

» About us



Founded in August 2003, Xi'an Elite Electronic Industrial Co., Ltd., is a national high-tech enterprise that specialized in R & D, manufacture and sales of electrical RF connector & adapter, cable assemblies, wave-guide connector & assemblies, multichannel microwave rotary joint and other electrical connection components. With our leading-level design experience, we've provided high performance interconnect products and solutions for military and commercial applications for 15 years.

It's located in the Chang'an communications industrial park of high tech Zone, Xi'an, China. The factory covers 35,000 square meters. There are over 500 employees, three machine processing workshops, four assembly lines, three military standard production lines, two laboratories, two aerospace and high reliable production lines, 500 sets equipment for production, testing and experimental, including 110GHz Vector Network Analyzer, Helium Mass-spectrometer Leak Detector, X-ray Thickness Gauge, GDJS, Salt-mist Corrosion Tester and other equipment.



» Main Products

- *RF products
 - Cable Assembly
 - Connector(Integrated, cable, 50Ω, 75Ω type, ASMP, BNC, CSMP, SMA, SMP, etc.)
 - Adapter(In-series, Between-series)

- *Microwave Rotary Joint

- *Wave-guide Products
 - Cable Assembly
 - Adapter

- *Low Frequency Products
- *New Products
 - Attenuator
- *Tools

» Contact Us

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» Introduction



SMP is a sub-miniature push-on RF coaxial connector, which has the characters of small size, light weight, excellent vibration-proof performance, and wide working broadband, etc. Operating frequency up to 30GHz (our product of high performance SMP connector can reach 40GHz), and the plug has three interface forms - full detent, limited detent and smooth bore (including with braking). Various interface forms can satisfy the required axial or radial movement of blind mating in the couple usage of board-to-board system. It's suitable for the install situation with the requirement of high reliability modular intensive.

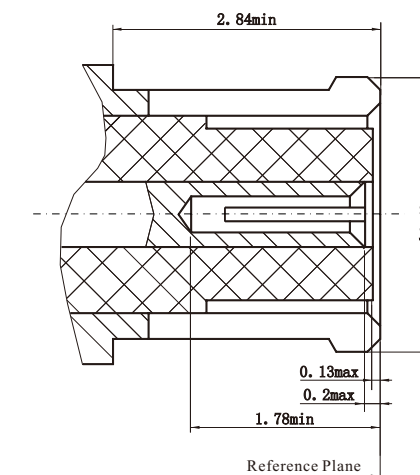
» Performance Index

Electrical Characteristics		
Impedance	50Ω	
Frequency Range	DC~40GHz	
Rated Voltage	170VRMS (maximum sea-level)	
Dielectrics Voltage-resistance	500VRMS (maximum sea-level)	
Insulation Resistance	≥2000MΩ	
Contact Resistance	outer conductor	normal ≤2.5mΩ, hermetic ≤4mΩ
	center conductor	normal ≤6mΩ, hermetic ≤26mΩ
VSWR		DC~18GHz 18~26.5GHz 26.5~40GHz
	straight connector	≤1.25 ≤1.3 ≤1.5
	Right angle connector	≤1.3
	adapter	≤1.2 ≤1.3 ≤1.5
other	≤1.3	

Material & Mechanical Characteristics			
Center Conductor	male	Sn-P bronze	gold plated
	female	beryllium bronze	gold plated
Elastic Contact		beryllium bronze	gold plated
Shell and other Metal Parts		brass, stainless steel	gold plated passivation
Insulators		glass sintering/PTFE/PEI	
Hermetic Product Leakage Rate		1.01325 × 10 ⁻³ Pa·cm ³ /s	

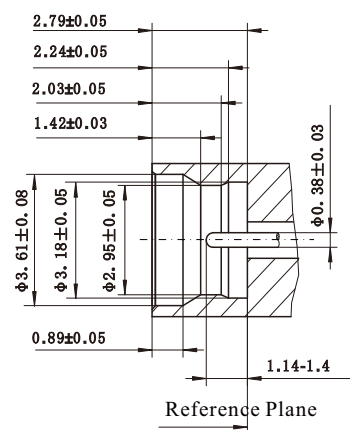
» Interface Dimension

■ Socket

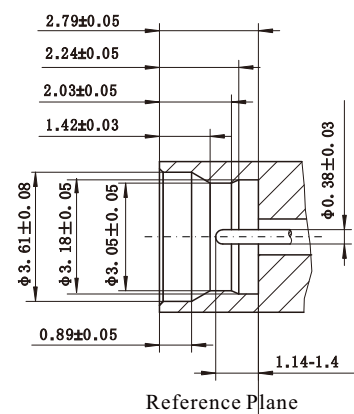


Plugs

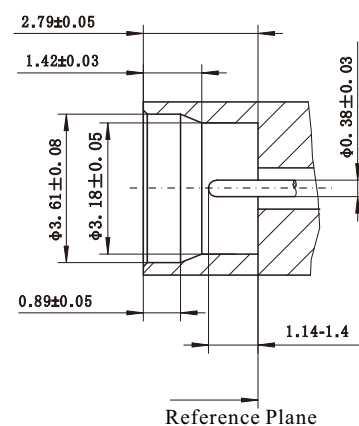
Full Detent



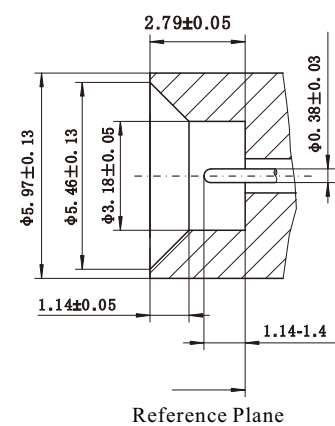
Limited Detent



Smooth Bore



Smooth Bore(control)



The plugs of SMP has three kinds of interface forms. Different letters are used to distinguish them according to their different engagement and disengagement forces. Details as below:

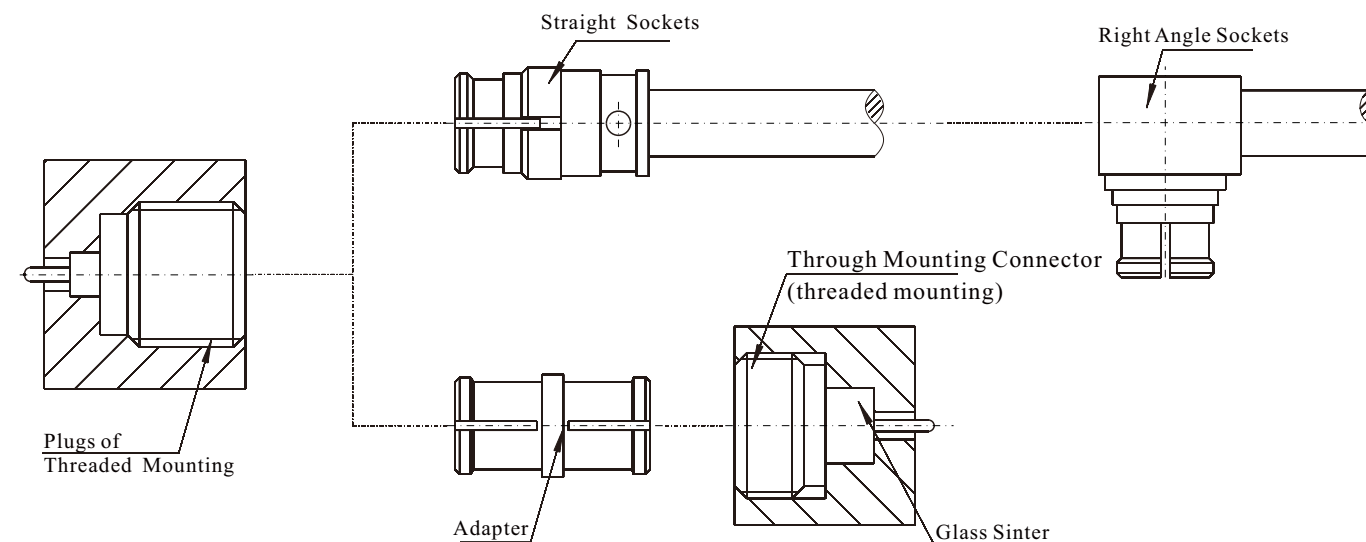
Interface Form	Name Method	Engagement Force	Disengagement Force
Full Detent	Model Number-F	68N max	22N min
Limited Detent	Model Number	45N max	9N min
Smooth Bore	Model Number-S	9N max	2.2N min

