

# FIGURE 40A FLEXIBLE CONNECTORS

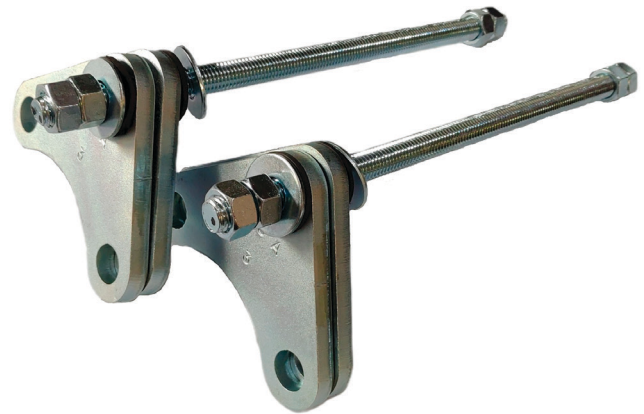


## SINGLE SPHERE FLEXIBLE CONNECTOR

Flexible connectors are used to absorb thermal and seismic movement, absorb hydraulic shock, provide vibration and noise dampening, ease installation, and correct minor misalignment of piping and components.

Similar to the metal flexible connectors in application advantages, single sphere flexible connectors are suitable for pressure and vacuum services. The spherical shape is stronger than cylindrical elastomer connectors and disperses pressure evenly over a larger surface area. The streamline shape also reduces turbulence and sediment build-up and lessens deformation while under pressure. The elastomer allows greater movements in the axial, elongation, lateral, and angular directions and provides a wide service range due to its chemical resistance characteristics.

**Warning:** Control rods must be used to protect this part from excessive movement if piping is not properly anchored. See Fig. 40A IOM



Operating Conditions	
Maximum Operating Pressure	227 PSI
Burst Pressure @ 80°F	853 PSI
Vacuum Rating	25.59"Hg (650 Torr)
Operating Temperature	14°F–158°F

### PART NUMBERS AND WEIGHT

Size	Part Number	Approximate Wt
2-1/2	FNW40AL	14.74
3	FNW40AM	16.50
4	FNW40AP	18.26
5	FNW40AS	23.98
6	FNW40AU	31.68
8	FNW40AX	42.24
10	FNW40A10	55.00

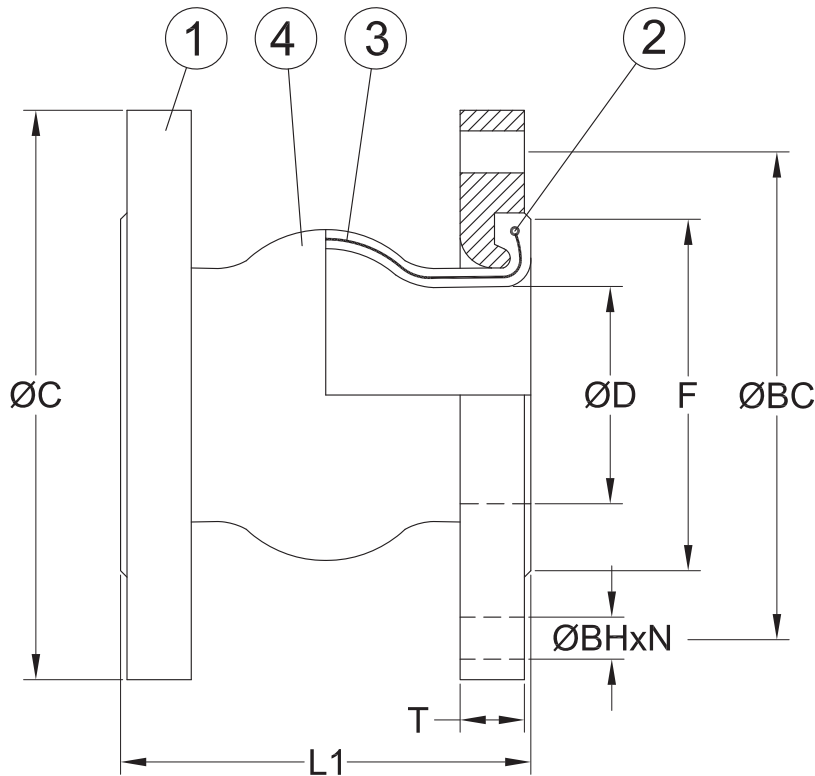
### CONTROL RODS (sold separately)

