spirax sarco

TI-P027-01 CMGT Issue 14

# **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 and having a BSP connection. The gauge is supplied with either:

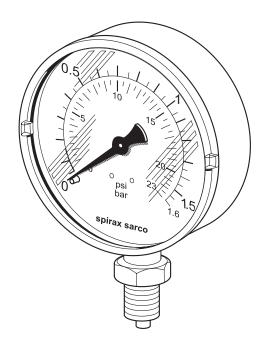
Ring type syphon tube and cock or a 'U' type syphon tube and cock.

#### For the following options, consult Spirax Sarco:

Pressure gauges with NPT connections.

## Available pressure range

	Range	0 to 1.6 bar	0 to 23 psi
	Range*	0 to 4.0 bar	0 to 53 psi
	Range*	0 to 6.0 bar	0 to 86 psi
Steel	Range*	0 to 10.0 bar	0 to 145 psi
	Range*	0 to 16.0 bar	0 to 230 psi
Note: Where indicated (*) a dial with MPa units is	Range*	0 to 25.0 bar	0 to 360 psi
available.	Range	-1 to 1.5 bar	30" Hg to 20 psi
	Range	-1 to 3.0 bar	30" Hg to 40 psi
	Range	-1 to 5.0 bar	30" Hg to 70 psi
	Range	0 to 4.0 bar	0 to 53 psi
	Range	0 to 10.0 bar	0 to 145 psi
Stainless steel	Range	0 to 16.0 bar	0 to 230 psi
	Range	0 to 25.0 bar	0 to 360 psi



#### **Standards**

The product fully complies with the requirements of the EU Pressure Equipment Directive/UK Pressure Equipment (Safety) Regulations.

This pressure gauge conforms to:

- DIN EN 837-1:1997-02 Pressure gauges Part 1: Bourdon tube pressure gauges; dimensions, metrology, requirements and testing,
   and
- DIN EN 837-1:1997-02 Pressure gauges Part 3: Diaphragm and capsule pressure gauges; dimensions, metrology, requirements and testing

#### Certification

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

# Sizes and pipe connections

Pressure gauge	%" BSP male		EN 100 000 4
Gauge cock	Gauge end	3/s" BSP female	EN ISO 228-1
	Syphon end	3/s" BSP female parallel	
	Cock end	3/s" BSP male taper	EN 10226-1
Ring/'U' syphon	Process end	3/s" male parallel	

## **Materials**

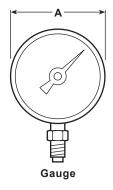
	Part	Material			
		Case	Pressed steel		
	Gauge	Glass	Snap fit perspex		
Steel		Bourdon tube	CuSh 8 (92% Cu 8% Zn)		
	Ring and 'U' syphon	Mild steel tube BS 1387 heavy grade			
	Gauge cock (for use up to 16 bar g)	Body	Brass		
		Handle	Phenolic		
	* For use on pressures above 16 bar g	%" M10S2 ball valve	Carbon steel		
		Case	Stainless steel		
	Gauge	Glass	Snap-fit perspex		
Stainless steel		Bourdon tube	Stainless steel 316TI		
	'U' syphon		Stainless steel		
	Gauge cock	Use a Spirax Sarco %" M10S4	Stainless steel		

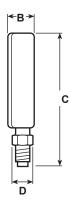
## Pressure/temperature limits

Maxim	num design conditions		Full sc	ale reading
PMA	Maximum allowable pressure		Full scale reading	
TMA	Maximum allowable temperature of gauge.  Note: Either a 'U' or a ring syphon must be fitted to achieve this.		217 °C	
Minim	um allowable temperature			-40 °C
		Range †	1.5 bar	20 psi
DMO	Martin and the second s	Range	1.6 bar	23 psi
РМО	PMO Maximum operating pressure  Please note:		3 bar	40 psi
	Where indicated (†) these units are available as compound gauges down to full	Range	4 bar	53 psi
	vacuum.		5 bar	70 psi
	2. For compressed air and steam services the maximum operating pressure for this		6 bar	86 psi
	product is 16 bar g.	Range	10 bar	145 psi
	<b>3.</b> Gauge cock limited to 16 bar g. Use M10S2 or M10S4 for higher pressures.	Range	16 bar	230 psi
			25 bar	360 psi
Maxim	num ambient temperature			50 °C

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

		Gauge		
Α	В	С	D	Weight
100	29	137	22 A/F	0.43

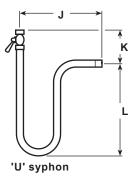




Ring syphon						
				Weight		
E	F	G	Н	Syphon	Cock	M10S2 and M10S4 ball valve
321	35	80	116	0.94	0.21	0.61

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U' syphon						
			Weight			
J	K	L	Syphon	Cock	M10S2 and M10S4 ball valve	
167.5	61.5	136.5	0.59	0.21	0.61	



#### Safety information, installation and maintenance

For full details see the Installation and Maintenance Instructions (IM-P027-02) supplied with the product.

#### Installation note:

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.

#### Disposal:

The product is recyclable. No ecological hazard is anticipated with the disposal of this product providing due care is taken, with the exception of PTFE (ball valves).

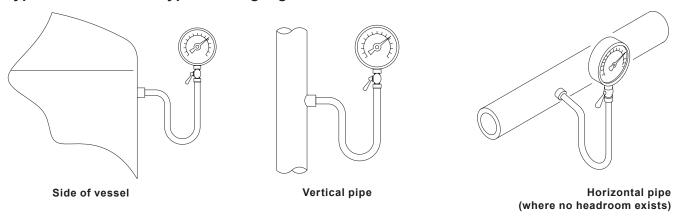
#### PTFE:

- Can only be disposed of by approved methods, not incineration.
- Keep PTFE waste in a separate container, do not mix it with other rubbish, and consign it to a landfill site.

#### How to order

Example: 1 off Spirax Sarco 4" pressure gauge with a pressure range of 0 - 10 bar and having screwed %" BSP connections.

# Typical uses of a 'U' syphon and gauge



## Typical uses of a ring syphon and gauge

