Bulletin G409d JAN 2013

# HHANSEN



#### HGV1: Long Neck

H9490: Transducer Valve

# INTRODUCTION

These specially designed refrigerant gauge, purge, and transducer valves feature tough, forged steel bodies, compact size, and polished stainless steel stems. The patented O-ring plus packing dual seal design and polished stainless steel stem virtually eliminates stem seal leakage. Safety stems are designed to be nonremovable from the body to avoid dangerous stem "blow out".

# APPLICATION

These Hansen-made valves are suitable for ammonia, R22, R134a, CO2 and other approved refrigerants. They are available with seal caps, bar handles or bare stems. They are often used to isolate pressure gauges on regulators and safety relief valves. These valves may also be used for pumpout and purging. They are not recommended for oil drain because the port is too small for viscous oil. The Long Neck<sup>®</sup> valves provide additional length for insulation and pressure gauge turning clearance. The transducer valve accommodates calibration or device replacement without system pumpdown.

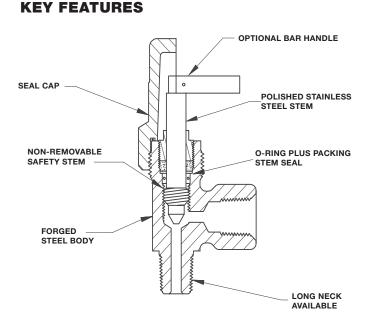
#### **MATERIAL SPECIFICATIONS**

Body: Forged steel, ASTM A105, zinc plated (H9490 not plated) Stem: Stainless steel, polished, ¼" square flats Stem Packing: Graphite composite plus neoprene O-ring Packing Nut: Steel, zinc plated Seal Cap: Glass filled polymer Seal Cap O-ring: Neoprene Bar Handle: Steel, zinc plated Safe Working Pressure: 400 psig (28 bar) SWP 600 psig (41 bar) available upon request Operating Temperature: -60°F to 240°F (-50°C to +115°C)

# Specifications, Applications, Service Instructions & Parts

# GAUGE, PURGE, AND TRANSDUCER VALVES

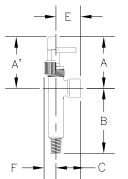
1/4" – 1/2" (7mm – 13mm) MPT or FPT Globe & Angle for Refrigerants

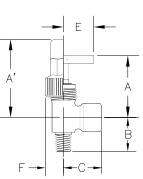


#### ADDITIONAL FEATURES

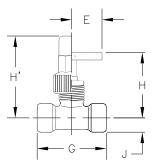
Globe and angle valve available Heavy duty forged steel body Long Neck gauge valve available Unique Transducer / Gauge valve Interchangeable seal caps and bar handles

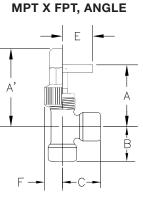
# **INSTALLATION DIMENSIONS (inches)**





MPT x FPT, LONG NECK





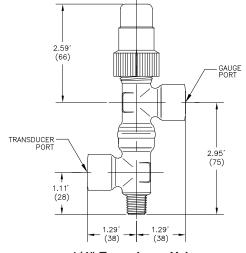
**FPT X FPT, GLOBE** 

**FPT X FPT, ANGLE** 

SIZE (mm)	A	A'	в	с	E	F	G	н	H'	J
1/4"	2.09	2.57	1.11*	1.26	1.00	0.59	2.28	2.22	2.71	0.47
(7)	(53)	(65)	(28)	(32)	(25)	(15)	(58)	(56)	(69)	(12)
3/8"	2.94	3.57	1.44	1.88	1.63	0.72	3.22	3.07	3.70	0.59
(10)	(75)	(91)	(37)	(48)	(41)	(18)	(82)	(78)	(94)	(15)
1/2"	2.94 (75)	3.57 (91)	1.44 (37)	1.88 (48)	1.63 (41)	0.72 (18)	-	-	-	-

\*THE B DIMENSION FOR HGV1, HGV1H, & HGV2 IS 3.25" (83MM)

#### TRANSDUCER VALVE



1/4" Transducer Valve

The H9490 Transducer Valve can be installed wherever pressure monitoring is desired. Turn stem all the way in (clockwise) and seat to isolate pressure from both gauge and transducer ports. Turn stem all the way out (counter-clockwise) and seat to isolate pressure from the gauge port. With stem in middle position, both ports are active.

#### G409d JAN 2013

#### **ORDERING INFORMATION**

DESCRIPTION	SEAL CAP	BAR HANDLE	BARE STEM
1/4" MPT x FPT, Angle, Long Neck†	HGV1*	HGV1H	HGV2
1/4" MPT x FPT, Angle	H7771*	H7771H	H965
1/4" FPT x FPT, Angle	H7772	H7772H	H967
1/4" FPT x FPT, Globe	H957C	H957H	H957
1/4" MPT x FPT x FPT, Transducer Valve	H9490	-	-
3/8" MPT x FPT, Angle	H7773	H7773H	-
3/8" FPT x FPT, Angle	H7774	H7774H	-
3/8" FPT x FPT, Globe	H958C	H958H	-
1/2" MPT x 3/8" FPT, Angle	H7777	-	-
1/2" MPT x 1/4" FPT Angle	H7778	-	-

†LONG NECK VALVES PROVIDE ADDITIONAL LENGTH FOR INSULATION AND PRESSURE GAUGE TURNING CLEARANCE.

 $^{\star}\mathrm{HGV1}$  and H7771, available as welded inlet versions, Hgv1w and H7771w painted body.

TO ORDER: Specify Catalog Number.

# SERVICE AND MAINTENANCE

Hansen gauge valves require practically no service or maintenance due to the combination of polished stainless steel stem and reliable O-ring stem seal plus graphite composite packing. However, if tightening is ever needed, use a 3/8" open end wrench or an 8" adjustable wrench. Extrusion of some black graphite packing material along the stem is normal.

If the O-ring or the adjustable packing ever needs replacement as evidenced by refrigerant or oil leakage at the stem, isolate valve from the system and evacuate to zero pressure in accordance with appropriate practices.

Seal caps [1/4" (P/N 50–1071), 3/8"–1/2" (P/N 50–1036)] or bar handles [1/4" (P/N 50–1069), 3/8" (P/N 50–1075)] can be easily retro-fitted to valves in the field. All bodies have seal cap threads; simply screw seal cap with O-ring onto these threads. Bar handle kit comes with pin partially installed in handle Place handle on stem and turn clockwise to close valve. Begin to push pin through handle and valve stem using pliers, then tap with hammer to finish.

# CAUTION

Hansen valves are for refrigeration systems only. Read these instructions completely before selecting, using, or servicing these valves. Only knowledgeable, trained refrigeration technicians should install, operate, or service these valves. Stated temperature and pressure limits should not be exceeded. Bonnets should not be removed from valves unless the system has been evacuated to zero pressure. See also Safety Precautions in the current List Price Schedule and the Safety Precautions Sheet supplied with the product.

#### WARRANTY

Hansen valves are guaranteed against defective materials or workmanship for one year F.O.B. our factory. No consequential damages or field labor is included.

