

Waveguide-to-coaxial adapters

Description and purpose

Waveguide-to-coaxial adapters provide connection of waveguide path devices with coaxial path devices. The adapters provide low loss and reflection level, high stability of parameters for a great number of connect/disconnect cycles at operating temperatures between -60 °C and +85 °C. Custom adapters with maximum operating temperature up to +110 °C are available for ordering.



Specifications

Model	Description	Waveguide cross-section, mm	Frequency range, GHz	VSWR, max. (typ.)	Insertion loss, dB, max. (typ.)	Fig.
PKV1-01R-35 × 15	Type III (female)	35 × 15	5.64 ... 8.15	1.1 (1.07)	0.3 (0.15)	1
PKV1-11R-35 × 15	Type N (female)					
PKV1-01-35 × 15	Type III (male)					
PKV1-11-35 × 15	Type N (male)					
PKV1-01R-28.5 × 12.6	Type III (female)	28.5 × 12.6	6.85 ... 9.93	1.1 (1.07)	0.3 (0.2)	3
PKV1-11R-28.5 × 12.6	Type N (female)					
PKV1-01-28.5 × 12.6	Type III (male)					
PKV1-11-28.5 × 12.6	Type N (male)					
PKV1-01R-23 × 10	Type III (female)	23 × 10	8.15 ... 12.05	1.1 (1.07)	0.3 (0.18)	5
PKV1-11R-23 × 10	Type N (female)					
PKV1-01-23 × 10	Type III (male)					
PKV1-11-23 × 10	Type N (male)					
PKV1-03R-23 × 10	Type IX, ver. 3 (female)	23 × 5	9 ... 11*	1.17 (1.13)	0.4 (0.2)	6
PKV1-13R-23 × 10	3.5 mm (female)					
PKV1-03-23 × 10	Type IX, ver. 3 (male)					
PKV1-13-23 × 10	3.5 mm (male)					
PKV1-03R-23 × 5	Type IX, ver. 3 (female)	16 × 8	11.83 ... 17.99	1.15 (1.12)	0.3 (0.2)	7
PKV1-13R-23 × 5	3.5 mm (female)					
PKV1-03-23 × 5	Type IX, ver. 3 (male)					
PKV1-13-23 × 5	3.5 mm (male)					
PKV1-01R-16 × 8	Type III (female)	16 × 8	11.83 ... 17.99	1.15 (1.12)	0.3 (0.2)	8
PKV1-11R-16 × 8	Type N (female)					
PKV1-01-16 × 8	Type III (male)					
PKV1-11-16 × 8	Type N (male)					
PKV1-03R-16 × 8	Type IX, ver. 3 (female)	16 × 8	11.83 ... 17.99	1.15 (1.12)	0.3 (0.2)	9
PKV1-13R-16 × 8	3.5 mm (female)					
PKV1-03-16 × 8	Type IX, ver. 3 (male)					
PKV1-13-16 × 8	3.5 mm (male)					

Model	Description	Waveguide cross-section, mm	Frequency range, GHz	VSWR, max. (typ.)	Insertion loss, dB, max. (typ.)	Fig.
PKV1-03R-11 × 5.5	Type IX, ver. 3 (female)					15
PKV1-13R-11 × 5.5	3.5 mm (female)					
PKV1-03-11 × 5.5	Type IX, ver. 3 (male)	11 × 5.5	17.44 ... 25.95	1.2 (1.14)	0.5 (0.2)	16
PKV1-13-11 × 5.5	3.5 mm (male)					
PKV1-05R-11 × 5.5	2.4 mm (female)					17
PKV1-05-11 × 5.5	2.4 mm (male)					18
PKV1-03R-7.2 × 3.4	Type IX, ver. 3 (female)					19
PKV1-13R-7.2 × 3.4	3.5 mm (female)					
PKV1-03-7.2 × 3.4	Type IX, ver. 3 (male)	7.2 × 3.4	25.95 ... 37.50	1.2 (1.17)	0.7 (0.35)	20
PKV1-13-7.2 × 3.4	3.5 mm (male)					
PKV1A-14R-7.2x3.4	2.92 mm (female)					21
PKV1A-14-7.2x3.4	2.92 mm (male)					22
PKV1-05R-7.2 × 3.4	2.4 mm (female)					23
PKV1-05-7.2 × 3.4	2.4 mm (male)					24
PKV1-15R-7.2 × 3.4	1.85 mm (female)					25
PKV1-15-7.2 × 3.4	1.85 mm (male)					26
PKV1-05R-5.2 × 2.6	2.4 mm (female)	5.2 × 2.6	37.5 ... 50	1.2 (1.15)	0.4	27
PKV1-05-5.2 × 2.6	2.4 mm (male)					28

* Custom waveguide-to-coaxial adapters for 23 × 5 mm waveguide path and operating frequency range from 8.2 GHz to 9.2 GHz are available for ordering.

