Enclosures assembly screws

In the table below, the recommended minimum and maximum tightening torque to apply to the fixing screws of ILME bulkhead mounting housings are shown, assuming the use of steel screws with 8.8 resistance class and a good fixing panel surface according to the requirements mentioned therein.

Series	Number of screws	Screw size	Recommended torque		Flange sealing element
			(Nm)	(lb.in)	
CK/MK, CKX, CKA/MKA, CQ	2	M3	0,8 – 1,0	7,1 – 8,9	Gasket
MIXO ONE	4	M3	0,5 – 0,9	4,4 - 8,0	Gasket
CZI 15 /25	4	M3	0,8 – 1,0	7,1 – 8,9	Gasket
CHI 50	4	M4	1,2 – 1,8	10,6 – 15,9	Gasket
CHI 06 /10 /16 /24	4	M4	0,8 – 1,2	7,1 – 8,9	Gasket
CHI 32	4	M4	1,2 – 1,8	10,6 – 15,9	Gasket
CHI 48	4	M6	3,0 – 3,6	26,6 – 31,9	Gasket
CGK/MGK (IP68)	2	M4	0,8 – 1,2	7,1 – 8,9	O-ring
CGI/ MGI 06/ 10/ 16/ 24 (IP68)	2	M6	3,0 – 3,6	26,6 – 31,9	O-ring
T-TYPE, T-TYPE/H, T-TYPE/C, T-TYPE/ W	4	M4	0,8 – 1,2	7,1 – 8,9	Gasket

To guarantee the declared IP degree of protection of the housings reported in this catalogue, according to EN IEC 60529 or to the relevant Type rating per ANSI/UL 50 and 50E (for those products bearing approval to those ratings), the surface of the mounting panel must meet the following requirements (definitions are provided in ISO 4287 standard):

– Waviness Wt ≤ 0,2 mm over a distance of 200 mm (measured on the panel without load)

– Roughness Ra ≤ 16 µm

NOTE: The values of tightening torque indicated in the above table are just recommended values, that must be related – by the designer of the final application – to the resistance class of the screws (not included in the delivery), with the assumption that the mounting panel is sufficiently rigid (stiff). If the deflection of the panel, under the effect of tightening the screws, is greater than 0,7 mm over a distance of 100 mm, it is necessary to use the counter-flanges mentioned in our catalogue or the special flange gaskets available upon request (please contact our Sales Department). For the CGI/MGI IP68 enclosures the specific counter-flanges mentioned in our catalogue are always recommended.

Enclosures locking screws

Series	Number of screws	Screw size	Recommended tightening torque		Recommended size of screwdriver
			(Nm)	(lb.in)	
CGK/MGK	2	M4	1,2	10,6	1,0 x 5,5 or 7 mm hexagonal key
CG/MG	2	M6	2,5	22,1	1,6 x 10 or 10 mm hexagonal key

RANGE OF CONDUCTOR CROSS-SECTIONAL AREA AND STRIPPING LENGTH

Connector inserts connection technique	Range of conductor cross-sectional area		Stripping length
Screw	**(mm^2)**	**AWG**	**(mm)**
CK	0,75 – 2,5	18 – 14	6
CX 4/2, CX 4/8 (poles 16A) [1]	0,75 – 4	18 – 12	7
	0,75 – 2,5	18 – 14	7
CNE [1]	0,5 – 4	20 – 12	7
CNE..X	0,25 – 2,5	24 – 14	7
CDA [1]	0,5 – 4	20 – 12	7
CDA..X	0,25 – 2,5	24 – 14	7
CT 06..24	0,75 – 2,5	18 – 14	12
CT 40 and 64	0,75 – 2,5	18 – 14	12
CME [1]	0,5 – 4	20 – 12	7
CME..X	0,5 – 2,5	20 – 14	7
CP [1]	0,75 – 6	18 – 10	10,5
CX 4/.. (80A poles)	4 – 16	12 – 5	14
Crimp			
MIXO (5A), CX 25 IB	0,08 – 0,75	28 – 18	4
CQ 21	0,08 – 0,5	28 – 20	4
CDD, CD, MIXO (10A), CQ 12, CQ 07	0,14 – [2,5]*	26 – 14	8 – *[6 for 2,5 mm^2]
CCE, CDC, CMCE, CQ, CQE, CQEE, MIXO (16A)	0,14 – 4	26 – 12	7,5
CX, MIXO (40A), CQ4 03	1,5 – 2,5	16 – 14	9
	4 – 6	12 – 10	9.6
MIXO (70A)	10 – 25	7 – 4	15
MIXO (100A), CX 6/6	10 – 35	7 - 2	15
MIXO (200A)	16 – 70	6 - 2/0	15
Spring			
CSE, CSH, CTSE 06..24, CMSH, MIXO [CX 05 S [2], CX 05 SH], CSS	0,14 – 2,5	26 – 14	9 - 11
CTS 40/64	0,14 – 2,5 unprepared 0,14 – 1 prepared	26 – 14 unprepared 26 – 18 prepared	9 - 11
CKS, CKSH, CDS, CDSH, CSAH	0,14 – 2,5 unprepared 0,14 – 1,5 prepared	26 – 14 unprepared 26 – 16 prepared	9 - 11

