

## Serie HNM

### Verbinden und trennen

**Gehäuseunterteile** (Anbau- oder Sockelgehäuse) mit einem **V-TYPE-Verschlussbügel** mit spezieller **Behandlung zur Reibungsminderung**

*werden verbunden mit*

**Tüllengehäusen** mit **drehbar gelagerten Edelstahlbolzen**, die häufiges Verbinden und Trennen ermöglichen.

Die Steckverbindergehäuse der **Serie HNM** wurden für den Einsatz in Kombination mit den Kontakteinsätzen der **Serie HNM** entwickelt, die mit den entsprechenden Crimpkontakten der **Serie HNM** ausgestattet sind, um den gleichen zuverlässigen Schutz wie die Standard-Serie zu bieten, jedoch eine deutlich erhöhte **Anzahl von Steckzyklen sicherstellen**.

Wenn die Anzahl von 500 Steckzyklen, die als Lebensdauer von Standard-Kontakteinsätzen, Kontakten und Gehäusen angegeben wird, nicht ausreicht, um eine ausreichend lange Betriebsdauer bei den Steckverbinderanwendungen zu gewährleisten, bei denen aufgrund ihrer Funktion ein sehr häufiges Stecken und Trennen der Steckverbindung vorgesehen ist, ist es notwendig, sich für eine Lösung zu entscheiden, die diese garantierte Lebensdauer erhöhen kann.

Mit der Gehäuseserie **HNM** wird dieses Ziel erreicht und die Anzahl der gewährleisteten Steckzyklen auf bis zu 10.000 erhöht.

Das Verriegelungssystem, das sowohl den Verschlussbügel als auch die Bolzen umfasst, wird so ausgeführt und behandelt, dass der Verschleiß durch Reibung auf ein Minimum reduziert wird, dank der Verwendung der speziell entwickelten **V-TYPE-Verschlussbügel**, die bereits bei Standardgehäusen in der Lage sind, einen extrem reduzierten Verschleiß an den entsprechenden Bolzen zu gewährleisten, woraus eine sehr begrenzte Reibung entsteht, die durch die Aufbringung einer speziellen Gleitschmierung weiter reduziert wird.

Die „Gegengehäuse“ (Tüllengehäuse) sind zur Verriegelung bereits mit genieteten, drehbar gelagerten Bolzen aus Edelstahl versehen und werden durch die spezielle Gleitschmierung weiter optimiert.



# RV - RVA HNM (High Number of Matings)

passende Einsätze:

RDD	24-polig + ⊕
RCE	6-polig + ⊕
MIXO HNM	2 Module

Seite:

210
214
321 - 333

**Anbaugehäuse  
mit 1 Bügel aus Edelstahl**



**Q 10.000 STECKZYKLEN MIT  
HNM-EINSÄTZEN**

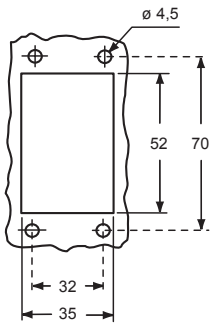
**Sockelgehäuse  
mit 1 Bügel aus Edelstahl**



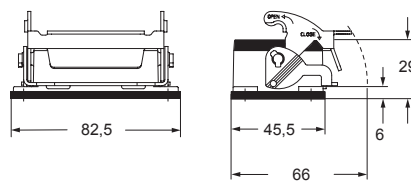
**Q 10.000 STECKZYKLEN MIT  
HNM-EINSÄTZEN**

Beschreibung	Artikel- bezeichnung	Artikel- bezeichnung	Kabelausgang M
mit Bügel	<b>RVI 06 L</b>		
mit Bügel		<b>RVP 06 L20</b>	20
mit Bügel		<b>RVP 06 L220</b>	20 x 2
mit Bügel, hoch		<b>RVAP 06 L32</b>	32
mit Bügel, hoch		<b>RVAP 06 L232</b>	32 x 2

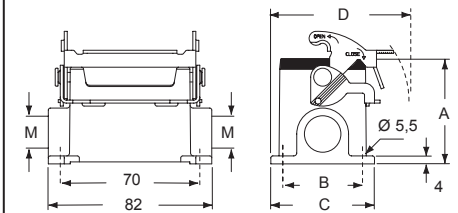
Montageausschnitt Anbaugehäuse in mm



**RVI L**



**RVP L - RVAP L**



Artikel	A	B	C	D
<b>RVP 06 L</b>	53	40	52	70
<b>RVAP 06 L</b>	74	45	57	72,5

**CAVUS**® Type 4/4X/12



Kabelverschraubung aus Kunststoff ohne Dichtung



Kabelverschraubung mit O-Ring-Dichtung

# RH – RF HNM (High Number of Matings)

passende Einsätze:

RDD	24-polig + ⊕
RCE	6-polig + ⊕
MIXO HNM	2 Module

Seite:

210
214
321 – 333

## Tüllengehäuse mit 2 Bolzen



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

## Tüllengehäuse mit 2 Bolzen

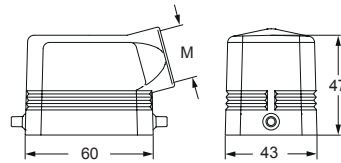


**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

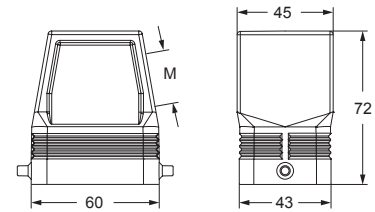
Beschreibung	Artikelbezeichnung	Kabelausgang M	Artikelbezeichnung	Kabelausgang M
mit Bolzen, seitlicher Kabelausgang	<b>RHO 06 L25</b>	25	<b>RFO 06 L32</b>	32
mit Bolzen, gerader Kabelausgang <sup>1)</sup>	<b>RHV 06 L25</b>	25	<b>RFV 06 L32</b>	32
Bolzen, seitlicher Kabelausgang, hoch, ohne Gewindestutzen <sup>2)</sup>				
Bolzen, gerader Kabelausgang, hoch, ohne Gewindestutzen <sup>2)</sup>				

- 1) kann nicht mit der Serie MIXO verwendet werden
- 2) Gehäuse ohne Gewindestutzen, Gewinde im Gehäusekörper nur mit Kompletverschraubungen zu verwenden (separat erhältlich)

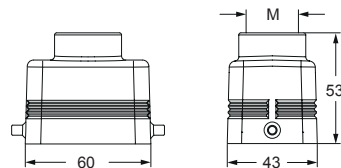
### RHO L



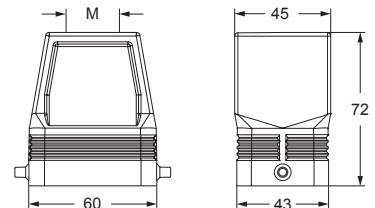
### RFO L



### RHV L



### RFV L



**CAVUS**® Type 4/4X/12

- Kabelverschraubung aus Kunststoff ohne Dichtung
- Kabelverschraubung mit O-Ring-Dichtung

# RV – RVA HNM (High Number of Matings)

passende Einsätze:

RDD	42-polig + ⊕
RCE	10-polig + ⊕
MIXO HNM	3 Module

Seite:

211
215
321 – 333

## Anbaugehäuse mit 1 Bügel aus Edelstahl



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

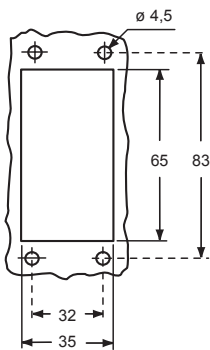
## Sockelgehäuse mit 1 Bügel aus Edelstahl



