

SPAN™

Liquid Filled Series H.P. Industrial Gauges

Overview

SPAN Instruments, long a standard of excellence for Sub-Sea, ROV and Exploration in the oil patch, now offers 'Top Side' solutions for High Pressure Pumping, Water Jet Cutting and Panel Builders.

The series is manufactured in 63mm, 100mm and 6" sizes. Many standard and HP connections are offered in pressures up to 40,000 PSI. Stem and panel mounting configurations in standard and solid front cases are available.

MANY extra features are 'standard' on the H.P. Series that are only available as cost adder options on other gauges. (316 SST case, stabilizer movement, helium leak checked)

Custom logo dials, glow dials and dual scaled dials are readily offered.



Benefits

- The Bachmeir-Klemmer German Bourdon Tube (standard on ranges 10K and above) offers the finest performance of repeatable accuracy and longest cycle life.
- A heavy-duty 'Stabilizer' movement is standard with exclusive double dash-pot dampeners at multiple critical wear points. This offers unmatched performance in both Dry and Liquid-Filled configurations.
- All pressure joints are Argon TIG welded and 100% helium leak checked. Each gauge has a permanent serial number.
- The unique Solid Front / Blow-out Back design (when specified) features a laser welded design at the case to socket connection, which eliminates the need for o-rings. This ensures a No-Leak construction for liquid-filled gauges.

Applications

- High Pressure Systems for Oil & Gas Market
- Panel Builders
- Water Jet & Water Blast Equipment
- General OEM Equipment

Construction Data

Case	316 SST Standard 316 SST Solid Front Design
Bezel	316 SST Bayonet w/Gasket
Accuracy	ASME / ANSI B40.1 Grade 1A (1% Full Scale)
Socket	ANSI 316LSST w/restrictor screw
Bourdon Tubes	ANSI 316LSST, C Tube to 1000 PSI Spiral Tube 1500 to 40,000 PSI
Pressure Connection	NPT male, 1/4" male & female HP, 9/16" UNF HP male
Lens	Safety Glass
Pointer	Micrometer Adjustable
Movement	SST Stabilizer with over and underload stops
Dial	White, Black or Glow aluminum
Fill fluid	High purity glycerin
Ranges	Vacuum, compound to 40,000 PSI

Dial Ranges and Intervals

Standard Dial Range	Numbered	Minor	Standard Dial Range	Numbered	Minor
30" Hg	5"	.5"	0-600	100	10
30-0-15	10"-3 psi	2"-1 psi	0-1000	100	10
30-0-30	10"-5 psi	2"-1 psi	0-1500	300	20
30-0-60	30"-10 psi	5"-2 psi	0-2000	200	20
30-0-150	30"-25 psi	10"-5 psi	0-3000	500	50
30-0-300	30"-50 psi	15"-10 psi	0-5000	500	50
30-0-600	30"-100 psi	30"-20 psi	0-6000	1000	100
0-15	3	.2	0-7500	1500	100
0-30	5	.5	0-10,000	1000	100
0-60	10	1	0-15,000	2000	200
0-100	10	1	0-20,000	2000	200
0-160	20	2	0-30,000	5000	250
0-200	20	2	0-35,000	5000	500
0-300	50	5	0-40,000	5000	500
0-400	50	5			

SPAN™ Liquid Filled Series H.P. Industrial Gauge

2.5", 4" and 6"

Temperature Error

Additional error when temperature changes from reference temperature of 68F (20C) +0.4% for every 18F (10C) rising or falling as a percentage of span.

Performance Data

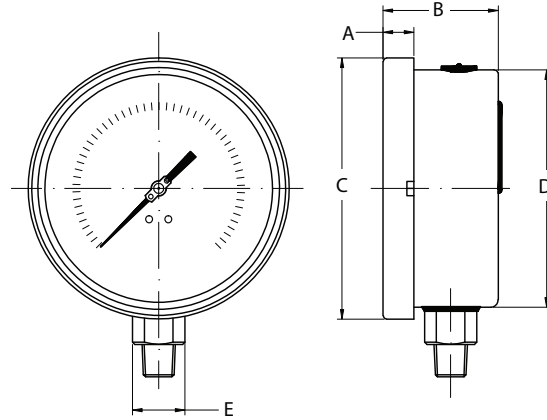
Accuracy	1% Full Scale Grade 1A
Design	ANSI/ASME B40.1
Ambient Temp.	-40 to 150° F
Media Temp.	-40 to 212° F

Weather Protection

Weather tight (NEMA 4X / IP 66)

