enclosures for aggressive environments

CLASS series enclosures sees the introduction of new versions for **Heavy Duty** aggressive environments distinguishable by the colour RAL 9005 black.

The Heavy Duty series is specially **designed for industrial applications where particularly aggressive external agents are present** (e.g. salty environments, etc.).

The range includes enclosures in the 8 basic sizes and in dual versions with 32 and 48 poles.
The enclosures may be bulkhead, surface-mounting or hoods with side or top entry.

The new version is **distinguished by the black colour** and has the following characteristics:
- new **chromate die-casting** treatment (RoHS compliant) providing **50% improvement in resistance in salt spray tests** (according to UNI EN ISO 9227) compared to the previous green versions
- **oven painted with epoxy polyester powder** (**improved resistance** to chemical agents compared to epoxy polyester).

Other construction characteristics are:
1) CKA..W and MKA..W series
- 21.21 size inserts
- gaskets in anti-aging fluoro elastomer
- monoblock locking device in stainless steel

2) CH..W, CA..W and MH..W, MA..W series
- 44.27, 57.27, 77.27, 104.27, 77.62, 104.62, 66.40 size inserts
- gaskets in anti-aging fluoro elastomer
- pegs in stainless steel
- CLASS type levers (stainless steel lever body, springs and pins, lever in thermoplastic material reinforced with glass fibers)
- supplementary insulation inside enclosures

3) CZ..W and MZ..W series
- 49.16, 66.16 size inserts
- locking device with levers, springs and pins in stainless steel
- pegs in stainless steel
- supplementary insulation inside enclosures

UL approved for USA and Canada for protection 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.

With connector complete and with appropriate cable glands, it is possible to guarantee **IP44, IP66 protection** compliant with EN 60529 **and IP69K** compliant with DIN 40050-9 (water jet at 80 °C (± 5 °C) at a pressure of 80bar ÷ 100 bar, for a period of 30s for each angle of inclination 0°, 30°, 60° and 90° w.r.t the plane).

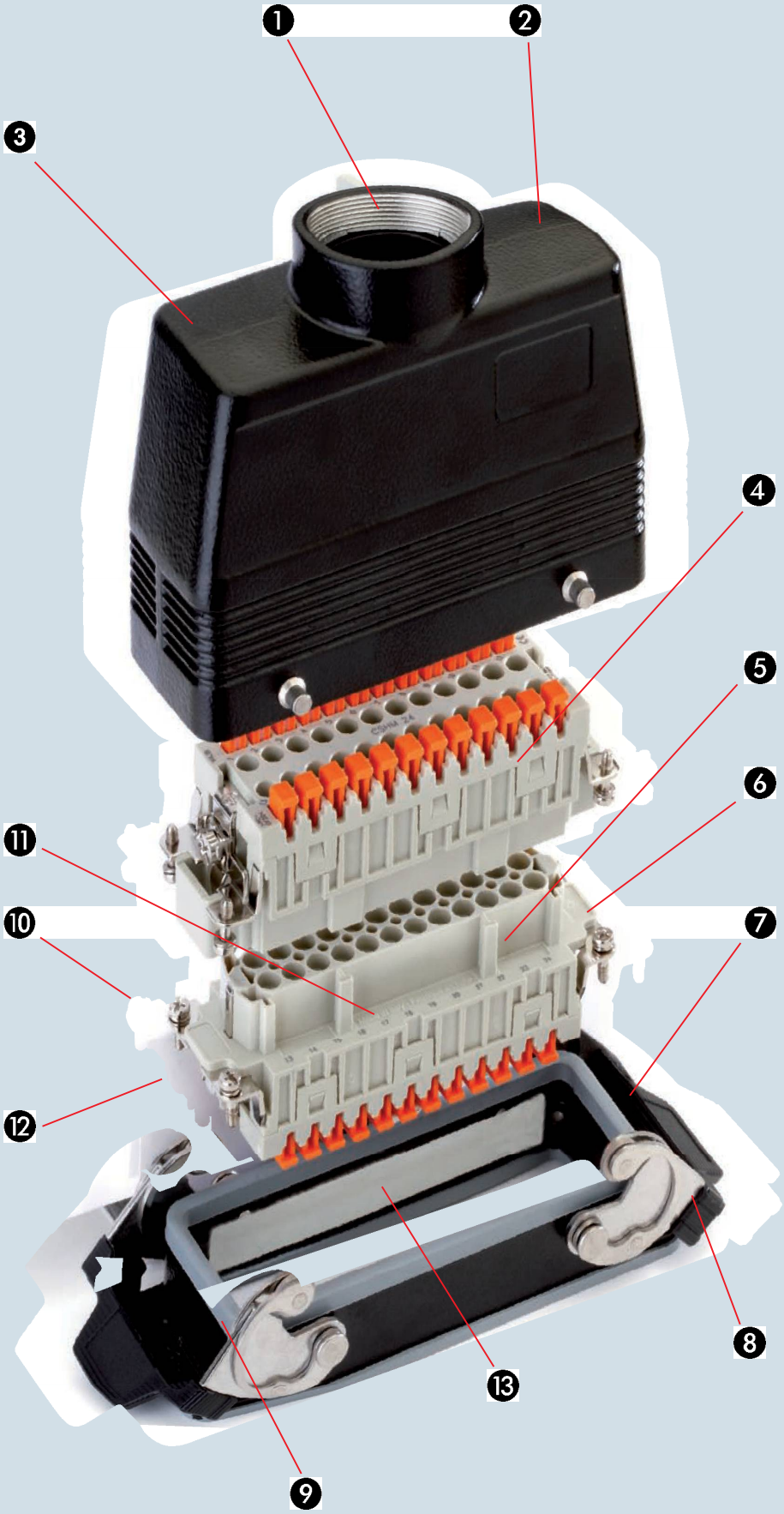
Ambient temperature limits from -40 °C to +125 °C.

