



 **Jepef**
Refrigeration

Products	Description	Page
	Packaging / Assembly Area / Labeling and Traceability	3
	Refrigeration solutions	4
	Tubes and thermoplastic fittings for refrigeration systems	5
	FR5T Capillary Tubes	6
	FR5T Tubes	14
	FR5A Tubes	18
	FR5C Tubes	23
	TLP Charging tube	24

Packaging - Capillary Hoses and Fittings Kits

Cardboard boxes for hoses (10m and 50m) and for fittings (25pcs and 50pcs) preserve the product's integrity and allow proper storage, on the resale shelf and after package's opening. An ideal solution for the retail market.



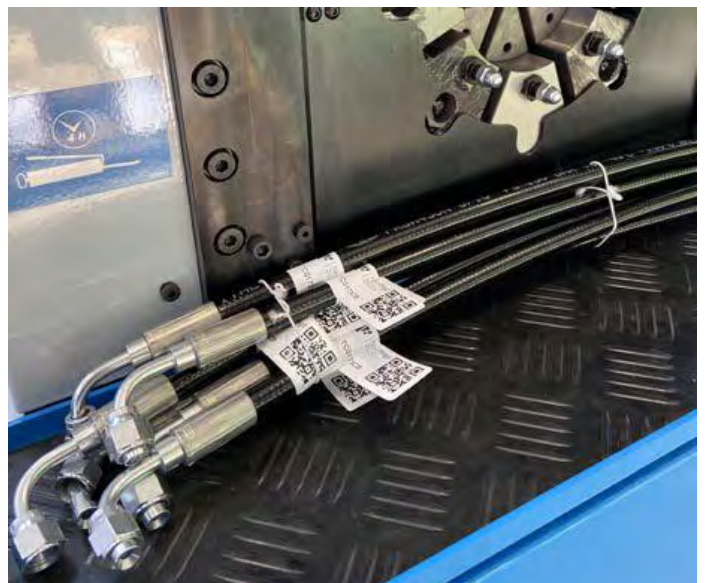
Assembly Area

The dedicated assembly area ensures precision and fast execution to satisfy even the most demanding system manufacturers.



Labeling and Traceability

Total traceability is assured by means of a resistant QR code label and automated code scanning system. Customization of the labels is available on request.



Solutions for Refrigeration Systems

hoses are specifically designed for industrial and commercial applications to replace the traditional copper tubes.

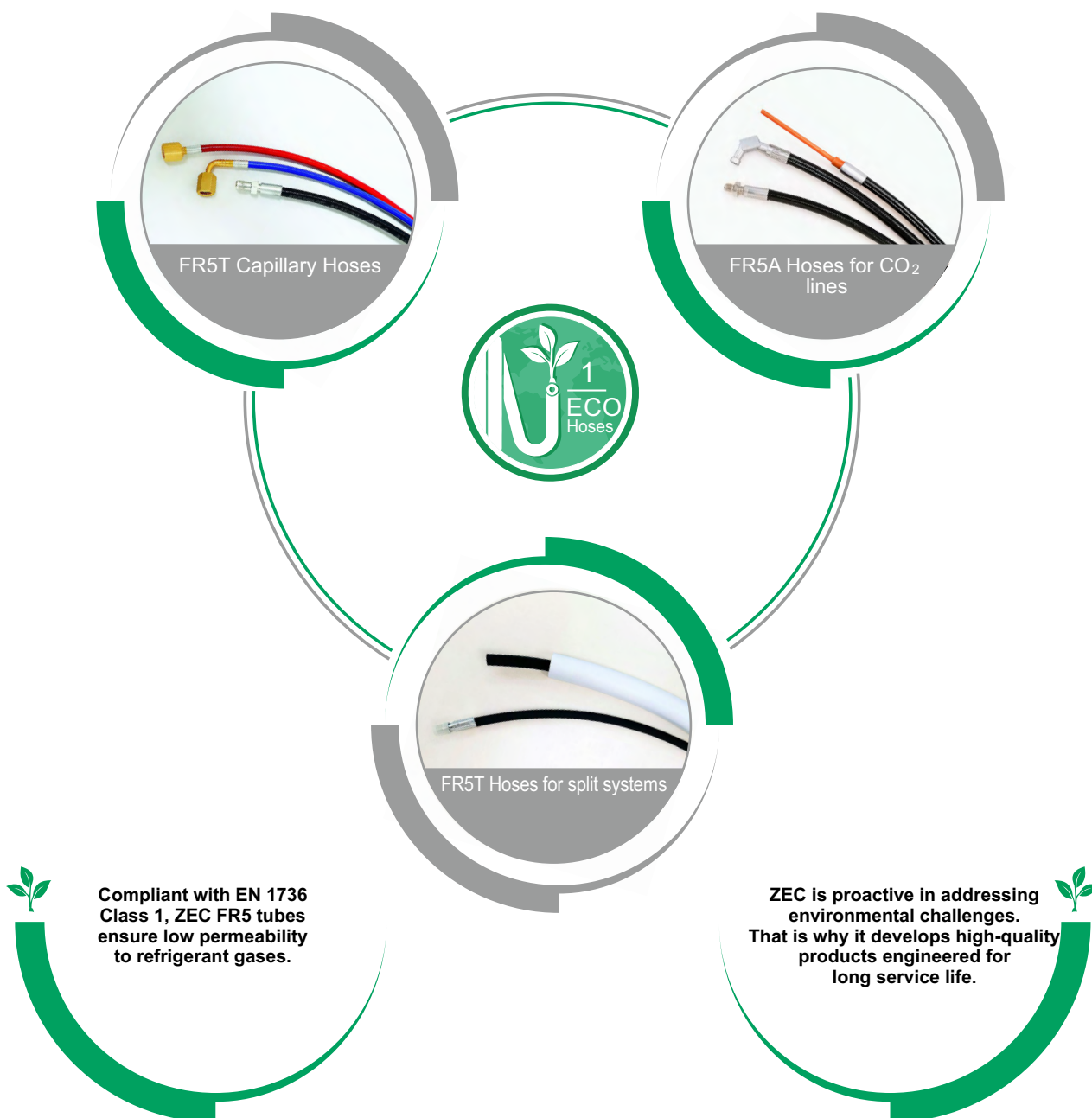
Features and Benefits

- Flexible solution, easy to install
- Low permeability to refrigerant gases (including CO₂)
- Eliminates leaks caused by system vibrations and movement
- High chemical compatibility and weather resistance
- Reduced welding/brazing operations

Applications

- Refrigerant gas pressure control systems (pressure switches) using capillary tubes
- Refrigerant gas management in commercial refrigeration systems (display cases, refrigerators, wine coolers, beverage dispensers, etc.)
- Refrigeration systems (chillers) applied to machine tools and industrial equipment
- Industrial air conditioning systems
- Refrigeration systems for refrigerated transport
- Refrigerant gas charging systems for automotive air conditioning applications





