	30
K43790-20-16	28	-20	1.1/8"	100,5	54,5	88,5	41,8	60,0	Ø 11,0	36
NEW K43790-20-16097	28	-20	1.1/8"	100,5	54,5	96,5	48,0	60,0	Ø 11,0	36

K42410

STRAIGHT ORS FLAT SEAL FEMALE

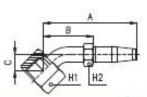
INSERT CODE ONLY		HOSE SIZE		THREAD		DIMEN		
	DN	Dash	Inch		A±2.5	B±2.5	H1	H2
K42410-04-04	5	- 04	3-16"	9/16"-18-UNF-2B	61,0	34,0	19	12
K42410-06-06	8	- 06	5-16"	11-16"-UN-2B	69,0	34,0	22	14
K42410-08-08	10	- 08	13/32"	13/16"-16-UN-2B	78,0	37,0	27	18
K42410-10-10	12	- 10	1/2"	1"-14-UNS-2B	93,5	47,5	30	21
K42410-12-12	16	- 12	5/8"	1.3/16"-12-UN-2B	99,0	49,5	36	24
K42410-12-16	16	- 12	5/8"	1.7/16"-12-UNF-2B	52,5	102,0	41	27
K42410-12-16079	16	- 12	5/8"	1.7/16"-12-UNF-2B	29,0	78,5	41	24
K42410-16-16	22	- 16	7/8"	1.7/16"-12-UN-2B	117,5	70,5	41	30
K42410-16-20	22	- 16	7/8"	1.11/16"-UN-2B	69,5	116,5	50	30
K42410-20-20	28	- 20	1.1/8"	1.11/16"-12-UN-2B	114,5	68,5	50	36
K42410-24-24	35	-24	1.3/8"	2"-12-UN	115,5	70,5	60	46





K42440

ORS FLAT SEAL FEMALE 45° ELBOW

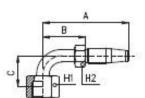


INSERT CODE ONLY		HOSE SIZE	:	THREAD	DIMENSIONS					
1	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2	
K42440-04-04	5	- 04	3/16"	9/16"-18-UNF-2B	52,2	25,2	10,0	19	12	
K42440-06-06	8	- 05	5/16"	11/16"-16-UN-2B	62,3	27,3	10,5	22	14	
K42440-08-08	10	- 08	13/32"	13/16"-16-UN-2B	96,5	55,5	13,0	27	18	
K42440-10-10	12	- 10	1/2"	1"-14-UNS-2B	86,5	40,5	16,0	30	21	
K42440-12-12	16	- 12	5/8"	1.3/16"-12-UN-2B	115,0	65,5	17,0	36	24	
K42440-16-16	22	- 16	7/8"	1.7/16"-12-UN-2B	115,5	68,5	40,5	41	30	
K42440-20-20	28	-20	1.1/8"	1.11/16"-12-UN-2B	111,5	66,5	27,0	50	36	
K42440-24-24	35	-24	1.3/8"	2"-12-UN	115,5	70,5	29,0	60	46	

K42490

ORS FLAT SEAL FEMALE 90° ELBOW

INSERT CODE ONLY	HOSE SIZE		THREAD	DIMENSIONS						
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2	
K42490-04-04	5	- 04	3/16"	9/16"-18-UNF-2B	50,5	23,5	22,5	19	12	
K42490-06-06	8	- 06	5/16"	11/16"-16-UN-2B	62,5	27,5	25,5	22	14	
K42490-08-08	10	- 08	13/32"	13/16"-16-UN-2B	81,5	40,5	29,0	27	18	
K42490-10-10	12	- 10	1/2"	1"-14-UNS-2B	83,5	37,5	36,0	30	21	
K42490-12-12	16	- 12	5/8"	1.3/16"-12-UN-2B	98,0	48,5	45,0	36	24	
K42490-16-16	22	- 16	7/8"	1.7/16"-12-UN-2B	117,5	70,5	48,0	41	30	
K42490-20-20	28	-20	1.1/8"	1.11/16"-12-UN-2B	104,5	58,5	56,0	50	36	





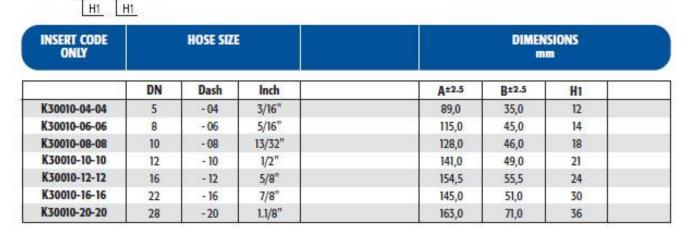
-4-+-+

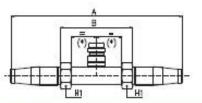
B

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K30010

STRAIGHT CONNECTION FITTING





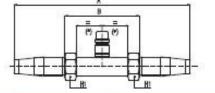
K30015

STRAIGHT CONNECTION FITTING WITH HIGH PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE	:		DIMENSIONS				
	DN	Dash	Inch	A±2.5	B±2.5	H1			
K30015-08-08	10	- 08	13/32"	150,0	68,0	18			
K30015-10-10	12	- 10	1/2"	159,0	67,0	21			

