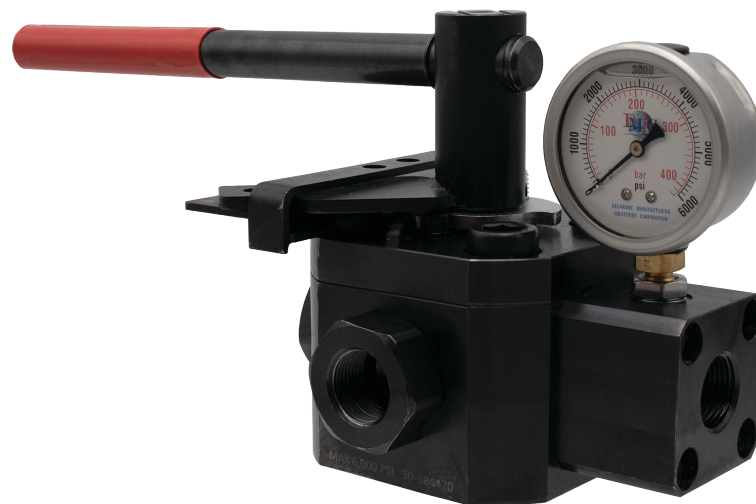




HYDRAULIC LOCKOUT VALVE H L-O-X[®] SERIES



PRODUCT CATALOG

H L-O-X® Series Hydraulic Lockout Valve

Lockout Safety Function

Blocks the flow of hydraulic fluid in order to stop cylinder motion.



Illustration example.

VALVE FEATURES

Actuation	Manual handle bar with 90° rotation, to control ON/OFF positions
Quick Energy Dump	Full size Tank ports provide rapid bleed of downstream hydraulic energy (T1) and rapid bypass of pump flow (T2).
Locking Position	Design only allows the valve to be lockable in the OFF (bypassing & bleeding) position
Seals	O-rings – Nitrile Rubber (Buna-N) seals for easy shifting, even after long periods of inactivity Ball Seals – Thermoplastic (Delrin) for high-strength, low-friction, and high-wear resistance
Visible Pressure Indication	Includes integrated sensing port on port A for pressure verification with a analog gauge (included) An electrical pressure switch or a pressure transducer can also be used.
Mounting	Inline or surface
4-Way Design	Includes two Tank ports that, in the OFF position, are used to dump energy from downstream (T1) and bypass pump flow to the reservoir (T2). If bypassing is not necessary, only use T1.

NOTE: Per specifications and regulations, these products are defined as energy isolation devices, NOT AS EMERGENCY STOP DEVICES.

STANDARD SPECIFICATIONS					
GENERAL	Function		Lockout		
	Construction Design		Ball		
	Actuation		Manual 90° rotation		
	Mounting	Type	In-line		
		Orientation	Any, preferably horizontal		
	Connection (hydraulic)		Threaded Ports	SAE-ORB	
Minimum Operation Frequency		Once per month, to ensure proper function			
OPERATING CONDITIONS	Temperature	Ambient	-4° to 160°F (-20° to 71°C)		
		Media	-4° to 250°F (-20° to 121°C)		
	Flow Media	Hydraulic Fluids	Mineral Oil HLP, HL-DIN 51524		
			Vegetable Oil HETG - VDMA 24568		
	Max Fluid Contamination Level		ISO 4406 class 20/18/15 NAS 1638 class 9		
	Flow	Size 1/2		10 GPM @ 5 psid	
		Size 3/4		20 GPM @ 5 psid	
		Size 1-1/4		50 GPM @ 5 psid	
Operating Pressure		6000 psi (413 bar) maximum			
LOCK HOLE MEASURES	Size 1/2 & 3/4		0.34 inch (8.64 mm) diameter		
	Size 1-1/4		0.38 inch (89.65 mm) diameter		
CONSTRUCTION MATERIAL	Valve Body		Cast Steel		
	Manifold		Ductile Iron		
	Spool		Steel		
	Seals	O-ring	Nitrile Rubber	Buna-N	
		Ball	Thermoplastic	Delrin	
IMPORTANT NOTE: Please read carefully and thoroughly all of the CAUTIONS, WARNINGS on the inside back cover.					

