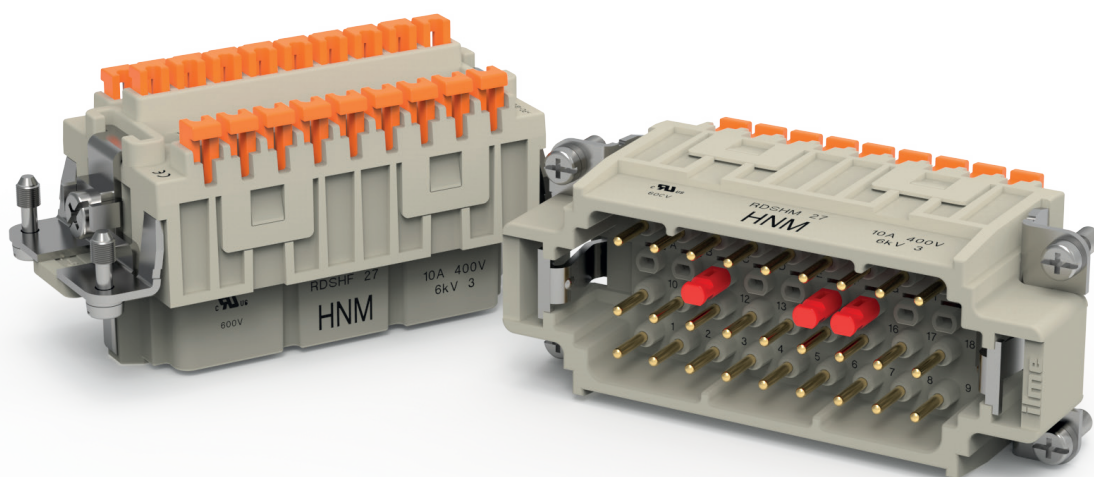

RDSH-SQUICH® CONNECTOR SERIES

HNM VERSION

RDSHF /M 09 / 18 / 27 / 42



RDSH-SQUICH® Series
(HNM version of CDSH-SQUICH®)

10 A 400 V 6 kV 3

10 A 400/690 V 6 kV 2



Find more
information on
our products at
www.ilme.com

TECHNICAL FEATURES

RDSHF /M 09 / 18 / 27 / 42

The new **RDSH-SQUICH®** is the HNM (High Number of Matings) version of the original **CDSH-SQUICH®** series.

Inherits all benefits of the ILME proprietary SQUICH® technology also in its most compact evolution: operator skill independence, fast and reliable wiring, high resistance to vibration.

Boosts mechanical lifecycle of **CDSH** from ≥ 500 to 10.000 cycles of **RDSH**, for applications requiring the higher density of contacts of this series (up to 42-pole in the "104.27" size) and frequent connection and disconnection (e.g. measuring/controlling drawer-mounted equipment, control equipment on moulds and replaceable tools, etc.).

- Available in four classical sizes "44.27" (6-pole) through "104.27" (24-pole).

NOTE – 2-insert combinations "77.62" (54-pole) and "104.62" (84-pole) not available, as size "77.62" and "104.62" enclosures are not foreseen in the HNM range.

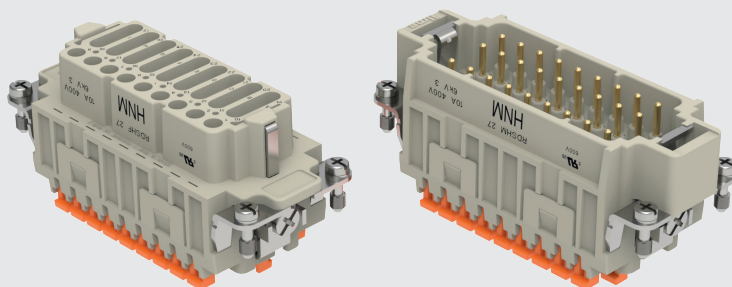
- Same ratings (voltage, current including derating diagrams, range of conductor cross-sectional areas, limiting temperatures) as **CDSH**.
- Suitable for up to **10.000 operating cycles** when installed in compatible HNM enclosures, equally rated (10.000 locking and unlocking cycles).
- Spring clamp contacts with actuator pushbutton, selectively high thickness gold plated and specially lubricated.
- Lateral sliding PE contacts specially lubricated.
- Identified by specific **RDSH...** part No. and **HNM** on the insert.
- **CR CDS** plastic coding pin that enables the polarisation of inserts in a wide range of combinations.

