

## W-TYPE

### ENCLOSURES for aggressive environments

### A cornerstone against corrosion

Series W-TYPE connector enclosures for aggressive environments is specially **designed for industrial applications where particularly aggressive external agents are present** (e.g. salty environments, etc.).

The range includes enclosures in the 7 basic sizes (size 21.21 for CKA..W and MKA..W models, sizes 44.27, 57.27, 77.27 and 104.27 for CH..W, CA..W and MH..W, MA..W models, sizes 49.16 and 66.16 for CZ..W and MZ..W models) and in the 3 double sizes (sizes 66.40 also known as 50 poles, 77.62 a.k.a. 32 poles, 104.62 a.k.a. 48 poles).

Series W-TYPE enclosures may be bulkhead mounting, surface-mounting or hood type with side or top entry. They are **distinguished by the jet black RAL 9005 colour** and have the following characteristics:

- **chromate conversion treatment of castings** RoHS 2 compliant, providing **50% improved corrosion in resistance in salt spray tests** (according to UNI EN ISO 9227) compared to the previous green coloured versions;
- **thermosetting epoxy powder coating** (with improved resistance to chemicals compared to epoxy polyester of the standard enclosures series);
- **FKM fluoroelastomer gaskets** (with improved resistance to chemicals and aging);
- **ambient temperature limits from -40 °C to +125 °C.**

Other constructional characteristics are:

#### 1) CKA..W and MKA..W series

- 21.21 inserts size
- stainless steel monoblock locking lever

#### 2) CH..W, CA..W and MH..W, MA..W series

- 44.27, 57.27, 77.27, 104.27, single inserts sizes and 77.62, 104.62, 66.40 double inserts sizes;
- CLASS type locking levers (stainless steel lever body, springs and pins, lever handle by fibreglass reinforced thermoplastic material);
- stainless steel riveted pegs;

#### 3) CZ..W and MZ..W series

- 49.16, 66.16 inserts size;
- stainless steel monoblock locking lever (body, handle, springs), rolls and pins;
- stainless steel riveted pegs;
- supplementary insulation inside enclosures.



Series **W-TYPE** enclosures are approved by UL with **cULus** Recognized Component mark for USA and Canada, with protection type ratings **UL Type 4 (= NEMA 4)**, **UL Type 4X (= NEMA 4X)** and **UL Type 12 (= NEMA 12)** according to the American standard ANSI/UL 50 and ANSI/UL 50E and the corresponding Canadian Standards CSA C22.2 No.94.1 and CSA C22.2 No.94.2.

Upon connector complete and fitted with suitably rated cable glands or conduit fittings, series **W-TYPE** enclosures guarantee a **degree of protection IP44** (for size 21.21, **IP66/IP67** using CKR 65(D) kit), or **IP66** (all other sizes) as well as **IP69** according to EN 60529 (the IPX9 test recently added to this standard covers resistance to high pressure and temperature water jetting, jets applied at 80 °C (± 5 °C) at a pressure of 80 bar to 100 bar, 30 s for each angle of inclination 0°, 30°, 60° and 90° with reference to the horizontal plane).

Series **W-TYPE** enclosures **can accommodate all connector inserts** with either crimp, screw, spring or the innovative **SQUICH®** connection.



Watch our  
W-TYPE enclosure  
series video

## CKA - MKA W-TYPE for aggressive environments

## inserts

CK	3 poles + ⊕	58
CK	4 poles + ⊕	58
CKS	3 poles + ⊕	-
CKS	4 poles + ⊕	-
CKSH	3 poles + ⊕	63
CKSH	4 poles + ⊕	63
CD	8 poles	67
CQ4	2 poles + ⊕	182
CQ4 H	2 poles + ⊕	183
CQ4	3 poles + ⊕	184
CQ	5 poles + ⊕	186
CQ	7 poles + ⊕	187
CQ	12 poles + ⊕	189
CQ	21 poles	190

## page:

bulkhead mounting housings  
straight and angled

## hoods



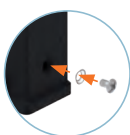
description	part No. (entry Pg 11)	part No. (entry M20)	part No. (entry Pg 11)	part No. (entry M20 / M25)
with stainless steel lever and gasket	CKAXW 03 I			
without cable entry, with stainless steel lever and gasket <sup>1)</sup>	CKAXW 03 IA			
with cable entry, with stainless steel lever and gasket <sup>1)</sup>	CKAXW 03 IAP	MKAXW IAP20		
with cable entry, with stainless steel lever and gasket, bulkhead hole closed <sup>1)</sup>	CKAXW 03 AP	MKAXW AP20		
with pegs, top entry <sup>1)</sup>			CKAW 03 V	MKA W V20
with pegs, top entry				MKA W V25
with pegs, side entry <sup>1)</sup>			CKAW 03 VA	MKA W VA20
with stainless steel lever, top entry <sup>1)</sup>			CKAXW 03 VG	MKAXW VG20
gasket and screw kit for IP66/IP67/IP69 <sup>2)</sup> for CK, CKSH, CQ4, CQ inserts	CKR 65		CKR 65	
gasket and screw kit for IP66/IP67/IP69 <sup>2)</sup> for CD 08 inserts	CKR 65 D		CKR 65 D	

<sup>1)</sup> Not suitable for CQ4 series inserts

<sup>2)</sup> To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) **except for** the inserts listed below (already supplied with a fixing screw with gasket):

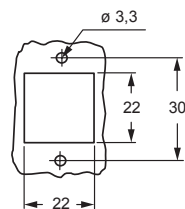
- CQF/M 07, CQF/M 12

NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



versions with glued gasket (DESINA®) upon request

panel cut-out for bulkhead mounting housings



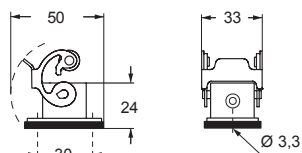
CAUS

Type 12  
Type 4/4X only  
with CKR 65 (D)

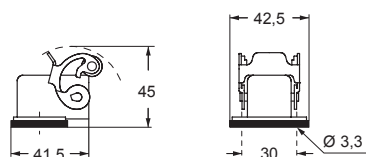
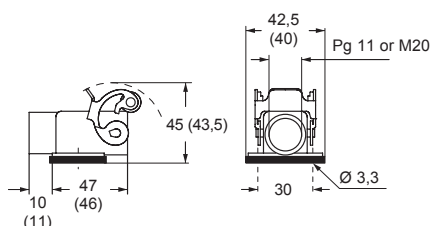


IP66/IP67/IP69 with CKR 65 (D) <sup>2)</sup>

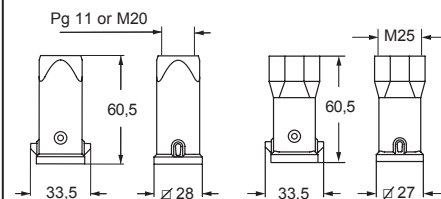
## CKAXW I



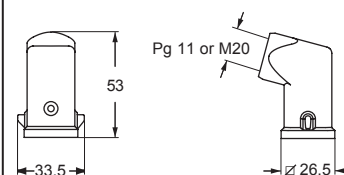
## CKAXW IA

CKAXW IAP (CKAXW AP) and  
MKAXW IAP (MKAXW AP)

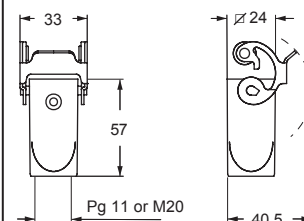
## CKAW V and MKA W V20 - V25



## CKAW VA and MKA W VA



## CKAXW VG and MKAXW VG





CKAX - CKAXX W-TYPE for aggressive environments

inserts		page:
CK	3 poles + ⊕	58
CK	4 poles + ⊕	58
CKS	3 poles + ⊕	-
CKS	4 poles + ⊕	-
CKSH	3 poles + ⊕	63
CKSH	4 poles + ⊕	63
CD	8 poles	67
CQ4	2 poles + ⊕	182
CQ4 H	2 poles + ⊕	183
CQ4	3 poles + ⊕	184
CQ	5 poles + ⊕	186
CQ	7 poles + ⊕	187
CQ	12 poles + ⊕	189
CQ	21 poles	190

angled bulkhead mounting housings  
stainless steel lever



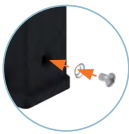
angled bulkhead mounting housings  
stainless steel rigid lever