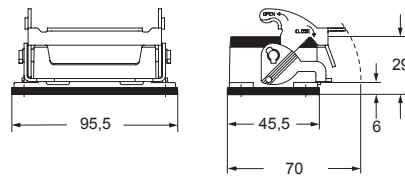
**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

Beschreibung	Artikelbezeichnung	Artikelbezeichnung	Kabelausgang
mit Bügel	<b>RV 10 L</b>		M
mit Bügel		<b>RVP 10 L20</b>	20
mit Bügel		<b>RVP 10 L220</b>	20 x 2
mit Bügel, hoch		<b>RVAP 10 L32</b>	32
mit Bügel, hoch		<b>RVAP 10 L232</b>	32 x 2

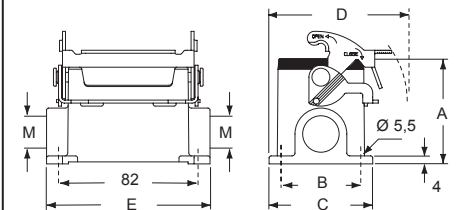
Montageausschnitt Anbaugehäuse in mm



**RV 10 L**



**RVP L - RVAP L**



Artikel	A	B	C	D	E
<b>RVP 10 L</b>	57	40	52	73	93,5
<b>RVAP 10 L</b>	74	45	57	75,5	94

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Kabelverschraubung aus Kunststoff ohne Dichtung



Kabelverschraubung mit O-Ring-Dichtung

# RH – RF HNM (High Number of Matings)

passende Einsätze:

RDD	42-polig + ⊕
RCE	10-polig + ⊕
MIXO HNM	3 Module

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215
321 – 333

## Tüllengehäuse mit 2 Bolzen



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

## Tüllengehäuse mit 2 Bolzen



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

Beschreibung

Artikel-  
bezeichnung    Kabelausgang  
M

Artikel-  
bezeichnung    Kabelausgang  
M

mit Bolzen, seitlicher Kabelausgang  
mit Bolzen, gerader Kabelausgang

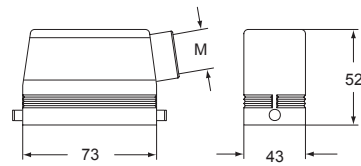
**RHO 10 L25**    25  
**RHV 10 L25**    25

**RFO 10 L32**    32  
**RFV 10 L32**    32

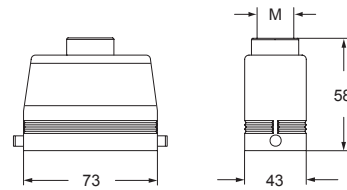
Bolzen, seitlicher Kabelausgang, hoch, ohne Gewindestutzen <sup>1)</sup>  
Bolzen, gerader Kabelausgang, hoch, ohne Gewindestutzen <sup>1)</sup>

<sup>1)</sup> Gehäuse ohne Gewindestutzen, Gewinde im Gehäusekörper nur mit Komplettschraubungen zu verwenden.

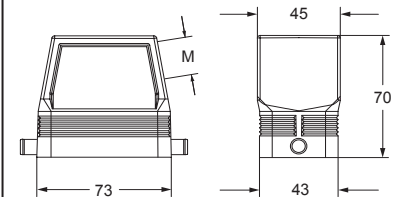
### RHO L



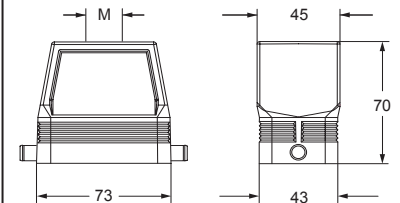
### RHV L



### RFO L



### RFV L



**CAVUS**® Type 4/4X/12

Kabelverschraubung aus Kunststoff ohne Dichtung

Kabelverschraubung mit O-Ring-Dichtung

# RV - RVA HNM (High Number of Matings)

passende Einsätze:

RD	40-polig + ⊕
RDD	72-polig + ⊕
RCE	16-polig + ⊕
RQEE	40-polig + ⊕
RX	12-polig + 2-polig + ⊕
MIXO HNM	4 Module

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216
218
221
321 - 333

## Anbaugehäuse mit 1 Bügel aus Edelstahl



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

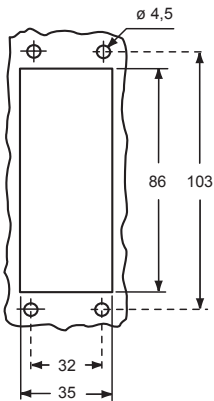
## Sockelgehäuse mit 1 Bügel aus Edelstahl



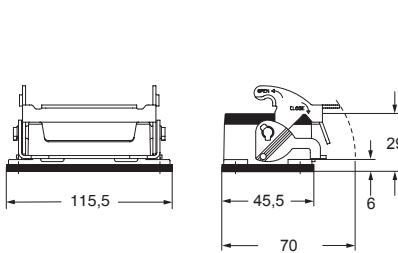
**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

Beschreibung	Artikelbezeichnung	Artikelbezeichnung	Kabelausgang
mit Bügel	<b>RV 16 L</b>		M
mit Bügel		<b>RVP 16 L25</b>	25
mit Bügel		<b>RVP 16 L225</b>	25 x 2
mit Bügel, hoch		<b>RVAP 16 L32</b>	32
mit Bügel, hoch		<b>RVAP 16 L232</b>	32 x 2

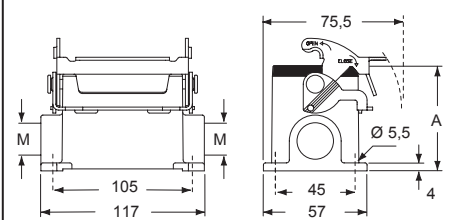
Montageausschnitt Anbaugehäuse in mm



RV 1 L



RVP L - RVAP L



Artikel	A
<b>RVP 16 L</b>	63
<b>RVAP 16 L</b>	81

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Kabelverschraubung aus Kunststoff ohne Dichtung



Kabelverschraubung mit O-Ring-Dichtung

# RH - RF HNM (High Number of Matings)

passende Einsätze:

RD	40-polig + ⊕
RDD	72-polig + ⊕
RCE	16-polig + ⊕
RQEE	40-polig + ⊕
RX	12-polig + 2 polig + ⊕
MIXO HNM	4 Module

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321 - 333

## Tüllengehäuse mit 2 Bolzen



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

## Tüllengehäuse mit 2 Bolzen

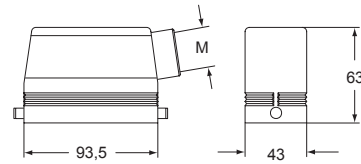


**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

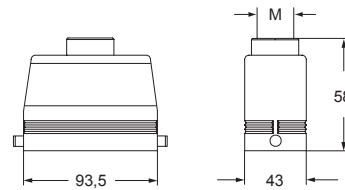
Beschreibung	Artikel- bezeichnung	Kabelausgang M	Artikel- bezeichnung	Kabelausgang M
mit Bolzen, seitlicher Kabelausgang	<b>RHO 16 L32</b>	32	<b>RFO 16 L32</b>	32
mit Bolzen, gerader Kabelausgang	<b>RHV 16 L32</b>	32	<b>RFV 16 L32</b>	32
Bolzen, seitlicher Kabelausgang, hoch, ohne Gewindestutzen <sup>1)</sup>				
Bolzen, gerader Kabelausgang, hoch, ohne Gewindestutzen <sup>1)</sup>				

<sup>1)</sup> Gehäuse ohne Gewindestutzen, Gewinde im Gehäusekörper nur mit Komplettverschraubungen zu verwenden.

