

HNM series

TECHNICAL FEATURES

Specifically designed for applications requiring a high number of mating cycles, the **HNM series** guarantees **up to 10.000 matings**.

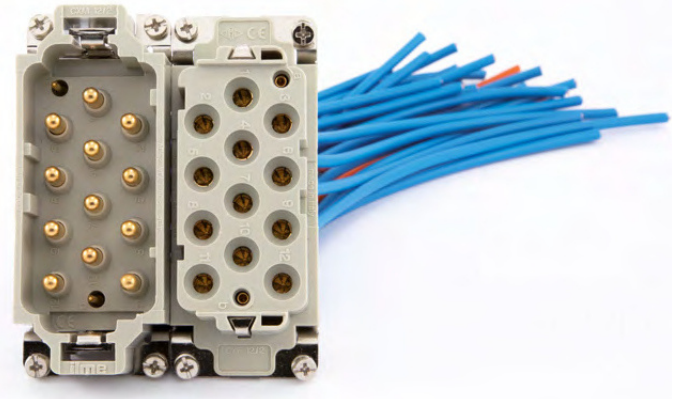
Ideal for test benches, the special **HNM inserts** guarantee 10.000 matings when used together with the **dedicated enclosure series**, thanks to the special antifriction treatment applied both on the contacts of the inserts and on the V-TYPE locking lever and the riveted pegs (available only in the 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 16A 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**

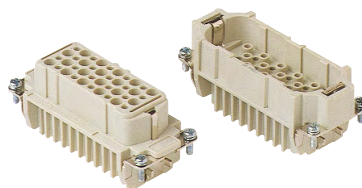


RD 40 poles + $\oplus$ 10A - 250V HNM (High Number of Matings)enclosures:
size "77.27"

page:

HNM
C-TYPE IP65/IP66, single lever
V-TYPE IP65/IP66, single lever596 - 597
402 - 411
454 - 458

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 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

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

RDF2D 0.3
RDF2D 0.5
RDF2D 0.7
RDF2D 1.0
RDF2D 1.5
RDF2D 2.5**gold plated****RDM2D 0.3**
RDM2D 0.5
RDM2D 0.7
RDM2D 1.0
RDM2D 1.5
RDM2D 2.5

- characteristics according to EN 61984:

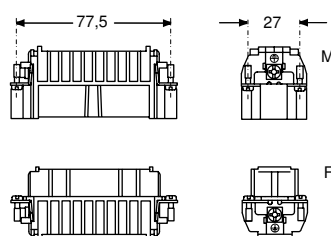
10A 250V 4kV 3**10A 230/400V 4kV 2**

- DNV-GL VERITAS ERI certified

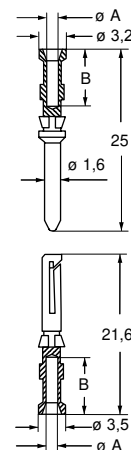
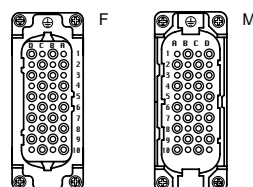
- rated voltage according to UL/CSA: 600V

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

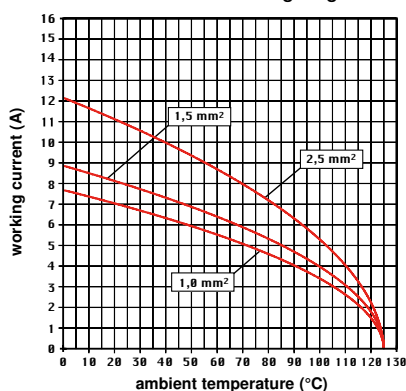
- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin
UL 94V-0- mechanical life: ≥ 10.000 cycles- contact resistance: $\leq 3 \text{ m}\Omega$ - 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 ϕA (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

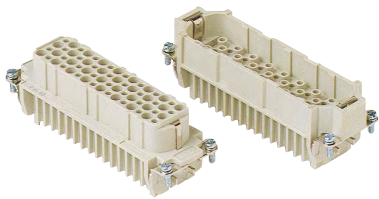
RD 40 poles connector inserts
Maximum current load derating diagram**CR CP coding pin**
with loss of one contact
(page 689)

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

enclosures:
size "104.27" page:

HNM 598 - 599
C-TYPE IP65/IP66, single lever 412 - 423
V-TYPE IP65/IP66, 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

RDF 64
RDM 64

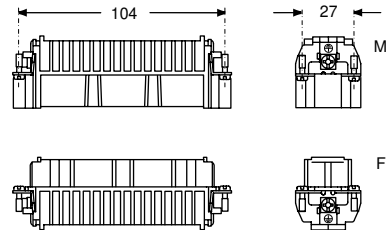
10A female contacts		
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

RDF2D 0.3	gold plated
RDF2D 0.5	
RDF2D 0.7	
RDF2D 1.0	
RDF2D 1.5	
RDF2D 2.5	

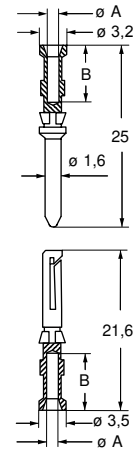
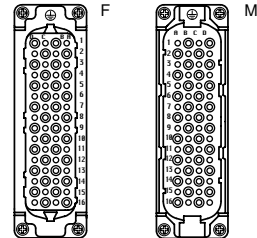
10A male contacts		
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

RDM2D 0.3	gold plated
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

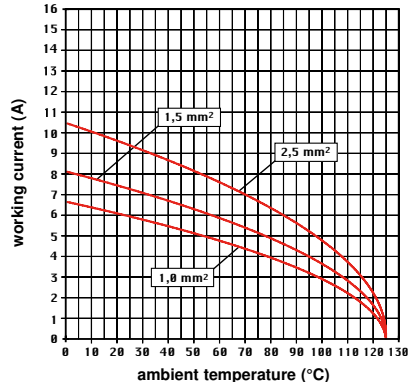


contacts side (front view)



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"

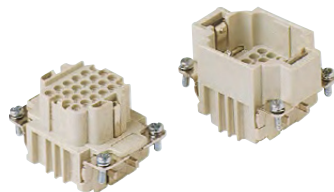
page:

HNM

592 - 593

inserts, crimp connections

10A crimp contacts
gold plated



Q 10.000 MATINGS WITH HNM ENCLOSURES

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

- **BUREAU VERITAS** ENE certified

- rated voltage according to UL/CSA: 600V

- insulation resistance: ≥ 10 G Ω

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

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

- mechanical life: ≥ 10.000 cycles

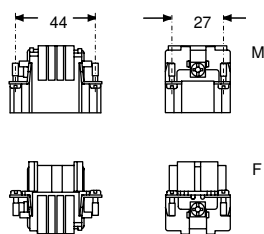
- contact resistance: ≤ 3 m Ω

- for applications requiring higher voltages, please see
the special voltage application section on page 75

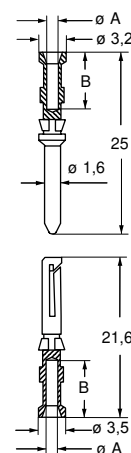
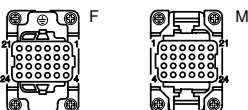
- **it is recommended to crimp the contacts with
crimping tools homologated by ILME** (please
see the crimping tool section 10A contacts, RDF2D and
RDM2D series) on pages 708 - 741

- PCBs interface, see article CIF 2.4

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



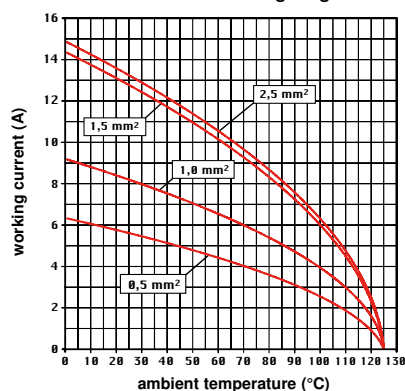
contacts side (front view)



