High-Pressure Piston-Sensing, Hydraulic Pressure-Reducing Regulators (KHR Series)

The KHR series provides control of pressures up to 10 000 psig (689 bar) for both liquid and gas applications. Metal or polymer seats are available.

Features

- Self-venting
- Captured vent port in bottom of body
- Panel-mounting configuration available
- Thrust roller bearing eases operation
- High-flow, dual-gauze type filter positively retained in inlet port

Technical Data

Maximum Inlet Pressure

- 10 000 psig (689 bar)

Pressure Control Ranges

- 0 to 500 psig (34.4 bar) through 100 to 10 000 psig (6.8 to 689 bar)

Flow Coefficient (C_v)

- 0.06

See page 47 for flow graphs.

- 0.25 also available

Supply-Pressure Effect

Flow Coefficient (C_v)	Pressure Control Range		
	Up to 2500 psig (172 bar)	3600 and 6000 psig (248 and 413 bar)	10 000 psig (689 bar)
	Supply Pressure Effect, %		
0.06	1.0	2.6	4.2
0.25	3.3	8.5	14.6

Maximum Operating Temperature

- 212°F (100°C)

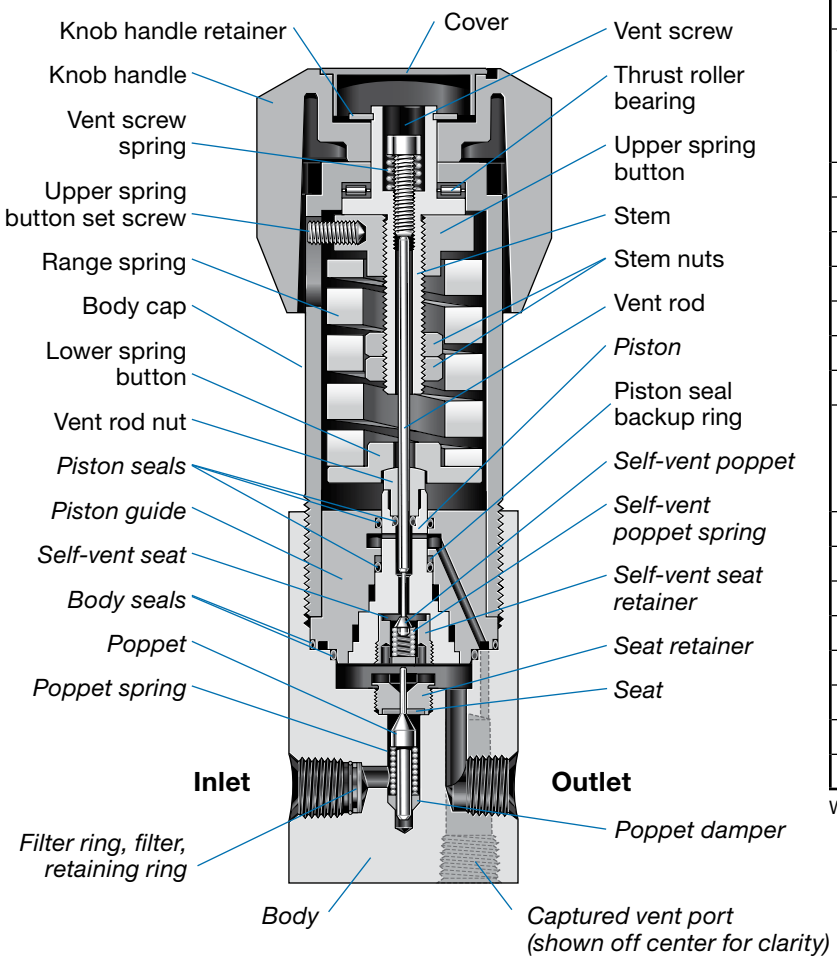
Weight

- 6.1 lb (2.75 kg)

