

# Type A and Type B (Exde) stopping plugs – PA-U / PB-U Series

## Technical specification

Redapt PA-U & PB-U series of stopping plugs provide a method of blanking off unused entries in hazardous area approved equipment whilst ensuring the integrity and Ex approval of the installation is maintained. Shouldered plugs are not permitted in Exd application using NPT threads. Therefore the PA-U and PB-U are the perfect choice in this application.

### 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 IIIC Db
- CSA:** Ex db / Ex eb IIC Gb IP54  
CII Zn 1 AEx eb / AEx db IIC Gb IP54  
CII Div 1 Gr ABCD CII Gr EFG CII III; Type 3

### Compliance standards

- ATEX/**
- IECEC:** IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7, IEC/EN 60079-31
- CSA:** CAN/CSA C22.2 No. 60079-0, No. 60079-1, No. 60079-7, ANSI/UL 60079-0, 60079-1, 60079-7, UL1203

### Certificate details

- ATEX:** ITS16ATEX101335X
- IECEC:** IECEx ITS 16.0012X
- CSA:** CSA01CA1248014X
- EAC:** TC RU C-GB.M1062.B.06226
- INMETRO:** NCC 18.0133X

### 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

### Temperature

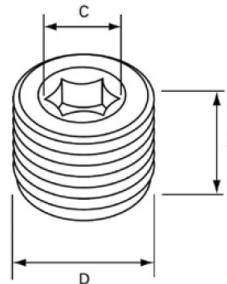
-60°C to +200°C



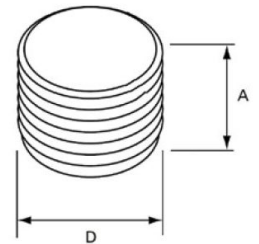
Type PA-U



Type PB-U



PA-U



PB-U

A O/L	C A/F	D Thread
17	6	M12
17	6	M14
17	8	M16
17	10	M20
17	10	M25
17	10	M32
17	10	M40
17	10	M50
17	14	M63
17	14	M75
22	14	M80
22	14	M85
22	14	M90
22	14	M100
22	14	M110
22	14	M120

# Type A and Type B (Exde) stopping plugs – Product coding

Product	DIGITS 1 & 2
Type A PLUG	PA
Type B PLUG	PB

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	
02 M12							
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
11 M80 x 2.0	ET Special	37 3 1/2" NPT	50 3 1/2" NPSM	63 3 1/2" BSPP	76 3 1/2" BSPT	87	PG42
12 M85 x 2.0		38 4" NPT	51 4" NPSM	64 4" BSPP	77 4" BSPT	88	PG48
13 M90 x 2.0		NT Special	NS Special	BP Special	BT Special		PG Special
14 M100 x 2.0							
15 M110 x 2.0							
BZ M120 x 2.0							

## Example

Digits 1&2	Digit 3	Digit 4	Digit 5	Digits 6 & 7	Digits 8 & 9
PA	- U	- 1	- 1	- 29	- 00
Plug	Exd/e certified	Brass	Nickel-plated	1/2" NPT	(male)

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

## 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

## 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

## 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	–	–	–	–



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