Thermoplastic enclosures
size “32.13” standard or EMC versions

SUM-UP

For use with all size “32.13” connector inserts

Characteristics of materials for CQ - MQ series

- In self-extinguishing thermoplastic material jet black RAL 9005;
- gaskets in anti-aging, oil-resistant, grease-resistant and fuel-resistant NBR vinyl nitrile elastomer;
- with single-block locking lever in self-extinguishing thermoplastic material.

UL certified for USA and Canada for Type 4, 4X and 12 degrees of protection (enclosure type ratings, equivalent to NEMA rating), printed on the packaging.

IP66/IP67/IP69 degree of protection.

CQ insulating version

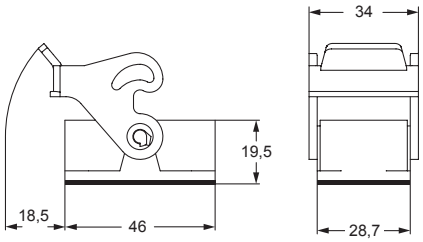
inserts		page:
CQ 04/2	4 poles + 2 poles + ⏚	191
CQ 08	8 poles + ⏚	192
CQ 17	17 poles + ⏚	193

bulkhead mounting housings with single lever

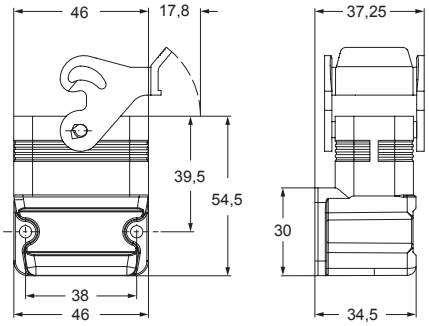
angled bulkhead mounting housings with single lever

description	part No.	part No.	entry Pg
with lever	**CQ 08 I**		
without cable entry, with lever		**CQ 08 IA**	
with cable entry, with lever		**CQ 08 IAP**	21

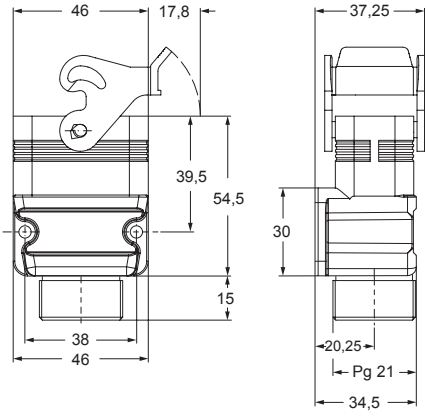
CQ I



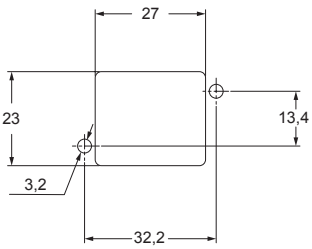
CQ IA



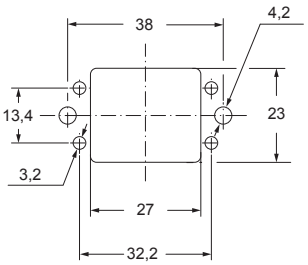
CQ IAP



panel cut-out for CQ I enclosure



panel cut-out for CQ IA - CQ IAP enclosure



Type 4/4X/12

EN 60529 IP66 IP67 IP69 IEC 60529

CQ - MQ insulating version

inserts		page:
CQ 04/2	4 poles + 2 poles + ⏚	**191**
CQ 08	8 poles + ⏚	**192**
CQ 17	17 poles + ⏚	**193**

hoods with 2 pegs

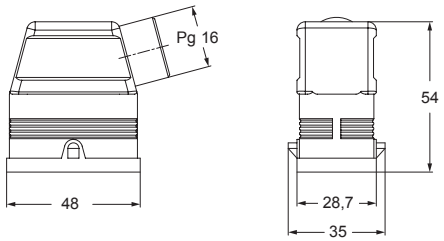
hoods with 2 pegs

description	part No.	entry Pg	part No.	entry M
with pegs, side entry [1]	**CQ 08 VA**	16		
with pegs, top entry [1]	**CQ 08 V**	21		
with pegs, side and top entry [2]			**MQ 08 VO225**	25 x 2

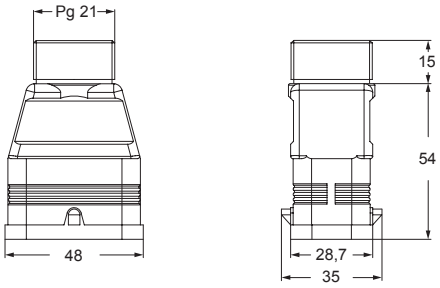
[1] Pg male thread on enclosure exterior

[2] metric thread on the internal enclosure;
accessories to be ordered separately:
- **AL M25DN** insulating black sealing plug M25
- **AL M25IN** insulating black cable gland M25

