

90 degree (Exd/Exe) swivel adaptors – TP-U, TQ-U & TR-U Series

Technical specification

Redapt TP-U, TQ-U & TR-U series of 90 degree explosion-proof swivel adaptors provide a method of matching various electrical thread forms on hazardous area approved equipment. Available in brass, aluminium and stainless steel 316L, the TP-U series ensure the integrity and the Ex approval of the installation.

These 90 degree models allow a 360° choice of cable entry and exit positions, and improve ease of installation in confined or difficult situations.



Type TP-U

Certifications and compliances



Code of protection categories

- ATEX:** I M2, II 2 GD
IECEC: Ex db I/II C Mb/Gb, Ex eb I/II C Mb/Gb, Ex tb IIIC Db
(Aluminium not mining)

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.UM43.B.01715
INMETRO: NCC 18.0133 X

Temperature

-50°C to +150°C

Ingress protection (IP):

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

Plating options

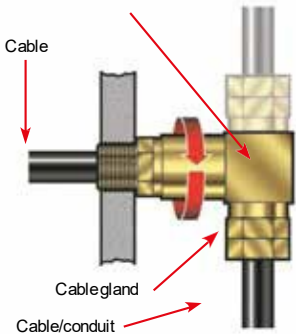
- Electroless nickel
- Zinc
- Chromated
- Others on application

Threadforms

- Metric
- NPT
- NPSM
- PG
- ISO Pipe (BSP)
- ET

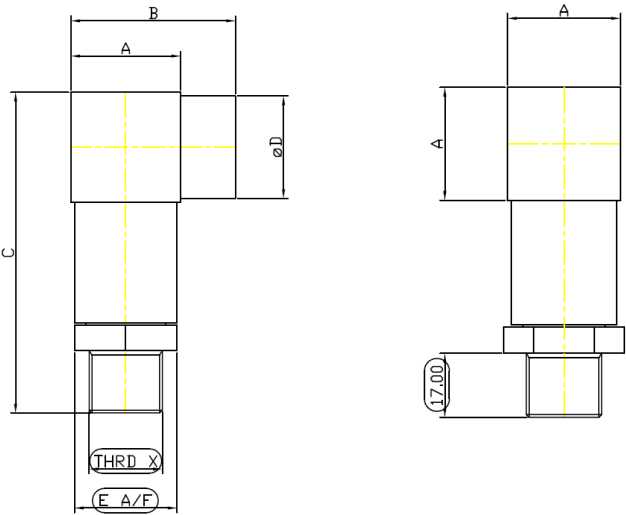
90° swivel adaptor

This part rotates, enabling the cable glands to be correctly positioned for cable connection



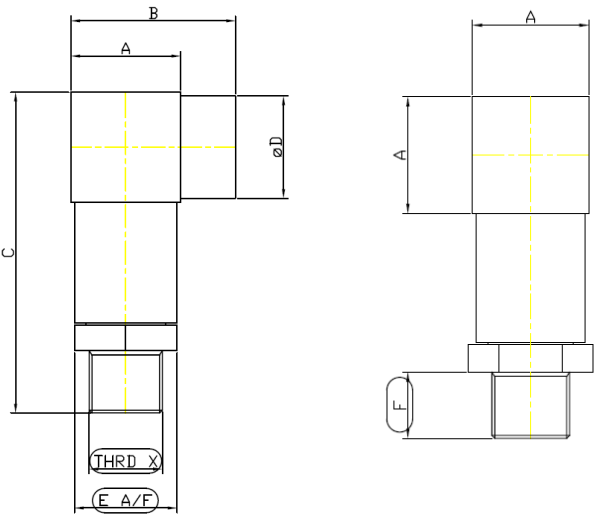
90 degree (Exd/Exe) swivel adaptors– Dimensions

Metric to metric



Thread X	A	B	C	Ø D	E A/F
M20 x 1.5	30.0	45.0	88.1	28.0	27.9
M25 x 1.5	35.0	50.0	93.1	34.0	34.9
M32 x 1.5	42.0	57.0	100.1	41.5	42.4
M40 x 1.5	50.0	65.0	109.1	48.5	50.0
M50 x 1.5	60.0	75.0	124.3	58.8	63.5
M63 x 1.5	75.0	90.0	134.3	73.0	76.2
M75 x 1.5	90.0	105.0	151.3	86.0	85.0

