CZ7 - MZ7

Rigid coupling

Enclosures with rigid stainless steel lever to assure an IP66/IP67/IP69 dust and watertight seal.

SUM-UP

- **CZ7 and MZ7 series: stainless steel locking lever, rigid**
- **Sizes 49.16, 66.16**
- **With and without hinged cover**
- **Bulkhead or surface mounting**
- **Recommended in case of vibrations or heavy weight of cables.**

IP65, IP66/IP67/IP69 degrees of protection according to model.

Characteristics of materials

for CZ7 and MZ7 series

- Made of die cast aluminium alloy;
- with epoxy-polyester thermosetting powder coating;
- gaskets in anti-aging, oil-resistant, grease-resistant and fuel-resistant vinyl nitrile elastomer;
- locking device integrally in stainless steel;
- ambient temperature range: -40 °C / +125 °C.

CZ7 - MZ7 standard version RIGID LEVER

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

bulkhead mounting housings with single lever

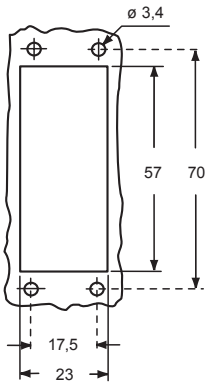
STAINLESS STEEL LEVER

surface mounting housings with single lever

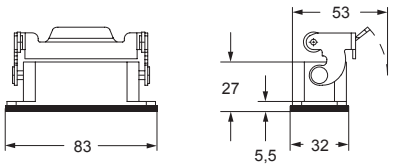
STAINLESS STEEL LEVER

description	part No.	part No.	entry M
with single lever	**CZ7I 15 L**		
with single lever and cover	**CZ7I 15 LS**		
with single lever with single lever		**MZ7P 15 L25** **MZ7P 15 L225**	25 25 x 2
with single lever and cover with single lever and cover		**MZ7P 15 LS25** **MZ7P 15LS225**	25 25 x 2

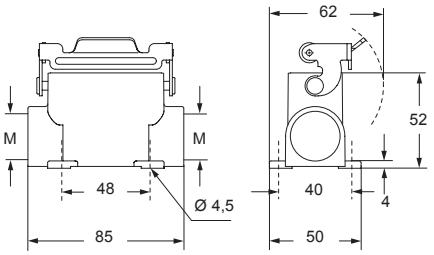
panel cut-out for bulkhead mounting housings



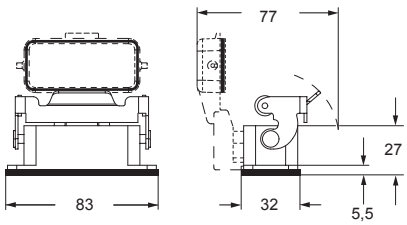
CZ7I L



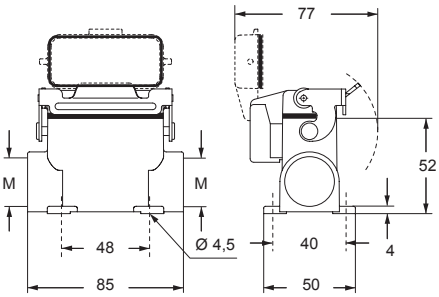
MZ7P L



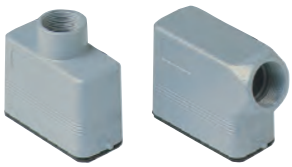
CZ7I LS



MZ7P LS



Hoods (page 376)



The rigid lever offers an IP66/IP67/IP69 degree of protection (according to EN 60529) when fitted with a complete and coupled connector and used with ILME standard hoods in die cast aluminum with pegs (without adapter).

cULus Type 4/4X/12

IP65 insulating cable gland or fittings without gasket

IP66 IP67 IP69 cable gland with O-Ring gasket
IP67 if coupled with IP67 hood or cover

For bulkhead mounting housings, IP66/IP67/IP69 degree of protection is guaranteed for mounting on a sufficiently rigid panel; use M3 screws of suitable length (negligible surface buckling when subjected to tightening torque on the fixing screws of 0,9 - 1 Nm or to deformation caused by the weight of the complete connector).
In addition, the panel surface in contact with the flange gasket of the bulkhead mounting housings must be free from defects (deep scratches, grooves, burrs) that could negatively affect the performance of the gasket.

