Process Gauges

SOLFRUNT® 4-1/2" and 6" Receiver Gauges

DESCRIPTION

This series of 4-1/2" and 6" receiver gauges is designed to meet general requirements of the process industry, providing remote or local indication.

Both the aluminum and phenolic case designs available in this series are constructed with an integral partition between the measuring element and the window. A pressure-relieving back is

standard.

An accuracy of ±0.5% of the 12 psi span is provided by a wide phosphor bronze Bourdon tube and a movement of light durable parts.

An adjustable pointer permits front zero adjustment. Other calibration adjustments can be made by removing the pressure relieving back without removing the internals from the case.



SPECIFICATIONS

DIAL SIZE: 4-1/2": 1362, 1365, 1367; 6": 1362, 1365

CASE:

1362: SOLFRUNT die cast aluminum case with back flange for wall or stem mounting. Black finish. 4-1/2" size has polypropylene pressure relieving back; 6" size has Nitrile pressure relieving back

1365: SOLFRUNT die cast aluminum case with front flange for panel mounting. Black finish. 4-1/2" size has aluminum pressure relieving back; 6" size has Nitrile pressure relieving back

1367: SOLFRUNT PET turret case (black) with polypropylene pressure relieving back. Available in 4-1/2" size only

RING

1362 4-1/2": Aluminum bayonet lock, black finish 1362 6": Aluminum, threaded, black finish 1365 4-1/2" and 6": steel, hinged, black finish 1367 4-1/2" only: polypropylene, snap-in, black

1307 4-172 Only, polypropylene, snap-in, black

WINDOW: 1362 and 1365: acrylic with neoprene gasket; 1367: acrylic

POINTER: Knife-edged, adjustable, black finish

DIAL: Aluminum, white background with black markings. Outer scale marked 3 to 15 psi. Inner scale marked in terms of process variable

MOVEMENT: Geared ARC-LOC® with parts of phosphor bronze and stainless steel to reduce friction and wear. Minimum stop and spring loaded slotted link allow stopping the pointer at 3 psi, while permitting the Bourdon to return to its unstressed position at 0 psi

BOURDON TUBE: Phosphor bronze, silver brazed

CONNECTION: 1/4-18 ANPT brass

ACCURACY: ±0.5% of span, ±.06 psi (Grade 2A)

DEAD BAND: 0.5% of span, .06 psi

General Information About Receiver Gauges

U.S. Gauge receiver gauges are specifically designed for use with pneumatic transmission of process variables. A wide variety of transmitters is available to convert flow, temperature, differential pressure, level, etc., into a proportional air pressure signal. The most commonly used transmission range is 3 to 15 psi. Transmitters are arranged so that the lowest value of the variable to be measured creates a 3 psi pressure, and the highest value creates a 15 psi pressure. These pressures may be indicated locally or remotely by a pressure gauge having a dial calibrated in terms of the variable being measured. Called Receiver Gauges, these gauges generally provide a graduation arc of 270° for a pressure change of 3 psi to 15 psi; or a span of 12 psi.

If the gauge is to be used for "tuning" the process, accuracy and deadband are of prime importance. Accuracy is conformity of a pressure gauge indication to an accepted standard or "true" indication. Dead band is the range through which the input can be varied without indicating pointer motion. Both accuracy and dead band are expressed in "percent of span."

If the gauge is to be used simply to give an indication of the transmitted pressure or process variable, a smaller, less accurate gauge is sufficient.

The receiver gauges offered in this catalog provide a wide selection, ranging

in accuracy from $\pm 0.5\%$ and a deadband of 0.5%, to general purpose gauges having an accuracy of $\pm 1\%$.

Standard operating ranges are 3 to 15 psi. Other ranges are available, but are not stock items.

From a safety standpoint it is important to note that receiver gauges may have dials calibrated in any unit, e.g. 0 to 1000 psi. However, regardless of the nomenclature on the dial, the maximum normal operating pressure is 15 psi, and severe overpressure can cause the pressure element to burst with possible catastrophic results.

For the purpose of warning the user against applying excessive pressure to the gauge, most receiver gauges described in this catalog have the following notice on the dial:

RECEIVER GAUGE 25 PSI MAXIMUM INPUT PRESSURE

While 25 psi will not cause the pressure element to burst, it will cause a calibration shift.