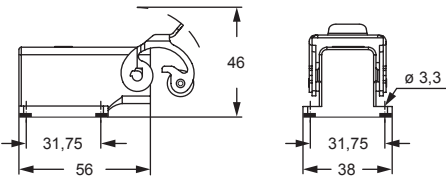
description	part No.	part No.
without cable entry, fixing by 4 screws	CKAXW 03 IA4	CKAXXW 03IA4
gasket and screw kit for IP66/IP67/IP69 1) for CK, CKSH, CQ4, CQ inserts	CKR 65	CKR 65
gasket and screw kit for IP66/IP67/IP69 1) for CD 08 inserts	CKR 65 D	CKR 65 D

1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) **except for** the inserts listed below (already supplied with a fixing screw with gasket):  
- CQF/M 07, CQF/M 12

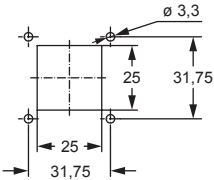
NOTE: The enclosure shown here is an example.  
The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



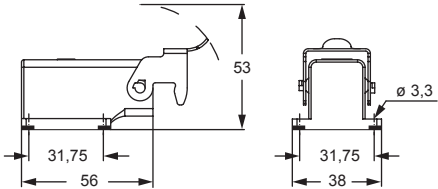
CKAXW IA4



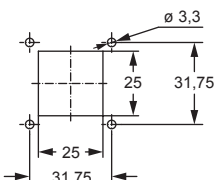
panel cut-out for enclosures



CKAXXW IA4



panel cut-out for enclosures



Type 12  
Type 4/4X only  
with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)

**MKAX W-TYPE for aggressive environments**

inserts	page:
<b>CK</b> 3 and 4 poles + ⊕	<b>58</b>
<b>CKS</b> 3 and 4 poles + ⊕	<b>-</b>
<b>CKSH</b> 3 and 4 poles + ⊕	<b>63</b>
<b>CD</b> 8 poles	<b>67</b>
<b>CQ4</b> 2 poles + ⊕	<b>182</b>
<b>CQ4 H</b> 2 poles + ⊕	<b>183</b>
<b>CQ4</b> 3 poles + ⊕	<b>184</b>
<b>CQ</b> 5 poles + ⊕	<b>186</b>
<b>CQ</b> 7 poles + ⊕	<b>187</b>
<b>CQ</b> 12 poles + ⊕	<b>189</b>
<b>CQ</b> 21 poles	<b>190</b>
if the counterpart has glued gasket:	
<b>CLK 04 SC</b>	<b>239</b>
<b>CX 1/2 BD</b>	<b>243</b>
<b>CXL 2/4 PF/PM</b>	<b>251</b>
<b>CXL 2/4 PFH/PMH</b>	<b>251</b>
<b>CXL PF/PM</b>	<b>251</b>

**angled surface mounting housings  
stainless steel lever****angled surface mounting housings  
stainless steel lever****description**part No.  
(entry M25)part No.  
(entry M25)

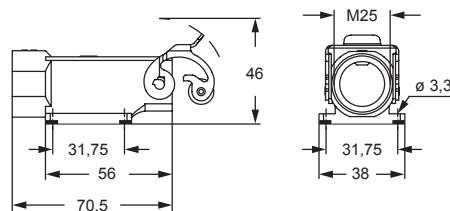
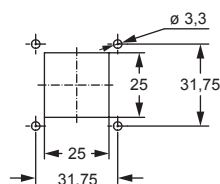
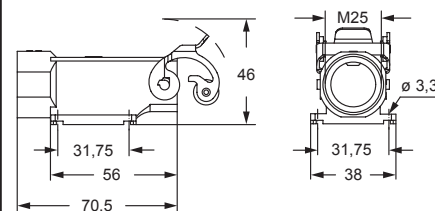
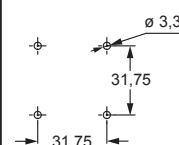
with cable entry, fixing by 4 screws

**MKAXW IAP25**with cable entry, fixing by 4 screws,  
bulkhead hole closed (without gasket)**MKAXW AP25**gasket and screw kit for IP66/IP67/IP69 1)  
for CK, CKSH, CQ4, CQ, inserts**CKR 65****CKR 65**gasket and screw kit for IP66/IP67/IP69 1)  
for CD 08 inserts**CKR 65 D****CKR 65 D**

1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) **except for** the inserts listed below (already supplied with a fixing screw with gasket):

- CQF/M 07, CQF/M 12
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH, CXL PF/PM

NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page

**MKAXW IAP25****panel cut-out for enclosures****MKAXW AP25****panel cut-out for enclosures****CAVUS**

Type 12  
Type 4/4X only  
with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)



MKAXX W-TYPE for aggressive environments

inserts	page:
CK	3 and 4 poles + ⊕ 58
CKS	3 and 4 poles + ⊕ -
CKSH	3 and 4 poles + ⊕ 63
CD	8 poles 67
CQ4	2 poles + ⊕ 182
CQ4 H	2 poles + ⊕ 183
CQ4	3 poles + ⊕ 184
CQ	5 poles + ⊕ 186
CQ	7 poles + ⊕ 187
CQ	12 poles + ⊕ 189
CQ	21 poles 190

if the counterpart has glued gasket:	
CLK 04 SC	239
CX 1/2 BD	243
CXL 2/4 PF/PM	251
CXL 2/4 PFH/PMH	251
CXL PF/PM	251

angled surface mounting housings  
stainless steel rigid lever



angled surface mounting housings  
stainless steel rigid lever



description	part No. (entry M25)	part No. (entry M25)
with cable entry, fixing by 4 screws	MKAXXW IAP25	
with cable entry, fixing by 4 screws, bulkhead hole closed (without gasket)		MKAXXW AP25
gasket and screw kit for IP66/IP67 1)	CKR 65	CKR 65
for CK, CKSH, CQ4, CQ, inserts		
gasket and screw kit for IP66/IP67 1)	CKR 65 D	CKR 65 D
for CD 08 inserts		

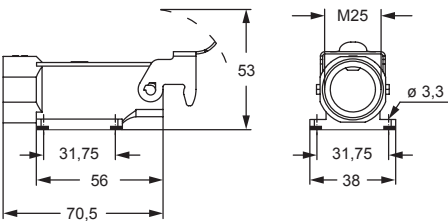
1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) **except for** the inserts listed below (already supplied with a fixing screw with gasket):

- CQF/M 07, CQF/M 12
- CUK 2FT /3FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH, CXL PF/PM

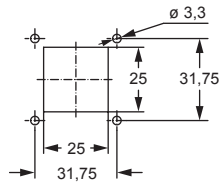
NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



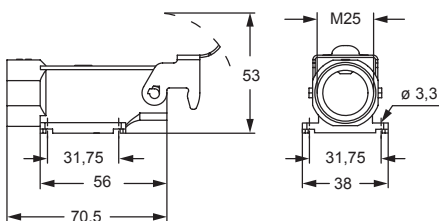
MKAXXW IAP25



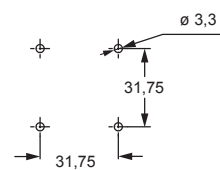
panel cut-out for enclosures



MKAXXW AP25



panel cut-out for enclosures



Type 12  
Type 4/4X only  
with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)

**MKAX W-TYPE for aggressive environments**

inserts		page:
CK	3 and 4 poles + ⊕	58
CKS	3 and 4 poles + ⊕	-
CKSH	3 and 4 poles + ⊕	63
CD	8 poles	67
CQ4	2 poles + ⊕	182
CQ4 H	2 poles + ⊕	183
CQ4	3 poles + ⊕	184
CQ	5 poles + ⊕	186
CQ	7 poles + ⊕	187
CQ	12 poles + ⊕	189
CQ	21 poles	190

if the counterpart has glued gasket:

CJ KF	223
CJK 8FT	226
CLK 04 SC	239
CX 1/2 BD	243
CXL 2/4 SF/SM	250
CXL SF/SM	250
CXL 2/4 PF/PM	251
CXL 2/4 PFH/PMH	251
CXL PF/PM	251

**bulkhead mounting housings  
stainless steel lever****description**

part No.  
(entry M32)

M32 fixing thread (\*) 1)

**MKAXW IF**

gasket and screw kit  
for IP66/IP67/IP69 1)

**CKR 65**

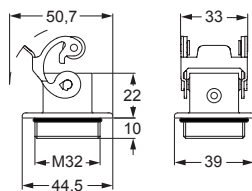
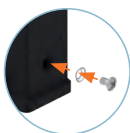
gasket and screw kit for IP66/IP67/IP69 1)  
specific for CD 08 inserts

**CKR 65 D**

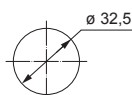
1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) **except for** the inserts listed below (already supplied with a fixing screw with gasket):

- CQF/M 07, CQF/M 12
- CJ KF
- CJK 8FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M
- CXL PF /PM

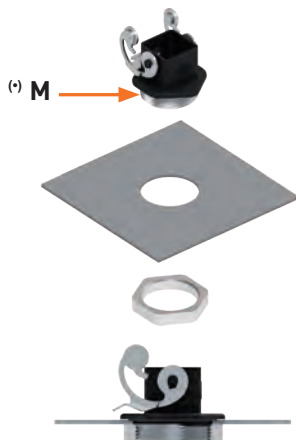
NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



panel cut-out for enclosures



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).



