

CATALOGUE 21



COAXIAL COMPONENTS AND ACCESSORIES



ANYWHERE THE SOLUTION

Company History

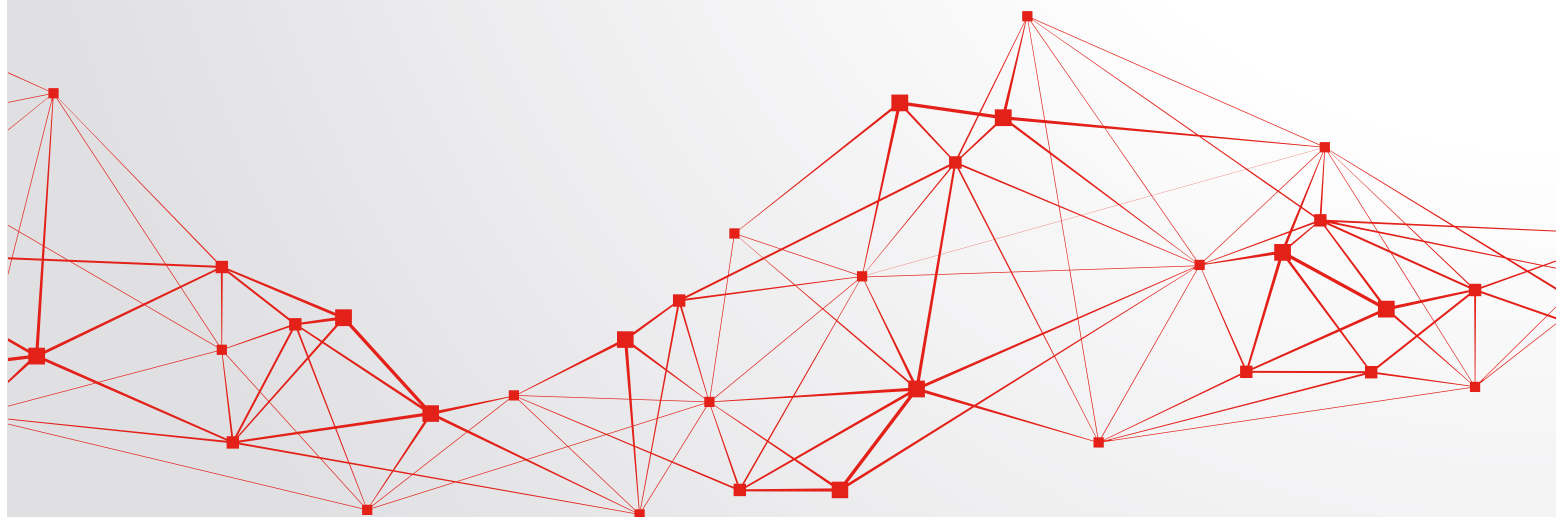
SIRA S.r.l. was founded in 1977 and has more than 40 years of proud history in broadcasting and telecommunications RF equipment. Headquartered in Caponago, Italy, the company had developed into a leading manufacturer of broadcast equipment with installations in more than 120 countries. Throughout the years, the SIRA brand has become known for flexibility in engineering solutions, fast delivery and good quality at an attractive price. Since 1992 the company has belonged to the Kathrein group

but operated independently under the SIRA name. Only in 2015 we started to integrate SIRA operations with the Kathrein Broadcast activities. Since 2016 customers are able to buy both brands out of one hand. In 2019 the Broadcast business worldwide was carved out into the Kathrein Broadcast group. The Italian branch of Kathrein Broadcast is now named "SIRA Radio Systems S.r.l." to pick up on the proud heritage of the SIRA brand.

Continuity and proven quality

Our SIRA engineering team is based near Milan, Italy. Since 2018, we have optimized our supply chain with our own centralized manufacturing that is subject to the notoriously rigorous Kathrein quality management system.

With this approach we have been able to maintain the values and virtues SIRA has stood for in the Broadcast market for more than 40 years: The creativity of our solutions combined with attractive economics, reliability and fast delivery.



CATALOGUE OVERVIEW & CONTACT

Unique designs

SIRA includes a full portfolio of UHF, VHF and FM antennas as well as combiners, all designed in Italy. The product line includes unique custom designs as well as proven standard designs, so the product line offers an attractively priced

alternative to customers who are looking for more choices, as well as customized project specific solutions. The SIRA portfolio is therefore complimentary to the traditional Kathrein Broadcast offering.



Please feel free to order our catalogues under the following contact.

Contact

For any question, your familiar contacts in Italy are now supporting you out of **SIRA Radio Systems S.r.l.**

Mail: info@siraradiosystems.com







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SWITCHING UNIT and MANUAL SWITCHES

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MANUAL SWITCHES

FEATURES

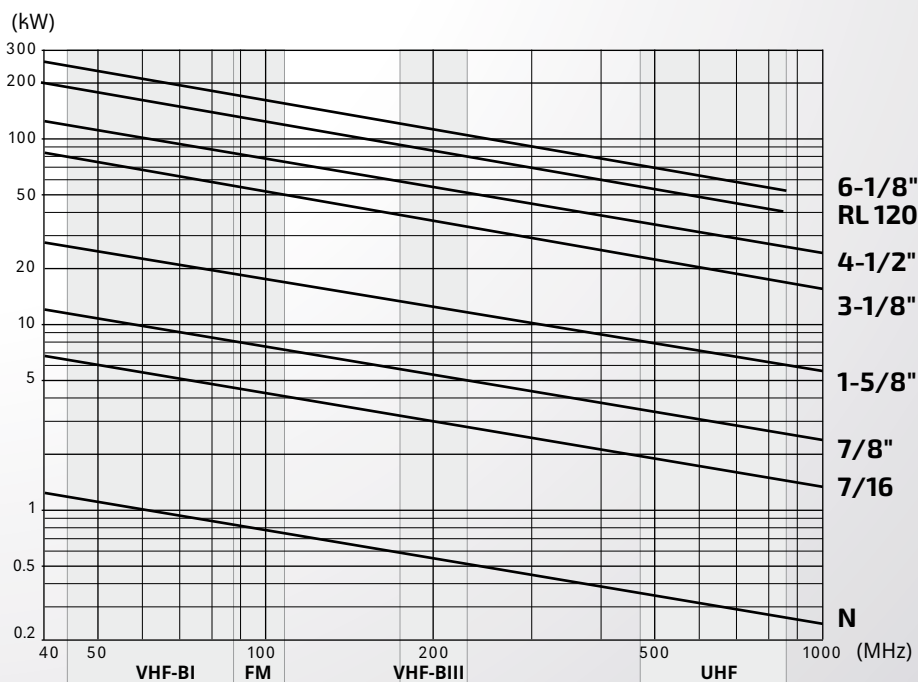
- unflanged type
- low insertion loss
- low V.S.W.R
- indoor applications
- easy and quick lock and unlock system



GENERAL FEATURES

FREQUENCY RANGE	0.1 ÷ 860 MHz
IMPEDANCE	50 ohm
RETURN LOSS (in the operating channel)	≥ 32 dB
MAX MEAN POWER	See table below
CONNECTORS	See table
WEIGHT	See table
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
MATERIALS	- Support frame Available on request
	- Supporting plate Aluminium
	- External body Polished copper, polished brass
	- Inner conductor Silver plated brass, silver plated aluminium
	- Insulating material Teflon
EXTERNAL FINISHING	Painted RAL 9005, Surtec 650

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

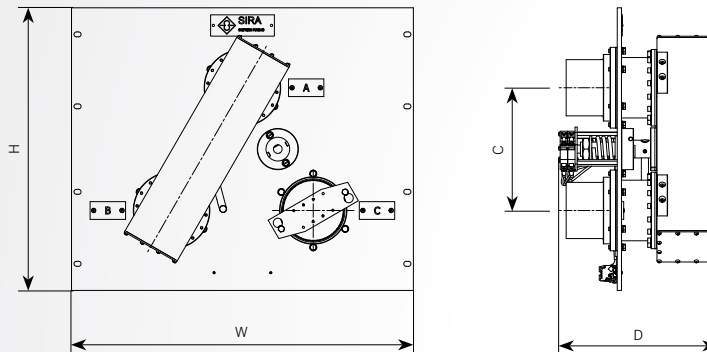
MANUAL SWITCHES

3 PORTS / 1 U-LINK MANUAL SWITCHES

TYPE	U-LINKS	PORTS	DIMENSIONS mm (in)				WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
	TYPE	TYPE	H	W	D	C			
CMT-41/B/Z	7/8"	7/16	132.5 (5.2)	482.6 (19)	101 (4.0)	0 (0)	3 (6.6)	1.5	3
CMT-41/C/U/Z	7/8"	7/8" UNFL	132.5 (5.2)	482.6 (19)	120 (4.7)	0 (0)	3 (6.6)	2.7	4
CMT-01/U/Z	1-5/8"	1-5/8" UNFL	132.5 (5.2)	482.6 (19)	240 (9.4)	150 (5.9)	5 (11)	5.2	7
CMT-11/U/Z	3-1/8"	3-1/8" UNFL	399 (15.7)	482.6 (19)	224 (8.8)	200 (7.9)	14 (31)	9.7	14
CMT-21/4/U/Z	5"	4-1/2" UNFL	488 (19.2)	482.6 (19)	327 (12.9)	250 (9.8)	29 (64)	12.5	19
CMT-31/VHF/U/Z *	6-1/8"	6-1/8" UNFL	580 (22.8)	715 (28.1)	348 (13.7)	300 (11.8)	34 (75)	17	25
CMT-31/UHF/U/Z *	6-1/8"	6-1/8" UNFL	580 (22.8)	715 (28.1)	348 (13.7)	300 (11.8)	34 (75)	17	25

* VHF up to 254 MHz UHF= 470 ÷ 780 MHz

3 PORTS / 1 U-LINK MANUAL SWITCHES

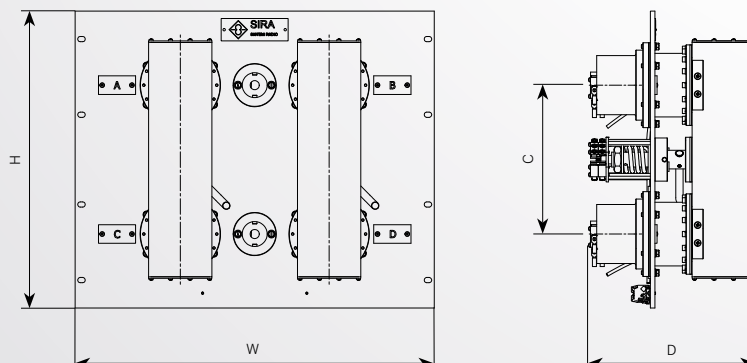


4 PORTS / 2 U-LINK MANUAL SWITCHES

TYPE	U-LINKS	PORTS	DIMENSIONS mm (in)				WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
	TYPE	TYPE	H	W	D	C			
CMT-42/B/Z	7/8"	7/16	310.5 (12.2)	482.6 (19)	101 (4)	116.4 (4.6)	6 (13)	1.5	3
CMT-42/C/U/Z	7/8"	7/8" UNFL	310.5 (12.2)	482.6 (19)	120 (4.7)	116.4 (4.6)	6 (13)	2.7	4
CMT-02/U/Z	1-5/8"	1-5/8" UNFL	310.5 (12.2)	482.6 (19)	240 (9.4)	150 (5.9)	10 (22)	5.2	7
CMT-12/U/Z	3-1/8"	3-1/8" UNFL	399 (15.7)	482.6 (19)	224 (8.8)	200 (7.9)	19 (42)	9.7	14
CMT-22/4/U/Z	5"	4-1/2" UNFL	532.5 (21)	482.6 (19)	326 (12.8)	250 (9.8)	44 (97)	12.5	19
CMT-32/VHF/U/Z *	6-1/8"	6-1/8" UNFL	600 (23.6)	715 (28.1)	348 (13.7)	300 (11.8)	53 (117)	17	25
CMT-32/UHF/U/Z *	6-1/8"	6-1/8" UNFL	600 (23.6)	715 (28.1)	348 (13.7)	300 (11.8)	53 (117)	17	25

* VHF up to 254 MHz UHF=470 ÷ 780 MHz

4 PORTS / 2 U-LINKS MANUAL SWITCHES

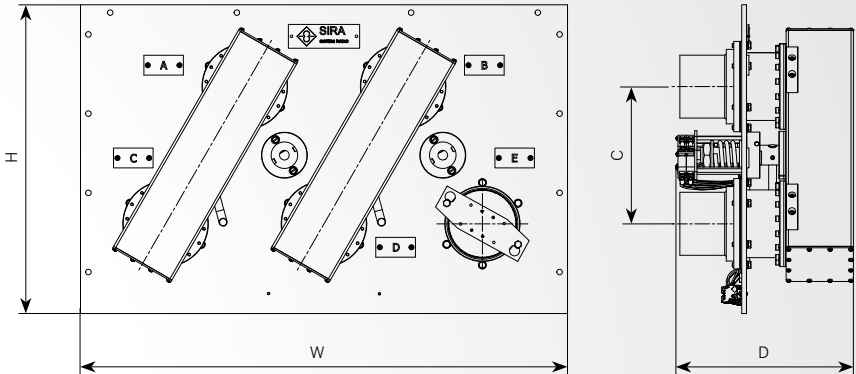


MANUAL SWITCHES

5 PORTS / 2 U-LINK MANUAL SWITCHES

TYPE	U-LINKS	PORTS	DIMENSIONS mm (in)				WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
	TYPE	TYPE	H	W	D	C			
CMT-03/U/Z	1-5/8"	1-5/8" UNFL	310.5 (12.2)	482.6 (19)	240 (9.4)	150 (5.9)	11 (24)	5.2	7
CMT-13/U/Z	3-1/8"	3-1/8" UNFL	390 (15.4)	615 (24.2)	224 (8.8)	200 (7.9)	22 (49)	9.7	14

5 PORTS / 2 U-LINKS
MANUAL SWITCHES



FM SWITCHING UNITS

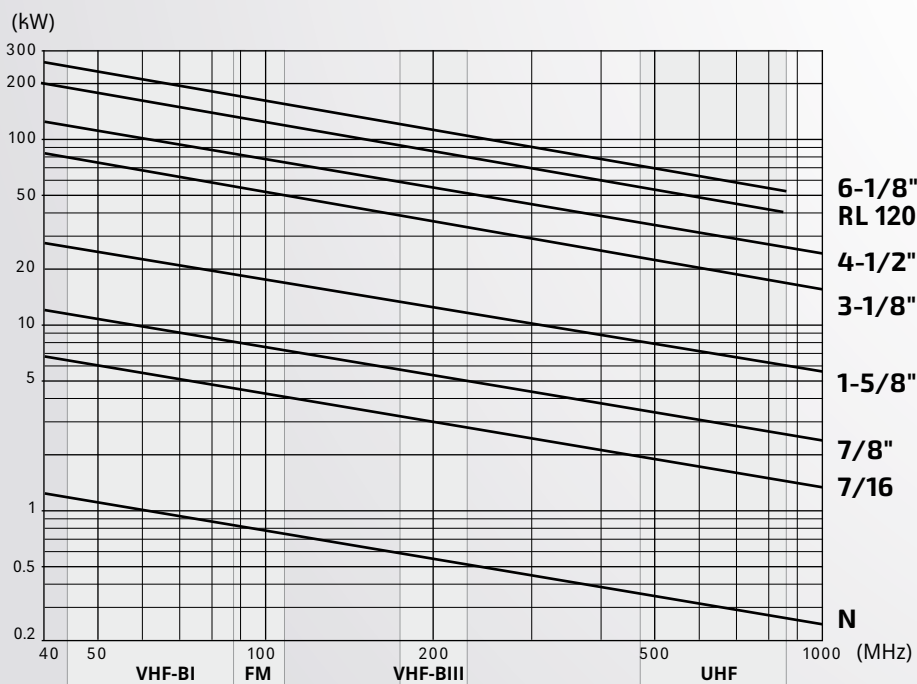
FEATURES

- unflanged type
- low insertion loss
- low V.S.W.R
- indoor applications
- easy and quick lock and unlock system
- equal or unequal power split ratio

GENERAL FEATURES

FREQUENCY RANGE	87.5 ÷ 108 MHz	
IMPEDANCE	50 ohm	
RETURN LOSS	≥ 32 dB	
INSERTION LOSS	≤ 0.1 dB	
MAX MEAN POWER	See table below	
CONNECTORS	See table	
WEIGHT	See table	
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)	
MATERIALS	- Support frame	Galvanized steel
	- Supporting plate	Aluminium
	- External body	Polished copper, polished brass
	- Inner conductor	Silver plated brass, silver plated aluminium
	- Insulating material	Teflon
EXTERNAL FINISHING	Painted RAL 9005, Surtec 650	

MAX MEAN POWER



Note: Power handling is limited by the smallest size either by U-Links or inputs / outputs ports.