K30016

STRAIGHT CONNECTION FITTING WITH LOW PRESSURE VALVE



NSERT CODE ONLY		HOSE SIZE			DIMEN		
15							
	DN	Dash	Inch	A±2.5	B±2.5	H1	
K30016-10-10	DN 12	Dash - 10	1/2"	A±2.5 159,0	B±2.5 67,0	H1 21	



K42510

JIC 37° STRAIGHT FEMALE FITTING

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INSERT CODE ONLY		HOSE SIZE	OSE SIZE THREAD DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	H1	H2
K42510-16-12	22	- 16	7/8"	1.1/16"-12-UNF-2B	78,5	31,5	32,0	30
K42510-16-16	22	- 16	7/8"	1.5/16"-12-UNF-2B	62.0	15.0	38.0	

K42540

JIC 37° FEMALE FITTING 45° ELBOW

INSERT CODE ONLY		HOSE SIZE		THREAD			IMENSION mm	15	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2

K42590

JIC 37° FEMALE FITTING 90° ELBOW

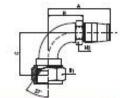
INSERT CODE ONLY		HOSE SIZE		THREAD	THREAD DIMENSIONS mm			15	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2
K42590-16-16	DN 22	Dash - 16	Inch 7/8"	1.5/16"-12-UNF-2B	A±2.5	B±2.5 54,5	C±2 67,5	H1 38	H2 30

K31110

STRAIGHT 24° MALE DIN

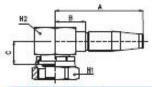
INSERT CODE ONLY		HOSE SIZE		THREAD		DIMEN	sions "	
	DN	Dash	Inch		A±2.5	B±2.5	H1	





K47980





INSERT CODE ONLY		HOSE SIZE		THREAD		D	IMENSION	15	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2
K47980-08-11	10	- 08	13/32"	1"-14-UNF-2B	62,5	21,5	16,4	29	29
K47980-10-11	12	- 10	1/2"	1"-14-UNS-2B	67,5	21,5	16,4	29	29
K47980-12-11	16	- 12	5/8"	1"-14-UNS-2B	75,5	26,0	24,2	29	25

K47982

SHORT VERSION O-RING FEMALE 90° ELBOW WITH 1/4" SAE CHARGE VALVE

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INSERT CODE ONLY		HOSE SIZE		THREAD		D	MENSION	IS	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2
K47982-10-08	12	- 10	1/2"	3/4"-16-UNF-2B	64,0	18,0	16,0	22	22
K47982-10-11	12	- 10	1/2"	1"-14-UNS-2B	67,5	21,5	16,4	29	29
K47982-12-08	16	- 12	5/8"	3/4"-16-UNF-2B	52,5	102,0	16,0	22	22
K47982-16-10	22	- 16	7/8"	7/8"-14-UNF-2B	101,5	54,5	16,4	27	27
K47982-16-11	22	- 16	7/8"	1"-14-UNS-2B	54,0	101,0	24,2	29	25

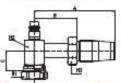
K47985

SHORT VERSION O-RING FEMALE 90° ELBOW WITH HIGH PRESSURE VALVE

INSERT CODE ONLY	HOSE SIZE			THREAD			IMENSION	15	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2
K47985-08-11	10	- 08	13/32"	1"-14-UNS-2B	21,5	62,5	16,4	29	29
K47985-12-11	16	- 12	5/8"	1"-14-UNS-2B	24,0	75,5	24,2	29	25

K47986

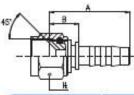
SHORT VERSION O-RING FEMALE 90° ELBOW WITH LOW PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE		THREAD		D	IMENSION	15	
	DN	Dash	Inch	8	A±2.5	B±2.5	C±2	H1	H2
K47986-12-11	16	- 12	5/8"	1"-14-UNS-2B	24,0	75,5	24,2	29	25
K47986-16-11	22	- 16	7/8"	1"-14-UNS-2B	54,0	101,0	24,2	29	25

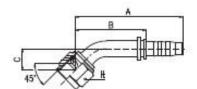


			TTT
	HOSE SIZE	STAR-CRIMP FERRULE (crimped solution	
DN	DASH	INCH	CODE
5	- 04	3/16"	C00300-04
8	- 06	5/16"	C00300-06
10	- 08	13/32"	C00300-08
12	- 10	1/2"	C00300-10
16	- 12	5/8"	C00300-12
22	- 16	7/8"	C00300-16
28	- 20	1.1/8"	C00300-20



C22610 45° SAE STRAIGHT FEMALE

INSERT CODE ONLY		HOSE SIZE	Ê.	THREAD		DIMENSIONS	
	DN	Dash	Inch	5	A±2.5	B±2.5	H
C22610-04-04	5	- 04	3/16"	7/16"-20-UNF-2B	34,2	14,5	15
C22610-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	42,0	16,0	19
C22610-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	44,3	16,3	22
C22610-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	50,3	17,3	27
C22610-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	50,3	18,8	32



C22640

45° SAE FEMALE 45° ELBOW

INSERT CODE ONLY		HOSE SIZE	1	THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
C22640-04-04	5	- 04	3/16"	7/16"-20-UNF-2B	68,2	48,5	12,0	15	
C22640-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	73,7	47,7	15,5	19	
C22640-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	82,3	54,3	16,5	22	
C22640-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	95,3	62,3	19,5	27	
C22640-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	97,0	65,5	20,5	32	