**CAVUS**

Type 12  
Type 4/4X only  
with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)



MKAXX W-TYPE for aggressive environments

inserts	page:
CK 3 and 4 poles + ⊕	58
CKS 3 and 4 poles + ⊕	-
CKSH 3 and 4 poles + ⊕	63
CD 8 poles	67
CQ4 2 poles + ⊕	182
CQ4 H 2 poles + ⊕	183
CQ4 3 poles + ⊕	184
CQ 5 poles + ⊕	186
CQ 7 poles + ⊕	187
CQ 12 poles + ⊕	189
CQ 21 poles	190

if the counterpart has glued gasket:

CJ KF	223
CJK 8FT	226
CLK 04 SC	239
CX 1/2 BD	243
CXL 2/4 SF/SM	250
CXL SF/SM	250
CXL 2/4 PF/PM	251
CXL 2/4 PFH/PMH	251
CXL PF/PM	251

bulkhead mounting housings  
stainless steel rigid lever

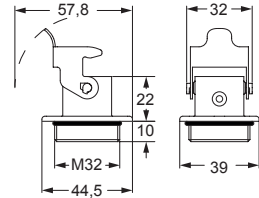


description	part No. (entry M32)
M32 fixing thread (*) 1)	MKAXXW IF
gasket and screw kit for IP66/IP67/IP69 1)	CKR 65
gasket and screw kit for IP66/IP67/IP69 1) specific for CD 08 inserts	CKR 65 D

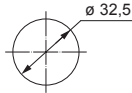
1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) **except for** the inserts listed below (already supplied with a fixing screw with gasket):

- CQF/M 07, CQF/M 12
- CJ KF
- CJK 8FT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M
- CXL PF /PM

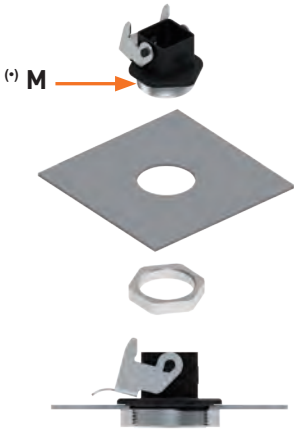
NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



panel cut-out for enclosures



(\*) Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).



Type 12  
Type 4/4X only  
with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)

**MKAX - MKAXX W-TYPE for aggressive environments**

inserts		page:
CK	3 and 4 poles + ⊕	58
CKS	3 and 4 poles + ⊕	-
CKSH	3 and 4 poles + ⊕	63
CD	8 poles	67
CQ4	2 poles + ⊕	182
CQ4 H	2 poles + ⊕	183
CQ4	3 poles + ⊕	184
CQ	5 poles + ⊕	186
CQ	7 poles + ⊕	187
CQ	12 poles + ⊕	189
CQ	21 poles	190

if the counterpart has glued gasket:

CJ KM	223
CJK 8MT	226
CJK 8IMT	226, 228
CLK 04 SC	239
CX 1/2 BD	243
CXL 2/4 SF/SM	250
CXL SF/SM	250
CXL 2/4 PF/PM	251
CXL 2/4 PFH/PMH	251
CXL PF/PM	251

hoods  
stainless steel lever



hoods  
galvanized steel rigid lever

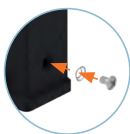
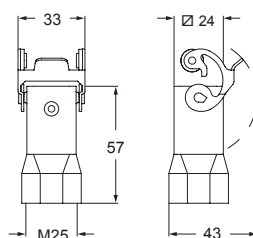
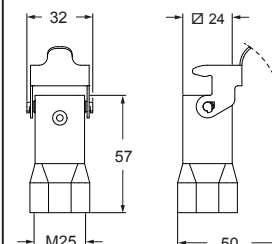


description	part No. (entry M25)	part No. (entry M25)
top entry	<b>MKAXW VG25</b>	<b>MKAXXW VG25</b>
gasket and screw kit for IP66/IP67/IP69 1)	<b>CKR 65</b>	<b>CKR 65</b>
gasket and screw kit for IP66/IP67/IP69 1) specific for CD 08 inserts	<b>CKR 65 D</b>	<b>CKR 65 D</b>

1) To obtain the IP66/IP67/IP69 degree of protection it is necessary to replace the fixing screw supplied with all inserts, with the one with gasket included in the kit (to be purchased separately) **except for** the inserts listed below (already supplied with a fixing screw with gasket):

- CQF/M 07, CQF/M 12
- CJ KM
- CJK 8MT /8IMT
- CX 1/2 BDF/M
- CLK 04 SCF /SCF-H /SCM
- CXL 2/4 PF /PM /PFH /PMH /SF /SM, CXL SF/M
- CXL PF /PM

NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page

**MKAXW VG25****MKAXXW VG25**

**CE** <sup>®</sup> **US**

Type 12  
Type 4/4X only  
with CKR 65 (D)



IP66/IP67/IP69 with CKR 65 (D) 1)



CZ7 - MZ7 CZ - MZ and CZA - MZA W-TYPE for aggressive environments

inserts		page:
CD	15 poles + ⊕	68
CDA	10 poles + ⊕	98
CSAH	10 poles + ⊕	99
CDC	10 poles + ⊕	104
MIXO	1 module	264 - 316

Covers  
cannot be used together  
with metal coding pins.

housings and cover

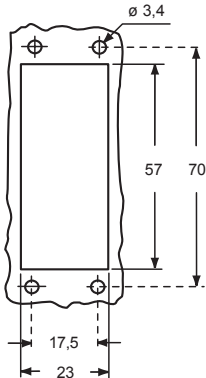


hoods and cover

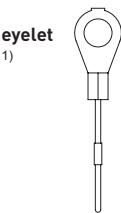


description	part No.	entry Pg	part No.	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housing with lever	CZ7IW 15 L	—						
surface mounting housing, with lever	CZ7PW 15 L2	16 x 2	MZ7PW 15L225	25 x 2				
cover with pegs and gasket (for 1 lever enclosures) <sup>1)</sup>	CZCW 15 L							
enclosure with pegs and gasket, side entry					CZOW 15 L	16	MZOW 15 L20	20
enclosure with pegs and gasket, side entry							MZOW 15 L25	25
enclosure with pegs and gasket, side entry, high construction					CZAOW 15 L21	21	MZAOW 15 L25	25
enclosure with pegs and gasket, top entry					CZVW 15 L	13,5	MZVW 15 L20	20
enclosure with pegs and gasket, top entry, high construction					CZAVW 15 L21	21	MZAVW 15 L25	25
cover with lever (for enclosures with pegs) <sup>2)</sup>					CZ7CW 15 LG			

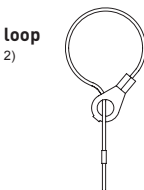
panel cut-out for bulkhead mounting housings



For fixing  
on housings



For fixing  
on hoods



**CALUS** Type 4/4X/12



insulating cable gland or fittings  
without gasket

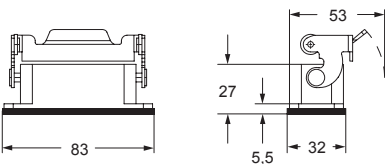


cable gland with O-Ring gasket

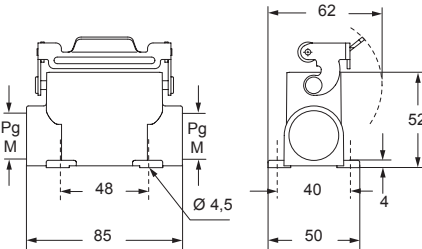


cable gland with O-Ring gasket  
for housings coupled with either a cover or a  
hood without adapter ● and for hoods coupled  
with a cover with lever ●

