



Rack & Panel Blind Mating Modular Connectors

- Railway flat floating connector
- Modularity mixed power, signal & coaxial contacts.
- Up to 70 signal contacts.
- Guiding pins.
- Rack/Panel applications (norm XPF61-005)
- One size only: 14 units (5.5mm)
- In compliance with NF F 61-032, SNCF norm approved.

Technical Characteristics

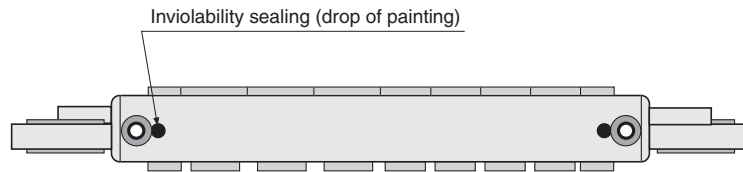
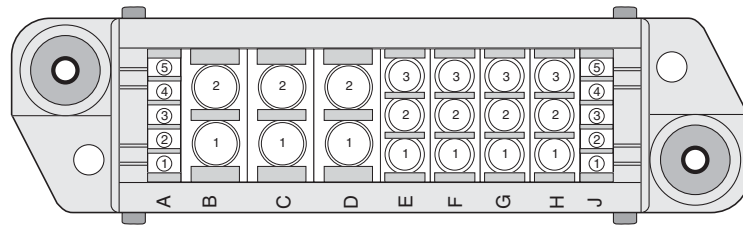
| MATERIALS AND PLATINGS | | ENVIRONMENTAL | |
|------------------------|--------------------------|--------------------------------------|-----------------------------------|
| Frame | Soft Steel (Zinc coated) | Temperature range | - 40 °C to 100 °C |
| Side flange | Polycarbonate | Fire classification | Exigence 2 following NF F 16-102 |
| Insulator | Polycarbonate | Salt spray test | 96 hours |
| Pin & socket body | Brass, Au/Ni | Acid withstanding | Following NF F 61-032 par. 11.4.6 |
| Socket wires | Copper alloy, Au/Ni | Vibration Withstanding | 5 g /25 to 250 Hz |
| Pin | Au/Ni | Insulator mechanical resistance | 1000 N |
| Floating eyelets | Brass (Ni plated) | Max torque for auto threading screws | 75 Ncm |

| ELECTRICAL CHARACTERISTICS | | | |
|------------------------------------|-----------------------|-----------|-----------|
| Contact Ø | Ø 1.50 | Ø 2.50 | Ø 3.50 |
| Creepage distance | 1.85 mm | 2.25 mm | 4.05 mm |
| Clearance distance | 1.25 mm | 3.40 mm | 5.40 mm |
| Working current | 8 A | 16 A | 25 A |
| Insulation resistance | ≥ 5.10 ³ M | | |
| Contact resistance | # 2.50 m | # 1.00 m | # 0.80 m |
| Dielectric withstanding voltage | 1500 Vrms | 2000 Vrms | 3000 Vrms |
| Contact Ø | Ø 1.50 | Ø 2.50 | Ø 3.50 |
| Voltage rating | 110 V | 220 V | 220 V |
| Contact holding back in the module | 40 N | 50 N | 70 N |
| Maxi male contact mass | 1.10 g | 2.90 g | 4.90 g |
| Maxi female contact mass | 0.70 g | 1.60 g | 2.70 g |
| IF/SF* (Max value) | 1.60N | 9.00N | 10.00N |