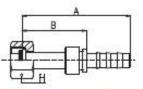


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C22690

45° SAE FEMALE 90° ELBOW

INSERT CODE ONLY		HOSE SIZE	<u>8</u>	THREAD		DIMEN		
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н
C22690-04-04	5	- 04	3/16"	7/16"-20-UNF-2B	52,2	32,5	26,0	15
C22690-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	57,0	31,0	29,5	19
C22690-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	64,5	36,5	31,5	22
C22690-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	74,5	41,5	38,5	27
C22690-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	78,5	47,0	49,5	32

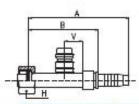


C27910 STRAIGHT O-RING FEMALE

INSERT CODE ONLY		HOSE SIZE		HOSE SIZE THREAD		DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	H			
C27910-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	64,0	38,0	19			
C27910-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	76,0	48,0	22			
C27910-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	86,5	53,5	27			
C27910-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	94,5	63,0	32			
C27910-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	97,5	64,5	32			

C27915

STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE	Ř.	THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	V±1	H	
C27915-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	90.8	62.8	16,0	22	
C27915-08-11	10	- 08	13/32"	1"-14-UNS-2B	78.0	50.0	16,0	29	
C27915-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	94.5	63.0	16,0	32	



C27916

STRAIGHT O-RING FEMALE WITH LOW PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	V±1	H	
C27916-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	97,5	64,5	16,0	32	

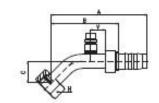
C27940

O-RING FEMALE 45° ELBOW

INSERT CODE ONLY	E HOSE SIZE THREAD	DIMENSIONS						
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н
C27940-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	77,0	51,0	12,5	19
C27940-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	81,0	53,0	13,5	22
C27940-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	107,0	74,0	24,0	27
C27940-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	106,5	75,0	24,0	27
C27940-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	114,5	83,0	27,0	32
C27940-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	118,0	85,0	27,0	32

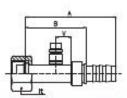
C27946

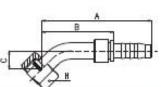
O-RING FEMALE 45° ELBOW WITH LOW PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H1	H2	
C27946-12-10	12	- 12	5/8"	7/8"-14-UNF-2B	106,5	75,0	24,0	16,0	27	







C27990

O-RING FEMALE 90° ELBOW

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INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
	DN	Dash	Inch		A=2.5	B±2.5	C±2	Н	
C27990-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	69,0	43,0	24,0	19	
C27990-06-06036	8	- 06	5/16"	5/8"-18-UNF-2B	74,0	48,0	35,5	19	
C27990-06-06060	8	- 06	5/16"	5/8"-18-UNF-2B	68,8	42,8	60,0	19	
C27990-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	80,0	52,0	30,0	22	
C27990-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	100,0	67,0	45,0	27	
C27990-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	99,5	68,0	45,0	27	
C27990-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2B	104,0	72,5	54,5	32	
C27990-16-10	22	- 16	7/8"	7/8"-14-UNF-2B	104,0	70,0	45,0	27	
C27990-16-12	22	- 16	7/8"	1.1/16"-14-UNS-2B	107,0	74,0	54,5	32	

C27995

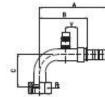
O-RING FEMALE 90° ELBOW WITH HIGH PRESSURE VALVE

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INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS					
	DN	Dash	Inch	3	A±2.5	B±2.5	C±2	V±1	H	
C27995-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	84,5	56,5	36,5	16,0	22	

C27996

O-RING FEMALE 90° ELBOW WITH LOW PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE		THREAD		(1	IMENSION mm	45			
	DN	Dash	Inch		A±2.5	B±2.5	C±2	V±1	H		
			1/2"		-			16,0			



C18010

STRAIGHT O-RING MALE

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	Н	
C18010-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	63,8	38,0	17	
C18010-16-10	22	- 16	7/8"	7/8"-14-UNF-2B	87,5	54,5	22	

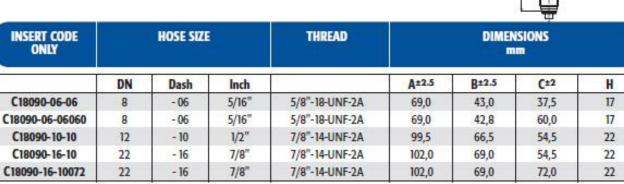
C18040

O-RING MALE 45° ELBOW

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	
C18040-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	83,5	57,5	21,5	17	
C18040-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	11,5	78,5	28,5	22	

C18090

O-RING MALE 90° ELBOW

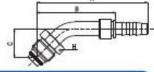


C17910

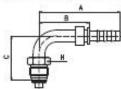
STRAIGHT MALE WITH O-RING SEAT

INSERT CODE ONLY		HOSE SIZE	ĥ	THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	Н	
C17910-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	50,5	24,5	17	
C17910-12-12	16	- 12	5/8"	1.1/16"-14-UNS-2A	71,0	39,5	30	





THEFT-



C21510

STRAIGHT 24° DIN FLARE O-RING OGIVAL FEMALE

Н **INSERT CODE** HOSE SIZE THREAD DIMENSIONS ONLY mm DN Dash Inch A±2.5 B±2.5 H 22 7/8" C21510-16-30 - 16 M 30x2 36 61,0 28,0 C21510-20-36 28 -20 1.1/8" M 36x2 74,5 30,5 41