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

FM SWITCHING UNITS

6 or 7 PORTS / 3 U-LINKS SWITCHING UNITS

figure "1"

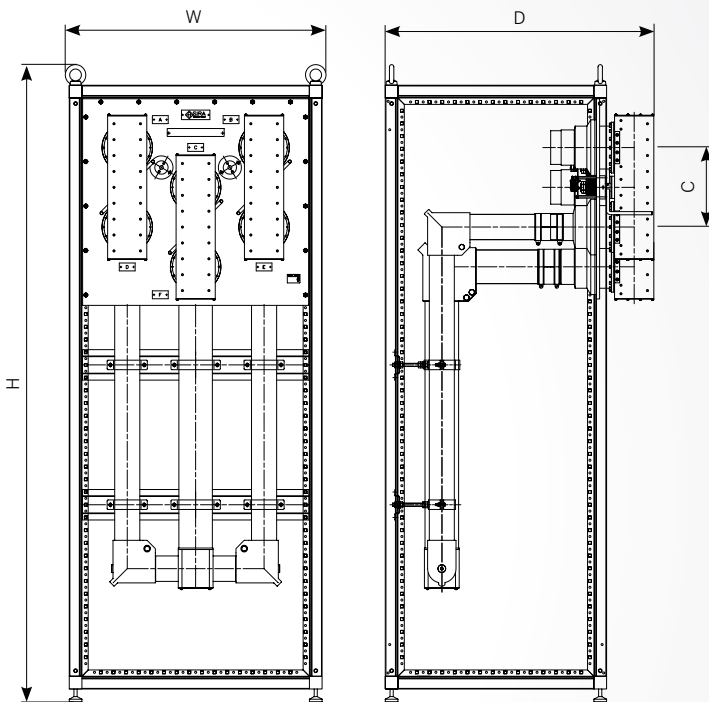
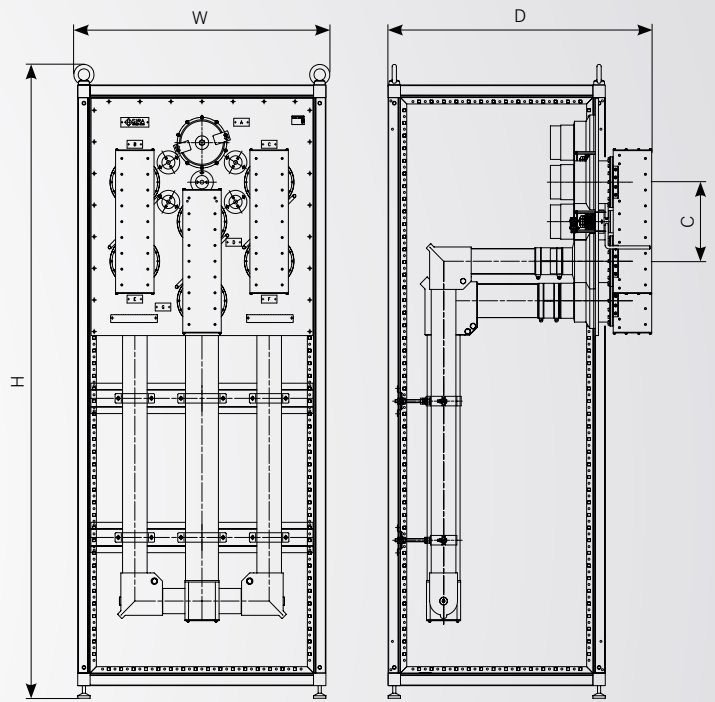


figure "2"



TYPE	U-LINKS	PORTS	FIGURE		DIMENSIONS mm (in)				WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
	TYPE	TYPE			Nr.	H	W	D			
SWU/FM-04/U/Z	1-5/8"	1-5/8" UNFL	6	1	1980 (78)	566 (22.3)	730 (28.7)	150 (5.9)	57 (126)	5.2	7
SWU/FM-05/U/Z	1-5/8"	1-5/8" UNFL	7	2	1980 (78)	566 (22.3)	730 (28.7)	150 (5.9)	60 (132)	5.2	7
SWU/FM-14/U/Z	3-1/8"	3-1/8" UNFL	6	1	1980 (78)	600 (23.6)	810 (31.9)	200 (7.9)	95 (209)	9.7	14
SWU/FM-15/U/Z	3-1/8"	3-1/8" UNFL	7	2	1980 (78)	600 (23.6)	810 (31.9)	200 (7.9)	108 (238)	9.7	14
SWU/FM-24/4/U/Z	5"	4-1/2" UNFL	6	1	1980 (78)	800 (31.5)	850 (33.5)	250 (9.8)	145 (320)	12.5	19
SWU/FM-25/4/U/Z	5"	4-1/2" UNFL	7	2	1980 (78)	800 (31.5)	850 (33.5)	250 (9.8)	155 (342)	12.5	19
SWU/FM-34/U/Z	6-1/8"	6-1/8" UNFL	6	1	1980 (78)	900 (35.4)	775 (30.5)	300 (11.8)	182 (401)	17	25

VHF-B3 SWITCHING UNITS

FEATURES

- unflanged type
- low insertion loss
- low V.S.W.R
- indoor applications
- easy and quick lock and unlock system
- equal or unequal power split ratio

GENERAL FEATURES

FREQUENCY RANGE 174 ÷ 230 MHz (up to 254 MHz on request)

IMPEDANCE 50 ohm

RETURN LOSS ≥ 32 dB

INSERTION LOSS ≤ 0.1 dB

MAX MEAN POWER See table below

CONNECTORS See table

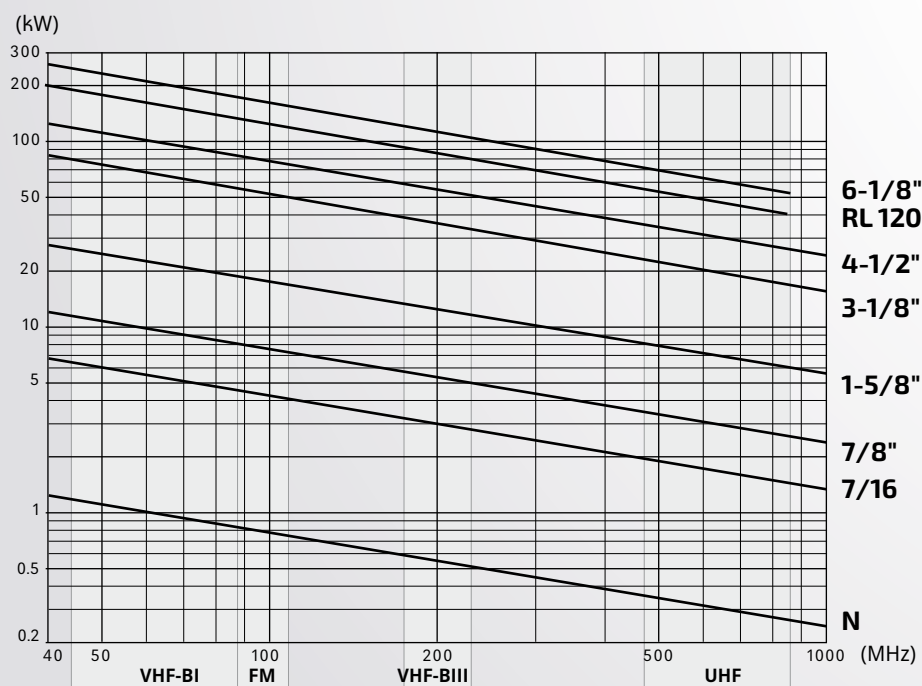
WEIGHT See table

OPERATING TEMPERATURE RANGE -40 to +70° C (-40 to +158° F)

MATERIALS	- Support frame	Galvanized steel
	- Supporting plate	Aluminium
	- External body	Polished copper, polished brass
	- Inner conductor	Silver plated brass, silver plated aluminium
	- Insulating material	Teflon

EXTERNAL FINISHING Painted RAL 9005, Surtec 650

MAX MEAN POWER



Note: Power handling is limited by the smallest size either by U-Links or inputs / outputs ports.



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

VHF-B3 SWITCHING UNITS

6 or 7 PORTS / 3 U-LINKS SWITCHING UNITS

figure "1"

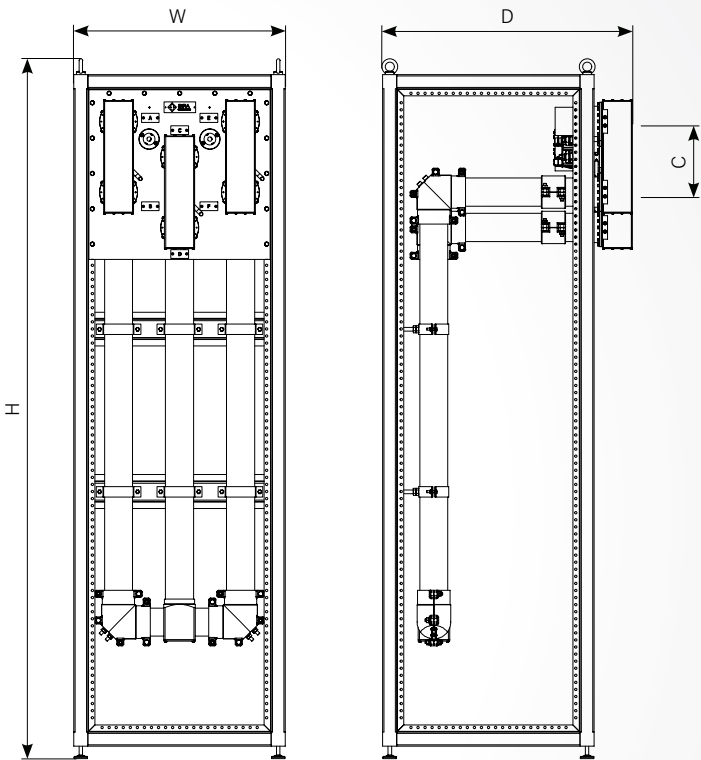
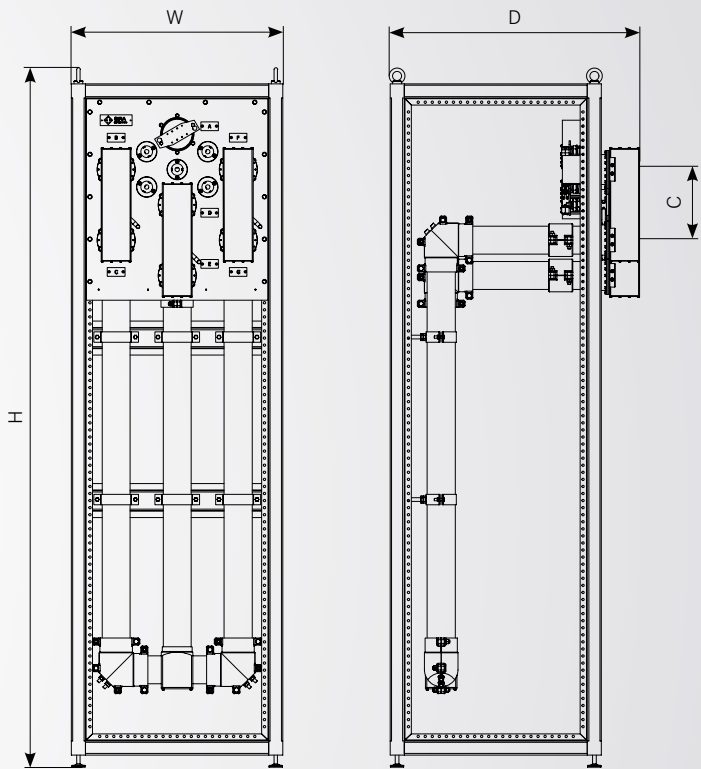


figure "2"



TYPE	U-LINKS	PORTS	FIGURE	H	DIMENSIONS mm (in)				WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
	TYPE	TYPE	Nr.		W	D	C				
SWU/BT-04/U/Z	1-5/8"	1-5/8" UNFL	6	1	1980 (78)	566 (22.3)	730 (28.7)	150 (5.9)	54 (119)	5.2	7
SWU/BT-05/U/Z	1-5/8"	1-5/8" UNFL	7	2	1980 (78)	566 (22.3)	730 (28.7)	150 (5.9)	58 (128)	5.2	7
SWU/BT-14/U/Z	3-1/8"	3-1/8" UNFL	6	1	1980 (78)	600 (23.6)	710 (28)	200 (7.9)	74 (163)	9.7	14
SWU/BT-15/U/Z	3-1/8"	3-1/8" UNFL	7	2	1980 (78)	600 (23.6)	710 (28)	200 (7.9)	79 (174)	9.7	14
SWU/BT-24/4/U/Z	5"	4-1/2" UNFL	6	1	1980 (78)	800 (31.5)	850 (33.5)	250 (9.8)	140 (309)	12.5	19
SWU/BT-25/4/U/Z	5"	4-1/2" UNFL	7	2	1980 (78)	800 (31.5)	850 (33.5)	250 (9.8)	145 (320)	12.5	19

UHF SWITCHING UNITS

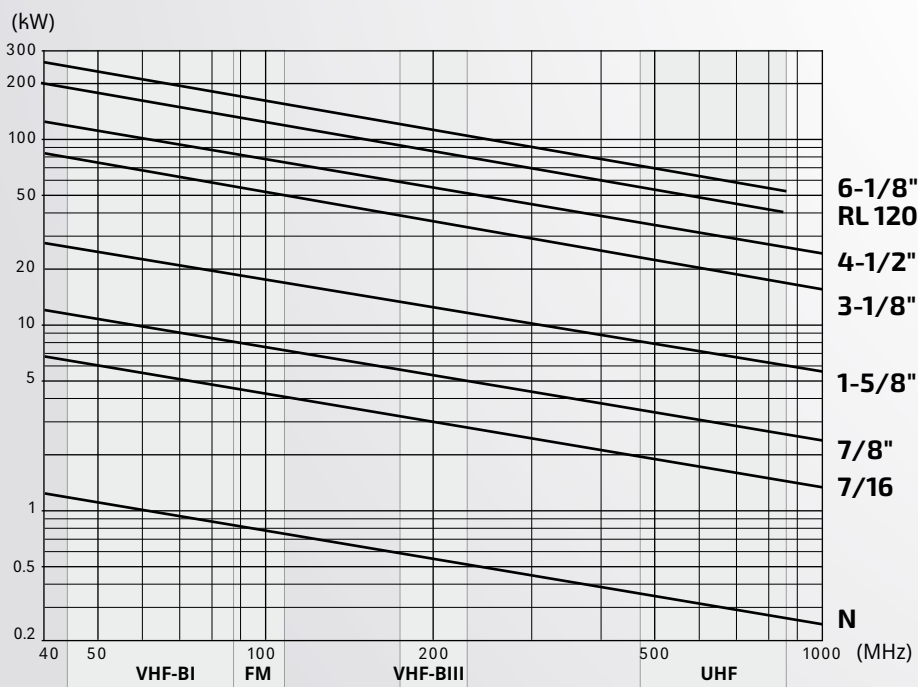
FEATURES

- unflanged type
- low insertion loss
- low V.S.W.R
- indoor applications
- easy and quick lock and unlock system
- equal or unequal power split ratio

GENERAL FEATURES

FREQUENCY RANGE	470 ÷ 860 MHz	
IMPEDANCE	50 ohm	
RETURN LOSS	≥ 32 dB	
INSERTION LOSS	≤ 0.1 dB	
MAX MEAN POWER	See table below	
CONNECTORS	See table	
WEIGHT	See table	
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)	
MATERIALS	- Support frame	Galvanized steel
	- Supporting plate	Aluminium
	- External body	Polished copper, polished brass
	- Inner conductor	Silver plated brass, silver plated aluminium
	- Insulating material	Teflon
EXTERNAL FINISHING	Painted RAL 9005, Surtec 650	

MAX MEAN POWER



Note: Power handling is limited by the smallest size either by U-Links or inputs / outputs ports.

STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)



UHF SWITCHING UNITS

6 or 7 PORTS / 3 U-LINKS SWITCHING UNITS

figure "1"

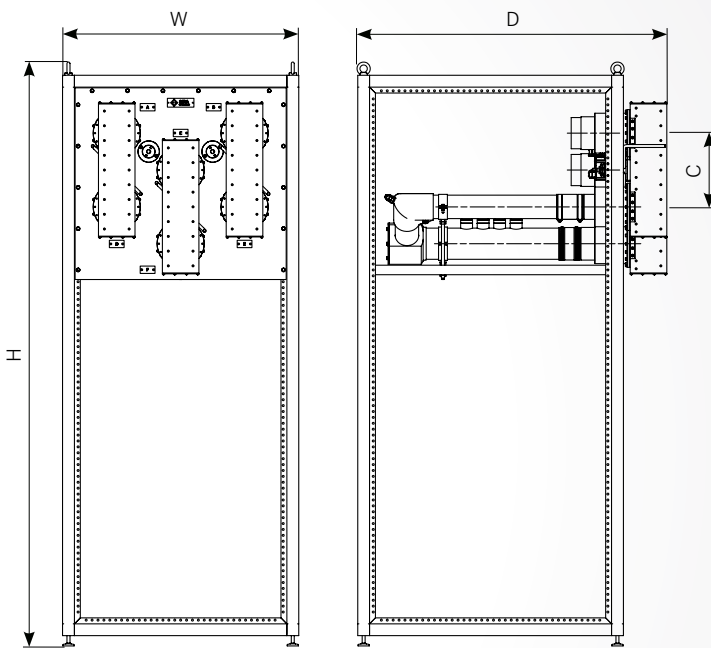
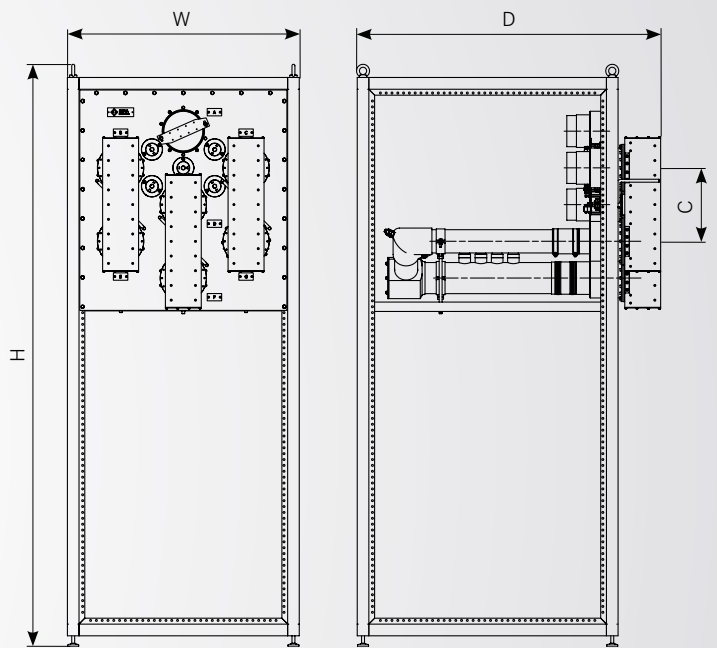


figure "2"



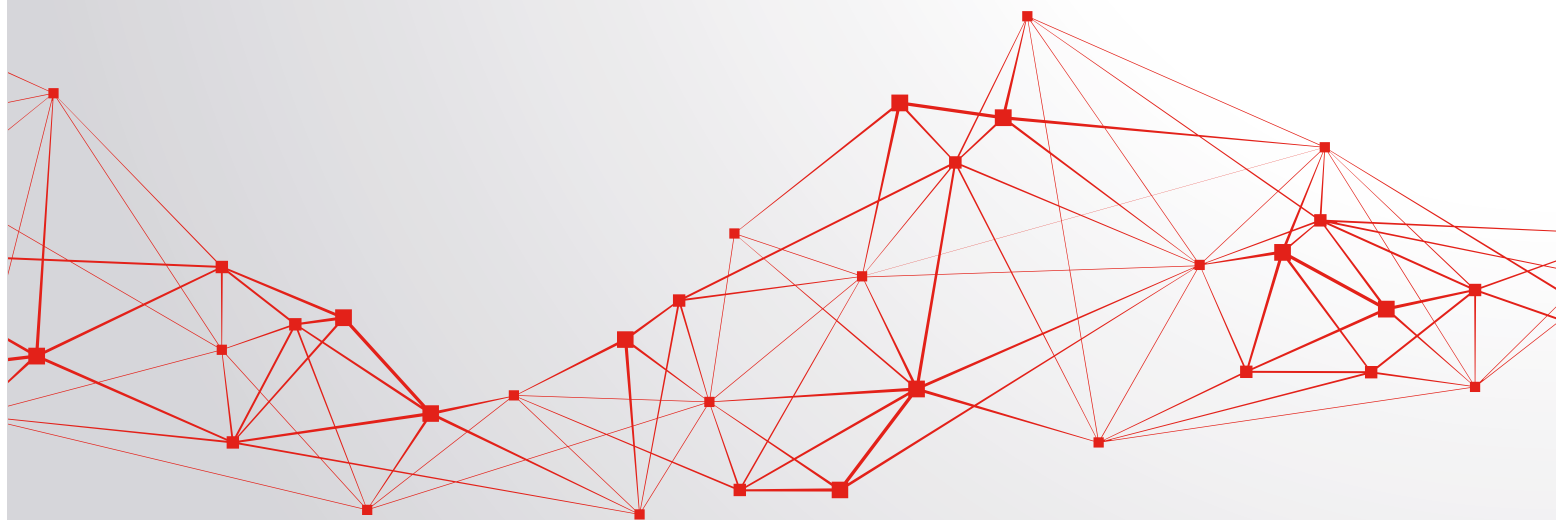
TYPE	U-LINKS	PORTS	FIGURE	H	DIMENSIONS mm (in)				WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
	TYPE	TYPE	Nr.		W	D	C				
SWU/TV-04/U/Z	1-5/8"	1-5/8" UNFL	6	1	1980 (78)	566 (22.3)	830 (32.7)	150 (5.9)	50 (110)	5.2	7
SWU/TV-05/U/Z	1-5/8"	1-5/8" UNFL	7	2	1980 (78)	566 (22.3)	830 (32.7)	150 (5.9)	53 (117)	5.2	7
SWU/TV-14/U/Z	3-1/8"	3-1/8" UNFL	6	1	1980 (78)	600 (23.6)	810 (31.9)	200 (7.9)	76 (168)	9.7	14
SWU/TV-15/U/Z	3-1/8"	3-1/8" UNFL	7	2	1980 (78)	600 (23.6)	810 (31.9)	200 (7.9)	80 (176)	9.7	14
SWU/TV-24/4/U/Z	5"	4-1/2" UNFL	6	1	1980 (78)	800 (31.5)	1050 (41.3)	250 (9.8)	118 (260)	12.5	19
SWU/TV-25/4/U/Z	5"	4-1/2" UNFL	7	2	1980 (78)	800 (31.5)	1050 (41.3)	250 (9.8)	126 (278)	12.5	19
SWU/TV-34/U/Z*	6-1/8"	6-1/8" UNFL	6	1	1980 (78)	900 (35.4)	1075 (42.3)	300 (11.8)	145 (320)	17	25

* up to 702 MHz

COAXIAL COMPONENTS and ACCESSORIES

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FM COAXIAL SPLITTERS

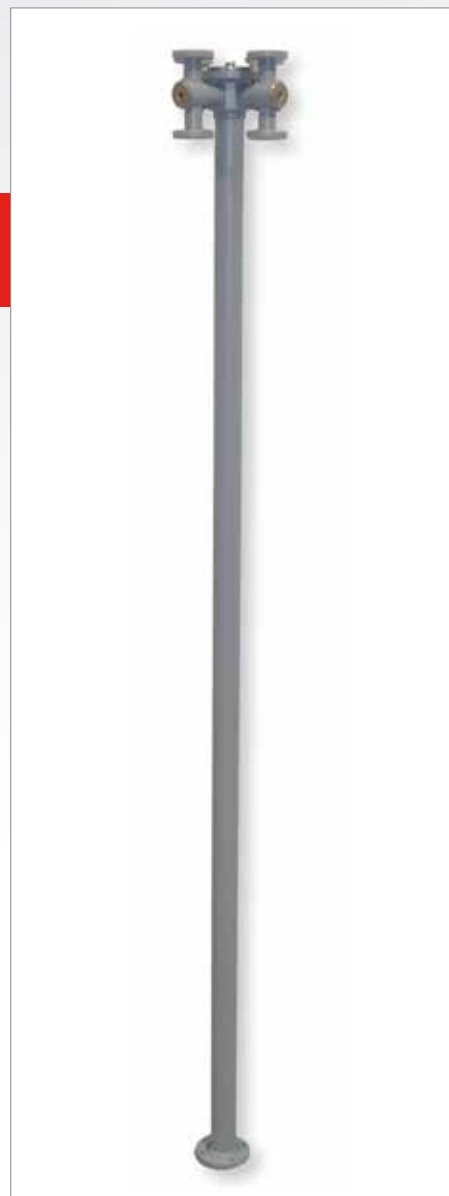
FEATURES

- broadband power dividers
- low insertion loss
- low V.S.W.R

GENERAL FEATURES

FREQUENCY RANGE	87.5 ÷ 108 MHz
IMPEDANCE	50 ohm
RETURN LOSS (typical)	≥ 32 dB with outputs ≥ 7/8" size ≥ 28 dB with outputs 7/16 F size
POWER RATING *	See table
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTORS	See table
NUMBER OF WAYS	See table
WEIGHT	See table
PRESSURIZATION	Typical operating pressure 300hPa (300mBar)
MATERIALS	- External body Polished copper, polished brass - Inner conductor Silver plated brass, polished brass, deoxidized aluminium - Insulator Teflon
EXTERNAL FINISHING	Painted RAL 7001, Nickel plating

* mean power , ambient temperature 40° C (104° F) , atmosphere pressure, dry air



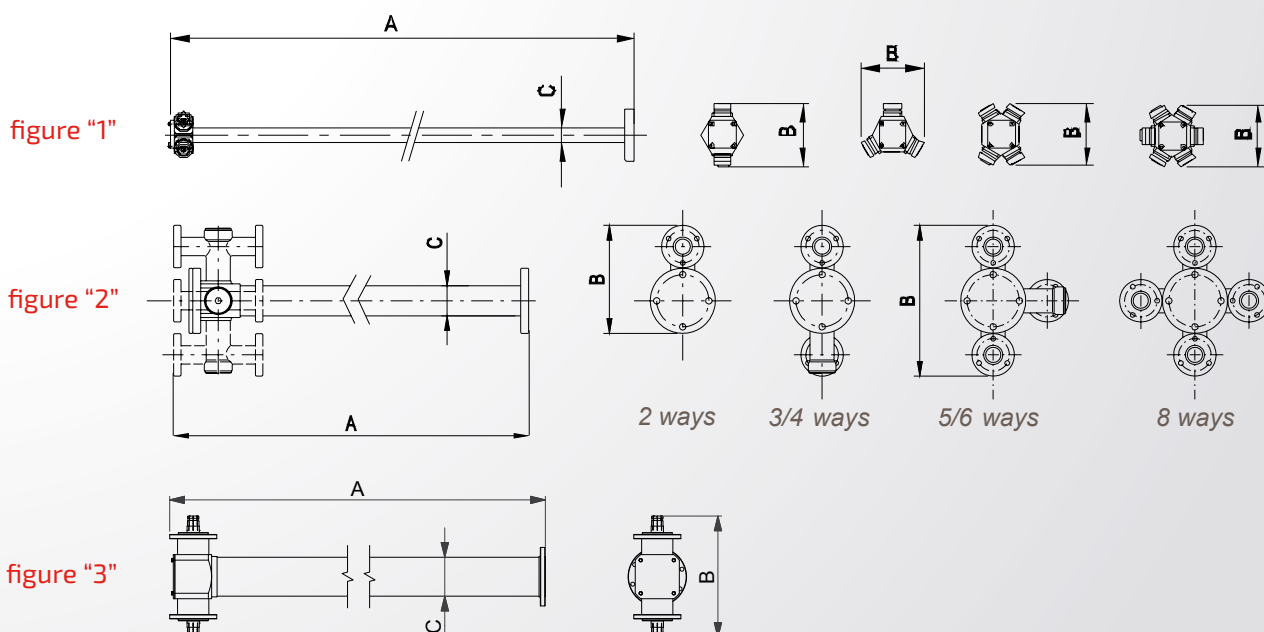
STANDARD TYPES

TYPE	INPUT CONNECTOR	OUTPUT CONNECTORS		DIMENSIONS mm (in)			POWER RATING (kW)			WEIGHT	FIGURE
		Nr.	TYPE	A	B	C (Ø)	87.5 MHz	98 MHz	108 MHz	Kg (lb)	
RFM-52	7/8" EIA	2	7/16 F	1621 (63.8)	103 (4.1)	25 (0.98)	8.2	7.7	7.3	4.5 (9.9)	1
RFM-53	7/8" EIA	3	7/16 F	1621 (63.8)	103 (4.1)	25 (0.98)	8.2	7.7	7.3	4.7 (10)	1
RFM-54	7/8" EIA	4	7/16 F	1621 (63.8)	103 (4.1)	25 (0.98)	8.2	7.7	7.3	5 (11)	1
RFM-56	7/8" EIA	6	7/16 F	1621 (63.8)	104 (4.1)	25 (0.98)	8.2	7.7	7.3	5.3 (12)	1
RFM-64	1-5/8" EIA	4	7/16 F	1671 (65.8)	103 (4.1)	41.8 (1.6)	18.4	17.2	16.4	6.5 (14)	1
RFM-66	1-5/8" EIA	6	7/16 F	1666 (65.6)	104 (4.1)	41.8 (1.6)	18.8	17.9	17	6.8 (15)	1
RFM-68	1-5/8" EIA	8	7/16 F	1738 (68.4)	166 (6.5)	41.8 (1.6)	18.8	17.9	17	9 (20)	1

FM COAXIAL SPLITTERS

STANDARD TYPES

TYPE	INPUT CONNECTOR	OUTPUT CONNECTORS		DIMENSIONS mm (in)			POWER RATING (kW)			WEIGHT Kg (lb)	FIGURE
		Nr.	TYPE	A	B	C (Ø)	87.5 MHz	98 MHz	108 MHz		
RFM-12	1-5/8" EIA	2	7/8" EIA	1761 (69.3)	206 (8.1)	41.8 (1.6)	16.4	15.4	14.6	7.1 (16)	2
RFM-13	1-5/8" EIA	3	7/8" EIA	1761 (69.3)	206 (8.1)	41.8 (1.6)	18.8	17.9	17	8.5 (19)	2
RFM-14	1-5/8" EIA	4	7/8" EIA	1761 (69.3)	206 (8.1)	41.8 (1.6)	18.8	17.9	17	9 (20)	2
RFM-15	1-5/8" EIA	5	7/8" EIA	1761 (69.3)	206 (8.1)	41.8 (1.6)	18.8	17.9	17	9.1 (20)	2
RFM-16	1-5/8" EIA	6	7/8" EIA	1761 (69.3)	206 (8.1)	41.8 (1.6)	18.8	17.9	17	9.6 (21)	2
RFM-18	1-5/8" EIA	8	7/8" EIA	1761 (69.3)	206 (8.1)	41.8 (1.6)	18.8	17.9	17	11 (24)	2
RFM-144	3-1/8" EIA	4	7/8" EIA	1686 (66.4)	248 (9.8)	79.4 (3.1)	33	31	29	14 (31)	2
RFM-146	3-1/8" EIA	6	7/8" EIA	1686 (66.4)	248 (9.8)	79.4 (3.1)	49	46	44	20 (44)	2
RFM-148	3-1/8" EIA	8	7/8" EIA	1686 (66.4)	248 (9.8)	79.4 (3.1)	56	53	50	22 (49)	2
RFM-22	3-1/8" EIA	2	1-5/8" EIA	1777 (70)	219 (8.6)	79.4 (3.1)	37	36	34	16 (35)	2
RFM-23	3-1/8" EIA	3	1-5/8" EIA	1777 (70)	309 (12.2)	79.4 (3.1)	56	53	50	20 (44)	2
RFM-24	3-1/8" EIA	4	1-5/8" EIA	1777 (70)	309 (12.2)	79.4 (3.1)	56	53	50	21 (46)	2
RFM-25	3-1/8" EIA	5	1-5/8" EIA	1777 (70)	280 (11)	79.4 (3.1)	56	53	50	25 (55)	2
RFM-26	3-1/8" EIA	6	1-5/8" EIA	1777 (70)	280 (11)	79.4 (3.1)	56	53	50	27 (60)	2
RFM-294	4-1/2" EIA	4	1-5/8" EIA	1777 (70)	349 (13.7)	106 (4.2)	75	71	68	28 (62)	2
RFM-295	4-1/2" EIA	5	1-5/8" EIA	1777 (70)	349 (13.7)	106 (4.2)	84	80	75	29 (64)	2
RFM-296	4-1/2" EIA	6	1-5/8" EIA	1777 (70)	349 (13.7)	106 (4.2)	84	80	75	38 (84)	2
RFM-202	4-1/2" EIA	2	3-1/8" EIA M	1764 (69.4)	330 (13)	106 (4.2)	84	80	75	28 (62)	3
RFM-204	4-1/2" EIA	4	3-1/8" EIA	1785 (70.3)	428 (16.9)	106 (4.2)	84	80	75	46.5 (103)	2
RFM-232	6-1/8" EIA	2	4-1/2" EIA M	1790 (70.5)	400 (15.7)	156 (6.1)	168	160	150	35 (77)	3



VHF-B3 COAXIAL SPLITTERS

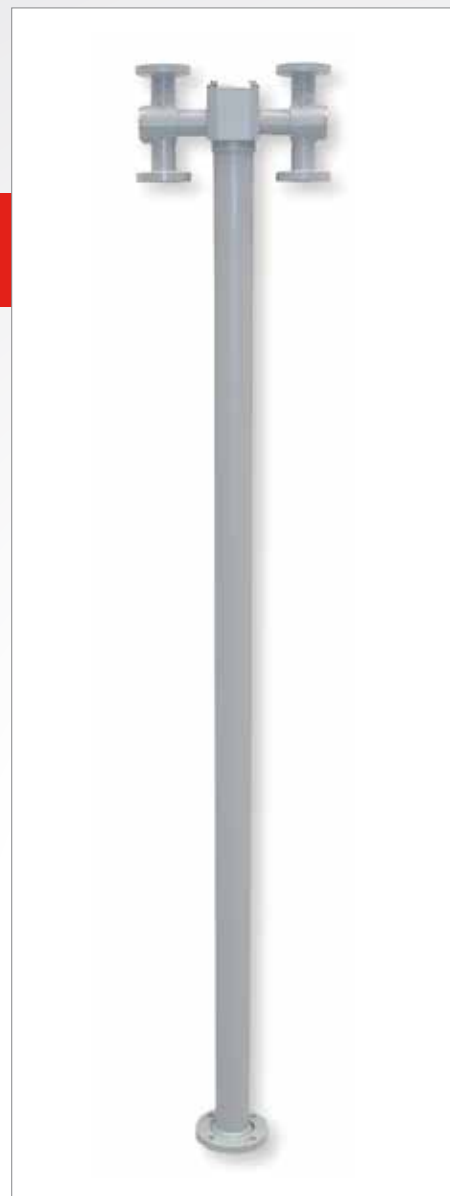
FEATURES

- broadband power dividers
- low insertion loss
- low V.S.W.R

GENERAL FEATURES

FREQUENCY RANGE	174 ÷ 240 MHz (up to 254 MHz on request)	
IMPEDANCE	50 ohm	
RETURN LOSS (typical)	≥ 32 dB	
POWER RATING *	See table	
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)	
CONNECTORS	See table	
NUMBER OF WAYS	See table	
WEIGHT	See table	
PRESSURIZATION	Typical operating pressure 300hPa (300mBar)	
MATERIALS	- External body	Polished copper, polished brass
	- Inner conductor	Silver plated brass, polished brass, deoxidized aluminium
	- Insulator	Teflon
EXTERNAL FINISHING	Painted RAL 7001, Nickel plating	