Dimensions

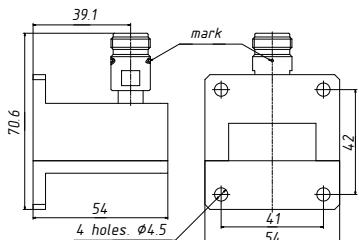


Fig. 1

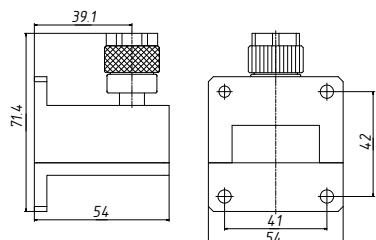


Fig. 2

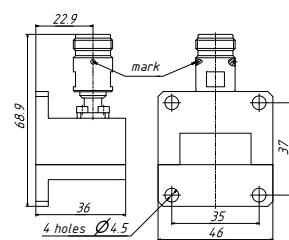


Fig. 3

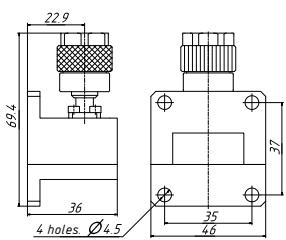


Fig. 4

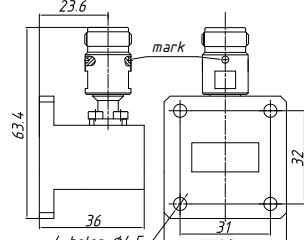


Fig. 5

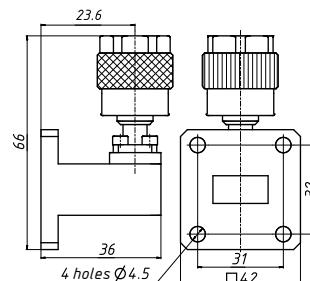


Fig. 6

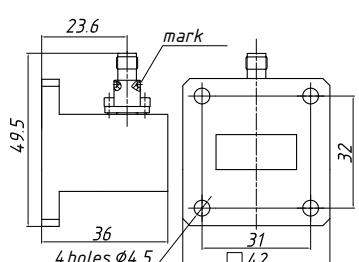


Fig. 7

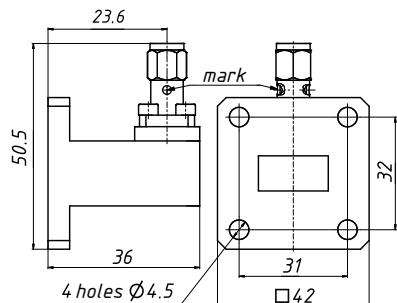


Fig. 8

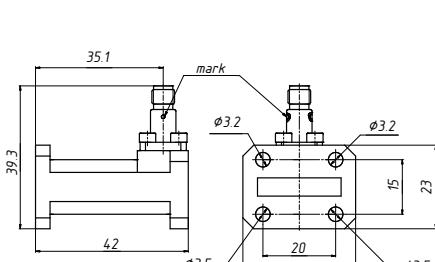
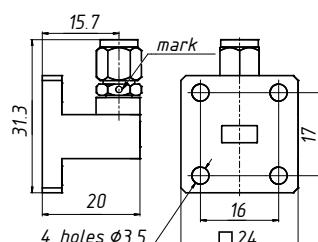
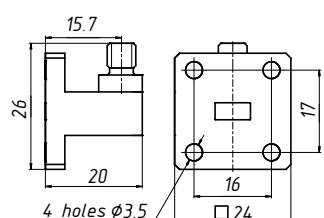
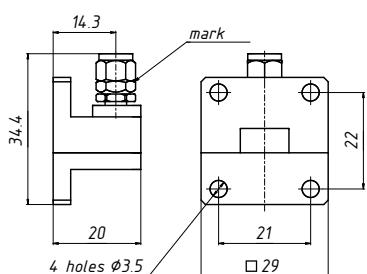
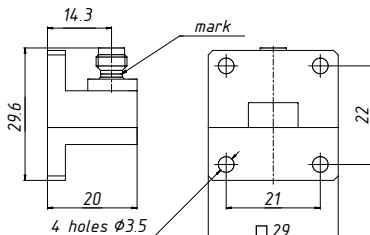
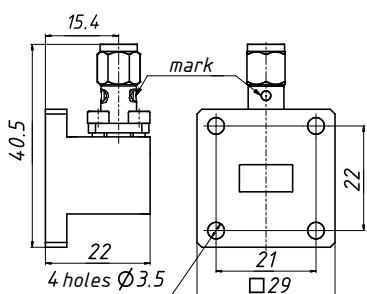
