

Small Water Temperature Control

Description :

For use on water systems, heating or cooling.

Available types :

- JD 61 2 port normally open diaphragm balanced control valve
 - JD 61 RA 2 port normally closed diaphragm balanced control valve
 - JD 61 3 port mixing or diverting valve
- Type 300 control system for use with any of the valves above. The sensor of the control system will need to be mounted by one of the following :
- Union Kit for immersion
 - Pocket for immersion
 - Wall mounting bracket

Limiting conditions :

- Maximum body pressure 10 bar
- Maximum temperature 120° C.
- Maximum differential pressure
- JD 61 and JD 61 RA 7bar
- JS 61 1.7 bar

Temperature ranges :

- Range 30 0 to 30° C.
- Range 50 20 to 50° C.
- Range 70 40 to 70° C.
- Range 90 60 to 90° C.

Sizes and pipe connections :

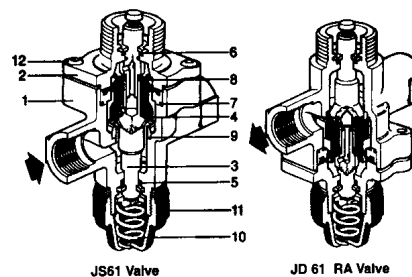
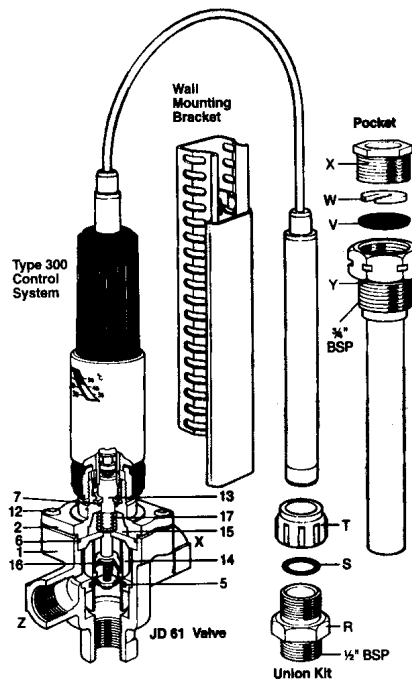
DN 15, 20, and 25
Screwed BSP (BS 21 Parallel)

Capillary tube :

Standard length 2 m.
4m, and 8m, are available for range 30 only.

Materials :

No.	Part	Material
1	Body	DZR Brass BS 2871 CZ 132
2	Bonnet	DZR Brass BS 2871 CZ 132
3	Steam	DZR Brass BS 2871 CZ 132
4	Valve Closure Member	Rubber Ethylene
5	Body 'O' Ring	Rubber Propylene
6	Bonnet 'O' Ring	Rubber
7	Internal 'O' Ring	Rubber
8	Diaphragm	Fabric & Rubber Dacron EP
9	Valve Seat Ring	Stainless Steel BS 970 431 S29
10	Valve Return Spring	Stainless Steel BS 2056 302 S26
11	Cap	Nylon
12	Screw Socket Head	Steel Zinc Plated M5 X 12 Gr 8.8
13	Stem	DZR Brass BS 2871 CZ 132
14	Piston	DZR Brass BS 2871 CZ 132
15	Piston Guide Plate	DZR Brass BS 2871 CZ 132
16	Piston Locating Plate	Stainless Steel BS 1449 304 S12
17	Return Spring Discs	Stainless Steel AISI 301



Mounting

Immersion :

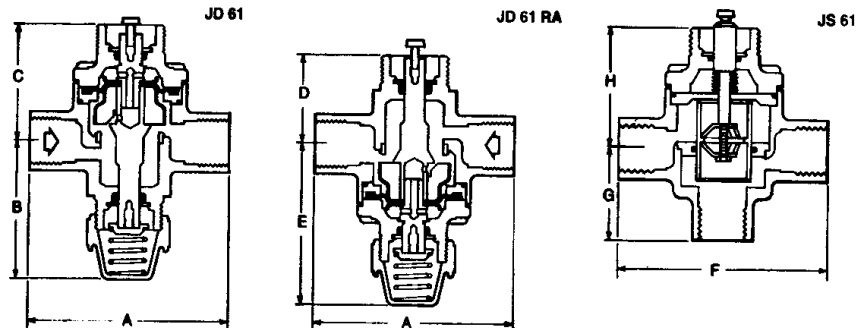
Union kit comprises union nipple (R), compression ring (S) and Gland Nut (T). Union nipple is screwed 1/2 BSP.

Wall mounting :

A wall mounting bracket is available.

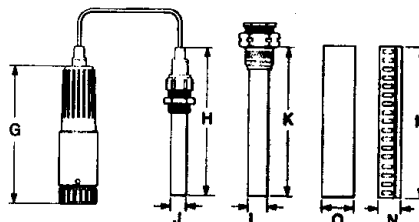
Pocket :

Available in copper, brass or stainless steel. Union nipple (Y) forms the top of the pocket and carries a rubber washer (V), 'C' washer (W) and Gland Nut (X).



Dimensions : (approx.) mm.

JD 61 and JD 61 RA						
Size DN	A	B	C	D	E	Weight
15	88	57	52	38	71	0.80 kg
20	90	57	52	38	71	0.85 kg
25	98	57	52	38	71	0.90 kg
JS 61						
Size DN	F	G	H	Weight		
15	90	39	52	0.71 kg		
20	94	44	52	0.71 kg		
25	103	48	52	0.71 kg		



Type 300 Control System :

G	H	J	K	L	M	N	O	Weight
134	163	15	160	17.5	171	29	23	0.5 kg

Installation :

The 2 port or 3 port valve should be installed in a horizontal line with the type 300 control system vertically above the line.

The 2 port valve installed with the flow as indicated on the body.

The 3 port valve connections are marked O' X and Z. Full instructions are available with each valve.

Kv Values

	DN 15	DN 20	DN 25
JD 61	1.85	3.10	5.15
JS 61	1.85	3.10	4.46

For conversion C_v (UK) = $K_v \times 0.97$ C_v (US) = $K_v \times 1.17$

How to Specify :

1 Spirax Sarco DN 15 JD 61 Valve with brass body screwed BSP and type 300 control, range 30.

Spare parts :

The spare parts available are shown in heavy outline. Parts drawn in broken line are not supplied as spares.

AVAILABLE SPARE	
Internal Assembly	A
Set of 'O' Rings JD 61 and JD 61 RA	B, C
JD 61	B, C, C1
Type 300 Control System	D
Union Kit	E
Pocket (State material)	F
Wall Mounting Bracket	G

How to order :

Always order spares by using the description given in the column headed Available spare and stating the size and type of valve.

Example 1-Internal Assembly for a Spirax Sarco DN 20 JD 61 control valve.