* mean power , ambient temperature 40° C (104° F) , atmosphere pressure, dry air

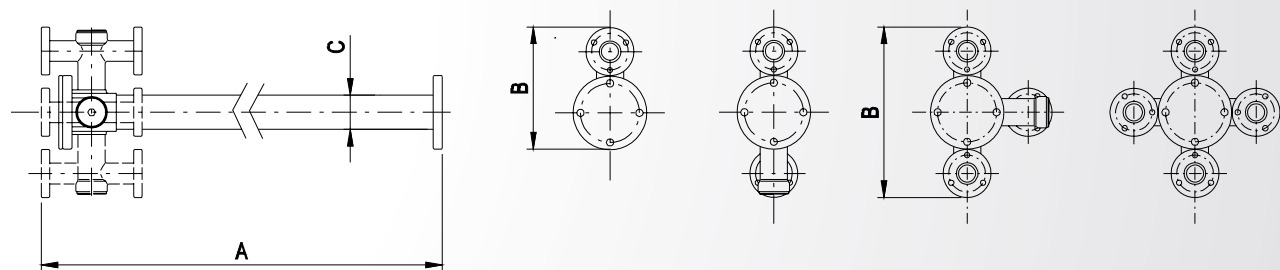


VHF-B3 COAXIAL SPLITTERS

STANDARD TYPES

TYPE	INPUT CONNECTOR	OUTPUT CONNECTORS		DIMENSIONS mm (in)			POWER RATING (kW)			WEIGHT	FIGURE
		Nr.	TYPE	A	B	C (Ø)	174 MHz	202 MHz	230 MHz	Kg (lb)	
RBT-12	1-5/8" EIA	2	7/8" EIA	1261 (49.6)	206 (8.1)	41.8 (1.6)	11.4	10.4	9.5	6 (13)	1
RBT-13	1-5/8" EIA	3	7/8" EIA	1261 (49.6)	206 (8.1)	41.8 (1.6)	13.2	12.2	11.6	7 (15)	1
RBT-14	1-5/8" EIA	4	7/8" EIA	1261 (49.6)	206 (8.1)	41.8 (1.6)	13.2	12.2	11.6	7.5 (17)	1
RBT-15	1-5/8" EIA	5	7/8" EIA	1261 (49.6)	206 (8.1)	41.8 (1.6)	13.2	12.2	11.6	7.6 (17)	1
RBT-16	1-5/8" EIA	6	7/8" EIA	1261 (49.6)	206 (8.1)	41.8 (1.6)	13.2	12.2	11.6	8 (18)	1
RBT-18	1-5/8" EIA	8	7/8" EIA	1261 (49.6)	206 (8.1)	41.8 (1.6)	13.2	12.2	11.6	9 (20)	1
RBT-22	3-1/8" EIA	2	1-5/8" EIA	1277 (50.3)	218 (8.6)	79.4 (3.1)	26	24	23	12.5 (28)	1
RBT-23	3-1/8" EIA	3	1-5/8" EIA	1277 (50.3)	309 (12.2)	79.4 (3.1)	39	36	33	16 (35)	1
RBT-24	3-1/8" EIA	4	1-5/8" EIA	1277 (50.3)	309 (12.2)	79.4 (3.1)	39	36	33	17 (37)	1

figure "1"



UHF COAXIAL SPLITTERS

FEATURES

- broadband power dividers
- low insertion loss
- low V.S.W.R

GENERAL FEATURES

FREQUENCY RANGE	470 ÷ 860 MHz
IMPEDANCE	50 ohm
RETURN LOSS (typical)	≥ 32 dB with outputs ≥ 7/8" size ≥ 28 dB with outputs 7/16 F size
POWER RATING *	See table
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTORS	See table
NUMBER OF WAYS	See table
WEIGHT	See table
PRESSURIZATION	Typical operating pressure 300hPa (300mBar)
MATERIALS	- External body Polished copper, polished brass - Inner conductor Silver plated brass, polished brass, deoxidized aluminium - Insulator Teflon
EXTERNAL FINISHING	Painted RAL 7001, Nickel plating

* mean power , ambient temperature 40° C (104° F) , atmosphere pressure, dry air

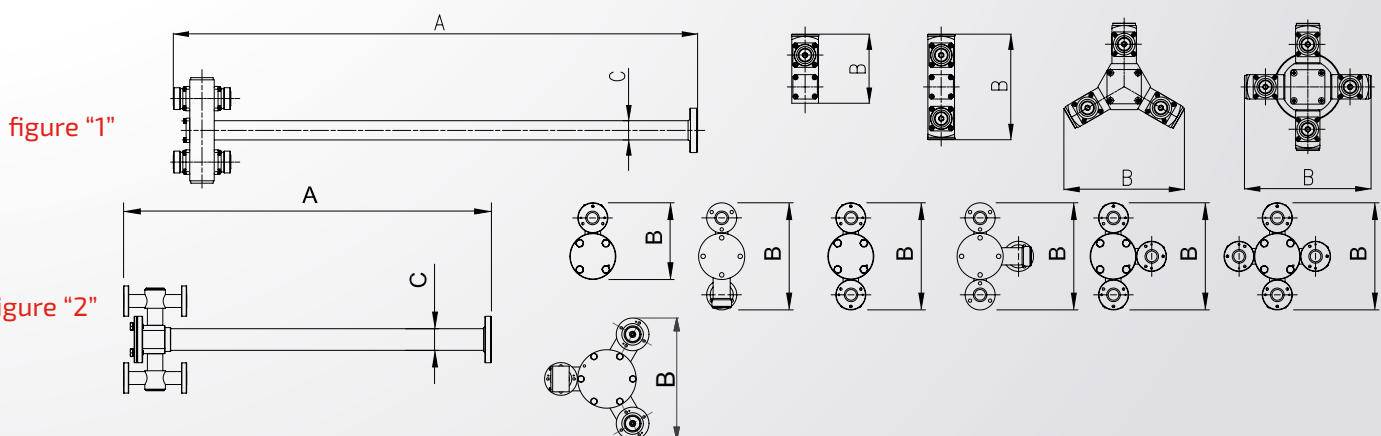


TYPE	INPUT CONNECTOR	OUTPUT CONNECTORS		DIMENSIONS mm (in)			POWER RATING (kW)			WEIGHT	FIGURE
		Nr.	TYPE	A	B	C (Ø)	470 MHz	665 MHz	860 MHz	Kg (lb)	
RTV-52	7/8" EIA	2	7/16 F	688 (27.1)	91 (3.6)	25 (0.98)	3.4	2.9	2.5	2.5 (5.5)	1
RTV-53	7/8" EIA	3	7/16 F	688 (27.1)	138 (5.4)	25 (0.98)	3.4	2.9	2.5	3 (6.6)	1
RTV-54	7/8" EIA	4	7/16 F	688 (27.1)	138 (5.4)	25 (0.98)	3.4	2.9	2.5	3.5 (7.7)	1
RTV-56	7/8" EIA	6	7/16 F	688 (27.1)	138 (5.4)	25 (0.98)	3.4	2.9	2.5	4 (8.8)	1
RTV-02	7/8" EIA	2	7/8" EIA	711 (28)	132 (5.2)	25 (0.98)	3.4	2.9	2.5	3.8 (8.4)	2
RTV-03	7/8" EIA	3	7/8" EIA	711 (28)	206 (8.1)	25 (0.98)	3.4	2.9	2.5	4.5 (9.9)	2
RTV-04	7/8" EIA	4	7/8" EIA	711 (28)	206 (8.1)	25 (0.98)	3.4	2.9	2.5	4.9 (11)	2

UHF COAXIAL SPLITTERS

STANDARD TYPES

TYPE	INPUT CONNECTOR	OUTPUT CONNECTORS		DIMENSIONS mm (in)			POWER RATING (kW)			WEIGHT Kg (lb)	FIGURE
		Nr.	TYPE	A	B	C (Ø)	470 MHz	665 MHz	860 MHz		
RTV-64	1-5/8" EIA	4	7/16 F	694 (27.3)	138 (5.4)	41.8 (1.6)	7.6	6.4	5.6	4.2 (9.3)	1
RTV-66	1-5/8" EIA	6	7/16 F	688 (27.1)	158 (6.2)	41.8 (1.6)	8	6.8	6	4.6 (10)	1
RTV-68	1-5/8" EIA	8	7/16 F	688 (27.1)	166 (6.5)	41.8 (1.6)	8	6.8	6	5 (11)	1
RTV-12	1-5/8" EIA	2	7/8" EIA	711 (28)	206 (8.1)	41.8 (1.6)	6.8	5.8	5	4.3 (9.5)	2
RTV-13	1-5/8" EIA	3	7/8" EIA	711 (28)	206 (8.1)	41.8 (1.6)	8	6.8	6	4.8 (11)	2
RTV-14	1-5/8" EIA	4	7/8" EIA	711 (28)	206 (8.1)	41.8 (1.6)	8	6.8	6	5.2 (11)	2
RTV-15	1-5/8" EIA	5	7/8" EIA	711 (28)	206 (8.1)	41.8 (1.6)	8	6.8	6	5.9 (13)	2
RTV-16	1-5/8" EIA	6	7/8" EIA	711 (28)	206 (8.1)	41.8 (1.6)	8	6.8	6	6.3 (14)	2
RTV-17	1-5/8" EIA	7	7/8" EIA	711 (28)	206 (8.1)	41.8 (1.6)	8	6.8	6	6.5 (14)	2
RTV-18	1-5/8" EIA	8	7/8" EIA	711 (28)	206 (8.1)	41.8 (1.6)	8	6.8	6	7.2 (16)	2
RTV-144	3-1/8" EIA	4	7/8" EIA	603 (23.7)	248 (9.8)	79.4 (3.1)	13.6	11.6	10	9 (20)	2
RTV-146	3-1/8" EIA	6	7/8" EIA	713 (28.1)	235 (9.3)	79.4 (3.1)	20.4	17.4	15	11 (24)	2
RTV-148	3-1/8" EIA	8	7/8" EIA	713 (28.1)	248 (9.8)	79.4 (3.1)	24	20	17	13 (29)	2
RTV-22	3-1/8" EIA	2	1-5/8" EIA	726 (28.6)	218 (8.6)	79.4 (3.1)	16	13.6	12	9 (20)	2
RTV-23	3-1/8" EIA	3	1-5/8" EIA	726 (28.6)	309 (12.2)	79.4 (3.1)	24	20	17	11.5 (25)	2
RTV-24	3-1/8" EIA	4	1-5/8" EIA	726 (28.6)	309 (12.2)	79.4 (3.1)	24	20	17	12.5 (28)	2
RTV-26	3-1/8" EIA	6	1-5/8" EIA	726 (28.6)	280 (11)	79.4 (3.1)	24	20	17	15 (33)	2
RTV-294	4-1/2" EIA	4	1-5/8" EIA	747 (29.4)	349 (13.7)	106 (4.2)	32	27.2	24	19 (42)	2
RTV-295	4-1/2" EIA	5	1-5/8" EIA	726 (28.6)	331 (13)	106 (4.2)	37	31	28	21 (46)	2
RTV-296	4-1/2" EIA	6	1-5/8" EIA	726 (28.6)	314 (12.4)	106 (4.2)	37	31	28	22 (49)	2
RTV-298	4-1/2" EIA	8	1-5/8" EIA	747 (29.4)	349 (13.7)	106 (4.2)	37	31	28	24 (53)	2
RTV-202	4-1/2" EIA	2	3-1/8" EIA	754 (29.7)	428 (16.9)	106 (4.2)	37	31	28	22 (49)	2
RTV-203	4-1/2" EIA	3	3-1/8" EIA	754 (29.7)	428 (16.9)	106 (4.2)	37	31	28	23 (51)	2
RTV-204	4-1/2" EIA	4	3-1/8" EIA	754 (29.7)	428 (16.9)	106 (4.2)	37	31	28	25 (55)	2
RTV-232/SP	6-1/8" EIA	2	4-1/2" EIA	850 (33.5)	659 (25.9)	135 (5.3)	57	48	42	44 (97)	2



FINE MATCHERS

FEATURES

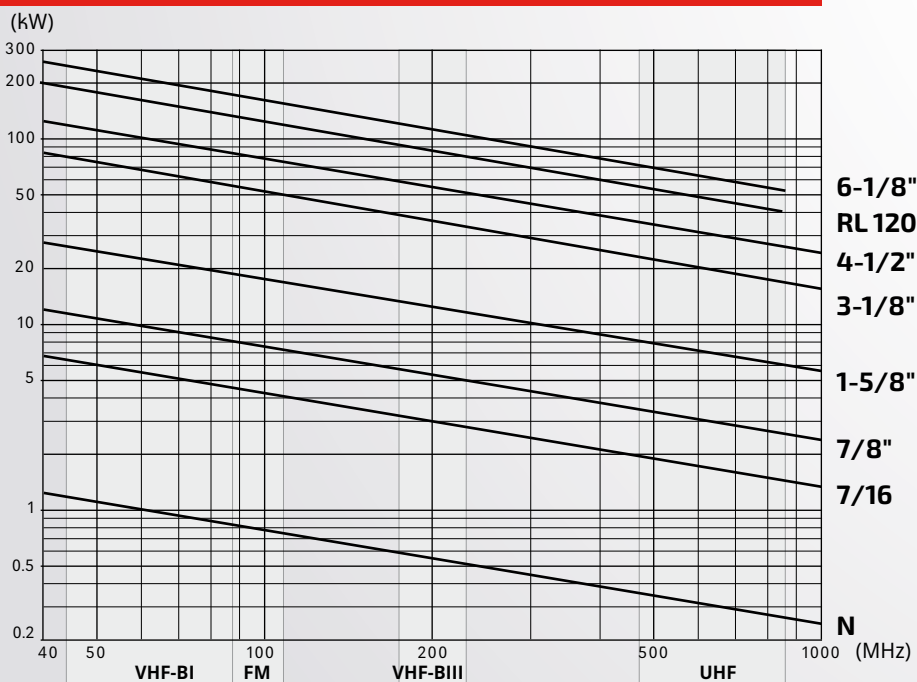
- flanged / unflanged type
- low insertion losses
- low V.S.W.R
- outdoor applications



GENERAL FEATURES

FREQUENCY RANGE	See table
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
MAX MEAN POWER	See table below
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTORS	See table below
WEIGHT	See table below
PRESSURIZATION	Typical operating pressure 300 hPa (300 mBar)
MATERIALS	- External body - Inner conductor - Insulating material Polished copper, polished brass, aluminium Silver plated brass Teflon
EXTERNAL FINISHING	Painted RAL 7001, Painted RAL 9005 Passivation SURTEC 650

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)



figure "1"

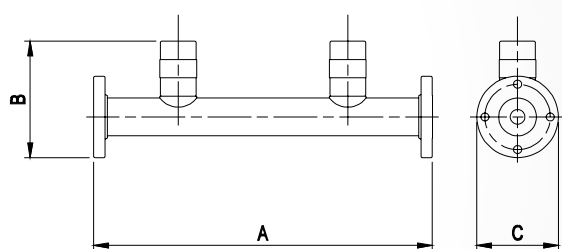
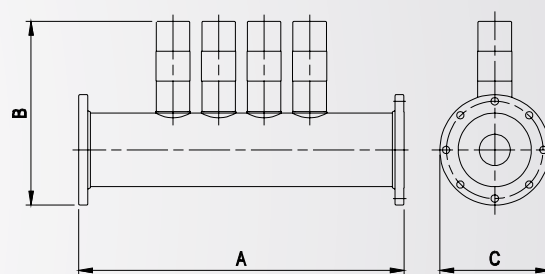


figure "2"



STANDARD TYPES

TYPE	FREQUENCY RANGE (MHz)	CONNECTORS	FIGURE	DIMENSIONS mm (in)			WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
				A	B	C			
FMFM-03	87.5 ÷ 108	1-5/8" EIA	1	764 (30.1)	127.5 (5)	89 (3.5)	4 (8.8)	5.2	7
FMFM-04	87.5 ÷ 108	3-1/8" EIA	1	764 (30.1)	208.7 (8.2)	128 (5)	6.5 (14)	9.7	14
FMFM-06	87.5 ÷ 108	6-1/8" EIA	1	764 (30.1)	363 (14.3)	206 (8.1)	19.2 (42)	17	25
FMFM-07	87.5 ÷ 108	4-1/2" EIA	1	764 (30.1)	264.5 (10.4)	159 (6.3)	10.5 (23)	12.5	19
FMBT-03	174 ÷ 230*	1-5/8" EIA	1	370 (14.6)	127.5 (5)	89 (3.5)	3.2 (7.1)	5.2	7
FMBT-04	174 ÷ 230*	3-1/8" EIA	1	370 (14.6)	208.7 (8.2)	128 (5)	4 (8.8)	9.7	14
FMTV-03	470 ÷ 860	1-5/8" EIA	2	354 (13.9)	121.2 (4.8)	89 (3.5)	2.4 (5.3)	5.2	7
FMTV-04	470 ÷ 860	3-1/8" EIA	2	390 (15.4)	183.5 (7.2)	128 (5)	5 (11)	9.7	14
FMTV-06/SP	470 ÷ 860	6-1/8" EIA	2	520 (20.5)	265 (10.4)	206 (8.1)	16 (35)	17	25
FMTV-07	470 ÷ 860	4-1/2" EIA	2	442 (17.4)	233.5 (9.2)	159 (6.3)	10.5 (23)	12.5	19