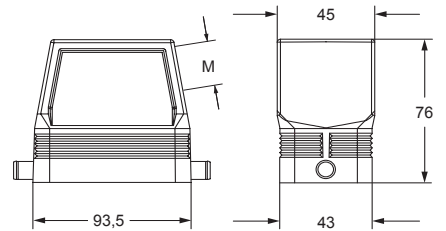
### RHO L



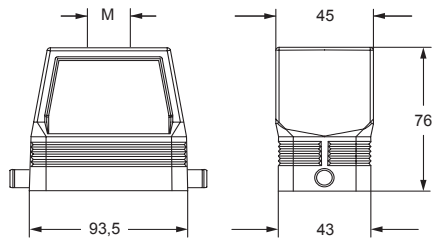
### RHV L



### RFO L



### RFV L



**CAIUS**® Type 4/4X/12

Kabelverschraubung aus Kunststoff ohne Dichtung

Kabelverschraubung mit O-Ring-Dichtung

# RV – RVA HNM (High Number of Matings)

passende Einsätze:

RD	64-polig + ⊕
RDD	108-polig + ⊕
RCE	24-polig + ⊕
RQEE	64-polig + ⊕
MIXO HNM	6 Module

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213
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321 – 333

## Anbaugehäuse mit 1 Bügel aus Edelstahl



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

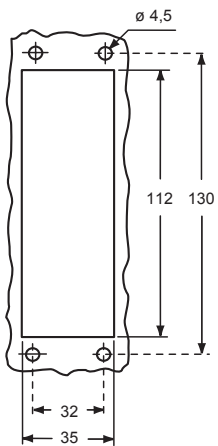
## Sockelgehäuse mit 1 Bügel aus Edelstahl



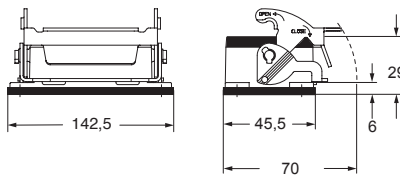
**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

Beschreibung	Artikelbezeichnung	Artikelbezeichnung	Kabelausgang
mit Bügel	<b>RVI 24 L</b>		M
mit Bügel		<b>RVP 24 L25</b>	25
mit Bügel		<b>RVP 24 L225</b>	25 x 2
mit Bügel, hoch		<b>RVAP 24 L32</b>	32
mit Bügel, hoch		<b>RVAP 24 L232</b>	32 x 2

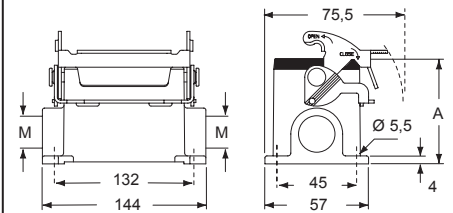
Montageausschnitt Anbaugehäuse in mm



RVI L



RVP L - RVAP L



Artikel	A
<b>RVP 24 L</b>	63
<b>RVAP 24 L</b>	81

**CAVUS**® Type 4/4X/12



Kabelverschraubung aus Kunststoff ohne Dichtung



Kabelverschraubung mit O-Ring-Dichtung



# RH – RF HNM (High Number of Matings)

passende Einsätze:

RD	64-polig + ⊕
RDD	108-polig + ⊕
RCE	24-polig + ⊕
RQEE	64-polig + ⊕
MIXO HNM	6 Module

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219
321 – 333

## Tüllengehäuse mit 2 Bolzen



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

## Tüllengehäuse mit 2 Bolzen

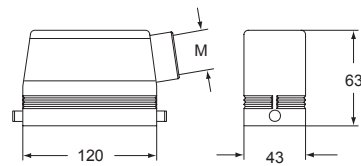


**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

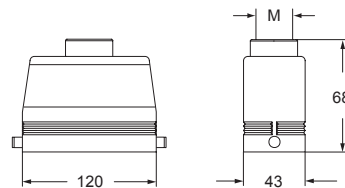
Beschreibung	Artikelbezeichnung	Kabelausgang M	Artikelbezeichnung	Kabelausgang M
mit Bolzen, seitlicher Kabelausgang	<b>RHO 24 L32</b>	32	<b>RFO 24 L40</b>	40
mit Bolzen, gerader Kabelausgang	<b>RHV 24 L32</b>	32	<b>RFV 24 L40</b>	40
Bolzen, seitlicher Kabelausgang, hoch, ohne Gewindestutzen <sup>1)</sup>				
Bolzen, gerader Kabelausgang, hoch, ohne Gewindestutzen <sup>1)</sup>				

<sup>1)</sup> Gehäuse ohne Gewindestutzen, Gewinde im Gehäusekörper nur mit Kompletverschraubungen zu verwenden.

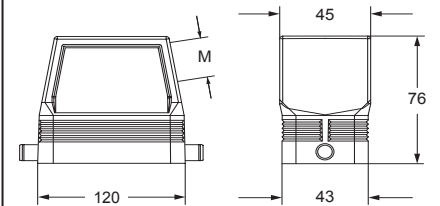
### RHO L



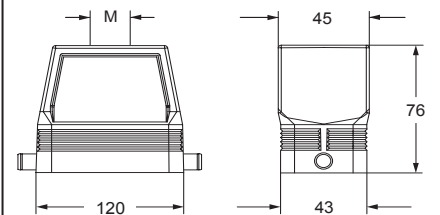
### RHV L



### RFO L



### RFV L



**CAIUS**® Type 4/4X/12

Kabelverschraubung aus Kunststoff ohne Dichtung

Kabelverschraubung mit O-Ring-Dichtung

# RAC Geschlossene Tüllengehäuse HNM (High Number of Matings)

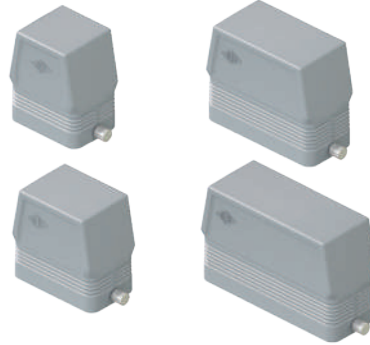
passende Gehäuseunterteile

Seite:

Größe "44.27"  
Größe "57.27"  
Größe "77.27"  
Größe "104.27"

592 – 593  
594 – 595  
596 – 597  
598 – 599

Tüllengehäuse ohne Kabelausgänge,  
zur nachträglichen Bearbeitung



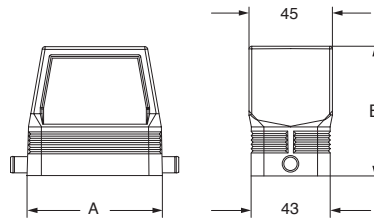
**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

Beschreibung

Artikelbezeichnung  
mit 2 Bolzen

mit Bolzen  
Baugröße "44.27"  
Baugröße "57.27"  
Baugröße "77.27"  
Baugröße "104.27"

**RAC 06 L**  
**RAC 10 L**  
**RAC 16 L**  
**RAC 24 L**



Artikel	A	B
<b>RAC 06 L</b>	60	72
<b>RAC 10 L</b>	73	70
<b>RAC 16 L</b>	93,5	76
<b>RAC 24 L</b>	120	76

**CAUS**® Type 4/4X/12



Kabelverschraubung aus Kunststoff  
ohne Dichtung



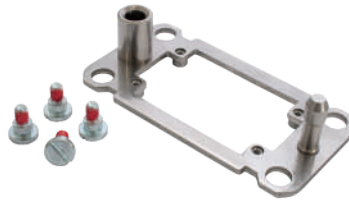
Kabelverschraubung  
mit O-Ring-Dichtung

**Q ACHTUNG:** Weil die Rahmen schwimmend gelagert sind, **muss die Anbauwand separat geerdet werden**. Die Erdung erfolgt nicht automatisch über den PE Anschluss der Kontakteinsätze.

