



# HOBAS

**HOBAS PIPE USA**

## Technical Advice Sheet

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### **FWC Coupling Assembly**

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#### **General:**

The HOBAS PIPE FWC coupling is a structural sleeve that provides a gasket-sealed, leak-free connection. Due to its flexibility, the FWC Coupling allows some angular deflection to allow simple grade and line corrections or gradual radius curves. See table under item 4 for adjustable angular deflection by pipe diameter.

#### **Assembly:**

1. Remove any dirt or mud buildup from the pipe spigot and the FWC gasket. Assure no stones, dirt buildup, or debris is under the FWC coupling gasket seal lips. Be careful not to damage the gasket during the cleaning process.
2. Apply lubricant on both the FWC coupling gasket and the spigot. Give special attention to the spigot bevel.
3. Most frequently the pipes are assembled by moving the bell end (coupling) over the previously installed spigot end. Place the pipe so that the

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coupling/bell end is in contact with the installed pipe spigot. Align the pipe sections carefully and push or pull the pipe until the coupling reaches the reference line on the pipe being joined. Be careful not to push the pipe past the center register of the coupling. If pushing directly on the spigot, protect the end with wood timbers.

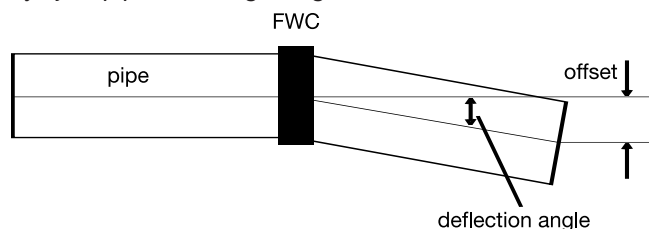
The approximate joining forces for a properly aligned and lubricated coupling are shown below:

Nominal Pipe Size (in)	Average FWC Joining Force in "Straight" Alignment (lbs.)	Nominal Pipe Size (in) cont.	Average FWC Joining Force in "Straight" Alignment (lbs.), cont.	Nominal Pipe Size (in) cont.	Average FWC Joining Force in "Straight" Alignment (lbs.), cont.
18	1500	42	3500	66	5500
20	1700	44	3600	69	5750
24	2000	45	3750	72	6000
26	2150	48	4000	78	6500
28	2300	51	4250	84	6800
30	2500	54	4500	85	7000
33	2700	57	4750	90	7500
36	3000	60	5000	96	8000
40	3400	63	5250	104	9000
				110	9500

- If a small change in line direction is needed, simply move the unjoined end of the pipe to the desired position. Any angular deflection within the permissible limits (see chart below) should only be done after the pipe has been completely "homed" straight. If the deviation is large, make the correction over several joints. Do not allow more than a 1-inch gap between the center register of the coupling and the pipe end.

Pipe Diameter (in.)	Max. Angle (degrees)	Max. Offset @ 20 ft.	Max. Offset @ 10 ft.
18-20	3	12	6
24-33	2	8	4
36-42	1-1/2	6	3
44-60	1	4	2
63-78	3/4	3	1-1/2
84-110	1/2	2	1

\*\*NOTE: Always join pipes in straight alignment and then offset to the desired angle.



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