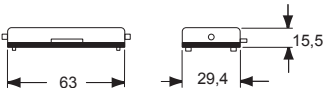
CZ7IW L



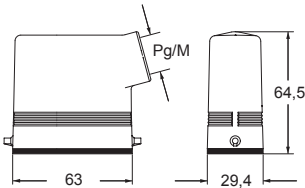
CZ7PW L and MZ7PW L



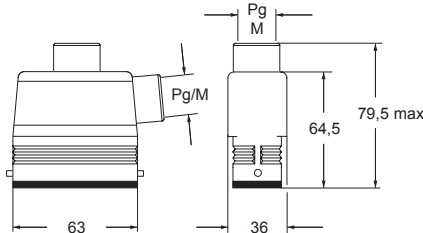
CZCW L ●



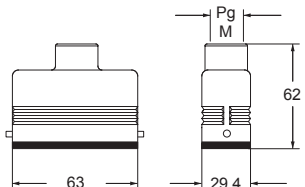
CZOW L and MZOW L ●



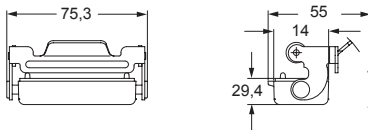
CZAOW L - MZAOW L and CZAVW L - MZAVW L



CZVW L and MZVW L ●



CZ7CW LG ●



**CZ7 - MZ7 CZ - MZ and CZA - MZA W-TYPE for aggressive environments**

## inserts

CD	25 poles + ⊕	69
CDD	38 poles + ⊕	77
CDA	16 poles + ⊕	100
CSAH	16 poles + ⊕	101
CDC	16 poles + ⊕	105

## page:

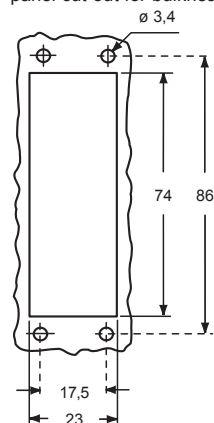
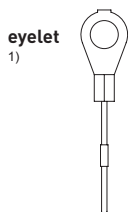
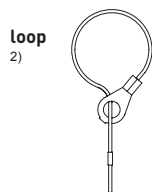
## housings and cover

## hoods and cover

✎ Covers  
cannot be used together  
with metal coding pins.

description	part No.	entry Pg	part No.	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housing with lever	CZ7IW 25 L	--						
surface mounting housing, with lever	CZ7PW 25 L2	16 x 2	MZ7PW 25L225	25 x 2				
cover with pegs and gasket (for 1 lever enclosures) <sup>1)</sup>	CZCW 25 L							
enclosure with pegs and gasket, side entry					CZOW 25 L	16	MZOW 25 L20	20
enclosure with pegs and gasket, side entry							MZOW 25 L25	25
enclosure with pegs and gasket, side entry, high construction					CZAOW 25 L21	21	MZAOW 25 L25	25
enclosure with pegs and gasket, top entry					CZVW 25 L	16	MZVW 25 L20	20
enclosure with pegs and gasket, top entry, high construction					CZAVW 25 L21	21	MZAVW 25 L25	25
cover with lever (for enclosures with pegs) <sup>2)</sup>					CZ7CW 25 LG			

panel cut-out for bulkhead mounting housings

For fixing  
on housingsFor fixing  
on hoods

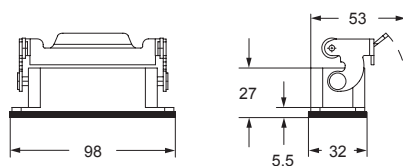
**CALUS** Type  
4/4X/12

insulating cable gland or fittings  
without gasket

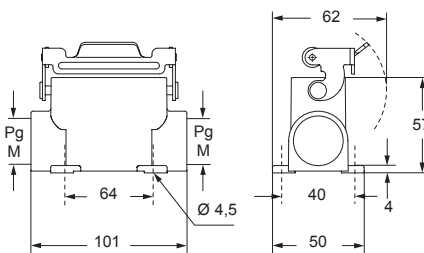
cable gland with O-Ring gasket

cable gland with O-Ring gasket  
for housings coupled with either a cover or a  
hood without adapter ● and for hoods coupled  
with a cover with lever ●

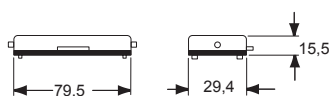
## CZ7IW L



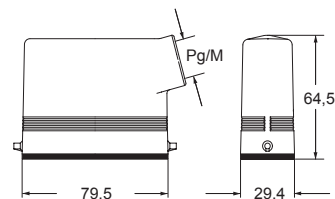
## CZ7PW L and MZ7PW L



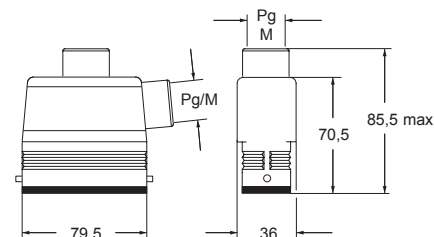
## CZCW L ●



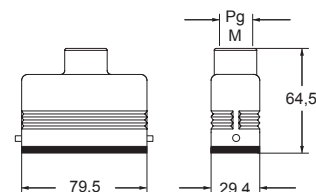
## CZOW L and MZOW L ●



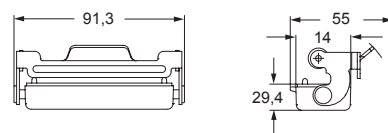
## CZAOW L - MZAOW L and CZAVW L - MZAVW L



## \* CZVW L and MZVW L ●

\* can only be used with a complete cable  
gland (to be purchased separately)

## CZ7CW LG ●





CH - CA and MA W-TYPE for aggressive environments

inserts		page:
CDD	24 poles + ⊕	76
CDS	9 poles + ⊕	-
CDSH	9 poles + ⊕	86
CDSH NC	6 poles + ⊕	95
CNE	6 poles + ⊕	110
CSE	6 poles + ⊕	-
CSH	6 poles + ⊕	110
CSH S	6 poles + ⊕	122
CCE	6 poles + ⊕	130
CSS	6 poles + ⊕	148
CT, CTSE (16A *)	6 poles + ⊕	160
CQE	10 poles + ⊕	168
MIXO	2 modules	262 - 317

\*) only for enclosure CHIW 06 L

housings and cover

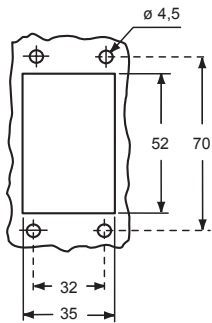


hoods and cover

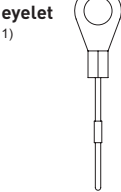


description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housing with lever and gasket	CHIW 06 L	–						
surface mounting housing, with lever, high construction	CAPW 06 L	21	MAPW 06 L32	32				
cover with pegs (for 1 lever enclosures) 1)	CHCW 06 L							
cover with pegs (for 1 lever enclosures) 2)	CHCW 06 SL							
enclosure with pegs, side entry, high construction					CAOW 06 L21	21	MAOW 06 L32	32
enclosure with pegs, top entry, high construction					CAVW 06 L21	21	MAVW 06 L32	32
cover with lever (for enclosures with pegs) 2)					CHCW 06 LG			
enclosure with lever and gasket, side entry, high construction					CAVW 06 LG	21	MAVW 06 LG32	32

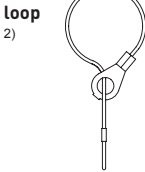
panel cut-out for bulkhead mounting housings



