



REFRIGERATION



Thermoplastic Hoses and Fittings for Refrigeration Systems



THERMOPLASTIC TUBING AND HOSES



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ZEC S.p.A.: Flexibility for Choice

ZEC S.p.A., founded in 1961 by Mr. Eugenio Zantelli in Colomo, Province of Parma, Italy, manufactures thermoplastic hoses for low, medium, high and very high pressure applications.

Since 1990, the artisan approach to the production has been boosted by an international breakthrough. Investments in special skilled human resources, manufacturing, product innovations and commercial presence elevates ZEC S.p.A. meanwhile into the global market, covering more than 90 countries world wide.

The global expansion of the Company has been accompanied with the constant development of the product range dedicated to a large portfolio of applications such as fluid power, pneumatics, lubrication, automotive, food processing, marine, refrigeration, petrochemical-offshore, and so on.

The ZEC S.p.A. product range includes standard or customized single, multiple and coiled thermoplastic hoses, with technical characteristics within the range of 2mm to 40mm inner diameter, working pressures from 5bar to 1280bar and operating temperatures from -200°C to +260°C.

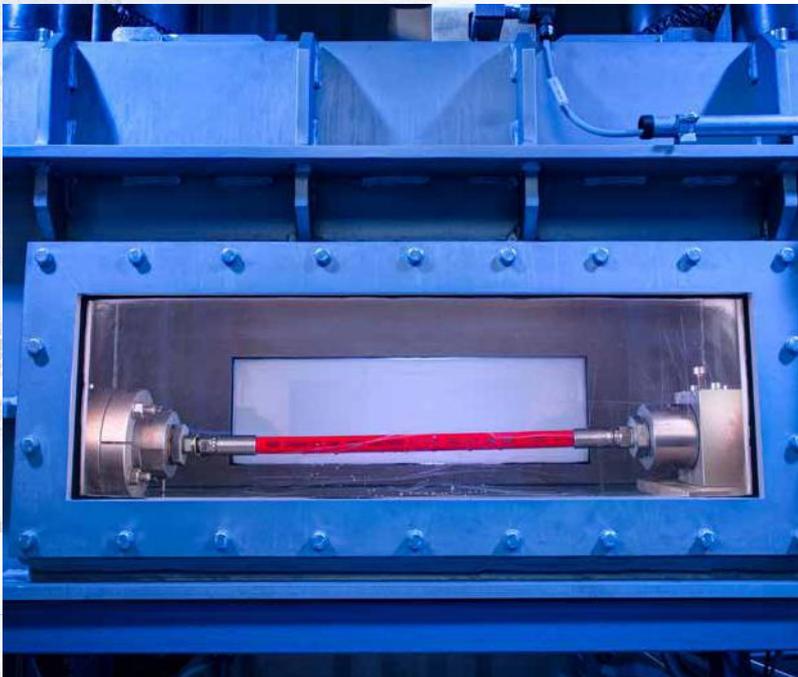
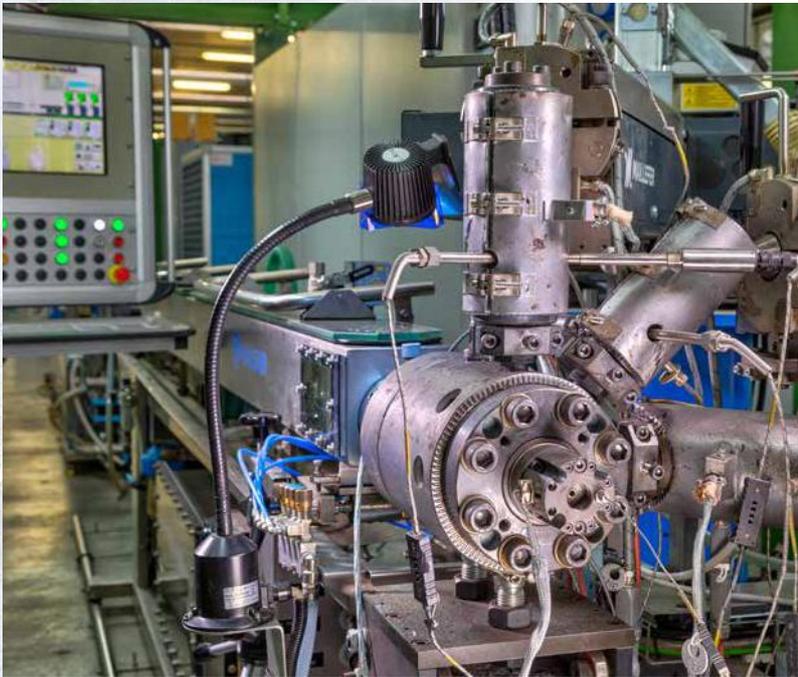
All products manufactured by ZEC S.p.A. are of top quality and carefully selected raw materials. Manufacturing processes are continuously multiple controlled.