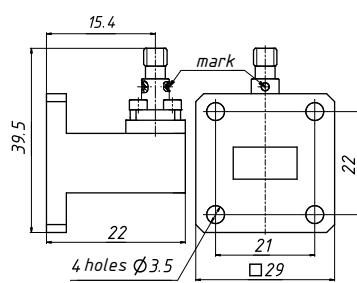
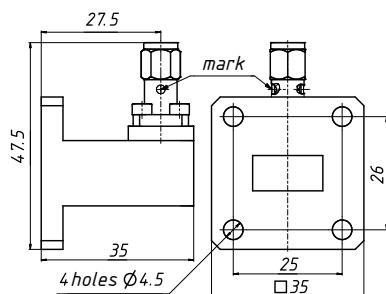
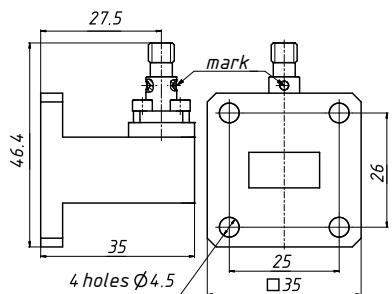
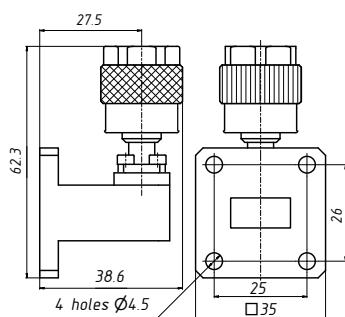
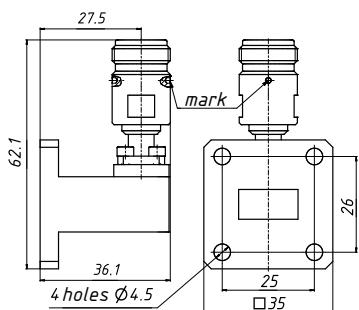
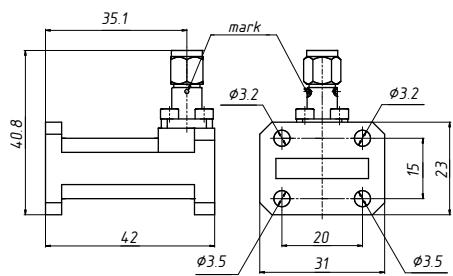
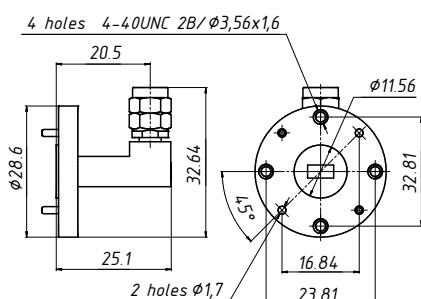
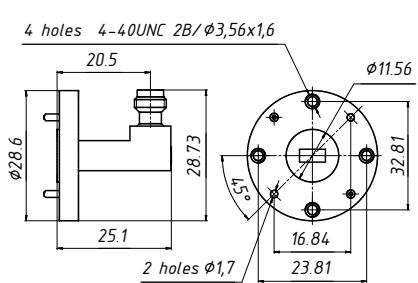
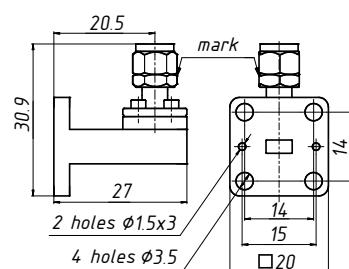
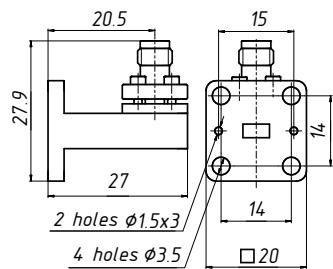
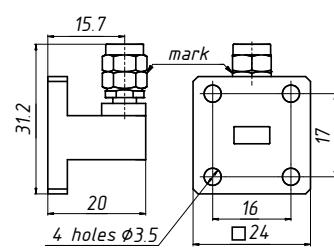
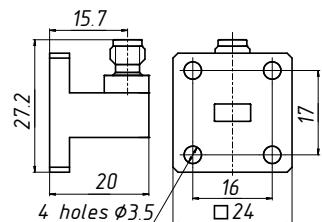
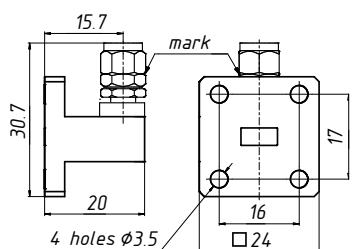
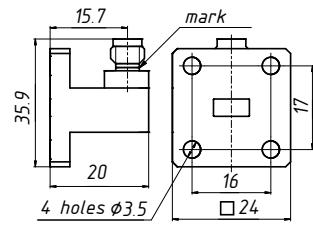
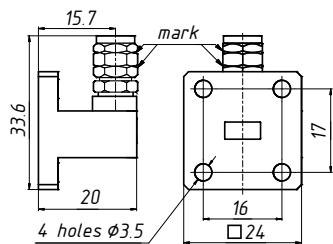
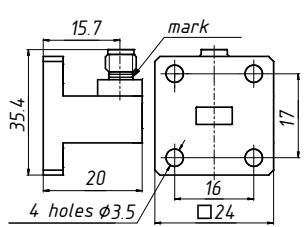


