

# Receptacle with flange

Series GR

Item number: GR321-28-10SN-EAA

Packing unit: 1



## MECHANICAL PROPERTIES

|                                           |                |
|-------------------------------------------|----------------|
| Size:                                     | 28             |
| Contact type:                             | Socket         |
| Number of coding options:                 | 4              |
| Number of contacts:                       | 7              |
| Number of contacts, size 4:               | 2              |
| Number of contacts, size 8H:              | 2              |
| Number of contacts, size 12:              | 3              |
| Shell material:                           | Aluminum alloy |
| Surface:                                  | Zinc           |
| Type of surface:                          | Passivated     |
| Thickness of surface treatment [ $\mu$ ]: | 12-15 $\mu$    |
| Surface colour:                           | Black          |
| Corrosion resistance [h]:                 | 200            |

## MECHANICAL PROPERTIES

Operation temperature [°C]: -55 - +90

Temperature shock [°C]: -55 - +125

Conductivity (MΩ): ≤ 0.5

EMI: Yes

Coupling-torque to lock [Nm]: max. 7.0

Coupling-torque to open [Nm]: min. 2.7

## THERMAL PROPERTIES

Material contact insert: Ethylene acrylate GXF

Operating temperature insert [°C]: -55 - +150

## ELECTRICAL PROPERTIES

|                                    |              |
|------------------------------------|--------------|
| Contact numbers:                   | G            |
| Operating voltage DC [V]:          | 1250         |
| Operating voltage AC [V]:          | 900          |
| Test voltage AC [V]:               | 2800         |
| Insulation resistance (mΩ):        | ≥ 5000       |
| Insulation creepage distance [mm]: | ≥ 4.8        |
| Voltage class:                     | MIL-DTL-5015 |
| Contact numbers:                   | Rest         |
| Operating voltage DC [V]:          | 700          |
| Operating voltage AC [V]:          | 500          |
| Test voltage AC [V]:               | 2000         |
| Insulation resistance (mΩ):        | ≥ 5000       |
| Insulation creepage distance [mm]: | ≥ 3.2        |
| Voltage index:                     | MIL-DTL-5015 |

## ELECTRICAL PROPERTIES CONTACTS

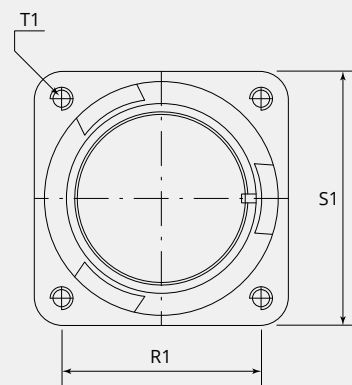
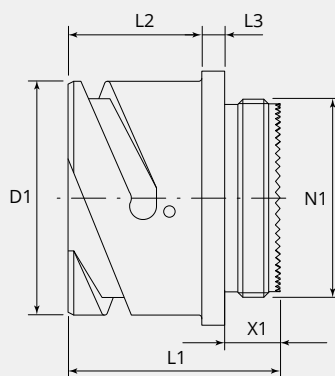
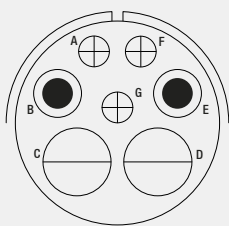
|                                             |     |
|---------------------------------------------|-----|
| Size 4 - rated current (continuous) [A]:    | 80  |
| Size 4 - maximum current (short-term) [A]:  | 135 |
| Size 4 - test current [A]:                  | 110 |
| Size 8H - rated current (continuous) [A]:   | 56  |
| Size 8H - maximum current (short-term) [A]: | 90  |
| Size 8H - test current [A]:                 | 72  |
| Size 12 - rated current (continuous) [A]:   | 23  |
| Size 12 - maximum current (short-term) [A]: | 41  |
| Size 12 - test current [A]:                 | 35  |