The entire production takes place in our facilities located in Colomo, Italy.

End products comply strictly with major international standards such as SAE, EN, DIN & ISO.

All company sectors and activities are qualified and operate according to UNI EN ISO 9001-2015 quality system.

Refrigeration



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 and Hose Assemblies

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.



ZEC Solutions for Refrigeration Systems

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

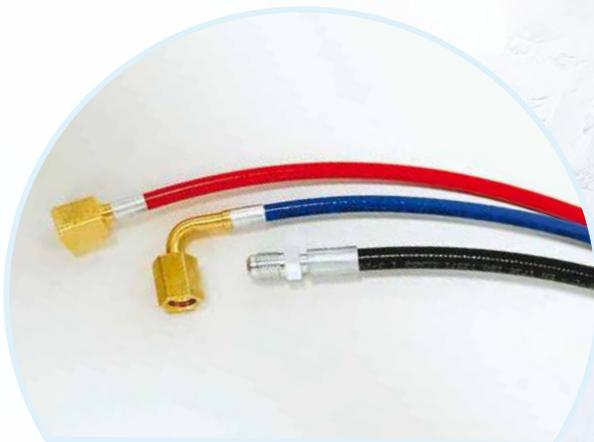
FEATURES AND BENEFITS

- flexible and easy to install
- low permeability to refrigerant gases (including CO₂ and ammonia)
- elimination of leakages caused by vibrations / movements of the system
- high chemical compatibility and resistance against atmospheric agents
- reduction of welding / brazing processes

APPLICATIONS

- pressure control systems (pressure gauges) of the refrigerant gases through capillary hoses
- management of refrigerant gases on commercial equipment (display cabinets, display refrigerators, wine cellars, dispensers, etc.)
- cooling systems (chillers) applied on tooling machines in general
- industrial conditioning systems
- cooling systems for refrigerated transport
- refrigerant gas recharging systems for automotive air conditioning systems

Thermoplastic Hoses and Fittings for Refrigeration Systems



FR5T Capillary Hoses



FR5A Hoses for CO₂ lines



Developed in compliance with EN 1736 CLASS 1, all ZEC FR5 hoses assure the lowest permeability to refrigerant gases.



FR5T Hoses for split systems

FR5T Capillary Hoses

ZEC capillary hoses are the most efficient solution for the connection of manometres, pressure gauges and for oil return lines. Flexible and highly pressure resistant, ZEC capillaries significantly reduce vibrations of the entire system.

The capillaries are available in black, red and blue colours, defining the phases of refrigeration circuits (high and low pressure).

ZEC capillaries can be easily assembled with the specific ZEC hand pliers PZFR5DN2 and ZEC crimping tool PZFR5DN4.



FR5T CAPILLARY HOSES



Technical Features

- **Technical-constructive features:**
Smooth bore coextruded textile braid capillary hoses DN2 and DN4.
- **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 and ISO 13971 class 1, meet UL1963 requirements.

Datasheet

CODE	ID			OD		WP		R MIN		g	
	inch	mm	DN	inch	mm	bar	psi	mm	inch	g/m	lbs/ft
FR5T170	1/12"	2.1	2	0.236	6.0	130	1885	15	0.590	27	0.018
FR5T270	5/32"	4.0	4	0.323	8.2	130	1885	30	1.181	45	0.030

Type	Part Nr.	Colour	Description
DN2 - TUBI / 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 - TUBI / 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

FR5T Capillary Hose Fittings DN2

1/4" SAE STRAIGHT FEMALE



Part Nr.	Pcs
FR5T1K001AA	1
FR5T1K025AA	25
FR5T1K050AA	50
Part Nr.	Description
YDLSA7160TM	NUT 7/16" SAE BRASS
YFDLSA0C7161120T	S. FEM. 1/4" SAE
BP112FR5AA	DN2 ALUMINIUM FERRULE

1/4" SAE STRAIGHT FEMALE WITH DEPRESSOR



Part Nr.	Pcs
FR5T1K001GA	1
FR5T1K025GA	25
FR5T1K050GA	50
Part Nr.	Description
YDLSA7160TM	NUT 7/16" SAE BRASS
YFDLSAD0C7161120T	S. FEM. 1/4" SAE WITH DEP.
BP112FR5AA	DN2 ALUMINIUM FERRULE

