

FITTING INSTRUCTIONS FOR Ex d (FLAMEPROOF) CABLE BOXES

1 SPECIAL CONDITIONS OF SAFE USE

- Any terminals, End connectors, Relays and/or Circuit breakers can be fitted according to the allowances set-out in table 3 & 4. (See Accessories)
- Use only certified Ex d minimum IP65 Cable glands, Blanking plugs and/or Adaptors and Reducers. (See Accessories)
- All unused entries must be blanked off using suitably certified blanking elements. (See Accessories)
- Junction Box rated for an ambient temperature range of -20°C to +40°C.
- Inspection of gaskets, flamepath gaps and general condition of box, to be carried out by suitably trained personnel in accordance with IEC 60079-17.
- All Internal components fitted must conform to both the dissipated power, current and geometric requirements set-out in table 3 & 4.
- Only Manufacturer supplied replacement gaskets and lid fasteners may be fitted. (See table 2 & Accessories)
- No energy storing electronics, cells, batteries or switch gear components may be fitted inside this enclosure.
- Isolate internal circuit elsewhere before opening.

2 CERTIFICATION AND MARKING



Ex d I/IIA, IIB
Ex tb IIIC T85°C
IP65
EPL Gb & Db & Mb

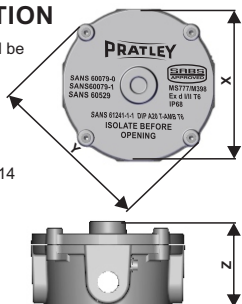


SANS 60079-0
SANS 60079-1
SANS 60529
SANS 60079-31

- GROUPS I, IIA, IIB.
- SIZE 1 & 2 FOR IIC ALSO.
- SUITABLE FOR USE IN ZONE 1,2,21, & 22.
- SURFACE & UNDERGROUND.
- TEMP CLASS T6 (85°C)
- MS-XPL/16.0229X

3 TERMINATION

- Installation shall be carried-out by suitably trained personnel in accordance with the code of practice per EN/IEC 60079-14



Box Size	Product Codes	Type	Certification
1	17101	Flanged Joint	Ex d I/IIIC T6 MbGb Ex tb IIIC T85°C Db IP 65
	17102		
	17103		
2	17110	Serrated Joint	Ex d I/IIIC T6 MbGb Ex tb IIIC T85°C Db IP 65
	17111		
2	17104	Flanged Joint	Ex d I/IIIB+H2 T6 MbGb Ex tb IIIC T85°C Db IP 65
	17105		
	17106		
4	17107	Flanged Joint	Ex d I/IIIB T6 MbGb Ex tb IIIC T85°C Db IP 65
	17108		
	17109		

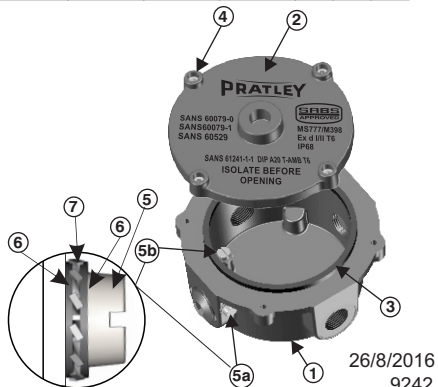
TABLE 1 EQUIPMENT DESCRIPTION & RATINGS

Box Size	Product Code	No. Entries	Entry Thread Size(6H)	Cap Screw (Grade 12.9) (Torque)	Flamepath Details			Enclosed Volume (mL)	Gas Groups (Ex d T6)	Dust Groups (Ex tb T85°C)	Dimensions (mm)		
					Type	Max Gap between Surfaces (mm)	Min Length (mm)				X	Y	Z
1	17101	2	M20 x 1.5	M5 x 0.8 x 14 (5 Nm)	Flanged	0.04	13	408	I / IIC	IIIC	136.0	150.2	77.0
	17102												
	17103												
2	17104	3	M25 x 1.5	M6 x 1.0 x 14 (7 Nm)	Flanged	0.04	15.8	747	I / IIB +H2	IIIC	161.0	173.0	80.0
	17105												
	17106												
	17110				2	Serrated	0.04	10.5	747	I / IIC	IIIC	161.0	173.0
17111													
2	17112	4	M40 x 1.5	M8 x 1.2 x 25 (10 Nm)	Flanged	0.15	14.5	3814	I / IIB	IIIC	254.0	277.0	134.0
	17107												
	17108												
17109													