## STANDARDS

Fire protection class EN 45545-2:

R23/HL3

## DIMENSIONS



## DIMENSIONS

|            |                   |
|------------|-------------------|
| D1 Ø [mm]: | 46.7              |
| L1 [mm]:   | 39.1              |
| L2 [mm]:   | 24.1              |
| L3 [mm]:   | 4.0               |
| N1:        | 1 5/8"-18 UNEF 2A |
| T1 [mm]:   | 4.3 / M5          |
| X1 [mm]:   | 9.0               |
| S1 [mm]:   | 50.8              |
| R1 [mm]:   | 39.7              |

- Please contact your Gimota partner for other shell materials, surface coatings or contact insert materials.
- Voltage classes tested acc. MIL-DTL-5015 Power transmission verification acc. VG95234 / 2 test 5.10.1 and VG95210 / 37
- Corrosion resistance tested acc. MIL 1344A Test 101.1 Temperature shock tested acc. MIL 202F, 107G Method Electrical conductivity acc. MIL 1344A, Test 3007

# Socket contact size 8H, 1.5mm<sup>2</sup>

Item number: 10-40796-18AG

Product weight (kg): 0.0087 kg

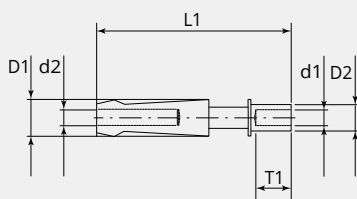
Packing unit:



## MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 90                   |
| Test current [A]:                 | 72                   |
| Rated current (continuous) [A]:   | 56                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 1.5                  |
| Wire section [AWG]:               | 16                   |
| Stripping length [mm]:            | 9                    |

## DIMENSIONS



## DIMENSIONS

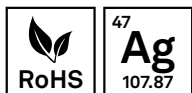
|            |      |
|------------|------|
| D1 Ø [mm]: | 7.8  |
| D2 Ø [mm]: | 4    |
| d1 Ø [mm]: | 1.75 |
| d2 Ø [mm]: | 3.6  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 8.5  |

## Socket contact size 8H, 6.0mm<sup>2</sup>

Item number: 10-40796-38AG

Product weight (kg): 0.0086 kg

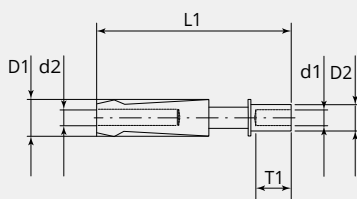
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 90                   |
| Test current [A]:                 | 72                   |
| Rated current (continuous) [A]:   | 56                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 6                    |
| Wire section [AWG]:               | 10                   |
| Stripping length [mm]:            | 9                    |

## DIMENSIONS



## DIMENSIONS

|            |      |
|------------|------|
| D1 Ø [mm]: | 7.8  |
| D2 Ø [mm]: | 5    |
| d1 Ø [mm]: | 3.55 |
| d2 Ø [mm]: | 3.6  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 8.5  |

## Socket contact size 12, 4.0mm<sup>2</sup>

Item number: 10-40560-30AU

Product weight (kg): 0.0035 kg

Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                    |
|-----------------------------------|--------------------|
| Contact type:                     | Socket             |
| Maximum current (short-term) [A]: | 41                 |
| Test current [A]:                 | 35                 |
| Rated current (continuous) [A]:   | 23                 |
| Contact Material:                 | CU alloy           |
| Protective layer:                 | Gold plated, 0.5µm |
| Connection type:                  | Crimp              |
| Wire section [mm <sup>2</sup> ]:  | 4                  |
| Wire section [AWG]:               | 12 - 10            |
| Stripping length [mm]:            | 9                  |

## DIMENSIONS



## DIMENSIONS

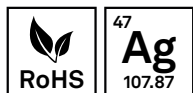
|            |      |
|------------|------|
| D1 Ø [mm]: | 4.8  |
| D2 Ø [mm]: | 4.75 |
| d1 Ø [mm]: | 2.95 |
| d2 Ø [mm]: | 2.4  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 8.5  |

