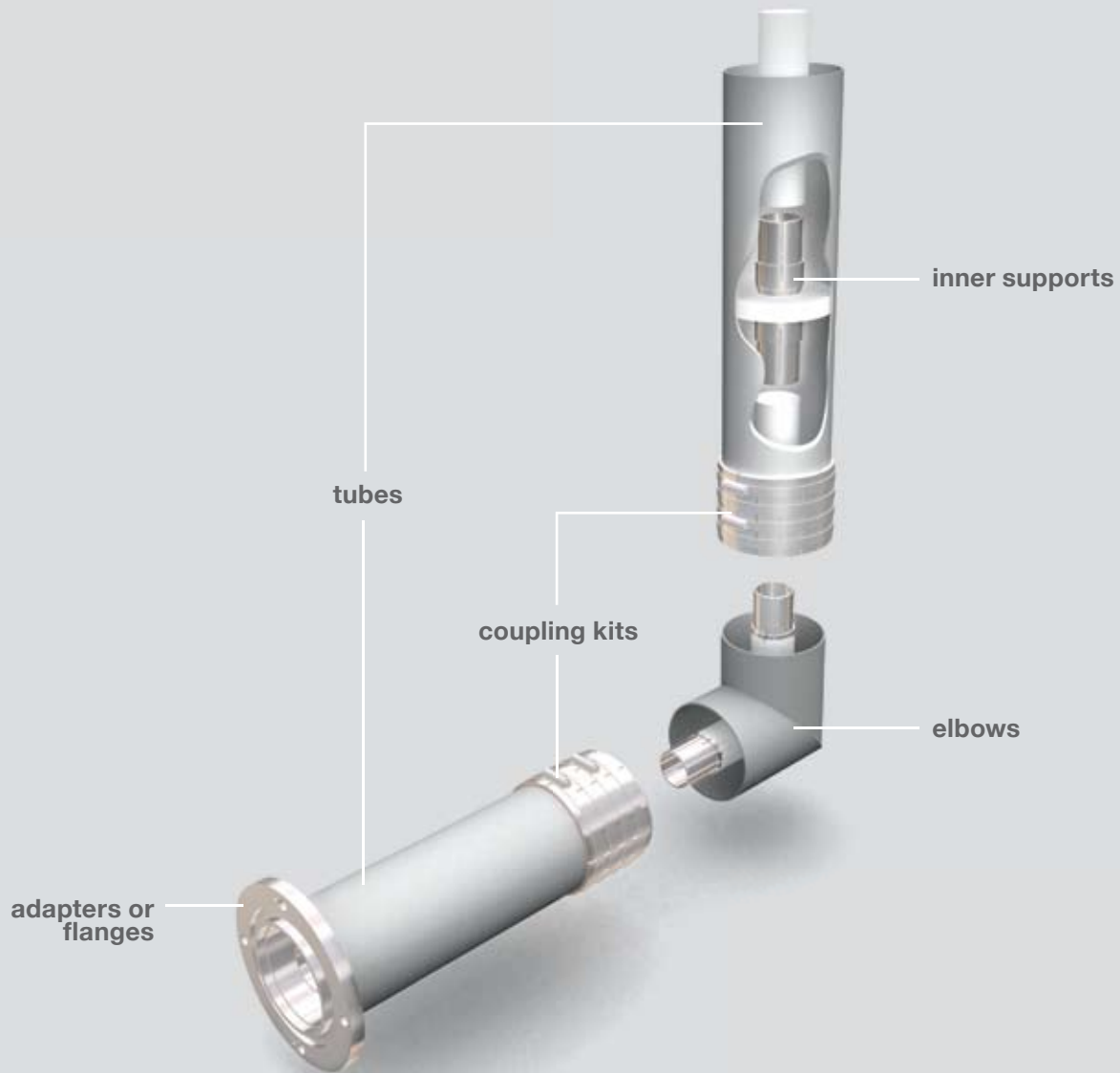


rigid lines

Main Features

- High quality materials (low-loss copper, Teflon PTFE, silver-plated brass)
- Easy assembly
- Circlips in inner bullets to ensure excellent contact
- Available as custom-made
- Adaptors for any size
- Low VSWR



RIGID LINE TUBES

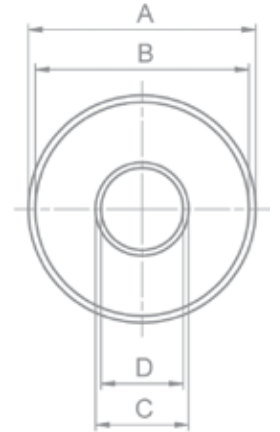
ELTI supplies rigid lines of different types. Low-loss copper and copper are used to ensure high conductivity. The tubes are connected with silver-plated brass sleeves tightened with tube clamps. The inner conductors are connected with silver-plated brass bullets.