- **us** (ECBT2/ECBT8), **EAC** **DNV** **CE** **UKCA**

- CQC, BV pending.

- **RoHS**: compliant with exemption **6(c)**.

spring clamp
contacts with actuator
pushbutton, selectively
high thickness gold
plated and specially
lubricated



RDSH-SQUICH® 9 poles + ⊕ 10 A - 400 V HNM (High Number of Matings)

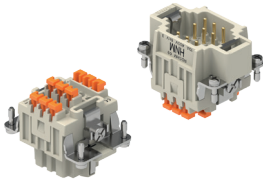
enclosures:
size "44.27"

HNM

page:
592 - 593

refer to CN.19 pages

inserts,
spring terminal connections without tools



10 000 MATINGS
WITH HNM ENCLOSURES

coding pins



description

part No.

part No.

spring terminals with actuator button
female inserts with female contacts
male inserts with male contacts

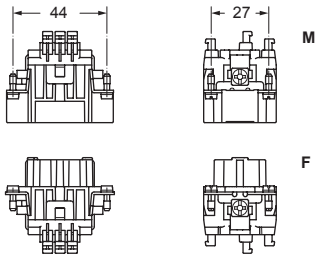
RDSHF 09
RDSHM 09

plastic coding pins

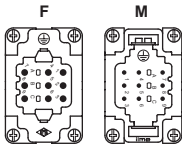
CR CDS

- characteristics according to EN 61984:
10 A 400 V 6 kV 3
10 A 400/690 V 6 kV 2
- us (ECBT2/ECBT8), DNV certified
- CQC, BV pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10\text{ G}\Omega$
- ambient temperature limit: $-40\text{ }^{\circ}\text{C} \dots +125\text{ }^{\circ}\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: $\leq 3\text{ m}\Omega$
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 09

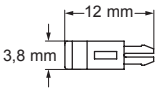


contacts side (front view)



- inserts for conductors cross-sectional areas:
0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section:
up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

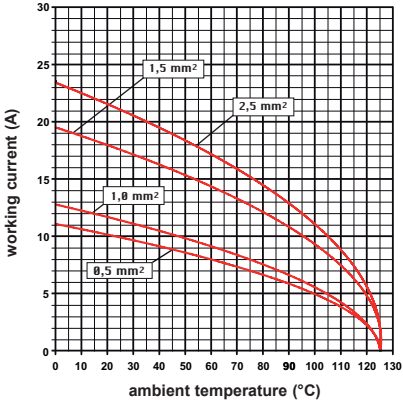
CR CDS



RDSH series - Coding with CR CDS pins

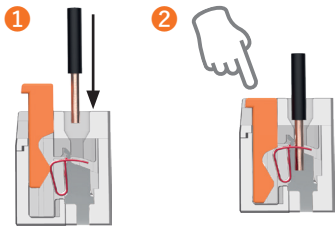
| Size of connectors | Slots for coding pins (M) = male insert (F) = female insert | Required coding pins for each coupling | Possible codings |
|--------------------|---|--|------------------|
| 9P + ⊕ | 3 (M) + 3 (F) | 3 2 (M) + 1 (F) | 3 |

RDSH 09 poles connector inserts
Maximum current load derating diagram



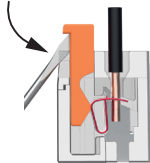
SQUICH®-spring connection technology

WIRING



Deeply insert a stripped conductor into a round terminal.
Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

RDSH-SQUICH® 18 poles + ⊕ 10 A - 400 V HNM (High Number of Matings)

enclosures:
size "57.27"

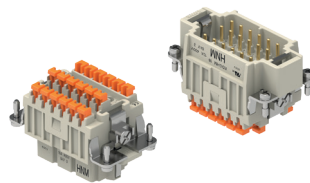
HNM

page:

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inserts,
spring terminal connections without tools

coding pins



**Q 10 000 MATINGS
WITH HNM ENCLOSURES**

refer to CN.19 pages

description

part No.

part No.

spring terminals with actuator button
female inserts with female contacts
male inserts with male contacts

**RDSHF 18
RDSHM 18**

plastic coding pins

CR CDS

- characteristics according to EN 61984:

10 A 400 V 6 kV 3
10 A 400/690 V 6 kV 2

- **UL** (ECBT2/ECBT8), **IEC** **DNV** certified

- CQC, BV pending

- rated voltage according to UL/CSA: 600 V

- insulation resistance: $\geq 10 \text{ G}\Omega$

- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$

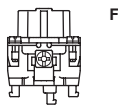
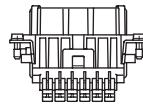
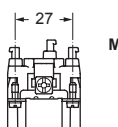
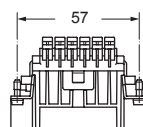
- made of self-extinguishing thermoplastic resin UL 94V-0