RIGID LEVER

CZ7 - MZ7 standard version RIGID LEVER

inserts		page:
CD	25 poles + ⏚	69
CDD	38 poles + ⏚	77
CDA	16 poles + ⏚	100
CSAH	16 poles + ⏚	101
CDC	16 poles + ⏚	105

bulkhead mounting housings with single lever

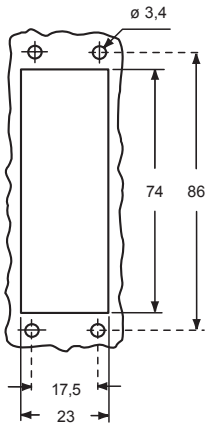
STAINLESS STEEL LEVER

surface mounting housings with single lever

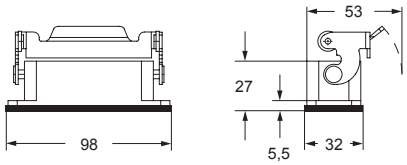
STAINLESS STEEL LEVER

description	part No.	part No.	entry M
with single lever	**CZ7I 25 L**		
with single lever and cover	**CZ7I 25 LS**		
with single lever with single lever		**MZ7P 25 L25** **MZ7P 25 L225**	25 25 x 2
with single lever and cover with single lever and cover		**MZ7P 25 LS25** **MZ7P 25LS225**	25 25 x 2

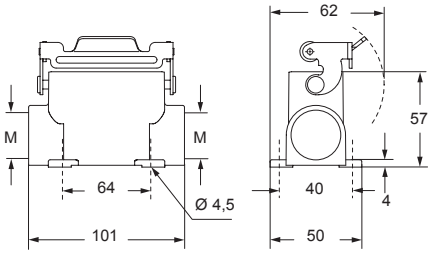
panel cut-out for bulkhead mounting housings



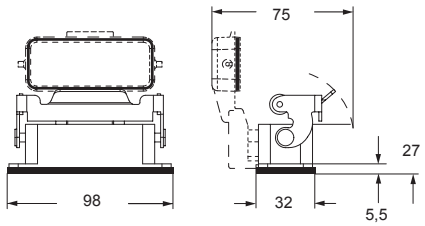
CZ7I L



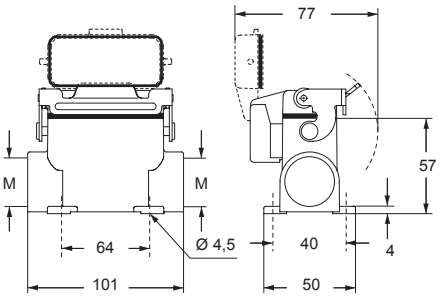
MZ7P L



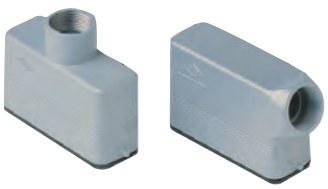
CZ7I LS



MZ7P LS



Hoods (page 380)



The rigid lever offers an IP66/IP67/IP69 degree of protection (according to EN 60529) when fitted with a complete and coupled connector and used with ILME standard hoods in die cast aluminum with pegs (without adapter).

Type 4/4X/12

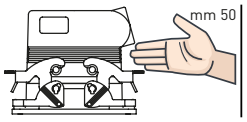
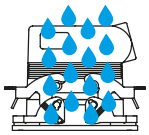
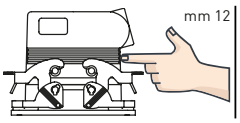
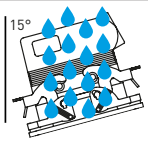
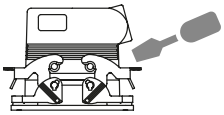
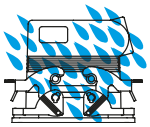
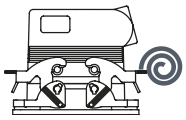
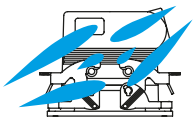
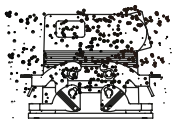
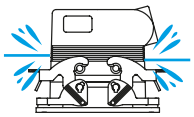
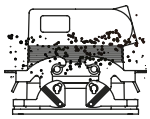
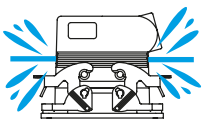
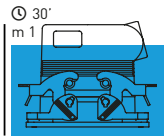
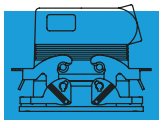
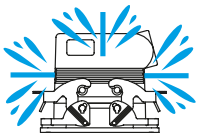
IP65 insulating cable gland or fittings without gasket

IP66 IP67 IP69 cable gland with O-Ring gasket
IP67 if coupled with IP67 hood or cover

For bulkhead mounting housings, IP66/IP67/IP69 degree of protection is guaranteed for mounting on a sufficiently rigid panel; use M3 screws of suitable length (negligible surface buckling when subjected to tightening torque on the fixing screws of 0,9 - 1 Nm or to deformation caused by the weight of the complete connector).
In addition, the panel surface in contact with the flange gasket of the bulkhead mounting housings must be free from defects (deep scratches, grooves, burrs) that could negatively affect the performance of the 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 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