RDF2D and RDM2D contacts

conductor section mm ²	conductor slot ϕ 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



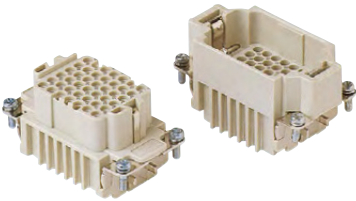
CR CP coding pin
with loss of one contact
(page 689)



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

enclosures: size "57.27"	page:
HNM	594 - 595
C-TYPE IP65/IP66, single lever	393 - 401
V-TYPE IP65/IP66, 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.
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without contacts (to be ordered separately)
female inserts for female contacts
male inserts for male contacts

RDDF 42
RDDM 42

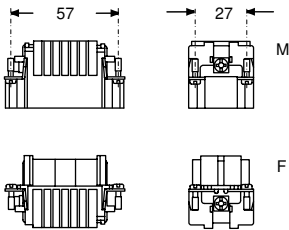
10A female contacts		
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

RDF2D 0.3	gold plated
RDF2D 0.5	
RDF2D 0.7	
RDF2D 1.0	
RDF2D 1.5	
RDF2D 2.5	

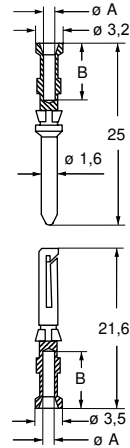
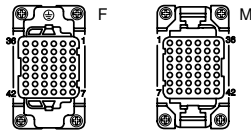
10A male contacts		
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

RDM2D 0.3	gold plated
RDM2D 0.5	
RDM2D 0.7	
RDM2D 1.0	
RDM2D 1.5	
RDM2D 2.5	

- characteristics according to EN 61984:
10A 250V 4kV 2
- **ERC** certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 G Ω
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 3 m Ω
- 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



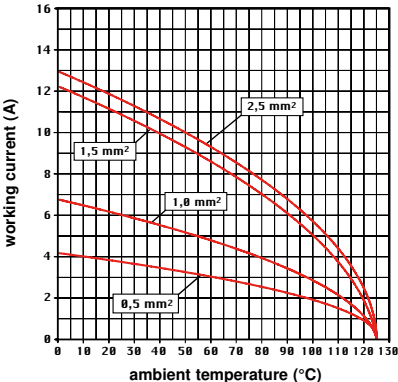
contacts side (front view)



RDF2D and RDM2D contacts

conductor section mm ²	conductor slot ϕ 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)

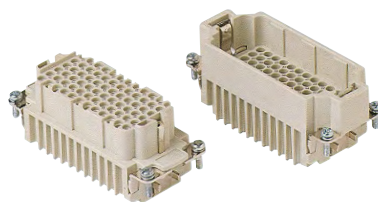


RDD 72 poles + ⊕ 10A - 250V HNM (High Number of Matings)enclosures:
size "77.27"

page:

HNM
C-TYPE IP65/IP66, single lever
V-TYPE IP65/IP66, single lever596 - 597
402 - 411
454 - 458

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 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

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

RDF2D 0.3
RDF2D 0.5
RDF2D 0.7
RDF2D 1.0
RDF2D 1.5
RDF2D 2.5**gold plated****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

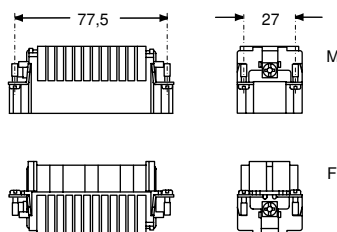
- rated voltage according to UL/CSA: 600V

- insulation resistance: ≥ 10 G Ω

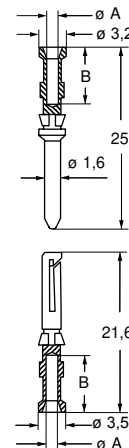
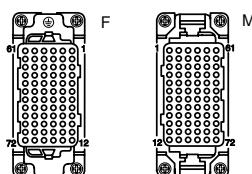
- ambient temperature limit: -40 °C ... +125 °C

- made of self-extinguishing thermoplastic resin
UL 94V-0- mechanical life: ≥ 10.000 cycles- contact resistance: ≤ 3 m Ω - 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

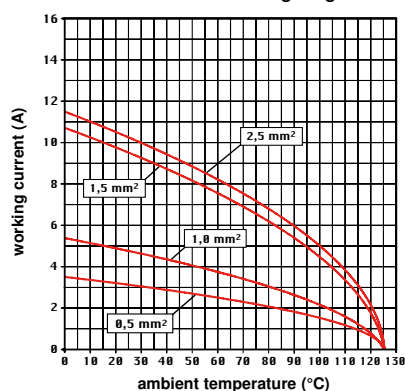
- PCBs interface, see article CIF 2.4

- 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)

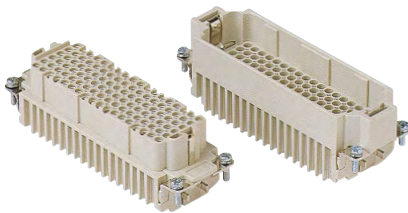
enclosures:
size "104.27"

page:

HNM
C-TYPE IP65/IP66, single lever
V-TYPE IP65/IP66, single lever

598 - 599
412 - 423
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.
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without contacts (to be ordered separately)
female inserts for female contacts
male inserts for male contacts

RDDF 108
RDDM 108

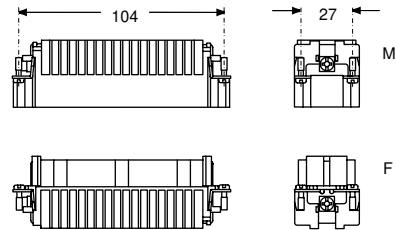
10A female contacts		
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

RDF2D 0.3	gold plated
RDF2D 0.5	
RDF2D 0.7	
RDF2D 1.0	
RDF2D 1.5	
RDF2D 2.5	

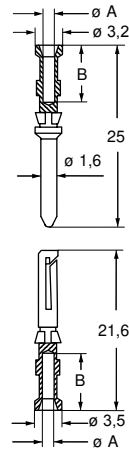
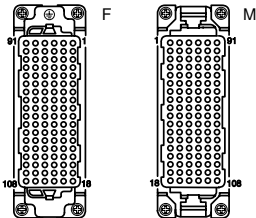
10A male contacts		
0,14-0,37 mm ²	AWG 26-22	identification No. 1
0,5 mm ²	AWG 20	identification No. 2
0,75 mm ²	AWG 18	identification No. ②
1 mm ²	AWG 18	identification No. 3
1,5 mm ²	AWG 16	identification No. 4
2,5 mm ²	AWG 14	identification No. 5

RDM2D 0.3	gold plated
RDM2D 0.5	
RDM2D 0.7	
RDM2D 1.0	
RDM2D 1.5	
RDM2D 2.5	

- characteristics according to EN 61984:
10A 250V 4kV 2
- **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 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



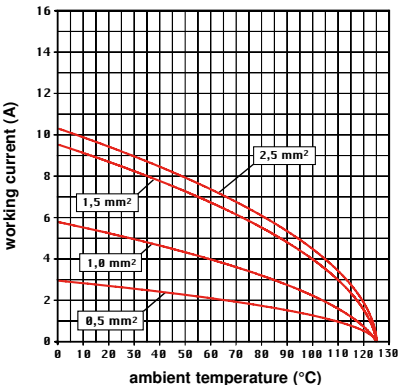
contacts side (front view)



