

GripTight® Elbow Test Plug Technical Specifications

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Thank you for choosing to use a GripTight Elbow Test Plug.

Proper maintenance of your GripTight Elbow Test Plugs should always include lubrication of the shaft threads where the Hex Nut(s) is/are installed and both sides of the Hardened Washer(s) with antiseize, as well as lubrication of the tapered surface of the cone with an appropriate lubricant such as Molykote® DX paste. Ensure the Seal, Gripper Teeth, and the inside of the unit under test are not exposed to any lubricant.

WARNING

- ⚠ GTLBO plugs are for use in all Carbon Steel, Stainless Steel and Alloy pipes with a hardness up to HRC 32. Contact EST Customer Service if pipes to be tested have a hardness greater than HRC 32.
- ⚠ Contact EST Group Customer Service if the test pressure required exceeds the maximum plug rating or is in excess of 80% of specified minimum yield stress for host pipe, tube, or equipment.
- ⚠ Pressure testing is inherently dangerous. Strict adherence to the operating procedures and industry standard safety practices could prevent injury to personnel and damage to equipment.
- ⚠ All personnel must be clear of the GripTight Elbow Test Plug during pressure testing. Never stand in the potential path of a GripTight Elbow Test Plug during testing. Always understand and observe industry standard safe practices for distance between personnel and equipment being tested.
- ⚠ Pressures must never exceed the maximum pressure rating of any component in a system or the maximum pressure rating of the GripTight Elbow Test Plug being used.
- ⚠ For safety, an incompressible liquid such as water should be used as the test medium. Residual air or gas should be displaced or vented from the pipe prior to testing.
- ⚠ If testing pneumatically, every attempt to limit potential damage to equipment or injury to personnel must be made. Testing procedures and protocol should adhere to the provisions for pneumatic testing set forth in the current ASME PCC-2 Repair of Pressure Equipment and Piping.

Questions? Contact EST Group Customer Service at any of the following locations.

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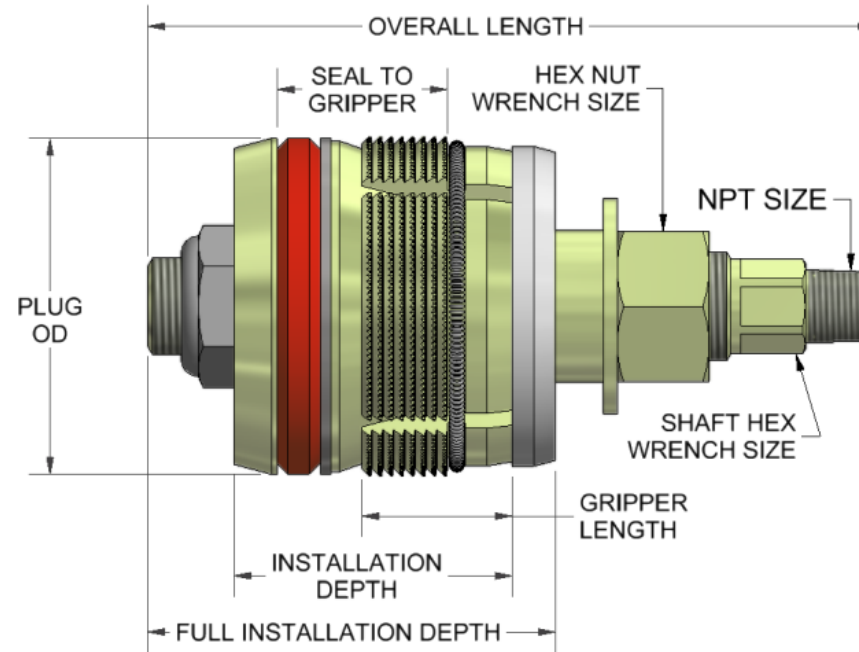
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GripTight® Elbow Test Plug Technical Specifications