1/4" SAE 90° FEMALE



Part Nr.	Pcs
FR5T1K001BA	1
FR5T1K025BA	25
FR5T1K050BA	50
Part Nr.	Description
RPF914SAE112FR5	90° FEM. 1/4" SAE
BP112FR5AA	DN2 ALUMINIUM FERRULE

"T" FITTING



Part Nr.	Pcs
FR5T1K001T	1
FR5T1K025T	25
FR5T1K050T	50
Part Nr.	Description
RFR51120012	"T" FITTING
3X BP112FR5AA	DN2 ALUMINIUM FERRULE

"T" FITTING WITH CENTRAL NUT



Part Nr.	Pcs
FR5T1K001TC	1
FR5T1K025TC	25
FR5T1K050TC	50
Part Nr.	Description
RFR51120117	1/4" SAE "T" FITTING, CENTRAL NUT
2X BP112FR5AA	DN2 ALUMINIUM FERRULE

"T" FITTING WITH SIDE NUT



Part Nr.	Pcs
FR5T1K001TL	1
FR5T1K025TL	25
FR5T1K050TL	50
Codice / Part Nr.	Description
RFR51120118	1/4" SAE "T" FITTING, SIDE NUT
2X BP112FR5AA	DN2 ALUMINIUM FERRULE

1/4" SAE STRAIGHT MALE



Part Nr.	Pcs
FR5T1K001CA	1
FR5T1K025CA	25
FR5T1K050CA	50
Part Nr.	Description
RPMD14SAE112FR5	ST. MALE 1/4" SAE
BP112FR5AA	DN2 ALUMINIUM FERRULE

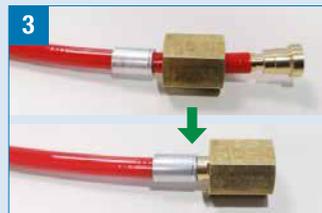
ASSEMBLY INSTRUCTIONS FR5T DN2



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 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.



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



7 If after several uses the measured crimping diameter tends to increase, adjust the gear of the plier.

FR5T Capillary Hose Fittings DN4

1/4" SAE STRAIGHT FEMALE



Part Nr.	Pcs
FR5T2K001AA	1
FR5T2K025AA	25
FR5T2K050AA	50
Part Nr.	Description
YDLSA7160TM	NUT 7/16" SAE BRASS
YFDLSAFR716532	S. FEM. 1/4" SAE
BP532FR5	DN4 CARBON STEEL FERRULE

1/4" SAE STRAIGHT FEMALE WITH DEPRESSOR



Part Nr.	Pcs
FR5T2K001GA	1
FR5T2K025GA	25
FR5T2K050GA	50
Part Nr.	Description
YDLSA7160TM	NUT 7/16" SAE BRASS
YFDLSADOC716532	S. FEM. 1/4" SAE DEP.
BP532FR5	DN4 CARBON STEEL FERRULE

3/8" SAE STRAIGHT FEMALE



Part Nr.	Pcs
FR5T2K001AC	1
FR5T2K025AC	25
FR5T2K050AC	50
Part Nr.	Description
YDLSA58M	NUT 3/8" SAE STEEL
YFDLSAFR58532	S. FEM. 3/8" SAE
BP532FR5	DN4 CARBON STEEL FERRULE

1/4" SAE 90° FEMALE



Part Nr.	Pcs
FR5T2K001BA	1
FR5T2K025BA	25
FR5T2K050BA	50
Part Nr.	Description
RPF914SAE532FR5	90° FEM. 1/4" SAE
BP532FR5	DN4 CARBON STEEL FERRULE

3/8" SAE 90° FEMALE



Part Nr.	Pcs
FR5T2K001BC	1
FR5T2K025BC	25
FR5T2K050BC	50
Part Nr.	Description
YDLSA58M	NUT SAE 3/8" STEEL
YF90LSAFR58532	90° FEM. 3/8" SAE
BP532FR5	DN4 CARBON STEEL FERRULE

"T" FITTING



Part Nr.	Pcs
FR5T2K001T	1
FR5T2K025T	25
FR5T2K050T	50
Part Nr.	Description
RFR54112	"T" FITTING
3X BP532FR5	DN4 CARBON STEEL FERRULE

