



Cert. No. LRQ 0963008

ISO 9001

# spirax sarco

TI-P027-01  
ST Issue 9

## BSP Pressure Gauge with Syphon and Cock

### Description

Pressure gauge with 100 mm diameter dial with units marked in bar, psi and inches Hg for vacuum as appropriate. The gauge is supplied with either:-

Ring-type syphon tube and cock or a 'U' type syphon tube and cock.  
Bourdon tube gauge, constructed in accordance with DIN 16005.

### Sizes and pipe connections

<b>Pressure gauge:</b>	$\frac{3}{8}$ " BSP male (BS 2779)
<b>Gauge cock:</b>	Gauge end $\frac{3}{8}$ " BSP female (BS 2779)
	Syphon end $\frac{3}{8}$ " BSP female parallel (BS 21)
<b>Ring / 'U' syphon:</b>	Cock end $\frac{3}{8}$ " BSP male taper (BS 21)
	Process end $\frac{3}{8}$ " male parallel (BS 21)

### Limiting conditions

Maximum design conditions = full scale reading

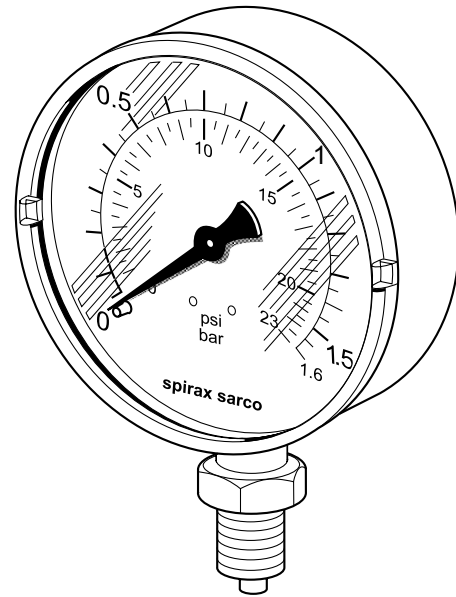
Maximum design temperature 217°C  
( 'U' or ring syphon must be fitted to achieve this).

Range 6 (0 - 25 bar g), where on compressed air and steam services the operating limit is 21 bar g (BS 1387 - heavy grade tube). Maximum service temperature, if the syphon tube is not fitted, is 60°C. On applications with a service temperature above 60°C, a syphon tube must be fitted.

The pressure gauge has an IP rating of 34 and should be used in an indoor dry environment.

### Pressure ranges

Range	bar	psi
1	0 to 1.6	0 to 23
2	0 to 4.0	0 to 53
3	0 to 6.0	0 to 86
4	0 to 10.0	0 to 145
5	0 to 16.0	0 to 230
6	0 to 25.0	0 to 360
7	-1 to 1.5	30" Hg to 20 psi
8	-1 to 3.0	30" Hg to 40 psi
9	-1 to 5.0	30" Hg to 70 psi



### Materials

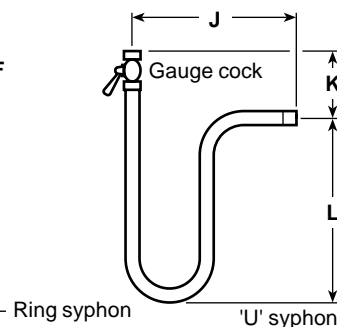
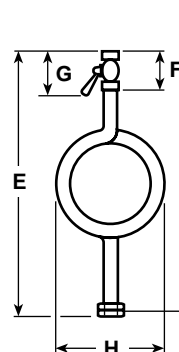
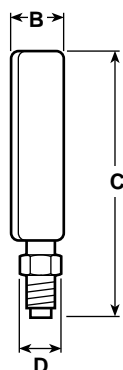
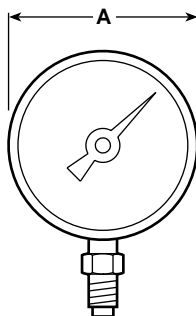
Gauge	Case	Pressed steel with grey enamel finish
	Glass	Snap fit perspex
	Bourdon tube	CuSh 8 (92% Cu 8% Zn)
Ring and 'U' syphon	Mild steel tube BS 1387 heavy grade	
Gauge cock	Body	Brass
	Handle	Phenolic

### Certification

Certificate of conformity is available as standard for this product. A calibration certificate is available by special order at extra cost.

### Dimensions / weights (approximate) in mm and kg

Gauge						Ring syphon					'U' syphon					
A	B	C	D	Weight		E	F	G	H	Weight Syphon	Cock	J	K	L	Weight Syphon	Cock
100	29	137	22 A/F	0.43		321	35	80	116	0.94	0.21	167.5	61.5	136.5	0.59	0.21



## Installation

As with all instrumentation, the Spirax Sarco pressure gauge is a delicate measuring device and care has to be taken in its installation and use if it is to remain reliable.

