

Peppers Cable Glands Limited

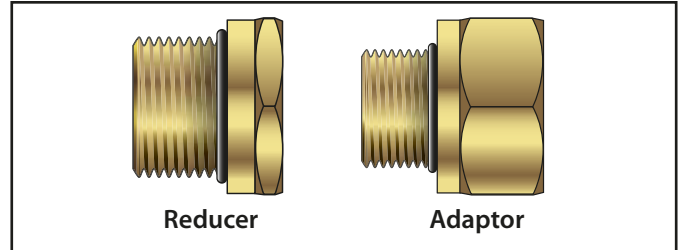
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AR Series Metallic Adaptors and Reducers

"AR" Series Certified Adaptors & Reducers provide a method of matching electrical thread forms on Ex equipment whilst maintaining Ex d, Ex e, Ex tb and Ex nR methods of explosion protection. Approved for use in mining and surface installations they maintain IP66 & IP68 for IEC type applications and Class I Division 1 and NEMA 4X for CEC type applications. All external parallel 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
Certification:	ATEX I M2 II 2GD Ex d I&IIC Mb Gb / Ex e I&IIC Mb Gb/ Ex tb IIIC Db II 3GD Ex nR IIC Gc IECEX Ex d I&IIC / Ex e I&IIC / Ex tb IIIC / Ex nR IIC CSA Class I, Division 1 Groups A, B, C & D Class II, Groups E, F & G; Class III GOST-R Ex d I&IICU / Ex e I&IICU / Ex nRIIU LLOYDS Enclosure Systems - Part 1B
Marine Approvals:	RMRS Part XI of Rules for sea-going ships (ed.2008)
Certificate No.	ATEX SIRA 09ATEX1322X & SIRA 09ATEX4323X IECEX SIR 09.0131X CSA 2310046 GOST-R POCC GB.F506.B00853 LLOYDS 10/00056 RMRS 09.00784.011
IP Rating:	IP66 & IP68 (100 metres for 7 days) & NEMA 4X 6P
Impact Resistance:	20Nm (Aluminium 7Nm)
Operating Temperature:	O-ring - None -100°C to +400°C O-ring - Nitrile -30°C to +100°C O-ring - Silicone -60°C to +200°C
Materials:	Brass, Stainless Steel or Aluminium
Plating:	Nickel - Zinc



Example Part Numbering

Always Quote Male Thread First

AR1BF/NP/M20/M25

AR	Thread converting Adaptor/Reduce
1	No IP O-ring (0) - Nitrile (1) - Silicone (3)
B	Brass (B) - Stainless Steel (S) - Aluminium (A)
F	Ex d & Ex e certification
NP	Nickel Plated (NP) - Zinc Plated (ZP)
M20	Male Entry Thread
M25	Female Entry Thread
Optional Accessories	[N/V] IP Washers Nylon [N] (ACNSW) / Fibre [V] (ACFSW)
	[T] Earth Tag Brass (ACBET) / Stainless Steel (ACSET)
	[L] Locknut Brass (ACBLN) / Stainless Steel (ACSLN)
	[S] Serrated Washer Stainless Steel (ACSSW)

Thread Reference Tables

ISO Metric ISO 965-1, ISO 965-3, BS 3643, IEC 60423							
Thread	Peppers Reference	Standard Pitch	TPI	Major Dia	Thread Length	Bore	Max Clearance Hole Dia
M16	M16	1.50	16.93	15.97	16.0	10.0	16.7
M20	M20	1.50	16.93	19.97	16.0	14.0	20.7
M25	M25	1.50	16.93	24.97	16.0	18.0	25.7
M32	M32	1.50	16.93	31.97	16.0	24.0	32.7
M40	M40	1.50	16.93	39.97	16.0	32.0	40.7
M50	M50	1.50	16.93	49.97	16.0	41.0	50.7
M63	M63	1.50	16.93	62.97	16.0	53.0	63.7
M75	M75	1.50	16.93	74.97	16.0	64.0	75.7
M80	M80	2.00	12.70	79.97	20.0	69.0	80.8
M85	M85	2.00	12.70	84.97	20.0	73.0	85.7
M90	M90	2.00	12.70	89.97	20.0	78.0	90.7
M100	M100	2.00	12.70	99.97	20.0	88.0	100.7
M110	M110	2.00	12.70	109.97	20.0	98.0	110.7
M120	M120	2.00	12.70	119.97	20.0	108.0	120.7

