

'Y' (Exd/Exe) adaptors – AY-U Series

Technical specification

Redapt AY-U series of explosion-proof shaped adaptors provide an opportunity for installers to run cables in additional entries where pre-machine entries are limited or at an angle in confined or difficult situations.

Compared to traditional methods of creating additional entries in enclosures Redapt shaped adaptors can reduce downtime from three weeks to one hour and total cost by half.

Available in brass, aluminium, mild steel and stainless steel 316L, the AY-U series provides extra means of connection where space is limited and maintains Ex certification while matching various threadforms.



Type AY-U

Certifications and compliances



Code of protection categories

ATEX:	I M2, II 2 GD
IECEC:	Ex db I/IIc Mb/Gb, Ex eb I/IIc Mb/Gb, Ex tb IIc Db

Compliance standards

ATEX:	EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31
IECEC:	IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31

Certificate details

ATEX:	ITS16ATEX101340U
IECEC:	IECEX ITS 16.0015U
EAC:	RU C-GB. M43.B.01715
INMETRO:	NCC 18.0133 X

Temperature

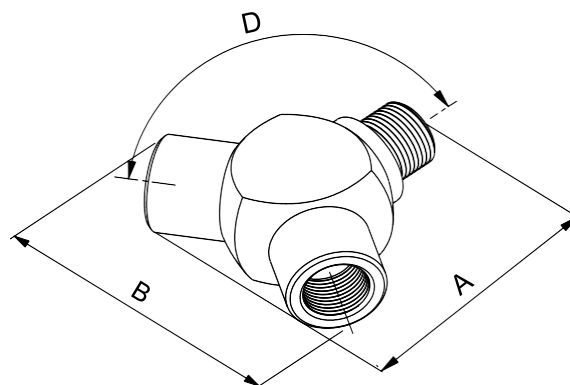
-60 °C to +200 °C

Ingress protection (IP):

IP64 when fitted without sealing washer. IP66/IP68 when fitted with washer or thread sealant according to manufacturer's instructions.

Dimensions

Male size	Female size	A (max.)	B (max.)	Angle between entries (D)
M16	M16	65.00	75.00	120°
M20	M20	65.00	75.00	120°
M25	M25	67.00	78.00	120°
M32	M32	70.00	81.00	120°
M40	M40	89.00	102.00	120°
M50	M50	104.00	120.00	120°
M63	M63	131.00	151.00	120°
M75	M75	153.00	177.00	120°
3/8" NPT	3/8" NPT	65.00	75.00	120°
1/2" NPT	1/2" NPT	65.00	75.00	120°
3/4" NPT	3/4" NPT	67.00	78.00	120°
1" NPT	1" NPT	78.00	90.00	120°
1 1/4" NPT	1 1/4" NPT	89.00	102.00	120°
1 1/2" NPT	1 1/2" NPT	104.00	120.00	120°
2" NPT	2" NPT	131.00	151.00	120°
2 1/2" NPT	2 1/2" NPT	153.00	177.00	120°



Notes:

- In some instances the product can be supplied slightly different in appearance.
- For dimension D, other angles are available, please contact us.