"T" FITTING WITH CENTRAL NUT



Part Nr.	Pcs
FR5T2K001TC	1
FR5T2K025TC	25
FR5T2K050TC	50
Codice / Part Nr.	Description
RFR54117	"T" FITTING, CENTRAL NUT 1/4" SAE
2X BP532FR5	BOCCOLA IN ACCIAIO PER TUBO DN4 / DN4 CARBON STEEL FERRULE

T FITTING WITH SIDE NUT



Part Nr.	Pcs
FR5T2K001TL	1
FR5T2K025TL	25
FR5T2K050TL	50
Part Nr.	Description
RFR54118	"T" FITTING, SIDE NUT 1/4" SAE
2X BP532FR5	DN4 CARBON STEEL FERRULE

1/4" SAE STRAIGHT MALE



Part Nr.	Pcs
FR5T2K001CA	1
FR5T2K025CA	25
FR5T2K050CA	50
Part Nr.	Description
RPMD14SAE532FR5	S. MALE 1/4" SAE
BP532FR5	DN4 CARBON STEEL FERRULE

ASSEMBLY INSTRUCTIONS FR5T DN4



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 with the battery crimping tool. The pliers' die must cover the whole ferrule length.



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.

FR5T Series Accessories

PROTECTIVE PLASTIC PLUG



Part Nr.	Pcs	SAE
TAPPOPE14SAEKC	50	1/4"
TAPPOPP38SAEKC	50	3/8"

CONIC FUNNEL COPPER WASHER



Part Nr.	Pcs	SAE
GCICU14FR5KC	50	1/4"

CONIC COPPER WASHER



Part Nr.	Pcs	SAE
GCCU14FR5KC	50	1/4"
GCCU38FR5KC	50	3/8"

BRASS DEPRESSOR



Part Nr.	Pcs	SAE
VFR5DN2TKC	50	1/4"

HOSE CUTTER



Part Nr.	Description
PZG1	Cutter up to a maximum external diameter of 28.0 mm.
PZP1	Cutter up to a maximum external diameter of 12 mm.

CRIMPING TOOL FOR DN2 FERRULE



Part Nr.
PZFR5DN2

PINZA A CRIMPIRE PER BOCCOLA DN4 CRIMPING TOOL FOR DN4 FERRULE



Part Nr.
PZFR5DN4

FLUID POWER CRIMPING TOOL FOR DN2-4-6 FERRULES

Codice / Part Nr.
PZBCFR5

 DIE SET	Hose diameter
MPZBCFR5DN2	DN2
MPZBCFR5DN4	DN4
MPZBCFR5DN6	DN6



Assembly instructions for FR5T Capillary and FR5T Hose available on www.zecspa.com/en/technical-support.

FR5T Hoses

ZEC 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.



FR5T HOSES



Technical Features

- 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 and ISO 13971 class 1, meet UL1963 requirements.

Datasheet

CODICE / CODE	ID			OD		WP		R MIN		g	
	inch	mm	DN	inch	mm	bar	psi	mm	inch	g/m	lbs/ft
FR5T390N	1/4"	4.8	5	0.366	9.3	120	1740	50	1.968	55	0.036
FR5T490N	5/16"	6.4	6	0.460	11.7	120	1740	75	2.952	80	0.053
FR5T590N	3/8"	8.1	8	0.555	14.1	120	1740	90	3.543	105	0.071
FR5T690N	1/2"	11.1	11	0.669	17.7	120	1740	100	3.937	150	0.101
FR5T790N	5/8"	13.9	14	0.811	20.6	120	1740	125	4.921	190	0.128
FR5T890N	3/4"	17.0	17	0.944	24.9	120	1740	165	6.496	270	0.181

Datasheet (Pre-insulated version)

CODICE / CODE	ID			OD		WP		R MIN		g	
	inch	mm	DN	inch	mm	bar	psi	mm	inch	g/m	lbs/ft
FR5T390NI	1/4"	4.8	5	1.074	27.3	120	1740	50	1.968	85	0.057
FR5T590NI	3/8"	8.1	8	1.263	32.1	120	1740	90	3.543	130	0.087
FR5T690NI	1/2"	11.1	11	1.393	35.4	120	1740	100	3.937	200	0.134
FR5T790NI	5/8"	13.9	14	1.519	38.6	120	1740	125	4.921	250	0.168
FR5T890NI	3/4"	17.0	17	1.692	43	120	1740	165	6.496	335	0.225