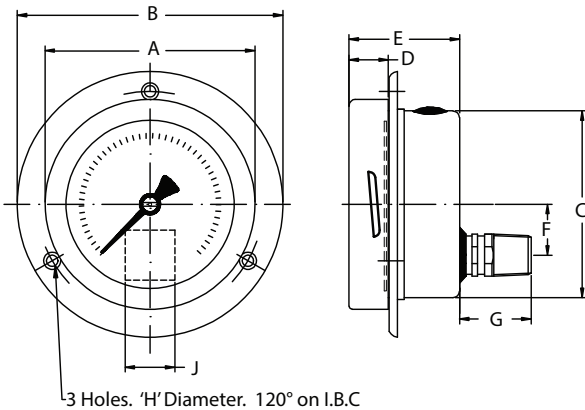
Optional Extras

A.5	=	1/2% Accuracy
MON	=	Monel Bourdon & Socket
CERT	=	NIST Certified with calibration points
DPB	=	Dual Scale - PSI & BAR
DPKP	=	Dual Scale - PSI & KpA
DPKG	=	Dual Scale - PSI & KgCm ²
GLO	=	Glow Dial
OEM	=	Custom Dial with Logo
U/C	=	U-Clamp Mounting Case
RF	=	Rear Flange Case



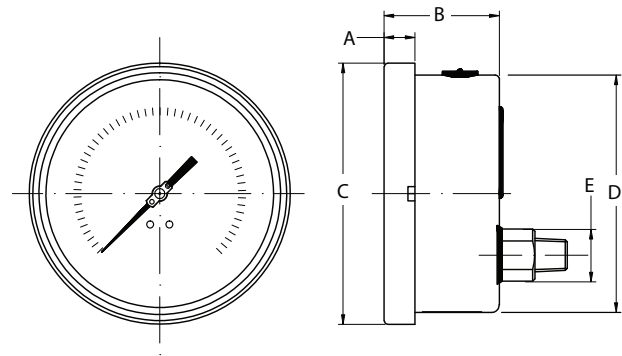
BM Bottom Mount w/NPT. 2.5", 4" and 6"

NS	A	B	C	D	E	lbs.
2.5"	.50	1.40	2.70	2.40	.60	.44
4"	.50	1.87	4.40	4.00	.87	1.32
6"	.60	1.87	6.40	5.90	.87	2.65



LBM Front Flanged Panel Mount w/NPT. 2.5", 4" and 6"

NS	A	B	C	D	E	F	G	H	I	J
2.5"	2.74	3.46	2.4	.51	1.24	.74	.95	.15	2.90	.60
4"	4.40	5.20	4.00	.51	1.87	1.26	1.30	.20	4.57	.87
6"	6.30	7.70	5.90	.60	1.90	2.00	1.30	.20	7.01	.87



LM Lower Back Mount w/NPT. 2.5", 4" and 6"

NS	A	B	C	D	E	lbs.
2.5"	.50	1.40	2.70	2.40	.60	.44
4"	.50	1.87	4.40	4.00	.87	1.32
6"	.60	1.87	6.40	5.90	.87	2.65

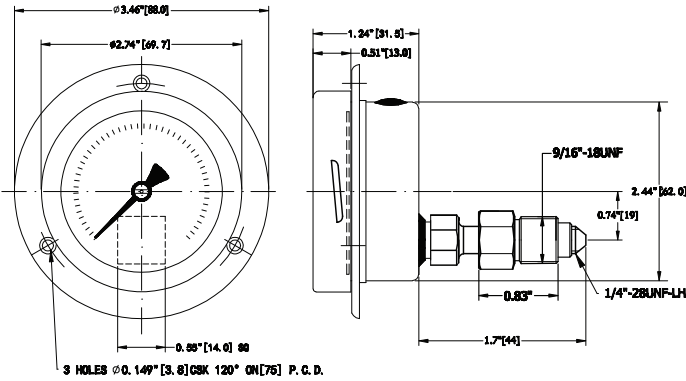
Ordering Number SPAN HP Series Gauges

Configuration	Dial Size	Connection Location	Connection Size	Connection Type	Range	Fill	Options
HP = Standard	25 = 2-1/2"	BM = Bottom Mount	1 = 1/8"	N = NPT	Specify from Chart	G = Glycerin D = Dry, No Fill	See Options Page
HPS = Solid Front Blowout Back	40 = 4" 60 = 6"	LB = Lower Back Mount UC = LB with U-Clamp FF = LB with Front Flange	2 = 1/4" 3 = 3/8" 4 = 1/2" 5 = 9/16"	MM = Med. Press. Male MF = Med. Press. Female HM = High Press. Male HF = High Press. Female			
Example:	HP	40	BM	5	HM	40K	G

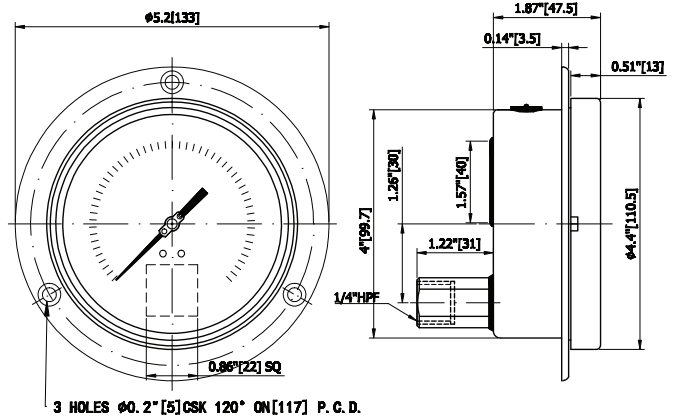
(HP40BM-5HM-40K-G)