Example: Full Detent SMP-JFD26G-F
 Limited Detent SMP-JFD26G
 Smooth Bore SMP-JFD26G-S

Install Introduction

SMP connectors include a variety of straight plugs, right angle plugs and sockets. Plugs have three kinds of interface forms---full detent, limited detent and smooth bore. To meet different conditions and requirements, many kinds of mounting are available such as through mounting, flange mounting and glass sinter, etc. According to classification, there are two main forms of connection:

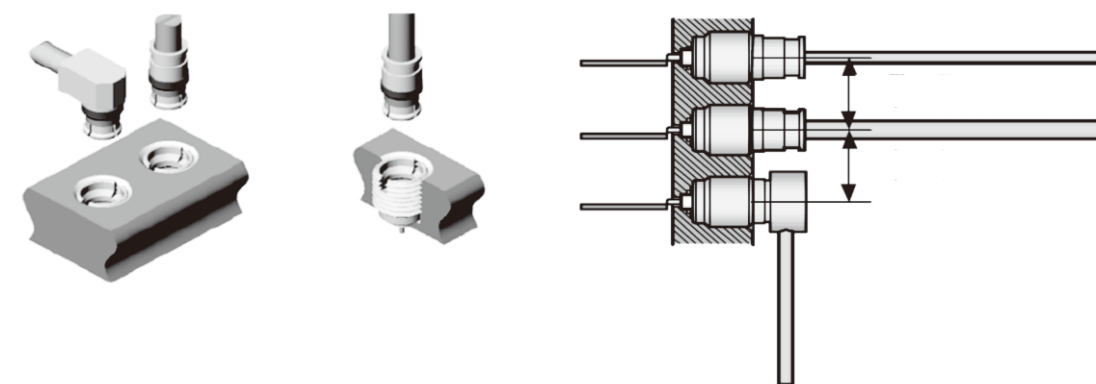
- 1, Put the straight or right angle socket directly into the plug or the connector with through mounting (threaded or flange mounting)
- 2, Add an adapter to avoid axial or radial misalignment.



Figures 1 Plugs and sockets matching diagram

Matching method of connector with cable

Following drawing is SMP straight, right angle cable connectors with module mated usage, left is unmated drawing, right is mated.



Figures 2 Sockets with cable and module matching diagram

Matching method of connector with adapter

SMP is a sub-miniature connector which can provide various interface forms. It's used extensively in multiple situations of intensive mounting and blind-mated mounting. The adoption of an adapter between the two modules can solve the axial and radial misalignment tolerance cause of the two modules mounting mole dimension error, make the two modules meet the requirements of multiple SMP plug and socket simultaneous use.

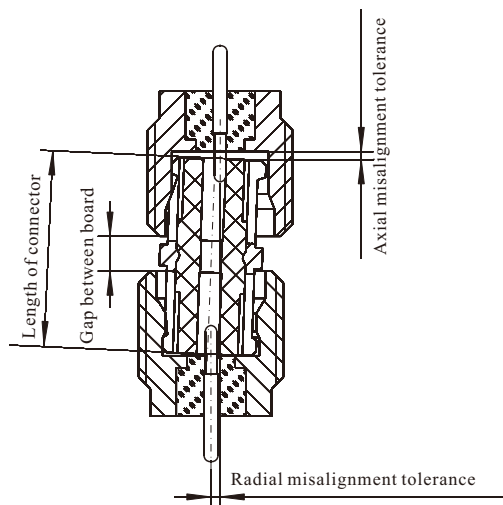


Figure 3 Mate adapter between two models

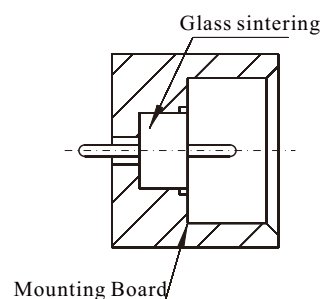


Figure 4 Glass sintering connector

Through-mounting connector is usually composed of shell and glass sintering connector(Figure 4). By changing the structure of the shell forms three plug interface of SMP. If there is enough space in through-mounting connector, it can use the shell with 2- hole flange mounting(Figure 5), if the space is limited, the relevant holes can be processed by the installation wall, make the shell weld or screw into installation hole(Figure 6). The welding structure has good seal-ability.

