

Product Type AR - (Metallic Adaptors and Reducers)

Ex d: Ex e: Ex nR: Ex tb: IP66: IP68

Part No's: A R 1 B F 3 S



"AR" Series Certified Adaptors & Reducers provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex d, Ex e, Ex the and Ex nR methods of explosion protection. Approved for use in mining (except Aluminium) and surface installations, they maintain IP66 & IP68 for IEC type applications and Class I Division 1 and NEMA 4X for CEC / NEC type applications. All external metric threads are fitted with a nitrile O-ring as standard.

Compliance Standard: 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 & 60529

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

Certification:

I M2 II 2GD Exd I Mb / Ex d IIC Gb / Exe I Mb / Ex e IIC Gb / Ex tb IIIC Db

II 3G Ex nR IIC Go

IECEx Ex d I Mb / Ex d IIC Gb / Exe I Mb / Ex e IIC Gb / Ex tb IIIC Db / Ex nR IIC Gc

CEC - Class I Zone 1 Ex d IIC / Ex e IIC / Class II Zone 21 Ex tb IIIC

Canada Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G

Class III, Enclosure Type 4X

NEC - USA Class I Zone 1 AEx d IIC Gb / AEx e IIC Gb / Class II Zone 21 AEx tb IIIC Db

Class I Division 1, Groups A, B, C & D Class II Division 1, Groups E, F & G Class III, Enclosure Type 4X

EAC Exd IU / Exd IICU / Exe IU / Exe IIU / ExnR IIU

INMETRO - Ex d I Mb / Ex d IIC Gb / Exe I Mb / Ex e IIC Gb / Ex tb IIIC Db / Ex nR IIC Gc

Brazil

ATEX

SAC - China Ex d IIC / Ex e IIC

UKRAINE Exd IU / Exd IICU / Exe IU / Exe IIU

CCoE - India Ex d IIC Gb / Ex e IIC Gc

ABS Specified ABS Rules

LLOYD'S Enclosure Systems (Part 1B)

RMRS Part XI of Rules for sea-going ships (ed.2014)

Certificate No. ATEX SIRA 09ATEX1322X & SIRA 09ATEX4323X

IECEx SIR 09.0131X CEC - CSA 2310046

Canada

NEC - USA CSA 2310046

EAC RU C-GB.ΓБ06.Β.00098 INMETRO - NCC 13.2189 X

Brazil

SAC - China NEPSI GYJ16.1404X

UKRAINE UA.TR.047.C.0408-13 & 2937 CCoE - India PESO P365300/9 & P365300/12

ABS 14-LD1183401-PDA LLOYD'S 10/00056(E1) RMRS 14.02755.315 Reducer Adaptor

Example Part Numbering	AR1BF/NP/M20/M25
(Always Quote Male Thread First)	AITTO / IVI / IVI ZO/ IVI ZO

AR	Thread converting Adaptor/Reducer
1	No IP O-ring (0) - Nitrile (1) - Silicone (3)
В	Brass (B) - Stainless Steel (S) - Aluminium (A)
F	Ex d & Ex e certification including Marine Approvals
NP	Nickel Plated
M20	Male Entry Thread
M25	Female Entry Thread
	IP Washers - (N) Nylon (ACNSW) / (V) Fibre (ACFSW) / (H) PTFE (ACPSW)
Optional	(T) Earth Tag - Brass (ACBET) / St-Steel (ACSET) / Aluminium (ACAET)
Accessories	(L) Locknut - Brass (ACBLN) / St-Steel (ACSLN) / Aluminium (ACALN)
	(S) Serrated Washer - Stainless Steel (ACSSW)

IP Rating: IP66 & IP68 (100 metres for 7 days) & NEMA 4X

Impact

Materials:

Resistance: 20Nm (Aluminium 7Nm)

 Operating
 O-ring - None
 -100°C to +400°C

 Temperature:
 O-ring - Nitrile
 -30°C to +100°C

O-ring - Silicone -60°C to +200°C Brass, Stainless Steel or Aluminium

Plating: Electroless Nickel

Male and Female Thread References and Size information can be found on page TR-1 of our product catalogue.

Adaptor and Reducer size information is available on pages TR-2 & TR-3 of our product catalogue.

Male and female 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)

Notes:

- Assembly instructions must be read prior to installation and adhered to in full.
- For Ex d 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.
- ATEX / IECEx versions are supplied as standard.
- Additional approvals must be requested at time of order.
- 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.