The maximum production length of a tube is 5 meters. If the maximum length is used, then the inner conductors have to be supported by inner supports. All dimensions can be ordered with connecting flanges for outdoor use.

All line types are made from the same material. The inner part is made from low-loss copper and outer from copper. Nominal impedance is 50 Ohm.

More detailed information is available on request.

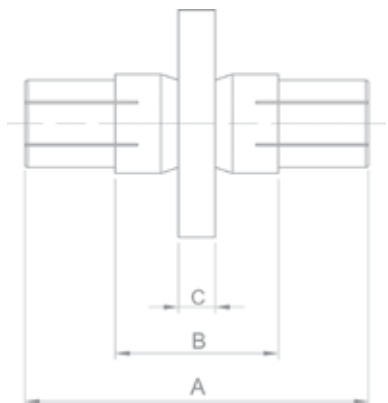
LINE TYPE	EIA 7/8"	EIA 1 5/8"	EIA 3 1/8"	EIA 4 1/2"	EIA 6 1/8"
ARTICLE	078 Inner	158 Inner	318 Inner	412 Inner	618 Inner
	078 Outer	158 Outer	318 Outer	412 Outer	618 Outer
A	22,23 mm	41,28 mm	79,38 mm	106,00 mm	155,60 mm
B	19,95 mm	38,79 mm	76,88 mm	103,00 mm	151,92 mm
C	8,66 mm	16,87 mm	33,40 mm	44,80 mm	66,00 mm
D	7,39 mm	14,93 mm	31,27 mm	42,80 mm	64,10 mm



INNER SUPPORTS

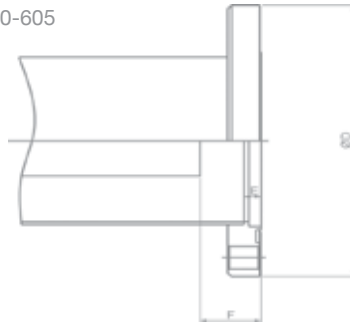
ELTI manufactures inner supports for all our rigid lines. The supports are designed to maintain excellent connectivity in rigid line and flange connections. Silver-plated brass is used for the inner conductor. The ends are slotted and a circlip ensures excellent contact. All the support plates are made of high quality Teflon (PTFE) that has been controlled and adjusted before manufacturing.

LINE TYPE	ARTICLE	A	B	C
EIA 7/8" unflange	R078-ISUP-AA00	49,0 mm	23,8 mm	5,0 mm
EIA 7/8" flange	078F-ISUP-A0	49,0 mm	23,8 mm	5,0 mm
EIA 1 5/8" unflange	R158-ISUP-A0	58,5 mm	28,6 mm	6,3 mm
EIA 1 5/8" flange	158F-ISUP-A0	59,4 mm	28,4 mm	6,3 mm
EIA 3 1/8" unflange	R318-ISUP-A0	78,3 mm	47,3 mm	8,1 mm
EIA 3 1/8" flange	318F-ISUP-A0	78,3 mm	47,3 mm	9,4 mm
EIA 4 1/2" unflange	R412-ISUP-A0	100,0 mm	45,0 mm	9,35 mm
EIA 4 1/2" flange	412F-ISUP-A0	108,4 mm	47,4 mm	9,35 mm
EIA 6 1/8" unflange	R618-ISUP-A0	110,0 mm	65,0 mm	8,1 mm
EIA 6 1/8" flange	618F-ISUP-A0	110,0 mm	65,0 mm	11,1 mm