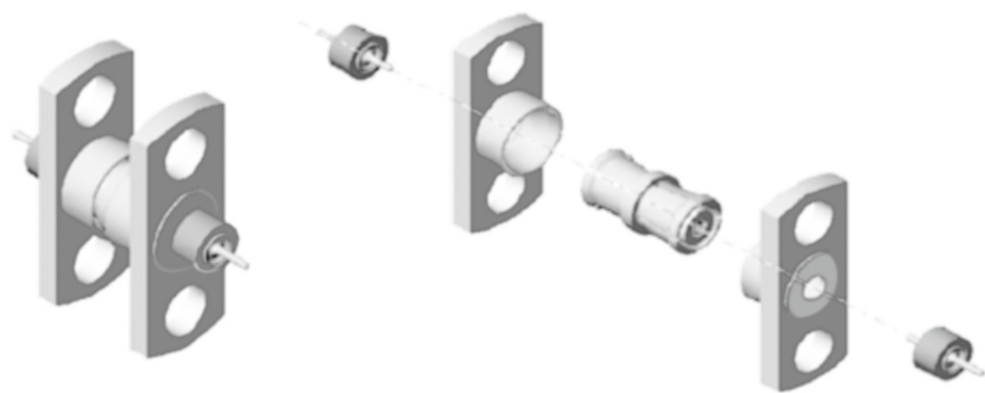


Figure 5 2- hole flange mounting diagram

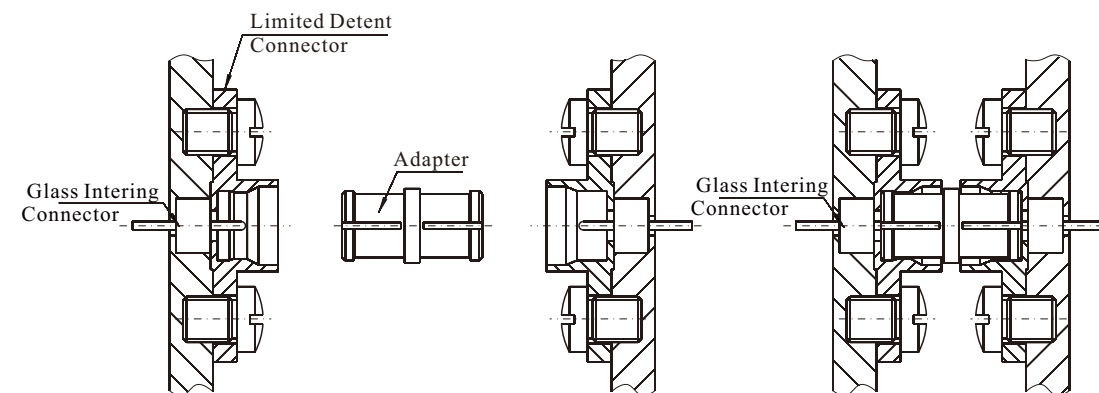
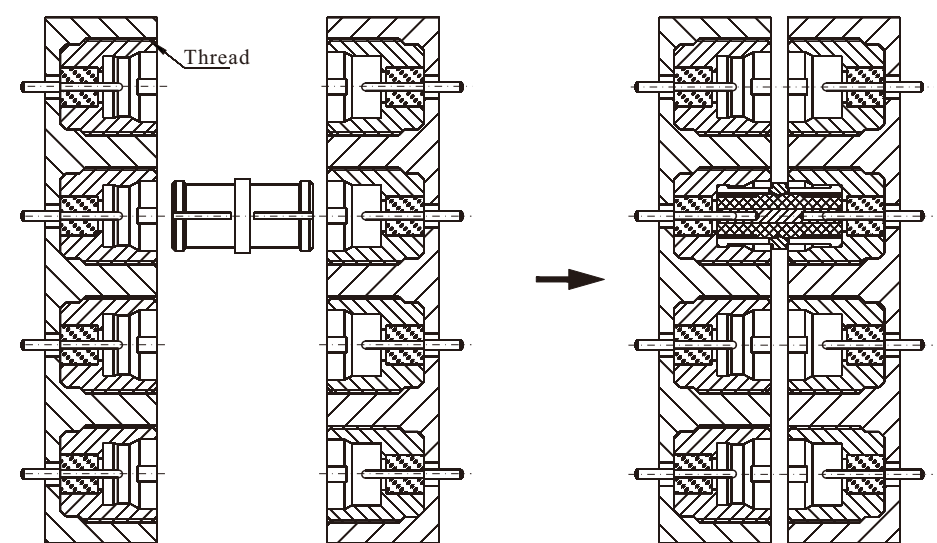
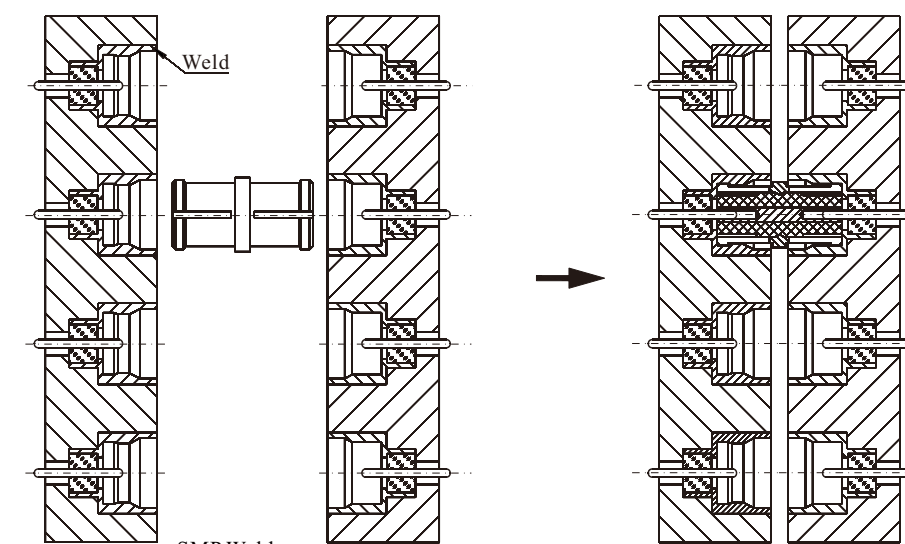


Figure 5-B 2-hole flange mounting diagram



SMP Threaded Mounting

SMP Threaded Mounting Effect



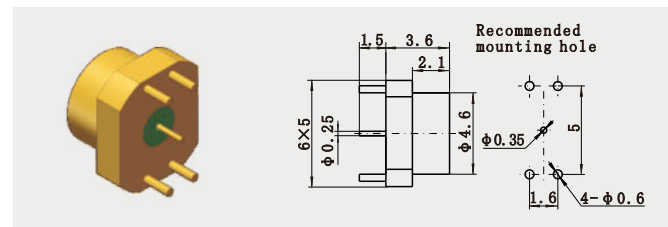
SMP Weld

SMP Weld Mounting Effect

Figure 6 SMP mounting diagram

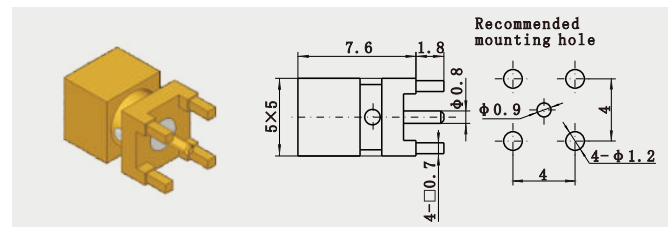
Micro Strip Connector (JHD series)

SMP-JHD235



Model Number	Interface Form	Note
SMP-JHD235	Limited Detent	Meshing depth 1.7
SMP-JHD235-S	Smooth Bore	Meshing depth 1.7

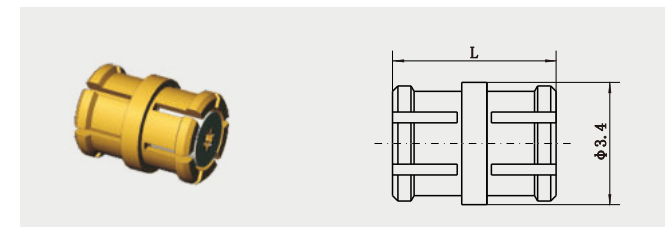
SMP-JHD243



Model Number	Interface Form
SMP-JHD243	Limited Detent
SMP-JHD243-S	Smooth Bore
SMP-JHD243-F	Full Detent

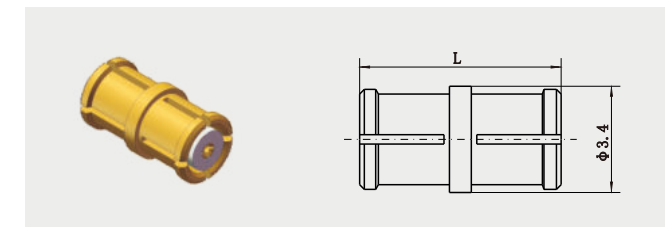
SMP In-Series Adapter

SMPD-KK2



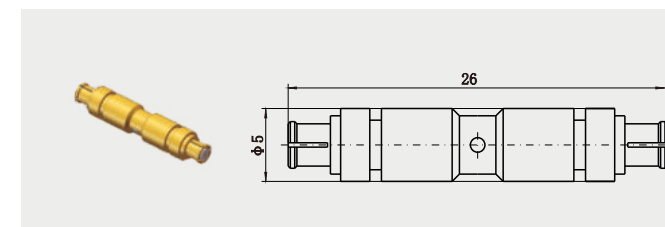
Model No.	L	Note
SMPD-KK2	4.55	Can only be used with a short interface male end
SMPD-KK3	4.75	Can only be used with a short interface male end
SMPD-KK4	4.9	Can only be used with a short interface male end
SMPD-KK8	5	Can only be used with a short interface male end
SMPD-KK12	4.6	Can only be used with a short interface male end