C21540

24° DIN FLARE O-RING OGIVAL FEMALE 45° ELBOW

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	B	
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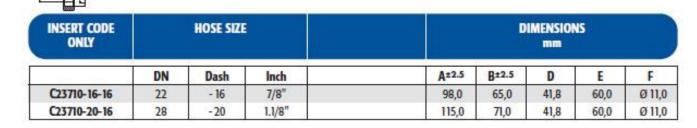
INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
C21540-16-30	22	- 16	7/8"	M 30x2	95,0	62,0	29,0	36	
C21540-20-36	28	- 20	1.1/8"	M 36x2	118,5	74,5	34,5	41	

C21590

24° DIN FLARE O-RING OGIVAL FEMALE 90° ELBOW

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
C21590-16-30	22	- 16	7/8"	M 30x2	81,5	48,5	56,5	36	
C21590-20-36	28	- 20	1.1/8"	M 36x2	105,0	61,0	69,5	41	

C23710 STRAIGHT FLANGE FITTING





C23790

FLANGE FITTING 90° ELBOW

INSERT CODE ONLY		HOSE SIZE		DIMENSIONS							
	DN	Dash	Inch	A±2.5	B±2.5	C±2	V±1	H1	H2		
C23790-16-16	22	- 16	7/8"	81,5	48,5	79,5	41,8	60,0	Ø11,		
C23790-20-16	28	- 20	1.1/8"	105,0	61,0	88,5	41,8	60,0	Ø11,		

C23740

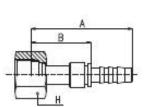
FLANGE FITTING 45° ELBOW

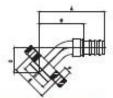
INSERT CODE ONLY		HOSE SIZE				DIMEN	m		
	DN	Dash	Inch	A±2.5	B±2.5	C±2	D	E	F
C23740-16-16	22	- 16	7/8"	107,1	74,6	41,7	41,8	60,0	Ø 11,0
C23740-20-16	28	- 20	1.1/8"	126,4	82,9	44,3	41,8	60,0	Ø 11,0

C22410 STRAIGHT ORS FLAT SEAL FEMALE

INSERT CODE ONLY HOSE SIZE THREAD DIMENSIONS mm B±2.5 A±2.5 DN Dash Inch H C22410-10-08 12 - 10 1/2" 13/16"-16-UN-2B 73,4 41,3 27 C22410-10-10 - 10 1/2" 1"-14-UNS-2B 12 84,0 51,0 30 C22410-16-16 22 - 16 7/8" 1.7/16"-12-UN-2B 108,5 75,5 41 C22410-20-20 28 -20 1.1/8" 1.11/16"-12-UN-2B 119,0 75,0 50

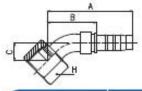






C22440

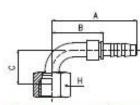
ORS FLAT SEAL FEMALE 45° ELBOW



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
C22440-10-10	12	- 10	1/2"	1"-14-UNS-2B	77,0	44,0	16,0	30	
C22440-16-16	22	- 16	7/8"	1.7/16"-12-UN-2B	106,5	73,5	40,5	41	
C22440-20-20	28	- 20	1.1/8"	1.11/16"-12-UN-2B	115,0	71,0	25,5	50	

C22490

ORS FLAT SEAL FEMALE 90° ELBOW



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
111	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
C22490-16-16	22	- 16	7/8"	1.7/16"-12-UN-2B	108,5	75,5	48,0	41	
C22490-20-20	28	- 20	1.1/8"	1.11/16"-12-UN-2B	109,0	65,0	56,0	50	

C10090

CONNECTION 90° ELBOW

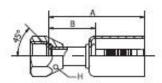
INSERT CODE ONLY	ONLY DN Dash Inch	6		DIMENSIONS	8	
	DN	Dash	Inch	A±2.5	B±2.5	
C10090-06-06			5/16"	74,8	48,8	



			1
	HOSE SIZE		FERRULE EXTERNAL DIAMETER
DN	DASH	INCH	mm
8	- 06	5/16"	22,0
10	- 08	13/32"	22,0
12	- 10	1/2"	25,8
16	- 12	5/8"	28,4

OPC22610

45° SAE STRAIGHT FEMALE



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	Н	
OPC22610-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	53,2	26,0	19	
OPC22610-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	58,7	28,5	22	
OPC22610-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	60,7	30,0	27	
OPC42610-12-12*	16	- 12	5/8"	1.1/16"-14-UNS	94,3	59,5	32	

· Obtained by brazing / Obtenido por soldadura

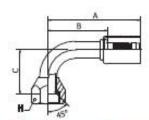


OPC22640

K H

45° SAE FEMALE 45° ELBOW

INSERT CODE ONLY		HOSE SIZE		THREAD		DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н		
OPC22640-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	73,7	46,5	12,5	19		
OPC22640-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	84,7	54,5	15,0	22		
OPC22640-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	114,5	83,8	26,5	27		



OPC22690

45° SAE FEMALE 90° ELBOW

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H	
OPC22690-06-06	8	- 06	5/16"	5/8"-18-UNF-28	69,2	42,0	26,0	19	
OPC22690-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	75,2	45,0	35,0	22	
OPC22690-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	85,7	55,0	41,0	27	