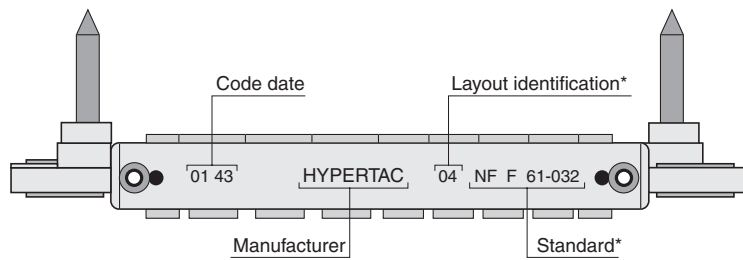
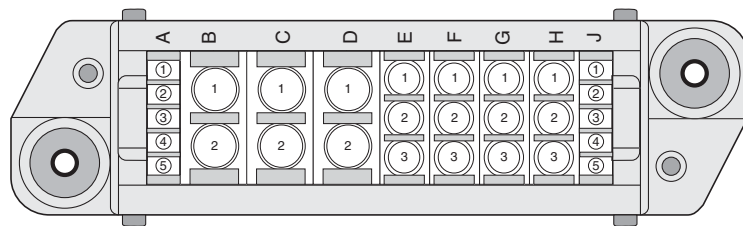
*IF/SF: Insertion and separation force according to NF F 61-032

Mounting example with L/RHA, L/SH, L/UH, L/VM and L/VF modules

Receptacle cabling side view



Plug cabling side view



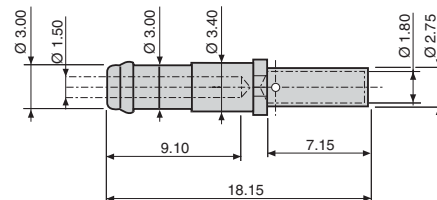
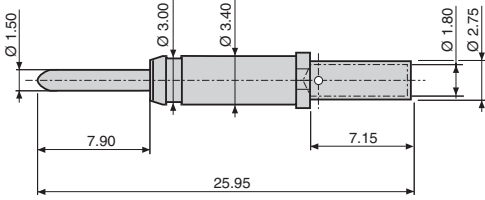
Dimensions are in mm

Contacts - Crimp terminations

Males

Females

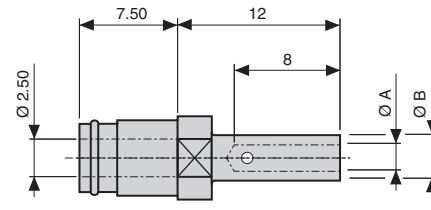
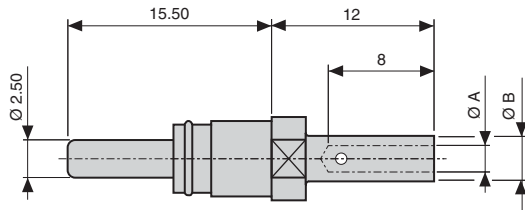
CONTACTS Ø 1.50 AWG 24-22-20-18-16-14



Ref: 0150 761-20-OG

Ref: 0150 682-20-G1

CONTACTS Ø 2.50*



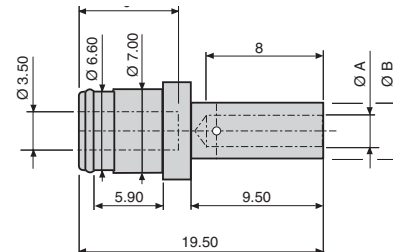
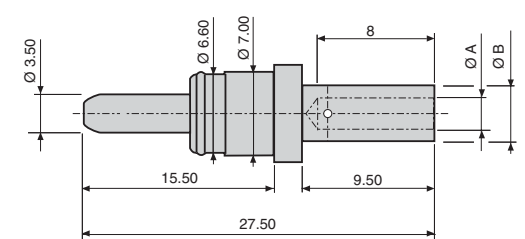
Ref: 0250 181-22-OG

