

Enclosure: Junction Boxes (Empty Enclosure), DER Series

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



Application

The DER junction boxes (empty enclosures) are designed for spliced and tapped conductors or connecting of conductors for control and instrument. These boxes are suitable for explosive atmospheres Zone 1, 2 and Zone 21, 22.

Specification

Body and cover : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (grey)
 Sealing (O-ring) : Silicone
 Screws : Stainless steel, SUS 304

Electrical Rating

Rated voltage : up to 630V.ac
 Rated current : up to 41A.
 (as per terminal specification)

Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	Ex II 2G	Ex II 2D
Symbol of Protection	Ex d IIC Gb	Ex tb IIIC Db
Certificate No.	Nemko 12 ATEX 1248U	
Conformity to Standards	EN 60079-0:2009, EN 60079-1:2007, EN 60079-31:2009	
Ambient Temperature	-20°C to +55°C	
Index of Protection	IP66	
Mounting	Wall type	
Entries	NPT or Metric thread	
Mechanical resistance	≥7Nm. of impact energy	

Remark: Certificate with symbol "U" denotes an Ex Component. It indicates that the equipment is incomplete and is not suitable for installation without further evaluation.



Catalogue Number Logic

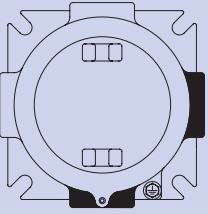
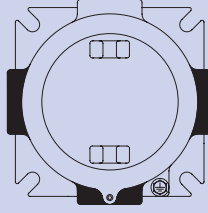
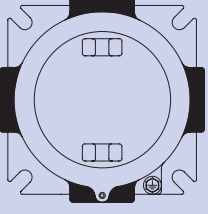
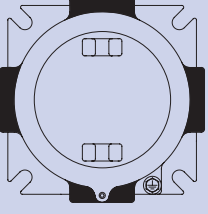
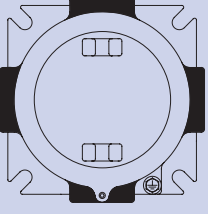
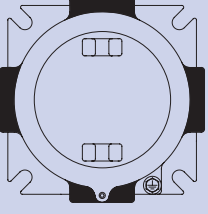
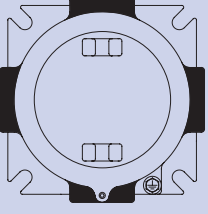
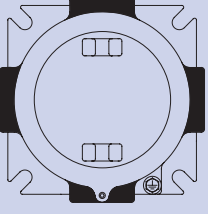
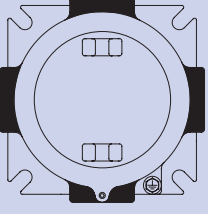
DER	-	■	-	■ ■
Series	Enclosure	Outline Diagram	Entries	
1	Size 1	C	M0	M16x1.5
2	Size 2	L	M1	M20x1.5
3	Size 3	T	M2	M25x1.5
		X	M3	M32x1.5
			M4	M40x1.5
			M5	M50x1.5
			M6	M63x1.5
			N1	1/2" NPT
			N2	3/4" NPT
			N3	1" NPT
			N4	1-1/4" NPT
			N5	1-1/2" NPT
			N6	2" NPT