Fig. 9





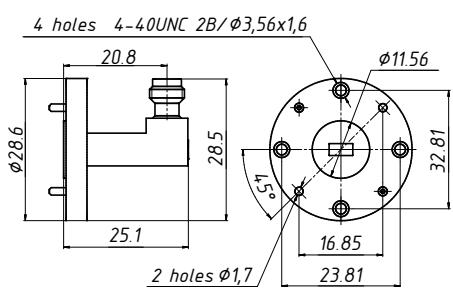


Fig. 31

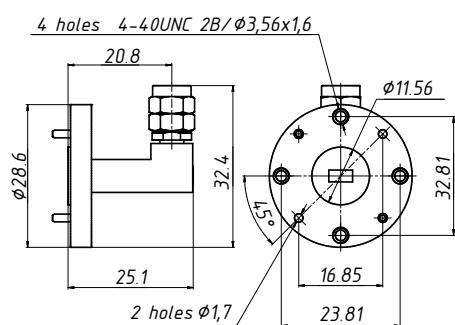


Fig. 32

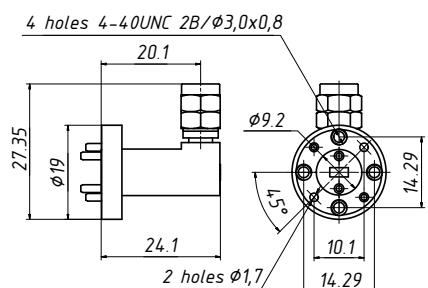


Fig. 34

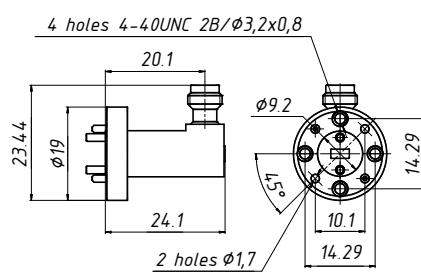


Fig. 33

Ordering example

- PKV1-03R-7.2 × 3.4 Waveguide-to-coaxial adapter, 7.2 × 3.4 mm waveguide cross-section, type IX, ver. 3 (female) connector.