Enclosures **can accommodate all connector inserts** with crimp, screw, spring and the innovative Squich ® connection.

The enclosures do not have any internal tabs and therefore **allow insertion of CME inserts** with rated voltage of 830V, thanks to the additional insulation strips placed inside.

The new series joins the family of traditional CLASS series enclosures and will support **the various solutions: standard (grey), for temperatures up to 180 °C (red), with protection rating IP68, in thermoplastic insulating material (T-Type) and with vertical lever locking system (V-Type).**

The new enclosures for aggressive environments in RAL 9005 black replace the previous and similar green versions.



1. Threaded cable passage in various Pg diameters (types with pre-code ”C”) or metric passage (types with pre-code ”M”) in accordance with EN 60423, for cable entry devices in accordance with EN 50262 (NPT threading on request), may be located vertically, horizontally or frontally.

2. Sturdy foundry grade aluminium alloy enclosures with stainless steel treated pegs.
Fixed surface-mounted, bulkhead and hood versions are available.

3. Metallic enclosures with a coated finish of epoxy-polyester with high resistance to mechanical stress and external agents.
New chromate die-casting treatment (RoHS compliant) providing 50% improvement in resistance in salt spray tests (according to UNI EN ISO 9227) compared to the previous green versions.

4. The inserts are made of UL certified self-extinguishing fibreglass reinforced thermoplastics, and feature an operating temperature range between -40 °C and +125 °C.

5. Insert profile polarised with asymmetrical guides to avoid incorrect matings.
The inserts have a mechanical life equal to or higher than 500 mating cycles.

6. Inserts are manufactured in compliance with European standard EN 61984 (DIN VDE 0627), certified and identified with UL, CSA, CCC, GL and GOST markings.

7. Gaskets in anti-aging, oil-resistant and fuel-resistant fluoro elastomer.

8. Stainless steel closure levers and springs guarantee a perfect closure and sealing.

9. Locking device available in two versions, simple (with one lever), or double (with two levers).

10. Captive insert fastening screws, with anti-slackening spring washer

11. Contact position identified with numbers or codes on both sides of each insert and printed with a laser system or from a die.

12. Protective earth terminal with a wide contact surface.

13. Supplementary insulation inside enclosures

inserts:

CK	3	poles + ⏚	40
CK	4	poles + ⏚	40
CKS	3	poles + ⏚	41
CKS	4	poles + ⏚	41
CD	8	poles + ⏚	46
CDA	5	poles + ⏚	69
CDC	12	poles + ⏚	68

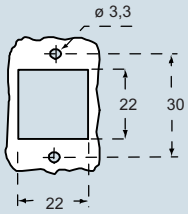
insert dimensions:
21 x 21 mm

bulkhead mounting housings straight and angled

hoods

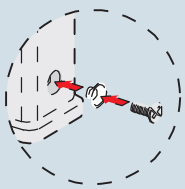
description	part no. (entry - Pg 11)	part no. (entry - M 20)	part no. (entry - Pg 11)	part no. (entry - M 20)
with stainless steel lever without cable gland, stainless steel lever	**CKAXW 03 I** **CKAXW 03 IA**			
without cable gland, stainless steel lever without cable gland, stainless steel lever	**CKAXW 03 IAP** **CKAXW 03 AP**	**MKAXW IAP20** **MKAXW AP20**		
with pegs, top entry with pegs, side entry			**CKAW 03 V** **CKAW 03 VA**	**MKAW V20** **MKAW VA20**
with stainless steel lever, top entry			**CKAXW 03 VG**	**MKAXW VG20**
gasket and screw kit for IP66/IP67 [1] for CK, CQ 05, CKS inserts	**CKR 65**		**CKR 65**	
gasket and screw kit for IP66/IP67 [1] for CD 08 inserts	**CKR 65 D**		**CKR 65 D**	

panel cut-out for bulkhead mounting housings in mm



1) To obtain the protection rating IP66/IP67 a kit is provided that includes a gasket to fit under the insert fixing screws supplied with the kit (see illustrative example)

Note:
CQ 12 inserts are already supplied with a gasket and screw which ensure IP66/IP67 protection rating.



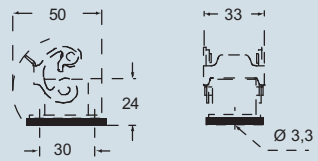
Type 12
Type 4/4X only
with CKR 65 (D)

IP66/IP67 with CKR 65 (D) [1]
IP69K (compliant with DIN 40050-9)

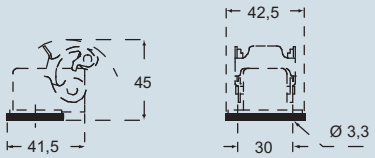
dimensions shown are not binding
and may be changed without notice

dimensions in mm

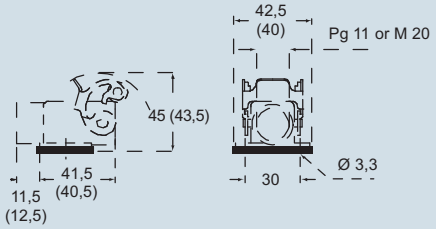
CKAXW I



CKAXW IA

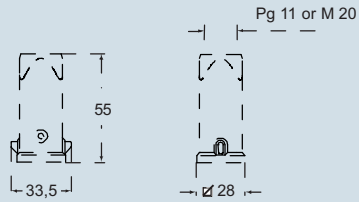


CKAXW IAP (CKAXW AP) and
MKAXW IAP (MKAXW AP)

