

INSTALLATION INSTRUCTION STOPPING PLUG



CA-A-740-F R0-01/02/2024

Technical Data	
Type	STOPPING PLUG
Ingress Protection Rating	IP 66 (IP 68 Optional)
Process Control System	ISO 9001:2015 & ISO/IEC 80079-34:2018
ATEX Certification No	DNV 22ATEX16409X
Code of Protection †	ATEX (See Last page of this manual)
IECEX Certification No	IECEX DNV 22.0004X
Code of Protection ††	IECEX (See Last page of this manual)
Operating Temperature	-40° C to + 100° C** / -55° C to + 175° C*** (HT)
Optional Accessories	Earth Tag, Lock Nut, Serrated Washer, Entry Thread Sealing Washer, Shroud
Special Condition for Safe Use	Read Special Condition for Safe Use****

** For this Temperature range : IP Washer

*** For this Temperature range : Thermost O Ring - Red Colour

INSTALLATION INSTRUCTION STOPPING PLUG



STOPPING PLUGS RANGE



Stopping Plug (Flat Head) Selection Table

METRIC				NPT			
Thread Size	Head Length	Head Dia	Allen Key Size	Thread Size*	Head Length	Head Dia	Allen Key Size
M20 X 1.5	4.0	28.0	10.0	3/4"	4.0	34.0	10.0
M25 X 1.5	4.0	34.0	10.0	1"	4.0	44.0	10.0
M32 X 1.5	4.0	44.0	10.0	1-1/4"	5.0	52.0	10.0
M40 X 1.5	5.0	52.0	10.0	1-1/2"	6.0	62.0	10.0
M50 X 1.5	6.0	62.0	10.0	2"	7.0	75.0	10.0
M63 X 1.5	7.0	75.0	10.0	2-1/2"	8.0	88.0	10.0
M75 X 1.5	8.0	88.0	10.0	3"	8.0	105.0	12.0
M80 X 2.0	8.0	95.0	12.0	3-1/2"	8.0	115.0	12.0
M85 X 2.0	8.0	100.0	12.0	4"	8.0	130.0	12.0
M90 X 2.0	8.0	105.0	12.0	-	-	-	-
M100 X 2.0	8.0	125.0	12.0	-	-	-	-
-	-	-	-	-	-	-	-

Stopping Plug (Dome Head) Selection Table

METRIC				NPT			
Thread Size	Head Length	Head Dia	Allen Key Size	Thread Size*	Head Length	Head Dia	Allen Key Size
M16 X 1.5	4.0	24.0	8.0	1/2"	4.0	27.0	30.5
M20 X 1.5	4.0	28.0	10.0	3/4"	4.0	33.0	37.5
M25 X 1.5	4.0	34.0	10.0	1"	4.0	40.0	45.0
M32 X 1.5	4.0	44.0	10.0	1-1/4"	5.0	48.0	54.3
M40 X 1.5	5.0	52.0	10.0	1-1/2"	5.0	55.0	62.0
M50 X 1.5	6.0	62.0	10.0	2"	6.0	65.0	74.0
M63 X 1.5	7.0	75.0	10.0	2-1/2"	8.0	80.0	91.0
M75 X 1.5	8.0	88.0	10.0	3"	10.0	100.0	110.0
M80 X 2.0	8.0	95.0	12.0	3-1/2"	10.0	115.0	130.0
M85 X 2.0	8.0	100.0	12.0	4"	10.0	128.0	141.0
M90 X 2.0	8.0	105.0	12.0	-	-	-	-
M100 X 2.0	8.0	125.0	12.0	-	-	-	-

Stopping Plug (Hex Head) Selection Table

METRIC				NPT			
Thread Size	Head Length	Head Dia	Allen Key Size	Thread Size*	Head Length	Head Dia	Allen Key Size
M16 X 1.5	4.0	24.0	27.0	1/2"	4.0	30.0	34.0
M20 X 1.5	4.0	30.0	34.0	3/4"	4.0	36.0	40.5
M25 X 1.5	4.0	36.0	40.5	1"	4.0	46.0	52.0
M32 X 1.5	4.0	46.0	52.0	1-1/4"	5.0	55.0	62.0
M40 X 1.5	5.0	55.0	62.0	1-1/2"	6.0	65.0	73.5
M50 X 1.5	6.0	65.0	73.5	2"	7.0	80.0	88.0
M63 X 1.5	7.0	80.0	90.0	2-1/2"	8.0	95.0	104.5
M75 X 1.5	8.0	95.0	106.5	3"	8.0	110.0	121.0
M80 X 2.0	8.0	105.0	116.5	3-1/2"	8.0	115.0	126.5
M85 X 2.0	8.0	105.0	116.5	4"	8.0	128.0	141.0
M90 X 2.0	8.0	110.0	121.0	-	-	-	-
M100 X 2.0	8.0	125.0	137.5	-	-	-	-

