DATA SHEET PRESSURE REGULATOR



Brass Model: 7561



SPECIFICATIONS	U.S.	Metric
Flow Range	0-4.0 gpm	0–15.1 lpm
Pressure Range	100–1250 psi	6.9–86 bar
Maximum Temperature	194° F	90° C
Inlet Port	1/4" NPT(M)	1/4" NPT(M)
Outlet Port	1/4" NPT(F)	1/4" NPT(F)
Bypass Port (Bottom)	1/4" NPT(F)	1/4" NPT(F)
Weight	4.0 oz	0.11 kg
Dimensions	2.75 x 1.65 x 0.75"	69.8 x 42 x 19 mm

FEATURES

- \bullet Maintains full system pressure while running in idle for quick return to system pressure.
- Compact size and easy installation.

Read all CAUTIONS and WARNINGS before commencing service or operation of high-pressure system

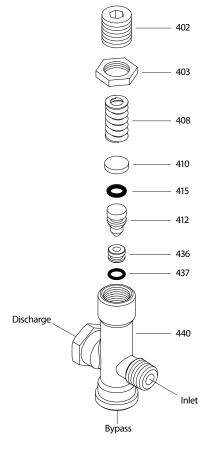
PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
402	49681	BB	Adjuster, Pressure	1
403	49682	BB	Nut, Locking	1
408	49876	STZP	Spring, Coil	1
410	549352	STCP R	Retainer, Spring	1
412	49877	S	Piston	1
415	14759	NBR	O-Ring, Piston Stem	1
436	49878	S	Seat	1
437	25300	NBR	O-Ring, Seat	1
440	_	BB	Body	1
468	76860	NBR	Kit, Repair (includes: 412, 415, 436, 437)	1

Italics are optional items.

MATERIAL CODES (Not Part of Part Number):
R Components compy with RoHS Directive
BB = Brass NBR = Medium Nitrile (Buna-N) S = 304SS
STCP = Steel/Chrome-plated STZP = Steel/Zinc Plated

EXPLODED VIEW



SELECTION

This pressure regulator is designed for systems with a single pump, solenoid (gate) valve, nozzle and shut-off gun. The pressure regulator should meet both the desired system flow (combined nozzle flow rate) and the desired system pressure.

NOTICE: Operating above the maximum rated flow of the regulator causes cycling and premature wear, preventing achievement of the desired system pressure.

INSTALLATION

This regulator operates properly mounted in any direction. However, keeping the plumbing to a minimum and the pressure adjuster easily accessible is preferred. The preferred mounting location is directly onto the pump's discharge manifold.

The inlet connection is a $\frac{1}{4}$ " NPT(M) port that is located on the side. Liquid from the discharge of the pump goes into this connection.

The discharge connection is a $\frac{1}{4}$ " NPT(F) port located on the front. There is an arrow cast into the body indicating the direction of flow. Plumbing for the spray gun, solenoid (gate) valve or nozzle connect here.

The bypass connection is a 3" NPT(F) port located on the bottom. The word BY-PASS and an arrow is cast into the body. Bypass liquid is directed out of this port and can be routed to a reservoir (preferred method), drain or pump inlet.

OPERATION

This pressure regulator maintains system pressure in the discharge line and at the pump head when the trigger gun or solenoid (gate) valve is closed, or the nozzles are clogged, thus bypassing all unrequired flow. Squeezing the trigger gun or opening the solenoid valve allows for a quick return to system pressure.

PRESSURE ADJUSTMENT

Note: Pressure is not set at the factory.

- 1. Setting and adjusting the regulator pressure must be done while the system is running.
- Start the system with the regulator backed off to the lowest pressure setting (counterclockwise).

 ▲ CAUTION
 Backing off pressure too far can release spring and piston while under pressure.

- Increase the regulator pressure setting by turning the pressure adjuster clockwise.
- 4. Squeeze the trigger and read the pressure on the gauge at the pump.

Note: Do not read the pressure at the gun or nozzle.

- If more pressure is desired, release the trigger, turn the pressure adjuster one quarter turn in a clockwise direction.
- 6. Squeeze the trigger and reread the pressure.
- 7. Once the desired system pressure is reached, stop turning the pressure adjuster.
- 8. Thread the top locking nut down to the regulator body.

NOTICE: A minimum of 5% of the flow through the regulator should bypass for proper regulator performance. If the entire regulator flow pumps through the nozzle (zero-bypass), the valve can easily be set for pressure higher than the desired pressure, causing a malfunction or premature wear.

⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (e.g. regulator, unloader) and a secondary pressure relief device (e.g. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high-pressure system. Read all CAUTIONS and WARNINGS before commencing service or operation of any high-pressure system. The CAUTIONS and WARNINGS are included in each Service Manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at www.catpumps.com/dynamic-literature/cautions-and-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty online at www.catpumps.com/literature/cat-pumps-limited-warranty