

JBX SERIES



SOURIAU

Push-Pull Coupling Mechanism

Typical Applications



Medical



Robotics - Machine tools



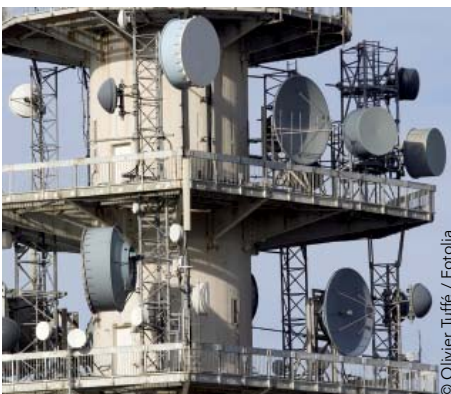
Building Automation & Control



Instrumentation / Measurement



Off road - Mining - Railway



Telecom - Data infrastructure

Features & Benefits

WATER PROOF

IP68 in Mated and Unmated Conditions

Ideal for outdoor applications with temporary or continuous water immersion and dust protection.

SIGNAL INTEGRITY

360° EMI Shielded

Less than 5mΩ: Qualified and Compatible to be used in electromagnetic radiation areas and ensures proper signal integrity and transmission.

SPACE SAVING

High Density Layouts

Ideal for compact devices due to small footprint. The use of 0.5mm contacts along with miniature housing makes it suitable for tight applications.

RELIABLE MATING

Push Pull Locking Mechanism

Only requires two fingers to mate/unmate securely with an audible, tactile and visual confirmed mating over 1,000 times.

COST SAVINGS

Mixed Power & Signal Layouts

Power supply and transmission can be combined in a unique interconnection solution to reduce system complexity and minimize component/installation costs.

Protective Boot



Choice of Contact termination

- Crimp
- Solder



Boot Version

Example: JBXFG0G02MCSDSMR

+



Boot

Example: JBX0MPR

=



Plug



FC: Right Angle Plug



FD: Straight Plug



FG: Breakaway Plug



FF: Straight Plug no Latch with Black Boot



FN: Straight Plug with Lanyard



FM: Right Angle Plug with Lanyard

Range Overview

Receptacle



EA: Double Nut Receptacle*



ED: Protuding Front Mount



EP: Rear Mount Receptacle*



ER: Front Mount Receptacle



EZ: Rear Mount Receptacle with Mounting Pins



PC: In Line Cable Receptacle



SA: Rear Mount Cable Receptacle



SR: Front Mount Cable Receptacle

Choice of Contact termination

- Crimp
- Solder
- Straight PCB Tails
- 90° PCB Tails

Protective Boot



* available with 90° PCB tails

Protective Boot



Choice of Contact termination

- Crimp
- Solder

Plug
(Available in size 0 and 2)



FH: Straight Plug



Boot Version

Example: JBXFH0G02FSSDSMR

+



Boot

Example: JBX0MPR

=



Range Overview

Receptacle (Available in size 0 and 2)



HC: Rear Mount Receptacle*
Available size 0



HD: Protuding Front Mount Receptacle
Available size 0



HH: Front Mount Extended Receptacle
Available size 0 & 2



EC: Double Nut, Front or Rear Mount Receptacle *
Available size 2

Choice of Contact termination

- Crimp
- Solder
- Straight PCB Tails
- 90° PCB Tails

* available with 90° PCB tails

Layouts (Electrical parameter according to UL1977)

Shell size	Contact Ø 0.5	Contact Ø 0.7	Contact Ø 0.9	Contact Ø 01.3	Contact Ø 1.6	Contact Ø 2.0
00	2 contacts 2A 500V 					
	4 contacts 2A 500V 					
0	6 contacts 2.5A 320V 	4 contacts 7A 660V 	2 contacts 10A 660V 			
	7 contacts 2.5A 320V 	5 contacts 6.5A 400V 	3 contacts 8A 600V 			
	8 contacts 2A 190V 					
1	10 contacts 2.5A 300V 	6 contacts 7A 660V 	4 contacts 10A 900V 	2 contacts 15A 760V 		
	12 contacts 2.5A 170V 	7 contacts 7A 660V 	5 contacts 9A 660V 	3 contacts 12A 600V 		
		8 contacts 5A 600V 				

Note: Contacts are numbered counter clock wise in the plug and clock wise in the receptacle.