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 + $\oplus$ 16A - 500V HNM (High Number of Matings)

enclosures:
size "44.27"

page:

HNM

592 - 593

inserts, crimp connections



Q 10.000 MATINGS WITH HNM ENCLOSURES

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 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

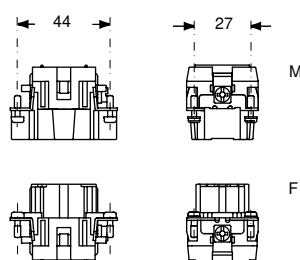
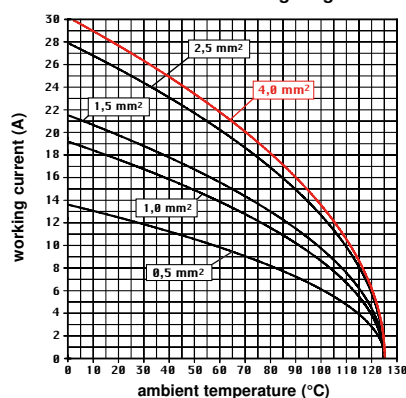
- characteristics according to EN 61984:

16A 500V 6kV 3

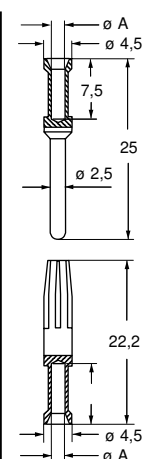
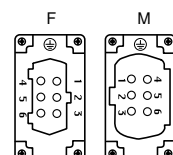
16A 400/690V 6kV 2

-  certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40^\circ\text{C} \dots +125^\circ\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: $\leq 1 \text{ m}\Omega$
- **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

RCE 06 poles connector inserts
Maximum current load derating diagram



contacts side (front view)



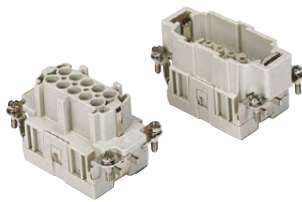
RCF2D and RCM2D contacts

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

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

enclosures: size "57.27"	page:
HNM	594 - 595
C-TYPE IP65/IP66, single lever	393 - 401
V-TYPE IP65/IP66, single lever	448 - 453

inserts, crimp connections



16A 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

RCEF 10
RCEM 10

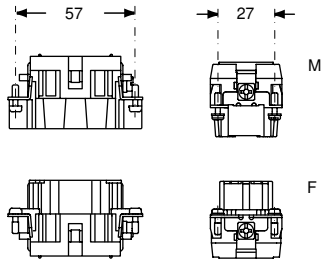
16A female contacts		
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

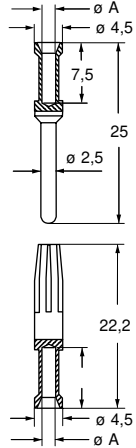
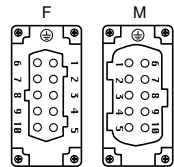
16A male contacts		
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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

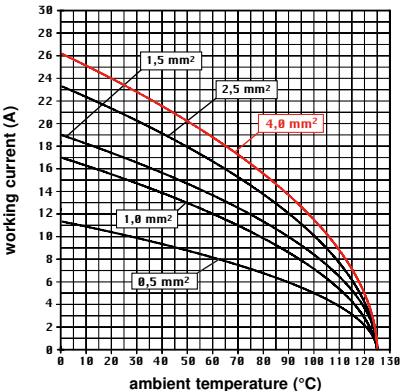
- characteristics according to EN 61984:
16A 500V 6kV 3
16A 400/690V 6kV 2
- certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- 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)

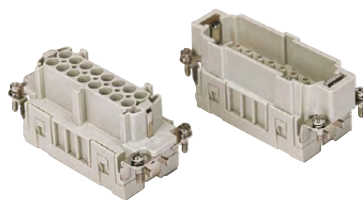
enclosures:
size "77.27"

page:

HNM
C-TYPE IP65/IP66, single lever
V-TYPE IP65/IP66, single lever

596 - 597
402 - 411
454 - 458

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 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

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

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

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:

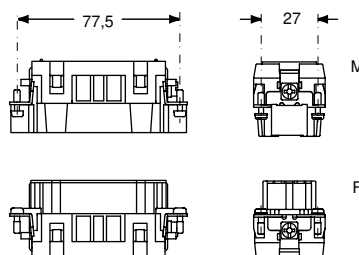
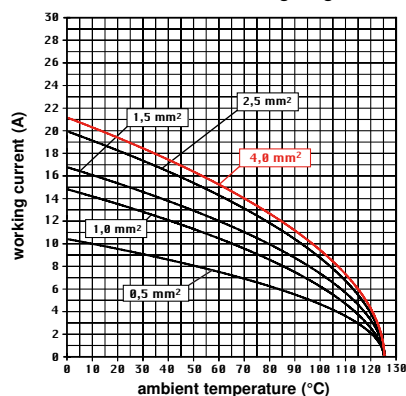
16A 500V 6kV 3

16A 400/690V 6kV 2

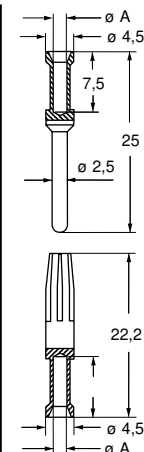
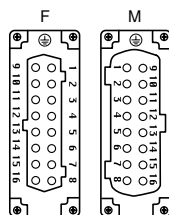
-  certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 G Ω
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 1 m Ω
- it is recommended to crimp the contacts 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

RCE 16 poles connector inserts

Maximum current load derating diagram



contacts side (front view)



RCF2D and RCM2D contacts

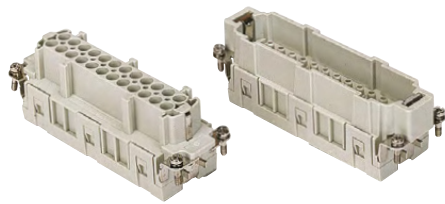
conductor section mm ²	conductor slot ϕ A (mm)	conductors stripping length (mm)
0,14-0,37	0,9	7,5
0,5	1,1	7,5
0,75	1,3	7,5
1,0	1,45	7,5
1,5	1,8	7,5
2,5	2,2	7,5
3	2,55	7,5
4	2,85	7,5

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

enclosures:
size "104.27" page:

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

inserts, crimp connections



16A 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

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

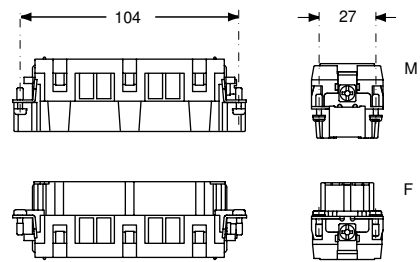
RCF2D 0.3
RCF2D 0.5
RCF2D 0.7
RCF2D 1.0
RCF2D 1.5
RCF2D 2.5
RCF2D 3.0
RCF2D 4.0

gold plated

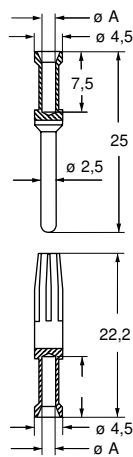
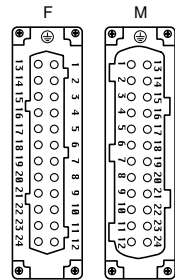
16A male contacts		
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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
- 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



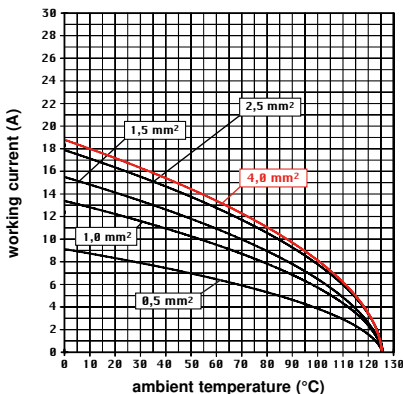
contacts side (front view)



