

Ruggedized Singleway Connector (RSC)

Ruggedized Singleway Connector (RSC)

Product Facts

- **Insert-to-insert keying assists precision alignment**
- **Individually rear insertable/removable optical contacts enable easy assembly**
- **Backshells and adaptors available for most single and multifiber cable types**

Fiber Type – 8, 50, 62.5, 85/125µm
 100/140µm
 200/230µm
 200/280µm
 200/300µm

Cable size – 1.6mm to 5mm
 Simplex tight jacket Kevlar reinforced secondary buffered fiber

Materials

Shell – Arcap

Contact body – Arcap

Ferrule – Zirconia

Alignment sleeve – Zirconia

Seals – Fluorosilicone

Plating – Nickel

Optical Performance

Insertion loss – 0.25dB typical

Return loss – -40dB typical*

Repeatability – Better than 0.2dB

Temperature

High temperature endurance – +155°C*

Low temperature endurance – -65°C*

Durability – not less than 500 matings

TE's RSC range of high performance fiber optic connectors are manufactured from Arcap for corrosion resistance and feature a rugged construction, incorporating environmental sealing and an anti-vibration coupling mechanism. The optical contact is sprung loaded and common to both plug and receptacle to maintain physical contact even under severe shock or vibration. The RSC range is suitable for both singlemode and multimode applications, and features easily accessible fiber faces for cleaning purposes.

Key Features

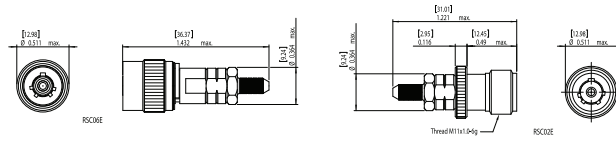
- Precision Zirconia ceramic ferrule and alignment sleeve to ensure superior repeatable optical performance with physical contact polishing techniques
- Manufactured from Arcap for corrosion resistance
- Easy access to ferrule to facilitate simple cleaning and maintenance
- Common ferrule carriers for the plug and receptacle
- Optical contact is sprung loaded in both the plug and receptacle to maintain physical contact even under severe shock or vibration
- Simple termination process and tooling
- Anti-vibration coupling mechanism
- Six alternative shell keyway orientations provide protection from inadvertent mis-mating
- Able to accommodate various sizes of multimode and singlemode fiber - (8/125, 50/125, 62.5/125, 100/140, 200/280µm)
- Able to accommodate various sizes of simplex cable (1.6mm - 5mm)
- Compatible with HA Connector series



Ruggedized Singleway Connector (RSC) (Continued)

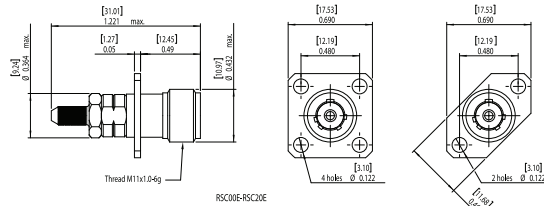
Dimensional Information

All dimensions in inches (except threads). To complete part number for ordering see 'ordering information'

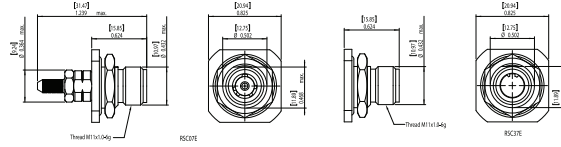


Plug

Free Receptacle

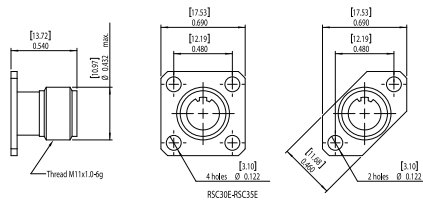


Receptacles

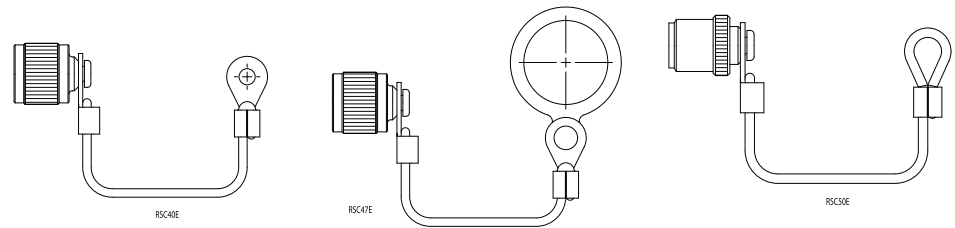


Jam Nut Receptacle

Dummy Receptacle



Dummy Receptacles and Mounting



Procap

Ruggedized Singleway Connector (RSC) (Continued)

