

# Coaxial rotary joints

## DC-40 GHz

The series of single-channel coaxial rotary joints consists of 5 models in different frequency ranges DC-40.0 GHz. They are intended for use in systems for medium power. The joints are weatherized to withstand severe environmental conditions.

## Contact types

The sliding-contact types are designed with spring loaded precious metal contacts and are very compact. These types have the frequency range extended down to DC.

## Choke-type

The PM 7893 choke joint has low torque and improved noise characteristics. It is recommended for high speed applications up to 2000 rpm.

## Multichannel

Coaxial rotary joints are available up to 12 GHz, both contacting and non contacting types.



## Single-channel

See also page 55 for coaxial stackable rotary joints.

Type of connectors	Frequency range GHz	Model	Power <sup>1)</sup>		VSWR max	WOW in VSWR	Insertion loss dB max
			peak kW	avg kW			
type K female/female	DC-40	<b>PM 7889/11</b>	2 1	50 W at 1 GHz 25 W at 10 GHz	(DC-26 GHz) 1.75 31-36 GHz 2.5	1.0 (DC-26) 1.00 1.5 31-36 1.1	(DC-26GHz) 1.0 31-36 GHz 1.5
type N <sup>2)</sup> male/female	DC-12.4	<b>PM 7890</b>	10	0.5 (DC-3 GHz) 0.2 (3-12 GHz)	1.30 (DC-8 GHz) 1.50 (8-12.4 GHz)	1.03	0.2 (DC-8 GHz) 0.3 (8-12.4 GHz)
type SMA female/female	DC-18.0	<b>PM 7892</b>	1.0	0.05	1.30 (DC-12 GHz) 1.50 (12-18 GHz)	1.02	0.3 (DC-12 GHz) 0.6 (12-18 GHz)
type N male/female	2-10	<b>PM 7893</b>	5.0	0.1	1.40	1.03	0.3
type TNC female/female	DC-11	<b>PM 7895</b>	3.0	0.4 (DC-3 GHz) 0.2 (3-11 GHz)	1.30 (DC-8 GHz) 1.50 (8-11 GHz)	1.03	0.2 (DC-8 GHz) 0.3 (8-11 GHz)
type SMA female/female	8.5-9.6	<b>SL 6778</b>	<b>3.0</b>	0.05	1.5	1.05	0.3

<sup>1)</sup> The power capacity of rotary joints are given for +25°C 0.1 MPa (1 ATA) 2 μs pulsewidth, 500 Hz repetition rate and matched load.

<sup>2)</sup> PM 7890/01 female/female.