Cert. No. LRQ 0963008

ISO 9001

spirax sarco

Self-acting
Temperature Control Systems

Description

A range of self-powered control systems that incorporate sensor, actuator, set point adjustment/indicator for use with the following valve types:-

2-port	KA, KB, KC, KX, KY, SB, SBRA, BX, BXRA, BM, BMRA, BMF, BMFRA, NS, NSRA
3-port	TW

Available types

Set point adjustment at sensor

SA121	For use on	2-port valves DN15 to 80
		3-port valves DN20 to 50
SA1219	For use on 3-port valves DN80 and 100	
SA128	For use on	2-port valves DN15 to 25
		3-port valves DN20 and 25

Set point adjustment at valve

| SA122 | For use on | 2-port valves DN15 to 25 |
| | | 3-port valves DN20 and 25 |

Remote set point adjustment

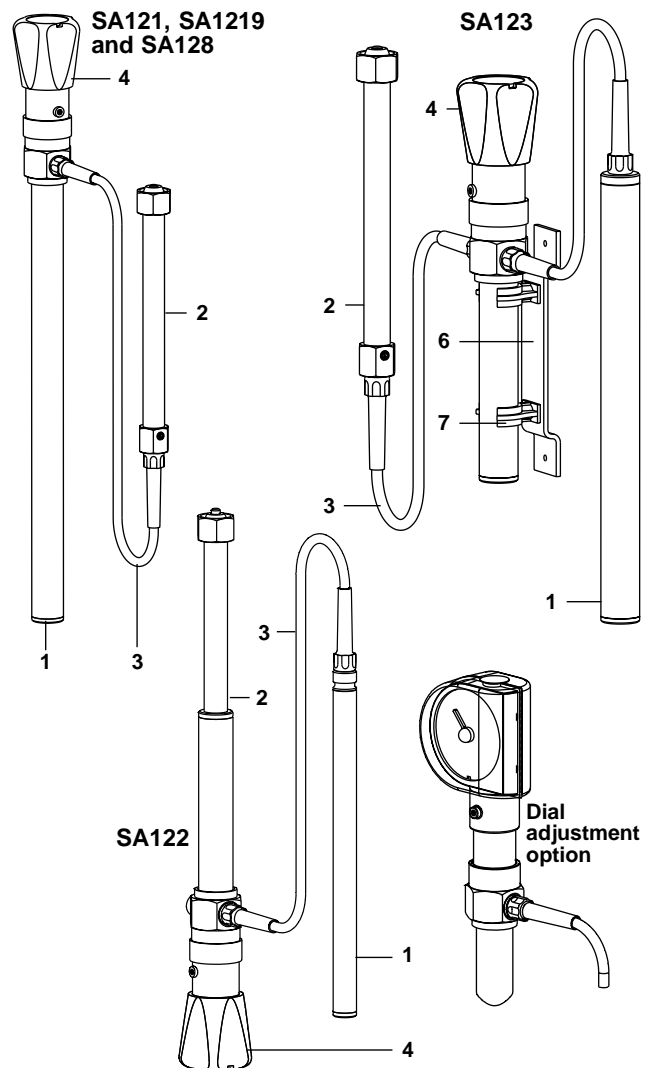| SA123 | For use on | 2-port valves DN15 to 80 |
| | | 3-port valves DN20 to 50 |

Optional extras

Union kit	Direct immersion
Pocket	Indirect immersion

Material options include mild steel, copper, brass, stainless steel. Glass option also available for SA122 and SA123 only.

Wall bracket	
Duct adaptor	Duct mounting
Coiled sensor	Fast response
Nickel plating	
Dial type set point adjuster	
Pt100 temperature sensor	SA122TP and SA123TP incorporate an internal pocket to accept a Pt100 sensor

Materials

No	Part	Material
1	Sensor	Brass
2	Actuator	Brass
3	Capillary tube	Copper with PVC coated armoured covering
4	Adjustment head	Polypropylene
* 5	Union kit	Brass
6	Mounting bracket	Steel
7	Clip	Polypropylene
* 8	Adaptor plate (Duct fixing adaptor)	Steel
* 9	Pocket	Mild steel	BS 980 CEW2
		Copper	BS 2871 C106
		Brass EN 12451 CW707R H130/170
		Stainless steel BS 3605 CFS 316S 18
		Glass
10	Liquid fill	Kerosene

* Items 5, 8 and 9 are shown overleaf.

SA121, SA1219 and SA128

SA123

SA122

Dial adjustment option

Temperature ranges

SA121, SA1219 and SA123	Range 1	-15°C to 50°C
	Range 2	40°C to 105°C
	Range 3	95°C to 160°C
Over temperature protection		55°C over set value to 190°C maximum 215°C maximum for SA123
SA122	Range 1	-20°C to 120°C
	Range 2	40°C to 170°C
Over temperature protection		55°C over set value
SA128	Range 1	-20°C to 110°C
	Range 2	40°C to 170°C
Over temperature protection		55°C over set value to 190°C maximum

Capillary tube

Standard length 2 m, 4 m, 8 m and 20 m.