Ref: 0250 172-22-G1

Ref: 0250 201-23-OG

Ref: 0250 202-23-G1

CONTACTS Ø 3.50*



Ref: 0350 111-24-OG

Ref: 0350 112-24-G1

Ref: 0350 121-25-OG

Ref: 0350 122-25-G1

Ref: 0350 131-26-OG

Ref: 0350 132-26-G1

Ref: 0350 251-23-OG

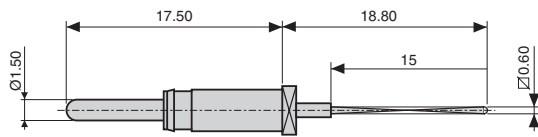
Ref: 0350 302-23-G1

| Reference | Ø A | Ø B | Ø C | *AWG |
|----------------|------|------|------|-------------|
| Ø 2.50 | | | | |
| 0250 181-22-OG | - | - | 1.95 | 16-14 |
| 0250 172-22-G1 | - | - | 1.50 | 22-20-18-16 |
| 0250 201-23-OG | - | - | 1.50 | 22-20-18-16 |
| 0250 202-23-G1 | - | - | 1.50 | 22-20-18-16 |
| Ø 3.50 | | | | |
| 0350 111-24-OG | - | - | - | 14-13 |
| 0350 112-24-G1 | 2.10 | 4.10 | - | 14-13 |
| 0350 121-25-OG | - | - | - | 16-14 |
| 0350 122-25-G1 | 1.95 | 3.10 | - | 16-14 |
| 0350 131-26-OG | - | - | - | 22-17 |
| 0350 132-26-G1 | 1.50 | 3.10 | - | 22-17 |
| 0350 251-23-OG | 4.55 | 5.65 | - | 8 |
| 0350 302-23-G1 | 4.55 | 5.65 | - | 8 |