Ordering Information

MODEL NUMBER CONFIGURATOR

HLOX

08

A

F

1

1

1

1

G

M

X

A*

Series

Port Size

Port Thread/Type

Ball Pattern

Body Material

Ball & Spindle Material

Revision Level

Limit Switch (OFF position)

Actuation

Pressure Measuring Device

O-Ring Material

Ball Seal Material

1/2	08
3/4	12
1-1/4	20

SAE-ORB

X-Bore 90

Carbon Steel

Carbon Steel

None

Manual

Analog Gauge

Nitrile Rubber (Buna-N)

Thermoplastic (Delrin)

*Subject to change.

Model Number examples: HLOX08AF1111GMXA, HLOX20AF1111GMXA.

VALVE SCHEMATIC	
A T2 A T2 A T2 P T1 P T1 P T1 45° 90°	
Port Size	≈ Weight lb (kg)
1/2	8.00 (3.6)
3/4	15.00 (6.8)
1-1/4	46.00 (20.9)

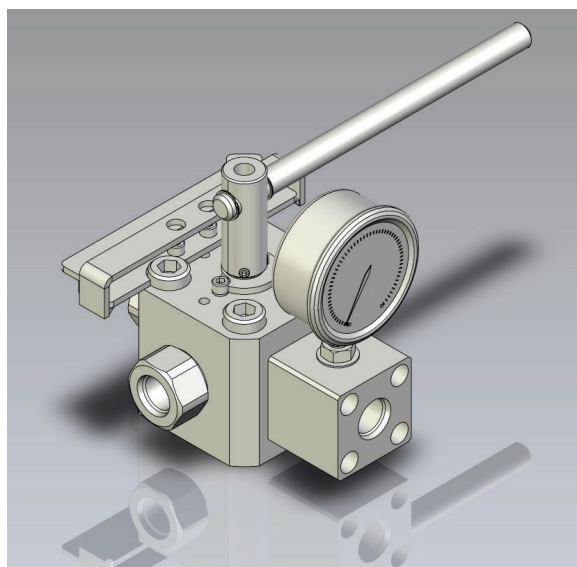
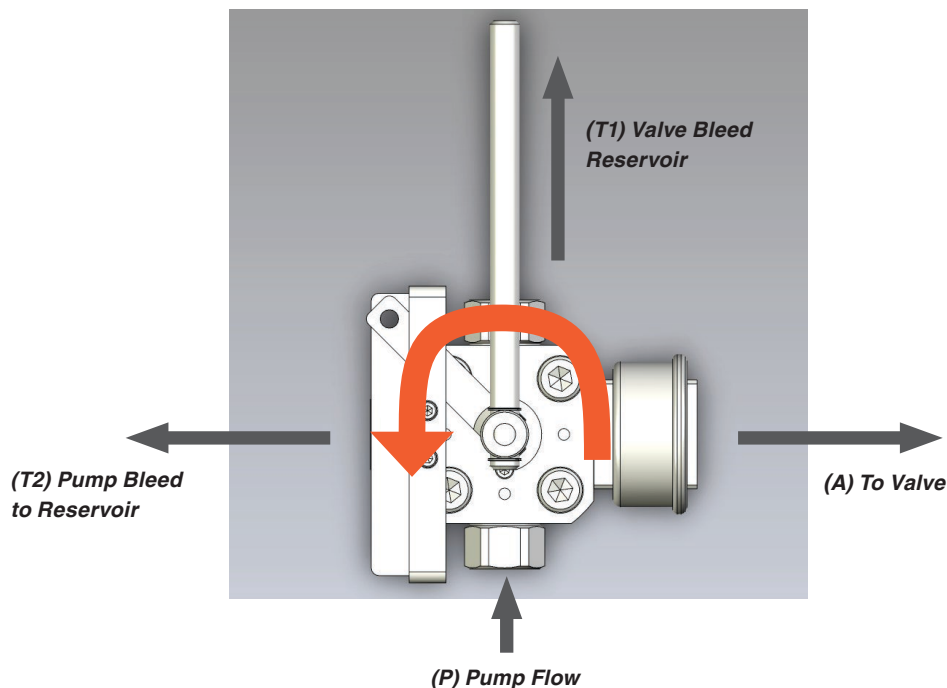
Valve Closed

