

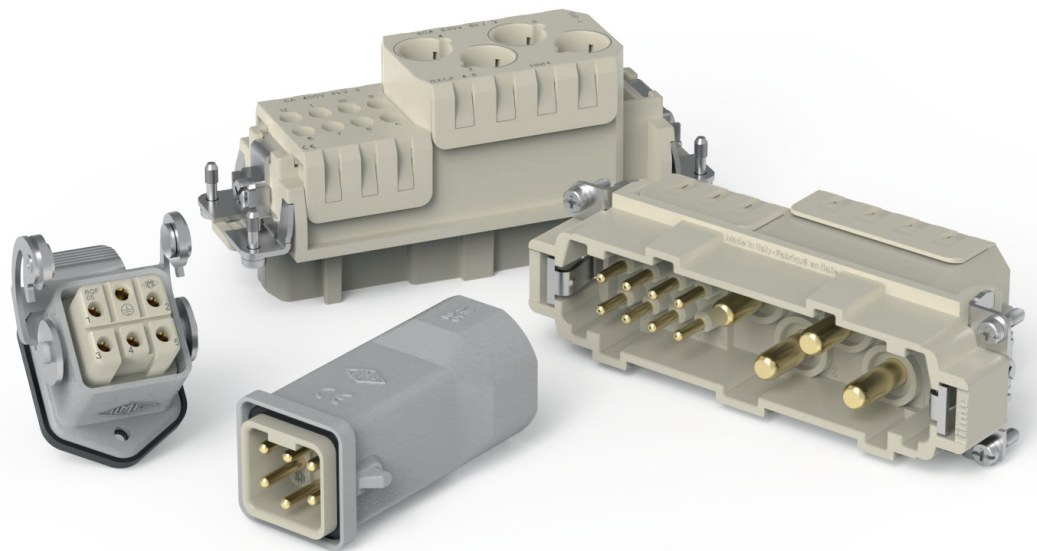


Multipole connectors

20 22

Newsbook

Extract 3/5



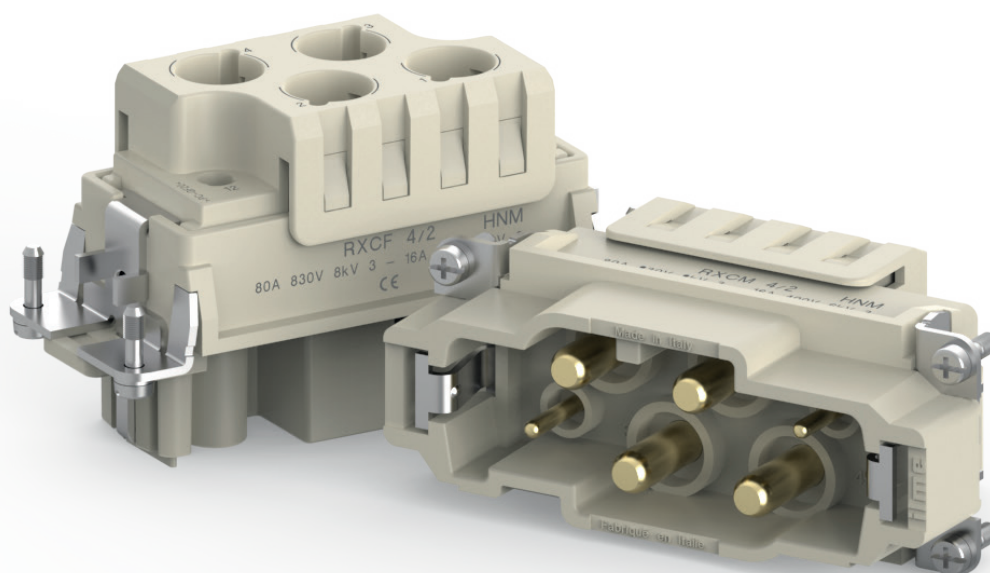
HNM RANGE WIDENING



datasheet

RXC SERIES COMBINED CRIMP CONNECTOR

HNM VERSION



**RXCF /M 4/2 Combined power/auxiliaries
crimp connector**

(HNM version of CXC)

4 P + ⊕: 80 A 830 V 8 kV 3

2 P + ⊕: 16 A 400 V 6 kV 3



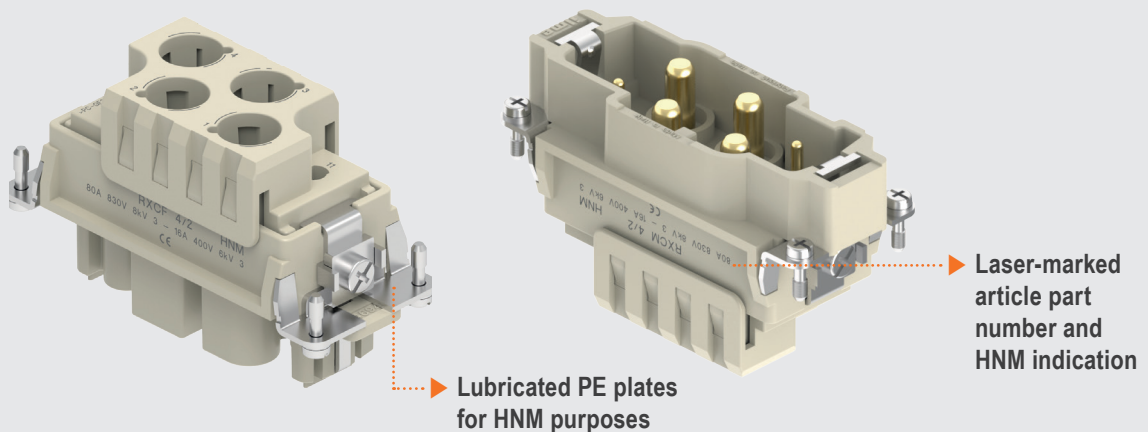
Find out more
www.ilme.com


TECHNICAL FEATURES

The new combined connectors **RXC 4/2** are the **HNM version** of the recently introduced CXC 4/2 inserts with 4× 80 A power crimp contact seats and 2× 16 A auxiliary crimp contact seats.

- Q Thanks to the **HNM treatment** (PE plates lubrication and RX7..2D and RC..2D HNM series crimp contacts with special gold plating, rated current 80 A and 16 A respectively), the mechanical life, when used in combination with dedicated HNM enclosures, extends from 500 to **10 000 mating cycles** ensuring optimal performance.
- Q The connectors are ideal for **applications** requiring frequent **disconnection** use: test benches, charging systems, and removable tooling equipment.