FR5T Capillary Hoses



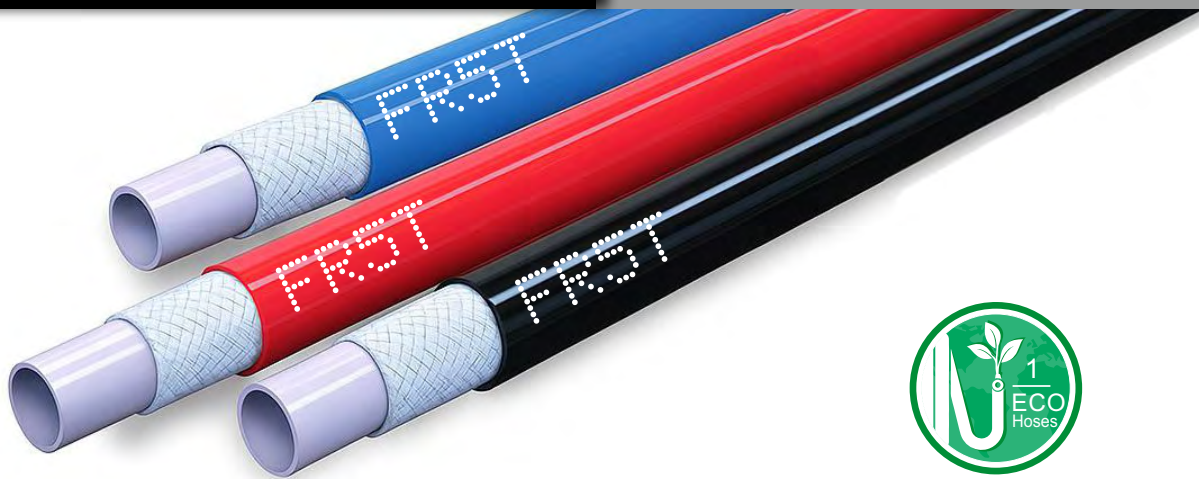
Capillary tubes are the most efficient solution for connecting pressure gauges, pressure switches, and oil return lines.

Flexible and highly resistant to high pressures, capillary tubes significantly reduce vibrations throughout the entire system.

Capillary tubes are available in black, red, and blue, allowing easy identification of low- and high-pressure circuits.

Our capillary tubes can be easily assembled using the PZFR5DN2 crimping pliers, the PZFR5DN4 portable crimping tool, or the PZBCFR5 electric crimping machine.





Type	DN	Ø I.D mm	Ø O.D mm	Rated Pressure (bar / PSI)	Min. Bend Radius mm	Weight g/m	
FR5T170*	2	2,1	6,0	130 / 1885	15	27	BP112FR5AA
FR5T270*	4	4,0	8,2	130 / 1885	30	45	BP532FR5

N.B. In the code there is an *, this must be replaced with the color code of the tube: BLACK (N), BLUE (B) or RED (R)

Example: Tube 1/12" black – code FR5T170N

Type	Code	Color	Description
DN2 - Hoses	FR5T170N	●	FREE COIL
	FR5T1NR010	●	10M CARTON BOX
	FR5T1NR050	●	50M CARTON BOX
	FR5T170R	●	FREE COIL
	FR5T1RR010	●	10M CARTON BOX
	FR5T1RR050	●	50M CARTON BOX
	FR5T170B	●	FREE COIL
	FR5T1BR010	●	10M CARTON BOX
	FR5T1BR050	●	50M CARTON BOX
DN4 - Hoses	FR5T270N	●	FREE COIL
	FR5T2NR010	●	10M CARTON BOX
	FR5T2NR050	●	50M CARTON BOX
	FR5T270R	●	FREE COIL
	FR5T2RR010	●	10M CARTON BOX
	FR5T2RR050	●	50M CARTON BOX
	FR5T270B	●	FREE COIL
	FR5T2BR010	●	10M CARTON BOX
	FR5T2BR050	●	50M CARTON BOX

Technical-constructive features

Smooth bore coextruded textile braid capillary hoses DN2 and DN4 with polyurethane cover.

Working temperatures

From -40°C to +120°C from -40°F to +248°F / Max. peak temperature 130°C / 266°F

Working pressure

Safety ratio exceeding EN 1736 and ISO 13971 requirements

Vacuum rating

5 mbar

Specifications

Compliant with EN 1736, ISO 13971 class 1 and UL 1963.

1/4" SAE Straight Female Fitting



Code	Qty. (pcs)
------	------------

FR5T1K001AA	1
FR5T1K025AA	25
FR5T1K050AA	50

Code	Description
------	-------------

YDLSA716OTM	NUT 7/16" SAE Brass
YFDLSAOC716112OT	S. FEM. 1/4" SAE Brass
BP112FR5AA	DN2 Aluminium ferrule

1/4" SAE Straight Female Fitting With Depressor



Code	Qty. (pcs)
------	------------

FR5T1K001GA	1
FR5T1K025GA	25
FR5T1K050GA	50

Code	Description
------	-------------

YDLSA716OTM	NUT 7/16" SAE Brass
YFDLSADOC716112OT	S. FEM. 1/4" SAE with dep. brass
BP112FR5AA	DN2 Aluminium ferrule

1/4" SAE 90° Female Fitting



Code	Qty. (pcs)
------	------------

FR5T1K001BA	1
FR5T1K025BA	25
FR5T1K050BA	50

Code	Description
------	-------------

RPF914SAE112FR5	90° Fem. 1/4" SAE brass
BP112FR5AA	DN2 Aluminium ferrule

"T" Fitting



Code	Qty. (pcs)
------	------------

FR5T1K001T	1
FR5T1K025T	25
FR5T1K050T	50

Code	Description
------	-------------

RFR51120012	"T" Zinc plated brass
3X BP112FR5AA	DN2 Aluminium ferrule

"T" Fitting With Central Nut



Code	Qty. (pcs)
------	------------

FR5T1K001TC	1
FR5T1K025TC	25
FR5T1K050TC	50

Code	Description
------	-------------

RFR51120117	1/4" SAE "T" fitting, central nut zinc plated brass
2X BP112FR5AA	DN2 Aluminium ferrule

"T" Fitting With Side Nut



Code	Qty. (pcs)
------	------------

FR5T1K001TL	1
FR5T1K025TL	25
FR5T1K050TL	50

Code	Description
------	-------------

RFR51120118	1/4" SAE "T" fitting, side nut zinc plated brass
2X BP112FR5AA	DN2 Aluminium ferrule

1/4" SAE Straight Male Fitting



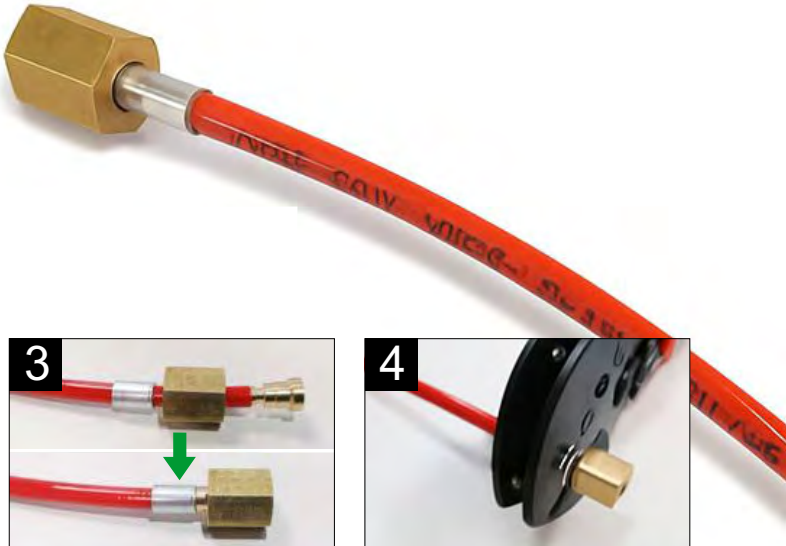
Code	Qty. (pcs)
FR5T1K001CA	1
FR5T1K025CA	25
FR5T1K050CA	50
Code	Description
RPMD14SAE112FR5	ST. male 1/4" SAE brass
BP112FR5AA	DN2 Aluminium ferrule