When the red handle is rotated counter-clockwise (In-Line with the T2 Port), the flow of oil is blocked and exhausted from Port P to Port T2, to tank and downstream oil is exhausted from Port A to Port T1 to tank. The H L-O-X® Valve should be padlocked in this position to prevent the handle from being rotated clockwise where potential for human injury exists.

Valve Open

When the red handle is rotated clockwise (In-Line with the T1 Port) supply oil flows freely from inlet to outlet and flow to exhaust is blocked.

Turn Handle Counter Clockwise to Move to Safe Position and Lock.



WARNING: Fully shift and lock valve to ensure proper function. Incomplete shifting or unlocking may cause failure.

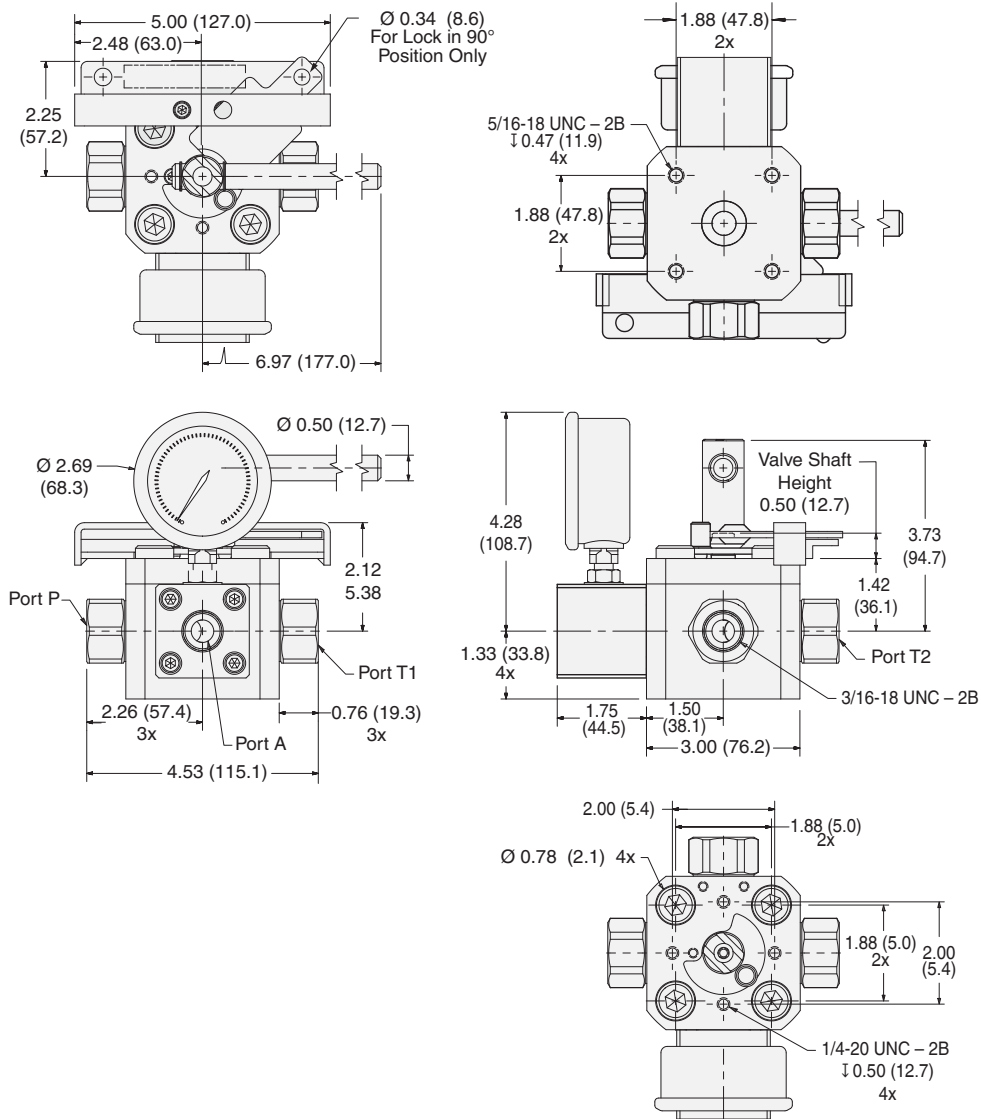
Do Not Exceed the Maximum Service Pressure Stamped on the Side of Valve Body. Completely Relieve the Internal Pressures of both Upstream and Downstream Ports of the Valve BEFORE Attempting to Service or Remove the Valve.

