



221 Serie

Quick-Releasable Connector

221



... Easy use and communication
reliability in operation !

Catalog



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◆ Description

The 221 connectors are designed for applications requiring quick-disconnection. Used on military and civil planes and helicopters, they provide all types of communication between on board equipments and external connections.

Customer specifications : STTE N°269PNI/1

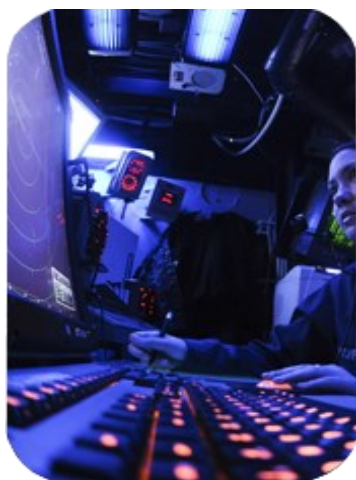
Environmental specification : AIR 7304

Electrical specification : MIL-C-38999.



221

◆ Applications



Radios



Accessories



Intercoms



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◆ Climatic and mechanical characteristics

| | 221 Serie |
|-----------------------|---|
| Unlocking system | Quick-releasable : Traction Force ($25N \leq F \leq 40N$) |
| Operating temperature | -45°C to + 125°C |
| Endurance | 500 Operations |
| Sealing performance | IP68 (connected and disconnected) |
| Contacts protection | 100% scoop-proof |
| Vibrations | 55Hz at 2000Hz at 10g (6 hours) |
| Fluids resistance | Oils and hydrocarbons |

221

◆ Electrical characteristics

| | 221 Serie |
|----------------------------|-------------------------------|
| Working voltage | 1800 V _{max} at 50Hz |
| Current rating per contact | 7.5 A _{max} |
| Gauge (AWG) | 20 |
| Contact type | To be crimped |
| Contact resistance | ≤ 10 mOhms à 25°C |
| Insulation resistance | ≥ 5000 MOhms |
| Crosstalk on mated pairs | <110dB à 8Khz |

◆ Material and plating

| | Material | Plating |
|-----------------|---------------------|------------------|
| Connector shell | Aluminium | - |
| Insulator | PPS / Fluorosilicon | - |
| Contacts | Copper alloy | Gold over nickel |
| Backshell shell | Aluminium | Black chrome |



Additional information

◆ Weights

| Part number | Weight (Max) |
|-------------|--------------|
| 22110001 | 33 g |
| 22111002 | 33 g |
| 22111003 | 14 g |
| 22111004 | 14 g |
| 22111005 | 32 g |
| 22111006 | 11 g |
| 22111011 | 36 g |
| 22111013 | 17 g |

Standard material

◆ Dimensions (mated/unmated)

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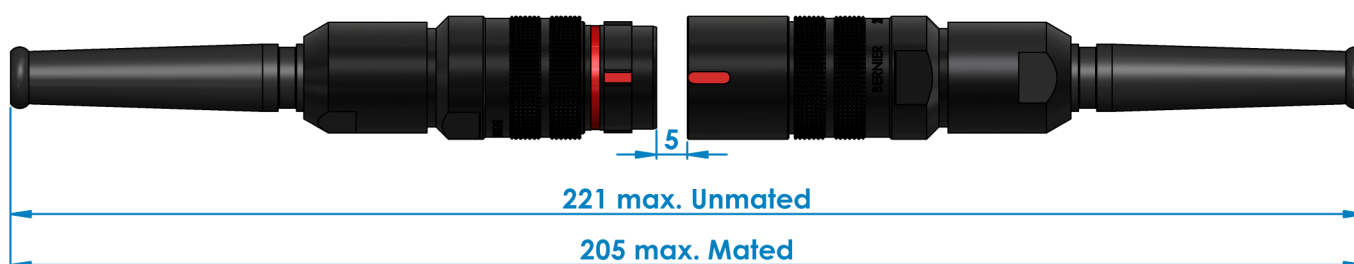
Receptacle without panel sealing / plug :



Receptacle with panel sealing / plug :



Extension / plug :





