

# SPAN™

## Liquid Filled Industrial Gauges

### Overview

SPAN gauges are designed for rugged service applications where 316 stainless steel materials are compatible with the media being used. Liquid fill fluid dampens the gauge pointer movement for improved readings and longer life, making SPAN gauges ideal for high shock and vibration applications.

Our Zytel case and ring offer good appearance and excellent resistance to chemical, weather, and corrosion attack.

The SPAN gauge has many optional features that allow a user to develop a basic or special product specification.

### Benefits

- “Fully Filled”: The internal “breathing diaphragm” eliminates the need for an air bubble in the mid-range of the gauge, which can distort readings and looks unsightly. The ICD is standard on all stainless socket gauges.
- Temperature compensated: The ICD compensates the case (to 150° F) for changes in internal case pressure caused by fluctuations in ambient temperature. (Especially critical in lower pressure and vacuum gauges.)
- Freeze proof: The KEM-X Socket Saver is an internal diaphragm seal to prevent freezing, clogging, and corrosion. It is available on all SPAN gauges.
- Lighted Dial: SPAN offers the only lighted and liquid filled gauge. 12 volt incandescent or LED in white, blue, green or red.

### Applications

- Mobile Hydraulic Equipment
- Irrigation / Water Purification
- Waste Water / Slurry
- Food / Pharmaceutical
- Bulk Transport Trailers
- Military / Marine



### Construction Data

Case	Zytel Nylon – black
Bezel	Zytel Nylon – removable
Socket	316 Stainless Steel - TIG Welded
Bourdon Tubes	316 Stainless Steel Vac to 1000 PSI “C” tube 1500 to 20,000 stainless spiral tube
Pressure Connection	¼” NPT Male (JIC optional)
Lens	Acrylic
Pointer	Black aluminum
Movement	Swiss movement stainless steel
Dial	White aluminum
Fill fluid	High purity glycerin
Ranges	Vacuum, compound to 20,000 PSI

### Dial Ranges and Intervals

Standard Dial Range	Major	Minor	Standard Dial Range	Major	Minor
30” Hg	5”	.5”	0-300	50	5
30-0-15	10”-3 psi	2”-1 psi	0-400	50	5
30-0-30	10”-5 psi	2”-1 psi	0-600	100	10
30-0-60	30”-10 psi	5”-2 psi	0-1000	100	10
30-0-150	30”-25 psi	10”-5 psi	0-1500	300	20
30-0-300	30”-50 psi	15”-10 psi	0-2000	200	20
30-0-600	30”-100 psi	30”-20 psi	0-3000	500	50
0-15	3	.2	0-5000	500	50
0-30	5	.5	0-6000	1000	100
0-60	10	1	0-7500	1500	100
0-100	10	1	0-10,000	1000	100
0-160	20	2	0-15,000	2000	200
0-200	20	2	0-20,000	4000	500

## SPAN™ Liquid Filled Industrial Gauge 2.5", 3.5" and 4.5"

### 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

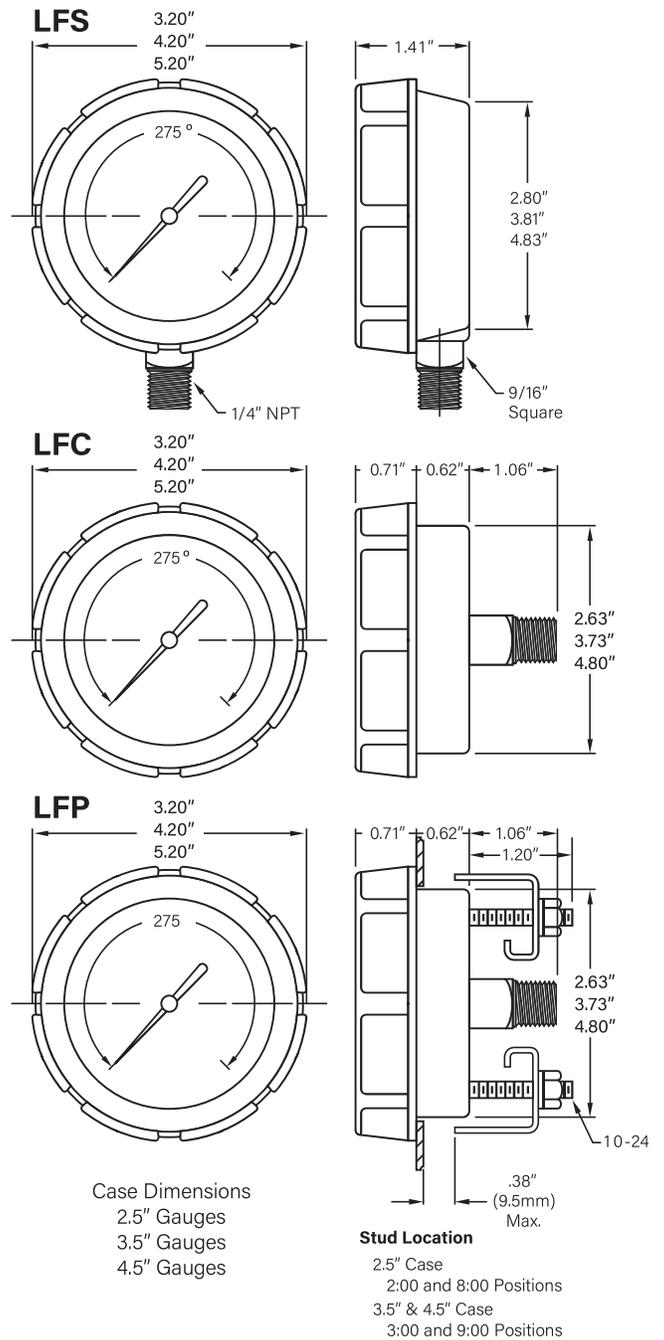
Accuracy	1% Full Scale Grade 1A
Design	ANSI/ASME B40.1
Ambient Temp.	-40 to 225F

### Weather Protection

Weather tight (NEMA 4X / IP 65)

### Optional Extras

ICD	=	Internal temperature compensating diaphragm
IPG	=	Lighted dial
IB1	=	KEM-X Buna-N diaphragm
IV1	=	KEM-X Viton diaphragm
IE1	=	KEM-X EPDM diaphragm
SCK	=	Threaded socket restrictor
CERT	=	NIST Certified with calibration points
SFB	=	S.S. Bezel
RECAL	=	Slotted adjustable pointer
O2C	=	Oxygen cleaning
GL	=	Glass lens
STUD	=	Back mount studs and hardware for panel mounting
DM	=	Dampened movement
WC	=	Sanitary applications, white case
OEM	=	Custom dials
JIC	=	#4 JIC process connection
COL	=	Color coded bezel



**Ordering Number for 3.5" Span Gauge -** Construct by selecting one item from each of the columns below:

Configuration	Dial Size	Accuracy	Wetted Parts	Range	Fill	Options
LFS = Stem Mount Bottom	2 = 2-1/2"	1 = 1% Accuracy	2 = 316 Stainless Steel tube and socket	Please specify from chart	G = Glycerin Filled D = Dry No fill	From option list
LFC = Center Back Mount	3 = 3-1/2"	2 = 2% Accuracy (20,000 PSI Only)				
LFP = Panel Mount U-Clamp	4 = 4-1/2"					
<b>Example:</b> LFS -	<b>3</b>	<b>1</b>	<b>2 -</b>	<b>5000 -</b>	<b>G</b>	<b>CERT</b>

( LFS-312-5000-G - CERT )