




HYDROSTATIC PRESSURE TEST AT 20°C

※ 4" Size – JWPress GRIP RING Performance

Maximum Slippage		
Size	Maximum Slippage per joint after 1 hr	Maximum additional slippage per joint after first hour
4"	0.157 in	0.004 in
	3.988 mm	0.102 mm

Pressure (kgf)	5	10	15	20	25	30	35	43		43	Remark
								Initial	After 1hr		
Maker											
Major Competitor Coupling 4" Temper: 20°C											
	Left	0.22	0.54	0.68	0.76	0.85	0.99	1.13	1.26	1.33	
Right	0.24	0.30	0.95	1.00	1.16	1.18	1.24	1.44	1.46	1.47	
<p>Pressure 43 Kgf, After 1 hr. Competitor: Slippage 1.33~1.46mm – within spec. Jungwoo : Slippage 0.65~0.33mm – within spec, but half of Competitor</p> <p>After 2 hr. Competitor: Slippage 0.01mm more - within spec. Jungwoo : Slippage 0.00mm more – within spec, but half of Competitor</p>											
Jungwoo Coupling 4" Temper: 20°C	0.12	0.4	0.49	0.53	0.56	0.58	0.61	0.63	0.65	0.65	
	0.04	0.18	0.26	0.28	0.29	0.30	0.30	0.32	0.33	0.33	

[Test Date: 2014. 02.04]

EXPLANATION ON TEST BY ASME B16.51 – 2011

14.2 Hydrostatic Pressure Test at 20°C (68°F)

14.2.1 Test Assembly. The test assembly shall contain a press-connection fitting located between two sections of copper tube as shown in Fig. 4. The sample shall not be restrained in the test assembly. The sample shall be filled with water to a pressure of $4\ 140\ \text{kPa} \pm 50\ \text{kPa}$ ($600\ \text{psi} \pm 7\ \text{psi}$) at a temperature of $20^\circ\text{C} \pm 5^\circ\text{C}$ ($68^\circ\text{F} \pm 9^\circ\text{F}$) for a period of 48 h.

14.2.2 Acceptance Criteria. During the first hour, the maximum slippage of each joint shall be as specified in Table 2 (Table I-2). Once the 1-h slippage is recorded, the maximum additional slippage after the first hour shall not exceed the distance specified in Table 2 (Table I-2). During the test, there shall be no visible leakage of the joint.

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Table I-2 Maximum Slippage

Standard Water Tube Size	Maximum Slippage (in.) per Joint After 1 hr	Maximum Additional Slippage (in.) per Joint After First Hour
$\frac{3}{8}$	0.012	0.002
$\frac{1}{2}$	0.012	0.002
$\frac{3}{4}$	0.012	0.002
1	0.032	0.002
$1\frac{1}{4}$	0.039	0.002
$1\frac{1}{2}$	0.059	0.002
2	0.079	0.002
$2\frac{1}{2}$	0.098	0.004
3	0.118	0.004
$3\frac{1}{2}$	0.138	0.004
4	0.157	0.004