

## RC/RM Machined contact AWG16

A unique contact technology for a wide range of railway connectors

**Qualified for railway applications** ■ Machined crimp contact

**Low contact resistance** ■ Gold plated

**Good contact retention** ■ Locking spring

**Suitable for automatic crimping** ■ Available on plastic carrier

## Technical features

- Machined crimp contact
- **Contact body:** High conductive copper alloy
- **Plating:** K (Std) Min. 0.4µm gold all over, over nickel
- **Current per contact max.:** 15A according to NFF61030
- **Contact resistance:** ≤ 3 MΩ
- **Contact retention in body:** 110 N min.
- **Individual insertion force:** 3.5 N max.
- **Individual withdrawal force:** 0.55 N min
- RC/RM machined contact size 16 can be used in any contact position UTS, UTO, VGE1 and 838 connectors

## Ordering information

|                                              |       |    |   |    |       |   |
|----------------------------------------------|-------|----|---|----|-------|---|
| <b>Type</b>                                  | (K)RM | 16 | M | 23 | (GE1) | K |
| RM: Male contact bulk packing                | (K)RC | 16 | M | 23 | (GE1) | K |
| RC: Female contact bulk packing              |       |    |   |    |       |   |
| KRM: Male contact on plastic carrier strip   |       |    |   |    |       |   |
| KRC: Female contact on plastic carrier strip |       |    |   |    |       |   |
| <b>Wire size</b>                             |       |    |   |    |       |   |
| #14 – #16 – #20 – #24 – #28                  |       |    |   |    |       |   |
| <b>Contact size #16</b>                      |       |    |   |    |       |   |
| .0625" (1.6mm) diameter contacts             |       |    |   |    |       |   |
| Design variation: Crimp barrel               |       |    |   |    |       |   |
| <b>Contact type</b>                          |       |    |   |    |       |   |
| No digit: Pin                                |       |    |   |    |       |   |
| GE1: Longer contact                          |       |    |   |    |       |   |
| GE3: Shorter contact (only male contact)     |       |    |   |    |       |   |
| GE7: Shorter contact (only female contact)   |       |    |   |    |       |   |
| <b>Plating indication:</b>                   |       |    |   |    |       |   |
| K: Gold                                      |       |    |   |    |       |   |
| Other plating on request                     |       |    |   |    |       |   |
| <b>Packing quantity</b>                      |       |    |   |    |       |   |
| No digit (std): 50 pcs bulk packing (RM/RC)  |       |    |   |    |       |   |
| 2000 pcs on reel (KRM/KRC)                   |       |    |   |    |       |   |
| 1000: 1000 pcs bulk packing (RM/RC)          |       |    |   |    |       |   |

### The RM/RC machined contact packing

Conscious of the wide variety of applications, contact packaging has been considered for small series (bulk packaging) and high volume production (reeled contacts):



- 50 pieces bulk package (machined contacts)



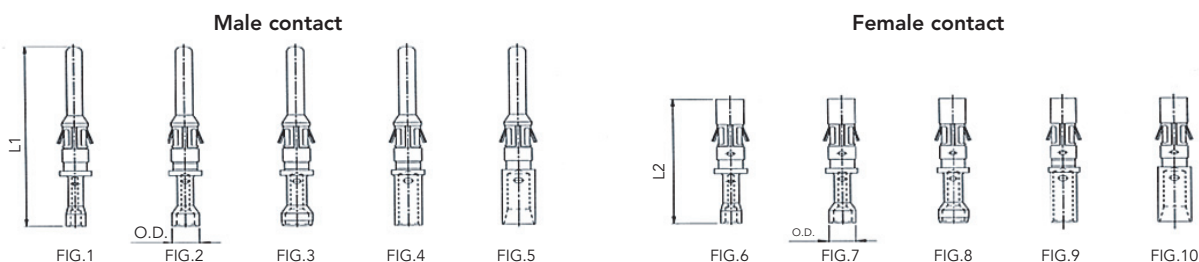
- 1000 pieces bulk package (machined contacts)



- 5000 pieces reeled (machined contacts)

## RM/RC machined contacts

### Contact size 16 - Pin Ø1.6mm (.063")



### Part numbers & dimensions

| Part numbers |      |                |      | Wire size |                 | Max. wire Ø | Max. insul. Ø | Wire strip length | O.D.** | L1   | L2   |
|--------------|------|----------------|------|-----------|-----------------|-------------|---------------|-------------------|--------|------|------|
| Male contact | FIG. | Female contact | FIG. | AWG       | mm <sup>2</sup> |             |               |                   |        |      |      |
| RM28M1K      | 1    | RC28M1K        | 6    | 30-28     | 0.05-0.08       | 0.55        | 1.1           | 4.8               | 1.90   | 26.2 | 18.2 |
| RM24M9K      | 2    | RC24M9K        | 7    | 26-24     | 0.13-0.20       | 0.8         | 1.6           |                   | 2.55   |      |      |
| RM20M13K     | 3    | RC20M13K       | 8    | 22-20     | 0.32-0.52       | 1.18        | 1.8           |                   | 2.92   |      |      |
| RM20M12K     |      | RC20M12K       |      |           |                 |             | 2.2           |                   | 2.92   |      |      |
| RM16M23K     | 4    | RC16M23K       | 9    | 20-16     | 0.50-1.50       | 1.80        | 3.2           | 7.1               | 2.55   | 26.2 | 18.2 |
| RM14M50K     | 5    | RC14M50K       | 10   | 16-14     | 1.5-2.5         | 2.05        |               |                   | 3.10   |      |      |
| RM14M30K     | 5    | RC14M30K       | 10   | 16-14     | 1.5-2.5         | 2.28        |               |                   | 3.10   |      |      |