## Socket contact size 4, 16mm<sup>2</sup>

Item number: 10-903-4-16G10

Product weight (kg): 0.0171 kg

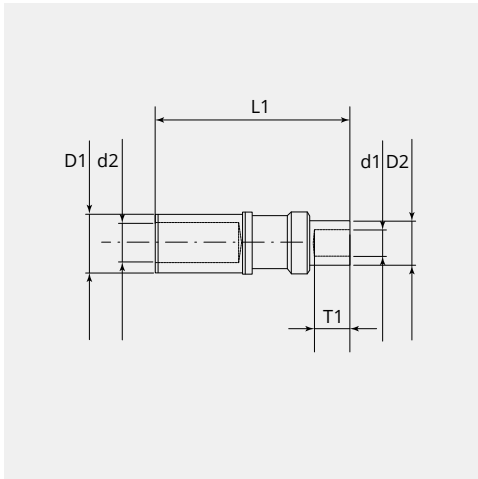
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 135                  |
| Test current [A]:                 | 110                  |
| Rated current (continuous) [A]:   | 80                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 16                   |
| Wire section [AWG]:               | 4 - 3                |
| Stripping length [mm]:            | 13                   |

## DIMENSIONS



## DIMENSIONS

|            |      |
|------------|------|
| D1 Ø [mm]: | 11   |
| D2 Ø [mm]: | 9.3  |
| d1 Ø [mm]: | 7    |
| d2 Ø [mm]: | 5.7  |
| L1 [mm]:   | 41   |
| T1 [mm]:   | 12.2 |

## Socket contact size 12, 0.5mm<sup>2</sup>

Item number: 10-40560-11AU

Product weight (kg): 0.0031 kg

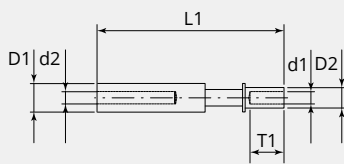
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                    |
|-----------------------------------|--------------------|
| Contact type:                     | Socket             |
| Maximum current (short-term) [A]: | 41                 |
| Test current [A]:                 | 35                 |
| Rated current (continuous) [A]:   | 23                 |
| Contact Material:                 | CU alloy           |
| Protective layer:                 | Gold plated, 0.5µm |
| Connection type:                  | Crimp              |
| Wire section [mm <sup>2</sup> ]:  | 0.5                |
| Wire section [AWG]:               | 20                 |
| Stripping length [mm]:            | 9                  |

## DIMENSIONS



## DIMENSIONS

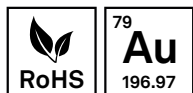
|            |     |
|------------|-----|
| D1 Ø [mm]: | 4.8 |
| D2 Ø [mm]: | 3   |
| d1 Ø [mm]: | 1.1 |
| d2 Ø [mm]: | 2.4 |
| L1 [mm]:   | 38  |
| T1 [mm]:   | 8.5 |

## Socket contact size 12, 0.75 - 1.0mm<sup>2</sup>

Item number: 10-40560-15AU

Product weight (kg): 0.0032 kg

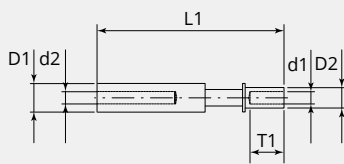
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                    |
|-----------------------------------|--------------------|
| Contact type:                     | Socket             |
| Maximum current (short-term) [A]: | 41                 |
| Test current [A]:                 | 35                 |
| Rated current (continuous) [A]:   | 23                 |
| Contact Material:                 | CU alloy           |
| Protective layer:                 | Gold plated, 0.5µm |
| Connection type:                  | Crimp              |
| Wire section [mm <sup>2</sup> ]:  | 0.75 - 1.0         |
| Wire section [AWG]:               | 22 - 18            |
| Stripping length [mm]:            | 9                  |

