

INSTALLATION INSTRUCTION ADAPTOR & REDUCER



CABEX®

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

Technical Data	
Type	ADAPTOR & REDUCER
Ingress Protection Rating	IP 66 (IP 68 Optional)
Process Control System	ISO 9001:2015 & ISO/IEC 80079-34:2018
ATEX Certification No	DNV 22ATEX16166X
Code of Protection	Ex db M2 2G 1D 2460, IP66/IP68
IECEx Certification No	IECEx DNV 22.0003X
Code of Protection	Ex db Mb Ex eb Mb, Ex db C Gb Ex eb C Gb, Ex ta C Da
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 : Thermoset O Ring - Red Colour

Adaptor Selection Table							
METRIC				NPT			
Thread Size	Max Bore	Across Flat	Across Corner	Thread Size*	Max Bore	Across Flat	Across Corner
M16	9.7	20.0	22.5	1/2"	14.0	27.0	30.5
M20	14.0	24.0	27.0	3/4"	20.0	33.0	37.5
M25	20.0	30.0	34.0	1"	26.0	40.0	45.0
M32	26.0	37.5	42.5	1-1/4"	32.1	48.0	54.3
M40	32.1	46.0	52.0	1-1/2"	38.0	55.0	62.0
M50	44.2	55.0	62.0	2"	49.0	65.0	74.0
M63	53.0	70.0	80.0	2-1/2"	60.0	80.0	91.0
M75	68.0	85.0	95.0	3"	75.0	100.0	112.0
M80	71.0	90.0	100.5	3-1/2"	86.0	115.0	130.0
M85	76.0	95.0	106.0	4"	97.0	128.0	141.0
M90	79.3	100.0	112.0	-	-	-	-
M100	88.0	115.0	130.0	-	-	-	-
All dimensions are in millimetres (Except * where dimensions are in inches)							

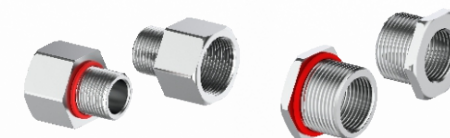
Reducer Selection Table							
METRIC				NPT			
Thread Size	Head Length	Across Flat	Across Corner	Thread Size*	Head Length	Across Flat	Across Corner
M16	4.0	20.0	22.5	1/2"	4.0	27.0	30.5
M20	4.0	24.0	26.5	3/4"	4.0	33.0	37.5
M25	4.0	30.0	34.0	1"	4.0	40.0	45.0
M32	4.0	37.5	42.5	1-1/4"	5.0	48.0	54.3
M40	5.0	46.0	52.0	1-1/2"	5.0	55.0	62.0
M50	5.0	55.0	62.0	2"	6.0	65.0	74.0
M63	6.0	70.0	80.0	2-1/2"	8.0	80.0	91.0
M75	7.0	85.0	95.0	3"	10.0	100.0	110.0
M80	10.0	90.0	100.5	3-1/2"	10.0	115.0	130.0
M85	10.0	95.0	106.0	4"	10.0	128.0	141.0
M90	10.0	100.0	112.0	-	-	-	-
M100	10.0	115.0	130.0	-	-	-	-
All dimensions are in millimetres (Except * where dimensions are in inches)							

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ADAPTOR

REDUCER

INSTALLATION NOTES

1. 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).
2. Only one adaptor or reducer shall be used with any enclosure entry.
3. It is installer's responsibility to ensure IP rating is maintained at the interface between enclosure and cable entry components.
4. Interface between cable entry and its associated enclosure will required additional sealing to perform ingress protection (IP) ratings higher than IP54.
5. Minimum protection level is IP54 for explosive gas atmosphere and IP6X for explosive dust atmosphere.
6. Surface of enclosure shall be clean and free from dust and moisture before assembly.
7. 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.
8. All tapered thread will automatically provide an IP rating IP68 when fitted to taper threaded entry.

