



Sina Ghabezah

Oil and Gas Equipment Manufacturer

Sina Ghabezah



Sina Ghabezah

Oil and Gas Equipment Manufacturer

Content



COMPANY PROFILE



JUNCTION BOX

MARK series

Supreme series

EJB series

LJB series



Distribution, Control & Lighting System

Ex Distribution System

Signal Lamp

Pushbutton

Mushroom- head

pushbutton

Key-operated switch

Window- Rotary Actuator-

Cable Bushing



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CABLE GLAND

TYPE 453 Flameproof

TYPE 421 Flameproof

TYPE VBL453 Flameproof

TYPE 121 Industrial

TYPE 153 Industrial

TYPE VBL153 Industrial

TYPE 1221 Industrial (PG Version)

TYPE 1221 Industrial (Metric Version)



TECHNICAL DATA

Gland's Technical Data



GLAND ACCESSORIES



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Content



LIGHTING

FLB Fluorescent Series

FLC Fluorescent Series

Hand Lamp

Sign Series

Aircraft Series



LOCAL CONTROL STATIONS

LCS Series

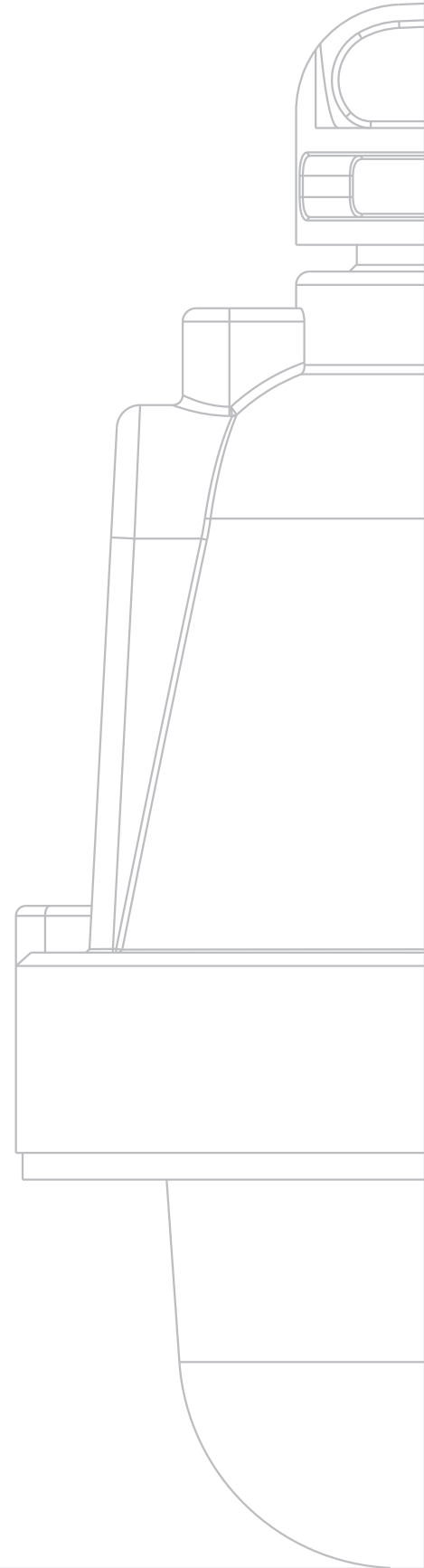
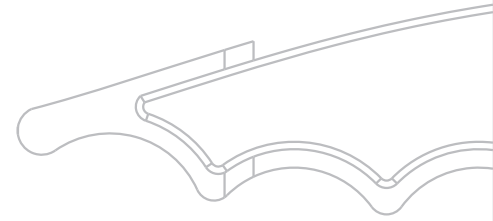
Ex Aircraft Warning Control Box

LTB Series



PHOTOCELL

Photocell





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PILLAR TERMINAL BLOCK



ALUMINUM CONDUIT



SOCKET & PLUGS



TECHNICAL INFORMATION



Sina Ghabezah

Oil and Gas Equipment Manufacturer

Sina Ghabezah

is a new and dynamic company specializing in manufacturing of explosion protected products for oil, gas, petrochemical and mining industry.

Although we are a newborn firm in Turkey, but we are enjoying more than 20 years of experience in design and manufacturing of Ex equipment outside Istanbul, Turkey in Middle east Region.

The Istanbul, Turkey based company activities are based on EN ISO 9001:2015 and ATEX Directive 2014/34/EU standards and all our products conform to the relevant national and international standards.



Sina Ghabezah

Special execution

We are also specialized in designing and manufacturing special assemblies in explosion-proof execution according to customers' specifications, such as panel boards for the control and signal of lighting systems, obstruction lighting fixtures...

Cable glands, electrical fittings and conduits for electrical systems.

SEMC designs and manufactures a wide range of cable glands, in various materials in Ex-d, Ex-e, execution and IP66 protection, together with fittings and connecting conduits both rigid and flexible, for the realization of complete piping electrical systems.

Push button and signaling units, switches, receptacles and plugs.

We offer a whole range of switches, control and signaling stations in Ex-d, Ex-e execution and Ip65 protection, for any kind of industrial plant.

Junction boxes and pulling boxes.

The junction and pulling boxes are manufactured in various materials, in Ex-d, Ex-e, Ex-l execution and IP66 protection. They are suitable for all industrial plants at risk of explosion and are to hold switching terminals, switches, control and signaling push buttons to form panel boards in Ex-d, Ex-de execution.

Obstacle and lighting fixtures.

We design a wide range of lighting fixtures and reflectors in Ex d, Ex-de, Ex-n execution, IP65 protection, which are manufactured using both aluminum alloy and polyester resin reinforced with glass fiber (GRP). We thus offer to the worldwide market a large range of products for many different plants, where incandescent, discharge or fluorescent lamps, xenon and led obstruction signaling stations can be employed.





JUNCTION BOX

MARK SERIES



Sina Ghabezah

Oil and Gas Equipment Manufacturer





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JUNCTION BOX MARK SERIES



JUNCTION BOX

Increased Safety MARK SERIES

MARK I

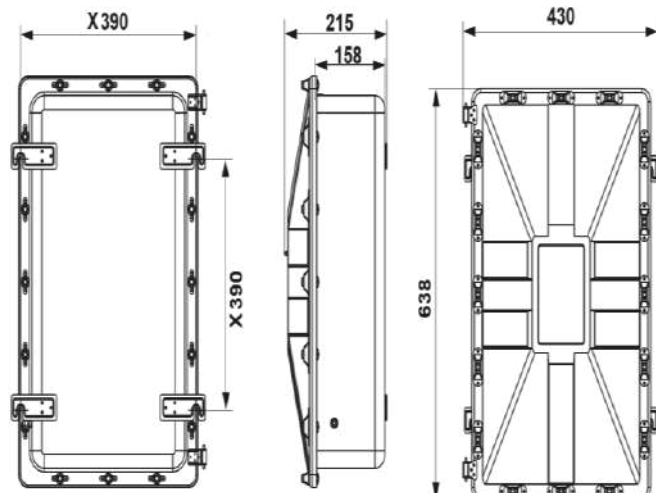
Zone 1,2 ,21,22



SPECIFICATION	
TYPE	MARK I
Application	As terminal or marshaling enclosure
Protection	Ex e II T6/T5 Gb- Ex ia IIC T6/T5 Gb- Ex t IIIC T80°C/T 95°C Db
Marking(ATEX)	⊕ II 2 GD
Certificate No.	TÜV 11 ATEX 7155X- IECEx TUR 11.0021X
Standards	IEC60079-0, IEC60079-7, IEC60079-11 , IEC60079-31
Material	A) Stainless steel. B) Mild steel.
Finish	A) Stainless steel may be coated or painted to suit customer application. B) Mild steel to be coated or painted by the manufacturer or the customer.
Ingress Protection	IP 66,67,68 to IEC 60529
Temperature Class	T6 and T5
Ambient Temperature	-40°C to +65°C
Lid Fixing	16 x M8 stainless steel screws.
Earthing	M10 or M8 Internal / External stainless steel Earth Stud.
Enclosure Mounting	4 slotted Fixing Brackets for M10 screws.
Drain plug	As an option

SIDE CABLE ENTRY SELECTION									
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	
ACROSS FLATS	25	30	36	46	55	65	80	95	
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.6	
MAX.NO. OF ENTRIES	L	58	35	29	16	9	6	5	4
	R	58	35	29	16	9	6	5	4
	T	30	18	14	8	5	3	2	2
	B	30	18	14	8	5	3	2	2

Dimensions (mm)		
	INTERNAL	EXTERNAL
LENGTH	574+5	638+5
WIDTH	336+5	430+5
HEIGHT	158+5	215+5
FIXING BRACKETS	-	390x390+ 1





JUNCTION BOX

Increased Safety **MARK SERIES**
MARK I
 Zone 1,2 ,21,22

MARK I TERMINALS DATA (CONTINUED)						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
WDU 2.5 / 1.5 / ZR	0.13	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
WDU 2.5	0.13	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
WDU 2.5N	0.13	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
WDU 4	0.13	6	69	138	2	VERTICAL
			41	164	4	HORIZONTAL
WDU 6	0.5	10	53	106	2	VERTICAL
			32	128	4	HORIZONTAL
WDU 10	1.31	16	42	84	2	VERTICAL
			25	100	4	HORIZONTAL
WDU 16	1.5	25	35	70	2	VERTICAL
			21	84	4	HORIZONTAL
WDU 35	2.5	50	26	52	2	VERTICAL
			15	60	4	HORIZONTAL
WDU 50N	5.26	70	22	22	1	VERTICAL
			13	26	2	HORIZONTAL
WDU 70/95	16	120	16	16	1	VERTICAL
			9	18	2	HORIZONTAL
WDU 120/150	35	150	13	13	1	VERTICAL
			7	7	1	HORIZONTAL
WDU 240	70	240	11	11	1	VERTICAL
			7	7	1	HORIZONTAL
WDK 2.5 *	0.13	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
WFF35*	2.5	50	15	30	2	VERTICAL
			9	36	4	HORIZONTAL
WFF70	2.5	95	13	13	1	VERTICAL
			7	14	2	HORIZONTAL
WFF120	6	150	10	10	1	VERTICAL
			6	6	1	HORIZONTAL
WFF185	10	240	7	7	1	VERTICAL
			4	4	1	HORIZONTAL
WFF300	25	300	7	7	1	VERTICAL
			4	4	1	HORIZONTAL
SAK 2.5*	0.5	4	70	140	2	VERTICAL
			42	168	4	HORIZONTAL

JUNCTION BOX

Increased Safety

MARK SERIES

MARK I

Zone 1,2 ,21,22



MARK I TERMINALS DATA (CONTINUED)

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
SAK 4	0.5	6	65	130	2	VERTICAL
			39	156	4	HORIZONTAL
SAK 6N	0.5	10	53	106	2	VERTICAL
			31	124	4	HORIZONTAL
SAK 10	1.5	16	42	84	2	VERTICAL
			25	100	4	HORIZONTAL
SAK 16	2.5	16	35	70	2	VERTICAL
			21	84	4	HORIZONTAL
SAK 35	6	50	23	46	2	VERTICAL
			14	56	4	HORIZONTAL
ZDU 2.5*	0.08	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
ZDU 2.5/3AN	0.08	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
ZDU2.5/4AN	0.08	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
ZDU2.5/2X2AN	0.08	4	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
ZDU 4	0.21	6	70	140	2	VERTICAL
			42	168	4	HORIZONTAL
ZDU 6	0.21	6	53	106	2	VERTICAL
			31	124	4	HORIZONTAL
ZDK2.5/1.5*	0.08	2.5	83	166	2	VERTICAL
			50	200	4	HORIZONTAL
UK 1.5N**	0.14	0.7	101	202	2	VERTICAL
			60	240	4	HORIZONTAL
UK 2.5 N	0.2	2.5	81	162	2	VERTICAL
			49	196	4	HORIZONTAL
UK 3N	0.2	2.5	81	162	2	VERTICAL
			49	196	4	HORIZONTAL
UK 5N	0.2	4	68	136	2	VERTICAL
			41	167	4	HORIZONTAL
UK 6N	0.2	6	51	102	2	VERTICAL
			31	124	4	HORIZONTAL
UK 10N	0.5	10	41	82	2	VERTICAL
			25	100	4	HORIZONTAL
UK 16N	0.75	16	34	68	2	VERTICAL
			20	80	4	HORIZONTAL
UK 35	0.75	35	27	54	2	VERTICAL
			16	64	4	HORIZONTAL

JUNCTION BOX

Increased Safety **MARK SERIES**
MARK I
 Zone 1,2 ,21,22



MARK I TERMINALS DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
UKH 50	10	50	21	21	1	VERTICAL
			12	24	2	HORIZONTAL
UKH 95	16	95	17	17	1	VERTICAL
			10	20	2	HORIZONTAL
UKH 150	25	150	13	13	1	VERTICAL
			8	8	1	HORIZONTAL
RTP 2.5***	0.5	4	70	140	2	VERTICAL
			42	168	4	HORIZONTAL
RTP 4	0.5	4	66	132	2	VERTICAL
			39	156	4	HORIZONTAL
RTP 6	0.5	10	53	106	2	VERTICAL
			31	124	4	HORIZONTAL
RTP 10	0.5	16	42	84	2	VERTICAL
			25	100	4	HORIZONTAL
RTP 16	0.5	16	34	68	2	VERTICAL
			20	80	4	HORIZONTAL
RTP 25	0.5	25	31	62	2	VERTICAL
			18	72	4	HORIZONTAL
RTP 35	1.5	35	65	130	2	VERTICAL
			39	156	4	HORIZONTAL
RTP 50	10	50	21	21	1	VERTICAL
			12	24	2	HORIZONTAL
RTP 95	6	95	9	18	2	VERTICAL
			18	18	1	HORIZONTAL

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

- 1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE CALL THE "S.G. "REPRESENTATIVE.
- 2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.
- 3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN LINKED AND UNLINKED TERMINALS.
- 4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.
- 5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE REQUIRED.



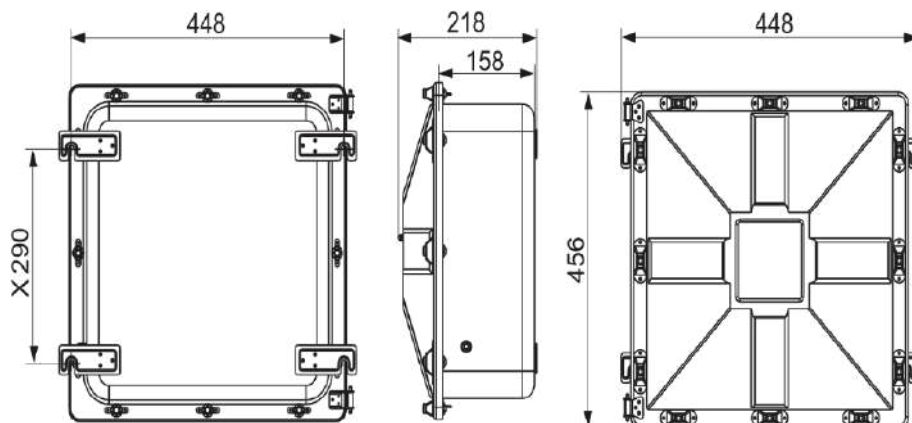
JUNCTION BOX

MARK SERIES Increased Safety
MARK II
 Zone 1,2,21,22

SPECIFICATION	
TYPE	MARK II
Application	As terminal or marshaling enclosure
Protection	Ex e II T6/T5 Gb- Ex ia IIC T6/T5 Gb- Ex t IIIC T80°C/T 95°C Db
Marking(ATEX)	Ⓔ II 2 GD
Certificate No.	TÜV 11 ATEX 7155X- IECEX TUR 11.0021X
Standards	IEC60079-0, IEC60079-7, IEC60079-11, IEC60079-31
Material	A) Stainless steel. B) Mild steel.
Finish	A) Stainless steel may be coated or painted to suit customer application. B) Mild steel to be coated or painted by the manufacturer or the customer.
Ingress Protection	IP 66,67,68 to IEC 60529
Temperature Class	T6 and T5
Ambient Temperature	-40°C to +65°C
Lid Fixing	12 x M8 stainless steel screws.
Earthing	M10 or M8 Internal / External stainless steel Earth Stud.
Enclosure Mounting	4 slotted Fixing Brackets for M10 screws.

SIDE CABLE ENTRY SELECTION									
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	
ACROSS FLATS	25	30	36	46	55	65	80	95	
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.6	
MAX.NO. OF ENTRIES	L	34	24	17	10	7	4	3	2
	R	34	24	17	10	7	4	3	2
	T	34	24	17	10	7	4	3	2
	B	34	24	17	10	7	4	3	2

Dimensions (mm)		
	INTERNAL	EXTERNAL
LENGTH	394 ₊₅	488 ₊₅
WIDTH	394 ₊₅	456 ₊₅
HEIGHT	158 ₊₅	218 ₊₅
FIXING BRACKETS	-	488 x 290 ₊₁



JUNCTION BOX

MARK SERIES Increased Safety
MARK II
 Zone 1,2,21,22



MARK II TERMINALS DATA (CONTINUED)						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	50	100	2	V
			50	100	2	H
WDU 2.5 / 1.5 / ZR	0.13	4	50	100	2	V
			50	100	2	H
WDU 2.5	0.13	4	50	100	2	V
			50	100	2	H
WDU 2.5N	0.13	4	50	100	2	V
			50	100	2	H
WDU 4	0.13	6	41	82	2	V
			41	82	2	H
WDU 6	0.5	10	32	64	2	V
			32	64	2	H
WDU 10	1.31	16	25	50	2	V
			25	50	2	H
WDU 16	1.5	25	21	42	2	V
			21	42	2	H
WDU 35	2.5	50	15	30	2	V
			15	30	2	H
WDU 50N	5.26	70	13	13	1	V
			13	13	1	H
WDU 70/95	16	120	9	9	1	V
			9	9	1	H
WDU 120/150	35	150	7	7	1	V
			7	7	1	H
WDU 240	70	240	7	7	1	V
			7	7	1	H
WDK 2.5 *	0.13	4	50	100	2	V
			50	100	2	H
WFF35*	2.5	50	9	18	2	V
			9	18	2	H
WFF70	2.5	95	7	7	1	V
			7	7	1	H
WFF120	6	150	6	6	1	V
			6	6	1	H
WFF185	10	240	4	4	1	V
			4	4	1	H
WFF300	25	300	4	4	1	V
			4	4	1	H
SAK 2.5*	0.5	4	42	84	2	V
			43	84	2	H



JUNCTION BOX

MARK SERIES Increased Safety
MARK II
 Zone 1,2,21,22

MARK II TERMINALS DATA (CONTINUED)						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
SAK 4	0.5	6	39	78	2	V
			39	78	2	H
SAK 6N	0.5	10	31	62	2	V
			31	62	2	H
SAK 10	1.5	16	25	50	2	V
			25	50	2	H
SAK 16	2.5	16	21	42	2	V
			21	42	2	H
SAK 35	6	50	14	28	2	V
			14	28	2	H
ZDU 2.5*	0.08	4	50	100	2	V
			50	100	2	H
ZDU 2.5/3AN	0.08	4	50	100	2	V
			50	100	2	H
ZDU2.5/4AN	0.08	4	50	100	2	V
			50	100	2	H
ZDU2.5/2X2AN	0.08	4	50	100	2	V
			50	100	2	H
ZDU 4	0.21	6	42	84	2	V
			42	84	2	H
ZDU 6	0.21	6	31	62	2	V
			31	62	2	H
ZDK 2.5/1.5*	0.08	2.5	50	100	2	V
			50	100	2	H
UK 1.5N**	0.08	2.5	60	120	2	V
			60	120	2	H
UK 2.5N	0.14	0,7	46	98	2	V
			46	98	2	H
UK 3N	0.2	2.5	49	98	2	V
			49	98	2	H
UK 5N	0.2	4	41	82	2	V
			41	80	2	H
UK 6N	0.2	6	31	62	2	V
			31	62	2	H
UK10N	0.5	10	25	50	2	V
			25	50	2	H
UK16N	0.75	16	20	40	2	V
			20	40	2	H
UK35	0.75	35	16	32	2	V
			16	32	2	H
UKH50	10	50	12	12	1	V
			12	12	1	H

JUNCTION BOX

MARK SERIES Increased Safety
MARK II
 Zone 1,2,21,22



MARK II TERMINALS DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
UKH 95	16	95	10	10	1	V
			10	10	1	H
UKH 150	25	150	8	8	1	V
			8	8	1	H
RTP 2.5 ***	0.5	4	42	84	2	V
			42	84	2	H
RTP 4	0.5	4	39	78	2	V
			39	78	2	H
RTP 6	0.5	10	31	62	2	V
			31	62	2	H
RTP 10	0.5	16	25	50	2	V
			25	50	2	H
RTP 16	0.5	16	20	40	2	V
			20	40	2	H
RTP 25	0.5	25	18	36	2	V
			18	36	2	H
RTP 35	0.5	35	39	78	2	V
			39	78	2	H
RTP 50	10	50	12	12	1	V
			12	12	1	H
RTP 95	6	95	9	9	1	V
			9	9	1	H

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE REQUIRED.



JUNCTION BOX

MARK SERIES Increased Safety

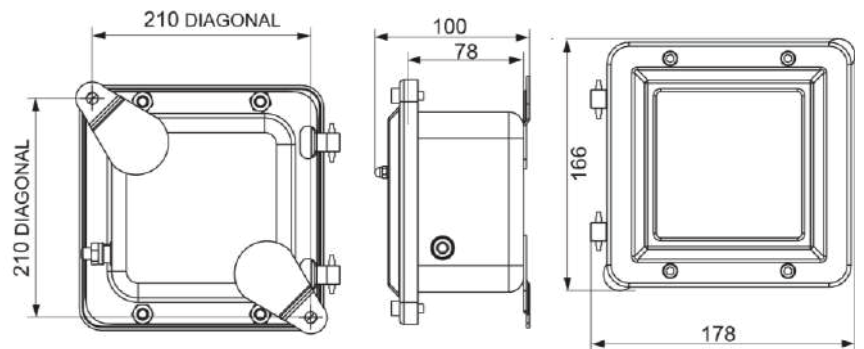
MARK III

Zone 1,2,21,22

SPECIFICATION	
TYPE	MARK III
Application	As terminal or marshaling enclosure
Protection	Ex e II T6/T5 Gb- Ex ia IIC T6/T5 Gb- Ex t IIIC T80°C/T 95°C Db
Marking(ATEX)	⊕ II 2 GD
Certificate No.	TÜV 11 ATEX 7155X- IECEx TUR 11.0021X
Standards	IEC60079-0, IEC60079-7, IEC60079-11, IEC60079-31
Material	A) Stainless steel. B) Mild steel.
Finish	A) Stainless steel may be coated or painted to suit customer application. B) Mild steel to be coated or painted by the manufacturer or the customer.
Ingress Protection	IP 66,67,68 to IEC 60529
Temperature Class	T6 and T5
Ambient Temperature	-40°C to +65°C
Lid Fixing	4 x M6 stainless steel screws.
Earthing	M8 Internal / External stainless steel Earth Stud.
Enclosure Mounting	2 Hole Fixing Brackets for M6 screws.
DRAIN PLUG	As an option

SIDE CABLE ENTRY SELECTION									
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	
ACROSS FLATS	25	30	36	46	55	65	80	95	
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.6	
MAX.NO. OF ENTRIES	L	4	2	2	1	1	-	-	-
	R	4	2	2	1	1	-	-	-
	T	4	2	2	1	1	-	-	-
	B	4	2	2	1	1	-	-	-

Dimensions (mm)		
	INTERNAL	EXTERNAL
LENGTH	118 ₊₅	178 ₊₅
WIDTH	118 ₊₅	166 ₊₅
HEIGHT	78 ₊₅	100 ₊₅
FIXING BRACKETS	-	210 DIAGONALS



JUNCTION BOX

MARK SERIES Increased Safety
MARK III
 Zone 1,2,21,22



MARK III TERMINALS DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	MIN		
WDU 1.5/ZZ*	0.13	2.5	17	17	1	DIAGONAL
WDU 2.5 / 1.5 / ZR	0.13	4	17	17	1	DIAGONAL
WDU 2.5	0.13	4	17	17	1	DIAGONAL
WDU 2.5N	0.13	4	17	17	1	DIAGONAL
WDU 4	0.13	6	14	14	1	DIAGONAL
WDU 6	0.5	10	11	11	1	DIAGONAL
WDU 10	1.31	16	8	8	1	DIAGONAL
WDK 2.5 *	0.13	4	17	17	1	DIAGONAL
SAK 2.5*	0.5	4	14	14	1	DIAGONAL
SKK 4	0.5	6	13	13	1	DIAGONAL
SAK 6N	0.5	10	11	11	1	DIAGONAL
SAK 10	1.5	16	8	8	1	DIAGONAL
ZDU 2.5*	0.08	4	17	17	1	DIAGONAL
ZDU 2.5/3AN	0.08	4	17	17	1	DIAGONAL
ZDU2.5/4AN	0.08	4	17	17	1	DIAGONAL
ZDU2.5/2X2AN	0.08	4	17	17	1	DIAGONAL
ZDU 4	0.21	6	14	14	1	DIAGONAL
ZDU 6	0.21	6	11	11	1	DIAGONAL
ZDK2.5/1.5*	0.08	2.5	17	17	1	DIAGONAL
UK 1.5N**	0.14	0.7	20	20	1	DIAGONAL
UK 2.5 N	0.2	2.5	16	16	1	DIAGONAL
UK 3N	0.2	2.5	16	16	1	DIAGONAL
UK 5N	0.2	4	14	14	1	DIAGONAL
UK 6N	0.2	6	10	10	1	DIAGONAL
UK 10N	0.5	10	8	8	1	DIAGONAL
RTP 2.5***	0.5	4	14	14	1	DIAGONAL
RTP 4	0.5	4	13	13	1	DIAGONAL
RTP 6	0.5	10	11	11	1	DIAGONAL
RTP 10	0.5	16	8	8	1	DIAGONAL



JUNCTION BOX

MARK SERIES Increased Safety
MARK III
Zone 1,2,21,22

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE REQUIRED.

JUNCTION BOX

MARK SERIES

MARK IV Increased Safety

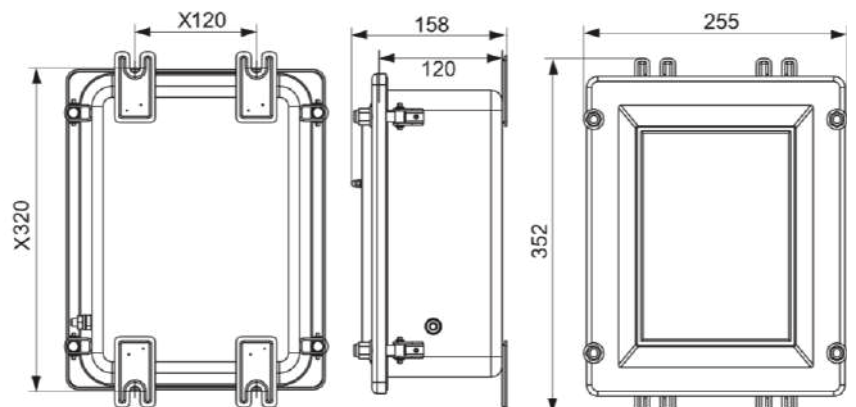
Zone 1,2,21,22



SPECIFICATION	
TYPE	MARK IV
Application	As terminal or marshaling enclosure
Protection	Ex e II T6/T5 Gb- Ex ia IIC T6/T5 Gb- Ex t IIIC T80°C/T 95°C Db
Marking(ATEX)	Ex II 2 GD
Certificate No.	TÜV 11 ATEX 7155X- IECEx TUR 11.0021X
Standards	IEC60079-0, IEC60079-7, IEC60079-11, IEC60079-31
Material	A) Stainless steel. B) Mild steel.
Finish	A) Stainless steel may be coated or painted to suit customer application. B) Mild steel to be coated or painted by the manufacturer or the customer.
Ingress Protection	IP 66,67,68 to IEC 60529
Temperature Class	T6 and T5
Ambient Temperature	-40°C to +65°C
Lid Fixing	4 x M8 stainless steel screws.
Earthing	M8 Internal / External stainless steel Earth Stud.
Enclosure Mounting	4 slotted Fixing Brackets for M10 screws.
DRAIN PLUG	As an option

SIDE CABLE ENTRY SELECTION									
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	
ACROSS FLATS	25	30	36	46	55	65	80	95	
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.6	
MAX.NO. OF ENTRIES	L	18	11	9	4	3	2	2	-
	R	18	11	9	4	3	2	2	-
	T	15	11	6	4	2	2	1	-
	B	15	11	6	4	2	2	1	-

Dimensions (mm)		
	INTERNAL	EXTERNAL
LENGTH	280.5±5	352±5
WIDTH	202±5	255±5
HEIGHT	118.5±5	158±5
FIXING BRACKETS	-	320x120±1





JUNCTION BOX

MARK SERIES

MARK IV Increased Safety

Zone 1,2,21,22

MARK IV TERMINALS DATA (CONTINUED)

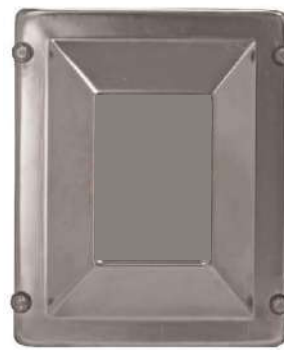
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	40	40	1	V
			24	48	2	H
WDU 2.5 / 1.5 / ZR	0.13	4	40	40	1	V
			24	48	2	H
WDU 2.5	0.13	4	40	40	1	V
			24	48	2	H
WDU 2.5N	0.13	4	40	40	1	V
			24	48	2	H
WDU 4	0.13	6	33	33	1	V
			20	40	2	H
WDU 6	0.5	10	25	25	1	V
			15	30	2	H
WDU 10	1.31	16	20	20	1	V
			12	24	2	H
WDU 16	1.5	25	17	17	1	V
			10	10	1	H
WDU 35	2.5	50	12	12	1	V
			7	7	1	H
WDU 50N	5.26	70	11	11	1	V
			6	6	1	H
WDU 70/95	16	120	7	7	1	V
			4	4	1	H
WDK 2.5 *	0.13	4	40	40	1	V
			24	48	2	H
WFF35*	2.5	50	7	7	1	V
			4	4	1	H
SAK 2.5*	0.5	4	34	34	1	V
			20	40	2	H
SAK 4	0.5	6	31	31	1	V
			19	38	2	H
SAK 6N	0.5	10	25	25	1	V
			15	30	2	H
SAK 10	1.5	16	20	20	1	V
			12	24	2	H
SAK 16	2.5	16	17	17	1	V
			10	10	1	H
SAK 35	6	50	11	11	1	V
			6	6	1	H

JUNCTION BOX

MARK SERIES

MARK IV Increased Safety

Zone 1,2,21,22



MARK IV TERMINALS DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
ZDU 2.5*	0.08	4	40	40	1	V
			24	48	2	H
ZDU 2.5/3AN	0.08	4	40	40	1	V
			24	48	2	H
ZDU2.5/4AN	0.08	4	40	40	1	V
			24	48	2	H
ZDU2.5/2X2AN	0.08	4	40	40	1	V
			24	48	2	H
ZDU 4	0.21	6	34	34	1	V
			20	40	2	H
ZDU 6	0.21	6	25	25	1	V
			15	30	2	H
ZDK2.5/1.5*	0.08	2.5	40	40	1	V
			24	48	2	H
UK 1.5N**	0.14	0.7	48	48	1	V
			29	58	2	H
UK 2.5 N	0.2	2.5	39	39	1	V
			24	48	2	H
UK 3N	0.2	2.5	39	39	1	V
			24	48	2	H
UK 5N	0.2	4	33	33	1	V
			20	40	2	H
UK 6N	0.2	6	25	25	1	V
			15	30	2	H
UK 10N	0.5	10	20	20	1	V
			12	24	2	H
UK 16N	0.75	16	16	16	1	V
			10	10	1	H
UK 35	0.75	35	13	13	1	V
			8	8	1	H
UKH 50	16	95	10	10	1	V
			6	6	1	H
RTP 2.5***	0.5	4	34	34	1	V
			20	40	2	H
RTP 4	0.5	4	32	32	1	V
			19	38	2	H
RTP 6	0.5	10	25	25	1	V
			15	30	2	H
RTP 10	0.5	16	20	20	1	V
			12	24	2	H
RTP 16	0.5	16	8	8	1	V
			8	8	1	H
RTP 25	0.5	25	15	15	1	V
			9	9	1	H
RTP 35	1.5	35	12	12	1	V
			7	7	1	H
RTP 50	10	50	10	10	1	V
			6	6	1	H



JUNCTION BOX

MARK SERIES

MARK IV Increased Safety

Zone 1,2,21,22

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

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*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

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2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE REQUIRED

JUNCTION BOX

MARK SERIES

Increased Safety MARK V

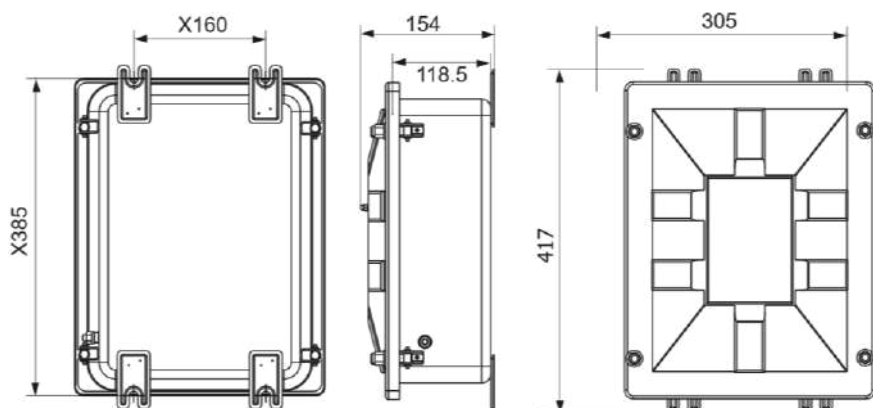
Zone 1,2,21,22



SPECIFICATION	
TYPE	MARK V
Application	As terminal or marshaling enclosure
Protection	Ex e II T6/T5 Gb- Ex ia IIC T6/T5 Gb- Ex t IIIC T80°C/T 95°C Db
Marking(ATEX)	⊕II 2 GD
Certificate No.	TÜV 11 ATEX 7155X- IECEx TUR 11.0021X
Standards	IEC60079-0, IEC60079-7, IEC60079-11, IEC60079-31
Material	A) Stainless steel. B) Mild steel.
Finish	A) Stainless steel may be coated or painted to suit customer application. B) Mild steel to be coated or painted by the manufacturer or the customer.
Ingress Protection	IP 66,67,68 to IEC 60529
Temperature Class	T6 and T5
Ambient Temperature	-40°C to +65°C
Lid Fixing	4 x M8 stainless steel screws.
Earthing	M8 Internal / External stainless steel Earth Stud.
Enclosure Mounting	4 slotted Fixing Brackets for M10 screws.
DRAIN PLUG	As an option

SIDE CABLE ENTRY SELECTION									
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	
ACROSS FLATS	25	30	36	46	55	65	80	95	
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.6	
MAX.NO. OF ENTRIES	L	25	15	11	7	4	3	2	-
	R	25	15	11	7	4	3	2	-
	T	17	11	8	4	3	2	2	-
	B	17	11	8	4	3	2	2	-

Dimensions (mm)		
	INTERNAL	EXTERNAL
LENGTH	342±5	417±5
WIDTH	242±5	305±5
HEIGHT	118.5±5	154±5
FIXING BRACKETS	-	385x160±1





JUNCTION BOX

MARK SERIES

Increased Safety **MARK V**

Zone 1,2,21,22

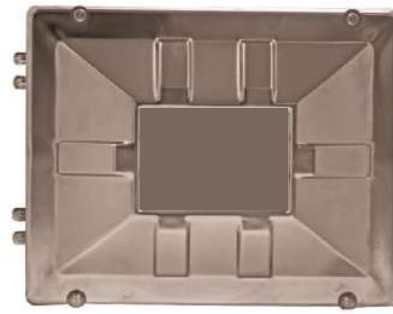
MARK V TERMINALS DATA (CONTINUED)

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	50	50	1	V
			34	68	2	H
WDU 2.5 / 1.5 / ZR	0.13	4	50	50	1	V
			34	68	2	H
WDU 2.5	0.13	4	50	50	1	V
			34	68	2	H
WDU 2.5N	0.13	4	50	50	1	V
			34	68	2	H
WDU 4	0.13	6	41	41	1	V
			28	56	2	H
WDU 6	0.5	10	32	32	1	V
			22	44	2	H
WDU 10	1.31	16	25	25	1	V
			17	34	2	H
WDU 16	1.5	25	21	21	1	V
			14	28	2	H
WDU 35	2.5	50	15	15	1	V
			10	10	1	H
WDU 50N	5.26	70	19	13	1	V
			9	9	1	H
WDU 70/95	16	120	9	9	1	V
			6	6	1	H
WDK 2.5 *	0.13	4	50	50	1	V
			34	68	2	H
WFF35*	2.5	50	9	9	1	V
			6	6	1	H
WFF70	2.5	95	7	7	1	V
			5	5	1	H
SAK 2.5*	0.5	4	42	42	1	V
			29	58	2	H
SAK 4	0.5	6	39	39	1	V
			26	52	2	H
SAK 6N	0.5	10	31	31	1	V
			21	42	2	H
SAK 10	1.5	16	25	25	1	V
			17	34	2	H
SAK 16	2.5	16	21	21	1	V
			14	28	2	H
SAK 35	6	50	14	14	1	V
			9	9	1	H

JUNCTION BOX MARK SERIES

Increased Safety MARK V

Zone 1,2,21,22



MARK V TERMINALS DATA (CONTINUED)						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
ZDU 2.5*	0.08	4	50	50	1	V
			34	68	2	H
ZDU 2.5/3AN	0.08	4	50	50	1	V
			34	68	2	H
ZDU2.5/4AN	0.08	4	50	50	1	V
			34	68	2	H
ZDU2.5/2X2AN	0.08	4	50	50	1	V
			34	68	2	H
ZDU 4	0.21	6	42	42	1	V
			29	58	2	H
ZDU 6	0.21	6	31	31	1	V
			21	42	2	H
ZDK2.5/1.5*	0.08	2.5	50	50	1	V
			34	68	2	H
UK 1.5N**	0.14	0.7	60	60	1	V
			41	82	2	H
UK 2.5 N	0.2	2.5	49	49	1	V
			33	66	2	H
UK 3N	0.2	2.5	49	49	1	V
			33	66	2	H
UK 5N	0.2	4	41	41	1	V
			28	56	2	H
UK 6N	0.2	6	31	31	1	V
			21	42	2	H
UK 10N	0.5	10	25	25	1	V
			17	34	2	H
UK 16N	0.75	16	20	20	1	V
			14	28	2	H
UK 35	0.75	35	16	16	1	V
			11	11	1	H
UKH 50	16	95	12	12	1	V
			8	8	1	H
RTP 2.5***	0.5	4	42	42	1	V
			29	58	2	H
RTP 4	0.5	4	39	39	1	V
			27	54	2	H
RTP 6	0.5	10	31	31	1	V
			21	42	2	H
RTP 10	0.5	16	25	25	1	V
			17	34	2	H



JUNCTION BOX MARK SERIES

Increased Safety **MARK V**

Zone 1,2,21,22

MARK V TERMINALS DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
RTP 16	0.5	16	20	20	1	V
			14	28	2	H
RTP 25	0.5	25	18	18	1	V
			12	12	1	H
RTP 35	1.5	35	15	15	1	V
			12	12	1	H
RTP 50	10	50	12	12	1	V
			8	8	1	H

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE REQUIRED

JUNCTION BOX

MARK SERIES

Increased Safety MARK VI

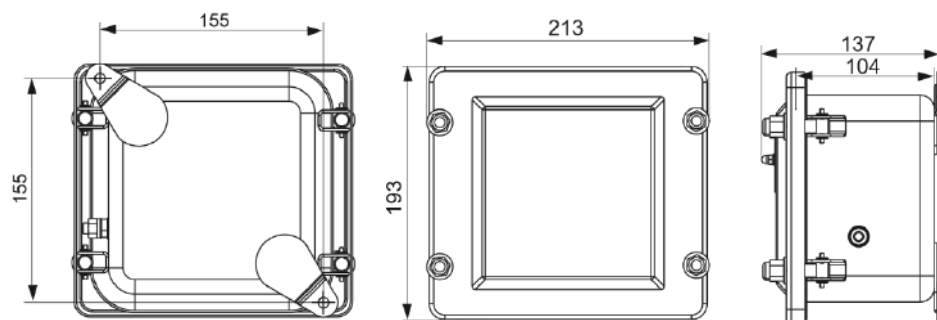
Zone 1,2,21,22



SPECIFICATION	
TYPE	MARK VI
Application	As terminal or marshaling enclosure
Protection	Ex e II T6/T5 Gb- Ex ia IIC T6/T5 Gb- Ex t IIIC T80°C/T 95°C Db
Marking(ATEX)	⊕ II 2 GD
Certificate No.	TÜV 11 ATEX 7155X- IECEx TUR 11.0021X
Standards	IEC60079-0, IEC60079-7, IEC60079-11, IEC60079-31
Material	A) Stainless steel. B) Mild steel.
Finish	A) Stainless steel may be coated or painted to suit customer application. B) Mild steel to be coated or painted by the manufacturer or the customer.
Ingress Protection	IP 66,67,68 to IEC 60529
Temperature Class	T6 and T5
Ambient Temperature	-40°C to +65°C
Lid Fixing	4 x M8 stainless steel screws.
Earthing	M8 Internal / External stainless steel Earth Stud.
Enclosure Mounting	2 Hole Fixing Brackets for M6 screws.
DRAIN PLUG	As an option

SIDE CABLE ENTRY SELECTION								
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)
ACROSS FLATS	25	30	36	46	55	65	80	95
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7
MAX.NO. OF ENTRIES	L	5	5	3	2	1	-	-
	R	5	5	3	2	1	-	-
	T	6	6	4	2	1	1	-
	B	6	6	4	2	1	1	-

Dimensions (mm)		
	INTERNAL	EXTERNAL
LENGTH	155±5	213±5
WIDTH	155±5	193±5
HEIGHT	104±5	137±5
FIXING BRACKETS	-	248.8 DIAGONAL





JUNCTION BOX

MARK SERIES

Increased Safety **MARK VI**

Zone 1,2,21,22

MARK VI TERMINALS DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	MIN		
WDU 1.5/ZZ*	0.13	2.5	26	26	1	DIAGONAL
WDU 2.5 / 1.5 / ZR	0.13	4	26	26	1	DIAGONAL
WDU 2.5	0.13	4	26	26	1	DIAGONAL
WDU 2.5N	0.13	4	26	26	1	DIAGONAL
WDU 4	0.13	6	22	22	1	DIAGONAL
WDU 6	0.5	10	17	17	1	DIAGONAL
WDU 10	1.31	16	13	13	1	DIAGONAL
WDK 2.5 *	0.13	4	17	17	1	DIAGONAL
SAK 2.5*	0.5	4	14	14	1	DIAGONAL
SKK 4	0.5	6	13	13	1	DIAGONAL
SAK 6N	0.5	10	11	11	1	DIAGONAL
SAK 10	1.5	16	13	13	1	DIAGONAL
SAK 16	2.5	16	11	11	1	DIAGONAL
ZDU 2.5*	0.08	4	26	26	1	DIAGONAL
ZDU 2.5/3AN	0.08	4	26	26	1	DIAGONAL
ZDU2.5/4AN	0.08	4	26	26	1	DIAGONAL
ZDU2.5/2X2AN	0.08	4	26	26	1	DIAGONAL
ZDU 4	0.21	6	22	22	1	DIAGONAL
ZDU 6	0.21	6	16	16	1	DIAGONAL
ZDK2.5/1.5*	0.08	2.5	26	26	1	DIAGONAL
UK 1.5N**	0.14	0.7	32	32	1	DIAGONAL
UK 2.5 N	0.2	2.5	25	25	1	DIAGONAL
UK 3N	0.2	2.5	25	25	1	DIAGONAL
UK 5N	0.2	4	21	21	1	DIAGONAL
UK 6N	0.2	6	16	16	1	DIAGONAL
UK 10N	0.5	10	13	13	1	DIAGONAL
UK 16N	0.75	16	11	11	1	DIAGONAL

JUNCTION BOX

MARK SERIES

Increased Safety MARK VI

Zone 1,2,21,22



MARK VI TERMINALS DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	MIN		
RTP 2.5***	0.5	4	22	22	1	DIAGONAL
RTP 4	0.5	4	21	21	1	DIAGONAL
RTP 6	0.5	10	16	16	1	DIAGONAL
RTP 10	0.5	16	13	13	1	DIAGONAL
RTP 16	0.5	16	10	10	1	DIAGONAL

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** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE REQUIRED



JUNCTION BOX

Supreme SERIES

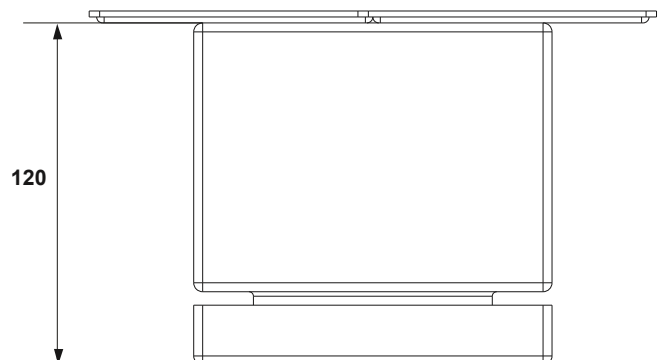
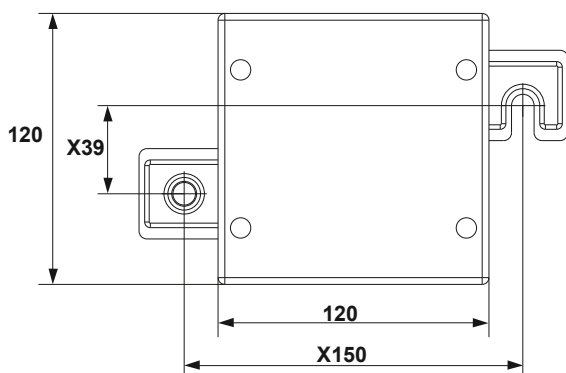
SPM 1

Zone 1,2,21,22

SPECIFICATION	
TYPE	SPM 1
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	Ⓔ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEX TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	4 x M6 stainless steel screws
Earthing	M6 & M8 & M10 Internal / External stainless steel stud
Enclosure Mounting	2 slotted fixing brackets for M8 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

CABLE ENTRY SELECTION				
THREAD SIZE	M20(0)		M20(A)	M25(B)
ACROSS FLATS	25		30	36
ACROSS CORNERS	27.5		36.4	41.6
Height	90	L/R	2	1
MAX.NO. OF ENTRIES		T/B	2	1

*Dimensions in mm



JUNCTION BOX

Supreme SERIES

SPM 1

Zone 1,2,21,22



SPM 1 TERMINAL CAPACITY DATA(Continued)						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	MIN		
WDU 1.5/ZZ*	0.13	2.5	8	8	1	VERTICAL
						HORIZONTAL
WDU 2.5 / 1.5 / ZR	0.13	4	8	8	1	VERTICAL
						HORIZONTAL
WDU 2.5	0.13	4	8	8	1	VERTICAL
						HORIZONTAL
WDU 2.5N	0.13	4	8	8	1	VERTICAL
						HORIZONTAL
WDU 4	0.13	6	6	6	1	VERTICAL
						HORIZONTAL
WDU 6	0.5	10	5	5	1	VERTICAL
						HORIZONTAL
WDU 10	1.31	16	4	4	1	VERTICAL
						HORIZONTAL
WDU 16	1.5	25	3	3	1	VERTICAL
						HORIZONTAL
WDU 50N	5.26	70			1	VERTICAL
						HORIZONTAL
WDK 2.5 *	0.13	4	8	8	1	VERTICAL
						HORIZONTAL
SAK 2.5*	0.5	4	7	7	1	VERTICAL
						HORIZONTAL
SAK 4	0.5	6	6	6	1	VERTICAL
						HORIZONTAL
SAK 6N	0.5	10	5	5	1	VERTICAL
						HORIZONTAL
SAK 10	1.5	16	4	4	1	VERTICAL
						HORIZONTAL
SAK 16	2.5	16	3	3	1	VERTICAL
						HORIZONTAL
ZDU 2.5*	0.08	4	8	8	1	VERTICAL
						HORIZONTAL
ZDU 2.5/3AN	0.08	4	8	8	1	VERTICAL
						HORIZONTAL
ZDU2.5/4AN	0.08	4	8	8	1	VERTICAL
						HORIZONTAL
ZDU2.5/2X2AN	0.08	4	8	8	1	VERTICAL
						HORIZONTAL
ZDU 4	0.21	6	7	7	1	VERTICAL
						HORIZONTAL
ZDU 6	0.21	6	5	5	1	VERTICAL
						HORIZONTAL



JUNCTION BOX

Supreme SERIES
SPM 1

Zone 1,2,21,22

SPM 1 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm2		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	MIN		
ZDK2.5/1.5*	0.08	2.5	8	8	1	VERTICAL
						HORIZONTAL
UK 1.5N**	0.14	0.7	10	10	1	VERTICAL
						HORIZONTAL
UK 2.5 N	0.2	2.5	8	8	1	VERTICAL
						HORIZONTAL
UK 3N	0.2	2.5	8	8	1	VERTICAL
						HORIZONTAL
UK 5N	0.2	4	6	6	1	VERTICAL
						HORIZONTAL
UK 6N	0.2	6	5	5	1	VERTICAL
						HORIZONTAL
UK 10N	0.5	10	4	4	1	VERTICAL
						HORIZONTAL
UK 16N	0.75	16	3	3	1	VERTICAL
						HORIZONTAL
RTP 2.5***	0.5	4	7	7	1	VERTICAL
						HORIZONTAL
RTP 4	0.5	4	6	6	1	VERTICAL
						HORIZONTAL
RTP 6	0.5	10	5	5	1	VERTICAL
						HORIZONTAL
RTP 10	0.5	16	4	4	1	VERTICAL
						HORIZONTAL
RTP 16	0.5	16	3	3	1	VERTICAL
						HORIZONTAL
WFF 35	2.5	50	6	6	1	VERTICAL
			2	2	1	HORIZONTAL

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE REQUIRED.

