

Miniature coaxial feedthrough type SMP 242-SMPD-LD-C16 / 242-SMPD-SD-C16 (and other flange sizes)

If space is a limited, SMP feedthroughs are a good choice. Even on a DN16CF, up to 4 off these double sided feedthroughs can be mounted. Allectra offers SMP feedthroughs with "limited detent" (LD) and "smooth detent" (SD) who have different insertion and disengagement forces. The feedthrough has 50 Ohm impedance and can be used up to 12 GHz and up to 14 GHz with a higher damping. Various in-vacuum cables are available.

	242-SMPD-LD-C16	242-SMPD-SD-C16
Type	SMP male, double sided Mounted on DN16CF flange	
Insertion type	Limited Detent	Smooth Bore / Detent
Insertion force	45 N max.	9 N max.
disengagement force	9 N min.	2 N min.
Impedance	50 Ohm	
Frequency range	0 – 12 GHz	
Voltage rating	335 V rms / 500 V DC	
Max current	1 A DC	
Standing Wave Ratio (VSWR)	<1.1 (10GHz) / <1.3 (12GHz) / <1.5 (14GHz)	
Vacuum	UHV, all metal seal	
Temperature	-55 ... 165 °C with connector / 4k... 400°C	
Vacuum leak rate	< 5x 10 ⁻¹⁰ mbar l / s (He)	
Materials	Stainless Steel, Glass, Kovar	
Vacuum	UHV, leak rate < 2x 10 ⁻¹⁰ mbar l / s He	
Number of f/t's per flange	DN16CF: 1 – 4 off DN40CF: 1 – 15 off (standard: 1 / 4 / 8 / 12 off)	
UHV compatible cables (examples, more versions possible)	380-SMP-FX-500 (one connector, open end, 500mm Kapton cable) 380-SMP-FF-500 (two connectors, 500mm Kapton cable 301-KAP50S) 380-SMP-FF-PTFE-500 (two connectors, 500mm with high frequency PTFE cable)	



4 off SMP double sided feedthroughs on a DN16CF flange, shown from air side and vacuum side



SMP connector with cable type 301-KAP50S. This version can be used up to approx. 3 GHz

On DN40CF, versions with 1 / 2 / 4 / 8 / 12 SMP feedthroughs are offered as standard, other numbers of f/'s on one flange can be done as specials on request.