**Figure 1**

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See Figure 1

Part Number	Nominal Pipe Size	Elbow Schedule	Functional I.D. Range				Plug OD		Total clearance from Min. I.D.		NPT Size	Shaft / Port I.D.		Overall Length		Seal to Gripper		Gripper Length		Installation Depth		Full Installation Depth		Maximum Test Pressure		Shaft Hex Wrench Size	Hex Nut Wrench Size	Approximate Shipping Weight	
			(in)		(mm)		(in)	(mm)	(in)	(mm)		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(PsiG)	(BarG)	(in)	(in)			(lbs)	(kg)
			Min.	Max.	Min.	Max.																							
GTLBO-2P160	2	160	1.66	1.77	42.2	45.0	1.60	40.6	0.06	1.5	1/4	0.25	6.4	5 - 3/4	146	1.53	38.8	0.85	21.6	2.21	56.2	2.67	67.7	3350	231	1/2	15/16	2 - 1/2	1.1
GTLBO-2P80		80/XS	1.91	1.99	48.5	50.5	1.81	46.0	0.10	2.5	3/8	0.44	11.2	6	152	1.51	38.5	0.85	21.6	2.24	56.9	2.86	72.8	3350	231	11/16	1 - 5/16	2 - 1/2	1.1
GTLBO-2P40		40/STD	2.04	2.12	51.8	53.8	1.94	49.3	0.10	2.5	3/8	0.44	11.2	6	152	1.51	38.5	0.85	21.6	2.24	56.9	2.86	72.8	3350	231	11/16	1 - 5/16	2 - 3/4	1.2
GTLBO-2P10		10	2.10	2.22	53.3	56.4	2.00	50.8	0.10	2.5	3/8	0.44	11.2	6	152	1.57	39.9	0.85	21.6	2.29	58.3	2.92	74.2	3350	231	11/16	1 - 5/16	3	1.4
GTLBO-2P5		5	2.22	2.30	56.4	58.4	2.12	53.8	0.10	2.5	3/8	0.44	11.2	6	152	1.57	39.9	0.85	21.6	2.29	58.3	2.92	74.2	3350	231	11/16	1 - 5/16	3	1.4
GTLBO-25PXXS	2 1/2	XXS	1.74	1.91	44.2	48.5	1.68	42.7	0.06	1.5	1/4	0.25	6.4	5 - 3/4	146	1.53	38.8	0.85	21.6	2.21	56.2	2.67	67.7	3350	231	1/2	15/16	2 - 1/2	1.1
GTLBO-25P160		160	2.10	2.22	53.3	56.4	2.00	50.8	0.10	2.5	3/8	0.44	11.2	6	152	1.57	39.9	0.85	21.6	2.29	58.3	2.92	74.2	3350	231	11/16	1 - 5/16	3	1.4
GTLBO-25P80		80/XS	2.27	2.45	57.7	62.2	2.17	55.1	0.10	2.5	3/8	0.44	11.2	6	152	1.57	39.9	0.85	21.6	2.29	58.3	2.92	74.2	3350	231	11/16	1 - 5/16	4	1.8
GTLBO-25P40		40/STD	2.44	2.54	62.0	64.5	2.34	59.4	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	1.55	39.5	1.00	25.4	2.55	64.9	3.55	90.3	3350	231	1	1 - 7/8	6	2.7
GTLBO-25P10		10	2.60	2.74	66.0	69.6	2.50	63.5	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	1.86	47.2	1.11	28.2	2.72	69.1	3.72	94.5	3350	231	1	1 - 7/8	6 - 3/4	3.1
GTLBO-25P5	5	2.68	2.78	68.1	70.6	2.58	65.5	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	1.86	47.2	1.11	28.2	2.72	69.1	3.72	94.5	3350	231	1	1 - 7/8	6 - 3/4	3.1	
GTLBO-3PXXS	3	XXS	2.27	2.45	57.7	62.2	2.17	55.1	0.10	2.5	3/8	0.44	11.2	6	152	1.57	39.9	0.85	21.6	2.29	58.3	2.92	74.2	3350	231	11/16	1 - 5/16	4	1.8
GTLBO-3P160		160	2.60	2.74	66.0	69.6	2.50	63.5	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	1.86	47.2	1.11	28.2	2.72	69.1	3.72	94.5	3350	231	1	1 - 7/8	6 - 3/4	3.1
GTLBO-3P80		80/XS	2.87	2.98	72.9	75.7	2.77	70.4	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	1.83	46.5	1.11	28.2	2.69	68.4	3.69	93.8	3350	231	1	1 - 7/8	7 - 1/2	3.4
GTLBO-3P40		40/STD	3.04	3.14	77.2	79.8	2.94	74.7	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	1.83	46.5	1.11	28.2	2.69	68.4	3.69	93.8	3350	231	1	1 - 7/8	8	3.6