Ordering Information

Series:

Shell style:

- 00 = Bulkhead receptacle
- 06 = Plug
- 07 = Jam nut
- 20 = Protective cap plug
- 30 = Dummy receptacle
- 40 = Protective receptacle

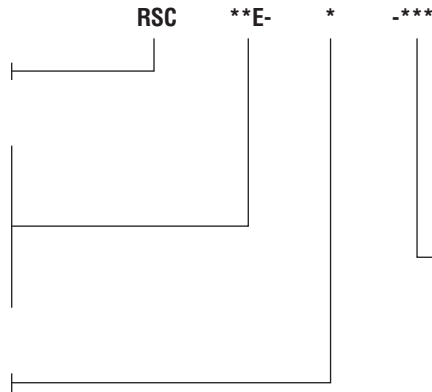
Shell orientation:

N, A, B, C, D, E

*Special glass braid

For other cable types, please consult the sales office.

Example part number: RSC06E-N-100
RSC plug, 'N' orientation, 2.5mm cable



- 100 cable diameter 2.5mm O/D
- 180 cable diameter 1.8mm O/D
- 200 cable diameter 2.0mm O/D
- 300 cable diameter 1.65mm O/D
- 400 cable diameter 3.0mm O/D
- 500 cable diameter 3.2mm O/D
- 600 cable diameter 2.1mm O/D
- 700 cable diameter 1.6mm O/D*
- 800 cable diameter 3.7mm O/D
- 900 cable diameter 5.0mm O/D

Optical Contacts

(Must be ordered separately)

Mode	Fiber size	Part number
Singlemode	8/125µm	456099SM-126
	50, 62.5/125µm	456099-126
	100/140µm	456099-145
	100/172µm	456099-176
Multimode	200/220µm	456099-224
	200/230µm	456099-232
	200/280µm (flat faced)	454103-283
	200/300µm	453800-305

Accessories

Fixing	Dummy receptacle part number	Protective cap part number
4 hole	RSC30E	RSC40E
2 hole	RSC35E	
Jam nut	RSC37E	RSC47E

Please contact technical support for termination tools and consumables.

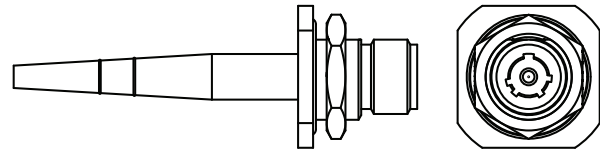
Hermetic Receptacle (RSC07HE)

Key Features

- Compatible with the RSC plug connector
- Leak rate < 1x10⁻⁶ cc/s
- 125°C temperature rating

Dimensional Information

All dimensions in inches (except threads). To complete part number for ordering see 'ordering information'



Ordering Information

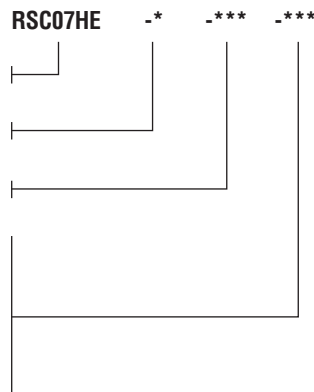
Series:

Shell orientation - N, A, B, C, D, E

Fiber size - 125, 140, 280µm

Pigtail length - cms

Example part number: (pigtail cable 900µm buffer only)
RSC07HE-N-283-100 receptacle, pigtail, 'N' orientation, 280µm fiber, 100cm cable



Quality Approvals

- Civil Aviation Authority A8-1
- BS EN ISO 9001
- Military Spec Approvals 38999
- BS9000 and CECC
- Underwriters Laboratories
- BS EN ISO9001:2000 (BSI)
- BS/EN 9100:2003 (BSI)
- AS9100 Rev B (BSI)
- AS9120:2002 (BSI)
- EASA Part 21 Subpart G (CAA)
- BS9000 (BSI)
- Underwriters Laboratories (UL)
- Military Spec Approvals 38999 (DSCC)