Copper Pipe DN 6mm



Code	Description	Qty. (pcs)
FR5T1K025GA	Copper pipe DN 6mm	1
FR5T1K025DG	Copper pipe DN 6mm	25

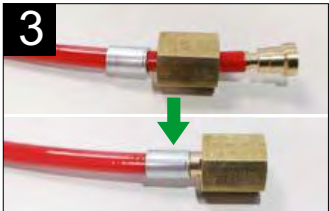
Assembly Instructions FR5T DN



1 Cut the hose at the required length using the proper hose cutter. The cut must be perpendicular to the hose's longitudinal axis



2 Insert the ferrule with the incision on the side of the cut hose. Move the ferrule along the hose. Insert the nut with the thread on the side of the cut.



3 Push the fitting insert into the hose all way down and slide the nut. Slide also the ferrule until it stops against the insert. There must be no space between the ferrule and the insert.



4 Crimp the ferrule with the manual crimping pliers. The pliers' die must cover the whole ferrule length. Keep the pliers completely tight for 10 seconds at least.



5 Turn the ferrule of 90° and crimp again.



6 Make visual inspections of the fittings after the crimping. The ferrule must be uniformly crimped. In case of an incorrect crimping you have to cut the hose and retry with a new ferrule.



7 Check the crimping diameter by averaging two measurements at 90° and verify that it corresponds with the data shown on the ZEC Crimping Table.



8 f after several uses the measured crimping diameter tends increases, adjust the gear of the plier.

1/4" SAE Straight Female Fitting



Code	Qty. (pcs)
------	------------

FR5T2K001AA	1
FR5T2K025AA	25
FR5T2K050AA	50

Code	Description
------	-------------

YDLSA716OTM	Nut 7/16" SAE brass
YFDLSAFR716532	S. Fem. 1/4" SAE carbon steel
BP532FR5	DN4 Carbon steel ferrule

1/4" SAE Straight Female Fitting With Depressor



Code	Qty. (pcs)
------	------------

FR5T2K001GA	1
FR5T2K025GA	25
FR5T2K050GA	50

Code	Description
------	-------------

YDLSA716OTM	Nut 7/16" SAE brass
YFDLSADOC716532	S. Fem. 1/4" SAE with dep. carbon steel
BP532FR5	DN4 Carbon steel ferrule

3/8" SAE Straight Female Fitting



Code	Qty. (pcs)
------	------------

FR5T2K001AC	1
FR5T2K025AC	25
FR5T2K050AC	50

Code	Description
------	-------------

YDLSA58M	Nut 3/8" SAE steel
YFDLSAFR58532	S. Fem. 3/8" SAE carbon steel
BP532FR5	DN4 Carbon steel ferrule

1/4" SAE 90° Female Fitting



Code	Qty. (pcs)
------	------------

FR5T2K001BA	1
FR5T2K025BA	25
FR5T2K050BA	50

Code	Description
------	-------------

RPF914SAE532FR5	90° Fem. 1/4" SAE carbon steel
RPF914SAE532FR5	nut zinc plated brass
BP532FR5	DN4 Carbon steel ferrule

3/8" SAE 90° Female Fitting



Code	Qty. (pcs)
------	------------

FR5T2K001BC	1
FR5T2K025BC	25
FR5T2K050BC	50

Code	Description
------	-------------

YDLSA58M	Nut 3/8" SAE steel
YF90LSAFR58532	90° Fem. 3/8" SAE carbon steel
BP532FR5	DN4 Carbon steel ferrule

"T" Fitting



Code	Qty. (pcs)
------	------------

FR5T2K001T	1
FR5T2K025T	25
FR5T2K050T	50

Code	Description
------	-------------

RF54112	"T" Fitting carbon steel
3X BP532FR5	DN4 Carbon steel ferrule

"T" Fitting With Central Nut



Code	Qty. (pcs)
FR5T2K001TC	1
FR5T2K025TC	25
FR5T2K050TC	50

Code	Description
RFR54117	"T" Fitting, central nut 1/4"
	SAE carbon steel
2X BP532FR5	DN4 Carbon steel ferrule

1/4" SAE Straight Male Fitting



Code	Qty. (pcs)
FR5T2K001CA	1
FR5T2K025CA	25
FR5T2K050CA	50

Code	Description
RPMD14SAE532FR5	S. Male 1/4" SAE carbon steel
BP532FR5	DN4 Carbon steel ferrule

"T" Fitting With Side Nut



Code	Qty. (pcs)
FR5T2K001TL	1
FR5T2K025TL	25
FR5T2K050TL	50

Code	Description
RFR54118	"T" Fitting, side nut 1/4"
	SAE carbon steel
2X BP532FR5	DN4 Carbon steel ferrule

Copper Pipe DN 6mm



Code	Description	Qty. (pcs)
FR5T2K001DG	Copper pipe DN 6mm	1
FR5T2K025DG	Copper pipe DN 6mm	25

Assembly Instructions FR5T DN

1



Cut the hose at the required length using the proper hose cutter. The cut must be perpendicular to the hose's longitudinal axis.

2



Insert the ferrule with the incision on the side of the cut hose.

3



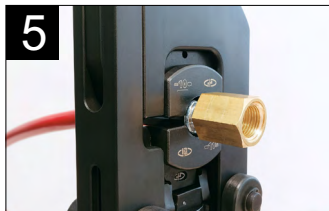
Insert the fittings with his nut until the stop.

4



Slide the ferrule until it stops. There must be no more space between the ferrule and the insert.

5



Crimp the ferrule using a proper crimping tool and die set. Close the die until they automatically open. The pliers' die must cover the whole ferrule length.

6



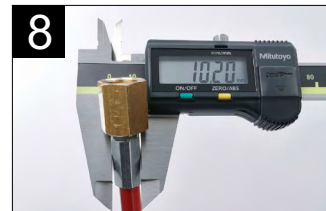
Turn the ferrule of 90° and crimp again.

7



Make visual inspections of the fittings after the crimping. The ferrule must be uniformly crimped. In case of an incorrect crimping you have to cut the hose and retry with a new ferrule.

8



Check the crimping diameter by averaging two measurements at 90° and verify that it corresponds with the data shown on the ZEC Crimping Table.

