

HNM series

TECHNICAL FEATURES

Specifically designed for applications requiring a high number of mating cycles, the **HNM series** guarantees **up to 10,000 matings**.

Ideal for test benches, the special **HNM inserts** guarantee 10,000 matings when used together with the **dedicated enclosure series**, thanks to the special antifriction treatment applied both on the contacts of the inserts and on the V-TYPE locking lever and the riveted pegs (available only in the single lever version).

5,000 matings are achieved when working with standard enclosures single lever, with V-TYPE or CLASS locking lever and riveted pegs on the hoods (therefore the size "44.27" is excluded).

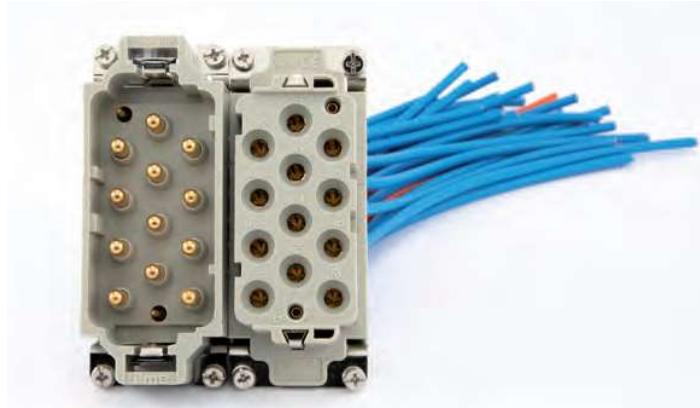
The series features **special versions of the 10 and 16 A gold plated crimp contacts** to be used both with **special crimp inserts** (up to 108 poles) and with standard MIXO inserts mounted in **special frames** equipped with **gold PE contacts**.

SUM-UP

- ☑ **Special treatment + special lubricant**
- ☑ **HNM marking on each insert**

Q NOTE

For contacts in **HNM** version (series **RI, RD, RC** and **RX**) the same tools are suitable for crimping, insertion/extraction (where indicated), as those used for the corresponding contacts in standard version (respectively series **CI, CD, CC** and **CX**).



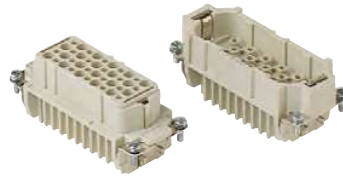
RD 40 poles + ⊕ 10A - 250V HNM (High Number of Matings)

enclosures:
size "77.27"

page:

HNM 596 - 597
C-TYPE IP65 or IP66/IP69, single lever 402 - 411
V-TYPE IP65 or IP66/IP69, single lever 454 - 458

inserts, crimp connections



10A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

HNM

description

part No.

part No.

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

RDF 40
RDM 40

10A 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

10A 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

- characteristics according to EN 61984:

10A 250V 4kV 3
10A 230/400V 4kV 2

- DNV-GL VERITAS ERC certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: ≥ 10 GΩ

- ambient temperature limit: -40 °C ... +125 °C

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

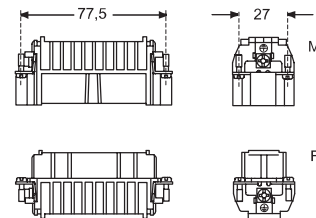
- mechanical life: ≥ 10.000 cycles

- contact resistance: ≤ 3 mΩ

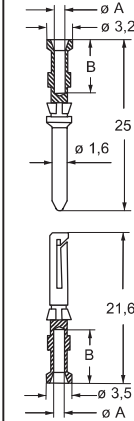
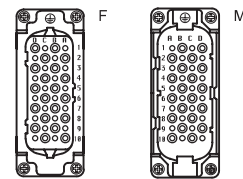
- for applications requiring higher voltages, please see
the special voltage application section on page 65

- it is recommended to crimp the contacts with
crimping tools homologated by ILME (please
see the crimping tool section 10A contacts, RDF2D and
RDM2D series) on pages 708 - 741