NPT to NPT



Thread X	A	B	C	Ø D	E A/F	F
½" NPT	31.8	45.0	93.4	28.0	1.1"	20.2
¾" NPT	38.1	50.0	99.0	34.0	1.4"	20.5
1" NPT	42.0	62.0	115.6	41.5	1.7"	25.3
1 ¼" NPT	50.0	70.5	126.0	48.5	2.0"	26.0
1 ½" NPT	65.0	86.0	142.0	63.0	2.5"	26.5
2" NPT	75.0	97.0	153.4	73.0	3.0"	27.2
2 ½" NPT	90.0	123.0	199.0	86.0	3.3"	40.5

90 degree (Exd/Exe) swivel adaptors– Product coding

Product	DIGITS 1 & 2
Swivel in-line male to female Exd/Exe ADAPTOR	TP
Swivel in-line female to female Exd/Exe ADAPTOR	TQ
Swivel in-line male to male Exd/Exe ADAPTOR	TR

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	TBA 3/8" NPT	TBA 3/8" NPSM	TBA 3/8" BSPP	TBA 3/8" BSPT	80 PG9
04 M20	18 3/4" ET	29 1/2" NPT	42 1/2" NPSM	55 1/2" BSPP	68 1/2" BSPT	81 PG11
05 M25	19 1" ET	31 1/2" NPT	43 3/4" NPSM	56 3/4" BSPP	69 3/4" BSPT	82 PG13.5
06 M32	20 1 1/4" ET	32 1" NPT	44 1" NPSM	57 1" BSPP	70 1" BSPT	83 PG16
07 M40	21 1 1/2" ET	33 1 1/4" NPT	45 1 1/4" NPSM	58 1 1/4" BSPP	71 1 1/4" BSPT	84 PG21
08 M50	22 2" ET	34 1 1/2" NPT	46 1 1/2" NPSM	59 1 1/2" BSPP	72 1 1/2" BSPT	85 PG29
09 M63	23 2 1/2" ET	35 2" NPT	47 2" NPSM	60 2" BSPP	73 2" BSPT	86 PG36
10 M75	24 3" ET	36 2 1/2" NPT	48 2 1/2" NPSM	61 2 1/2" BSPP	74 2 1/2" BSPT	87 PG42
						88 PG48

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

Example

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

Always quote male thread first.

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

NPT

ANSI/ASME B1.20.1

Size	Pipe dia.	TPI
3/8"	17.15	18.00
1/2"	21.34	14.00
3/4"	26.67	14.00
1"	33.40	11.50
1 1/4"	42.16	11.50
1 1/2"	48.26	11.50
2"	60.33	11.50
2 1/2"	73.03	8.00

PG

DIN 40430

Size	Major dia.	TPI
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

Alternate ISO pipe thread designations

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

BSP ISO pipe thread

ISO R/7; UNI 6125

Size	Pipe Dia.	TPI
3/8"	16.66	19.00
1/2"	20.96	14.00
3/4"	26.44	14.00
1"	33.25	11.00
1 1/4"	41.91	11.00
1 1/2"	47.80	11.00
2"	59.61	11.00
2 1/2"	75.18	11.00

ET imperial conduit

BS31

Size	Major dia.	TPI
5/8"	15.88	18.00
3/4"	19.05	16.00
1"	25.40	16.00
1 1/4"	31.75	16.00
1 1/2"	38.10	14.00
2"	50.80	14.00
2 1/2"	63.50	14.00
3"	76.20	14.00

Thread dimension substitution chart

Metric	NPT (or NPS)	PG	BSP ISO Pipe	ET
M16	3/8"	9	3/8"	5/8"
M20	1/2"	11, 13.5	1/2"	3/4"
M25	3/4"	16	3/4"	1"
M32	1"	21	1"	1 1/4"
M40	1 1/4"	29	1 1/4"	1 1/2"
M50	1 1/2"	36	1 1/2"	2"
M63	2"	42, 48	2"	2 1/2"
M75	2 1/2"	—	2 1/2"	3"