

P289 BACKPRESSURE REGULATOR

- Throttling Type Relief
- Compact
- Tight Shutoff
- High Flow Rates
- Reliability Due to Simplicity

The Type P289 Backpressure Regulator functions as a high flow relief valve with an adjustable set point. The P289 can be used in place of a standard relief valve to provide protection against over pressurization in the downstream system. The design of a large diaphragm area and a pitot tube booster allow the valve to respond quickly and relieve the excessive pressure smoothly, especially in low-pressure settings.

APPLICATIONS

- Fuel Gas Relief
- Gas Gathering Relief

SPECIFICATIONS

	P289-1"	P289 2"
Port Size	1" NPT	2" NPT
Maximum Relief Inlet Pressure	100 PSIG, 6.9 BAR	25 PSIG, 1.7 BAR
Relief Set Pressure Ranges	1-4.5 PSIG, .07-0.3 BAR	7-18" W.C, 0.017-0.045 BAR
	4-15 PSIG, .28-1.0 BAR	0.5-2.25 PSIG, 0.035-0.16 BAR
	10-20 PSIG, 0.7-1.4 BAR	1.75-7 PSIG, 0.12-0.5 BAR
	15-50 PSIG, 1-3.5 BAR	4-10 PSIG, 0.28-0.7 BAR
Temperature Range	-20-150 °F with Nitrile and Neoprene	-20-150 °F with Nitrile and Neoprene Elastomers
	20-300 °F with Fluoroelastomer	20-300 °F with Fluoroelastomer
Approximate Weight	2 lbs.	15 lbs.
Materials Of Construction		
Body, Bonnet	Aluminum	Cast iron body with aluminum bonnet
Diaphragm	Nitrile or fluoroelastomer	Nitrile or fluoroelastomer
Gaskets	Neoprene	Neoprene/Composite
O-Rings	Nitrile or fluoroelastomer	Nitrile or fluoroelastomer
O-Ring Piston and spacer	Aluminum	N/A
Seat Washer	N/A	Stainless Steel
Pitot Tube	Aluminum	Brass or Stainless Steel
Main Seat	N/A	Brass or Stainless Steel
Spring	Zinc-plated steel	Zinc Plated steel
Diaphragm Piston	Zinc-plated steel	Zinc-plated steel
Closing Cap	N/A	Zinc



P289 1" PART MATRIX

	P	2	8	9	0	8			0	0	0		0
PORT SIZE					08								
SPRING RANGE													
PSIG													
BAR													
1-4.5					004								
4-15					015								
10-20					020								
15-50					050								
O-RING MATERIAL													
Nitrile					0								
Fluoroelastomer					1								
DIAPHRAGM MATERIAL													
Nitrile					0								
Fluoroelastomer					1								