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



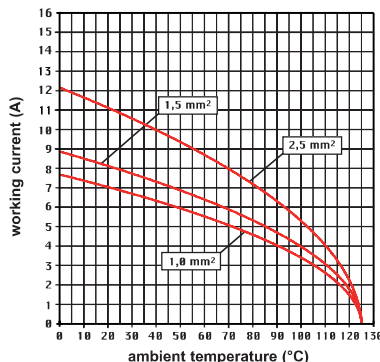
contacts side (front view)



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

RD 40 poles connector inserts
Maximum current load derating diagram



CR CP coding pin
with loss of one contact
(page 689)



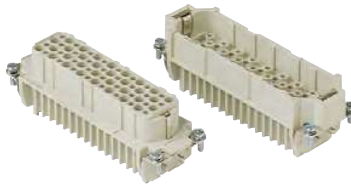
RD 64 poles + ⊕ 10A - 250V HNM (High Number of Matings)

enclosures:
size "104.27"

page:

HNM	598 - 599
C-TYPE IP65 or IP66/IP69, single lever	412 - 423
V-TYPE IP65 or IP66/IP69, single lever	459 - 463

inserts, crimp connections



Q 10.000 MATINGS WITH HNM ENCLOSURES
Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

10A 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

RDF 64
RDM 64

10A 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

10A 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

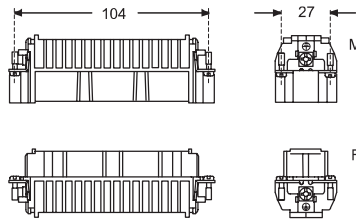
RDM2D 0.3
RDM2D 0.5
RDM2D 0.7
RDM2D 1.0
RDM2D 1.5
RDM2D 2.5

- characteristics according to EN 61984:

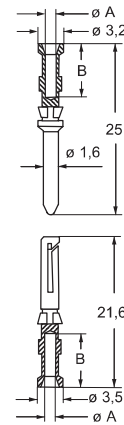
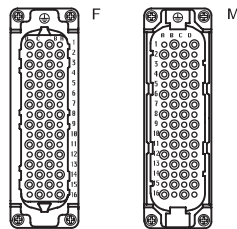
10A 250V 4kV 3
10A 230/400V 4kV 2

- certified

- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for applications requiring higher voltages, please see the special voltage application section on page 65
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10A contacts, RDF2D and RDM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



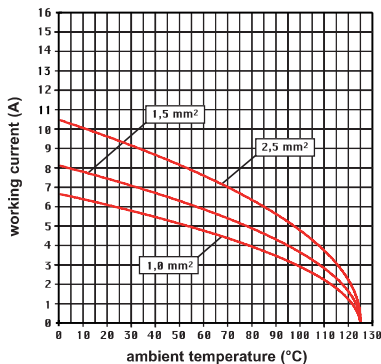
contacts side (front view)



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

RD 64 poles connector inserts
Maximum current load derating diagram



CR CP coding pin
with loss of one contact
(page 689)



RDD 24 poles + ⊕ 10A - 250V HNM (High Number of Matings)

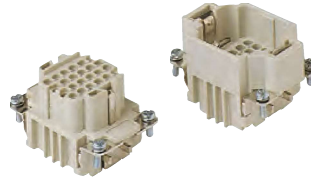
enclosures:
size "44.27"

page:

HNM

592 - 593

inserts, crimp connections



10A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

HNM

description

part No.

part No.

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

RDDF 24
RDDM 24

10A 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

10A male contacts

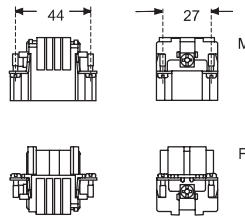
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

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

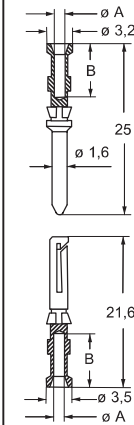
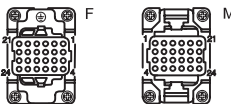
- characteristics according to EN 61984:

10A 250V 4kV 2

- DNV-GL VERITAS ENE certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for applications requiring higher voltages, please see the special voltage application section on page 75
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10A contacts, RDF2D and RDM2D series) on pages 708 - 741
- PCBs interface, see article CIF 2.4
- for max. current load see the connector inserts derating diagram below; for more information see page 28