*up to 254 MHz on request

DIRECTIONAL COUPLERS

FEATURES

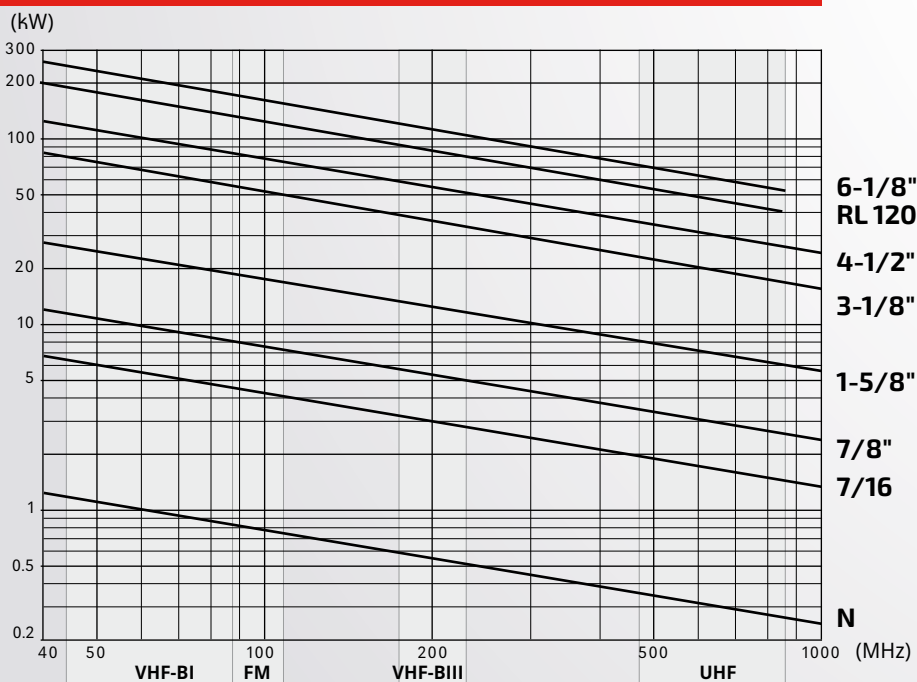
- flanged type
- low insertion losses
- low V.S.W.R
- high directivity value
- outdoor applications

GENERAL FEATURES

FREQUENCY RANGE	0.1 ÷ 860 MHz
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
COUPLING FACTOR	See table below
DIRECTIVITY	≥ 40 dB
MAX MEAN POWER	See table below
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTORS	See table below
PROBE CONNECTORS	N F
WEIGHT	See table below
PRESSURIZATION	Typical operating pressure 300 hPa (300 mBar)
MATERIALS	- External body Nickel plated brass, polished brass
	- Inner conductor Silver plated brass, silver plated aluminium
	- Insulator Teflon
EXTERNAL FINISHING	Painted RAL 7001



MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

DIRECTIONAL COUPLERS

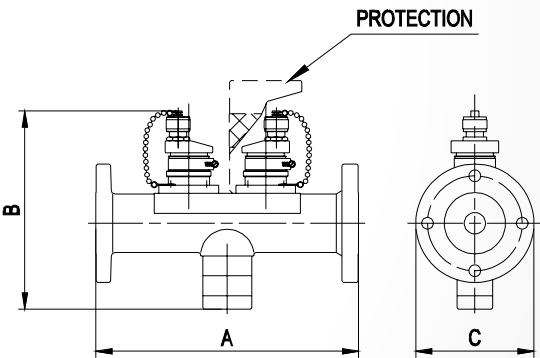


figure "1"

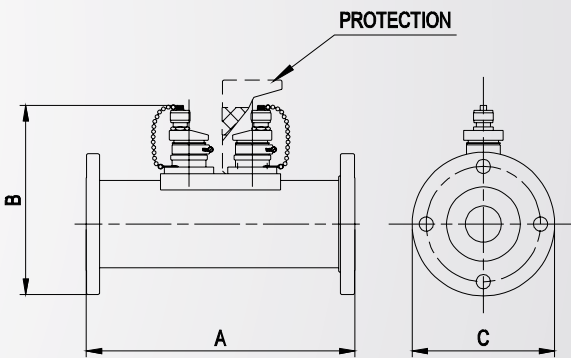


figure "2"

STANDARD TYPES

TYPE	CONNECTORS	Nr PROBES	FIGURE	DIMENSIONS mm (in)			WEIGHT Kg (lb)	WATER PROOF	PROTECTION	COUPLING FACTOR (dB)		
				A	B	C				FM	VHF	UHF
										min/max	min/max	min/max
ADR-02/P	7/8" EIA	2	1	200 (7.9)	172 (6.8)	58 (2.3)	3 (6.6)	YES	YES	-56/-51	-49/-45	-38/-35
ADR-03/P	1-5/8" EIA	2	1	198 (7.8)	172 (6.8)	89 (3.5)	3.3 (7.3)	YES	YES	-56/-51	-49/-45	-38/-35
ADR-04/P	3-1/8" EIA	2	2	246 (9.7)	195 (7.7)	128 (5)	4.7 (10)	YES	YES	-61/-56	-55/-51	-45/-42
ADR-06/P	6-1/8" EIA	2	2	281 (11.1)	276 (10.9)	206 (8.1)	8.4 (19)	YES	YES	-67/-62	-61/-57	-49/-46
ADR-08/P	4-1/2" EIA	2	2	246 (9.7)	229 (9)	159 (6.3)	6 (13)	YES	YES	-64/-59	-58/-54	-43/-46

FREQUENCY EQUALIZED DIRECTIONAL COUPLERS

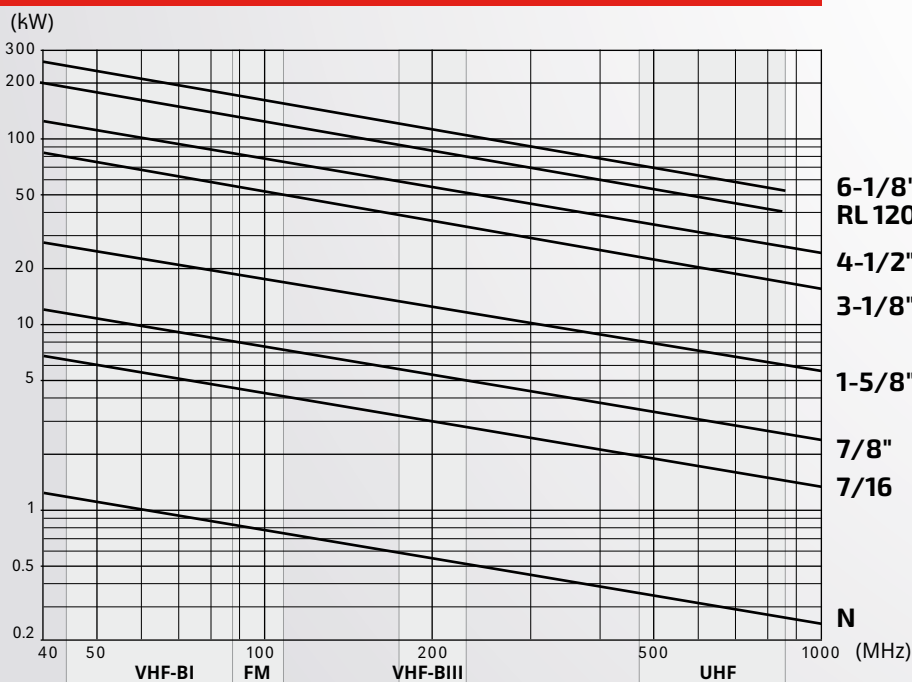
FEATURES

- unflanged type
- low V.S.W.R and insertion losses
- only for indoor applications

GENERAL FEATURES

FREQUENCY RANGE	FM band 87.5 ÷ 108 MHz (EF)
IMPEDANCE	50 ohm
RETURN LOSS	≥ 30 dB
COUPLING FACTOR	See table below
DIRECTIVITY	≥ 30 dB
FLATNESS	≤ ±0.15 dB
MAX MEAN POWER	See table below
OPERATING TEMPERATURE RANGE	-10 to +45° C (+14 to +113° F)
CONNECTORS	See table below
PROBE CONNECTORS	SMA F
WEIGHT	See table below
WATERPROOF	No
MATERIALS	- External body - Inner conductor - Insulator Aluminium Silver plated brass, silver plated aluminium Teflon, rexolite
EXTERNAL FINISHING	Surtec 650

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)



6-1/8"
RL 120

4-1/2"
3-1/8"

1-5/8"

7/8"
7/16"

N

FREQUENCY EQUALIZED DIRECTIONAL COUPLERS

figure "1"

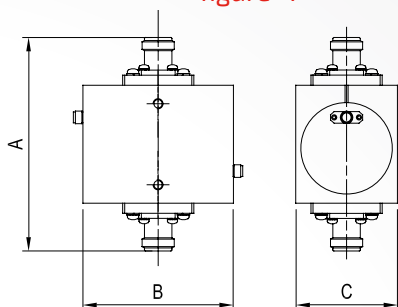


figure "2"

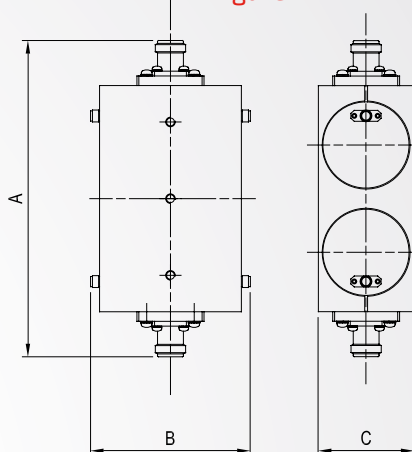


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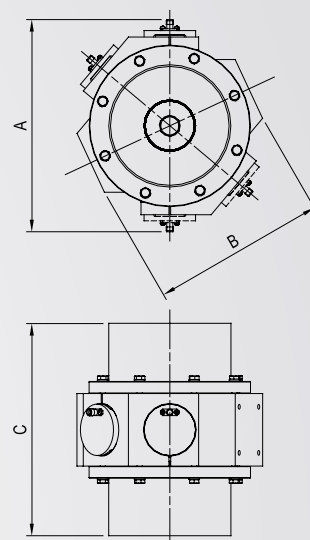
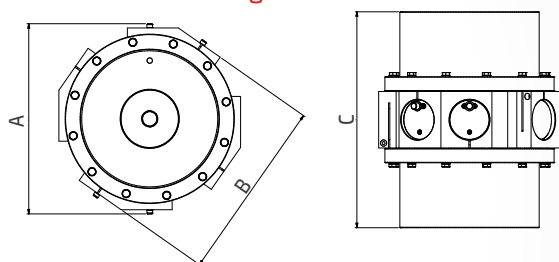


figure "4"



FM BAND

TYPE	CONNECTORS	Nr PROBES	FIGURE	DIMENSIONS mm (in)			WEIGHT Kg (lb) (max)	COUPLING FACTOR (dB) min/max
				A	B	C		
ADR-01/EF/2/AA	NF - NF	2	1	105 (4.1)	104 (4.1)	50 (2)	0.60 (1.3)	-50/-70
ADR-01/EF/2/AA1	NF - NM	2	1	123 (4.8)	104 (4.1)	50 (2)	0.65 (1.4)	-50/-70
ADR-01/EF/2/BB	7/16 F - 7/16 F	2	1	102 (4)	104 (4.1)	50 (2)	0.68 (1.5)	-50/-70
ADR-01/EF/2/BB1	7/16 F - 7/16 M	2	1	111 (4.4)	104 (4.1)	50 (2)	0.72 (1.6)	-50/-70
ADR-01/EF/2/CC/Z	7/8" Unfl F - 7/8" Unfl F	2	1	138 (5.4)	104 (4.1)	50 (2)	0.59 (1.3)	-50/-70
ADR-02/EF/2/DD/Z	1-5/8" Unfl F - 1-5/8" Unfl F	2	1	170 (6.7)	119.5 (4.7)	60 (2.4)	0.93 (2.1)	-55/-75
ADR-03/EF/2/EE/Z	3-1/8" Unfl F - 3-1/8" Unfl F	2	3	155 (6.1)	110 (4.3)	177.4 (7)	2.37 (5.2)	-60/-80
ADR-04/EF/2/FF/Z	4-1/2" Unfl F - 4-1/2" Unfl F	2	3	184 (7.2)	151.5 (6)	184 (7.2)	2.90 (6.4)	-65/-85
ADR-06/EF/2/GG/Z	6-1/8" Unfl F - 6-1/8" Unfl F	2	4	217 (8.5)	203 (8)	241 (9.5)	5.5 (12)	-70/-90

Note: F = female / M = male

CABLE TEST SECTIONS

FEATURES

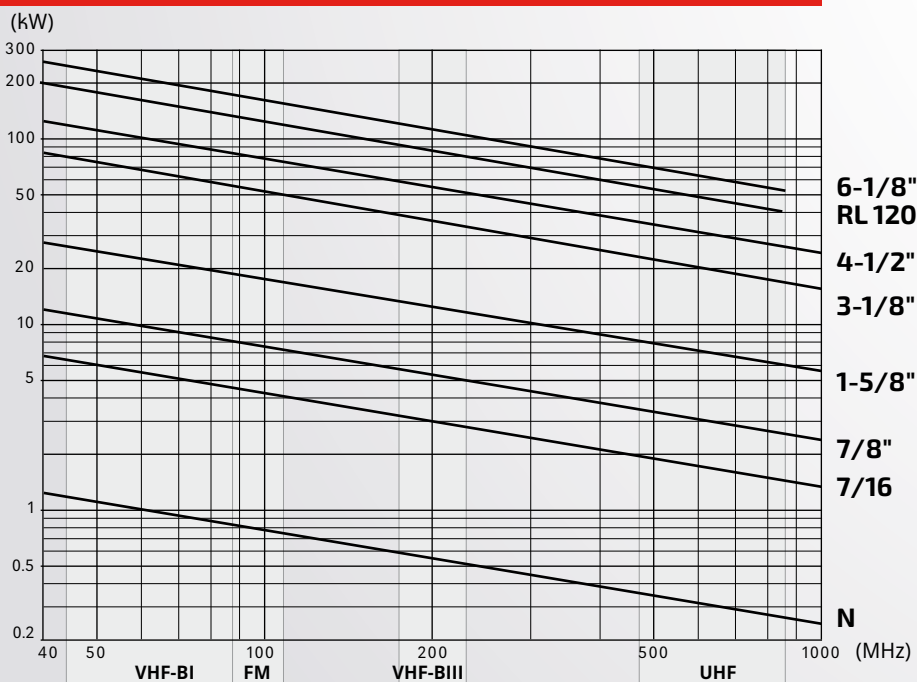
- direct antenna system VSWR testing
- quick and accurate measurements
- low V.S.W.R
- suitable for outdoor applications
- material aluminium EN AW-6082



GENERAL FEATURES

FREQUENCY RANGE	See table
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
MAX MEAN POWER	See table below
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTORS	See table below
WEIGHT	See table below
PRESSURIZATION	Typical operating pressure 300 hPa (300 mbar)
MATERIALS	- External body - Inner conductor - Insulator Aluminium EN AW-6082, nickel plated brass Silver plated brass Teflon
EXTERNAL FINISHING	anodizing natural colour