For fixing on housings



For fixing on hoods



**CAU<sup>®</sup> US** Type 4/4X/12

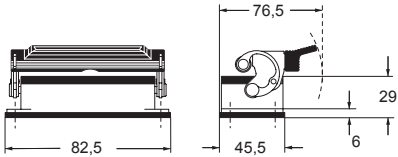


insulating cable gland or fittings without gasket

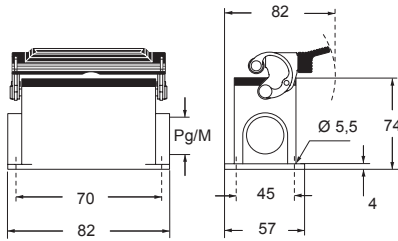


cable gland with O-Ring gasket

CHIW L



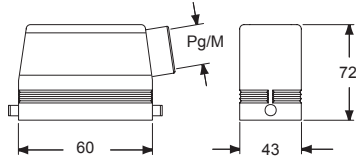
CAPW L and MAPW L



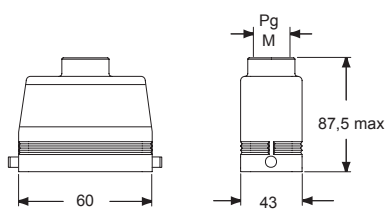
CHCW L - CHCW SL



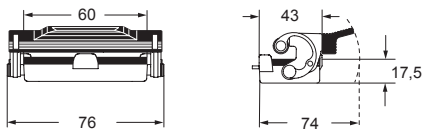
CAOW L and MAOW L



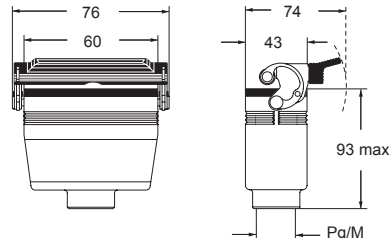
CAVW L and MAVW L



CHCW LG



CAVW LG and MAVW LG



## CH - CA and MA W-TYPE for aggressive environments

inserts		page:
CDD	42 poles + ⊕	78
CDS	18 poles + ⊕	-
CDSH	18 poles + ⊕	87
CNE	10 poles + ⊕	111
CSE	10 poles + ⊕	-
CSH	10 poles + ⊕	111
CSH S	10 poles + ⊕	123
CCE	10 poles + ⊕	131
CMSH	3+2 (aux) poles + ⊕	136
CMCE	3+2 (aux) poles + ⊕	137
CSS	10 poles + ⊕	149
CT, CTSE (16A) *)	10 poles + ⊕	161
CQE	18 poles + ⊕	169
CX	8/24 poles + ⊕	194
MIXO	3 modules	262 - 317

\*) only for enclosure CHIW 10

## housings and cover

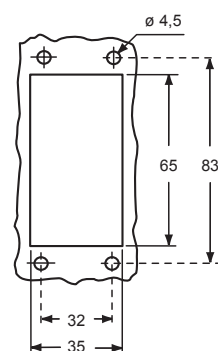
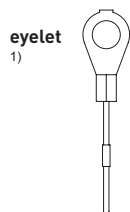
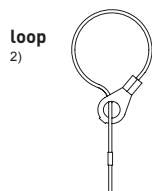


## hoods and cover



description	part No.	entry Pg	part No.	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housing with levers and gasket	<b>CHIW 10</b>	--						
surface mounting housing, with levers, high construction	<b>CAPW 10.21</b>	21	<b>MAPW 10.32</b>	32				
cover with 4 pegs (for enclosures with 2 levers) <sup>1)</sup>	<b>CHCW 10</b>							
cover with 4 pegs (for enclosures with 2 levers) <sup>2)</sup>	<b>CHCW 10 S</b>							
enclosure with pegs, side entry, high construction					<b>CAOW 10.21</b>	21	<b>MAOW 10.32</b>	32
enclosure with pegs, top entry, high construction					<b>CAVW 10.21</b>	21	<b>MAVW 10.32</b>	32
cover with 2 levers (for enclosures with 4 pegs) <sup>2)</sup>					<b>CHCW 10 G</b>			
enclosure with levers and gasket, top entry, high construction					<b>CAVW 10 G</b>	21	<b>MAVW 10 G32</b>	32

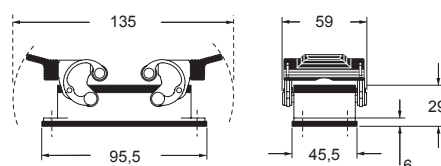
panel cut-out for bulkhead mounting housings

For fixing  
on housingsFor fixing  
on hoods

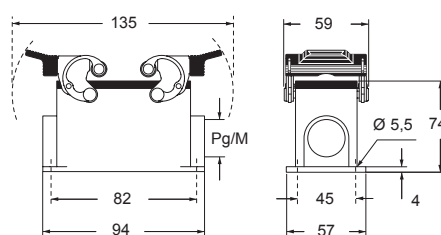
**CAIUS** Type  
4/4X/12

insulating cable gland or fittings  
without gasketcable gland  
with O-Ring gasket

## CHIW



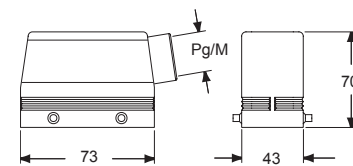
## CAPW and MAPW



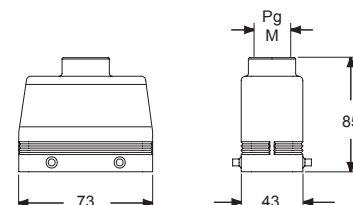
## CHCW - CHCW S



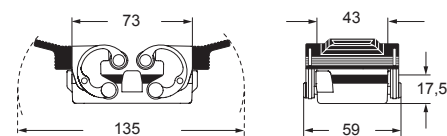
## CAOW and MAOW



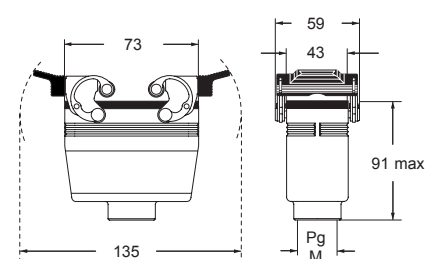
## CAVW and MAVW



## CHCW G



## CAVW G and MAVW G





CH - CA and MH - MA W-TYPE for aggressive environments

inserts		page:
CD	40 poles + ⊕	70
CDD	72 poles + ⊕	79
CDS	27 poles + ⊕	-
CDSH	27 poles + ⊕	88
CNE	16 poles + ⊕	112
CSE	16 poles + ⊕	-
CSH	16 poles + ⊕	112
CSH S	16 poles + ⊕	124
CCE	16 poles + ⊕	132
CMSH, CMCE	6+2 (aux) poles + ⊕	138 - 139
CSS	16 poles + ⊕	150
CT, CTS (10A) *)	40 poles + ⊕	156
CT, CTSE (16A) *)	16 poles + ⊕	162
CQE	32 poles + ⊕	170
CQEE	40 poles + ⊕	176
CP	6 poles + ⊕	178
CX	6/12, 6/36 and 12/2 poles + ⊕	197 - 199
CX	4/0 and 4/2 poles + ⊕	200 - 201
MIXO	4 modules	262 - 317

\*) only for enclosure CHIW 16

housings and cover

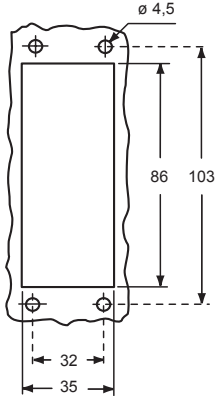


hoods and cover

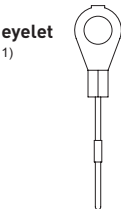


description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housing with levers and gasket	CHIW 16	–						
surface mounting housing, with levers, high construction	CAPW 16.21	21	MAPW 16.32	32				
cover with 4 pegs (for enclosures with 2 levers) 1)	CHCW 16							
cover with 4 pegs (for enclosures with 2 levers) 2)	CHCW 16 S							
enclosure with pegs, side entry					CHOW 16	21	MHOW 16.25	25
enclosure with pegs, side entry							MHOW 16.32	32
enclosure with pegs, side entry, high construction					CAOW 16.29	29	MAOW 16.32	32
enclosure with pegs, side entry, high construction							MAOW 16.40	40
enclosure with pegs, top entry					CHVW 16	21	MHVW 16.25	25
enclosure with pegs, top entry							MHVW 16.32	32
enclosure with pegs, top entry, high construction					CAVW 16.29	29	MAVW 16.32	32
enclosure with pegs, top entry, high construction							MAVW 16.40	40
cover with 2 levers (for enclosures with 4 pegs 2)					CHCW 16 G			
enclosure with levers and gasket, top entry, high construction					CAVW 16 G29	29	MAVW 16 G32	32