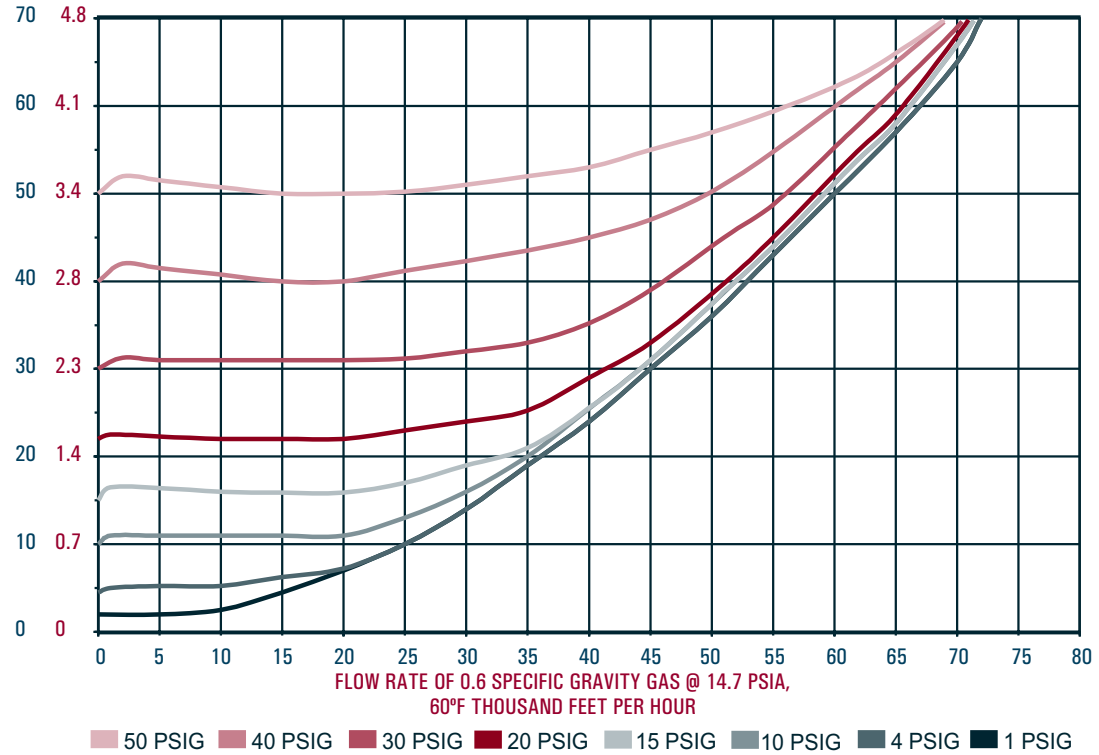
P289 2" PART MATRIX

	P	2	8	9	1	6			0	0	0		0
PORT SIZE					16								
SPRING RANGE													
W.C or PSIG													
BAR													
7-18" W.C.					001								
0.5-2.25 PSIG					002								
1.75-7 PSIG					007								
4-10 PSIG					010								
MAIN SEAT MATERIAL													
Brass					0								
Stainless Steel					1								
O-RING MATERIAL													
Nitrile					0								
Fluoroelastomer					1								
DIAPHRAGM MATERIAL													
Nitrile					0								
Fluoroelastomer					1								
PITOT TUBE MATERIAL													
Brass					0								
Stainless Steel					1								