**HINWEIS:** Der Lieferumfang umfasst einen Andockrahmen und 4 Befestigungsschrauben mit Ausgleichkopf.

Für die Verwendung mit MIXO Modulareinsätzen CX 04 X wenden Sie sich bitte direkt an Ihre ILME-Regionalorganisation.

## selbstzentrierender Andockrahmen



**Q 10.000 STECKZYKLEN MIT HNM-EINSÄTZEN**

### Beschreibung

### Artikelbezeichnung

aus Edelstahl, passend für:

- Einsätze Größe "44.27" <sup>1)</sup> oder MIXO Halterahmen für 2 Module
- Einsätze Größe "57.27" <sup>1)</sup> oder MIXO Halterahmen für 3 Module
- Einsätze Größe "77.27" <sup>1)</sup> oder MIXO Halterahmen für 4 Module
- Einsätze Größe "104.27" <sup>1)</sup> oder MIXO Halterahmen für 6 Module

- CR 06 DF**
- CR 10 DF**
- CR 16 DF**
- CR 24 DF**

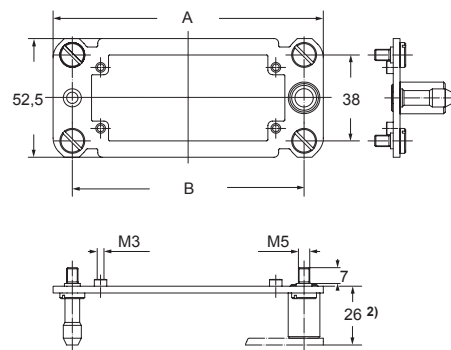
<sup>1)</sup> außer CT, CTS und CTSE

### Technische Eigenschaften

- Materialien
- schwimmender Rahmen, Edelstahl
- Befestigungsschrauben aus verzinktem Stahl
- Mechanische Lebensdauer:  $\geq 10.000$  Zyklen mit HNM Einsätzen
- Ausgleichmaße:
- x-Achse:  $\pm 1,5$  mm
- y-Achse:  $\pm 1,5$  mm

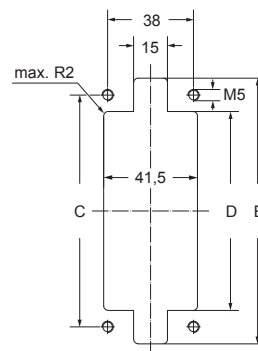
### Eigenschaften

- passend für alle Kontakteinsätze außer Anschlussverteiler der Serien CT, CTS, CTE und CTSE
- besonders geeignet für den Einsatz von Steckverbindern hinter Einschüben auf Schleifringen, in Verbindung mit kuppelnden Werkzeughälften, generell in der Verkehrstechnik, der Windenergie und der Druckindustrie.
- ermöglicht das **selbstzentrierende Stecken zweier Steckverbinderhälften** an Anlagenteilen ohne Gehäuse. Die in die Rahmen eingebauten Steckverbinderinsätze werden über die Führungsbuchsen und Führungsstifte der Rahmen frühzeitig in Position gebracht, hierdurch wird eine Beschädigung der Einsätze vermieden. **Die Ausgleichmaße betragen in x- und y-Richtung jeweils  $\pm 1,5$  mm.**

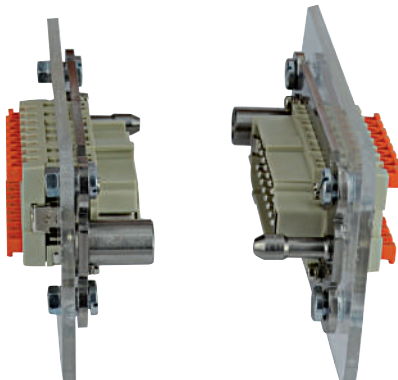


<sup>2)</sup> Abstand für elektrische und faseroptische Kontakte: max. 27 mm;  
Abstand für Pneumatikkontakte: max. 26,5 mm.

### Montageausschnitt

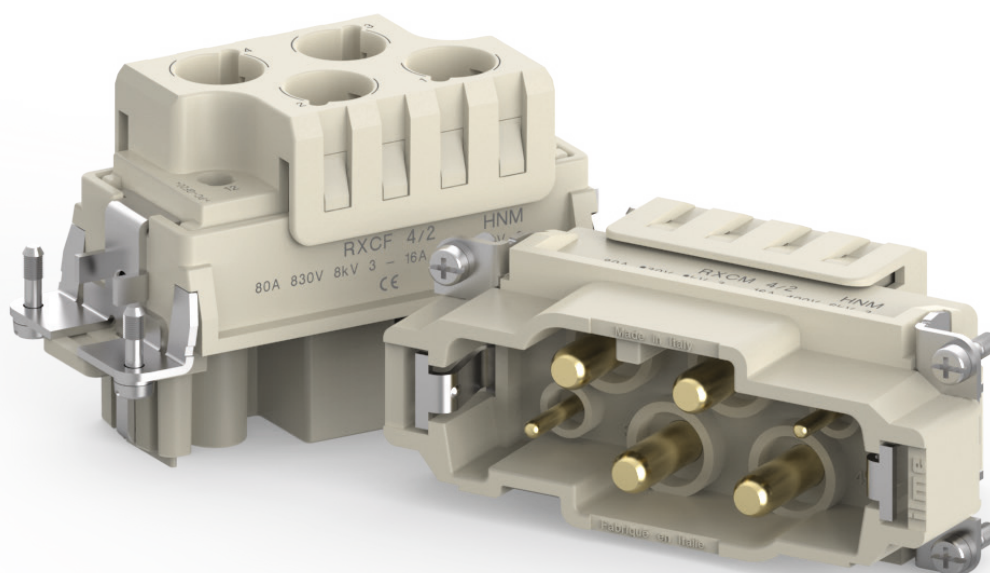


Artikel	A	B	C	D	E
<b>CR 06 DF</b>	86	69	69	54,5	84
<b>CR 10 DF</b>	99	82	82	67,5	97
<b>CR 16 DF</b>	119,5	102,5	102,5	88	117,5
<b>CR 24 DF</b>	146	129	129	114,5	144



# 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**



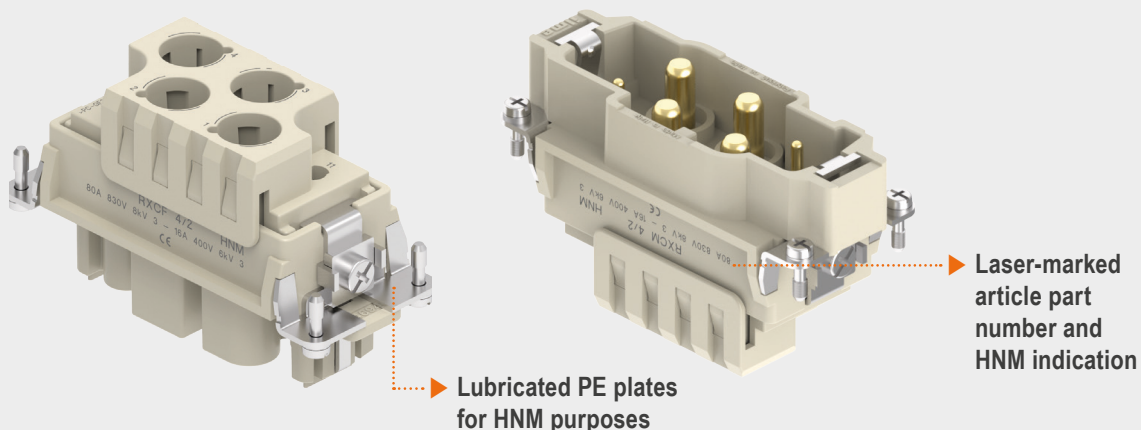
Find out more  
[www.ilme.com](http://www.ilme.com)