SMP-KK



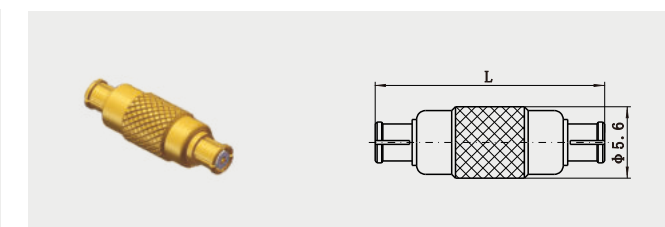
Model Number	L
SMP-KK	6.45
SMP-KK12	5.8
SMP-KK88	6.2
SMP-KK173	6.1
SMP-KK174	5.8
SMP-KK180	12.3
SMP-KK182	8.1
SMP-KK202	5.9

SMP-KK1



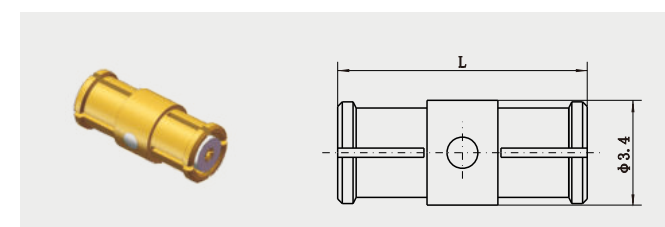
Model Number	Note
SMP-KK1	

SMP-KK2



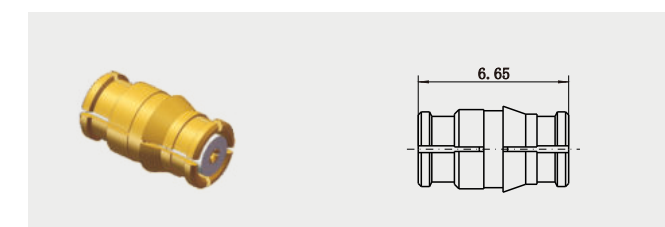
Model Number	L
SMP-KK2	18.2
SMP-KK10	17.8

SMP-KK3



Model Number	L
SMP-KK3	8.1
SMP-KK8	7.75
SMP-KK22	6.45
SMP-KK26	9.45
SMP-KK29	8.5
SMP-KK46	7.2
SMP-KK105	25.5
SMP-KK106	8.6
SMP-KK117	14.65

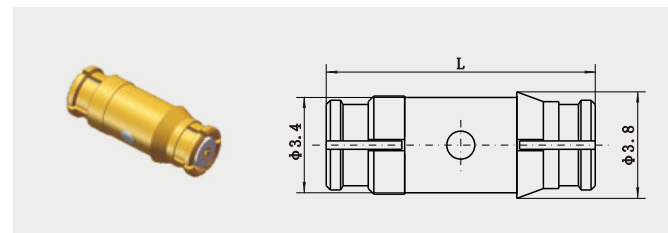
SMP-KK4



Model Number	Note
SMP-KK4	Right end can only be used with smooth bore.

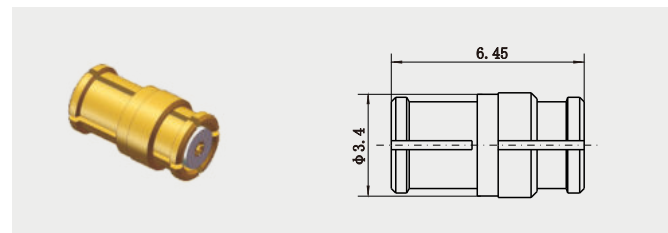
SMP In-Series Adapter

SMP-KK6



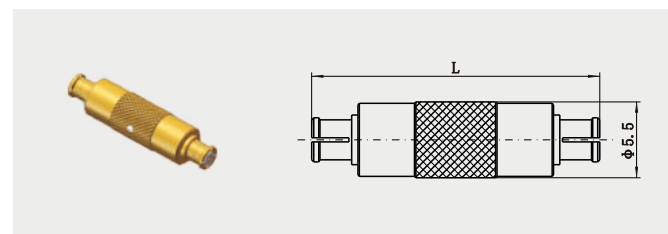
Model Number	L	Note
SMP-KK6	9.6	Right end can only be used with smooth bore
SMP-KK7	8.5	Right end can only be used with smooth bore

SMP-KK9



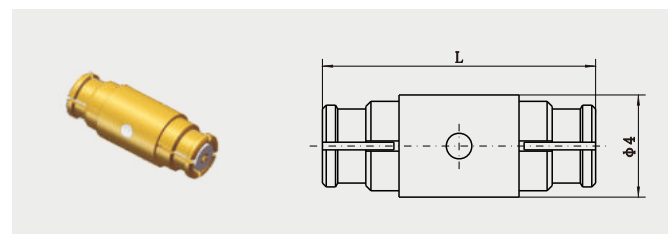
Model Number	Note
SMP-KK9	

SMP-KK11



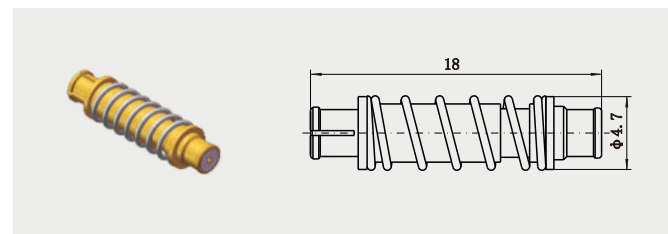
Model Number	L
SMP-KK11	22.3
SMP-KK42	20.9

SMP-KK13



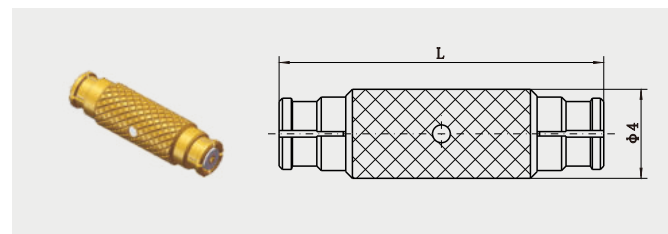
Model Number	L
SMP-KK13	10.7
SMP-KK17	11
SMP-KK37	8.3
SMP-KK38	7.8

SMP-KK15



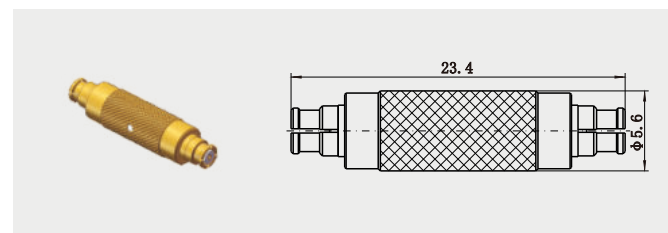
Model Number	Note
SMP-KK15	Can be compressed to 16.7, right end can only be used with smooth bore

SMP-KK16



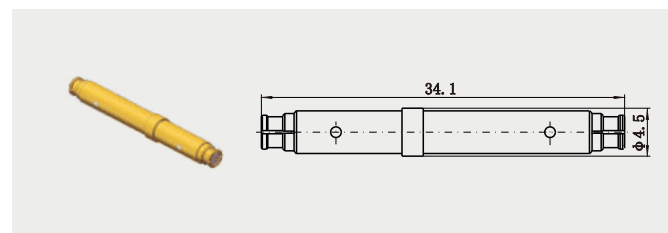
Model Number	L
SMP-KK16	14.5
SMP-KK23	14.8
SMP-KK31	13.7