Stopping Plug (Internal & External) Selection Table

METRIC				NPT			
Thread Size	Head Length	Head Dia	Allen Key Size	Thread Size*	Head Length	Head Dia	Allen Key Size
M16 X 1.5	4.0	16.5	8.0	1/2"	4.0	22.0	10.0
M20 X 1.5	4.0	20.5	10.0	3/4"	4.0	27.5	10.0
M25 X 1.5	4.0	25.5	10.0	1"	4.0	34.0	10.0
M32 X 1.5	4.0	32.5	10.0	1-1/4"	4.0	43.0	10.0
M40 X 1.5	4.0	40.5	10.0	1-1/2"	4.0	49.0	10.0
M50 X 1.5	4.0	50.5	10.0	2"	4.0	60.5	10.0
M63 X 1.5	4.0	63.5	10.0	2-1/2"	4.0	74.0	10.0
M75 X 1.5	4.0	75.5	10.0	3"	4.0	89.5	12.0
M80 X 2.0	4.0	80.5	12.0	3-1/2"	4.0	103.0	12.0
M85 X 2.0	4.0	85.5	12.0	4"	4.0	115.0	12.0
M90 X 2.0	4.0	90.5	12.0	-	-	-	-
M100 X 2.0	4.0	100.5	12.0	-	-	-	-

All dimensions are in millimetres (Except * where dimensions are in inches)

EU Declaration of Conformity in accordance with ATEX Directive 2014/34/EU.

Cabex Electrical Components on its sole responsibility declare that the STOPPING PLUGS products complies with the requirements of the ATEX Directive 2014/34/EU and also comply with the requirements of EN/IEC 60079-0:2018, EN/IEC 60079-1:2014, EN/IEC 60079-7:2015 + A1:2018, EN/IEC 60079-31:2014 where applicable.

On behalf of the aforementioned company, I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and statutory regulatory requirements of the above listed directives.


Kekin R. Trada (Ex Person).

Address: Cabex Electrical Components
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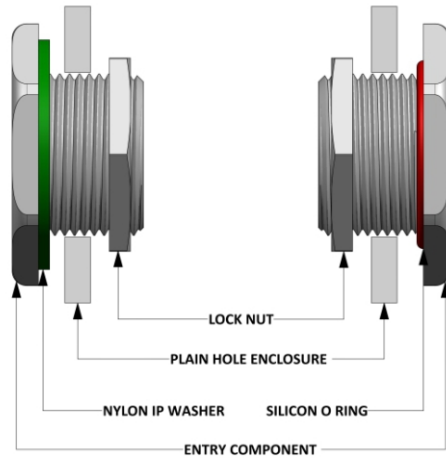
Place : Jamnagar,Gujarat,India. & Date : 01/02/2024  Notified Body : DNV Product Assurance AS

INSTALLATION NOTES

- Installation shall only be performed by a competent person (in accordance with EN/IEC 60079-14) using the correct tools, Spanners should be used for tightening. Inspection & maintenance shall be done by a competent person (in accordance with EN/IEC 60079-17 & EN/IEC 60079-14).
- It is installer's responsibility to ensure that stopping plug threads are compatible with the enclosure threads. Standard thread pitch from M16 to M75 is 1.5mm & from M80 to M100 is 2.0mm.
- It is installer's responsibility to ensure IP rating is maintained at the interface between enclosure and cable entry components.
- Interface between cable entry components and its associated enclosure will required additional sealing to perform ingress protection (IP) ratings higher than IP54.
- Minimum protection level is IP54 for explosive gas atmosphere and IP6X for explosive dust atmosphere.
- Surface of enclosure shall be Flat, smooth, clean and free from dust & moisture before assembly.
- Parallel or Taper thread when fitted to a non threaded entry shall requires a Cabex sealing washer or integral O-ring seal to maintain IP66, IP67 and IP68. Non threaded entry hole in the enclosure must be not greater than 0.7mm of the male thread diameter. Lock nut shall be used from inside of the enclosure to secure entry components as per tightening torque given in the table.
- All tapered thread will automatically provide an IP rating IP68 when fitted to taper threaded entry.