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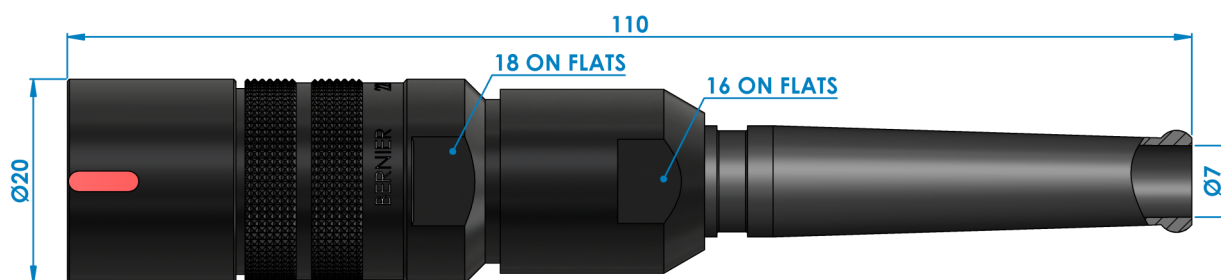
Plugs

◆ Plug with straight backshell (diam 7mm)



| Part number | Description |
|-------------|----------------------------|
| 22111001 | 10 male contacts (AWG20) |
| 22111011 | 10 female contacts (AWG20) |

Ex: 22111001



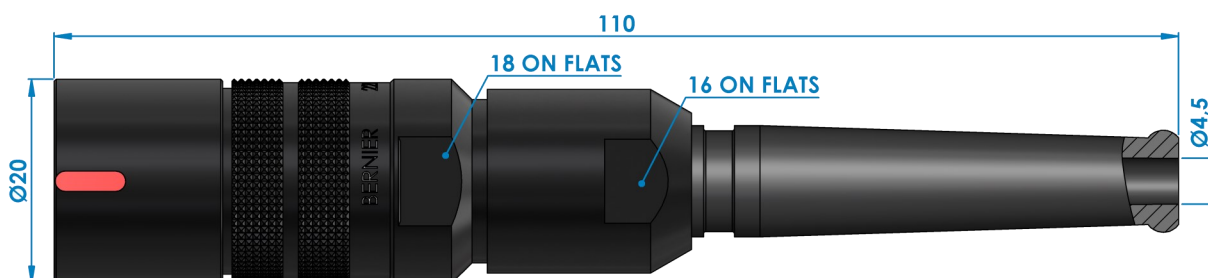
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◆ Plug with straight backshell (diam 4.5 mm)



| Part number | Description |
|-------------|----------------------------|
| 22111001-45 | 10 male contacts (AWG20) |
| 22111011-45 | 10 female contacts (AWG20) |

Ex: 22111001-45



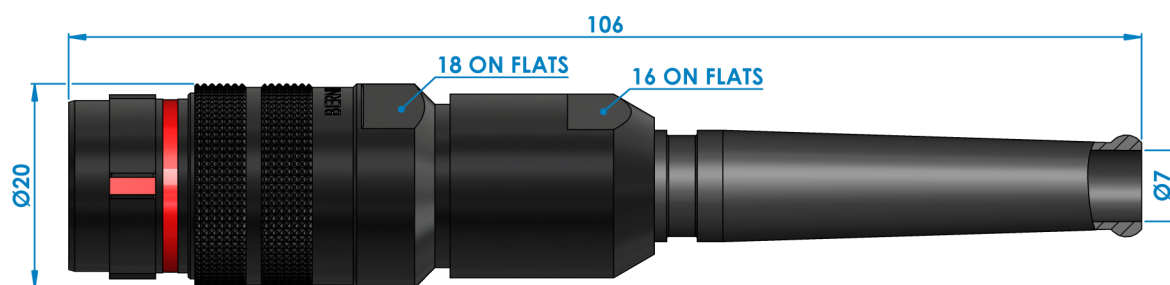
Extensions

◆ Extension with straight backshell (diam 7mm)



| Part number | Description |
|-------------|----------------------------|
| 22111007 | 10 male contacts (AWG20) |
| 22111005 | 10 female contacts (AWG20) |

Ex: 22111005



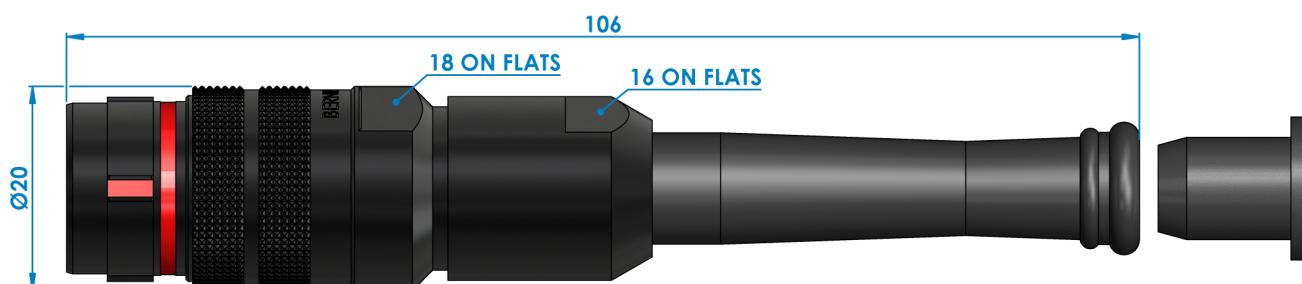
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◆ Extension with straight backshell (diam 7mm) and panel fixing



| Part number | Description |
|-------------|----------------------------|
| 22111002 | 10 female contacts (AWG20) |