OPC27910

STRAIGHT O-RING FEMALE

INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	H		
OPC27910-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	61,2	34,0	19		
OPC27910-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	66,2	36,0	22		
OPC27910-08-11	10	- 08	13/32"	1"-14-UNS-2B	65,7	35,5	29		
OPC27910-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	67,7	37,0	27		
OPC27910-10-10078	12	- 10	1/2"	7/8"-14-UNF-2B	77,7	47,0	27		
OPC27910-10-11	12	- 10	1/2"	1"-14-UNS-2B	56,2	25,5	29		
OPC27910-10-11076	12	- 10	1/2"	1"-14-UNS-2B	76,2	45,5	29		
OPC27910-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	68,96	39,6	27		
OPC27910-12-10079	16	- 12	5/8"	7/8"-14-UNF-2B	78,9	46,9	27		
OPC47910-12-11*	16	- 12	5/8"	1"-14-UNS-2B	51,2	16,4	29		
OPC47910-12-12*	16	- 12	5/8"	1.1/16"-14-UNS	67,8	33,0	32		

· Obtained by brazing / Obtenido por soldadura

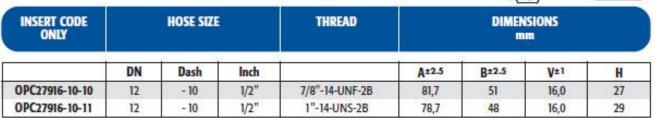
OPC27915

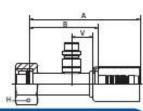
STRAIGHT O-RING FEMALE WITH HIGH PRESSURE VALVE

INSERT CODE ONLY	HOSE SIZE			THREAD		DIMEN		
	DN	Dash	Inch		A±2.5	B±2.5	V±1	Н
OPC27915-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	70,7	43,5	16,0	19
OPC27915-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	76,7	46,5	16,0	22
OPC27915-08-11	10	- 08	13/32"	1"-14-UNS-2B	82,7	52,5	16,0	29

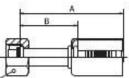
OPC27916

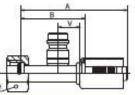
STRAIGHT O-RING FEMALE WITH LOW PRESSURE VALVE





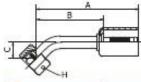






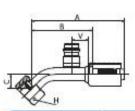
OPC27940

O-RING FEMALE 45° ELBOW



INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS mm				
	DN	Dash	Inch	la contra c	A±2.5	B±2.5	C±2	H	
OPC27940-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	79,7	52,5	12,5	19	
OPC27940-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	87,7	57,5	13,5	22	
OPC27940-08-11	10	- 08	13/32"	1"-14-UNS-2B	84,7	54,5	14,0	29	
OPC27940-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	98,7	68,0	24,0	27	
OPC27940-10-11	12	- 10	1/2"	1"-14-UNS-2B	97,7	67,0	22,0	29	
OPC27940-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	98,7	66,7	24,0	27	

OPC27945

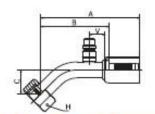


O-RING FEMALE WITH HIGH PRESSURE VALVE 45° ELBOW

INSERT CODE ONLY		HOSE SIZI	1	THREAD		D	IMENSIO mm	85	
	DN	Dash	Inch	-	A±2.5	B±2.5	C±2	V±1	H
OPC27945-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	79,7	52,5	12,5	16,0	19
OPC27945-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	87,7	57,5	13,5	16,0	22
OPC27945-08-11	10	- 08	13/32"	1"-14-UNS-2B	84.7	54.5	14.0	16.0	29

OPC27946

O-RING FEMALE WITH LOW PRESSURE VALVE 45° ELBOW



INSERT CODE ONLY	the state of the s			THREAD	DIMENSIONS					
	DN	Dash	Inch		A±2.5	B±2.5	C±2	V±1	H	
OPC27946-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	98,7	68,0	24,0	16,0	27	
OPC27946-10-11	12	- 10	1/2"	1"-14-UNS-2B	97,7	67,0	22,0	16,0	29	



OPC27990

O-RING FEMALE 90° ELBOW

INSERT CODE ONLY		HOSE SIZE	1	THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H
OPC27990-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	72,2	45	24,0	19
OPC27990-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	78,7	48,5	30,0	22
OPC27990-08-11	10	- 08	13/32"	1"-14-UNS-2B	77,7	47,5	33,0	29
OPC27990-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	91,7	61,0	46,5	27
OPC27990-10-11	12	- 10	1/2"	1"-14-UNS-2B	92,7	62,0	39,0	29
OPC27990-12-10	16	- 12	5/8"	7/8"-14-UNF-2B	88,7	56,7	45,0	27
OPC27990-12-11	16	- 12	5/8"	1"-14-UNS-2B	92,2	60,2	38,0	29
OPC47990-12-12*	16	- 12	5/8"	1.1/16"-14-UNS	102,8	68,0	54,5	32