GTLBO-3P10		10	3.23	3.34	82.0	84.8	3.13	79.5	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.07	52.6	1.74	44.2	3.32	84.4	4.32	109.8	3350	231	1	1 - 7/8	8	3.6
GTLBO-3P5	5	3.30	3.41	83.8	86.6	3.20	81.3	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.07	52.6	1.74	44.2	3.32	84.4	4.32	109.8	3350	231	1	1 - 7/8	8	3.6	
GTLBO-35PXXS	3 1/2	XXS	2.70	2.89	68.6	73.4	2.60	66.0	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	1.94	49.3	1.11	28.2	2.80	71.2	3.80	96.6	3350	231	1	1 - 7/8	7	3.2
GTLBO-35P80		80/XS	3.33	3.44	84.6	87.4	3.23	82.0	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.07	52.6	1.74	44.2	3.32	84.4	4.32	109.8	3350	231	1	1 - 7/8	9	4.1
GTLBO-35P40		40/STD	3.52	3.63	89.4	92.2	3.42	86.9	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.07	52.6	1.74	44.2	3.32	84.4	4.32	109.8	3350	231	1	1 - 7/8	10	4.5
GTLBO-35P10		10	3.73	3.84	94.7	97.5	3.63	92.2	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.13	54.0	1.74	44.2	3.38	85.8	4.38	111.2	3350	231	1	1 - 7/8	11 - 1/4	5.1
GTLBO-35P5		5	3.80	3.91	96.5	99.3	3.70	94.0	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.13	54.0	1.74	44.2	3.38	85.8	4.38	111.2	3350	231	1	1 - 7/8	11 - 1/4	5.1
GTLBO-4PXXS	4	XXS	3.12	3.32	79.2	84.3	3.02	76.7	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.18	55.4	1.74	44.2	3.43	87.2	4.43	112.6	3350	231	1	1 - 7/8	8 - 3/4	4.0
GTLBO-4P160		160	3.41	3.57	86.6	90.7	3.31	84.1	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.15	54.7	1.74	44.2	3.40	86.5	4.40	111.9	3350	231	1	1 - 7/8	9 - 1/2	4.3
GTLBO-4P120		120	3.60	3.74	91.4	95.0	3.50	88.9	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.10	53.3	1.74	44.2	3.35	85.1	4.35	110.5	3350	231	1	1 - 7/8	10 - 1/4	4.6
GTLBO-4P80		80/XS	3.80	3.91	96.5	99.3	3.70	94.0	0.10	2.5	1/2	0.56	14.2	8 - 7/16	214	2.13	54.0	1.74	44.2	3.38	85.8	4.38	111.2	3350	231	1	1 - 7/8	11 - 1/4	5.1
GTLBO-4P40		40/STD	4.00	4.11	101.6	104.4	3.89	98.8	0.11	2.8	1/2	0.56	14.2	8 - 7/16	214	2.10	53.3	1.74	44.2	3.35	85.1	4.35	110.5	3350	231	1	1 - 7/8	12	5.4
GTLBO-4P10	10	4.23	4.34	107.4	110.2	4.12	104.6	0.11	2.8	1/2	0.56	14.2	8 - 7/16	214	2.10	53.3	1.74	44.2	3.35	85.1	4.80	121.9	3350	231	1	1 - 7/8	12	5.4	
GTLBO-4P5	5	4.28	4.47	108.7	113.5	4.17	105.9	0.11	2.8	1/2	0.56	14.2	9 - 5/8	244	2.70	68.6	1.90	48.3	4.00	101.6	6.00	152.4	3350	231	1	1 - 7/8	12	5.4	
GTLBO-5P160	5	160	4.28	4.47	108.7	113.5	4.17	105.9	0.11	2.8	1/2	0.56	14.2	9 - 5/8	244	2.70	68.6	1.90	48.3	4.00	101.6	6.00	152.4	3350	231	1	1 - 7/8	12	5.4
GTLBO-5P120		120	4.53	4.69	115.1	119.1	4.42	112.3	0.11	2.8	1/2	0.56	14.2	9 - 5/8	244	2.70	68.6	1.90	48.3	4.00	101.6	6.00	152.4	3350	231	1	1 - 7/8	12	5.4
GTLBO-5P80		80	4.78	4.91	121.4	124.7	4.67	118.6	0.11	2.8	1/2	0.56	14.2	9 - 5/8	244	2.70	68.6	1.90	48.3	4.00	101.6	6.00	152.4	3350	231	1	1 - 7/8	12	5.4
GTLBO-6PXXS	6	XXS	4.59	4.83	116.6	122.7	4.48	113.8	0.11	2.8	1/2	0.56	14.2	9 - 5/8	244	2.70	68.6	1.90	48.3	4.00	101.6	6.00	152.4	3350	231	1	1 - 7/8	12	5.4