SKU	Size	Plate Thickness	Rod Diameter	Sets Needed
FNW40ACRL	2-1/2"	3/8"	5/8"	1 Set (2 rods)
FNW40ACRM	3"	3/8"	5/8"	1 Set (2 rods)
FNW40ACRP	4"	3/8"	5/8"	1 Set (2 rods)
FNW40ACRS	5"	3/8"	3/4"	1 Set (2 rods)
FNW40ACRU	6"	1/2"	3/4"	1 Set (2 rods)
FNW40ACRX	8"	1/2"	3/4"	2 Sets (4 rods)
FNW40ACR10	10"	3/4"	7/8"	2 Sets (4 rods)

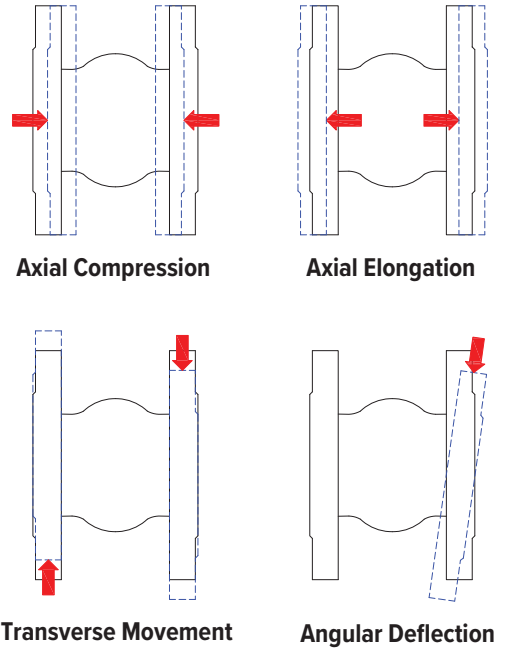
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### Braid Limits



### DIMENSIONS (INCHES)

SIZE	ØC	ØD	F	L1	ØBC	ØBH	N	T
2-1/2	7.0	2.68	4.17	6.0	5.50	0.75	4	0.71
3	7.5	2.99	4.57	6.0	6.00	0.75	4	0.71
4	9.0	4.06	5.91	6.0	7.50	0.75	8	0.71
5	10.0	5.04	7.09	6.0	8.50	0.87	8	0.79
6	11.0	5.98	8.23	6.0	9.50	0.87	8	0.87
8	13.5	7.64	10.24	6.0	11.75	0.87	8	0.87
10	16.0	9.84	12.60	8.0	14.25	1.00	12	0.94

Size	Maximum Axial Compression	Maximum Axial Elongation	Maximum Transverse Movement	Maximum Angular Deflection
2-1/2	0.500"	0.375"	0.50"	15°
3	0.500"	0.375"	0.50"	15°
4	0.625"	0.375"	0.50"	15°
5	0.625"	0.375"	0.50"	15°
6	0.625"	0.375"	0.50"	15°
8	0.625"	0.375"	0.50"	15°
10	0.625"	0.500"	0.75"	15°

### STANDARD MATERIALS

Ref. No.	Description	Material
1	Flange	Carbon Steel
2	Reinforcement Wire	Carbon Steel
3	Reinforcement Fabric	Synthetic Fiber
4	Elastomer Sleeve	Inside and Outside: EPDM Middle: NBR