



ADAPTOR

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™) available in aluminium or stainless steel 316/316L on request. (Note: Aluminium not suitable for Group I applications.)
- Converts mismatching threads to the required thread.



Technical Data

Type:	Adaptor
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: Ex I M2 Ex db I Mb / Ex eb I Mb, Ex II 2G 1D Ex db IIC Gb / Ex eb IIC Gb / Ex ta IIIC Da TR CU: Ex 1Ex d IIC Gb X / PB Ex d I Mb X / 1Ex e IIC Gb X / PΠ 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	SANS/IEC 60079 Part 0, 1, 7, 31 SANS/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

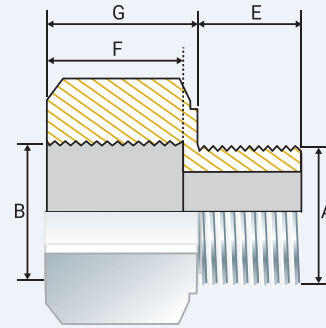
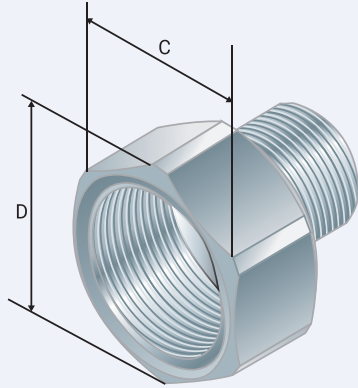


Conditions and limitations for Safe Use - X

- 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 IEC60079-14. 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 Adaptor.
- 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.



METRIC, NPT AND BSP ADAPTOR



Hex Across Flats and Hex Across Corners can be bigger but never smaller.

METRIC TO NPT

Product Code	Male Metric Thread "A"	Female NPT Thread "B"	Hex Across Flats Min "C"	Hex Across Corners Min "D"	Male Thread Length Min "E"	Female Thread Depth Min "F"	Hex Length Max "G"
AM016N012	M16	½"	27.0	30.4	15.0	15.0	21.0
AM016N034	M16	¾"	32.0	36.0	15.0	15.0	21.0
AM020N012	M20	½"	27.0	30.4	15.0	15.0	21.0
AM020N034	M20	¾"	32.0	36.0	15.0	15.0	21.0
AM020N001	M20	1"	38.0	42.8	15.0	18.0	24.0
AM025N034	M25	¾"	32.0	36.0	15.0	15.0	21.0
AM025N001	M25	1"	38.0	42.8	15.0	18.0	24.0
AM025N114	M25	1½"	50.0	56.3	15.0	19.0	25.0
AM032N001	M32	1"	38.0	42.8	15.0	18.0	24.0
AM032N114	M32	1¼"	50.0	56.3	15.0	19.0	25.0
AM032N112	M32	1½"	50.0	56.3	15.0	19.0	25.0
AM040N114	M40	1¼"	50.0	56.3	15.0	19.0	25.0
AM040N112	M40	1½"	55.0	61.9	15.0	19.0	25.0
AM040N002	M40	2"	70.0	78.8	15.0	19.0	25.0
AM050N112	M50	1½"	60.0	67.5	15.0	19.0	25.0
AM050N002	M50	2"	70.0	78.8	15.0	19.0	25.0
AM050N212	M50	2½"	80.0	90.0	15.0	25.0	31.0
AM063N002	M63	2"	70.0	78.8	15.0	19.0	25.0
AM063N212	M63	2½"	80.0	90.0	15.0	25.0	31.0
AM063N003	M63	3"	100.0	112.5	15.0	27.0	33.0
AM075N212	M75	2½"	80.0	90.0	15.0	25.0	31.0
AM075N003	M75	3"	100.0	112.5	15.0	27.0	33.0
AM075N312	M75	3½"	111.0	124.9	15.0	29.0	35.0
AM080N003	M80	3"	100.0	112.5	20.0	27.0	33.0
AM080N312	M80	3½"	111.0	124.9	20.0	29.0	35.0
AM080N004	M80	4"	115.0	129.4	20.0	29.0	35.0
AM090N312	M90	3½"	111.0	124.9	20.0	29.0	35.0
AM090N004	M90	4"	125.0	140.6	20.0	29.0	35.0
AM100N004	M100	4"	125.0	140.6	20.0	29.0	35.0

All dimensions except NPT are in mm.