## DIMENSIONS



## DIMENSIONS

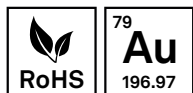
|            |      |
|------------|------|
| D1 Ø [mm]: | 4.8  |
| D2 Ø [mm]: | 3.35 |
| d1 Ø [mm]: | 1.45 |
| d2 Ø [mm]: | 2.4  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 8.5  |

## Socket contact size 12, 2.5mm<sup>2</sup>

Item number: 10-40560-22AU

Product weight (kg): 0.0033 kg

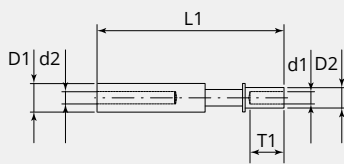
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                    |
|-----------------------------------|--------------------|
| Contact type:                     | Socket             |
| Maximum current (short-term) [A]: | 41                 |
| Test current [A]:                 | 35                 |
| Rated current (continuous) [A]:   | 23                 |
| Contact Material:                 | CU alloy           |
| Protective layer:                 | Gold plated, 0.5µm |
| Connection type:                  | Crimp              |
| Wire section [mm <sup>2</sup> ]:  | 2.5                |
| Wire section [AWG]:               | 14                 |
| Stripping length [mm]:            | 9                  |

## DIMENSIONS



## DIMENSIONS

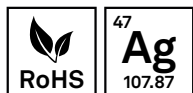
|            |      |
|------------|------|
| D1 Ø [mm]: | 4.8  |
| D2 Ø [mm]: | 3.95 |
| d1 Ø [mm]: | 2.25 |
| d2 Ø [mm]: | 2.4  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 8.5  |

## Socket contact size 4, 16mm<sup>2</sup>

Item number: 10-903-4-16G62

Product weight (kg): 0.0184 kg

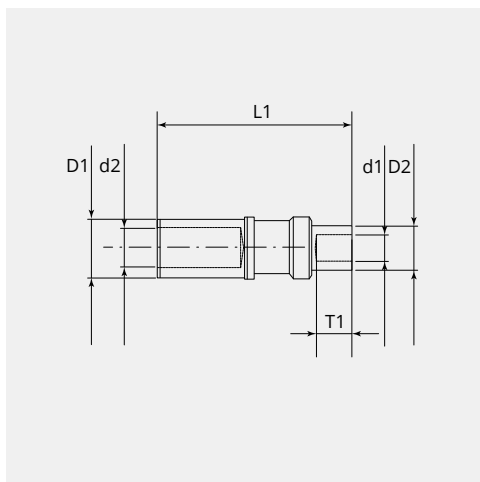
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 135                  |
| Test current [A]:                 | 110                  |
| Rated current (continuous) [A]:   | 80                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 16                   |
| Stripping length [mm]:            | 13                   |

## DIMENSIONS



## DIMENSIONS

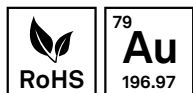
|            |      |
|------------|------|
| D1 Ø [mm]: | 11   |
| D2 Ø [mm]: | 9.3  |
| d1 Ø [mm]: | 6.2  |
| d2 Ø [mm]: | 5.7  |
| L1 [mm]:   | 41   |
| T1 [mm]:   | 12.2 |

## Socket contact size 12, 1.5mm<sup>2</sup>

Item number: 10-40560-18AU

Product weight (kg): 0.0033 kg

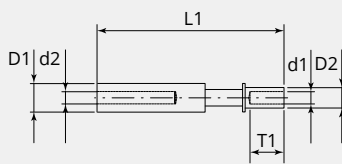
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                    |
|-----------------------------------|--------------------|
| Contact type:                     | Socket             |
| Maximum current (short-term) [A]: | 41                 |
| Test current [A]:                 | 35                 |
| Rated current (continuous) [A]:   | 23                 |
| Contact Material:                 | CU alloy           |
| Protective layer:                 | Gold plated, 0.5µm |
| Connection type:                  | Crimp              |
| Wire section [mm <sup>2</sup> ]:  | 1.5                |
| Wire section [AWG]:               | 18 - 16            |
| Stripping length [mm]:            | 9                  |