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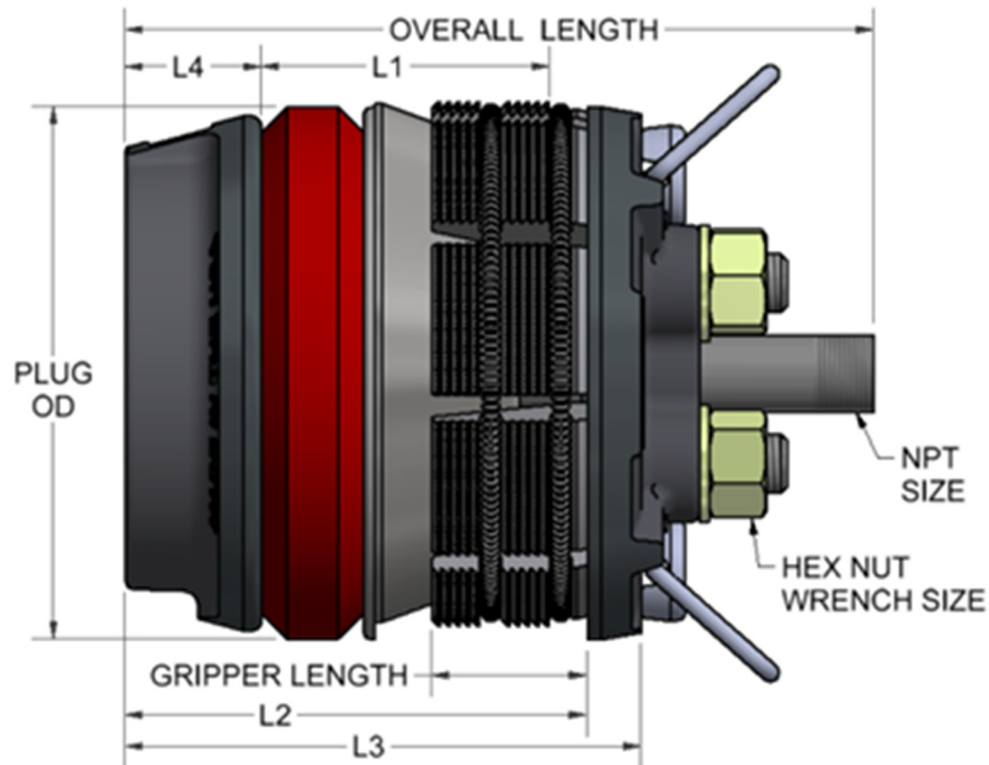