- ▶ To be used with HNM crimp contacts series RX7 (70 A / 80 A) and RC (16 A) in HNM enclosures, for up to 10 000 matings



 HNM crimp contacts RX7 and RC series are separately available

RXCF /M 4/2 4 poles (80 A - 830 V) + 2 poles (16 A - 400 V) + ⊕ HNM (High Number of Matings)



enclosures:
size "77.27"

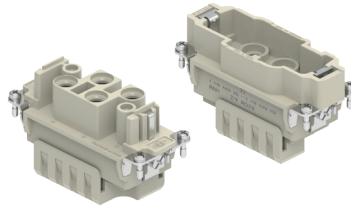
page:

HNM

596 - 597

Enclosures: bulkhead mounting housings, high construction housings or high construction hoods

HNM inserts, crimp connections



Q 10 000 MATINGS
WITH HNM ENCLOSURES

RATING 830V

FROM MARCH 2022

80 A HNM crimp contacts
gold plated



FROM MARCH 2022

refer to CN.19 pages

description

part No.

part No.

without contacts (to be ordered separately)
female insert for female contacts
male insert for male contacts

RXCF 4/2
RXCM 4/2

80 A female crimp contacts

6 mm ²	(Class 5)	AWG 10
10 mm ²	(Class 5)	AWG 8 - 7
16 mm ²	(Class 5)	AWG 6 - 5
16 mm ²	(Class 6)	AWG 6 - 5
25 mm ²	(Class 5)	AWG 4 - 3

80 A male crimp contacts

6 mm ²	(Class 5)	AWG 10
10 mm ²	(Class 5)	AWG 8 - 7
16 mm ²	(Class 5)	AWG 6 - 5
16 mm ²	(Class 6)	AWG 6 - 5
25 mm ²	(Class 5)	AWG 4 - 3

RX7F2D 6.0
RX7F2D 10
RX7F2D 16
RX7F2D 16 XF
RX7F2D 25

gold plated

RX7M2D 6.0
RX7M2D 10
RX7M2D 16
RX7M2D 16 XF
RX7M2D 25

- characteristics according to EN/IEC 61984 ratings:

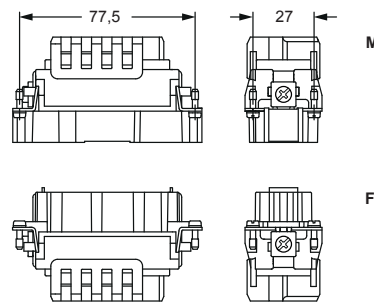
80 A 830 V 8 kV 3
16 A 400 V 6 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- Lower and Upper Limiting Temperatures (LLT ... ULT): -40 °C ... +125 °C
- made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 0,3 mΩ (4 power poles) ≤ 1 mΩ (2 auxiliary poles)

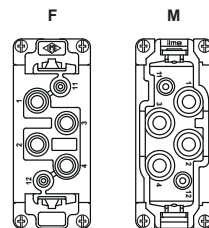
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70 A contacts RX7F2D and RX7M2D series and 16 A contacts RCF2D, RCM2D series, on pages 708 - 741 of CN.19 catalogue)

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

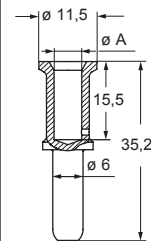
RXC 4/2



contacts side (front view)



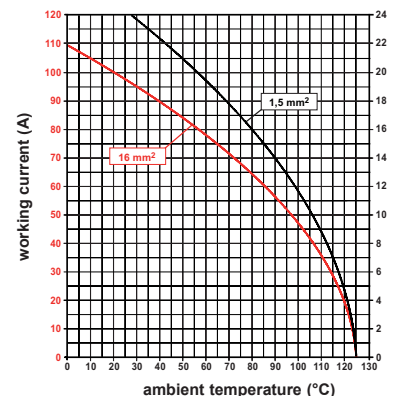
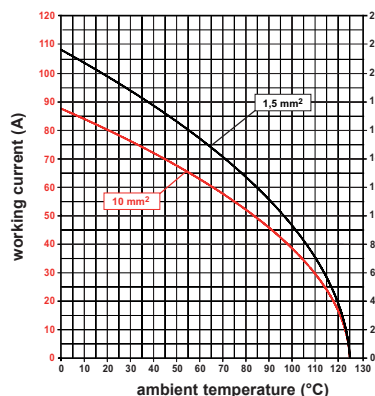
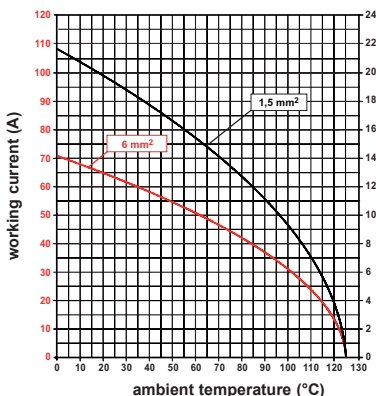
RX7F2D, RX7M2D and
RX7F2D 16 XF, RX7M2D 16 XF



RX7F2D and RX7M2D contacts			
conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length (mm)	
6	3,5	15	
10	4,3	15	
16	5,5	15	
16 (XF)	6,1	15	
25	7,0	15	

RXC 4/2 poles connector inserts

Maximum current load derating diagram





RC..2D 16 A crimp contacts HNM (High Number of Matings)

16 A HNM crimp contacts gold plated



removal tools



description

part No.

part No.

16 A female contacts, HNM gold plated

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

RCF2D 0.3
RCF2D 0.5
RCF2D 0.7
RCF2D 1.0
RCF2D 1.5
RCF2D 2.5
RCF2D 3.0
RCF2D 4.0

gold plated

16 A male contacts, HNM gold plated

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

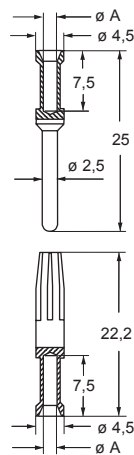
RCM2D 0.3
RCM2D 0.5
RCM2D 0.7
RCM2D 1.0
RCM2D 1.5
RCM2D 2.5
RCM2D 3.0
RCM2D 4.0

removal tools

for **RX7F2D** and **RX7M2D** series contacts
for **RCF2D** and **RCM2D** series contacts

CX7ES
CQES

RCF2D and RCM2D

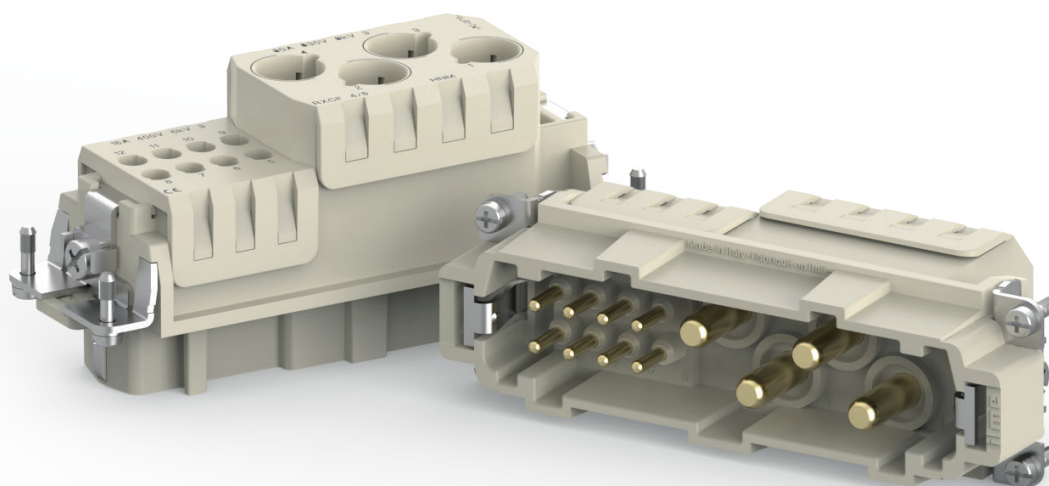


RCF2D and RCM2D contacts

conductor section mm ²	conductor slot $\varnothing A$ (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