JUNCTION BOX

Supreme SERIES

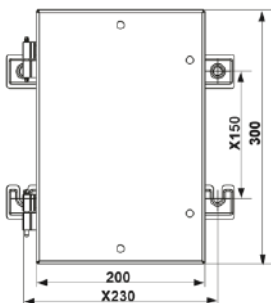
SPM 2

Zone 1,2,21,22



SPECIFICATION	
TYPE	SPM 2
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	Ⓔ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEX TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 4xM6 Stainless steel screws
Earthing	M10 Internal / External stainless steel stud
Enclosure Mounting	4 Sotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

CABLE ENTRY SELECTION										
THREAD SIZE		M20(0)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90
ACROSS FLATS		25	30	36	46	55	65	80	95	-
ACROSS CORNERS		27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7	-
Height	140	L / R	14(27)	6(14)	5(12)	4(5)	- (4)	- (3)	-(2)	- -
		T / B	8(18)	3(10)	3(8)	2(3)	- (2)	- (6)	-(1)	- (1)
Height	200	L / R	28(45)	18(28)	15(18)	8(10)	6(8)	3(2)	2(2)	2 -
		T / B	16(30)	9(16)	6(12)	4(6)	2(4)	1(4)	1(1)	1(2)



* Values in brackets are valid when no gland plate is installed.

** The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...

***Dimensions in mm.



JUNCTION BOX

Supreme SERIES

SPM 2

Zone 1,2,21,22

SPM 2 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
WDU 2.5 / 1.5 / ZR	0.13	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
WDU 2.5	0.13	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
WDU 2.5N	0.13	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
WDU 4	0.13	6	26	26	1	VERTICAL
			9	18	2	HORIZONTAL
WDU 6	0.5	10	20	20	1	VERTICAL
			7	14	2	HORIZONTAL
WDU 10	1.31	16	16	16	1	VERTICAL
			5	10	2	HORIZONTAL
WDU 16	1.5	25	13	13	1	VERTICAL
			4	8	2	HORIZONTAL
WDU 35	2.5	50	10	10	1	VERTICAL
			3	6	2	HORIZONTAL
WDU 50N	5.26	70	8	8	1	VERTICAL
			8	8	1	HORIZONTAL
WDU 70/95	16	120	6	6	1	VERTICAL
			6	6	1	HORIZONTAL
WDK 2.5 *	0.13	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
WFF35*	2.5	50	6	6	1	VERTICAL
			2	2	1	HORIZONTAL
SAK 2.5*	0.5	4	27	27	1	VERTICAL
			9	18	2	HORIZONTAL
SAK 4	0.5	6	24	24	1	VERTICAL
			8	16	2	HORIZONTAL
SAK 6N	0.5	10	20	20	1	VERTICAL
			7	14	2	HORIZONTAL
SAK 10	1.5	16	16	16	1	VERTICAL
			5	10	2	HORIZONTAL
SAK 16	2.5	16	13	13	1	VERTICAL
			4	8	2	HORIZONTAL
SAK 35	6	50	9	9	1	VERTICAL
			3	6	2	HORIZONTAL
ZDU 2.5*	0.08	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
ZDU 2.5/3AN	0.08	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL

JUNCTION BOX

Supreme SERIES

SPM 2

Zone 1,2,21,22



SPM 2 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
ZDU2.5/4AN	0.08	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
ZDU2.5/2X2AN	0.08	4	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
ZDU 4	0.21	6	27	27	1	VERTICAL
			9	18	2	HORIZONTAL
ZDU 6	0.21	6	20	20	1	VERTICAL
			7	14	2	HORIZONTAL
ZDK2.5/1.5*	0.08	2.5	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
UK 1.5N**	0.14	0.7	38	38	1	VERTICAL
			13	26	2	HORIZONTAL
UK 2.5 N	0.2	2.5	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
UK 3N	0.2	2.5	31	31	1	VERTICAL
			11	22	2	HORIZONTAL
UK 5N	0.2	4	26	26	1	VERTICAL
			9	18	2	HORIZONTAL
UK 6N	0.2	6	19	19	1	VERTICAL
			7	14	2	HORIZONTAL
UK 10N	0.5	10	15	15	1	VERTICAL
			5	10	2	HORIZONTAL
UK 16N	0.75	16	13	13	1	VERTICAL
			4	8	2	HORIZONTAL
UK 35	0.75	35	10	10	1	VERTICAL
			3	6	2	HORIZONTAL
RTP 2.5***	0.5	4	27	27	1	VERTICAL
			9	18	2	HORIZONTAL
RTP 4	0.5	4	25	25	1	VERTICAL
			9	18	2	HORIZONTAL
RTP 6	0.5	10	20	20	1	VERTICAL
			7	14	2	HORIZONTAL
RTP 10	0.5	16	16	16	1	VERTICAL
			5	10	2	HORIZONTAL
RTP 16	0.5	16	12	12	1	VERTICAL
			4	8	2	HORIZONTAL
RTP 25	0.5	25	11	11	1	VERTICAL
			4	8	2	HORIZONTAL
RTP 35	1.5	35	24	24	1	VERTICAL
			8	16	2	HORIZONTAL
RTP 95	6	95	6	6	1	VERTICAL
			6	6	1	HORIZONTAL
WFF 70	2.5	95	5	5	1	VERTICAL
			5	5	1	HORIZONTAL



JUNCTION BOX

Supreme SERIES

SPM 2

Zone 1,2,21,22

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

* * UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE

ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE

CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN

LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF

ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE

REQUIRED.

JUNCTION BOX

Supreme SERIES

SPM 3

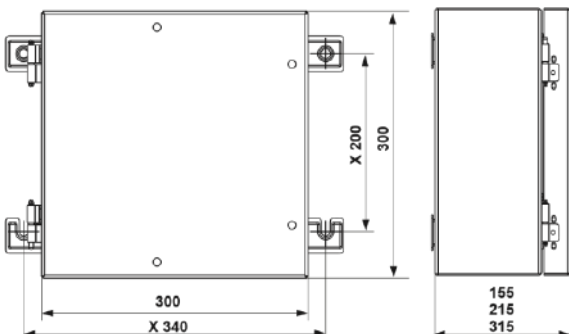
Zone 1,2,21,22



SPECIFICATION	
TYPE	SPM 3
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	Ex II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEx TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 4xM6 Stainless steel screws
Earthing	M10 Internal / External stainless steel stud
Enclosure Mounting	4 Slotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

SIDE CABLE ENTRY SELECTION

THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90	M100	M110
ACROSS FLATS	25	30	36	46	55	65	80	95	-	-	-
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7	-	-	-
Height	L / R	13 (27)	6 (14)	5 (12)	4 (5)	- (4)	- (3)	- (2)	- (-)	- (-)	- (-)
MAX.NO. OF ENTRIES	140	T / B	13 (27)	6 (14)	5 (12)	4 (5)	- (4)	- (3)	- (2)	- (-)	- (-)
Height	L / R	21 (45)	18 (28)	10 (18)	10 (10)	5 (8)	4 (6)	3 (2)	2 (2)	- (1)	- (1)
MAX.NO. OF ENTRIES	200	T / B	21 (45)	18 (28)	10 (18)	8 (10)	5 (8)	3 (6)	2 (2)	2 (2)	- (1)
Height	L / R	49 (72)	36 (42)	24 (30)	15 (20)	9 (12)	6 (9)	4 (5)	3 (4)	2 (1)	1 (1)
MAX.NO. OF ENTRIES	300	T / B	48 (72)	30 (42)	20 (30)	15 (20)	9 (12)	6 (9)	4 (5)	2 (4)	1 (1)



*Values in brackets are valid when no gland plate is installed.

• ** The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...

• ***Dimensions in mm.



JUNCTION BOX

Supreme SERIES

SPM 3

Zone 1,2,21,22

SPM 3 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	31	62	2	VERTICAL HORIZONTAL
WDU 2.5 / 1.5 / ZR	0.13	4	31	62	2	VERTICAL HORIZONTAL
WDU 2.5	0.13	4	31	62	2	VERTICAL HORIZONTAL
WDU 2.5N	0.13	4	31	62	2	VERTICAL HORIZONTAL
WDU 4	0.13	6	26	52	2	VERTICAL HORIZONTAL
WDU 6	0.5	10	20	40	2	VERTICAL HORIZONTAL
WDU 10	1.31	16	16	32	2	VERTICAL HORIZONTAL
WDU 16	1.5	25	13	26	2	VERTICAL HORIZONTAL
WDU 35	2.5	50	10	20	2	VERTICAL HORIZONTAL
WDU 50N	5.26	70	8	8	1	VERTICAL HORIZONTAL
WDU 70/95	16	120	6	6	1	VERTICAL HORIZONTAL
WDK 2.5 *	0.13	4	31	62	2	VERTICAL HORIZONTAL
WFF35*	2.5	50	6	12	2	VERTICAL HORIZONTAL
WFF 70	2.5	95	5	5	1	VERTICAL HORIZONTAL
SAK 2.5*	0.5	4	27	54	2	VERTICAL HORIZONTAL
SAK 4	0.5	6	24	48	2	VERTICAL HORIZONTAL
SAK 6N	0.5	10	20	40	2	VERTICAL HORIZONTAL
SAK 10	1.5	16	16	32	2	VERTICAL HORIZONTAL
SAK 16	2.5	16	13	26	2	VERTICAL HORIZONTAL
SAK 35	6	50	9	18	2	VERTICAL HORIZONTAL
ZDU 2.5*	0.08	4	31	62	2	VERTICAL HORIZONTAL

JUNCTION BOX

Supreme SERIES

SPM 3

Zone 1,2,21,22



SPM 3 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
ZDU 2.5/3AN	0.08	4	31	62	2	VERTICAL HORIZONTAL
ZDU2.5/4AN	0.08	4	31	62	2	VERTICAL HORIZONTAL
ZDU2.5/2X2AN	0.08	4	31	62	2	VERTICAL HORIZONTAL
ZDU 4	0.21	6	27	54	2	VERTICAL HORIZONTAL
ZDU 6	0.21	6	20	40	2	VERTICAL HORIZONTAL
ZDK2.5/1.5*	0.08	2.5	31	62	2	VERTICAL HORIZONTAL
UK 1.5N**	0.14	0.7	38	76	2	VERTICAL HORIZONTAL
UK 2.5 N	0.2	2.5	31	62	2	VERTICAL HORIZONTAL
UK 3N	0.2	2.5	31	62	2	VERTICAL HORIZONTAL
UK 5N	0.2	4	26	52	2	VERTICAL HORIZONTAL
UK 6N	0.2	6	19	38	2	VERTICAL HORIZONTAL
UK 10N	0.5	10	15	30	2	VERTICAL HORIZONTAL
UK 16N	0.75	16	13	26	2	VERTICAL HORIZONTAL
UK 35	0.75	35	10	20	2	VERTICAL HORIZONTAL
UKH 50	10	50	8	16	2	VERTICAL HORIZONTAL
RTP 2.5***	0.5	4	27	54	2	VERTICAL HORIZONTAL
RTP 4	0.5	4	25	50	2	VERTICAL HORIZONTAL
RTP 6	0.5	10	20	40	2	VERTICAL HORIZONTAL
RTP 10	0.5	16	16	32	2	VERTICAL HORIZONTAL
RTP 16	0.5	16	12	24	2	VERTICAL HORIZONTAL
RTP 25	0.5	25	11	22	2	VERTICAL HORIZONTAL



JUNCTION BOX

**Supreme SERIES
SPM 3**

Zone 1,2,21,22

SPM 3 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
RTP 35	1.5	35	24	48	2	VERTICAL HORIZONTAL
RTP 50	10	50	8	16	2	VERTICAL HORIZONTAL
RTP 95	6	95	6	6	1	VERTICAL HORIZONTAL

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE

ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE

CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN

LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF

ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE

REQUIRED.

JUNCTION BOX

Supreme SERIES

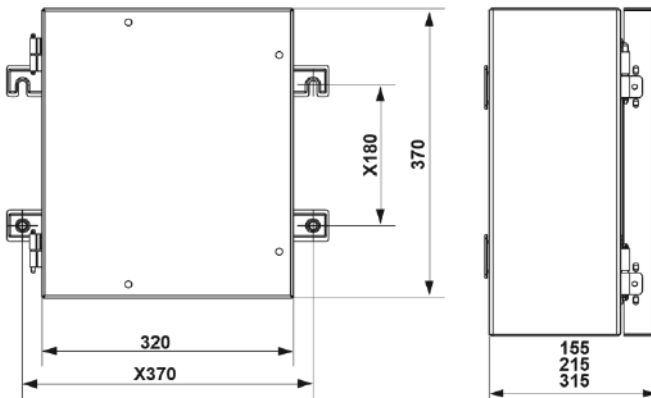
SPM 4

Zone 1,2,21,22



SPECIFICATION	
TYPE	SPM 4
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	Ⓔ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEx TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 4 x M12 stainless steel screws
Earthing	M10 Internal / External stainless steel stud
Enclosure Mounting	4slotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

SIDE CABLE ENTRY SELECTION											
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90	M100	M110
ACROSS FLATS	25	30	36	46	55	65	80	95	-	-	-
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7	-	-	-
Height	L / R	20 (33)	8 (18)	6 (14)	5 (6)	- (5)	- (4)	- (3)	- -	- -	- (-)
MAX.NO. OF ENTRIES	140	T / B	7 (16)	5 (12)	4 (5)	- (4)	- (3)	- (3)	- -	- -	- (-)
Height	L / R	39 (55)	24 (36)	13 (21)	10 (12)	7 (10)	4 (8)	3 (3)	2 (3)	- (2)	- (1)
MAX.NO. OF ENTRIES	200	T / B	31 (45)	21 (28)	10 (18)	8 (10)	4 (8)	3 (6)	2 (3)	2 (2)	- (1)
Height	L / R	70 (88)	48 (54)	29 (35)	19 (24)	12 (15)	8 (12)	6 (6)	4 (6)	2 (2)	2 (2)
MAX.NO. OF ENTRIES	300	T / B	56 (72)	42 (42)	25 (30)	15 (20)	11 (12)	6 (9)	4 (6)	3 (4)	2 (1)
									2 (1)	1 (1)	1 (1)



*Values in brackets are valid when no gland plate is installed.

**The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...

***Dimensions in mm.



JUNCTION BOX

Supreme SERIES

SPM 4

Zone 1,2,21,22

SPM 4 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDU 2.5 / 1.5/ ZR	0.13	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDU 2.5	0.13	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDU 2.5N	0.13	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDU 4	0.13	6	29	58	2	HORIZONTAL
			37	74	2	VERTICAL
WDU 6	0.5	10	23	46	2	HORIZONTAL
			28	56	2	VERTICAL
WDU 10	1.31	16	18	36	2	HORIZONTAL
			23	46	2	VERTICAL
WDU 16	1.5	25	15	30	2	HORIZONTAL
			19	38	2	VERTICAL
WDU 35	2.5	50	11	22	2	HORIZONTAL
			14	28	2	VERTICAL
WDU 50N	5.26	70	9	18	2	HORIZONTAL
			12	24	2	VERTICAL
WDU 70/95	16	120	6	6	1	HORIZONTAL
			8	8	1	VERTICAL
WDU 120/150	35	150	5	5	1	HORIZONTAL
			7	7	1	VERTICAL
WDU 240	70	240	5	5	1	HORIZONTAL
			6	6	1	VERTICAL
WDK2.5*	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDK ZQV	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDK 2.5 V	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDK 2.5 DU-PE	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDK 2.5 / 800V	0.05	4	29	58	2	HORIZONTAL
			37	74	2	VERTICAL
WDK 2.5N	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDK 2.5N V	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 4

Zone 1,2,21,22



SPM 4 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDK 2.5N DU-PE	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDK 4N	0.13	6	29	58	2	HORIZONTAL
			37	74	2	VERTICAL
WDK 4N V	0.13	6	29	58	2	HORIZONTAL
			37	74	2	VERTICAL
WDK 4N DU-PE	0.13	6	29	58	2	HORIZONTAL
			37	74	2	VERTICAL
WDK 2.5 PE	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WDK 2.5N PE	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WPE 1.5/ZZ	0.13	2.5	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WPE 2.5/1.5/ZR	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WPE 2.5	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WPE 2.5N	0.05	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
WPE 4	0.13	6	29	58	2	HORIZONTAL
			37	74	2	VERTICAL
WPE 6	0.33	10	23	46	2	HORIZONTAL
			28	56	2	VERTICAL
WPE 10	1.31	16	18	36	2	HORIZONTAL
			23	46	2	VERTICAL
WPE 16	1.5	25	15	30	2	HORIZONTAL
			19	38	2	VERTICAL
WPE 35	2.5	50	11	22	2	HORIZONTAL
			14	28	2	VERTICAL
WPE 50N	10	70	9	18	2	HORIZONTAL
			12	24	2	VERTICAL
WPE 70N/35	10	95	8	8	1	HORIZONTAL
			11	11	1	VERTICAL
WPE 95N/120N	16	150	6	6	1	HORIZONTAL
			8	8	1	VERTICAL
WPE 70/95	13.3	120	6	6	1	HORIZONTAL
			8	8	1	VERTICAL
WPE 120/150	33.62	150	5	10	2	HORIZONTAL
			7	14	2	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 4

Zone 1,2,21,22

SPM 4 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WFF35*	2.5	50	6	12	2	HORIZONTAL
			8	16	2	VERTICAL
WFF70	2.5	95	5	5	1	HORIZONTAL
			7	7	1	VERTICAL
WFF120	6	150	4	4	1	HORIZONTAL
			5	5	1	VERTICAL
WFF185	10	240	3	3	1	HORIZONTAL
			4	4	1	VERTICAL
WFF300	25	300	3	3	1	HORIZONTAL
			4	4	1	VERTICAL
SAK 2.5*	0.5	4	30	60	2	HORIZONTAL
			38	76	2	VERTICAL
SAK 4	0.5	6	28	56	2	HORIZONTAL
			35	70	2	VERTICAL
SAK 6N	0.5	10	22	44	2	HORIZONTAL
			28	56	2	VERTICAL
SAK 10	1.5	16	18	36	2	HORIZONTAL
			22	44	2	VERTICAL
SAK 16	2.5	16	15	30	2	HORIZONTAL
			19	38	2	VERTICAL
SAK 35	6	50	10	20	2	HORIZONTAL
			12	24	2	VERTICAL
ZDU 2.5*	0.08	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
ZDU2.5/3AN	0.08	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
ZDU2.5/4AN	0.08	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
ZDU2.5/2x2AN	0.08	4	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
ZDU 4	0.21	6	30	60	2	HORIZONTAL
			38	76	2	VERTICAL
ZDU 6	0.21	6	22	44	2	HORIZONTAL
			28	56	2	VERTICAL
ZDK2.5/1.5*	0.08	2.5	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
UK 1.5N**	0.14	0.7	43	86	2	HORIZONTAL
			54	108	2	VERTICAL
UK 2.5N	0.2	2.5	35	70	2	HORIZONTAL
			44	88	2	VERTICAL
UK 3N	0.2	2.5	35	70	2	HORIZONTAL
			44	88	2	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 4

Zone 1,2,21,22



SPM 4 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
UK 5N	0.2	4	29	58	2	HORIZONTAL
			36	72	2	VERTICAL
UK 6N	0.2	6	22	44	2	HORIZONTAL
			27	54	2	VERTICAL
UK 10N	0.5	10	17	34	2	HORIZONTAL
			22	44	2	VERTICAL
UK 16N	0.75	16	14	28	2	HORIZONTAL
			18	36	2	VERTICAL
UK 35	0.75	35	11	22	2	HORIZONTAL
			15	30	2	VERTICAL
UKH 50	10	50	9	18	2	HORIZONTAL
			11	22	2	VERTICAL
UKH 95	16	95	7	7	1	HORIZONTAL
			9	9	1	VERTICAL
UKH 150	25	150	5	5	1	HORIZONTAL
			7	7	1	VERTICAL
RTP 2.5***	0.5	4	30	60	2	HORIZONTAL
			38	76	2	VERTICAL
RTP 4	0.5	4	28	56	2	HORIZONTAL
			35	70	2	VERTICAL
RTP 6	0.5	10	22	44	2	HORIZONTAL
			28	56	2	VERTICAL
RTP 10	0.5	16	18	36	2	HORIZONTAL
			22	44	2	VERTICAL
RTP 16	0.5	16	14	28	2	HORIZONTAL
			18	36	2	VERTICAL
RTP 25	0.5	25	13	26	2	HORIZONTAL
			16	32	2	VERTICAL
RTP 35	1.5	35	28	56	2	HORIZONTAL
			35	70	2	VERTICAL
RTP 50	10	50	9	18	2	HORIZONTAL
			11	22	2	VERTICAL
RTP 95	6	95	6	6	1	HORIZONTAL
			8	8	1	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 4

Zone 1,2,21,22

* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE

ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE

CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN

LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF

ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE

REQUIRED.

JUNCTION BOX

Supreme SERIES

SPM 5

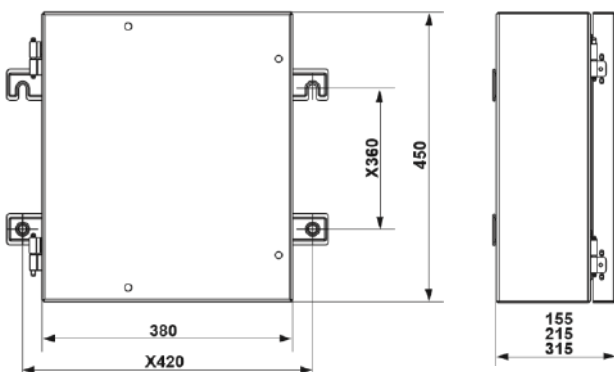
Zone 1,2,21,22



SPECIFICATION	
TYPE	SPM 5
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	Ⓔ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEX TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 4xM6 Stainless steel screws
Earthing	M10 Internal / External stainless steel stud
Enclosure Mounting	4 Slotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

SIDE CABLE ENTRY SELECTION

THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90	M100	M110
ACROSS FLATS	25	30	36	46	55	65	80	95	-	-	-
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7	-	-	-
Height	L/R	25 (39)	11 (22)	8 (18)	7 (7)	- (6)	- (5)	- (4)	- -	- -	- (-)
MAX.NO. OF ENTRIES	140	T/B	20(33)	9(18)	7 (16)	5 (6)	- (5)	- (4)	- (3)	- -	- (-)
Height	L/R	47(65)	33(44)	16 (27)	14 (14)	11 (12)	5 (10)	4 (4)	3 (3)	- (2)	- (-)
MAX.NO. OF ENTRIES	200	T/B	39(55)	27(36)	14 (24)	10 (12)	7 (10)	4 (8)	3 (3)	2 (3)	- (2)
Height	L/R	84(104)	66(66)	39 (45)	18 (28)	17 (18)	10 (15)	7 (8)	5 (6)	3 (3)	2 (2)
MAX.NO. OF ENTRIES	300	T/B	70(88)	54(54)	34 (40)	20 (24)	14 (15)	8 (12)	6 (6)	4 (6)	2 (2)
									2 (2)	2 (2)	1 (1)



* Values in brackets are valid when no gland plate is installed.

** The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...

***Dimensions in mm.



JUNCTION BOX

Supreme SERIES

SPM 5

Zone 1,2,21,22

SPM 5 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDU 2.5 / 1.5/ ZR	0.13	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDU 2.5	0.13	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDU 2.5N	0.13	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDU 4	0.13	6	51	102	2	VERTICAL
			39	117	3	HORIZONTAL
WDU 6	0.5	10	39	78	2	VERTICAL
			30	90	3	HORIZONTAL
WDU 10	1.31	16	31	62	2	VERTICAL
			24	72	3	HORIZONTAL
WDU 16	1.5	25	26	52	2	VERTICAL
			20	60	3	HORIZONTAL
WDU 35	2.5	50	19	38	2	VERTICAL
			14	42	3	HORIZONTAL
WDU 50N	5.26	70	16	32	2	VERTICAL
			12	36	3	HORIZONTAL
WDU 70/95	16	120	11	11	1	VERTICAL
			8	8	1	HORIZONTAL
WDU 120/150	35	150	9	9	1	VERTICAL
			7	7	1	HORIZONTAL
WDU 240	70	240	8	8	1	VERTICAL
			6	6	1	HORIZONTAL
WDK2.5*	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDK ZQV	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDK 2.5 V	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDK 2.5 DU-PE	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDK 2.5 / 800V	0.05	4	51	102	2	VERTICAL
			39	117	3	HORIZONTAL
WDK 2.5N	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDK 2.5N V	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL

JUNCTION BOX

Supreme SERIES

SPM 5

Zone 1,2,21,22



SPM 5 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDK 2.5N DU-PE	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDK 4N	0.13	6	51	102	2	VERTICAL
			39	117	3	HORIZONTAL
WDK 4N V	0.13	6	51	102	2	VERTICAL
			39	117	3	HORIZONTAL
WDK 4N DU-PE	0.13	6	51	102	2	VERTICAL
			39	117	3	HORIZONTAL
WDK 2.5 PE	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WDK 2.5N PE	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WPE 1.5/ZZ	0.13	2.5	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WPE 2.5/1.5/ZR	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WPE 2.5	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WPE 2.5N	0.05	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
WPE 4	0.13	6	51	102	2	VERTICAL
			39	117	3	HORIZONTAL
WPE 6	0.33	10	39	78	2	VERTICAL
			30	90	3	HORIZONTAL
WPE 10	1.31	16	31	62	2	VERTICAL
			24	72	3	HORIZONTAL
WPE 16	1.5	25	26	52	2	VERTICAL
			20	60	3	HORIZONTAL
WPE 35	2.5	50	19	38	2	VERTICAL
			14	42	3	HORIZONTAL
WPE 50N	10	70	16	32	2	VERTICAL
			12	36	3	HORIZONTAL
WPE 70N/35	10	95	15	15	2	VERTICAL
			11	11	1	HORIZONTAL
WPE 95N/120N	16	150	11	11	1	VERTICAL
			8	8	2	HORIZONTAL
WPE 70/95	13.3	120	11	11	1	VERTICAL
			8	8	1	HORIZONTAL
WPE 120/150	33.62	150	9	9	1	VERTICAL
			7	7	1	HORIZONTAL

JUNCTION BOX

Supreme SERIES

SPM 5

Zone 1,2,21,22



SPM 5 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WFF35*	2.5	50	11	22	2	VERTICAL
			8	24	3	HORIZONTAL
WFF70	2.5	95	9	9	1	VERTICAL
			7	14	2	HORIZONTAL
WFF120	6	150	7	7	1	VERTICAL
			5	5	1	HORIZONTAL
WFF185	10	240	5	5	1	VERTICAL
			4	4	1	HORIZONTAL
WFF300	25	300	5	5	1	VERTICAL
			4	4	1	HORIZONTAL
SAK 2.5*	0.5	4	52	104	2	VERTICAL
			39	117	3	HORIZONTAL
SAK 4	0.5	6	48	96	2	VERTICAL
			36	108	3	HORIZONTAL
SAK 6N	0.5	10	39	78	2	VERTICAL
			29	87	3	HORIZONTAL
SAK 10	1.5	16	31	62	2	VERTICAL
			23	69	3	HORIZONTAL
SAK 16	2.5	16	26	52	2	VERTICAL
			19	57	3	HORIZONTAL
SAK 35	6	50	17	34	2	VERTICAL
			13	39	3	HORIZONTAL
ZDU 2.5*	0.08	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
ZDU2.5/3AN	0.08	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
ZDU2.5/4AN	0.08	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
ZDU2.5/2x2AN	0.08	4	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
ZDU 4	0.21	6	52	104	2	VERTICAL
			39	117	3	HORIZONTAL
ZDU 6	0.21	6	39	78	2	VERTICAL
			29	87	3	HORIZONTAL
ZDK2.5/1.5*	0.08	2.5	61	122	2	VERTICAL
			46	138	3	HORIZONTAL
UK 1.5N**	0.14	0.7	74	148	2	VERTICAL
			56	168	3	HORIZONTAL
UK 2.5N	0.2	2.5	60	120	2	VERTICAL
			45	135	3	HORIZONTAL



JUNCTION BOX

Supreme SERIES

SPM 5

Zone 1,2,21,22

SPM 5 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
UK 3N	0.2	2.5	60	120	2	VERTICAL
			45	135	3	HORIZONTAL
UK 5N	0.2	4	50	100	2	VERTICAL
			38	114	3	HORIZONTAL
UK 6N	0.2	6	38	76	2	VERTICAL
			29	87	3	HORIZONTAL
UK 10N	0.5	10	30	60	2	VERTICAL
			23	69	3	HORIZONTAL
UK 16N	0.75	16	25	50	2	VERTICAL
			19	57	3	HORIZONTAL
UK 35	0.75	35	20	40	2	VERTICAL
			15	45	3	HORIZONTAL
UKH 50	10	50	15	30	2	VERTICAL
			11	33	3	HORIZONTAL
UKH 95	16	95	12	12	1	VERTICAL
			9	9	1	HORIZONTAL
UKH 150	25	150	10	10	1	VERTICAL
			7	7	1	HORIZONTAL
RTP 2.5***	0.5	4	52	104	2	VERTICAL
			39	117	3	HORIZONTAL
RTP 4	0.5	4	48	96	2	VERTICAL
			37	111	3	HORIZONTAL
RTP 6	0.5	10	39	78	2	VERTICAL
			29	87	3	HORIZONTAL
RTP 10	0.5	16	31	62	2	VERTICAL
			23	69	3	HORIZONTAL
RTP 16	0.5	16	24	48	2	VERTICAL
			19	57	3	HORIZONTAL
RTP 25	0.5	25	22	44	2	VERTICAL
			17	51	3	HORIZONTAL
RTP 35	1.5	35	48	96	2	VERTICAL
			36	108	3	HORIZONTAL
RTP 50	10	50	15	30	2	VERTICAL
			11	33	3	HORIZONTAL
RTP 95	6	95	10	10	1	VERTICAL
			8	8	1	HORIZONTAL

JUNCTION BOX

Supreme SERIES

SPM 5

Zone 1,2,21,22



* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

* * UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE

ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE

CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN

LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF

ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE

REQUIRED.



JUNCTION BOX

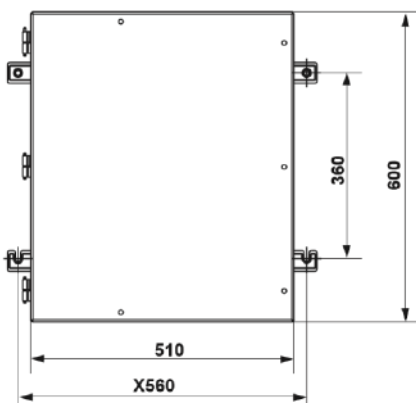
Supreme SERIES

SPM 6

Zone 1,2,21,22

SPECIFICATION	
TYPE	SPM 6
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	Ⓔ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEX TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 5 (vertical) or 7 (horizontal) M6 stainless steel screws
Earthing	M12 Internal / External stainless steel stud
Enclosure Mounting	4 slotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

SIDE CABLE ENTRY SELECTION											
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90	M100	M110
ACROSS FLATS	25	30	36	46	55	65	80	95	-	-	-
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7	-	-	-
Height	L	34	15 (30)	12	9 (10)	- (8)	- (7)	- (5)	- -	- -	- -
MAX.NO. OF ENTRIES	140	(54)	(24)	(24)	(8)	(7)	(4)	(4)	(4)	(4)	(4)
	R	28	12 (24)	11	8 (8)	- (7)	- (6)	- (4)	- -	- -	- -
Height	T	(45)	(20)	(20)	(14)	(12)	(5)	(4)	(3)	(2)	(2)
MAX.NO. OF ENTRIES	200	(90)	(36)	(36)	(16)	(14)	(5)	(4)	(3)	(2)	(2)
	B	56	36 (48)	29	16 (16)	7 (14)	5 (12)	4 (5)	3 (4)	- (3)	- (2)
Height	L	67	45 (60)	24	18 (20)	13 (16)	6 (14)	5 (6)	4 (5)	- (3)	- (3)
MAX.NO. OF ENTRIES	300	(144)	(60)	(60)	(24)	(24)	(21)	(12)	(10)	(4)	(3)
	R	19	90 (80)	59	35 (40)	24 (24)	13 (21)	10 (12)	7 (10)	4 (4)	3 (3)
Height	T	(120)	(72)	(50)	(32)	(21)	(18)	(10)	(8)	(3)	(2)
MAX.NO. OF ENTRIES	300	(120)	(72)	(50)	(32)	(21)	(18)	(10)	(8)	(3)	(2)
	B	98	72 (72)	48	31 (32)	18 (21)	15 (18)	8 (10)	6 (8)	3 (3)	2 (2)



- * Values in brackets are valid when no gland plate is installed.
- ** The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...
- ***Dimensions in mm.

JUNCTION BOX

Supreme SERIES

SPM 6

Zone 1,2,21,22



SPM 6 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDU 2.5 / 1.5/ ZR	0.13	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDU 2.5	0.13	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDU 2.5N	0.13	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDU 4	0.13	6	59	236	4	HORIZONTAL
			75	225	3	VERTICAL
WDU 6	0.5	10	45	180	4	HORIZONTAL
			57	171	3	VERTICAL
WDU 10	1.31	16	36	144	4	HORIZONTAL
			46	138	3	VERTICAL
WDU 16	1.5	25	30	120	4	HORIZONTAL
			38	114	3	VERTICAL
WDU 35	2.5	50	22	88	4	HORIZONTAL
			28	84	3	VERTICAL
WDU 50N	5.26	70	19	57	3	HORIZONTAL
			24	48	2	VERTICAL
WDU 70/95	16	120	13	13	1	HORIZONTAL
			16	16	1	VERTICAL
WDU 120/150	35	150	11	11	1	HORIZONTAL
			14	14	1	VERTICAL
WDU 240	70	240	10	10	1	HORIZONTAL
			12	12	1	VERTICAL
WDK2.5*	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDK ZQV	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDK 2.5 V	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDK 2.5 DU-PE	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDK 2.5 / 800V	0.05	4	59	236	4	HORIZONTAL
			75	225	3	VERTICAL
WDK 2.5N	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 6

Zone 1,2,21,22

SPM 6 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDK 2.5N V	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDK 2.5N DU-PE	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDK 4N	0.13	6	59	236	4	HORIZONTAL
			75	225	3	VERTICAL
WDK 4N V	0.13	6	59	236	4	HORIZONTAL
			75	225	3	VERTICAL
WDK 4N DU-PE	0.13	6	59	236	4	HORIZONTAL
			75	225	3	VERTICAL
WDK 2.5 PE	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WDK 2.5N PE	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WPE 1.5/ZZ	0.13	2.5	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WPE 2.5/1.5/ZR	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WPE 2.5	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WPE 2.5N	0.05	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
WPE 4	0.13	6	59	236	4	HORIZONTAL
			75	225	3	VERTICAL
WPE 6	0.33	10	45	180	4	HORIZONTAL
			57	171	3	VERTICAL
WPE 10	1.31	16	36	144	4	HORIZONTAL
			46	138	3	VERTICAL
WPE 16	1.5	25	30	120	4	HORIZONTAL
			38	114	3	VERTICAL
WPE 35	2.5	50	22	88	4	HORIZONTAL
			28	84	3	VERTICAL
WPE 50N	10	70	19	57	3	HORIZONTAL
			24	48	2	VERTICAL
WPE 70N/35	10	95	17	51	3	HORIZONTAL
			22	44	2	VERTICAL
WPE 95N/120N	16	150	13	52	4	HORIZONTAL
			16	48	3	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 6

Zone 1,2,21,22



SPM 6 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WPE 70/95	13.3	120	13	13	1	HORIZONTAL
			16	16	1	VERTICAL
WPE 120/150	33.62	150	11	11	1	HORIZONTAL
			14	14	1	VERTICAL
WFF35*	2.5	50	13	52	4	HORIZONTAL
			16	48	3	VERTICAL
WFF70	2.5	95	11	22	1	HORIZONTAL
			14	14	1	VERTICAL
WFF120	6	150	8	8	1	HORIZONTAL
			10	10	1	VERTICAL
WFF185	10	240	6	6	1	HORIZONTAL
			8	8	1	VERTICAL
WFF300	25	300	6	6	1	HORIZONTAL
			8	8	1	VERTICAL
SAK 2.5*	0.5	4	60	240	4	HORIZONTAL
			76	228	3	VERTICAL
SAK 4	0.5	6	55	220	4	HORIZONTAL
			70	210	3	VERTICAL
SAK 6N	0.5	10	45	180	4	HORIZONTAL
			57	171	3	VERTICAL
SAK 10	1.5	16	36	144	4	HORIZONTAL
			45	135	3	VERTICAL
SAK 16	2.5	16	30	120	4	HORIZONTAL
			38	114	3	VERTICAL
SAK 35	6	50	20	80	4	HORIZONTAL
			25	75	3	VERTICAL
ZDU 2.5*	0.08	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
ZDU2.5/3AN	0.08	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
ZDU2.5/4AN	0.08	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
ZDU2.5/2x2AN	0.08	4	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
ZDU 4	0.21	6	60	240	4	HORIZONTAL
			76	228	3	VERTICAL
ZDU 6	0.21	6	45	180	4	HORIZONTAL
			57	171	3	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 6

Zone 1,2,21,22

SPM 6 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
ZDK2.5/1.5*	0.08	2.5	70	280	4	HORIZONTAL
			89	267	3	VERTICAL
UK 1.5N**	0.14	0.7	85	340	4	HORIZONTAL
			109	327	3	VERTICAL
UK 2.5N	0.2	2.5	69	276	4	HORIZONTAL
			88	264	3	VERTICAL
UK 3N	0.2	2.5	69	276	4	HORIZONTAL
			88	264	3	VERTICAL
UK 5N	0.2	4	58	232	4	HORIZONTAL
			73	219	3	VERTICAL
UK 6N	0.2	6	43	172	4	HORIZONTAL
			55	165	3	VERTICAL
UK 10N	0.5	10	35	140	4	HORIZONTAL
			44	132	3	VERTICAL
UK 16N	0.75	16	29	116	4	HORIZONTAL
			37	111	3	VERTICAL
UK 35	0.75	35	23	92	4	HORIZONTAL
			30	90	3	VERTICAL
UKH 50	10	50	18	54	3	HORIZONTAL
			22	44	2	VERTICAL
UKH 95	16	95	14	14	1	HORIZONTAL
			18	18	1	VERTICAL
UKH 150	25	150	11	11	1	HORIZONTAL
			14	14	1	VERTICAL
RTP 2.5***	0.5	4	60	240	4	HORIZONTAL
			76	228	3	VERTICAL
RTP 4	0.5	4	56	224	4	HORIZONTAL
			71	213	3	VERTICAL
RTP 6	0.5	10	45	180	4	HORIZONTAL
			57	171	3	VERTICAL
RTP 10	0.5	16	36	144	4	HORIZONTAL
			45	135	3	VERTICAL
RTP 16	0.5	16	28	112	4	HORIZONTAL
			36	108	3	VERTICAL
RTP 25	0.5	25	26	104	4	HORIZONTAL
			33	99	3	VERTICAL
RTP 35	1.5	35	55	220	4	HORIZONTAL
			70	210	3	VERTICAL
RTP 50	10	50	17	51	3	HORIZONTAL
			22	44	2	VERTICAL
RTP 95	6	95	13	13	1	HORIZONTAL
			16	16	1	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 6

Zone 1,2,21,22



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ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE

ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE

CALL THE "S.G" REPRESENTATIVE.

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JUNCTION BOX

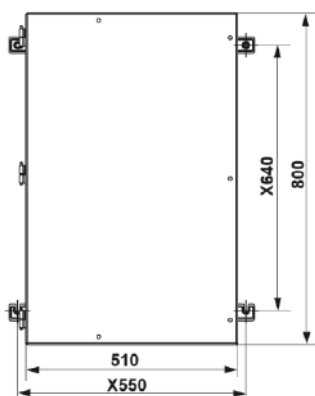
Supreme SERIES

SPM 7

Zone 1,2,21,22

SPECIFICATION	
TYPE	SPM 7
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	⊕ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEx TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 5 (vertical) or 9 (horizontal) M6 Stainless steel screws
Earthing	M12 Internal / External stainless steel stud
Enclosure Mounting	4 slotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

SIDE CABLE ENTRY SELECTION												
THREAD SIZE		M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90	M100	M110
ACROSS FLATS		25	30	36	46	55	65	80	95	-	-	-
ACROSS CORNERS		27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7	-	-	-
Height	L/R	48 (72)	21 (40)	16 (34)	13 (13)	- (11)	- (9)	- (8)	- -	- -	- -	- -
MAX.NO. OF ENTRIES	140	T/B	28 (45)	12 (24)	10 (20)	8 (8)	- (7)	- (6)	- (5)	- -	- -	- -
Height	L/R	65 (120)	63 (80)	32 (51)	26 (26)	11 (22)	9 (18)	7 (8)	6 (6)	- (5)	- (4)	- -
MAX.NO. OF ENTRIES	200	T/B	58(75)	36 (48)	20 (30)	16 (16)	7 (14)	5 (12)	4 (5)	3 (4)	- (3)	- (2)
Height	L/R	168(192)	125(120)	64 (85)	51 (52)	33 (33)	18 (27)	14 (16)	11 (12)	5 (5)	5 (4)	4 (4)
MAX.NO. OF ENTRIES	300	T/B	98 (120)	72 (72)	48 (50)	28 (32)	18 (21)	10 (18)	8 (10)	6 (8)	3 (3)	3 (2)



- Values in brackets are valid when no gland plate is installed.
- ** The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...
- ***Dimensions in mm.

