# MFC-G - Large Diameter FRP/GRE/GRP Firestop Collar

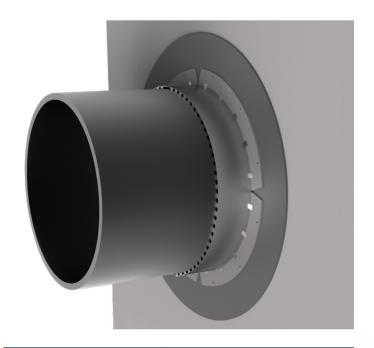
Factory-manufactured, intumescent device for use as a penetration seal in fire-rated bulkheads and decks. It is comprised of a stainless steel body with a mild steel flange for easy weld attachment to the division, and can provide watertightness with a quick application of MFS Sealant.

#### **Product Features**

- Tested to 2010 IMO FTP Code, Annex 1, Part 3 (Class A-0 through A-60 Bulkheads and Decks)
- Fits most pipe sizes from 302 mm to 1095 mm
- Provides watertightness up to 4 bar and gastightness up to 1 bar, when sealed with MFS sealant
- Rapid intumescent expansion under fire conditions quickly seals off the path for fire, gases, and smoke
- Stainless steel body with mild steel flange for weld-attachment or steel screws
- Flexible intumescent liner accommodates vibration and will not damage pipe
- Resistant to aging and weathering

PHYSICAL PROPERTIES - DEVICE					
Collar Construction	Stainless steel shell with nominal mild steel flange				
Expansion Begins	160°C (320°F)				
Expansion Volume	30 to 60 times				
In Service Temperature	<54°C (<129.2°F)				
Storage Temperature	<49°C (<120.2°F)				
Shelf Life	No Limit				

PHYSICAL PROPERTI	ES - MFS - AS SUPPLIED			
Consistency	Paste			
Percent Solids	>99.0% 11 g/L (<2%)			
VOC (ASTM D2369)				
Tooling Time	15-20 minutes			
Tack Free (ASTM C679 @ 77°F/50%RH)	2-3 hours			
Storage Temperature	4°C (40°F) to 35°C (95°F)			
Application Temperature	4°C (40°F) to 65°C (149°F)			
Shelf Life	18 months			
Density	1.5 kg/L (12.5 lbs/gal)			
Viscosity	400,000 - 600,000 cps			



PHYSICAL PROPERTIES - MFS - CURED						
Color	Red (MFS100, MFS120) or Black (MFS100BLK)					
In Service Temperature	-40°C (-40°F) to 93°C (200°F)					
Movement (ASTM C719)	25%					
Flame Spread (ASTM E84/UL723)	<25					
Smoke Development (ASTM E84/UL723)	<50					
Accelerated Aging tested to ASTM E1641 & ASTM E1877 (Using Thermogravimetric Analysis (TGA) @ 20°C)	>30 years					

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MFB MARINE FILLER BLANKET						
Color	Blanket - Off-White / Foil - Silver 25 mm (1 in.)					
Thickness						
Density	160 kg/m³ (10 pcf)					
Noncombustible (IMO 2010 FTP, Part 1)	Yes					
In Service Temperature	<982°C (<1,800°F) >1,193°C (>2,179°F)					
Fiber Melting Temperature						
IARC Classification	Group 3: Not Classifiable As Carcinogenic to Humans (Biosoluble Fiber)					
Recycled Content	100%					
Shelf Life	No Limit					



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### Maintenance

Maintenance free. Observed damage can be repaired per the original approved design.

### **Third Party Approvals**









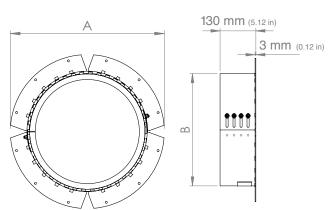




COLLAR DIMENSIONS									
Catalog Number	Doubler Plate	Flange Diameter (A)		Shell Diameter (B)		Min. Pipe Diameter		Max. Pipe Diameter	
		mm	in	mm	in	mm	in	mm	in
MFC300G	Optional	471	18.6	357	14.1	302	11.9	360	14.2
MFC350G	Optional	522	20.6	408	16.1	354	13.9	402	15.8
MFC400G	Optional	572	22.6	458	18.1	402	15.8	456	18.0
MFC450G	Optional	620	24.4	506	19.9	456	18.0	501	19.7
MFC500G	Required	671	26.4	557	21.9	501	19.7	555	21.9
MFC600G	Required	772	30.4	658	25.9	608	23.9	665	26.2
MFC700G	MFC700G Required		34.4	762	30.0	710	28	746	29.4
MFC800G Required		1080	42.6	968	38.2	747	29.4	895	35.2
MFC900G Required		1206	47.6	1094	43.2	895	35.2	995	39.2
MFC1000G	Required	1334	52.6	1222	48.2	995	39.2	1095	43.1

Suggested opening size is max. 10 mm larger than OD of pipe.

Min. 4.5 mm thick steel doubler plate required when bulkhead or deck stiffeners are cut. Doubler plate OD to be min. 275 mm larger than pipe OD. Overlap between doubler plate and division shall be min. 50 mm around entire perimeter of opening. Doubler plate centered over opening and continuously welded to non-insulated side of division. For further information regarding installation requirements, please refer to Installation Sheet Nos. ZIS1221, ZIS1222, ZIS1355 and the corresponding Type Approvals.



ORDERING INFORMATION						
Catalog Number	UPC Number	Description	(UOM) Qty.	Case Qty.	Weight (Each)	
MFC300G	730573439197	300 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	7.06 kg (15.57 lbs)	
MFC350G	730573439135	350 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	7.81 kg (17.21 lbs)	
MFC400G	730573439142	400 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	7.77 kg (17.14 lbs)	
MFC450G	730573439159	450 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	9.93 kg (21.90 lbs)	
MFC500G	730573439166	500 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	10.50 kg (23.15 lbs)	
MFC600G	730573439173	600 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	11.68 kg (25.74 lbs)	
MFC700G	730573439180	700 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	13.40 kg (29.54 lbs)	
MFC800G	730573439227	800 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	14.23 kg (31.5 lbs)	
MFC900G	730573439234	900 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	16.19 kg (35.7 lbs)	
MFC1000G	730573439241	1000 mm Marine Firestop Collar for Large Diameter FRP/GRE/GRP Pipe	1	1	20.18 kg (44.5 lbs)	
MFS100	730573413104	MFS Marine Firestop Sealant, red, 281 mL cartridge (9.5 oz/17.1 cubic inch)	1	12	0.53 kg (1.16 lbs)	
MFS100BLK	730573413104	MFS Marine Firestop Sealant, black, 281 mL cartridge (9.5 oz/17.1 cubic inch)	1	12	0.53 kg (1.16 lbs)	
MFS120	730573413128	MFS Marine Firestop Sealant, red, 590 mL sausage (20 oz/36.1 cubic inch)	1	12	0.97 kg (2.14 lbs)	
MFB530F	730573440100	MFB Marine Filler Blanket with Foil on one side, 12.7 cm x 914 cm (5 in. x 360 in.) roll	1	5	5.67 kg (12.50 lbs)	

