



REDUCER

Ex db, Ex eb, Ex ta, Ex nR, IP65/66/68

for General Industrial and Hazardous Area Installations

Features and Benefits

- Precision manufactured from high quality brass (Marine Grade Electroless Nickel Plated™), aluminium or stainless steel 316/316L. (Note: Aluminium not suitable for Group I applications.)
- Converts mismatching threads to the required thread.



Technical Data

Type:	Reducer
Material:	Brass (Marine Grade Electroless Nickel Plated™), Aluminium, Stainless Steel 316/316L
Gasket material:	Standard HDPE or Extreme Temp. PTFE
Note:	The installer should check that the materials are suitable for the installation environment.

Standards and Certifications

Equipment Protection Levels:	IECEX/INMETRO: Ex db I Mb / Ex eb I Mb / Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da / Ex nR IIC ATEX/UKEX: I M2 Ex db I Mb / Ex eb I Mb, II 2G 1D Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da TR CU: I Ex d IIC Gb X / PB Ex d I Mb X / 1Ex e IIC Gb X / ПП Ex e I Mc X / Ex tb IIIC Db X	
Conformance:	Standard:	Certificate:
IECEX	IEC 60079 Part 0, 1, 7, 15, 31 IEC 60079 Part 0, 1, 7, 31	IECEX CML 16.0062X IECEX ITA 13.0005X
ATEX	EN 60079 Part 0, 1, 7, 31	CML 15ATEX1040X
UKEX	BS EN 60079 Part 0, 1, 7, 31	CML 21UKEX1014X
INMETRO (Brazil)	ABNT NBR IEC 60079 Part 0, 1, 7, 31	TÜV 15.0485X
TR CU (Russia)	ГОСТ 31610-0, 15, ГОСТ IEC 60079-1 ГОСТ P MЭК 60079-7, 31	EAЭC RU C-ZA.HA91.B.00244/21
CNEX (Chinese)	GB 3836.1, GB3936.2, GB3836.3 GB12476.1, GB12476.5	CNEX 21.3391X, CNEX CCC 2021312313000391
KCS (Korea)	Notification of Ministry of Labour No. 2013-54	16-AV4BO-0439-42X
SANS/IEC	IEC 60079 Part 0, 1, 7, 31 IEC 60529	MASC MS/13-594X
IP66/68 2m - Parallel	IEC 60529	CML15Y728
IP65/66 - Tapered	IEC 60529	
Deluge Protection	DTS-01	CML 14CA370-2
Corrosion Protection	ASTM B117-11, BS EN ISO 3231	EXOVA N968667
Marine ABS	IEC 60079 Part 0, 1, 7, 15, 31, IEC 60529	ABS 20-SG1952706-1-PDA
DNV-GL	IEC 60079 Part 0, 1, 7, IEC 60529	DNV-GL TAE0000010
ClassNK	IEC 60079 Part 0, 1, 7, 15, 31	TA20272M
London Underground Approval	BS EN 62444	LU 3043, LU 3044



Conditions and limitations for Safe Use - X

- An IP rating of IP66/68 is maintained for units with parallel threads when used with the supplied washer and for units with tapered thread when thread sealant is conducted as indicated in IEC 60079-14. Alternatively an IP65 rating is applicable.
- Operating temperature range -60°C to +95°C (HDPE gasket), -60°C to +100°C (nylon gasket) or -60°C to +160°C (PTFE gasket) is applicable if the gaskets are utilized to maintain an IP rating IP65/66/68 2m continued.
- A blanking element may not be installed on an Reducer.
- When the equipment with metric male thread and with the sealing washer fitted is intended for use / interface in threaded holes in a flame-proof enclosure the applicable thread engagement must be achieved after the washer has been fitted. Thread engagement shall be at least five full threads.



REDUCER SELECTION CHART

METRIC TO METRIC, BSP/NPT REDUCER SELECTION CHART

FEMALE MALE	METRIC REDUCER											BSP / NPT REDUCER								
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"
M20	R											R								
M25	R	R										R	R							
M32	R	R	R									R	R	R						
M40	R	R	R	R								R	R	R	R					
M50	R	R	R	R	R							R	R	R	R	R				
M63	R	R	R	R	R	R						R	R	R	R	R	R			
M75	R	R	R	R	R	R	R					R	R	R	R	R	R	R		
M80	R	R	R	R	R	R	R	R				R	R	R	R	R	R	R	R	
M90	R	R	R	R	R	R	R	R	R			R	R	R	R	R	R	R	R	R
M100	R	R	R	R	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R

BSP/NPT TO METRIC, BSP/NPT REDUCER SELECTION CHART

FEMALE MALE	METRIC REDUCER											BSP / NPT REDUCER								
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	
½"BSP/½"NPT	R																			
¾"BSP/¾"NPT	R	R										R								
1"BSP/1"NPT	R	R	R									R	R							
1¼"BSP/1¼"NPT	R	R	R	R								R	R	R						
1½"BSP/1½"NPT	R	R	R	R	R							R	R	R	R					
2"BSP/2"NPT	R	R	R	R	R	R						R	R	R	R	R				
2½"BSP/2½"NPT	R	R	R	R	R	R	R					R	R	R	R	R	R			
3"BSP/3"NPT	R	R	R	R	R	R	R	R				R	R	R	R	R	R	R		
3½"BSP/3½"NPT	R	R	R	R	R	R	R	R	R			R	R	R	R	R	R	R	R	
4"BSP/4"NPT	R	R	R	R	R	R	R	R	R	R		R	R	R	R	R	R	R	R	R

SIZE REFERENCE

Metric Size Reference	NPT Size Reference	BSP Size Reference
M16 x 1.5	-	-
M20 x 1.5	½ / ¾	½ / ¾
M25 x 1.5	¾ / 1	¾ / 1
M32 x 1.5	1 / 1¼	1 / 1¼
M40 x 1.5	1¼ / 1½	1¼ / 1½
M50 x 1.5	1½ / 2	1½ / 2
M63 x 1.5	2 / 2½	2 / 2½
M63 x 1.5	2 / 2½	2 / 2½
M75 x 1.5	2½ / 3	2½ / 3
M75 x 1.5	2½ / 3	2½ / 3
M80 x 2.0	3	3
M90 x 2.0	3 / 3½	3 / 3½
M100 x 2.0	3½ / 4	3½ / 4
M115 x 2.0	4	4
M120 x 2.0	-	-