Technical Data

DIMENSIONS

Inches (mm)

Port Size 1/2



Downloadable CAD models available.

Inches (mm)

Technical drawings of the 1/2 inch NPT 100 PSI 3-Port Solenoid Valve, showing four views: top, side, front, and rear. The top view shows a 5.50 inch (139.7 mm) width and a 2.50 inch (63.5 mm) height. The side view shows a 2.50 inch (63.5 mm) width and a 4.46 inch (113.3 mm) height. The front view shows a 2.68 inch (68.1 mm) width and a 5.35 inch (135.9 mm) height. The rear view shows a 4.00 inch (101.6 mm) width and a 4.69 inch (119.1 mm) height. Key features include a solenoid coil, a 1/2 inch NPT port, and three 1/8 inch NPT ports (Port P, Port T1, Port A). Dimensions are given in inches and millimeters.

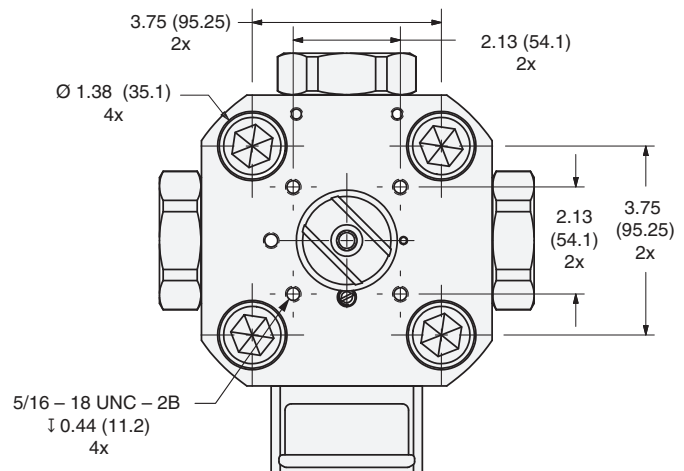
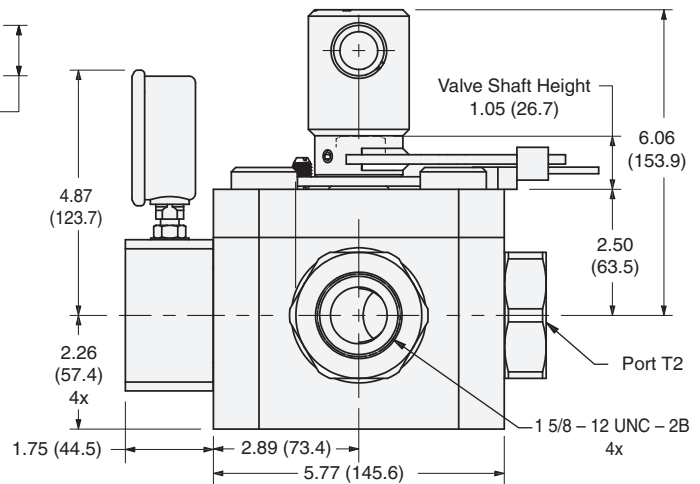
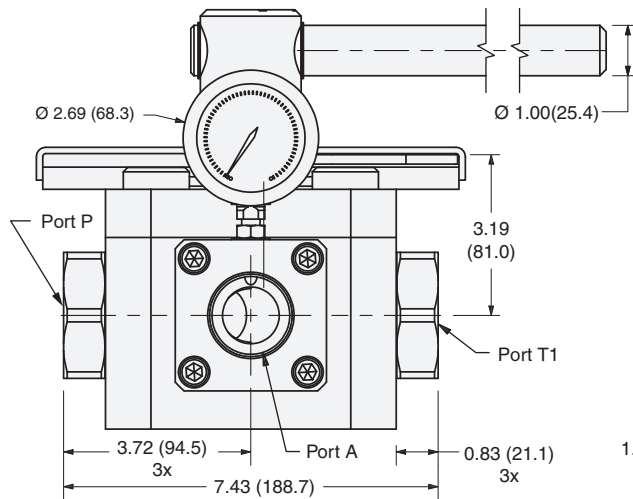
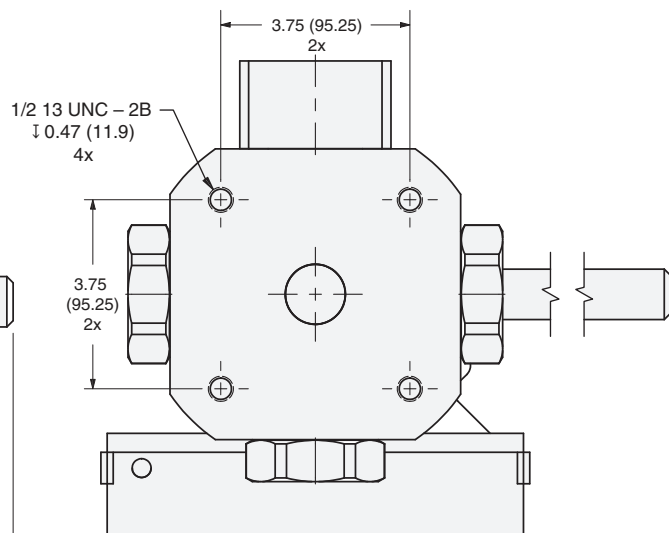
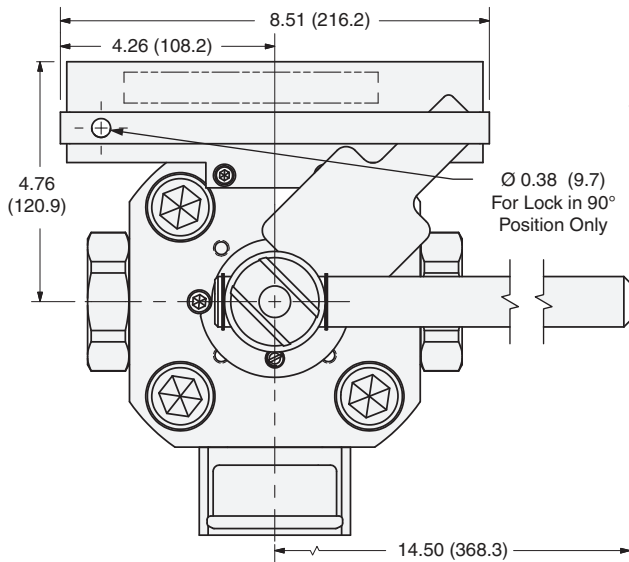
 www.rosscontrols.com

Technical Data

DIMENSIONS

Inches (mm)

Port Size 1-1/4



Downloadable CAD models available.

CONNECTION PIPING KITS

Flanges

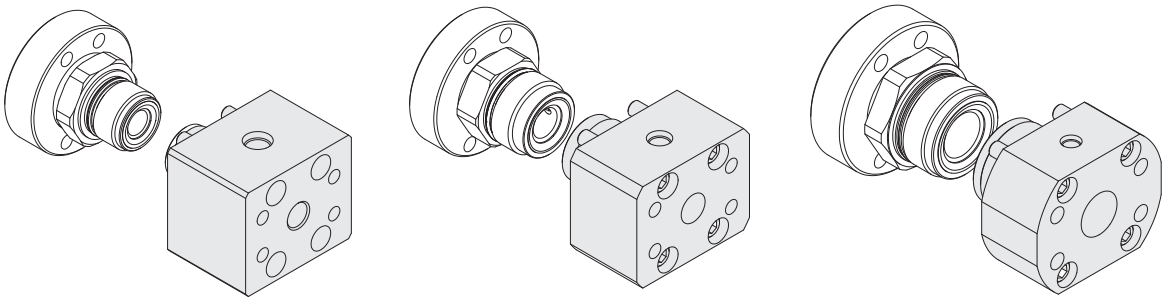


Illustration examples.