## 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"

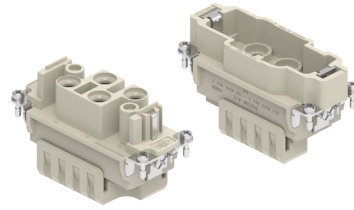
page:

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

80 A male crimp contacts

6 mm <sup>2</sup>	(Class 5)	AWG 10
10 mm <sup>2</sup>	(Class 5)	AWG 8 - 7
16 mm <sup>2</sup>	(Class 5)	AWG 6 - 5
16 mm <sup>2</sup>	(Class 6)	AWG 6 - 5
25 mm <sup>2</sup>	(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:

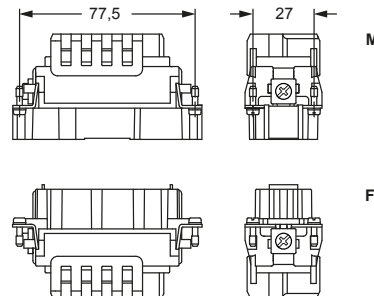
**80 A 830 V 8 kV 3**  
**16 A 400 V 6 kV 3**

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance:  $\geq 10$  G $\Omega$
- 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:  $\geq 10.000$  cycles
- contact resistance:  $\leq 0,3$  m $\Omega$  (4 power poles)  
 $\leq 1$  m $\Omega$  (2 auxiliary poles)

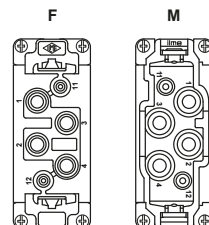
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70 A contacts RX7F2D and RX7M2D series and 16 A contacts RCF2D, RCM2D series, on pages 708 - 741 of CN.19 catalogue)

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

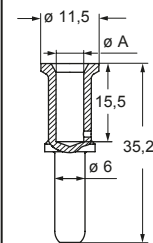
RXC 4/2



contacts side (front view)



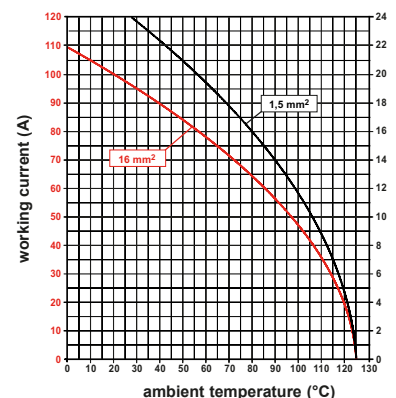
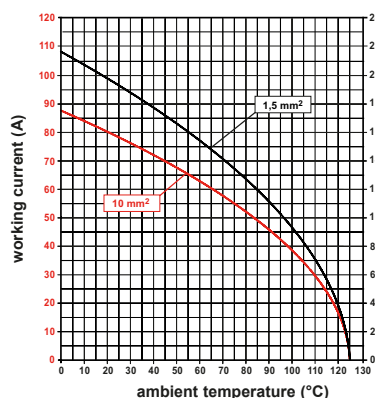
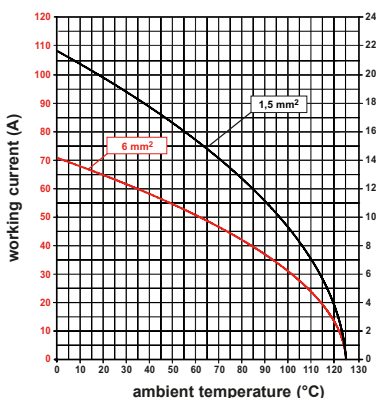
RX7F2D, RX7M2D and  
RX7F2D 16 XF, RX7M2D 16 XF



RX7F2D and RX7M2D contacts		
conductor section (mm <sup>2</sup> )	conductor slot $\phi$ 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



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

<b>RCF2D 0.3</b>
<b>RCF2D 0.5</b>
<b>RCF2D 0.7</b>
<b>RCF2D 1.0</b>
<b>RCF2D 1.5</b>
<b>RCF2D 2.5</b>
<b>RCF2D 3.0</b>
<b>RCF2D 4.0</b>

gold plated

16 A male contacts, HNM gold plated

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

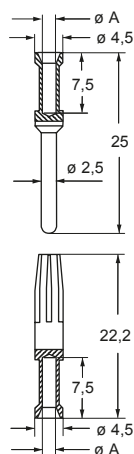
<b>RCM2D 0.3</b>
<b>RCM2D 0.5</b>
<b>RCM2D 0.7</b>
<b>RCM2D 1.0</b>
<b>RCM2D 1.5</b>
<b>RCM2D 2.5</b>
<b>RCM2D 3.0</b>
<b>RCM2D 4.0</b>

removal tools

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

**CX7ES**  
**CQES**

### RCF2D and RCM2D

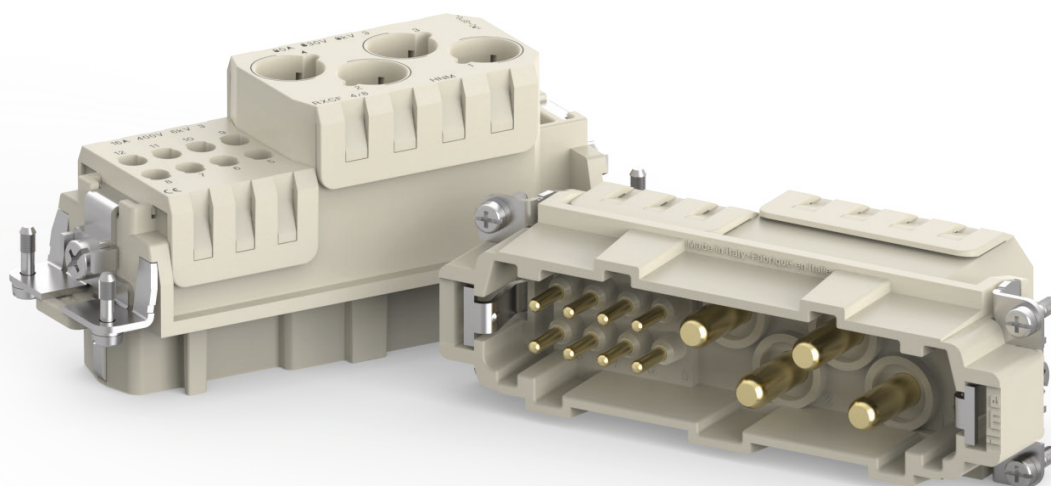


### RCF2D and RCM2D contacts

conductor section mm <sup>2</sup>	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](http://www.ilme.com)

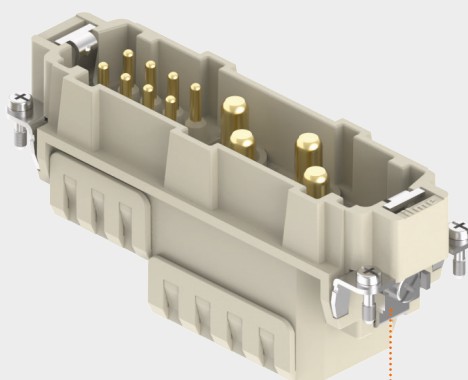
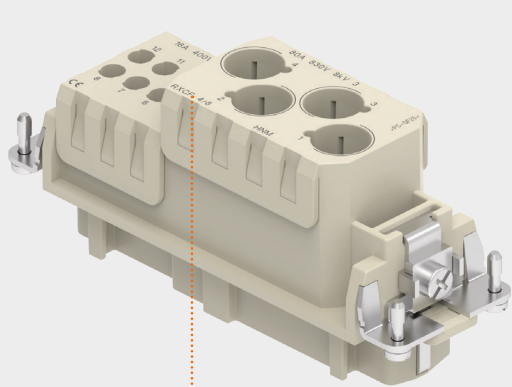


