

OPERATING PROCEDURES FOR RIMBOLT TEST PLUGS**WARNINGS!**

- **ALL WARNING STATEMENTS MUST BE CAREFULLY OBSERVED TO HELP PROTECT AGAINST INJURY AND DAMAGE TO PERSONS AND PROPERTY.**
- **WHEN PRESSURE TESTING KEEP ALL PERSONNEL CLEAR OF THE TEST PLUG AND IMMEDIATE TEST AREA.**
- **WHEN SYSTEM IS UNDER PRESSURE DO NOT, UNDER ANY CIRCUMSTANCES ATTEMPT TO ADJUST, MOVE, OR CHANGE THE TEST PLUG IN ANY WAY, SHAPE, OR FORM.**
- **DO NOT EXCEED THE MAXIMUM TEST PRESSURE LISTED.**

INSTALLATION INSTRUCTIONS

1. Clean inside surface of pipe being tested of any dirt, scale or debris.
2. Place plug into pipe and tighten seal hex nuts in a star like pattern. Tighten to 25%, 50%, 75% and 100% of torque values listed in Table 1. Continue until final torque is reached. If plug is a Medium Pressure (MP) Rim Bolt, repeat procedure for lockbolts. **SEE INSTALLATION TORQUES IN TABLE 1.**
3. Make required pressure connections to plug for hydro test.
4. At this time keep all personnel away from pipe being tested.
5. Pressurize sealed pipe. **SEE MAXIMUM TEST PRESSURE IN TABLE 1.**
6. Release test pressure. Remove fittings as required.
7. Loosen seal hexnuts and then lockbolts.
8. Withdraw plug from the pipe.

QUESTIONS? Contact EST Customer Service at any of the following locations with questions.

In USA and Canada: tel: 800-355-7044, fax: 215-721-1101, e-mail: info@expansionseal.com

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On the Internet: www.expansionseal.com

Expansion Seal Technologies is part of the EST Group of companies. **EST Group** provides a complete range of repair products, services and replacement parts covering the life cycle of tubular heat exchangers and condensers; additionally EST provides products and services to facilitate pressure testing pipe, piping systems, pressure vessels and their components. Visit EST Group on the internet at www.estgrp.com.



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Table 1. LP and MP Rimbolt Test Plug Installation Torque and Working Pressures

LOW PRESSURE RIMBOLT			MEDIUM PRESSURE RIMBOLT			
PLUG SIZE	MAX PRESSURE RATING (psi)	SEAL INSTALLATION TORQUE (Ft/Lbs)	PLUG SIZE	MAX PRESSURE RATING (psi)	SEAL INSTALLATION TORQUE (Ft/Lbs)	LOCKBOLT INSTALLATION TORQUE (Ft/Lbs)
8	30	15	8	70	15	APPROX 15-20
10	19	20	10	45	20	APPROX 15-20
12	13	20	12	31	20	APPROX 15-20
13-1/2	10	20	13-1/2	23	20	APPROX 15-20
14	10	20	14	23	20	APPROX 15-20
15	7	20	15	17	25	APPROX 15-20
16	7	20	16	17	25	APPROX 15-20
18	6	25	18	14	25	APPROX 15-20
20	5	25	20	11	25	APPROX 15-20
22	4	25	22	9	25	APPROX 15-20
24	3	25	24	8	25	APPROX 15-20
26	3	25	26	7	25	APPROX 15-20
28	2	25	28	6	25	APPROX 15-20
30	2	25	30	5	25	APPROX 15-20
32	2	25	32	4	25	APPROX 15-20
34	2	25	34	4	25	APPROX 15-20
36	1	25	36	3	25	APPROX 15-20



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SPECIALISTS IN TUBE TESTING, SLEEVING AND PLUGGING TECHNOLOGY

AN ISO-9001 REGISTERED COMPANY

Rim Bolt Test Plug



Medium Pressure Rim Bolt Test Plug

Rim Bolt Test Plugs

Inflate-A-Plug

Wing Nut Test Plug

Threaded Pipe Stopper

Economy Test Plug

Bolt Type Test Plug

For Low Pressure Pipe Applications

EST Rim Bolt Test Plugs are used on low to medium pressure applications, such as welding vent plugs. Special versions are also available for use as foreign material exclusive (FME) barriers during in place valve seat resurfacing.