Obtained by brazing / Obtenido por soldadura

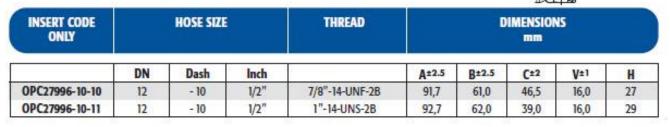
OPC27995

O-RING FEMALE WITH HIGH PRESSURE VALVE 90° ELBOW

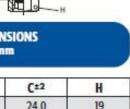
INSERT CODE ONLY	HOSE SIZE			THREAD	DIMENSIONS				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	V±1	Н
OPC27995-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	72,2	45,0	24,0	16,0	19
OPC27995-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	78,8	48,5	30,0	16,0	22
OPC27995-08-11	10	- 08	13/32"	1"-14-UNS-2B	79,2	49,0	32,0	16,0	29

OPC27996

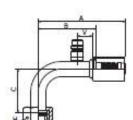
O-RING FEMALE WITH LOW PRESSURE VALVE 90° ELBOW

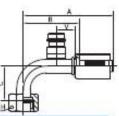






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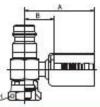


OPC27980

SHORT VERSION O-RING FEMALE

INSERT CODE ONLY	HOSE SIZE		SE SIZE THI		THREAD DIMENSIONS mm			
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H
OPC27980-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	47,0	17,5	12,9	19
OPC27980-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	52,0	19,0	16,0	22
OPC27980-08-11	10	- 08	13/32"	1"-14-UNS-2B	55,5	22,5	16,4	29
OPC27980-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	55,0	21,5	16,4	27
OPC27980-10-11	12	- 10	1/2"	1"-14-UNS-2B	56,0	22,5	16,4	29
OPC47980-12-11*	16	- 12	5/8"	1"-14-UNS-2B	56,3	21,5	24,2	29

Obtained by brazing / Obtenido por soldadura



OPC27985

SHORT VERSION O-RING FEMALE WITH HIGH PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE			THREAD		DIMEN	sions m	
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	
OPC27985-06-06	8	- 06	5/16"	5/8"-18-UNF-2B	47,0	17,5	12,9	19	
OPC27985-08-08	10	- 08	13/32"	3/4"-16-UNF-2B	52,0	19,0	16,0	22	
OPC27985-08-11	10	- 08	13/32"	1"-14-UNS-2B	55,5	22,5	16,4	29	

OPC27986

SHORT VERSION O-RING FEMALE WITH LOW PRESSURE VALVE

INSERT CODE ONLY		HOSE SIZE		THREAD	DIMENSIONS			
	DN	Dash	Inch		A±2.5	B±2.5	C±2	H
OPC27986-10-10	12	- 10	1/2"	7/8"-14-UNF-2B	55,0	21,5	16,4	27
OPC27986-10-11	12	- 10	1/2"	1"-14-UNS-2B	56,0	22,5	16,4	29
OPC47986-12-11*	16	- 12	5/8"	1"-14-UNS-2B	56,3	21,5	24,2	29

· Obtained by brazing / Obtenido por soldadura



OPC18010

STRAIGHT O-RING MALE

INSERT CODE ONLY	HOSE SIZE		HOSE SIZE THREAD	THREAD	DIMENSIONS			
	DN	Dash	Inch	2	A±2.5	B±2.5	H	
OPC18010-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	62,7	35,5	17	
OPC18010-08-08	10	- 08	13/32"	3/4"-18-UNS-2A	82,2	52,0	22	
OPC18010-10-10	12	- 10	1/2"	7/8"-18-UNS-2A	74,2	43,5	22	
OPC18010-12-10	16	- 12	5/8"	7/8"-18-UNS-2A	69,7	37,7	22	

OPC18040

O-RING MALE 45° ELBOW

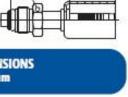
INSERT CODE ONLY	Contraction of the second s		HOSE SIZE		THREAD DIMENSIONS mm				
	DN	Dash	Inch		A±2.5	B±2.5	C±2	Н	
OPC18040-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	82,7	55,5	21,5	17	
OPC18040-08-08	10	- 08	13/32"	3/4"-18-UNS-2A	96,7	66,5	25,0	22	
OPC18040-10-10	12	- 10	1/2"	7/8"-18-UNS-2A	102,2	71,5	30,0	22	
OPC18040-12-10	16	- 12	5/8"	7/8"-18-UNS-2A	132,2	100,2	27,0	22	

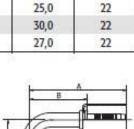
OPC18090

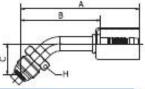
O-RING MALE 90° ELBOW

INSERT CODE ONLY		HOSE SIZE	1	THREAD	DIMENSIONS			
	DN	Dash	Inch	2 5	A±2.5	B±2.5	C±2	H
OPC18090-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	67,7	40,5	36,5	17
OPC18090-08-08	10	- 08	13/32"	3/4"-18-UNS-2A	78,7	48,5	48,0	22
OPC18090-10-10	12	- 10	1/2"	7/8"-18-UNS-2A	86,7	56,0	54,5	22









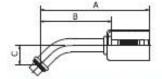
OPC27610

STRAIGHT FITTING FOR EXPANSION VALVE

INSERT CODE ONLY		HOSE SIZE			DIMENSIONS	
-	DN	Dash	Inch	A±2.5	B±2.5	
OPC27610-06-06	8	- 06	5/16"	55,2	28,0	
OPC27610-10-12	12	- 10	1/2"	56,7	26,0	