- mechanical life: ≥ 10.000 cycles

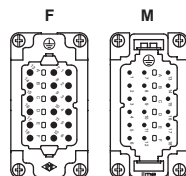
- contact resistance: $\leq 3 \text{ m}\Omega$

- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 18

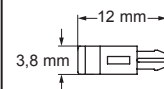


contacts side (front view)



- inserts for conductors cross-sectional areas:
0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section:
up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

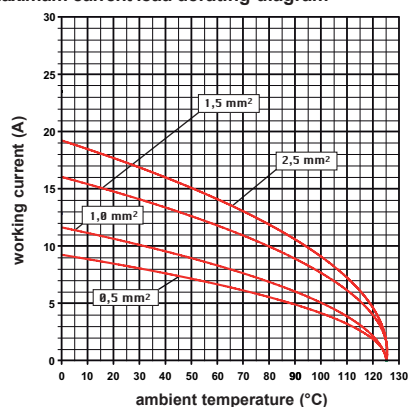
CR CDS



RDSH series - Coding with CR CDS pins

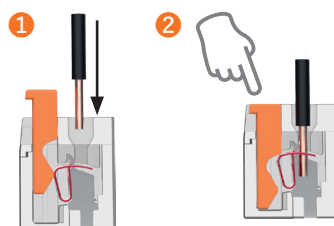
| Size of connectors | Slots for coding pins (M) = male insert (F) = female insert | Required coding pins for each coupling | Possible codings |
|--------------------|---|--|------------------|
| 18P + ⊕ | 6 (M) + 6 (F) | 6 3 (M) + 3 (F) | 20 |

RDSH 18 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

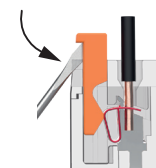
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a **0,5 x 3,5 mm** flat blade screwdriver in the actuator button side window and pull it up by levering down.

RDSH-SQUICH® 27 poles + ⊕ 10 A - 400 V HNM (High Number of Matings)

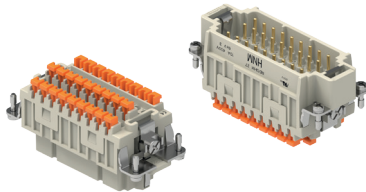
enclosures:
size "77.27"

HNM

page:
596 - 597

refer to CN.19 pages

inserts,
spring terminal connections without tools



10 000 MATINGS
WITH HNM ENCLOSURES

coding pins



description

part No.

part No.

spring terminals with actuator button
female inserts with female contacts
male inserts with male contacts

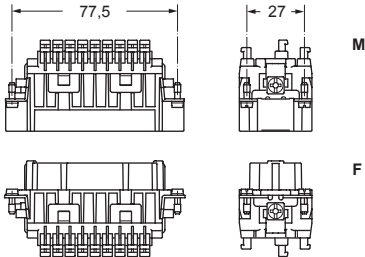
RDSHF 27
RDSHM 27

plastic coding pins

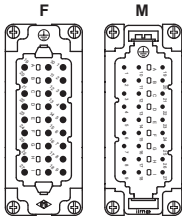
CR CDS

- characteristics according to EN 61984:
10 A 400 V 6 kV 3
10 A 400/690 V 6 kV 2
- us (ECBT2/ECBT8), DNV certified
- CQC, BV pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 27

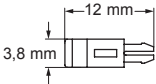


contacts side (front view)



- inserts for conductors cross-sectional areas:
0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section:
up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

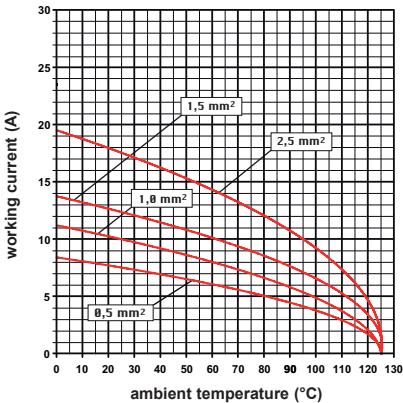
CR CDS



RDSH series - Coding with CR CDS pins

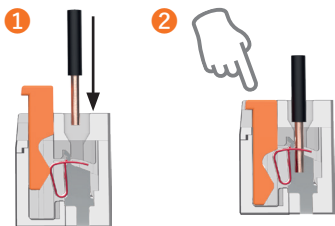
| Size of connectors | Slots for coding pins (M) = male insert (F) = female insert | Required coding pins for each coupling | Possible codings |
|--------------------|---|--|------------------|
| 27P + ⊕ | 9 (M) + 9 (F) | 9 5 (M) + 4 (F) | 126 |