Protective Plastic Plug



Code	Qty. (pcs)	SAE
TAPPOPE14SAEKC	50	1/4"
TAPPOPE38SAEKC	50	3/8"

Copper Washer - Conic Funnel



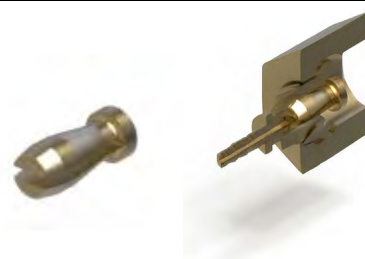
Code	Qty. (pcs)	SAE
GCICU14FR5KC	50	1/4"
GCICU38FR5KC	50	3/8"
GCICU12FR5KC	50	1/2"
GCICU58FR5KC	50	5/8"
GCICU34FR5KC	50	3/4"

Copper Washer - Conic



Code	Qty. (pcs)	SAE
GCCU14FR5KC	50	1/4"
GCCU38FR5KC	50	3/8"
GCCU12FR5KC	50	1/2"
GCCU58FR5KC	50	5/8"
GCCU34FR5KC	50	3/4"

Brass Depressor



Code	Qty. (pcs)	SAE
VFR5DN2TKC	50	1/4"

Crimping Tool For DN2 Ferrule



Code
PZFR5DN2

Hose Cutter



Code	Descrição
PZG1	Cutter up to a maximum external diameter of 28.0 mm.
PZP1	Cutter up to a maximum external diameter of 12 mm.
LMG1	Replacement blades for tube cutter PZG1
LMP1	Replacement blades for tube cutter PZG1

Fluid Power Crimping Tool For DN2-4-6 Ferrules



DN4 Electric assembly procedure

Code

PZBCFR5

Crimping Tool For DN-2-4-6 Ferrules



DN4 Manual assembly procedure

Code

PZFR5DN4



Die set	Hose Code	Inch	Fittings	Description	Fittings	Description
GCICU34FR5KC	FR5T170N FR5T170B FR5T170R DN2	1/2"	FR5T1K001AA	S. Fem. 1/4" SAE	FR5T1K001T	"T" Fitting
			FR5T1K001GA	S. Fem. 1/4" SAE with dep.	FR5T1K001TC	"T" Fitting with central nut
			FR5T1K001BA	90° Fem. 1/4" SAE	FR5T1K001TL	"T" Fitting with lateral nut
			FR5T1K001CA	S. Male 1/4" SAE		
MPZBCFR5DN4	FR5T270N FR5T270B FR5T270R DN4	5/32"	FR5T2K001AA	S. Fem. 1/4" SAE	FR5T2K001BA	90° Female 1/4" SAE
			FR5T2K001GA	S. Fem. 1/4" SAE with dep.	FR5T2K001T	"T" Fitting
			FR5T2K001AC	S. Fem. 3/8" SAE	FR5T2K001TC	"T" Fitting with central nut
			FR5T2K001BC	90° Fem. 3/8" SAE	FR5T2K001TL	"T" Fitting with lateral nut
			FR5T2K001CA	S. Male 1/4" SAE		
MPZBCFR5DN6	FR5T490N DN6	5/16"	FR5T4KA01AA	S. Fem. 1/4" SAE AL. Ferrule	FR5T4KA01AC	S. Fem. 3/8" SAE AL. Ferrule
			FR5T4KA01BA	90° Fem. 1/4" SAE AL. Ferrule	FR5T4KA01BC	90° Fem. 3/8" SAE AL. Ferrule

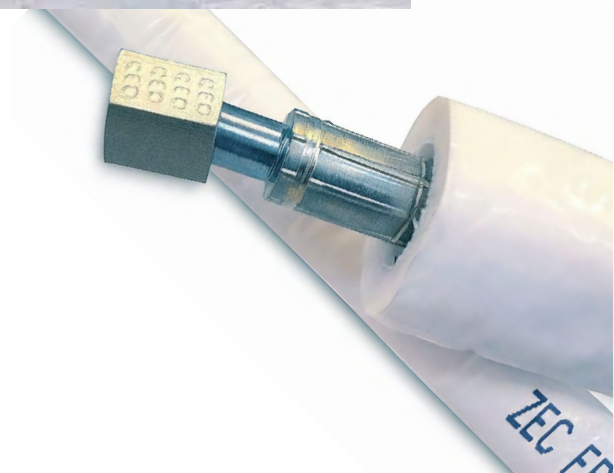
FR5T Hoses



FR5T Hoses

Hoses for split systems have been developed specifically for discharge, suction and to connect the evaporator to the condensing units in domestic and industrial air conditioning, reducing significantly the installation time.

Available also in pre-insulated version.





Technical-constructive features

Smooth bore textile braid coextruded hoses.

Designed solution for refrigeration systems and for domestic and industrial HVAC applications.

Working temperatures

From -40°C to +120°C from -40°F to +248°F / Max. peak temperature 130°C / 266°F

With insulation maximum temperature limited to +110°C (230°F)

Working pressure

Safety ratio exceeding

EN 1736 and ISO 13971 requirements

Vacuum rating

5 mbar

Specifications

Compliant with EN 1736, ISO 13971 class 1 and UL 1963.

Type	DN	Ø I.D mm	Ø O.D mm	Rated Pressure (bar / PSI)	Min. Bend Radius mm	Weight g/m	
FR5T390N	5	4,8	9,3	120 / 1740	50	55	BP316R7
FR5T490N	6	6,4	11,7	120 / 1740	75	80	BP14R7
FR5T590N	8	8,1	14,1	120 / 1740	90	105	BP516R1TV
FR5T690N	11	11,1	17,7	120 / 1740	100	150	BP38R1TV
FR5T790N	14	13,9	20,6	120 / 1740	125	190	BP12R1TV
FR5T890N	17	17,0	24,9	120 / 1740	160	270	BP58R9R

Type	DN	Ø I.D mm	Ø O.D mm	Rated Pressure (bar / PSI)	Min. Bend Radius mm	Weight g/m	
FR5T390NI	5	4,8	27,3	120 / 1740	50	85	BP316R7
FR5T590NI	8	8,1	32,1	120 / 1740	90	130	BP316R7
FR5T690NI	11	11,1	35,4	120 / 1740	100	200	BP38R1TV
FR5T790NI	14	13,9	38,6	120 / 1740	125	250	BP12R1TV
FR5T890NI	17	17,0	43,0	120 / 1740	165	335	BP58R9R

Straight Female Fitting



Hose	Code	Description	Qty. (pcs)
FR5T390N 1/4"	FR5T3K001AA	S. Fem. 1/4" SAE carbon steel	1
	FR5T3K025AA	S. Fem. 1/4" SAE carbon steel	25
FR5T490N 5/16"	FR5T4K001AA	S. Fem. 1/4" SAE carbon steel	1
	FR5T4K025AA	S. Fem. 1/4" SAE carbon steel	25
	FR5T4K001AC	S. Fem. 3/8" SAE carbon steel	1
	FR5T4K025AC	S. Fem. 3/8" SAE carbon steel	25
FR5T590N 3/8"	FR5T5K001AC	S. Fem. 3/8" SAE carbon steel	1
	FR5T5K025AC	S. Fem. 3/8" SAE carbon steel	25
FR5T690N 1/2"	FR5T6K001AD	S. Fem. 1/2" SAE carbon steel	1
	FR5T6K025AD	S. Fem. 1/2" SAE carbon steel	25
FR5T790N 5/8"	FR5T7K001AE	S. Fem. 5/8" SAE carbon steel	1
	FR5T7K025AE	S. Fem. 5/8" SAE carbon steel	25
FR5T890N 3/4"	FR5T8K001AF	S. Fem. 3/4" SAE carbon steel	1
	FR5T8K025AF	S. Fem. 3/4" SAE carbon steel	25