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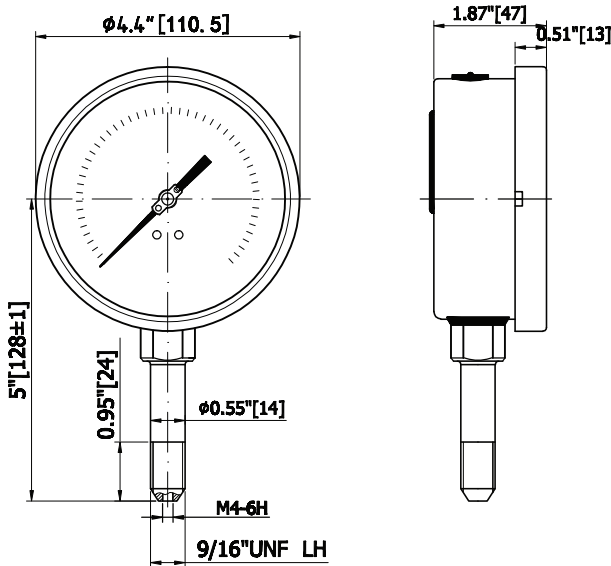
2.5", 4" and 6"



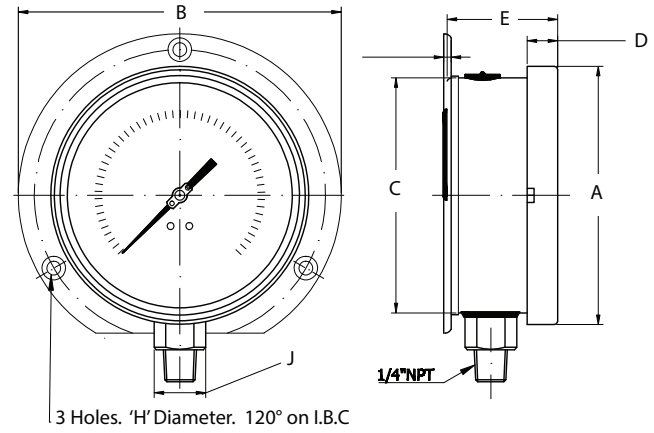
2.5" LBM Front Flanged for Panel Mounting
1/4" HP(M) Connection with Solid Front / Blow Out Back



4" LBM Front Flanged for Panel Mounting
1/4" HP(F) Connection



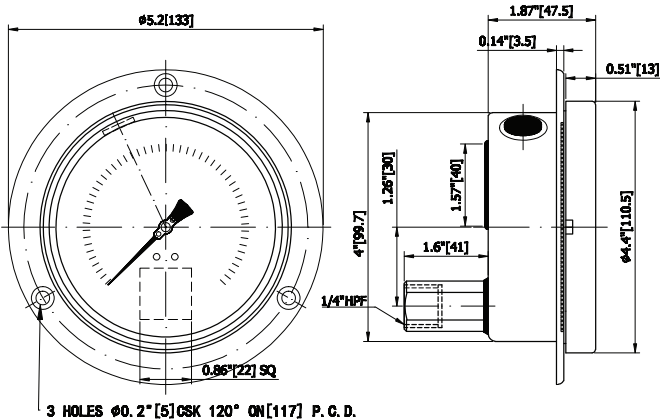
4" LM Mounting Stainless Steel Gauge
9/16" UNF H.P. Connection



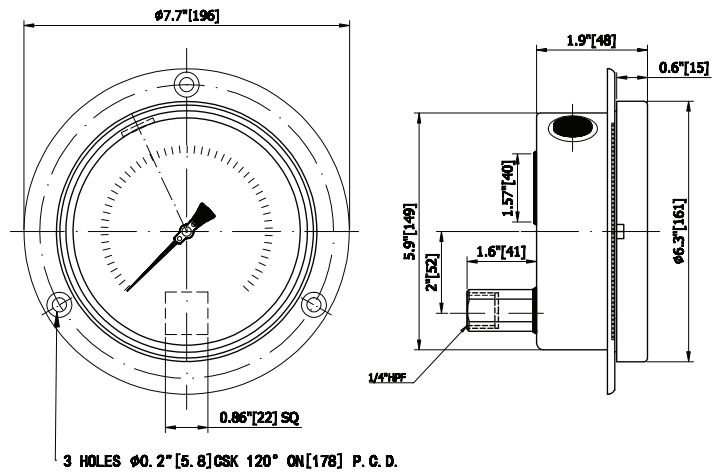
3 Holes. 'H' Diameter. 120° on I.B.C.

NS	A	B	C	D	E	H	I	J
4"	4.40	5.20	4.00	.51	1.87	.20	4.57	.87
6"	6.30	7.70	5.90	.60	1.90	.20	7.01	.87

Rear Flange Surface Mounting
with NPT Bottom Connction



4" LBM Front Flanged for Panel Mounting
1/4" HP(F) Connection with Solid Front / Blow Out Back



6" LBM Front Flanged for Panel Mounting
1/4" HP(F) with Solid Front / Blow Out Back