RDSH 27 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

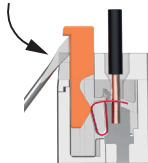
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

RDSH-SQUICH® 42 poles + ⊕ 10 A - 400 V HNM (High Number of Matings)

enclosures:
size "104.27"

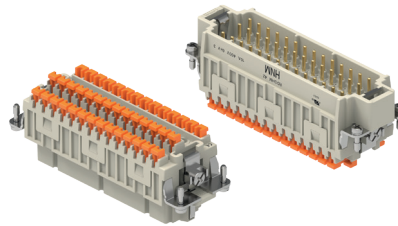
HNM

page:

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inserts,
spring terminal connections without tools

coding pins



**Q 10 000 MATINGS
WITH HNM ENCLOSURES**

refer to CN.19 pages

description

part No.

part No.

spring terminals with actuator button
female inserts with female contacts
male inserts with male contacts

RDSHF 42
RDSHM 42

plastic coding pins

CR CDS

- characteristics according to EN 61984:

10 A 400 V 6 kV 3
10 A 400/690 V 6 kV 2

- (ECBT2/ECBT8), DNV certified

- CQC, BV pending

- rated voltage according to UL/CSA: 600 V

- insulation resistance: $\geq 10 \text{ G}\Omega$

- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$

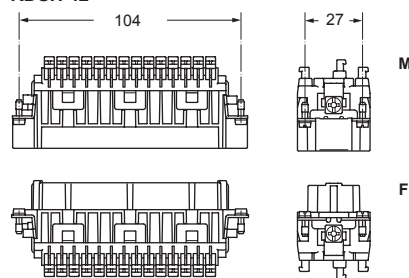
- made of self-extinguishing thermoplastic resin UL 94V-0

- mechanical life: ≥ 10.000 cycles

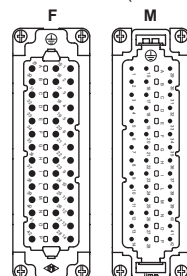
- contact resistance: $\leq 3 \text{ m}\Omega$

- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue

RDSH 42

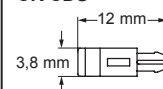


contacts side (front view)



- inserts for conductors cross-sectional areas:
0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section:
up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

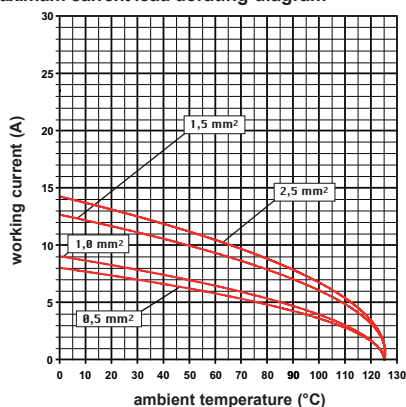
CR CDS



RDSH series - Coding with CR CDS pins

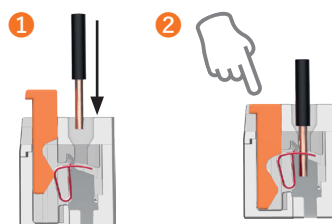
| Size of connectors | Slots for coding pins (M) = male insert (F) = female insert | Required coding pins for each coupling | Possible codings |
|--------------------|---|--|------------------|
| 42P + ⊕ | 14 (M) + 14 (F) | 14 7 (M) + 7 (F) | 3.432 |

RDSH 42 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

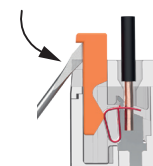
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



Insert a 0,5 x 3,5 mm flat blade screwdriver in the actuator button side window and pull it up by levering down.

