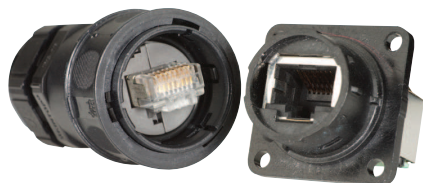# RJF 544
Ethernet connection system for harsh environment – Industrial Ethernet

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

Now available with tranversal sealing*
*Seald in unmated condition

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]

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

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Part number code

	RJF 544	2	2	03 100BTX
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				
Back terminations *(for receptacles only)* **1**: female RJ45 **1RA**: right angle female RJ45 **2**: RJ45 cordset				
Cordset length *(for receptacles with "2" back termination only) - Other lengths are available on demand* **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
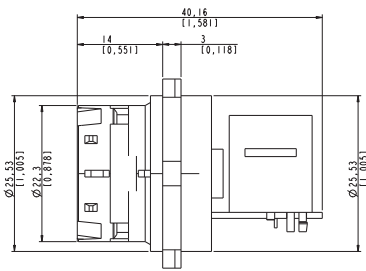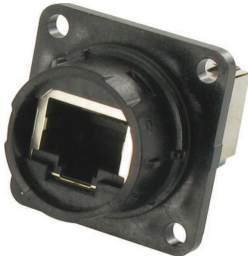- Transversally sealed receptacle female RJ45 back termination: RJF544 2S1
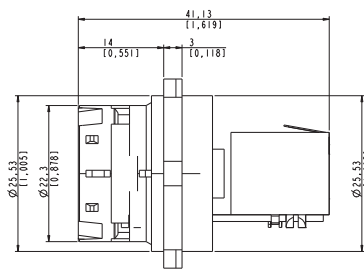
Plug

- Type 6 shell with plastic gland

64 [2.519]

φ32.5 [1.279]

φ14.6 [.575]
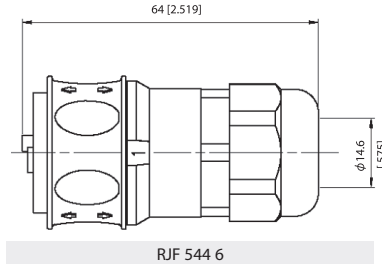
RJF 544 6

Receptacle

- Type 2S/2M/2SM shell: square flange receptacle with 4 mounting holes

40,16 [1,581]

14 [0,551] 3 [0,118]

Ø25.53 [1.005] Ø22.3 [0.878] Ø25.53 [1.005]

RJF 544 2x 1 RA

41,13 [1,619]

14 [0,551] 3 [0,118]

Ø25.53 [1.005] Ø22.3 [0.878] Ø25.53 [1.005]

RJF 544 2x 1

31 [1.220]
24.61 [.969]

φ3.5 [.138]

24.61 [.969]

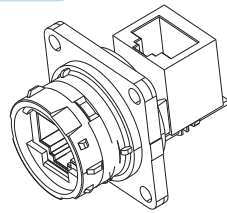φ3.5 [.138]

φ26 [1.024]

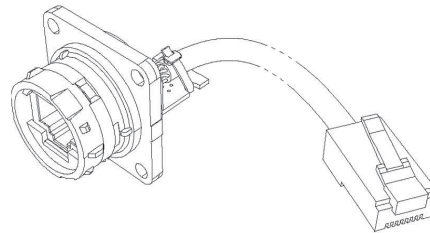24.61 [.969]
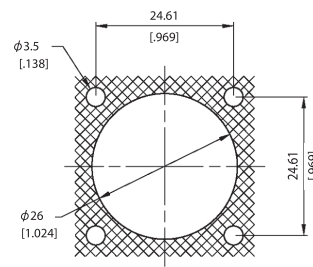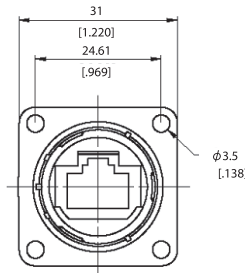
Panel Drilling
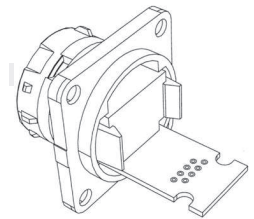(same as#16 MIL-C-5015)

Back terminations
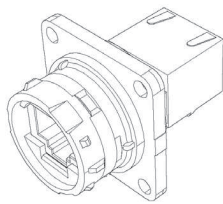
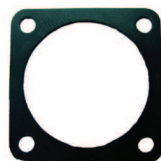| Type1: female RJ45 | Type1RA: right angle female RJ45 | Type2: RJ45 cordset | Type 2 - 00: solder - 8 tinned holes |

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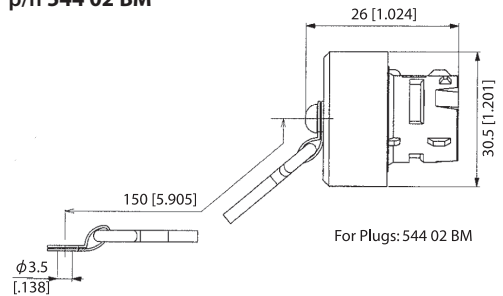
Accessories

- **Rubber IP68 receptacle cap** p/n **RJF 544BESC**
- **Panel gasket** p/n **RJF 544 02JE**
- **IP68 caps for plug** p/n **544 02 BM**

26 [1.024]

30.5 [1.201]

150 [5.905]

φ3.5 [.138]

For Plugs: 544 02 BM

- Panel gasket (thickness: 0.6mm [.039]): p/n **RJF 544 02 JE**
- Plug Insert removal tool: p/n **5440 OT 02**

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