[1] For CNE, CDA, CP, CME, "CX 4/8 – pole 16A" series connectors with screw terminal and conductor protection plate, the use of ferrules is not necessary (= unprepared conductor). The use of ferrules (= prepared conductor) causes a reduction in maximum useful cross-section to the lower size (e.g. 4 mm^2 unprepared - 2,5 mm^2 prepared).

[2] Available upon request.

CH C-TYPE standard version

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**

*) can be used only in bulkhead mounting housings

bulkhead mounting housings with 2 levers or 4 pegs



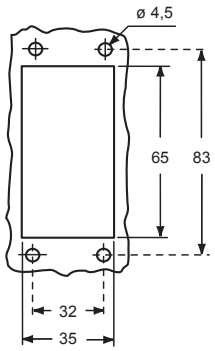
bulkhead mounting housings with single lever



description	part No.	part No.
with one or two levers	**CHI 10**	**CHI 10 L**
with pegs [1]	**CHI 10 C**	
with pegs and aluminum cover [1]	**CHI 10 CS**	
with pegs and plastic cover [1]	**CHI 10 CP**	
with lever and cover		**CHI 10 LS**

[1] may be combined with enclosures:
- CHO/CAO 10 X and CHV/CAV 10 X
- MHO/MAO 10 X and MHV/MAV 10 X

panel cut-out for bulkhead mounting housings



IMPORTANT NOTE: The enclosures ensure IP66/IP69 degree of protection (or IP65 for hinged cover versions) when mated and locked with the closing levers.
The cover (CS, CP) only ensures mechanical protection, but does not ensure IP65 degree of protection.

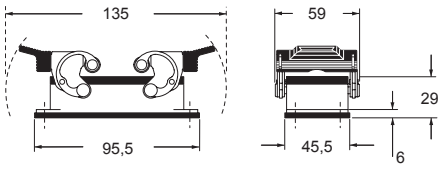
CR CLK
locking device for CLASS locking levers
(page 666)



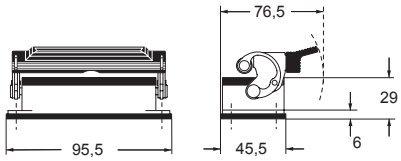
Type 4/4X/12
(except enclosures with plastic cover)

▲ ●

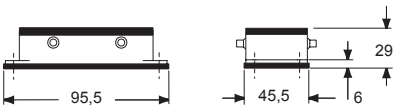
CHI ▲



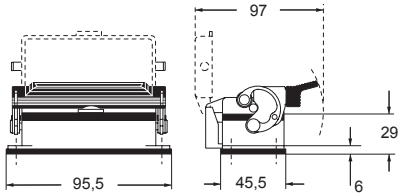
CHI L ▲



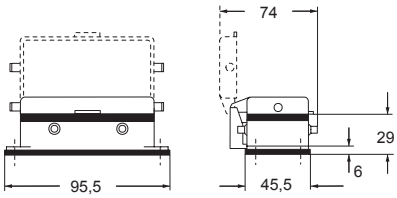
CHI C ▲



CHI LS ●



CHI CS/CP ●



ANGLED VERSION
(page 450)