It is recommended that all gauges are fitted with a gauge cock to assist when calibration or maintenance is necessary. When used on steam or other hot gases, gauges **must** be protected from heat by the use of a 'U' syphon or ring syphon tube and gauge cock. The syphon pipe should be primed with water prior to fitting the gauge. Care should be taken if the installation is exposed to frost as gauges can burst.

Gauges should be adequately protected from either mechanical vibration or rapid system pulsation.

Tighten the gauge with care using a 22 mm A/F spanner not by twisting the gauge case. Gauges should be selected so as not to exceed 75 % of maximum scale reading during normal use.

## Maintenance and recalibration

There are no spare parts for the Spirax Sarco pressure gauge: the only maintenance work necessary is regular cleaning of the perspex window and recalibration. Solvents should not be used to clean the perspex window as it may impair clarity.

**Note: Gauge cocks should always be opened and closed slowly to avoid pressure shocks to the gauges.**

During recalibration the perspex window can be removed, using a narrow flat-faced screwdriver, placed in the slots on the edge of the glass. The pointer can be gently pulled off its spindle and replaced at the correct reading by gently pushing back on to the spindle. After calibration, push fit the window back into position. Refit the gauge to the system.

## Safety

### Pressure

Ensure that any pressure is isolated upstream and downstream of the product and safely vented to atmospheric pressure before attempting to maintain the product. This is easily achieved by fitting Spirax Sarco depressurisation valves type DV (see separate literature for details). Do not assume that the system is depressurised even when the gauge indicates zero.

### Temperature

Allow time for temperature to normalise after isolation to avoid the danger of burns and consider whether protective clothing (including safety glasses) is required.

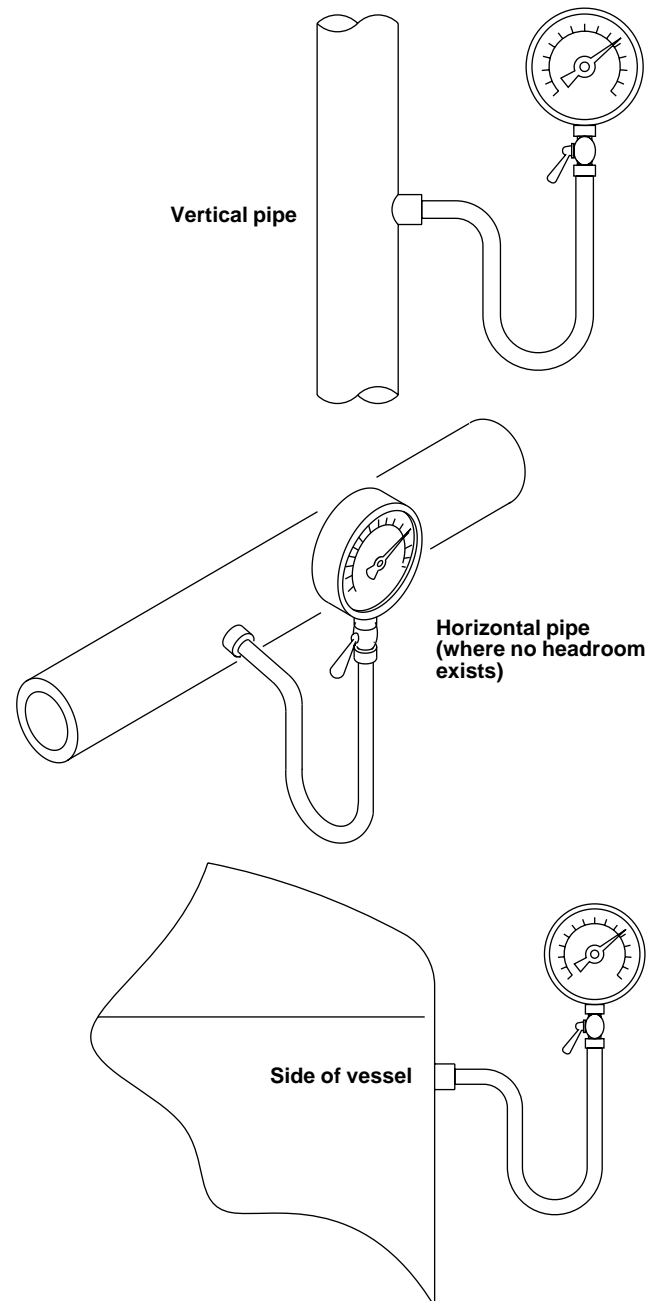
### Isolation

Consider whether closing isolating valves will put any other part of the system or personnel at risk. Dangers might include: isolation of vents, protective devices or alarms. Ensure isolation valves are turned on and off in a gradual way to avoid system shocks.

## Disposal

The product is recyclable. No ecological hazard is anticipated with the disposal of this product providing due care is taken.

## Typical uses of a 'U' syphon and gauge



## Typical uses of a ring syphon and gauge