Raccordi per tubo FR5T / FR5T Hose Fittings

FEMMINA DIRITTA
STRAIGHT FEMALE FITTING



FEMMINA 90°
90° FEMALE FITTING



Tubo / Hose	Codice / Part Nr.	Descrizione / Description	Pezzi / Pcs
FR5T390N	FR5T3K001AA	RAC. FEM. DRITTA 1/4" SAE / STRAIGHT FEM. FIT. 1/4" SAE	1
	FR5T3K025AA	RAC. FEM. DRITTA 1/4" SAE / STRAIGHT FEM. FIT. 1/4" SAE	25
FR5T490N	FR5T4K001AA	RAC. FEM. DRITTA 1/4" SAE / STRAIGHT FEM. FIT. 1/4" SAE	1
	FR5T4K025AA	RAC. FEM. DRITTA 1/4" SAE / STRAIGHT FEM. FIT. 1/4" SAE	25
	FR5T4K001AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	1
	FR5T4K025AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	25
FR5T590N	FR5T5K001AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	1
	FR5T5K025AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	25
FR5T690N	FR5T6K001AD	RAC. FEM. DRITTA 1/2" SAE / STRAIGHT FEM. FIT. 1/2" SAE	1
	FR5T6K025AD	RAC. FEM. DRITTA 1/2" SAE / STRAIGHT FEM. FIT. 1/2" SAE	25
FR5T790N	FR5T7K001AE	RAC. FEM. DRITTA 5/8" SAE / STRAIGHT FEM. FIT. 5/8" SAE	1
	FR5T7K025AE	RAC. FEM. DRITTA 5/8" SAE / STRAIGHT FEM. FIT. 5/8" SAE	25
FR5T890N	FR5T8K001AF	RAC. FEM. DRITTA 3/4" SAE / STRAIGHT FEM. FIT. 3/4" SAE	1
	FR5T8K025AF	RAC. FEM. DRITTA 3/4" SAE / STRAIGHT FEM. FIT. 3/4" SAE	25

Tubo / Hose	Codice / Part Nr.	Descrizione / Description	Pezzi / Pcs
FR5T390N	FR5T3K001BA	RAC. FEM. 90° 1/4" SAE / 90° FEM. FIT. 1/4" SAE	1
	FR5T3K025BA	RAC. FEM. 90° 1/4" SAE / 90° FEM. FIT. 1/4" SAE	25
FR5T490N	FR5T4K001BA	RAC. FEM. 90° 1/4" SAE / 90° FEM. FIT. 1/4" SAE	1
	FR5T4K025BA	RAC. FEM. 90° 1/4" SAE / 90° FEM. FIT. 1/4" SAE	25
	FR5T4K001BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	1
	FR5T4K025BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	25
FR5T590N	FR5T5K001BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	1
	FR5T5K025BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	25
FR5T690N	FR5T6K001BD	RAC. FEM. 90° 1/2" SAE / 90° FEM. FIT. 1/2" SAE	1
	FR5T6K025BD	RAC. FEM. 90° 1/2" SAE / 90° FEM. FIT. 1/2" SAE	25
FR5T790N	FR5T7K001BE	RAC. FEM. 90° 5/8" SAE / 90° FEM. FIT. 5/8" SAE	1
	FR5T7K025BE	RAC. FEM. 90° 5/8" SAE / 90° FEM. FIT. 5/8" SAE	25
FR5T890N	FR5T8K001BF	RAC. FEM. 90° 3/4" SAE / 90° FEM. FIT. 3/4" SAE	1
	FR5T8K025BF	RAC. FEM. 90° 3/4" SAE / 90° FEM. FIT. 3/4" SAE	25

Tubi FR5A

Dall'impegno di ZEC nella ricerca di soluzioni eco-sostenibili per i sistemi di refrigerazione e aria condizionata nasce una gamma speciale di tubi per la CO₂ (R744).

La serie FR5A, realizzata con una treccia di rinforzo in acciaio, resiste ad una pressione di 130 bar ed una temperatura di picco di 130°C massimizzando le prestazioni dell'intero sistema.

FR5A Hoses

ZEC has conducted an intensive research into sustainable and energy-efficient solutions for HVAC.

Recognizing the shift toward ecological responsibility, ZEC has developed a special hose series a steel reinforcement braiding. The FR5A hoses resist to a pressure of 130 bar and a peak temperature of 130°C, optimizing the performance of the entire system.



TUBI FR5A FR5A HOSES



Caratteristiche tecniche

- **Caratteristiche tecnico-costruttive:**
Tubi coestrusi treccia acciaio. Soluzione ideale per utilizzo CO2 su impianti di refrigerazione industriale e commerciale.
- **Temperature di utilizzo:**
Da -40°C a +120°C
Temperatura di picco max. 130°C
- **Pressioni d'esercizio:**
Rapporto di sicurezza superiore ai requisiti della EN 1736 e ISO 13971
- **Valore max. di vuoto:** 5 mbar
- **Specifiche:**
Conformi alla norme EN 1736 e ISO 13971 classe 1, requisiti della norma UL1963.