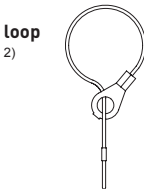
panel cut-out for bulkhead mounting housings



For fixing on housings



For fixing on hoods



CAIUS® Type 4/4X/12

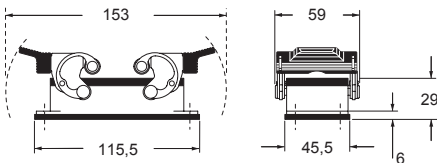


insulating cable gland or fittings without gasket

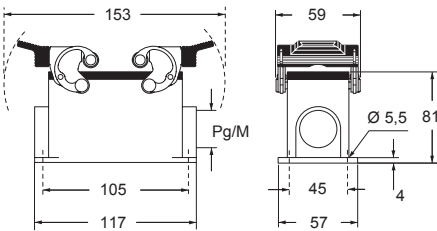


cable gland with O-Ring gasket

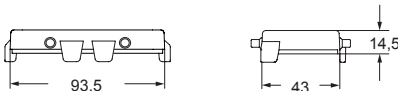
CHIW



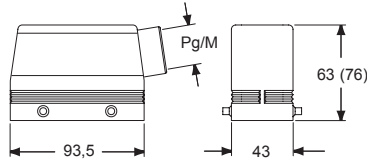
CAPW and MAPW



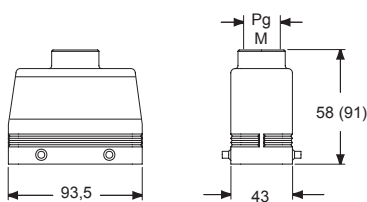
CHCW - CHCW S



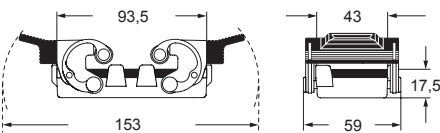
CHOW (CAOW) and MHOW (MAOW)



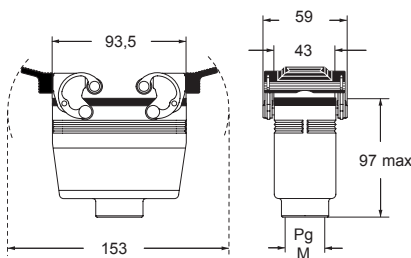
CHVW (CAVW) and MHVW (MAVW)



CHCW G



CAVW G and MAVW G



**CH - CA and MH - MA W-TYPE for aggressive environments**

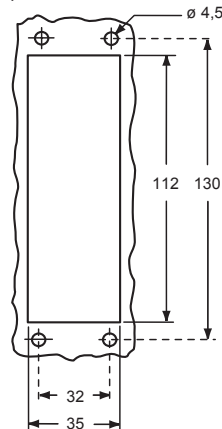
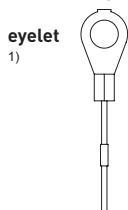
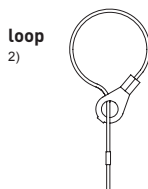
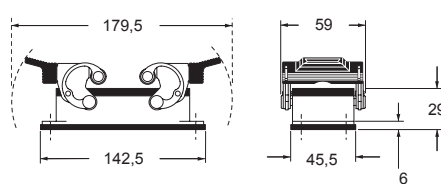
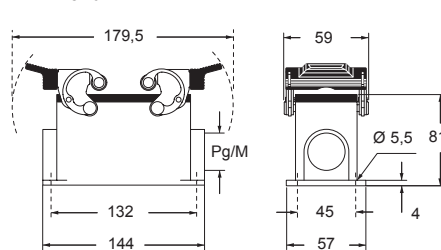
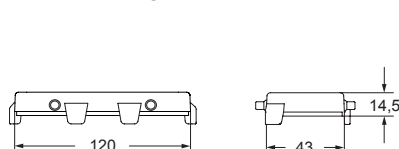
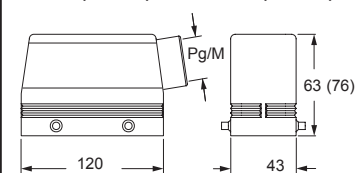
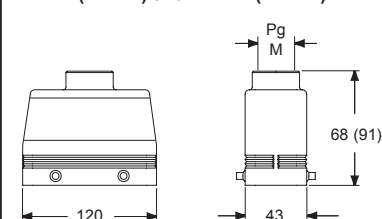
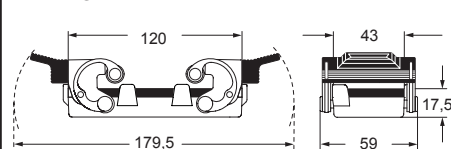
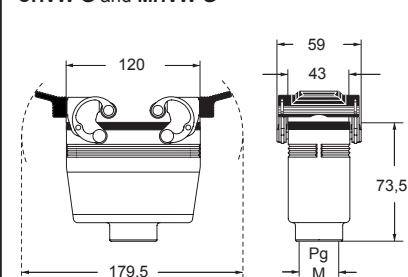
inserts		page:
CD	64 poles + ⊕	72
CDD	108 poles + ⊕	81
CDS	42 poles + ⊕	-
CDSH	42 poles + ⊕	89
CNE	24 poles + ⊕	113
CSE	24 poles + ⊕	-
CSH	24 poles + ⊕	113
CSH S	24 poles + ⊕	125
CCE	24 poles + ⊕	133
CMSH	10+2 (aux) poles + ⊕	140
CMCE	10+2 (aux) poles + ⊕	141
CSS	24 poles + ⊕	151
CT, CTS (10A) *)	64 poles + ⊕	157
CT, CTSE (16A) *)	24 poles + ⊕	163
CQE	46 poles + ⊕	171
CQEE	64 poles + ⊕	177
CX	4/8 and 6/6 poles + ⊕	204, 206
MIXO	6 modules	262 - 317

\*) only for enclosure CHIW 24

**housings and cover****hoods and cover**

description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housing with levers and gasket	<b>CHIW 24</b>	--						
surface mounting housing, with levers, high construction	<b>CAPW 24.21</b>	21	<b>MAPW 24.32</b>	32				
cover with 4 pegs (for enclosures with 2 levers) <sup>1)</sup>	<b>CHCW 24</b>							
cover with 4 pegs (for enclosures with 2 levers) <sup>2)</sup>	<b>CHCW 24 S</b>							
enclosure with pegs, side entry					<b>CHOW 24</b>	21	<b>MHOW 24.25</b>	25
enclosure with pegs, side entry							<b>MHOW 24.32</b>	32
enclosure with pegs, side entry, high construction					<b>CAOW 24.29</b>	29	<b>MAOW 24.32</b>	32
enclosure with pegs, side entry, high construction							<b>MAOW 24.40</b>	40
enclosure with pegs, top entry					<b>CHVW 24</b>	21	<b>MHVW 24.25</b>	25
enclosure with pegs, top entry							<b>MHVW 24.32</b>	32
enclosure with pegs, top entry, high construction					<b>CAVW 24.29</b>	29	<b>MAVW 24.32</b>	32
enclosure with pegs, top entry, high construction							<b>MAVW 24.40</b>	40
cover with 2 levers (for enclosures with 4 pegs) <sup>2)</sup>					<b>CHCW 24 G</b>			
enclosure with levers and gasket, top entry					<b>CHVW 24 G</b>	21	<b>MHVW 24 G32</b>	32

panel cut-out for bulkhead mounting housings

For fixing  
on housings**CALUS** Type 4/4X/12insulating cable gland or fittings  
without gasketcable gland  
with O-Ring gasketFor fixing  
on hoods**CHIW****CAPW and MAPW****CHCW - CHCW S****CHOW (CAOW) and MHOW (MAOW)****CHVW (CAVW) and MHVW (MAVW)****CHCW G****CHVW G and MHVW G**



**CH and MH W-TYPE for aggressive environments**

inserts		page:
CD	128 poles + ⊕	74
CDD	216 poles + ⊕	83
CDS	84 poles + ⊕	-
CDSH	84 poles + ⊕	91
CNE	48 poles + ⊕	115
CSE	48 poles + ⊕	-
CSH	48 poles + ⊕	115
CSH S	48 poles + ⊕	127
CCE	48 poles + ⊕	135
CMSH	20+4 (aux) poles + ⊕	144
CSS	48 poles + ⊕	153
CTSE (16A) *)	48 poles + ⊕	165
CQE	92 poles + ⊕	173
MIXO	6 + 6 modules	262 - 317

