



## 221 Serie

Quick-Releasable Connector

221



... Easy use and communication  
reliability in operation !

Catalog



## ◆ 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.*

Quick-releasable

Watertight

Ergonomics

Aluminium

## ◆ Applications



Radios



Accessories



Intercoms



## ◆ 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

## ◆ Electrical characteristics

	221 Serie
Working voltage	1800 V <sub>max</sub> at 50Hz
Current rating per contact	7.5 A <sub>max</sub>
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



## ◆ 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)

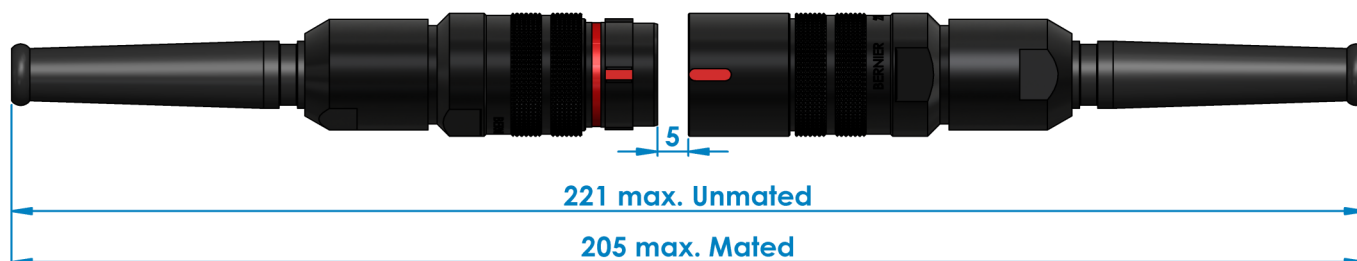
Receptacle without panel sealing / plug :



Receptacle with panel sealing / plug :



Extension / plug :