RXC SERIES COMBINED CRIMP CONNECTOR

HNM VERSION



**RXCF /M 4/8 Combined power/auxiliaries
crimp connector**

(HNM version of CXC)

4 P + ⊕: 80 A 400 V 6 kV 3

8 P + ⊕: 16 A 230/400 V 4 kV 3



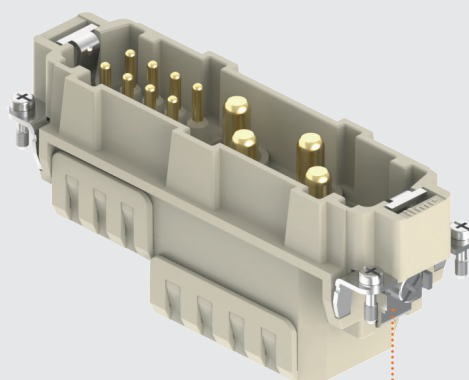
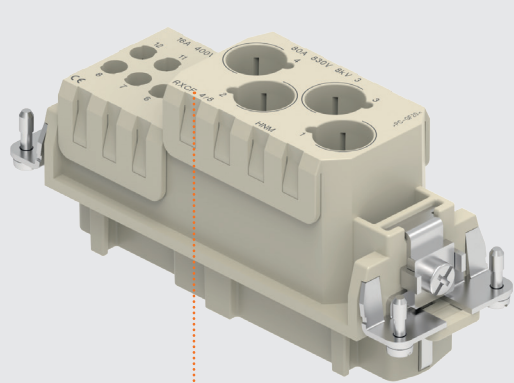
Find out more
www.ilme.com

TECHNICAL FEATURES

The new combined crimp connectors **RXC 4/8** are the **HNM version** of the recently introduced CXC 4/8 inserts with 4× 80 A power crimp contact seats and 8× 16 A auxiliary crimp contact seats.

- Q Thanks to the **HNM treatment** (PE plates lubrication and RX7..2D and RC..2D HNM series crimp contacts with special gold plating, rated current 80 A and 16 A respectively), the mechanical life, when used in combination with dedicated HNM enclosures, extends from 500 to **10 000 mating cycles** ensuring optimal performance.
- Q The connectors are ideal for **applications** requiring frequent **disconnection** use: test benches, charging systems, and removable tooling equipment.

- ▶ To be used with HNM crimp contacts series RX7 (70 A / 80 A) and RC (16 A) in HNM enclosures, for up to 10 000 matings



✍ HNM crimp contacts RX7 and RC series are separately available

▶ Laser-marked article part number and HNM indication

▶ Lubricated PE plates for HNM purposes

enclosures:
size "104.27"

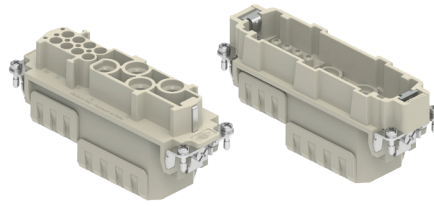
page:

HNM

598 - 599

Enclosures: bulkhead mounting housings, high construction housings or high construction hoods

HNM inserts, crimp connections

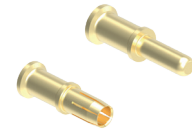


Q 10 000 MATINGS
WITH HNM ENCLOSURES

RATING 830V

FROM MARCH 2022

80 A HNM crimp contacts
gold plated



FROM MARCH 2022

refer to CN.19 pages

description

part No.

part No.

without contacts (to be ordered separately)
female inserts for female contacts
male inserts for male contacts

RXCF 4/8
RXCM 4/8

80 A female crimp contacts

6 mm ²	(Class 5)	AWG 10
10 mm ²	(Class 5)	AWG 8 - 7
16 mm ²	(Class 5)	AWG 6 - 5
16 mm ²	(Class 6)	AWG 6 - 5
25 mm ²	(Class 5)	AWG 4 - 3

RX7F2D 6.0
RX7F2D 10
RX7F2D 16
RX7F2D 16 XF
RX7F2D 25

gold plated

80 A male crimp contacts

6 mm ²	(Class 5)	AWG 10
10 mm ²	(Class 5)	AWG 8 - 7
16 mm ²	(Class 5)	AWG 6 - 5
16 mm ²	(Class 6)	AWG 6 - 5
25 mm ²	(Class 5)	AWG 4 - 3

RX7M2D 6.0
RX7M2D 10
RX7M2D 16
RX7M2D 16 XF
RX7M2D 25

- characteristics according to EN/IEC 61984 ratings:

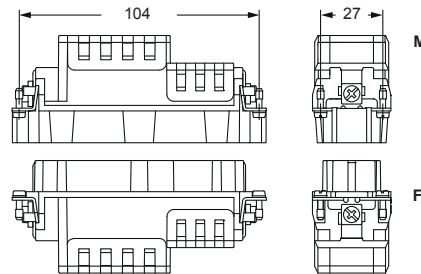
80 A 400 V 6 kV 3
16 A 230/400 V 4 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made by UL 94V-0 glass reinforced polycarbonate, EN 45545-2:2015 compliant
- mechanical life: ≥ 500 cycles
- contact resistance: ≤ 0,3 mΩ (4 power poles)
≤ 1 mΩ (8 auxiliary poles)

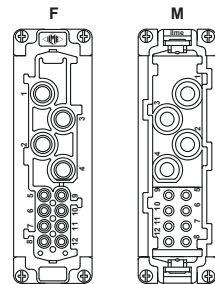
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70 A contacts RX7F2D and RX7M2D series and 16 A contacts RCF2D, RCM2D series, on pages 708 - 741 of CN.19 catalogue)

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

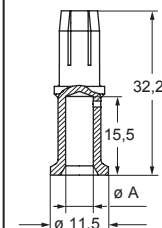
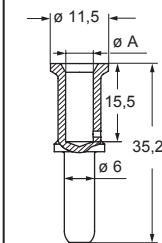
RXC 4/8



