

**standard version**



**description**

This series has been developed for application in electric and electronic machinery, control units, electric panels, control equipment, industrial environments, and in general, wherever a sectional and reliable connection is required for power and signal circuits. The inserts of the CMCE series (excepting the 16+2 poles) and of the CMSE series may use standard enclosures also for uses of up to 830V.

UL certified for USA and Canada for NEMA 4, NEMA 4X and NEMA 12 protection ratings, printed on the packaging. IP65, IP66 and IP69K protection ratings (IP44 and IP67 for CK and MK series).

**Note:** the enclosures are currently printed with the wording **IP65**.

Characteristics of the materials used:

**CK, MK and CQ series**

- in self-extinguishing grey RAL 7035 or black thermoplastic material for insulating enclosures (in the CQ version, only available in black) or metallic enclosures
- metallic enclosures with epoxy-polyester powder coating
- gaskets in anti-aging, oil-resistant, grease-resistant and fuel-resistant vinyl nitrile elastomer
- monoblock locking device in stainless steel or galvanised stainless steel for metallic enclosures
- monoblock locking device in self-extinguishing thermoplastic material for insulating enclosures

**CZ, CH, CA and MZ, MH, MA, MF, MZF series**

- In die-cast aluminium alloy
- with epoxy-polyester powder coating
- gaskets in anti-aging, oil-resistant, grease-resistant and fuel-resistant vinyl nitrile elastomer
- locking device with levers, springs and pegs in stainless steel
- monoblock lever handles in stainless steel (for CZ and MZ enclosures)
- lever handles in self-extinguishing thermoplastic material reinforced with glass fibres, UL approved (for CH, CA and MH, MA enclosures)

**insulated 830V version**



**description**

Applications as for the standard version. The enclosures do not have tabs and allow the insertion of inserts with rated voltage up to 830V (series CME). The enclosures contain supplementary insulating strips inside.

UL certified for USA and Canada for NEMA 4, NEMA 4X and NEMA 12 protection ratings, printed on the packaging. IP65, IP66 and IP69K protection ratings.

**Note:** the enclosures are currently printed with the wording **IP65**.

Characteristics of the materials used:

**CM, CMA and MM, MMA, MMF series**

- In die-cast aluminium alloy
- with epoxy-polyester powder coating
- gaskets in anti-aging, oil-resistant, grease-resistant and fuel-resistant vinyl nitrile elastomer
- locking device with levers, springs and pegs in stainless steel
- lever handles in self-extinguishing thermoplastic material reinforced with glass fibres, UL approved
- supplementary insulation inside enclosures

**Changeover from Pg threads to M metric threads**

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 grippers for electrical installations" has been in force since 1st January 2000. This standard defines the new sizes with metric threads for cable grippers 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 grippers.

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 grippers. Cable gripper producers have introduced the new metric series to add to the Pg size series, to gradually replace the latter type. The transition period indicated in the new standard should have ended on 1st March 2001, after which date the use of entry devices for Pg cables 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 CE marking of these items, observance of the safety conditions specified by the Low Voltage Directive is sufficient. To distinguish mobile and fixed wall-mounted enclosures with metric outlets from the relevant Pg versions (marked with a C pre-code), the ILME metric types are marked 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.

**Transposition Pg → metric**

Pg	metric
Pg 11	M 20
Pg 13.5	M 20
Pg 16	M 20
Pg 21	M 25
Pg 29	M 32
Pg 36	M 40
Pg 42	M 50