NPT ANSI B1.20.1							
Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Bore	Max Clearance Hole Dia
3/8"	038NPT	1.41	18.0	17.15	15.3	10.0	17.85
1/2"	050NPT	1.81	14.0	21.34	19.9	14.1	22.04
3/4"	075NPT	1.81	14.0	26.67	20.1	19.0	27.37
1"	100NPT	2.20	11.5	33.40	25.0	25.0	34.10
1-1/4"	125NPT	2.20	11.5	42.16	25.6	32.0	42.86
1-1/2"	150NPT	2.20	11.5	48.26	26.0	38.0	48.96
2"	200NPT	2.20	11.5	60.33	26.9	49.0	61.03
2-1/2"	250NPT	3.18	8.0	73.03	39.9	60.0	73.73
3"	300NPT	3.18	8.0	88.90	41.5	75.0	89.60
3-1/2"	350NPT	3.18	8.0	101.60	42.8	88.0	102.30
4"	400NPT	3.18	8.0	114.30	44.0	100.0	115.00
5"	500NPT	3.18	8.0	141.30	46.7	120.0	142.00

NPS ANSI B1.20.1							
Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Bore	Max Clearance Hole Dia
1/2"	050NPS	1.81	14.0	20.90	19.9	14.1	21.60
3/4"	075NPS	1.81	14.0	26.26	20.1	19.0	26.96
1"	100NPS	2.20	11.5	32.84	25.0	25.0	33.54
1-1/4"	125NPS	2.20	11.5	41.61	25.6	32.0	42.31
1-1/2"	150NPS	2.20	11.5	47.67	26.0	38.0	48.37
2"	200NPS	2.20	11.5	59.72	26.9	49.0	60.42
2-1/2"	250NPS	3.18	8.0	72.16	39.9	60.0	72.86
3"	300NPS	3.18	8.0	88.06	41.5	75.0	88.76
3-1/2"	350NPS	3.18	8.0	100.78	42.8	88.0	101.48
4"	400NPS	3.18	8.0	113.43	44.0	100.0	114.13

PG DIN 40430							
Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Bore	Max Clearance Hole Dia
PG7	PG7	1.27	20.0	12.50	16.0	8.0	13.20
PG9	PG9	1.41	18.0	15.20	16.0	10.0	15.90
PG11	PG11	1.41	18.0	18.60	16.0	13.5	19.30
PG13.5	PG13.5	1.41	18.0	20.40	16.0	14.0	21.10
PG16	PG16	1.41	18.0	22.50	16.0	16.0	23.20
PG21	PG21	1.59	16.0	28.30	16.0	21.0	29.00
PG29	PG29	1.59	16.0	37.00	16.0	29.0	37.70
PG36	PG36	1.59	16.0	47.00	16.0	38.0	47.70
PG42	PG42	1.59	16.0	54.00	16.0	45.0	54.70
PG48	PG48	1.59	16.0	59.30	16.0	50.0	60.00

ISO Pipe Parallel ISO 228 BS2779 (BSPP, C, G, R, PF & Tpy 6) ISO Pipe Taper ISO 7-1 BS21 (BSPT, Gc, Gk, Rk, PT & Kmpy 6)							
Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Bore	Max Clearance Hole Dia
1/2"	050BSP/BST	1.81	14.0	20.96	19.9	14.1	21.66
3/4"	075BSP/BST	1.81	14.0	26.44	20.1	19.0	27.14
1"	100BSP/BST	2.31	11.0	33.25	25.0	25.0	33.95
1-1/4"	125BSP/BST	2.31	11.0	41.91	25.6	32.0	42.61
1-1/2"	150BSP/BST	2.31	11.0	47.80	26.0	38.0	48.50
2"	200BSP/BST	2.31	11.0	59.61	26.9	49.0	60.31
2-1/2"	250BSP/BST	2.31	11.0	75.18	39.9	60.0	75.78
3"	300BSP/BST	2.31	11.0	87.88	41.5	75.0	88.58

ET Imperial Conduit BS31							
Thread	Peppers Reference	Pitch	TPI	Major Dia	Thread Length	Bore	Max Clearance Hole Dia
5/8"	058ET	1.41	18	15.88	16	10	16.58
3/4"	075ET	1.59	16	19.05	16	14	19.75
1"	100ET	1.59	16	25.40	16	18	26.10
1-1/4"	125ET	1.59	16	31.75	16	24	32.45
1-1/2"	150ET	1.81	14	38.10	16	32	38.80
2"	200ET	1.81	14	50.80	16	41	51.50
2-1/2"	250ET	1.81	14	63.50	16	53	64.20
3"	300ET	1.81	14	76.20	16	64	76.90

- 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. If additional approvals are required they 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 application.