JUNCTION BOX

Supreme SERIES

SPM 7

Zone 1,2,21,22



SPM 7 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	72	36	5	HORIZONTAL
			128	384	3	VERTICAL
WDU 2.5 / 1.5/ ZR	0.13	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDU 2.5	0.13	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDU 2.5N	0.13	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDU 4	0.13	6	60	300	5	HORIZONTAL
			107	321	3	VERTICAL
WDU 6	0.5	10	46	230	5	HORIZONTAL
			83	249	3	VERTICAL
WDU 10	1.31	16	37	185	5	HORIZONTAL
			66	198	3	VERTICAL
WDU 16	1.5	25	31	155	5	HORIZONTAL
			55	165	3	VERTICAL
WDU 35	2.5	50	23	115	5	HORIZONTAL
			41	123	3	VERTICAL
WDU 50N	5.26	70	20	70	2	HORIZONTAL
			35	80	4	VERTICAL
WDU 70/95	16	120	13	13	1	HORIZONTAL
			24	24	1	VERTICAL
WDU 120/150	35	150	11	11	1	HORIZONTAL
			20	20	1	VERTICAL
WDU 240	70	240	10	10	1	HORIZONTAL
			18	18	1	VERTICAL
WDK2.5*	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDK ZQV	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDK 2.5 V	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDK 2.5 DU-PE	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDK 2.5 / 800V	0.05	4	60	300	5	HORIZONTAL
			107	321	3	VERTICAL
WDK 2.5N	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDK 2.5N V	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 7

Zone 1,2,21,22

SPM 7 TERMINAL CAPACITY DATA

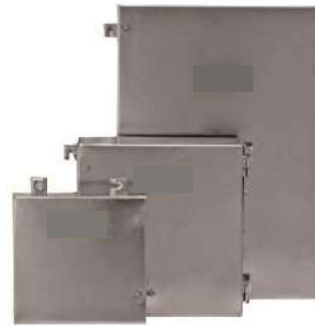
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDK 2.5N DU-PE	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDK 4N	0.13	6	60	300	5	HORIZONTAL
			107	321	3	VERTICAL
WDK 4N V	0.13	6	60	300	5	HORIZONTAL
			107	321	3	VERTICAL
WDK 4N DU-PE	0.13	6	60	300	5	HORIZONTAL
			107	321	3	VERTICAL
WDK 2.5 PE	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WDK 2.5N PE	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WPE 1.5/ZZ	0.13	2.5	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WPE 2.5/1.5/ZR	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WPE 2.5	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WPE 2.5N	0.05	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
WPE 4	0.13	6	60	300	5	HORIZONTAL
			107	321	3	VERTICAL
WPE 6	0.33	10	46	230	5	HORIZONTAL
			83	249	3	VERTICAL
WPE 10	1.31	16	37	185	5	HORIZONTAL
			66	198	3	VERTICAL
WPE 16	1.5	25	31	155	5	HORIZONTAL
			55	165	3	VERTICAL
WPE 35	2.5	50	23	115	5	HORIZONTAL
			41	123	3	VERTICAL
WPE 50N	10	70	20	80	4	HORIZONTAL
			35	70	2	VERTICAL
WPE 70N/35	10	95	18	72	4	HORIZONTAL
			32	64	2	VERTICAL
WPE 95N/120N	16	150	13	26	2	HORIZONTAL
			24	24	1	VERTICAL
WPE 70/95	13.3	120	13	26	2	HORIZONTAL
			24	24	1	VERTICAL
WPE 120/150	33.62	150	11	11	1	HORIZONTAL
			20	20	1	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 7

Zone 1,2,21,22



SPM 7 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WFF35*	2.5	50	13	65	5	HORIZONTAL
			24	72	3	VERTICAL
WFF70	2.5	95	11	22	2	HORIZONTAL
			20	20	1	VERTICAL
WFF120	6	150	8	8	1	HORIZONTAL
			15	15	1	VERTICAL
WFF185	10	240	6	6	1	HORIZONTAL
			11	11	1	VERTICAL
WFF300	25	300	6	6	1	HORIZONTAL
			11	11	1	VERTICAL
SAK 2.5*	0.5	4	61	305	5	HORIZONTAL
			109	327	3	VERTICAL
SAK 4	0.5	6	57	285	5	HORIZONTAL
			100	300	3	VERTICAL
SAK 6N	0.5	10	46	230	5	HORIZONTAL
			82	246	3	VERTICAL
SAK 10	1.5	16	37	185	5	HORIZONTAL
			65	195	3	VERTICAL
SAK 16	2.5	16	30	150	5	HORIZONTAL
			54	162	3	VERTICAL
SAK 35	6	50	20	100	5	HORIZONTAL
			36	108	3	VERTICAL
ZDU 2.5*	0.08	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
ZDU2.5/3AN	0.08	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
ZDU2.5/4AN	0.08	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
ZDU2.5/2x2AN	0.08	4	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
ZDU 4	0.21	6	61	305	5	HORIZONTAL
			109	327	3	VERTICAL
ZDU 6	0.21	6	46	230	5	HORIZONTAL
			82	246	3	VERTICAL
ZDK2.5/1.5*	0.08	2.5	72	360	5	HORIZONTAL
			128	384	3	VERTICAL
UK 1.5N**	0.14	0.7	88	440	5	HORIZONTAL
			156	468	3	VERTICAL
UK 2.5N	0.2	2.5	71	355	5	HORIZONTAL
			126	378	3	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 7

Zone 1,2,21,22

SPM 7 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
UK 3N	0.2	2.5	71	355	5	HORIZONTAL
			126	378	3	VERTICAL
UK 5N	0.2	4	59	295	5	HORIZONTAL
			105	315	3	VERTICAL
UK 6N	0.2	6	45	225	5	HORIZONTAL
			80	240	3	VERTICAL
UK 10N	0.5	10	36	180	5	HORIZONTAL
			64	192	3	VERTICAL
UK 16N	0.75	16	30	150	5	HORIZONTAL
			53	159	3	VERTICAL
UK 35	0.75	35	24	120	5	HORIZONTAL
			43	129	3	VERTICAL
UKH 50	10	50	18	64	2	HORIZONTAL
			36	72	4	VERTICAL
UKH 95	16	95	14	28	2	HORIZONTAL
			26	26	1	VERTICAL
UKH 150	25	150	11	11	1	HORIZONTAL
			21	21	1	VERTICAL
RTP 2.5***	0.5	4	61	305	5	HORIZONTAL
			109	327	3	VERTICAL
RTP 4	0.5	4	57	285	5	HORIZONTAL
			102	306	3	VERTICAL
RTP 6	0.5	10	46	230	5	HORIZONTAL
			82	246	3	VERTICAL
RTP 10	0.5	16	37	185	5	HORIZONTAL
			65	195	3	VERTICAL
RTP 16	0.5	16	29	145	5	HORIZONTAL
			52	156	3	VERTICAL
RTP 25	0.5	25	27	135	5	HORIZONTAL
			48	144	3	VERTICAL
RTP 35	1.5	35	57	285	5	HORIZONTAL
			100	300	3	VERTICAL
RTP 50	10	50	18	72	4	HORIZONTAL
			32	64	2	VERTICAL
RTP 95	6	95	13	26	2	HORIZONTAL
			24	24	1	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 7

Zone 1,2,21,22



* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

** UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE

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CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN

LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF

ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE

REQUIRED.



JUNCTION BOX

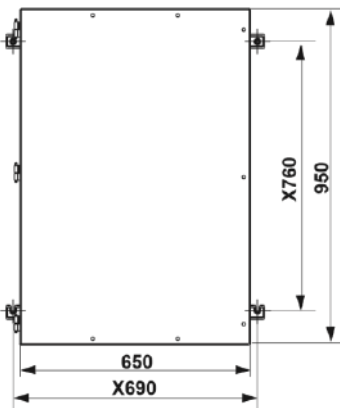
Supreme SERIES

SPM 8

Zone 1,2,21,22

SPECIFICATION	
TYPE	SPM 8
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	⊕ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEx TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application.
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 7 (vertical) or 9 (horizontal) M6 stainless steel screws
Earthing	M12 Internal / External stainless steel stud
Enclosure Mounting	4 slotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

SIDE CABLE ENTRY SELECTION											
THREAD SIZE	M20(O)	M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90	M100	M110
ACROSS FLATS	25	30	36	46	55	65	80	95	-	-	-
ACROSS CORNERS	27.7	34.6	41.6	53.1	63.5	75.1	92.4	109.7	-	-	-
Height	L/R	58(84)	25(46)	19(40)	16(16)	- (13)	- (11)	- (9)	- -	- -	- -
MAX.NO. OF ENTRIES	140										
	T/B	38(52)	16(32)	13(26)	10(11)	- (9)	- (7)	- (6)	- -	- -	- -
Height	L/R	46(140)	75(92)	57(60)	32(32)	13(26)	11(22)	9(12)	7 (7)	- (6)	- (5)
MAX.NO. OF ENTRIES	200										
	T/B	76(95)	48(64)	38(39)	20(22)	9 (18)	7 (14)	6 (6)	5 (5)	- (4)	- (3)
Height	L/R	203(224)	150(138)	95(100)	63 (64)	39(39)	32 (33)	18 (18)	14(14)	6 (6)	6 (5)
MAX.NO. OF ENTRIES	300										
	T/B	133(152)	96 (96)	64 (65)	40 (40)	27(27)	14 (21)	12 (9)	9 (10)	4 (4)	4 (3)
											3 (3)



* Values in brackets are valid when no gland plate is installed.
 ** The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...
 ***Dimensions in mm.

JUNCTION BOX

Supreme SERIES

SPM 8

Zone 1,2,21,22



SPM 8 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDU 2.5 / 1.5/ ZR	0.13	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDU 2.5	0.13	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDU 2.5N	0.13	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDU 4	0.13	6	132	528	4	VERTICAL
			83	498	6	HORIZONTAL
WDU 6	0.5	10	102	408	4	VERTICAL
			64	384	6	HORIZONTAL
WDU 10	1.31	16	81	324	4	VERTICAL
			51	306	6	HORIZONTAL
WDU 16	1.5	25	67	268	4	VERTICAL
			42	252	6	HORIZONTAL
WDU 35	2.5	50	50	200	4	VERTICAL
			31	186	6	HORIZONTAL
WDU 50N	5.26	70	43	129	3	VERTICAL
			27	135	5	HORIZONTAL
WDU 70/95	16	120	29	29	1	VERTICAL
			18	54	3	HORIZONTAL
WDU 120/150	35	150	25	25	1	VERTICAL
			15	30	2	HORIZONTAL
WDU 240	70	240	22	22	1	VERTICAL
			14	28	2	HORIZONTAL
WDK2.5*	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDK ZQV	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDK 2.5 V	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDK 2.5 DU-PE	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDK 2.5 / 800V	0.05	4	132	528	4	VERTICAL
			83	498	6	HORIZONTAL
WDK 2.5N	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDK 2.5N V	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL



JUNCTION BOX

Supreme SERIES

SPM 8

Zone 1,2,21,22

SPM 8 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDK 2.5N DU-PE	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDK 4N	0.13	6	132	632	4	VERTICAL
			83	600	6	HORIZONTAL
WDK 4N V	0.13	6	132	528	4	VERTICAL
			83	498	6	HORIZONTAL
WDK 4N DU-PE	0.13	6	132	528	4	VERTICAL
			83	498	6	HORIZONTAL
WDK 2.5 PE	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WDK 2.5N PE	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WPE 1.5/ZZ	0.13	2.5	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WPE 2.5/1.5/ZR	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WPE 2.5	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WPE 2.5N	0.05	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
WPE 4	0.13	6	132	528	4	VERTICAL
			83	498	6	HORIZONTAL
WPE 6	0.33	10	102	408	4	VERTICAL
			64	384	6	HORIZONTAL
WPE 10	1.31	16	81	324	4	VERTICAL
			51	306	6	HORIZONTAL
WPE 16	1.5	25	67	268	4	VERTICAL
			42	252	6	HORIZONTAL
WPE 35	2.5	50	50	200	4	VERTICAL
			31	186	6	HORIZONTAL
WPE 50N	10	70	43	129	3	VERTICAL
			27	135	5	HORIZONTAL
WPE 70N/35	10	95	39	39	1	VERTICAL
			24	72	3	HORIZONTAL
WPE 95N/120N	16	150	29	29	1	VERTICAL
			18	54	3	HORIZONTAL
WPE 70/95	13.3	120	29	29	1	VERTICAL
			18	54	3	HORIZONTAL
WPE 120/150	33.62	150	25	25	1	VERTICAL
			15	30	2	HORIZONTAL
WFF35*	2.5	50	29	116	4	VERTICAL
			18	108	6	HORIZONTAL

JUNCTION BOX

Supreme SERIES

SPM 8

Zone 1,2,21,22



SPM 8 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WFF70	2.5	95	25	25	1	VERTICAL
			15	45	3	HORIZONTAL
WFF120	6	150	19	19	1	VERTICAL
			12	36	3	HORIZONTAL
WFF185	10	240	14	14	1	VERTICAL
			9	18	2	HORIZONTAL
WFF300	25	300	14	14	1	VERTICAL
			9	18	2	HORIZONTAL
SAK 2.5*	0.5	4	134	536	4	VERTICAL
			85	510	6	HORIZONTAL
SAK 4	0.5	6	124	496	4	VERTICAL
			78	468	6	HORIZONTAL
SAK 6N	0.5	10	100	400	4	VERTICAL
			63	378	6	HORIZONTAL
SAK 10	1.5	16	80	320	4	VERTICAL
			51	306	6	HORIZONTAL
SAK 16	2.5	16	67	268	4	VERTICAL
			42	252	6	HORIZONTAL
SAK 35	6	50	44	176	4	VERTICAL
			28	168	6	HORIZONTAL
ZDU 2.5*	0.08	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
ZDU2.5/3AN	0.08	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
ZDU2.5/4AN	0.08	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
ZDU2.5/2x2AN	0.08	4	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
ZDU 4	0.21	6	134	536	4	VERTICAL
			85	510	6	HORIZONTAL
ZDU 6	0.21	6	100	400	4	VERTICAL
			63	378	6	HORIZONTAL
ZDK2.5/1.5*	0.08	2.5	158	632	4	VERTICAL
			100	600	6	HORIZONTAL
UK 1.5N**	0.14	0.7	192	768	4	VERTICAL
			121	726	6	HORIZONTAL
UK 2.5N	0.2	2.5	155	620	4	VERTICAL
			98	588	6	HORIZONTAL
UK 3N	0.2	2.5	155	620	4	VERTICAL
			98	588	6	HORIZONTAL
UK 5N	0.2	4	130	520	4	VERTICAL
			82	492	6	HORIZONTAL



JUNCTION BOX

Supreme SERIES

SPM 8

Zone 1,2,21,22

SPM 8 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
UK 6N	0.2	6	98	392	4	VERTICAL
			62	372	6	HORIZONTAL
UK 10N	0.5	10	79	316	4	VERTICAL
			50	300	6	HORIZONTAL
UK 16N	0.75	16	66	264	4	VERTICAL
			41	246	6	HORIZONTAL
UK 35	0.75	35	53	212	4	VERTICAL
			33	198	6	HORIZONTAL
UKH 50	10	50	40	120	3	VERTICAL
			25	125	5	HORIZONTAL
UKH 95	16	95	32	32	1	VERTICAL
			20	60	3	HORIZONTAL
UKH 150	25	150	26	26	1	VERTICAL
			16	32	2	HORIZONTAL
RTP 2.5***	0.5	4	134	536	4	VERTICAL
			85	510	6	HORIZONTAL
RTP 4	0.5	4	126	504	4	VERTICAL
			79	474	6	HORIZONTAL
RTP 6	0.5	10	100	400	4	VERTICAL
			63	378	6	HORIZONTAL
RTP 10	0.5	16	80	320	4	VERTICAL
			51	306	6	HORIZONTAL
RTP 16	0.5	16	64	256	4	VERTICAL
			40	240	6	HORIZONTAL
RTP 25	0.5	25	59	236	4	VERTICAL
			37	222	6	HORIZONTAL
RTP 35	1.5	35	124	496	4	VERTICAL
			78	468	6	HORIZONTAL
RTP 50	10	50	40	120	3	VERTICAL
			25	125	5	HORIZONTAL
RTP 95	6	95	30	30	1	VERTICAL
			19	57	3	HORIZONTAL

JUNCTION BOX

Supreme SERIES

SPM 8

Zone 1,2,21,22



* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

* * UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

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ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

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LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF

ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

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JUNCTION BOX

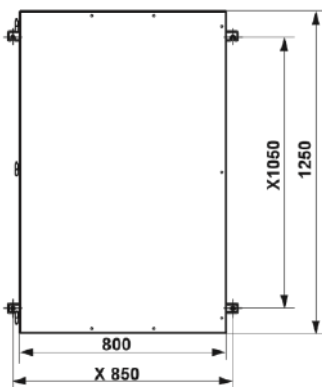
Supreme SERIES

SPM 9

Zone 1,2,21,22

SPECIFICATION	
TYPE	SPM 9
Application	Terminal box or marshaling box
Protection	Ex e IIC Gb- Ex t IIIC Db
Marking(ATEX)	⊕ II 2 GD
Certificate No.	TÜV 13 ATEX 7439X- IECEx TUR 13.0012X
Standards	IEC 60079-0, IEC 60079-7, IEC 60079-11, IEC 60079-31
Material	A) Stainless steel. B) Painted mild steel.
Finish	Stainless steel may be coated or painted to suit customer application Mild steel may be coated or painted to suit customer application,
Ingress Protection	IP 66 to IEC 60529
Temperature Class	T6 / T5 / T4
Ambient Temperature	-30°C to 55°C / -20°C to 40°C
Lid Fixing	Hinged by 7 (vertical) or 9 (horizontal) M6 stainless steel screws
Earthing	M12 Internal / External stainless steel stud
Enclosure Mounting	4 slotted fixing brackets for M10 screws
DRAIN PLUG	M20 breather/drain plug as an option
Entries	Through gland plates or through walls

SIDE CABLE ENTRY SELECTION												
THREAD SIZE	M20(O)		M20(A)	M25(B)	M32(C)	M40(C2)	M50(D)	M63(E)	M75(F)	M90	M100	M110
ACROSS FLATS	25		30	36	46	55	65	80	95	-	-	-
ACROSS CORNERS	27.7		34.6	41.6	53.1	63.5	75.1	92.4	109.7	-	-	-
Height	L/R	48(114)	21(62)	16(52)	13(21)	- (18)	- (15)	- (12)	- -	- -	- -	- -
MAX.NO. OF 140 ENTRIES	T/B	78(72)	37 (40)	26(32)	21(13)	- (11)	- (9)	- (7)	- -	- -	- -	- -
	Height	L/R	72(190)	63(124)	32(78)	26(12)	11(36)	9(30)	7(12)	6 (10)	- (8)	- (7)
MAX.NO. OF 200 ENTRIES	T/B	156(120)	99(80)	52(57)	42(26)	18(22)	14(18)	12 (8)	10 (6)	- (5)	- (4)	- -
	Height	L/R	168(304)	126(186)	79(130)	51(84)	33(54)	26(45)	14(24)	11(20)	- (8)	- (7)
MAX.NO. OF 300 ENTRIES	T/B	273(192)	198(120)	129(80)	83(52)	54(33)	42(27)	24 (16)	9 (12)	9(5)	7(4)	6(4)



* values in brackets are valid when no gland plate is installed.

** The number of entries indicated above is for reference only, and may vary depend on application requirements e.g.: type of cable entries, number of terminals, ...

***Dimensions in mm.

JUNCTION BOX

Supreme SERIES

SPM 9

Zone 1,2,21,22



SPM 9 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDU 1.5/ZZ*	0.13	2.5	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDU 2.5 / 1.5/ ZR	0.13	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDU 2.5	0.13	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDU 2.5N	0.13	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDU 4	0.13	6	107	856	8	HORIZONTAL
			181	905	5	VERTICAL
WDU 6	0.5	10	83	664	8	HORIZONTAL
			140	700	5	VERTICAL
WDU 10	1.31	16	66	528	8	HORIZONTAL
			111	555	5	VERTICAL
WDU 16	1.5	25	55	440	8	HORIZONTAL
			93	465	5	VERTICAL
WDU 35	2.5	50	41	328	8	HORIZONTAL
			69	345	5	VERTICAL
WDU 50N	5.26	70	35	245	7	HORIZONTAL
			59	236	4	VERTICAL
WDU 70/95	16	120	24	72	3	HORIZONTAL
			41	82	2	VERTICAL
WDU 120/150	35	150	20	60	3	HORIZONTAL
			34	68	2	VERTICAL
WDU 240	70	240	18	54	3	HORIZONTAL
			30	30	2	VERTICAL
WDK2.5*	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDK ZQV	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDK 2.5 V	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDK 2.5 DU-PE	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDK 2.5 / 800V	0.05	4	107	856	8	HORIZONTAL
			181	905	5	VERTICAL
WDK 2.5N	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDK 2.5N V	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 9

Zone 1,2,21,22

SPM 9 TERMINAL CAPACITY DATA

TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WDK 2.5N DU-PE	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDK 4N	0.13	6	107	856	8	HORIZONTAL
			181	905	5	VERTICAL
WDK 4N V	0.13	6	107	856	8	HORIZONTAL
			181	905	5	VERTICAL
WDK 4N DU-PE	0.13	6	107	856	8	HORIZONTAL
			181	905	5	VERTICAL
WDK 2.5 PE	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WDK 2.5N PE	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WPE 1.5/ZZ	0.13	2.5	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WPE 2.5/1.5/ZR	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WPE 2.5	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WPE 2.5N	0.05	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
WPE 4	0.13	6	107	856	8	HORIZONTAL
			181	905	5	VERTICAL
WPE 6	0.33	10	83	664	8	HORIZONTAL
			140	700	5	VERTICAL
WPE 10	1.31	16	66	528	8	HORIZONTAL
			111	555	5	VERTICAL
WPE 16	1.5	25	55	440	8	HORIZONTAL
			93	465	5	VERTICAL
WPE 35	2.5	50	41	328	8	HORIZONTAL
			69	345	5	VERTICAL
WPE 50N	10	70	35	245	7	HORIZONTAL
			59	236	4	VERTICAL
WPE 70N/35	10	95	32	96	3	HORIZONTAL
			54	108	2	VERTICAL
WPE 95N/120N	16	150	24	72	3	HORIZONTAL
			41	82	2	VERTICAL
WPE 70/95	13.3	120	24	72	3	HORIZONTAL
			41	82	2	VERTICAL
WPE 120/150	33.62	150	20	60	3	HORIZONTAL
			34	68	2	VERTICAL
WFF35*	2.5	50	24	192	8	HORIZONTAL
			41	205	5	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 9

Zone 1,2,21,22



SPM 9 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
WFF70	2.5	95	20	60	3	HORIZONTAL
			34	68	2	VERTICAL
WFF120	6	150	15	45	3	HORIZONTAL
			26	52	2	VERTICAL
WFF185	10	240	11	33	3	HORIZONTAL
			20	40	2	VERTICAL
WFF300	25	300	11	33	3	HORIZONTAL
			20	40	2	VERTICAL
SAK 2.5*	0.5	4	109	872	8	HORIZONTAL
			184	920	5	VERTICAL
SAK 4	0.5	6	100	800	8	HORIZONTAL
			170	850	5	VERTICAL
SAK 6N	0.5	10	82	656	8	HORIZONTAL
			138	690	5	VERTICAL
SAK 10	1.5	16	65	520	8	HORIZONTAL
			110	550	5	VERTICAL
SAK 16	2.5	16	54	432	8	HORIZONTAL
			92	460	5	VERTICAL
SAK 35	6	50	36	288	8	HORIZONTAL
			61	305	5	VERTICAL
ZDU 2.5*	0.08	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
ZDU2.5/3AN	0.08	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
ZDU2.5/4AN	0.08	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
ZDU2.5/2x2AN	0.08	4	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
ZDU 4	0.21	6	109	872	8	HORIZONTAL
			184	920	5	VERTICAL
ZDU 6	0.21	6	82	656	8	HORIZONTAL
			138	690	5	VERTICAL
ZDK2.5/1.5*	0.08	2.5	128	1024	8	HORIZONTAL
			217	1085	5	VERTICAL
UK 1.5N**	0.14	0.7	156	1248	8	HORIZONTAL
			263	1315	5	VERTICAL
UK 2.5N	0.2	2.5	126	1008	8	HORIZONTAL
			213	1065	5	VERTICAL
UK 3N	0.2	2.5	126	1008	8	HORIZONTAL
			213	1065	5	VERTICAL
UK 5N	0.2	4	105	840	8	HORIZONTAL
			178	890	5	VERTICAL



JUNCTION BOX

Supreme SERIES

SPM 9

Zone 1,2,21,22

SPM 9 TERMINAL CAPACITY DATA						
TERMINAL TYPE	CONDUCTOR SIZE mm ²		MAX NO OF TERMINALS		MAX NO OF RAILS	
	MIN	MAX	PER RAIL	TOTAL		
UK 6N	0.2	6	80	640	8	HORIZONTAL
			135	675	5	VERTICAL
UK 10N	0.5	10	64	512	8	HORIZONTAL
			108	540	5	VERTICAL
UK 16N	0.75	16	53	424	8	HORIZONTAL
			90	450	5	VERTICAL
UK 35	0.75	35	43	344	8	HORIZONTAL
			72	360	5	VERTICAL
UKH 50	10	50	32	224	7	HORIZONTAL
			55	220	4	VERTICAL
UKH 95	16	95	26	78	3	HORIZONTAL
			44	88	2	VERTICAL
UKH 150	25	150	21	63	3	HORIZONTAL
			35	70	2	VERTICAL
RTP 2.5***	0.5	4	109	872	8	HORIZONTAL
			184	920	5	VERTICAL
RTP 4	0.5	4	102	816	8	HORIZONTAL
			173	865	5	VERTICAL
RTP 6	0.5	10	82	656	8	HORIZONTAL
			138	690	5	VERTICAL
RTP 10	0.5	16	65	520	8	HORIZONTAL
			110	550	5	VERTICAL
RTP 16	0.5	16	52	416	8	HORIZONTAL
			88	440	5	VERTICAL
RTP 25	0.5	25	48	384	8	HORIZONTAL
			81	405	5	VERTICAL
RTP 35	1.5	35	100	800	8	HORIZONTAL
			170	850	5	VERTICAL
RTP 50	10	50	32	224	7	HORIZONTAL
			55	220	7	VERTICAL
RTP 95	6	95	24	72	3	HORIZONTAL
			42	84	2	VERTICAL

JUNCTION BOX

Supreme SERIES

SPM 9

Zone 1,2,21,22



* SAK & WDU & WDK & ZDU & ZDK & WFF ARE WEIDMULLER / KLIPPON RANGE OF TERMINALS.

* * UK & UKH ARE PHOENIX CONTACT RANGE OF TERMINALS.

*** RTP IS RAAD RANGE OF TERMINALS.

ALL TERMINALS INCREASED SAFETY AND ALL CODED Exe II.

NOTES

1- THE NUMBER AND COMBINATION OF DIFFERENT SIZES OF TERMINALS WHICH CAN BE FITTED TO THE

ENCLOSURE IS LIMITED BY THE MAXIMUM POWER DISSIPATION OF ENCLOSURE FOR ASSISTANCE

CALL THE "S.G" REPRESENTATIVE.

2- ROWS OF TERMINALS ARE FITTED BETWEEN END STOPS ON TERMINALS RAILS.

3- PARTITIONS ARE FITTED BETWEEN TERMINALS OF DIFFERENT TYPES OR SIZES, AND BETWEEN

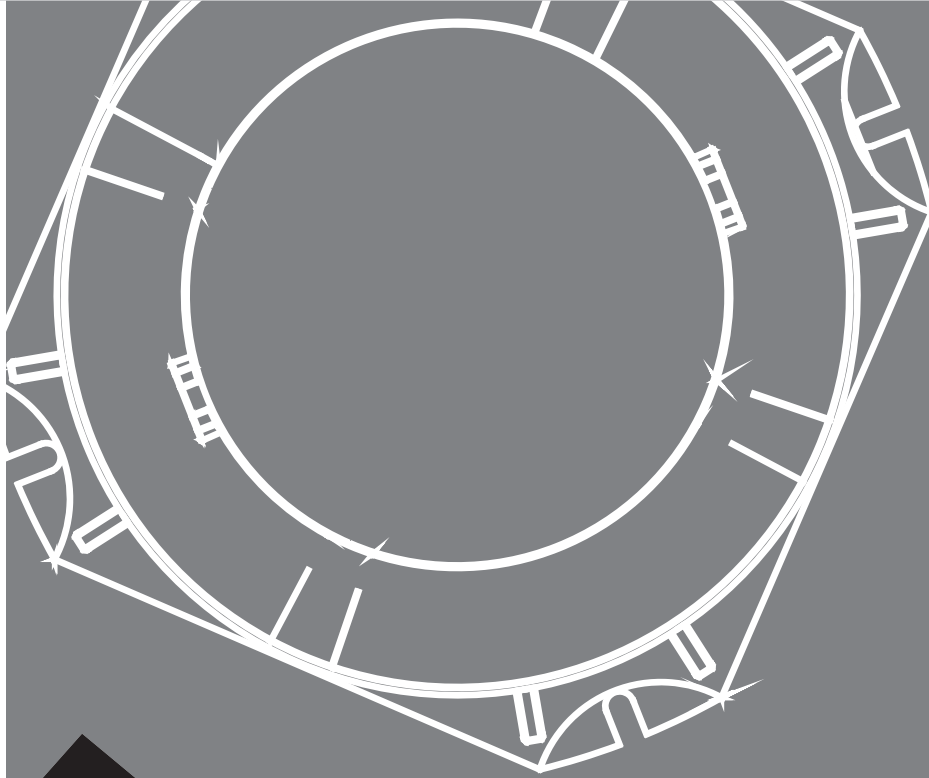
LINKED AND UNLINKED TERMINALS.

4- THE TABLE SHOWN IS GIVEN AS A GUIDE ONLY, ALLOWANCE HAVE BEEN MADE FOR THE FITTING OF

ONE END SECTION AND TWO END BRACKETS ON EACH RAIL.

5- THE NUMBER OF TERMINALS MUST BE REDUCED IF PARTITIONS OR EXTRA END SECTION SPACE ARE

REQUIRED.



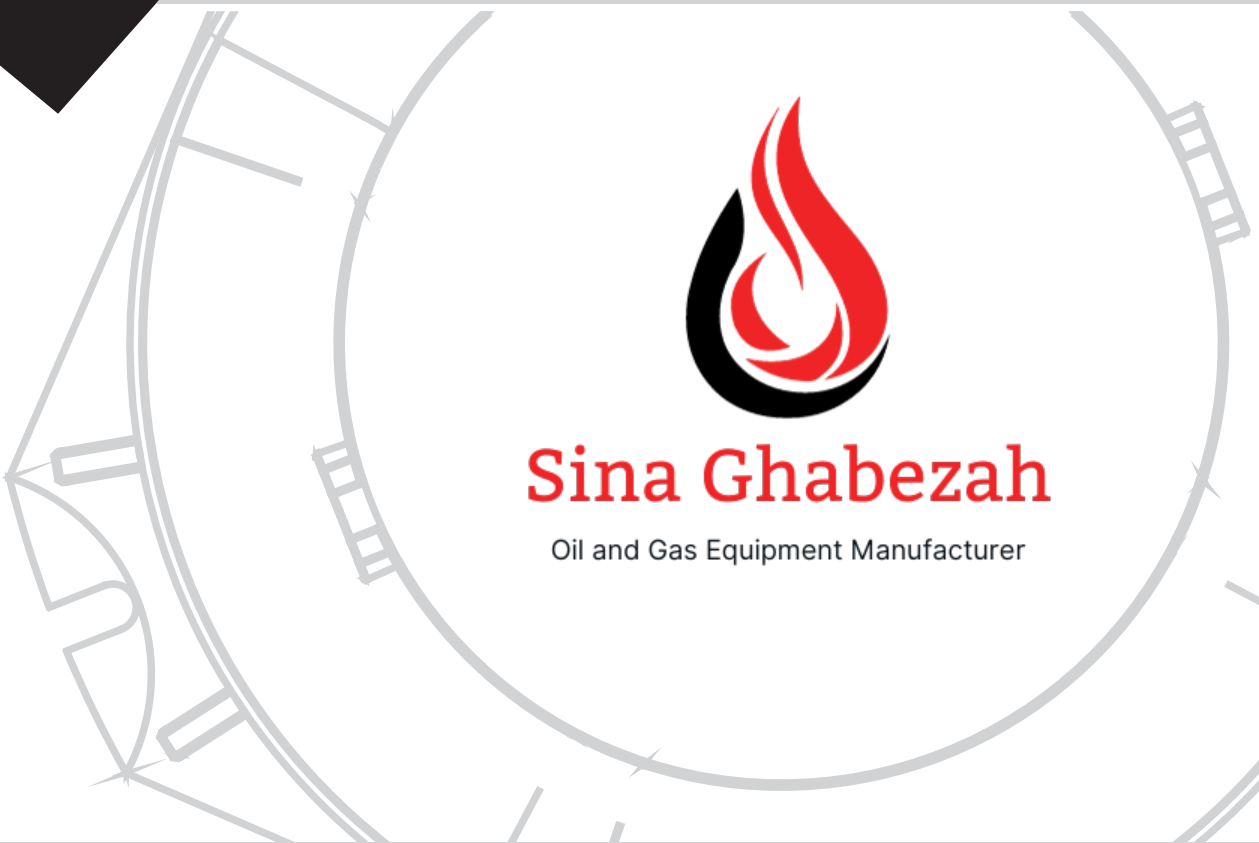
JUNCTION BOX

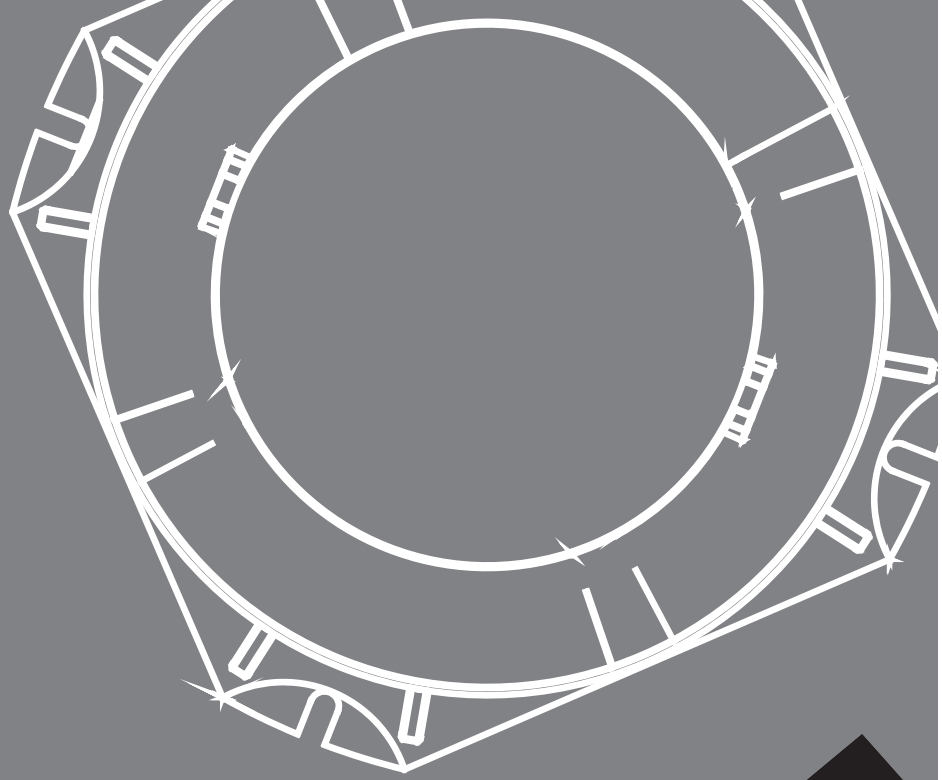
EJB & LJB SERIES



Sina Ghabezah

Oil and Gas Equipment Manufacturer





JUNCTION BOX

EJB & LJB SERIES



Sina Ghabezah

Oil and Gas Equipment Manufacturer



JUNCTION BOX

EJB I

Zone 1,2,21,22

SPECIFICATION

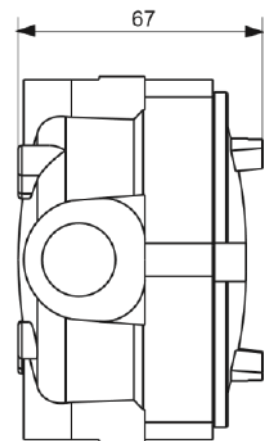
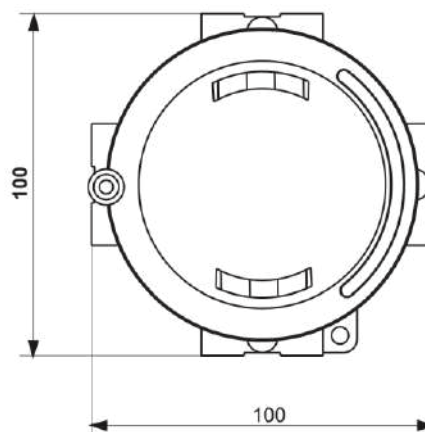
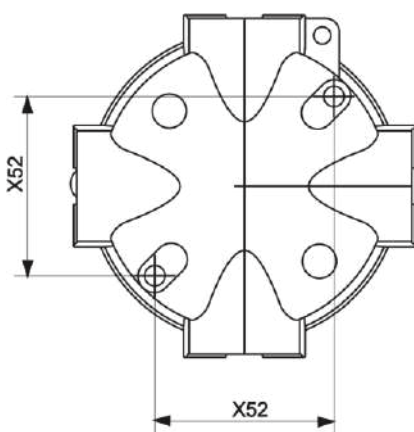
TYPE	EJB I
Application	As a terminal or fuse switch enclosure
Protection	Ex d IIB T3 & Industrial
Size	See the dimensions table below
Material	Cast Aluminum Alloy
Finish	As die cast or painted to suit customer application
Standards	BS EN 50014, BS EN 50018 , IEC 60079-0 , IEC 60079-1
Ingress Protection	IP 65, by captive rubber "O" ring
Temperature Class	T3
Entries	Standard: M20 to BS 3643 pt2 1.5 mm pitch Alternative 1: 1/2 " , 3/4 "NPT Thread to USAS B2.1, Alternative 2: 1 / 2 " , 3/4 "Imperial Thread to BS 31 Alternative 3: 13.5 PG, 16PG and 19PG to DIN 40430
Earthing	M5 Internal / External Earth Studs
Enclosure Mounting	Fixing Bracket, 2 x M6 x 6screws

DIMENSIONS (mm)

	LENGTH	WIDTH	HEIGHT
INTERNAL	Ø133	-	53
EXTERNAL	100	100	67
Fixing Hole Centers	X 52±1	X 52±1	-

TERMINAL CAPACITY

Terminal Size	Max. Physical No. Of Terminals
SAKD 2.5 (N)	7



JUNCTION BOX

EJB II

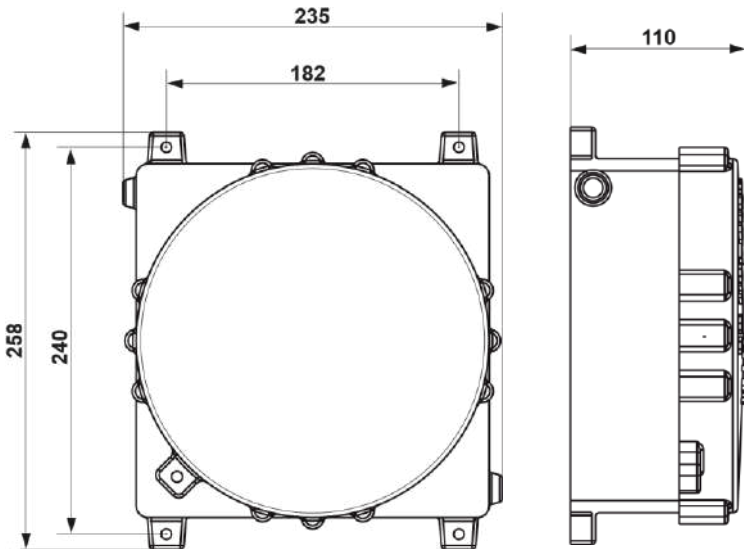
Zone 1,2,21,22



SPECIFICATION	
TYPE	EJB II
Application	As a terminal or fuse switch enclosure
Protection	Ex d IIB T6 & Industrial
Size	See the dimensions table below
Material	Cast Aluminum Alloy
Finish	As cast or painted to suit customer application
Standards	BS EN 50014 BS EN 50018, IEC 60079-0 , IEC 60079-1
Ingress Protection	IP 65, by captive rubber "O" ring
Temperature Class	T6
Entries	See the entries table below
Cover	Threaded
Earthing	M6 Internal / External Earth Screw
Enclosure Mounting	4 mounting holes , Ø 6.5mm

DIMENSIONS (mm)			
	LENGTH	WIDTH	HEIGHT
INTERNAL	240	182	87
EXTERNAL	258	235	110
Fixing Hole Centers	X 239±1	X 181±1	-

TERMINAL CAPACITY	
Terminal Size	Max. Physical No. Of Terminals
RTP 2.5	25
RTP 4	23
RTP 6	18
RTP 10	14
RTP 16	12
RTP 25	10
RTP 35	9



ENTRIES				
Entry Size	Top	Bottom	Left	Right
M20 (O)	6	6	6	6
M20 (A)	5	5	5	5
M25 (B)	4	4	4	4
M32 (C)	3	3	3	3



JUNCTION BOX

EJB 10

Flameproof

Zone 1,2,21,22

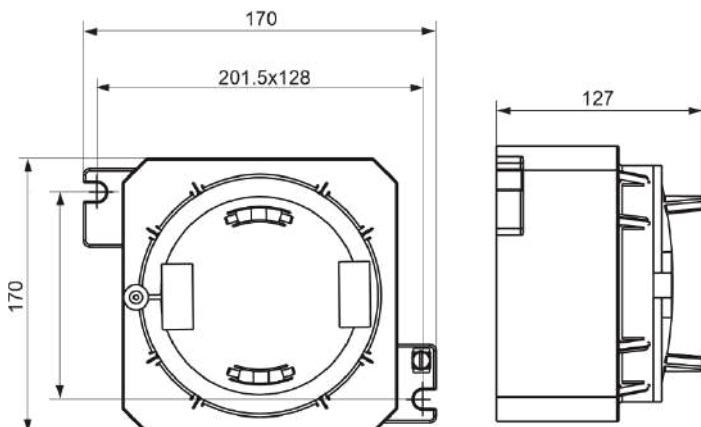
SPECIFICATION	
TYPE	EJB10
Application	Flame proof Ex d enclosure
Protection	Ex d IIC T6/T5/T4 Gb, Ex t IIIC T85°C /T100°C/T135°C Db
Marking(ATEX)	Ⓔ II 2 G D
Ingress Protection to IEC 60529	IP 66 / 67
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
Certificate No.	TÜV 11 ATEX 7151X, IECEx TUR 11.0017X
Standards	IEC 60079-0 , IEC 60079-1 , IEC 61241-1 , IEC-60529
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-30°C to +55°C, -20°C to +40°C
Lid Fixing	Threaded type
Earthing	M5 External / M8 internal earth stud
Enclosure Mounting	2 slotled fixing holes for (M8) screws

Table 1- Maximum Permitted dissipation power

Type of Enclosure	Tamb (-20°C to + 40°C)			Tamb (-30°C to + 55°C)			Max. Rated Current	Max. Rated Voltage
	T4, T135 °C	T5, T105 °C	T6, T85 °C	T4, T135 °C	T5, T105 °C	T6, T85 °C		
EJB 10	111W	60W	38W	87W	38W	15W	60A	690V

Table 2- Maximum number of entries per side

Other thread forms/ combination available on request					
Type	M20 / M16	M25	M32	M40	M50
EJB 10	4	3	2	-	-



DIMENSIONS (mm)

	LENGTH	WIDTH	HEIGHT
INTERNAL DIM	170	170	127
EXTERNAL DIM	139	139	87.5
Fixing Brackets	201.5x128		

JUNCTION BOX

EJB 20

Flameproof

Zone 1,2,21,22



SPECIFICATION	
TYPE	EJB 20
Application	Flame proof Ex d enclosure
Protection	Ex d IIC T6/T5/T4 Gb, Ex t IIIC T85°C /T100°C/T135°C Db
Marking(ATEX)	⊕ II 2 G D
Ingress Protection to IEC 60529	IP 66 / 67
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
Certificate No.	TÜV 11 ATEX 7151X, IECEx TUR 11.0017X
Standards	IEC 60079-0, IEC 60079-1 , IEC 61241-1 , IEC-60529
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-30°C to +55°C , -20°C to +40°C
Lid Fixing	Threaded type
Earthing	M6 External / M8 internal earth stud
Enclosure Mounting	2 slotled fixing holes for (M8) screws

Table 1- Maximum Permitted dissipation power

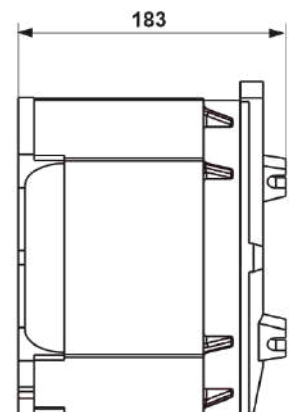
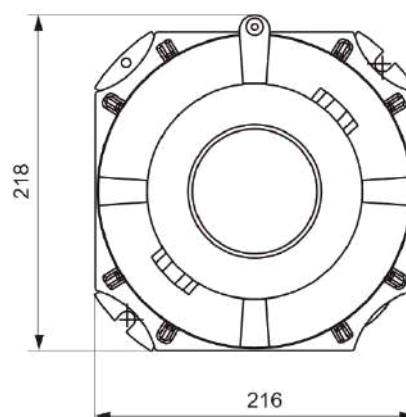
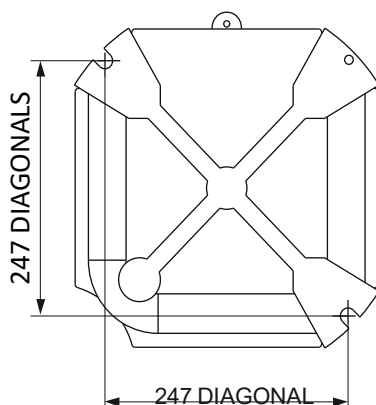
Type of Enclosure	Tamb (-20°C to + 40°C)			Tamb (-30°C to + 55°C)			Max. Rated Current	Max. Rated Voltage
	T4, T135 °C	T5, T105 °C	T6, T85 °C	T4, T135 °C	T5, T105 °C	T6, T85 °C		
EJB 20	232W	127W	81W	188W	81W	46W	150A	690V

Table 2- Maximum number of entries per side

Other thread forms/ combination available on request							
Type	M20 / M16	M25	M32	M40	M50	M63	M75
EJB 20	9	4	2	2	1	-	-

DIMENSIONS (mm)

	LENGTH	WIDTH	HEIGHT
EXTERNAL DIM	218	216	183
INTERNAL DIM	177	177	136
Fixing Brackets	247 DIAGONALS		





JUNCTION BOX

EJB 30

Flameproof

Zone 1,2,21,22

SPECIFICATION	
TYPE	EJB 30
Application	Flame proof Ex d enclosure
Protection	Ex d IIC T6/T5/T4 Gb, Ex t IIIC T85°C /T100°C/T135°C Db
Marking(ATEX)	⊕ II 2 G D
Ingress Protection to IEC 60529	IP 66
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
Certificate No.	TÜV 11 ATEX 7151X, IECEx TUR 11.0017X
Standards	IEC 60079-0, IEC 60079-1 , IEC 61241-1 , IEC-60529
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-30°C to +55°C , -20°C to +40°C
Lid Fixing	Threaded type
Earthing	M5 External / M8 internal earth stud
Enclosure Mounting	4 slotled fixing holes for (M8) screws

Table 1- Maximum Permitted dissipation power

Type of Enclosure	Tamb (-20°C to + 40°C)			Tamb (-30°C to + 55°C)			Max. Rated Current	Max. Rated Voltage
	T4, T135 °C	T5, T105 °C	T6, T85 °C	T4, T135 °C	T5, T105 °C	T6, T85 °C		
EJB 30	412W	238W	152W	326W	152W	79W	250A	690V

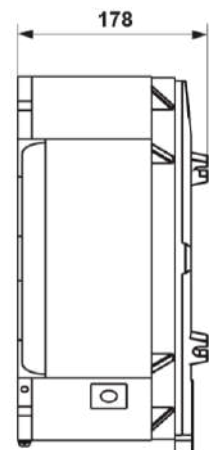
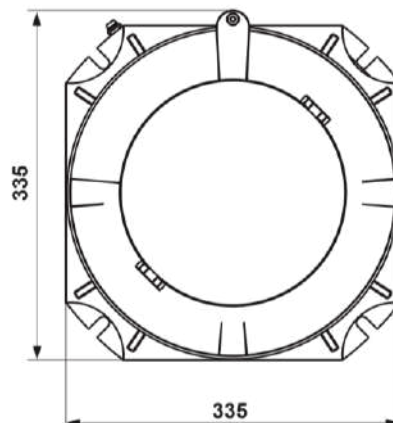
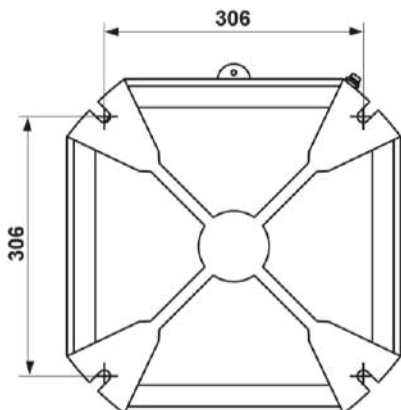
Table 2- Maximum number of entries per side

Other thread forms/ combination available on request

Type	M20 / M16	M25	M32	M40	M50	M63
EJB 30	8	6	3	2	2	1

DIMENSIONS (mm)

	LENGT H	WIDT H	HEIGHT
EXTERNAL DIM	335	335	178
INTERNAL DIM	306	306	125.5
Fixing Brackets	260X260		