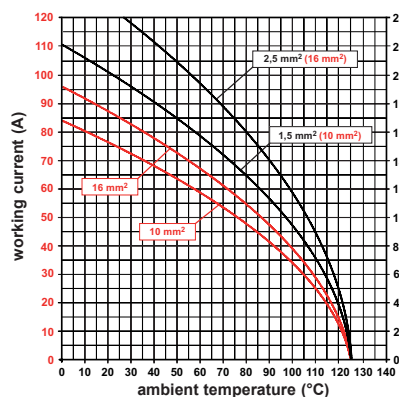
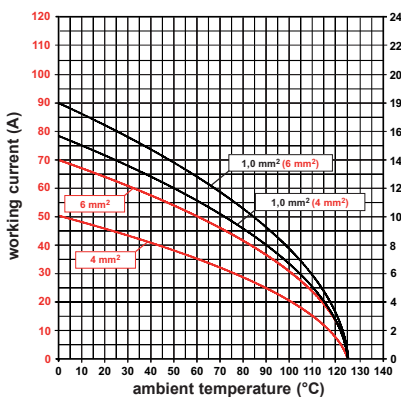
contacts side (front view)



RX7F2D, RX7M2D and
RX7F2D 16 XF, RX7M2D 16 XF



RXC 4/8 poles connector inserts
Maximum current load derating diagram



RX7F2D and RX7M2D contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductor stripping length (mm)
6	3,5	15
10	4,3	15
16	5,5	15
16 (XF)	6,1	15
25	7,0	15



RC..2D 16 A crimp contacts HNM (High Number of Matings)

16 A HNM crimp contacts gold plated



removal tools



description	part No.	part No.
-------------	----------	----------

16 A female contacts, HNM gold plated		
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

RCF2D 0.3
RCF2D 0.5
RCF2D 0.7
RCF2D 1.0
RCF2D 1.5
RCF2D 2.5
RCF2D 3.0
RCF2D 4.0

gold plated

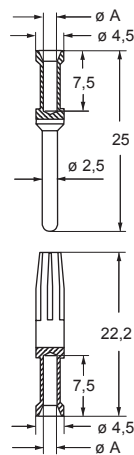
16 A male contacts, HNM gold plated		
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

RCM2D 0.3
RCM2D 0.5
RCM2D 0.7
RCM2D 1.0
RCM2D 1.5
RCM2D 2.5
RCM2D 3.0
RCM2D 4.0

removal tools
for **RX7F2D** and **RX7M2D** series contacts
for **RCF2D** and **RCM2D** series contacts

CX7ES
CQES

RCF2D and RCM2D

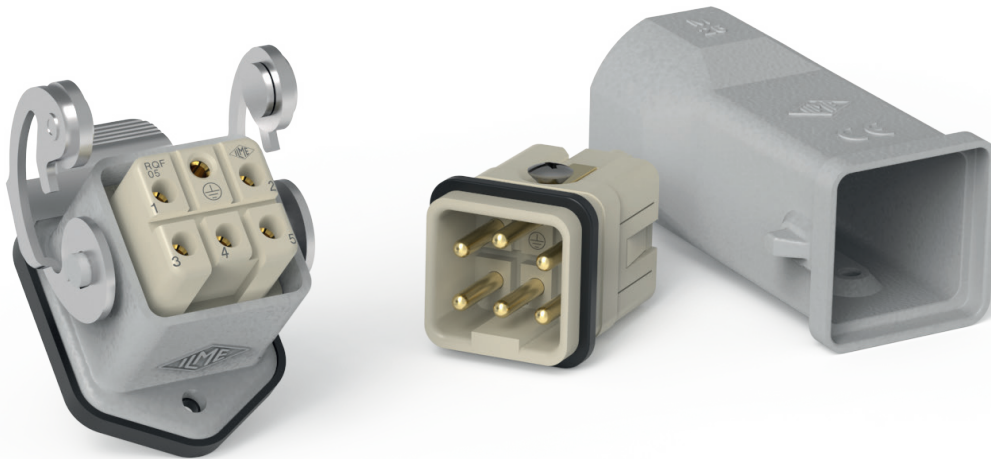


RCF2D and RCM2D contacts

conductor section mm ²	conductor slot $\varnothing A$ (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

SIZE “21.21” ENCLOSURES

HNM VERSION



Size “21.21” metallic housings
(bulkhead and surface mounting)
and hoods with CLASS lever,
suitable for up to 5 000 mating cycles



Find out more
www.ilme.com

TECHNICAL FEATURES

Housings (bulkhead-mounting or surface mounting) size “21.21” equipped with **CLASS single locking lever**, made by stainless-steel with sintered stainless-steel rolls with special **anti-friction treatment**

Q *to be mated to standard hoods* “size 21.21”.

This **HNM** series of connector housings has been developed to be used in combination with the **HNM** series of size “21.21” multipole connector inserts, equipped with the relevant **HNM** series of removable crimp contacts, to provide the same reliable protection of the standard series but for a consistently extended, **HIGH NUMBER OF MATINGS**.

The **CLASS** locking lever has been chosen and treated so as to reduce wear due to friction at minimum.

Even mated on standard hoods, it is able to provide extremely reduced wear on the corresponding locking pegs, producing virtually no friction by the application of special lubrication on the hinged rolls.

The counterpart hoods are therefore standard metallic types, with fused pegs.

Currently (see next pages) the **suitable HNM inserts size “21.21”** for these new HNM housings are:

- Q **CQF /M 21** inserts
with **5 A HNM** crimp contacts series **RI**
- Q **CDF /M 08** inserts
with **10 A HNM** crimp contacts series **RD**
- Q **New RQF /M 05** inserts,
special **HNM** screw-type PE terminal,
with **16 A HNM** crimp contacts series **RC**
- Q **CQ4F /M 03**
with **40 A HNM** crimp contacts series **RX**

NOTE – Series CKSH (SQUICH®), as well as all MIXO BUS multi-axial and coaxial inserts for use within the size “21.21” CX 1/2 BDF /BDM adapter are not foreseen in HNM version. For requests of other size “21.21” connector inserts in HNM version (e.g.: RK, RQ 12, RQ 07), please contact ILME Commercial Offices.

When the number of 500 mating cycles guaranteed life of standard connector hoods and housings is insufficient to provide a reasonably long lifespan in those connector applications that by inherent function are foreseen to be subject to very frequent connections and disconnections, it is necessary to opt for a solution able to increase that guaranteed lifetime.

- Q The **HNM size “21.21”** series of connector enclosures achieves this goal, extending the guaranteed number of matings **up to 5 000**.

