

Structural Bearing Assemblies

**Versiflex™ HLMR Disc Bearing
Assemblies Fixed DF Series - 30%**

Design Basis: AASHTO 17th Edition w/ Interims – Section 14

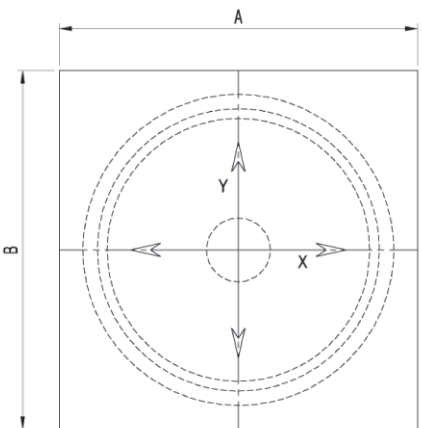
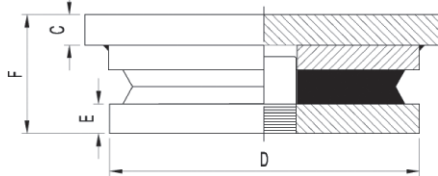
Rotation: 0.02 Radians

Horizontal Capacity: 30% of Vertical Capacity

Movement: X = 0"

Y = 0"

Steel Strength: Fy = 50 ksi



DF SERIES- 30%

Model Number	Vertical Capacity (Kips)	Horizontal Capacity (Kips)	A	B	C	D	E	F
DF100	100	30	8.50	8.50	1.00	7.250	0.750	3.250
DF200	200	60	10.75	10.75	1.00	9.500	0.750	3.750
DF300	300	90	12.50	12.50	1.25	11.250	0.875	4.625
DF400	400	120	14.00	14.00	1.25	12.750	1.000	5.000
DF500	500	150	15.38	15.38	1.25	14.125	1.125	5.375
DF600	600	180	16.50	16.50	1.25	15.250	1.250	5.750
DF700	700	210	17.75	17.75	1.25	16.375	1.375	6.125
DF800	800	240	18.75	18.75	1.25	17.375	1.500	6.500
DF900	900	270	19.75	19.75	1.25	18.375	1.625	6.750
DF1000	1000	300	20.75	20.75	1.25	19.250	1.625	7.000
DF1250	1250	375	23.00	23.00	1.50	21.375	1.875	8.000
DF1500	1500	450	24.88	24.88	1.50	23.250	2.000	8.500
DF1750	1750	525	26.75	26.75	1.50	25.000	2.125	9.000
DF2000	2000	600	28.63	28.63	1.50	26.750	2.250	9.500
DF2250	2250	675	30.13	30.13	1.50	28.250	2.375	10.000
DF2500	2500	750	31.88	31.88	1.75	29.875	2.500	10.625
DF2750	2750	825	33.38	33.38	1.75	31.375	2.625	11.000
DF3000	3000	900	34.75	34.75	1.75	32.625	2.750	11.375

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DESIGN CONSIDERATIONS

- A. Bearing assembly component dimensions are based on assumed structural conditions and a skew of 0°.
- B. Sole plates are designed for a welded connection to a steel girder flange. Sole plate dimensions will vary for bolted connections to steel flanges and/or for bearings supporting concrete superstructure elements.
- C. Masonry plate information has been excluded from the bearing details. Masonry plate dimensions are based on the allowable bearing stress of the substructure unit and the anchorage requirements.

A recommended method of determining the masonry plate thickness is to use a 60° load distribution through the plate. The effective loaded area should be used to calculate the bending moment of the plate and the concrete bearing pressure.