Valve Piping Flange Kits	Port Size	Connection	Kit Number*	Quantity Included	
				Flange	Flange Block
	1/2	08 ORB to 08 FLG	2907K77	3	1
	3/4	12 ORB to 12 FLG	2908K77	3	1
	1-1/4	20 ORB to 20 FLG	2909K77	3	1
* Kits include all required seals and mounting bolts.					

ROSS OPERATING VALVE, ROSS CONTROLS[®], ROSS DECCO[®], and AUTOMATIC VALVE INDUSTRIAL, collectively the "ROSS Group".

CAUTIONS, WARNINGS

Additional technical documentation, cautions and warnings information is available.

STANDARD WARRANTY

All products sold by the ROSS Group are warranted for a one-year period [with the exception of Filters, Regulators and Lubricators ("FRLs") which are warranted for a period of seven (7) years] from the date of purchase. All products are, during their respective warranty periods, warranted to be free of defects in material and workmanship. The ROSS Group's obligation under this warranty is limited to repair, replacement or refund of the purchase price paid for products which the ROSS Group has determined, in its sole discretion, are defective. All warranties become void if a product has been subject to misuse, misapplication, improper maintenance, modification or tampering. Products for which warranty protection is sought must be returned to the ROSS Group freight prepaid.

THE WARRANTY EXPRESSED ABOVE IS IN LIEU OF AND EXCLUSIVE OF ALL OTHER WARRANTIES AND THE ROSS GROUP EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED WITH RESPECT TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ROSS GROUP MAKES NO WARRANTY WITH RESPECT TO ITS PRODUCTS MEETING THE PROVISIONS OF ANY GOVERNMENTAL OCCUPATIONAL SAFETY AND/OR HEALTH LAWS OR REGULATIONS. IN NO EVENT IS THE ROSS GROUP LIABLE TO PURCHASER, USER, THEIR EMPLOYEES OR OTHERS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A BREACH OF THE WARRANTY DESCRIBED ABOVE OR THE USE OR MISUSE OF THE PRODUCTS. NO STATEMENT OF ANY REPRESENTATIVE OR EMPLOYEE OF THE ROSS GROUP MAY EXTEND THE LIABILITY OF THE ROSS GROUP AS SET FORTH HEREIN.



GLOBAL LOCATIONS

	AMERICAS	USA	ROSS CONTROLS	Tel: +1-248-764-1800	www.rosscontrols.com
		Canada	ROSS CANADA	Tel: +1-416-251-7677	www.rosscanada.com
		Brazil	ROSS BRASIL	Tel: +55-11-4335-2200	www.rosscontrols.com.br
	EUROPE	Germany	ROSS EUROPA	Tel: +49 (0)6103-7597-100	www.rosseuropa.com
		France	ROSS FRANCE	Tel: +33 (0)1-49-45-65-65	www.rossfrance.com
		United Kingdom	ROSS UK	Tel: +44 (0)1254 872277	www.rossuk.co.uk
	ASIA & PACIFIC	India	ROSS CONTROLS INDIA	Tel: +91-44-2624-9040	www.rosscontrolsindia.com
		China	ROSS CONTROLS CHINA	Tel: +86-21-6915-7961	www.rosscontrolschina.com
		Japan	ROSS ASIA	Tel: +81-42-778-7251	www.rossasia.co.jp



www.automaticvalve.com



www.rossdecco.com



www.manufactis.net



www.masterpneumatic.com



www.pneumatrol.com



www.ubsafe.com