RECOMMENDED TIGHTENING TORQUE

- insert terminal screws, including PE terminal and fixing screws
- axial screw insert, MIXO series CX 02 4A / CX 02 4B
- enclosures assembly screws

Insert terminal screws, including PE terminal and fixing screws

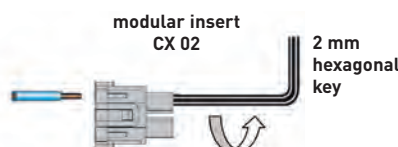
Increasing the tightening torque of terminal screws does not considerably improve the contact resistance. The screw torques are selected according to standard EN 60999-1, to provide excellent mechanical, thermal and electric behaviour. The conductor or terminal may be damaged if the recommended values are significantly exceeded.

| Screw size | Connector type | Recommended tightening torque | | Recommended size of screwdriver |
|------------|--|-------------------------------|---------|---------------------------------|
| | | (Nm) | (lb.in) | |
| | LINE TERMINALS | | | |
| M2,5 | CT 40, 64 | 0,4 | 3,5 | 0,5 x 3 |
| M2,6 | CT 06..24 | 0,4 | 3,5 | 0,5 x 3 |
| M3 | CK | 0,5 | 4,4 | 0,5 x 3 |
| M3 | CDA | 0,5 | 4,4 | Ph0 or 0,6 x 3,5 |
| M3 | CNE, CME | 0,5 | 4,4 | Ph0 or 0,8 x 4 |
| M3 | CX 4/2, CX 4/8 (16A) | 0,5 | 4,4 | 0,6 x 3,5 |
| M3 | CX 4/8 Q (16A) | 0,5 | 4,4 | Ph0 |
| M4 | CP | 1,2 | 10,6 | Ph1 or 0,8 x 4 |
| M6 | CX 4/.. (80A) | 2,5 | 22,1 | 1,0 x 5,5 |
| | PE TERMINAL | | | |
| M3 | CK, CQ 05, CQ 07, CQ 12 | 0,5 | 4,4 | 0,5x3 |
| M4 | all series except CD 15, CD 25, CDA, CDC, CSAH, MIXO | 1,2 | 10,6 | Ph2 or 1,0 x 5,5 |
| M3,5 | series CD 15, CD 25, CDA, CDC, CSAH | 0,8 | 7,1 | Ph1 or 0,8 x 5,5 |
| M3 | small PE terminal, MIXO frames series | 0,5 | 4,4 | Ph1 or 1,0 x 4,5 |
| M4 | large PE terminal, MIXO frames series | 1,2 | 10,6 | Ph1 or 1,0 x 5,5 |
| M4 | PE terminal, MIXO ONE enclosures | 1,2 | 10,6 | Ph1 or 1,0 x 5,5 |
| | FASTENING SCREWS | | | |
| M3 | CK, CKS, CKSH, CD 07, CD 08, CQ 05, CQ 07, CQ 12, CQ 21, CQ4 02 /02 H, CQ4 03, CX 1/2 BD | 0,5 | 4,4 | Ph1 or 0,8 x 5,5 |
| M3 | screw for fastening inserts to enclosures of all series except T-TYPE, CQ-MQ 08 and MIXO ONE | 0,8 | 7,1 | Ph1 or 0,8 x 4 |
| Ø 2,9 | screws for fastening "32.13" inserts CQ 04/2, CQ 08, CQ 17 to CQ-MQ 08 enclosures | 0,7 | 6,2 | Ph1 |
| M3 | screw for fastening inserts to T-TYPE enclosures | 0,5 | 4,4 | Ph1 or 0,8 x 4 |
| Ø 2,9 | series MIXO ONE enclosures, assembly of top and bottom parts | 0,8 | 7,1 | Ph1 |
| M4 | CYR 16.3, CYR 24.4 cable pass-through hoods, assembly of two halves | 1,2 | 10,6 | Ph2 or 1,0 x 5,5 |
| M4 | CYG 16 in-line joint, assembly of two halves and mounting of two bulkhead mounting housings size "77.27" | 1,2 | 10,6 | Ph2 or 1,0 x 5,5 |
| M5 | series BIG enclosures, assembly of top and bottom parts | 1,0 | 8,8 | Ph2 |

Axial screw insert, MIXO series CX 02 4A / CX 02 4B

The connections of the conductors to the female and male inserts are made via axial screw. Fully insert the stripped wire in the back of the contact (axial screw terminals are supplied fully opened); while holding the wire down, insert a 2 mm hexagonal key in the front of the contact and tighten to recommended torque. After assembling the complete connector periodically check that the contact is screwed tight by re-applying the proper tightening torque.

