

In-line (Exd/Exe) swivel adaptors - TA-U, TC-U & TD-U Series

Type TA-U



Technical specifications

Code of protection categories
ATEX: I M2, II 2 GD
IECEX: Ex db I/IIC Mb/Gb, Ex eb I/IIC Mb/Gb, Ex tb IIIC Db (Aluminium not mining)
Compliance standards
ATEX: EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-31
IECEX: IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-31
Certificate details
ATEX: ITS16ATEX101340U
IECEX: IECEX ITS 16.0015U
EAC: RU C-GB.11M43.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
Part number:
Please refer to part numbering system below

[Download certificates and documents here](#)

Redapt TA-U, TC-U & TD-U series of in-Line 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 TA-U series ensure the integrity and the Ex approval of the installation.

These in-line models allow independent connection at both ends and improve ease of installation in confined or difficult situations.

Materials

- Brass CZ121
- Mild steel
- 316 stainless steel
- Aluminium

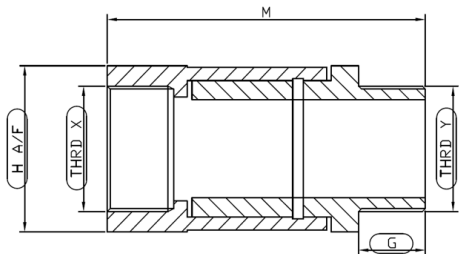
Plating options

- Electroless nickel
- Zinc
- Chromated
- Others on application

Threadforms

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

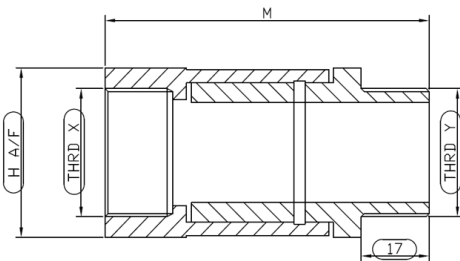
NPT to NPT



Dimensions

Thread (Y)	Thread (X)	H A/F	G (mm)	M (mm)
1/2" NPT	1/2" NPT	1.1"	20.2	83.8
3/4" NPT	3/4" NPT	1.4"	20.5	84.1
1" NPT	1" NPT	1.7"	25.3	94.4
1 1/4" NPT	1 1/4" NPT	2.0"	26.0	96.6
1 1/2" NPT	1 1/2" NPT	2.5"	26.5	97.8
2" NPT	2" NPT	3.0"	27.2	100.0
2 1/2" NPT	2 1/2" NPT	3.3"	40.5	126.3

Metric to metric



Dimensions

Thread (Y)	Thread (X)	H A/F	M (mm)
M20 x 1.5	M20 x 1.5	1.1"	80.6
M25 x 1.5	M25 x 1.5	1.4"	80.6
M32 x 1.5	M32 x 1.5	1.7"	81.1
M40 x 1.5	M40 x 1.5	2.0"	82.1
M50 x 1.5	M50 x 1.5	2.5"	82.3
M63 x 1.5	M63 x 1.5	3.0"	82.8
M75 x 1.5	M75 x 1.5	3.3"	84.8

In-line (Exd/Exe) swivel adaptors - Product coding

Product	Digits 1 & 2
Swivel in-line male to female Exd/Exe ADAPTOR	TA
Swivel in-line female to female Exd/Exe ADAPTOR	TC
Swivel in-line male to male Exd/Exe ADAPTOR	TD

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

Material	Digit 4
1	Brass
2	Mild steel
3	Stainless steel
5	Aluminium

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	30 3⁄4" NPT	43 3⁄4" NPSM	56 3⁄4" BSPP	69 3⁄4" BSPT	82 PG13.5
06 M32	20 1 1⁄4" ET	31 1" NPT	44 1" NPSM	57 1" BSPP	70 1" BSPT	83 PG16
07 M40	21 1 1⁄2" ET	32 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	33 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	34 2" NPT	47 2" NPSM	60 2" BSPP	73 2" BSPT	86 PG36
10 M75	24 3" ET	35 2 1⁄2" NPT	48 2 1⁄2" NPSM	61 2 1⁄2" BSPP	74 2 1⁄2" BSPT	87 PG42
		36 3" NPT				88 PG48

Example

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

Notes:

- Always quote male thread first.
- 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

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) R (Parallel) RK (Taper)
Japan	PF (Parallel) JIS B 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"

Part numbering system

Codes

Page No.	Product	Digits 1 & 2
Adaptors and reducers		
14-17	AD	Adaptor
14-17	RD	Reducer
18	TA	Swivel - in-line male to female
18	TC	Swivel - in-line female to female
18	TD	Swivel - in-line male to male
18	TP	Swivel - 90° male to female
18	TQ	Swivel - 90° female to female
18	TR	Swivel - 90° male to male
19	AY	'Y' adaptor
20	AT	'T' adaptor
21	AR	90° adaptor
22	AM	Male to male adaptor
23	AF	Female to female adaptor
24-25	DB	Insulated adaptor
Stopping Plugs		
26-27	PD	Dome head plug
28	PA	Type A plug
28	PB	Type B plug
Breather Drains		
31	DP	Breather drain (Exe)
32	BD	Breather drain (Exde)
Other products		
34	UN	Union - male to female
34	UF	Union - female to female
35	AE	Earth lead adaptor

Certification	Digit 3
U	Exd I and IIC & Exe I and IIC
D	Exd I and IIC
E	Exe I and IIC
F	Industrial (marked product)

Material	Digit 4
1	Brass
2	Mild steel
3	Stainless steel
4	Glass filled nylon
5	Aluminium
6	Nylon 6
7	Red fibre

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

Example

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

Always quote male thread first.