Dimensions are in mm

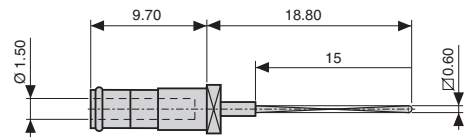
Contacts Ø 1.50 - Wire wrap termination

Males

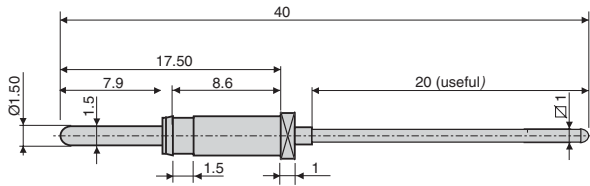


Ref: 0151 131-51-OG

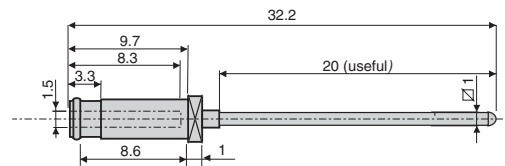
Females



Ref: 0151 132-51-G1

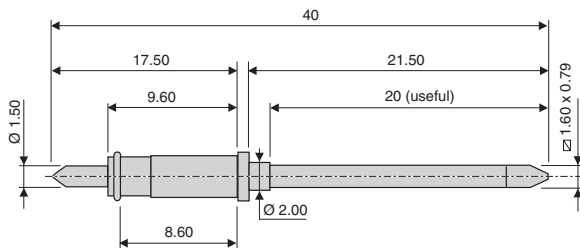


Ref: 0151 151-56-OG

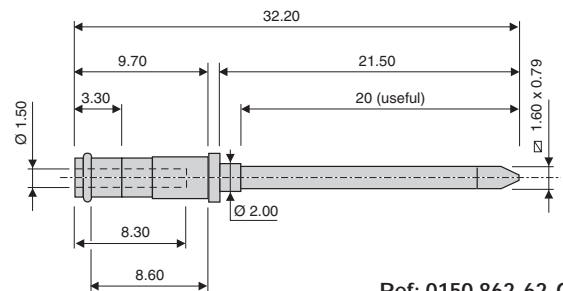


Ref: 0151 152-56-G1

Contacts Ø 1.50 - Post termination

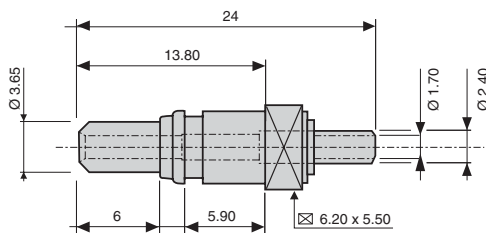


Ref: 0150 861-62-OG

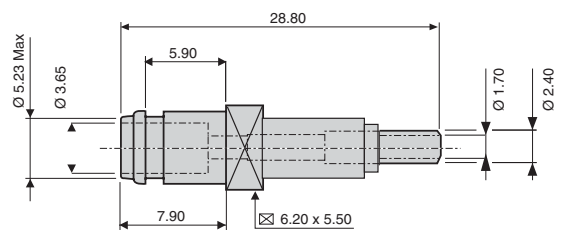


Ref: 0150 862-62-G1

Coaxial contacts



Ref: 0370 031-XB-U1



Ref: 0370 032-XB-U1

TECHNICAL CHARACTERISTICS

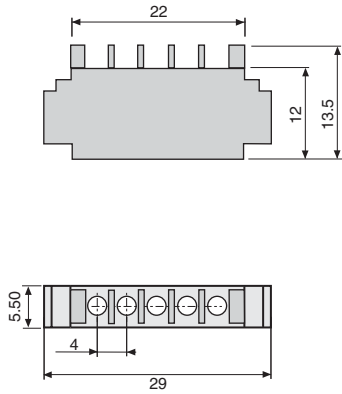
| | | |
|---------------------------|--------------------------------|---------------------|
| Impedance | cable KX22A (RG316) : 50 | cable RG179B/U : 75 |
| Curent rating | 3 A | |
| Contact resistance | Internal 10 milli | External 0.8 milli |
| Insulation resistance | > 5.10 ³ M (500VDC) | |
| Temperature range | -40 °C + 100 °C | |
| Contact life cycle | > 5000 | |
| Standing wave ratio up to | 1.2 (500 MHz) | |

Dimensions are in mm

Modules

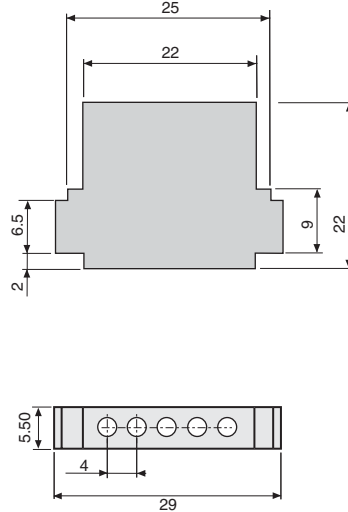
5 x Ø 1.50

L/RH



Ref: L-- 515 00 00 RHA

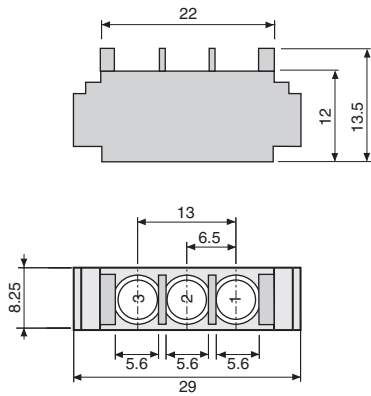
L/ZH



Ref: L -- 515 00 00 ZHA

3 x Ø 2.50

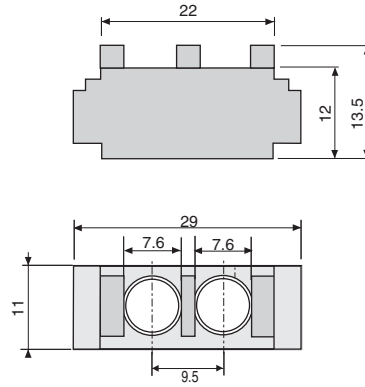
L/SH



Ref: L-- 325 00 00 SH

2 x Ø 3.50

L/UH



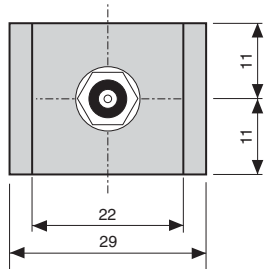
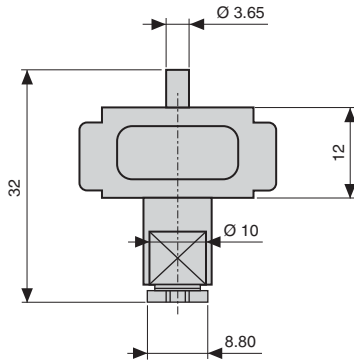
Ref: L-- 235 00 00 UH