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

RCE 24 poles connector inserts
Maximum current load derating diagram

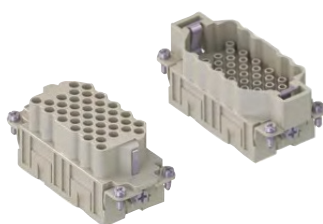


RQEE 40 poles + ⊕ 16A - 500V HNM (High Number of Matings)enclosures:
size "77.27"

page:

HNM
C-TYPE IP65/IP66, single lever
V-TYPE IP65/IP66, single lever596 - 597
402 - 411
454 - 458

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 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

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

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

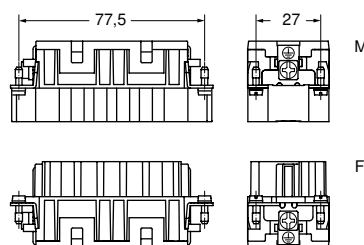
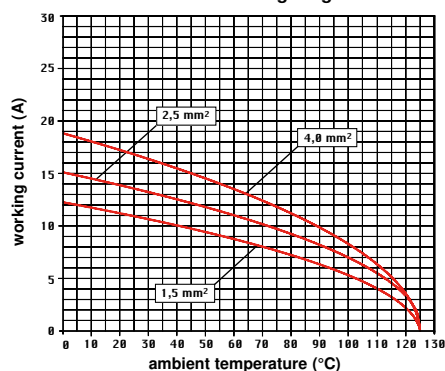
gold plated

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

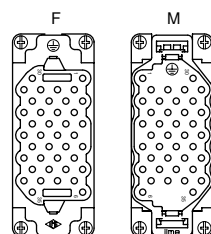
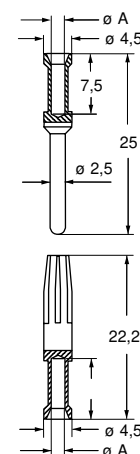
- characteristics according to EN 61984:

16A 500V 6kV 3

- **DNV-GL VERITAS EAC** certified
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 G Ω
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: ≤ 1 m Ω
- **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

RQEE 40 poles connector inserts
Maximum current load derating diagram

contacts side (front view)

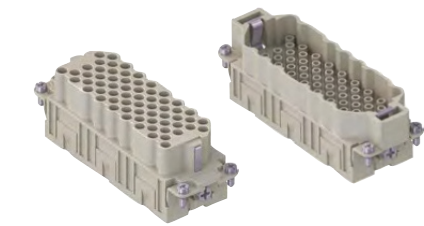
**CR CPQ coding pins**
[page 689]**RCF2D and RCM2D contacts**

conductor section mm ²	conductor slot ϕ 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 + ⊕ 16A - 500V HNM (High Number of Matings)

enclosures: size "104.27"	page:
HNM	598 - 599
C-TYPE IP65/IP66, single lever	412 - 423
V-TYPE IP65/IP66, 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

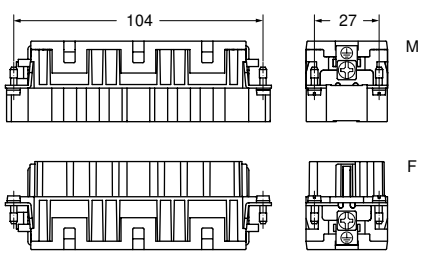
RCF2D 0.3
RCF2D 0.5
RCF2D 0.7
RCF2D 1.0
RCF2D 1.5
RCF2D 2.5
RCF2D 3.0
RCF2D 4.0

gold plated

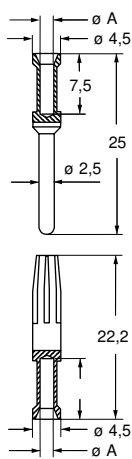
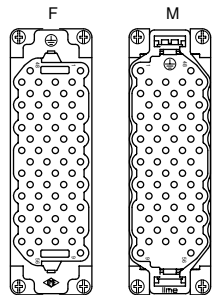
16A male contacts		
0,14-0,37 mm ²	AWG 26-22	one groove
0,5 mm ²	AWG 20	with no grooves
0,75 mm ²	AWG 18	one groove (back side)
1 mm ²	AWG 18	one groove
1,5 mm ²	AWG 16	two grooves
2,5 mm ²	AWG 14	three grooves
3 mm ²	AWG 12	one wide groove
4 mm ²	AWG 12	with no grooves

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



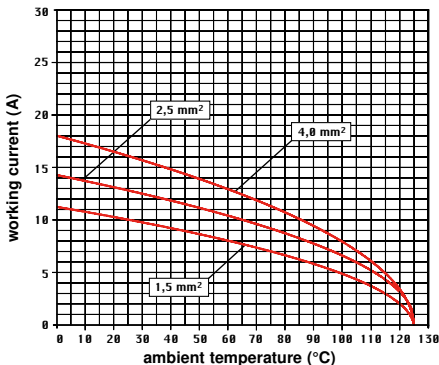
contacts side (front view)



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)

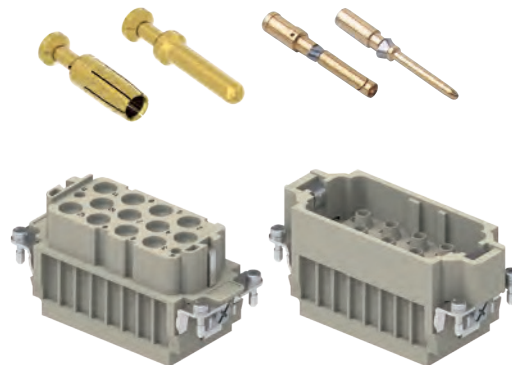


RXF/M 12/2

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**

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



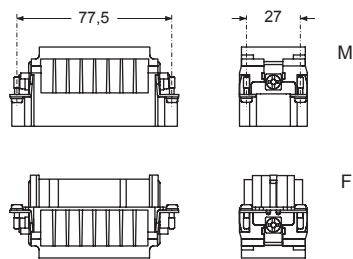
Q 10.000 MATINGS WITH HNM ENCLOSURES
Q 5.000 MATINGS WITH STANDARD ENCLOSURES, SINGLE LEVER

40A and 10A crimp contacts
gold plated

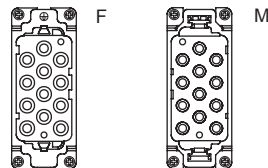


description	part No.	part No
without contacts (to be ordered separately)		
female inserts for female contacts	RXF 12/2	
male inserts for male contacts	RXM 12/2	
40A female crimp contacts		
1,5 mm ² AWG 16		RXF2D 1.5
2,5 mm ² AWG 14		RXF2D 2.5
4 mm ² AWG 12		RXF2D 4.0
6 mm ² AWG 10		RXF2D 6.0
40A male crimp contacts		
1,5 mm ² AWG 16		RXM2D 1.5
2,5 mm ² AWG 14		RXM2D 2.5
4 mm ² AWG 12		RXM2D 4.0
6 mm ² AWG 10		RXM2D 6.0
10A female contacts		
0,14-0,37 mm ² AWG 26-22 identification No. 1		RDF2D 0.3
0,5 mm ² AWG 20 identification No. 2		RDF2D 0.5
0,75 mm ² AWG 18 identification No. ②		RDF2D 0.7
1 mm ² AWG 18 identification No. 3		RDF2D 1.0
1,5 mm ² AWG 16 identification No. 4		RDF2D 1.5
2,5 mm ² AWG 14 identification No. 5		RDF2D 2.5
10A male contacts		
0,14-0,37 mm ² AWG 26-22 identification No. 1		RDM2D 0.3
0,5 mm ² AWG 20 identification No. 2		RDM2D 0.5
0,75 mm ² AWG 18 identification No. ②		RDM2D 0.7
1 mm ² AWG 18 identification No. 3		RDM2D 1.0
1,5 mm ² AWG 16 identification No. 4		RDM2D 1.5
2,5 mm ² AWG 14 identification No. 5		RDM2D 2.5