Plating options

Electroless nickel
Zinc
Chromated
Others on application

Threadforms

Metric
NPT

'Y' (Exd/Exe) adaptors – Product coding

Product	DIGITS 1 & 2
'Y' Exd/Exe ADAPTOR	AY

Certification	DIGIT 3
U	Exd I and IIC & Exe I and IIC

Material	DIGIT 4
1	Brass
2	Mild steel
3	Stainless steel
5	Aluminum

Plating	DIGIT 5
0	Unplated
1	Electroless nickel
2	Zinc
6	Chromated

DIGITS 6 & 7 Male thread ; DIGITS 8 & 9 Female thread							
Metric	ET imperial conduit	NPT	NPSM	ISO pipe parallel (BSPP)	ISO pipe taper (BSPT)	PG	
03 M16	17 5/8" ET	29 1/2" NPT	42 1/2" NPSM	55 1/2" BSPP	68 1/2" BSPT	79 PG7	
04 M20	18 3/4" ET	30 3/4" NPT	43 3/4" NPSM	56 3/4" BSPP	69 3/4" BSPT	80 PG9	
05 M25	19 1" ET	31 1" NPT	44 1" NPSM	57 1" BSPP	70 1" BSPT	81 PG11	
06 M32	20 1 1/4" ET	32 1 1/4" NPT	45 1 1/4" NPSM	58 1 1/4" BSPP	71 1 1/4" BSPT	82 PG13.5	
07 M40	21 1 1/2" ET	33 1 1/2" NPT	46 1 1/2" NPSM	59 1 1/2" BSPP	72 1 1/2" BSPT	83 PG16	
08 M50	22 2" ET	34 2" NPT	47 2" NPSM	60 2" BSPP	73 2" BSPT	84 PG21	
09 M63	23 2 1/2" ET	35 2 1/2" NPT	48 2 1/2" NPSM	61 2 1/2" BSPP	74 2 1/2" BSPT	85 PG29	
10 M75	24 3" ET	36 3" NPT	49 3" NPSM	62 3" BSPP	75 3" BSPT	86 PG36	

For other thread options please contact us.

Example

Digits 1&2	Digit 3	Digit 4	Digit 5	Digits 6 & 7	Digits 8 & 9
AY	-	U	-	2	- 2 - 29 - 04
Adaptor	Exd/e certified	Mild steel	Zinc	1/2" NPT (male)	M20 (female)

Always quote male thread first.

Note: threadform codes below to be used for both male and female threads.

Thread dimension chart

ISO metric

BS 3643 1.5mm pitch

Size	Major dia.	TPI
M12	11.97	16.93
M16	15.97	16.93
M20	19.97	16.93
M25	24.97	16.93
M32	31.97	16.93
M40	39.97	16.93
M50	49.97	16.93
M63	62.97	16.93
M75	74.97	16.93
2.0mm pitch		
M80	79.97	12.70
M85	84.97	12.70
M90	89.97	12.70
M100	99.97	12.70
M110	109.97	12.70
M120	119.97	12.70

Alternate ISO pipe thread designations

UK	BSP Parallel or Taper BS2279 (BS21)
Europe	G (Parallel) GK (Taper) R (Parallel) RK (Taper)
Japan	PF (Parallel) JISB 303
CIS	K mpy (Taper)

NPT

ANSI/ASME B1.20.1

Size	Pipe dia.	TPI
½"	21.34	14.00
¾"	26.67	14.00
1"	33.40	11.50
1¼"	42.16	11.50
1½"	48.26	11.50
2"	60.33	11.50
2½"	73.03	8.00
3"	88.90	8.00
3½"	101.60	8.00
4"	114.30	8.00

BSP ISO pipe thread

ISO R/7; UNI 6125

Size	Pipe Dia.	TPI
⅝"	16.66	19.00
½"	20.96	14.00
¾"	26.44	14.00
1"	33.25	11.00
1¼"	41.91	11.00
1½"	47.80	11.00
2"	59.61	11.00
2½"	75.18	11.00
3"	87.88	11.00

PG

DIN 40430

Size	Major dia.	TPI
PG7	12.50	20.00
PG9	15.20	18.00
PG11	18.60	18.00
PG13.5	20.40	18.00
PG16	22.50	18.00
PG21	28.30	16.00
PG29	37.00	16.00
PG36	47.00	16.00
PG42	54.00	16.00
PG48	59.30	16.00

ET imperial conduit

BS31

Size	Major dia.	TPI
⅝"	15.88	18.00
¾"	19.05	16.00
1"	25.40	16.00
1¼"	31.75	16.00
1½"	38.10	14.00
2"	50.80	14.00
2½"	63.50	14.00
3"	76.20	14.00

Thread dimension substitution chart

Metric	NPT (or NPS)	PG	BSP ISO Pipe	ET
M16	—	7, 9	—	⅝"
M20	½"	11, 13.5	½"	¾"
M25	¾"	16	¾"	1"
M32	1"	21	1"	1¼"
M40	1¼"	29	1¼"	1½"
M50	1½"	36	1½"	2"
M63	2"	42, 48	2"	2½"
M75	2½"	—	2½"	3"
M90 x 2.0	3"	—	3"	—
M100 x 2.0	3½"	—	—	—
M110 x 2.0	—	—	—	—
M120 x 2.0	—	—	—	—