

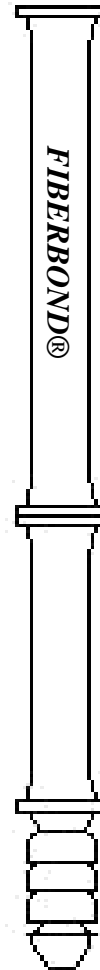
FIBERBOND®

ENGINEERED COMPOSITE PIPING SYSTEMS

Series 20HV(CP) Fiberglass Column Pipe

Offshore & Marine Applications

- Vertical Pumps
&
•Submersible Pumps



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May 2015 Edition



FIBERBOND® 20HV(CP) Column Pipe

Sizes (ID) 2" 3" 4" 6" 8" 10" 12" 14" 16" 18" 20" 24"

Lengths: **5ft. and 10ft.;** other lengths also available
 (Spools for use with line-shaft driven pumps with "machineable" flanges come 1/4" over nominal length for machining by the customer)

Color: **Medium Blue**

Pipe		Pressure		Empty Weight	
Size / I.D.	Thickness	Pressure Rating	Max. Shut-In Rating	5-FT	10-FT
in. (mm)	in. (mm)	psi (bar)	psi (bar)	lbs (kg)	lbs (kg)
2 (51)	0.25 (6)	200 (13.8)	350 (24.1)	12 (5)	20 (9)
3 (76)	0.25 (6)	200 (13.8)	350 (24.1)	18 (8)	29 (13)
4 (102)	0.25 (6)	200 (13.8)	300 (20.7)	24 (10)	39 (18)
6 (152)	0.31 (8)	200 (13.8)	266 (18.3)	48 (22)	77 (35)
8 (203)	0.38 (9.5)	200 (13.8)	266 (18.3)	77 (35)	121 (55)
10 (254)	0.44 (11)	200 (13.8)	266 (18.3)	114 (52)	176 (80)
12 (305)	0.50 (12.5)	200 (13.8)	266 (18.3)	166 (62)	248 (112)
14.25 (362)	0.63 (16)	200 (13.8)	266 (18.3)	217 (99)	340 (154)
16.25 (413)	0.69 (17.5)	200 (13.8)	266 (18.3)	283 (129)	434 (197)
18" and larger – Contact Specialty Plastics, +1 225-752-2705 or 800-752-7473					

NOTES: (1) These pressure ratings are based on a maximum allowable hoop stress of 4,389psi, a maximum allowable axial stress of 1,932psi for sustained loads and a maximum allowable axial stress of 2,567psi for occasional loads. Normally, this will limit elongations to acceptable levels for use with enclosed impeller type pumps. However, these calculations are highly dependent on pump design, particularly the area of the bowls & impellers subject to the pressure force.

ANSI 150# FLANGE DIMENSIONS

Size (ID) (in.)	Nominal Pipe OD (in.)	Flange OD (in.)	Bolt Circle (in.)	Bolt Hole (in.)	# Bolts (in.)	Spot Facing (in.)	Flange Thickness (-5%, +0.19") (in.)	Bolt Torque (ft-lbs)
2	2.50	6.00	4.75	3/4	4	1.69	0.69	78-117
3	3.50	7.50	6.00	3/4	4	1.69	0.81	84-126
4	4.50	9.00	7.50	3/4	8	1.69	1.00	48-72
6	6.63	11.00	9.50	7/8	8	1.88	1.19	98-147
8	8.75	13.50	11.75	7/8	8	1.88	1.38	98-147
10	10.88	16.00	14.25	1	12	2.13	1.63	110-165
12	13.00	19.00	17.00	1	12	2.13	1.88	129-194
14.25	15.50	21.00	18.75	1 1/8	12	2.38	1.93	178-267
16.25	17.63	23.50	21.25	1 1/8	16	2.38	2.13	153-230
18.25	19.75	25.00	22.75	1 1/4	16	2.63	2.19	200-300
20.25	22.00	27.50	25.00	1 1/4	20	2.63	2.31	200-300

NOTES: 1. Torque values are valid for bolting to flat surfaces. For bolting flanges with a spider, torque values are 55 to 70% of these values. Excessive bolt torque may damage the flange. 1ft-lb = 1.356N-m.

2. Washers should be used underneath all bolt heads and nuts. Washers must be SAE "Narrow" Series.

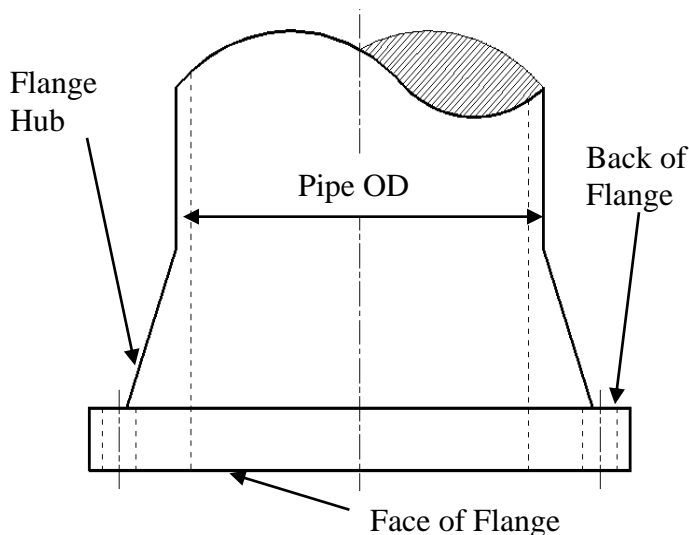
3. Minimum bolt circles and O.D.s for flanges:

6" 5/8" bolts - 8.31" and 10.00"; 6" 3/4" bolts - 8.50" and 10.38"

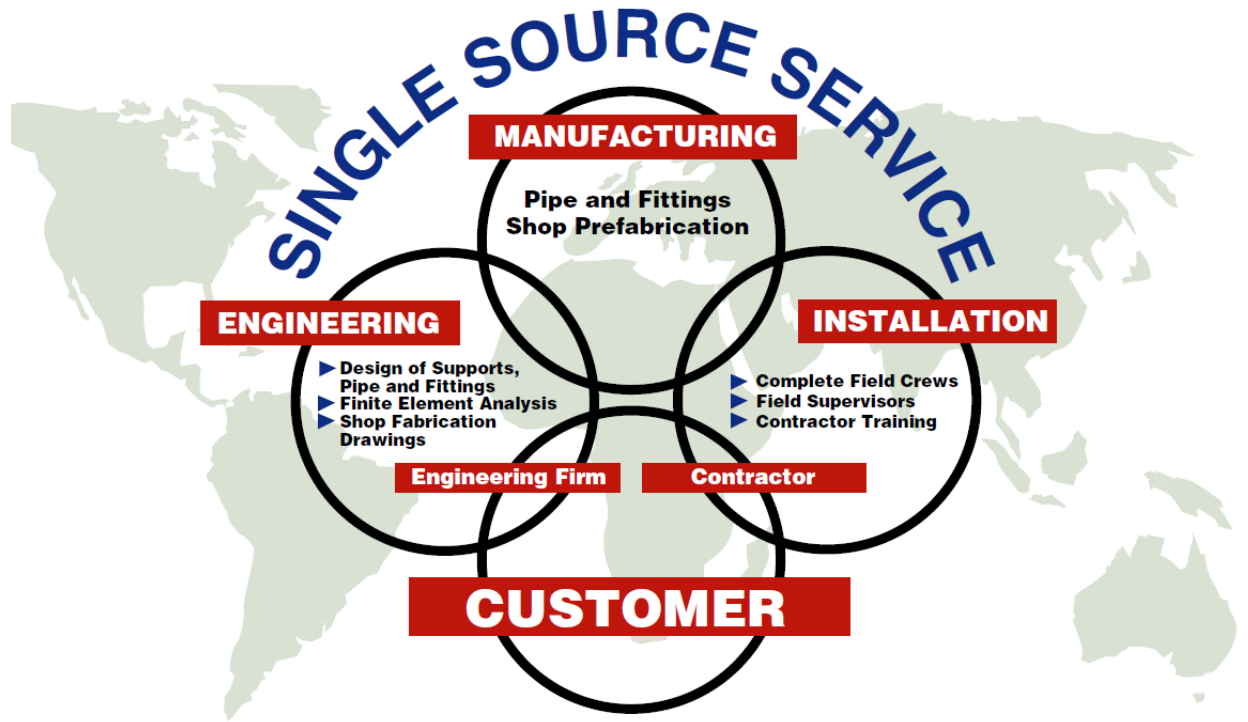
8" 5/8" bolts - 10.44" and 12.13"; 8" 3/4" bolts - 10.63" and 12.50"

10" 5/8" bolts - 12.56" and 14.25"; 10" 3/4" bolts - 12.75" and 14.63"; 10" 7/8" bolts - 13.00" and 15.13"

12" 5/8" bolts - 14.69" and 16.38"; 12" 3/4" bolts - 14.88" and 16.75"; 12" 7/8" bolts - 15.13" and 17.25"



FIBERBOND® Series 20HV Flanged Column Pipe can be supplied with either 1) standard flanges for use with submersible pumps or 2) "machineable" flanges to be cut for registers by the pump manufacturer (machineable flanges are slightly thicker and can have up to 1/8" machined off of the face before cutting the register groove). Notches can also be cut into these flanges to allow for the passage of a cable. **The back of the flange and the OD of the PIPE must not be machined, as this will structurally weaken the column.** For special machining assistance, contact Future Pipe Industries at (225) 752-2705.



OVER 40 YEARS EXPERIENCE IN SUCCESSFUL APPLICATIONS OF FIBERGLASS PIPE SYSTEMS.

<p>Phone +1 (225) 752-2705</p>	<p>FIBERBOND®</p>	
<p>Toll Free (U.S.A.) (800-752-7473)</p>	<p>Future Pipe Industries, Inc. 15915 Perkins Road Baton Rouge, LA 70810 U.S.A.</p>	<p>ISO 9001 Certified</p>
	<p>www.fiberbond.com</p>	