

Rev C - Jul-11-2017

Series Specifications 20FR20.E6 (20FR20)

(also includes Series 20FR20-C)

**Table 20FR20.E6.6C  
 (Series 20FR20)  
 Support Spacing (ft)**

(Limited by Bending Stress, Deflection of 0.50 in. over 3 spans, and Max. Spacing of 30.0 ft)

(See notes for information on what value of bending stress to use)

Size in.	Rating psi	500 psi SG = 0.85			1000 psi SG = 1.0			1500 psi SG = 1.0			500 psi SG = 1.15			1000 psi SG = 1.15			1500 psi SG = 1.15		
		500 psi SG = 0.85	1000 psi SG = 0.85	1500 psi SG = 0.85	500 psi SG = 1.0	1000 psi SG = 1.0	1500 psi SG = 1.0	500 psi SG = 1.15	1000 psi SG = 1.15	1500 psi SG = 1.15	500 psi SG = 1.15	1000 psi SG = 1.15	1500 psi SG = 1.15						
0.50	290	7.0	8.6	8.6	7.0	8.6	8.6	6.9	8.6	8.6									
0.75	290	7.9	9.7	9.7	7.7	9.6	9.6	7.6	9.5	9.5									
1.00	290	8.5	10.5	10.5	8.3	10.4	10.4	8.2	10.3	10.3									
1.50	290	9.5	11.9	11.9	9.2	11.8	11.8	9.0	11.6	11.6									
2.00	290	10.2	13.1	13.1	9.8	12.8	12.8	9.5	12.6	12.6									
2.50	290	10.7	14.0	14.0	10.3	13.7	13.7	9.9	13.5	13.5									
3.00	290	11.1	14.8	14.8	10.6	14.5	14.5	10.2	14.2	14.2									
4.00	290	11.7	16.2	16.2	11.1	15.7	15.8	10.6	15.0	15.5									
5.00	290	12.1	16.2	16.2	11.5	15.8	15.8	10.9	15.4	15.5									
6.00	290	13.4	19.0	19.1	12.7	18.0	18.6	12.1	17.1	18.1									
8.00	290	15.6	22.0	22.1	14.7	20.8	21.5	14.0	19.8	21.0									
10.00	290	17.5	24.7	24.8	16.5	23.3	24.1	15.7	22.1	23.4									
12.00	290	19.3	27.3	27.3	18.2	25.8	26.5	17.3	24.5	25.8									
14.00	261	20.1	28.5	29.0	19.0	26.8	28.1	18.0	25.4	27.4									
16.00	261	21.5	30.0	30.0	20.2	28.6	30.0	19.2	27.1	29.2									
18.00	261	22.9	30.0	30.0	21.6	30.0	30.0	20.4	28.9	30.0									
20.00	232	22.9	30.0	30.0	21.5	30.0	30.0	20.4	28.8	30.0									
24.00	232	25.2	30.0	30.0	23.7	30.0	30.0	22.4	30.0	30.0									
30.00	150	23.4	30.0	30.0	21.8	30.0	30.0	20.6	29.1	30.0									
36.00	150	25.6	30.0	30.0	23.9	30.0	30.0	22.5	30.0	30.0									
42.00	100	22.9	30.0	30.0	21.3	30.0	30.0	20.0	28.3	30.0									
48.00	100	24.7	30.0	30.0	22.9	30.0	30.0	21.5	30.0	30.0									
54.00	50	18.9	26.7	30.0	17.5	24.8	30.0	16.4	23.2	28.4									
60.00	50	19.8	28.0	30.0	18.4	26.0	30.0	17.2	24.3	29.8									
66.00	50	20.9	29.5	30.0	19.3	27.3	30.0	18.1	25.6	30.0									
72.00	50	21.9	30.0	30.0	20.3	28.6	30.0	19.0	26.8	30.0									

Notes: Normally, we recommend 1000psi (6.9MPa) for an allowable bending stress due to support spacing, however, this value can range from 500psi (3.5MPa) to 1500psi (13.4MPa), depending upon the other axial & bending stresses in the system. At design temperatures of 200F (93c) or more, 500psi (3.5MPa) may be needed. At very low pressures and temperatures, 1500psi (13.4MPa) may be satisfactory.  
 For seawater, multiply the support spacings for SG=1.0 by 0.986 (i.e., the support spacings for seawater are approximately 98.6% of the values for SG=1.0 (water)).

