

Multimode 50/125 Single Channel ST FORJ

BGB Part No: **GA5942-200**



Fibre Optic Rotary Joint (FORJ) for high-speed data transfer. Constructed from Stainless Steel, this unit is designed to be chemically resilient and rugged.

For application flexibility this unit is manufactured with ST bulkhead connectors allowing versatility and choice of suitable leads for the application. BGB are able to offer a range of chemically and mechanically resilient leads to accompany this FORJ.

Rigorously tested in BGB's environmental test facility and in UKAS accredited test facilities to military vibration test standards.

Other fibre designations are available at request.

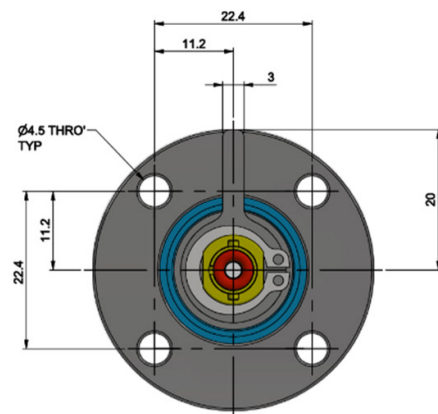
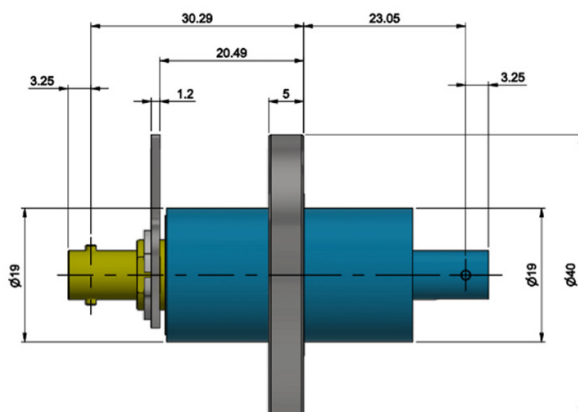
Table 1. Packaging/envelope properties

Property	Value	Standard (where applicable)
Fibre type	50/125 OM2, graded index	ISO 11801
Cable jacket	n/a	
Termination	ST	IEC 61754-2
Termination polish	PC	
Diameter ¹ (mm)	19	
Length (mm)	59.84	
Mass (g)	140 approx. tbc	
Casing	Stainless Steel 303	

Table 2. Optical properties

Property	Value	Standard (where applicable)
Insertion loss typical/maximum (dB)	1.5/3.0	IEC 61300-3-4:2012
Variation Insertion Loss typical/maximum (dB)	0.5/1.0	
Return loss typical/minimum (dB)	27/24	IEC 61300-3-6:2008
Wavelength, nm	1310 & 1550	

¹ Excluding flange



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The FJ (Fibre Joint) Series of FORJ's can be used in many different industries ranging from Renewable Energy such as Wind Turbines, through to Robotics, Radar, Drone, ROV, Military, Packaging and many other high data transfer technologies.



Table 3. Mechanical properties

Property	Value	Standard (where applicable)
Lifetime, million cycles	>50	ISO 281
Start-up torque (N·m)	2.0	
Running torque (N·m)	0.5-1.5	
Across all temperatures		
Vibration	20-2000Hz 3 dB/Oct (20-80 Hz) 0.04 g ² /Hz (80-350 Hz) -3 dB/Oct (350-2000Hz) RMS Level: 6 grms	MIL-STD-810G, IEC 61300-2-1:2009

Table 4. Environmental properties

Property	Value	Standard (where applicable)
IP rating	IP68	IEC 60529, EN 60529, IEC 61300-2-45:1999
Operating temperature range, °C	-30°C to 85°C	IEC 61300-2-21:2009
Survival temperature, °C	-40°C to 85°C	