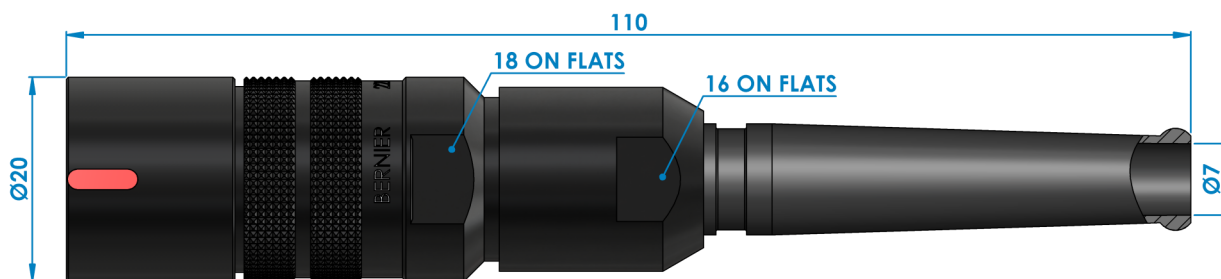
221

◆ **Plug with straight backshell (diam 7mm)**



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

Ex: 22111001

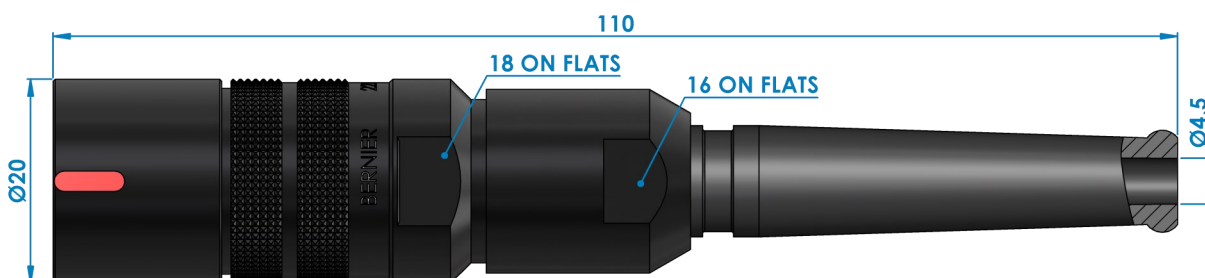


◆ **Plug with straight backshell (diam 4.5 mm)**



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

Ex: 22111001-45

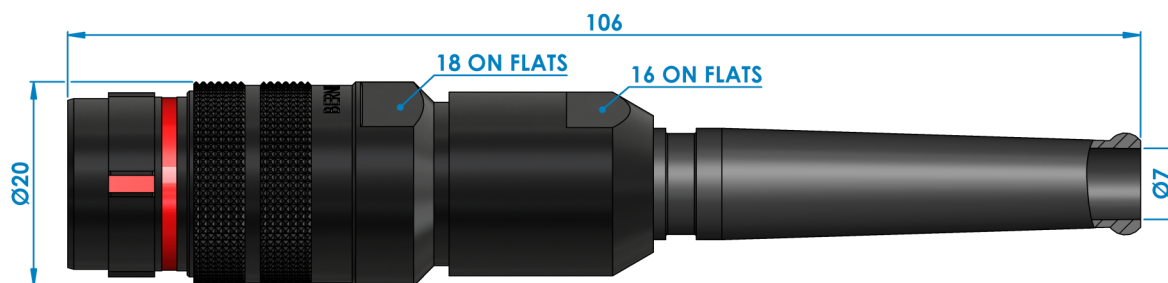


◆ **Extension with straight backshell (diam 7mm)**



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

Ex: 22111005



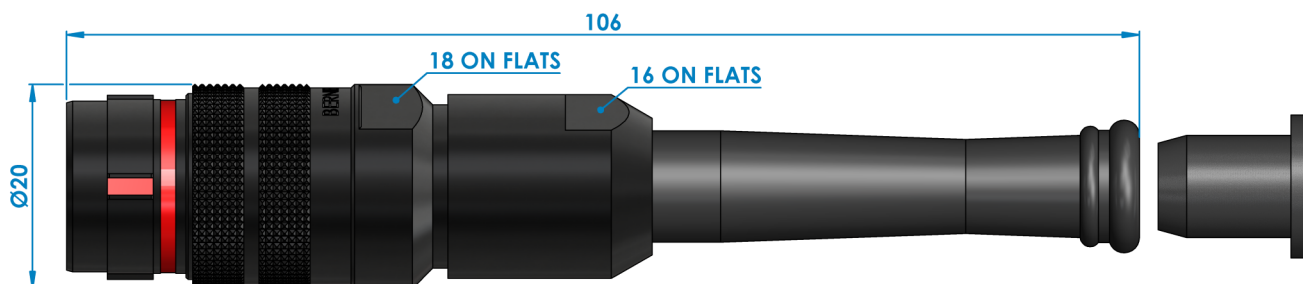
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◆ **Extension with straight backshell (diam 7mm) and panel fixing**



Part number	Description
22111002	10 female contacts (AWG20)

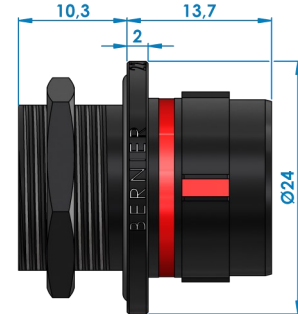
Ex: 22111002



## ◆ Receptacle with panel sealing



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



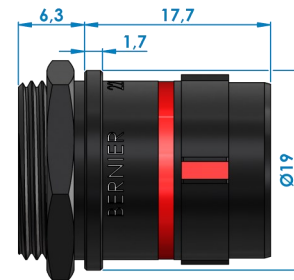
Ex: 22111003

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## ◆ Receptacle with no panel sealing

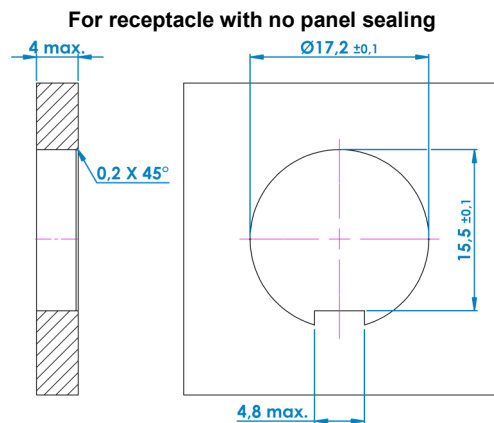
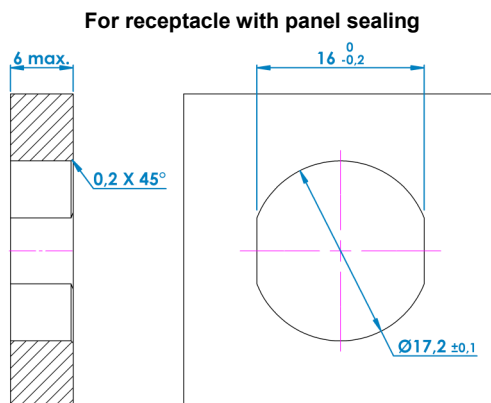


Part number	Description
22111004	10 female contacts (AWG20)



Ex: 22111004

## ◆ Panel cut





## ◆ Caps

Metallic cap for receptacle



22111006

Please contact us for other cap versions (for plug or elastomer)

221

## ◆ 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



## ◆ 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

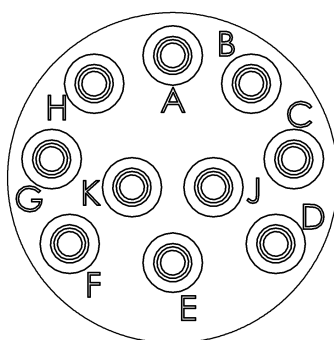


M22520/1-04

221

## ◆ Contacts positions

Mating side view



## ◆ Tightening torque

Material	Torque for receptacle nut	Torque for backshell
Alliage Aluminium	8 <sup>+2</sup> N.m	6 N.m

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Push-Pull / Quick-Releaseable Connector

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