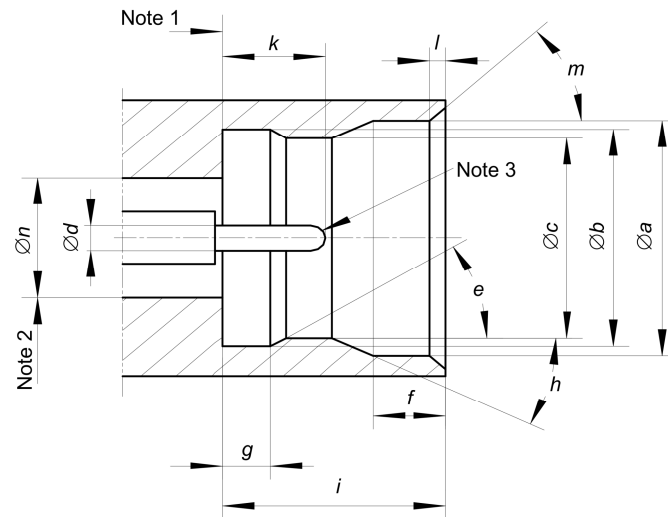


To facilitate quick reference and comparison of commonly required SMP connector interface dimensions and mating force specifications, the following information has been compiled in accordance with the IEC 61169-44:2012 standard.

1. SMP Male Interface Dimensions



Dimension Table (mm)

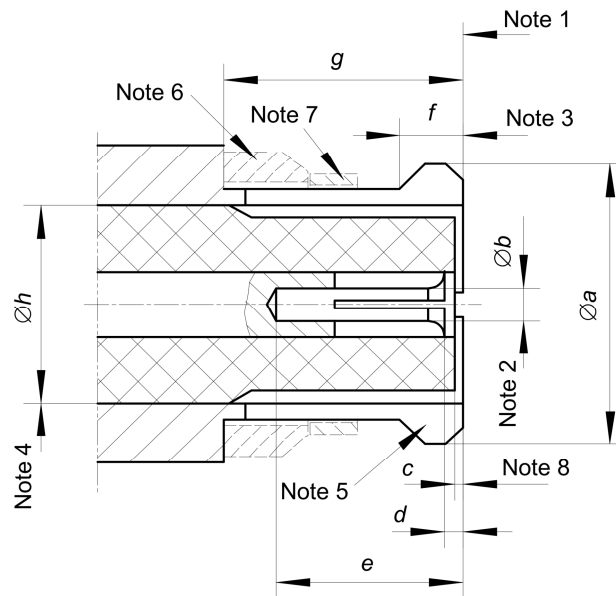
Dimension	Full Detent		Limited Detent		Smooth Bore	
	Min.	Max.	Min.	Max.	Min.	Max.
a	3.53	3.68	3.53	3.68	3.53	3.68
b	3.15	3.20	3.15	3.20	3.15	3.20
c	2.92	2.97	3.02	3.07	-	-
d	0.38	0.41	0.38	0.41	0.38	0.41
e	$30^\circ \pm 1^\circ$		$30^\circ \pm 1^\circ$		-	-
f	0.84	0.94	0.84	0.94	0.84	0.94
g	0.52	0.60	0.52	0.60	-	-
h	$32^\circ \pm 1^\circ$		$32^\circ \pm 1^\circ$		$32^\circ \pm 1^\circ$	
i	2.74	2.84	2.74	2.84	2.74	2.84
k	1.14	1.40	1.14	1.40	1.14	1.40
l	0.08	0.20	0.08	0.20	0.08	0.20
m	40°	50°	40°	50°	40°	50°
n	-	-	-	-	-	-

NOTE 1 Mechanical and electrical reference plane .

NOTE 2 The diameter is chosen to meet the nominal impedance of 50 Ω and electrical and mechanical requirements .

NOTE 3 Spherical or chamfered.

2. SMP Female Interface Dimensions



Dimension Table (mm)

Dimension	Cabled		Uncabled	
	Min.	Max.	Min.	Max.
a	-	3.43	-	3.43
b	-	-	-	-
c	0.00	-	0.00	-
d	0.00	0.20	0.00	0.20
e	1.78	-	1.78	-
f	0.64	0.89	0.46	0.64
g	2.84	-	2.84	-
h	-	-	-	-

NOTE 1 Mechanical and electrical reference plane .

NOTE 2 Bore diameter and closure to meet electrical and mechanical requirements .

NOTE 3 The form and dimensions of outer conductor to meet mechanical and electrical requirements .

NOTE 4 Diameter is chosen upon the assumption that the PTFE dielectric has a dielectric constant of 2,02 to give an impedance of 50 Ω.

NOTE 5 The number and dimension of slots allows to meet mechanical and electrical requirements .

NOTE 6 Anti-rock ring is required for cabled connectors, optional for all others .

NOTE 7 EMI ring (shield) is required for cabled connectors, optional for all others .

NOTE 8 To meet electrical requirement.

3. SMP Mating Force Specifications

Interface Type	Engagement Force	Seperation Force	Mating Cycles
Full Detent	$\leq 68 \text{ N}$	$\geq 22 \text{ N}$	≥ 100
Limited Detent	$\leq 45 \text{ N}$	$\geq 9 \text{ N}$	≥ 500
Smooth Bore	$\leq 9 \text{ N}$	$\geq 2.2 \text{ N}$	≥ 1000

Unit Conversion: 1 lbs = 4.448 N