OPC27640

FITTING FOR EXPANSION VALVE 45° ELBOW



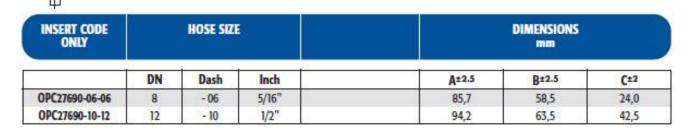
111

F

INSERT CODE ONLY		HOSE SIZE				
	DN	Dash	Inch	A±2.5	B±2.5	C±2
OPC27640-06-06	8	- 06	5/16"	78,7	51,5	14,0
OPC27640-10-12	12	- 10	1/2"	98,7	68,0	18,5
OPC27640-12-12	16	- 12	5/8"	96,2	64,2	18,5

OPC27690

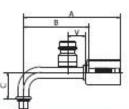
FITTING FOR EXPANSION VALVE 90° ELBOW





OPC27695

FITTING FOR EXPANSION VALVE WITH HIGH PRESSURE VALVE 90° ELBOW



INSERT CODE ONLY	HOSE SIZE			DIMEN			
	DN	Dash	Inch	A±2.5	B±2.5	C±2	V±1

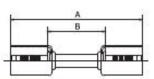


CONNECTION FITTING 90° ELBOW

INSERT CODE ONLY		HOSE SIZE		DIMENSIONS		
	DN	Dash	Inch	A±2.5	B±2.5	
OPC10090-06-06	8	- 06	5/16"	94,3	67,1	
OPC10090-08-08	10	- 08	13/32"	93,7	63,5	
OPC10090-10-10	12	- 10	1/2"	98,1	67,4	

OPC10010

CONNECTION FITTING

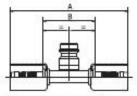


INSERT CODE ONLY		HOSE SIZE			DIMENSIONS	
	DN	Dash	Inch	A±2.5	B±2.5	
OPC10010-06-06	8	- 06	5/16"	97,4	43,0	
OPC10010-08-08	10	- 08	13/32"	99,4	39,0	
OPC10010-10-10	12	- 10	1/2"	101,4	40,0	
OPC10010-12-12	16	- 12	5/8"	105,4	41,4	



OPC10015

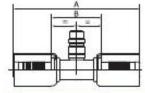
CONNECTION FITTING WITH HIGH PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE			DIMENSIONS	
	DN	Dash	Inch	A±2.5	B±2.5	
DPC10015-06-06	8	- 06	5/16"	97,4	43,0	
DPC10015-08-08	10	- 08	13/32"	94,0	33,6	

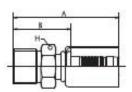
OPC10016

CONNECTION FITTING WITH LOW PRESSURE VALVE



INSERT CODE ONLY		HOSE SIZE			DIMENSIONS mm
	DN	Dash	Inch	A±2.5	B±2.5
OPC10016-10-10	12	- 10	1/2"	96,0	34,6
OPC10016-12-12	16	- 12	5/8"	117,9	53,9





INSERT CODE ONLY		HOSE SIZE		THREAD		DIMENSIONS	
	DN	Dash	Inch		A±2.5	B±2.5	Н
VEW OPC17910-06-06	8	- 06	5/16"	5/8"-18-UNF-2A	56,0	28,5	17
OPC17910-10-10	12	- 10	1/2"	7/8"-14-UNF-2A	68,3	33,8	24



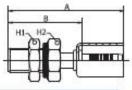
OPC17910...H

STRAIGHT MALE WITH O-RING SEAT WITH COUNTER NUT

INSERT CODE ONLY		HOSE SIZE	r -	THREAD		DIMEN	and the second se	
	DN	Dash	Inch		A±2.5	B±2.5	H1	H2
OPC17910-08-08H25	10	- 08	13/32"	3/4"-16-UNF-2A	106,2	76,0	22	25

OPC17910...H...Q

STRAIGHT MALE WITH O-RING SEAT WITH COUNTER NUT AND Q-RING



H2 /H1

INSERT CODE ONLY		HOSE SIZE		THREAD		DIMEN	1000	
	DN	Dash	Inch	5	A±2.5	B±2.5	H1	H2
OPC17910-06-06H24Q	8	- 06	5/16"	5/8"-18-UNF-2A	75,2	48,0	24	24
OPC17910-10-10H29Q	12	- 10	1/2"	7/8"-14-UNF-2A	82,7	52,0	29	29

OPC17990...H...Q

MALE WITH O-RING SEAT WITH COUNTER NUT AND Q-RING 90° ELBOW

INSERT CODE ONLY		HOSE SIZE	l	THREAD		D	IMENSION	15	
1	DN	Dash	Inch		A±2.5	B±2.5	C±21	H1	H2
OPC17990-06-06H24Q	8	- 06	5/16"	5/8"-18-UNF-2A	68,4	41,2	55,0	24	24
OPC17990-10-10H30Q	12	- 10	1/2"	7/8"-14-UNF-2A	85,4	54,7	64,0	29	30