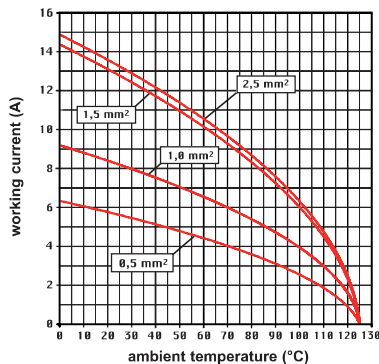
contacts side (front view)



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

RDD 24 poles connector inserts
Maximum current load derating diagram



CR CP coding pin
with loss of one contact
(page 689)



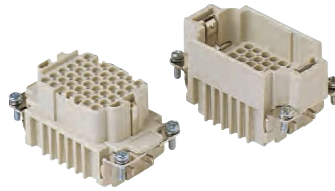
RDD 42 poles + ⊕ 10A - 250V HNM (High Number of Matings)

enclosures:
size "57.27"

page:

HNM	594 - 595
C-TYPE IP65 or IP66/IP69, single lever	393 - 401
V-TYPE IP65 or IP66/IP69, single lever	448 - 453

inserts, crimp connections



Q 10.000 MATINGS WITH HNM ENCLOSURES
Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

10A 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

RDDF 42
RDDM 42

10A 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

10A male contacts

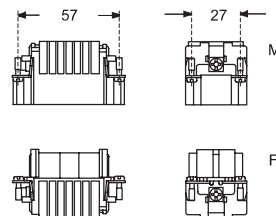
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

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

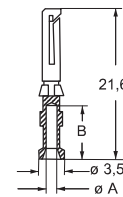
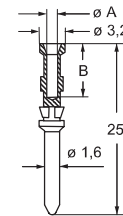
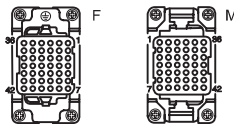
- characteristics according to EN 61984:

10A 250V 4kV 2

- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for applications requiring higher voltages, please see the special voltage application section on page 75
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10A contacts, RDF2D and RDM2D series) on pages 708 - 741
- PCBs interface, see article CIF 2.4
- for max. current load see the connector inserts derating diagram below; for more information see page 28



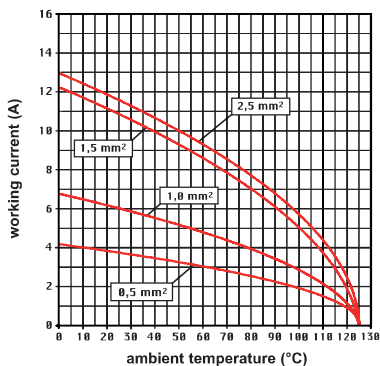
contacts side (front view)



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

RDD 42 poles connector inserts
Maximum current load derating diagram



CR CP coding pin
with loss of one contact
(page 689)



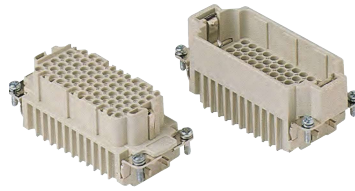
RDD 72 poles + ⊕ 10A - 250V HNM (High Number of Matings)

enclosures:
size "77.27"

page:

HNM 596 - 597
C-TYPE IP65 or IP66/IP69, single lever 402 - 411
V-TYPE IP65 or IP66/IP69, single lever 454 - 458

inserts, crimp connections



10A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

HNM

description

part No.

part No.

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

RDDF 72
RDDM 72

10A 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

10A male contacts

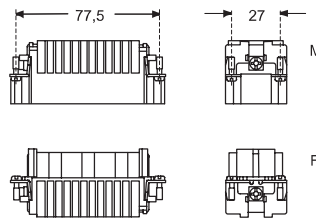
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

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

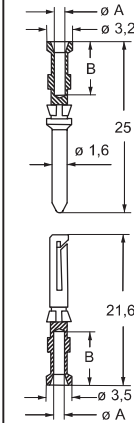
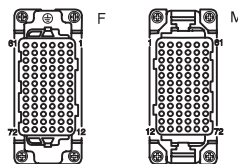
- characteristics according to EN 61984:

10A 250V 4kV 2

- DNV-GL, TÜV SÜD, ENEC, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for applications requiring higher voltages, please see the special voltage application section on page 75
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10A contacts, RDF2D and RDM2D series) on pages 708 - 741
- PCBs interface, see article CIF 2.4
- for max. current load see the connector inserts derating diagram below; for more information see page 28



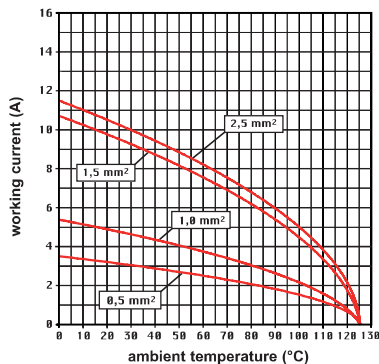
contacts side (front view)



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

RDD 72 poles connector inserts
Maximum current load derating diagram



CR CP coding pin
with loss of one contact
(page 689)



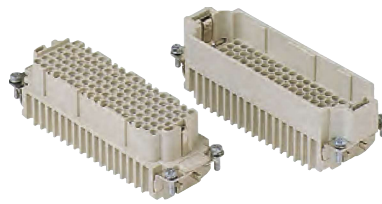
RDD 108 poles + ⊕ 10A - 250V HNM (High Number of Matings)

enclosures:
size "104.27"

page:

HNM	598 - 599
C-TYPE IP65 or IP66/IP69, single lever	412 - 423
V-TYPE IP65 or IP66/IP69, single lever	459 - 463

inserts, crimp connections



10A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

description

part No.

part No.

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

RDDF 108
RDDM 108

10A 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

10A male contacts

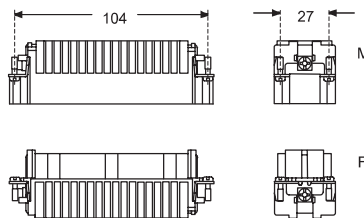
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

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

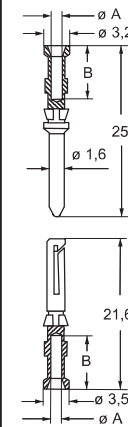
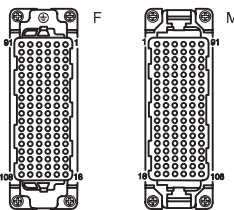
- characteristics according to EN 61984:

10A 250V 4kV 2

- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 mΩ
- for applications requiring higher voltages, please see the special voltage application section on page 75
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 10A contacts, RDF2D and RDM2D series) on pages 708 - 741
- PCBs interface, see article CIF 2.4
- for max. current load see the connector inserts derating diagram below; for more information see page 28



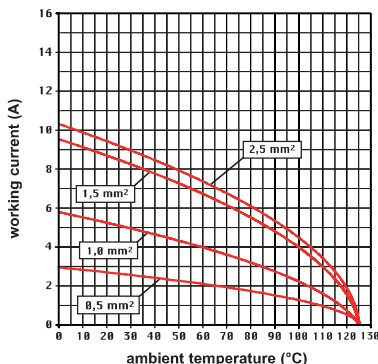
contacts side (front view)



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

RDD 108 poles connector inserts
Maximum current load derating diagram



CR CP coding pin
with loss of one contact
(page 689)



RCE 6 poles + ⊕ 16A - 500V HNM (High Number of Matings)

enclosures:
size "44.27"

page:

HNM

592 - 593

inserts, crimp connections



16A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

HNM

description

part No.

part No.

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

RCEF 06
RCEM 06

16A 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

16A male contacts

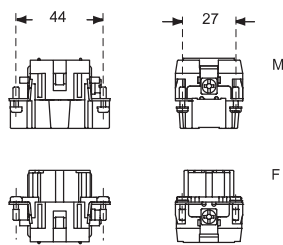
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

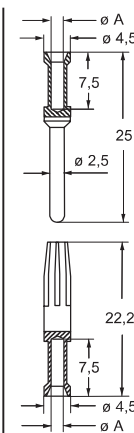
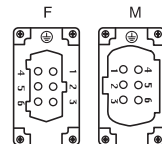
- characteristics according to EN 61984:

16A 500V 6kV 3
16A 400/690V 6kV 2

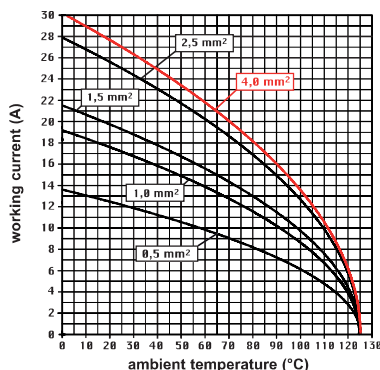
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 1 mΩ
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)



RCE 06 poles connector inserts
Maximum current load derating diagram



RCF2D and RCM2D contacts

conductor section mm ²	conductor slot ø 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

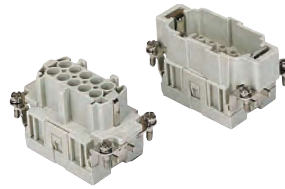
RCE 10 poles + ⊕ 16A - 500V HNM (High Number of Matings)

enclosures:
size "57.27"

page:

HNM	594 - 595
C-TYPE IP65 or IP66/IP69, single lever	393 - 401
V-TYPE IP65 or IP66/IP69, single lever	448 - 453

inserts, crimp connections



Q 10.000 MATINGS WITH HNM ENCLOSURES
Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

16A 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

RCEF 10
RCEM 10

16A 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

16A male contacts

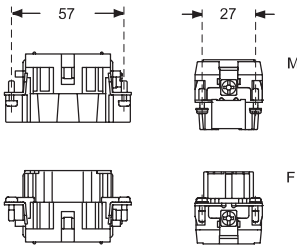
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

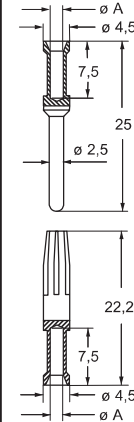
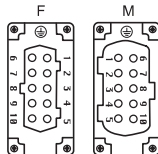
- characteristics according to EN 61984:

16A 500V 6kV 3
16A 400/690V 6kV 2

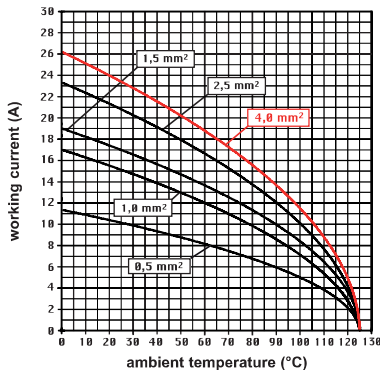
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 1 mΩ
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)



RCE 10 poles connector inserts
Maximum current load derating diagram



RCF2D and RCM2D contacts

conductor section mm ²	conductor slot ø 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

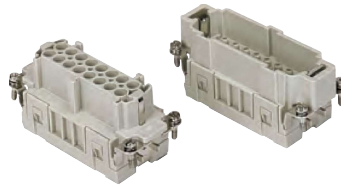
RCE 16 poles + ⊕ 16A - 500V HNM (High Number of Matings)

enclosures:
size "77.27"

page:

HNM 596 - 597
C-TYPE IP65 or IP66/IP69, single lever 402 - 411
V-TYPE IP65 or IP66/IP69, single lever 454 - 458

inserts, crimp connections



16A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

HNM

description

part No.

part No.

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

RCEF 16
RCEM 16

16A 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

16A male contacts

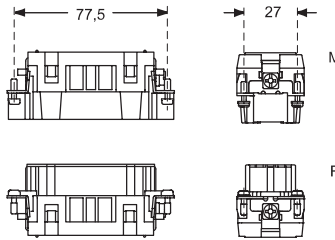
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

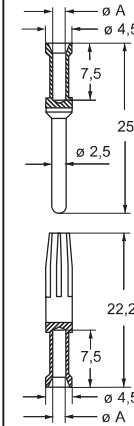
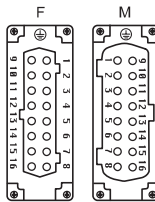
- characteristics according to EN 61984:

16A 500V 6kV 3
16A 400/690V 6kV 2

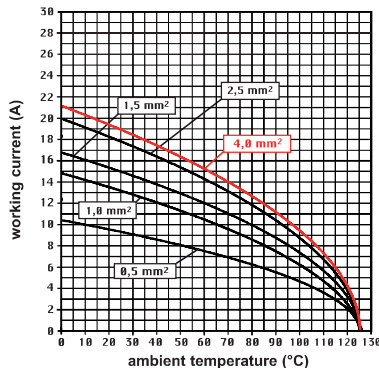
- DNV-GL, BUREAU VERITAS, ERIC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)



RCE 16 poles connector inserts
Maximum current load derating diagram



RCF2D and RCM2D contacts

conductor section mm ²	conductor slot ø 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

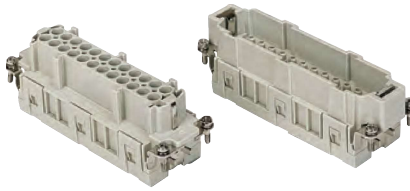
RCE 24 poles + ⊕ 16A - 500V HNM (High Number of Matings)

enclosures:
size "104.27"

page:

HNM	598 - 599
C-TYPE IP65 or IP66/IP69, single lever	412 - 423
V-TYPE IP65 or IP66/IP69, single lever	459 - 463

inserts, crimp connections



Q 10.000 MATINGS WITH HNM ENCLOSURES
Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

16A 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

RCEF 24
RCEM 24

16A 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

16A male contacts

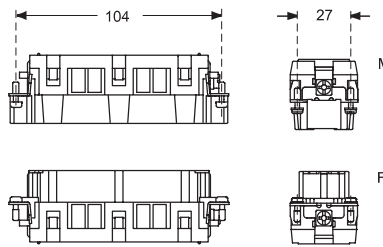
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

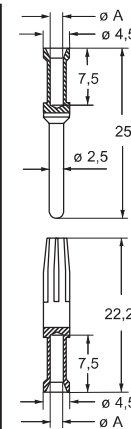
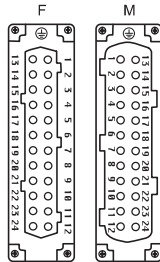
- characteristics according to EN 61984:

16A 500V 6kV 3
16A 400/690V 6kV 2

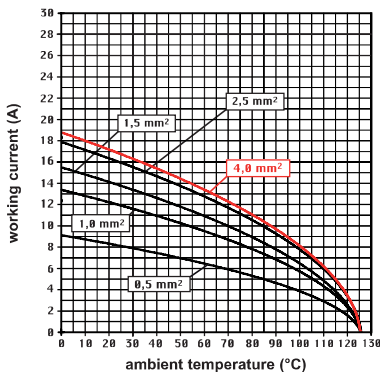
- DNV-GL, BUREAU VERITAS, EAC certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 1 mΩ
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)



RCE 24 poles connector inserts
Maximum current load derating diagram



RCF2D and RCM2D contacts

conductor section mm ²	conductor slot ø 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

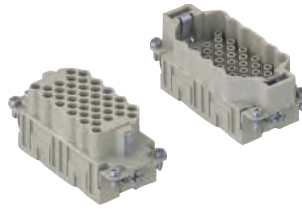
RQEE 40 poles + ⊕ 16A - 500V HNM (High Number of Matings)

enclosures:
size "77.27"

page:

HNM 596 - 597
C-TYPE IP65 or IP66/IP69, single lever 402 - 411
V-TYPE IP65 or IP66/IP69, single lever 454 - 458

inserts, crimp connections



16A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

HNM

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

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

RQEEF 40
RQEEM 40

16A 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

16A male contacts

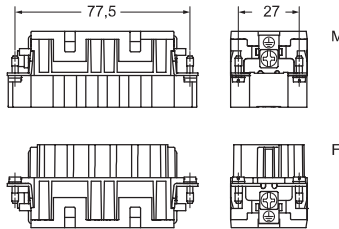
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

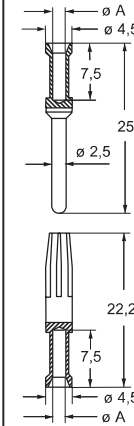
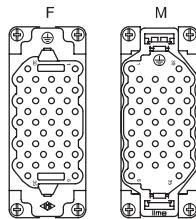
- characteristics according to EN 61984:

16A 500V 6kV 3

- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 1 mΩ
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



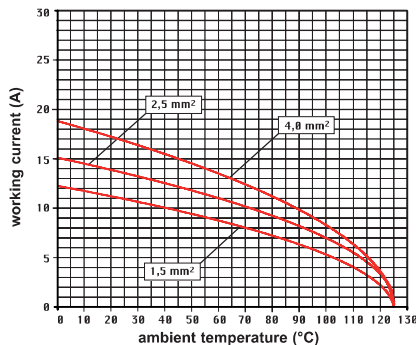
contacts side (front view)



RCF2D and RCM2D contacts

conductor section mm ²	conductor slot ø 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

RQEE 40 poles connector inserts
Maximum current load derating diagram



CR CPQ coding pins
(page 689)



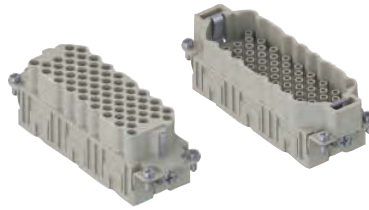
RQEE 64 poles + ⊕ 16A - 500V HNM (High Number of Matings)

enclosures:
size "104,27"

page:

HNM	598 - 599
C-TYPE IP65 or IP66/IP69, single lever	412 - 423
V-TYPE IP65 or IP66/IP69, single lever	459 - 463

inserts, crimp connections



Q 10.000 MATINGS WITH HNM ENCLOSURES
Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

16A 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

RQEEF 64
RQEEM 64

16A 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

16A male contacts

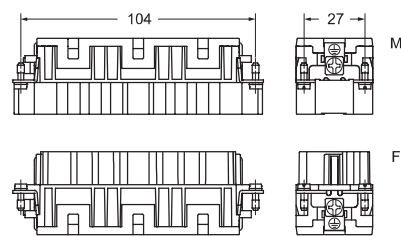
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

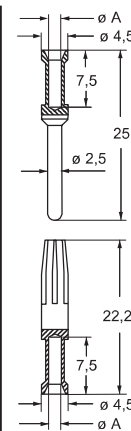
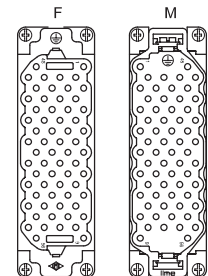
- characteristics according to EN 61984:

16A 500V 6kV 3

- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 1 mΩ
- **it is recommended to crimp the contacts with crimping tools homologated by ILME** (please see the crimping tool section 16A contacts, RCF2D and RCM2D series) on pages 708 - 741
- for max. current load see the connector inserts derating diagram below; for more information see page 28



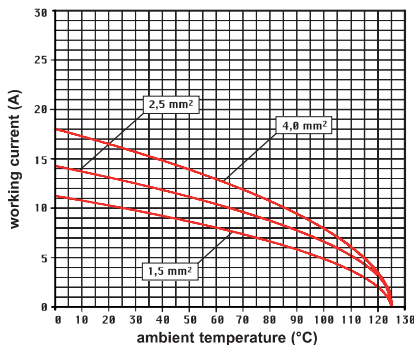
contacts side (front view)



RCF2D and RCM2D contacts

conductor section mm ²	conductor slot ø 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

RQEE 64 poles connector inserts
Maximum current load derating diagram



CR CPQ coding pins
(page 689)

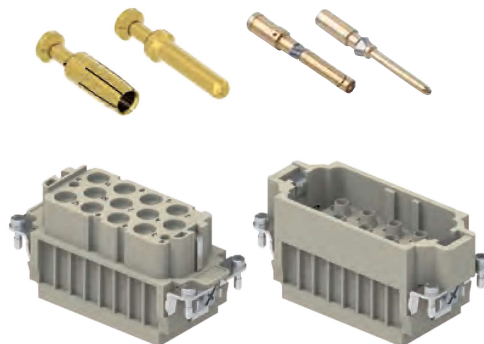


RXF/M 12/2

TECHNICAL FEATURES

Special **HNM** version (**High Number of Matings** up to 10.000 cycles) of CXF/M 12/2 connector inserts, to be used in combination with:

- **up to 12 40A HNM gold plated removable crimp contacts** of the **new RX** series,
- **2 10A HNM gold plated removable crimp contacts** of the **already available RD** series;
- crimp connector inserts with a combination of 12 power contacts (40A) plus 2 auxiliary contacts (10A) + PE;
- suitable for the operation of 4 three-phase AC motors with 2 auxiliary contacts;
- featuring a special antifriction treatment to guarantee up to **10.000 mating cycles**
- **5.000 mating cycles** with standard enclosures, single lever (excluding size "44.27").

