MIXO ONE - CXA - MXA
TECHNICAL FEATURES

MIXO ONE is the aluminium housings system designed by ILME to accept the wide range of MIXO series single-sized modules.

- These robust connector enclosures (3 hood variants and 1 bulkhead mounting housing) transform each single MIXO module into a completely independent connector;
- the enclosures allow mounting of single MIXO module only in one guided way, to avoid incorrect match with the mating connector;
- the enclosures incorporate a pre-leading (first-make, last-break) PE connection terminal and contact, for the safest connector operation;
- the pins protruding from the bulkhead mounting housing act also as key guide, in cooperation with the corresponding keyway sockets in the hoods, to avoid incorrect 180° reversed mating with corresponding connector;
- the rigid locking lever is releasably mounted on moulded pegs that include a stopping teeth;
- the hoods are split in two parts (front, rear), to allow MIXO module mounting and simplify the enclosure's PE connection. Supplied with four self-threading screws and self-retaining sealing gasket;
- the bulkhead mounting housing is supplied with the module locking frame and self-retaining flange gasket;
- four optional coding pins available for up to 16 different codings, as a provision against mismatching when identical connectors are installed side by side;
- protection covers for hoods and housings , either with pegs (for enclosures with locking lever and sealing gasket) or with locking lever and sealing gasket (for enclosures with pegs) available either with eyelet-terminated string (for fastening to housings) or with loop-terminated cord (for fastening to hoods, around the incoming cable).

SUM-UP

- **Aluminium die cast alloy, nickel plated**
- **Rigid stainless steel locking lever**
- **Hoods split in two parts (front, rear), to simplify the PE connection. Supplied with four self-threading screws and sealing gasket**
- **Four optional coding pins for up to 16 different codings, as a provision against mismatching when identical connectors are installed side by side**
- **Protection covers for hoods and housings made in shock-proof thermoplastic material, either with pegs (for enclosures with locking lever and sealing gasket) or with locking lever and sealing gasket (for enclosures with pegs) both with eyelet-terminated string (for fastening to housings) or with loop-terminated cord (for fastening to hoods, around the incoming cable)**

Watch our MIXO ONE housing system video

MIXO ONE CXA - MXA

inserts MIXO		page:
CX 01 G	1 module	264
CX 02 7	1 module	266
CX 02 4	1 module	267
CX 02 4A, CX 02 4B	1 module	268
CX 03 4	1 module	269
CX 03 4B	1 module	270
CX 3/4 XD	1 module	271
CX 04 X	1 module	272
CX 05 S	1 module	-
CX 05 SH	1 module	274
CX 06 C, CX 06P C	1 module	275, 276
CX 08 C	1 module	277
CX 02 CH *)	1 module	279
CX 12 D, CX 17 D	1 module	281, 282
CX 25 IB	1 module	284
CX 25 I	1 module	-
CX 08 I6	1 module	286
CX 01 9V, CX 01 9VT	1 module	296, 298
CX 04 L	1 module	299
CX 04 R	1 module	300
CX 04 SC	1 module	301
CX 01 J8, CX 01 J8I	1 module	302
CX 03 P, CX 02 P	1 module	312

*) can be used only with CXA 01 I and MXA 01 V32 enclosures

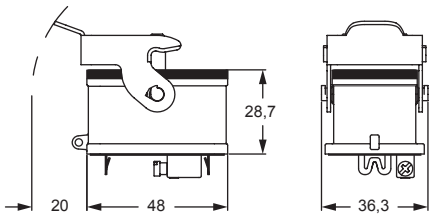
bulkhead mounting housing with single lever

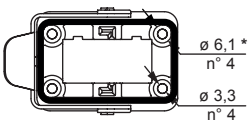
hoods with 2 pegs

description	part No.	part No.	entry M
with lever	**CXA 01 I**		
with pegs, side entry (in 2 parts)		**MXA 01 O25**	25
with pegs, top entry (in 2 parts)		**MXA 01 V25**	25
with pegs, top entry (in 2 parts)		**MXA 01 V32**	32

PE terminal
On both the bulkhead mounting housing and on the hood front part, PE screw terminal without protection plate, zinc plated steel terminal screw with rounded tip.
Connecting capacity:
0,5 mm² (20 AWG) – 10 mm² (8 AWG) both unprepared and prepared stranded copper wire.
PE terminal screw head footprint:
for Ph1 or 1,0x5,5 mm flat screwdriver, recommended torque 1,2 Nm (10.6 lb.in)
NOTE:
Some regulations may require conductor preparation with a crimped end sleeve.
Recommended crimp shape: square, e.g. by using Rennsteig ferrule crimping pliers PEW 8.85 (610 1853).

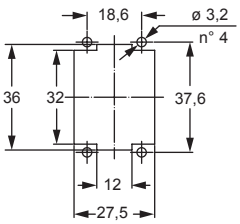
CXA I



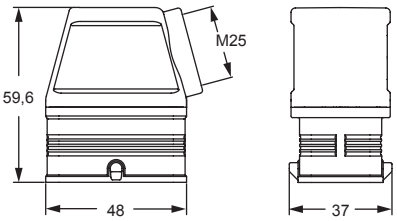


* for M3 fixing screws (not supplied) with maximum 6 mm head diameter

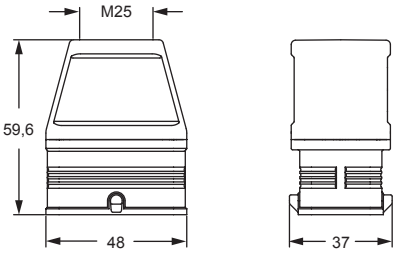
panel cut-out for bulkhead mounting housings