JUNCTION BOX

EJB 30 M1
Flameproof
Zone 1,2,21,22



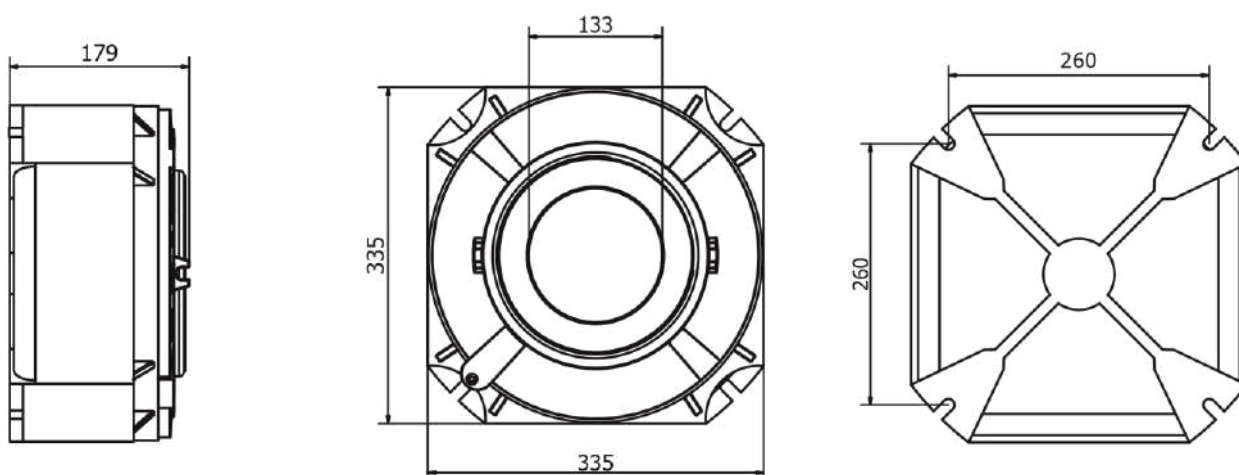
SPECIFICATION	
TYPE	EJB30 M1
Application	Flame proof Ex d enclosure
Protection	Ex d IIC T6/T5/T4 Gb, Ex t IIIC T85°C /T100°C/T135°C Db
Marking (ATEX)	⊕ II 2 G D
Ingress Protection to IEC 60259	IP 66
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
C ertificate No.	Under certification
Standards	IEC 60079-0 , IEC 60079-1 , IEC 61241-1 , IEC-60529
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-30°C to +55°C, -20°C to +40°C
Lid Fixing	Threaded Type
Earthing	M5 External / M8 internal earth stud
Enclosure Mounting	4 slotted fixing holes for (M8) screws

Type of Enclosure	Tamb (-20 C to + 40 C)			Tamb (-30 C to + 55 C)			Max. Rated Current	Max. Rated Voltage
	T4, T135°C	T5, T105°C	T6, T85°C	T4, T135°C	T5, T105°C	T6, T85°C		
EJB 30 M1	412W	238W	152W	326W	152W	79W	250A	690V

Table 2- Maximum number of entries per side other thread forms/ combination available on request

Type	M20 / M16	M25	M32	M40	M50	M63
EJB 30M1	8	6	3	2	2	1

	LENGTH	WIDTH	HEIGHT
EXTERNAL DIM	335	335	179
INTERNAL DIM	306	306	125.5
Fixing Brackets	260X260		





JUNCTION BOX

EJB 31

Flameproof

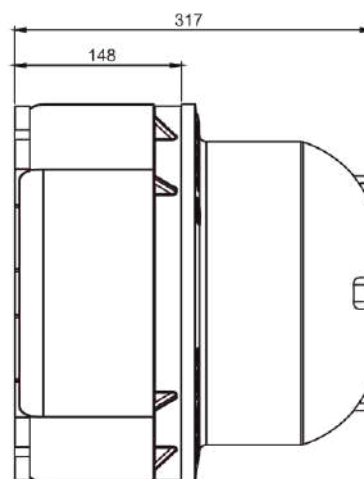
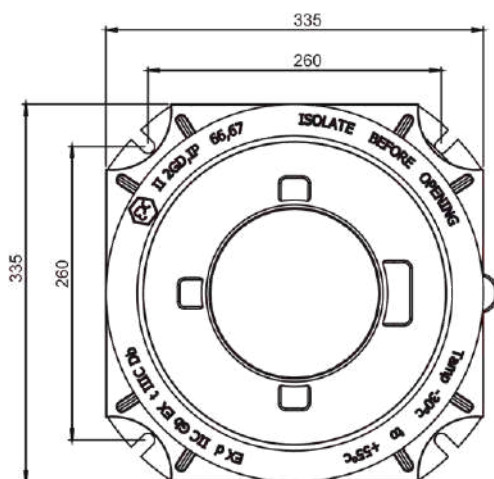
Zone 1,2,21,22

SPECIFICATION	
TYPE	EJB31
Application	Flame proof Ex d enclosure
Protection	Ex d IIC T6/T5/T4 Gb, Ex t IIIC T85°C /T100°C/T135°C Db
Marking (ATEX)	Ex II 2 G D
Ingress Protection to IEC 60259	IP 66
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
C ertificate No.	Under certification
Standards	IEC 60079-0 , IEC 60079-1 , IEC 61241-1 , IEC-60529
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-30°C to +55°C , -20°C to +40°C
Lid Fixing	Threaded Type
Earthing	M5 External / M8 internal earth stud
Enclosure Mounting	4 slotted fixing holes for (M8) screws

Type of Enclosure	Tamb (-20 C to + 40 C)			Tamb (-30 C to + 55 C)			Max. Rated Current	Max. Rated Voltage
	T4, T135°C	T5, T105°C	T6, T85°C	T4, T135°C	T5, T105°C	T6, T85°C		
EJB 31	412W	238W	152W	326W	152W	79W	250A	690V

Type	M20/ M16	M25	M32	M40	M50	M63
EJB 31	8	6	3	2	2	1

	LENGTH	WIDTH	HEIGHT
EXTERNAL DIM	335	335	317
INTERNAL DIM	260	260	312
Fixing Brackets	260X260		



JUNCTION BOX

EJB 110

Flameproof

Zone 1,2,21,22



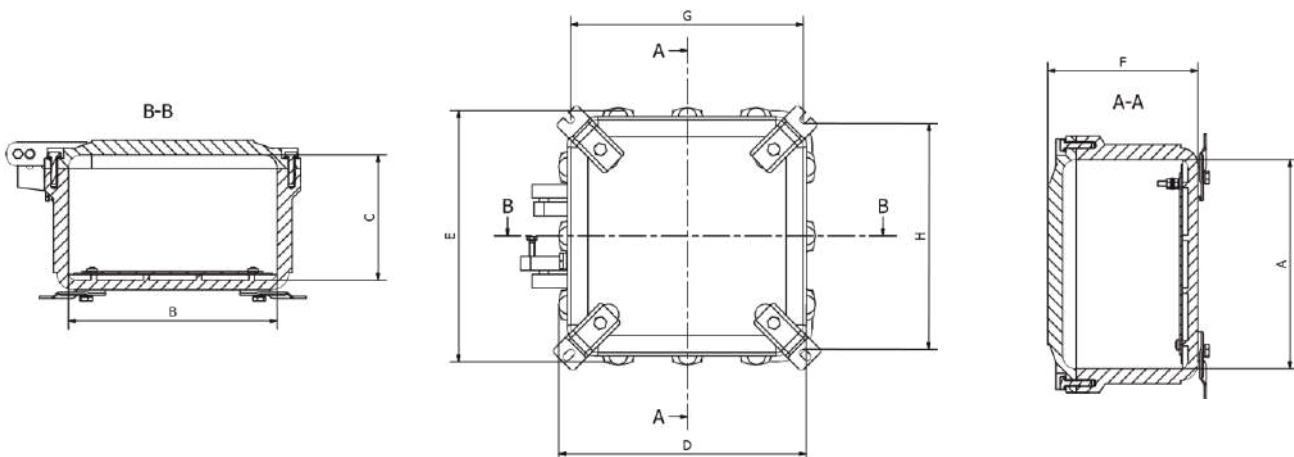
SPECIFICATION	
TYPE	EJB 110
Application	Flame proof Ex d enclosure
Protection	Ex d IIB Gb, Ex tb IIIB T85°C, 105°C & T135°C Db
Marking (ATEX)	Ⓔ II 2 G D
Ingress Protection to IEC 60259	IP 65
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
Certificate No.	ECM 16 ATEX - B 280 X
Standards	EN 60079-0 , EN 60079-1 , EN 60079-31
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-20°C to +40°C
Lid Fixing	Flange type by 12 x M10 socket head stainless steel screw
Earthing	M5 External / M8 internal earth stud
Enclosure Mounting	4 slotted fixing holes for (M8) screws

Table 1- Maximum Permitted dissipation power

Type of Enclosure	Tamb (-20 C to + 40 C)			Tamb (-30 C to + 55 C)			Max. Rated Current(A)	Max. Rated Voltage(V)
	T4, T135°C	T5, T105°C	T6, T85°C	T4, T135°C	T5, T105°C	T6, T85°C		
EJB 110	446 W	235 W	130 W	346W	130W	50W	160	690

Table 2- Dimension

Type	Inside Nominal Dimension(mm)			Overall Dimension(mm)			Mounting Dimension(mm)		Weight (Kg)
	A	B	C	D	E	F	G	H	
EJB 110	311	311	178	356	356	220	347	347	22





JUNCTION BOX

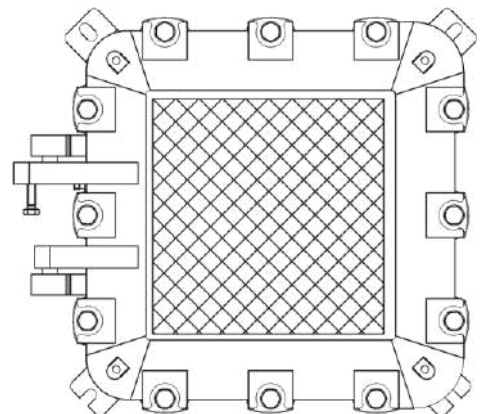
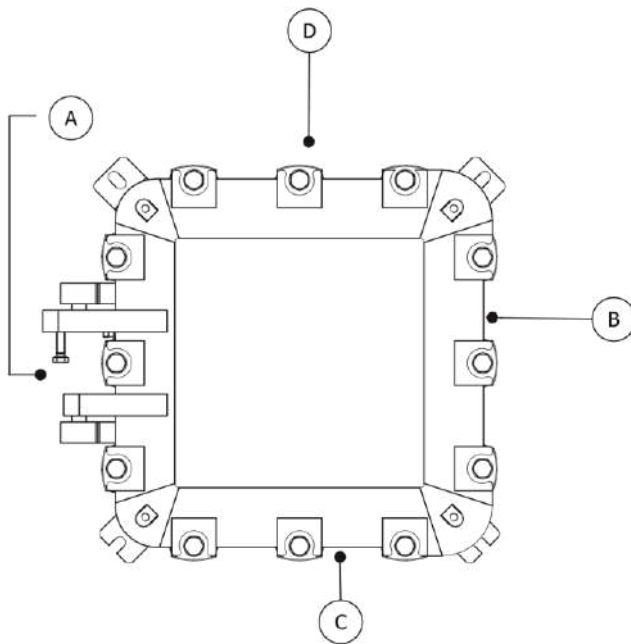
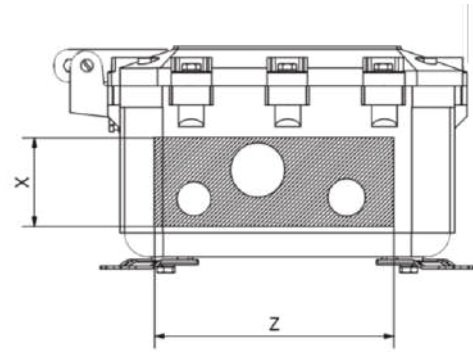
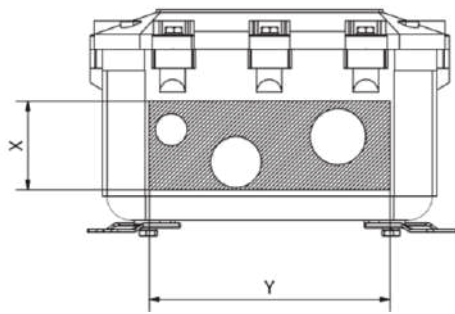
EJB 110

Flameproof

Zone 1,2,21,22

Table 3-Entries for cable gland on sides

EJB	Entry Size	Max. no. of Entries per side								Dimension		
		Metric NPT	M16/M20 1/2	M25 3/4	M32 1 - 1/4 1 - 1/4	M40 1 1/4 - 1 1/2	M50 2	M63 2 1/2	M75 3	X	Y	Z
110	No. of Entries(s)/side (A, B)		21	14	8	4	3	2	2	77	230	
	No. of Entries(s)/side (C,D)		21	14	8	4	3	2	2	77		230



JUNCTION BOX

EJB 120

Flameproof

Zone 1,2,21,22



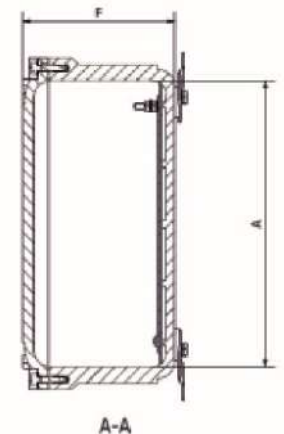
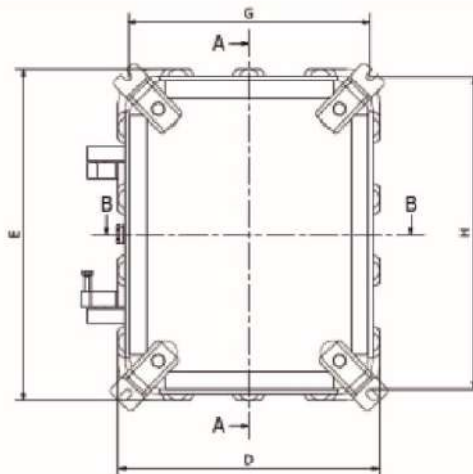
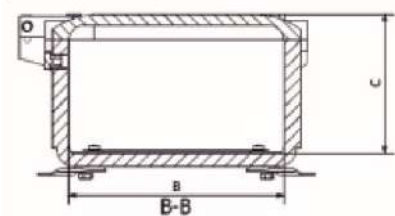
SPECIFICATION	
TYPE	EJB 120
Application	Flame proof Ex d enclosure
Protection	Ex d IIB T4, T5 & T6 Gb, Ex tb IIIB T85°C, 105°C & T135°C Db
Marking (ATEX)	Ex II 2 G D
Ingress Protection to IEC 60259	IP 65
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
Certificate No.	ECM 16 ATEX - B 280 X.
Standards	EN 60079-0 , EN 60079-1 , EN 60079-31.
Material	Copper free Aluminum,
Finish	As Aluminum or Electrostatic paint to suit customer Application.
Ambient temperature	-20°C to +40°C.
Lid Fixing	Flange type by 14 x M10 socket head stainless steel screw.
Earthing	M5 External / M8 internal earth stud.
Enclosure Mounting	4 slotted fixing holes for (M8) screws.

Table 1- Maximum Permitted dissipation power

Type of Enclosure	Tamb (-20 C to + 40 C)			Tamb (-30 C to + 55 C)			Max. Rated Current(A)	Max. Rated Voltage(V)
	T4, T135° C	T5, T105° C	T6, T85° C	T4, T135° C	T5, T105° C	T6, T85° C		
EJB 120	396 W	278 W	187 W	296W	187W	107W	300	690

Table 2- Dimension

Type	Inside Nominal Dimension(mm)			Overall Dimension(mm)			Mounting Dimension(mm)		Weight (Kg)
	A	B	C	D	E	F	G	H	
EJB 120	408	308	183	356	454	220	346	450	28.5





JUNCTION BOX

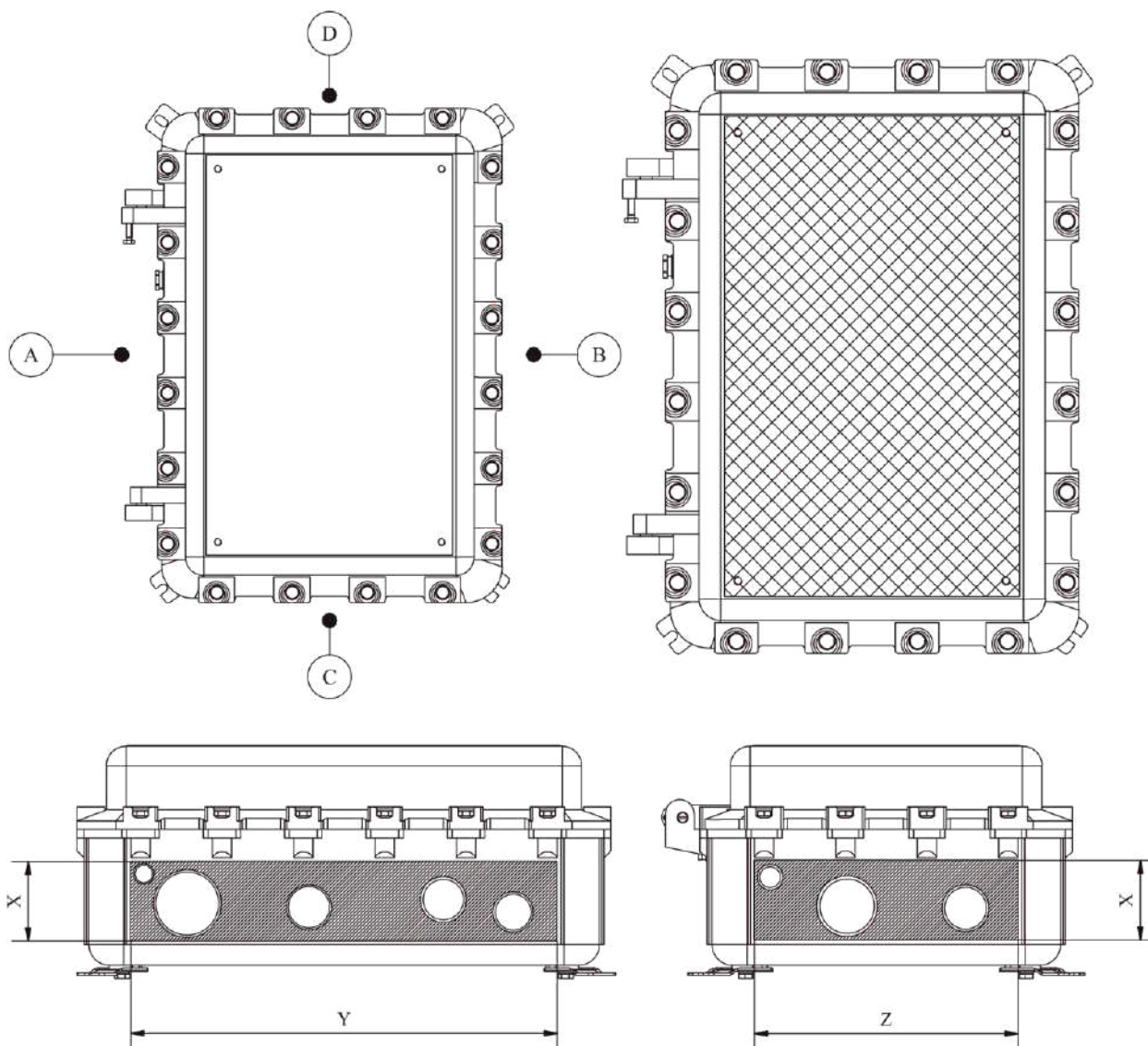
EJB 120

Flameproof

Zone 1,2,21,22

Table 3-Entries for cable gland on sides

EJB	Max. no. of Entries per side									Dimension		
	Entry Size	Metric NPT	M16/M20 1/2	M25 3/4	M32 1 - 1 1/4	M40 1 1/4 - 1 1/2	M50 2	M63 2 1/2	M75 3	X	Y	Z
120	No. of Entries(s)/side(A,B)		27	18	9	5	4	3	2	77	305	
	No. of Entries(s)/side (C,D)		21	14	8	4	3	2	2	77		230



JUNCTION BOX

EJB 240-241
Flameproof



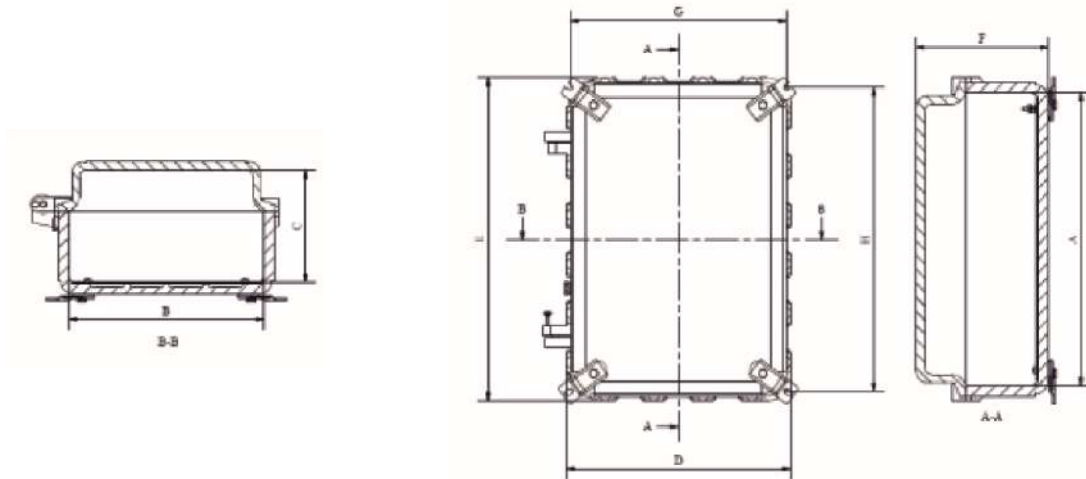
SPECIFICATION	
TYPE	EJB 240 - 241
Application	Flame proof Ex d enclosure
Protection	Ex d IIB T4, T5 & T6 Gb, Ex tb IIB T85°C, 105°C & T135°C Db
Marking (ATEX)	Ⓔ II 2 G D
Ingress Protection to IEC 60259	IP 65
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
Certificate No.	ECM 16 ATEX - B 280 X
Standards	EN 60079-0 , EN 60079-1 , EN 60079-31
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-20°C to +40°C
Lid Fixing	Flange type by 20 x M10 socket head stainless steel screw
Earthing	M5 External / M8 internal earth stud
Enclosure Mounting	4 slotted fixing holes for (M8) screws

Table 1- Maximum Permitted dissipation power

Type of Enclosure	Tamb (-20 C to + 40 C)			Tamb (-30 C to + 55 C)			Max. Rated Current(A)	Max. Rated Voltage(V)
	T4, T135° C	T5, T105° C	T6, T85° C	T4, T135° C	T5, T105° C	T6, T85° C		
EJB 240-241	793 W	400 W	295 W	693W	295W	215W	850	690

Table 2- Dimension

Type	Inside Nominal Dimension(mm)			Overall Dimension(mm)			Mounting Dimension(mm)		Weight (Kg)
	A	B	C	D	E	F	G	H	
EJB 240	622	415	273	460	670	220	454	646	54.8
EJB 241	622	415	288	460	670	280	454	646	56.8





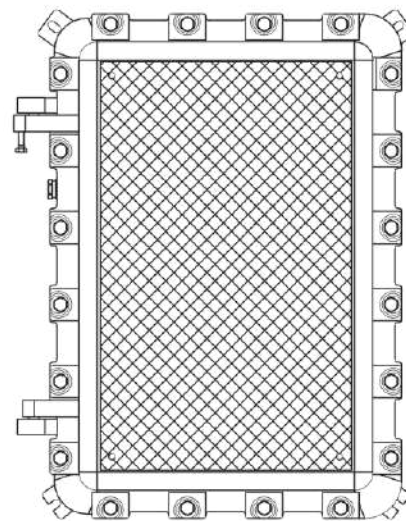
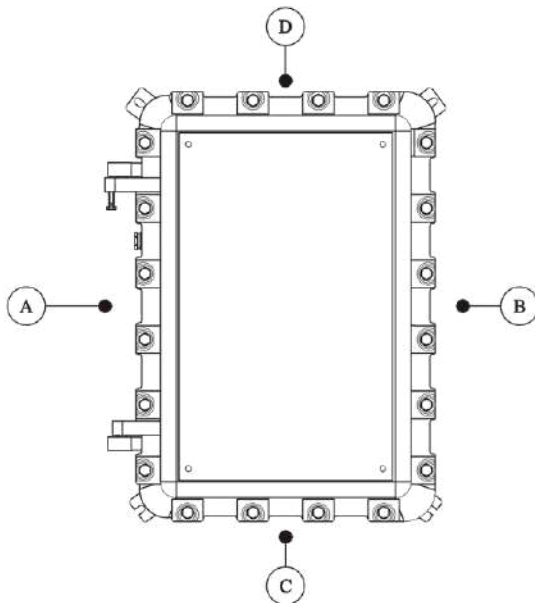
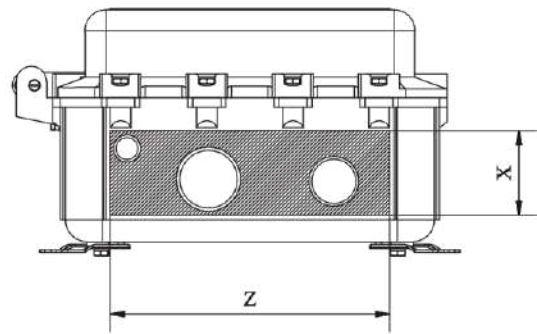
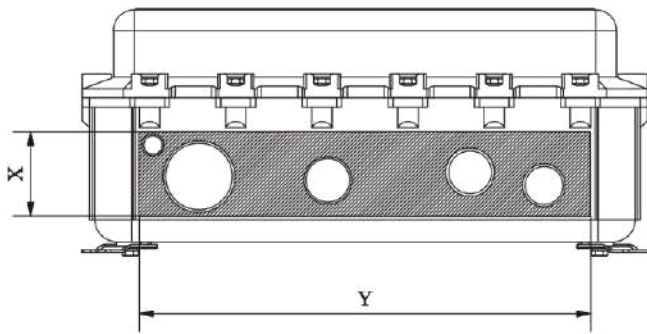
JUNCTION BOX

EJB 240-241

Flameproof

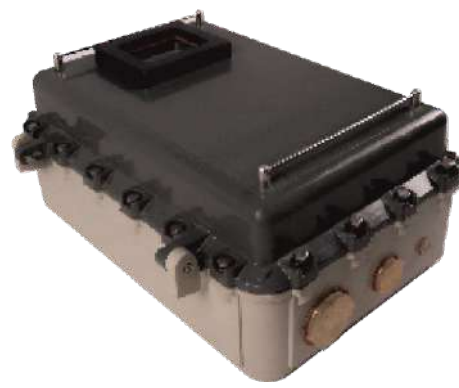
Table 3-Entries for cable gland on sides

EJB	Max. no. of Entries per side									Dimension		
	Entry Size	Metric NPT	M16/M20 1/2	M25 3/4	M32 1 - 1 1/4	M40 1 1/4 - 1 1/2	M50 2	M63 2 1/2	M75 3	X	Y	Z
240	No. of Entries(s)/side (A,B)		42	29	15	9	7	5	4	76	522	
241	No. of Entries(s)/side (C,D)		27	18	9	5	4	3	2	76		305



JUNCTION BOX

EJB 241 M1
Flameproof



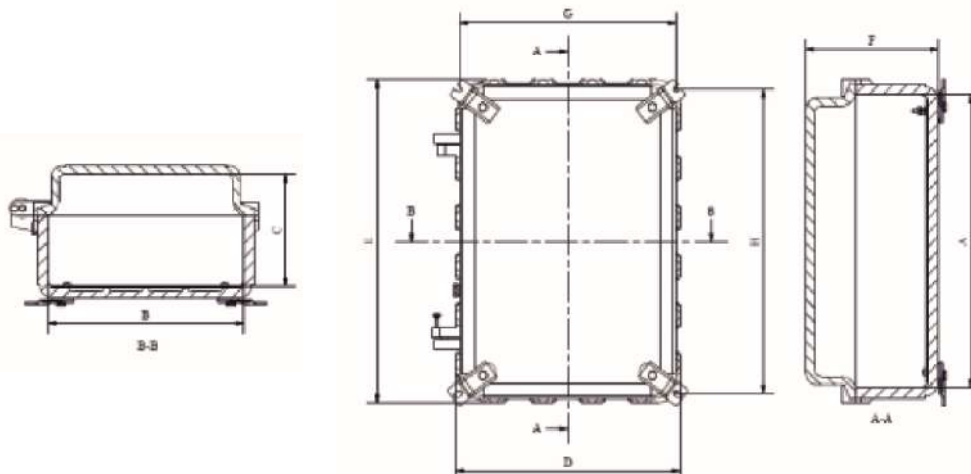
SPECIFICATION	
TYPE	EJB 241M1
Application	Flame proof Ex d enclosure
Protection	Ex d IIB T4, T5 & T6 Gb, Ex tb IIIB T85°C, 105°C & T135°C Db
Marking (ATEX)	Ex II 2 G D
Ingress Protection to IEC 60259	IP 65
Temperature Class/Power dissipation	T6/T5/T4 (see table 1)
Certificate No.	ECM 16 ATEX - B 280 X
Standards	EN 60079-0 , EN 60079-1 , EN 60079-31
Material	Copper free Aluminum
Finish	As Aluminum or Electrostatic paint to suit customer Application
Ambient temperature	-20°C to +40°C
Lid Fixing	Flange type by 20 x M10 head stainless steel screw
Earthing	M5 External / M8 internal earth stud
Enclosure Mounting	4 slotted fixing holes for (M8) screws

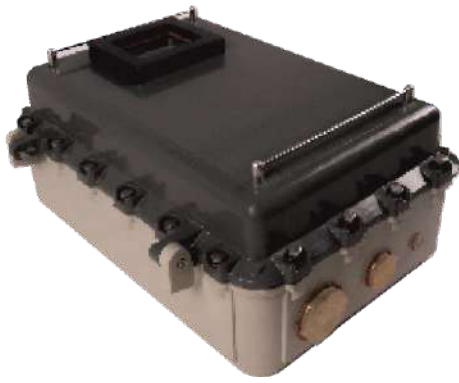
Table 1- Maximum Permitted dissipation power

Type of Enclosure	Tamb (-20 C to + 40 C)			Tamb (-30 C to + 55 C)			Max. Rated Current(A)	Max. Rated Voltage(V)
	T4, T135° C	T5, T105° C	T6, T85° C	T4, T135° C	T5, T105° C	T6, T85° C		
EJB 241M1	793 W	400 W	295 W	693W	295W	215W	850	690

Table 2- Dimension

Type	Inside Nominal Dimension(mm)			Overall Dimension(mm)			Mounting Dimension(mm)		Weight (Kg)
	A	B	C	D	E	F	G	H	
EJB 241M1	622	415	288	460	670	280	454	646	56



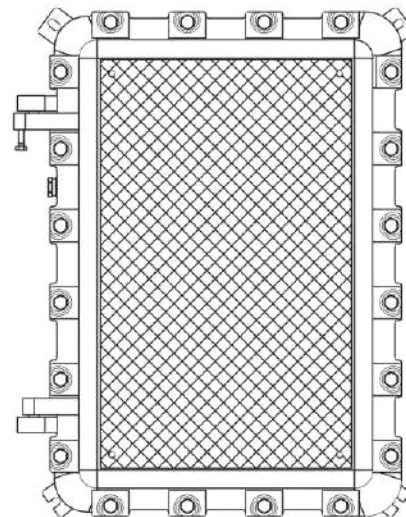
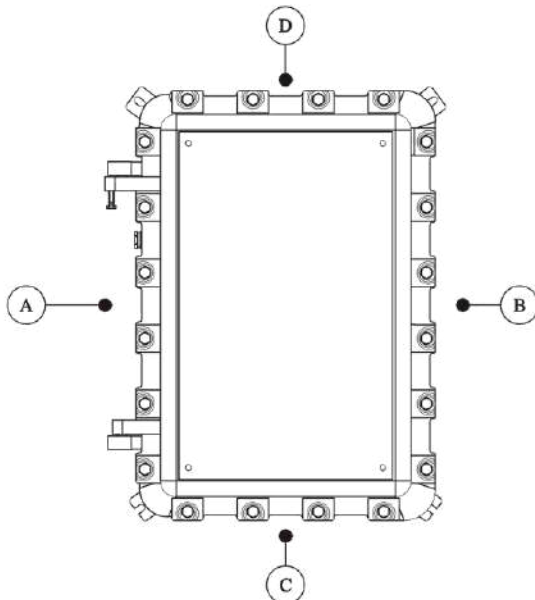
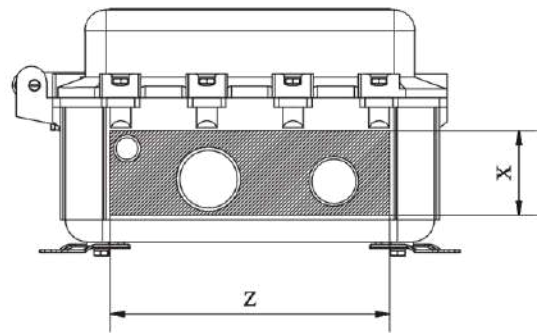
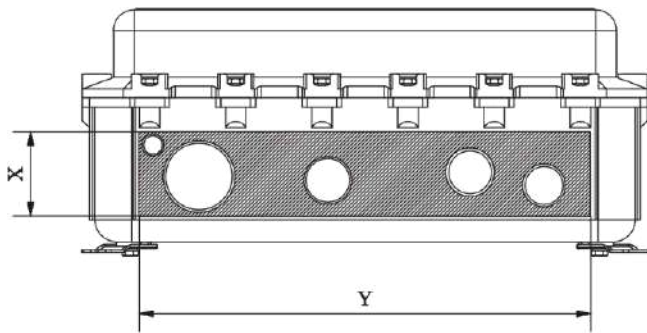


JUNCTION BOX

EJB 241 M1
Flameproof

Table 3-Entries for cable gland on sides

EJB	Max. no. of Entries per side									Dimension		
	Entry Size	Metric NPT	M16/M20 1/2	M25 3/4	M32 1-11/4	M40 1 1/4 - 1 1/2	M50 2	M63 2 1/2	M75 3	X	Y	Z
241M1	No. of Entries(s)/side(A,B)		42	29	15	9	7	5	4	76	52 2	
	No. of Entries(s)/side (C,D)		27	18	9	5	4	3	2	76		30 5



JUNCTION BOX

LJB 1

Explosion protected Terminals & Switchgear Box
Zone 1,2,21,22



SPECIFICATION	
TYPE	LJB 1
Marking acc to 94/9/EC directive	Ⓔ II 2 GD
EC type examination certificate	TÜV 11 ATEX 7152 X
Marking acc.to IEC	Exd IIC T6 Gb,Ex t IIIC T85°C Db
IEC certificate of conformity	IECEX TUR 11.0019X
Ingress protection to IEC 60529	IP 66 / 67
Permissible ambient temperature	-20°C to +40°C and -30°C to +55°C,(See Table1)
Material	Copper free Aluminum

TABLE 1 Maximum Permitted dissipation power						
Tamb (-20°C to +40°C)			Tamb (-30°C to +55°C)			Type of Enclosure
T4 T 135°C	T5 T 100°C	T6 T 85°C	T4 T 135°C	T5 T 100°C	T6 T 85°C	
47 W	26 W	18 W	39 W	18W	10W	LJB 1

TABLE 2 TYPE CONFIGURATION			
TYPE	STYLE	Entry From Side	Volume < 2 L
LJB1 T1		3 X 1/2"(M20)	
LJB1 T2		3 X 3/4"(M25)	
LJB1 X1		4 X 1/2"(M20)	
LJB1 X2		4 X 3/4"(M25)	

* Other thread forms are available on request.ie.Metric,PG,NPT...

**Other configurations are available on request.Max.number of entries=4



JUNCTION BOX

LJB 1

Explosion protected Terminals & Switchgear Box

Zone 1,2,21,22

Table 3 APPLICATIONS

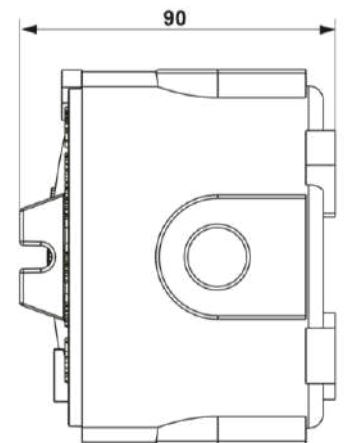
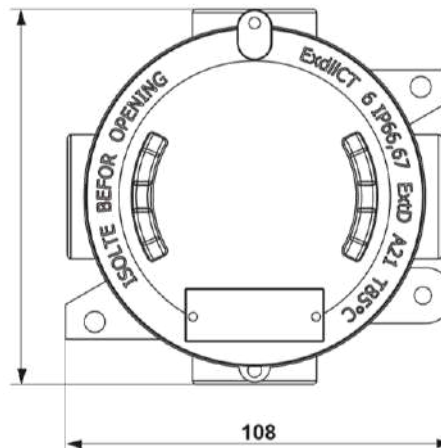
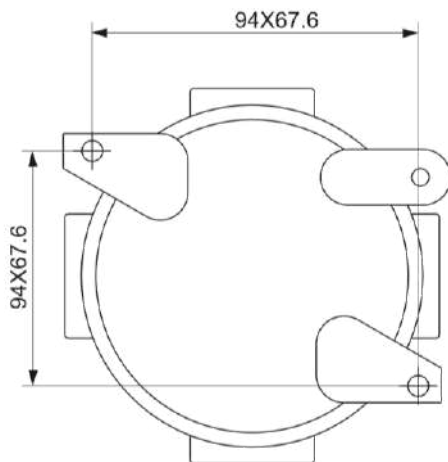
Max. Number of terminals	Size	VMax	IMax	Max rail Length	Type of enclosure
10	2.5 mm ²	<750 V	<20A	45 mm	LJB 1
7	4 mm ²		< 32A		
4 *	6 mm ²		< 40A		

*pillar or column terminals

DIMENSIONS (mm)

	LENGTH	WIDTH	HEIGHT
EXTERNAL	108	-	90
INTERNAL	∅ 86	-	70

Fixing Brackets: 112° DIAGONAL, 60 VERTICALS



JUNCTION BOX

LJB 2

Explosion protected Terminals & Switchgear Box

Zone 1,2,21,22



SPECIFICATION	
TYPE	LJB 2
Marking acc to 94/9/EC directive	Ex II 2 GD
EC type examination certificate	TÜV 11 ATEX 7152 X
Marking acc.to IEC	Exd IIC T6 Gb,Ex t IIIC T85°C Db
IEC certificate of conformity	IECEX , TUR 11.0019
Ingress protection to IEC 60529	IP 66 / 67
Permissible ambient temperature	-20°C to +40°C and -30°C to +55°C,(See Table1)
Material	Copper free Aluminum

TABLE 1 Maximum Permitted dissipation power						
Tamb (-20°C to +40°C)			Tamb (-30°C to +55°C)			Type of Enclosure
T4 T 135°C	T5 T 100°C	T6 T 85°C	T4 T 135°C	T5 T 100°C	T6 T 85°C	
70 W	41 W	28 W	57 W	28W	15W	LJB 2

TABLE 2 TYPE CONFIGURATION			
TYPE	STYLE	Entry From Side	Volume< 2 L
LJB2 T1		3 X 1/2"(M20)	
LJB2 T2		3 X 3/4"(M25)	
LJB2 T3		3 X 1 " (M32)	
LJB2 X1		4 X 1/2"(M20)	
LJB2 X2		4 X 3/4"(M25)	
LJB2 X3		4 X 1 " (M32)	

* Other thread forms are available on request.ie.Metric,PG,NPT...

**Other configurations are available on request.Max.number of entries=8



JUNCTION BOX

LJB 2

Explosion protected Terminals & Switchgear Box

Zone 1,2,21,22

Table 3 APPLICATIONS

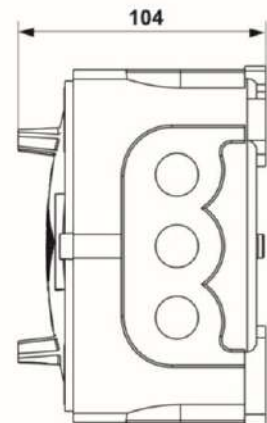
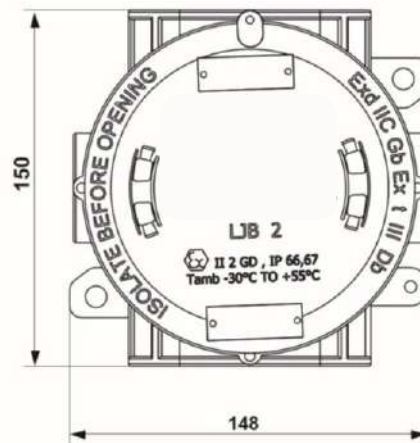
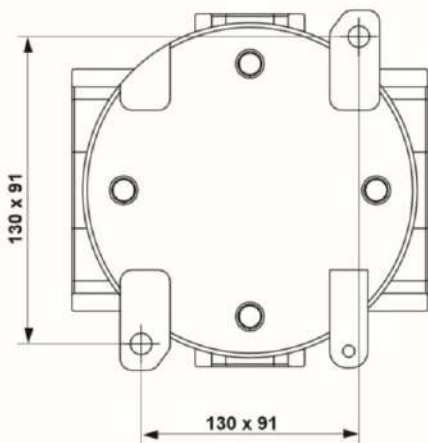
Max. Number of terminals	Size	VMax	IMax	Max rail Length	Type of enclosure
20	2.5 mm ²	<750 V	<20A	82 mm	LJB 2
15	4 mm ²		< 32A		
13	6 mm ²		< 45A		
4 *	6 mm ²		< 40A		
10	10 mm ²		< 60A		

*pillar or column terminals

DIMENSIONS (mm)

	LENGTH	WIDTH	HEIGHT
EXTERNAL	152	150	105
INTERNAL	∅ 125.5	-	70

Fixing Brackets: 130 X 91



EX DISTRIBUTION SYSTEMS



Sina Ghabezah

Oil and Gas Equipment Manufacturer





Sina Ghabezah

Oil and Gas Equipment Manufacturer

EX DISTRIBUTION SYSTEMS



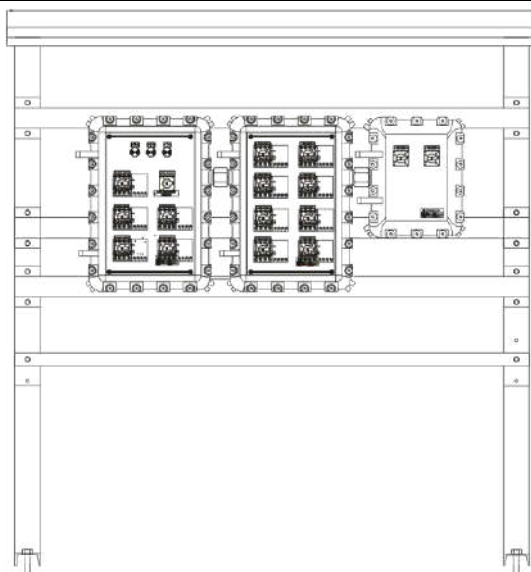
EX DISTRIBUTION SYSTEMS

Flameproof
Zone 1,2,21,22

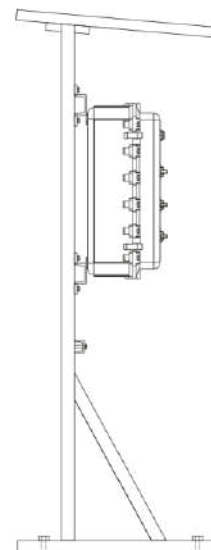


SPECIFICATION	
EC type examination certificate	n. 0F150609.SEMDD43
Marking acc to 94/9/EC directive	Ⓔ II 2 G D
Marking acc. to IEC	Ex d IIB T4, T5 & T6 Gb, Ex tb IIIB T85°C, 105°C & T135°C Db
Ingress protection to IEC 60529	IP 65
Approval of production, QAN Number	n. 0F150609.SEMDD44
Permissible ambient temperature	-20°C to +40°C and -30°C to +55°C
Material	Copper free Aluminum

Type of Enclosure	Maximum Permitted dissipation power(w)						Max. Rated Current(A)	Max. Rated Voltage(V)
	Tamb (-20 C to + 40 C)			Tamb (-30 C to + 55 C)				
	T4, T135°C	T5, T105°C	T6, T85°C	T4, T135°C	T5, T105°C	T6, T85°C		
EJB 110	446 W	235 W	130 W	346W	130W	50W	160	690
EJB 120	396 W	278 W	187 W	296W	187W	107W	300	
EJB 240	793 W	400 W	295 W	693W	295W	215W	850	
EJB 241	793 W	400 W	295 W	693W	295W	215W	850	
EJB 241M1	793 W	400 W	295 W	693W	295W	215W	850	



Front View



Left View

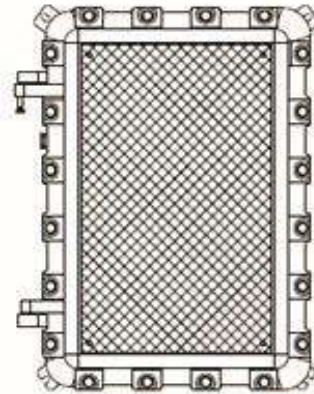


EX DISTRIBUTION SYSTEMS

Flameproof

Zone 1,2,21,22

Entries for electrical component on covers
Component characteristics and use
Terminal
Bus-bars
Low voltage transformers
Air circuit breakers
Automatic circuit breaker
Control and operating circuit
Starters and ballasts for discharge lamps
Electronic apparatus
Fuses
Servo motors without ventilation



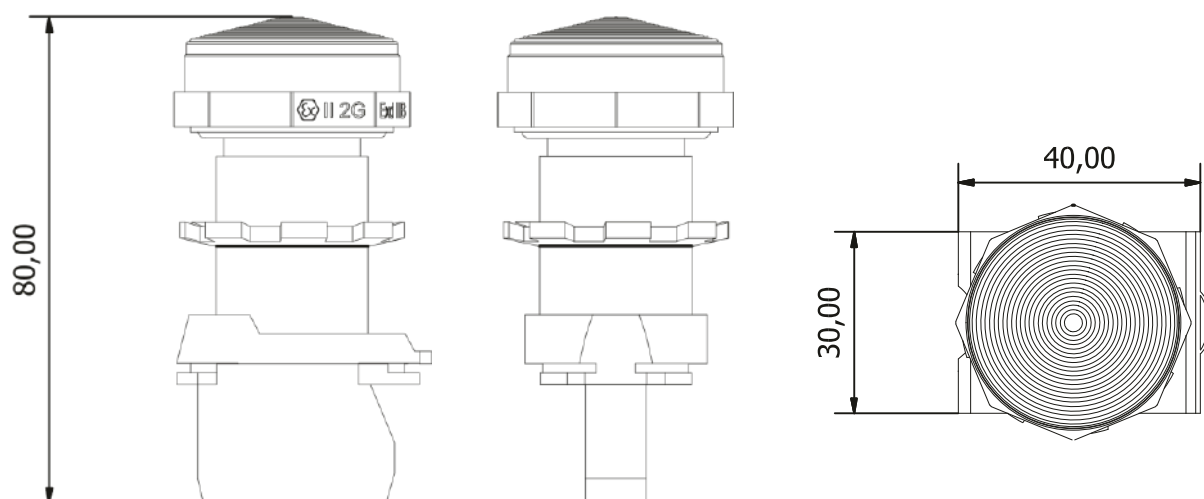
Electrical components		Max. capacity			
		EJB110	E JB120	EJB240	EJB240 -241-241M1
Pushbutton		16	24	54	50
signal lamp		16	24	54	50
Small-window(M130)		1	2	6	6
Big-window(M130)		1	1	2	2
Control switch - MCB	I Pole	6	9	20	20
	II Poles	6	9	20	20
	III Poles	6	9	20	20
	IV Poles	4	6	20	16
	II Poles + Vigi	4	6	20	16
	III Poles + Vigi	4	6	15	11
	IV Poles + Vigi	2	3	9	9
Control switch - MCCB	Up to 250A				6
	250 - 800 A				1

