FL2S-C - series

Straight screw connections

Steel, zinc plated	Stainless steel (cutting ring)	Stainless steel (compression ring)	Load class (DIN 2353)	Tube diameter (mm)	Max pressure (bar)	Union nut
FL2S-C-EZ-04-LL	**FL2S-C-ST-04-LL**		LL (very light)	4	100	M8 x 1
FL2S-C-EZ-05-LL			LL (very light)	5	100	M10 x 1
FL2S-C-EZ-06-LL	**FL2S-C-ST-06-LL**		LL (very light)	6	100	M10 x 1
FL2S-C-EZ-08-LL	**FL2S-C-ST-08-LL**		LL (very light)	8	100	M12x1
FL2S-C-EZ-10-LL			LL (very light)	10	100	M14 x 1
FL2S-C-EZ-12-LL			LL (very light)	12	100	M16 x 1
FL2S-C-EZ-06-L	**FL2S-C-ST-06-L**	**FL2S-O-ST-06-L**	L (light)	6	315	M12 x 1.5
FL2S-C-EZ-08-L	**FL2S-C-ST-08-L**	**FL2S-O-ST-08-L**	L (light)	8	315	M14 x 1.5
FL2S-C-EZ-10-L	**FL2S-C-ST-10-L**	**FL2S-O-ST-10-L**	L (light)	10	315	M16 x 1.5
FL2S-C-EZ-12-L	**FL2S-C-ST-12-L**	**FL2S-O-ST-12-L**	L (light)	12	315	M18 x 1.5
FL2S-C-EZ-15-L	**FL2S-C-ST-15-L**	**FL2S-O-ST-15-L**	L (light)	15	315	M22 x 1.5
FL2S-C-EZ-18-L	**FL2S-C-ST-18-L**	**FL2S-O-ST-18-L**	L (light)	18	315	M26 x 1.5
FL2S-C-EZ-22-L	**FL2S-C-ST-22-L**	**FL2S-O-ST-22-L**	L (light)	22	160	M30 x 2
FL2S-C-EZ-28-L	**FL2S-C-ST-28-L**		L (light)	28	160	M36×2.0
FL2S-C-EZ-35-L	**FL2S-C-ST-35-L**		L (light)	35	160	M45 x 2
FL2S-C-EZ-42-L	**FL2S-C-ST-42-L**		L (light)	42	160	M52 x 2
FL2S-C-EZ-06-S	**FL2S-C-ST-06-S**	**FL2S-O-ST-06-S**	S (heavy)	6	630	M14 x 1.5
FL2S-C-EZ-08-S	**FL2S-C-ST-08-S**	**FL2S-O-ST-08-S**	S (heavy)	8	630	M16 x 1.5
FL2S-C-EZ-10-S	**FL2S-C-ST-10-S**	**FL2S-O-ST-10-S**	S (heavy)	10	630	M18 x 1.5
FL2S-C-EZ-12-S	**FL2S-C-ST-12-S**	**FL2S-O-ST-12-S**	S (heavy)	12	630	M20 x 1.5
FL2S-C-EZ-14-S	**FL2S-C-ST-14-S**	**FL2S-O-ST-14-S**	S (heavy)	14	630	M22 x 1.5
FL2S-C-EZ-16-S	**FL2S-C-ST-16-S**	**FL2S-O-ST-16-S**	S (heavy)	16	400	M24 x 1.5
FL2S-C-EZ-20-S	**FL2S-C-ST-20-S**	**FL2S-O-ST-20-S**	S (heavy)	20	400	M30 x 2
FL2S-C-EZ-25-S	**FL2S-C-ST-25-S**	**FL2S-O-ST-25-S**	S (heavy)	25	400	M36×2.0
FL2S-C-EZ-30-S	**FL2S-C-ST-30-S**		S (heavy)	30	400	M42 x 2
FL2S-C-EZ-38-S	**FL2S-C-ST-38-S**		S (heavy)	38	315	M52 x 2
FL2S-C-EZ-17-F			French standard	17		M24 x 1.5
FL2S-C-EZ-21-F			French standard	21		M30 x 1.5

ENGLISH
Zinc-plated steel type

Materials:
Bodies: Zinc plated steel, any existing elastomer seal: NBR

Temperature range:
-40°C to max. +120°C (with an elastomer seal: -35°C to max. +100°C)

Stainless steel type and screw connection

Materials:
Body: 1.4571, any existing elastomer seal: FKM

Temperature range:
-60°C up to max. +400°C (with elastomer seal: -20°C to max. +200°C, NC screw connections on request up to +550°C)

NEDERLANDS
Type verzinkt staal

Materialen
Lichaam: Verzinkt staal of beschikbare elastomeerafdichting: NBR

Temperatuurbereik:
-40 °C tot max. +120 °C (met elastomeerafdichting: -35 °C tot max. +100 °C)

Type roestvrij staal en NC-klemring

Materialen
Lichaam: 1.4571, eventueel beschikbare elastomeerafdichting: FKM

Temperatuurbereik:
-60 °C tot max. +400 °C (met elastomeerafdichting: -20 °C tot max. +200 °C, NC-koppelingen op aanvraag tot +550 °C)

DEUTSCH
Typ Stahl verzinkt

Werkstoffe:
Körper: Stahl verzinkt, ggf. vorhandene Elastomerdichtung: NBR

Temperaturbereich:
-40°C bis max. +120°C (mit Elastomerdichtung: -35°C bis max. +100°C)

Typ Edelstahl und NC-Klemmring

Werkstoffe:
Körper: 1.4571, ggf. vorhandene Elastomerdichtung: FKM

Temperaturbereich:
-60°C bis max. +400°C (mit Elastomerdichtung: -20°C bis max. +200°C, NC-Verschraubungen auf Anfrage bis +550°C)

FRANÇAIS
Type acier galvanisé

Matériaux:
Corps : Acier galvanisé, éventuelle présence de joint en élastomère: NBR

Plage de température:
-40°C à max. +120°C (avec joint en élastomère: -35°C à +100°C max.)

