

FibrePlus FC Fibre Optic Connector

Datasheet: GD102428v1

APPLICATION

The Brand-Rex FC-compatible connectors are comprised of a nickel-plated brass body and a ceramic ferrule crimp barrel assembly plus a crimp over-sleeve and rubber boot. These connectors are suitable for both 900µm and 2.4 - 3mm cables. Refer to the diagram for nominal dimensional information.

The connector is precision made and manufactured to demanding specifications. The combination of a ceramic ferrule and a precision metal housing provides consistent long-term mechanical and optical performance.

FEATURES

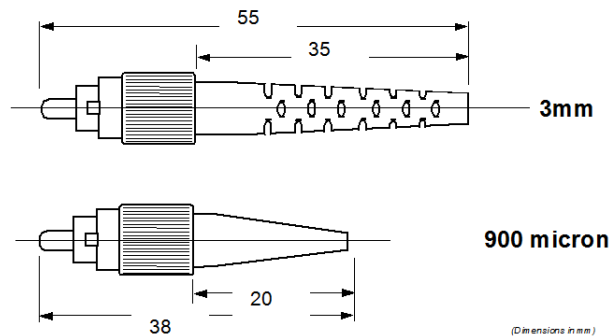
- Strong and robust design
- Reliable performance
- Consistent optical and mechanical performance
- Dust protection caps as standard



ORDER INFO

Brand-Rex Part Number	Item Description	Colour	Qty per Pack
FOCFCEPSM001	FC-PC Singlemode Connector	3 mm Boot – 1x Black and 1x Yellow 900µm Boot - Black Dust cap - Yellow	1
FOCFCEPMM001	FC-PC Multimode Connector	3 mm Boot - 1x Black and 1x Red 900µm Boot - Black Dust cap - Natural	1
FOCAFEPSM00X	FC-APC Singlemode Connector	900µm Boot - Green 2mm Strain relief - Green 3mm Strain relief - Green Dust cap - White	1

PHYSICAL CHARACTERISTICS



MECHANICAL

- Singlemode:
 - Capillary diameter tolerance: 126 +1/-0 μm
 - Ferrule Diameter: 2.499mm ± 0.0005
 - PC - Pre-radiused, PC-end finish for Physical Contact ferrule to ferrule R 10 to 25
- Multimode:
 - Capillary diameter tolerance: 127 +3/-0 μm
 - Ferrule Diameter: 2.499mm ± 0.001
 - PC - Pre-radiused, PC-end finish for Physical Contact ferrule to ferrule R 10 to 25
- APC Singlemode:
 - Capillary diameter tolerance: 126 +1/-0 μm
 - Ferrule Diameter: 2.499mm ± 0.0005
 - Conical ferrule

BACK SHELL

- Cable Acceptance
 - Max. Diameter: 3.0mm Tight Buffer Cable
 - Min. Diameter: 0.9mm Buffered Fibre
 - Tensile Strength: >10 kg before pull out 2.4 - 3.0mm Cable

ENVIRONMENTAL (WHEN TERMINATED)

- Temperature Cycling: -40 to +75°C, 40 cycles (IEC 874-1 sec.4.5.22) $\leq 0.2\text{dB}$ Change
- High Temperature: 75°C for 96 hours (IEC 874-1 sec.4.5.18) 60°C at 95% RH, 96 hours (IEC 874-1 sec.4.5.19) $\leq 0.2\text{dB}$ Change
- Vibration (Mated Pair): 10-55 Hz, 1.5mm P to P (IEC 874-1 sec.4.5.1) $\leq 0.3\text{dB}$ Change
- Mating Durability: 1000 mating cycles (IEC 874-1 sec.4.5.32) Clean every 25 < 0.2 dB Change

OPERATING TEMPERATURE

- -40°C to +85°C (Check cable temp performance)

OPTICAL PERFORMANCE

- Singlemode:
 - Insertion loss: Max. 0.3 Db Typical 0.15 dB (IEC 874-1 method 7)
 - Return loss: < -45Db
- Multimode:
 - Insertion loss: Max. 0.5 Db Typical 0.3 dB (IEC 874-1 method 7)

INTERMATEABILITY

- Optically and mechanically compatible with all FC equivalent connectors compliant with ANSI/TIA604-4B: 2004 (FOCIS-4)

CRIMP TOOL

- Standard .213 Hex Die hand tool

PRODUCT PACKAGING

- Each connector is packaged individually
- Each pack contains: FC connector, dust cap, crimp eyelet, strain relief/boot
- Bulk packaging also available

TERMINATION PROCEDURE

- Prep cable end, Epoxy-Crimp-Polish

"Brand-Rex is dedicated to designing, developing and manufacturing sustainable high performance structured cabling and speciality cabling solutions"

The information contained in this document is valid and correct at the time of issue. Brand-Rex reserves the right to modify details without notice in light of subsequent standard/specification changes and ongoing technical developments.