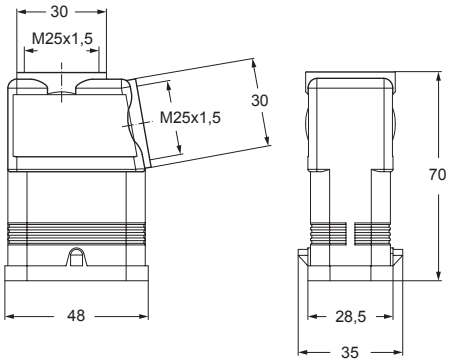
CQ VA



CQ V



MQ VO



Type 4/4X/12
(pending for MQ 08 VO225)

EN 60529 IP66 IP67 IP69 IEC 60529

CQ insulating version

inserts		page:
CQ 04/2	4 poles + 2 poles + ⏚	**191**
CQ 08	8 poles + ⏚	**192**
CQ 17	17 poles + ⏚	**193**

hoods with single lever

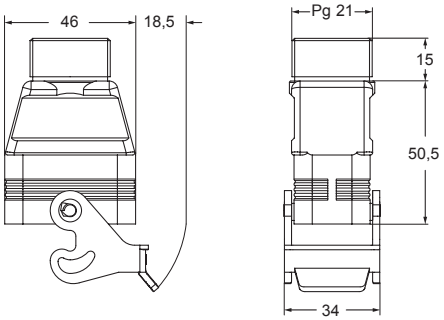
covers with 2 pegs
thermoplastic resin cable glands

description	part No.	entry Pg	part No.
with lever, top entry [1]	**CQ 08 VG**	21	
cover with 2 pegs for female inserts cover with 2 pegs for male inserts			**CQ 08 C** **CQ 08 CA**
cable gland head and gasket for CQ 08 VA enclosure cable gland head and gasket for CQ 08 IAP/V/VG enclosure			**CRQ 16** **CRQ 21**

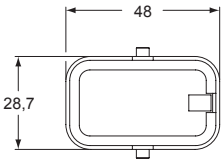
[1] Pg male thread on enclosure exterior

cable diameters for cable glands:
- **CRQ 16**: 10 - 14,5 mm
- **CRQ 21**: 14 - 18 mm

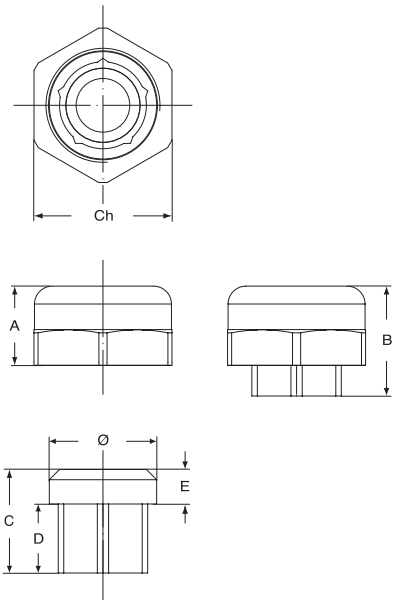
CQ VG



CQ C and **CQ CA**



CRQ 16 and **CRQ 21**



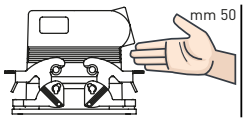
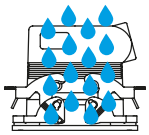
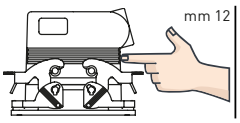
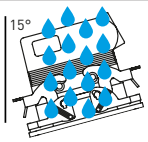
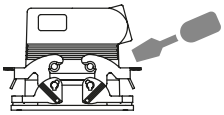
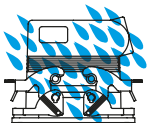
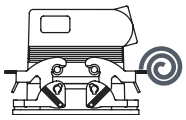
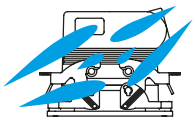
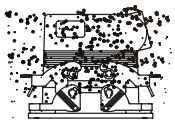
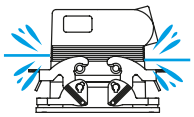
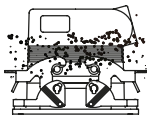
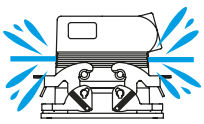
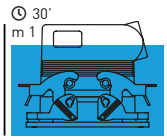
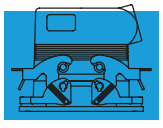
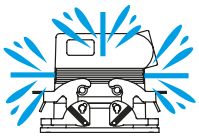
part No.	A	B	C	D	E	Ø	Ch
CRQ 16	15,5	21,5	20,25	13,5	6,75	21	27
CRQ 21	18,2	27,5	25	15,5	9	26,5	33

Type 4/4X/12

EN 60529 IP66 IP67 IP69 IEC 60529

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 againstsolid 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)
			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

RATING EXAMPLE

IP 6 5

Description according to IEC 60529

CHANGEOVER FROM PG THREADS TO METRIC

After 31st 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 1st 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 1st 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 1st 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

∅ 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