

# Compression

Because of their secure seal and flexibility, BFM® fittings are ideal for use in applications involving compression. This is typically in applications such as bag feeders, filling heads or bulk bag fillers where the upper machine moves in a vertical motion up and down, compressing the connector as it moves down.

The compression action tends to fold the connector material in random places, potentially causing faster wear and tear than normal. It is therefore recommended that connectors used in compression applications should have internal support to maintain their shape. There are several products within the BFM® fittings range that are particularly suited to applications involving compression:

### BFM® CONNECTORS WITH SUPPORT RINGS

Rings are inserted in the connectors to help keep the connector walls open and maintain its integrity during up compression. Stainless Steel (SS) support rings can be inserted into connectors up to 500mm (20") in diameter, above that they must be plastic support rings. Plastic support rings can also be used for metal detection applications.

Seeflex O20E connectors with rings have an approximate compression ratio of 5:1 and Seeflex O40E connectors 2½:1.



Stainless Steel Ring



Plastic Ring

### BFM® FLEXI CONNECTORS

There are BFM® Flexi connectors available in 100, 125, 150, 200, 250, 300 and 350mm. (4, 5, 6, 8, 10, 12 and 14") diameters. The BFM® Flexi has a stainless steel spiral wire wrapped in Urethane and are ideal for use where it is critical that the connector is held open while it moves up or down and as the product flows through the connector.

The coil section of the BFM® Flexi connectors has an approximate compression ratio of 3:1 (ie. applies between the 50mm/2 inch top and bottom Seeflex sections only).



## COMPRESSION COMPARISON: SEEFLEX WITH RINGS VS FLEXI CONNECTOR

<p><b>SEEFLEX O20E</b> 200mm dia x 500mm L (8 inch dia x 20 inch L) 4 x rings</p>		<p>Ring spacing: 100mm/4 inch</p>		<p>Compressed Height: 100mm/4 inch</p>		<p>Compressed Aperture: 150mm/6 inch</p>
<p><b>SEEFLEX O40E</b> 200mm dia x 500mm L (8 inch dia x 20 inch L) 4 x rings</p>		<p>Ring spacing: 100mm/4 inch</p>		<p>Compressed Height: 200mm/8 inch</p>		<p>Compressed Aperture: 150mm/6 inch</p>
<p><b>FLEXI-CONNECTOR</b> 200mm dia x 500mm L (8 inch dia x 20 inch L)</p>		<p>Coil spacing: 30mm/1 inch</p>		<p>Compressed Height: 250mm/10 inch</p>		<p>Compressed Aperture: 200mm/8 inch</p>

*NOTE: Measurements in mm are exact, inches are approximate.*

**COMPRESSION GUIDE:**

The following table applies to BFM® Flexi Connectors and Flexi-Earthed Connectors.

CONNECTOR LENGTH (CL)	LENGTH OF COMPRESSIBLE SECTION	FULLY COMPRESSED LENGTH (SHORTEST OVERALL LENGTH)	AMOUNT COMPRESSED
250.00mm	150.00 mm	150.00 mm	100.00 mm
300.00 mm	200.00 mm	166.67 mm	133.33 mm
350.00 mm	250.00 mm	183.33 mm	166.67 mm
400.00 mm	300.00 mm	200.00 mm	200.00 mm
450.00 mm	350.00 mm	216.67 mm	233.33 mm
500.00 mm	400.00 mm	233.33 mm	266.67 mm
550.00 mm	450.00 mm	250.00 mm	300.00 mm
600.00 mm	500.00 mm	266.67 mm	333.33 mm
650.00 mm	550.00 mm	283.33 mm	366.67 mm
700.00 mm	600.00 mm	300.00 mm	400.00 mm
750.00 mm	650.00 mm	316.67 mm	433.33 mm
800.00 mm	700.00 mm	333.33 mm	466.67 mm
850.00 mm	750.00 mm	350.00 mm	500.00 mm
900.00 mm	800.00 mm	366.67 mm	533.33 mm
950.00 mm	850.00 mm	383.33 mm	566.67 mm
1000.00 mm	900.00 mm	400.00 mm	600.00 mm

The following table applies to BFM® Flexi-Light Connectors.

CONNECTOR LENGTH (CL)	LENGTH OF COMPRESSIBLE SECTION	FULLY COMPRESSED LENGTH (SHORTEST OVERALL LENGTH)	AMOUNT COMPRESSED
250.00 mm	150.00 mm	137.50 mm	112.50 mm
300.00 mm	200.00 mm	150.00 mm	150.00 mm
350.00 mm	250.00 mm	162.50 mm	187.50 mm
400.00 mm	300.00 mm	175.00 mm	225.00 mm
450.00 mm	350.00 mm	187.50 mm	262.50 mm
500.00 mm	400.00 mm	200.00 mm	300.00 mm
550.00 mm	450.00 mm	212.50 mm	337.50 mm
600.00 mm	500.00 mm	225.00 mm	375.00 mm
650.00 mm	550.00 mm	237.50 mm	412.50 mm
700.00 mm	600.00 mm	250.00 mm	450.00 mm
750.00 mm	650.00 mm	262.50 mm	487.50 mm
800.00 mm	700.00 mm	275.00 mm	525.00 mm
850.00 mm	750.00 mm	287.50 mm	562.50 mm
900.00 mm	800.00 mm	300.00 mm	600.00 mm
950.00 mm	850.00 mm	312.50 mm	637.50 mm
1000.00 mm	900.00 mm	325.00 mm	675.00 mm

**NOTE:** Connector length shown above (black numbers) is given in mm.