P289 BACKPRESSURE REGULATOR

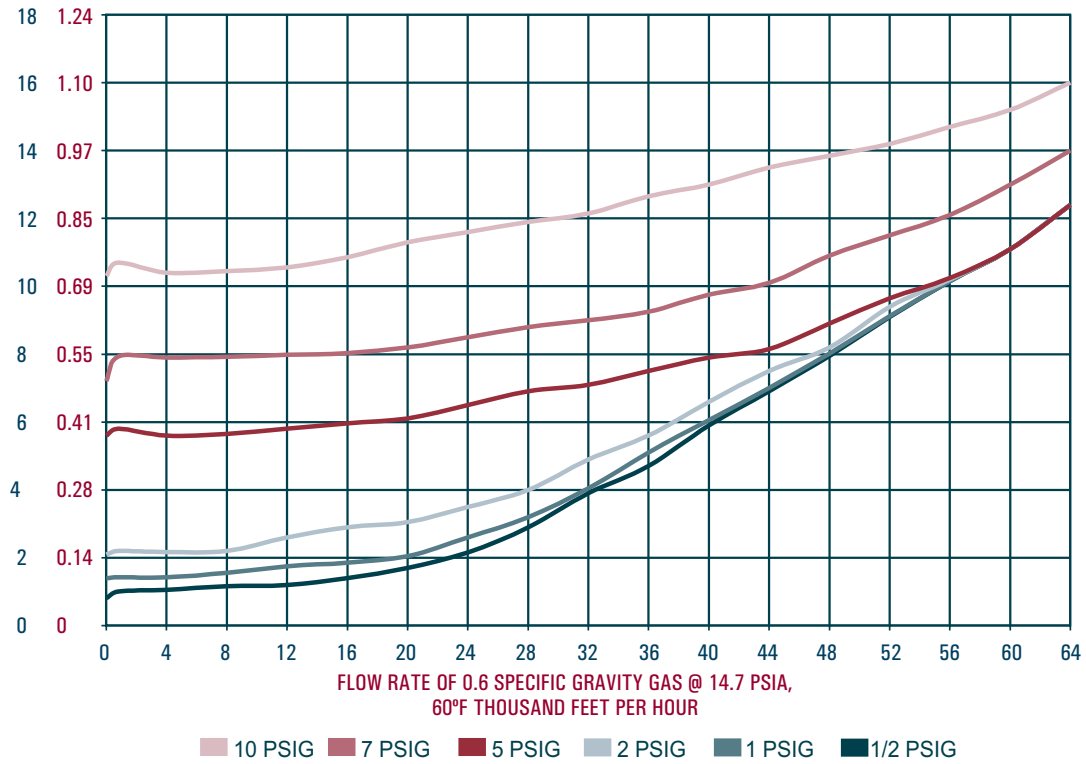
INLET PRESSURE
PSIG BAR

P289-1" NPT
Vent screen installed



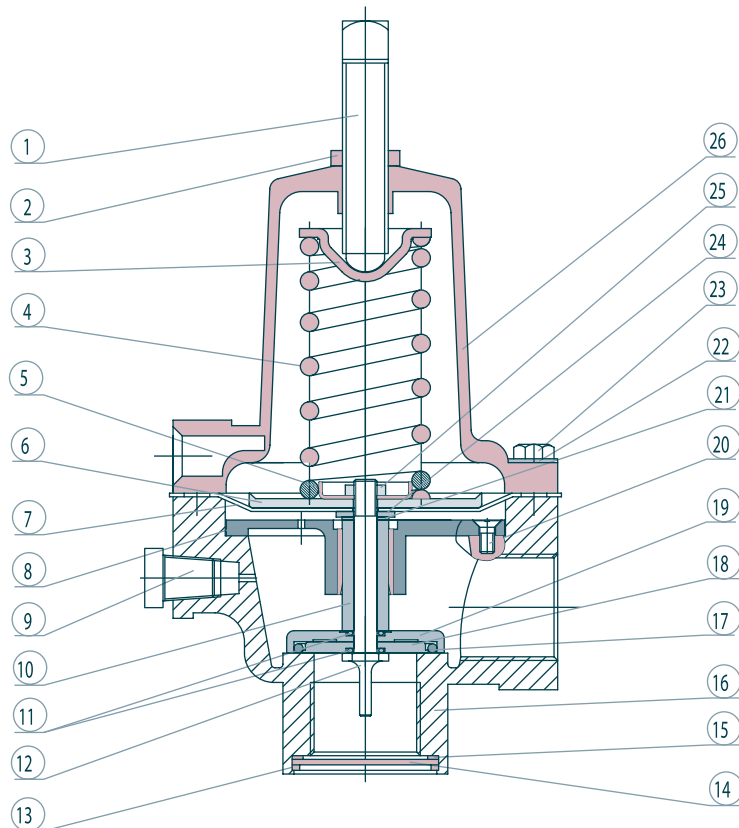
INLET PRESSURE
PSIG BAR

P289-2" NPT
Vent screen uninstalled



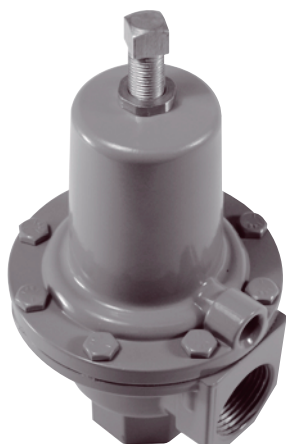
P289 1" PARTS

ITEM	DESCRIPTION	PART NUMBER
1	Adjusting Screw, plated steel	648-487-000
2	Hex Nut, plated steel	634-154-000
3	Spring Guide, plated steel	626-090-000
4	Spring 1-4.5 PSIG (0.1-0.3 BAR), pink	655-688-000
	Spring 4-15 PSIG (0.3-1 BAR), red	655-689-000
	Spring 10-20 PSIG (0.7-1.4 BAR), silver	655-676-000
	Spring 15-50 PSIG (1-3.4 BAR), green	655-690-000
5	Piston Retainer, plated steel	643-191-000
6	Piston, plated steel	637-306-000
7	P289 1" Diaphragm, nitrile	600-497-000
	P289 1" Diaphragm, fluoroelastomer	600-497-001
8	Stem Guide Assembly	814-014-000
9	Pipe Plug, plated steel	639-099-000
10	Spacer Tube, stainless steel	654-178-000
11	O-Ring, nitrile (qty. 2)	649-000-003
	O-Ring, fluoroelastomer (qty. 2)	649-000-343
12	Pitot Tube, aluminum	660-051-000
13	Retaining Ring, plated steel	644-051-000
14	Screen, stainless steel	647-018-000
15	Gasket, neoprene	624-063-000
16	Body, aluminum	664-295-000
17	O-Ring, nitrile	649-293-000
	O-Ring, fluoroelastomer	649-293-001
18	O-Ring Spacer, aluminum	654-177-000
19	O-ring Piston, aluminum	637-311-000
20	Machine Screw, stainless steel (qty. 2)	648-488-000
21	Gasket, neoprene	624-062-000
22	Nameplate, aluminum	632-496-000
23	Machine Screw (qty. 8)	648-501-000
24	Washer, aluminum	662-204-000
25	Hex Nut, plated steel	634-162-000
26	Bonnet, aluminum	604-221-000
27	label (not shown)	631-227-000