Figure 2

Questions? Contact EST Group Customer Service at any of the following locations.

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GripTight® Elbow Test Plug Technical Specifications

See Figure 2

Part Number	Nominal Pipe Size	Elbow Schedule	Functional I.D. Range				Plug OD		Total clearance from Min. I.D.		NPT Size	Shaft / Port I.D.		Overall Length		L1		Gripper Length		L2		L3		L4		Maximum Test Pressure		Number of Shafts	Hex Nut Wrench Size	Approximate Shipping Weight	
			(in)		(mm)																										
			NPS	Min.	Max.	Min.	Max.	(in)	(mm)	(in)		(mm)	-	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(PsiG)	(BarG)			-	(in)
GTLBO-5P40	5	40/STD	4.91 - 5.12	124.7 - 130.0	4.80	121.9	0.11	2.8	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	3/4	21	10		
GTLBO-5P10		10	5.21 - 5.33	132.3 - 135.4	5.10	129.5	0.11	2.8	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	3/4	23	10		
GTLBO-5P5		5	5.27 - 5.44	133.9 - 138.2	5.16	131.1	0.11	2.8	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	3/4	24	11		
GTLBO-6P160	6	160	4.91 - 5.12	124.7 - 130.0	4.80	121.9	0.11	2.8	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	3/4	26	12		
GTLBO-6P120		120	5.27 - 5.44	133.9 - 138.2	5.16	131.1	0.11	2.8	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	3/4	28	13		
GTLBO-6P80		80/XS	5.57 - 5.71	141.5 - 145.0	5.46	138.7	0.11	2.8	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	3/4	31	14		
GTLBO-6P40		40/STD	5.93 - 6.06	150.6 - 153.9	5.81	147.6	0.12	3.0	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	3/4	33	15		
GTLBO-6P10		10	6.27 - 6.41	159.3 - 162.8	6.15	156.2	0.12	3.0	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	1 - 1/16	35	16		
GTLBO-6P5		5	6.33 - 6.47	160.8 - 164.3	6.21	157.7	0.12	3.0	1/2	0.46	11.7	9 - 1/2	241	3.25	82.6	2.10	53.3	5.32	135.1	6.32	160.5	1.47	37.3	3350	231	4	1 - 1/16	37	17		
GTLBO-8P160		160	6.49 - 6.75	164.8 - 171.5	6.37	161.8	0.12	3.0	3/4	0.61	15.5	10 - 3/4	273	3.65	92.7	2.70	68.6	5.97	151.6	6.97	177.0	1.47	37.3	3350	231	4	1 - 1/16	39	18		
GTLBO-8PXXS	XXS	6.57 - 6.81	166.9 - 173.0	6.45	163.8	0.12	3.0	3/4	0.61	15.5	10 - 3/4	273	3.65	92.7	2.70	68.6	5.97	151.6	6.97	177.0	1.47	37.3	3350	231	4	1 - 1/16	41	19			
GTLBO-8P140	140	6.70 - 6.93	170.2 - 176.0	6.58	167.1	0.12	3.0	3/4	0.61	15.5	10 - 3/4	273	3.65	92.7	2.70	68.6	5.97	151.6	6.97	177.0	1.47	37.3	3350	231	4	1 - 1/16	43	19			
GTLBO-8P120	120	6.91 - 7.12	175.5 - 180.8	6.79	172.5	0.12	3.0	3/4	0.61	15.5	10 - 3/4	273	3.65	92.7	2.70	68.6	5.97	151.6	6.97	177.0	1.47	37.3	3350	231	4	1 - 1/16	45	20			
GTLBO-8P100	100	7.20 - 7.38	182.9 - 187.5	7.08	179.8	0.12	3.0	3/4	0.61	15.5	10 - 3/4	273	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	48	22			
GTLBO-8P80	80	7.42 - 7.57	188.5 - 192.3	7.30	185.4	0.12	3.0	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	50	23			
GTLBO-8P60	60	7.63 - 7.78	193.8 - 197.6	7.51	190.8	0.12	3.0	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	53	24			
GTLBO-8P40	40	7.82 - 7.97	198.6 - 202.4	7.70	195.6	0.12	3.0	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	56	25			
GTLBO-8P30	30	7.93 - 8.08	201.4 - 205.2	7.81	198.4	0.12	3.0	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	59	27			
GTLBO-8P20	20	8.00 - 8.15	203.2 - 207.0	7.88	200.2	0.12	3.0	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	61	28			
GTLBO-8P10	10	8.24 - 8.39	209.3 - 213.1	8.12	206.2	0.12	3.0	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	63	29			
GTLBO-8P5	5	8.33 - 8.48	211.6 - 215.4	8.21	208.5	0.12	3.0	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1 - 1/16	66	30			