Technical Features

- **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 and ISO 13971 class 1, meet UL1963 requirements.

Scheda tecnica - Datasheet

CODICE / CODE	ID		DN	OD		WP	psi	R MIN		g	
	inch	mm		inch	mm			mm	inch	g/m	lbs/ft
FR5A430N	5/16"	6.4	6	0.468	11.9	130	1885	40	1.574	130	0.087
FR5A530N	3/8"	8.1	8	0.551	14.0	130	1885	50	1.968	200	0.134
FR5A630N	1/2"	11.1	11	0.685	17.4	130	1885	80	3.149	255	0.171
FR5A730N	5/8"	13.9	14	0.791	20.1	130	1885	120	4.724	320	0.215

Raccordi per tubo FR5A / FR5A Hose Fittings

FEMMINA DIRITTA
STRAIGHT FEMALE FITTING



FEMMINA 90°
90° FEMALE FITTING



Tubo / Hose	Codice / Part Nr.	Descrizione / Description	Pezzi / Pcs
FR5A430N	FR5A4K001AA	RAC. FEM. DRITTA 1/4" SAE / STRAIGHT FEM. FIT. 1/4" SAE	1
	FR5A4K025AA	RAC. FEM. DRITTA 1/4" SAE / STRAIGHT FEM. FIT. 1/4" SAE	25
	FR5A4K001AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	1
	FR5A4K025AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	25
FR5A530N	FR5A5K001AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	1
	FR5A5K025AC	RAC. FEM. DRITTA 3/8" SAE / STRAIGHT FEM. FIT. 3/8" SAE	25
FR5A630N	FR5A6K001AD	RAC. FEM. DRITTA 1/2" SAE / STRAIGHT FEM. FIT. 1/2" SAE	1
	FR5A6K025AD	RAC. FEM. DRITTA 1/2" SAE / STRAIGHT FEM. FIT. 1/2" SAE	25
FR5A730N	FR5A7K001AE	RAC. FEM. DRITTA 5/8" SAE / STRAIGHT FEM. FIT. 5/8" SAE	1
	FR5A7K025AE	RAC. FEM. DRITTA 5/8" SAE / STRAIGHT FEM. FIT. 5/8" SAE	25

