

# Series 1100 Pressure Relief & Loading valves



Bonnet Material	Max operating temperature (based on bonnet construction)
PVC	60°C
Polypropylene	90°C
Stainless steel	90°C with EPDM diaphragms
Stainless steel	140°C with FPM or PTFE diaphragms

Our high quality, cost effective Series 1100 valves are designed for dosing pumps and skids, but are equally suited to other loading or relief functions. The valves are available in a breadth of sizes with standard options for all applications.

Manufactured in a wide variety of materials, the Series 1100 valves can be configured for all liquid types and are able to deal with large capacity flow rates. Spare kits are available for the whole series and valves can have factory pre-set pressures at no extra cost.

To choose the valve for your application use the valve specifier overleaf or contact our technical team for assistance.

- 2D dimensional drawings and 3D CAD models available for download from Technical Data Page on website
- 3.1 for metal valves and test certificates are available
- 1100 valves comply with PED 2014/68/EU & UKCA

	# Max allowable pressure @ 20°C				
Plastic bonnet	[with plastic or metal body]				
<sup>3</sup> / <sub>8</sub> " - 1½"	16 Bar				
2"	12 Bar				
Metal bonnet	24 Bar (with metal body only)				

Sizes		Pulsed flow rate	Damped /smooth flow rate	Adjustment range				
				Std relief	Std loading	HP relief	HP loading	
0D (mm)	DN	NB	L/Hr	L/Hr	BarG	BarG	BarG	BarG
16	10	3/8"	200	400	0 - 10	0 - 3	0 - 26	0 - 7
20	15	1/2"	375	750	0 - 10	0 - 3	0 - 26	0 - 7
25	20	3/4"	625	1250	0 - 10	0 - 3	0 - 26	0 - 7
32	25	1"	1000	2000	0 - 10	0 - 3	0 - 28	0 - 7
40	32	1 1/4"	1500	3000	0 - 10	0 - 3	0 - 22	0 - 6
50	40	1 ½"	2000	4000	0 - 10	0 - 3	0 - 22	0 - 5
63	50	2"	3000	6000	0 - 10	0 - 3	0 - 16	0 - 5
63 duplex	50 duplex	2" duplex	6000	12000	0 - 10	0 - 3	0 - 16	0 - 5

<sup>\*</sup> This is the range acheivable with the high pressure spring fitted and when the adjuster screw is screwed fully down, the valve will not gag. Valve should not be set to exceed maximum allowable pressure as above #.



### **HOW TO SPECIFY YOUR VALVE:** SPARES KITS: VALVE SIZE (INCH NB OR MM OD) VALVE TYPE (1100 SERIES) **VALVE OPTIONS** 0 = BASIC VALVE 1 = MANUAL LIFT 2 = SECURITY LOCK & PRESSURE SWITCH 3 = MAN. LIFT & PRESSURE SWITCH 4 = SECURITY LOCK 5 = MANUAL LIFT & SECURITY LOCK 6 = PRESSURE SWITCH (SPECIFY)# 7 = OTHER COMBINATIONS (SPECIFY) **CONNECTION TYPE** 0 = SOLVENT/FUSION/SOCKET WELD 1 = SCREWED 2 = WELD UNION 3 = SCREWED UNION 4 = FLANGED (SPECIFY FLANGE. RATING)\* 5 = WAFER TYPE (SPECIFY FLANGE. RATING)\* 6 = BUTTWELD 7 = TRI-CLAMP [SPECIFY TYPE] **BODY MATERIAL** 0 = PVC-U1 = POLYPROP 2 = PVDF3 = 316L STAINLESS STEEL 4 = HASTELLOY C276 5 = TITANIUM GRADE 2 6 = ALLOY 207 = ABS8 = OTHER MATERIAL. (SPECIFY) **DIAPHRAGM MATERIAL** 0 = EPDM -----2 = FPMX X -XX - XXX - XXXXNPT DUP **BRPP** DIN 150 **Duplex Valve DIN Pressure Switch NPT Connections** Ansi 150 lb flange Polyprop Coated Backing Rings **PPC** DTX Solvent Weld Normally Closed Protective Port Caps Ansi 300 lb flange Mounting holes for switched (uPVC only) Pressure Switch version only NO **PN16** Normally Open EN1902-1 PN16. Pressure Switch PN25,PN40 flange **CPS PPH** Stainless Steel Cap Mild Steel Adjuster Screw Hastelloy Higher Pressure Spring Pressuré Pad **PDB AJPE PVDF** Bonnet PTFE Adjuster Screw Higher Pressure Silver Plated 316 Stainless Steel Pressure Pad Spring AJPP PPR PPT Polypropylene Bonnet Polypropylene Adjuster Screw Titanium Pressure Pad Silver Plated Spring SB4 PPP 304L Stainless Steel Bonnet 316L Stainless Steel Adjuster PTFE Pressure Pad 316 Stainless Steel Spring Screw SB<sub>6</sub> 316L Stainless Steel Bonnet

## **EXAMPLE VALVES:**

1"- 1104-33-150-SB4 - 1" 1100 SERIES BASIC VALVE, FLANGED 150lb CONNECTION, 316 L S/STL BODY, PTFE COATED DIAPHRAGM, 304 STAINLESS STEEL BONNET

20-1102-02-NC – 20MM 1100 SERIES BASIC VALVE, PLAIN SOCKET WELD UNION CONNECTION, PVC BODY, FPM DIAPHRAGM, NORMALLY CLOSED PRESSURE SWITCH

## **EXAMPLE SPARES KITS:**

1"-1100-2-SK 1100 SERIES BASIC VALVE SPARES KIT WITH FPM DI-APRHRAGM FOR SIZE 1"/32mm

1/2"-1160-0-SK 1100 SERIES BASIC VALVE SPARES KIT INCLUDING BOTH MAIN & SWITCH DIAPHRAGM IN EPDM FOR SIZE 1/2"/20mm & 3/8"/16mm

# 1100 VALVES HAVE THE FOLLOWING COMPONENTS AS STANDARD:

3/8" & 1/2" – Polyprop bonnet, adjuster screw & pressure pad, 302 stainless spring. 1/2" – PVC-U bonnet & adjuster screw, steel pressure pad & carbon steel spring. Plastic flanged valves are stub flanged with 316L stainless steel backing rings.