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

CABLE TEST SECTIONS

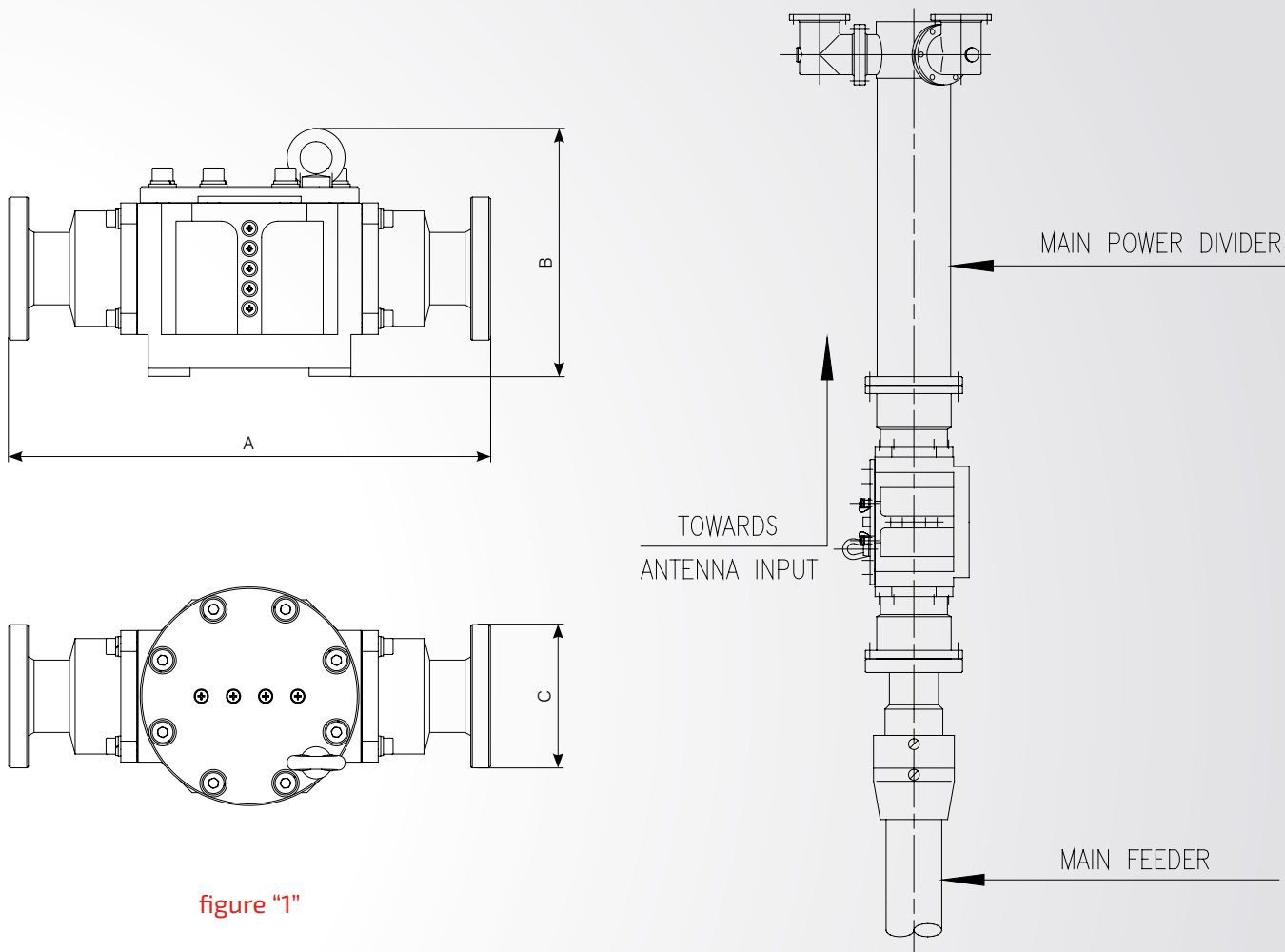


figure "1"

MECHANICAL DATA

TYPE	FREQUENCY RANGE (MHz)	CONNECTORS	FIGURE	DIMENSIONS mm (in)			WEIGHT Kg (lb)	INSERT SECTION	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
				A	B	C				
PCM-04	up to 860	1-5/8" EIA	1	300 (11.8)	154 (6.1)	89 (3.5)	6 (13)	1-5/8" - NF 1-5/8" - 7/16 F	5.2	7
PCM-14	up to 860	3-1/8" EIA	1	350 (13.8)	154 (6.1)	128 (5)	7 (15)	3-1/8" - NF 3-1/8" - 7/16 F	9.7	14
PCM-24	up to 860	4-1/2" EIA	1	430 (16.9)	206 (8.1)	159 (6.3)	13 (29)	4-1/2" - NF 4-1/2" - 7/16 F	12.5	19
PCM-26	up to 860	6-1/8" EIA	1	519.5 (20.5)	245 (9.6)	206 (8.1)	28 (62)	6-1/8" - NF	17	25

FLANGED RIGID LINES

FEATURES

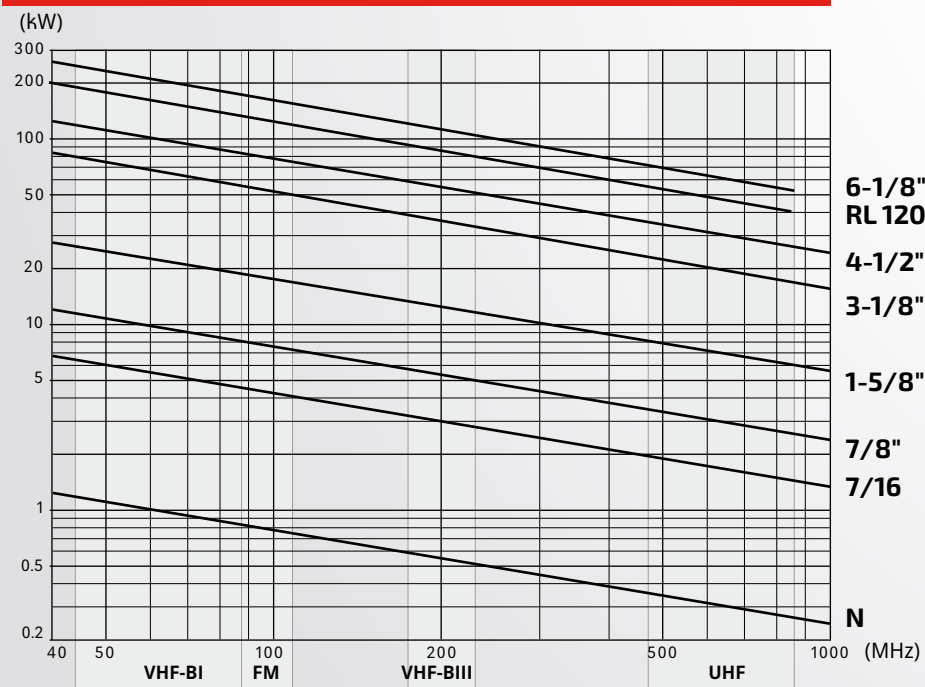
- flanged rigid lines
- low insertion losses
- low V.S.W.R
- outdoor applications



GENERAL FEATURES

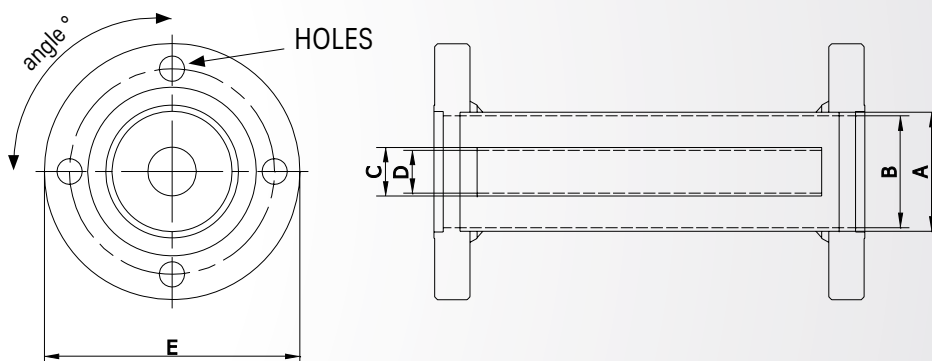
FREQUENCY RANGE	0.1 ÷ 860 MHz
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
MAX MEAN POWER	See table
LENGHT	0.5 ÷ 2 m (1.64 ÷ 6.56 ft)
WEIGHT	See table
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
PRESSURIZATION	Typical operating pressure 300 hPa (300 mbar)
MATERIALS	- Outer conductor - Inner conductor - Insulating material High conductivity copper, polished brass High conductivity copper Teflon
TERMINATED TYPE	EIA Flanged

MAX MEAN POWER



- STANDARD CONDITIONS:**
- V.S.W.R. = 1.0
 - Ambient temperature 40°C (104°F)
 - Atmospheric Pressure, dry air
 - Inner Conductor Temperature 120°C (248°F)

FLANGED RIGID LINES



EIA FLANGED RIGID LINES

TYPE	DIMENSIONS mm (in)		E	WEIGHT Kg/m (lb/ft)	Qty	HOLES		Bolts	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
	Outer conductor (A/B)	Inner conductor (C/D)				Angle (°)	DIA mm (in)			
7/8"	25 / 20 (0.98 / 0.79)	8.7 / 7.4 (0.34 / 0.29)	58 (2.3)	2 (1.3)	3	120	6.5 (0.25)	M6	2.7	4
1-5/8"	41.27 / 38.78 (1.62 / 1.53)	16.87 / 14.93 (0.66 / 0.59)	89 (3.5)	2.7 (1.8)	4	90	8.8 (0.34)	M8	5.2	7
3-1/8"	79.4 / 76.88 (3.13 / 3.03)	33.4 / 31.26 (1.31 / 1.23)	128 (5)	5.2 (3.5)	6	60	10.8 (0.42)	M10	9.7	14
4-1/2"	106 / 103 (4.17 / 4.06)	44.8 / 42.8 (1.76 / 1.69)	159 (6.3)	7.9 (5.3)	8	45	10.8 (0.42)	M10	12.5	19
6-1/8"	155.6 / 151.9 (6.13 / 5.98)	66 / 64 (2.6 / 2.52)	206 (8.1)	14.5 (9.7)	12	30	10.8 (0.42)	M10	17	25

FLANGED COAXIAL ELBOWS

FEATURES

- flanged coaxial elbows
- low insertion losses
- low V.S.W.R
- outdoor applications

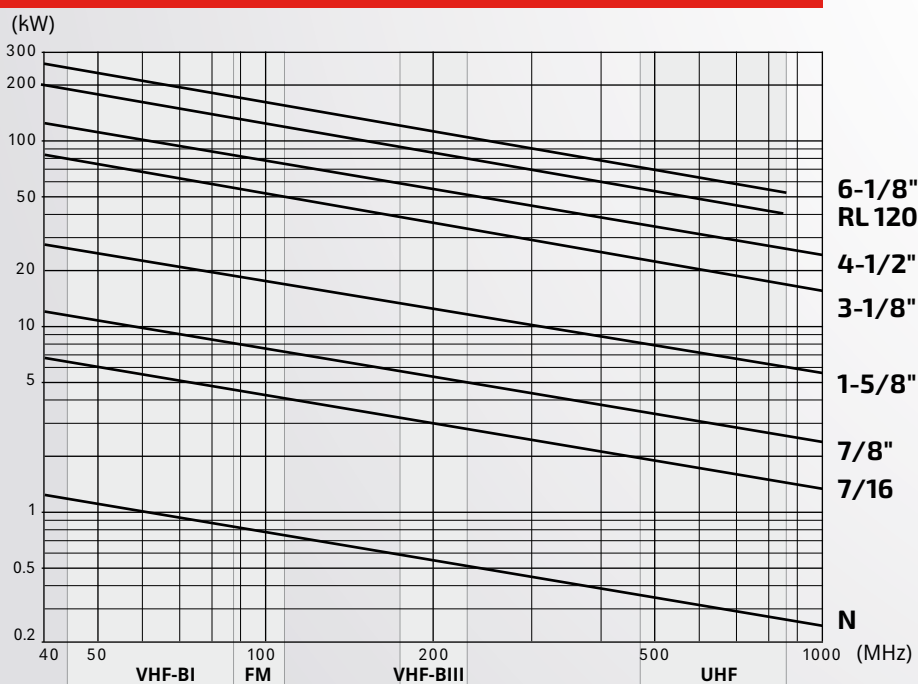


GENERAL FEATURES

FREQUENCY RANGE	0.1 ÷ 860 MHz *
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
MAX MEAN POWER	See table below
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTORS	See table below
WEIGHT	See table below
PRESSURIZATION	Typical operating pressure 300 hPa (300 mbar)
MATERIALS	- External body - Inner conductor - Insulator Polished brass Silver plated brass, silver plated aluminium Teflon
EXTERNAL FINISHING	Painted RAL 7001, Nickel plating, Passivation SURTEC 650

* up to 790 MHz for 6-1/8"

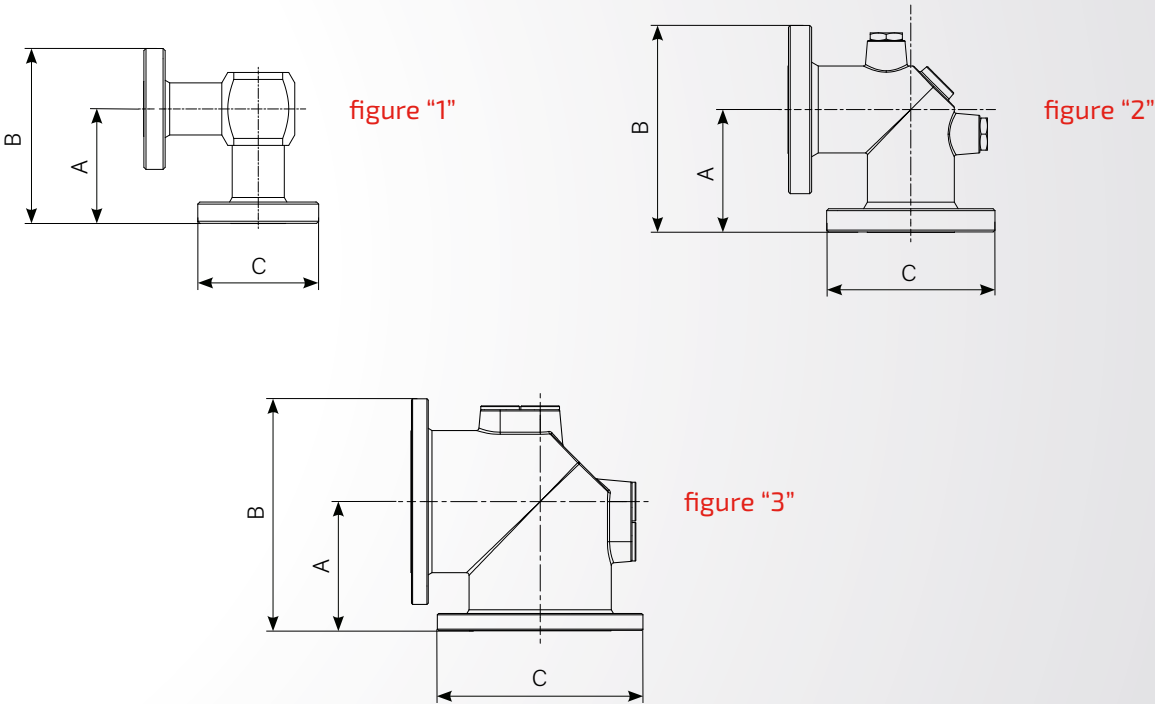
MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

FLANGED COAXIAL ELBOWS



EIA FLANGED COAXIAL ELBOWS

TYPE	CONNECTORS	FIGURE	DIMENSIONS mm (in)			WEIGHT Kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
			A	B	C			
GMT-01	7/8" EIA	1	55 (2.17)	84 (3.31)	58 (2.3)	0.62 (1.4)	2.7	4
GMT-04	1-5/8" EIA	2	65 (2.56)	110 (4.33)	89 (3.5)	1.5 (3.3)	5.2	7
GMT-05	3-1/8" EIA	3	85 (3.35)	149 (5.87)	128 (5)	3.1 (6.8)	9.7	14
GMT-07	6-1/8" EIA	3	130 (5.12)	233 (9.17)	206 (8.1)	10 (22)	17	25
GMT-10	4-1/2" EIA	3	100 (3.94)	179.5 (7.07)	159 (6.3)	5 (11)	12.5	19

Note: F = female / M = male

FLANGED COAXIAL ADAPTORS

FEATURES

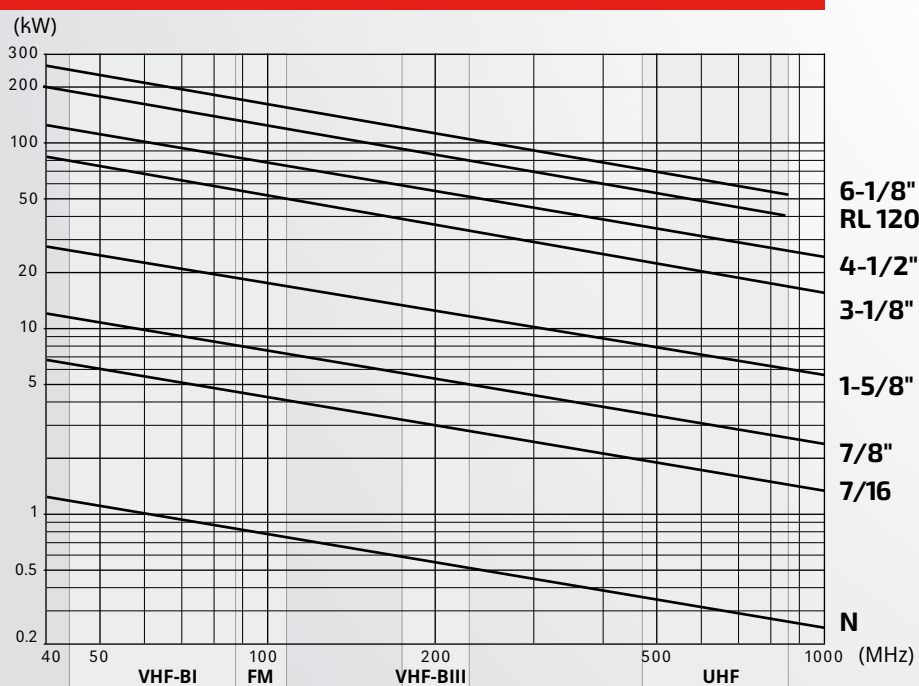
- flanged coaxial adaptors
- low insertion losses
- low V.S.W.R
- outdoor applications

GENERAL FEATURES

FREQUENCY RANGE	0.1 ÷ 860 MHz
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
MAX MEAN POWER	See table below
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTORS	See table
WEIGHT	See table
PRESSURIZATION	Typical operating pressure 300 hPa (300 mbar)
MATERIALS	- External body - Inner conductor - Insulator High conductivity copper, polished brass Silver plated brass, silver plated aluminium Teflon
EXTERNAL FINISHING	Painted RAL 7001, Nickel plating



MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

FLANGED COAXIAL ADAPTORS

figure "1"