**SUM-UP**

- ☑ **Crimp connection**
- ☑ **Great resistance to strong vibrations**
- ☑ **For wires: up to 10 mm² (AWG 8)**
- ☑ **Auxiliary crimp contacts: HNM gold plated**

RX 12 poles (40A - 690V) + 2 poles (10A - 250V) + ⊕ HNM (High Number of Matings)

enclosures:
size "77.27"

page:

HNM	596 - 597
C-TYPE IP65 or IP66/IP69, single lever	402 - 411
V-TYPE IP65 or IP66/IP69, single lever	454 - 458

inserts, crimp connections



Q 10.000 MATINGS WITH HNM ENCLOSURES
Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

40A and 10A 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

RXF 12/2
RXM 12/2

40A 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

40A 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

10A female contacts
0,14-0,37 mm² AWG 26-22 identification No. 1
0,5 mm² AWG 20 identification No. 2
0,75 mm² AWG 18 identification No. ②
1 mm² AWG 18 identification No. 3
1,5 mm² AWG 16 identification No. 4
2,5 mm² 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

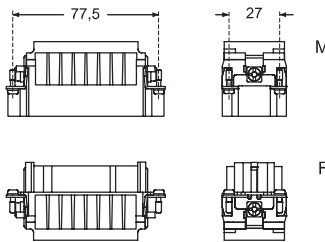
10A male contacts
0,14-0,37 mm² AWG 26-22 identification No. 1
0,5 mm² AWG 20 identification No. 2
0,75 mm² AWG 18 identification No. ②
1 mm² AWG 18 identification No. 3
1,5 mm² AWG 16 identification No. 4
2,5 mm² AWG 14 identification No. 5

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

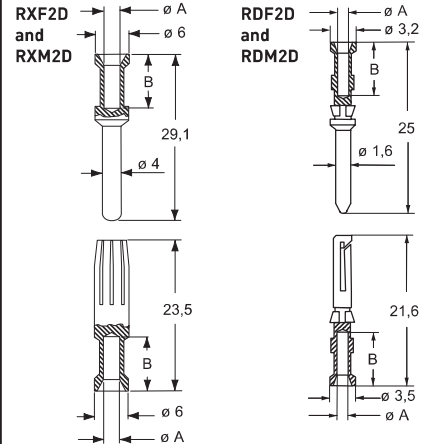
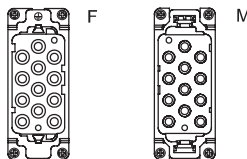
- characteristics according to EN 61984:

40A 690V 8kV 3
10A 250V 4kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 0,3 mΩ (12 poles), ≤ 1 mΩ (2 poles)
- for max. current load see the connector inserts derating diagram below; for more information see page 28



contacts side (front view)



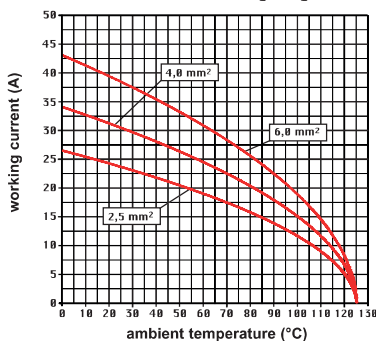
RXF2D and RXM2D contacts

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

RDF2D and RDM2D contacts

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

RX 12/2 power poles connector inserts
Maximum current load derating diagram



- it is recommended to crimp the contacts with crimping tools homologated by ILME (please see the crimping tool section 40A contacts, RXF2D, RXM2D series and 10A contacts RDF2D, RDM2D series) on pages 708 - 741