## TECHNICAL FEATURES

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

# CXCF /M 4/8 4 poles (80 A - 400 V) + 8 poles (16 A - 230/400 V) + ⊕ HNM (High Number of Matings)

enclosures:  
size "104.27"

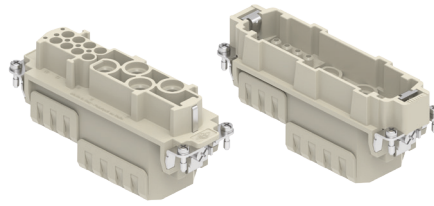
page:

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

80 A male crimp contacts

6 mm <sup>2</sup>	(Class 5)	AWG 10
10 mm <sup>2</sup>	(Class 5)	AWG 8 - 7
16 mm <sup>2</sup>	(Class 5)	AWG 6 - 5
16 mm <sup>2</sup>	(Class 6)	AWG 6 - 5
25 mm <sup>2</sup>	(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:

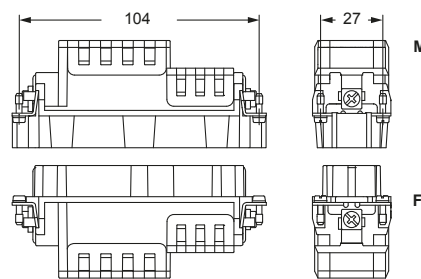
**80 A 400 V 6 kV 3**  
**16 A 230/400 V 4 kV 3**

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

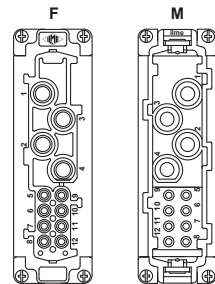
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 70 A contacts RX7F2D and RX7M2D series and 16 A contacts RCF2D, RCM2D series, on pages 708 - 741 of CN.19 catalogue)

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

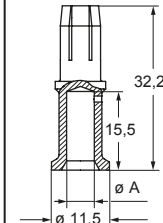
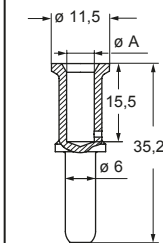
RXC 4/8



contacts side (front view)

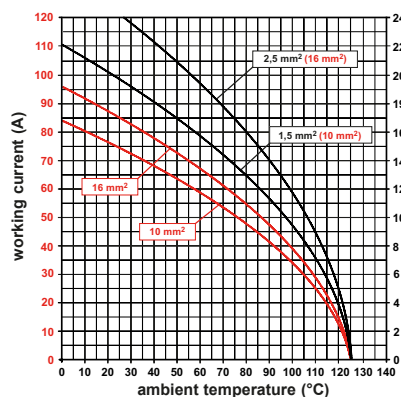
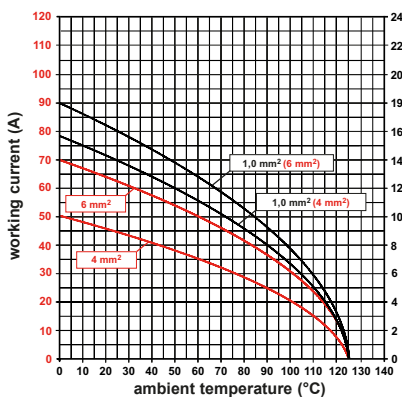


RX7F2D, RX7M2D and  
RX7F2D 16 XF, RX7M2D 16 XF



RXC 4/8 poles connector inserts

Maximum current load derating diagram

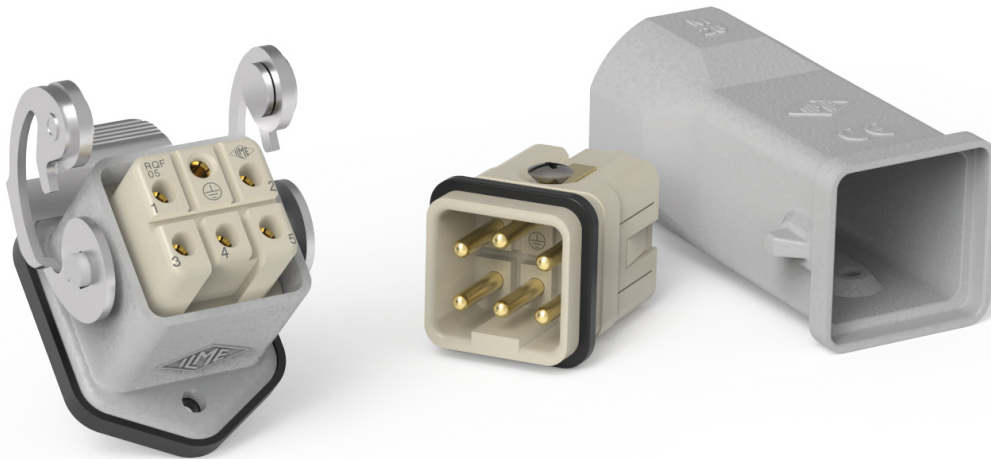


RX7F2D and RX7M2D contacts

conductor section (mm <sup>2</sup> )	conductor slot $\varnothing$ 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

## 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](http://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



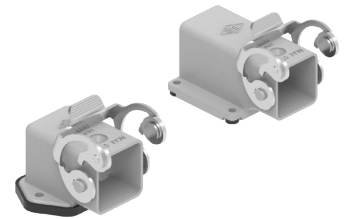
<b>inserts</b>		<b>page:</b>
<b>CQ</b>	21 poles	<b>82</b>
<b>CD</b>	8 poles	<b>83</b>
<b>RQ</b>	5 poles + ⊕	<b>84</b>
<b>CQ4 03</b>	3 poles + ⊕	<b>85</b>

**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**

without cable entry <sup>1)</sup>  
without cable entry, fixing by 4 screws

**RKAX 03 IA  
RKAX 03 IA4**

gasket and screw kit  
for IP66 <sup>2)</sup>

**CKR 65**

**CKR 65**

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

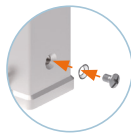
**CKR 65 D**

**CKR 65 D**

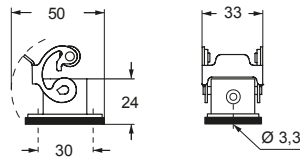
<sup>1)</sup> Not suitable for CQ4 series inserts

<sup>2)</sup> 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).

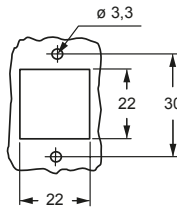
**NOTE:** The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page.



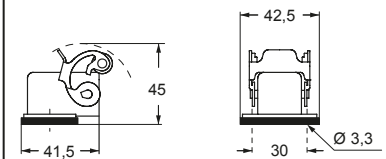
**RKAX 03 I**



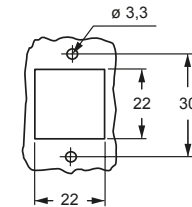
panel cut-out for enclosures



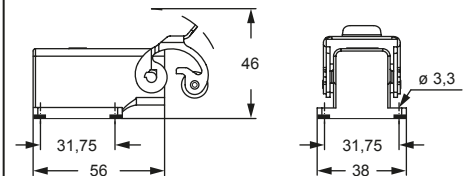
**RKAX 03 IA**



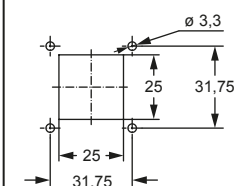
panel cut-out for enclosures



**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) <sup>2)</sup>

# RKAX VG

# HNM (High Number of Matings)

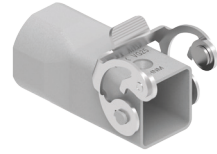
inserts		page:
CQ	21 poles	82
CD	8 poles	83
RQ	5 poles + ⊕	84
CQ4 03	3 poles + ⊕	85

hoods  
stainless steel lever



FROM JUNE 2022

hoods  
stainless steel lever



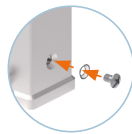
FROM JUNE 2022

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

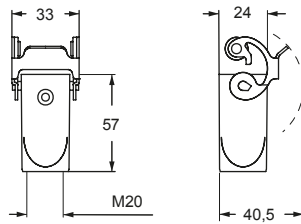
<sup>1)</sup> Not suitable for CQ4 series inserts

<sup>2)</sup> 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).