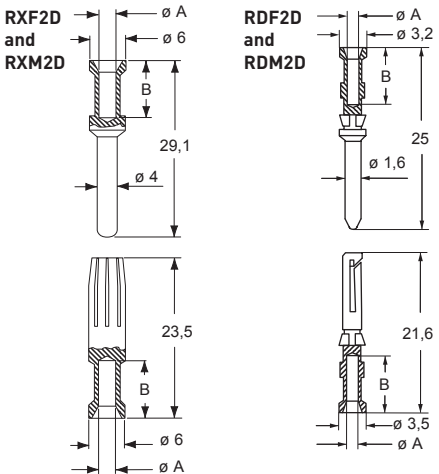
- characteristics according to EN 61984:
40A 690V 8kV 3
10A 250V 4kV 3
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600V
- insulation resistance: ≥ 10 GΩ
- ambient temperature limit: -40 °C ... +125 °C
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical 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)



- 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

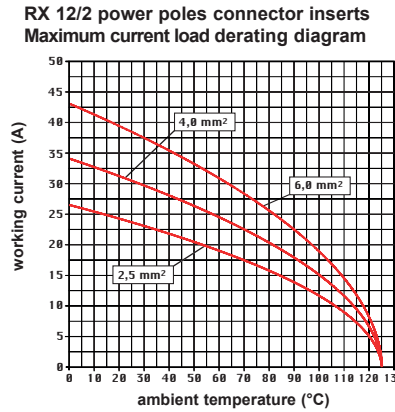


RXF2D and RXM2D contacts

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

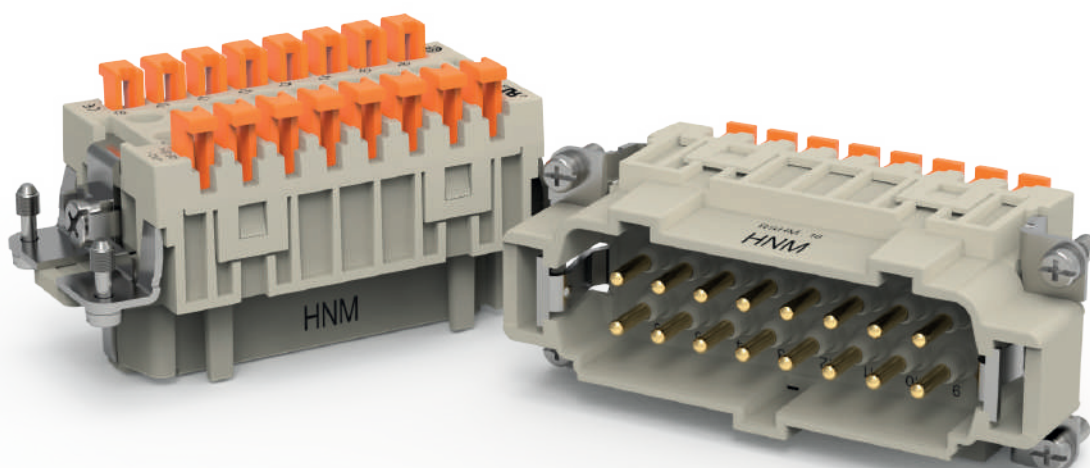
conductor cross-sectional area mm ²	conductor slot ø A (mm)	conductor stripping length B (mm)
0,14-0,37	0,9	8
0,5	1,1	8
0,75	1,3	8
1,0	1,45	8
1,5	1,8	8
2,5	2,2	6



RSH-SQUICH® CONNECTOR SERIES

HNM VERSION

RSHF /M 06 / 10 / 16 / 24



RSH-SQUICH® Series
(HNM version of CSH-SQUICH®)
16 A 500 V 6 kV 3



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

TECHNICAL FEATURES

RSHF /M 06 / 10 / 16 / 24

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

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

Boosts mechanical lifecycle of **CSH** from ≥ 500 to 10.000 cycles of **RSH**, for applications requiring frequent connection and disconnection (e.g. measuring/controlling drawer-mounted equipment, control equipment on moulds and replaceable tools, etc.).

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

NOTE – 2-insert combinations "77.62" (32-pole) or "104.62" (48-pole) not available: size "77.62" and "104.62" enclosures are not foreseen in the HNM range.

- Same ratings (voltage, current including derating diagrams, range of conductor cross-sectional areas, limiting temperatures) as series **CSH**.

- Suitable for up to **10.000 operating cycles** when installed in compatible HNM enclosures, equally rated (10.000 locking and unlocking cycles).

- Spring clamp contacts with actuator pushbutton, selectively high thickness gold plated and specially lubricated.

- Lateral sliding PE contacts specially lubricated.

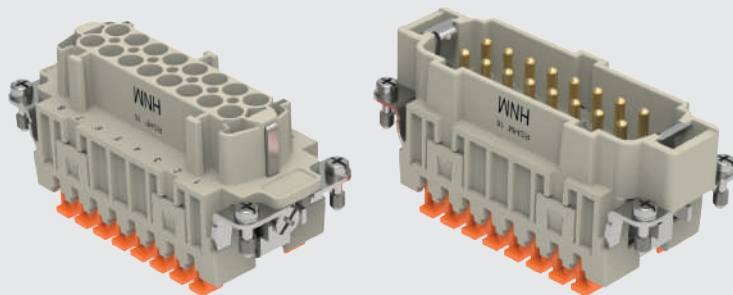
- Identified by specific **RSH..** part No. and **HNM** on the insert.

- Interchangeable and intermateable with already available series **RCE** (crimp) HNM inserts.

- cURus, CSA, CQC, DNV-GL, BV, EAC pending.

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

special gold plating and lubrication to reduce the wear of the contacts during frequently repeated mating/unmating operations



RSH-SQUICH® 6 poles + $\oplus$ 16 A - 500 V HNM (High Number of Matings)

enclosures:

size "44.27"

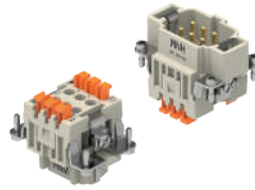
page:

HNM

592 - 593

inserts,

spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

FROM JUNE 2021

refer to CN.19 pages

description

part No.

spring terminals with actuator button

female inserts with female contacts

male inserts with male contacts

RSHF 06

RSHM 06

- characteristics according to EN 61984:

16 A 500 V 6 kV 3

- cURus, CSA, CQC, DNV-GL, BV, EAC pending

- rated voltage according to UL/CSA: 600 V

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

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

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

- mechanical life: ≥ 10.000 cycles

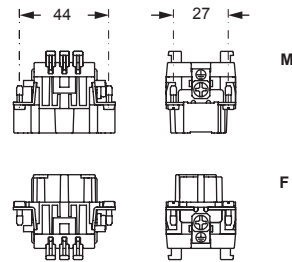
- contact resistance: $\leq 3 \text{ m}\Omega$

- for max. current load see the connector inserts derating

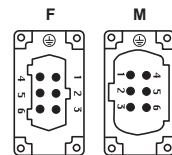
diagrams below; for more information see page 28 of

CN.19 catalogue

RSH 06



contacts side (front view)



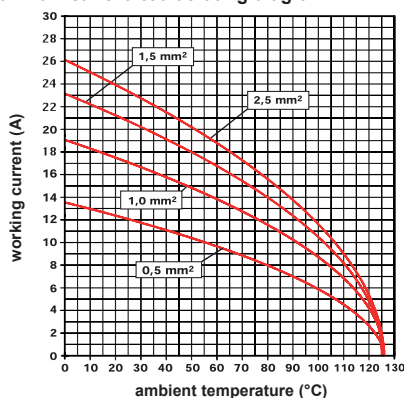
- inserts for conductors with the following sections:

0,14 - 2,5 mm² - AWG 26 - 14

- conductors stripping length: 7 mm

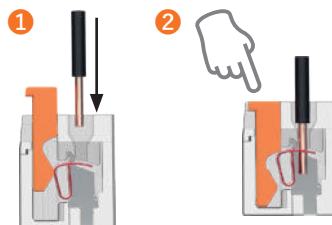
RSH 06 poles connector inserts

Maximum current load derating diagram



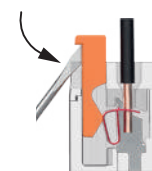
SQUICH®-spring connection technology

WIRING


Deeply insert a
stripped conductor
into a round terminal.