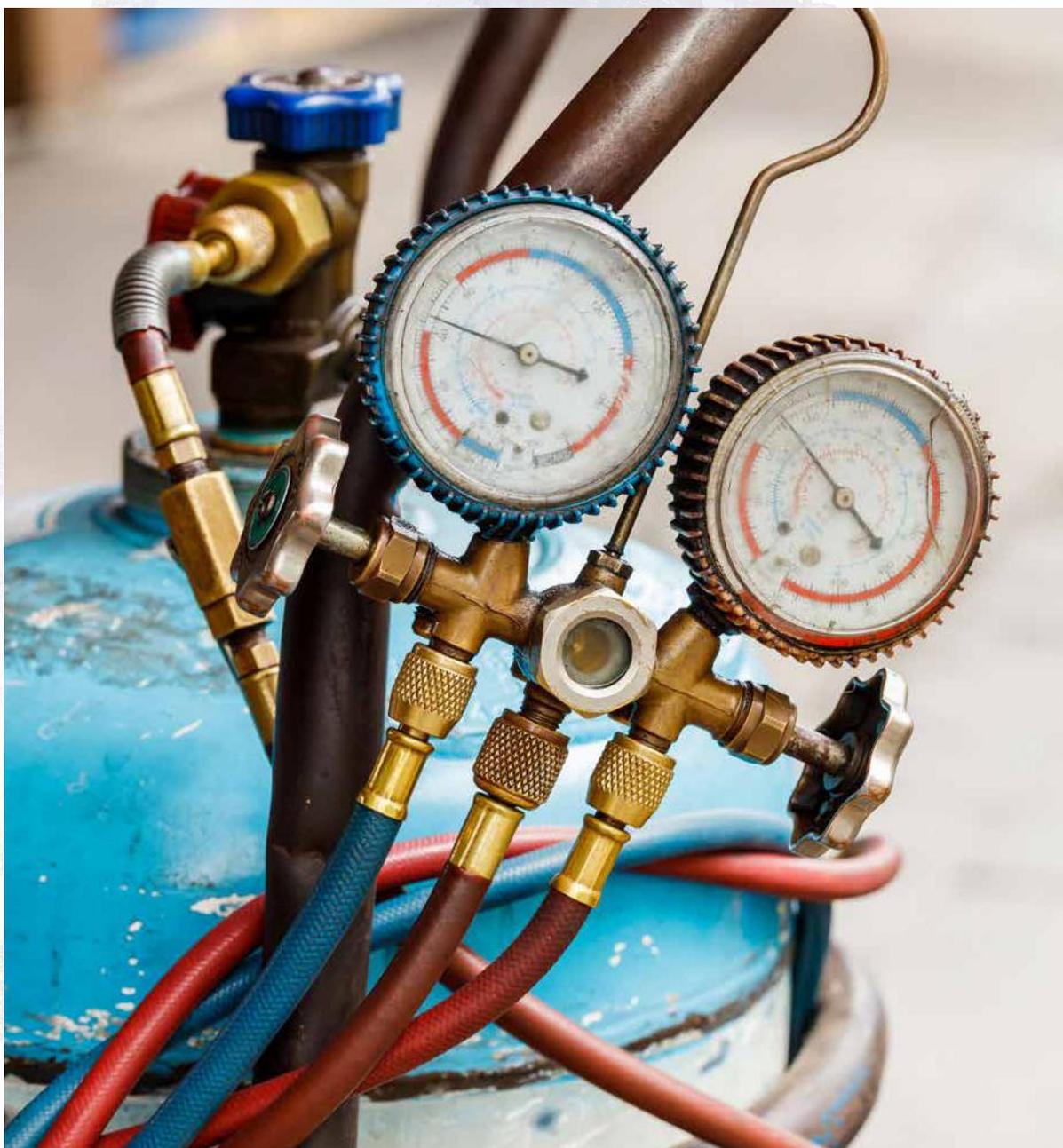
Tubo / Hose	Codice / Part Nr.	Descrizione / Description	Pezzi / Pcs
FR5A430N	FR5A4K001BA	RAC. FEM. 90° 1/4" SAE / 90° FEM. FIT. 1/4" SAE	1
	FR5A4K025BA	RAC. FEM. 90° 1/4" SAE / 90° FEM. FIT. 1/4" SAE	25
	FR5A4K001BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	1
	FR5A4K025BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	25
FR5A530N	FR5A5K001BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	1
	FR5A5K025BC	RAC. FEM. 90° 3/8" SAE / 90° FEM. FIT. 3/8" SAE	25
FR5A630N	FR5A6K001BD	RAC. FEM. 90° 1/2" SAE / 90° FEM. FIT. 1/2" SAE	1
	FR5A6K025BD	RAC. FEM. 90° 1/2" SAE / 90° FEM. FIT. 1/2" SAE	25
FR5A730N	FR5A7K001BE	RAC. FEM. 90° 5/8" SAE / 90° FEM. FIT. 5/8" SAE	1
	FR5A7K025BE	RAC. FEM. 90° 5/8" SAE / 90° FEM. FIT. 5/8" SAE	25

Tubi carica TLP

I tubi carica ZEC TLP sono appositamente sviluppati per le stazioni di carica di gas refrigerante. Presentano un'ottima flessibilità, pur conservando un'altrettanto elevata resistenza allo schiacciamento. Sono caratterizzati da un basso valore di raggio minimo di curvatura ed una conseguente superiore resistenza all'effetto "kinking", se confrontati con i tradizionali tubi in elastomero di equivalenti prestazioni.

TLP Charging Hoses

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.



TUBI CARICA TLP TLP CHARGING HOSES



Caratteristiche tecniche

- Caratteristiche tecnico-costruttive:**

L'anima interna dei tubi carica TLP è realizzata in una speciale lega costituita da poliammide (PA) ed elastomero termoplastico (TPE). Oltre a conferire una grande flessibilità al tubo, questo materiale garantisce una bassa permeabilità al refrigerante, riducendo al minimo le fughe di gas attraverso il tubo.

- Temperature di utilizzo:**

La temperatura di esercizio dei tubi carica TLP è compresa nel range tra -30°C e +95°C.

- Specifiche:**

Conformi alle normative SAE J2196 e SAE J2888.

Technical Features

- 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.