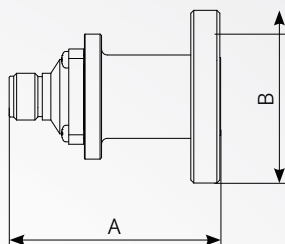


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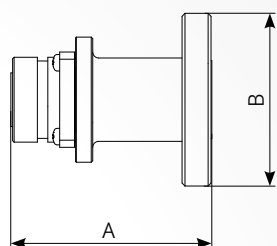


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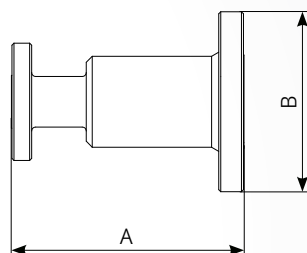


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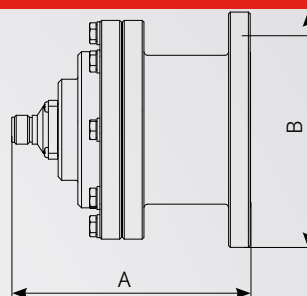


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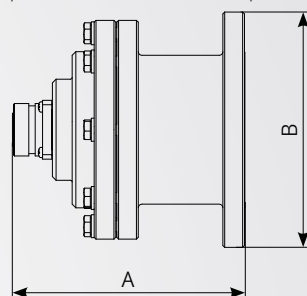
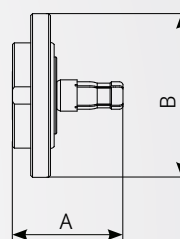


figure "6"



EIA FLANGED COAXIAL ADAPTORS

TYPE	CONNECTORS	FIGURE	DIMENSIONS mm (in)		WEIGHT* Kg (lb)
			A	B	
TRS-05	7/8" EIA N F	1	71 (2.8)	58 (2.3)	0.5 (1.1)
TRS-07	7/8" EIA 7/16 F	3	67.5 (2.7)	58 (2.3)	0.4 (0.88)
TRS-11	1-5/8" EIA N F	1	121.2 (4.8)	89 (3.5)	1.8 (4)
TRS-13	1-5/8" EIA 7/16 F	3	117.6 (4.6)	89 (3.5)	1.7 (3.7)
TRS-15	1-5/8" EIA 7/8" EIA	5	115 (4.5)	89 (3.5)	1 (2.2)
TRS-17	3-1/8" EIA 1-5/8" EIA	1	150 (5.9)	128 (5)	2.7 (6)
TRS-19	3-1/8" EIA N F	2	130 (5.1)	128 (5)	2.2 (4.9)
TRS-22	6-1/8" EIA 3-1/8" EIA	5	190 (7.5)	206 (8.1)	6.2 (14)
TRS-26	3-1/8" EIA 7/8" EIA	5	150 (5.9)	128 (5)	2.5 (5.5)
TRS-36	6-1/8" EIA N F	2	173 (6.8)	206 (8.1)	8.8 (19)
TRS-39	4-1/2" EIA N F	2	135 (5.3)	159 (6.3)	4.1 (9)
TRS-40	1-5/8" EIA M 7/8" EIA	6	21 (0.83)	89 (3.5)	0.86 (1.90)
TRS-41	6-1/8" EIA 4-1/2" EIA	5	190 (7.5)	206 (8.1)	6.7 (15)
TRS-42	4-1/2" EIA 3-1/8" EIA	5	165 (6.5)	159 (6.3)	4.1 (9)
TRS-44	6-1/8" EIA 7/16 F	4	169.5 (6.7)	206 (8.1)	8.9 (20)
TRS-45	3-1/8" EIA 7/16 F	4	127.5 (5)	128 (5)	2.1 (4.6)
TRS-50	4-1/2" EIA 7/16 F	4	131.5 (5.2)	159 (6.3)	4 (8.8)

* worse case of brass
Note: F = female / M = male

UNFLANGED RIGID LINES ZERO CUT

FEATURES

- unflanged rigid lines
- low insertion losses
- low V.S.W.R
- indoor applications



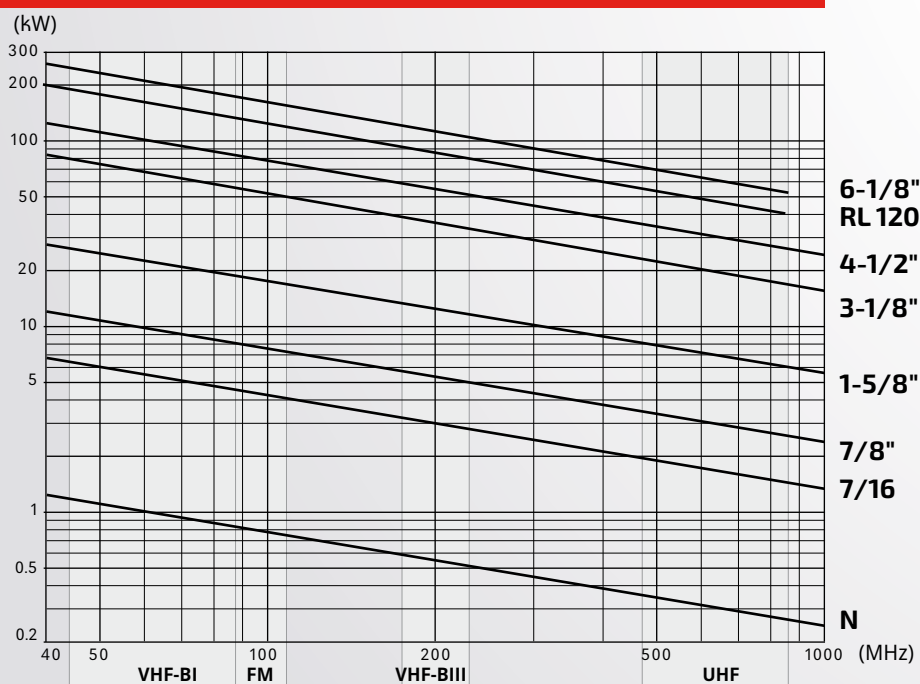
GENERAL FEATURES

FREQUENCY RANGE	0.1 ÷ 860 MHz
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
MAX MEAN POWER	See table
LENGHT	Standard lenght 4 m (13.1 ft) **
WEIGHT	See table
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
MATERIALS	- Outer conductor* - Inner conductor - Insulating material High conductivity copper, aluminium High conductivity copper Teflon
TERMINATED TYPE	EIA Unflanged

* only aluminium for 7/8"

** other lenght on request

MAX MEAN POWER



STANDARD CONDITIONS:

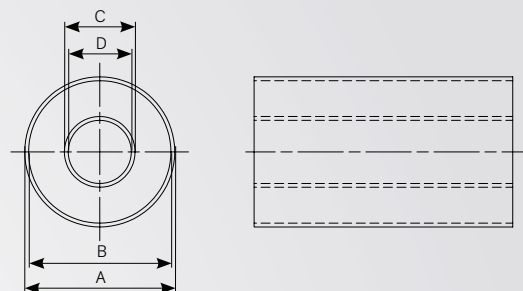
- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

UNFLANGED RIGID LINES

ZERO CUT

UNFLANGED RIGID LINES ZERO CUT

TYPE	DIMENSIONS mm (in)		WEIGHT Kg/m (lb/ft)	RF OPERAT- ING VOLTAGE (kV)	DC VOLTAGE (kV)
	Outer conductor (A/B)	Inner conductor (C/D)			
7/8"	22.3 / 20 (0.88 / 0.79)	8.7 / 7.4 (0.34 / 0.29)	0.4 (0.27)	2.7	4
1-5/8"	41.3 / 38.8 (1.63 / 1.53)	16.87 / 14.93 (0.66 / 0.59)	1.9 (1.3)	5.2	7
3-1/8"	79.4 / 76.9 (3.13 / 3.03)	33.4 / 31.3 (1.31 / 1.23)	3.8 (2.6)	9.7	14
4-1/2"	106 / 103 (4.17 / 4.06)	44.8 / 42.8 (1.76 / 1.69)	5.65 (3.8)	12.5	19
6-1/8"	155.6 / 151.9 (6.13 / 5.98)	66 / 64 (2.6 / 2.52)	9.8 (6.6)	17	25



MECHANICAL DATA

TYPE	DIMENSIONS	FIGURE A	FIGURE B	FIGURE C	FIGURE D
7/8"	LENGHT mm (in)	$L \leq 1000$ (39.4)	1000 (39.4) $< L \leq 2000$ (78.7)	2000 (78.7) $< L \leq 3000$ (118.1)	3000 (118.1) $< L \leq 4000$ (157.5)
	INNER SUPPORTS (No)	0	1	2	3
	OUTER CONDUCTOR LENGHT mm (in)	$Le = L$	$Le = L$	$Le = L$	$Le = L$
	INNER CONDUCTOR LENGHT mm (in)	$Li = L$	$Li = (L-25.5)/2$ (L-1.0)/2	$Li = (L-49.5)/3$ (L-1.95)/3	$Li = (L-74.0)/4$ (L-2.91)/4
1-5/8"	LENGHT mm (in)	$L \leq 1500$ (59.1)	1500 (59.1) $< L \leq 3000$ (118.1)	3000 (118.1) $< L \leq 4000$ (157.5)	-
	INNER SUPPORTS (No)	0	1	2	-
	OUTER CONDUCTOR LENGHT mm (in)	$Le = L$	$Le = L$	$Le = L$	-
	INNER CONDUCTOR LENGHT mm (in)	$Li = L$	$Li = (L-32.0)/2$ ((L-1.26)/2)	$Li = (L-62.0)/3$ ((L-2.44)/3)	-
3-1/8"	LENGHT mm (in)	$L \leq 2000$ (78.7)	2000 (78.7) $< L \leq 4000$ (157.5)	-	-
	INNER SUPPORTS (No)	0	1	-	-
	OUTER CONDUCTOR LENGHT mm (in)	$Le = L$	$Le = L$	-	-
	INNER CONDUCTOR LENGHT mm (in)	$Li = L$	$Li = (L-49.0)/2$ ((L-1.93)/2)	-	-
4-1/2"	LENGHT mm (in)	$L \leq 2000$ (78.7)	2000 (78.7) $< L \leq 4000$ (157.5)	-	-
	INNER SUPPORTS (No)	0	1	-	-
	OUTER CONDUCTOR LENGHT mm (in)	$Le = L$	$Le = L$	-	-
	INNER CONDUCTOR LENGHT mm (in)	$Li = L$	$Li = (L-49.0)/2$ ((L-1.93)/2)	-	-
6-1/8"	LENGHT mm (in)	$L \leq 2000$ (78.7)	2000 (78.7) $< L \leq 4000$ (157.5)	-	-
	INNER SUPPORTS (No)	0	1	-	-
	OUTER CONDUCTOR LENGHT mm (in)	$Le = L$	$Le = L$	-	-
	INNER CONDUCTOR LENGHT mm (in)	$Li = L$	$Li = (L-66.5)/2$ ((L-2.62)/2)	-	-

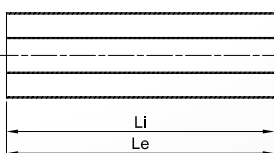


figure "A"

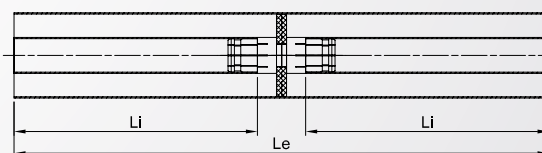


figure "B"

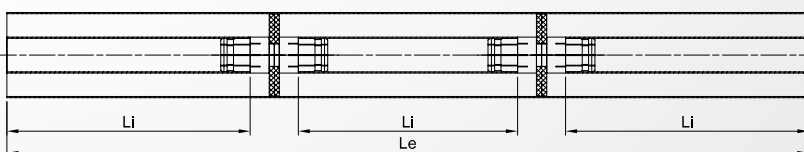


figure "C"

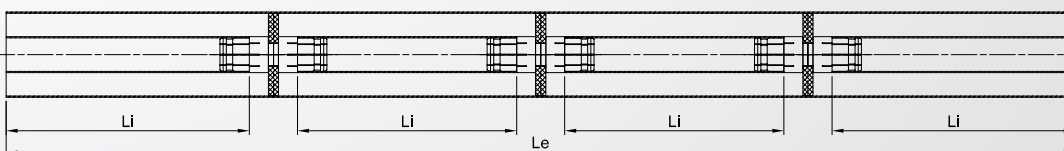


figure "D"

UNFLANGED COAXIAL ELBOWS ZERO CUT

FEATURES

- unflanged coaxial elbows
- low insertion losses
- low V.S.W.R
- indoor applications

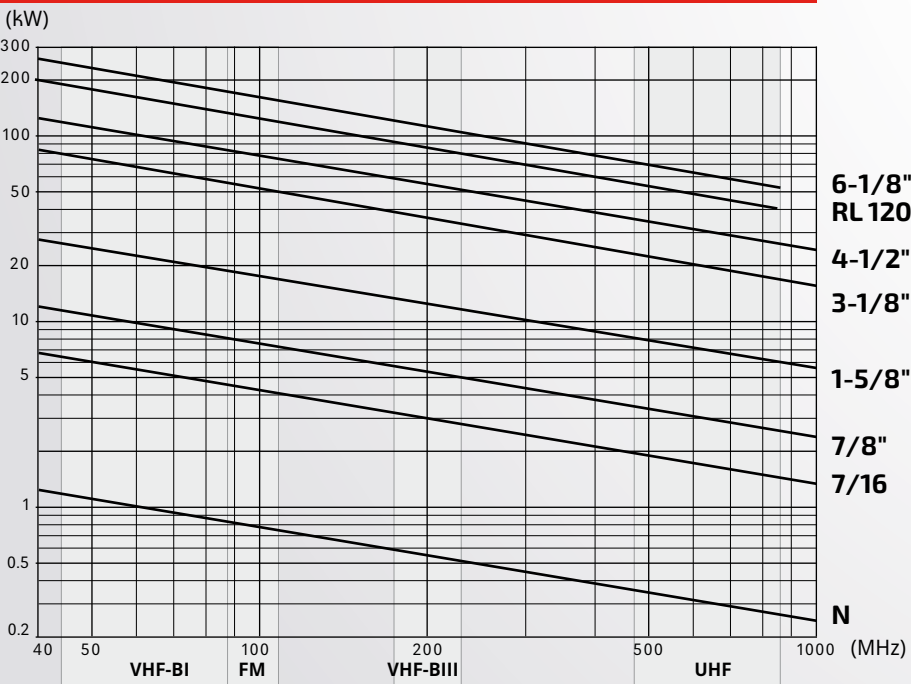


GENERAL FEATURES

FREQUENCY RANGE	0.1 ÷ 860 MHz *	
IMPEDANCE	50 ohm	
RETURN LOSS	≥ 32 dB	
MAX MEAN POWER	See table below	
OPERATING TEMPERATURE RANGE	-40 ÷ +70° C (-40 to +158° F)	
CONNECTORS	See table below	
WEIGHT	See table below	
MATERIALS	- External body	Aluminium
	- Inner conductor	Silver plated brass, silver plated aluminium
	- Insulator	Teflon
EXTERNAL FINISHING	Sandblasting	

* up to 790 MHz for 6-1/8"

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

UNFLANGED COAXIAL ELBOWS ZERO CUT

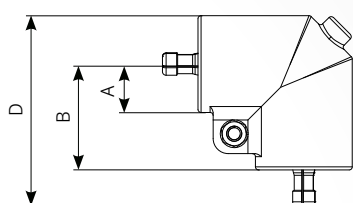


figure "1"

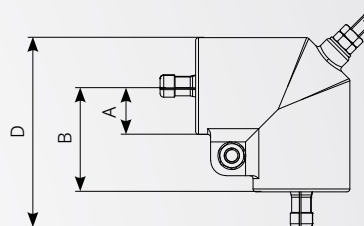
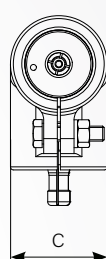


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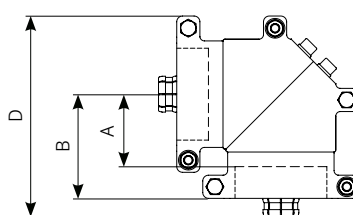
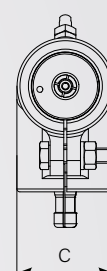


figure "3"

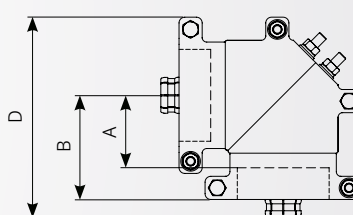
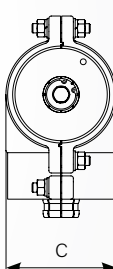
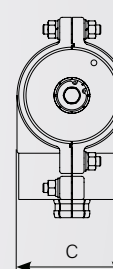


figure "4"