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GripTight® Elbow Test Plug Technical Specifications

See Figure 2

Part Number	Nominal Pipe Size	Elbow Schedule	Functional I.D. Range				Plug OD		Total clearance from Min. I.D.		NPT Size	Shaft / Port I.D.		Overall Length		L1		Gripper Length		L2		L3		L4		Maximum Test Pressure		Number of Shafts	Hex Nut Wrench Size	Approximate Shipping Weight	
			(in)		(mm)																										
			NPS	Min.	Max.	Min.	Max.	(in)	(mm)	(in)		(mm)	-	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)			(PsiG)	(BarG)
GTLBO-10P160	160	160	8.13	8.54	206.5	216.9	7.99	202.9	0.14	3.6	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1-7/16	75	34
GTLBO-10P140	140	140	8.36	8.64	212.3	219.5	8.29	210.6	0.07	1.8	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1-7/16	80	36
GTLBO-10P120	120	120	8.76	9.09	222.5	230.9	8.63	219.2	0.13	3.3	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1-7/16	80	36
GTLBO-10P100	100	100	9.03	9.34	229.4	237.2	8.88	225.6	0.15	3.8	3/4	0.61	15.5	11	279	3.65	92.7	2.70	68.6	6.22	158.0	7.22	183.4	1.72	43.7	3350	231	4	1-7/16	85	39
GTLBO-10P80	80	80	9.32	9.59	236.7	243.6	9.17	232.9	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	100	45
GTLBO-10PXS	XS	XS	9.54	9.79	242.3	248.7	9.39	238.5	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	110	50
GTLBO-10P40	40/STD	40/STD	9.85	10.07	250.2	255.8	9.70	246.4	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	110	50
GTLBO-10P30	30	30	9.98	10.19	253.5	258.8	9.84	249.9	0.14	3.6	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	110	50
GTLBO-10P20	20	20	10.12	10.31	257.0	261.9	9.97	253.2	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	120	54
GTLBO-10P10	10S	10S	10.32	10.49	262.1	266.4	10.17	258.3	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	125	57
GTLBO-10P5	5	5	10.39	10.55	263.9	268.0	10.25	260.4	0.14	3.6	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	125	57
GTLBO-12P160	160	160	9.74	10.05	247.4	255.3	9.60	243.8	0.14	3.6	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	110	50
GTLBO-12P140	140	140	10.14	10.55	257.6	268.0	9.99	253.7	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	125	57
GTLBO-12P120	120/XXS	120/XXS	10.41	10.78	264.4	273.8	10.26	260.6	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	135	61
GTLBO-12P100	100	100	10.75	11.09	273.1	281.7	10.60	269.2	0.15	3.8	1	0.82	20.7	12-7/8	327	5.05	128.2	2.67	67.8	8.04	204.2	8.98	228.1	2.34	59.4	3350	231	4	1-5/8	135	61
GTLBO-12P80	80	80	11.10	11.40	281.9	289.6	10.95	278.1	0.15	3.8	1	0.82	20.7	12-7/8	327	5.37	136.4	3.00	76.2	8.37	212.6	9.31	236.5	2.34	59.4	3350	231	4	1-5/8	150	68
GTLBO-12P60	60	60	11.39	11.66	289.3	296.2	11.25	285.8	0.14	3.6	1	0.82	20.7	12-7/8	327	5.37	136.4	3.00	76.2	8.37	212.6	9.31	236.5	2.34	59.4	3350	231	4	1-5/8	150	68
GTLBO-12PXS	XS	XS	11.54	11.79	293.1	299.5	11.39	289.3	0.15	3.8	1	0.82	20.7	12-7/8	327	5.37	136.4	3.00	76.2	8.37	212.6	9.31	236.5	2.34	59.4	3350	231	4	1-5/8	160	72
GTLBO-12P40	40/STD	40/STD	11.76	12.04	298.7	305.8	11.67	296.4	0.09	2.3	1	0.82	20.7	12-7/8	327	5.43	138.0	3.00	76.2	8.50	215.9	9.44	239.8	2.41	61.2	3350	231	6	1-5/8	165	75
GTLBO-12P30	30	30	11.90	12.14	302.3	308.4	11.78	299.2	0.12	3.0	1	0.82	20.7	12-7/8	327	5.43	138.0	3.00	76.2	8.50	215.9	9.44	239.8	2.41	61.2	3350	231	6	1-5/8	165	75
GTLBO-12P20	20	20	12.12	12.31	307.8	312.7	11.97	304.0	0.15	3.8	1	0.82	20.7	12-7/8	327	5.43	138.0	3.00	76.2	8.50	215.9	9.44	239.8	2.41	61.2	3350	231	6	1-5/8	170	77
GTLBO-12P10	10S/5	10S/5	12.29	12.50	312.2	317.5	12.13	308.1	0.16	4.1	1	0.82	20.7	12-7/8	327	5.43	138.0	3.00	76.2	8.50	215.9	9.44	239.8	2.41	61.2	3350	231	6	1-5/8	170	77
GTLBO-14P160	160	160	10.80	11.27	274.3	286.3	10.64	270.3	0.16	4.1	1	0.82	20.7	12-7/8	327	5.37	136.4	3.00	76.2	8.37	212.6	9.31	236.5	2.34	59.4	3350	231	4	1-5/8	150	68
GTLBO-14P140	140	140	11.12	11.56	282.4	293.6	10.98	278.9	0.14	3.6	1	0.82	20.7	12-7/8	327	5.37	136.4	3.00	76.2	8.37	212.6	9.31	236.5	2.34	59.4	3350	231	4	1-5/8	150	68
GTLBO-14P120	120	120	11.45	11.85	290.8	301.0	11.30	287.0	0.15	3.8	1	0.82	20.7	12-7/8	327	5.37	136.4	3.00	76.2	8.37	212.6	9.31	236.5	2.34	59.4	3350	231	4	1-5/8	170	77
GTLBO-14P100	100	100	11.79	12.15	299.5	308.6	11.64	295.7	0.15	3.8	1	0.82	20.7	14-7/8	378	5.43	138.0	3.00	76.2	8.50	215.9	9.44	239.8	2.34	59.4	3350	231	4	1-5/8	175	79
GTLBO-14P80	80	80	12.22	12.53	310.4	318.3	12.07	306.6	0.15	3.8	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	175	79
GTLBO-14P60	60	60	12.57	12.84	319.3	326.1	12.42	315.5	0.15	3.8	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	175	79
GTLBO-14PXS	XS	XS	12.79	13.04	324.9	331.2	12.64	321.1	0.15	3.8	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	175	79
GTLBO-14P40	40	40	12.92	13.16	328.2	334.3	12.77	324.4	0.15	3.8	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	175	79
GTLBO-14PSTD	30/STD	30/STD	13.08	13.30	332.2	337.8	12.93	328.4	0.15	3.8	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	175	79
GTLBO-14P20	20	20	13.22	13.43	335.8	341.1	13.08	332.2	0.14	3.6	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	210	95
GTLBO-14P10	10	10	13.32	13.56	338.3	344.4	13.21	335.5	0.11	2.8	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	220	100
GTLBO-14P10S	10S	10S	13.47	13.69	342.1	347.7	13.36	339.3	0.11	2.8	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	230	104
GTLBO-14P5	5	5	13.60	13.81	345.4	350.8	13.44	341.4	0.16	4.1	1	0.82	20.7	14-7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1-5/8	235	106

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GripTight® Elbow Test Plug Technical Specifications

