# AS39029 QPL LISTED CONTACTS

## FOR MIL/AERO APPLICATIONS WITH PATENTED REVERSED CLIP TECHNOLOGY

QUALIFIED PRODUCT LISTED MIL AS39029

NEW QPL PARTS

preci-dip

swiss world connects

# REVERSED CLIP SOCKET CONTACT TECHNOLOGY

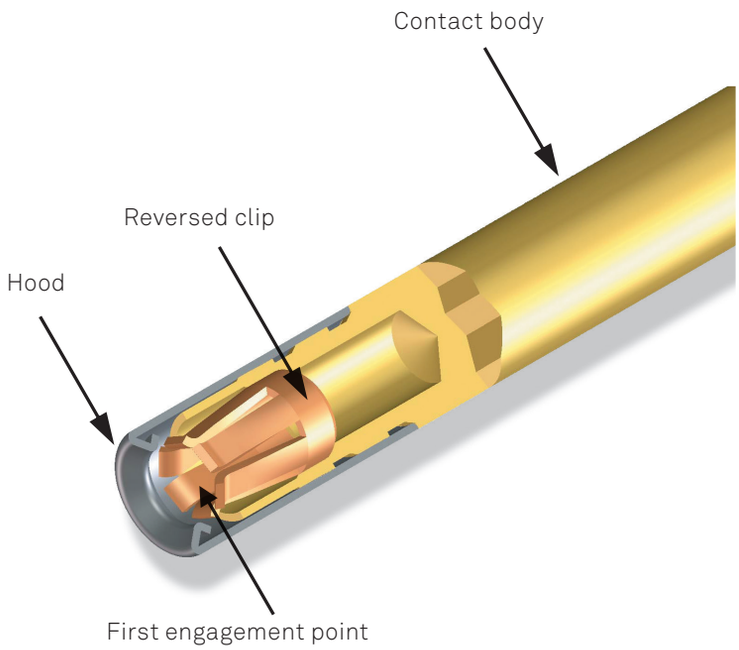
## CONTACT DESIGN

The contact consists of three parts, separately manufactured and made of different base materials. This design allows to optimise the performance and to select the most appropriate production process individually:

- Contact body made of machined brass
- Beryllium-copper clip insert achieved by precision stamping process
- Protection hood made of deep-drawn stainless steel

Separate electroplating processes of body and clip allow the best cost-performance ratio (localized finish). The assembly of the three parts is then carried out on dedicated, fully automatic assembly lines.

Reversed clip contacts are presently available in size 12, 16, 20 and 22. This proprietary technology developed by PRECI-DIP, is protected by international patents.




## ADVANTAGES AND CHARACTERISTICS

In comparison with the alternative slotted contact body design, the reversed clip concept has several advantages:

- Smaller difference between insertion and extraction forces
- Reduced dispersion of the force values
- Higher redundancy of the contact points, thanks to 6 or 8 contact fingers

We are also manufacturing the corresponding precision-machined pin contacts.

These contacts have successfully passed all the qualification tests according to AS39029 and are QPL listed.

## TECHNICAL SPECIFICATIONS

| | | |
|---|---|---|
| • Operating temp. | -65°C to +125°C for Class A contacts<br>-65°C to +200°C for Class B contacts | |
| • Material | Pin contact: | Type A : copper alloy<br>Machined brass acc. to ASTM B121/B121M |
| | Socket contact: | Type A : copper alloy<br>Machined brass acc. to ASTM B121/B121M |
| | Reversed clip: | BeCu acc. to ASTM B194 |
| | Hood: | Corrosion-resistant steel |
| • Finish | Gold plated (min. 1.27µm in the contact area) acc. to ASTM B488, Type II, Code C, over 2.5 µm Ni acc. to AMS-QQ-N-290, Class 2 | |
| | Silver plated acc. to ASTM B700, over 2.5 µm Ni acc. to AMS-QQ-N-290, Class 2 (M39029/29-213 only) | |

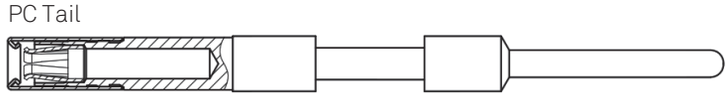
## CUSTOMIZED PRODUCTS

We also provide cost effective customized versions, derived from the MIL QPL contacts, for heavy duty applications:

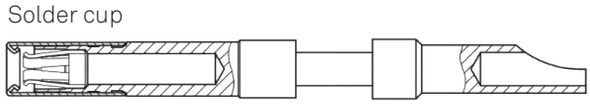
- Solder-cup or PC tail termination
- No color coding
- Other finish, Gold or Nickel only plating
- Hoodless version

Please consult for product availability.