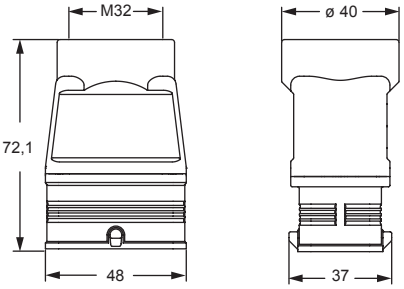
MXA O25



MXA V25



MXA V32

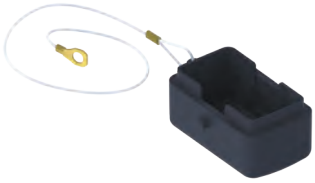


cURus
Type 4/4X/12 pending

IP65 according to IEC/EN 60529

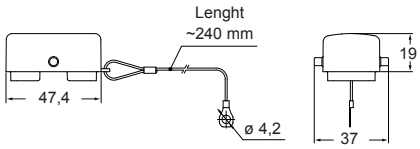
MIXO ONE CXP covers

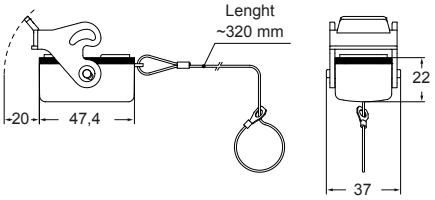
plastic covers



plastic covers with lever and gasket

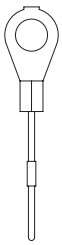
description	part No. (with eyelet)	part No. (with loop)
with 2 pegs (for enclosures with 1 lever with gasket)	**CXP 01 C**	
with 1 lever and gasket (for hoods with 2 pegs)		**CXP 01 CLG**





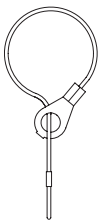
For fixing on housings

eyelet



For fixing on hoods

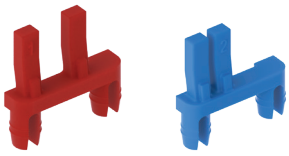
loop

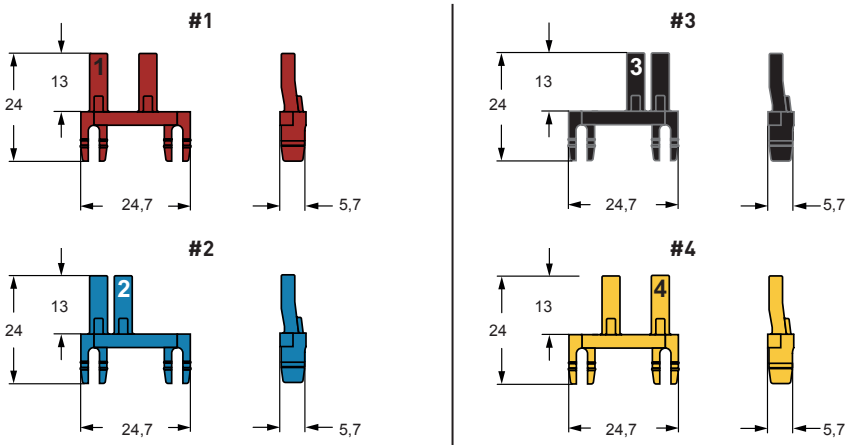


cURus
Type 4/4X/12 pending

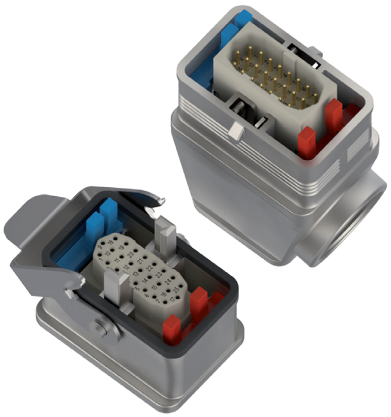
IP65 according to IEC/EN 60529

MIXO ONE CR CX coding pins

	coding pins	coding pins
		
description	part No.	part No.
red coding pin (#1)	**CR CX01R**	
blue coding pin (#2)	**CR CX01B**	
black coding pin (#3)		**CR CX01N**
yellow coding pin (#4)		**CR CX01G**



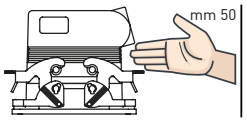
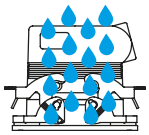
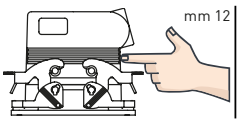
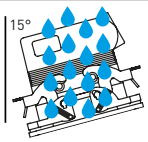
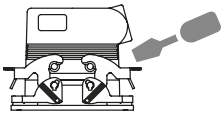
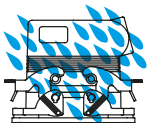
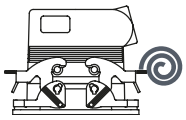
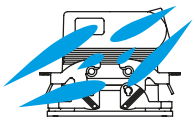
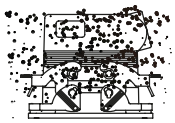
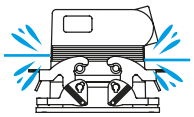
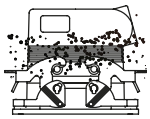
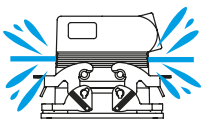
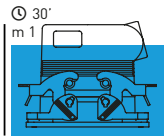
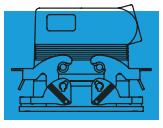
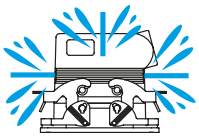
CR CX01 CODING OPTIONS



Example of coding option 6 of 16 different codings possible (4 coding pins per each connector coupling)

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