90° Female Fitting



Hose	Code	Description	Qty. (pcs)
FR5T390N 1/4"	FR5T3K001BA	90° Fem. 1/4" SAE carbon steel	1
	FR5T3K025BA	90° Fem. 1/4" SAE carbon steel	25
FR5T490N 5/16"	FR5T4K001BA	90° Fem. 1/4" SAE carbon steel	1
	FR5T4K025BA	90° Fem. 1/4" SAE carbon steel	25
	FR5T4K001BC	90° Fem. 3/8" SAE carbon steel	1
	FR5T4K025BC	90° Fem. 3/8" SAE carbon steel	25
FR5T590N 3/8"	FR5T5K001BC	90° Fem. 3/8" SAE carbon steel	1
	FR5T5K025BC	90° Fem. 3/8" SAE carbon steel	25
FR5T690N 1/2"	FR5T6K001BD	90° Fem. 1/2" SAE carbon steel	1
	FR5T6K025BD	90° Fem. 1/2" SAE carbon steel	25
FR5T790N 5/8"	FR5T7K001BE	90° Fem. 5/8" SAE carbon steel	1
	FR5T7K025BE	90° Fem. 5/8" SAE carbon steel	25
FR5T890N 3/4"	FR5T8K001BF	90° Fem. 3/4" SAE carbon steel	1
	FR5T8K025BF	90° Fem. 3/4" SAE carbon steel	25

Hose	Code	Description	Qty. (pcs)
FR5T390N 1/4"	FR5T3K001DA	Copper pipe 1/4"	1
	FR5T3K025DA	Copper pipe 1/4"	25
FR5T490N 5/16"	FR5T4K001DB	Copper pipe 5/16"	1
	FR5T4K025DB	Copper pipe 5/16"	25
FR5T590N 3/8"	FR5T5K001DC	Copper pipe 3/8"	1
	FR5T5K025DC	Copper pipe 3/8"	25
FR5T690N 1/2"	FR5T6K001DD	Copper pipe 1/2"	1
	FR5T6K025DD	Copper pipe 1/2"	25
FR5T790N 5/8"	FR5T7K001DE	Copper pipe 5/8"	1
	FR5T7K025DE	Copper pipe 5/8"	25
FR5T890N 3/4"	FR5T8K001DF	Copper pipe 3/4"	1
	FR5T8K025DF	Copper pipe 3/4"	25

Copper Pipes - Up to max. 60 bar



Cordless hidraulic crimping tool



SPLIT Electric assembly procedure

Code

PZBCFR5T130

Hidraulic crimping tool



SPLIT Manual assembly procedure

Code

PZMCFR5T130



Die set	Hose code	inch	Fittings	Description	Fittings	Description
MPZBCFR51303	FR5T390N/I DN5	1/4"	FR5T3K001AA	S. Fem. 1/4" SAE	FR3T3K001DA	Copper pipe 1/4"
			FR5T3K001BA	90° Fem. 1/4" SAE		
MPZBCFR51304	FR5T490N DN6	5/16"	FR5T4K001AA	S. Fem. 1/4" SAE	FR5T4K001DB	Copper pipe 5/16"
			FR5T4K001BA	90° Fem. 1/4" SAE		
			FR5T4K001AC	S. Fem. D.3/8" SAE		
			FR5T4K001BC	90° Fem. 3/8" SAE		
MPZBCFR51305	FR5T590N/I DN8	3/8"	FR5T5KP01AC	S. Fem. 3/8" SAE	FR5T5KP01DC	Copper pipe 3/8"
			FR5T5KP01BC	90° Fem. 3/8" SAE		
MPZBCFR51306	FR5T690N/I DN11	1/2"	FR5T6KP01AD	S. Fem. 1/2" SAE	FR5T6KP01DD	Copper pipe 1/2"
			FR5T6KP01BD	90° Fem. 1/2" SAE		
MPZBCFR51307	FR5T790N/I DN14	5/8"	FR5T7KP01AE	S. Fem. 5/8" SAE	FR5T7KP01DE	Copper pipe 5/8"
			FR5T7KP01BE	90° Fem. 5/8" SAE		

Hoses FR5A

Our commitment to researching eco-sustainable solutions for refrigeration and air conditioning systems has led to the development of a specialized hose line for CO₂ (R744).

The FR5A series, manufactured with a steel braid reinforcement, withstands pressures up to 130 bar and temperatures up to 130°C, maximizing the performance of the entire system.







Technical-constructive features

Steel braid coextruded hoses. Designed solution for CO2 systems on industrial and commercial refrigeration systems.

Working temperatures

From -40°C to +120°C from -40°F to +248°F

Max. peak temperature 130°C / 266°F

Working pressure:

Safety ratio exceeding EN 1736 and

ISO 13971 requirements

Vacuum rating

5 mbar

Specifications

Compliant with EN 1736, ISO 13971 class 1 and UL 1963.

Type	DN	Ø I.D mm	Ø O.D mm	Rated Pressure (bar / PSI)	Min. Bend Radius mm	Weight g/m	
FR5A430N	6	6,4	11,9	130 / 1885	40	130	BP14MT1
FR5A530N	8	8,1	14,0	130 / 1885	50	200	BP516R7V
FR5A630N	11	11,1	17,4	130 / 1885	80	255	BP38R1TV
FR5A730N	14	13,9	20,1	130 / 1885	120	320	BP12R7V

Straight Female Fitting



Hose	Code	Description	Qty. (pcs)
FR5A430N 5/16"	FR5A4K001AA	S. Fem. 1/4" SAE Carbon Steel	1
	FR5A4K001AA	S. Fem. 1/4" SAE Carbon Steel	25
	FR5A4K001AC	S. Fem. 3/8" SAE Carbon Steel	1
	FR5A4K025AC	S. Fem. 3/8" SAE Carbon Steel	25
FR5A530N 3/8"	FR5A5K001AC	S. Fem. 3/8" SAE Carbon Steel	1
	FR5A5K025AC	S. Fem. 3/8" SAE Carbon Steel	25
FR5A630N 1/2"	FR5A6K001AD	S. Fem. 1/2" SAE Carbon Steel	1
	FR5A6K025AD	S. Fem. 1/2" SAE Carbon Steel	25
FR5A730N 5/8"	FR5A7K001AE	S. Fem. 5/8" SAE Carbon Steel	1
	FR5A7K025AE	S. Fem. 5/8" SAE Carbon Steel	25