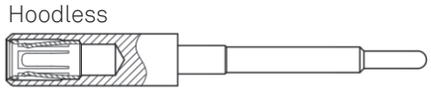
PC Tail



Solder cup



Hoodless



preci-dip

# CONTACT TECHNOLOGY

## MIL CONTACTS

## QUALIFIED PRODUCT LIST : PRECI-DIP PART NUMBERS

### SOCKET CONTACTS

| CONNECTOR TYPE ACC. TO | MIL P/N | PRECI-DIP P/N | MATING END SIZE | WIRE BARREL SIZE | TYPE | CLASS |
|---|---|---|---|---|---|---|
| MIL-DTL-26482, Series 2 | | | | | | |
| AS81703, Series 3 | M39029/5-115 | 83181-7Q4-7110-B1 | 20 | 20 | A | B |
| MIL-DTL-83723, Series 1, 3 | M39029/5-116 | 83191-7Q4-7210-B1 | 16 | 16 | A | B |
| MIL-DTL-83733 | M39029/5-118 | 83151-7Q4-7310-B1 | 12 | 12 | A | B |
| MIL-DTL-12883/40, /41, /47, /48 | | | | | | |
| AS81714, Series II | M39029/22-191 | 83211-7Q4-7010-B1 | 22 | 22 | A | B |
| MIL-C-81511, Series 3, 4 Class L | M39029/22-192 | 83231-7Q4-7110-B1 | 20 | 20 | A | B |
| MIL-DTL-26500 | | | | | | |
| MIL-DTL-26518, Class R | M39029/32-248 | 83171-7Q4-7210-B1 | 16 | 16 | A | B |
| MIL-C-38300 | | | | | | |
| MIL-DTL-26482, Series 1 | M39029/32-259 | 83161-7Q4-7110-B1 | 20 | 20 | A | A |
| MIL-DTL-38999, Series I, III, IV | M39029/56-348 | 83011-1P4-7010-B1 | 22 | 22D | A | B |
| | M39029/56-351 | 83021-1P4-7110-B1 | 20 | 20 | A | B |
| | M39029/56-352 | 83031-1P4-7210-B1 | 16 | 16 | A | B |
| | M39029/56-353 | 83041-1P4-7310-B1 | 12 | 12 | A | B |
| MIL-DTL-38999, Series II | | | | | | |
| MIL-DTL-24308 | M39029/57-354 | 83101-7Q4-7010-B1 | 22 | 22D | A | B |
| MIL-DTL-55302/68, /71, /75 | M39029/57-357 | 83341-7Q4-7110-B1 | 20 | 20 | A | B |
| MIL-DTL-83733 | M39029/57-358 | 83361-7Q4-7210-B1 | 16 | 16 | A | B |
| MIL-DTL-24308 | M39029/63-368 * | 83121-7Q4-6110-01 | 20 | 20 | A | A |
| MIL-DTL-12883/44, /45, /46 | M39029/101-552 | 83431-7Q4-7010-B1 | 22 | 22 | A | A |
| | M39029/101-553 | 83441-7Q4-7110-B1 | 20 | 20 | A | A |

NEW

**Listed part numbers are of localized finish.**

*** Eagle Grip Clip (hoodless)**

### PIN CONTACTS

| CONNECTOR TYPE ACC. TO | MIL P/N | PRECI-DIP P/N | MATING END SIZE | WIRE BARREL SIZE | TYPE | CLASS |
|---|---|---|---|---|---|---|
| AS81714, Series I | M39029/1-100 | 82151-7Q4-01 | 16 | 22 | A | B |
| | M39029/1-101 | 82161-7Q4-01 | 16 | 20 | A | B |
| | M39029/1-102 | 82171-7Q4-01 | 14 | 16 | A | B |
| | M39029/1-103 | 82181-7Q4-01 | 12 | 12 | A | B |
| MIL-DTL-26482, Series 2 | M39029/4-110 | 82071-7Q4-01 | 20 | 20 | A | B |
| AS81703, Series 3 | M39029/4-111 | 82081-7Q4-01 | 16 | 16 | A | B |
| MIL-DTL-83723, Series 1, 3 | M39029/4-113 | 82091-7Q4-01 | 12 | 12 | A | B |
| MIL-DTL-83733 | | | | | | |
| AS50151, Series 3450 | M39029/29-212 | 82111-7Q4-01 | 16 | 16 | A | B |
| MIL-DTL-83723, Series 2 | M39029/29-213 | 82121-6Q0-01 | 12 | 12 | A | B |
| MIL-DTL-26500 | | | | | | |
| MIL-DTL-26518, Class R | M39029/31-627 | 82141-7Q4-01 | 20 | 20 | A | B |
| MIL-C-38300 | M39029/31-229 | 82101-7Q4-01 | 16 | 16 | A | B |
| MIL-DTL-26482, Series 1 | M39029/31-240 | 82051-7Q4-01 | 20 | 20 | A | A |
| AS81703, Series 2 | M39029/31-228 | 82131-7Q4-01 | 16 | 16 | A | A |
| MIL-DTL-38999, Series I, II, III, IV | M39029/58-360 | 82011-7Q4-01 | 22 | 22D | A | B |
| MIL-DTL-24308 | M39029/58-363 | 82021-7Q4-01 | 20 | 20 | A | B |
| MIL-DTL-55302/69 | M39029/58-364 | 82031-7Q4-01 | 16 | 16 | A | B |
| MIL-DTL-83733 | M39029/58-365 | 82041-7Q4-01 | 12 | 12 | A | B |
| MIL-DTL-24308 | M39029/64-369 | 82061-7Q4-01 | 20 | 20 | A | A |

NEW

NEW

**Listed part numbers are of localized finish (except M39029/29-213). For overall plating please contact us.**

# ENJOY THE BENEFITS

## HEADED FOR SUCCESS

Awards from prestigious institutions and customers. Major certifications. World-wide recognition. For ongoing innovation, perfect teamwork, environmental responsibility as well as entrepreneurial excellence and sustained growth. In short, for Swiss quality.

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- Diverse fields of application
- Effective management system
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- Highly skilled and motivated workforce
- Strong customer support
- Custom design
- Competitive pricing, flexibility and Swiss quality
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- Prestigious client base

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