LED Signal Lamp

Flameproof
Zone 1,2,21,22



SPECIFICATION	
TYPE	LED Signal Lamp
Application	Flame Proof Ex d
Protection	Ex d IIB Gb Ex t IIIB tb 85°C-100°C and 135°
Marking (ATEX)	⊕ II 2 G D
Ingress Protection to IEC 60529	IP 65
Temperature class	T6/T5/T4
Certificate No.	n. 0F150609.SEMDD43
Standards	EN 60079-0/ IEC 60079-0/ EN/IEC 60079-1, EN 60079-31/ IEC 60079-31, IEC 60529
Material	Body material aluminum / window material white, yellow, blue red or green polycarbonate
Terminal cross section	2*2.5mm ²
Rated Voltage	230 V AC 50/60 Hz
Rated Power	3.2 W



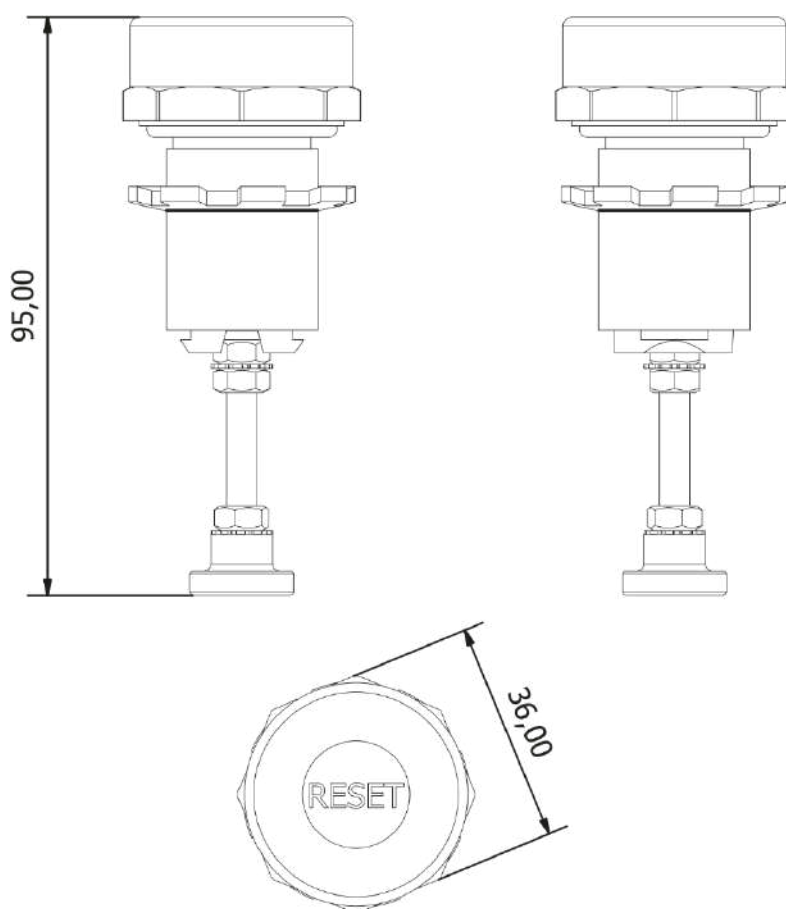


Pushbutton Mushroom-head pushbutton

Flameproof

Zone 1,2,21,22

SPECIFICATION	
TYPE	Mushroom-head pushbutton Pushbutton
Application	Flame Proof Ex d
Protection	Ex d IIB Gb Ex t IIB tb 85°C-100°C and 135°C
Marking (ATEX)	Ⓔ II 2 G D
Ingress Protection to IEC 60529	Ip65
Temperature class	T6/T5/T4
Certificate No.	n. 0F150609.SEMDD43
Standards	EN 60079-0/ IEC 60079-0/ EN/IEC 60079-1, EN 60079-31/ IEC 60079-31, IEC 60529
Material	Aluminum
Terminal cross section	2*2.5mm ²
Rated Voltage	500 V
Rated Power	10 A acc. to EN 60947-5-1

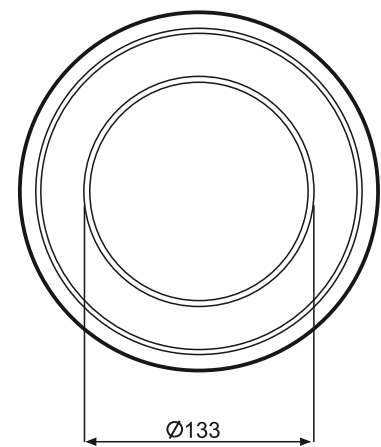
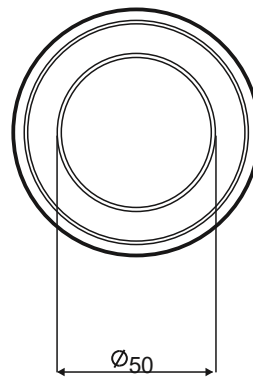
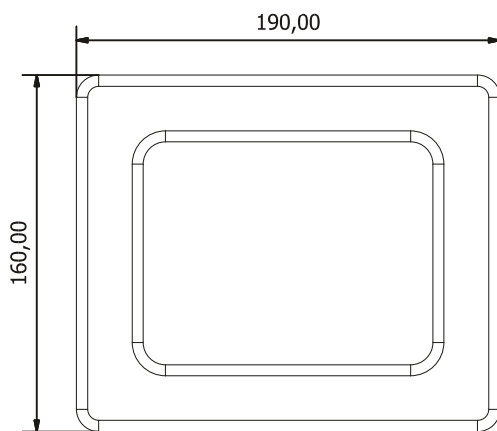


WINDOW

Flameproof
Zone 1,2,21,22



SPECIFICATION	
TYPE	Window
Application	Flame Proof Ex d
Protection	Ex d IIB Gb Ex t IIIB tb 85°C-100°C and 135°C
Marking (ATEX)	Ⓔ II 2 G D
Ingress Protection to IEC 60529	IP 65
Temperature class	T6/T5/T4
Certificate No.	n.0F150609.SEMDD43
Dimension	Circular 150&110mm and square 95mm
Material	Frame material Aluminum / Window material Borosilicate glass
Application temperature	- 30°C to + 100°C

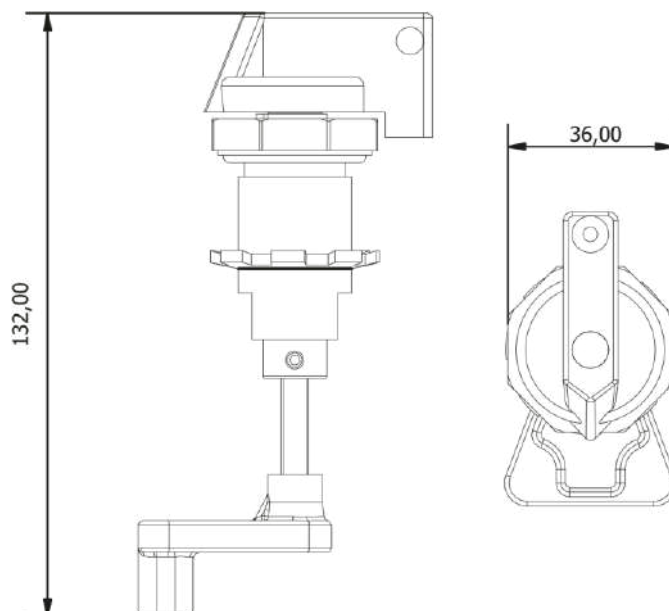
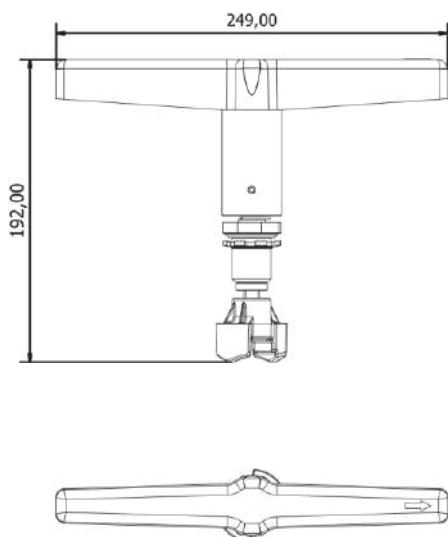




Rotary Actuator

Flameproof
Zone 1,2,21,22

SPECIFICATION	
TYPE	Rotary Actuator
Application	Flame Proof Ex d
Protection	Ex d IIB Gb Ex t IIIB tb 85°C-100°C and 135°C
Marking (ATEX)	Ⓔ II 2 G D
Ingress Protection to IEC 60529	IP 65
Temperature class/Power dissipation	T6/T5/T4
Certificate No.	0F150609.SEMDD43
Standards	EN 60079-0/ IEC 60079-0/ EN/IEC 60079-1, EN 60079-31/ IEC 60079-31, IEC 60529
Material	Aluminum
Terminal cross section	2*2.5mm ²
Application temperature	-30°C to +135°C
Rated Voltage	500 V
Rated Current	Up to 60 A / 60 -150 A / 150 – 600 A
Options	Locking facility for units up to 40 A On front panel for units > 40 A on enclosure panel

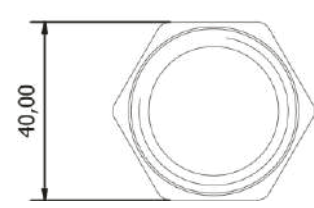
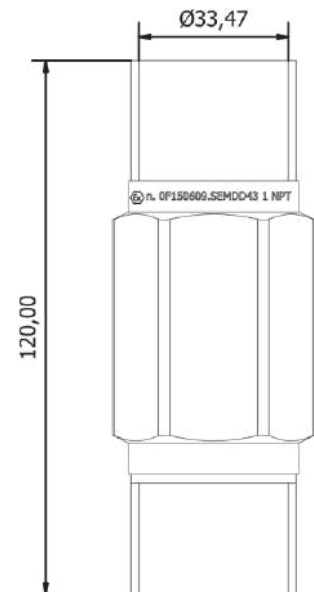
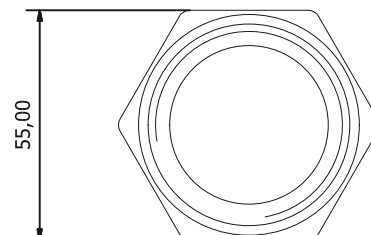
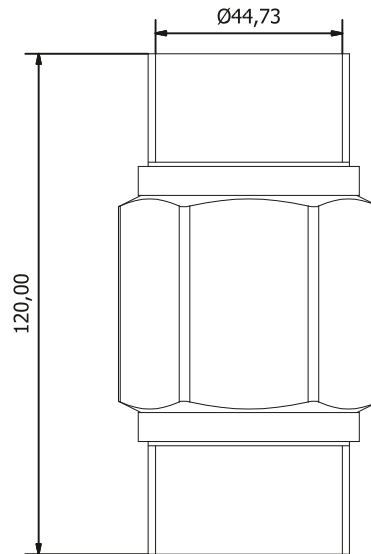
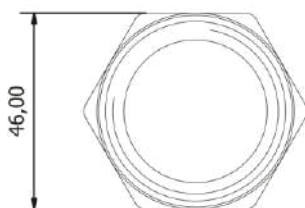
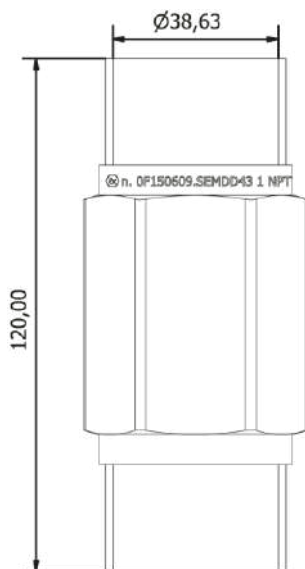


Cable Bushing

Flameproof
Zone 1,2,21,22



SPECIFICATION	
TYPE	Cable Bushing
Application	Flame Proof Ex d
Protection	Ex d IIB Gb Ex t IIIB tb 85°C-100°C and 135°C
Marking (ATEX)	⊕ II 2 G D
Ingress Protection to IEC 60529	IP 65
Temperature class	T6/T5/T4
Certificate No.	n. 0F150609.SEMDD43
Sizes	¾, 1 and 1 ½ NPT
Material	Nickle plated Brass, stainless steel
Line cross section	4 x 10 / 4 x 16 / 4 x 50
Application temperature	-30°C to +135°C
Rated Voltage	500 V
Rated Current	50A / 75A / 150A
Cable sealing	High-thermal and chemical-resistant compound



CABLE GLAND



Sina Ghabezah

Oil and Gas Equipment Manufacturer



CABLE GLAND

TYPE 453 FLAMEPROOF

SPECIFICATION-CABLE GLAND

Application	Outdoor and indoor. For use with single wire armour tape and braid armor, elastomer or plastic insulated cables.
Specification	In accordance with the relevant requirements of BS 6121 type E1WF and BS 5501 parts 1,5, EN 50014, EN 50018, IEC 60079-0, IEC 60079-1
Approval	Suitable for use in Group IIA, IIB, and IIC Suitable for use in Zone 1, and Zone 2.
Function	I) provides for armour clamp. II) provides seal on outer sheath of cable III) provides seal on inner sheath of cable
Seals	The inner seal complies with the pressure test of 30 BAR (450 psi) for two minutes.
Marking/certificate No.	Exd IIC IP66/BAS Ex98D 1229U
Ingress protection	IP 66 to IEC 60529
Material	Brass/ Stainless steel
Finish	This gland can be coated or plated to suit the application
Accessories	Shroud for additional protection against onerous weather conditions
(Optional)	(Sealing Washer for IP66 rating between gland and the equipment.)
	Earth Tag to ensure earth continuity between the gland and the equipment.
	Locknut to secure the gland body to the equipment where entry hole is not tapped

Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	** Acr oss flats	** Acr oss corn ers	Cable acceptance details					
	Metric	Imp * (in)	PG	BSPP * BSPT * NPT* (in)	Metric Imp PG	BSP P	BSPT	NPT				Diameter of Inner sheath		Diameter of outer sheath		Standard Steel wire armour R	
												N Min.	N Max	O Min	O Max	SWA	Tape Armor
Os	16/20	3/4	13.5	1/2	15	15	18.6	19.9	58.7	25	27.7	3.0	7.6	10.5	16.0	0.9 to 1.25	0 to 1
O	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	58.7	25	27.7	7.5	11.5	10.5	16.0	0.9 to 1.25	0 to 1
A	20	3/4	11/16	1/2	15	15	18.6	19.9	57.8	30	34.6	11.3	13.5	12.9	20.5	0.9 to 1.25	0 to 1
							20	20.2									
B	25	1	21	3/4	15	15	20	20.2	62.5	36	41.6	13.3	19.2	17.0	26.5	1.25 to 1.6	0 to 1
							20	23.7									
C	32	11/4	29	1	15	20	23.7	25	65.9	46	53.1	19.3	26.2	25.0	33.3	1.6 to 2	0 to 1
				11/4			20	26									
C2	40	1 1/2	36	11/4	15	20	26	25.6	73.8	55	63.5	25.5	31.5	33.0	42.0	1.6 to 2	0 to 1
				1 1/2			20	26									
D	50	2	42/48	2	15	20	30.3	26.9	82.3	65	75.1	32.0	43.5	39.5	52.0	2 to 2.5	0 to 1
E	63	2 1/2	-	2 1/2	15	20	33.6	39.9	83.1	80	92.4	43.0	54.5	52.0	64.8	2.5	0 to 1

Notes:

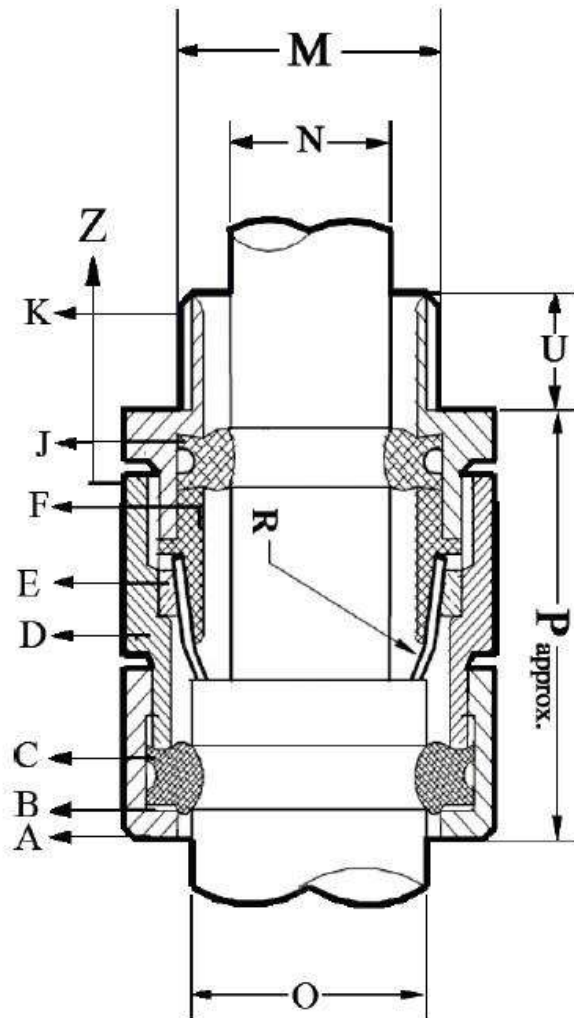
* The dimension of cable may vary with manufacturing tolerances. We do advise the actual cable diameter is measured where possible before purchasing Cable Glands.

The recommendations here are given in good faith but SG cannot be held liable for mistakes in selection however, caused.

**This dimension is the minimum acceptable

CABLE GLAND

TYPE 453 FLAMEPROOF



- A : TAIL NUT
- B : SKID WASHER
- C : OUTER SEAL
- D : COMPRESSION NUT
- E : ARMOUR CLAMP RING
- F : ARMOUR CLAMP

Note : Alternative clamping device (EOF) is available for tape Armor and braided cables

- J : INNER SEAL
- K : ENTRY ADAPTOR



CABLE GLAND

TYPE 421 FLAMEPROOF

SPECIFICATION-CABLE GLAND	
Application	Outdoor and indoor. For use with non - armoured elastomer or plastic insulated cables.
Specification	In accordance with the relevant requirements of BS 6121 type A1F, A 2F and BS 5501 parts 1,5, EN 50014, EN 50018, IEC 60079-0, IEC60079-1
Function	Provides seal on outer sheath of cable
Seals	The inner seal complies with the pressure test of 30 BAR (450 psi) for two minutes
Marking/certificate No.	Exd IICIP66/ BAS Ex 98D1133U
Ingress protection	IP 66 to IEC 60529
Material	Brass / Stainless steel
Finish	This gland can be coated or plated to suit the application
Accessories	Shroud for additional protection against onerous weather conditions
(Optional)	Sealing Washer for IP66 rating between gland and the equipment
	Earth Tag to ensure earth continuity between the gland and the equipment
	Locknut to secure the gland body to the equipment where entry hole is not tapped

Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	Across flats	Across corners	Cable acceptance details	
	Metric	Imp* (in)	PG	BSPP* BSPT* NPT* (in)	Metric	BS PP	BS PT	NPT				Diameter of Outer sheath	
												A.Min	A.Max
Os	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	27	25	27.7	3.0	7.6
O	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	27	25	27.7	7.5	11.5
A	20	3/4	16	1/2	15	15	18.6	19.9	25	30	34.6	11.0	13.5
							20	20.2				13.0	19.2
B	25	1	21	3/4	15	15	20	20.2	29	36	41.6	19.0	26.2
				1		20	23.7	25					
C	32	1 1/4	29	1	15	20	23.7	25	30	46	53.1	25.0	31.5
				1 1/4		20	26	25.6					
C2	40	1 1/2	36	1 1/4	15	20	26	25.6	34	55	63.5	31.5	44.3
				1 1/2		20	26	26					
D	50	2	42/48	2	15	20	30.3	26.9	61	65	75.1	42.5	54.5
E	63	2 1/2	-	2 1/2	15	20	33.6	39.9	59	80	92.4		

Dimensions in millimeters(except*)

Notes:

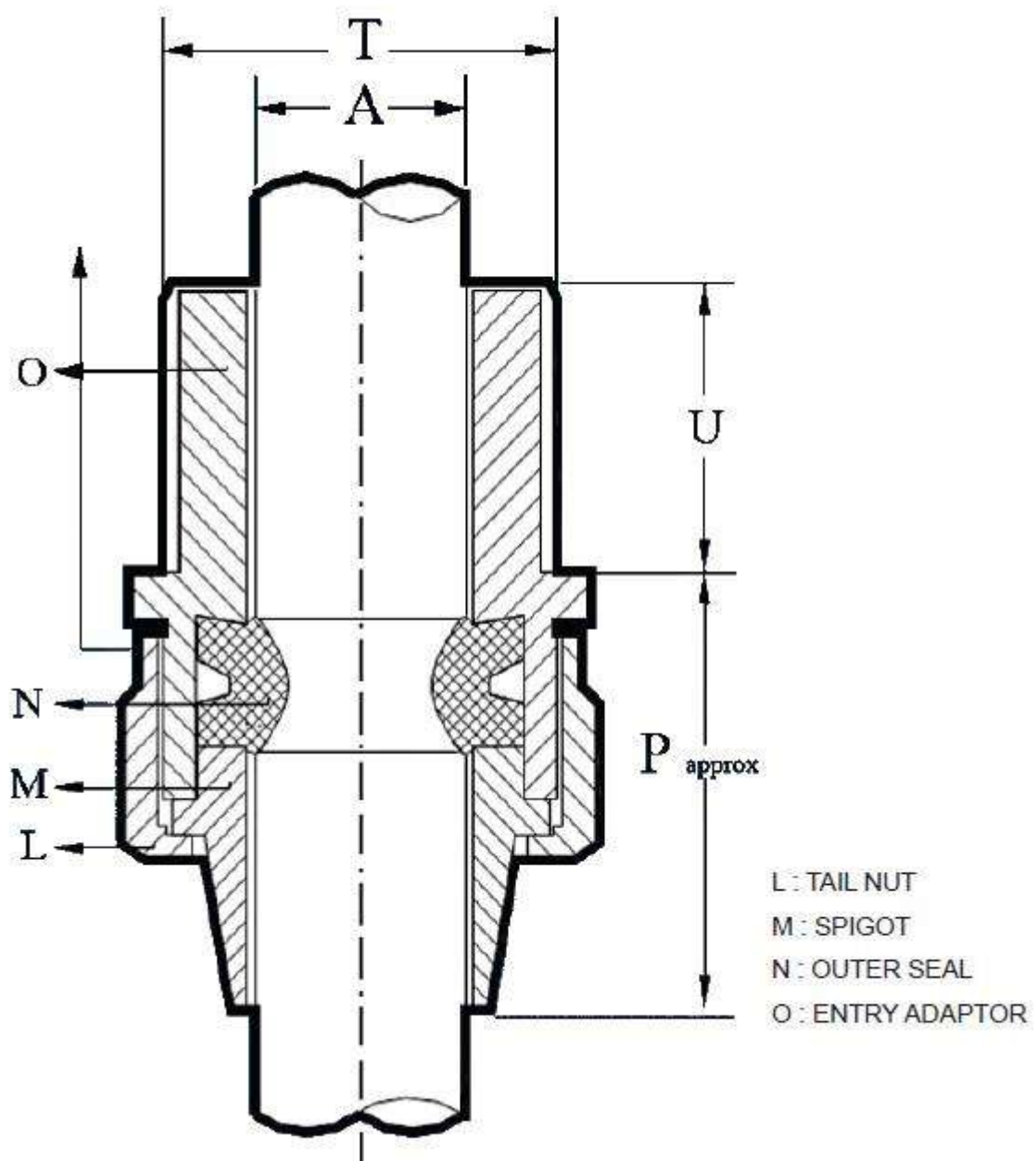
* The dimension of cable may vary with manufacturing tolerances. We do advise the actual cable diameter is measured where possible before purchasing Cable Glands.

The recommendations here are given in good faith but SG cannot be held liable for mistakes in selection however, caused.

**This dimension is the minimum acceptable

CABLE GLAND

TYPE 421 FLAMEPROOF





CABLE GLAND

TYPE VBL 453 FLAMEPROOF

SPECIFICATION-CABLE GLAND

Application	Outdoor and indoor. For use with lead sheathed single wire armour, elastomer or plastic insulated cables.
Specification	In accordance with the relevant requirements of BS 6121 type E2FW and BS 5501 parts 1,5 (EN 50014, EN 50018, IEC 60079-0, IEC 60079-1)
Approval	Suitable for use in Group IIA, IIB, and IIC Suitable for use in Zone 1, and Zone 2.
Function	I) provides for armour clamp. II) provides an electrical bond on lead sheath of cable III) provides seal on inner sheath of cable
Seals	The inner seal complies with the pressure test of 30 BAR (450 psi) for two minutes.
Marking/certificate No.	Ex d IIC IP66/ BAS Ex 98D 1230
Ingress protection	IP 66 to IEC 60529
Material	Brass / Stainless steel
Finish	This gland can be coated or plated to suit the application
Accessories (Optional)	Shroud for additional protection against onerous weather conditions Sealing Washer for IP66 rating between gland and the equipment. Earth Tag to ensure earth continuity between the gland and the equipment. Locknut to secure the gland body to the equipment where entry hole is not tapped

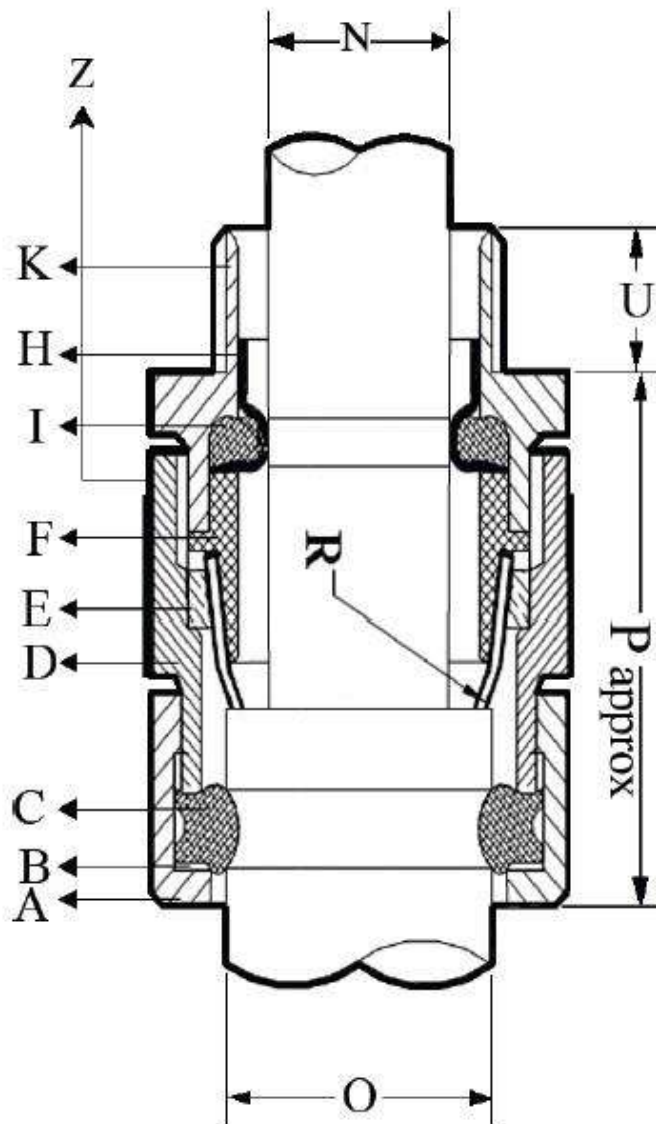
Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	** Across flats	** Across corners	Cable acceptance details				Standard Steel wire armour R
	Metric	Imp* (in)	PG	BSP P* BSP T* NPT* (in)	Metric Imp PG	BSP P	BSP T	NP T				Diameter of Inner sheath		Diameter of Inner sheath		
												N.Mi n	N.Ma x	O.Mi n	O.Ma x	
O	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	58.7	25	27.7	7.5	9	10.5	16.0	0.9/1.25
A	20	3/4	16	1/2	15	15	18.6	19.9	57.8	30	34.6	8.3	11.6	12.9	20.5	0.9/1.25
B	25	1	21	3/4	15	15	20	20.2	62.5	36	41.6	11.5	16.6	17.0	26.5	1.25/1.6
CS	32	1 1/4	29	1	15	20	23.7	25	65.9	46	53.1	15.0	18.3	25.0	33.3	1.6/2.0
C	32	1 1/4	29	1	15	20	23.7	25	73.8	46	53.1	19.3	22.8	25.0	33.3	1.6/2.0
C2s	40	1 1/2	36	1 1/4	15	20	26	25.6	73.8	55	63.5	20.0	24.8	33.0	42.0	1.6/2.0
C2	40	1 1/2	36	1 1/4	15	20	26	25.6	82.3	55	63.5	25.0	28.8	33.0	42.0	1.6/2.0
Ds	50	2	42/48	2	15	20	30.3	26.9	82.3	65	75.1	32.0	34.3	39.5	52.0	2.0/2.5

CABLE GLAND

TYPE VBL 453 FLAMEPROOF



Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	** Across flats	** Across corners	Cable acceptance details				Standard Steel wire armour R
	Metric	Imp* (in)	PG	BSPP* BSPT* NPT* (in)	Metric Imp PG	BSPP	BSPT	NPT				Diameter of Inner sheath		Diameter of Inner sheath		
												N.Mi n	N.Ma x	O.Mi n	O.Ma x	
D	50	2	42/48	2	15	20 20	30.3	26.9	83.1	65	75.1	34.0	40.0	39.5	52.0	2.0/2.5
Ess	63	2 1/2	-	2 1/2	15	20 20	30.6	39.9	83.1	80	92.4	40.0	42.8	52.0	64.8	2.5
Es	63	2 1/2	-	2 1/2	15	20 20	30.6	39.9	83.1	80	92.4	42.0	46.8	52.0	64.8	2.5
E	63	2 1/2	-	2 1/2	15	20 20	30.6	39.9	83.1	80	92.4	46.0	51.8	52.0	64.8	2.5



- A : TAIL NUT
- B : SKID WASHER
- C : OUTER SEAL
- D : COMPRESSION NUT
- E : ARMOUR CLAMP RING
- F : ARMOUR CLAMP
- H : LEAD SEAL
- I : INNER SEAL
- K : ENTRY ADAPTOR



CABLE GLAND

TYPE 121 INDUSTRIAL

SPECIFICATION-CABLE GLAND

Application	Outdoor and indoor. For use with non - armoured elastomer or plastic insulated cables.
Specification	In accordance with the relevant requirements of BS 6121 type A1, A 2
Function	Provides seal on outer sheath of cable.
Marking/certificate No.	S.G 121 C2 40 mm BS 6121 A1, A2
Ingress protection	IP 66 To IEC 60529
Material	Brass / Stainless steel
Finish	This gland can be coated or plated to suit the application.
Accessories (Optional)	Shroud for additional protection against onerous weather conditions. Sealing Washer for IP66 rating between gland and the equipment. Earth Tag to ensure earth continuity between the gland and the equipment. Locknut to secure the gland body to the equipment where entry hole is not tapped.

Gland Size ref.	'T' Entry thread sizes				'U' Thread Length				P	** Across flats	** Across corners	Cable acceptance details	
	Metric	Imp* (in)	PG	*BSPP BSPT* NPT* (in)	Metric Imp PG	BSP P	BSPT	NPT				Diameter of outer sheath	
												A.Min	A.Max
Os	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	27	25	27.7	3.0	7.6
O	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	27	25	27.7	7.5	11.5
A	20	3/4	16	1/2	15	15	18.6	19.9	25	30	34.6	11.0	13.5
				3/4			20	20.2					
B	25	1	21	3/4	15	15	20	20.2	29	36	41.6	13.0	19.2
				1			20	23.7					
C	32	1 1/4	29	1	15	20	23.7	25	30	46	53.1	19.0	26.2
				1 1/4			20	26					
C2	40	1 1/2	36	1 1/4	15	20	26	25.6	34	55	63.5	25.0	31.5
				1 1/2			20	26					
D	50	2	42/48	2	15	20	30.3	26.9	61	65	75.1	31.5	44.5
E	63	2 1/2	-	2 1/2	15	20	33.6	39.9	59	80	92.4	42.5	54.5
F	75	3	-	3	15	20	36.8	41.5	56	95	107	56.0	68.2
G	90	-	-	3 1/2	15	-	-	42.7	83	115	130	65	80

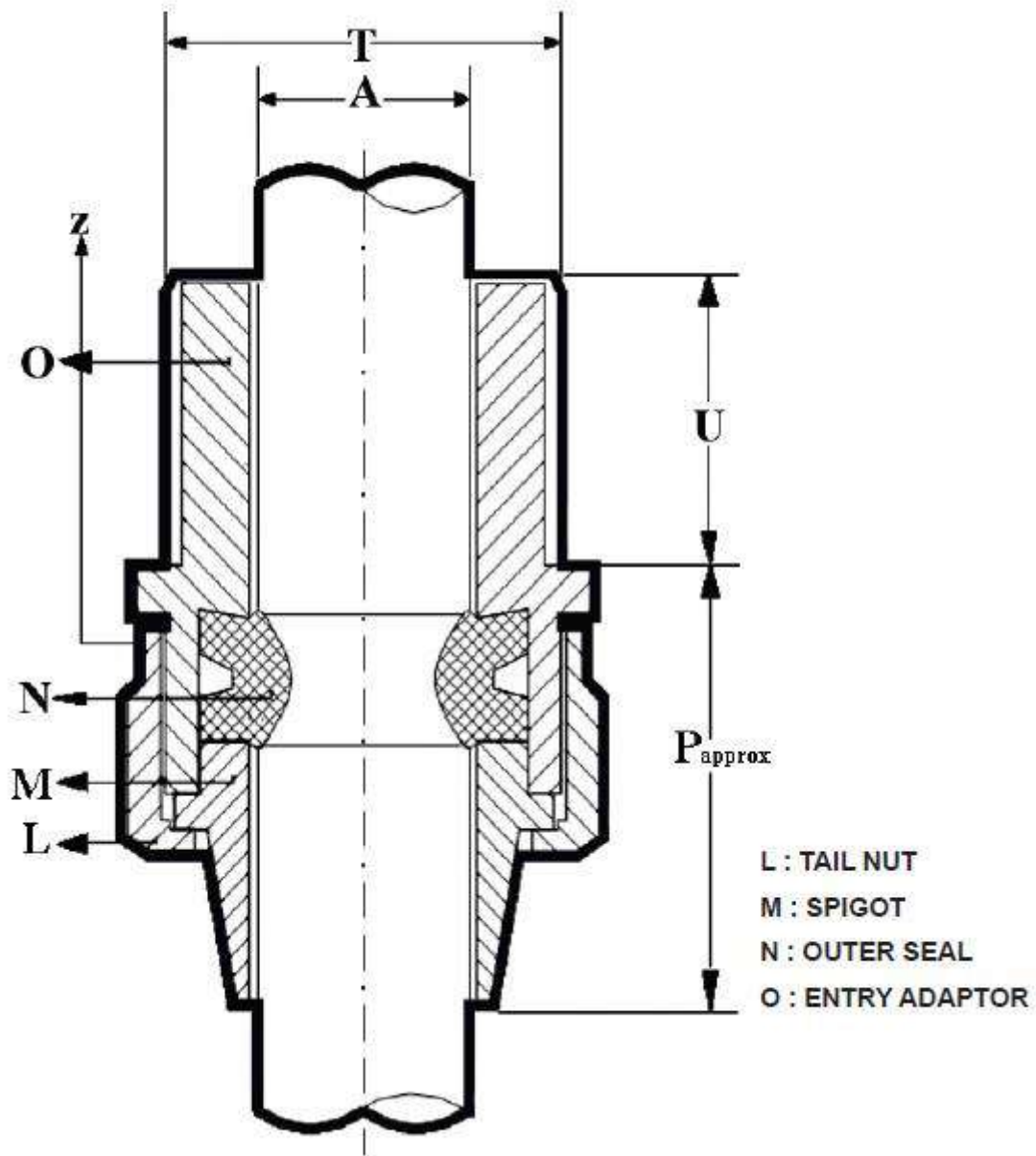
Dimensions in millimeters(except *)

CABLE GLAND

TYPE 121 INDUSTRIAL



Notes:
* The dimension of cable may vary with manufacturing tolerances. We do advise the actual cable diameter is measured where possible before purchasing Cable Glands.
The recommendations here are given in good faith but SG cannot be held liable for mistakes in selection however, caused.
**This dimension is the minimum acceptable





CABLE GLAND

TYPE 153 INDUSTRIAL

SPECIFICATION-CABLE GLAND

Application	Outdoor and indoor. For use with Single wire armour,tape and braid armor ,elastomer or plastic insulated cables..
Specification	In accordance with the relevant requirements of BS 6121 type E1W
Function	I) provides for armour clamp. II) provides seal on outer sheath of cable III) provides seal on inner sheath of cable
Marking/certificate No.	S.G 153 C 32 mm BS 6121 E1W
Ingress protection	IP 66 to IEC 60529
Material	Brass / Stainless steel
Finish	This gland can be coated or plated to suit the application.
Accessories (Optional)	Shroud for additional protection against onerous weather conditions. Sealing Washer for IP66 rating between gland and the equipment. Earth Tag to ensure earth continuity between the gland and the equipment. Locknut to secure the gland body to the equipment where entry hole is not tapped.

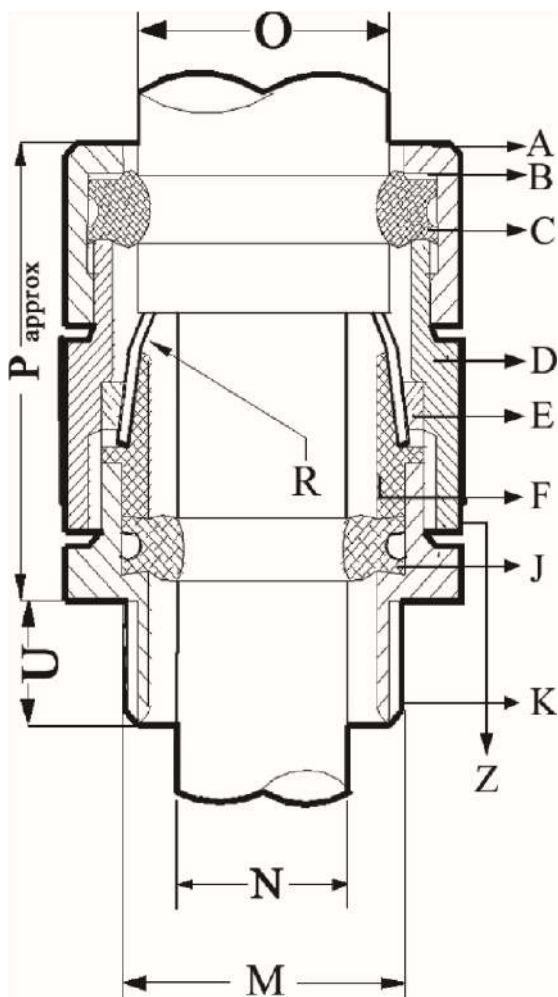
Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	** Across flats	** Across corners	Cable acceptance details					
	Metric	Imp* (in)	PG	BSPP* BSPT* NPT* (in)	Metric Imp PG	BS PP	BS PT	NP T				Diameter of inner sheath		Diameter of outer sheath		Standard Steel wire armour R	
												N MIN.	N MAX.	O MIN	O MAX.	SW A	Tap e Ar mor
Os	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	58.7	25	27.7	3.0	8.0	10.5	16	0.9 to 1.25	0-1
O	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	58.7	25	27.7	7.5	11.9	10.5	16.0	0.9 to 1.25	0-1
A	20	3/4	16	1/2	15	15	18.6	19.9	57.8	30	34.6	11.0	14.3	12.9	21	0.9 to 1.25	0-1
				3/4			20	20.2									
B	25	1	21	3/4	15	15	20	20.2	62.5	36	41.6	13.0	20.2	17.0	27.1	1.25 to 1.6	0-1
				1			20	23.7									
C	32	1 1/4	29	1	15	20	23.7	25	65.9	46	53.1	19.0	26.5	25.0	33.3	1.6 to 2	0-1
				1 1/4			20	26									
C2	40	1 1/2	36	1 1/4	15	20	26	25.6	73.8	55	63.5	25.0	32.5	33.0	42.9	1.6 to 2	0-1
				1 1/2			20	26									

CABLE GLAND

TYPE 153 INDUSTRIAL



Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	** Across flats	** Across corners	Cable acceptance details					
	Metric	Imp* (in)	PG	BSPP* BSPT* NPT* (in)	Metric Imp PG	BSPP	BSPT	NPT				Diameter of inner sheath		Diameter of outer sheath		Standard Steel wire armour R	
												N MIN.	N MAX.	O MIN.	O MAX.	SWA	Tape Armour
D	50	2	42/48	2	15	20	30.3	26.9	82.3	65	75.1	31.5	44.4	39.5	52.6	2.0 to 2.5	0-1
E	63	2 1/2	-	2 1/2	15	20	33.6	39.9	83.1	80	92.4	42.5	56.3	52.0	65.3	2.0	0-1
F	75	3	-	3	15	20	36.8	41.5	95	95	109.6	56.0	68.2	64.0	78.0	2.0	0-1
G	90	-	-	3 1/2	15	-	-	42.7	121	115	130	65.0	80.0	61.0	91.0	3.15	0-1
H	100	-	-	3 1/2	20	-	-	42.7	124	126	142.5	76.0	89.0	90.0	105.0	3.15	0-1
I	110	-	-	4	20	-	-	44.0	135	146	165.0	85.0	100.0	100.0	115.0	3.15	0-1



- A: TAIL NUT
- B: SKID WASHER
- C: OUTER SEAL
- D: COMPRESSION NUT
- E: ARMOUR CLAMP RING
- F: ARMOUR CLAMP

Note: Alternative clamping device (EOF) is available for tape Armor and braided cables

- J: INNER SEAL
- K: ENTRY ADAPTOR



CABLE GLAND

TYPE VBL 153 INDUSTRIAL

SPECIFICATION-CABLE GLAND

Application	Outdoor and indoor. For use with lead sheathed single wire armour plastic insulated cables.
Specification	In accordance with the relevant requirements of BS 6121 type E2W and BS 5501 parts 1,5 (EN 50014, EN 50018)
Function	I) provides for armour clamp. II) provides an electrical bond on lead sheath of cable III) provides seal on inner sheath of cable
Seals	The inner seal complies with the pressure test of 30 BAR (450 psi) for two minutes
Marking e.g.	S.G VBL153 C2 40 mm BS 6121 E2W
Ingress protection	IP 66 to IEC 60529
Material	Brass / Stainless steel
Finish	This gland can be coated or plated to suit the application.
Accessories (Optional)	Shroud for additional protection against onerous weather conditions. Sealing Washer for IP66 rating between gland and the equipment. Earth Tag to ensure earth continuity between the gland and the equipment. Locknut to secure the gland body to the equipment where entry hole is not tapped.

Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	** Across flats	** Across corners	Cable acceptance details				Standard Steel wire armour R
	Metric	Imp* (in)	PG	BSPP* BSPT* NPT* (in)	Metric Imp PG	BS PP	BS PT	NP T				Diameter of inner sheath		Diameter of outer sheath		
												N MI N.	N MA X.	O MI N.	O MAX	
O	16/20	3/4	11/13.5	1/2	15	15	18.6	19.9	58.7	25	27.7	7.0	9.6	10.5	16.0	0.9 / 1.25
A	20	3/4	16	1/2	15	15	18.6	19.9	57.8	30	34.6	8.0	12.0	12.09	20.5	0.9 / 1.25
				3/4			20	20.2								
B	25	1	21	3/4	15	15	20	20.2	62.5	36	41.6	11.5	17.0	17.0	26.5	1.25 / 1.6
				1		20	23.7	25								
CS	32	1 1/4	29	1	15	20	23.7	25	65.9	46	53.1	15.0	19.0	25.0	33.3	1.6 / 2.0
				1 1/4		20	26	25.6								

CABLE GLAND

TYPE VBL 153 INDUSTRIAL

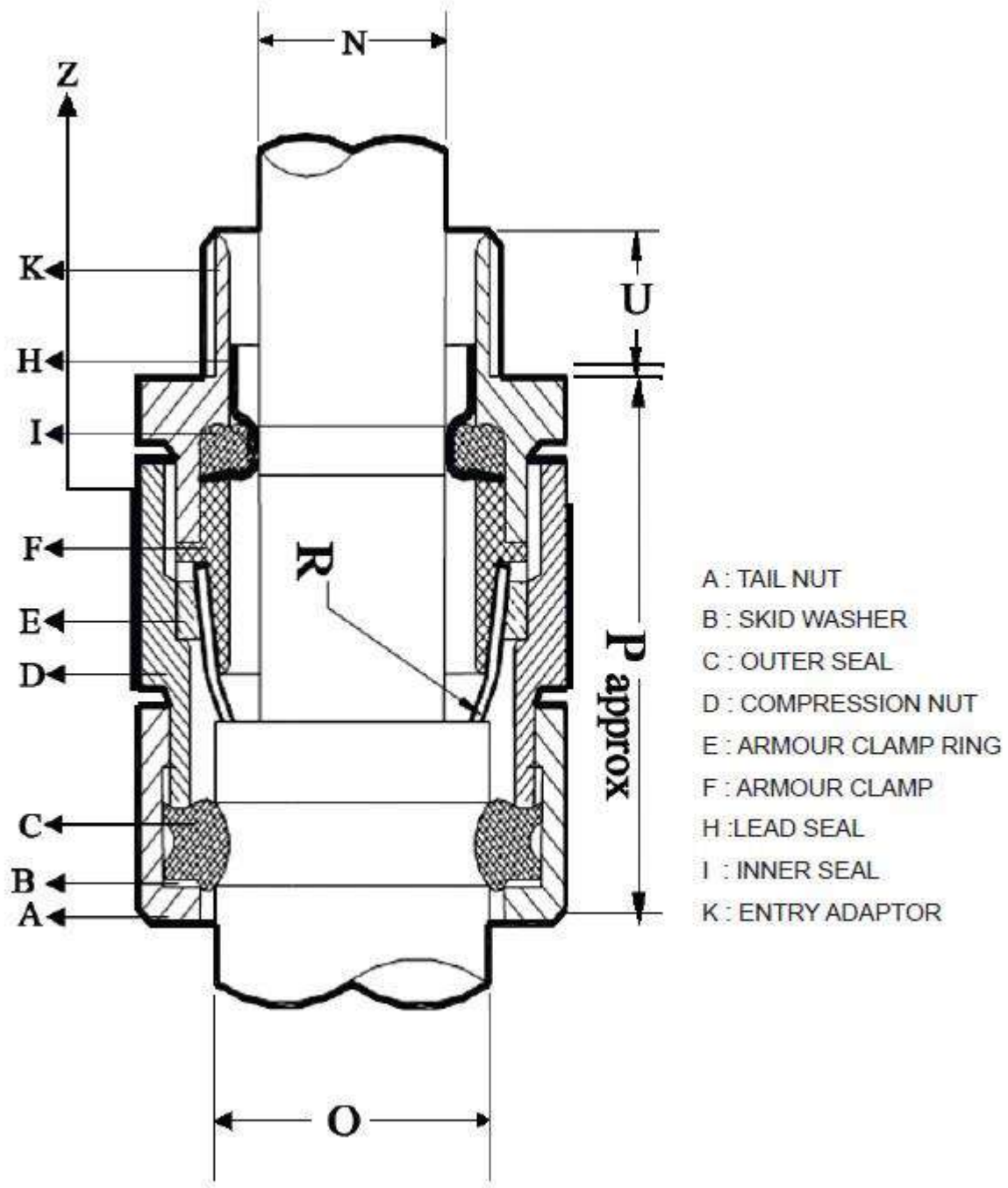


Gland Size ref.	'M' Entry thread sizes				'U' Thread Length				P	** Across flats	** Across corners	Cable acceptance details				
	Metric	Imp* (in)	PG	BSPP* BSPT* NPT* (in)	Metric Imp PG	BSPP	BSPT	NPT				Diameter of inner sheath		Diameter of outer sheath		Standard Steel wire armour R
												N MIN.	N MAX.	O MIN.	O MAX.	
C	32	1 $\frac{1}{4}$	29	1	15	20	23.7	25	65.9	46	53.1	18.0	23.0	25.0	33.3	1.6 / 2.0
				1 $\frac{1}{4}$		20	26	25.6								
C2s	40	1 $\frac{1}{2}$	36	1 $\frac{1}{4}$	15	20	26	25.6	73.8	55	63.5	20.0	25.0	33.0	42.0	1.6 / 2.0
				1 $\frac{1}{2}$		20	26	26								
C2	40	1 $\frac{1}{2}$	36	1 $\frac{1}{4}$	15	20	26	25.6	73.8	55	63.5	23.3	29.0	33.0	42.0	1.6 / 2.0
				1 $\frac{1}{2}$		20	26	26								
Ds	50	2	42/48	2	15	20	30.3	26.9	82.3	65	75.1	29.0	35.0	39.5	52.0	2.0 / 2.5
						20										
D	50	2	42/48	2	15	20	30.3	26.9	82.3	65	75.1	34.0	40.0	39.5	52.0	2.0 / 2.5
						20										
Ess	63	2 $\frac{1}{2}$	-	2 $\frac{1}{2}$	15	20	33.6	39.9	83.1	80	92.4	40.0	43.0	52.0	64.8	2.5
						20										
Es	63	2 $\frac{1}{2}$	-	2 $\frac{1}{2}$	15	20	33.6	39.9	83.1	80	92.4	42.0	47.0	52.0	64.8	2.5
						20										
E	63	2 $\frac{1}{2}$	-	2 $\frac{1}{2}$	15	20	33.6	39.9	83.1	80	92.4	46.0	52.0	52.0	64.8	2.5
						20										
Fss	75	3	-	3	15	20	36.8	41.5	95	95	109.6	52.0	54.0	64.0	78.0	2.5
						20										
Fs	75	3	-	3	15	20	36.8	41.5	95	95	109.6	54.0	59.0	64.0	78.0	2.5
						20										
F	75	3	-	3	15	20	36.8	41.5	95	95	109.6	59.0	64.0	64.0	78.0	2.5
						20										
G	90	-	-	3 $\frac{1}{2}$	15	-	-	42.7	115	115	130	61.0	76.0	76.0	91.0	3.15
H	100	-	-	3 $\frac{1}{2}$	15	-	-	42.7	124	126.0	142.5	70.0	85.0	90.0	106.6	3.15
I	100	-	-	4	15	-	-	72.7	135	146.0	165.0	81.0	96.0	100.0	115.0	3.15



CABLE GLAND

TYPE VBL 153 INDUSTRIAL



CABLE GLAND

Industrial cable gland
Type 1221 (PG Version)

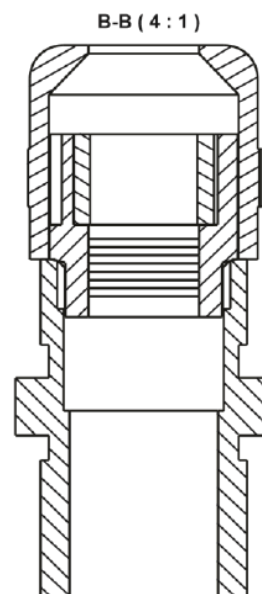
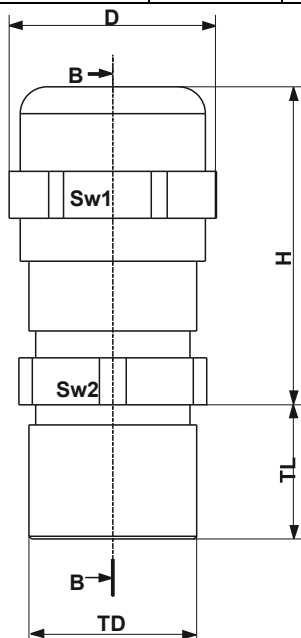


TECHNICAL DATA-CABLE GLAND

Material	
Body	Nickel plated brass
Clamping part	Polyamide 6
Sealing ring	EPDM
IP washer	NBR (O-ring) - Red fiber (volcanic)
Ingress Protection	IP 66
Temperature range	-40 °C to +100 °C

SPECIFICATION

SIZE	TD (mm)	TL (mm)		Sw1 (mm)	Sw2 (mm)	MAX H (mm)	D (mm)	CABLE CLAMPING RANGE
		Short	Tall					
pg 7	12.5	8	10	14	14	20.2	15.4	3_6.5
pg 9	15.2	8	10	17	18	21.8	19	4_8
pg 11	18.6	8	10	20	20	23.6	22	5_10
pg 13.5	20.4	8	10	22	22	22	24.6	6_12
pg 16	22.5	8	10	24	24	26.7	27	10_14
pg 21	28.3	9	12	30	30	30.5	32.8	13_18
pg 29	37	10	12	40	40	37.3	43.7	18_25
pg 36	47	11	14	50	50	47	55.2	22_32





CABLE GLAND

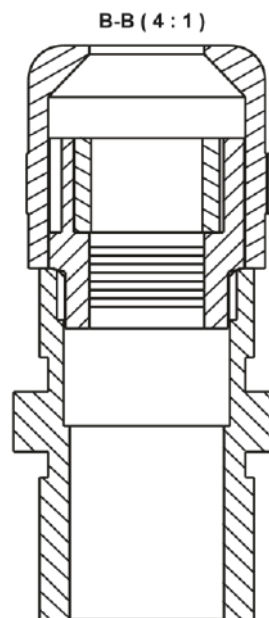
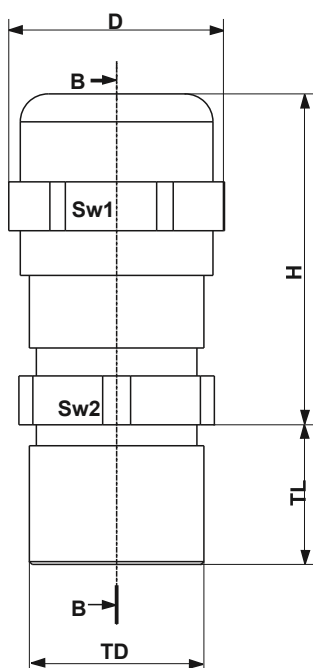
Industrial cable gland
Type 1221 ((Metric Version))

TECHNICAL DATA-CABLE GLAND

Material	
Body	Nickel plated brass
Clamping part	Polyamide 6
Sealing ring	EPDM
IP washer	NBR (O-ring) - Red fiber (volcanic)
Ingress Protection	IP 66
Temperature range	-40 °C to +100 °C

SPECIFICATION

SIZE	TD (mm)	TL (mm)		Sw1 (mm)	Sw2 (mm)	MAX H (mm)	D (mm)	CABLE CLAMPING RANGE
		Short	Tall					
M 12	12	8	12	14	14	20.2	15.4	3_6.5
M16	16	8	12	17	18	21.8	19	4_8
M16	16	8	12	20	20	23.6	22	5_10
M20	20	8	12	22	22	22	24.6	6_12
M25	25	9	12	30	30	30.5	32.8	13_18
M32	32	10	15	40	40	37.3	43.7	18_25
M40	40	11	15	50	50	47	55.2	22_32



TECHNICAL DATA

STANDARDS

1. Our cable glands are manufactured and tested to the requirements of BS 6121 and other standards where applicable
2. The outer sheath seals in S.G. have a wider range than required by BS 6121, due to superior design.
3. Certain glands in our range while not covered by BS 6121 are generally made and tested to this standard as appropriate.

MATERIALS AND FINISHES

Flameproof & Industrial cable glands are manufactured as standard in brass (BS 2874) which is suitable for the majority of applications; therefore, plated finishes, e.g. nickel, etc can be supplied to customer specification.

ENTRY THREADS

- 1- Metric*1.5 mm pitch is the standard (up to size M75), Imperial thread forms are also available. The following table gives the more popular thread forms available (the table is not a size for size comparison chart, some taper threads, e.g. NPT, may require larger than standard entry components to accommodate taper dimensions).

S.G Size Ref.	Metric BS 3643	Imperial Conduit BS 31	Pg DIN 40430	NPT USAS B2.1	BSP BS 2779
Os/O	20/16	$\frac{3}{4}$ "	13.5	$\frac{1}{2}$ "	$\frac{1}{2}$ "
A	20	$\frac{3}{4}$ "	16	$\frac{3}{4}$ "	$\frac{3}{4}$ "
B	25	1"	21	1"	1"
C	32	$1\frac{1}{4}$ "	29	$1\frac{1}{4}$ "	$1\frac{1}{4}$ "
C2	40	$1\frac{1}{2}$ "	36	$1\frac{1}{2}$ "	$1\frac{1}{2}$ "
D	50	2"	42/48	2"	2"
E	63	$2\frac{1}{2}$ "	-	$2\frac{1}{2}$ "	$2\frac{1}{2}$ "
F	75	3"	-	3"	3"

2. The length of entry thread is shown with other dimensions for each gland. Body lengths are within BS 6121. Full details on request.
3. All our metal glands manufactured without entry thread undercuts.
4. Entry into Exd flameproof equipment must be threaded, no clearance holes are permitted. The thread engagement of threaded joints shall be as detailed in the relevant standard, e.g. BS 5501: Pt.5 (IEC 60079-1) for Flameproof cable glands



TECHNICAL DATA

ENTRY STOPPING

All entries into Exd and Exe apparatus must be fitted with appropriate cable entry device. Unused entries must be plugged with a component, which is accepted with the apparatus certificate, or as an approved component in its ownright.

MARKING

All our cable glands are Marked with the type, size, entry thread size and type, and the relevant approval details (if applicable) e.g.
S.G. 453 A 20mm Exd II BAS Ex98D1229U.

EARTHING

1. For electrical continuity the screwed entry is normally sufficient with metal boxes. For other purposes it maybe necessary to provide a link to other apparatus and an earthtag is then placed between the gland and the apparatus into which it is screwed. it is essential to ensure metal to metal contact is achieved between equipmend/earth tag and the gland. This must not reduce thread engagement below specification requirement. (see note 4 under Entry Threads).

2. Where very heavy fault current can be anticipated, a gland entry portion incorporating an intrgral lug can be supplied.

3. Insulated adapturs are available for installation where it is necessary to avoid connection between the cable armour and earth at one end of the route, e.g. the break in an earth loop that can otherwise genrate spurious signals.

4. It is sometimes required to earth cable armour and core screens separately. In this situation drain wires must be insulated where they are passed through the gland body, by means of shrink tubing in the dase of barrier glands. An alternative id to terminate the screens at the crutch of the cable and use an insulated conductor through the gland body, crimped to the collected screens.

IMPORTANT ADVICE

The dimension of cable may vary with cable manufacturing tolerances. We do advise the actual cable diameter is measured where possible before purchasing glands. The recommendations here are given in good faith but we can not be held liable for mistakes in selection however caused.



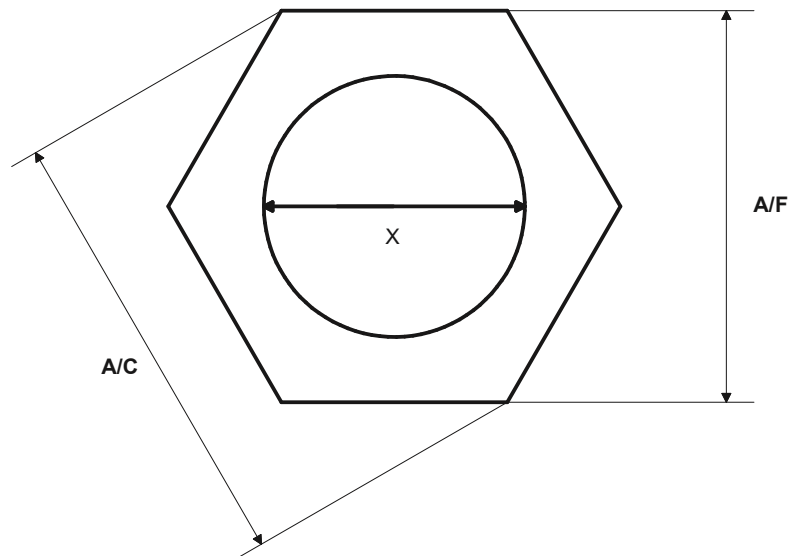
GLAND ACCESSORIES

LOCKNUT

SPECIFICATION

GLAND SIZE Os/O	Female Thread 'X'		A/F	A/C	Description
	Metric	Imp*			
A	M16	$\frac{3}{4}$ "	25	27.7	*Suitable for use with S.G cable glands with respect to mentioned thread sizes. to secure the gland body to the equipment were entry hole is not tapped. *Other threads are available including: Pg, NPSM, BSPP and BSPT to customer order. *Locknuts are made from Brass: they can be coated or plated to suit. customer application. * A/C: Across Corner * A/F: Across Flat
B	M20	$\frac{3}{4}$ "	30	34.6	
C	M25	1"	36	41.6	
C2	M32	$1\frac{1}{4}$ "	46	53.1	
D	M40	$1\frac{1}{2}$ "	55	63.5	
E	M50	2"	65	75.1	
F	M63	$2\frac{1}{2}$ "	80	92.4	
G	M75	3"	95	109.6	
H	M90	****	115	129.5	
I	M100	****	125.5	142.6	
	M110	****	145	164.8	

All dimensions in millimetres (except*)



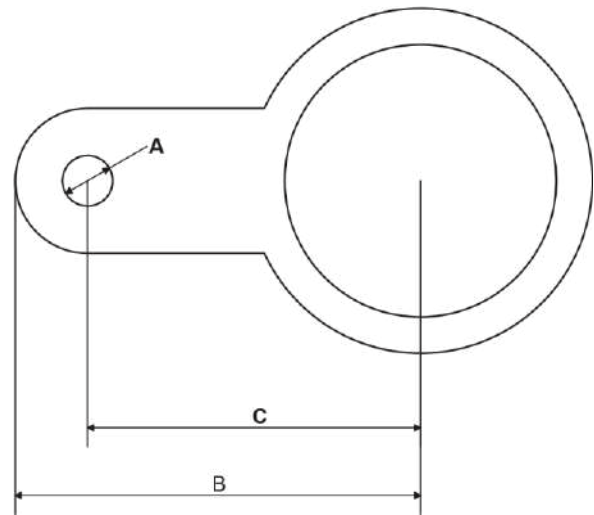
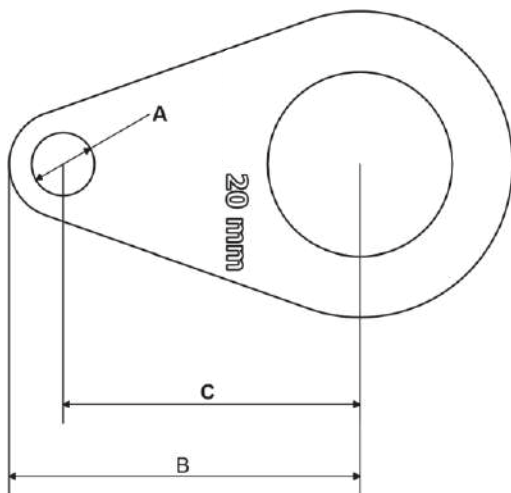
GLAND ACCESSORIES

EARTH TAG



GLAND SIZE	SPECIFICATION				Description
	'A'	'B'	'C'	Thickness	
Os/O	7.0	39	33	1.5	Earth tags are available in each gland sizes to ensure earth continuity between the gland and the equipment. Made form Brass; they can be coated or plated to suit customer application.
A	7.0	39	33	1.5	
B	10.5	45.3	37.1	1.5	
C	11.8	51.7	41.1	1.5	
C2	13.5	59.8	44.6	1.5	
D	13.5	78	58.1	1.5	
E	13.5	88.3	66.6	1.5	
F	14	11.8	92.5	1.5	
G	14	121.1	99.5	1.5	
H	M8	89	76	8	
I	M8	98.5	85	9	

All dimensions in millimetres





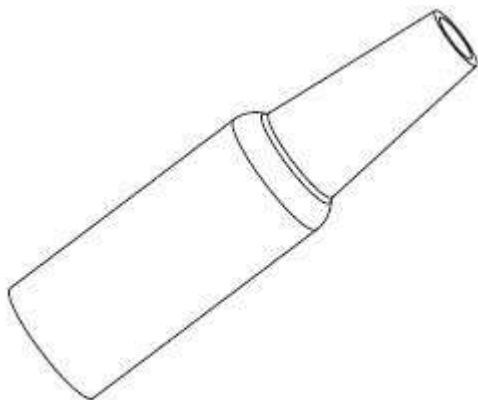
GLAND ACCESSORIES

SHROUDS, & SEALING WASHERS

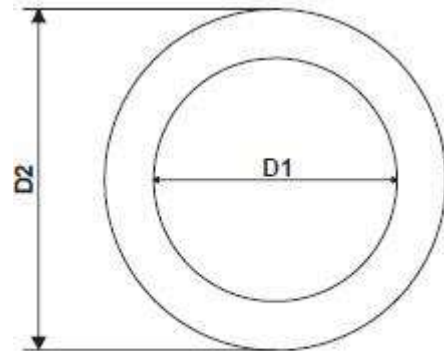
GLAND SIZE	DESCRIPTION
Os/O	*Shrouds are for use with S.G cable glands for additional Protection against onerous weather conditions. *Available in black PVC, EPDM, and Neoprene materials
A	
B	
C	
C2	
D	
E	
F	

GLAND SIZE	D1	D2	Thickness	Description
Os/O	20	26.3	2	*Sealing Washers are available for each gland size to maintain IP rating between gland and the equipment. *Alternative Material is: Volcanic Red Fiber Flat Washer EPDM or NBR O-ring.
A	20	30.5	2	
B	25	34	2	
C	32	46	2	
C2	40	55	2	
D	50	63	2	
E	63	78	2	
F	75	95	2	
G	90	108	2	
H	100	121	2	
I	115	139	2	

All dimensions in millimetres



SHROUD



SEALING WASHER

ADAPTORS, REDUCERS & STOPPING PLUGS

Zone 1,2,21,22



APPLICATION: Suitable for both industrial use and in either zone 1 or zone 2 approved equipment having flameproof Ex d, increased safety Ex'e', or NON - Incentive Ex'n/Ex'nR' methods of protection
SPECIFICATION: "Ex d IIC/Ex e IIC,Ex t IIIC" in accordance with the relevant requirements of IEC 60079-0 , IEC 60079-1, IEC 60079-7 , IEC 61241-0 , IEC 61241-1, IEC 60079-31
CERTIFICATION: Component certificate No.: TÜV 11 ATEX 7157 U and equipment certificate No. TÜV11 ATEX 7156 X
FUNCTION: Provides a means of outdoor or indoor connection between cable entry device and equipment having dissimilar threads.

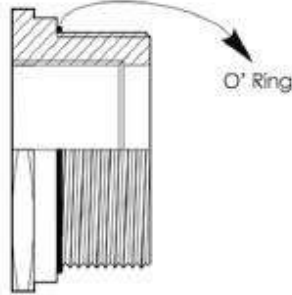
INGRESS PROTECTION: IP 66 TO BS EN 60529.
MATERIAL: Brass, aluminum, mild & stainless steel.
FINISH: May be coated or plated to suit the application.
THREAD FORMS: See thread conversion table.
MARKING: Surface engraving.
HAZARDOUS AREA CONSIDERATIONS: For hazardous area application all range of Adaptors, Reducers, & Stopping Plugs can be supplied as Certified Components appropriate for use on areas classified as Zone I or Zone II, in conjunction with any equipment Certified as Flameproof Exd, Increased Safety Exe, or Non-Incentive Exn / ExnR. The following considerations shall be taken into account while using Certified Adaptors, Reducers, & Stopping Plugs as well as "Good engineering practices": * For any cable entry, only one thread convertor (Adaptor or Reducer) can be used. * Stopping Plugs are not permitted to be fitted into an Adaptor or Reducer. They should directly be fitted into unplugged / unused cable entries of the equipment. * Female entry threads of adaptors can only be one step greater than the nominal size of the male thread form. All. range of Adaptors, Reducers, & Stopping Plugs cover the most popular international thread forms including: Metric, Imperial, NPT, PG, BSPP,and BSPT(see " Thread Conversion Table).



ADAPTORS, REDUCERS & STOPPING PLUGS

Zone 1,2,21,22

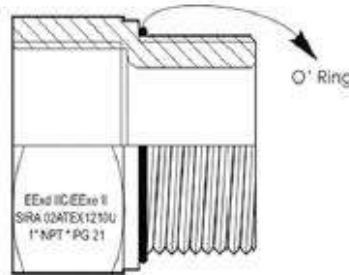
S.G TYPE 700 Plug



PLUG SIZE	Across Corner	Across Flat (min)
M16	22.5	20
M20	26.6	24
M25	33.3	30
M32	39.9	36
M40	49.9	44
M50	61.0	55
M63	77.6	68
M75	90.3	80
M90	113	100

All dimensions are in millimetress

S.G TYPE 600 ADAPTORS



ADAPTOR		Across Corner	Across Flat (min)	Bore
Male	Female			
M16	M20	26.6	24	9.5
M20	M25	33.3	30	14.0
M25	M32	39.9	36	20.0
M32	M40	49.9	44	26.5
M40	M50	61.0	55	32.0
M50	M63	77.6	68	44.0
M63	M75	90.3	80	56.0
M75	M90	113	100	68

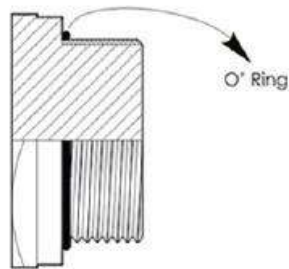
All dimensions are in millimetress

ADAPTORS, REDUCERS & STOPPING PLUGS

Zone 1,2,21,22



S.G TYPE 800 Reducer



Reducer Male	Across Corner	Across Flat (min)
M16	22.5	20
M20	26.6	24
M25	33.3	30
M32	39.9	36
M40	49.9	44
M50	61.0	55
M63	77.6	68
M75	90.3	80
M90	113	100

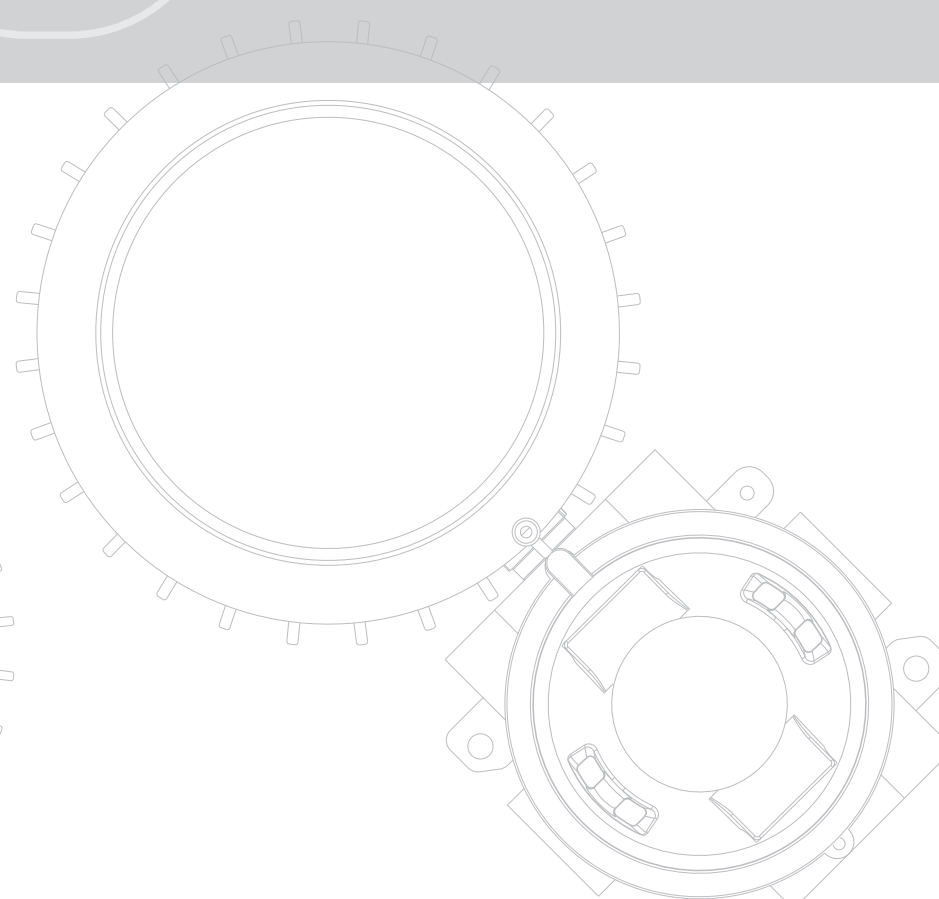
All dimensions are in millimetress



Sina Ghabezah

Oil and Gas Equipment Manufacturer

LIGHTING





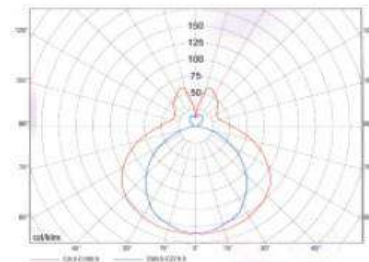
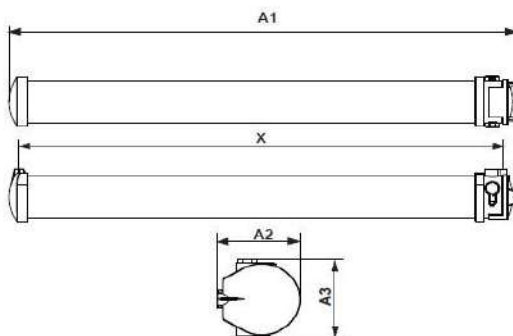
FLB Fluorescent Series

FLB 220-240 Electromagnetic Ballast
Zone 1,2,21,22

TECHNICAL DATA	
TYPE	FLB Fluorescent Series
Marking to 94/9/EC	Ex II 2 G D
Type of protection	Ex d IIC T6 Gb, Ex t IIIC tb T 80°C Db
Certificate No.	ECM 16 ATEX-B 281 X
Enclosure Material	Copper free aluminium
Transparent Cover	Borosilicate-glass
Rated Voltage	220-230 VAC (Other voltages are available on request)
Frequency	50/60 Hz
Circuit	Electromagnetic Ballast
Power Factor	>0.90
Degree of protection to IEC 60529	IP66
Insulation class	I
Permissible ambient temperature	-30°C to +55°C
Entries	Direct entry: 2 x $\frac{3}{4}$ " NPT (ISO 7/1) 1x Ex d-blanking plug $\frac{3}{4}$ " " Other thread forms available on request
Earthing	External and internal earth connections
Connecting Terminals	L1 N and PE: 2x 2.5 mm ² /PE ex.2 x 6 mm ²
Lamps	T8 Bi-Pin Fluorescent Tubes
Lamp Cap	G 13 for Bi pin lamps according to IEC 60081
Ordering Details:	<ul style="list-style-type: none"> Stainless steel/ Galvanized steel/ White painted sheet steel reflector Stainless steel/ Galvanized steel/ White painted sheet steel guard lamp Cable Gland Installation kit for surface, pole, ceiling and suspension mounting. Cable through wiring system.

Type	Lamp	Rated current	Weight approx.
FLB 220E	2 x 18/20 W	0.21 A	5.2 kg
FLB 240E	2 x 36/40 W	0.43 A	8.3 kg

code size	A1	X	A2	A3
FLB 240E	1330	1270	148	141
FLB 220E	736	579	148	141



FLB Fluorescent Series

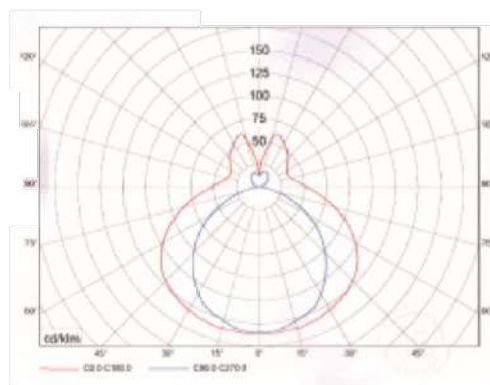
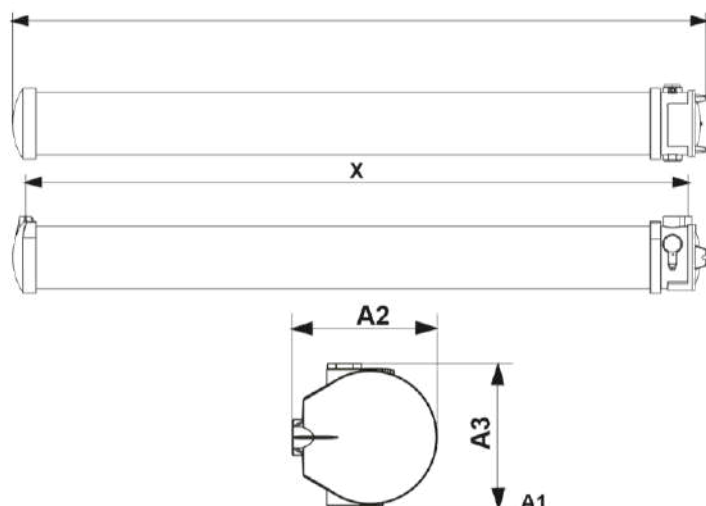
FLB 220-240 Electronic Ballast
Zone 1,2,21,22



TECHNICAL DATA	
TYPE	FLB Fluorescent Series
Marking to 94/9/EC	Ex II 2 G D
Type of protection	Ex d IIC T6 Gb, Ex t IIIC tb T 80°C Db
Certificate No.	ECM 16 ATEX-B 281 X
Enclosure Material	Aluminum alloy / Copper free aluminum as an option
Transparent Cover	Borosilicate-glass
Rated Voltage	220-240 VAC (Other voltages are available on request)
Frequency	50/60 Hz
Circuit	Electronic Ballast
Power Factor	>0.90
Degree of protection to IEC 60529	IP66
Insulation class	I
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Entries	Direct entry: 2 x $\frac{3}{4}$ " NPT (ISO 7/1) 1x Ex d-blanking plug $\frac{3}{4}$ " " Other thread forms available on request
Earthing	External and internal earth connections
Connecting Terminals	L1 N and PE: 2x 2.5 mm ² /PE ex.2 x 6 mm ²
Lamps	T8 Bi-Pin Fluorescent Tubes
Lamp Cap	G 13 for Bi pin lamps according to IEC 60081
Ordering Details:	<ul style="list-style-type: none"> Stainless steel/ Galvanized steel/ White painted sheet steel reflector Stainless steel/ Galvanized steel/ White painted sheet steel guard Lamp Cable Gland Installation kit for surface, pole, ceiling and suspension mounting. Cable through wiring system

Type	Lamp	Rated current	Weight approx.
FLB 220C	2 x 18/20 W	0.16 A	5.2 kg
FLB 240C	2 x 36/40 W	0.31 A	8.3 kg


code size	A1	X	A2	A3
FLB 240C	1330	1270	148	141
FLB 220C	736	579	148	141





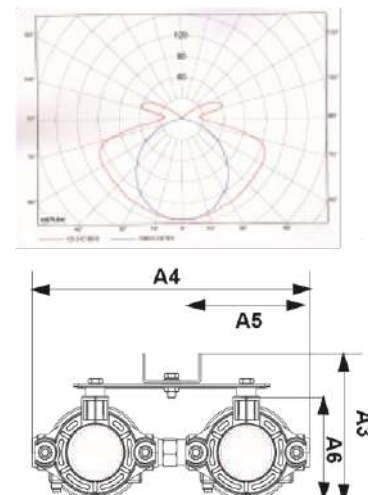
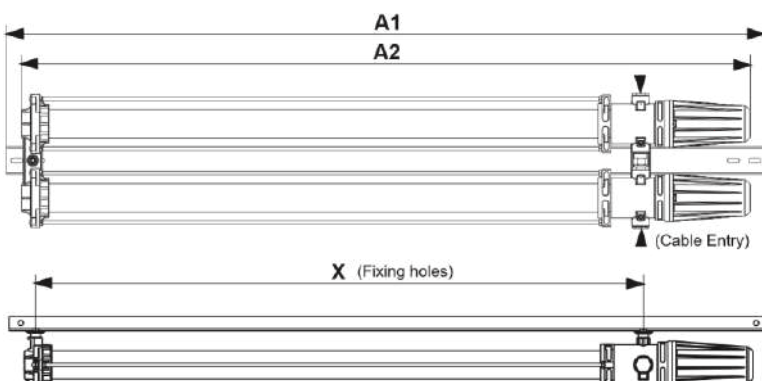
FLC Fluorescent Type

Explosion Protected Light Fittings With Electromagnetic Ballast Zone 1,2,21,22

TECHNICAL DATA	
TYPE	FLC Fluorescent Series
Marking to 94/9/EC	 II 2 G D
Type of protection	Ex d IIC T6 Gb, Ex t IIIC tb T 80°C Db
Certificate No.	ECM 16 ATEX-B 281 X
Enclosure Material	Copper free aluminum
Transparent Cover	Borosilicate-glass
Rated Voltage	220-230 VAC (Other voltages are available on request)
Frequency	50/60 Hz
Circuit	Electromagnetic Ballast
Power Factor	>0.90
Degree of protection to IEC 60529	IP66
Insulation class	I
Permissible ambient temperature	-30°C to +55°C
Entries	Direct entry: 2 x $\frac{3}{4}$ " NPT (ISO 7/1) 1x Ex d-blanking plug $\frac{3}{4}$ " " Other thread forms available on request
Earthing	External and internal earth connections
Connecting Terminals	L1 N and PE: 2x 2.5 mm ² /PE ex.2 x 6 mm ²
Lamps	T8 Bi-Pin Fluorescent Tubes
Lamp Cap	G 13 for Bi pin lamps according to IEC 60081
Ordering Details:	<ul style="list-style-type: none"> • Stainless steel/ Galvanized steel/ White painted sheet steel reflector • Stainless steel/ Galvanized steel/ White painted sheet steel guard • lamp • Cable Gland • Installation kit for surface, pole, ceiling and suspension mounting. • Cable through wiring system

Type	Lamp	Rated current	Weight approx
FLC 140E	1 x 36/40 W	0.21 A	5.5 kg
FLC 240E	2 x 36/40 W	0.43 A	14 kg

code size	A1	A2	A3	A4	A5	A6	X
FLC 140	1600	1535	147	277	120	102	1270
FLC 240	1600	1535	147	277	-	102	1270



FLC Fluorescent Type

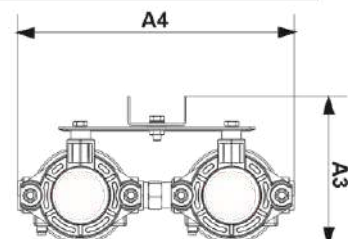
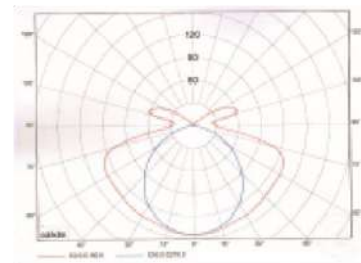
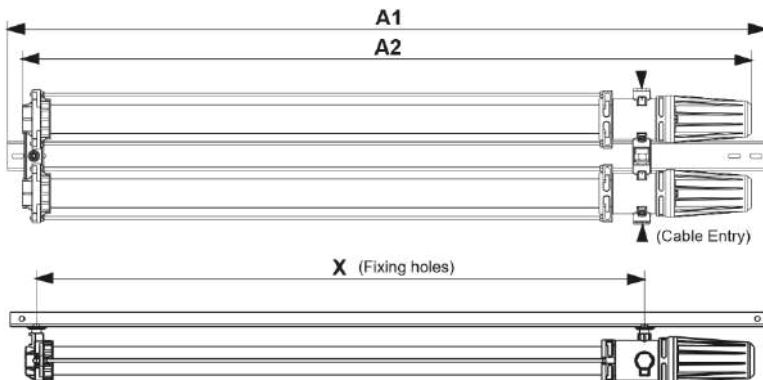
Explosion Protected Light Fittings With Electronic Ballast Zone 1,2,21,22



TECHNICAL DATA	
TYPE	FLC Fluorescent Series
Marking to 94/9/EC	⊕ II 2 G D
Type of protection	Ex d IIC T6 Gb, Ex t IIIC tb T 80°C Db
Certificate No.	ECM 16 ATEX-B 281 X
Enclosure Material	Copper free aluminum
Transparent Cover	Borosilicate-glass
Rated Voltage	220-230 VAC (Other voltages are available on request)
Frequency	50/60 Hz
Circuit	Electronic Ballast
Power Factor	>0.90
Degree of protection to IEC 60529	IP66
Insulation class	I
Permissible ambient temperature	-30°C to +55°C
Entries	Direct entry: 2 x $\frac{3}{4}$ " NPT (ISO 7/1) 1x Ex d-blanking plug $\frac{3}{4}$ " " Other thread forms available on request
Earthing	External and internal earth connections
Connecting Terminals	L1 N and PE: 2x 2.5 mm ² /PE ex.2 x 6 mm ²
Lamps	T8 Bi-Pin Fluorescent Tubes
Lamp Cap	G 13 for Bi pin lamps according to IEC 60081
Ordering Details:	<ul style="list-style-type: none"> Stainless steel/ Galvanized steel/ White painted sheet steel reflector Stainless steel/ Galvanized steel/ White painted sheet steel guard lamp Cable Gland Installation kit for surface, pole, ceiling and suspension mounting. Cable through wiring system.

Type	Lamp	Rated current	Weight approx
FLC 140E	1 x 36/40 W	0.21 A	5.5 kg
FLC 240E	2 x 36/40 W	0.43 A	14 kg

code size	A1	A2	A3	A4	A5	A6	X
FLC 140	1600	1535	147	277	120	102	1270
FLC 240	1600	1535	147	277	-	102	1270

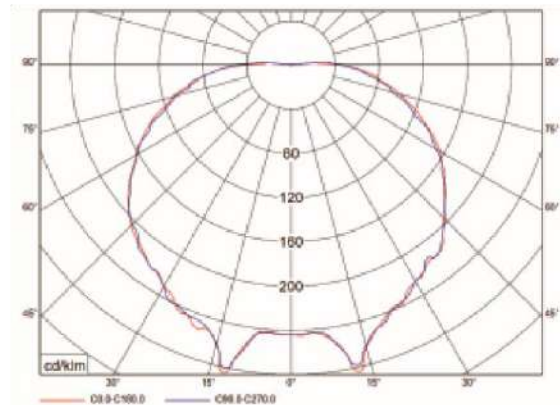
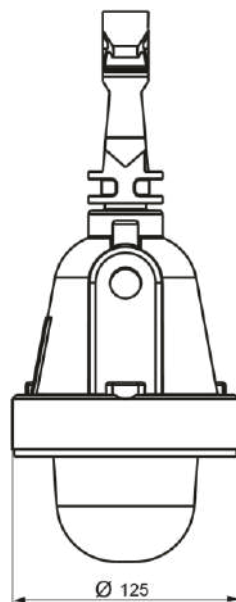
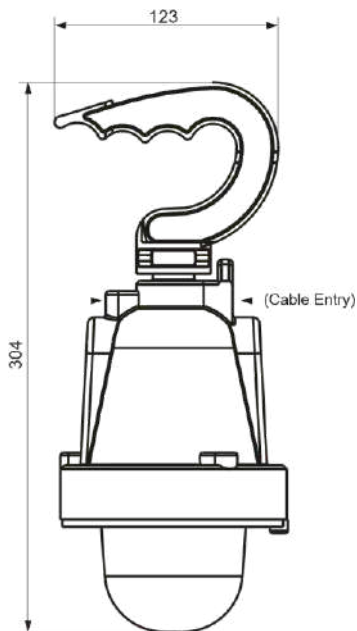




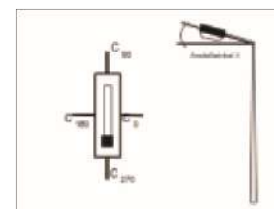
HAND LAMP

with LED
Zone 1,2,21,22

TECHNICAL DATA	
TYPE	PHL: without hanger PHL1: with hanger PHLL: LED version with hanger
Marking to 94/9/EC	⊕ II 2 G D
Type of protection	Ex d IIB T6
Enclosure material (Handel/Body)	Aluminum alloy / Copper free aluminum as an option
Lamp protector	Polycarbonate
Ingress protection	IP66
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Entries	2 x M20
Rated voltage	180 ~ 260VAC - 24/48 VAC or DC
Color	White (457.5 nm)
Luminous Flux	685 Lm
Weight	1.5 Kg
Input Power	PHL:60w PHLL:10w



temp(x)
1 x LED
total flux
683 lm
LOR
100 %
88 angle
0.0 °



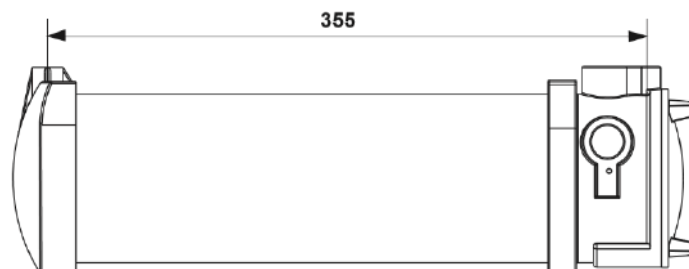
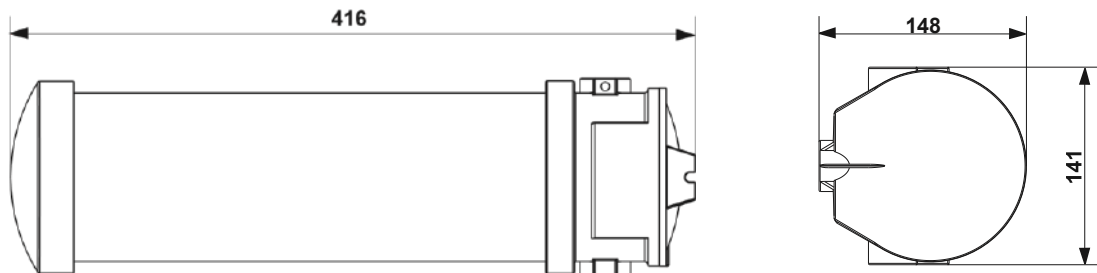
SIGN Series FLBS

Explosion Protected Warning & Alarm Devices

B Size Zone 1,2,21,22



TECHNICAL DATA	
TYPE	B Size
Marking to 94/9/EC	⊕ II 2 G D
Type of protection	Ex d IIB T6
Enclosure material	Copper free Aluminum
Transparent cover	Borosilicate Glass
Rated voltage	180~260 VAC or 12/24/48V AC/DC
Degree of protection acc to IEC 60529	IP 66
Permissible Ambient Temperature	-30°C to +55°C / -20°C to +40°C
Entries	Direct entry: 2 x 3/4" ISO 7/1 & 1x Ex d-blanking plug 3/4" Other thread forms available on request
Temperature class	T6
Size Code	B
Input Power	< 10 W
Viewing distance	Approx 25m
Color	(White-Green) or (White-Blue)





SIGN Series FLBS

Explosion Protected Warning
& Alarm Devices
Zone 1,2,21,22 B Size



APDR



APDR



APUL



APUR



AFUL45



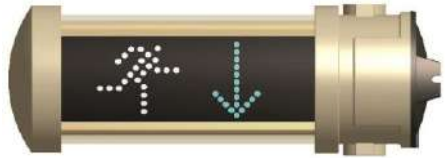
AFDL45



AFL



AFR



AFDR



AFDL



AFUR



AFUL



AFDR45



AFUR45

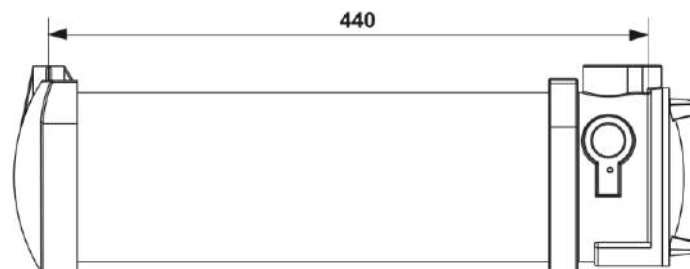
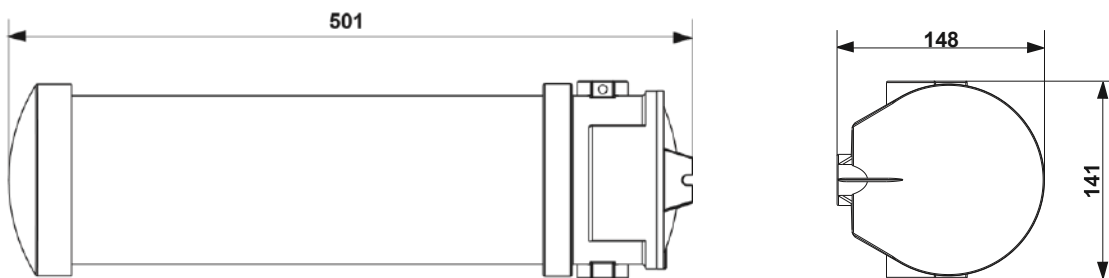
SIGN Series FLBS

Explosion Protected Warning & Alarm Devices

Zone 1,2,21,22 D Size



TECHNICAL DATA	
TYPE	D Size
Marking to 94/9/EC	⊕ II 2 G D
Type of protection	Ex d IIB T6
Enclosure material	Copper free Aluminum
Transparent cover	Borosilicate Glass
Rated voltage	180~260 VAC or 12/24/48V AC/DC
Degree of protection acc to IEC 60529	IP 66
Permissible Ambient Temperature	-30°C to +55°C / -20°C to +40°C
Entries	Direct entry: 2 x 3/4" ISO 7/1 & 1x Ex d-blanking plug 3/4" Other thread forms available on request
Temperature class	T6
Size Code	D
Input Power	< 10 W
Viewing distance	Approx 25m
Color	(White-Green) or (White-Blue)





SIGN Series FLBS

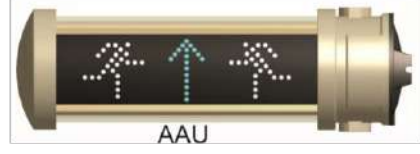
Explosion Protected Warning
& Alarm Devices
Zone 1,2,21,22 D Size



