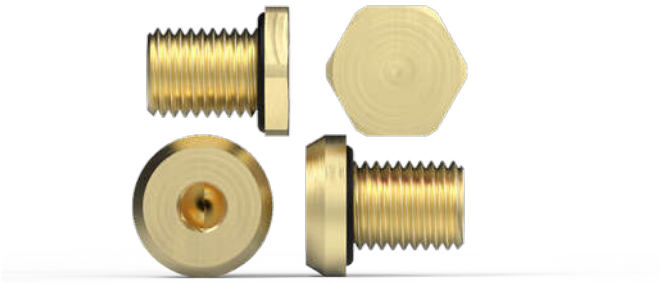
PRODUCT TYPE SPMH & SPHH

Metallic Dome Head & Hex Head Stopping Plugs

Ex db : Ex eb : Ex nR : Ex ta : IP66 : IP68 : Class I Div 1 : AEx db : AEx eb : AEx ta



PART NUMBERS:

SP	MH	0	B	F
	HH	1	S	
		3	A	

PRODUCT DESCRIPTION

"SPMH & SPHH" Series Certified Metallic Stopping (Blanking) Plugs provide a method of sealing unused entries in Ex equipment. They maintain Ex db, Ex eb, Ex ta and Ex nR methods of protection and IP66, IP68 for IEC type applications. They are Class I Division 1, Class II Division 1, Class II and Class 1 Zone 1 approved for NEC and CEC type applications whilst also maintain Type 4X/6P rating.

COMPLIANCE STANDARDS:

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-15, EN 60079-31
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-15, IEC 60079-31 & IEC 60529
C22.2 (see certificate), UL514B, UL1203, ANSI/UL 60079-0/1/7, ISA 60079-31, UL 50E

EXAMPLE PART NUMBERING: SPMH1BF/NP/M20

SP	Stopping (Blanking) Plug
MH	Dome (Mushroom) Head (MH) / Hex Head (HH)
1	No IP O-ring(0) - Nitrile (1) - Silicone (3)
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
F	Multiple Certification
K-V-H	Locknut & Nylon (K), Fibre (V) or PTFE (H) IP Washer
T	Including Earth Tag
S	Including Serrated Washer
1	Quantity per kit
NP	Nickel Plated
M20	Male Thread

OPTIONAL ACCESSORIES:

IP Washers	(N) Nylon (ACNSW) / (V) Fibre (ACFSW) / (H) PTFE (ACPSW)
Earth Tag	(T) Brass (ACBET) / St-Steel (ACSET) / Aluminium (ACAET)
Locknut	(L) Brass (ACBLN) / St-Steel (ACSLN) / Aluminium (ACALN)
Serrated Washer	(S) Stainless Steel (ACSSW)

IP RATING:	IP66 & IP68 (100 metres for 7 days) & Type 4X/6P	
OPERATING TEMPERATURE:	O-ring - None	-100°C to +400°C
	O-ring - Nitrile	-30°C to +100°C
	O-ring - Silicone	-60°C to +200°C
MATERIALS:	Brass, Stainless Steel or Aluminium	
PLATING:	Electroless Nickel	

CERTIFICATION:

ATEX	I M2 II 1D 2G Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex ta IIIC Da II 3G Ex nR IIC Gc
IECEx	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
CEC - Canada	Class I Zone 1 Ex db IIC / Ex eb IIC / Class II Zone 21 Ex ta IIIC Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Enclosure Type 4X/6P
NEC - USA	Class I Zone 1 AEx db IIC Gb / AEx eb IIC Gb / Class II Zone 21 AEx ta IIIC Da Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Enclosure Type 4X/6P
EAC	PB Ex d I Mb X / 1Ex d IIC Gb X / PB Ex e I Mb X / 1Ex e IIC Gb X 2Ex nR IIC Gc X / Ex tb IIIC Db X
INMETRO - Brazil	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
SAC - China	Ex d IIC Gb / Ex e IIC Gb
UKRAINE	I M2 Ex db I Mb / Ex eb I Mb / II 2GD Ex db IIC Gb / Ex eb IIC Gb / Ex tb IIIC Db II 3G Ex nR IIC Gc
CCoE - India	Ex d IIC Gb / Ex e IIC Gc / Ex nR IIC Gc
ABS	Specified ABS Rules
LLOYD'S	Ex db I Mb / Ex db IIC Gb / Ex eb I Mb / Ex eb IIC Gb / Ex nR IIC Gc / Ex ta IIIC Da
RS - Russia	Ex d IC / Ex d IIC / Ex e IC / Ex e IIC / Ex tb IIIC