UNFLANGED COAXIAL ELBOWS ZERO CUT

TYPE	CONNECTORS	FIGURE	DIMENSIONS mm (in)				WEIGHT kg (lb)	RF OPERATING VOLTAGE (kV)	DC VOLTAGE (kV)
			A	B	C	D			
GMT-17/Z	7/8" Unfl. M	1	16 (0.63)	35 (1.38)	32 (1.3)	62.3 (2.5)	0.11 (0.24)	2.7	4
GMT-17/SP/Z	7/8" Unfl. M	2	16 (0.63)	35 (1.38)	32 (1.3)	62.3 (2.5)	0.12 (0.26)	2.7	4
GMT-11/Z	1-5/8" Unfl. M	3	38.5 (1.52)	60 (2.36)	54 (2.1)	111.4 (4.4)	0.5 (1.1)	5.2	7
GMT-11/SP/Z	1-5/8" Unfl. M	4	38.5 (1.52)	60 (2.36)	54 (2.1)	111.4 (4.4)	0.5 (1.1)	5.2	7
GMT-12/Z	3-1/8" Unfl. M	3	62.6 (2.46)	90 (3.54)	95 (3.7)	173.3 (6.8)	1.65 (3.6)	9.7	14
GMT-12/SP/Z	3-1/8" Unfl. M	4	62.6 (2.46)	90 (3.54)	95 (3.7)	173.3 (6.8)	1.65 (3.6)	9.7	14
GMT-16/Z	4-1/2" Unfl. M	3	81.9 (3.22)	109 (4.3)	125 (4.9)	207.4 (8.2)	3.4 (7.5)	12.5	19
GMT-16/SP/Z	4-1/2" Unfl. M	4	81.9 (3.22)	109 (4.3)	125 (4.9)	207.4 (8.2)	3.4 (7.5)	12.5	19
GMT-15/Z*	6-1/8" Unfl. M	3	98 (3.86)	145 (5.7)	172.5 (6.8)	264.3 (10.4)	6.7 (15)	17	25
GMT-15/SP/Z*	6-1/8" Unfl. M	4	98 (3.86)	145 (5.7)	172.5 (6.8)	264.3 (10.4)	6.7 (15)	17	25

Note: F = female / M = male

UNFLANGED COAXIAL ADAPTORS ZERO CUT

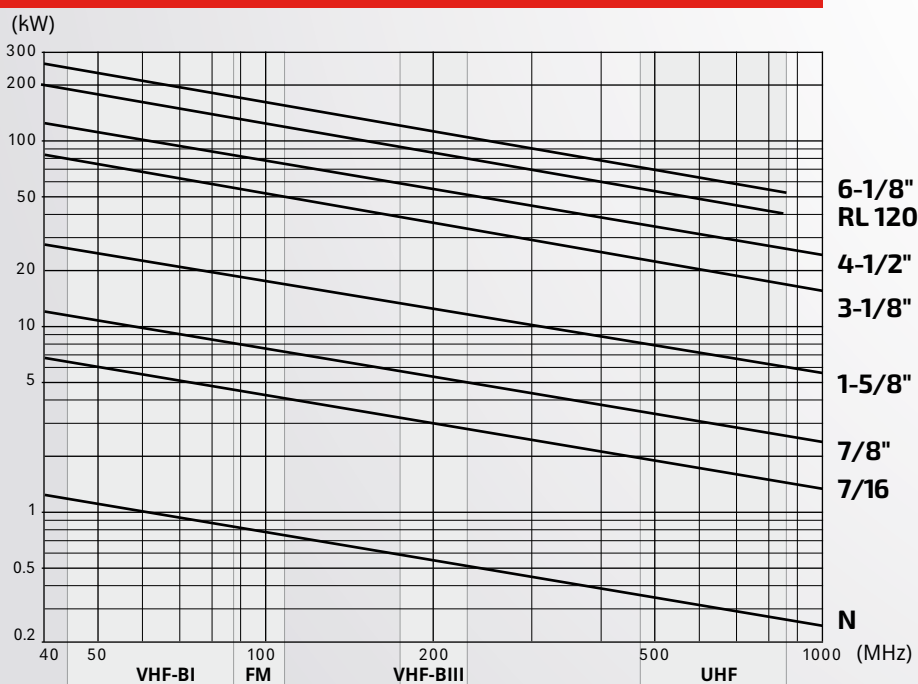
FEATURES

- unflanged coaxial adaptors
- low insertion losses
- low V.S.W.R
- indoor applications

GENERAL FEATURES

FREQUENCY RANGE		0.1 ÷ 860 MHz
IMPEDANCE		50 ohm
RETURN LOSS		≥ 32 dB
MAX MEAN POWER		See table below
OPERATING TEMPERATURE RANGE		-40 to +70° C (-40 to +158° F)
CONNECTORS		See table
WEIGHT		See table
MATERIALS	- External body	Aluminium
	- Inner conductor	Silver plated brass, silver plated alum
	- Insulator	Teflon
EXTERNAL FINISHING		Painted RAL 7001, Nickel plating

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)



UNFLANGED COAXIAL ADAPTORS

ZERO CUT

figure "1"

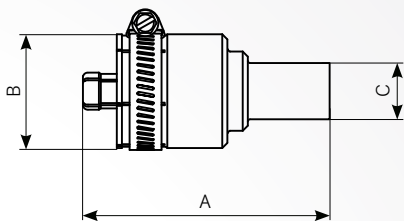


figure "2"

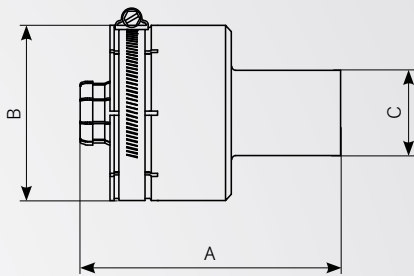


figure "3"

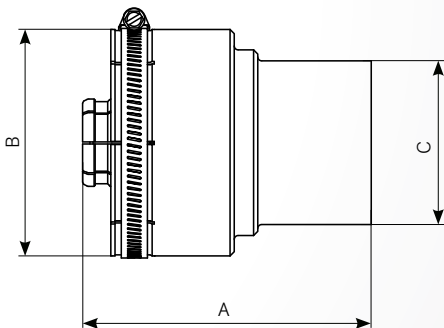
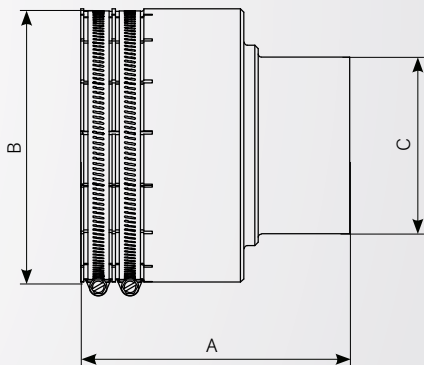


figure "4"



UNFLANGED COAXIAL ADAPTORS ZERO CUT

TYPE	CONNECTORS	FIGURE	DIMENSIONS			WEIGHT
			A mm (in)	B mm (in)	C mm (in)	
TRS-40/U/Z	1-5/8" Unfl. M 7/8" Unfl. F	1	97.8 (3.9)	45 (1.8)	22.3 (0.88)	0.2 (0.44)
TRS-17/U/Z	3-1/8" Unfl. M 1-5/8" Unfl. F	2	126.5 (5)	85 (3.3)	41.3 (1.63)	0.7 (1.5)
TRS-42/U/Z	4-1/2" Unfl. M 3-1/8" Unfl. F	3	140 (5.5)	110 (4.3)	79.4 (3.13)	1.2 (2.6)
TRS-41/U/Z	6-1/8" Unfl. M 4-1/2" Unfl. F	4	161.5 (6.4)	164 (6.5)	106 (4.17)	3.1 (6.8)

Note: F = female / M = male

COAXIAL ACCESSORIES ZERO CUT

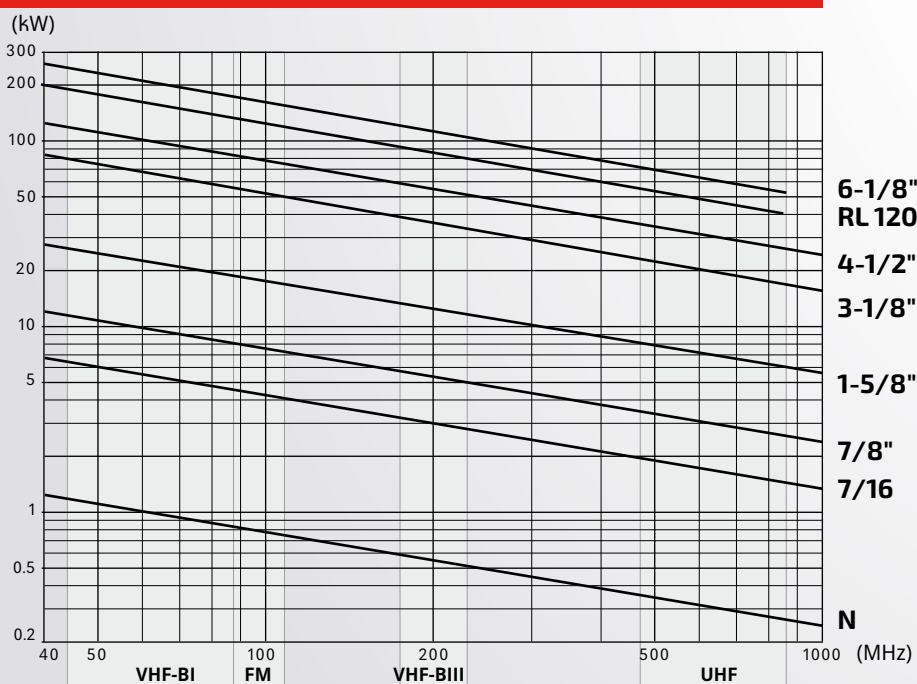
FEATURES

- flanged / unflanged coaxial accessories
- low insertion losses
- low V.S.W.R
- indoor applications

GENERAL FEATURES

FREQUENCY RANGE		0.1 ÷ 860 MHz
IMPEDANCE		50 ohm
RETURN LOSS		≥ 32 dB
MAX MEAN POWER		See table below
OPERATING TEMPERATURE RANGE		-40 ÷ +70° C (-40 to +158° F)
CONNECTORS		See table
WEIGHT		See table
MATERIALS	- External body	Aluminium
	- Inner conductor	Silver plated brass
	- Insulator	Teflon
EXTERNAL FINISHING		Sandblasting

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)



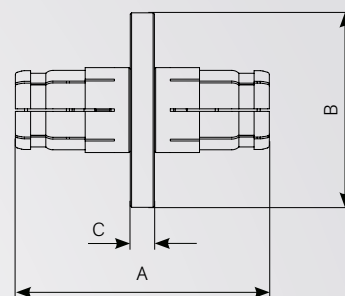
COAXIAL ACCESSORIES

ZERO CUT

BULLETS

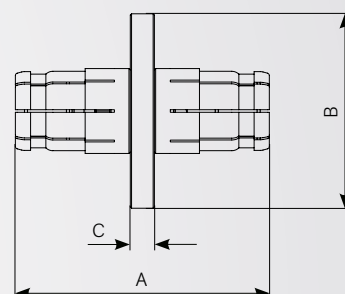
TYPE	CONNECTORS	DIMENSIONS mm (in)			WEIGHT Kg (lb)
		A	B	C	
INN-01	7/8"	59.8 (2.4)	20.65 (0.81)	4.7 (0.185)	0.02 (0.04)
INN-02	1-5/8"	78.4 (3.1)	41.75 (1.64)	6.4 (0.252)	0.07 (0.15)
INN-03	3-1/8"	100 (3.9)	81.2 (3.2)	9.5 (0.374)	0.34 (0.75)
INN-07	4-1/2"	100 (3.9)	105.3 (4.15)	9.8 (0.385)	0.55 (1.2)
INN-05	6-1/8"	125 (4.9)	154 (6.06)	11 (0.433)	1.32 (2.9)

suitable for outdoor connection



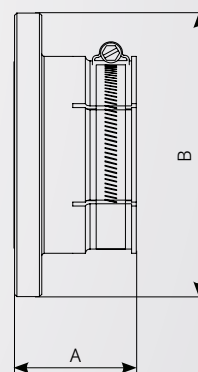
INNER SUPPORT

TYPE	CONNECTORS	DIMENSIONS mm (in)			WEIGHT Kg (lb)
		A	B	C	
INN-14	7/8"	59.8 (2.4)	19.8 (0.78)	4.7 (0.185)	0.02 (0.04)
INN-06	1-5/8"	78.4 (3.1)	38.5 (1.52)	6.4 (0.252)	0.07 (0.15)
INN-11	3-1/8"	100 (3.9)	76.5 (3.01)	9.5 (0.374)	0.34 (0.75)
INN-10	4-1/2"	100 (3.9)	102.5 (4.04)	9.8 (0.385)	0.55 (1.2)
INN-09	6-1/8"	125 (4.9)	151.3 (5.96)	11 (0.433)	1.32 (2.9)



CLAMP FLANGE

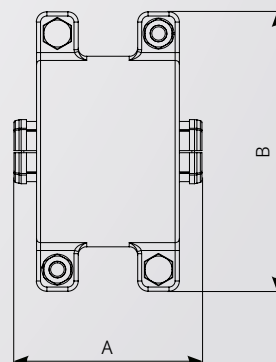
TYPE	CONNECTORS	DIMENSIONS mm (in)		WEIGHT kg (lb)
		A mm (in)	B mm (in)	
FLN-33/Z	7/8" EIA	29 (1.1)	58 (2.3)	0.08 (0.18)
FLN-01/Z	1-5/8" EIA	41 (1.6)	89 (3.5)	0.17 (0.37)
FLN-02/Z	3-1/8" EIA	53 (2.1)	128 (5.04)	0.38 (0.84)
FLN-27/Z	4-1/2" EIA	52.5 (2.1)	159 (6.3)	0.48 (1.1)
FLN-10/Z	6-1/8" EIA	75.5 (3.0)	206 (8.1)	0.86 (1.9)



STRAIGHT COUPLINGS

TYPE	CONNECTORS	DIMENSIONS mm (in)		WEIGHT kg (lb)
		A mm (in)	B mm (in)	
FLN-32/Z	7/8" Unfl. M	59.9 (2.4)	27.6 (1.1)	0.06 (0.13)
FLN-03/Z	1-5/8" Unfl. M	78.4 (3.1)	78 (3.1)	0.12 (0.26)
FLN-04/Z	3-1/8" Unfl. M	100 (3.9)	135 (5.3)	0.6 (1.3)
FLN-28/Z	4-1/2" Unfl. M	100 (3.9)	165 (6.5)	1.25 (2.8)
FLN-09/Z	6-1/8" Unfl. M	125 (4.9)	226.5 (8.9)	2.7 (6)

Note: M = male



CONNECTORS FOR COAXIAL CABLES

FEATURES

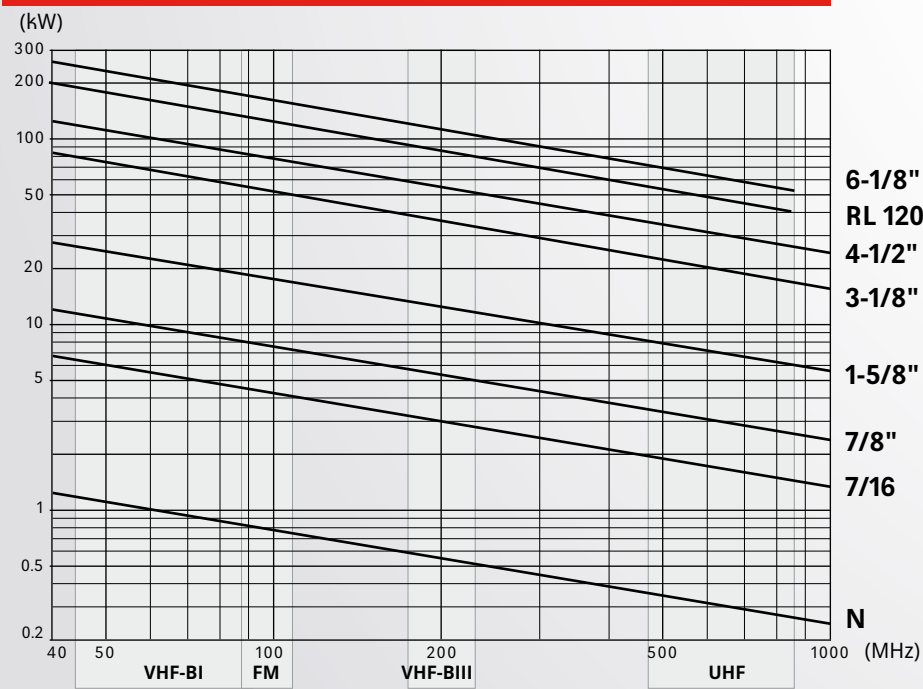
- flanged connectors
- low insertion losses
- low V.S.W.R



GENERAL FEATURES

FREQUENCY RANGE	0.1 ÷ 860 MHz
IMPEDANCE	50 ohm
RETURN LOSS	≥ 32 dB
MAX MEAN POWER	See table below
OPERATING TEMPERATURE RANGE	-40 to +70° C (-40 to +158° F)
CONNECTOR	See table below
WEIGHT	See table below
PRESSURIZATION	Typical operating pressure 300hPa (300mBar)
MATERIALS	- External body Polished brass Cu Zn Sn
	- Inner conductor Silver plated brass
	- Insulator Teflon
EXTERNAL FINISHING	Nickel plating

MAX MEAN POWER



STANDARD CONDITIONS:

- V.S.W.R. = 1.0
- Ambient temperature 40°C (104°F)
- Atmospheric Pressure, dry air
- Inner Conductor Temperature 120°C (248°F)

CONNECTORS FOR COAXIAL CABLES



STANDARD TYPES

TYPE	CONNECTORS	FOR CABLE TYPE
CNN-05	7/8" EIA M	3/8" HELIFLEX HCA 38-50J
CNN-25	7/8" EIA M	7/8" HELIFLEX HCA 78-50J
CNN-27	7/8" EIA	7/8" HELIFLEX HCA 78-50J
CNN-31	1-5/8" EIA	1-5/8" HELIFLEX HCA 158-50J

Note: M = male

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