## DIMENSIONS



## DIMENSIONS

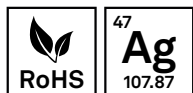
|            |      |
|------------|------|
| D1 Ø [mm]: | 4.8  |
| D2 Ø [mm]: | 3.95 |
| d1 Ø [mm]: | 1.75 |
| d2 Ø [mm]: | 2.4  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 8.5  |

## Socket contact size 8H, 10mm<sup>2</sup>

Item number: 10-40796-50AG

Product weight (kg): 0.009 kg

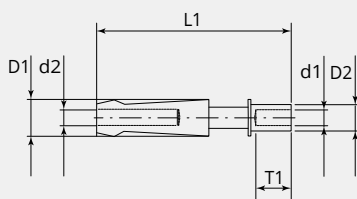
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 90                   |
| Test current [A]:                 | 72                   |
| Rated current (continuous) [A]:   | 56                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 10                   |
| Wire section [AWG]:               | 8 - 6                |
| Stripping length [mm]:            | 13                   |

## DIMENSIONS



## DIMENSIONS

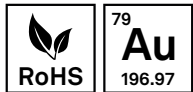
|            |      |
|------------|------|
| D1 Ø [mm]: | 7.8  |
| D2 Ø [mm]: | 6.35 |
| d1 Ø [mm]: | 4.6  |
| d2 Ø [mm]: | 3.6  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 12.2 |

# Socket contact size 12, 6.0mm<sup>2</sup>

Item number: 10-40560-38AU

Product weight (kg): 0.0033 kg

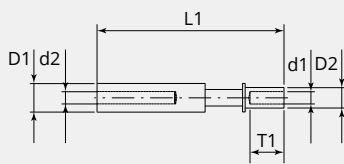
Packing unit:



## MECHANICAL PROPERTIES CONTACTS

|                                   |                    |
|-----------------------------------|--------------------|
| Contact type:                     | Socket             |
| Maximum current (short-term) [A]: | 41                 |
| Test current [A]:                 | 35                 |
| Rated current (continuous) [A]:   | 23                 |
| Contact Material:                 | CU alloy           |
| Protective layer:                 | Gold plated, 0.5µm |
| Connection type:                  | Crimp              |
| Wire section [mm <sup>2</sup> ]:  | 6                  |
| Wire section [AWG]:               | 10                 |
| Stripping length [mm]:            | 9                  |

## DIMENSIONS



## DIMENSIONS

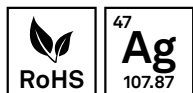
|            |      |
|------------|------|
| D1 Ø [mm]: | 4.8  |
| D2 Ø [mm]: | 4.75 |
| d1 Ø [mm]: | 3.5  |
| d2 Ø [mm]: | 2.4  |
| L1 [mm]:   | 38   |
| T1 [mm]:   | 8.5  |

## Socket contact size 4, 6.0mm<sup>2</sup>

Item number: 10-903-4-6G10

Product weight (kg): 0.0153 kg

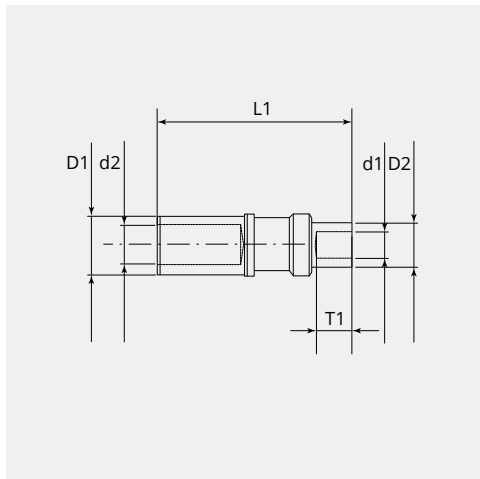
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 135                  |
| Test current [A]:                 | 110                  |
| Rated current (continuous) [A]:   | 80                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 6                    |
| Wire section [AWG]:               | 8                    |
| Stripping length [mm]:            | 9                    |