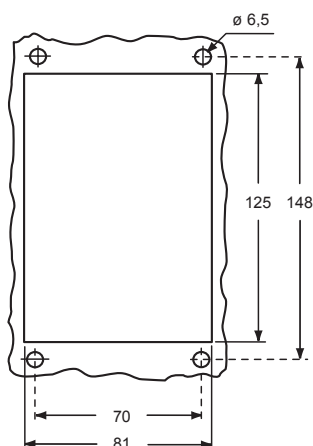
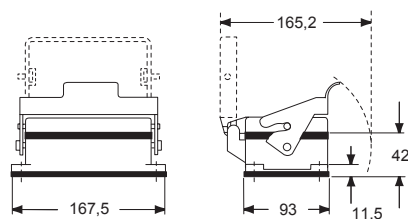
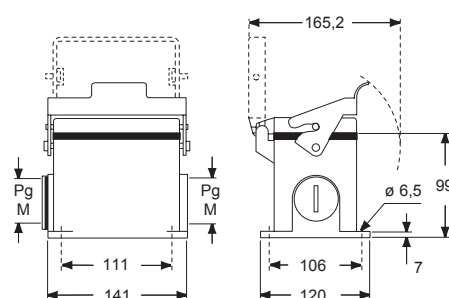
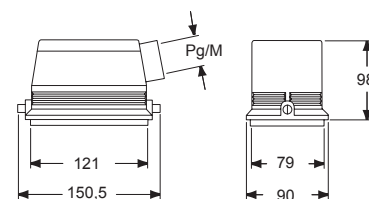
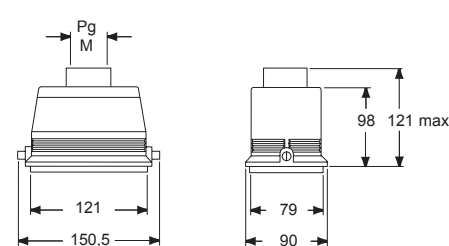
\*) only for enclosure CHIW 48 LS

insert dimensions:  
**2 x (104 x 27) mm**

**bulkhead and surface mounting housings****hoods**

description	part No.	entry Pg	part No.	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housings, with lever, gasket and cover	<b>CHIW 48 LS</b>	--						
surface mounting housings, with lever and cover	<b>CHPW 48 LS</b>	36 x 1/2	<b>MHPW 48 LS40</b>	40 x 1/2				
side entry, with pegs					<b>CHOW 48 L</b>	36	<b>MHOW 48 L40</b>	40
top entry, with pegs					<b>CHVW 48 L</b>	36	<b>MHVW 48 L40</b>	40

panel cut-out for bulkhead mounting housings

**CHIW LS****CHPW LS and MHPW LS****CHOW L and MHOW L****CHVW L and MHVW L**

**CALUS**® Type  
**4/4X/12**



insulating cable gland or fittings  
without gasket



cable gland  
with O-Ring gasket

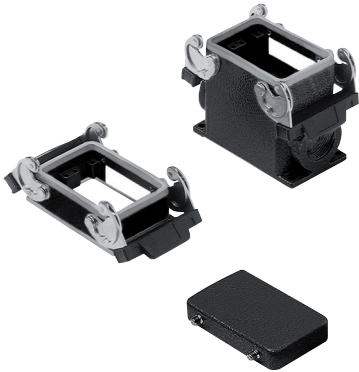
CH - CA and MH - MA W-TYPE for aggressive environments

inserts		page:
CD	50 poles + ⊕	71
CDD	76 poles + ⊕	80
CDA	32 poles + ⊕	102
CSAH	32 poles + ⊕	103
CDC	32 poles + ⊕	106

insert dimensions:  
2 x (66 x 16) mm

Covers  
**cannot be used together**  
with metal coding pins.

housings and cover

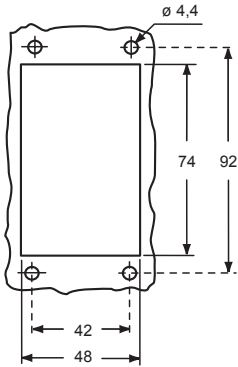


hoods and cover

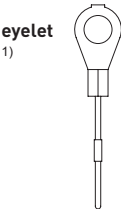


description	part No.	entry Pg	part No	entry M	part No.	entry Pg	part No.	entry M
bulkhead mounting housings with levers and gasket	CHIW 50	–						
surface mounting housing, with levers	CHPW 50.21	21	MHPW 50.32	32				
surface mounting housing, with levers	CHPW 50.229	29 x 2	MHPW 50.240	40 x 2				
cover with 4 pegs (for housings with 2 levers) <sup>1)</sup>	CHCW 50							
cover with 4 pegs (for housings with 2 levers) <sup>2)</sup>	CHCW 50 S							
enclosure with 4 pegs, side entry					CHOW 50	21	MHOW 50.25	25
enclosure with 4 pegs, side entry							MHOW 50.32	32
enclosure with 4 pegs, side entry, high construction					CAOW 50.29	29	MAOW 50.32	32
enclosure with 4 pegs, top entry, high construction					CAVW 50.29	29	MAVW 50.32	32
cover with 2 levers (for enclosures with 4 pegs) <sup>2)</sup>					CHCW 50 G			

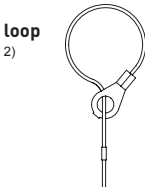
panel cut-out for bulkhead mounting housings



For fixing  
on housings



For fixing  
on hoods



**CALUS** Type  
4/4X/12

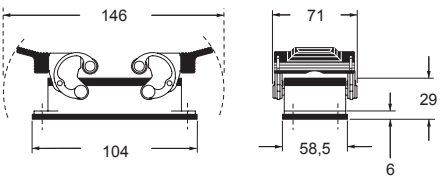


insulating cable gland or fittings  
without gasket

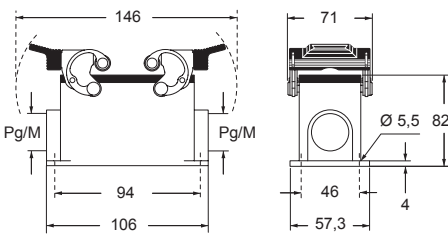


cable gland  
with O-Ring gasket

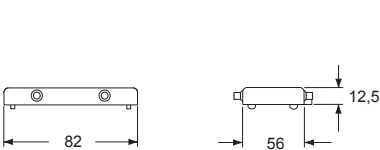
CHIW



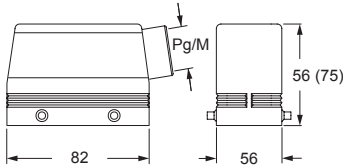
CHPW and MHPW



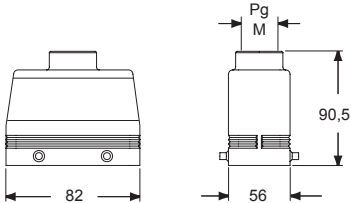
CHCW - CHCW S



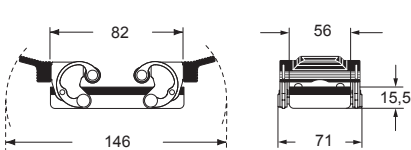
CHOW (CAOW) and MHOW (MAOW)



CAVW and MAVW



CHCW G



inserts

CD	50 poles + ⊕	71
CDD	76 poles + ⊕	80
CDA	32 poles + ⊕	102
CSAH	32 poles + ⊕	103
CDC	32 poles + ⊕	106

insert dimensions:  
2 x (66 x 16) mm

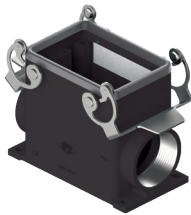
refer to CN.19 pages

pages:

bulkhead mounting housings  
with 2 levers



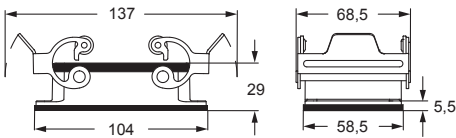
surface mounting housings  
with 2 levers



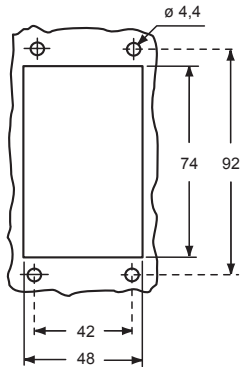
description	part No.	part No.	entry Pg	part No.	entry M
with full metal locking levers	CHIXW 50				
with full metal locking levers		CHPXW 50.21	21	MHPXW 50.32	32

The enclosures ensure IP66/IP69 degree of protection (or IP65 for cover versions) when mated and locked with the closing levers.