EFUR



EFDL



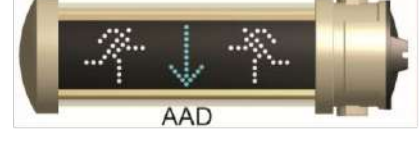
AAU



EFDR



EFUL



AAD



EFR



EFL



APDLB



EFDR45



EFDL45



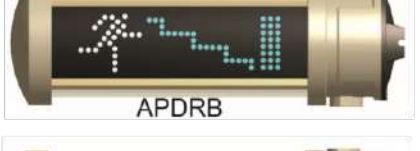
APULB



EFUR45



EFUL45



APDRB



EPUR - EPDL



EPUL - EPDR



APURB



EFDL45B



EFUL45B



EFUR45B



EFL45B



EFR45B



EFDL45B



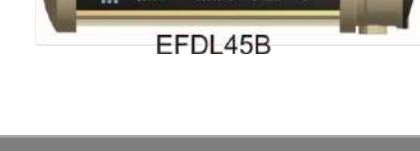
EFDR45B



EFUL45B



EFUR45B



EFDL45B

LTB LED Type

Explosion Protected Warning & Alarm Devices

Zone 1,2,21,22



TECHNICAL DATA

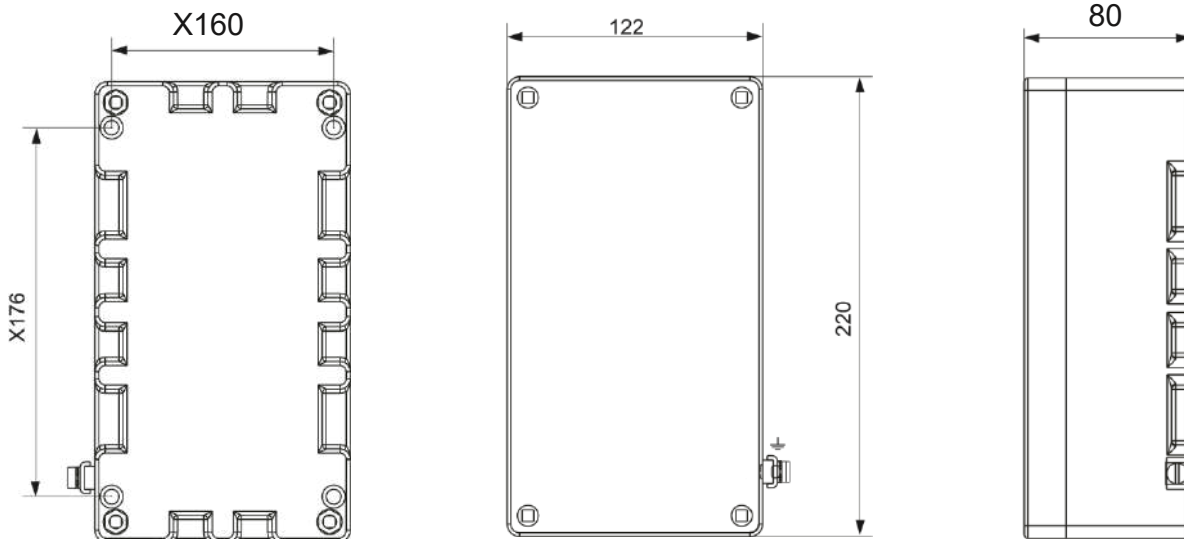
TYPE	LTB LED
Type of protection	Industrial or Weatherproof
Enclosure material	Aluminum
Transparent cover	Polycarbonate
Rated voltage	180~260 VAC or 12/24/48V AC/DC
Degree of protection acc to IEC 60529	IP 66
Permissible Ambient Temperature	-30°C to +55°C / -20°C to +40°C
Degree of protection acc to IEC 60529	IP 42
Size Code	B
Input Power	<10W
Viewing distance	Approx 25m
Color	(White-Green) or (White-Blue)

DIMENSIONS (mm)

	LENGTH	WIDTH	HEIGHT
INTERNAL	210	112	62
EXTERNAL	220	122	80
Mounting Location	X176	X106	-

LTB LED

M20(0)	T-B	3
	L-R	5
M20(A)	T-B	2
	L-R	4
M25(B)	T-B	2
	L-R	4



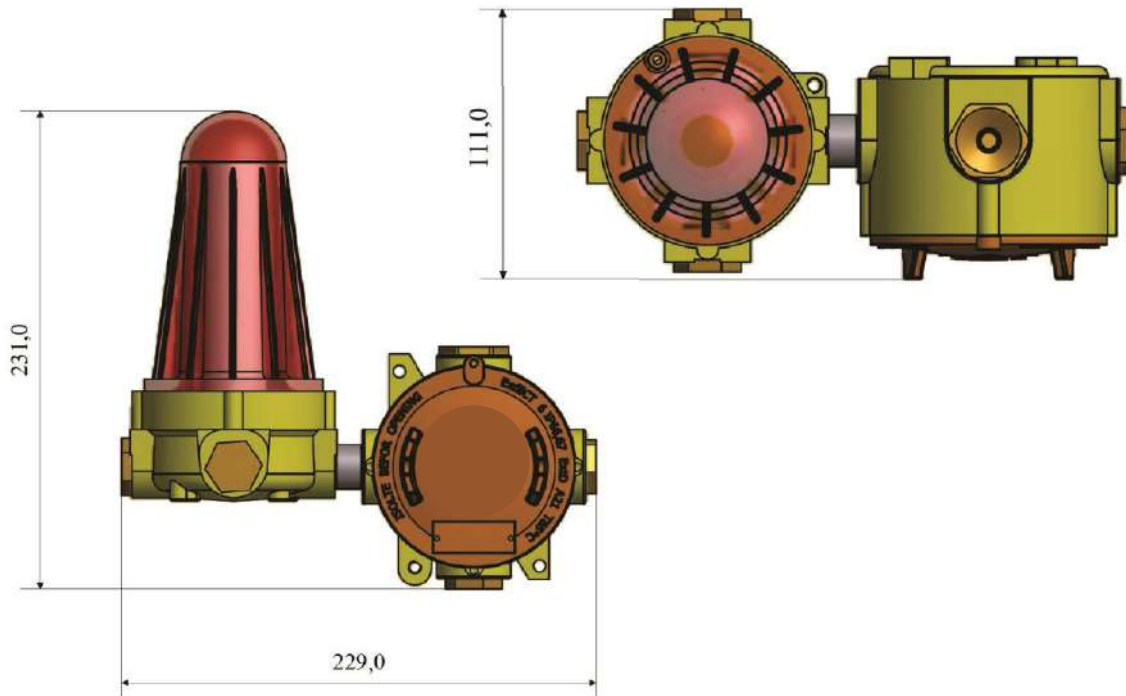


ALJE

Aircraft series

Zone 1,2,21,22

TECHNICAL DATA	
TYPE	L
Marking	Ⓔ II 2 G D
Type of protection	Ex d II C T6
Enclosure material	Copper free Aluminum
Transparent cover	Polycarbonate
Enclosure thickness	5mm
Degree of protection to EN 60529	IP 66
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Input power	<10W
Lamp	LED board
Rated voltage	12V/24V-AC/DC
Color	■ RED
Enclosure color	Body: RAL1028 Lid: RAL 2004
Construction	Single



ALJM

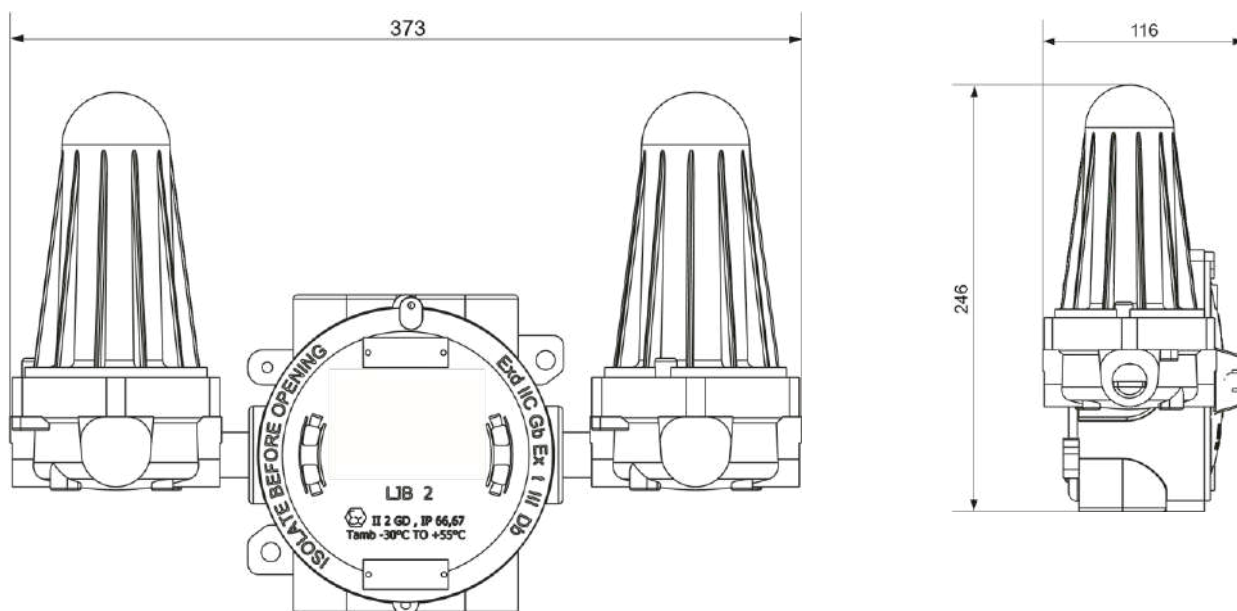
Aircraft Warning Light

Medium intensity

Zone 1,2,21,22



TECHNICAL DATA	
TYPE	MIOL (Medium intensity aircraft warning fixture)
Marking	⊕ II 2 G D
Type of protection	Ex d II C T6
Enclosure material	Copper free Aluminum
Transparent cover	Polycarbonate
Enclosure thickness	5mm
Degree of protection to EN 60529	IP66
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Rated voltage	180~260 V AC - 12/24/48 VAC/DC
Frequency	50 / 60 Hz
Luminous intensity	Flashing (2 x150cd) 40~60/min
Color	Red bulb
Enclosure Color	Body: RAL1028, Lid : RAL2004
Input power	<10 W
Beam radiation	360°
Entries	Top: 2 x M20 Other thread forms available on request Bottom : 1x M20
Construction	Double (Not Reserve)





ALJL 2x

Aircraft Warning Light

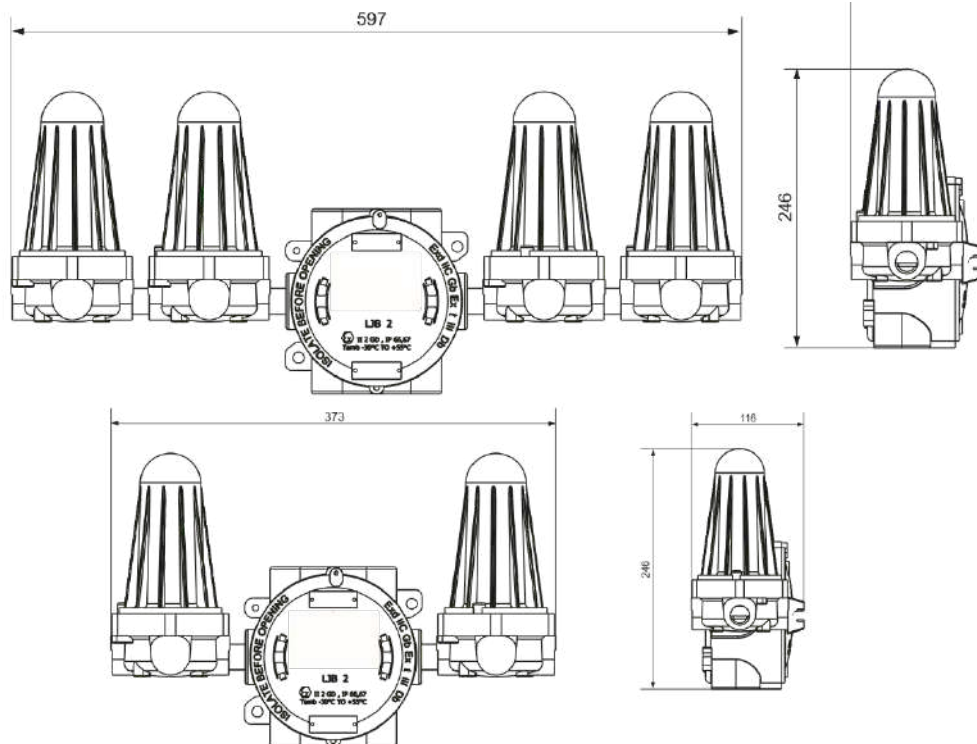
Low intensity

Zone 1,2,21,22

TECHNICAL DATA	
TYPE	LIOL (Low intensity aircraft warning light)
Marking	⊕ II 2 G D
Type of protection	Ex d II C T6 (Under certification)
Enclosure material	Aluminum alloy / Copper free aluminum as an option
Transparent cover	Polycarbonate
Enclosure thickness	5mm
Degree of protection to EN 60529	IP66
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Rated voltage	180~260 V AC - 12/24/48 VAC/DC
Frequency	50 / 60 Hz
Luminous intensity	Steady 32cd-Flashing on request Steady 64cd-Flashing on request
Color	Red Bulb
Enclosure Color	Body: RAL1028, Lid: RAL2004
Input power	<10 W
Beam radiation	360°
Entries	Top: 2 x M20 Other thread forms available on request Bottom :1 x M20
Construction	Twin (1 x 32 cd Main + 1x 32 cd reserve) ** Twin (2 x 32 cd Main + 2x 32 cd reserve) **

*This product is in accordance to annex 14 of ICAO document

** In order to use the integrated twin facility, the aircraft warning control box shall be used-see page.



ALJM 2x

Aircraft Warning Light

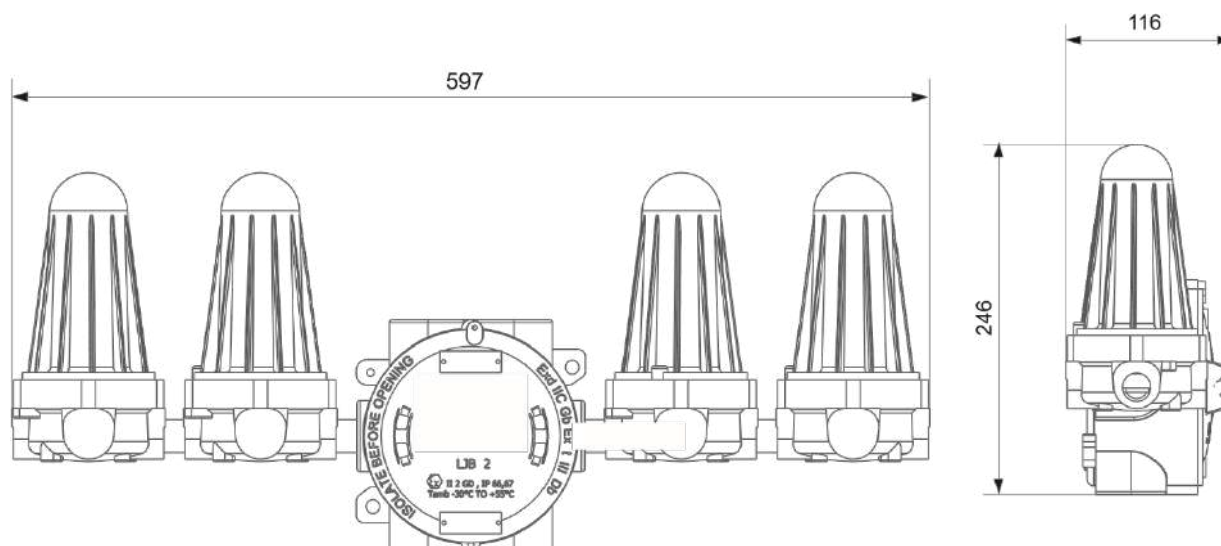
Medium intensity

Zone 1,2,21,22



TECHNICAL DATA	
TYPE	MIOL (Medium intensity aircraft warning light)
Marking	Ex II 2 G D
Type of protection	Ex d II C T6
Enclosure material	Aluminum alloy / Copper free aluminum as an option
Transparent cover	Polycarbonate
Enclosure thickness	5mm
Degree of protection to EN 60529	IP66
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Rated voltage	180~260 V AC - 12/24/48 VAC/DC
Frequency	50 / 60 Hz
Luminous intensity	Flashing 2 x 150 (300 cd Total),40~60/min
Color	Red Bulb
Enclosure Color	Body: RAL1028, Lid: RAL2004
Input power	<10 W
Beam radiation	360°
Expetancy life	10 years
Entries	Top: 2 x M20 Other thread forms available on request Bottom :1 x M20
Construction	Double/twin (2 x 150 cd main + 2 x 150 cd reserve) *

* In order to use the integrated twin facility, the aircraft warning control box shall be used-see page





FLBA-LIOL

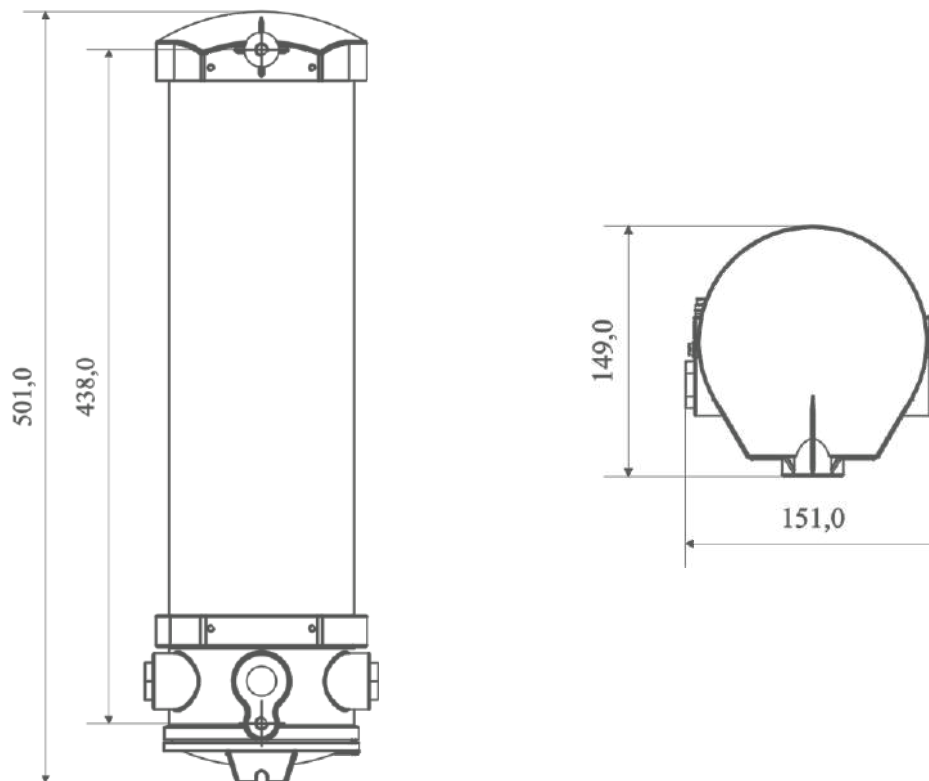
AIRCRAFT WARNING LIGHT

Low intensity

Zone 1,2,21,22

TECHNICAL DATA	
TYPE	FLBA-LIOL Aircraft warning light (Low Intensity)
Marking	Ex II 2 G D
Type of protection	Ex d II C T6
Enclosure material	Aluminum alloy / Copper free aluminum as an option
Transparent cover	Borosilicate - Glass
Degree of protection to EN 60529	IP66
Permissible ambient temprature	-30°C to +55°C / -20°C to +40°C
Rated voltage	180~260 VAC-12/24/48-VAC/DC
Frequency	50 / 60 Hz
Luminous intensity	Steady 100/150/200 cd (Flashing or request)
Color	Red
Input power	<10 W
Beam radiation	360°
Entries	Direct entry: 2 *3/4" iso 7/1 & 1 x Ex d-blanking plug 3/4" other thread forms available on request
Construction	Single (Not Reserve)

*This product is in accordance to annex 14 of ICAO document



FLBA-2xLIOL

AIRCRAFT WARNING LIGHT

Low intensity

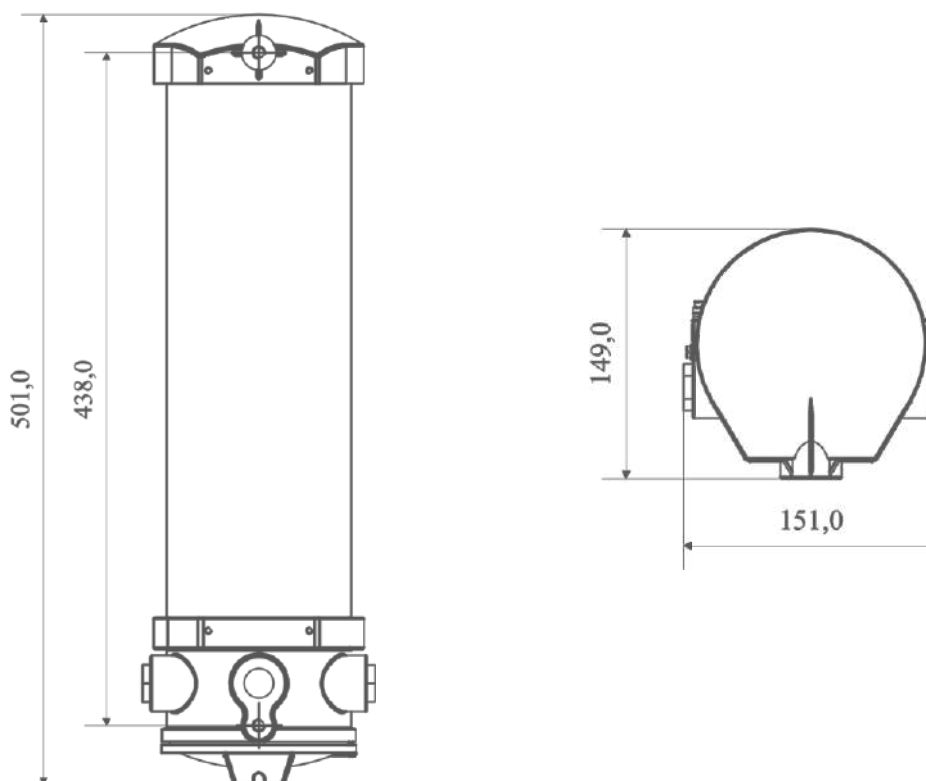
Zone 1,2,21,22



TECHNICAL DATA	
TYPE	FLBA-2xLIOL Aircraft warning light (Low Intensity)
Marking	Ex II 2 G D
Type of protection	Ex d II C T6
Enclosure material	Aluminum alloy / Copper free aluminum as an option
Transparent cover	Borosilicate - Glass
Degree of protection to EN 60529	IP66
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Rated voltage	180~260 VAC-12/24/48-VAC/DC
Frequency	50 / 60 Hz
Luminous intensity	Steady 32/50 cd (Flashing on request)
Color	Red
Input power	<10 W
Beam radiation	360°
Entries	Direct entry: 2 *3/4" iso 7/1 & 1 x Ex d-blanking plug 3/4" other thread forms available on request
Construction	Twin (Main+Reserve) **

*This product is in accordance to annex 14 of ICAO document

** In order to use the integrated twin facility, the aircraft warning control box shall be used-see page





FLBA-2xLIOL

AIRCRAFT WARNING LIGHT

Low intensity
Zone 1,2,21,22

HORIZONTAL [°] VERTICAL [°]	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
0	235.2	245.5	253.3	257.5	258.9	217.6	254.3	245.9	235.7	223.2	208.3
20	228.3	240.8	250.1	258.4	264.5	218.1	263.1	258.0	250.6	237.1	219.5
40	237.1	248.7	258.0	264.9	270.0	266.8	270.5	266.8	259.4	250.1	239.4
60	268.7	283.5	297.9	310.0	319.2	231.1	331.8	330.8	325.7	317.4	306.2
80	192.6	204.2	213.9	222.7	227.8	261.7	228.8	225.5	219.0	206.9	195.3
100	97.0	104.4	109.5	112.3	113.7	224.6	114.6	113.2	110.4	107.2	103.0
120	210.2	219.9	227.4	233.4	239.0	148.9	243.1	239.9	231.5	221.3	210.7
140	183.7	193.5	201.8	208.3	212.5	144.8	215.8	241.4	210.7	204.2	195.3
160	172.6	183.3	193.5	201.8	210.7	328.5	221.3	223.2	221.8	218.1	211.1
180	178.2	194.0	208.3	215.8	216.6	275..2	216.2	214.8	211.6	206.0	200.0
200	216.2	231.5	243.1	254.3	262.6	266.3	265.4	261.7	255.7	246.8	234.8
220	188.4	205.6	216.2	223.6	228.8	259.4	231.5	228.8	222.7	214.8	204.6
240	208.8	226.4	238.5	249.2	257.5	265.4	262.6	260.3	253.8	244.5	233.9
260	185.6	200.9	213.9	221.3	226.4	271.0	224.6	220.4	215.3	206.9	195.3
280	122.5	129.5	137.8	142.9	147.1	327.1	148.0	147.6	144.8	141.1	134.1
300	142.9	145.7	147.6	147.6	146.2	230.1	142.9	138.1	132.7	124.8	116.5
320	286.8	301.1	312.7	321.6	327.6	114.6	322.9	310.4	294.2	274.2	252.0
340	257.5	268.2	274.2	277.9	277.9	242.2	268.7	258.9	245.9	231.5	216.2
359	240.8	252.0	259.8	265.4	268.2	215.3	258.9	250.1	238.5	226.0	209.3

Table1. Luminous intensity measurement result [candela]

FLBA-MIOL

AIRCRAFT WARNING LIGHT

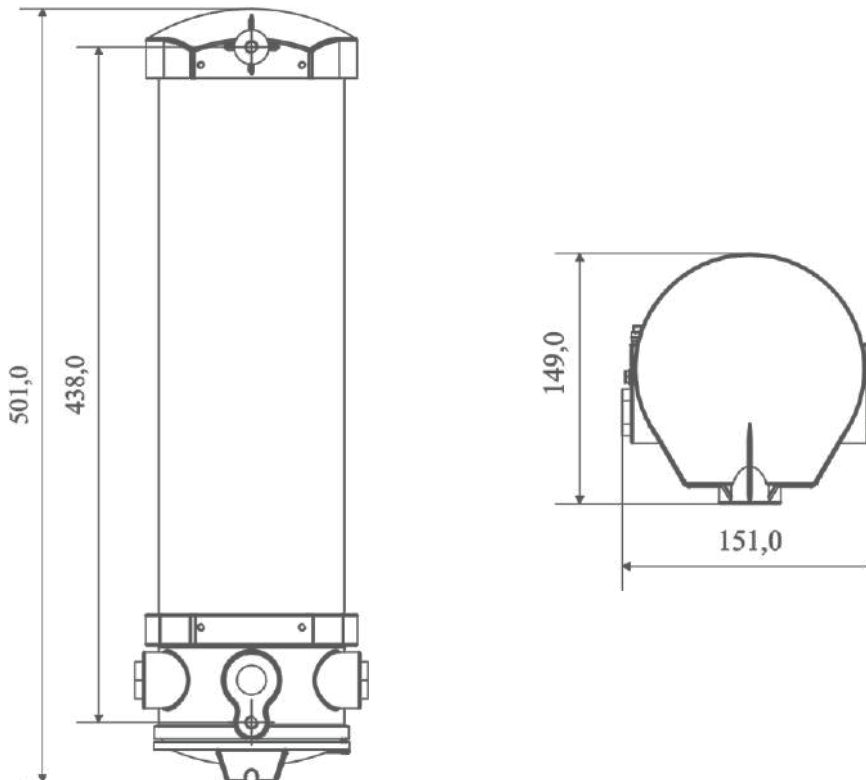
Medium intensity

Zone 1,2,21,22



TECHNICAL DATA	
TYPE	FLBA-MIOL Aircraft warning light (Medium Intensity)
Marking	Ex II 2 G D
Type of protection	Ex d II C T6
Enclosure material	Aluminum alloy / Copper free aluminum as an option
Transparent cover	Borosilicate - Glass
Degree of protection to EN 60529	IP66
Permissible ambient temperature	-30°C to +55°C / -20°C to +40°C
Rated voltage	180~260 VAC-12/24/48V-AC/DC
Frequency	50 / 60 Hz
Luminous intensity	Flashing 1000 cd 40~60/min
Color	Red
Input power	<20 W
Beam radiation	360°
Entries	Direct entry: 2 *3/4" iso 7/1 & 1 x Ex d-blanking plug 3/4" other thread forms available on request
Construction	Single (Not Reserve)

*This product is in accordance to annex of IKAO document





FLBA-2xMIOL

AIRCRAFT WARNING LIGHT

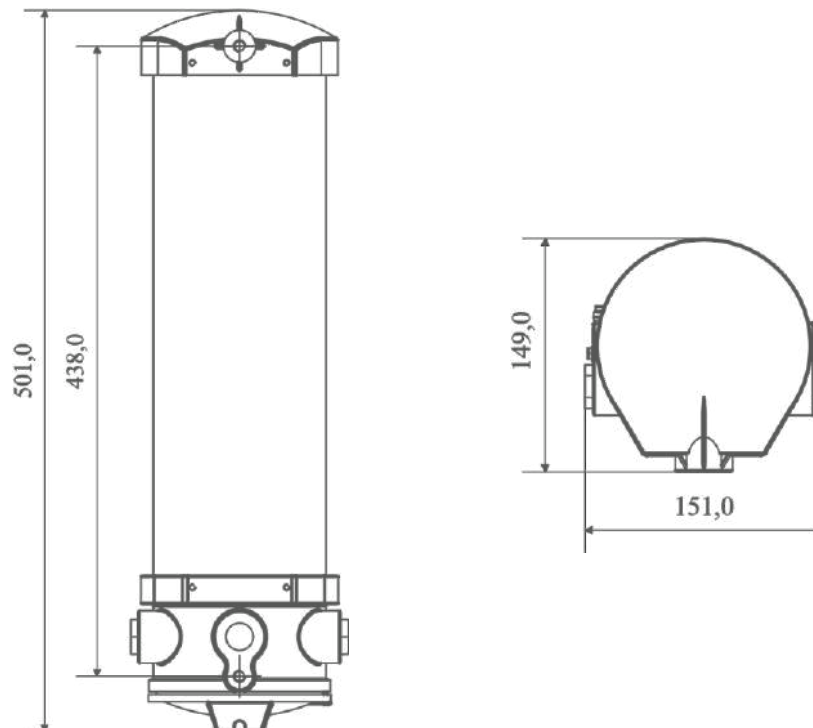
Medium intensity

Zone 1,2,21,22

TECHNICAL DATA	
TYPE	FLBA-MIOL Aircraft warning light (Medium Intensity)
Marking	⊕ II 2 G D
Type of protection	Ex d II C T6
Enclosure material	Aluminum alloy / Copper free aluminum as an option
Transparent cover	Borosilicate - Glass
Degree of protection to EN 60529	IP66
Permissible ambient temprature	-30°C to +55°C / -20°C to +40°C
Rated voltage	180~260 VAC-12/24/48V-AC/DC
Frequency	50 / 60 Hz
Luminous intensity	Flashing 1000 cd 40~60/min
Color	■ Red
Input power	<20 W
Beam radiation	360°
Entries	Direct entry: 2 *3/4" iso 7/1 & 1 x EX d-blanking plug 3/4" other thread forms available on request
Construction	Twin (500cd Main+500cd Reserve) ** Double (1000cd Main+1000cd Reserve)**

*This product is in accordance to annex of IKAO document

** In order to use the integrated twin facility, the aircraft warning control box shall be used-see page



LTB 120

Explosion Protected Local Terminal Box

Zone 1,2,21,22



TECHNICAL DATA

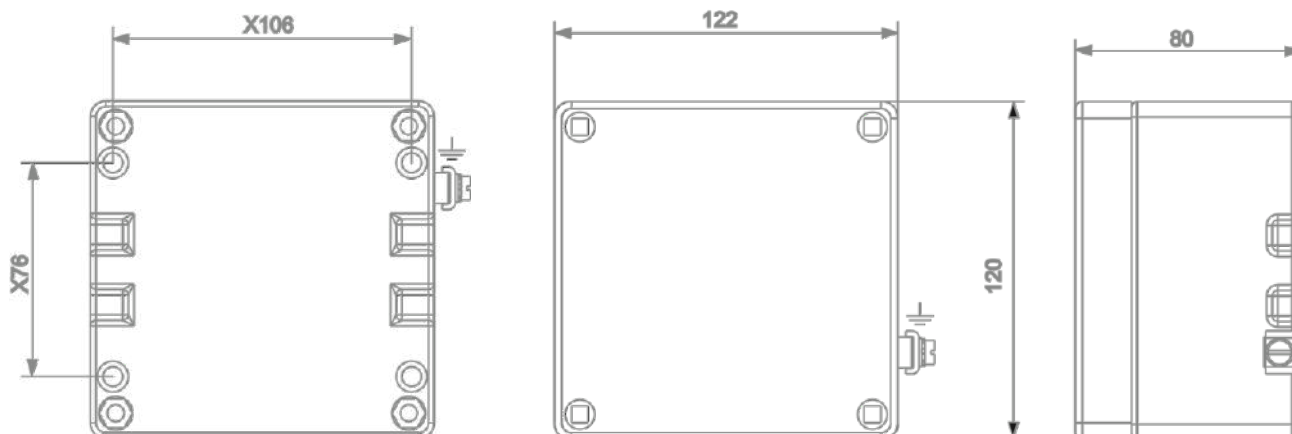
TYPE	LTB 120			
Marking to 94/9/EC	⊕ II 2 GD			
EC type examination certificate	TÜV 13 ATEX 7440X - IECEx TUR 13.0010X			
Type of protection	Ex e IIC T6 Gb Ex t IIIC T85°C Db			
Enclosure material	Aluminum alloy / Copper free aluminum as an option			
Rated voltage	Up to 690 V			
Degree of protection to IEC 60529	IP 66			
Permissible ambient temperature	-30°C to +55°C			
Earthing	Internal/External earth screw(M6/M5)			
Terminal mounting space on the terminal rail	80mm			
Maximum number of terminals: for one rail	2.5 mm ²	4 mm ²	6 mm ²	10 mm ²
	15	13	10	8

DIMENSIONS (mm)

	LENGTH	WIDTH	HEIGHT
INTERNAL	112	110	62
EXTERNAL	122	120	80
Mounting Location	X76	X106	-

LTB 120

M20(0)	T-B	3
	L-R	2
M20(A)	T-B	2
	L-R	1
M25(B)	T-B	2
	L-R	1





LTB 220

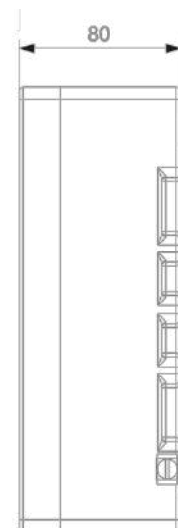
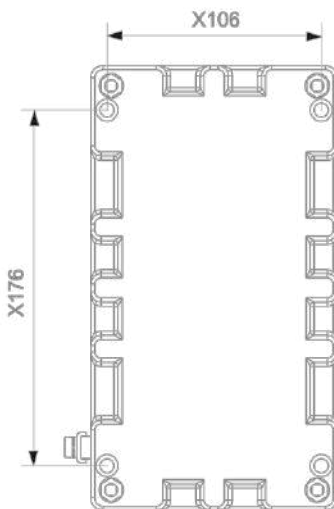
Explosion Protected Local Terminal Box

Zone 1,2,21,22

TECHNICAL DATA					
TYPE	LTB 220				
Marking to 94/9/EC	Ⓔ II 2 GD				
EC type examination certificate	TÜV 13 ATEX 7440X - IECEx TUR 13.0010X				
Type of protection	Ex e IIC T6 Gb Ex t IIIC T85°C Db				
Enclosure material	Aluminum alloy / Copper free aluminum as an option				
Rated voltage	Up to 690 V				
Degree of protection to IEC 60529	IP 66				
Permissible ambient temperature	-30°C to +55°C/ -20°C to +40°C				
Earthing	Internal/External earth screw(M6/M5)				
Terminal mounting space on the terminal rail	185mm				
Maximum number of terminals: for one rail	2.5 mm ²	4 mm ²	6 mm ²	10 mm ²	16
	30	24	19	15	13

DIMENSIONS (mm)			
	LENGTH	WIDTH	HEIGHT
INTERNAL	210	112	62
EXTERNAL	220	122	80
Mounting Location	X176	X106	-

LTB 220		
M20(0)	T-B	3
	L-R	5
M20(A)	T-B	2
	L-R	4
M25(B)	T-B	2
	L-R	4



LTB 260

Explosion Protected Local Terminal Box

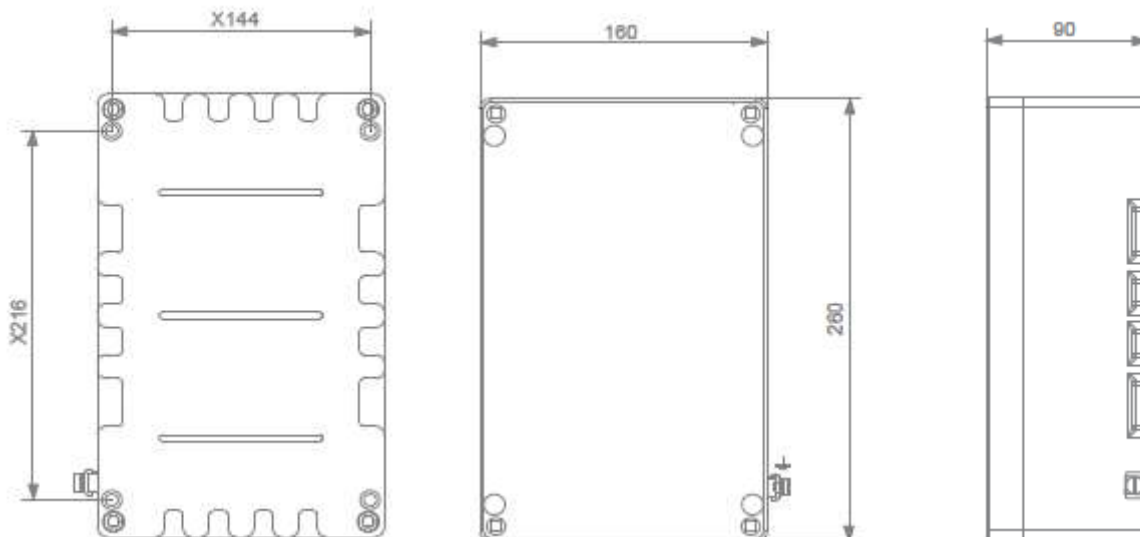
Zone 1,2,21,22

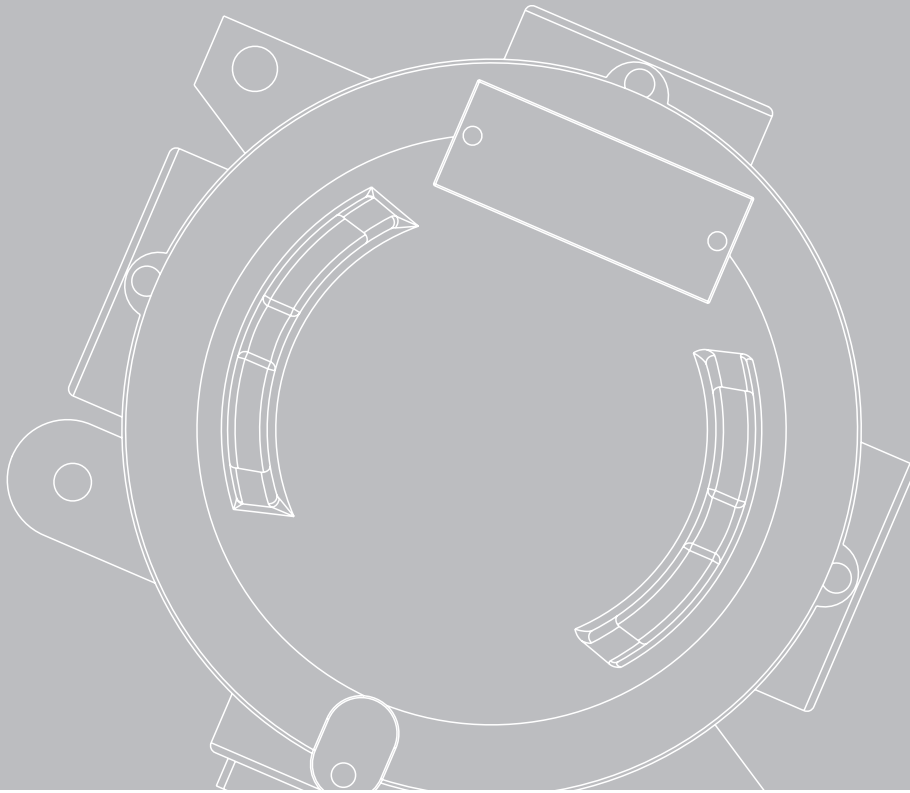


TECHNICAL DATA	
TYPE	LTB 260
Marking to 94/9/EC	⊕ II 2 GD
EC type examination certificate	TÜV 13 ATEX 7440X - IECEx TUR 13.0010X
Type of protection	Ex e IIC T6 Gb Ex t IIIC T85°C Db
Enclosure material	Aluminum alloy / Copper free aluminum as an option
Rated voltage	Up to 690 V
Degree of protection to IEC 60529	IP 66
Permissible ambient temperature	-30°C to +55°C/ -20°C to +40°C
Earthing	Internal/External earth screw(M6/M5)
Terminal mounting space on the terminal rail	220mm
Maximum number of terminals: for one rail	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² $\frac{25}{35}$ mm ²
	37 31 24 19 15 11

DIMENSIONS (mm)			
	LENGTH	WIDTH	HEIGHT
INTERNAL	250	150	72
EXTERNAL	260	160	90
Mounting Location	X216	X144	-

LTB 260		
M20(0)	T-B	8
	L-R	12
M20(A)	T-B	3
	L-R	6
M25(B)	T-B	3
	L-R	5
M32	T-B	2
	L-R	4
M40	T-B	2
	L-R	3



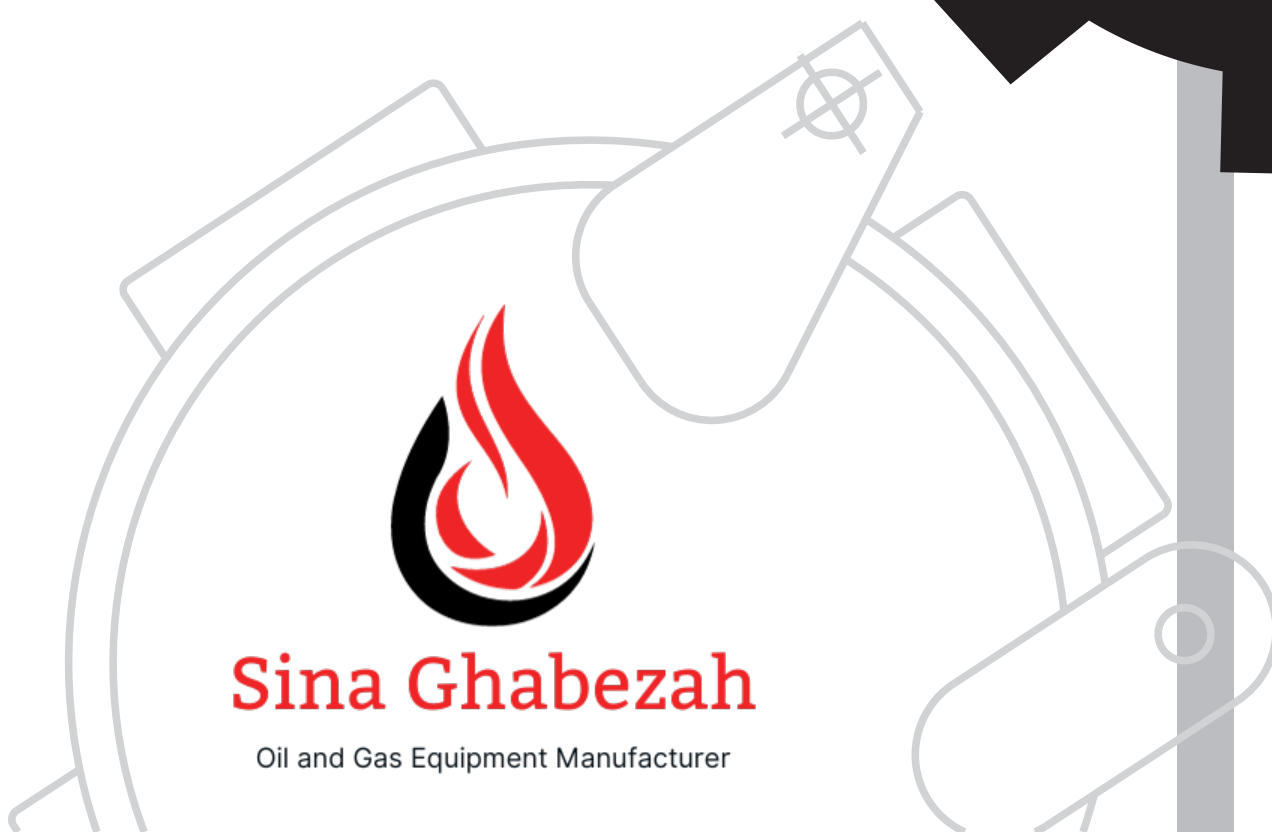


PHOTOCELL



Sina Ghabezah

Oil and Gas Equipment Manufacturer



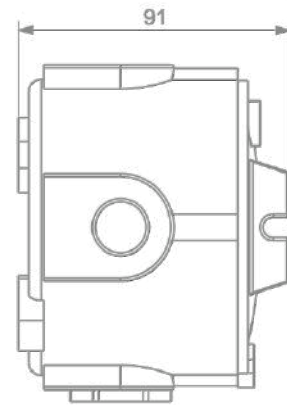
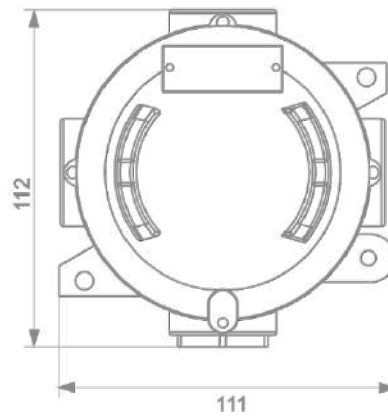
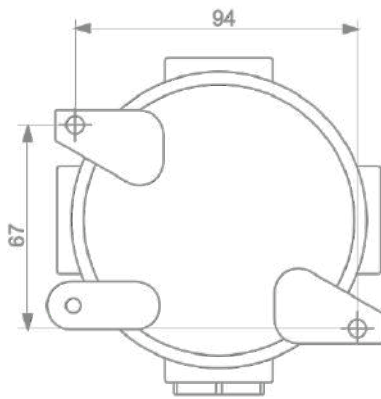


PHOTOCELL

Zone 1,2,21,22

EX PHOTO SWITCH	
SENSITIVITY SETTING	ON: 1 ~ 17 LUX OFF: 10 ~ 50LUX
RATED VOLTAGE	AC 190 ~ 240v
FREQUENCY	50 ~ 60 Hz
AMBIENT TEMP	-30°C ~ +55°C
LOAD CURRENT	8A or 16A
FUSE	8 or 16 on request
DELAY	(ON/OFF) 18S ~ 58S