- Working temperatures:**

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

- Specifications:**

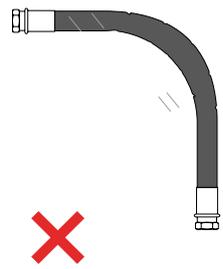
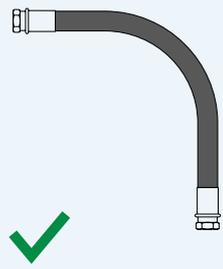
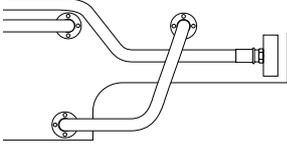
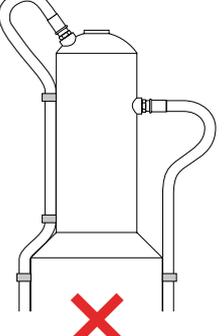
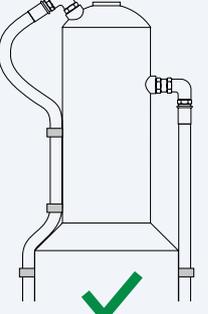
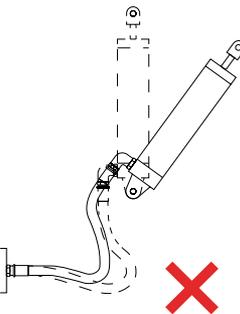
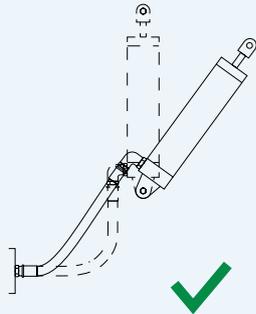
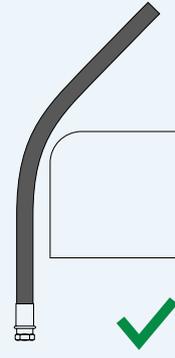
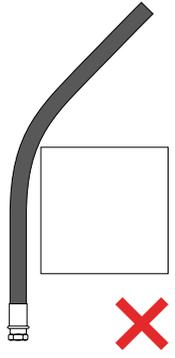
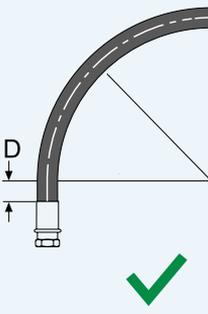
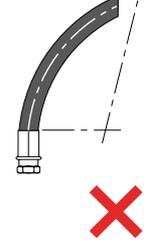
Compliant with SAE J2196 and SAE J2888.

Scheda tecnica - Datasheet

CODICE / CODE	Colore / Colour	ID		OD		1:4 WP		R MIN	
		inch	mm	inch	mm	bar	psi	mm	inch
TLP1085312102	●	0.209	5.3	0.425	10.8	60	870	30	1.18
TLP1085312104	●	0.209	5.3	0.425	10.8	60	870	30	1.18
TLP1125712100	●	0.209	5.3	0.425	10.8	60	870	30	1.18
TLP1125712102	●	0.224	5.7	0.441	11.2	60	870	30	1.18
TLP1125712104	●	0.224	5.7	0.441	11.2	60	870	30	1.18
TLP1125712105	●	0.224	5.7	0.441	11.2	60	870	30	1.18
TLP1125712100	●	0.224	5.7	0.441	11.2	60	870	30	1.18



Installation Instructions (SAE J1273 - ISO 8331)

 <p>WRONG INSTALLATION</p>	 <p>CORRECT INSTALLATION</p>	 <p>WRONG INSTALLATION</p>	 <p>CORRECT INSTALLATION</p>
 <p>WRONG INSTALLATION</p>	 <p>WRONG INSTALLATION</p>	 <p>CORRECT INSTALLATION</p>	
 <p>WRONG INSTALLATION</p>	 <p>WRONG INSTALLATION</p>	 <p>CORRECT INSTALLATION</p>	
 <p>CORRECT INSTALLATION</p>	 <p>WRONG INSTALLATION</p>	 <p>CORRECT INSTALLATION</p>	 <p>WRONG INSTALLATION</p>

The images and values indicated in the present document are to be intended only as an indication, with the purpose of permitting the customer a first evaluation of the products application possibilities. Our production can be modified without any obligation of prior notice to our customers.

Therefore we recommend to consult our website www.zecspa.com for the latest version of the technical data sheets.

It's the Customer's responsibility to check that hoses and fittings are suitable for his application and meet the required specifications and standards.

For Terms of Sale please refer to www.zecspa.com/en/general-conditions-of-sale



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THERMOPLASTIC TUBING AND HOSES



REFRIGERATION

