# SP4N

# **Liquid Filled Industrial Gauges**

# **Overview**

SPAN gauges are designed for rugged service applications where brass & copper 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**

- "No bubble": 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 2.5" dials up to 60 PSI, optional on higher ranges and standard on all 3.5" and 4.5" dials.
- 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
   Fire Apparatus
- Irrigation / Water purification
   Bulk Transport Trailers
- Waste Water / Slurry
- Military / Marine

# SPAN

### **Construction Data**

Case	Zytel Nylon – black
Bezel	Zytel Nylon – removable
Socket	Brass
Bourdon Tubes	Copper Alloy Vac to 1000 PSI "C" tube 1500 to 7500 stainless spiral tube
Pressure Connection	1/4" npt male (JIC SAE optional)
Lens	Acrylic
Pointer	Black aluminum
Movement	Swiss movement copper alloy
Dial	White aluminum
Fill fluid	High purity glycerin
Ranges	Vacuum, compound to 7500 PSI

Dial Ranges and Intervals	S				
Standard Dial Range	Numbered	Minor	Standard Dial Range	Numbered	Minor
30" Hg	5″	.5"	0-200	20	2
30-0-15	10"-3 psi	2" <b>-</b> 1 psi	0-300	50	5
30-0-30	10"-5 psi	2" <b>-</b> 1 psi	0-400	50	5
30-0-60	30"-10 psi	5" <b>-</b> 2 psi	0-600	100	10
30-0-150	30"-25 psi	10" <b>-</b> 5 psi	0-1000	100	10
30-0-300	30"-50 psi	15" <b>-</b> 10 psi	0-1500	300	20
30-0-600	30"-100 psi	30" <b>-</b> 20 psi	0-2000	200	20
0-15	3	.2	0-3000	500	50
0-30	5	.5	0-5000	500	50
0-60	10	1	0-6000	1000	100
0-100	10	1	0-7500	1500	100
0-160	20	2			

# 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**

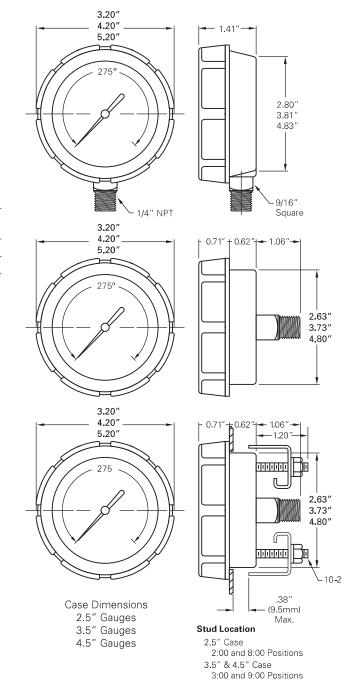
Accuracy - 2.5" - 3.5" & 4.5"	3-2-3% Grade B (1% Grade 1A Optional) 1% Full Scale Grade 1A
Design	ANSI/ASME B40.1
Ambient Temp.	-40° to 150° F

# **Weather Protection**

Weather tight (NEMA 4X / IP 65)

# **Optional Extras**

ICD	=	Internal temperature compensating diaphragm
IPG	=	Lighted dial
KEMX	=	Clog-Freeze proof diaphragm
SCK	=	Threaded socket restrictor
CERT	=	NIST Cerfified with calibration points
SFB	=	S.S. Bezel
RECAL	=	Slotted adjustable pointer
02C	=	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, SAE	=	Special process connections
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	0 = Phospher Bronze Tube, Brass Socket	' '	G = Glycerin Filled	From option list
LFC = Center Back Mount	3 = 3-1/2	2 = 3 - 2 - 3% Accuracy	4 = above 1000 PSI 316 Stainless Steel Tube, Brass socket		D = Dry No Fill	
LFP = Panel Mount U-Clamp	4 = 4-1/2					
Example: LFS -	3	1	0 -	100 -	G	KEMX

(LFS-310-100-G - KEMX)