Contacts Ø 0.5:
Solder wire: 30 maxi

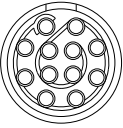
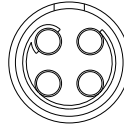
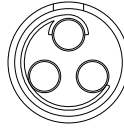
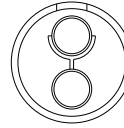
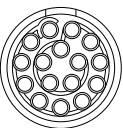
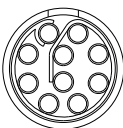
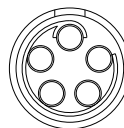
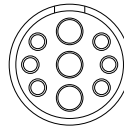
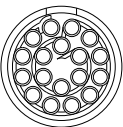
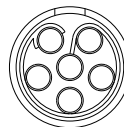
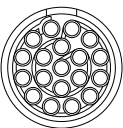
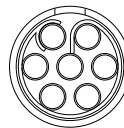
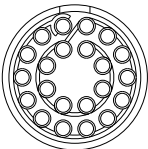
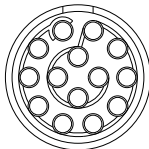
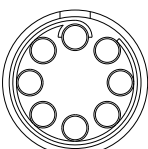
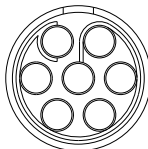
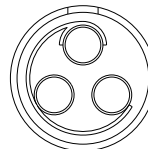
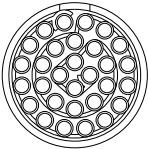
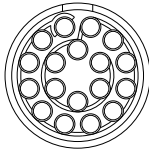
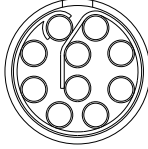
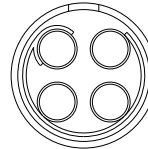
Contacts Ø 0.7:
Solder wire: 26 maxi
Crimp wire: 22-24-26

Contacts Ø 0.9:
Solder wire: 24 maxi
Crimp wire: 20-22-24

Contacts Ø 1.3:
Solder wire: 20 maxi
Crimp wire: 18-20-22

Contacts Ø 1.6:
Solder wire: 18 maxi
Crimp wire: 14-16-18

Contacts Ø 2.0:
Solder wire: 16 maxi
Crimp wire: 12-14-16

Shell size	Contact Ø 0.7	Contact Ø 0.9	Contact Ø 01.3	Contact Ø 1.6	Contact Ø 2.0	Mixed Contact
2	12 contacts 7A 830V 	8 contacts 10A 830V 	4 contacts 15A 1000V 	3 contacts 17A 830V 	2 contacts 30A 1000V 	8 contacts 26A 700V 6xØ1.3 2xØ2.0 
	16 contacts 6A 730V 	10 contacts 8A 830V 	5 contacts 14A 900V 			9 contacts 26A 700V 6xØ0.7 3xØ1.3 
	18 contacts 5.5A 660V 		6 contacts 12A 900V 			10 contacts 17A 700V 8xØ0.7 2xØ1.6 
	19 contacts 5A 660V 		7 contacts 11A 730V 			
3	22 contacts 5.5A 560V 	14 contacts 9A 830V 	8 contacts 12A 830V 	7 contacts 15A 1000V 	3 contacts 25A 1600V 	
	30 contacts 3.5A 400V 	18 contacts 7A 660V 	10 contacts 12A 600V 		4 contacts 25A 1100V 	

All dimensions are in mm

General Technical Characteristics



Materials

- **Outer shell and collet nut:** Brass
- **Latching sleeve:** Brass
- **Shielding ring:** Brass
- **Nut:** Brass
- **Half bushes:** Brass
- **Clip:** Beryllium copper
- **Insert:** PEEK
- **Collet:** PA 6/6 + MoS2
- **Cable grommet:** Silicon rubber
- **Contacts:** Gold thickness as per MIL-G-45204C type 1, class 00
- **Halogen free**
- **Oring (IP68 version):** NBR

Environmental

- **Operating temperature:**
from -40°C to +125°C
- **Flammability rating:**
UL94 V-0
- **Salt spray:**
per MIL-STD-1344 method 1001.1
- 48 h (standard version)
- 96 h (Black Chrome over Nickel)
- **Sealing:**
Per IEC 60529
- Non sealed: IP40
- Sealed: IP68 (mated / unmated)
- **Shielding effectiveness:**
55 dB at 100 MHz

Electrical



- **In accordance with:**
 - UL 1977: Certificate ECBT2
File number: E118235
 - CSA C22.2: Certificate ECBT8
File number E238675

Mechanical

- **Durability:**
> 1000 cycles (except for 0.7 mm contacts for which endurance is limited to 500 cycles)
- **Vibration resistance:**
10 - 2000 Hz, acceleration 15 g, contact Ø 0.7 mm and 0.9 mm
10 - 2000 Hz, acceleration 20 g, contact Ø 1.3 mm - 1.6 mm and 2 mm
- **Thermal shock:**
5 cycles 1 hour from -40°C to 80°C
per MIL-STD-1344 method 1001.1
- **Mechanical shock:**
50 g, duration 6 ms ; contact Ø 0.7 mm and 0.9 mm
100 g, duration 6 ms ; contact Ø 1.3 mm - 1.6 mm and 2 mm



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