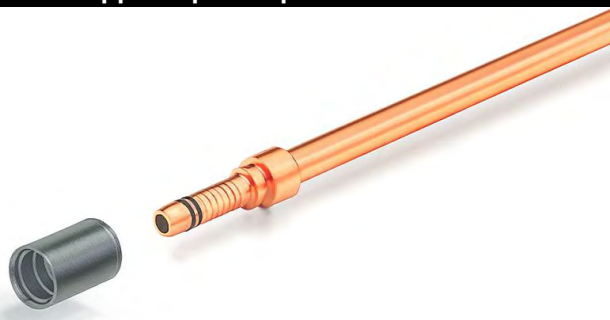
90° Female Fitting



Hose	Code	Description	Qty. (pcs)
FR5A430N 5/16"	FR5A4K001BA	90° Fem. 1/4" SAE Carbon Steel	1
	FR5A4K025BA	90° Fem. 1/4" SAE Carbon Steel	25
	FR5A4K001BC	90° Fem. 3/8" SAE Carbon Steel	1
	FR5A4K025BC	90° Fem. 3/8" SAE Carbon Steel	25
FR5A530N 3/8"	FR5A5K001BC	90° Fem. 3/8" SAE Carbon Steel	1
	FR5A5K025BC	90° Fem. 3/8" SAE Carbon Steel	25
FR5A630N 1/2"	FR5A6K001BD	90° Fem. 1/2" SAE Carbon Steel	1
	FR5A6K025BD	90° Fem. 1/2" SAE Carbon Steel	25
FR5A730N 5/8"	FR5A7K001BE	90° Fem. 5/8" SAE Carbon Steel	1
	FR5A7K025BE	90° Fem. 5/8" SAE Carbon Steel	25

Hose	Code	Description	Qty. (pcs)
FR5A490N 5/16"	FR5A4K001DB	Copper Pipe 5/16"	1
	FR5A4K025DB	Copper Pipe 5/16"	25
FR5A590N 3/8"	FR5A5K001DC	Copper Pipe 3/8"	1
	FR5A5K025DC	Copper Pipe 3/8"	25
FR5A690N 1/2"	FR5A6K001DD	Copper Pipe 1/2"	1
	FR5A6K025DD	Copper Pipe 1/2"	25
FR5A790N 5/8"	FR5A7K001DE	Copper Pipe 5/8"	1
	FR5A7K025DE	Copper Pipe 5/8"	25

Copper Pipes - Up to Max. 60 bar

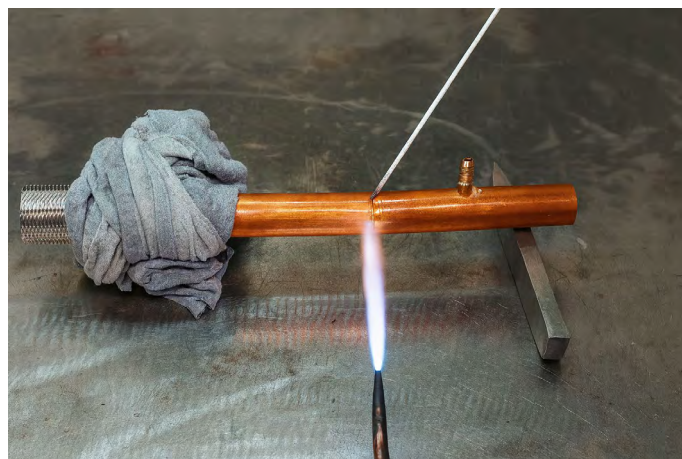


Copper pipe welding instructions

For the correct welding of the copper pipe to the refrigerant circuit, it is important to protect the thermoplastic hose from the excessive heat caused by the welding. Heating beyond the declared working temperature can compromise the use of the hose.

Before starting welding, wrap a wet rag around the fittings.

Once the welding is complete, quickly cool the part with cold water. To avoid heat you can also use a hot block paste or a cold air gun.





Technical-constructive features

Corrugated inner core in modified polyamide. Reinforcement with one AISI 304 steel braid.

Applications

FR5C hoses have been developed for vibration damping and noise absorption of refrigeration and air conditioning systems.

Working temperatures

From -40°C to +120°C from -40°F to +248°F / Max. peak temperature 130°C / 266°F

Working pressure

Safety ratio 1:3 (EN 1736)

Vacuum rating

5 mbar

Specifications

Compliant with EN 1736 and ISO 13971 class 2, meet UL1963 requirements.

Type	DN	Ø I.D mm	Ø O.D mm	Rated Pressure (bar / PSI)	Min. Bend Radius mm	Weight g/m	
FR5C800	18	18,0	25,3	50 / 725	150	410	BP34FR5IC
FR5C900	21	21,2	30,0	50 / 725	200	450	BP78FR5IC
FR5C1000	28	28,2	38,0	50 / 725	250	630	BP118FR5IC



Technical-constructive features

The inner core of TLP charging hoses is made of a special alloy composed of polyamide (PA) and thermoplastic elastomer (TPE).

In addition to making the hose extremely flexible, this material ensures low permeability to refrigerants, thus minimizing gas leaks through the hose.

Applications

TLP charging hoses are specifically developed for refrigerant gas recharging stations. TLP charging hoses feature low values of minimum bending radius and, consequently, higher resistance to kinking, if compared with traditional elastomeric hoses of equivalent performance.

Working temperatures

The working temperature of TLP charging hoses is in the range from -30°C to +95°C.

Specifications

Compliant with SAE J2196 and SAE J2888, meet UL 1963 requirements.

Type	Color	Ø I.D mm	Ø O.D mm	Rated Pressure (bar / PSI)	Min. Bend Radius mm	
TLP1085361**	● ● ● ●	5,3	10,8	60 / 870	30	BP53FR5TOT
TLP461**	● ● ● ●	8,0	14,2	60 / 870	40	BP80FR5TOT

* Available pre-assembled, with fittings installed

N.B. In the code there is **, this must be replaced with the color code of the tube: BLACK (00), BLUE (02), YELLOW (04) or RED (21)
Example: Tube TLP1085361** black – code TLP108536100.