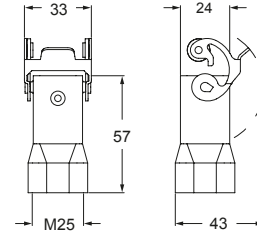
**NOTE:** The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page.



**RKAX VG20**



**RKAX VG25**



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



IP66 with CKR 65 (D) <sup>2)</sup>

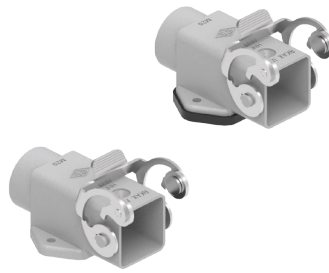
inserts

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

page:

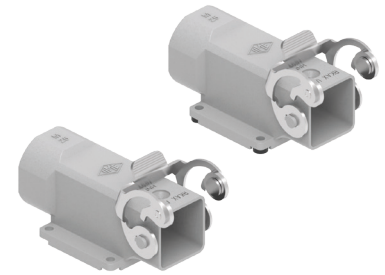
82
83
84
85

**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 <sup>1)</sup>  
with cable entry, bulkhead hole closed, without gasket <sup>1)</sup>

**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 <sup>2)</sup>

**CKR 65 D**

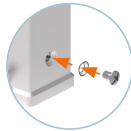
**CKR 65 D**

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

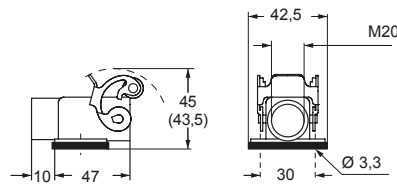
<sup>1)</sup> Not suitable for CQ4 series inserts

<sup>2)</sup> 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.

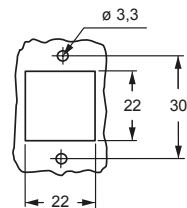


**RKAX IAP20 (RKAX AP20\*)**

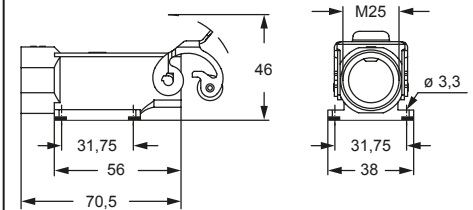


\*AP... without gasket

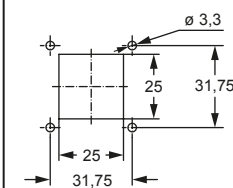
panel cut-out for enclosures



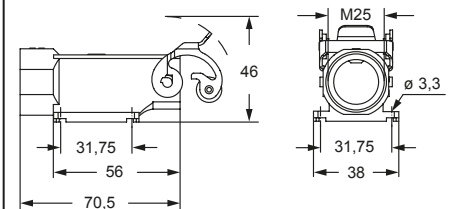
**RKAX IAP25**



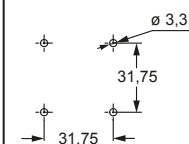
panel cut-out for enclosures



**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) <sup>2)</sup>

# RKAX IF – IAF

# HNM (High Number of Matings)

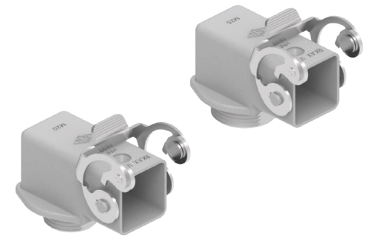
inserts		page:
CQ	21 poles	82
CD	8 poles	83
RQ	5 poles + ⊕	84
CQ4 03	3 poles + ⊕	85

## bulkhead mounting housings stainless steel lever



FROM JUNE 2022

## angled bulkhead mounting housings stainless steel lever

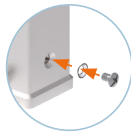


FROM JUNE 2022

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

<sup>1)</sup> 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).

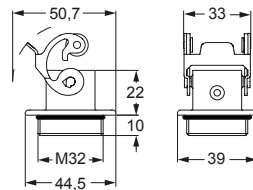
**NOTE:** The enclosure shown here is an example. The screw and sealing gasket kit can be used with all enclosures' part nos. in this page



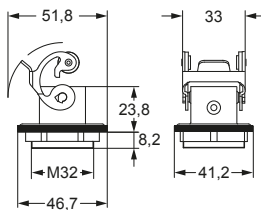
<sup>2)</sup> Not suitable for CQ4 series inserts

<sup>1)</sup> Locknut supplied on request, see Cable glands catalogue (article AS M32N metallic).

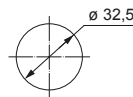
### RKAX IF



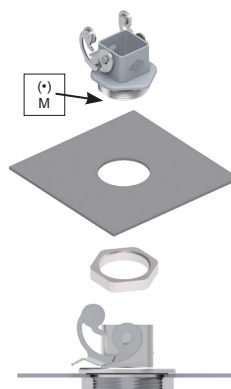
### RKAX IFC



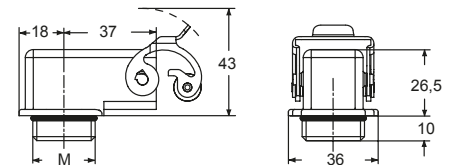
panel cut-out for enclosures



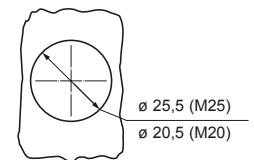
### USE OF THE LOCKNUT



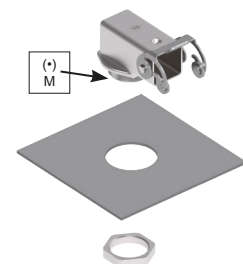
### MKAX IAF



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) <sup>2)</sup>



enclosures:  
size "21.21"

page:

HNM

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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 mm<sup>2</sup> AWG 28-24  
0,13-0,33 mm<sup>2</sup> AWG 26-22  
0,33-0,52 mm<sup>2</sup> AWG 22-20

RIFD 0.2  
RIFD 0.3  
RIFD 0.5

gold plated

5 A male crimp contacts  
0,08-0,21 mm<sup>2</sup> AWG 28-24  
0,13-0,33 mm<sup>2</sup> AWG 26-22  
0,33-0,52 mm<sup>2</sup> AWG 22-20

RIMD 0.2  
RIMD 0.3  
RIMD 0.5

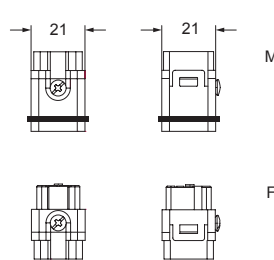
- characteristics according to EN 61984:  
**6,5 A 50 Vac / 120 Vdc 0,8 kV 3**

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

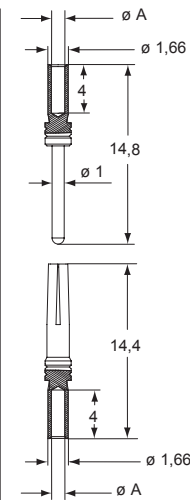
- rated voltage according to UL/CSA: 250V
- insulation resistance:  $\geq 10$  G $\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 5$  000 cycles
- contact resistance:  $\leq 4$  m $\Omega$
- seat of contact #9 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