- Standard construction is painted carbon steel with neoprene seals.
- Optional fluoroelastomer* or silicone seals available. (Not stocked. Consult factory for price and delivery.)
- Bolts tighten against hardened steel washers. This reduces wear and simplifies installation and removal.
- Large by-pass positioned close to the bottom of the plug simplifies filing and draining when used as a test plug. This also permits for high volumes of purge gas flows.
- Optional handles simplify and speed installation.
- Sizes 8" through 36".
- Additional sizes and materials available, consult factory

* Viton® or equivalent. Viton® is a registered trademark of DuPont Dow Elastomers.



Low Pressure Rim Bolt Test Plug



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SPECIALISTS IN TUBE TESTING AND PLUGGING TECHNOLOGY

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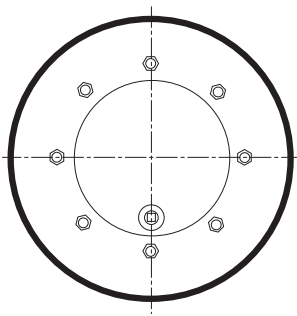
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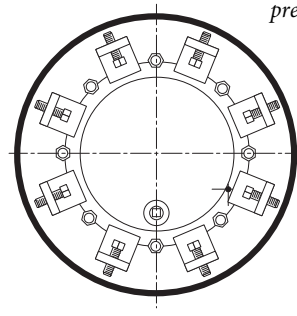
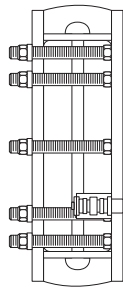
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QUALITY SYSTEM ISO-9001 CERTIFIED

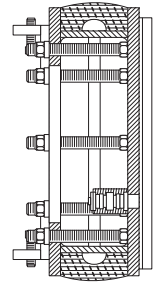
Rim Bolt Test Plugs



Low
pressure



Medium
pressure



Nom Size	Low Pressure Sch 40 Part No.	Port (NPT)	Unexp. OD	Max. Pressure		Nom. Size	Med. Pressure Sch 40 Part. No.	Port (NPT)	Unexp. OD	Max. Pressure	
				psi	bar					psi	bar
8	RBL-0798-N	1 1/4	7.75	30	2.1	8	RBM-0798-N	1 1/4	7.75	70	4.8
10	RBL-1002-N	1 1/4	9.75	19	1.3	10	RBM-1002-N	1 1/4	9.75	45	3.1
12	RBL-1194-N	1 1/4	11.69	13	0.90	12	RBM-1194-N	1 1/4	11.69	31	2.1
14	RBL-1312-N	1 1/2	12.88	10	0.69	14	RBM-1312-N	1 1/2	12.88	23	1.6
16	RBL-1500-N	1 1/2	14.75	7	0.48	16	RBM-1500-N	1 1/2	14.75	17	1.2
18	RBL-1688-N	1 1/2	16.63	6	0.41	18	RBM-1688-N	1 1/2	16.63	14	0.96
20	RBL-1881-N	1 1/2	18.56	5	0.34	20	RBM-1881-N	1 1/2	18.56	11	0.75
22	RBL-2125-N	1 1/2	21.00	4	0.27	22	RBM-2125-N	1 1/2	21.00	9	0.62
24	RBL-2262-N	1 1/2	22.38	3	0.21	24	RBM-2262-N	1 1/2	22.38	8	0.55
26	RBL-2525-N	2	25.00	3	0.21	26	RBM-2525-N	2	25.00	7	0.48
28	RBL-2725-N	2	27.00	2	0.14	28	RBM-2725-N	2	27.00	6	0.41
30	RBL-2925-N	2	29.00	2	0.14	30	RBM-2925-N	2	29.00	5	0.34
32	RBL-3062-N	2	30.38	2	0.14	32	RBM-3062-N	2	30.38	4	0.27
34	RBL-3262-N	2	32.38	2	0.14	34	RBM-3262-N	2	32.38	4	0.27
36	RBL-3450-N	2	34.25	1	0.07	36	RBM-3450-N	2	34.25	3	0.21

Ordering Information

When ordering, please specify the following information:

- Size information (OD, ID & wall thickness)
- Pipe materials
- Maximum test pressure
- Temperature
- Fluid medium

Note: Please contact factory for all non-metallic applications such as plastics, concrete, etc. These will be evaluated on an as-needed basis.

Special sizes available upon request.
Contact factory for information.

Specifications subject to change without notice.