Push the actuator
button to close the
terminal.

RE-OPENING

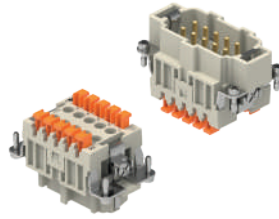

Insert a **0,5 x 3,5 mm** flat blade
screwdriver in the actuator button
side window and pull it up by
levering down.

RSH-SQUICH® 10 poles + ⚡ 16 A - 500 V HNM (High Number of Matings)enclosures:
size "57.27"

page:

HNM

594 - 595

inserts,
spring terminal connections without tools

Q 10 000 MATINGS WITH HNM ENCLOSURES

FROM JUNE 2021

refer to CN.19 pages

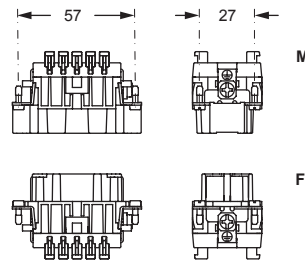
description

part No.

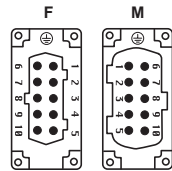
spring terminals with actuator button
female inserts with female contacts
male inserts with male contactsRSHF 10
RSHM 10

- characteristics according to EN 61984:
16 A 500 V 6 kV 3
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40 \text{ }^{\circ}\text{C} \dots +125 \text{ }^{\circ}\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagrams below; for more information see page 28 of CN.19 catalogue

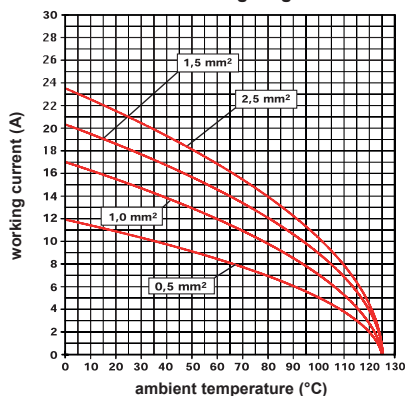
RSH 10



contacts side (front view)

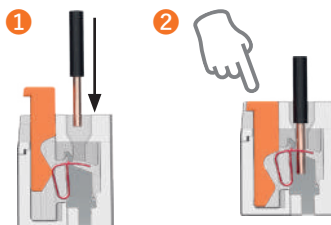


- inserts for conductors with the following sections:
0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 7 mm

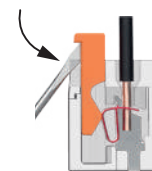
RSH 10 poles connector inserts
Maximum current load derating diagram

SQUICH®-spring connection technology

WIRING

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

RE-OPENING

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

RSH-SQUICH® 16 poles + 16 A - 500 V HNM (High Number of Matings)

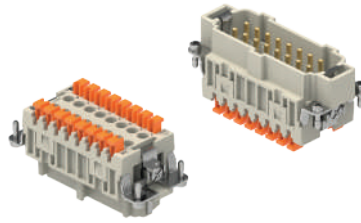
enclosures:
size "77.27"

page:

HNM

596 - 597

inserts,
spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

FROM JUNE 2021

refer to CN.19 pages

description

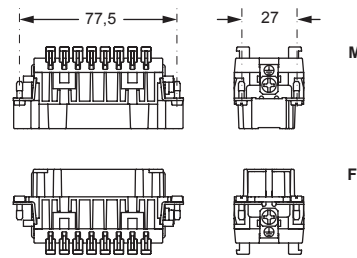
part No.

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

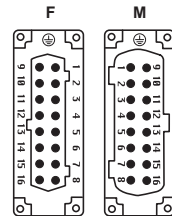
RSHF 16
RSHM 16

- characteristics according to EN 61984:
16 A 500 V 6 kV 3
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40 \text{ }^{\circ}\text{C} \dots +125 \text{ }^{\circ}\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagrams below; for more information see page 28 of CN.19 catalogue

RSH 16

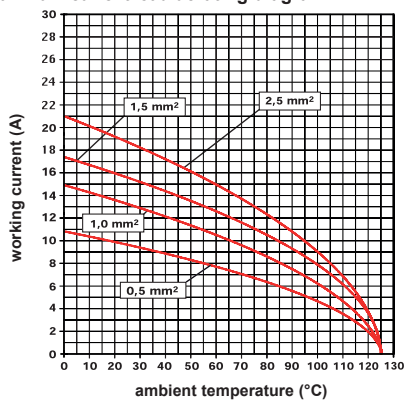


contacts side (front view)



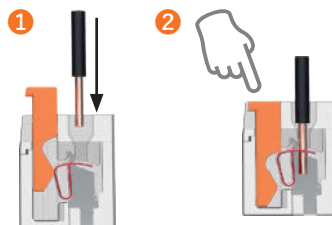
- inserts for conductors with the following sections:
0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 7 mm

RSH 16 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

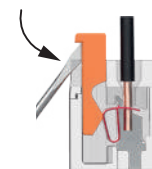
WIRING



Deeply insert a
stripped conductor
into a round terminal.

Push the actuator
button to close the
terminal.

RE-OPENING



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

RSH-SQUICH® 24 poles + 16 A - 500 V HNM (High Number of Matings)

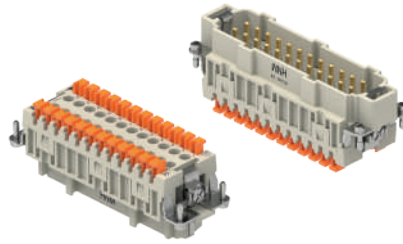
enclosures:
size "104.27"

page:

HNM

598 - 599

inserts,
spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

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refer to CN.19 pages

description

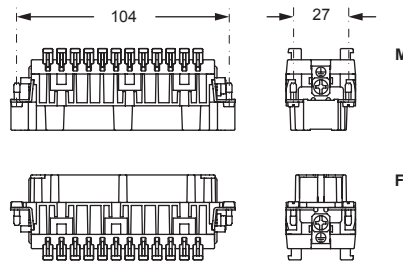
part No.