Dimensions are in mm

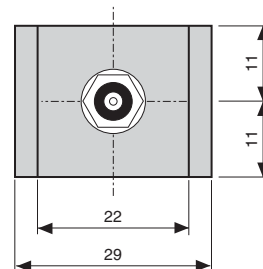
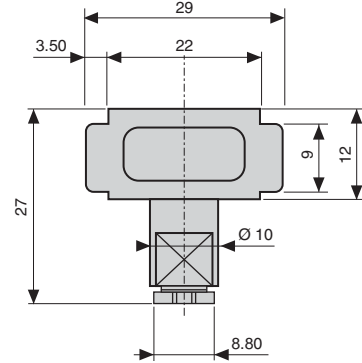
Modules

Modules equipped with contacts for KX15 coax cable

L/VM



L/VF



Ref: L-- 1CX 11 40 VM

Ref: L -- 1CX 20 40 VF

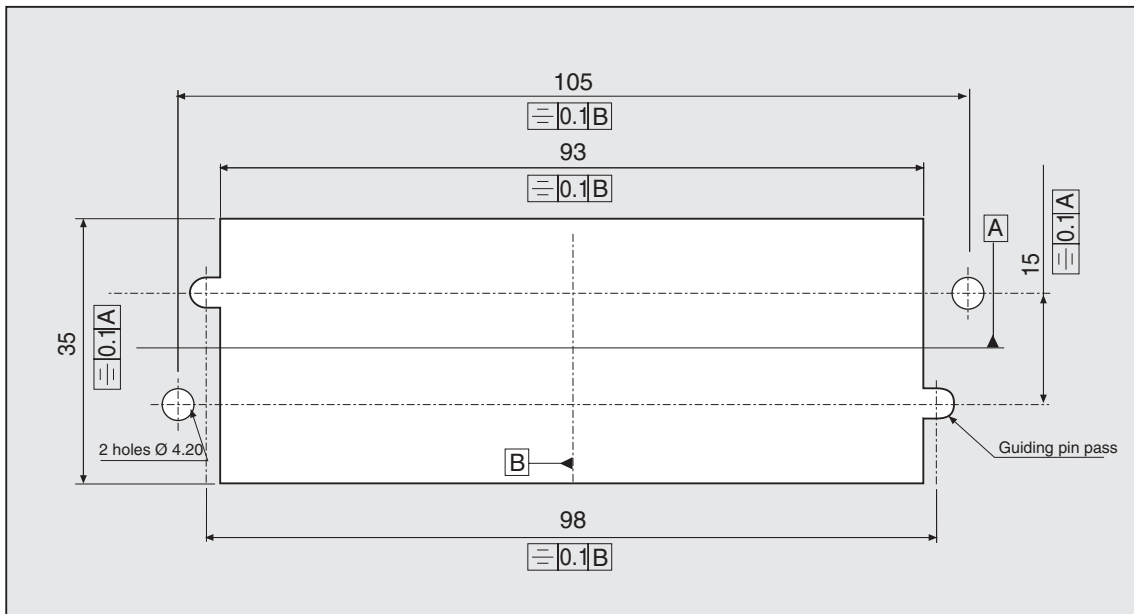
TECHNICAL CHARACTERISTICS

| | | |
|-----------------------|------------------------------------|---|
| Impedence | 50 | Dielectric withstanding voltage internal 1000 Vrms external 4800 Vrms |
| Curent rating | 2 A | Temperature range -40 °C + 100 °C |
| Contact resistance | Internal 10 milli External 1 milli | Module pitches number 4 as 22 mm |
| Insulation resistance | > 5.10 ⁴ M (500 VDC) | Recommended cable KX15 |