For machined contacts reeled on plastic carrier: put «K» in front of part number example: KRM16M13K

### Dimensions

#### Comparison with standard RM / RC contacts

|                             | GE1      | GE3   | GE7     |
|-----------------------------|----------|-------|---------|
| RM contact (male contact)   | + 1 mm   | -1 mm | -       |
| RC contact (female contact) | + 1.5 mm | -     | -0.6 mm |

#### Contact selector guide

|                     | Standard RC contact    | RM*GE1 | RC*GE7                 |
|---------------------|------------------------|--------|------------------------|
| Standard RC contact |                        |        |                        |
| Standard RM contact |                        |        | Last Mate, First Break |
| RM*GE1              | First Mate, Last Break |        |                        |



First Mate, Last Break contact can be used as grounding contact.

Note : all dimensions are in mm / \*\* Outer diameter

# RM/RC machined contact

## Longer

| Part numbers |      |                |      | Wire size |           | Max.<br>wire Ø | Max.<br>insul. Ø | Wire strip<br>length | O.D.** | L1   | L2   |
|--------------|------|----------------|------|-----------|-----------|----------------|------------------|----------------------|--------|------|------|
| Male contact | FIG. | Female contact | FIG. | AWG       | mm²       |                |                  |                      |        |      |      |
| RM28M1GE1K   | 1    | RC28M1GE1K     | 6    | 30-28     | 0.05-0.08 | 0.55           | 1.1              | 4.8                  | 1.90   | 27.2 | 19.7 |
| RM24M9GE1K   | 2    | RC24M9GE1K     | 7    | 26-24     | 0.13-0.20 | 0.8            | 1.6              |                      | 2.55   |      |      |
| RM20M13GE1K  | 3    | RC20M13GE1K    | 8    | 22-20     | 0.32-0.52 | 1.18           | 1.8              |                      | 2.92   |      |      |
| RM20M12GE1K  |      | RC20M12GE1K    |      |           |           |                | 2.2              |                      |        |      |      |
| RM16M23GE1K  | 4    | RC16M23GE1K    | 9    | 20-16     | 0.52-1.50 | 1.80           | 3.2              | 7.1                  | 2.55   |      |      |
| RM14M50GE1K  | 5    | RC14M50GE1K    | 10   | 16-14     | 1.5-2.5   | 2.05           |                  |                      | 3.10   |      |      |
| RM14M30GE1K  | 5    | RC14M30GE1K    | 10   |           |           | 2.28           |                  |                      |        |      |      |

## Shorter

| Part numbers |      |                |      | Wire size |           | Max.<br>wire Ø | Max.<br>insul. Ø | Wire strip<br>length | O.D.** | L1   | L2   |
|--------------|------|----------------|------|-----------|-----------|----------------|------------------|----------------------|--------|------|------|
| Male contact | FIG. | Female contact | FIG. | AWG       | mm²       |                |                  |                      |        |      |      |
| RM28M1GE3K   | 1    | RC28M1GE7K     | 6    | 30-28     | 0.05-0.08 | 0.55           | 1.1              | 4.8                  | 1.90   | 25.2 | 17.6 |
| RM24M9GE3K   | 2    | RC24M9GE7K     | 7    | 26-24     | 0.13-0.20 | 0.8            | 1.6              |                      | 2.55   |      |      |
| RM20M13GE3K  | 3    | RC20M13GE7K    | 8    | 22-20     | 0.32-0.52 | 1.18           | 1.8              |                      | 2.92   |      |      |
| RM20M12GE3K  |      | RC20M12GE7K    |      |           |           |                | 2.2              |                      |        |      |      |
| RM16M23GE3K  | 4    | RC16M23GE7K    | 9    | 20-16     | 0.52-1.50 | 1.80           | 3.2              | 7.1                  | 2.55   |      |      |
| RM14M50GE3K  | 5    | RC14M50GE7K    | 10   | 16-14     | 1.5-2.5   | 2.05           |                  |                      | 3.10   |      |      |
| RM14M30GE3K  | 5    | RC14M30GE7K    | 10   |           |           | 2.28           |                  |                      |        |      |      |

## Crimptooling

| Stripping<br>length | Wire size |           | Part numbers |          | Tool                | Locator  | Tool<br>selector | Extraction<br>tool |
|---------------------|-----------|-----------|--------------|----------|---------------------|----------|------------------|--------------------|
|                     | AWG       | mm²       |              |          |                     |          |                  |                    |
| 4.8                 | 30-28     | 0.05-0.08 | RM28M1*      | RC28M1*  | MH860 (M22520/7-01) | MH86164G | 4/6              | RX2025GE1          |
|                     | 26-24     | 0.13-0.2  | RM24M9*      | RC24M9*  | MH860 (M22520/7-01) | MH86164G | 5/6              |                    |
|                     | 22-20     | 0.32-0.52 | RM20M12*     | RC20M12* | MH860 (M22520/7-01) | MH86164G | 5/7              |                    |
| 7.1                 | 20-16     | 0.5-1.5   | RM16M23*     | RC16M23* | MH860 (M22520/7-01) | MH86164G | 6/8              |                    |
|                     | 16-14     | 1.5-2.5   | RM14M30      | RC16M30* | AF8 (M22520/1-01)   | TP1142   | 8                |                    |
|                     | 16-14     | 1.5-2.5   | RM14M50*     | RC14M50* | AF8 (M22520/1-01)   | TP1142   | 8                |                    |

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