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

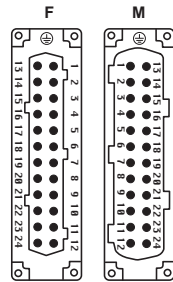
RSHF 24
RSHM 24

- characteristics according to EN 61984:
16 A 500 V 6 kV 3
- cURus, CSA, CQC, DNV-GL, BV, EAC pending
- rated voltage according to UL/CSA: 600 V
- insulation resistance: $\geq 10 \text{ G}\Omega$
- ambient temperature limit: $-40 \text{ }^{\circ}\text{C} \dots +125 \text{ }^{\circ}\text{C}$
- made of self-extinguishing thermoplastic resin UL 94V-0
- mechanical life: ≥ 10.000 cycles
- contact resistance: $\leq 3 \text{ m}\Omega$
- for max. current load see the connector inserts derating diagrams below; for more information see page 28 of CN.19 catalogue

RSH 24

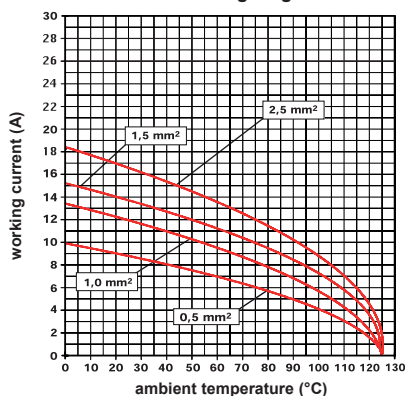


contacts side (front view)



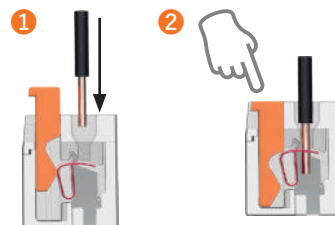
- inserts for conductors with the following sections:
0,14 - 2,5 mm² - AWG 26 - 14
- conductors stripping length: 7 mm

RSH 24 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

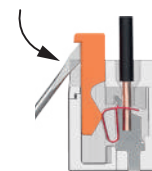
WIRING



Deeply insert a
stripped conductor
into a round terminal.

Push the actuator
button to close the
terminal.

RE-OPENING

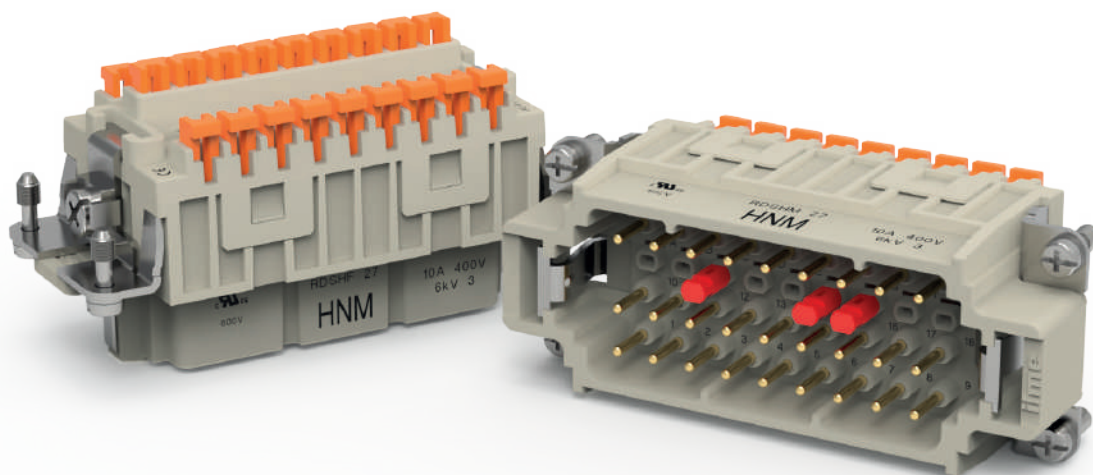


Insert a **0,5 x 3,5 mm** flat blade
screwdriver in the actuator button
side window and pull it up by
levering down.

RDSH-SQUICH® CONNECTOR SERIES

HNM VERSION

RDSHF /M 09 / 18 / 27 / 42



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

10 A 400 V 6 kV 3

10 A 400/690 V 6 kV 2



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

TECHNICAL FEATURES

RDSHF /M 09 / 18 / 27 / 42

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

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

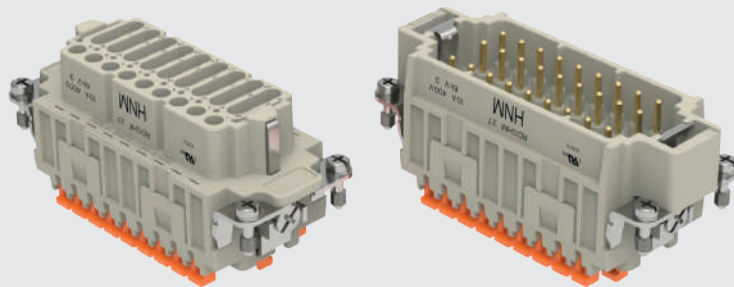
Boosts mechanical lifecycle of **CDSH** from ≥ 500 to 10.000 cycles of **RDSH**, for applications requiring the higher density of contacts of this series (up to 42-pole in the "104.27" size) and frequent connection and disconnection (e.g. measuring/controlling drawer-mounted equipment, control equipment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

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

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

- Same ratings (voltage, current including derating diagrams, range of conductor cross-sectional areas, limiting temperatures) as **CDSH**.
- Suitable for up to **10.000 operating cycles** when installed in compatible HNM enclosures, equally rated (10.000 locking and unlocking cycles).
- Spring clamp contacts with actuator pushbutton, selectively high thickness gold plated and specially lubricated.
- Lateral sliding PE contacts specially lubricated.
- Identified by specific **RDSH...** part No. and **HNM** on the insert.
- **CR CDS** plastic coding pin that enables the polarisation of inserts in a wide range of combinations.
- cURus, CSA, CQC, DNV-GL, BV, EAC pending.
- **RoHS**: compliant with exemption **6(c)**.

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



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

enclosures:
size "44.27"

page:

HNM

592 - 593

inserts,
spring terminal connections without tools

coding pins



Q 10 000 MATINGS WITH HNM ENCLOSURES

FROM JUNE 2021

refer to CN.19 pages

description

part No.

part No.

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

RDSHF 09
RDSHM 09

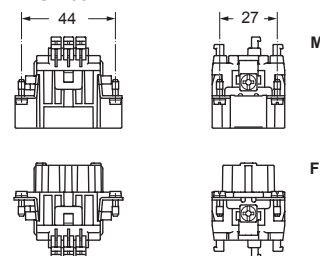
plastic coding pins

CR CDS

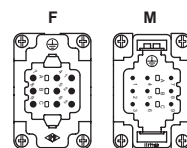
- characteristics according to EN 61984:

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

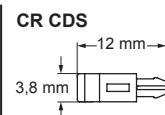
RDSH 09



contacts side (front view)



CR CDS

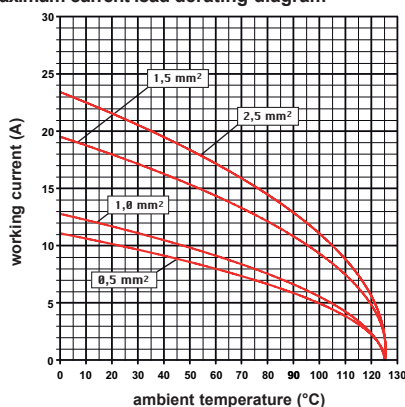


RDSH series - Coding with CR CDS pins

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

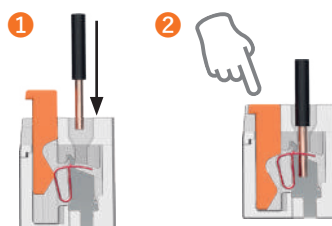
- inserts for conductors cross-sectional areas: 0,14 - 2,5 mm² - AWG 26 - 14
- for wires with crimped ferrule, usable section: up to 1,5 mm² (AWG 16)
- conductors stripping length: 9...11 mm

RDSH 09 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

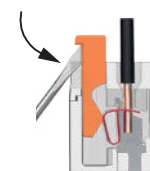
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



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

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

enclosures:
size "57.27"

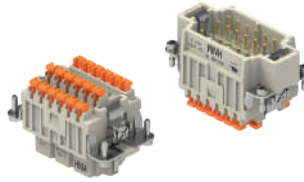
page:

HNM

594 - 595

inserts,
spring terminal connections without tools

coding pins



Q 10 000 MATINGS WITH HNM ENCLOSURES

FROM JUNE 2021

refer to CN.19 pages

description

part No.

part No.