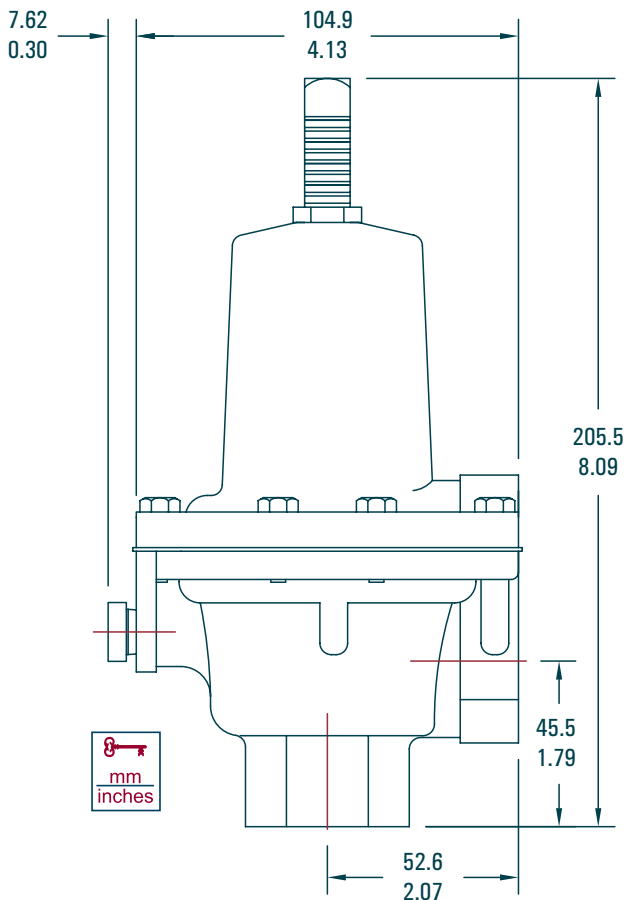


P289 1" REGULATOR REBUILD KITS

	Kit Includes	Part Number
P289	Nitrile Diaphragm, Screen & Gasket	971-289-000
P289	Fluorocarbon Diaphragm, Screen & Gasket	971-289-001