SPECIAL CONDITION FOR SAFE USE****

- The maximum operating temperature range of NPT threaded Stopping Plugs for non-threaded entry points when fitted with Nylon 66 IP Washer is -40°C to +100°C.
- The maximum operating temperature range of Metric threaded Stopping Plugs when fitted with silicon O-ring is -55°C to +175°C.
- The maximum operating temperature range of NPT threaded Stopping Plugs for threaded entry points with no O-ring /IP Washer is -55°C to +175°C.
- Stopping Plugs must not be used with a thread Adaptor or Reducer in flameproof application.
- O ring must be trapped between the enclosure face and the head of the metric threaded Stopping Plugs to ensure ingress protection level of IP66/ IP68 (30 meter below the surface of water for 7 days).
- The Stopping Plugs should be tightened to the torque declared in the installation instructions.
- When the metric threaded Stopping Plugs are used for increased safety or dust protection in a plain hole, the hole in the enclosure must not be greater than 0.5mm above the major diameter of the male thread and the Stopping Plugs must be secured with a locknut.
- In case of non-threaded entry points, the NPT threaded Stopping Plugs used for increased safety or dust protection shall be fitted with locking nut and Nylon 66 IP washer for ingress protection IP66 / IP68 (30 meter, 7 days). The hole in the enclosure must not be greater than 0.5mm above the major diameter of the male thread.
- When the Stopping Plugs are fitted in threaded holes, the sealing face of the enclosure shall be smooth, the threaded hole shall be perpendicular to the wall of the enclosure.
- Stopping Plugs not to be exposed to chemical for Group I application.



STOPPING PLUG WITH NYLON IP WASHER

STOPPING PLUG WITH SILICON O RING

ARRANGEMENT OF STOPPING PLUG IN PLAIN ENTRIES

Tightening Torque Value in Nm : Metric / NPT (Stopping Plug all range)												
THREAD SIZE (METRIC)	M16	M20	M25	M32	M40	M50	M63	M75	M80	M85	M90	M100
TORQUE	65	65	95	110	130	165	195	230	280	298	315	350
THREAD SIZE (NPT)	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	-	-
TORQUE	125	125	125	125	125	181	181	181	181	181	-	-

Code of Protection † : ATEX

Code of Protection †† : IECEx

Stopping Plug - Flat Head & Dome Head - Metric (Temperature: -55° C ≤ Ta ≤ + 175° C)

† -  I M2  II 2G 1D CE 2460 IP66/68

†† - Ex db I Mb Ex eb I Mb, Ex db IIC Gb Ex eb IIC Gb, Ex ta IIC Da

Stopping Plug - Flat Head & Dome Head - NPT (Temperature: -40° C ≤ Ta ≤ + 100° C)

† -  I M2  II 2G 1D CE 2460 IP66/68

†† - Ex eb I Mb, Ex eb IIC Gb, Ex ta IIC Da

Stopping Plug - Hex Head -Metric & NPT (Temperature: -55° C ≤ Ta ≤ + 175° C)

† -  I M2  II 2G 1D CE 2460 IP66/68

†† - Ex eb I Mb, Ex eb IIC Gb, Ex ta IIC Da

Stopping Plug - Hex Head -Metric & NPT (Temperature: -40° C ≤ Ta ≤ + 100° C)

† -  I M2  II 2G 1D CE 2460 IP66/68

†† - Ex eb I Mb, Ex eb IIC Gb, Ex ta IIC Da

Stopping Plug - Tamperproof Internal & Non Tamperproof External -Metric & NPT (Temperature: -55° C ≤ Ta ≤ + 175° C)

† -  I M2  II 2G 1D CE 2460 IP66/68

†† - Ex db I Mb Ex eb I Mb, Ex db IIC Gb Ex eb IIC Gb, Ex ta IIC Da