- ▶ **Original design, ILME exclusive**
in the market for rectangular connectors

Special
lubrication
of the lever
rolls



- ▶ **Special gold plating and lubrication** to reduce the wear of the contacts during frequently repeated mating/unmating operations



RKAX 03

HNM (High Number of Matings)

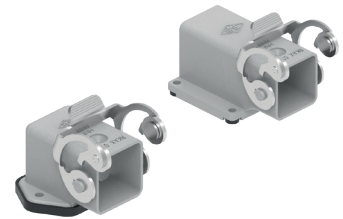
inserts		page:
CQ	21 poles	82
CD	8 poles	83
RQ	5 poles + ⊕	84
CQ4 03	3 poles + ⊕	85

bulkhead mounting housings straigh, stainless steel lever



FROM JUNE 2022

bulkhead mounting housings angled, stainless steel lever



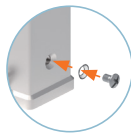
FROM JUNE 2022

description	part No.	part No.
with stainless steel lever	RKAX 03 I	RKAX 03 IA
without cable entry ¹⁾		RKAX 03 IA4
without cable entry, fixing by 4 screws		CKR 65
gasket and screw kit	CKR 65	CKR 65
for IP66 ²⁾		
gasket and screw kit for IP66 ²⁾	CKR 65 D	CKR 65 D
specific for CD 07/08 inserts		

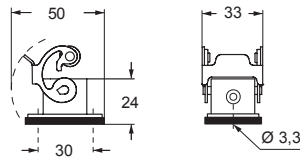
¹⁾ Not suitable for CQ4 series inserts

²⁾ To obtain the IP66 degree of protection it is necessary to replace the fixing screw supplied with the above listed inserts, with the one with gasket included in the kit (to be purchased separately).

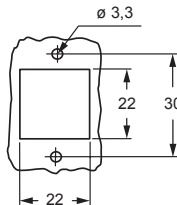
NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page.



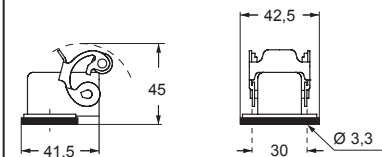
RKAX 03 I



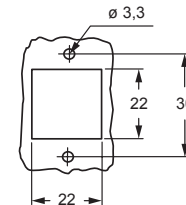
panel cut-out for enclosures



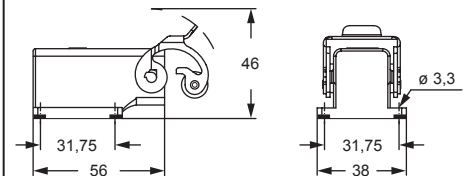
RKAX 03 IA



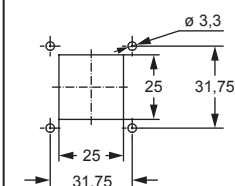
panel cut-out for enclosures



RKAX 03 IA4



panel cut-out for enclosures



cURus
Type 12 pending
Type 4/4X only with CKR 65 (D) pending



IP66 with CKR 65 (D) ²⁾

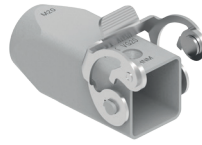


RKAX VG

HNM (High Number of Matings)

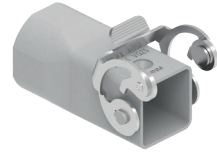
inserts		page:
CQ	21 poles	82
CD	8 poles	83
RQ	5 poles + ⊕	84
CQ4 03	3 poles + ⊕	85

hoods
stainless steel lever



FROM JUNE 2022

hoods
stainless steel lever



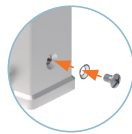
FROM JUNE 2022

description	part No. (entry M20)	part No. (entry M25)
top entry ¹⁾	RKAX VG20	
top entry		RKAX VG25
gasket and screw kit for IP66 ²⁾	CKR 65	CKR 65
gasket and screw kit for IP66 ²⁾ specific for CD 08 inserts	CKR 65 D	CKR 65 D

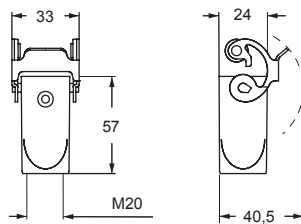
¹⁾ Not suitable for CQ4 series inserts

²⁾ To obtain the IP66 degree of protection it is necessary to replace the fixing screw supplied with the above listed inserts, with the one with gasket included in the kit (to be purchased separately).

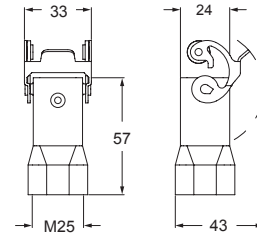
NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page.



RKAX VG20



RKAX VG25



cURus
Type 12 pending
Type 4/4X only with CKR 65 (D) pending



IP66 with CKR 65 (D) ²⁾

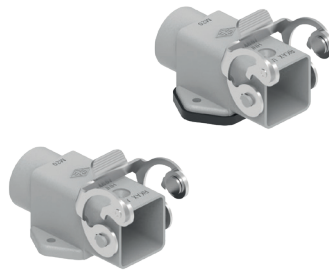
inserts

CQ	21 poles
CD	8 poles
RQ	5 poles + ⊕
CQ4 03	3 poles + ⊕

page:

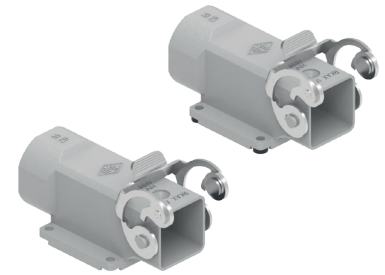
82
83
84
85

bulkhead mounting housings
straight and angled, stainless steel lever



FROM JUNE 2022

angled surface mounting housings
stainless steel lever



FROM JUNE 2022

description

part No.
(entry M20)

part No.
(entry M25)

with cable entry ¹⁾
with cable entry, bulkhead hole closed, without gasket ¹⁾

RKAX IAP20
RKAX AP20

RKAX IAP25
RKAX AP25

with cable entry, fixing by 4 screws
with cable entry, fixing by 4 screws,
bulkhead hole closed, without gasket

CKR 65

CKR 65

gasket and screw kit
for IP66 ²⁾

CKR 65 D

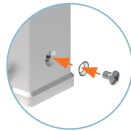
CKR 65 D

gasket and screw kit for IP66 ²⁾
specific for CD 07/08 inserts

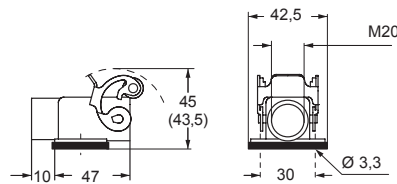
¹⁾ Not suitable for CQ4 series inserts

²⁾ To obtain the IP66 degree of protection it is necessary to replace the fixing screw supplied with the above listed inserts, with the one with gasket included in the kit (to be purchased separately).

NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page.