SA121, SA1219 and SA128   **SA122TP**   **SA122**   **SA123TP**   **SA123**   **Pockets**

(optional) **For a wall mounted sensor** — 6

6 (Included)

Glass / Metal
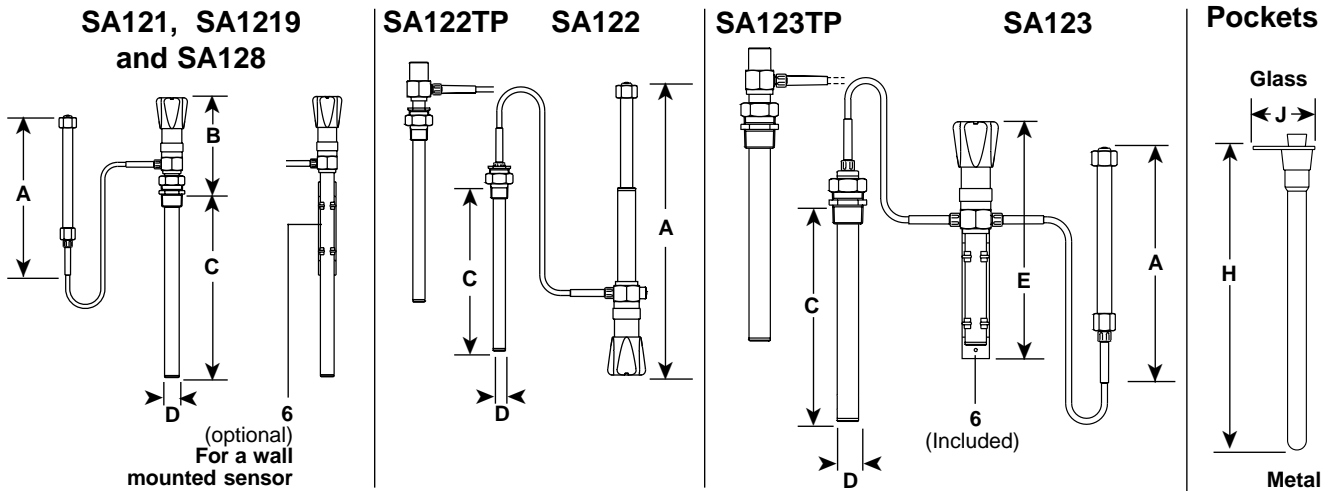
Dimensions / weights (approximate) in mm and kg

Model	Control system					Metal pockets		Glass pockets		Weight excluding pocket
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	
SA121	275	185	310	25	-	333	28	-	-	2.0
SA1219	350	185	310	25	-	333	28	-	-	2.3
SA122	415	-	240	17	-	271	20	575	117	1.8
SA122TP	415	-	255	17	-	271	20	-	-	2.0
SA123	275	-	248	25	270	276	28	575	117	2.5
SA123TP	275	-	255	25	270	276	28	-	-	2.7
SA128	275	185	178	25	-	196	28	-	-	1.8

Union kit (for sensor immersion without pocket)
Includes gland nut, compression ring and union nipple.

SA121, SA1219, SA123 and SA128	Items Z, Y and X
SA122	Items W, V and U

Pockets (for indirect immersion)
Includes pocket, gland nut and compression ring.

SA121, SA1219, SA123 and SA128	Items T, Z and Y
SA122	Items S, W and V.
Available materials	Mild steel, copper, brass and stainless steel

Long pockets (SA122 and SA123 only)
To special order only.
Having a minimum length 0.5 m, maximum length to order.
Includes pocket, bracket and rubber bung

SA122 and SA123	Items S, V, W and T, Z, Y
Available materials	Mild steel, copper, brass and stainless steel

Glass pockets (SA122 and SA123 only)
To special order only.
Includes pocket, bracket and rubber bung

SA122 and SA123	Items R, O and P

Wall mounting bracket (Item 6)

SA121, SA1219, SA122, SA123 and SA128	Optional

Duct fixing adaptor (for air sensing within ducts)
Includes adaptor plate, union nipple, compression ring and gland nut.

SA121, SA1219, SA123 and SA128	Items 8, X, Y and Z
SA122	Not available

Installation
Full instructions are given in the Installation and Maintenance Instructions provided with the product.

How to order
1 - Spirax Sarco SA121 control system, temperature range 2, having 2 m capillary and stainless steel pocket.

Union kit

5 — Z, Y, X — 1" BSP or NPT   W, V, U — ¾" BSP or NPT — 5

9 — Z, Y — 1" BSP or NPT   W, V — ¾" BSP or NPT — 9

Pocket (metal)

T — SA121, SA1219, SA123 and SA128

S — SA122

Pocket (glass)

P, O — R

Duct fixing adaptor — 8 — 112 mm — 112 mm — X Y Z