- Usable conductor cross-sections (EN 60228 Class 5):
 - from 2,5 to 8 mm² (14 AWG to 10 AWG) (CX 02 4AF/M)
 - from 6 to 10 mm² (10 AWG to 8 AWG) (CX 02 4BF/M)
 - (extra-flexible EN 60228 class 6: 2,5... 6 mm² (14 AWG to 10 AWG))
- Use only stranded flexible copper conductors
- Do not twist the strands!
- Tightening torque with 2 mm hexagonal Allen key:
 - 1,5 Nm (13,3 lb.in) max for conductors with section 2,5 ... 4 mm² (14 AWG to 12 AWG)
 - 2 Nm (17,7 lb.in) max for conductors with section 6 ... 10 mm² (10 AWG to 8 AWG)
- Stripping length: 8+1 mm



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 – 10,6 | 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 – 10,6 | 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 – 10,6 | 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 $W_t \leq 0,2$ mm over a distance of 200 mm (measured on the panel without load)
- Roughness $R_a \leq 16$ μ m

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 | 26 – 14 unprepared | 9 - 11 |
| | 0,14 – 1 prepared | 26 – 18 prepared | |
| CKS, CKSH, CDS, CDSH, CSAH | 0,14 – 2,5 unprepared | 26 – 14 unprepared | 9 - 11 |
| | 0,14 – 1,5 prepared | 26 – 16 prepared | |

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 mm² unprepared - 2,5 mm² prepared).

²⁾ Available upon request.

LOAD CURVES

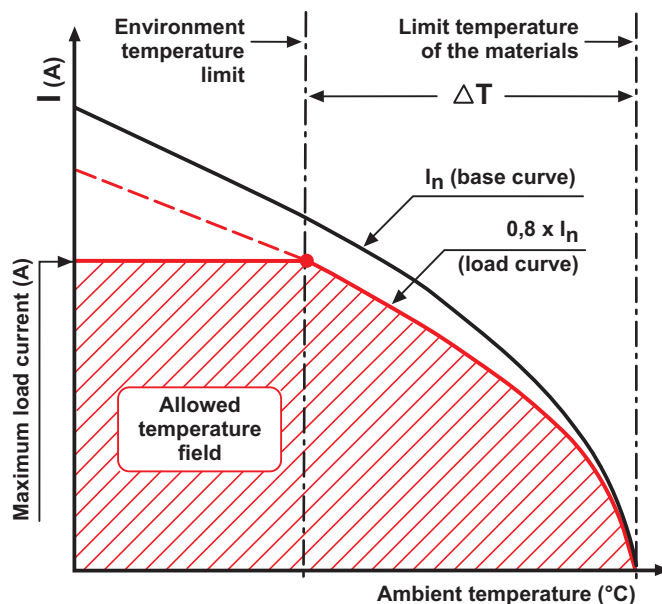
The permitted current carrying capacity for connectors is variable: it becomes lower with the increase of the number of poles and of the ambient temperature in which the connector is installed and it depends upon the thermal properties of the material used for the contacts and the insulating parts including those of the type of conductor used. The current carrying capacity is obtained from the load curves which are constructed according to standard IEC 60512-5-2 for currents circulating simultaneously in all poles.

The limit current curves express current values that determine the achievement of the upper limit temperature of the materials. The choice of the permanent load applicable on the contacts **must be made within the field of operation possible delimited by the above mentioned curves.**

Since use of connectors at the limit values of their characteristics is not recommended, the **base curve** is de-rated. The reduction of the load currents to 80% defines the correction curve where both the maximum permissible contact resistances and the inaccuracy of the temperature measurements are sufficiently taken into consideration.

The correction curve represents the final **limit current curve (load curve)** as defined by standard IEC 60512-5-2. It therefore bears in consideration the differences between the various connector inserts, as well as errors in the temperature measurements.

All the load curves presented in this catalogue include the correction. See figure below.



Legend

Maximum load current (A)

Value for which the connector reaches the upper limit temperature of the material at the corresponding ambient temperature intersected on the load curve.

Limit temperature of the materials

Value determined by the characteristics of the material used. The sum of the environmental temperature and the increase of the ΔT (temperature rise) caused by the current flow must not exceed the limit temperature of the materials.

Environment temperature limit

The environmental conditions must not exceed this value. It may be known and determines the maximum load current, or it may be directly obtained from the load curve.

Base curve

Set of current and temperature values obtained from laboratory tests and influenced by the connector's characteristics (number of poles, construction shape, thermal conductivity of the materials, etc.) and the cross-section of the conductor used.

Load curve (limit current curve)

Obtained from the base curve via the safety coefficient.

ΔT (temperature rise)

Temperature rise produced by a permanent current circulating through all the poles of a connector coupling; difference between the upper limit temperature of the material and the ambient temperature obtained on the limit current curve.