SMP-KK19



Model Number	Note
SMP-KK19	

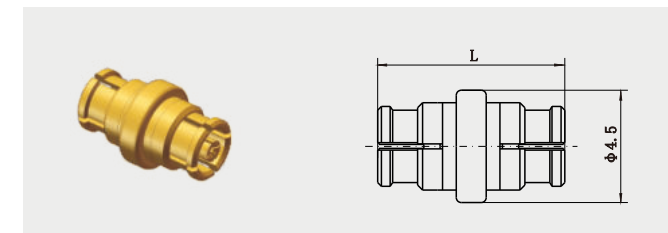
SMP-KK21



Model Number	Note
SMP-KK21	

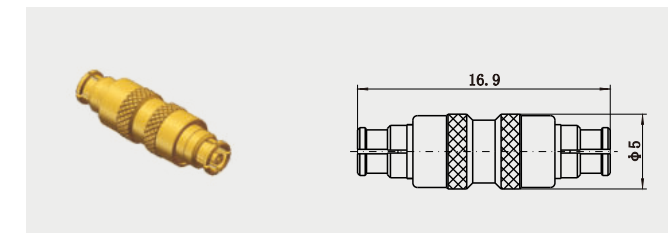
SMP In-Series Adapter

SMP-KK25



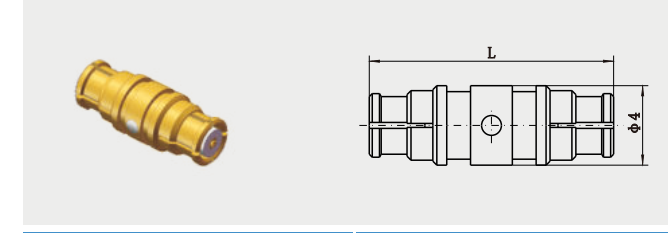
Model Number	L
SMP-KK25	7.5
SMP-KK27	7
SMP-KK30	7.7
SMP-KK33	9.4

SMP-KK28



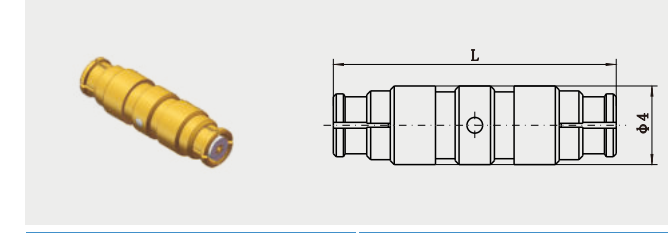
Model Number	Note
SMP-KK28	

SMP-KK32



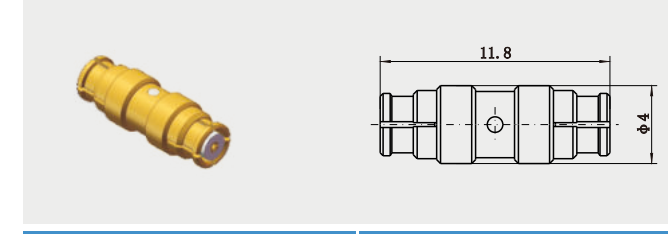
Model Number	L
SMP-KK32	10.3
SMP-KK40	12.3
SMP-KK45	12.5
SMP-KK50	15.9
SMP-KK63	12.4
SMP-KK194	12.7

SMP-KK35



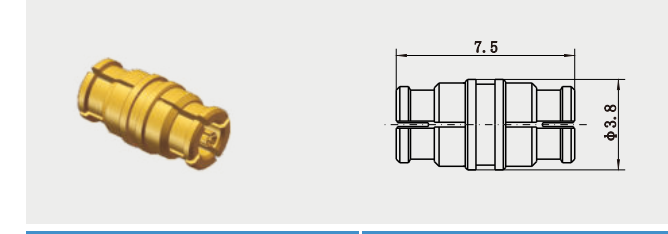
Model Number	L
SMP-KK35	14.4
SMP-KK61	14.6
SMP-KK235	14.25

SMP-KK36



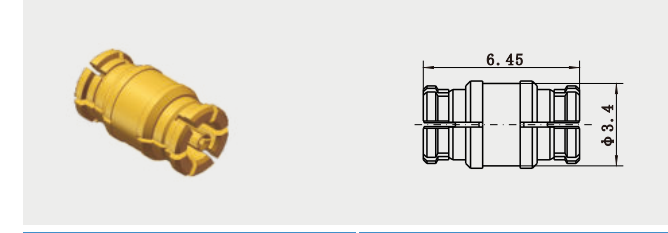
Model Number	Note
SMP-KK36	

SMP-KK41



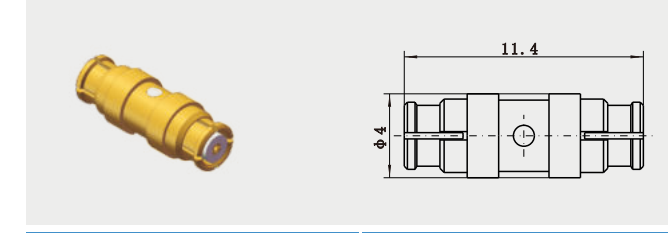
Model Number	Note
SMP-KK41	

SMP-KK48



Model Number	Note
SMP-KK48	

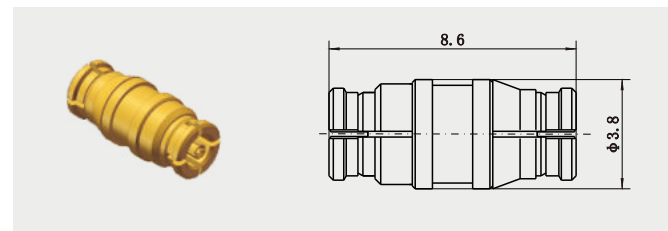
SMP-KK52



Model Number	Note
SMP-KK52	

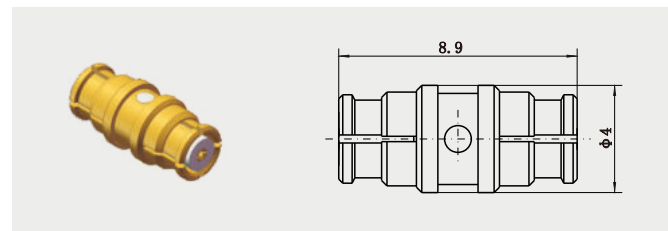
SMP In-Series Adapter

SMP-KK53



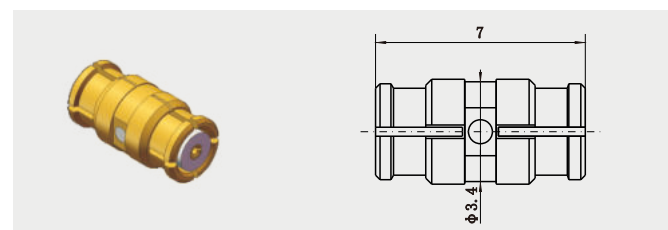
Model Number	Note
SMP-KK53	Right end can only be used with smooth bore