CERTIFICATION No:

ATEX	CML 19ATEX1089X & CML 19ATEX4092X
IECEx	IECEx CML 19.0022X
CEC - Canada	CSA 2310046
NEC - USA	CSA 2310046
EAC	RU C-GB.BH02.B.00693-18
INMETRO - Brazil	NCC 13.2189 X
SAC - China	NEPSI GYJ16.1406X
UKRAINE	СЦ 18.0320 X
CCoE - India	PESO P365300/7 & P365300/12
ABS	20-LD1944057-PDA
LLOYD'S	LR2124442TA
RS - Russia	19.00189.278

Male threads are manufactured in accordance with:-

- ISO Metric threads to ISO 965-1, ISO 965-3, BS3643 and IEC 60423
- NPT and NPS threads are in accordance to ANSI B1.20.1
- PG threads to DIN40430
- ET threads to Imperial Conduit BS31
- ISO Pipe Parallel to ISO 228 and BS2779 (BSPP, G, R, PF & Tpy 6)
- ISO Pipe Taper to ISO 7-1 and BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)

SPHH INFORMATION TABLE (ALL DIMENSIONS IN mm)

ISO Metric Thread	A/F	Overall Length	Weight (Kgs)	NPT Thread	A/F	Overall Length	Weight (Kgs)
M12	19.0	20.5	0.024	1/4"	20.0	19.1	0.029
M16	23.4	20.5	0.032	3/8"	24.0	19.3	0.045
M20	27.0	21.0	0.049	1/2"	27.9	24.4	0.076
M25	31.8	21.0	0.078	3/4"	33.0	24.7	0.118
M32	37.6	21.0	0.134	1"	41.3	30.0	0.225
M40	47.2	21.5	0.218	1 ¼"	50.0	31.1	0.379
M50	57.2	21.5	0.333	1 ½"	57.2	31.5	0.499
M63	69.9	22.0	0.544	2"	70.0	32.9	0.814
M75	90.0	22.0	0.777	2 ½"	80.0	46.4	1.671
M80	90.0	28.0	1.050	3"	106.4	49.5	2.652
M85	106.4	28.0	1.225	3 ½"	114.3	50.8	3.566
M90	106.4	28.0	1.326	4"	127.0	52.0	4.602
M100	114.3	28.0	1.680				

SPMH INFORMATION TABLE (ALL DIMENSIONS IN mm)

ISO Metric Thread	Hex Socket A/F	Overall Length	Weight (Kgs)	NPT Thread	Hex Socket A/F	Overall Length	Weight (Kgs)
M12	6.0	21.5	0.020	1/4"	6.0	20.6	0.027
M16	8.0	21.5	0.032	3/8"	8.0	20.8	0.041
M20	10.0	21.5	0.049	1/2"	10.0	25.4	0.062
M25	12.0	21.5	0.078	3/4"	12.0	25.7	0.125
M32	12.0	21.5	0.134	1"	12.0	30.5	0.202
M40	14.0	21.5	0.218	1 ¼"	14.0	31.1	0.337
M50	17.0	21.5	0.333	1 ½"	17.0	31.5	0.451
M63	17.0	21.5	0.544	2"	17.0	32.4	0.743
M75	19.0	21.5	0.777	2 ½"	19.0	45.4	1.499
M80	22.0	25.5	1.050	3"	22.0	47.0	2.310
M85	22.0	25.5	1.255	3 ½"	22.0	48.3	3.133
M90	22.0	25.5	1.326	4"	22.0	49.5	4.086
M100	22.0	25.5	1.680				

Head Diameter = Minimum 5.5mm larger than the major thread diameter.

NOTES

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex db applications female threads must comply with clause 5.3 of IEC 60079-1.
- For Ex nR applications parallel entry threads must be installed with a suitable entry thread seal.
- Where applicable, the standard O-ring material is nitrile. Other options are available upon request.
- Aluminium versions are not suitable for Group I Mining applications.
- Peppers supply products with parallel entry threads that conform to the flameproof threaded joint requirements of IEC/EN 60079-1 and other equivalent standards. We usually incorporate a thread run out according to the general machining techniques and will not have a full form thread for the entire length. Peppers Cable Glands Limited will not be held responsible for clients' installations where this has not been taken into account.
- Where approval in addition to ATEX, IECEx and CSA is required, this must be clearly requested at time of enquiry / order.