FIG. 7088, 7089 & 7090

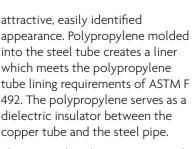
Gruvlok DI-LOK® Nipple ● Di-Electric Pipe Connection

The Gruvlok Fig. 7088, 7089 and 7090 DI-LOK Nipple inhibits the formation of a galvanic cell between steel pipe and copper tube at the transition from threaded or grooved-end steel pipe to a Gruvlok Advanced Copper Method pipe system. Patented Gruvlok Advanced Copper Method tube end preparation makes it possible to connect copper tube to steel pipe using a standard Gruvlok Figure 7400 Rigidlite Coupling or a Figure 7012 Gruvlok Flange; costly special adapter couplings are not needed. Gruvlok DI-LOK Nipples are easily installed between the copper tube and steel pipe in groove to groove or groove to thread configurations, producing a dielectric connection.

The separation of copper from steel by the DI-LOK Nipple virtually eliminates the galvanic cell created by the dissimilar metals. The Gruvlok Figure 7400 Rigidlite Coupling and Figure 7012 Gruvlok Flange provide tines which produce an electrical connection on the outside of the DI-LOK Nipple providing a means for transmission of stray current outside of the fluid media effectively eliminating acceleration of corrosion to the wetted metals.

The Gruvlok DI-LOK Nipple is manufactured from ASTM A 513 steel tube which provides tighter dimensional controls to that of steel pipe. The tube is zinc electroplated per ASTM B 633 which provides added corrosion resistance and produces an

appearance. Polypropylene molded into the steel tube creates a liner which meets the polypropylene tube lining requirements of ASTM F 492. The polypropylene serves as a dielectric insulator between the copper tube and the steel pipe.



The grooved-ends are cut grooved to standard Gruvlok groove dimensions, meeting the dimensional requirements of AWWA C606. The NPT threaded end of the DI-LOK Nipple is in conformance with ANSI B1.20.1.

The DI-LOK Nipple is designed for use at temperatures from - $40^{\circ}F$ to $230^{\circ}F$ ($-40^{\circ}C$ to $110^{\circ}C$) and pressures to 300 PSIG (20.7bar) in a wide range of applications.

MATERIAL SPECIFICATIONS

HOUSING: Steel Tube to ASTM A 513

LINER: Polypropylene to ASTM D 4140

INSTALLATION & ASSEMBLY: For installation and assembly of groovedend connections, see "Fig. 7400 Gruvlok Rigidlite Coupling" and "Fig. 7012 Gruvlok Flange".

FIG. 7088 - Groove by Thread

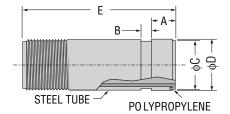


FIG. 7089 - Groove by Groove

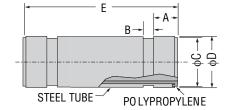




FIGURE 7088, 7089 & 7090 DI-LOK NIPPLES									
Nom. IPS Pipe Size	0.D.	A +/030 +/76	B +/030 +/76	C Actual	Tolerance	D Actual	Tolerance	E +/090 +/-2.29	Approx. Wt. Ea.
NIPS/DN	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	Lbs./Kg
3/4	1.050	n/a	n/a	7/8	n/a	1 ½16	+.005/000	3.000	0.2
19	26.7			22		26.7	+.13/00	76	0.1
1	1.315	n/a	n/a	11//8	n/a	1 ½16	+.005/000	4.000	0.4
25	33.7			28		33.7	+.13/00	102	0.2
11/4	1.660	n/a	n/a	1½	n/a	1 ¹¹ / ₁₆	+.006/000	4.000	0.6
32	42.4			37		42.4	+.15/00	102	0.3
1½	1.900	n/a	n/a	1 ¹¹ / ₁₆	n/a	2	+.006/000	4.000	0.8
40	48.3			43		48.3	+.15/00	102	0.4
2	2.375	5/8	5/16	21/4	-0.015	23/8	+.007/000	4.000	1.0
50	60.3	15.88	7.92	57	-0.37	60.3	+.18/00	102	0.5
21/2	2.875	5/8	5/16	23/4	-0.018	27/8	+.008/000	6.000	1.6
65	73.0	15.88	7.92	69	-0.45	73.0	+.20/00	152	0.7
3	3.500	5/8	5/16	3%	-0.018	31/2	+.010/000	6.000	2.0
80	88.9	15.88	7.92	85	-0.45	88.9	+.25/00	152	0.9
4	4.500	5/8	3/8	45/16	-0.020	41/2	+013/000	6.000	4.5
100	114.3	15.88	9.53	110	-0.50	114.3	+.33/00	152	2.0
5	5.563	5/8	3/8	5%	-0.022	5%16	±.010	6.000	7.3
125	141.3	15.88	9.53	137	-0.55	141.3	±.25	152	3.3
6	6.625	5/8	3/8	6½	-0.022	65%	±.015	6.000	9.5
150	168.3	15.88	9.53	164	-0.55	168.3	±.38	152	4.3`

Figure 7088 available in Nominal Pipe Sizes 2" through 4" only. Figure 7089 available in Nominal Pipe Sizes 2" through 6" only. Figure 7090 available in Nominal Pipe Sizes 3/4" through 2" only.