See Figure 2

Part Number	Nominal Pipe Size	Elbow Schedule	Functional I.D. Range				Plug OD		Total clearance from Min. I.D.		NPT Size	Shaft / Port I.D.		Overall Length		L1		Gripper Length		L2		L3		L4		Maximum Test Pressure		Number of Shafts	Hex Nut Wrench Size	Approximate Shipping Weight			
			(in)		(mm)		(in)	(mm)	(in)	(mm)		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)			(in)	(mm)	(in)	(mm)
			Min.	Max.	Min.	Max.	(in)	(mm)	(in)	(mm)		-	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)			(mm)	(in)	(mm)	(in)
GTLBO-16P160	16	160	12.40 - 12.67	315.0 - 321.8	12.25	311.2	0.15	3.8	1	0.82	20.7	14 - 7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1 - 5/8	175	36				
GTLBO-16P140		140	12.72 - 12.96	323.1 - 329.2	12.57	319.3	0.15	3.8	1	0.82	20.7	14 - 7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1 - 5/8	175	79				
GTLBO-16P120		120	13.19 - 13.62	335.0 - 345.9	13.04	331.2	0.15	3.8	1	0.82	20.7	14 - 7/8	378	5.97	151.5	3.25	82.6	8.92	226.5	9.86	250.4	2.41	61.2	3350	231	6	1 - 5/8	235	106				
GTLBO-16P100		100	13.60 - 13.98	345.4 - 355.1	13.45	341.6	0.15	3.8	1	0.82	20.7	14 - 7/8	378	6.48	164.5	3.75	95.3	9.42	239.2	10.36	263.1	2.41	61.2	3350	231	6	1 - 5/8	240	109				
GTLBO-16P80		80	14.00 - 14.34	355.6 - 364.2	13.85	351.8	0.15	3.8	1	0.82	20.7	14 - 7/8	378	6.48	164.5	3.75	95.3	9.42	239.2	10.36	263.1	2.41	61.2	3350	231	6	1 - 5/8	245	111				
GTLBO-16P60		60	14.38 - 14.72	365.3 - 373.9	14.28	362.7	0.10	2.5	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	250	113				
GTLBO-16P40		40/XS	14.74 - 15.03	374.4 - 381.8	14.64	371.9	0.10	2.5	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	250	113				
GTLBO-16PSTD		30/STD	15.08 - 15.29	383.0 - 388.4	14.93	379.2	0.15	3.8	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	260	118				
GTLBO-16P20		20	15.22 - 15.43	386.6 - 391.9	15.08	383.0	0.14	3.6	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	265	120				
GTLBO-16P10		10	15.32 - 15.56	389.1 - 395.2	15.22	386.6	0.10	2.5	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	265	120				
GTLBO-16P10S		10S/5	15.48 - 15.73	393.2 - 399.5	15.36	390.1	0.12	3.0	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	280	127				
GTLBO-18P160		18	160	13.97 - 14.60	354.8 - 370.8	13.87	352.3	0.10	2.5	1	0.82	20.7	14 - 7/8	378	6.48	164.5	3.75	95.3	9.42	239.2	10.64	270.2	2.41	61.2	3350	231	6	1 - 5/8	250	113			
GTLBO-18P140			140	14.41 - 14.99	366.0 - 380.7	14.31	363.5	0.10	2.5	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	25	11			
GTLBO-18P120			120	14.86 - 15.33	377.4 - 389.4	14.71	373.6	0.15	3.8	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	260	118			
GTLBO-18P100	100		15.33 - 15.74	389.4 - 399.8	15.18	385.6	0.15	3.8	2	1.69	42.9	17 - 5/8	448	6.48	164.5	3.75	95.3	10.23	259.8	11.45	290.7	3.22	81.8	3350	231	8	1 - 5/8	280	127				
GTLBO-18P80	80		15.79 - 16.16	401.1 - 410.5	15.64	397.3	0.15	3.8	2	1.69	42.9	17 - 5/8	448	7.15	181.6	4.25	108.0	10.92	277.3	12.14	308.3	3.22	81.8	3350	231	8	1 - 5/8	300	136				
GTLBO-18P60	60		16.22 - 16.53	412.0 - 419.9	16.07	408.2	0.15	3.8	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	320	145				
GTLBO-18P40	40		16.64 - 16.91	422.7 - 429.5	16.50	419.1	0.14	3.6	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	325	147				
GTLBO-18PX5	XS		16.79 - 17.03	426.5 - 432.6	16.64	422.7	0.15	3.8	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	335	152				
GTLBO-18P30	30		16.92 - 17.16	429.8 - 435.9	16.77	426.0	0.15	3.8	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	345	156				
GTLBO-18PSTD	STD		17.08 - 17.29	433.8 - 439.2	16.93	430.0	0.15	3.8	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	350	159				
GTLBO-18P20	20		17.22 - 17.43	437.4 - 442.7	17.08	433.8	0.14	3.6	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	355	161				
GTLBO-18P10	10		17.37 - 17.56	441.2 - 446.0	17.22	437.4	0.15	3.8	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	365	165				
GTLBO-18P10S	10S/5		17.56 - 17.73	446.0 - 450.3	17.37	441.2	0.19	4.8	2	1.69	42.9	18 - 1/2	470	7.15	181.6	4.25	108.0	11.67	296.4	13.11	333.0	3.97	100.8	3350	231	10	1 - 5/8	370	168				