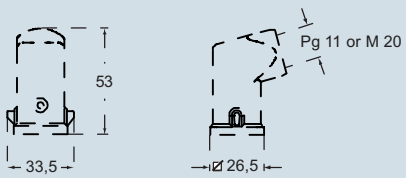


dimensions in mm

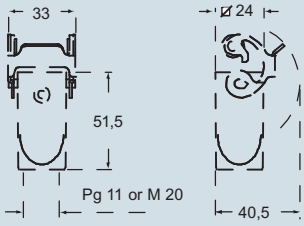
CKAW V and **MKAW V**



CKAW VA and **MKAW VA**



CKAXW VG and **MKAXW VG**



W-TYPE - size 21.21

inserts:

CK	15	poles + ⏚	47
CK	10	poles + ⏚	72
CK	10	poles + ⏚	73
MIXO	1	module	156÷195

insert centre distance:
49 x 16 mm

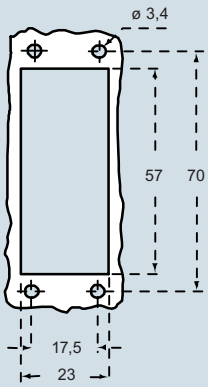
The covers for L and LG versions cannot be used together with coding pins.
If this application is required, please contact ILME SpA.

housings and cover

hoods and cover

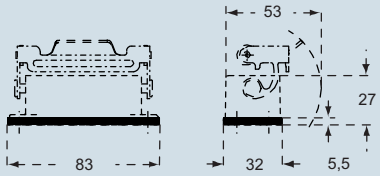
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housing with lever	**CZIW 15 L**	—						
surface mounting housing, with lever	**CZPW 15 L2**	16 x 2	**MZPW 15 L225**	25 x 2				
cover with pegs (for 1 lever enclosures)	**CZCW 15 L**							
enclosure with pegs, side entry					**CZOW 15 L**	16	**MZOW 15 L20**	20
enclosure with pegs, side entry							**MZOW 15 L25**	25
enclosure with pegs, side entry, high construction					**CZAOW 15 L21**	21	**MZAOW 15 L25**	25
enclosure with pegs, top entry					**CZVW 15 L**	13,5	**MZVW 15 L20**	20
enclosure with pegs, top entry, high construction					**CZAVW 15 L21**	21	**MZAVW 15 L25**	25
cover with lever (for enclosures with pegs)					**CZCW 15 LG**			

panel cut-out for bulkhead mounting housing in mm

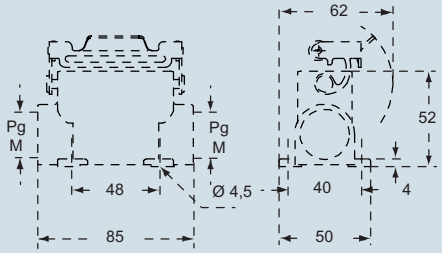


dimensions in mm

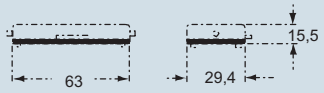
CZIW L



CZPW L and **MZPW L**

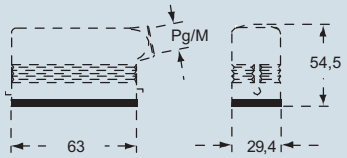


CZCW L

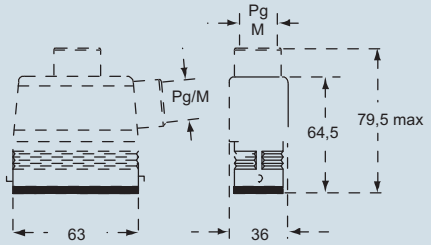


dimensions in mm

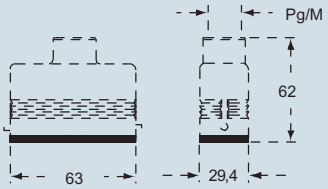
CZOW L and **MZOW L**



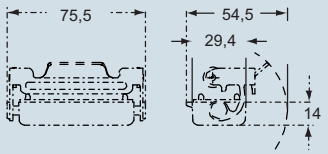
CZAOW L - MZAOW L and **CZAVW L - MZAVW L**



CZVW L and **MZVW L**



CZCW LG



cULus Type 4/4X/12

IP66 IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice

inserts:

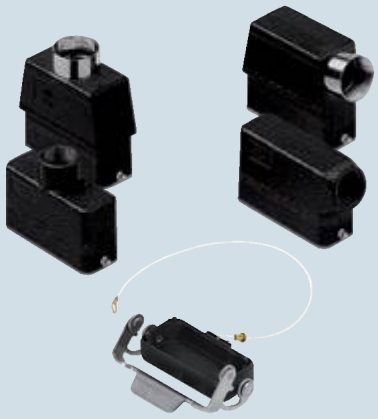
CD	25	poles + ⏚	48
CDD	38	poles + ⏚	60
CDA	16	poles + ⏚	74
CK	16	poles + ⏚	75

insert centre distance:
66 x 16 mm

The covers for L and LG versions cannot be used together with coding pins.
If this application is required, please contact ILME SpA.

