JBX SERIES

SOURIAU

Push-Pull Coupling Mechanism

Esterline
Connection Technologies

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.

JBX IP40

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

* available with 90° PCB tails

Choice of Contact termination

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

Protective Boot

JBX IP68

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  7 contacts 2.5A 320V  8 contacts 2A 190V 	4 contacts 7A 660V  5 contacts 6.5A 400V 	2 contacts 10A 660V  3 contacts 8A 600V 			
1	10 contacts 2.5A 300V  12 contacts 2.5A 170V 	6 contacts 7A 660V  7 contacts 7A 660V  8 contacts 5A 600V 	4 contacts 10A 900V  5 contacts 9A 660V 	2 contacts 15A 760V  3 contacts 12A 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

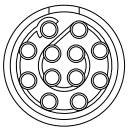
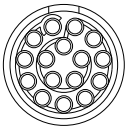
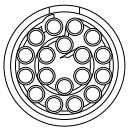
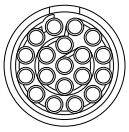
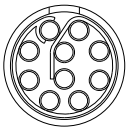
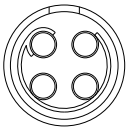
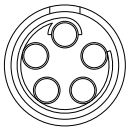
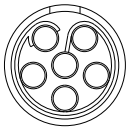
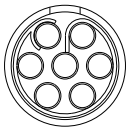
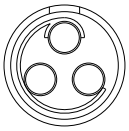
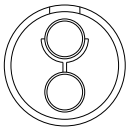
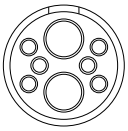
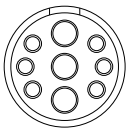
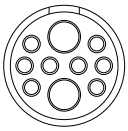
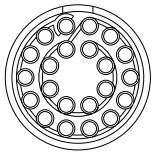
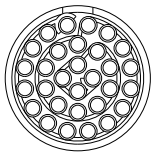
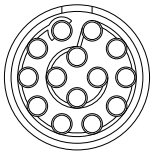
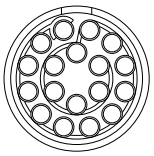
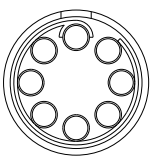
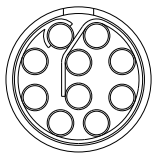
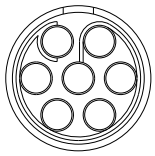
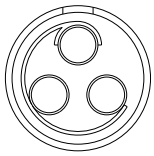
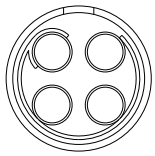
Contacts Ø 0.7:
Solder wire: 26 maxi
Crimp wire: 22-24-26

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  16 contacts 6A 730V  18 contacts 5.5A 660V  19 contacts 5A 660V 	8 contacts 10A 830V  10 contacts 8A 830V 	4 contacts 15A 1000V  5 contacts 14A 900V  6 contacts 12A 900V  7 contacts 11A 730V 	3 contacts 17A 830V 	2 contacts 30A 1000V 	8 contacts 26A 700V 6xØ1.3 2xØ2.0  9 contacts 26A 700V 6xØ0.7 3xØ1.3  10 contacts 17A 700V 8xØ0.7 2xØ1.6 
3	22 contacts 5.5A 560V  30 contacts 3.5A 400V 	14 contacts 9A 830V  18 contacts 7A 660V 	8 contacts 12A 830V  10 contacts 12A 600V 	7 contacts 15A 1000V 	3 contacts 25A 1600V  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 (Blick 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

Your local contact

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