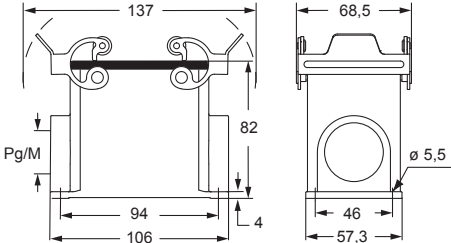
CHIXW



panel cut-out for bulkhead mounting housings



CHPXW and MHPXW



us (ECBT2.E115072, ECBT8.E115072)  
Type 12, Type 4/4X, certified;  
CQC, BV pending

insulating cable gland or fittings  
without gasket

cable gland  
with O-Ring gasket



CHCXW W-TYPE aggressive environments full metal locking levers

inserts		pages:
CD	50 poles + ⊕	71
CDD	76 poles + ⊕	80
CDA	32 poles + ⊕	102
CSAH	32 poles + ⊕	103
CDC	32 poles + ⊕	106

insert dimensions:  
2 x (66 x 16) mm

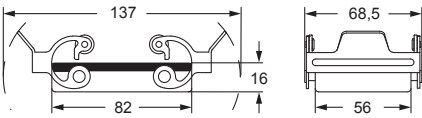
refer to CN.19 pages

covers



description	part No.
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with 2 full metal locking levers and gasket (for hoods with 4 pegs) **CHCXW 50 G**



us (ECBT2.E115072, ECBT8.E115072)  
Type 12, Type 4/4X, certified;  
CQC, BV pending



insulating cable gland or fittings  
without gasket

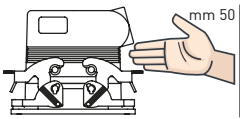
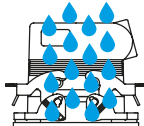
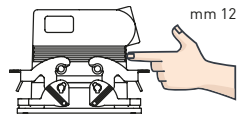
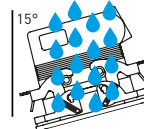
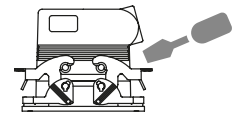
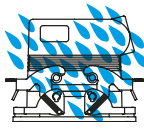
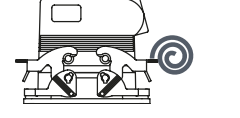
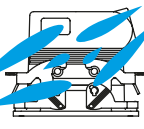
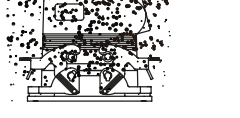
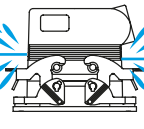
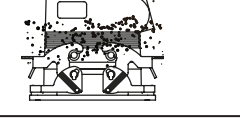
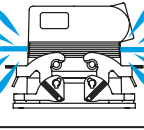
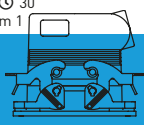
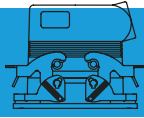
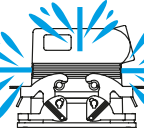


cable gland  
with O-Ring gasket

## THE DEGREE OF PROTECTION

The connector's housing, sealing and locking mechanism protect the connection from external influences such as mechanical shocks, foreign bodies, humidity, dust, water or other fluids such as cleansing and cooling agents, oils, etc. The degree of protection the housing offers is explained in the IEC 60529, DIN EN 60529, standards that categorize enclosures according to foreign body and water protection.

The following table shows the **IP (Ingress Protection) Ratings Guide**.

FIRST Index figure	Degree of protection SOLIDS		SECOND Index figure	Degree of protection WATER	
0		No protection	0		No protection
1		Protected against access to hazardous parts with the back of a hand and protected against solid foreign objects of Ø 50 mm and greater	1		Protected against vertically falling water drops
2		Protected against access to hazardous parts with a finger - protected against solid foreign objects of Ø 12,5 mm and greater	2		Protected against vertically falling water drops when enclosure tilted up to 15° (on either side of the vertical)
3		Protected against access to hazardous parts with a tool - protected against solid foreign objects of Ø 2,5 mm and greater	3		Protected against spraying water (at an angle up to 60° on either side of the vertical)
4		Protected against access to hazardous parts with a wire - protected against solid foreign objects of Ø 1,0 mm and greater	4		Protected against splashing water from any direction
5		Protected against access to hazardous parts with a wire dust-protected (no harmful dust deposit)	5		Protected against water jets from any direction
6		Protected against access to hazardous parts with a wire dust-tight (total protection against dust)	6		Protected against powerful water jets from any direction (similar to sea waves)
<b>RATING EXAMPLE</b>  <b>IP 65</b>			7		Protected against the effects of temporary immersion in water at a maximum depth of 1 metre for 30 min
			8		Protected against the effects of continuous immersion in water at depth and/or duration upon agreement, more severe than for numeral 7
			9		Protected against high pressure and temperature water jets from any direction

Description according to IEC 60529

# CHANGEOVER FROM PG THREADS TO METRIC

After 31<sup>st</sup> December 1999, the German safety standard DIN VDE 0619 (1987-09) and the standards it refers to - DIN 46319 for dimensions with metric threads and DIN 46320 (T1-T4), DIN 46255 and DIN 46259 for dimensions with Pg threads (Pg = Panzerrohr-Gewinde: literally "threads for armoured pipes") - were withdrawn and European standard EN 50262 "Metric cable glands for electrical installations" has been in force since 1<sup>st</sup> January 2000.

This standard defines the new sizes with metric threads for cable glands according to EN 60423 and establishes the safety prescriptions.

Conversely, it does not specify the dimensions, such as the size of the tightening wrench, the diagonal dimension, or the dimensions of the tightness seals, as was the case in the withdrawn DIN for Pg cable glands.

The standard came definitively into force on 1<sup>st</sup> April 2001, when the contrasting national standards were withdrawn.

It is valid in all member countries of CENELEC (European Electrical Standardisation Committee) and its publication has led to a broadening of the supply of enclosures for multi-pole connectors for industrial use, to include new enclosure versions with cable entry suitable for metric cable glands.

NOTE – In 2016 the new EN 62444:2013 standard "Cable glands for electrical installations" replaced the former to cover only cable gland with metric thread whose range is now M6 through M110 (previously up to M75).

Cable gland producers have introduced the new metric series to add to the Pg size series, to gradually replace the latter type. The transitional period indicated in the new standard should have ended on 1<sup>st</sup> March 2001, after which date the use of cable entry devices with Pg thread and, as a result, enclosures with Pg thread, should have ended in new installations. Nevertheless, both the cable entry devices and the relevant enclosures with Pg thread, may continue to be used as spare parts. For the mandatory **CE** marking of these items, observance of the safety conditions specified by the Low Voltage Directive is sufficient, however adherence to the safety requirements of EN 62444 provides presumption of conformity.

**To distinguish hoods and surface-mounting housings with metric entries from the relevant Pg versions (identified with a C pre-code), the ILME metric types are identified with an M pre-code. The transposition table below indicates the correspondence rule adopted in most cases by ILME for creating the new metric versions.**

## Pg → metric transposition table

Pg	Metric
Pg 11	M20
Pg 13.5	M20
Pg 16	M20
Pg 21	M25
Pg 29	M32
Pg 36	M40
Pg 42	M50

## Cable diameter for use with ILME cable glands

Ø in mm	Metric thread				
Series	20	25	32	40	50
AS M..P	6 - 12,5	10 - 18	14 - 24	15 - 24	23 - 30
AS M..E	8 - 12,5	13,5 - 18	17 - 24	—	—
AG M..T	6 - 8 - 10	11 - 14 - 17	19 - 21 - 24	26 - 29 - 32	35 - 38 - 41
AG M..I	5 - 12,5	9 - 18	14 - 25	18 - 32	24 - 38,5
AG M..R	6 - 8 - 10	11 - 14 - 17	19 - 21 - 24	—	—

For more information, please refer to the technical catalogue on [www.ilme.com](http://www.ilme.com)