1/4" SAE Straigh Female Fitting



Code	Qty. (pcs)
------	------------

TLP53K001AA	1
TLP53K025AA	25
TLP53K050AA	50

1/4" SAE 45° Straigh Female Fitting



Code	Qty. (pcs)
------	------------

TLP53K001QA	1
TLP53K025QA	25
TLP53K050QA	50

5/16" SAE Straigh Female Fitting



Code	Qty. (pcs)
------	------------

FR5T1K001BA	1
FR5T1K025BA	25
FR5T1K050BA	50

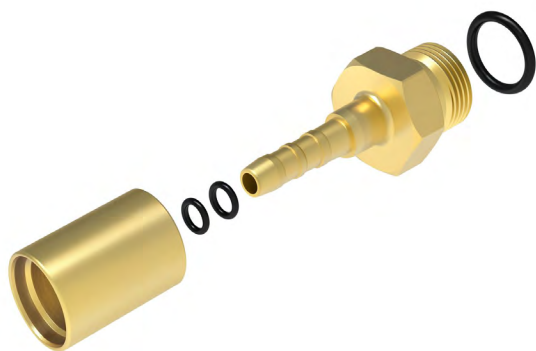
5/16" SAE 45° Female Fitting



Code	Qty. (pcs)
------	------------

FR5T1K001T	1
FR5T1K025T	25
FR5T1K050T	50

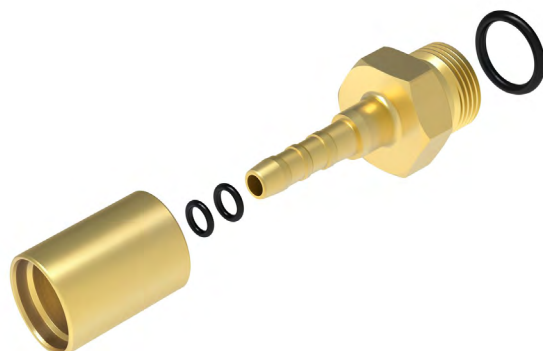
12x1,5mm Straigh Male Fitting



Code	Qty. (pcs)
------	------------

FR5T1K001TC	1
FR5T1K025TC	25
FR5T1K050TC	50

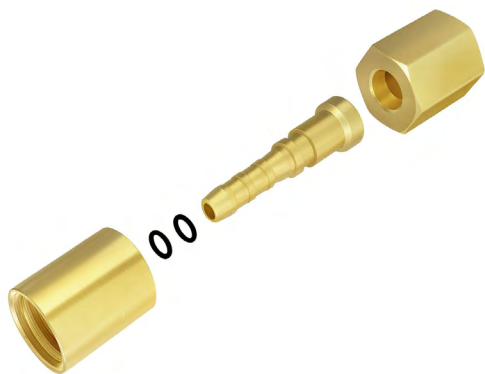
14x1,5mm Straigh Male Fitting



Code	Qty. (pcs)
------	------------

FR5T1K001TL	1
FR5T1K025TL	25
FR5T1K050TL	50

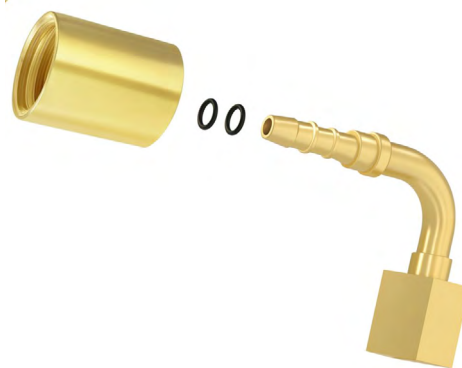
1/4" SAE 15mm Nut Straight Female Fitting



Code	Qty. (pcs)
------	------------

TLP53K001AAA	1
TLP53K025AAA	25
TLP53K050AAA	50

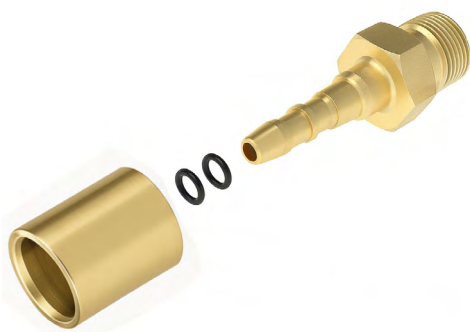
1/4" SAE 15mm Nut 90° Female Fitting



Code	Qty. (pcs)
------	------------

TLP53K001BAA	1
TLP53K025BAA	25
TLP53K050BAA	50

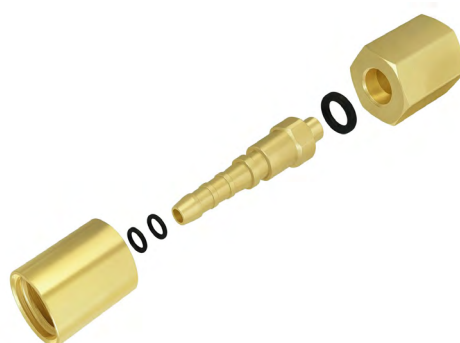
1/8" NPTF Straight Male Fitting



Code	Qty. (pcs)
------	------------

TLP53K001NS	1
TLP53K025NS	25
TLP53K050NS	50

1/4" o-ring Seal 15mm Nut Straight Female Fitting



Code	Qty. (pcs)
------	------------

TLP53K001JAA	1
TLP53K025JAA	25
TLP53K050JA	50

1/2" - 16 ACME Straight Female Fitting



Code	Qty. (pcs)
------	------------

TLP53K001V	1
TLP53K025V	25
TLP53K050V	50

3/8" SAE Straight Female Fitting



Code

Qty. (pcs)

TLP80K001AC

1

TLP80K025AC

25

TLP80K050AC

50

3/8" 45° Female Fitting



Code

Qty. (pcs)

TLP80K001QC

1

TLP80K025QC

25

TLP80K050QC

50

TLP Series Accessories

NBR Gastek TLP53 External Fem. 1/4" - ACME 1/2"



Code

Qty. (pcs)

YORC855KC

50

HNBR Gastek TLP53 External Fem. 5/16"



Code

Qty. (pcs)

YORC9355KC

50

FKM Gastek TLP53 Internal



Code

Qty. (pcs)

YOR351VKC

50

HNBR Gastek TLP53 External M12x1,5



Code

Qty. (pcs)

YORH92517KC

50

HNBR Gastek TLP53 External M14x1,5



Code

Qty. (pcs)

YORH10817KC

50

Depressor



Code

Qty. (pcs)

VFRC53KC

50

Fluid Power Crimping Tool For DN2-4-6 Ferrules



TLP Electric assembly procedure

Code

PZBCFR5

Crimping Tool For DN2-4-6 Ferrules



TLP Manual assembly procedure

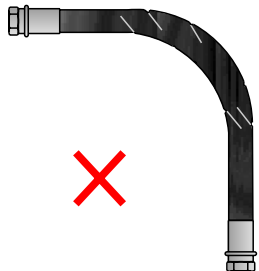
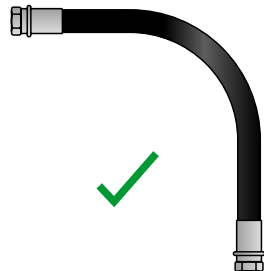
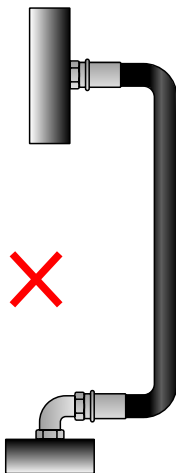
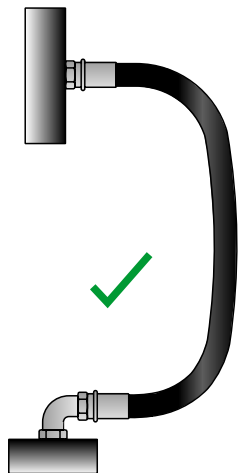
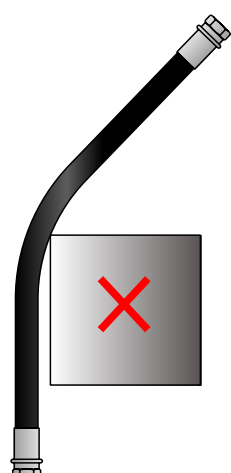
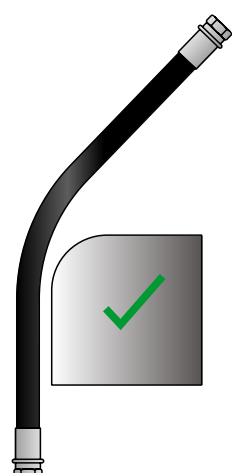
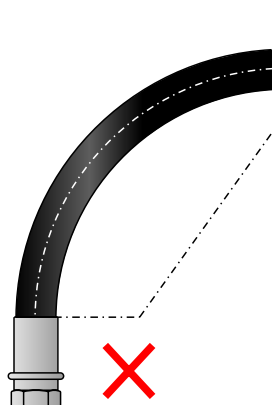
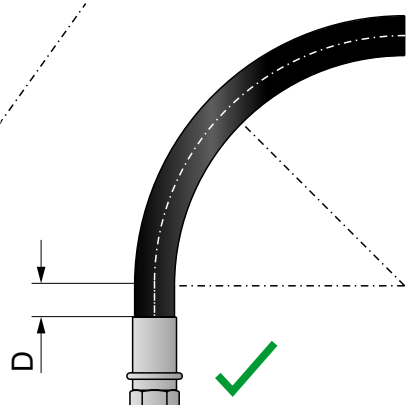
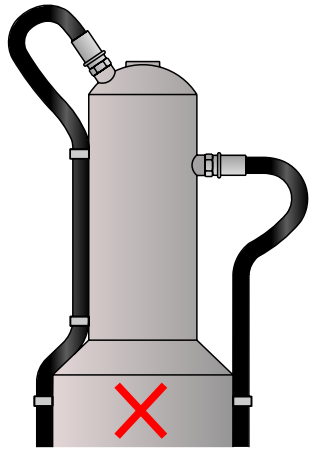
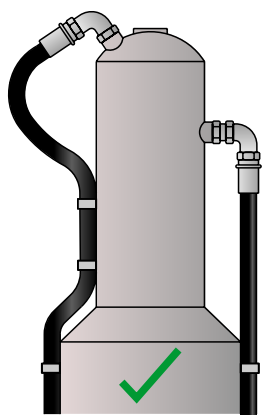
Code