TABLE 2 COMPONENT MATERIALS

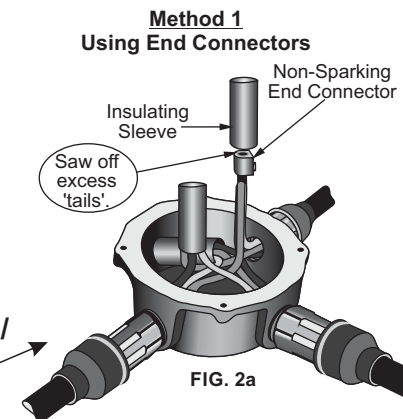
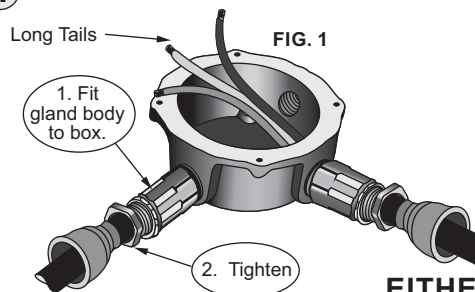
Item No.	Description	Material	
1	FLP Box Body	Cast Iron	450 Mpa
2	FLP Box Lid		
3	Sealing Gasket	Nitrile Rubber	Continuous Operating Temperature: -20 to 85°C
4	Metric Cap Screw (See table 1 for sizes)	Steel	Grade 12.9
5	Cheese Head Screw M6 x 10 LG	Brass	
6	Earthing Washer	Brass	
7	External Star Washer	S/Steel	

NOTE: 5a: External Earthing facility, 5b: Internal Earthing facility



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4 CONNECTING METHODS



Method 2
Using rail mounted Pratlley Kwikbloks.

EITHER/ OR

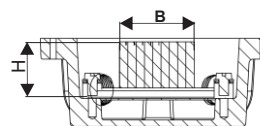
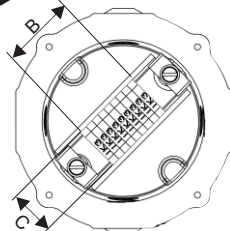
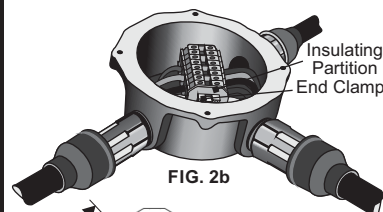


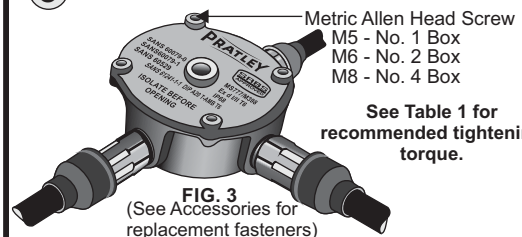
TABLE 3

Box Size	NUMBER OF TERMINALS & DISSIPATED POWER RATINGS							Max Permitted Dissipated Power (W)
	Ex e IK3 (30326) 550 V 15A	Ex e IK5 (30327) 550 V 21A	Ex e IK10 (30328) 550 V 37A	Ex e IK16 (30329) 550 V 47A	Ex e IK25 (30330) 550 V 63A	Ex e IK51 (30331) 550 V 98A	Ex e IK70 (30332) 550 V 121A	
1	9	8	6	5	NA	NA	NA	6.8
2	13	11	8	7	5	4	NA	9.8
4	35	30	22	18	14	11	7	30.3

TABLE 4

Box Size	INTERNAL COMPONENT DIMENSIONS		
	B (Max)	C (Max)	H (Max)
1	75.0	38.0	37.0
2	93.0	51.0	42.0
4	170.0	72.0	45.0

5 FIT THE LID AND TIGHTEN



6 MAINTENANCE

- Isolate internal circuit elsewhere before opening.
- Avoid damage to flamepath when opening box lid.
- Flange must be clean & free of dirt before replacing lid.
- Only suitable replacement gaskets and lid fasteners may be fitted. (See table 2 & Accessories)
- This junction box contains no parts which may be replaced. Replace parts if damaged. (Gasket &/or Lid fasteners only)
- Any parts which are modified, damaged or incorrectly fitted, will invalidate the type of protection.

ACCESSORIES

<p>PRATLEY Ex d (FLAMEPROOF) ADAPTORS</p> <p>Adaptor Type A Available in various sizes & thread types</p>	<p>PRATLEY Ex d (FLAMEPROOF) PLUG</p> <p>Brass plug with hex socket head.</p>	<p>PRATLEY Ex d (FLAMEPROOF) REDUCERS</p> <p>To fit a smaller gland to a larger entry.</p>	<p>PRATLEY KWIKBLOKS, TERMINALS & RAIL</p> <p>PRATLEY N35 RAIL</p>	<p>ALLEN HEAD SCREWS FOR FLAMEPROOF BOX COVERS</p>
<p>MOUNTING BRACKET KIT Consists of a bracket and two M6 x 9.5mm counter-sunk flat head stainless steel screws.</p> <p>For No 1 Box</p>		<p>REPLACEMENT GASKETS</p>		<p>PRATLEY NON-SPARKING END CONNECTORS & SLEEVES</p>