SMP-KK54



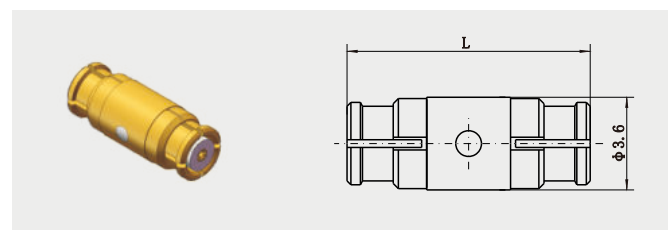
Model Number	Note
SMP-KK54	

SMP-KK58



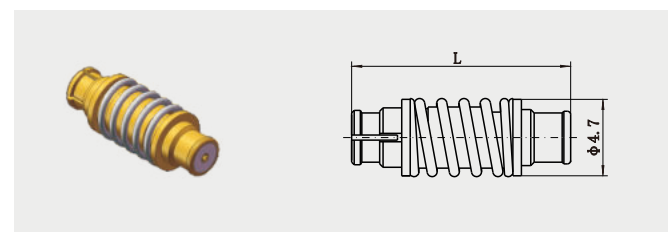
Model Number	Note
SMP-KK58	

SMP-KK64



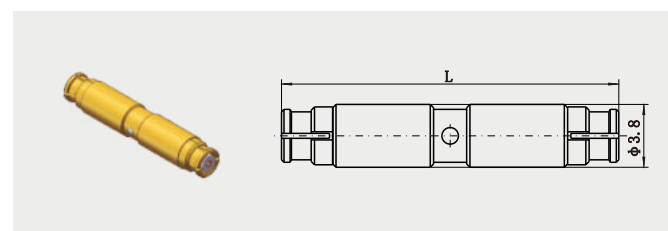
Model Number	L
SMP-KK64	9.45
SMP-KK65	15.4
SMP-KK67	9.18
SMP-KK69	11.1
SMP-KK84	7.95
SMP-KK85	15.25
SMP-KK94	10.4
SMP-KK95	12
SMP-KK100	8.8
SMP-KK101	13
SMP-KK102	13.2
SMP-KK103	13.4
SMP-KK104	13.6
SMP-KK110	17.6
SMP-KK181	13.1
SMP-KK183	10.55
SMP-KK184	8.75
SMP-KK185	22.2
SMP-KK187	20.4
SMP-KK195	11.4
SMP-KK241	8.4
SMP-KK253	19.5

SMP-KK59



Model Number	L	Note
SMP-KK59	16	Can be compressed to 15, right end can only be used with smooth bore
SMP-KK62T	13	Can be compressed to 12, right end can only be used with smooth bore
SMP-KK62T-Y1	13	Can be compressed to 12, right end can only be used with smooth bore. 192H salt fog resistance
SMP-KK190T	12.7	Can be compressed to 11.9, right end can only be used with smooth bore

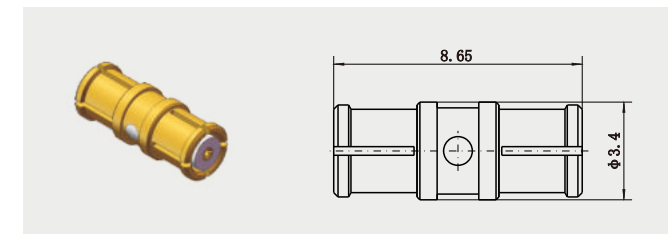
SMP-KK68



Model Number	L
SMP-KK68	20.4
SMP-KK73	16.6

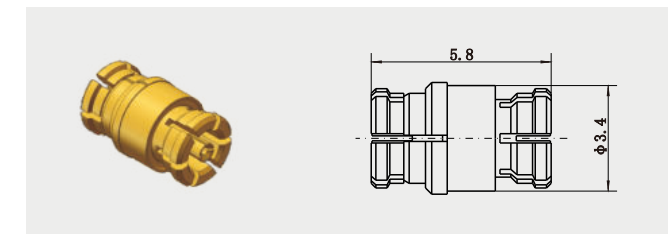
SMP In-Series Adapter

SMP-KK70



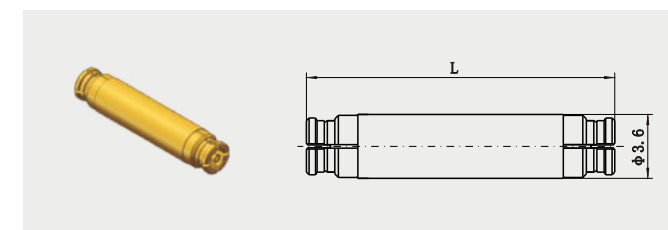
Model Number	Note
SMP-KK70	

SMP-KK72



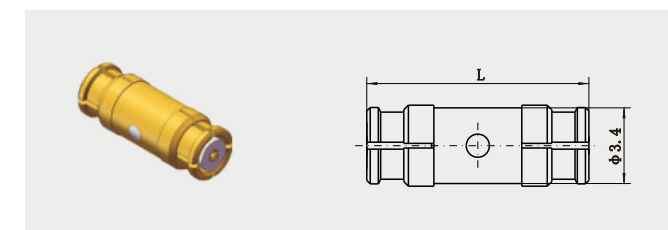
Model Number	Note
SMP-KK72	

SMP-KK96



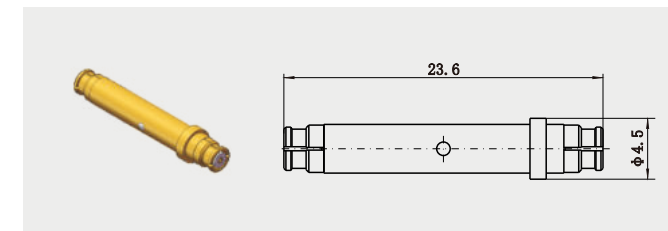
Model Number	L
SMP-KK96	17.35
SMP-KK97	9.6
SMP-KK98	11

SMP-KK99



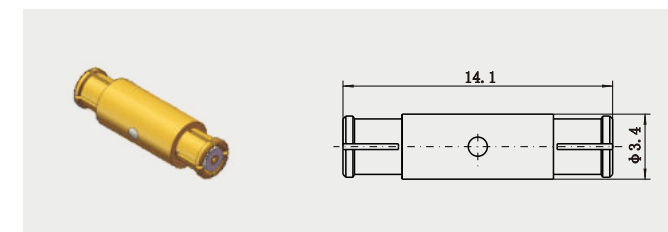
Model Number	L
SMP-KK99	9.6
SMP-KK166	10.2
SMP-KK175	6.7
SMP-KK176	7.1
SMP-KK177	7.4
SMP-KK178	8.1
SMP-KK188	10
SMP-KK189	9.7
SMP-KK192	9
SMP-KK239	9.9
SMP-KK249	6.7