## DIMENSIONS



## DIMENSIONS

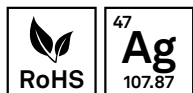
|            |     |
|------------|-----|
| D1 Ø [mm]: | 11  |
| D2 Ø [mm]: | 5.2 |
| d1 Ø [mm]: | 3.6 |
| d2 Ø [mm]: | 5.7 |
| L1 [mm]:   | 41  |
| T1 [mm]:   | 8.5 |

## Socket contact size 8H, 2.5mm<sup>2</sup>

Item number: 10-40796-22AG

Product weight (kg): 0.0085 kg

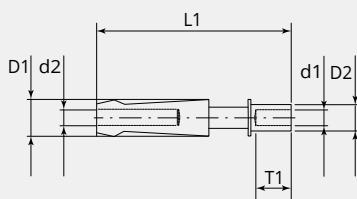
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 90                   |
| Test current [A]:                 | 72                   |
| Rated current (continuous) [A]:   | 56                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 2.5                  |
| Wire section [AWG]:               | 12                   |
| Stripping length [mm]:            | 9                    |

## DIMENSIONS



## DIMENSIONS

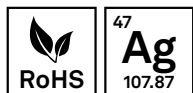
|            |     |
|------------|-----|
| D1 Ø [mm]: | 7.8 |
| D2 Ø [mm]: | 4   |
| d1 Ø [mm]: | 2.3 |
| d2 Ø [mm]: | 3.6 |
| L1 [mm]:   | 38  |
| T1 [mm]:   | 8.5 |

## Socket contact size 4, 10mm<sup>2</sup>

Item number: 10-903-4-10G10

Product weight (kg): 0.016 kg

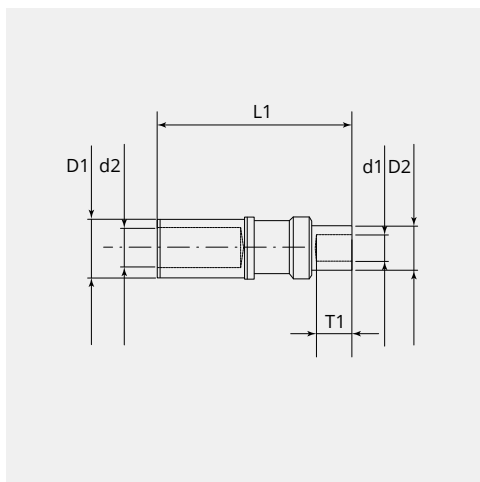
Packing unit:



### MECHANICAL PROPERTIES CONTACTS

|                                   |                      |
|-----------------------------------|----------------------|
| Contact type:                     | Socket               |
| Maximum current (short-term) [A]: | 135                  |
| Test current [A]:                 | 110                  |
| Rated current (continuous) [A]:   | 80                   |
| Contact Material:                 | CU alloy             |
| Protective layer:                 | Silver plated, 3.5µm |
| Connection type:                  | Crimp                |
| Wire section [mm <sup>2</sup> ]:  | 10                   |
| Wire section [AWG]:               | 6                    |
| Stripping length [mm]:            | 13                   |

## DIMENSIONS



## DIMENSIONS

|            |      |
|------------|------|
| D1 Ø [mm]: | 11   |
| D2 Ø [mm]: | 6.5  |
| d1 Ø [mm]: | 4.6  |
| d2 Ø [mm]: | 5.7  |
| L1 [mm]:   | 41   |
| T1 [mm]:   | 12.2 |