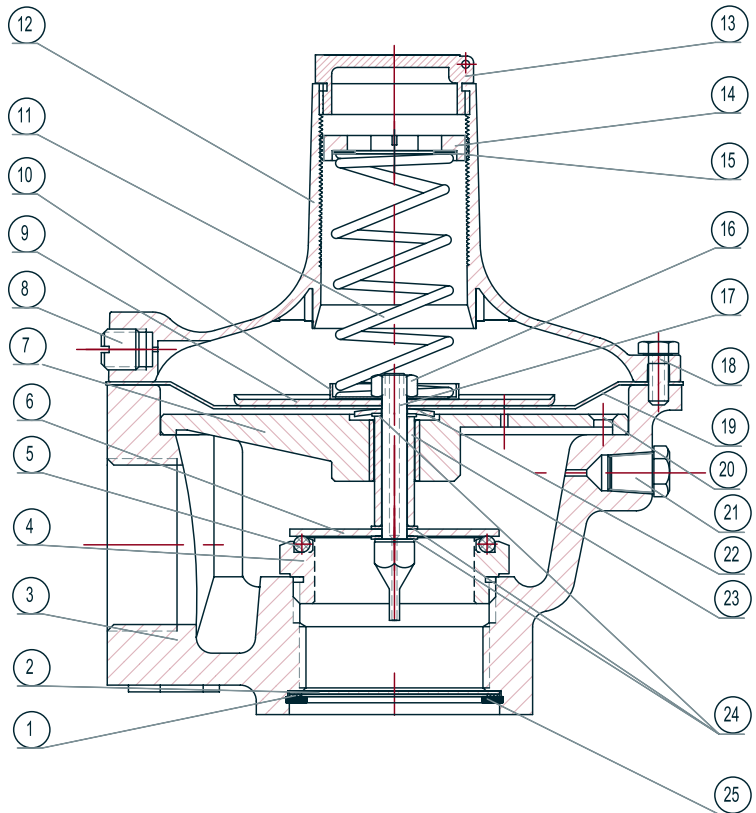


P289 1" DIMENSIONS

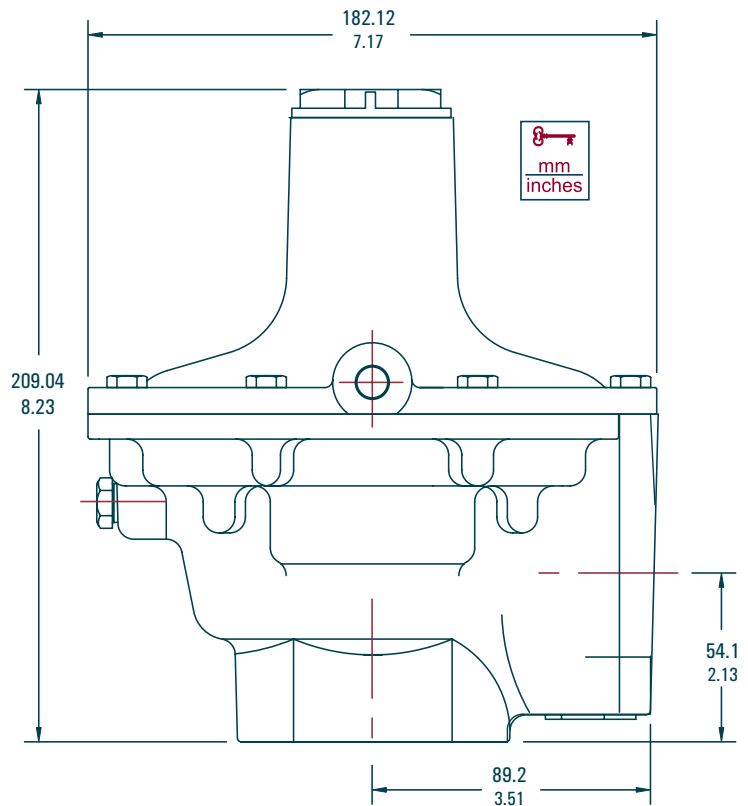


P289 2" PARTS

ITEM	DESCRIPTION	PART NUMBER
1	Gasket, neoprene	624-066-000
2	Screen, stainless steel	647-020-000
3	Body, cast iron	664-302-000
4	Main Seat, brass Main Seat, stainless steel	650-132-000 650-133-000
5	O-Ring, nitrile O-Ring, fluoroelastomer	649-302-000 649-301-000
6	O-Ring, washer, stainless steel	662-207-000
7	Stem Guide Assembly, cast iron & brass	814-015-000
8	Upper Pipe Plug	639-102-000
9	Diaphragm head, plated steel	637-315-000
10	Lower Spring Retainer, zinc plated steel	643-197-000
11	7 to 18" W.C. range spring, dark blue 0.5 to 2.25 PSIG range spring, gray 1.75 to 7 PSIG range spring, dark green 4 to 10 PSIG range spring, red stripe	655-691-000 655-692-000 655-693-000 655-694-000
12	Bonnet, aluminum	604-558-000
13	Closing Cap, zinc	610-056-000
14	Adjusting Screw, zinc	648-499-000
15	Upper Spring Seat Washer, aluminum	662-206-000
16	Hex Nut, plated steel	634-173-000
17	Pitot Tube, brass Pitot Tube, stainless steel	660-053-000 660-054-000
18	Machine Bolt, (qty. 8)	648-466-000
19	Diaphragm, nitrile Diaphragm, fluoroelastomer	618-071-000 618-071-001
20	Machine Screw (qty. 4), stainless steel	648-500-000
21	Low pipe plug, plated steel	639-099-000
22	Snap washer, plated steel	662-208-000
23	Spacer, brass Spacer, stainless steel	654-181-000 654-182-000
24	Gasket, (qty. 3), composite material	624-065-000
25	Retaining Ring, plated steel	644-054-000
26	Nameplate, aluminum (not shown)	632-504-000
27	label (not shown)	631-230-000



P289 2" DIMENSIONS



P289 2" REGULATOR REBUILD KITS

	Kit Includes	Part Number
2" P289	Nitrile diaphragm, Screen, Screen Gasket (Neoprene), Composite Gaskets (qty. 3)	971-289-002
2" P289	Fluorocarbon diaphragm, Screen, Screen Gasket (Neoprene), Composite Gaskets (qty. 3)	971-289-003