REFRIGERATION PRODUCT RANGE ACCESSORIES

CODE CODIGO	VALVE TYPE TIPO DE VÁLVULA	CHARACTERISTICS CARACTERÍSTICAS	VALVE CORE MECANISMO	CAP TAPA
9000984		CHARGE VALVE - 1/4" SAE FOR R134A VÁLVULA DE CARGA - 1/4" SAE PARA R134A		
9000981	413 413	LOW PRESSURE CHARGE VALVE FOR R134A VÁLVULA DE CARGA DE BAJA PRESION PARA R134A		
9000980		HIGH PRESSURE CHARGE VALVE FOR R134A VÁLVULA DE CARGA DE ALTA PRESION PARA R134A	Ti III	
9000983		LOW PRESSURE VALVE ADAPTER ADAPTADOR PARA VÁLVULA DE BAJA PRESION		
9000982		HIGH PRESSURE VALVE ADAPTER ADAPTADOR PARA VÁLVULA DE ALTA PRESION	T	
1003326		90° LOW PRESSURE VALVE ADAPTER 90° ADAPTADOR PARA VÁLVULA DE BAJA PRESION		
1004323		90° HIGH PRESSURE VALVE ADAPTER 90° ADAPTADOR PARA VÁLVULA DE ALTA PRESION		

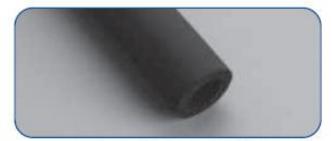
CODE CODIGO	PLATE PLATINA	CHARACTERISTICS CARACTERÍSTICAS			
9001181		PLATE TO FIX THE TUBE TO THE EXPANSION VALVE PLATINA PARA FLIAR EL TUBO A LA VÁLVULA DE EXPANSION			
9001182		PLATE TO FIX THE TUBE TO THE EXPANSION VALVE PLATINA PARA FIJAR EL TUBO A LA VÁLVULA DE EXPANSION			



REFRIGERATION PRODUCT RANGE ACCESSORIES

ELASTOMERIC INSULATING SLEEVE

CODE	DESCRIPTION	I.D.	WALL THICKNESS
9001127	ARM-D12x6	12,0	6,0
9001128	ARM-D14x6	14,0	6,0
9001133	ARM-D18x9	18,0	9,0
9001134	ARM-D22x9	22,0	9,0



FURTHER DIMENSIONS AVAILABLE ON REQUEST

COMPOSITION: Elastomeric foam compounded by synthetic rubber MAIN APPLICATION: Protection to avoid condensation for refrigeration and air conditioning system TECHNICAL DATA: Temperaure resistance -40°C - +105°C

CORRUGATED TUBE

CODE	DESCRIPTION	I.D.	WALL THICKNESS
2009051	DN17 SLITTED	16,8	1,8
2007947	DN19 SLITTED	19,4	2,0
2008438	DN22 SLITTED	21,8	1,7
2009064	DN23 SLITTED	23,7	2,0

FURTHER DIMENSIONS AVAILABLE ON REQUEST

COMPOSITION: Modified polypropilen MAIN APPLICATION: Abrasion resistance

SLEEVE FOR PROTECTION FROM RADIANT HEAT

CODE	DESCRIPTION WEST-SR-D20	I.D.	WALL THICKNESS	
2001265		20,0		
2001266	WEST-SR-D24	24,5	1,4	
9001267	WEST-SR-D26	26,5	1,5	
9007095	WEST-SR-D28	28,0	1,5	
9007156	WEST-SR-D30	30,0	1,6	
9007096	WEST-SR-D32	32,0	1,6	
9007154	WEST-SR-D34	34,0	1,6	



FURTHER DIMENSIONS AVAILABLE ON REQUEST

COMPOSITION: Inner layer: glassfabbric material laminated on aluminium - Outer layer: aluminium alloy MAIN APPLICATION: Protection against heat radiation sources for A/C hose assemblies TECHNICAL DATA: Temperaure resistance -40°C - +250°C

PLASTIC PROTECTIVE COIL SPRING

CODE	DESCRIPTION	I.D.	WALL THICKNESS
JP12B03016l099	HT PROTECTION SPRING DN16	16,0	1,8
JP12B03019l099	HT PROTECTION SPRING DN19	19,0	2,3

FURTHER DIMENSIONS AVAILABLE ON REQUEST

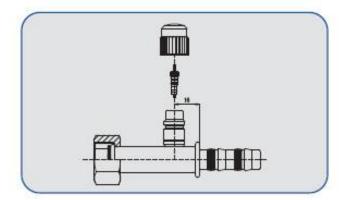
COMPOSITION: Black polyammide, rounded profile MAIN APPLICATION: Hose abrasion protection TECHNICAL DATA: Service Temperaure range -40°C - +120°C



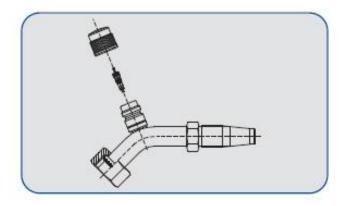




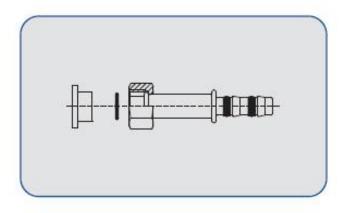
REFRIGERATION PRODUCT RANGE SPECIAL FEATURES



All fittings may be supplied with a charge valve equipped with cap and core positioned at 16 mm.



Different distances according to customer's request are feasible.



All fittings are equipped with protection cap and (where needed) a green HNBR O-ring.