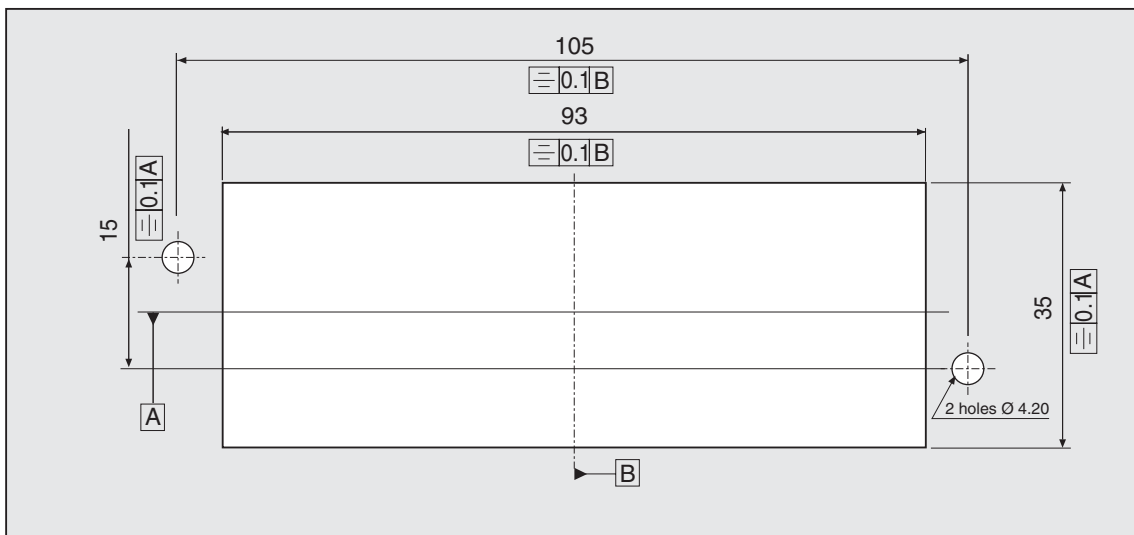
Dimensions are in mm

Panel cut out

Receptacle panel cut out



Plug panel cut out



Dimensions are in mm

Crimping tools

| Contact part number | Crimp tool | Gauge AWG | Wire cross section | Positioner | Tool turret | Selector position | | |
|----------------------------------|-------------------------|-----------------------|--------------------|--------------------------|-----------------------|-------------------|---------|---|
| 0150 682-20-G1 0150 761-20-OG | ASTRO TOOL TGV 101 | 24 | 0.22 | SS.015000002 HYPERTAC | ASTRO TOOL | 2 | | |
| | | 22 | 0.34 | | | 3 | | |
| | | 20 | 0.60 | | | 4 | | |
| | | 18 | 0.93 | | | 5 | | |
| | | 16 | 1.34 | | | 6 | | |
| | | 14 | 1.91 | | | 7 | | |
| | | DANIELS FT8 | 24 | | | 0.22 | DANIELS | 2 |
| | 22 | | 0.34 | | SH 463 red | 3 | | |
| | 20 | | 0.60 | | | 4 | | |
| | 18 | | 0.93 | | | 5 | | |
| | 16 | | 1.34 | | | 6 | | |
| | 14 | | 1.91 | | | 7 | | |
| | ASTRO TOOL MS 3191/1 | | 22 | | | 0.34 | Without | |
| | | 20 | 0.60 | | | | | |
| | | 18 | 0.93 | | | | | |
| 16 | | 1.34 | | | | | | |
| 14 | | 1.91 | | | | | | |
| 0250 181-22-OG 0250 172-22-G1 | | ASTRO TOOL TGV 101 | 16 | 1.34 | ASTRO TOOL | 6 | | |
| | | | 15 | 1.50 | | 6 | | |
| | 15 | | 1.82 | 7 | | | | |
| | 14 | | 1.91 | TGV 202 blue | | 7 | | |
| | 14 | | 2.00 | 7 | | | | |
| | DANIELS FT8 | 16 | 1.34 | DANIELS | 6 | | | |
| | | 15 | 1.5 | | 6 | | | |
| | | 15 | 1.82 | | 7 | | | |
| | | 14 | 1.91 | | SH 463 blue | 7 | | |
| | | 14 | 2.00 | | 7 | | | |
| 0250 201-23-OG 0250 202-23-G1 | ASTRO TOOL TGV 101 | 22 | 0.34 | ASTRO TOOL | 5 | | | |
| | | 20 | 0.60 | | 6 | | | |
| | | 18 | 0.93 | | 6 | | | |
| | | 18 | 1.00 | | TGV 202 blue | 6 | | |
| | | 16 | 1.34 | | 6 | | | |
| | DANIELS FT8 | 22 | 0.34 | DANIELS | 5 | | | |
| | | 20 | 0.60 | | 6 | | | |
| | | 18 | 0.93 | | 6 | | | |
| | | 18 | 1.00 | | SH 463 blue | 6 | | |
| | | 16 | 1.34 | | 6 | | | |