Ordering Requirements

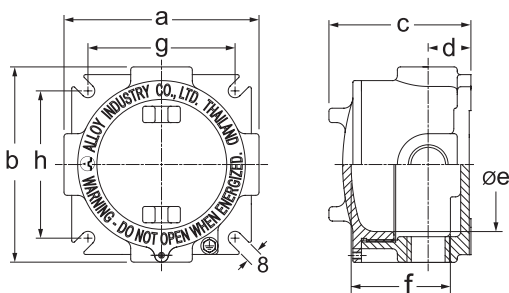
Entries		Outline Diagram for Entries	Enclosure Size	Cat. No.	Volume (cm ³)	Dissipation Power Loss by use in Temperature Class			
Metric	NPT					Ta 40°C		Ta 55°C	
						T6	T5	T6	T5
M16x1.5		C type 2-ways Through-Feed 	Size 1	DER-1C-M0	380	35W.	50W.	21W.	38W.
M20x1.5				DER-1C-M1					
M25x1.5				DER-1C-M2					
	DER-1C-N1								
	DER-1C-N2								
	1/2"		Size 2	DER-2C-M3	610	40W.	61W.	24W.	43W.
	3/4"			DER-2C-M4					
M32x1.5	DER-2C-N3								
M40x1.5	DER-2C-N4								
	1"		Size 3	DER-3C-M5	1170	54W.	79W.	36W.	57W.
	1-1/4"			DER-3C-M6					
M50x1.5	DER-3C-N5								
M63x1.5	DER-3C-N6								
	1-1/2"								
	2"								



Ordering Requirements

Entries		Outline Diagram for Entries	Enclosure Size	Cat. No.	Volume (cm ³)	Dissipation Power Loss by use in Temperature Class				
						Ta 40°C		Ta 55°C		
Metric	NPT					T6	T5	T6	T5	
M16x1.5		L type 2-ways Angle 	Size 1	DER-1L-M0	380	35W.	50W.	21W.	38W.	
M20x1.5				DER-1L-M1						
M25x1.5				DER-1L-M2						
	DER-1L-N1									
	1/2"				DER-1L-N2					
	3/4"									
M32x1.5			T type 3-ways 	Size 2	DER-2L-M3	610	40W.	61W.	24W.	43W.
M40x1.5					DER-2L-M4					
					DER-2L-N3					
	DER-2L-N4									
	1"									
	1-1/4"									
M50x1.5		X type 4-ways 		Size 3	DER-3L-M5	1170	54W.	79W.	36W.	57W.
M63x1.5					DER-3L-M6					
					DER-3L-N5					
	DER-3L-N6									
	1-1/2"									
	2"									
M16x1.5			X type 4-ways 	Size 1	DER-1T-M0	380	35W.	50W.	21W.	38W.
M20x1.5					DER-1T-M1					
M25x1.5					DER-1T-M2					
	DER-1T-N1									
	1/2"					DER-1T-N2				
	3/4"									
M32x1.5		X type 4-ways 		Size 2	DER-2T-M3	610	40W.	61W.	24W.	43W.
M40x1.5					DER-2T-M4					
					DER-2T-N3					
	DER-2T-N4									
	1"									
	1-1/4"									
M50x1.5			X type 4-ways 	Size 3	DER-3T-M5	1170	54W.	79W.	36W.	57W.
M63x1.5					DER-3T-M6					
					DER-3T-N5					
	DER-3T-N6									
	1-1/2"									
	2"									
M16x1.5		X type 4-ways 		Size 1	DER-1X-M0	380	35W.	50W.	21W.	38W.
M20x1.5					DER-1X-M1					
M25x1.5					DER-1X-M2					
	DER-1X-N1									
	1/2"					DER-1X-N2				
	3/4"									
M32x1.5			X type 4-ways 	Size 2	DER-2X-M3	610	40W.	61W.	24W.	43W.
M40x1.5					DER-2X-M4					
					DER-2X-N3					
	DER-2X-N4									
	1"									
	1-1/4"									
M50x1.5		X type 4-ways 		Size 3	DER-3X-M5	1170	54W.	79W.	36W.	57W.
M63x1.5					DER-3X-M6					
					DER-3X-N5					
	DER-3X-N6									
	1-1/2"									
	2"									

Dimension



Enclosure Size	Dimension in mm.								Approx. Weight (kgs.)
	a	b	c	d	øe	f	g	h	
Size 1	114	114	83	25	88	58	86	86	0.98
Size 2	124	124	99	34	98	72	96	96	1.65
Size 3	144	144	121	43.5	118	94	123	123	2.35