METRIC TO METRIC

Product Code	Male Metric Thread "A"	Female Metric Thread "B"	Hex Across Flats Min "C"	Hex Across Corners Min "D"	Male Thread Length Min "E"	Female Thread Depth Min "F"	Hex Length Max "G"
AM016M016	M16	M16	27.0	30.4	15.0	15.0	21.0
AM016M020	M16	M20	27.0	30.4	15.0	15.0	21.0
AM016M025	M16	M25	32.0	36.0	15.0	15.0	21.0
AM020M020	M20	M20	27.0	30.4	15.0	15.0	21.0
AM020M025	M20	M25	32.0	36.0	15.0	15.0	21.0
AM020M032	M20	M32	38.0	42.8	15.0	15.0	21.0
AM025M025	M25	M25	32.0	36.0	15.0	15.0	21.0
AM025M032	M25	M32	38.0	42.8	15.0	15.0	21.0
AM025M040	M25	M40	50.0	56.3	15.0	15.0	21.0
AM032M032	M32	M32	38.0	42.8	15.0	15.0	21.0
AM032M040	M32	M40	50.0	56.3	15.0	15.0	21.0
AM032M050	M32	M50	60.0	67.5	15.0	15.0	21.0
AM040M040	M40	M40	50.0	56.3	15.0	15.0	21.0
AM040M050	M40	M50	60.0	67.5	15.0	15.0	21.0
AM040M063	M40	M63	70.0	78.8	15.0	15.0	21.0
AM050M050	M50	M50	60.0	67.5	15.0	15.0	21.0
AM050M063	M50	M63	70.0	78.8	15.0	15.0	21.0
AM050M075	M50	M75	85.0	95.6	15.0	15.0	21.0
AM063M063	M63	M63	70.0	78.8	15.0	15.0	21.0
AM063M075	M63	M75	85.0	95.6	15.0	15.0	21.0
AM063M080	M63	M80	90.0	101.3	15.0	20.0	26.0
AM075M075	M75	M75	85.0	95.6	15.0	15.0	21.0
AM075M080	M75	M80	90.0	101.3	15.0	20.0	26.0
AM075M090	M75	M90	96.0	108.0	15.0	20.0	26.0
AM080M080	M80	M80	96.0	108.0	20.0	20.0	26.0
AM080M090	M80	M90	96.0	108.0	20.0	20.0	26.0
AM080M100	M80	M100	111.0	124.9	20.0	20.0	26.0
AM090M090	M90	M90	96.0	108.0	20.0	20.0	26.0
AM090M100	M90	M100	111.0	124.9	20.0	20.0	26.0
AM100M100	M100	M100	111.0	124.9	20.0	20.0	26.0

All dimensions are in mm.

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"
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	-	-