Ex: 22111002





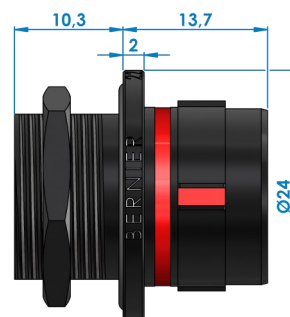
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Receptacles

◆ Receptacle with panel sealing



| Part number | Description |
|-------------|----------------------------|
| 22111013 | 10 male contacts (AWG20) |
| 22111003 | 10 female contacts (AWG20) |



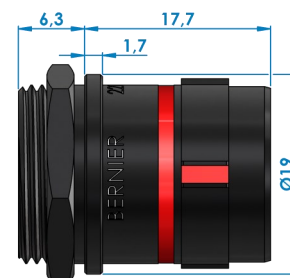
Ex: 22111003

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◆ Receptacle with no panel sealing

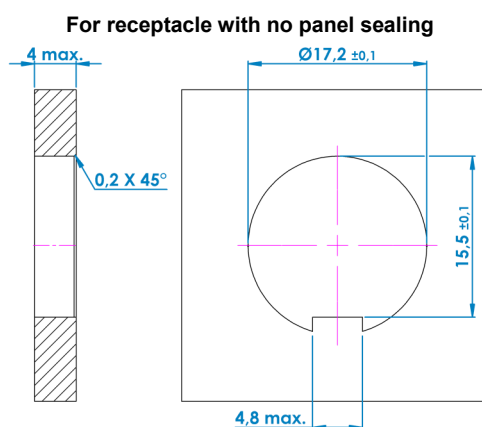
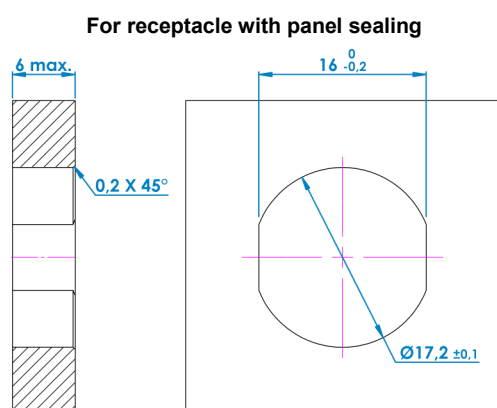


| Part number | Description |
|-------------|----------------------------|
| 22111004 | 10 female contacts (AWG20) |



Ex: 22111004

◆ Panel cut



Caps and fixing

◆ Caps

Metallic cap for receptacle



22111006

Metallic cap for plug



22111008MC

Please contact us for other cap versions

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◆ Terminations

Some terminations can accept several lanyards

Plastic clamp



Ferule



Metallic ring



Eyelet for M3 screw



Crimped eyelet for M3 screw



90° crimped eyelet for M3 screw





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◆ Accessories

| Type | Part number |
|--|-------------|
| Set of 10 male contacts + 5 shutters | 11423 |
| Set of 10 female contacts + 5 shutters | 11424 |
| Set of 8 long male contacts + 2 short male contacts + 5 shutters | 11425 |



11423



11424



11425

◆ Tools

| Type | Part number |
|---|--------------|
| Plastic insertion/extraction tool for male / female contact | M81969/14-02 |
| Hand crimp tool | M22520/1-01 |
| Turret head | M22520/1-04 |



M81969/14-02



M22520/1-01

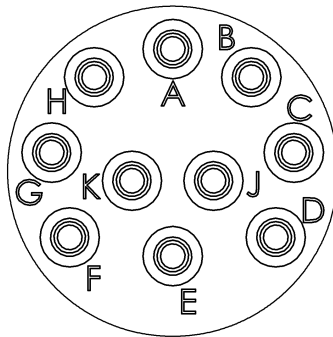


M22520/1-04

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◆ Contacts positions

Mating side view



◆ Tightening torque

| Material | Torque for receptacle nut | Torque for backshell |
|--------------------------|---------------------------|----------------------|
| <i>Alliage Aluminium</i> | 8^{+2} N.m | 9 N.m |

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