

Enclosure: Junction Boxes (Empty Enclosure), DER Series

Flameproof and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



Application

DER junction boxes (empty enclosures) are designed for spliced and tapped conductors or for connecting conductors for control and instrumentation. These boxes are suitable for use in explosive atmospheres, including Zones 1, 2, 21, and 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, SS 304

Electrical Rating

Rated voltage : up to 630 V AC
Rated current : up to 41 A
(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 IIC Db
Certificate	Nemko 12 ATEX 1248U	
Conformity to Standards	EN IEC 60079-0, EN 60079-1, EN IEC 60079-31	
Ambient Temperature	-20°C to +55°C	
Index of Protection	IP66	
Mounting	Wall type	
Entry Threads	NPT or Metric threads	
Mechanical resistance	≥7 N·m of impact energy	

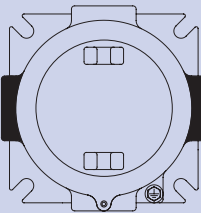
Remark: Certificate with symbol "U" denotes an Ex Component. It indicates that the equipment is incomplete and is not suitable for installation without further evaluation.



Catalogue Number Logic

Series	Enclosure	Outline diagram	Entry threads
DER	1 Size 1	C 2-way through-feed	M0 M16x1.5
	2 Size 2	L 2-way angle	M1 M20x1.5 N1 1/2" NPT
	3 Size 3	T 3-way	M2 M25x1.5 N2 3/4" NPT
		X 4-way	M3 M32x1.5 N3 1" NPT
			M4 M40x1.5 N4 1-1/4" NPT
			M5 M50x1.5 N5 1-1/2" NPT
			M6 M63x1.5 N6 2" NPT

Ordering Requirements

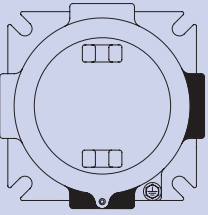
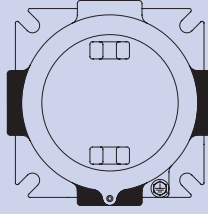
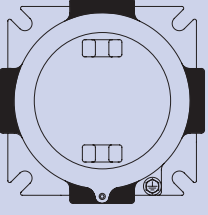
Entry threads		Outline diagram for entry	Enclosure size	Cat. No.	Volume (cm ³)	Dissipation power loss by use in temperature class			
						Ta 40°C		Ta 55°C	
Metric	NPT					T6	T5	T6	T5
M16x1.5		C type 2-way through-feed	Size 1	DER-1C-M0	380	35 W	50 W	21 W	38 W
M20x1.5				DER-1C-M1					
M25x1.5				DER-1C-M2					
	DER-1C-N1								
	DER-1C-N2								
	1/2"		Size 2	DER-2C-M3	610	40 W	61 W	24 W	43 W
	3/4"			DER-2C-M4					
M32x1.5				DER-2C-N3					
M40x1.5				DER-2C-N4					
	1"								
	1-1/4"		Size 3	DER-3C-M5	1,170	54 W	79 W	36 W	57 W
M50x1.5				DER-3C-M6					
M63x1.5				DER-3C-N5					
				DER-3C-N6					
	1-1/2"								
	2"								

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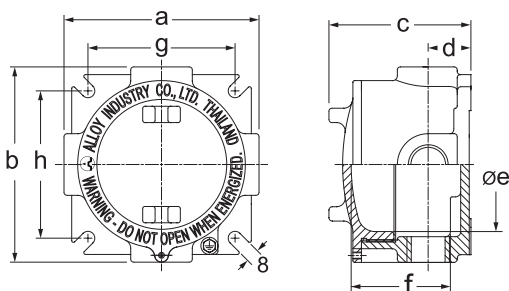
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Ordering Requirements

Entry threads		Outline diagram for entry	Enclosure size	Cat. No.	Volume (cm ³)	Dissipation power loss by use in temperature class			
						Ta 40°C		Ta 55°C	
						T6	T5	T6	T5
Metric	NPT	L type 2-way angle 	Size 1	DER-1L-M0	380	35 W	50 W	21 W	38 W
M16x1.5				DER-1L-M1					
M20x1.5				DER-1L-M2					
M25x1.5				DER-1L-N1					
				DER-1L-N2					
	1/2"		Size 2	DER-2L-M3	610	40 W	61 W	24 W	43 W
	3/4"			DER-2L-M4					
M32x1.5				DER-2L-N3					
M40x1.5				DER-2L-N4					
	1"		Size 3	DER-3L-M5	1,170	54 W	79 W	36 W	57 W
	1-1/4"			DER-3L-M6					
M50x1.5				DER-3L-N5					
M63x1.5				DER-3L-N6					
	1-1/2"								
	2"								
M16x1.5		T type 3-way 	Size 1	DER-1T-M0	380	35 W	50 W	21 W	38 W
M20x1.5				DER-1T-M1					
M25x1.5				DER-1T-M2					
				DER-1T-N1					
	1/2"		Size 2	DER-2T-M3	610	40 W	61 W	24 W	43 W
	3/4"			DER-2T-M4					
M32x1.5				DER-2T-N3					
M40x1.5				DER-2T-N4					
	1"		Size 3	DER-3T-M5	1,170	54 W	79 W	36 W	57 W
	1-1/4"			DER-3T-M6					
M50x1.5				DER-3T-N5					
M63x1.5				DER-3T-N6					
	1-1/2"								
	2"								
M16x1.5		X type 4-way 	Size 1	DER-1X-M0	380	35 W	50 W	21 W	38 W
M20x1.5				DER-1X-M1					
M25x1.5				DER-1X-M2					
				DER-1X-N1					
	1/2"		Size 2	DER-2X-M3	610	40 W	61 W	24 W	43 W
	3/4"			DER-2X-M4					
M32x1.5				DER-2X-N3					
M40x1.5				DER-2X-N4					
	1"		Size 3	DER-3X-M5	1,170	54 W	79 W	36 W	57 W
	1-1/4"			DER-3X-M6					
M50x1.5				DER-3X-N5					
M63x1.5				DER-3X-N6					
	1-1/2"								
	2"								

Dimensions



Enclosure size	Dimensions in mm								Approx. weight (kg)
	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