



# RJF 544

Ethernet Connection System for Harsh Environment – Industrial Ethernet



RJF544 allows you to use an Ethernet Class D / Cat 5e connection for 10 BaseT, 100 Base TX or 1000 BaseT networks in harsh environments.

With the patented RJStop® system you can use a standard RJ45 cordset in a protective **composite** plug which will protect it from shocks, dust and fluids.

No hazardous on-field cabling and grounding !

## Applications

- Telecom Equipment
- Video Control
- Robotics
- Industrial Process Control
- CNC Machines
- Special Machines
- Motion Control
- Tele-maintenance

## Main characteristics

- Compliant with IEC 60603-7 variante 12
- Shock, Vibration and Traction resistant
- No cabling operation in field and no tools required
- Sealed against fluids and dust (IP68)
- **Quick Push Pull coupling**
- RJ45 cordset retention in the plug: 100 N in the axis
- Mating cycles: 500 min
- Improved EMI Protection
- Compatible with cable diameter from 6 mm [0.236 in] to 13 mm [0.512 in]



Now available with transversal sealing\*

\*Sealed in unmated condition

## Environmental Protection

- Sealing: IP68
- Salt Spray > 1000 h
- Fire Retardant / Low Smoke: UL94 V0 and NFF 16102, DIN 5510-2
- Vibrations: 10 – 500 Hz, 10 g, 3 axes: no discontinuity > 10 nano s.
- Thermal Shock: 5 cycles at - 40°C / +100°C
- Operating Temperature: - 40°C / +85°C

## Data Transmission

10 BaseT, 100 BaseTX and 1000 BaseT networks  
Cat 5e per TIA/EIA 568B and ClassD per ISO/IEC 11801

## Part Number Code

Series	RJF 544	2	2	03 100BTX
<b>RJField 544 - Push Pull</b>				
Shell Type				
6:	Composite Push Pull Plug, Plastic Gland			
2:	Composite Square Flange Receptacle			
2S:	Composite Square Flange Receptacle Transversally sealed			
2M:	Metallized (Ni) Composite Square Flange Receptacle			
2SM:	Metallized (Ni) Composite Square Flange Receptacle Transversally sealed			
<b>Back Terminations (For Receptacles only)</b>				
1:	Female RJ45			
1RA:	Right Angle Female RJ45			
2:	RJ45 Cordset			
<b>Cordset Length (For Receptacles with "2" Back Termination only)</b>				
03 100BTX:	0.3 meters [11.81 inches]			
05 100BTX:	0.5 meters [19.68 inches]			
10 100BTX:	1 meter [39.37 inches]			
15 100BTX:	1.5 meters [59.05 inches]			
00:	8 tinned holes at the rear of the PCB to solder the cable			

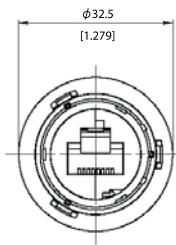
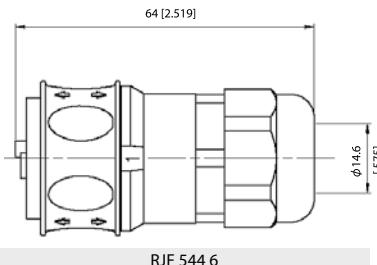
**Remark: Cabling configuration: 100 BTX = 568B (Ethernet specification)**

Examples:

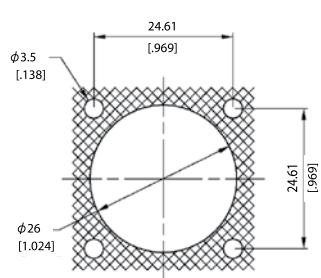
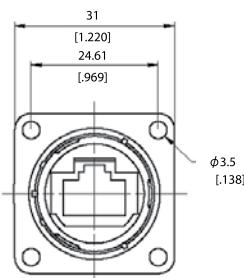
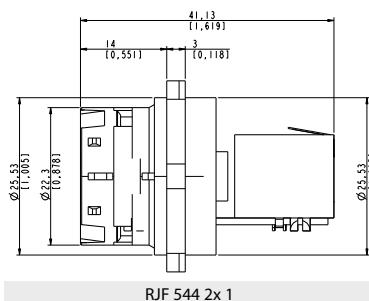
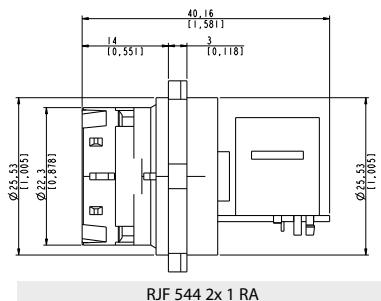
- Plug: RJF 544 6
- Square flange receptacle, Female RJ45 Back termination: RJF 544 21
- Metallized Square flange receptacle, Female RJ45 Back termination: RJF 544 2M 1
- Square flange receptacle, 1,5m [59.05"] 100 BTX cordset termination: RJF 544 22 15 100BTX
- Square flange receptacle, solder termination: RJF 544 22 00
- Transversally sealed receptacle female RJ45 Back termination: RJF544 2S1

**Plug**

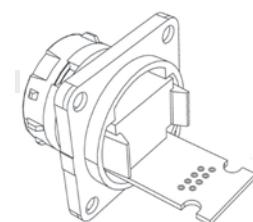
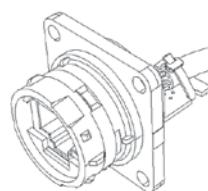
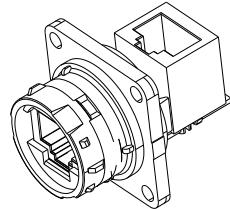
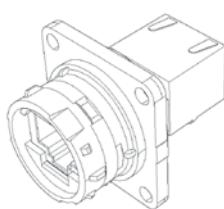
- Type 6 Shell with Plastic Gland

**Receptacle**

- Type 2S/2M/2SM Shell: Square flange receptacle with 4 mounting holes



Panel Drilling  
(same as#16 MIL-C-5015)

**Back terminations**

Type1: Female RJ45

Type1RA: Right Angle Female RJ45

Type2: RJ45 cordset

Type 2 - 00: Solder - 8 tinned holes

Notes: - Type 2 without RJ45 plug at the end of the cable is also available: consult factory

**Accessories**

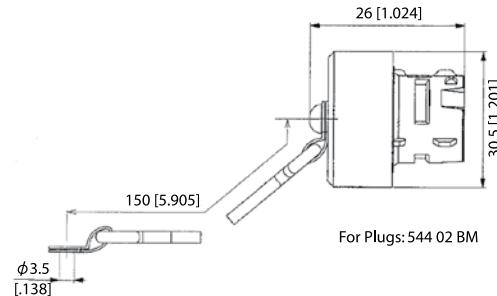
- Rubber IP68 receptacle cap  
RJF 544BESC



- Panel gasket  
RJF 544 02 JE



- IP68 Caps for Plug 544 02 BM



For Plugs: 544 02 BM

- Panel Gasket (Thickness: 0.6mm [.039]): Part No. RJF 544 02 JE
- Plug Insert removal tool: Part No. 5440 OT 02