SMP-KK116



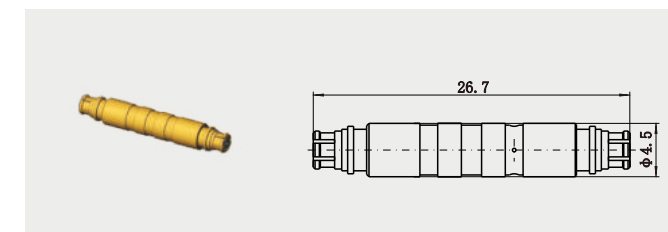
Model Number	Note
SMP-KK116	

SMP-KK167



Model Number	Note
SMP-KK167	

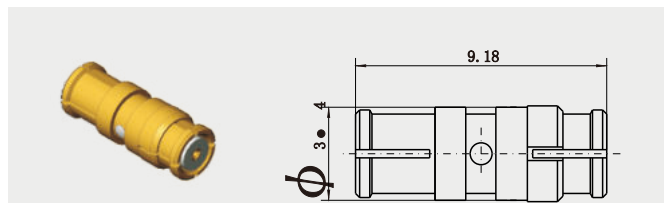
SMP-KK169



Model Number	Note
SMP-KK169	

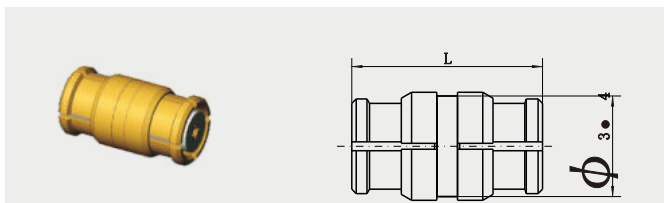
SMP In-Series Adapter

SMP-KK191



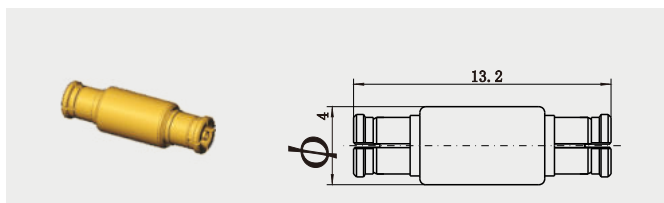
Model Number	Note
SMP-KK191	

SMP-KK193



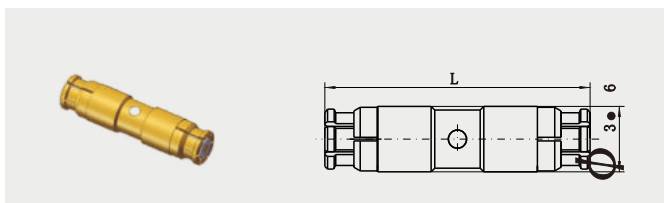
Model Number	L
SMP-KK193	6
SMP-KK518	6.45

SMP-KK197



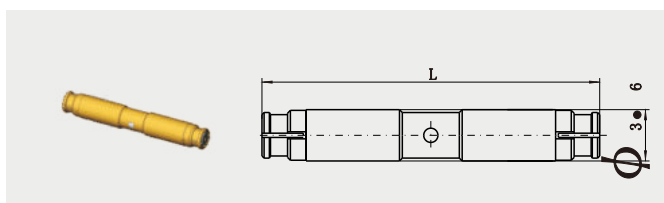
Model Number	Note
SMP-KK197	

SMP-KK206



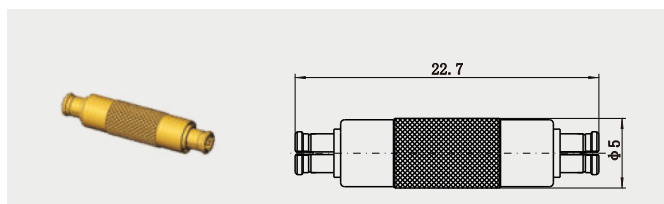
Model Number	L	Note
SMP-KK206	14.6	Weak Insertion Force
SMP-KK207	14.8	Weak Insertion Force
SMP-KK208	15	Weak Insertion Force
SMP-KK209	15.2	Weak Insertion Force
SMP-KK210	15.4	Weak Insertion Force
SMP-KK211	15.6	Weak Insertion Force
SMP-KK212	15.8	Weak Insertion Force
SMP-KK213	16	Weak Insertion Force
SMP-KK214	16.2	Weak Insertion Force
SMP-KK215	16.4	Weak Insertion Force
SMP-KK216	16.6	Weak Insertion Force
SMP-KK217	16.8	Weak Insertion Force
SMP-KK218	17	Weak Insertion Force
SMP-KK219	17.2	Weak Insertion Force
SMP-KK220	17.4	Weak Insertion Force
SMP-KK221	17.6	Weak Insertion Force
SMP-KK222	17.8	Weak Insertion Force
SMP-KK223	18	Weak Insertion Force
SMP-KK224	18.2	Weak Insertion Force
SMP-KK225	18.4	Weak Insertion Force
SMP-KK226	18.6	Weak Insertion Force
SMP-KK227	18.8	Weak Insertion Force
SMP-KK228	19	Weak Insertion Force
SMP-KK229	19.2	Weak Insertion Force
SMP-KK230	19.4	Weak Insertion Force
SMP-KK231	19.6	Weak Insertion Force
SMP-KK232	19.8	Weak Insertion Force
SMP-KK233	20	Weak Insertion Force
SMP-KK234	20.2	Weak Insertion Force