METRIC TO BSP

Product Code	Male Metric Thread "A"	Female BSP Thread "B"	Hex Across Flats Min "C"	Hex Across Corners Min "D"	Male Thread Length Min "E"	Female Thread Depth Min "F"	Hex Length Max "G"
AM016B012	M16	½"	27.0	30.4	15.0	16.0	22.0
AM016B034	M16	¾"	32.0	36.0	15.0	16.0	22.0
AM020B012	M20	½"	27.0	30.4	15.0	16.0	22.0
AM020B034	M20	¾"	32.0	36.0	15.0	16.0	22.0
AM020B001	M20	1"	38.0	42.8	15.0	18.0	24.0
AM025B034	M25	¾"	32.0	36.0	15.0	16.0	22.0
AM025B001	M25	1"	38.0	42.8	15.0	18.0	24.0
AM025B114	M25	1¼"	45.0	50.6	15.0	18.0	24.0
AM032B001	M32	1"	38.0	42.8	15.0	18.0	24.0
AM032B114	M32	1¼"	45.0	50.6	15.0	18.0	24.0
AM032B112	M32	1½"	60.0	67.5	15.0	18.0	24.0
AM040B114	M40	1¼"	45.0	50.6	15.0	18.0	24.0
AM040B112	M40	1½"	60.0	67.5	15.0	18.0	24.0
AM040B002	M40	2"	70.0	78.8	15.0	18.0	24.0
AM050B112	M50	1½"	60.0	67.5	15.0	18.0	24.0
AM050B002	M50	2"	70.0	78.8	15.0	18.0	24.0
AM050B212	M50	2½"	80.0	90.0	15.0	18.0	24.0
AM063B002	M63	2"	70.0	78.8	15.0	18.0	24.0
AM063B212	M63	2½"	80.0	90.0	15.0	18.0	24.0
AM063B003	M63	3"	96.0	108.0	15.0	18.0	24.0
AM075B212	M75	2½"	80.0	90.0	15.0	18.0	24.0
AM075B003	M75	3"	96.0	108.0	15.0	18.0	24.0
AM075B312	M75	3½"	111.0	124.9	15.0	18.0	24.0
AM080B003	M80	3"	96.0	108.0	15.0	18.0	24.0
AM080B312	M80	3½"	111.0	124.9	15.0	18.0	24.0
AM080B004	M80	4"	125.0	140.6	15.0	18.0	24.0
AM090B312	M90	3½"	111.0	124.9	15.0	18.0	24.0
AM090B004	M90	4"	125.0	140.6	15.0	18.0	24.0
AM100B004	M100	4"	125.0	140.6	15.0	18.0	24.0

All dimensions except BSP are in mm.



ADAPTOR SELECTION CHART

METRIC TO NPT/BSP, METRIC ADAPTOR SELECTION CHART

FEMALE MALE ▼	METRIC ADAPTOR											BSP / NPT ADAPTOR									
	M16	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"
M16	A	A	A									A	A								
M20		A	A	A								A	A	A							
M25			A	A	A								A	A	A						
M32				A	A	A								A	A	A					
M40					A	A	A								A	A	A				
M50						A	A	A								A	A	A			
M63							A	A	A								A	A	A		
M75								A	A	A								A	A	A	
M80									A	A	A								A	A	A
M90										A	A									A	A

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

FEMALE MALE ▼	METRIC ADAPTOR											BSP / NPT ADAPTOR									
	M20	M25	M32	M40	M50	M63	M75	M80	M90	M100	½"	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"	
½"BSP/½"NPT	A	A	A									A	A	A							
¾"BSP/¾"NPT		A	A	A									A	A	A						
1"BSP/1"NPT			A	A	A									A	A	A					
1¼"BSP/1¼"NPT				A	A	A									A	A	A				
1½"BSP/1½"NPT					A	A	A									A	A	A			
2"BSP/2"NPT						A	A	A									A	A	A		
2½"BSP/2½"NPT							A	A	A									A	A	A	
3"BSP/3"NPT								A	A	A									A	A	A
3½"BSP/3½"NPT									A	A										A	A
4"BSP/4"NPT										A											A

PRODUCT CODE STRUCTURE

1st Character denotes the type, A = Adaptor	2nd Character denotes the male thread - Metric, NPT or BSP	3rd to 5th Character denotes the size of the male thread	6th Character denotes the female thread - Metric, NPT, or BSP	7th to 9th Character denotes the size of female thread	10th Character denotes the classification - Conduit (S) or Ex (E)	Example Product Code
A	M	040	M	063	E	AM040M063E