spirax sarco

TI-P322-02
MI Issue 7

EL2600
Pressure Transmitter and 'U' Syphons

Description

The EL2600 is a combined pressure sensor and transmitter which is designed for general and industrial use.
It has a 2-wire 4-20 mA current loop, and a ¼" NPT process connection. Two syphon tube and valve assemblies are available, one with a maximum design pressure of 25 bar g, and one with a maximum design pressure of 80 bar g.

Available ranges

m bar g	0-100	0-250	0-600					
bar g	0-0.1	0-0.25	0-0.6	0-1	0-1.6	0-2.5	0-4	0-6
	0-10	0-16	0-25	0-40	0-60	0-100*	0-160*	0-250*
bar a	0-1.6	0-2.5						

*No 'U' syphon is available for these ranges, therefore maximum operating temperature is limited to 100°C

Limiting conditions

Pressure/temperature limits EL2600

Minimum operating temperature	-30°C (medium) -20°C (ambient)
Maximum operating temperature (without syphon tube)	100°C (medium) 80°C (ambient)

Low pressure syphon tube/valve

Maximum design pressure	25 bar g
Maximum design temperature	260°C
Maximum working conditions	21 bar g @ 217°C

High pressure syphon tube

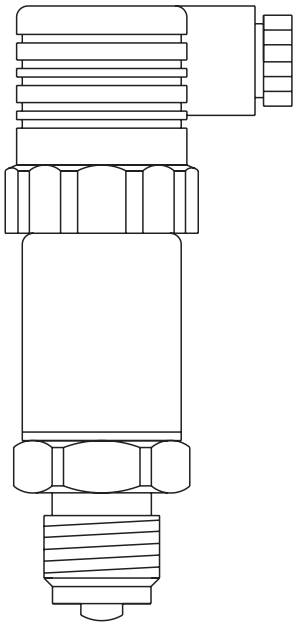
Maximum design pressure	80 bar g
Maximum design temperature	450°C
Maximum working conditions	60 bar g @ 450°C

Overpressure limit table

Calibrated pressure range	Overpressure P max (bar)
0-1.6 bar a, 0-2.5 bar a	10
0-0.1 bar g	1
0-0.25 bar g	2
0-0.6 bar g	4
0-1 bar g	5
0-1.6 bar g, 0-2.5 bar g	10
0-4 bar g	17
0-6 bar g, 0-10 bar g	35
0-16 bar g, 0-25 bar g	80
0-40 bar g	120
0-60 bar g	200
0-100 bar g	320
0-160 bar g	500
0-250 bar g	800

Note: High pressure 'spikes' above maximum overpressure, even of very short (milli-seconds) duration, could damage sensors. If pressure peaks are likely to occur in your application, we recommend the use of a pressure snubber. Alternatively, a higher range pressure transmitter could be used, though this would mean some loss of signal resolution.

Process connection
For fluids below 100°C the EL2600 may be mounted directly via its ¼" NPT connection.
Above 100°C, a 'U' syphon and isolating valve must be fitted between the EL2600 and the vessel or pipeline.



Technical data

Sensor type	0-1.6 bar a to 0-16 bar g	Piezorresistive
	0-40 bar g to 0-400 bar g	Thin film
Supply voltage		10 Vdc to 30 Vdc
Accuracy		≤ 0.5%
Repeatability		≤ 0.05 of span
Hysteresis		≤ 0.1% of span
Protection rating		IP65

Approvals

EMC emissions	2004/108/EC, EN 61 326 Emission (Group 1, Class B)
EMC susceptibility	2004/108/EC, EN 61 326 Emission (Group 1, Class B) and Immunity (industrial locations)

Materials

EL2600

Part	Material	
Body	Stainless steel	316L WS 1.4435
Connector	Moulded plastic	Polyamide PA 66

Low pressure syphon tube assembly (Valve ordered separately)

Part		Material	
Tube		Carbon steel	ASTM A 106 Gr. B. Phosphated
Valve	Body	Brass	
	Handle	Phenolic	

High pressure syphon tube assembly

Part		Material
Tube		Carbon steel BS 3602: Part.1 1987 CFS 360 (zinc plated/passivated).
Valve	Body	Carbon steel
	Seat	PEEK/Polymain

Local regulations may restrict the use of this product to below the conditions quoted.
In the interests of development and improvement of the product, we reserve the right to change the specification without notice.

Dimensions / weights (approximate) in mm and kg

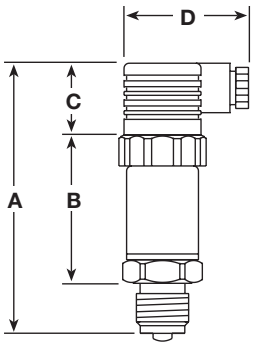
EL2600

A	B	C	D	Weight
104	57	28	48	0.2

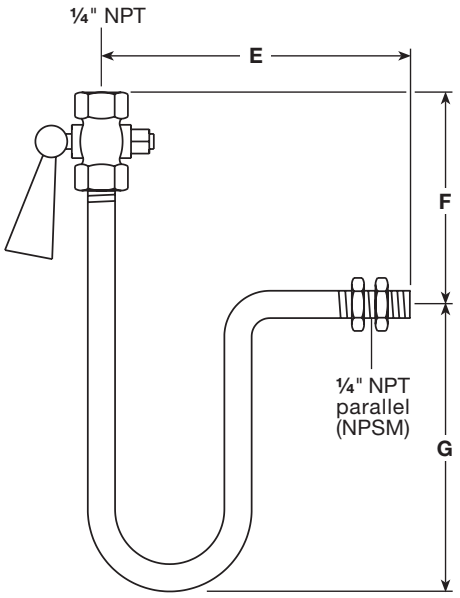
'U' Syphon and isolating valve

E	F	G	H	J	K	Weight
160	50	150	160	60	150	0.5

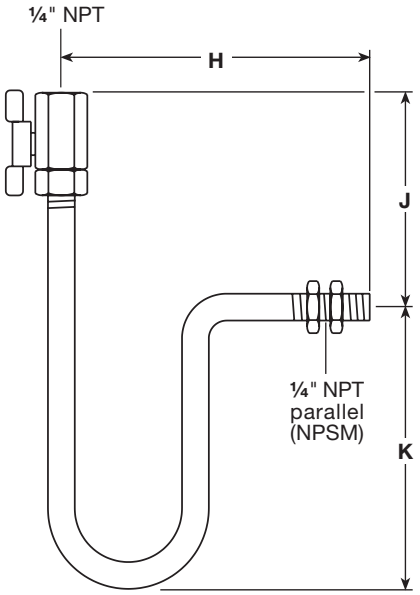
EL2600



Low pressure 'U' syphon



High pressure 'U' syphon



Safety information, installation and maintenance

This document does not contain sufficient information to install the product safely. See the Installation and Maintenance Instructions supplied with the product.

Safety note:
You attention is drawn to Safety Information Leaflet IM-GCM-10.

Installation note:
It is essential to use a 'U' syphon and valve for temperatures above 100°C to avoid damage to the unit.

Maintenance note:
No specific maintenance is required, but we recommend inspection and re-calibration of the transmitter once a year.

How to order

Example: 1 - Spirax Sarco EL2600 pressure transmitter, range 0 - 16 bar g, with low pressure 'U' syphon and isolating valve.