Questions? Contact EST Group Customer Service at any of the following locations.



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GripTight® Elbow Test Plug Technical Specifications

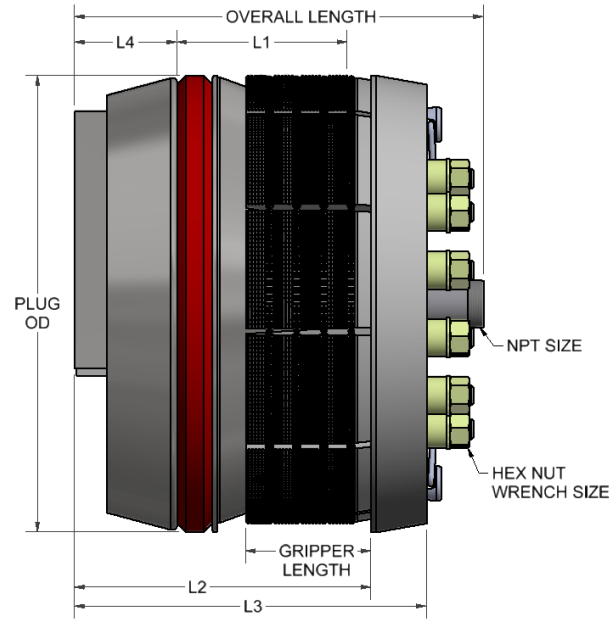


Figure 3

Part Number	Nominal Elbow Size	Elbow Schedule	Functional I.D. Range				Plug OD		Total clearance from Min.		NPT Size	Shaft / Port I.D.		Overall Length		L1		Gripper Length		L2		L3		L4		Maximum Test Pressure		Number of Shafts	Hex Nut Wrench Size		Approximate Shipping Weight	
			Min.	Max.	Min.	Max.	(in)	(mm)	(in)	(mm)		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)		(in)	(mm)	(in)	(mm)
GTLBO-22P5	22	5	21.51	21.72	546.4	551.7	21.30	541.0	0.21	5	2	1.69	42.9	20 - 3/8	518	8.65	219.6	5.93	150.6	14.62	371.3	17.37	441.1	5.10	129.5	3350	231	12	1 - 5/8	720	326	
GTLBO-24P60	24	60	21.73	22.13	551.9	562.1	21.51	546.4	0.22	6	2	1.69	42.9	20 - 3/8	518	8.65	219.6	5.93	150.6	14.62	371.3	17.37	441.1	5.10	129.5	3350	231	12	1 - 5/8	770	349	
GTLBO-24P40		40	22.35	22.68	567.7	576.1	22.13	562.1	0.22	6	2	1.69	42.9	20 - 3/8	518	8.65	219.6	6.25	158.8	14.94	379.4	17.69	449.2	5.10	129.5	3350	231	12	1 - 5/8	800	362	
GTLBO-24P30		30	22.64	22.94	575.1	582.7	22.43	569.7	0.21	5	2	1.69	42.9	20 - 3/8	518	8.65	219.6	6.25	158.8	14.94	379.4	17.69	449.2	5.10	129.5	3350	231	12	1 - 5/8	850	385	
GTLBO-24PXS		XS	22.79	23.07	578.9	586.0	22.57	573.3	0.22	6	2	1.69	42.9	20 - 3/8	518	8.65	219.6	6.25	158.8	14.94	379.4	17.69	449.2	5.10	129.5	3350	231	12	1 - 5/8	900	408	
GTLBO-24PSTD		20/STD	23.08	23.33	586.2	592.6	22.86	580.6	0.22	6	2	1.69	42.9	20 - 3/8	518	8.65	219.6	6.25	158.8	14.94	379.4	17.69	449.2	5.10	129.5	3350	231	12	1 - 5/8	950	430	
GTLBO-24P10	10/5	23.37	23.59	593.6	599.2	23.15	588.0	0.22	6	2	1.69	42.9	20 - 3/8	518	8.65	219.6	6.25	158.8	14.94	379.4	17.69	449.2	5.10	129.5	3350	231	12	1 - 5/8	1000	453		

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