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

RDSHF 18
RDSHM 18

plastic coding pins

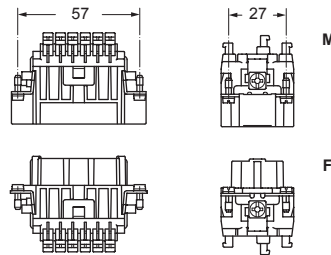
CR CDS

- characteristics according to EN 61984:

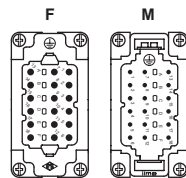
10 A 400 V 6 kV 3
10 A 400/690 V 6 kV 2

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

RDSH 18

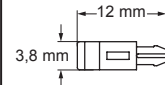


contacts side (front view)



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

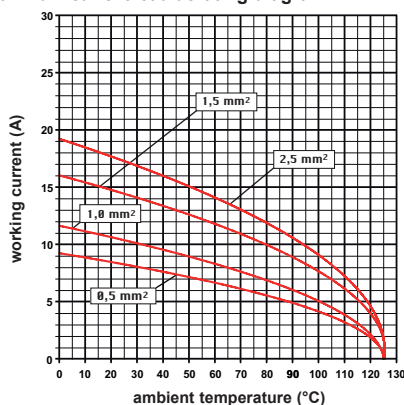
CR CDS



RDSH series - Coding with CR CDS pins

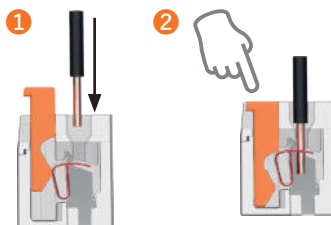
Size of connectors	Slots for coding pins (M) = male insert (F) = female insert	Required coding pins for each coupling	Possible codings
18P + ⊕	6 (M) + 6 (F)	6 3 (M) + 3 (F)	20

RDSH 18 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

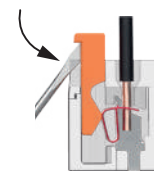
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



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

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

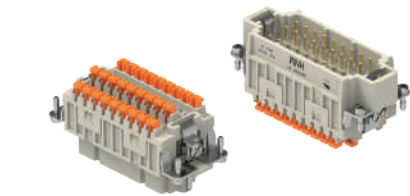
enclosures:
size "77.27"

HNM

page:
596 - 597

inserts,
spring terminal connections without tools

coding pins



Q 10 000 MATINGS WITH HNM ENCLOSURES

FROM JUNE 2021

refer to CN.19 pages

description

part No.

part No.

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

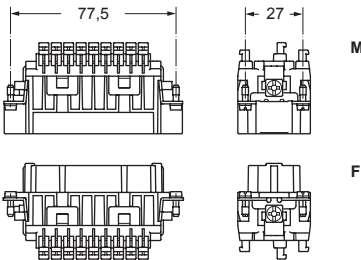
RDSHF 27
RDSHM 27

plastic coding pins

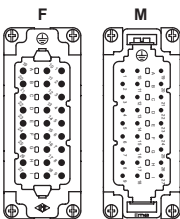
CR CDS

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

RDSH 27

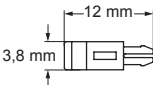


contacts side (front view)



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

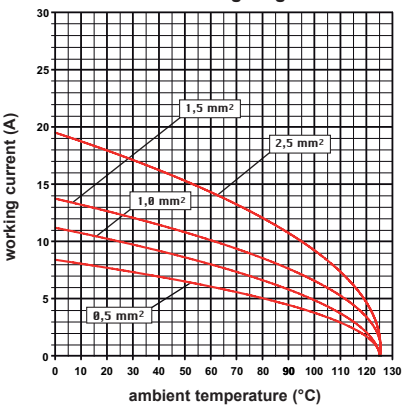
CR CDS



RDSH series - Coding with CR CDS pins

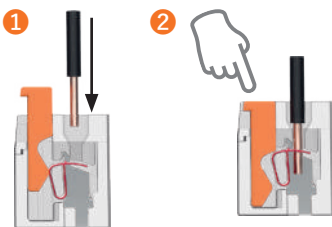
Size of connectors	Slots for coding pins (M) = male insert (F) = female insert	Required coding pins for each coupling	Possible codings
27P + ⊕	9 (M) + 9 (F)	9 5 (M) + 4 (F)	126

RDSH 27 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

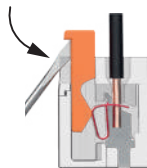
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



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

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

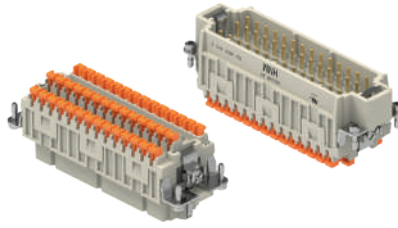
enclosures:
size "104.27"

page:

HNM

598 - 599

inserts,
spring terminal connections without tools



Q 10 000 MATINGS WITH HNM ENCLOSURES

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coding pins



refer to CN.19 pages

description

part No.

part No.

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

RDSHF 42
RDSHM 42

plastic coding pins

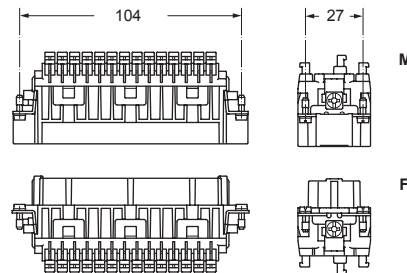
CR CDS

- characteristics according to EN 61984:

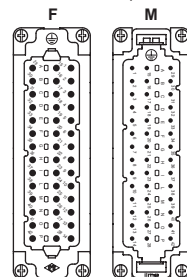
10 A 400 V 6 kV 3
10 A 400/690 V 6 kV 2

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

RDSH 42

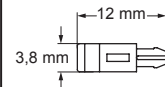


contacts side (front view)



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

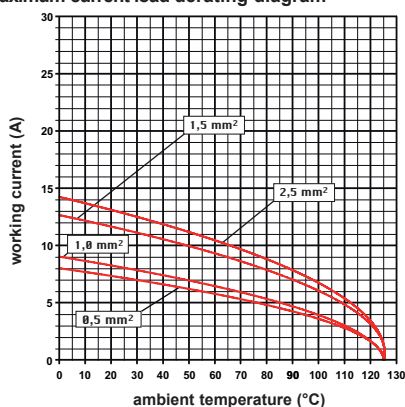
CR CDS



RDSH series - Coding with CR CDS pins

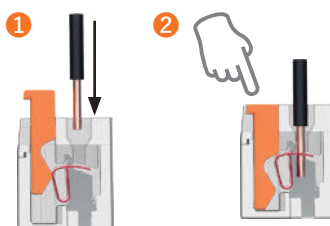
Size of connectors	Slots for coding pins (M) = male insert (F) = female insert	Required coding pins for each coupling	Possible codings
42P + ⊕	14 (M) + 14 (F)	14 7 (M) + 7 (F)	3.432

RDSH 42 poles connector inserts
Maximum current load derating diagram



SQUICH®-spring connection technology

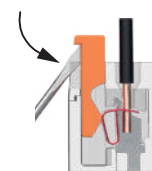
WIRING



Deeply insert a stripped conductor into a round terminal.

Push the actuator button to close the terminal.

RE-OPENING



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