C-TYPE

CH bulkhead connectors

inserts		page:
CD	40, 64 poles + ⏚	**70, 72**
CDD	24, 42, 72, 108 poles + ⏚	**76 - 81**
CDS	9, 18, 27, 42 poles + ⏚	**-**
CDSH	9, 18, 27, 42 poles + ⏚	**86 - 89**
CDSH NC	6 poles + ⏚	**95**
CNE	6, 10, 16, 24 poles + ⏚	**110 - 113**
CSE	6, 10, 16, 24 poles + ⏚	**-**
CSH	6, 10, 16, 24 poles + ⏚	**110 - 113**
CSH S	6, 10, 16, 24 poles + ⏚	**122 - 125**
CCE	6, 10, 16, 24 poles + ⏚	**130 - 133**
CMSH	3+2, 6+2, 10+2 (aux) poles + ⏚	**136 - 140**
CMCE	3+2, 6+2, 10+2 (aux) poles + ⏚	**137 - 141**
CSS	6, 10, 16, 24 poles + ⏚	**148 - 151**
CQE	10, 18, 32, 46 poles + ⏚	**168 - 171**
CQEE	40, 64 poles + ⏚	**176 - 177**
CP	6 poles + ⏚	**178**
CX	8/24, 6/36, 12/2 poles + ⏚	**194 - 199**
CX	4/0, 4/2, 4/8, 6/6 poles + ⏚	**200 - 206**
MIXO	2, 3, 4, 6 modules	**262 - 317**

bulkhead mounting housings with 2 or 4 pegs

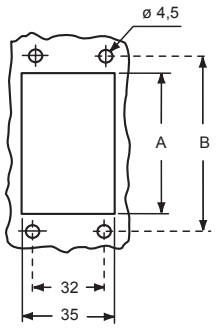


bulkhead mounting housings



description	part No.	part No. C-TYPE	part No. C7
size “44.27”	**CHI 06 LCH**	**CHI 06 L**	**C7I 06 L**
size “57.27”	**CHI 10 CH** [1]	**CHI 10**	**C7I 10**
size “77.27”	**CHI 16 CH** [1]	**CHI 16**	**C7I 16**
size “104.27”	**CHI 24 CH** [1]	**CHI 24**	**C7I 24**

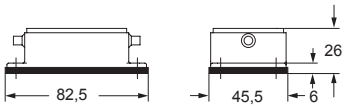
panel cut-out for bulkhead mounting housings



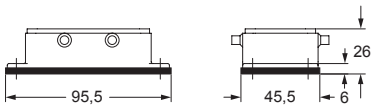
part No.	A	B
CHI 06 LCH - CHI 06 L - C7I 06 L	52	70
CHI 10 CH - CHI 10 - C7I 10	65	83
CHI 16 CH - CHI 16 - C7I 16	86	103
CHI 24 CH - CHI 24 - C7I 24	112	130

[1] may be combined also with enclosures:
- surface mounting housings (CHP / MHP...)
- hoods with lever and gasket (LG)

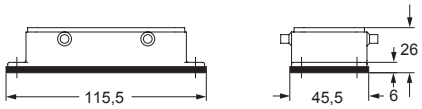
CHI 06 LCH



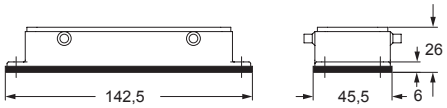
CHI 10 CH



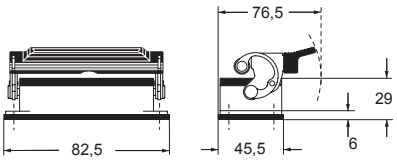
CHI 16 CH



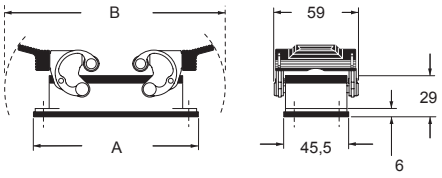
CHI 24 CH



CHI 06 L

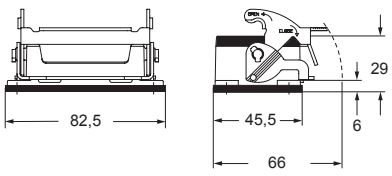


CHI

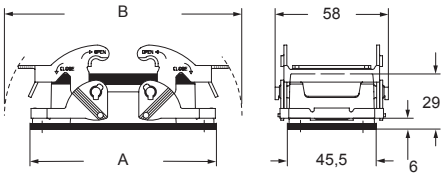


part No.	A	B
CHI 10	95,5	135
CHI 16	115,5	153
CHI 24	142,5	179,5

C7I 06 L



C7I



part No.	A	B
C7I 10	95,5	122
C7I 16	115,5	142,5
C7I 24	142,5	169

IMPORTANT NOTE: The enclosures ensure IP66 degree of protection when mated and locked with the closing levers.

c UL us Type 4/4X/12

EN 60529 IP66 IP69 IEC 60529 **CHI**

EN 60529 IP66 IP67 IP69 IEC 60529 **C7I**

dimensions shown in mm are not binding and may be changed without notice