Type acier inoxydable et anneau de serrage NC

Matériaux:
Corps : 1.4571, éventuelle présence de joint en élastomère : FKM

Plage de température:
-60°C à max. +400°C (avec joint en élastomère: -20°C à +200°C max, raccords NC sur demande jusqu'à +550°C)

Montage cutting ring screw connections and compression ring fittings
1) Cut the tube away at a right angle and lightly deburr and clean the inside and outside. Do not use a tube cutter. In the case of thin-walled or soft pipes a reinforcing ring must be used.
2) Thoroughly oil the socket threads and cone, inner union nuts and cutting ring. For stainless steel cutting ring connections PASTE ES must be used (optional for compression ring).
3) Push the union nut and cutting ring onto the tube. Ensure the correct position of the cutting ring/compression ring - otherwise the assembly will be incorrect.
4) Loosen the union nut as far as possible by hand. Attach the marking of the union nut for checking the specified rotations. Press tube in the cone until the stop. Tighten the union nut with screw wrench approx. 1 rotation. The tube must not be rotated.
5) Loosen the union nut to check the assembly. **Cutting ring:** The raised tube material must cover the front cutting ring area. If not, retighten slightly. Due to the spring effect of the cutting ring, this can still be rotated - no functional error. **compression ring:** The compression ring can no longer be displaced.
6) Final assembly: Assemble the union nuts on sockets until there is a noticeable increase in force. Then tighten with 1/4 - 1/2 rotation (cutting ring fitting), or 3/4 rotation (compression ring fitting).

Warning:
Assembly of stainless steel screw connections only with the aid of suitable lubricant.

Notes on compression ring fittings

Advantages:
• Compatible with all cutting ring fittings according to DIN EN ISO 8434-1 (DIN 2353). Also resistant to dynamic loads such as vibrations and pulsations. It can be loosened and screwed back in as often as is necessary. • In contrast to a cutting ring the compression ring is not hardened, therefore it cannot rust and has good chemical resistance. • Lubrication of the nut thread for initial assembly is not necessary, •Vacuum tightness Q< 10^8 mbar l/s, •Ideal for use in gas and water area

Required tube quality:
The screw connections must be processed with heat treated, seamless stainless steel tubes (1.4571) according to DIN EN ISO 1127. The tolerance category should be D4/T3, the surface must not show any damage and its hardness should not be more than Rockwel HRB 90.

Reference	Material	Tube diameter (mm)	Max pressure (bar)
FL2S-O-B-04	Brass	4	150
FL2S-O-B-05	Brass	5	150
FL2S-O-B-06	Brass	6	150
FL2S-O-B-08	Brass	8	135
FL2S-O-B-10	Brass	10	95
FL2S-O-B-12	Brass	12	75
FL2S-O-B-14	Brass	14	89
FL2S-O-B-15	Brass	15	82
FL2S-O-B-16	Brass	16	76
FL2S-O-B-18	Brass	18	67
FL2S-O-B-22	Brass	22	54

ENGLISH
Temperature range:
-60°C up to max. +300°C (with seal: -20°C up to max. +80°C)

Recommended raw materials:
Copper, polyamide (with reinforced sleeve)

Note:
The brass compression ring screw connections cannot be combined with the cutting ring pipe screw connectors ISO 8434-1 (DIN 2353). When using soft copper tube a correction factor of 0.65 must be used (pressure x 0.65). When using polyamide tube the operating pressure of the tube applies.

Materials:
Brass

NEDERLANDS
Temperatuurbereik:
-60°C tot max. +300°C (met afdichting: -20°C tot max. +80°C)

Aanbevolen buismaterialen:
Koper, polyamide (met versterkingshuls)

Aanwijzing:
De messing klemringkoppelingen kunnen niet met snijringbuiskoppelingen ISO 8434-1 (DIN 2353) gecombineerd worden. Bij gebruik van zachte koperen buis dient de correctiefactor van 0,65 toegepast te worden (Druk x 0,65). Bij gebruik van polyamide buis gelden de bedrijfsdrukken van de buis.

Materialen
Messing

DEUTSCH
Temperaturbereich:
-60°C bis max. +300°C (mit Dichtung: -20°C bis max. +80°C)

Empfohlene Rohrwerkstoffe:
Kupfer, Polyamid (mit Verstärkungshülse)

Hinweis:
Die Messing-Klemmringverschraubungen sind nicht mit Schneidring-Rohrverschraubungen ISO 8434-1 (DIN 2353) kombinierbar. Bei Verwendung von weichem Kupferrohr ist der Korrekturfaktor von 0,65 anzuwenden (Druck x 0,65). Bei Verwendung von Polyamidrohr gelten die Betriebsdrücke des Rohres.

Werkstoffe:
Messing

FRANÇAIS
Plage de température:
-60°C à max. +300°C (avec joint: -20°C jusqu'à max. +80°C)

Matériaux de tubes recommandés:
Cuivre, polyamide (avec douille de renfort)

Remarque:
Les raccords à bagues de serrage en laiton ne peuvent pas être combinés avec des raccords filetés de tuyaux à bagues coupantes ISO 8434-1 (DIN 2353). Lors de l'utilisation d'un tuyau en cuivre doux, un facteur de correction de 0,65 doit être appliqué (pression x 0,65). Lors de l'utilisation d'un tuyau en polyamide, les pressions de service du tube s'appliquent.

Matériaux:
Laiton