SPECIAL CONDITION FOR SAFE USE***

1. The maximum operating temperature range of male metric threaded Adaptors & Reducers when fitted with silicon O-ring is -55°C to +175°C.
2. The maximum operating temperature range of male NPT threaded Adaptors & Reducers when fitted with Nylon 66 IP Washer is -40°C to +100°C.
3. O ring must be trapped between the enclosure face and the head of the metric threaded Adaptors & Reducers to ensure ingress protection level of IP66/ IP68 (30 meter below the surface of water for 7 days).
4. The Adaptors & Reducers should be tightened to the torque declared in the installation instructions.
5. Only one Adaptor or Reducer is to be used with any single cable entry on the associated equipment.
6. Adaptors & Reducers shall not be used for the direct inter-connection of enclosures.
7. When the metric threaded Adaptors & Reducers 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 Adaptors & Reducers must be secured with a locknut.
8. In case of non-threaded entry points, the NPT threaded Adaptors & Reducers 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.
9. When the Adaptors & Reducers 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.
10. Adaptors & Reducers not to be exposed to chemicals for Group I application.

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

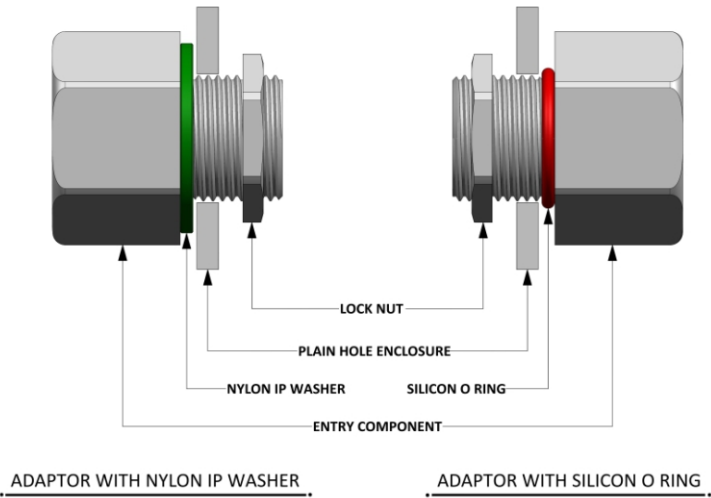
Cabex Electrical Components on its sole responsibility declare that the ADAPTORS & REDUCERS products complies with the requirements of the ATEX Directive 2014/34/EU and also comply with the requirements of EN/IEC 60079-0:2018, EN/IEC 60079-1:2014, EN/IEC 60079-7:2015 + A1:2018, EN/IEC 60079-31:2014 where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

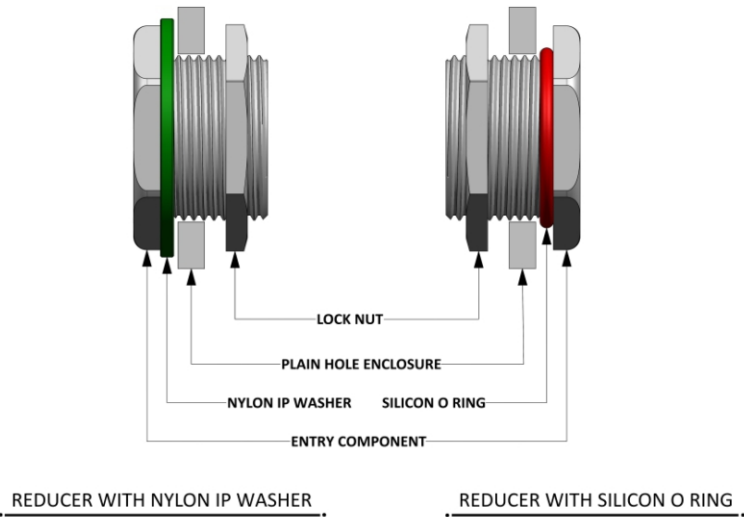
Address: Cabex Electrical Components
Plot No 4, GIDC, Phase-2, Dared,
Jamnagar-361004 (Gujarat) (India)

Place : Jamnagar, Gujarat, India. & Date : 01/02/2024 **CE 2460** Notified Body : DNV Product Assurance AS



ARRANGEMENT OF ADAPTOR IN PLAIN ENTRIES

Tightening Torque Value in Nm : Metric / NPT (Adaptor)												
THREAD SIZE (METRIC)	M16	M20	M25	M32	M40	M50	M63	M75	M80	M85	M90	M100
TORQUE	40	40	55	65	80	100	115	140	160	170	180	200
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	-	-



ARRANGEMENT OF REDUCER IN PLAIN ENTRIES

Tightening Torque Value in Nm : Metric / NPT (Reducer)												
THREAD SIZE (METRIC)	M16	M20	M25	M32	M40	M50	M63	M75	M80	M85	M90	M100
TORQUE	40	40	55	65	80	100	115	140	160	170	180	200
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	-	-