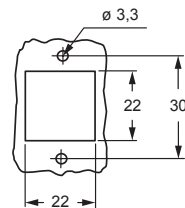


RKAX IAP20 (RKAX AP20*)

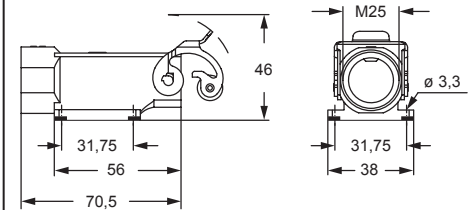


*AP... without gasket

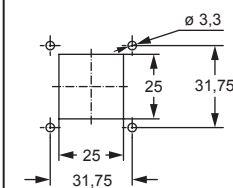
panel cut-out for enclosures



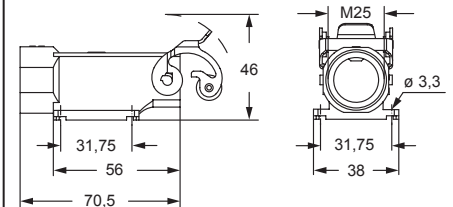
RKAX IAP25



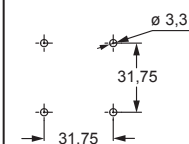
panel cut-out for enclosures



RKAX AP25



panel cut-out for enclosures



cURus
Type 12 pending
Type 4/4X only with CKR 65 (D) pending



IP66 with CKR 65 (D) ²⁾



RKAX IF – IAF

HNM (High Number of Matings)

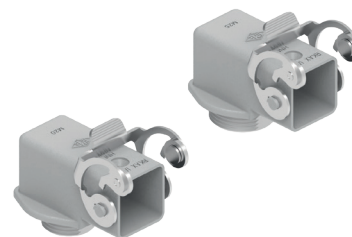
inserts		page:
CQ	21 poles	82
CD	8 poles	83
RQ	5 poles + ⊕	84
CQ4 03	3 poles + ⊕	85

bulkhead mounting housings stainless steel lever



FROM JUNE 2022

angled bulkhead mounting housings stainless steel lever

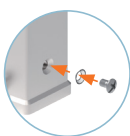


FROM JUNE 2022

description	part No.	entry M	part No.	entry M
with O-ring gasket ¹⁾ (1)	RKAX IF	32	RKAX IAF20	20
with flange gasket ¹⁾	RKAX IFC	32	RKAX IAF25	25
with O-ring gasket ^{1) 2)} (1)				
with O-ring gasket ^{1) 2)} (1)				
gasket and screw kit for IP66 ²⁾	CKR 65		CKR 65	
gasket and screw kit for IP66 ²⁾ specific for CD 07/08 inserts	CKR 65 D		CKR 65 D	

¹⁾ To obtain the IP66 degree of protection it is necessary to replace the fixing screw supplied with the above listed inserts, with the one with gasket included in the kit (to be purchased separately).

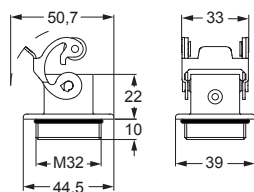
NOTE: The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



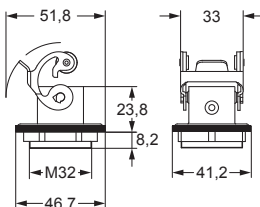
²⁾ Not suitable for CQ4 series inserts

³⁾ Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

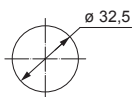
RKAX IF



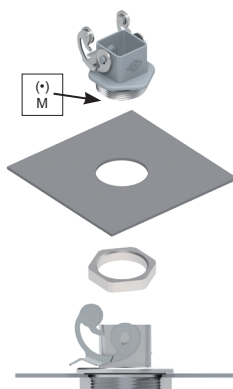
RKAX IFC



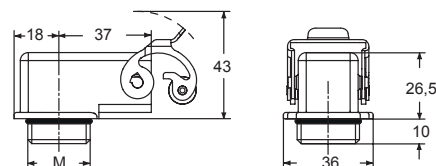
panel cut-out for enclosures



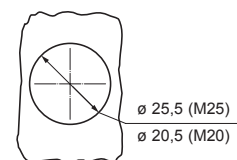
USE OF THE LOCKNUT



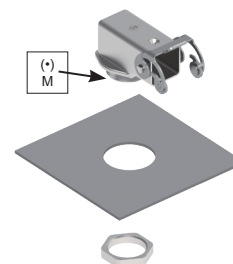
MKAX IAF



panel cut-out



USE OF THE LOCKNUT



cURus
Type 12 pending
Type 4/4X only with CKR 65 (D) pending



IP66 with CKR 65 (D) ²⁾

enclosures:
size "21.21"

page:

HNM

78 - 81

inserts, crimp connections



5 A HNM crimp contacts
gold plated



description

part No.

part No.

without contacts (to be ordered separately)
female insert for female contacts
male insert for male contacts

CQF 21
CQM 21

5 A female crimp contacts
0,08-0,21 mm² AWG 28-24
0,13-0,33 mm² AWG 26-22
0,33-0,52 mm² AWG 22-20

RIFD 0.2
RIFD 0.3
RIFD 0.5

gold plated

5 A male crimp contacts
0,08-0,21 mm² AWG 28-24
0,13-0,33 mm² AWG 26-22
0,33-0,52 mm² AWG 22-20

RIMD 0.2
RIMD 0.3
RIMD 0.5

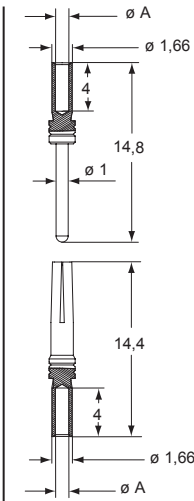
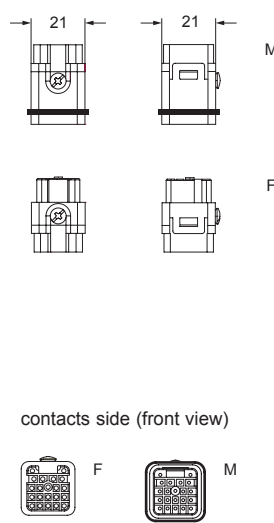
- characteristics according to EN 61984:
6,5 A 50 Vac / 120 Vdc 0,8 kV 3

- cULus (UL for USA and Canada),
BUREAU VERITAS certified

- rated voltage according to UL/CSA: 250V
- 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: $\geq 5 \text{ 000}$ cycles
- contact resistance: $\leq 4 \text{ m}\Omega$
- seat of contact #9 on both inserts set forward to obtain pre-leading contact (e.g. for FE functional earth)

- for crimp contacts RI series use, see pages 716 - 719 on CN.19 catalogue
CIPZ D crimping tool
CITP D turret head
CIES insertion / removal tool

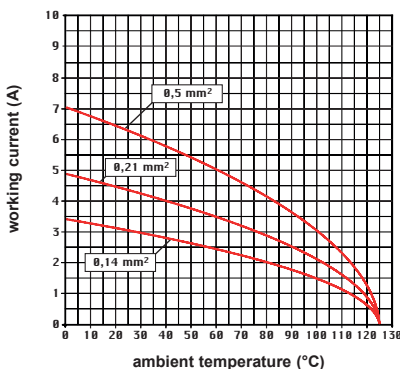
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue



RIF and RIM contacts

conductor section (mm ²)	conductor slot ø A (mm)	conductors stripping length (mm)
0,08-0,21	0,64	4
0,13-0,33	0,90	4
0,33-0,52	1,12	4

CQ 21 poles connector inserts
Maximum current load derating diagram





CD 8 poles 10 A - 50 Vac / 120 Vdc

HNM (High Number of Matings)

enclosures:
size "21.21"

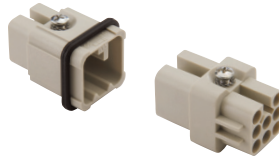
page:

HNM

78 - 81

inserts, crimp connections

10 A HNM crimp contacts
gold plated



description

part No.

part No..

without contacts (to be ordered separately)
female insert for female contacts ¹⁾
male insert for male contacts

CDF 08
CDM 08

10 A female contacts

0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

RDF2D 0.3
RDF2D 0.5
RDF2D 0.7
RDF2D 1.0
RDF2D 1.5
RDF2D 2.5

gold plated

10 A male contacts

0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

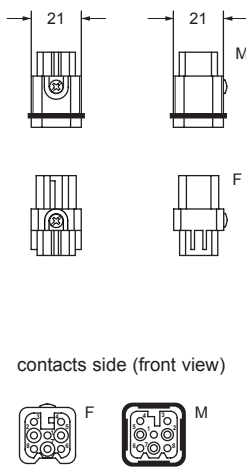
RDM2D 0.3
RDM2D 0.5
RDM2D 0.7
RDM2D 1.0
RDM2D 1.5
RDM2D 2.5

1) the female inserts can be mounted into the straight bulkhead housings CK I from the rear

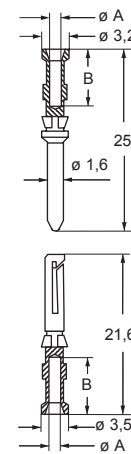
- characteristics according to EN 61984:
10A 50 Vac / 120 Vdc 0,8 kV 3

- cULus (UL for USA and Canada),
 certified

- rated voltage according to UL/CSA: 50V ac / 120V dc
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: $\geq 5 \text{ 000}$ cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for applications requiring higher voltages, please see the special voltage application section refer to C.19 catalogue on page 65
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10 A contacts, CDF and CDM series see pages 708 - 741 on CN.19)
- for max. current load see the connector inserts derating diagram below; for more information see **page 28** of CN.19 catalogue



contacts side (front view)

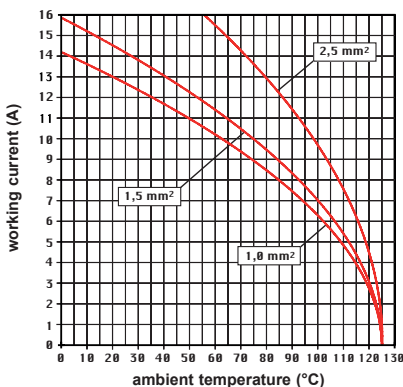


RDF2D and RDM2D contacts

conductor section mm ²	conductor slot ø A (mm)	conductors stripping length B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6

CD 08 poles connector inserts

Maximum current load derating diagram



CR CP coding pin with loss of one contact (refer to CN.19, page 689)



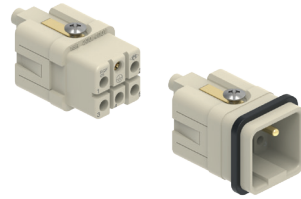
enclosures:
size "21.21"

page:

HNM

78 - 81

HNM inserts, crimp connections



FROM JUNE 2022

16 A HNM crimp contacts
gold plated



description

part No.

part No.

without contacts (to be ordered separately)
female insert for female contacts
male insert for male contacts

RQF 05
RQM 05

16 A female contacts

0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

RCF2D 0.3
RCF2D 0.5
RCF2D 0.7
RCF2D 1.0
RCF2D 1.5
RCF2D 2.5
RCF2D 3.0
RCF2D 4.0

gold plated

16 A male contacts

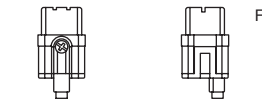
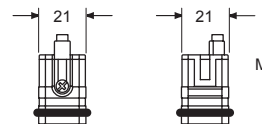
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

RCM2D 0.3
RCM2D 0.5
RCM2D 0.7
RCM2D 1.0
RCM2D 1.5
RCM2D 2.5
RCM2D 3.0
RCM2D 4.0

- characteristics according to EN 61984:

16 A 230/400 V 4 kV 3
16 A 320/500 V 4 kV 2

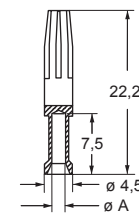
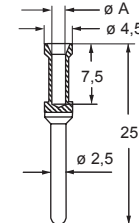
- cURus (UL for USA and Canada) pending
- CQC, DNV-GL, BV, EAC will follow
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: $\geq 5 \text{ 000}$ cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16 A contacts, RC series see pages 708 - 741 on CN.19 catalogue)
- can also be used partially fitted with 4 mm² section contacts
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue



contacts side (front view)

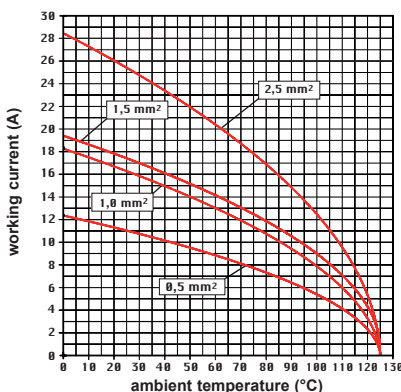


NOTE: PE screw connection for unprepared wires only



RQ 05 poles connector inserts

Maximum current load derating diagram



Coding pins
CR CPQ
(refer to CN.19,
page 689)



RCF2D and RCM2D contacts

conductor section mm ²	conductor slot $\varnothing A$ (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5



CQ4F /M 03 3 poles + ⊕ 40 A - 400 V

HNM (High Number of Matings)

enclosures:
size "21.21"

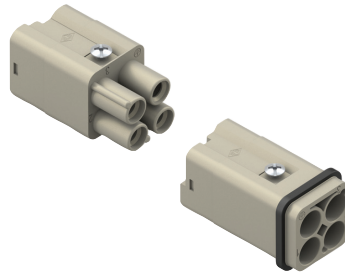
page:

HNM

78 - 81

HNM inserts, crimp connections

**40 A HNM crimp contacts
gold plated**



description

part No.

part No.

without contacts (to be ordered separately)
female inserts for female contacts *
male inserts for male contacts *