Ports

- 1/4 in. female NPT inlet, outlet, vent, and gauge ports

Materials of Construction

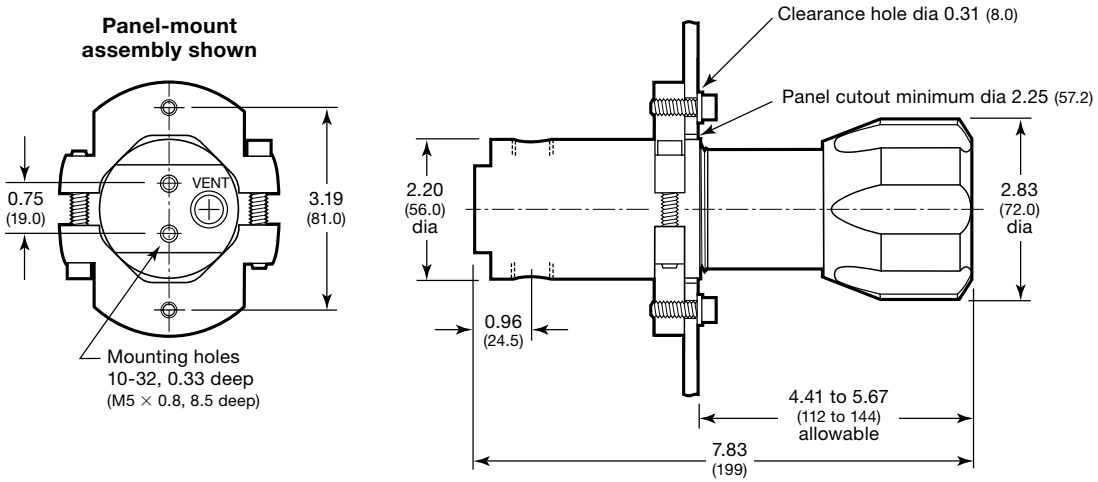


Component	Material
Knob handle, cover	Nylon with 316 SS insert
Spring buttons, upper spring button set screw, knob handle retainer, vent screw, stem nuts, vent rod nut, body cap	316 SS
Vent screw spring	302 SS
Vent rod	431 SS
Stem	CZ114 bronze
Thrust roller bearing	Hardened carbon steel
Range spring	Chrome vanadium steel
Piston seal backup ring	PEEK
Nonwetted lubricant	Hydrocarbon-based
Body, seat retainer, filter, retaining ring, piston, piston guide, self-vent seat retainer	*316 SS*
Self-vent seat	*PEEK*
Seat	*PEEK or 316 SS*
Poppet, self-vent poppet	*S17400 SS*
Poppet spring	*Alloy X-750*
Poppet damper, filter ring	*PTFE*
Self-vent poppet spring	*302 SS*
Body seals, piston seals	*Fluorocarbon FKM*
Wetted lubricant	*PTFE-based*

Wetted components listed in *italics*.

Dimensions

Dimensions, in inches (millimeters), are for reference only and are subject to change.



Ordering Information

Build a KHR series regulator ordering number by combining the designators in the sequence shown below.

	4	5	6	7	8	9	10	11	12	13	14	15	16
KHR	**1**	**T**	X	**A**	4	**J**	**2**	U	**2**	**0**	0	**0**	0

4 Body Material
1 = 316 SS
A = 316 SS, ASTM G93 Level E-cleaned

5 Pressure Control Range
J = 0 to 500 psig (0 to 34.4 bar)
K = 0 to 750 psig (0 to 51.6 bar)
T = 10 to 1500 psig (0.68 to 103 bar)
U = 15 to 2500 psig (1.0 to 172 bar)
V = 25 to 3600 psig (1.7 to 248 bar)
W = 50 to 6000 psig (3.4 to 413 bar)①
X = 100 to 10 000 psig (6.8 to 689 bar)①

① Not available for regulators assembled with isolation valves.

6 Maximum Inlet Pressure
X = 10 000 psig (689 bar)

7 Port Configuration
A, B, C, F, M
*See **Port Configurations,** page 52.*

8 Ports
4 = 1/4 in. female NPT

9 Seat, Seal Material
C = PEEK, fluorocarbon FKM
J = 316 SS, fluorocarbon FKM①

① Not suitable for gas service.

10 Flow Coefficient (C_v)
2 = 0.06
6 = 0.25

11 Sensing Mechanism, Vent
U = 316 SS piston, self and captured vent

12 Handle, Mounting
2 = Knob
6 = Knob, panel mount
For knob handle color options, see page 56.

13 Isolation Valves
0 = No valves
For isolation valve options, see page 54.

14 Cylinder Connections
0 = No connections

15 Gauges
0 = No gauges
For inlet and outlet gauge options, see page 54.

16 Options
0 = No options