SMP-KK199



Model Number	L
SMP-KK199	23.7
SMP-KK243	22.5
SMP-KK244	25.6
SMP-KK262	27.5

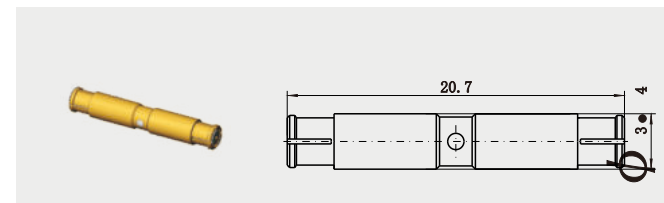
SMP-KK201



Model Number	Note
SMP-KK201	

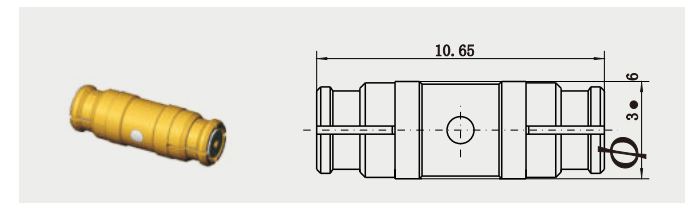
SMP In-Series Adapter

SMP-KK203



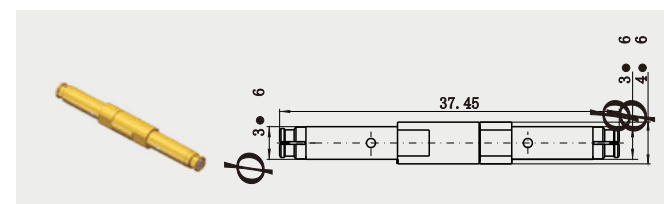
Model Number	Note
SMP-KK203	

SMP-KK242



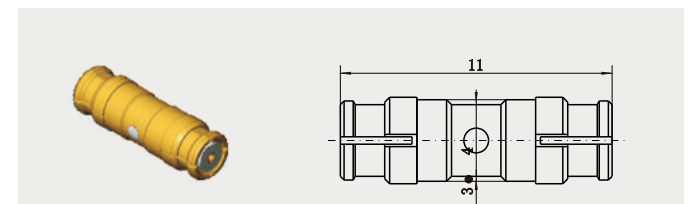
Model Number	Note
SMP-KK242	

SMP-KK245



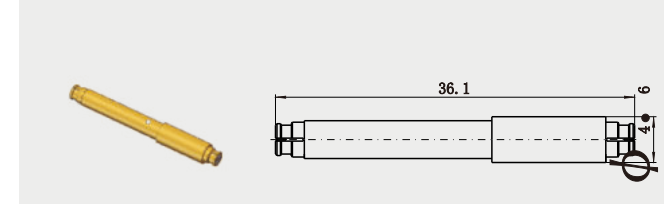
Model Number	Note
SMP-KK245	

SMP-KK248



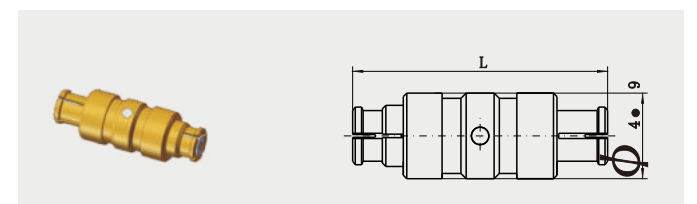
Model Number	Note
SMP-KK248	

SMP-KK258



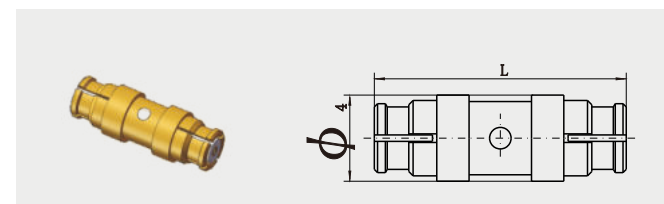
Model Number	Note
SMP-KK258	

SMP-KK264



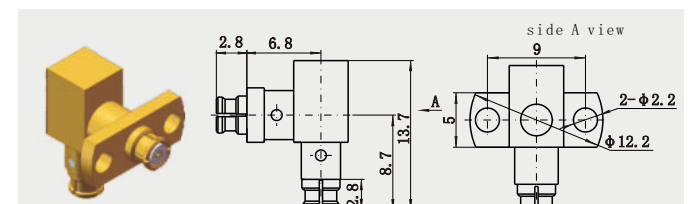
Model Number	L
SMP-KK264	14.6
SMP-KK265	17.6

SMP-KK268



Model Number	L
SMP-KK268	11.7
SMP-KK269	11.85
SMP-KK270	12.05

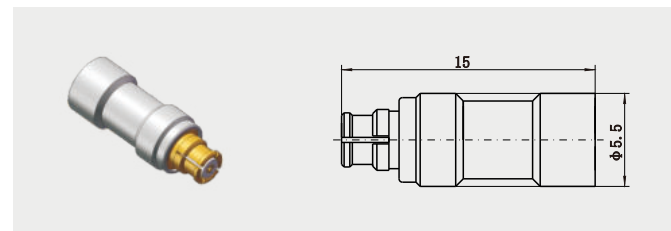
SMP-KWFK



Model Number	Note
SMP-KWFK	

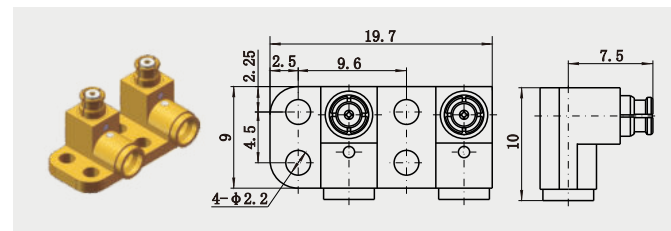
» SMP In-Series Adapter

■ SMP-JKG



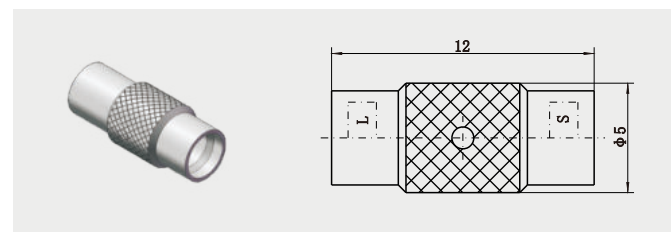
Model Number	Note
SMP-JKG	Male end is limited detent

■ SMP-JWFK1×2



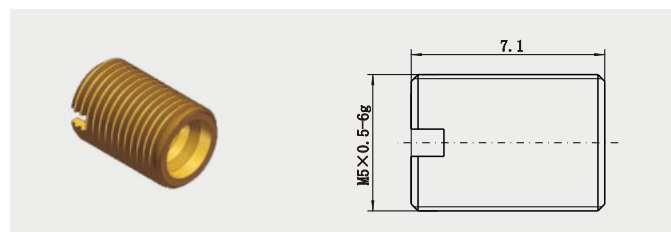
Model Number	Note
SMP-JWFK1×2	

■ SMP-JJG-LS



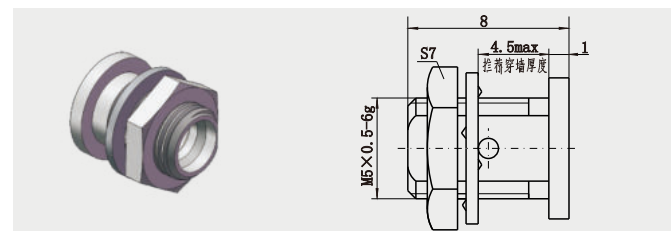
Model Number	Note
SMP-JJG-LS	"L" means limited detent. "S" means smooth bore

■ SMP(M)-JYJ1



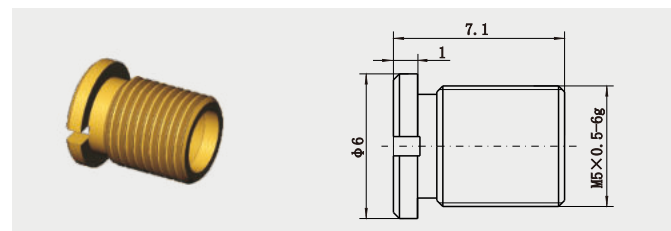
Model Number	Note
SMP(M)-JYJ1	Hermetic, both ends are limited detent

■ SMP-JYJ2G



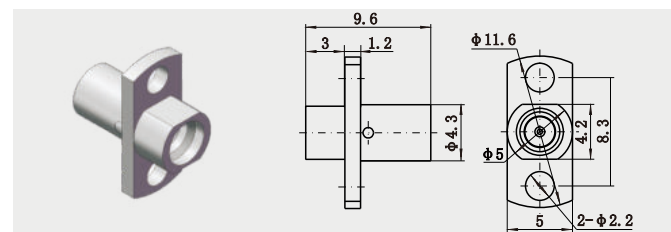
Model Number	Note
SMP-JYJ2G	Hermetic, both ends are limited detent

■ SMP(M)-JYJ2-S



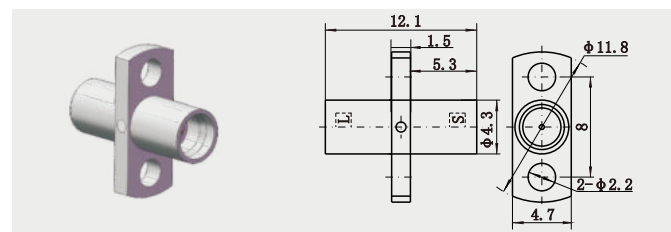
Model Number	Note
SMP(M)-JYJ2-S	Hermetic, both ends are limited detent
SMP(M)-JYJ2-FS	The left is smooth bore The right is full detent

■ SMP-JFJG



Model Number	Note
SMP-JFJG	Both ends are limited detent

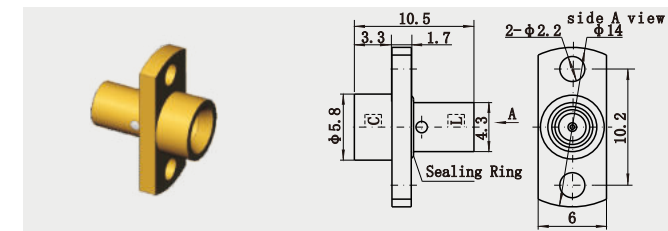
■ SMP-JFJ2G-LS



Model Number	Note
SMP-JFJ2G-LS	"L" means limited detent, "S" means smooth bore

» SMP In-Series Adapter

■ SMP-JFJ8-LC



Model Number	Note
SMP-JFJ8-LC	"L" means limited detent "C" means control