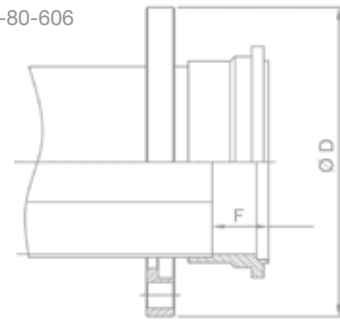


FLANGES

CEL 50-80-605



CEL 50-80-606



STANDARD		FIXED FLANGES FOR BRAZING		SWIVEL FLANGES FOR BRAZING		FLANGE DIMENSIONS (mm)		
339 IEC	EIA	TYPE	CODE	TYPE	CODE	D	E	F
50-22	7/8"	CEL 50-22-601	98264	CEL 50-22-602	98055	57,0	3,5	12,5
50-40	1 5/8"	CEL 50-40-603	98265	CEL 50-40-604	98056	89,0	5,1	15,5
50-80	3 1/8"	CEL 50-80-605	98266	CEL 50-80-606	98057	129,0	6,7	23,5
50-105	4 1/2"	CEL 50-105-607	98267	CEL 50-105-608	98058	158,0	7,0	23,5

COUPLING KITS

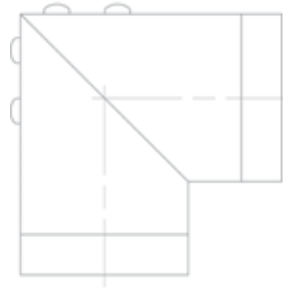
Coupling kits are used for connecting indoor rigid line components and available as flanged and unflanged coupling kits. The flanged version comprises flanged inner supports, O-rings, nuts and washers. The unflanged kit comprises an inner bullet, an outer sleeve and two or more tube clamps. The number of these clamps depends on the rigid line type.

RIGID LINE TYPE	TYPE	CODE
EIA 7/8" unflange	CEL 50-22-991	93079
EIA 1 5/8" unflange	CEL 50-40-992	93102
EIA 3 1/8" unflange	CEL 50-80-993	66679
EIA 4 1/2" unflange	CEL 50-105-974	52279
EIA 6 1/8" unflange	R618-CKIT-A0	45276
EIA 7/8" flange	CEL 50-22-616	64529
EIA 1 5/8" flange	CEL 50-40-618	64531
EIA 3 1/8" flange	CEL 50-80-620	64533
EIA 4 1/2" flange	CEL 50-105-622	64535
EIA 6 1/8" flange	CEL 50-155-624	65384

ELTI manufactures elbows for all our rigid lines for both outdoor and indoor use. The inner conductor on each model is milled from a single piece. This ensures a uniform quality both mechanically and electrically. No castings are used in our elbows.

All the support insulators for the inner conductor are made of high quality Teflon (PTFE) that has been controlled and adjusted before manufacturing. These are fixed with screws of stainless steel to make an absolutely airtight seal. The outdoor models are equipped with fixed or swivel flanges. O-rings of high quality EPDM are used for gas-tight flange connections.

RIGID LINE TYPE	TYPE	CODE
EIA 7/8" unflange	CEL 50-22-949	92965
EIA 1 5/8" unflange	CEL 50-40-958	93127
EIA 3 1/8" unflange	CEL 50-80-968	66683
EIA 4 1/2" unflange	R412-ELBO-A0	45214
EIA 6 1/8" unflange	R618-ELBO-A0	45274
EIA 7/8" flange	Elbow 22-2V	64578
EIA 1 5/8" flange	Elbow 40-2V	92492
EIA 3 1/8" flange	Elbow 80-2V	73130
EIA 4 1/2" flange	Elbow 105-1V	83261
EIA 6 1/8" flange	Elbow 155-2V	45281



ADAPTERS

ELTI manufactures a wide variety of adapters for its flanged and unflanged rigid line. Custom designs are also available.

We guarantee VSWR lower than 1:1,05 on every adapter. The maximum power is the same as the specifications for the smallest diameter (connector type). Measuring protocols and more detailed specifications concerning the materials used are available on request.

The adapters that we manufacture are made from solid silver-plated brass. The most common material for support and isolation details is high quality teflon (PTFE). The Teflon is electrically controlled before being milled and lathed into its final shape. As different types of Teflon have different electrical characteristics, these measurements are monitored to help us maintain uniform high quality.

Coaxial adapter RL - EIA	TYPE	CODE
EIA 7/8" unflange to EIA 7/8" flange	CEL 50-22-956	93080
EIA 1 5/8" unflange to EIA 1 5/8" flange	CEL 50-40-955	93100
EIA 3 1/8" unflange to EIA 3 1/8" flange	CEL 50-80-965	66681
EIA 4 1/2" unflange to EIA 4 1/2" flange	R418-418F-A0	45218
EIA 6 1/8" unflange to EIA 6 1/8" flange	R618-618F-A0	45275