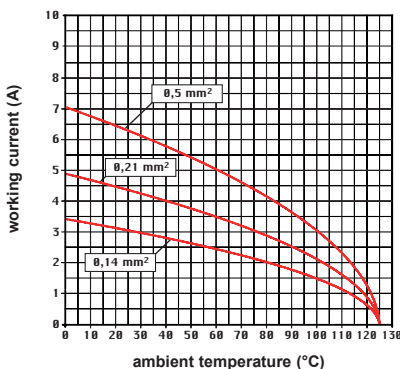
contacts side (front view)



RIF and RIM contacts

conductor section (mm <sup>2</sup> )	conductor slot $\varnothing$ 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



enclosures:  
size "21.21"

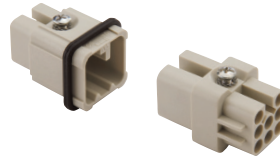
page:

HNM

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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 <sup>1)</sup>  
male insert for male contacts

**CDF 08**  
**CDM 08**

10 A female contacts

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

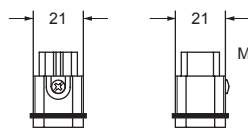
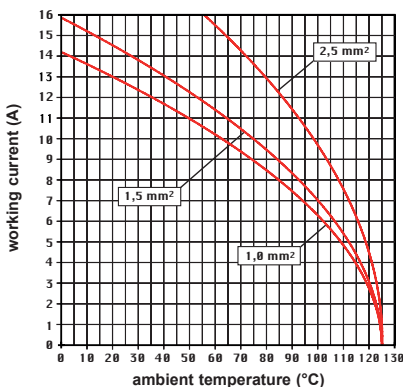
**10A 50 Vac / 120 Vdc 0,8 kV 3**

- cULus (UL for USA and Canada),   
 certified

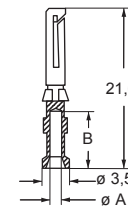
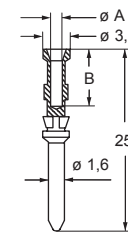
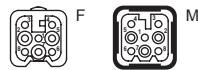
- rated voltage according to UL/CSA: 50V ac / 120V dc
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life:  $\geq 5 \text{ 000 cycles}$
- contact resistance:  $\leq 3 \text{ m}\Omega$
- 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

**CD 08 poles connector inserts**

**Maximum current load derating diagram**



contacts side (front view)



**RDF2D and RDM2D contacts**

conductor section mm <sup>2</sup>	conductor slot $\varnothing A$ (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

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



enclosures:  
size "21.21"

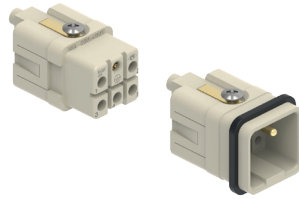
page:

HNM

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HNM inserts, crimp connections

16 A HNM crimp contacts  
gold plated



FROM JUNE 2022

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

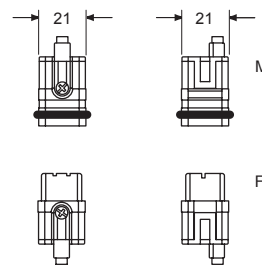
0,14-0,37 mm <sup>2</sup>	AWG 26-22	one groove
0,5 mm <sup>2</sup>	AWG 20	with no grooves
0,75 mm <sup>2</sup>	AWG 18	one groove (back side)
1 mm <sup>2</sup>	AWG 18	one groove
1,5 mm <sup>2</sup>	AWG 16	two grooves
2,5 mm <sup>2</sup>	AWG 14	three grooves
3 mm <sup>2</sup>	AWG 12	one wide groove
4 mm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

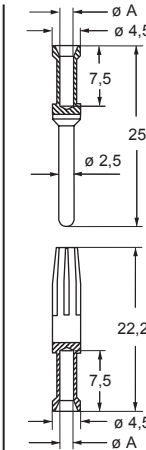
- cURus (UL for USA and Canada) pending
- CQC, DNV-GL, BV, EAC will follow
- rated voltage according to UL/CSA: 600V
- insulation resistance:  $\geq 10 \text{ G}\Omega$
- ambient temperature limit:  $-40 \text{ }^\circ\text{C} \dots +125 \text{ }^\circ\text{C}$
- made of self-extinguishing thermoplastic 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 mm<sup>2</sup> 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

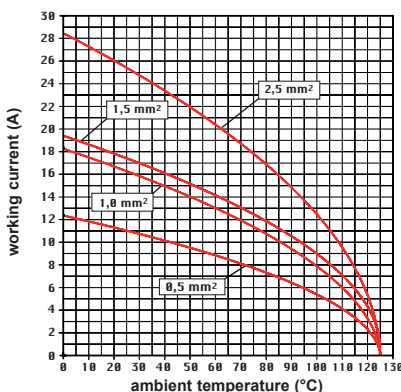


RCF2D and RCM2D contacts

conductor section mm <sup>2</sup>	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

RQ 05 poles connector inserts

Maximum current load derating diagram



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



enclosures:  
size "21.21"

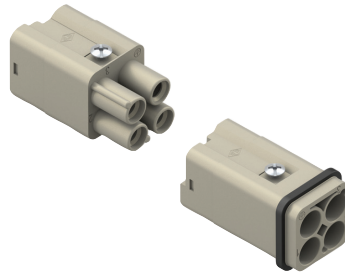
page:

HNM

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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 mm<sup>2</sup> AWG 16  
2,5 mm<sup>2</sup> AWG 14  
4 mm<sup>2</sup> AWG 12  
6 mm<sup>2</sup> AWG 10

**RXF2D 1.5**  
**RXF2D 2.5**  
**RXF2D 4.0**  
**RXF2D 6.0**

gold plated

40 A male crimp contacts  
1,5 mm<sup>2</sup> AWG 16  
2,5 mm<sup>2</sup> AWG 14  
4 mm<sup>2</sup> AWG 12  
6 mm<sup>2</sup> 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 mm<sup>2</sup>

☑ 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:

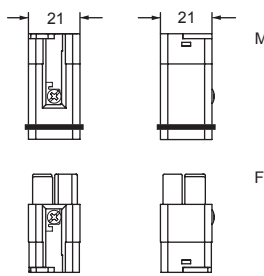
**40 A 400 V 6 kV 3**

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

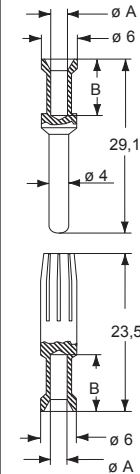
- insulation resistance: ≥ 10 GΩ  
- ambient temperature limit: -40 °C ... +125 °C  
- made of self-extinguishing thermoplastic resin UL 94V-0  
- mechanical life: ≥ 5 000 cycles  
- contact resistance: ≤ 0,3 mΩ

- 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)

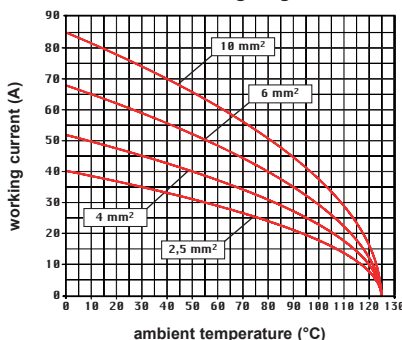
- for max. current load see the connector inserts derating diagram below; for more information see page 28 of CN.19 catalogue



contacts side (front view)



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



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



**RXF2D and RXM2D contacts**

conductor cross-sectional area mm <sup>2</sup>	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