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Series Specifications 20FR20.E6 (20FR20)

(also includes Series 20FR20-C)

**Table 20FR20.E6M.6C (Metric)  
 (Series 20FR20)**

**Support Spacing (m)**

(Limited by Bending Stress, Deflection of 12.5 mm over 3 spans, and Max. Spacing of 9.0 m)

(See notes for information on what value of bending stress to use)

Size mm	Rating bar	3.4 MPa 6.8 MPa 10.3 MPa			3.4 MPa 6.8 MPa 10.3 MPa			3.4 MPa 6.8 MPa 10.3 MPa		
		SG = 0.85	SG = 0.85	SG = 0.85	SG = 1.0	SG = 1.0	SG = 1.0	SG = 1.15	SG = 1.15	SG = 1.15
15	20	2.1	2.6	2.6	2.1	2.6	2.6	2.1	2.6	2.6
20	20	2.4	2.9	2.9	2.3	2.9	2.9	2.3	2.9	2.9
25	20	2.6	3.2	3.2	2.5	<b>3.2</b>	3.2	2.5	3.1	3.1
40	20	2.9	3.6	3.6	2.8	<b>3.6</b>	3.6	2.7	3.5	3.5
50	20	3.1	4.0	4.0	3.0	<b>3.9</b>	3.9	2.9	3.8	3.8
65	20	3.2	4.3	4.3	3.1	4.2	4.2	3.0	4.1	4.1
80	20	3.4	4.5	4.5	3.2	<b>4.4</b>	4.4	3.1	4.3	4.3
100	20	3.5	4.9	4.9	3.4	<b>4.8</b>	4.8	3.2	4.5	4.7
125	20	3.7	4.9	4.9	3.5	<b>4.8</b>	4.8	3.3	4.7	4.7
150	20	4.1	5.7	5.8	3.8	5.4	5.7	3.7	5.2	5.5
200	20	4.7	6.7	6.7	4.5	<b>6.3</b>	6.6	4.2	6.0	6.4
250	20	5.3	7.5	7.5	5.0	<b>7.1</b>	7.3	4.7	6.7	7.1
300	20	5.8	8.3	8.3	5.5	<b>7.8</b>	8.1	5.2	7.4	7.9
350	18	6.1	8.6	8.8	5.7	8.1	8.6	5.4	7.7	8.3
400	18	6.5	9.0	9.0	6.1	<b>8.7</b>	9.0	5.8	8.2	8.9
450	18	6.9	9.0	9.0	6.5	<b>9.0</b>	9.0	6.2	8.7	9.0
500	16	6.9	9.0	9.0	6.5	9.0	9.0	6.2	8.7	9.0
600	16	7.6	9.0	9.0	7.2	9.0	9.0	6.8	9.0	9.0
750	10	7.1	9.0	9.0	6.6	9.0	9.0	6.2	8.8	9.0
900	10	7.7	9.0	9.0	7.2	9.0	9.0	6.8	9.0	9.0
1050	7	6.9	9.0	9.0	6.5	9.0	9.0	6.1	8.6	9.0
1200	7	7.5	9.0	9.0	6.9	9.0	9.0	6.5	9.0	9.0
1350	3	5.7	8.1	9.0	5.3	7.5	9.0	5.0	7.0	8.6
1500	3	6.0	8.5	9.0	5.6	7.9	9.0	5.2	7.4	9.0
1650	3	6.3	8.9	9.0	5.9	8.3	9.0	5.5	7.7	9.0
1800	3	6.6	9.0	9.0	6.1	8.7	9.0	5.7	8.1	9.0

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