# WGF-12/WGF-6/WGF-461/WGF-4

### Overview

The WGF series provide a way of bringing pre-terminated fiber optic cables into a shielded enclosure while maintaining the enclosure's radio frequency isolation integrity. All versions except the WGF-4 feature a patented design with removable center plug so that connectorized fiber optic cables can be inserted into the peripheral cable-sized slots when the plug is removed.

#### **WGF-12**

The WGF-12 has twelve bores to accept preterminated fiber optic cables with attached connectors.



### WGF-6

The WGF-6 has six bores to accept preterminated fiber optic cables with attached connectors.



The WGF-461 was designed to meet MIL-461 EMC specifications by providing 100 dB attenuation for frequencies up to 40 GHz. It has six bores to accept preterminated fiber optic cables with attached connectors.



#### WGF-4

The WGF-4 accepts up to four pre-terminated fiber optic cables with either LC or ST connectors through fixed bores. It is accepts up to four pre-terminated fiber optic cables with attached connectors.





#### **Features:**

- 4, 6, or 12 Channel . Waveguide Filter
- . WGF-12, WGF-6 and WGF-461 exceed NSA 65-6 shielding specifications
- WGF-12, WGF-6 and WGF-. 461 have patented removable core to allow easy pass through of preterminated cable
- WGF-461 meets MIL-461 EMC specification

#### **Applications:**

- SCIF / TEMPEST Enclosures
- EMC Testing
- **RF**Testing
- Manufacturing
- MRI / Medical
- **Anechoic Chambers**



WGF-6 Shown with ST fiber installed

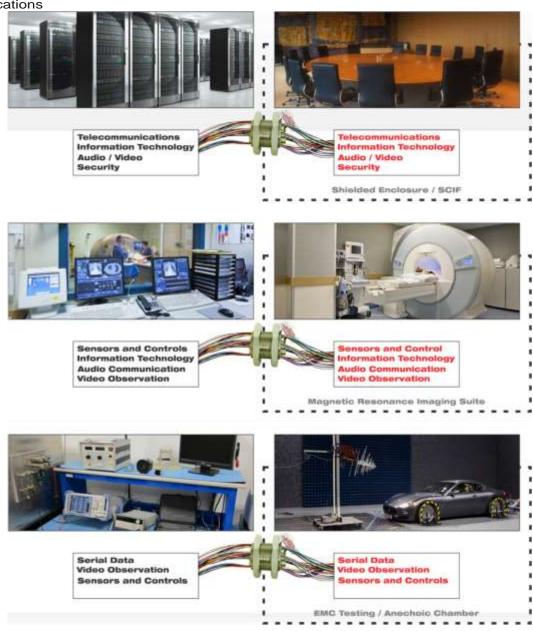


WGF-12 Shown with 24 strand fiber installed

## WGF-12/WGF-6/WGF-461/WGF-4



Typical Applications



#### Specifications

THEORETICAL ATTENUATION (dB)														
Model	43 GHz	40 GHz	35 GHz	30 GH	z :	25 GHz	20 GHz	18 GHz	15 GHz	10 G	Hz	4 GHz	100 MHz	
WGF-12	-	-	-	-		60.32	114.91	128.59	144.63	162.11		176.02	176.02	
WGF-6	-	-	-	-		63.32	-	131.59	147.63	147.63 165.		179.02	179.02	
WGF-461	64.67	123.02	179.33	217.0	0	-	-	-	-	-		-	-	
WGF-4								70.33	106.69	155.	63	178.88	-	
PHYSICAL SPECIFICATIONS														
			WGF-12			WGF-6			WGF-461			WGF-4		
Cut-Off Frequency		27 GHz	27 GHz			27 GHz			44.2 GHz			18.5 GHz		
Waveguide Bore Qty		12	12			6			6			4		
Waveguide Bore Diameter		0.257 x 0.	0.257 x 0.159 in (6.5 x 4.0 mm)			0.257 x 0.159 in (6.5 x 4.0 mm)			0.157 x 0.118 in (4.0 x 3.0 mm)			0.375 in (9.5 mm)		
Body Thread Size		1-5/8",20	1-5/8", 20 NEF			1-1/8", 18 NEF			1-1/8", 18 NEF			1-1/8", 18 NEF		
Clearance Hole Diameter		1-21/32 ir	1-21/32 in (42 mm)			1-5/32 in (29.5 mm)			1-5/32 in (29.5 mm)			1-5/32 in (29.5 mm)		
Effective Length		1.5 in (38	1.5 in (38 mm)			1.5 in (38 mm)			1.5 in (38 mm)			2.25 in (57 mm)		
Overall Length		2.31 in (5	2.31 in (59 mm)			2.125 in (54 mm)			2.125 in (54 mm)			2.25 in (57 mm)		
Plug Bore Diameter		1.0 in (25.	1.0 in (25.5 mm)			0.5 in (12.7 mm)			0.5 in (12.7 mm)			n/a		
Material			Steel, Electroless Nickel Finish											