PZFR5DN4

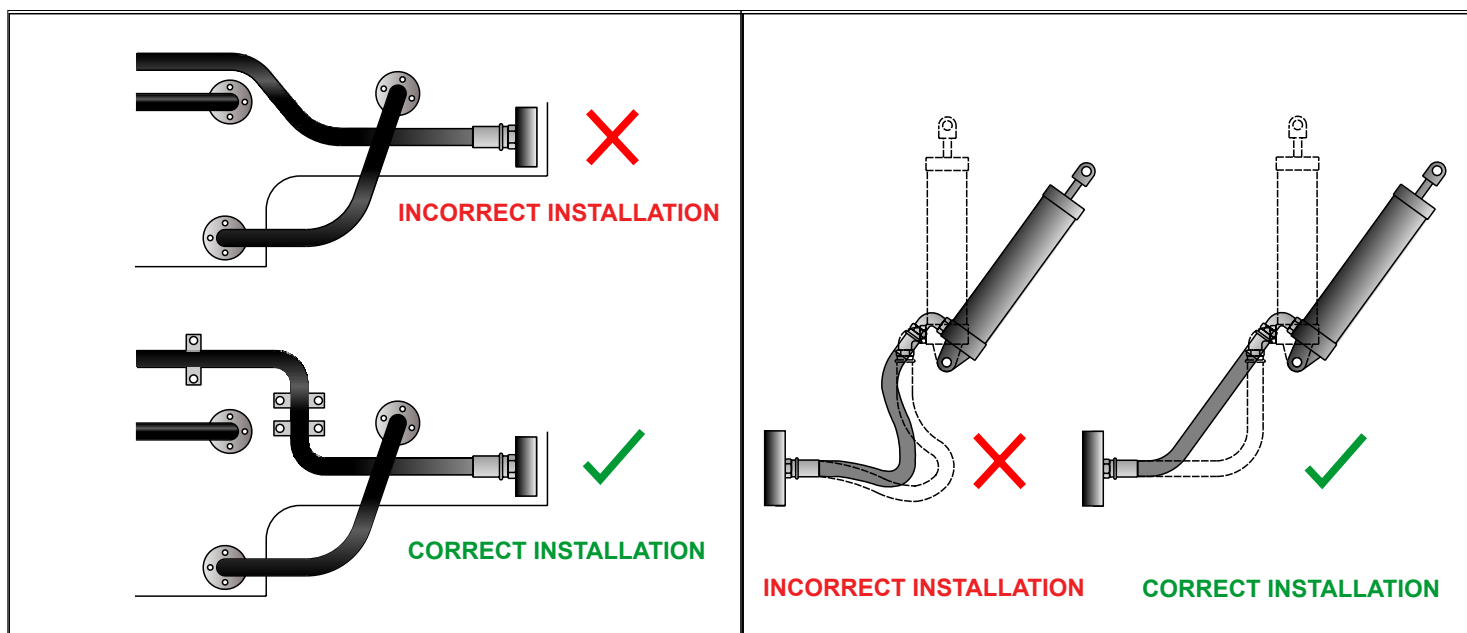


Die set	Hose Code	mm	Fittings	Description
MPZBCTLPDN53	TLP108536100 TLP108536102 TLP108536104 TLP108536121	5,3	TLP53K001AA	1/4" SAE Straight Female
			TLP53K001QA	1/4" SAE 45° Female
			TLP53K001AB	5/16" SAE Straight Female
			TLP53K001QB	5/16" SAE 45° Female
			TLP53K001Z	M14x1,5mm Straight Male
			TLP53K001W	M14x1,5mm Straight Male
			TLP53K001AAA	1/4" SAE 15mm Nut Straight Female
			TLP53K001BAA	1/4" SAE 15mm Nut 90° Female
			TLP53K001NS	1/8" NPTF Straight Male
			TLP53K001JAA	1/4" O-RING Seal 15mm Nut Straight Female
			TLP53K001V	1/2" - 16 ACME Straight Female

INSTALLATION INSTRUCTIONS (SAE J1273 - ISO 8331)

 INCORRECT INSTALLATION	 CORRECT INSTALLATION
 INCORRECT INSTALLATION	 CORRECT INSTALLATION
 INCORRECT INSTALLATION	 CORRECT INSTALLATION
 INCORRECT INSTALLATION	 CORRECT INSTALLATION
 INCORRECT INSTALLATION	 CORRECT INSTALLATION
 INCORRECT INSTALLATION	 CORRECT INSTALLATION

INSTALLATION INSTRUCTIONS (SAE J1273 - ISO 8331)



Hose Performance (according ISO 13971 - EN1736)

Hose performance assembled at our plant

TS	WT	PS
-40° +130° C	-40° + 120° C	120 bar
-40° +266° F	-40° +248° F	1740 psi

TS	WT	PS
-40° +130° C	-40° + 120° C	130 bar
-40° +266° F	-40° +248° F	1885 psi

TS = minimum and maximum allowable temperatures

WT = working temperatures

PS = maximum allowable pressure



Hose performance assembled with our PZBCFR5T130

TS	WT	PS
-40° +120° C	-40° + 110° C	60 bar
40° +248° F	-40° +230° F	870 psi





Manufacturing Facility

 + 55 15 3264-1222

 gepef@gepef.com.br

 www.gepef.com.br

 Avenida do Trabalhador, 1.680
ZIP Code 18552-100 - Boituva - SP
Brazil

Head Office & Operations Center

 Av. Antônio Ângelo Amadio 681
ZIP Code 18552-112 - Boituva - SP
Brazil

Branch Office – Belo Horizonte, MG – Brazil - Regional sales operations
for Minas Gerais and Brazil's Central-West Region

 + 55 31 3327-4459

 gepef-bh@gepef.com.br

 www.gepef.com.br

 Avenida Professor Mário Werneck, 300
(10th Floor – Room 1004 – Tower 2) – Estoril District
ZIP Code 30455-610 - Belo Horizonte - MG
Brazil