| 0350 111-24-OG 0350 112-24-G1 | DANIELS M317 | 14 | 1.91 | DANIELS TP 805 | 3 | | | |
| | | 14 | 2.00 | | 3 | | | |
| | | 13 | 2.50 | | 4 | | | |
| | ASTRO TOOL TGV 515 | 14 | 1.91 | Without | ASTRO TOOL TGV 503 | 3 | | |
| | | 14 | 2.00 | | | 3 | | |
| | | 13 | 2.50 | | | 4 | | |
| 0350 121-25-OG 0350 122-25-G1 | DANIELS M317 | 16 | 1.34 | DANIELS TP 805 | 2 | | | |
| | | 15 | 1.50 | | 2 | | | |
| | | 14 | 1.91 | | 3 | | | |
| | | 14 | 2.00 | | 3 | | | |
| | ASTRO TOOL TGV 515 | 16 | 1.34 | Without | ASTRO TOOL TGV 503 | 2 | | |
| | | 15 | 1.50 | | | 2 | | |
| | | 14 | 1.91 | | | 3 | | |
| | | 14 | 2.00 | | | 3 | | |
| 0350 131-26-OG 0350 132-26-G1 | DANIELS M317 | 22 | 0.38 | DANIELS TP 805 | 1 | | | |
| | | 20 | 0.60 | | 1 | | | |
| | | 18 | 0.93 | | 2 | | | |
| | | 18 | 1.00 | | 2 | | | |
| | ASTRO TOOL TGV 515 | 22 | 0.38 | Without | ASTRO TOOL TGV 503 | 1 | | |
| | | 20 | 0.60 | | | 1 | | |
| | | 18 | 0.93 | | | 2 | | |
| | | 18 | 1.00 | | | 2 | | |
| 0350 251-23-OG 0350 302-23-G1 | ASTRO TOOL TGV 515 | 8 | 8.98 | | M22520/1,05 | 4 | | |
| | DANIELS M300 BT | 8 | 8.98 | | M22520/1,05 | 4 | | |

Insertion and extraction tools

| Contact Ø | MALES | | FEMALES | |
|-----------|----------------|----------------|------------------------------|-----------------------|
| | Part number | Part number | Insertion tool | Extracting tool |
| 1.50 | 0150 761-20-OG | 0150 682-20-G1 | S_059 ⁽¹⁾ | S__072 |
| | | | SM-0150000002 ⁽²⁾ | |
| | | | SM-0150000003 ⁽³⁾ | |
| | | | SM-0150000000 ⁽⁴⁾ | |
| 2.50 | 0250 181-22-OG | 0250 172-22-G1 | SE-0250000001 | S__078 |
| | 0250 201-23-OG | 0250 202-23-G1 | | |
| 3.50 | 0350 111-24-OG | 0350 112-24-G1 | SE-0350000001 | S__083 ⁽⁵⁾ |
| | 0350 121-25-OG | 0350 122-25-G1 | | |
| | 0350 131-26-OG | 0350 132-26-G1 | | |
| | 0350 251-23-OG | 0350 302-23-G1 | | |

(1) straight tool

(2) unwedge tool

(3) bent tool

(4) 3 tool kit

(5) tool for Ø 1.50, 2.50 et 3.50 contacts