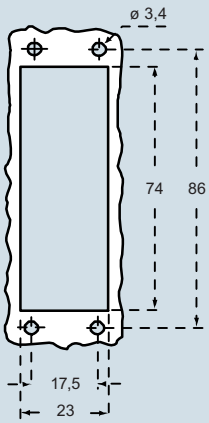
housings and cover

hoods and cover



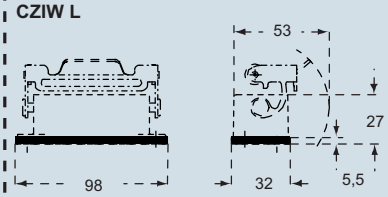
description	part no.	entry Pg	part no. no.	entry M	part no. no.	entry Pg	part no.	entry M
bulkhead mounting housing with lever	**CZIW 25 L**	—						
surface mounting housing, with lever	**CZAPW 25 L2**	16 x 2	**MZAPW 25L225**	25 x 2				
cover with pegs (for 1 lever enclosures)	**CZCW 25 L**							
enclosure with pegs, side entry					**CZOW 25 L**	16	**MZOW 25 L20**	20
enclosure with pegs, side entry							**MZOW 25 L25**	25
enclosure with pegs, side entry, high construction					**CZAOW 25 L21**	21	**MZAOW 25 L25**	25
enclosure with pegs, top entry					**CZVW 25 L**	16	**MZVW 25 L20** *	20
enclosure with pegs, top entry, high construction					**CZAVW 25 L21**	21	**MZAVW 25 L25**	25
cover with lever (for enclosures with pegs)					**CZCW 25 LG**			

panel cut-out for bulkhead mounting housings in mm

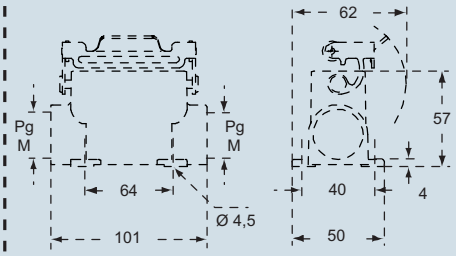


dimensions in mm

CZIW L



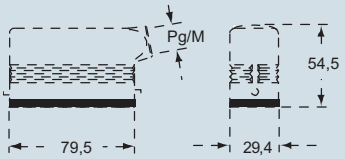
CZAPW L and **MZAPW L**



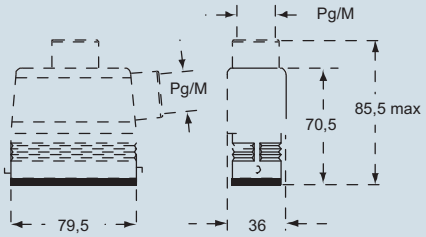
CZCW L

dimensions in mm

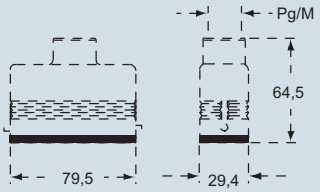
CZOW L and **MZOW L**



CZAOW L - MZAOW L and **CZAVW L - MZAVW L**

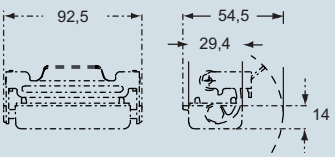


CZVW L and **MZVW L**



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

CZCW LG



c UL us Type 4/4X/12

IP66 IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice

CH - CA and MH - MA enclosures size “66.40” for aggressive environments

inserts:

CD	50	poles + ⏚	50
CDD	76	poles + ⏚	63
CDA	32	poles + ⏚	76
CDC	32	poles + ⏚	77

insert dimensions:
2 x (66 x 16) mm

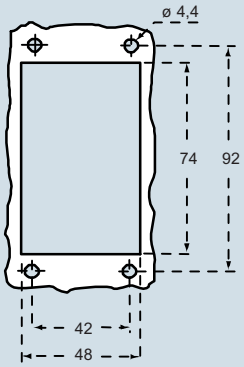
CHCW 50 and CHCW 50 G covers cannot be used together with coding pins. If this application is required, please contact ILME SpA.

housings and cover

hoods and cover

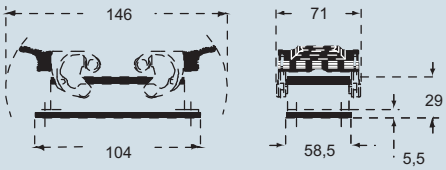
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housings with lever	**CHIW 50**	—						
surface mounting housing, with lever	**CHPW 50.21**	21	**MHPW 50.32**	32				
surface mounting housing, with lever	**CHPW 50.229**	29 x 2	**MHPW 50.250**	50 x 2				
cover with 4 pegs (for housings with 2 levers)	**CHCW 50**							
enclosure with pegs, side entry					**CHOW 50**	21	**MHOW 50.25**	25
enclosure with pegs, side entry							**MHOW 50.32**	32
enclosure with pegs, side entry, high construction					**CAOW 50.29**	29	**MAOW 50.32**	32
enclosure with pegs, top entry, high construction					**CAVW 50.29**	29	**MAVW 50.32**	32
cover with 2 levers (for enclosures with 4 pegs)					**CHCW 50 G**			

panel cut-out for bulkhead mounting housings in mm

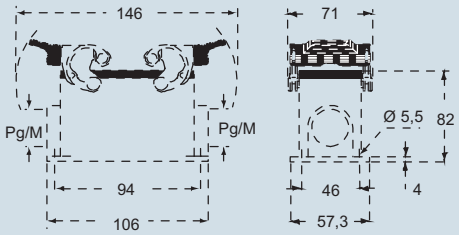


dimensions in mm

CHIW



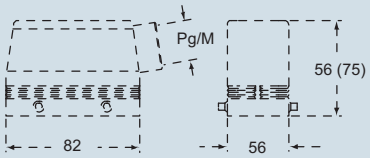
CHPW and **MHPW**



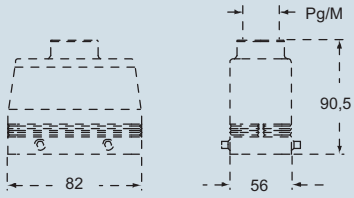
CHCW

dimensions in mm

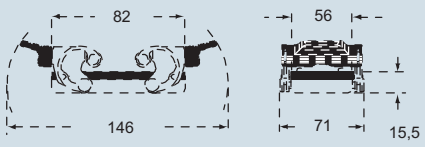
CHOW (CAOW) and **MHOW (MAOW)**



CAVW and **MAVW**



CHCW G



cULus Type 4/4X/12

IP66 IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice

inserts:

CDD	24	poles + ⏚	59
CQE	10	poles + ⏚	80
CSH	6	poles + ⏚	88
CCE	6	poles + ⏚	94
CNE, CSE, JCNE, JCSE	6	poles + ⏚	95 and 106
CSS	6	poles + ⏚	118
CT, CTE, CTSE *) (16A)..	6	poles + ⏚	126 and 130
MIXO	2	modules	156÷195

***) only for enclosure CHIW 06 L**

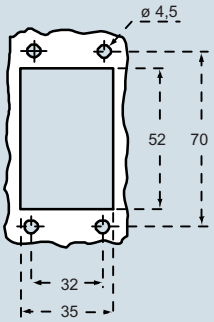
insert centre distance:
44 x 27 mm

housings and cover

hoods and cover

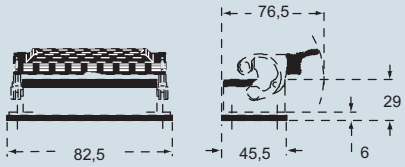
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housing with lever surface mounting housing, with lever	**CHIW 06 L** **CAPW 06 L**	— 21	**MAPW 06 L32**	32				
cover with pegs (for 1 lever enclosures)	**CHCW 06 L**							
enclosure with pegs, side entry,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

panel cut-out for bulkhead mounting housings in mm

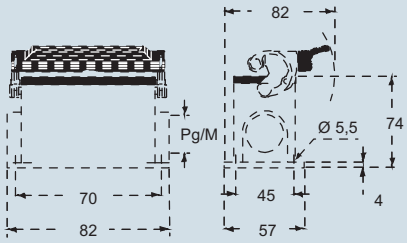


dimensions in mm

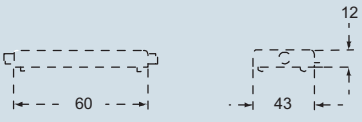
CHIW L



CAPW L and **MAPW L**

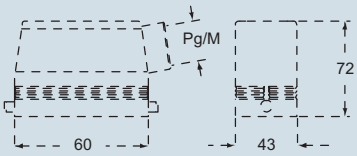


CHCW L

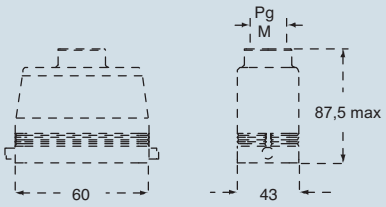


dimensions in mm

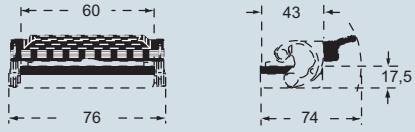
CAOW L and **MAOW L**



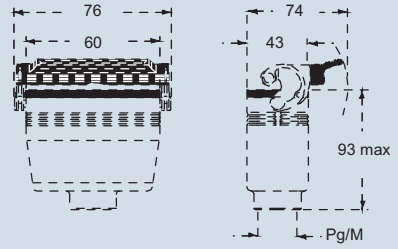
CAVW L and **MAVW L**



CHCW LG



CAVW LG and **MAVW LG**



Type 4/4X/12

IP66 IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice

CH - CA and MH - MA enclosures size “57.27” for aggressive environments

inserts:

CDD	42	poles + ⏚	61
CQE	18	poles + ⏚	81
CSH	10	poles + ⏚	89
CCE	10	poles + ⏚	96
CNE, CSE, JCNE, JCSE	10	poles + ⏚	97 and 107
CSS	10	poles + ⏚	119
CT, CTE, CTSE *) (16A)	10	poles + ⏚	127 and 131
CMSE	3+2	poles + ⏚	135
CMCE	3+2(aux)	poles + ⏚	134
CME	3+2(aux)	poles + ⏚	135
CX	8/24	poles + ⏚	151
MIXO	3	modules	156÷195

***) only for enclosure CHIW 10**

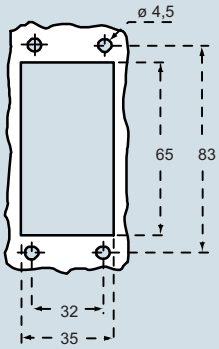
insert centre distance: **57 x 27 mm**

housings and cover

hoods and cover

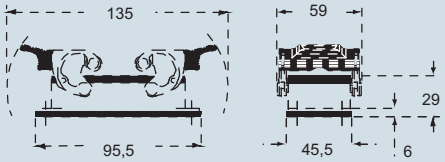
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housing with levers	**CHIW 10**	—						
surface mounting housing, with levers, high construction	**CAPW 10.21**	21	**MAPW 10.32**	32				
cover with 4 pegs (for enclosures with 2 levers)	**CHCW 10**							
enclosure with pegs, side entry, high construction					**CAOW 10.21**	21	**MAOW 10.32**	32
enclosure with pegs, top entry, high construction					**CAVW 10.21**	21	**MAVW 10.32**	32
cover with 2 levers (for enclosures with 4 pegs)					**CHCW 10 G**			
enclosure with levers and gasket, top entry, high construction					**CAVW 10 G**	21	**MAVW 10 G32**	32