DIMENSIONS (mm)			
	LENGTH	WIDTH	HEIGHT
INTERNAL	Ø86	-	64.5
EXTERNAL	108	112	90
FIXING BRACKETS	94	67.6	-



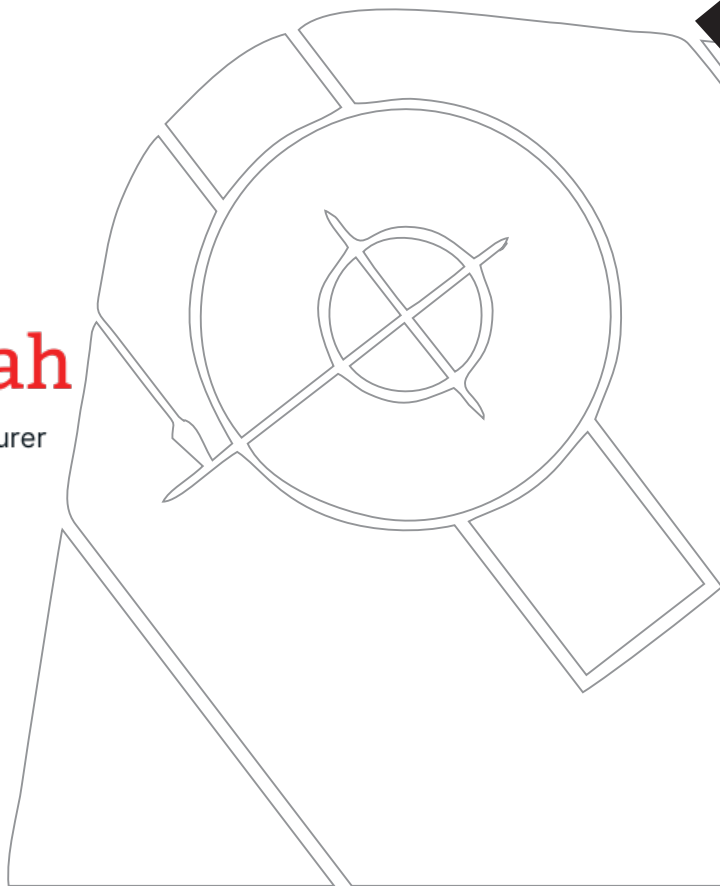


Pillar Terminal Blocks



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Oil and Gas Equipment Manufacturer



PTB 1

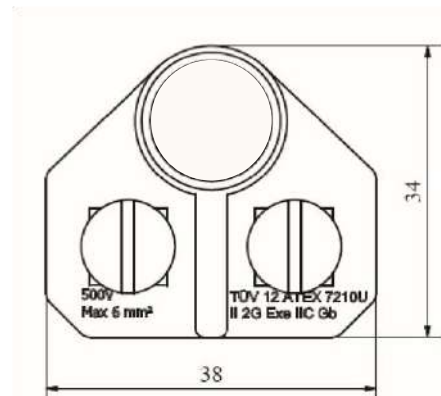
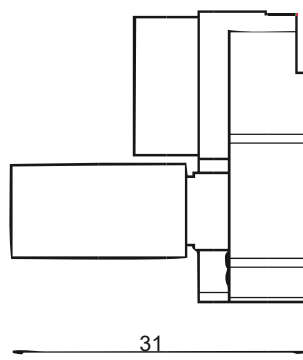
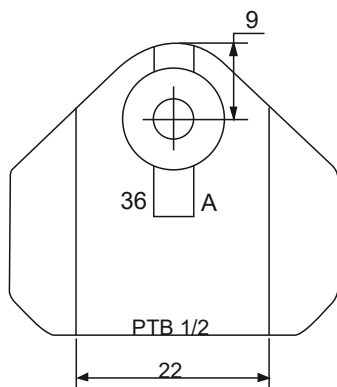
Pillar Terminal Blocks

Zone 1,2,21,22



Specification	
TYPE	PTB1
Application	In marshaling enclosure
Protection	Ex e IIC Gb
Marking	⊕ II 2 G
Certificate No.	TÜV 12 ATEX 7210 U
Standards	IEC60079-0, IEC60079-7
Material	Bakelite
Ambient temperature	Up to 160° C

Maximum numbers of conductors depending on conductor size	
Conductor size (mm ²)	Maximum number of conductors
6	3
4	4
4 ≥ 0.5 mm ²	4





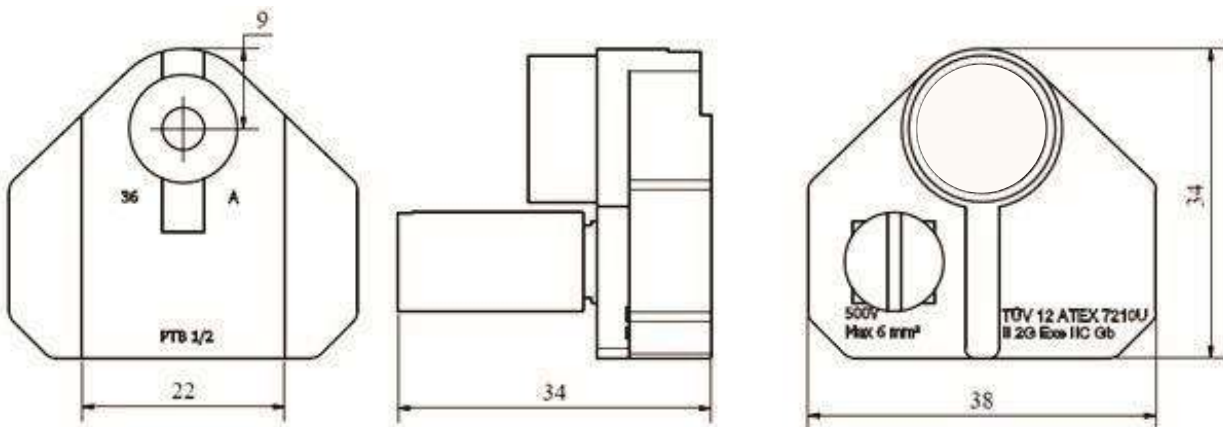
PTB 2

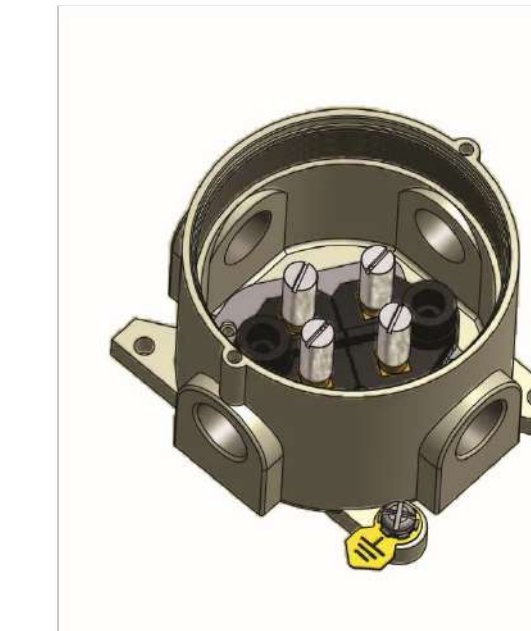
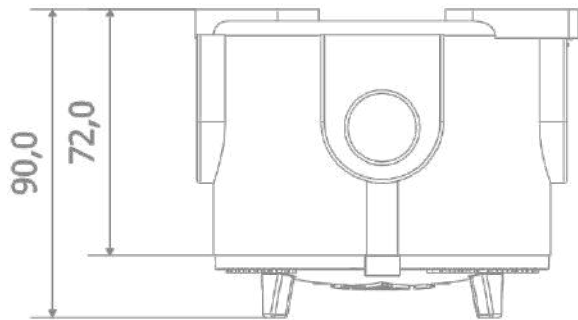
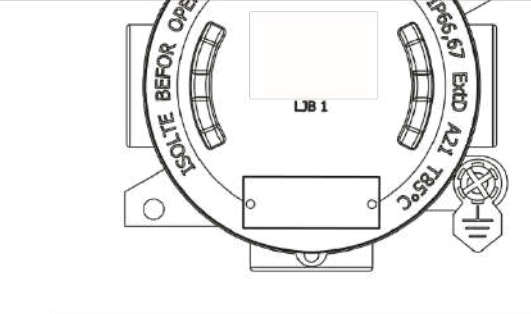
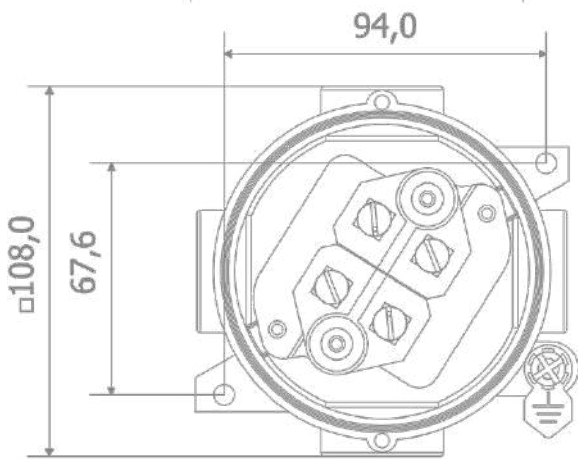
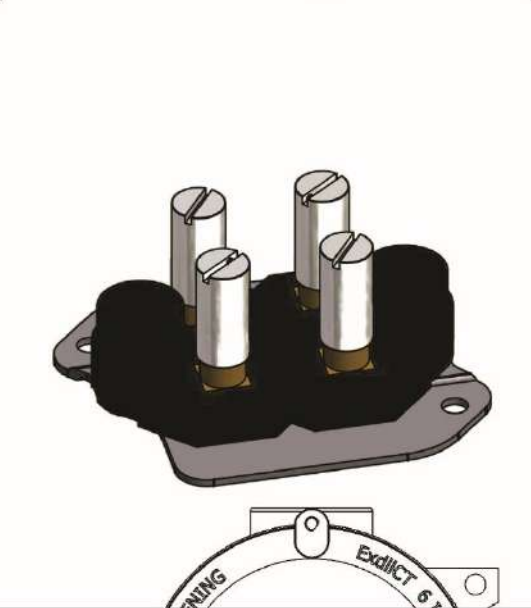
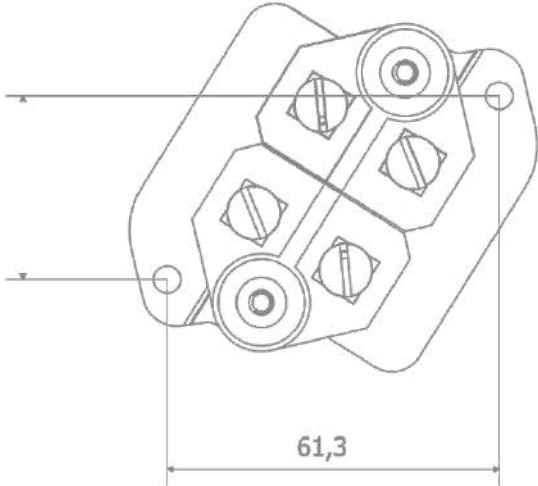
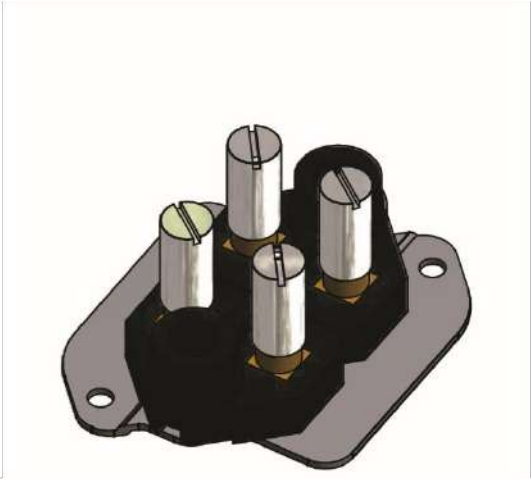
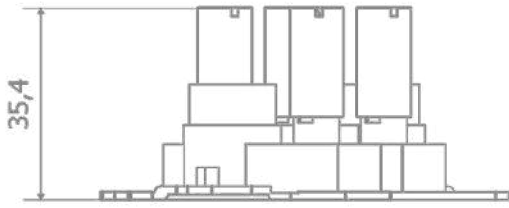
Pillar Terminal Blocks

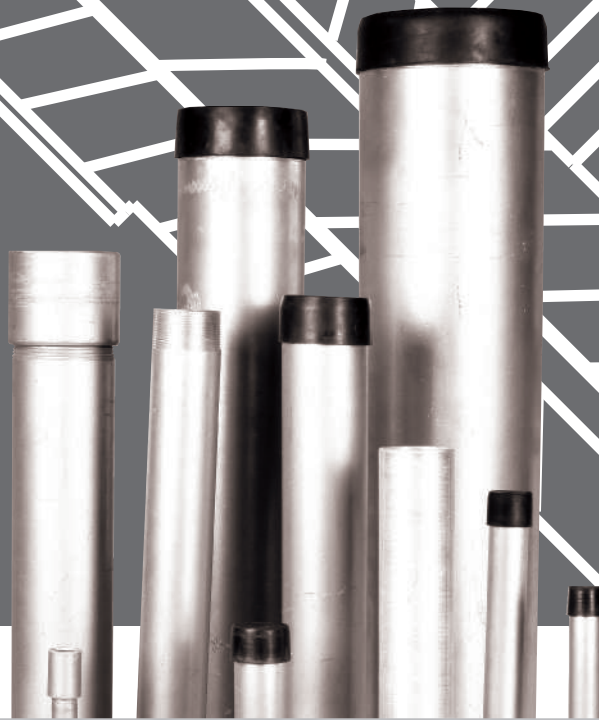
Zone 1,2,21,22

Specification	
TYPE	PTB2
Application	In marshaling enclosure
Protection	Ex e IIC Gb
Marking	Ⓔ II 2 G
Certificate No.	TÜV 12 ATEX 7210 U
Standards	IEC60079-0 , IEC60079-7
Material	Bakelite
Ambient temperature	Up to 120° C

Maximum numbers of conductors depending on conductor size	
Conductor size (mm ²)	Maximum number of conductors
6	3
4	4
4 ≥ 0.5 mm ²	4







ALUMINUM CONDUIT



Sina Ghabezah

Oil and Gas Equipment Manufacturer

ALUMINUM CONDUIT



WHY USE ALUMINUM CONDUIT?

Light Weight	Rigid aluminum conduit is approximately one third the weight of steel.
Corrosion Resistant	Aluminum resists most corrosive atmospheres in industrial environments.
Easy to install	Aluminum conduit can be easily cut bent and threaded without special tools.
Low maintenance	Aluminum conduit does not corrode or leave discoloring streaks or stains.

TECHNICAL SPECIFICATION

Product	Rigid Aluminum conduit & Accessories.
Standard	ANSI C80.5:1983 on Raceways for electrical wiring systems.
Cross Section	Rigid Aluminum conduit has a circular cross section sufficient to permit the cutting of threads in accordance with table shown below.
Wall Thickness	The wall thickness is uniform throughout.
Interior Surface	The interior surface is free from injurious defects.
Alloy	The conduit is made of an aluminum alloy containing not more than 0.40% copper 6063.
Dimensions	See table 1 for conduit. See table 2 for coupling. See table 3 for Elbows
Threads	National pipe thread NPT to ANSI/ASME B1.20.1-1983.
Threads Protectors	Color-coded end caps keep threads clean and sharp and help provide trade size recognition.
Stamping	Nominal/tread sizes are stamped on product.



ALUMINUM CONDUIT

Weights and Dimensions for rigid Aluminum conduit								
Thread Size Designator	Approximate weight per 100 Ft: (30.5M)		Nominal Outside Diameter		Nominal Wall Thickness		Master Bundles Approximate Weight *	
	U.S.	lb	kg	in	mm	in	mm	lb
1/2	28.1	12.7	0.840	21.3	0.104	2.64	706	318.4
3/4	37.4	17.0	1.050	26.7	0.107	2.72	935	424.1
1	54.5	24.7	1.315	33.4	0.126	3.20	1090	494.4
1 1/4	71.6	32.5	1.660	42.2	0.133	3.38	716	324.8
1 1/2	88.7	40.2	1.900	48.3	0.138	3.51	887	402.3
2	118.5	53.8	2.375	60.3	0.146	3.71	533.3	241.9
2 1/2	187.5	85.0	2.875	73.0	0.193	4.90	567.5	257.4
3	246.3	111.7	3.500	88.9	0.205	5.21	492.6	223.4
3 1/2	295.6	134.1	4.000	101.6	0.215	5.46	591.2	268.2
4	350.2	155.8	4.500	114.3	0.225	5.72	700.4	317.7
5	478.9	217.2	5.563	141.3	0.245	6.22	383.1	173.8
6	630.4	285.9	6.625	168.3	0.266	6.76	378.2	171.6

Applicable tolerances

Outside diameter:

For thread size 1/2 through 2 in: + 0.015 in: + 0.015 in (+ 0.38 mm)

For thread size 2-1/2 through 4 in: + 0.025 in: + 0.025 in (+ 0.64 mm)

For thread size 5 and 6 in: 1%

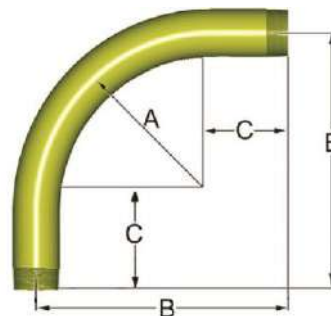
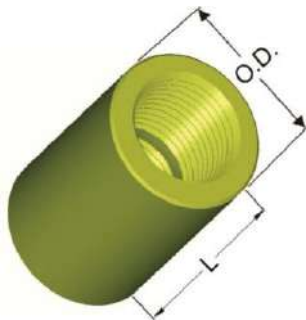
* Includes one coupling on each end.

Notes:

* Dimensions and weights are nominal unless otherwise noted.

* Each length of conduit with coupling attached will be nominally 10 feet.

Length: + 1/4 in (+ 6.35mm) (without coupling)



ALUMINUM CONDUIT



Recommended Installation Practices

CUTTING: A hacksaw is recommended to cut thread sizes 1 1/4 and smaller. Larger thread sizes can be cut with power cut-off equipment.

BENDING: Standard EMT benders, one size larger than the size of the conduit, should be used on conduit thread sizes 1 and smaller. For size over trade size 1, conventional equipment is recommended.

THEREADING: Sharp dies and conventional cutting oil should be used for aluminum conduit. A general-purpose emulsifiable oil can provide excellent results.

FITTINGS: aluminum fittings are recommended; however, cadmium plated or galvanized fittings are satisfactory for most installations.

FISHING AND WIRE PULLING: Small conduit: In trade sizes up to 1 1/2 and on shorter (up to 100 feet), polyethylene fish tapes can be used effectively. Also recommended are round, flexible, speedometer-type steel cables. Use of flat steel tapes should be avoided since they tend to jam in the bends, or if not used carefully, scrape and cut conduit walls.

LARGE CONDUIT: for pulling large conductors through larger conduit or longer runs, polypropylene rope is recommended. Steel pulling cables, especially when old or frayed, can damage steel or aluminum conduit.

IN SOIL OR CONCRETE:

underwriters' Laboratories Electrical Construction Equipment Directory (UL Green Book) states that aluminum conduit used in concrete or in contact with soil requires supplementary corrosion protection. Examples are paints approved for the purpose (bitumastic paint, for example), tape wraps approved for the purpose, or PVC coated conduit.



ALUMINUM CONDUIT

Weights and dimensions of Couplings

Thread Size Designator	Approximate weight per 100 Ft: (30.5M)		Nominal Outside Diameter		Length (min)		Standard Package
	lb	kg	in	mm	in	mm	Pieces
U.S.							
$\frac{1}{2}$	6.1	2.8	1.078	27.38	1.61	41	100
$\frac{3}{4}$	9.1	4.1	1.328	33.73	1.65	42	50
1	12.5	5.7	1.562	39.69	2.04	52	30
$1\frac{1}{4}$	18.9	8.6	1.953	49.61	2.12	54	25
$1\frac{1}{2}$	23.3	10.6	2.218	56.36	2.16	55	25
2	34.6	15.7	2.750	69.85	2.44	62	15
$2\frac{1}{2}$	68.3	31.0	3.281	83.34	3.26	83	20
3	91.4	41.5	3.812	96.84	3.38	86	15
$3\frac{1}{2}$	108.0	49.0	4.437	112.71	3.37	85.73	12
4	142.0	64.4	5.000	127.00	3.74	95	12
5	241.9	109.7	6.218	157.96	3.75	95.25	8
6	321.0	145.6	7.312	185.74	4.33	110	6

Applicable tolerances:

Outside diameter: No plus tolerances

-1% for the 1-1/4 in (31.75 mm) and larger thread sizes

-0.015 in (-0.38 mm) for sizes smaller than 1-1/4 in (31.75) thread sizes

ALUMINUM CONDUIT



Weights and dimensions of Elbows

thread Size Designator		Approximate weight per 100 Ft: (30.5M Conduit)		Nominal Dimensions					
				A		B		C	
U.S.	Metric	lb	kg	in	mm	in	mm	in	mm
$\frac{1}{2}$	16	29	13.2	4.0	101.6	6.50	165.1	2.50	63.5
$\frac{3}{4}$	21	43	14.5	4.5	114.3	7.25	184.2	2.75	69.9
1	27	71	32.2	5.75	146.1	8.375	212.7	2.875	73.0
$1\frac{1}{4}$	35	110	49.9	7.25	184.2	10.25	260.6	3.00	76.2
$1\frac{1}{2}$	41	153	69.4	8.25	209.6	11.875	301.6	3.625	92.1
2	53	249	112.9	9.50	241.3	14.00	355.6	4.50	114.3
$2\frac{1}{2}$	63	437	198.2	10.50	266.7	15.75	400.1	5.25	133.4
3	78	767	347.9	13.00	330.2	18.75	476.3	5.75	146.1
$3\frac{1}{2}$	91	1036	469.9	15.00	381.0	21.75	552.5	6.75	171.5
4	103	1228	557.0	16.00	406.4	23.00	584.2	7.00	177.8
5	129	2490	1129.5	24.00	609.6	36.00	914.4	11.00	279.4
6	155	3850	1746.3	30.00	762.0	42.50	1079.5	12.50	317.5



Sina Ghabezah

Oil and Gas Equipment Manufacturer

SOCKET & PLUG





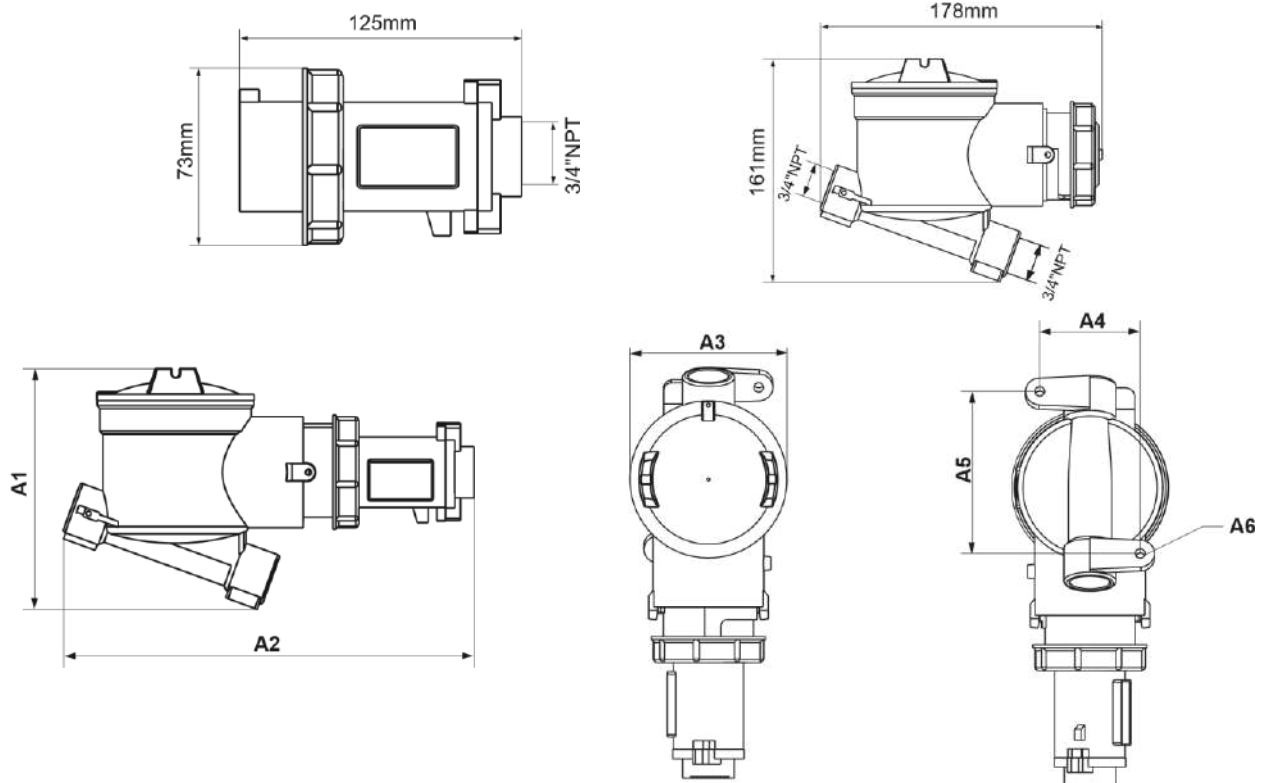
SOCKET & PLUGS

16A

Zone 1,2,21,22

SPECIFICATION

TYPE	Ex plug and socket 16A
Material	Body & cover: Aluminum alloy, copper free aluminum(as an option) Polyamide cap with chain to prevent from losing Brass pins Nickel plated
Marking	Ex II G D
Application	Ex d II C T5 Gb, Ex t III C T100°C Db(-25°C to +55°C)
Ambient temperature	-30°C to +55°C/-20°C to +40°C
Rated voltage	Up to 690v (see the ordering table)
Rated current	Up to 16A (see the ordering table)
Terminal	For 16A 2xM4(up to 6mm)
Frequency	50/60 Hz
Rated Marking/Breaking capacity	AC-3
Ingress protection	IP 66 to IEC 60529 when plug inserted to socket
Entries	Socket: 2x3/4"Npt, one plugged (other thread forms available on request) Plugs: 1x3/4"Npt
Ec type examination certificate	Under certification

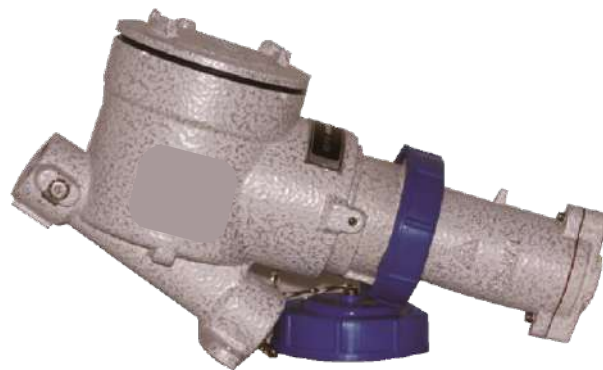


Size code	A1	A2	A3	A4	A5	A6
16A	140	265	Ø91	55.5	107	Ø6.5

SOCKET & PLUGS

16A

Zone 1,2,21,22



BO DY SIZ E	*EN TRY	SWITC HING CAPA CITY	SOCKE T{RE}	FREQUEN CY{Hz}	NUM BER OF PINS	POLA RITY	RATE D VOLT AGE {V ca}	ARRAN GMENT	ORDE RING CODE {AA Z RE/PL C XX}
16	3 4 NPT	16A	RE	50/60	3	2P+E	20/25		16V RE 316
						2P+E	40/50		16W RE 316
						2P+E	100/ 130		16Y RE 316
						2P+E	200/ 250		16B RE 316
					4	3P+E	20/25		16V RE 416
						3P+E	100/ 130		16 Y RE 416
						3P+E	200/ 250		16 B RE 416
						3P+E	380/ 415		16R RE 416

*Other thread forms are available on request

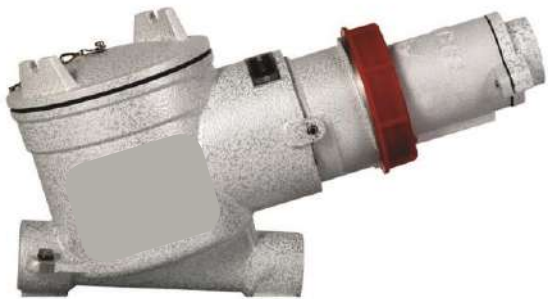
Ordering code system

AA	Z voltage(color)	RE	C	XX
Body size		RE: Socket PL:Plug	NO. OF PINS	Switching capacity
Socket Example		16 B RE 3 16		
Plug Example		32 Y PL 5 32		

Body size
16
32
63

Color code

20 25 V	VIOLET	V
40 50 V	WHITE	W
50 V	GREEN	G
100 130 V	YELLOW	Y
200 250 V	BLUE	B
380 415 V	RED	R
500 V	BLACK	L
(63A) 440 V	SILVER	S



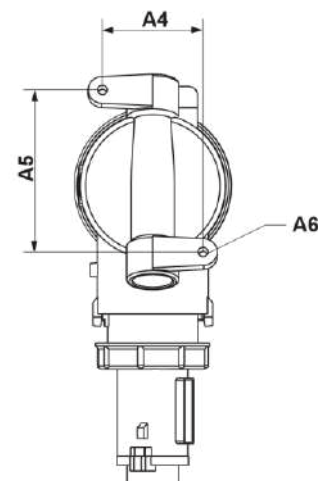
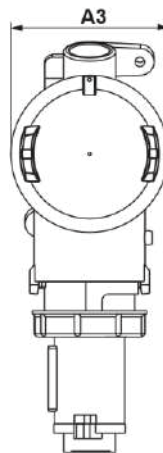
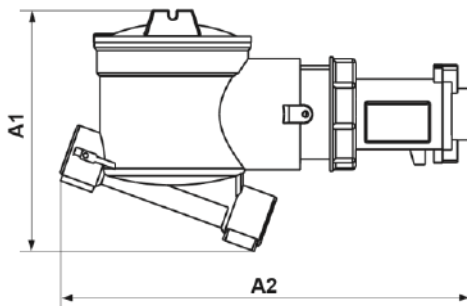
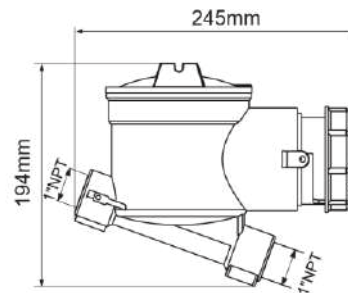
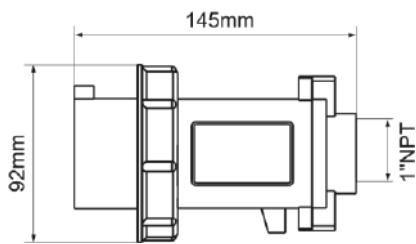
SOCKET & PLUGS

32A

Zone 1,2,21,22

SPECIFICATION

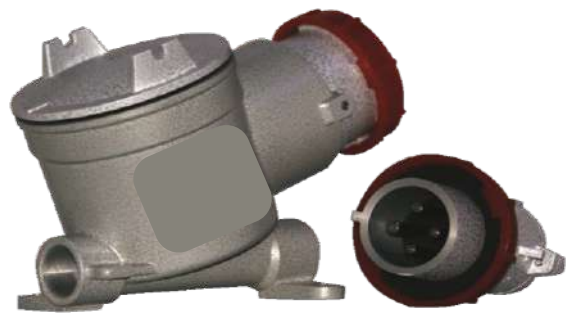
TYPE	Ex plug and socket 32A
Material	Body & cover: Aluminum alloy, copper free aluminum(as an option) Polyamide cap with chain to prevent from losing Brass pins Nickel plated
Marking	Ex II G D
Application	Ex d IIC T5 Gb, Ex t IIIC T100°C Db(-25°C to +55°C)
Ambient temperature	-30°C to +55°C/-20°C to +40°C
Rated voltage	Up to 690v (see the ordering table)
Rated current	Up to 32A (see the ordering table)
Terminal	For 32A 2xM5(up to 10mm)
Frequency	50/60 Hz
Rated Marking/Breaking capacity	AC-3
Ingress protection	IP 66 to IEC 60529 when plug inserted to socket
Entries	Socket: 2x3/4"Npt, one plugged (other thread forms available on request) Plugs: 1x3/4"Npt
Ec type examination certificate	Under certification







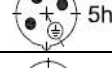







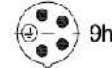






Size code	A1	A2	A3	A4	A5	A6
32A	194	340	127	81	139	Ø8

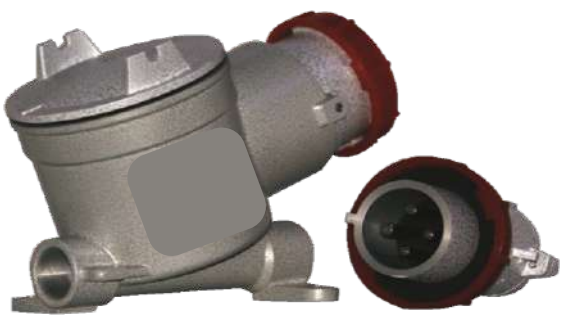
SOCKET & PLUGS

32A
Zone 1,2,21,22



BODY SIZE	*ENTRY	SWITCHING CAPACITY	SOCKET{RE}	FREQUENCY{Hz}	NUMBER OF PINS	POLARITY	RATED VOLTAGE {V ca}	ARRANGMENT	ORDERING CODE {AA Z RE/PL C XX}
32	1" NPT	32A	RE	50/60	3	2P+E	20/25	 5h	32V RE 332
						2P+E	40/50	 12h	32W RE 332
						2P+E	50	 2h	32G RE 332
						2P+E	100/130	 4h	32Y RE 332
						2P+E	200/250	 6h	32B RE 332
						2P+E	380/415	 9h	32R RE 332
32	NPT				4	3P+E	20/25	 5h	32V RE 432
						3P+E	50	 2h	32G RE 432
						3P+E	100/130	 4h	32Y RE 432
						3P+E	200/250	 9h	32B RE 432
						3P+E	380/415	 6h	32R RE 432
						3P+E	440	 11h	32R RE 432
						3P+E	500	 7h	32B RE 432
32	1" NPT	32A	RE	50/60	5	3P+N+E	50	 2h	32G RE 532
						3P+N+E	100/130	 4h	32Y RE 532
						3P+N+E	200/250	 9h	32Y RE 532
						3P+N+E	380/415	 6h	32R RE 532
						3P+N+E	440	 11h	32R RE 532
						3P+N+E	500	 7h	32B RE 532

*other thread forms are available on request



SOCKET & PLUGS

32A

Zone 1,2,21,22

Ordering code system				
AA	Z voltage(color)	RE	C	XX
Body size		RE: Socket PL: Plug	NO. OF PINS	Switching capacity
Socket Example		32 Y RE 5 32		
Plug Example		32 Y PL 5 32		

Color code		
$\frac{20}{25}$ V	VIOLET	V
$\frac{40}{50}$ V	WHITE	W
50 V	GREEN	G
$\frac{100}{130}$ V	YELLOW	Y
$\frac{200}{250}$ V	BLUE	B
$\frac{380}{415}$ V	RED	R
500 V	BLACK	L
(63A) 440 V	SILVER	S

Body size
16
32
63

SOCKET & PLUGS

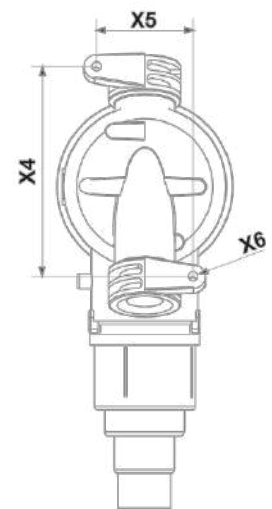
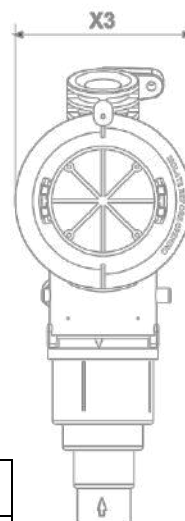
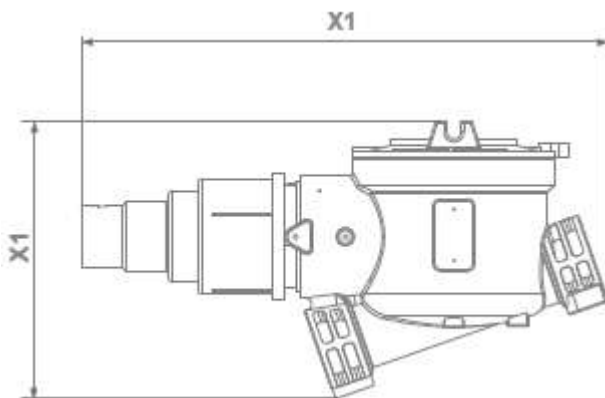
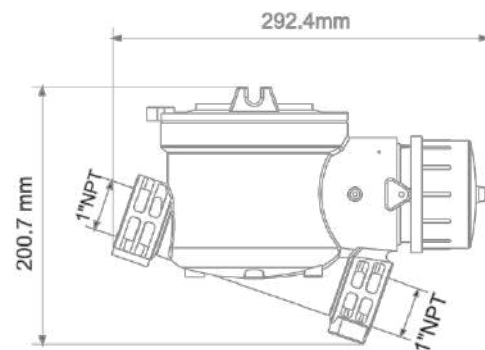
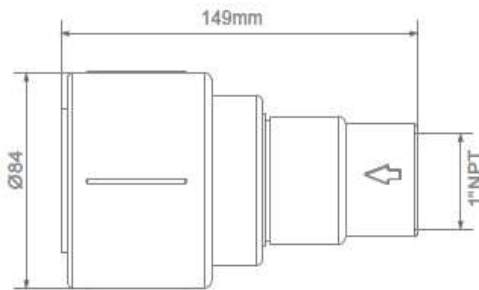
63A

Zone 1,2,21,22



SPECIFICATION

TYPE	Ex plug and socket (63A)
Material	Body & cover: Aluminum alloy, copper free aluminum(as an option) Aluminum cap with chain to prevent from losing Brass pins Nickel plated
Marking	Ex II G D
Application	Ex d IIC T5 Gb , Ex t IIIC T100°C Db(-25°C to +55°C)
Ambient temperature	-30°C to +55°C/-20°C to +40°C
Rated voltage	Up to 690v (see the ordering table)
Rated current	Up to 32A(see the ordering table)
Terminal	2xM5(up to 16mm ²)
Frequency	50/60 Hz
Rated Marking/Breaking capacity	AC-3
Ingress protection	IP 66 to IEC 60529 when plug inserted to socket
Entries	Socket: 2x3/4"Npt,one plugged (other thread forms available on request) Plugs: 1x3/4"Npt
Ec type examination certificate	Under certification



Size code	X1	X2	X3	X4	X5	X6
63A	200	380	Ø146	184	83	Ø8



SOCKET & PLUGS

63A

Zone 1,2,21,22

BODY SIZE	SOCKET(RE)	FREQUENCY(Hz)	ENTRY	NUMBER OF PINS	POLARITY	SWITCHING CAPACITY	ORDERING CODE (AA Z RE/PL C XX)
63	RE	50/60	1 NPT	3	2P+E	10A	63 S RE 3 10
					2P+E	15A	63 S RE 3 15
					2P+E	20A	63 S RE 3 20
					2P+E	30A	63 S RE 3 30
					2P+E	40A	63 S RE 3 40
					2P+E	50A	63 S RE 3 50
					2P+E	63A	63 S RE 3 63
				4	3P+E	10A	63 S RE 4 10
					3P+E	15A	63 S RE 4 15
					3P+E	20A	63 S RE 4 20
					3P+E	30A	63 S RE 4 30
					3P+E	40A	63 S RE 4 40
					3P+E	50A	63 S RE 4 50
				3P+E	63A	63 S RE 4 63	

*other thread forms are available on request

Ordering code system

AA	Z voltage(color)	RE	C	XX
Body size		RE: Socket PL: Plug	NO. OF PINS	Switching capacity
Socket Example		63 S RE 4 63		
Plug Example		63 S PL 4 63		

Body size
16
32
63

Color code

$\frac{20}{25}$ V	VIOLET	V
$\frac{40}{50}$ V	WHITE	W
50 V	GREEN	G
$\frac{100}{130}$ V	YELLOW	Y
$\frac{200}{250}$ V	BLUE	B
$\frac{380}{415}$ V	RED	R
500 V	BLACK	L
(63A) 440 V	SILVER	S



TECHNICAL INFORMATION



Sina Ghabezah

Oil and Gas Equipment Manufacturer

TECHNICAL INFORMATION

Area Classification

Area classification is the division of a facility into three-dimensional hazardous areas and non-hazardous areas and the subdivision of the hazardous area into 'Zones'.

Hazardous areas may be sud-divided into three Zones as follows: - Flammable gases and vapour's

Zone 0	An area in which an explosive atmosphere is constantly present, or present for long periods. (Rough Guide: More than 1,000 hours / year)
Zone 1	An area in which an explosive atmosphere is likely to occur in normal operation. (Rough Guide: 10 hours or more / year but less than 1,000 hours / year)
Zone 2	An area in which an explosive atmosphere is not likely to occur in normal operation and if it occurs, it will exist only for a short time. (Rough Guide: Less than 10 hours / year)

Combustible Dusts

Zone 20	An area in which combustible dust, as a cloud, is present continuously or frequently, during normal operation, in sufficient quantity to be capable of producing an explosive concentration of combustible dust in a mixture with air.
Zone 21	An area, in which combustible dust, as a cloud, is occasionally present during normal operation, in sufficient quantity to be capable of producing an explosive concentration of combustible dust in a mixture with air.
Zone 22	An area, in which combustible dust, as a cloud, may occur infrequently and persist for only a short period, or in which accumulations of layers of combustible dust may give rise to an explosive concentration of combustible dust in a mixture with air.

Apparatus selection according to the ignition temperature of gas or vapour

The equipment must be selected so that its maximum surface temperature will not reach the ignition temperature of any gas or vapour that may be present.

Temperature class of electrical apparatus	Maximum surface temperature of electrical apparatus	Ignition temperature of gas or vapour
T1	450° C	>450° C
T2	300° C	>300° C
T3	200° C	>200° C
T4	135° C	>135° C
T5	100° C	>100° C
T6	85°	>85° C

If the marking of the electrical apparatus does not include an ambient temperature range, the apparatus is only for use within an ambient temperature range from -20° C to 40° C

For further information regarding data for flammable gases and vapour's, see PD IEC 60079-20.

TECHNICAL INFORMATION

Electrical Protection Concepts						
Standard IEC / EN		Code		Protection concept	Zone	
Gas	Dust	Gas	Dust		Gas	Dust
60079-0		-	-	General requirements	-	-
60079-1		Ex d	-	Flameproof	1	-
-	60079-31		Ex ta Ex tb Ex tc	Enclosure	-	20 21 22
60079-2	61241-4	Ex pxb Ex pyb Ex pzc	Ep D	Pressurised	1 1 2	21/22
60079-5		Ex q		Powder filled	1	
60079-6	-	Ex o	-	Oil filled	1	-
60079-7		Ex e		Increased safety	1	
60079-11	61241-11	Ex ia Ex ib Ex ic	Ex ia Ex ib Ex ic	intrinsic safety	0 1 2	20 21 22
60079-15	-	Ex nA Ex nR Ex nC	-	Non-sparking Restricted breathing Enclosed break	2	-
60079-18		Ex ma Ex mb Ex mc	Ex ma Ex mb Ex mc	Encapsulation	0 1 2	20 21 22

Installation Standards and Codes

There are numerous different regulations, codes, guidelines and standards for the design, installation, and Maintenance of electrical and non-electrical systems for use in potentially explosive atmospheres. The type of Operational facility, geographic location, operator practice, local and national legislation authority, having Jurisdiction etc. will determine many of the design and installation rules permitted.

For further information on the design, selection and installation of equipment for use in hazardous areas see: -

IEC 60079-14	Electrical installation in hazardous areas (other than mines)
IEC 61892-7	Mobile and fixed offshore units - Electrical installation, part 7: Hazardous areas
IEC 612141-1-2	(proposed change to IEC 61241-14) - Electrical apparatus in the presence of combustible dust
Part 1-2 :	Electrical apparatus protected by enclosures and surface temperature
EN 60079-14	Electrical installations in hazardous areas (other than mines)
EN 50281-1-2	Electrical apparatus for use in the presence of combustible dust - part 1 - 2
	Electrical apparatus protected by enclosures - selection, installation and maintenance

TECHNICAL INFORMATION

Inspection Standards and Codes

For information regarding the installation and maintenance of equipment for use in hazardous areas see: -

IEC 60079-17 - Inspection and maintenance of electrical installations in hazardous areas (other than mines)
IEC 61241-17 - Electrical apparatus for use in the presence of combustible dust atmosphere - part 17: Inspection And maintenance

ATEX 94/9/EC Directive

The Directive classifies equipment into eight categories depending on the equipment's area of use: -

Category M1 -	Equipment intended for mining use and is required to remain functional in the presence of an explosive atmosphere
Category M2 -	Equipment intended for mining use but is intended to be de-energised. In the event of an explosive atmosphere
Category 1G -	Non-mining equipment for use in Zone 0
Category 2G -	Non-mining equipment for use in Zone 1
Category 3G -	Non-mining equipment for use in Zone 2
Category 1D -	Non-mining equipment for use in Zone 20
Category 2D -	Non-mining equipment for use in Zone 21
Category 2D -	Non-mining equipment for use in Zone 22

Equipment protection level

EPL	Zone
G a	0
G b	1
G c	2
D a	20
D b	21
D c	22
M a	Energized
M b	De-energized

ATEX 137 Directive 99/92/EC

The Directive covers the use of equipment in potentially explosive atmospheres and its aim is to establish minimum requirements for improving the safety and health of workers.

Article 137 of Directive 89/391/EC was published in the official journal of the EC on 28th January 2000 as Directive 99/92/EC, it is the 15th individual Directive of the framework Directive 89/391/EEC.

The article defines the:

Obligations of the employees are the prevention and protection against explosions.
Assessment obligations are the assessment of explosion risks.
General obligations are the safety and health of worker.

Requirements for explosion protection documents.








In places where potentially explosive atmospheres may occur in such quantities as to endanger the health and safety of workers, the point of entry must be marked with the sign shown below in accordance with Section II, Article 7 of the Directive.

TECHNICAL INFORMATION

CENELEC and IEC Degree of Ingress Protection, IP

IEC60529 & EN60592 standards is descriptive of a classifying system of degrees of protection provided by the enclosures of electrical equipment in accordance to the following table :










First Number

0		Non Protected	Protection of persons against access to hazardous parts inside the enclosure and against solid foreign objects
1		Protected against Objects of 50mm diameter and greater	An Object probe,sphere of 50mm diameter,shall not fully penetrate
2		Protected against Solid foreign objects of 12.5mm diameter and greater	An Object probe,sphere of 12.5mm diameter,shall not fully penetrate
3		Protected against Solid foreign objects of 2.5mm diameters and greater	An Object probe,sphere of 2.5mm diameter,shall not penetrate at all
4		Protected against Solid foreign objects of 1.0mm diameters and greater	An Object probe,sphere of 1.0mm diameter,shall not penetrate at all
5		Dust Protected	Ingress of dust is not totally prevented but dust shall not penetrate in a quantity to interfere with satisfactory Operation of apparatus or to impair safety
6		Dust - tight	No Ingress of dust

Example : IP 67

TECHNICAL INFORMATION

Second Number

0		Non Protected	Protection of the equipment inside the enclosure against harmful effects due to the ingress of water
1		Protected against Vertically falling water drops	Vertically falling drops shall have no harmful effects
2		Protected against Vertically falling water drops when enclosure tilted up to 15°	Vertically falling drops shall have no harmful effects when the enclosure is tilted at any angle up to 15° on either side of the vertical
3		Protected against Spraying water	Water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effects
4		Protected against Splashing Water	Water splashed against the enclosure from any direction shall have no harmful effects
5		Protected against Water jets	Water Projected in jets against the enclosure from any direction shall have no harmful effects
6		Protected against Powerd Water jets	Water Projected in powerful jets against the enclosure from any direction shall have no harmful effects
7		Protected against the effects of temporary immersion in water	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardised conditions of pressure and time
8		Protected against the effects of continuous immersion in water	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more server than for numeral 7

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