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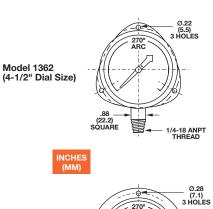


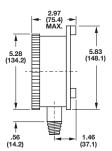


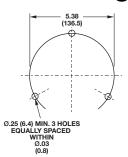
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Process Gauges

SOLFRUNT® 4-1/2" and 6" Receiver Gauges

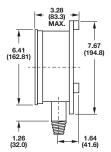


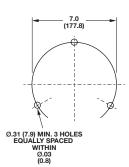




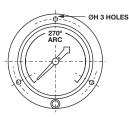


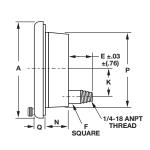
Model 1362 (6" Dial Size) 1/4-18 ANPT THREAD

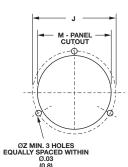




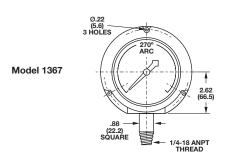
Model 1365

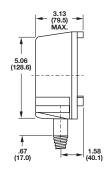


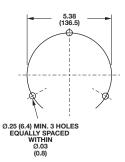




DIAL SIZE	UNIT	A	E	F	Н	J	K	М	N	P	Q	Z
4-1/2"	inches	6.09	1.08	.88	.22	5.38	1.62	4.90	1.77	4.83	.67	.25
	mm	154.69	42.16	22.35	5.56	136.53	41.15	124.21	44.96	30.23	17.02	6.35
6"	inches	7.72	1.24	.88	.28	7.0	1.62	6.39	2.12	6.31	.64	.31
	mm	196.09	37.59	22.35	7.14	177.80	41.15	161.80	53.85	160.27	16.26	7.87







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Process Gauges

General Purpose Receiver Gauges

DESCRIPTION

Offered in 2", 2-1/2", and 3-1/2" sizes for panel or stem mounting, these gauges are normally used for remote indication of process variables and not for tuning process controls. Inexpensive, and

suitable for applications which do not demand better than 1%

accuracy over the middle half of the scale.



SPECIFICATIONS

DIAL SIZE: 2", 2-1/2", 3-1/2"

CASE: Steel, black finish (back connected with U-clamp)

RING/WINDOW: Threaded, polycarbonate

WINDOW: 3-1/2": Acrylic, beveled POINTER: Aluminum, black finish

DIAL: Steel, white background with black markings. Outer scale marked 3 to 15 psi. Inner scale marked in terms of

process variable

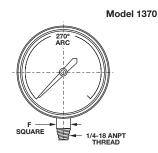
MOVEMENT: Brass with minimum stop **BOURDON TUBE: Beryllium Copper** CONNECTION: 1/4-18 ANPT, brass

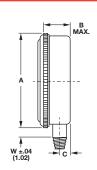
ACCURACY (Grade 1A):

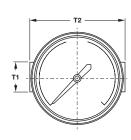
±1% of span (.12 psi) over middle half of scale Balance of scale is ±2% of span (.24 psi)

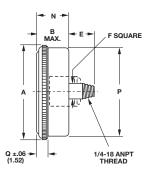
Model 1370 (Low Mount)

DIAL SIZE	UNIT	Α	В	C	F	w
2"	inches	2.28	1.18	.41	.56	.24
	mm	56.64	30.48	9.91	14.22	6.60
2-1/2"	inches	2.83	1.22	.41	.56	.23
	mm	70.25	30.48	9.65	14.22	6.10
3-1/2"	inches	3.88	1.19	.38	.56	.44
	mm	98.30	26.54	9.91	14.22	11.18









Model 1370 (U-Clamp, Center-Back Mount)

DIAL SIZE	UNIT	A	В	E	F	N	P	Q	T1	T2
2"	inches	2.25	1.22	.78	.56	1.09	2.11	.24	.75	2.28
	mm	56.64	30.99	27.69	14.22	27.69	53.59	10.41	25.40	57.66
2-1/2"	inches	2.80	1.22	.77	.56	1.09	2.59	.30	75	2.81
	mm	71.37	30.99	27.69	14.22	27.69	67.82	10.41	25.40	72.90
3-1/2	inches	3.88	1.18	.78	.56	1.09	3.64	.29	.75	3.94
	mm	98.30	29.97	27.43	14.22	27.69	93.98	9.40	25.40	101.60

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Process Gauges

General Purpose Receiver Gauges

SPEC NUMBER SELECTION CHART

Receiver Ga	auges		SURF	ACE OR STEM MO	UNTED GAUGES		
	1/4	Model No. 1370 I-18 ANPT Low Mo	unt		No. 1362 PT Low Mount	Model No. 1367 - Super Receiver 1/4-18 ANPT Low Mount Phosphor Bronze	
Bourdon Tube		Beryllium Copper		Phosphor	Bronze		
Connection	Brass	Brass	Brass	Brass	Brass	Brass	
Size	2"	2-1/2"	3-1/2"	4-1/2"	6"	4-1/2"	
Dial	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	
0-100	35242	35245	75818	132270	132607	132361	
0-10	-	_	75820	_	-	132362	

FLUSH PANELBOARD MOUNTED GAUGES

		Model No. 1370 ^a 4-18 NPT Low Mod		Model No. 1365 1/4-18 NPT Low Mount			
Size		Beryllium Copper		Phosphor Bronze	-		
Connection	Brass	Brass	Brass	Brass			
Size	2"	2-1/2"	3-1/2"	4-1/2"	6"		
Dial	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.		
0-100	35243	35244	75817	132270	-		
0-10	_	-	75819	132271	-		

^{*} Suitable for stem mounting

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