panel cut-out for bulkhead mounting housings in mm

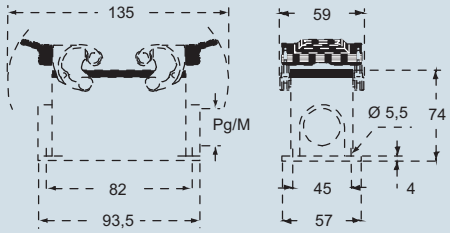


dimensions in mm

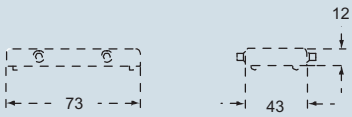
CHIW



CAPW and **MAPW**

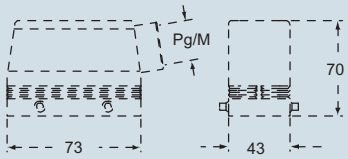


CHCW

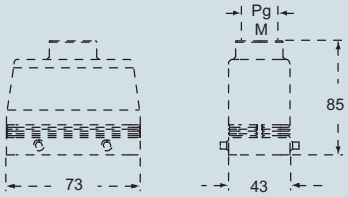


dimensions in mm

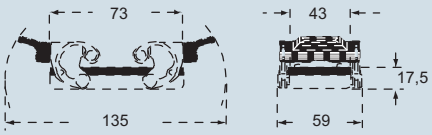
CAOW and **MAOW**



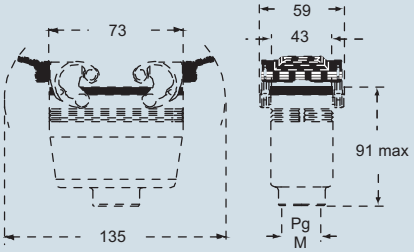
CAVW and **MAVW**



CHCW G



CAVW G and **MAVW G**



Type 4/4X/12

IP66 IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice

CH - CA and MH - MA enclosures size “77.27” for aggressive environments

inserts:

CD	40	poles + ⏚	49
CT, CTS *) (10A)	40	poles + ⏚	56
CDD	72	poles + ⏚	62
CQE	32	poles + ⏚	82
CSH	16	poles + ⏚	90
CCE	16	poles + ⏚	98
CNE, CSE, JCNE, JCSE	16	poles + ⏚	99 and 108
CSS	16	poles + ⏚	120
CT, CTE, CTSE *) (16A)	16	poles + ⏚	128 and 132
CMSE, CMCE	6+2(aux)	poles + ⏚	137 and 136
CME	6+2(aux)	poles + ⏚	137
CP	6	poles + ⏚	149
CX	6/36/ and 12/2	poles + ⏚	152÷153
CX	4/0/ and 4/2	poles + ⏚	154
MIXO	4	modules	156÷195

***) only for enclosure CHIW 16**

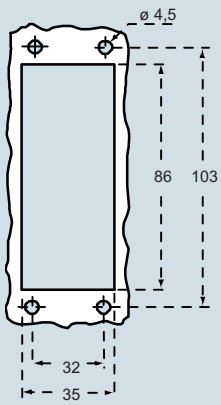
insert centre distance: **77.5 x 27 mm**

housings and cover

hoods and cover

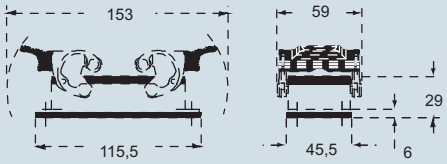
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housing with levers	**CHIW 16**	—						
surface mounting housing, with levers, high construction	**CAPW 16.21**	21	**MAPW 16.32**	32				
cover with 4 pegs (for enclosures with 2 levers)	**CHCW 16**							
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							**MHOW 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)					**CHCW 16 G**			
enclosure with levers, top entry, high construction					**CAVW 16 G29**	29	**MAVW 16 G32**	32

panel cut-out for bulkhead mounting housings in mm

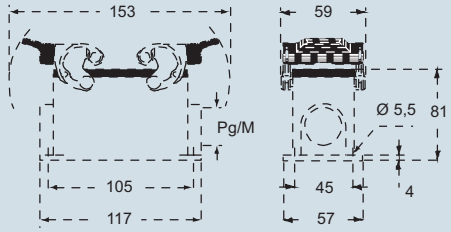


dimensions in mm

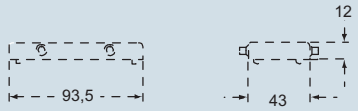
CHIW



CAPW and **MAPW**

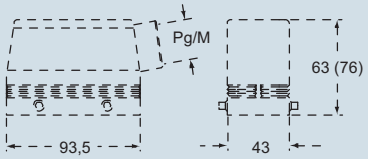


CHCW

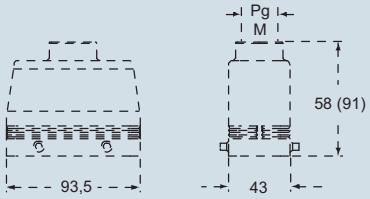


dimensions in mm

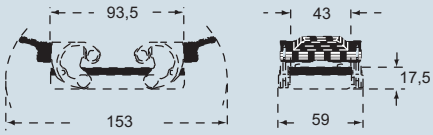
CHOW (CAOW) and **MHOW (MAOW)**



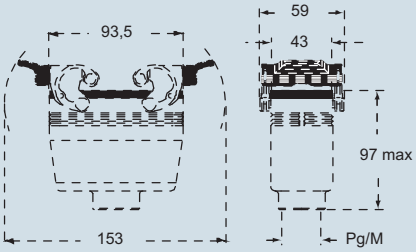
CHVW (CAVW) and **MHVW (MAVW)**



CHCW G



CAVW G and **MAVW G**



Type 4/4X/12

IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice

CH - CA and MH - MA enclosures size “104.27” for aggressive environments

inserts:

CD	64	poles + ⏚	51
CT, CTS *) (10A)	64	poles + ⏚	57
CDD	108	poles + ⏚	64
CQE	46	poles + ⏚	83
CSH	24	poles + ⏚	91
CCE	24	poles + ⏚	100
CNE, CSE, JCNE, JCSE	24	poles + ⏚	101 and 109
CSS	24	poles + ⏚	121
CT, CTE, CTSE *) (16A)	24	poles + ⏚	129 and 133
CMSE, CMCE	10+2(aux)	poles + ⏚	139 and 138
CME	10+2(aux)	poles + ⏚	139
CME	16+2(aux)	poles + ⏚	145
CMCE	16+2(aux)	poles + ⏚	144
CX	4/8	poles + ⏚	155
MIXO	6	modules	156÷195

***) only for enclosure CHIW 24**

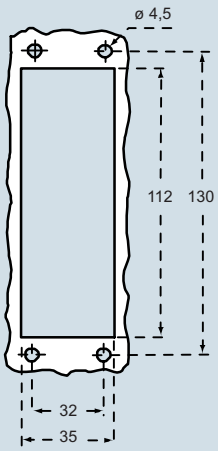
insert centre distance: **104 x 27 mm**

housings and cover

hoods and cover

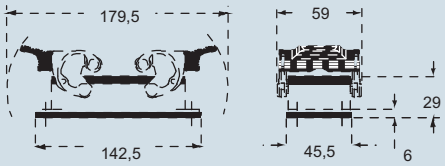
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housing with levers	**CHIW 24**	—						
surface mounting housing, with levers, high construction	**CAPW 24.21**	21	**MAPW 24.32**	32				
cover with 4 pegs (for enclosures with 2 levers)	**CHCW 24**			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

panel cut-out for bulkhead mounting housings in mm

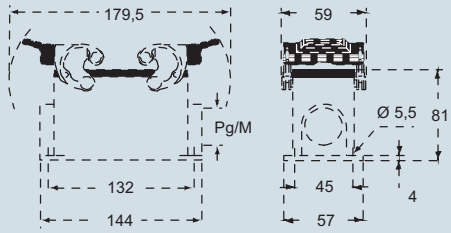


dimensions in mm

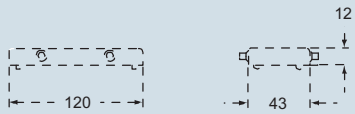
CHIW



CAPW and **MAPW**

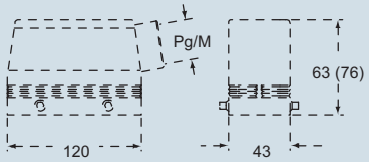


CHCW

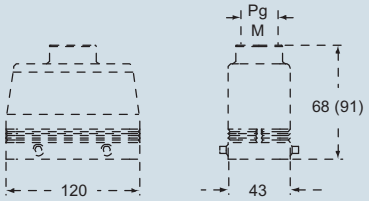


dimensions in mm

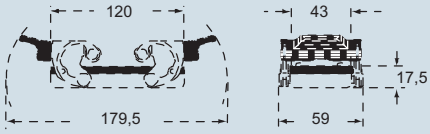
CHOW (CAOW) and **MHOW (MAOW)**



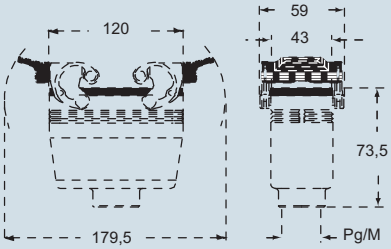
CHVW (CAVW) and **MHVW (MAVW)**



CHCW G



CHVW G and **MHVW G**



cULus Type 4/4X/12

IP66 IP69K (compliant with DIN 40050-9)

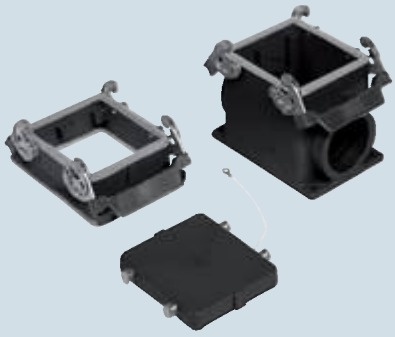
dimensions shown are not binding
and may be changed without notice

inserts:

CD	80	poles + ⏚	52
CDD	144	poles + ⏚	65
CQE	64	poles + ⏚	84
CSH	32	poles + ⏚	92
CCE	32	poles + ⏚	102
CNE, CSE, JCNE, JCSE	32	poles + ⏚	103 and 110
CSS	32	poles + ⏚	122
CMSE	12+4(aux)	poles + ⏚	141
CMCE	12+4(aux)	poles + ⏚	140
CME	12+4(aux)	poles + ⏚	141
CP	12	poles + ⏚	150
MIXO	4+4	modules	156÷195

insert centre distance:
2 x (77.5 x 27) mm

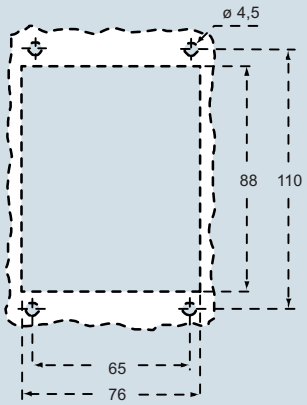
housings and cover



hoods and cover

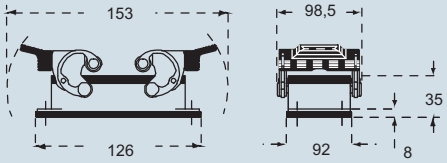
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housing with levers	**CHIW 32**	—						
surface mounting housing, with levers	**CHPW 32**	36	**MHPW 32.50**	50				
cover with 4 pegs (for enclosures with 2 levers)	**CHCW 32**							
enclosure with pegs, side entry,					**CHOW 32**	36	**MHOW 32.40**	40
enclosure with pegs, top entry,					**CHVW 32**	36	**MHVW 32.40**	40
cover with 2 levers (for enclosures with 4 pegs)					**CHCW 32 G**			
enclosure with levers and gasket, top entry, high construction					**CHVW 32 G**	36	**MHVW 32 G40**	40

