

Flexible hose must be used to connect each rotating union to its supply or drain piping. Use of rigid piping will drastically reduce the life of the rotating union due to its inflexibility. Also, the union should not be burdened with the weight of the pipe and fittings. The hose should be connected directly to the union and suitable support should be provided for the fittings and supply pipe beyond the hose. For cooling water, air, vacuum and other applications below 200°F, a single braid rubber hose similar to Parker Push-Lok #801-8 should be used. Use of plastic hose is not recommended due to its inflexibility. Use braided metal hose for all applications involving hot fluids, such as hot water, hot oil or steam above 200°F. Make certain that the pressure rating of the hose is above the operating pressure of the system.

FIGURE 2 illustrates the proper method of installing the hose to the union. <u>CAUTION:</u> Installing the hose to the union after it is mounted to the shaft can cause damage to the ball bearing because of the tightening wrench torque. Premature failure will result.



FIG 1.

Minimum Recommended Hose Lengths			
Hose Diameter		Length	
1/8″	х	10″	
1/4″	х	12″	
3/8″	х	12″	
1/2″	х	12″	
3/4″	х	14″	
1″	х	16″	
1 1/4″	х	18″	
1 1/2″	х	20″	
2″	х	24″	
2 1/2″	х	26″	
3″	х	28″	
4″	х	30″	

FIGURE 3 illustrates recommended hose installations. Unions 2 1/2" and larger and **applications above 300°F** should be connected with two hoses and a 90° elbow as illustrated in Fig. 3B. <u>CAUTION</u>: A straight hose from the header to the union when fully pressurized becomes as rigid as a solid pipe. This rigidity and expansion due to temperature can drastically shorten the service life of the union.

FIGURE 4 illustrates the reciprocating shaft of many printing press applications. Since the union is rotating and reciprocating at the same time, hose flexibility is of utmost importance. The supply header should be located as close to the center line of the reciprocation as possible to prevent hose CAUTION: THE twistina. HOSE SHOULD NOT PULL ON THE HEAD-FR WHEN THE UNION RECIPRO-CATES TO ITS FARTHEST EXTENT FROM THE SUPPLY HEADER.



FIG 4.



AVOID SHARP BENDS OR TWIST-ED HOSE. Extreme bends or torsion loading can diminish or eliminate the flexibility of the hose. Hoses should always be curved, not bent, to obtain maximum rotating union life