CQ4F 03
CQ4M 03

40 A female crimp contacts
1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

RXF2D 1.5
RXF2D 2.5
RXF2D 4.0
RXF2D 6.0

gold plated

40 A male crimp contacts
1,5 mm² AWG 16
2,5 mm² AWG 14
4 mm² AWG 12
6 mm² AWG 10

RXM2D 1.5
RXM2D 2.5
RXM2D 4.0
RXM2D 6.0

* wire diameter: up to 7,5 mm, contact section: up to 10 mm²

☑ the female insert **CQ4F 03** is finger proof (IP2X or IPXXB) even if not coupled, while the male insert **CQ4M 03** in this circumstance is protected from access with the back of the hand (IP1X or IPXXA)

☑ cannot be used in angled enclosures (IA/IAP/VA version)

- characteristics according to EN 61984:

40 A 400 V 6 kV 3

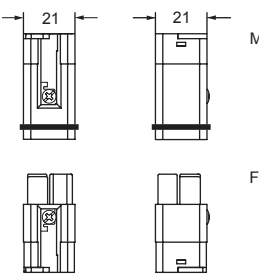
- cULus (UL for USA and Canada),

ERC certified

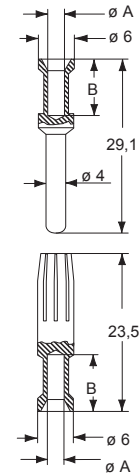
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 5 000 cycles
- contact resistance: ≤ 0,3 mΩ

- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 40 A contacts RX series, pages 708 - 741 on CN.19 catalogue)

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



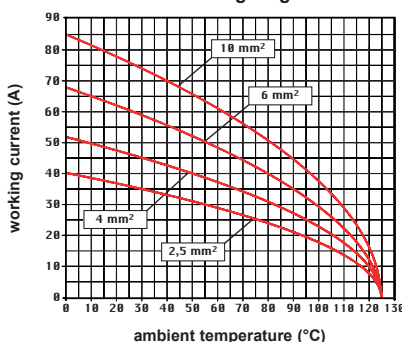
contacts side (front view)



RXF2D and RXM2D contacts

conductor cross-sectional area mm ²	conductor slot ø A (mm)	conductor stripping length B (mm)
1,5	1,8	9
2,5	2,2	9
4	2,85	9,6
6	3,5	9,6

**CQ4 03 poles connector inserts
Maximum current load derating diagram**

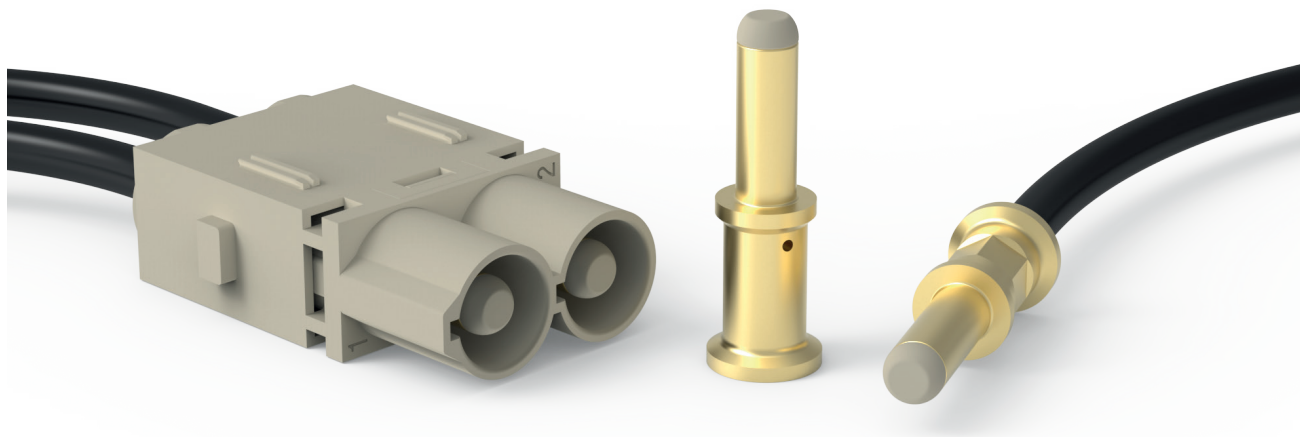


Coding pins
CR Q03, 4 possible
positions
(refer to CN.19,
page 692)



RX7 SERIES FINGERPROOF MALE CRIMP CONTACTS

HNM VERSION WITH INSULATING CAP



MIXO module **CX 02 7M**, when mounted in dedicated HNM MIXO is used in combination with the **RX7 HNM** series of 70 A crimp contacts which is now expanded by adding a variant of **male contacts with insulating cap** on their tip, to determine the **fingerproof safety** (IPXXB or IP20) feature.

This feature is particularly advantageous in all applications where male connector inserts feed electric motors equipped with power drives, such drives being often equipped motor side with **capacitors** that may remain charged with hazardous voltage present on the pin contacts of the connector for a few times after switching off the motor and unplugging the connector.

NOTE – The new **HNM** crimp combined connector inserts **RXM 4/2** and **RXM 4/8** for use with **RX7** power male crimp contacts and **RC** auxiliary male crimp contacts, cannot take advantage of **RX7M2D..P** fingerproof contacts, in that these inserts, for legacy with the traditional screw-type models, could not be provided with shrouded seats for male contacts as in **MIXO CX 02 7M**.

- Q Tip made by polycarbonate (same as those of the inserts), light grey colour.
- Q All other features are in common with RX7 contacts (i.e., crimping tools, dimensions, materials, etc.).
- Q RoHS: compliant with exemption 6(c).



Find out more
www.ilme.com

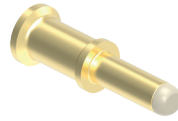
RX7M2D 6.0 P/ 10 P/ 16 P/ 16XFP /25 P 70 A FINGERPROOF HNM (High Number of Matings)

inserts:

MIXO (CX 02 7M)

page:

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70 A HNM gold plated fingerproof male crimp contacts

FROM MARCH 2022

removal tools



refer to CN.19 pages

description

part No.

part No.

70 A HNM fingerproof male crimp contacts

6 mm ²	(Class 5)	AWG 10
10 mm ²	(Class 5)	AWG 8 - 7
16 mm ²	(Class 5)	AWG 6 - 5
16 mm ²	(Class 6)	AWG 6 - 5
25 mm ²	(Class 5)	AWG 4 - 3

RX7M2D 6.0 P
RX7M2D 10 P
RX7M2D 16 P
RX7M2D 16XFP
RX7M2D 25 P

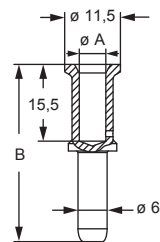
gold plated

removal tools

for RC series contacts

CX7ES

it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70 A contacts, RX7 series) on pages 720 - 721 of CN.19 catalogue

**RX7M2D..P contacts**

section (mm ²)	ø A (mm)	B (mm)	stripping length (mm)
6	3,5	36,6	15
10	4,3	35,8	15
16	5,5	35,8	15
16 (XF)	6,1	35,8	15
25	7,0	35,8	15



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