panel cut-out for bulkhead mounting housings in mm

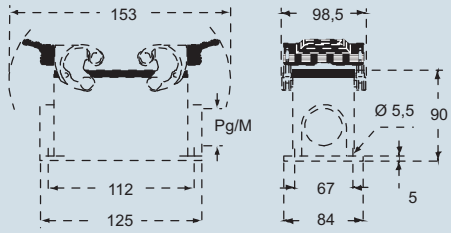


dimensions in mm

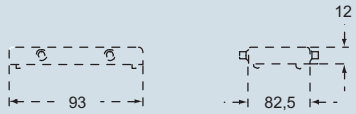
CHIW



CHPW and **MHPW**

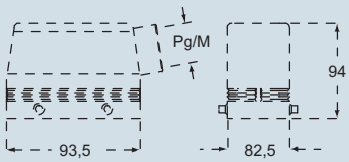


CHCW

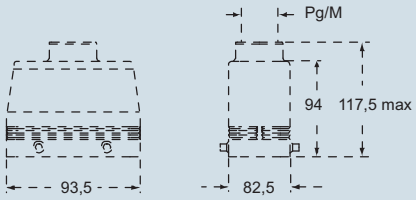


dimensions in mm

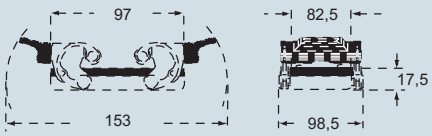
CHOW and **MHOW**



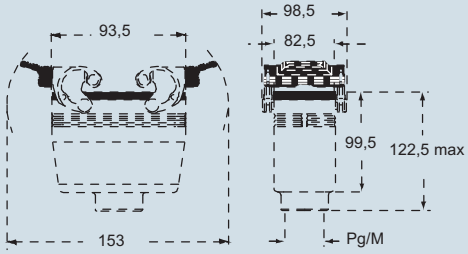
CHVW and **MHVW**



CHCW G



CHVW G and **MHVW G**



Type 4/4X/12

IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice

CH and **MH** enclosures size “104.62” version for aggressive environments

inserts:

CD	128	poles + ⏚	53
CDD	216	poles + ⏚	66
CQE	92	poles + ⏚	85
CSH	48	poles + ⏚	93
CCE	48	poles + ⏚	104
CNE, CSE, JCNE, JCSE	48	poles + ⏚	105 and 111
CSS	48	poles + ⏚	123
CMSE	20+4(aux)	poles + ⏚	143
CMCE	20+4(aux)	poles + ⏚	142
CME	20+4(aux)	poles + ⏚	143
CME	32+4(aux)	poles + ⏚	147
CMCE	32+4(aux)	poles + ⏚	146
MIXO	6+6	modules	156÷195

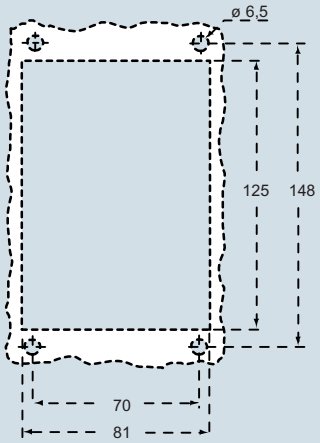
insert centre distance:
2 x (104 x 27) mm

bulkhead and surface mounting housings

hoods

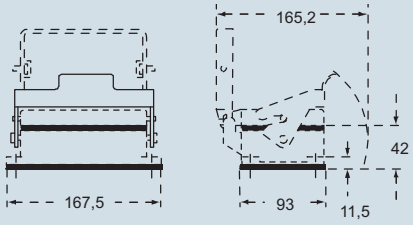
description	part no.	entry Pg	part no.	entry M	part no.	entry Pg	part no.	entry M
bulkhead mounting housings, with lever and cover	**CHIW 48 LS**	—						
surface mounting housings, with lever and cover	**CHPW 48 LS**	36 x 1/2	**MHPW 48 LS40**	40 x 1/2				
side entry, with pegs					**CHOW 48 L**	36	**MHOW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

panel cut-out for bulkhead mounting housings in mm

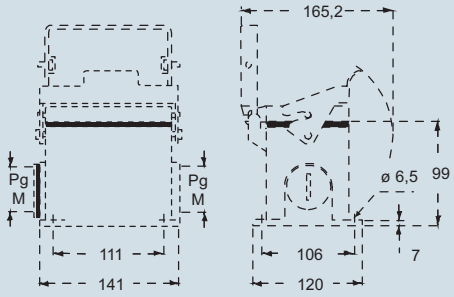


dimensions in mm

CHIW LS

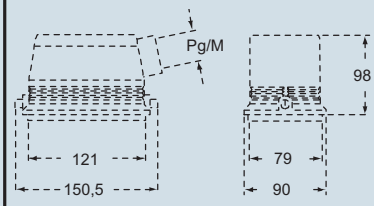


CHPW LS and **MHPW LS**

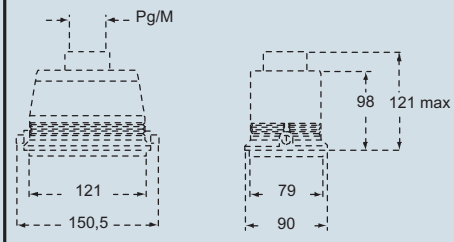


dimensions in mm

CHOW L and **MHOW L**



CHVW L and **MHVW L**



Type 4/4X/12

IP66 IP69K (compliant with DIN 40050-9)

dimensions shown are not binding
and may be changed without notice