Series 2371 Self-operated Pressure Regulators

Excess Pressure Valves for food and pharmaceutical industries

Type 2371-00 · Pneumatic set point adjustment
Type 2371-01 · Manual set point adjustment

Application

Excess pressure valves for set point ranges **0.3** to **6 bar** (5 to 90 psi) · **K_{VS} 0.1** to **25** (C_V 0.12 to 30) · **DN 15** to **50** (NPS ½ to 2) · Suitable for liquids and gases from **0** to **160 °C** (32 to 320 °F) · Max. operating pressure (inlet pressure) **10 bar** (150 psi)

The valve **opens** as the inlet pressure **rises**

Special features

- Proportional pressure regulators for use in the food processing and pharmaceutical industries
- Wetted inside surfaces with a surface roughness $R_a \leq 0.8$ µm; outside surface glass bead blasted
- Stainless steel 1.4404 (316L) or 1.4409 (CF3M)
- FDA-compliant materials
- Angle-style valve body
- Body free of cavities
- Diaphragm leakage monitoring

Versions

Excess pressure valves with a diaphragm for controlling the inlet pressure p_1 to the adjusted set point.

The set point of Type 2371-00 is adjusted pneumatically [1]. The set point of Type 2371-01 is adjusted manually by the set point spring.

Angle valve · Version in bar stock · DN 15 to 50 (NPS ½ to 2) · Metal-seated plug or optionally special soft-seated plug Maximum pressure 10 bar (150 psi)

The regulator can be fitted with a stem locking facility to keep the plug open during CIP (cleaning in place) or SIP (sterilization in place).

Type 2371-00 and Type 2371-01 · Additional version with pneumatic stem locking

Type 2371-01 · Additional version with manual stem locking

Connections

Welding ends: DIN 11866 Series A = DIN 11850 Series 2/ DIN 11866 Series B/DIN EN ISO 1127 Series 1/DIN 11866 Series C = ASME-BPE 2007 = ASTM A-270 = BS 4825/ DIN EN ISO 1127/ISO 2037/SMS 3008 = NF A 49-249

Threaded connections: DIN 11864-1 GS Form A, Series A, B, C/DIN 11887 A Series 1/ISO 2853 = IDF/SMS 1146

Clamp connections: DIN 11864-3 NKS Form A, Series A, B, C/DIN 32676 Series A, B, C/ISO 2852/BS 4825 Part 3 = ASME BPE

Flange connections: DIN 11864-2 NF Form A, Series A, B, C

[1] External compressed air source is required in this case

Fig. 1 · Type 2371-00

Fig. 2 · Type 2371-01 with manual stem locking

Special versions

Material: Body and plug in 1.4435, other materials on request

Valve size: Body DN 50 with DN 65 connections

Plug sealing: Pure PEEK (Victrex® 450G)

Surface finish: Inside roughness: $R_a \leq 0.6$ µm (polished) or $R_a \leq 0.4$ µm (satin finish or mirror finish); outside roughness: $R_a \leq 0.6$ µm (polished)

End connections: Flanges DIN EN 1092-1 B2, ASME B16.5 Class 150, other end connections on request

Principle of operation

The process medium flows through the valve body (1) in the direction indicated by the arrow. The position of the valve plug (3) determines the flow rate across the cross-sectional area released between the plug and the valve seat (2).

In the idle state, the valve is closed. The valve opens when the upstream pressure p_1 rises above the adjusted set point pressure. The resulting inlet pressure p_1 depends on the flow rate.

Any medium escaping from the test connection (11) in the housing indicates that the operating diaphragm (4/4.1) may be leaking or the diaphragm has ruptured. The test connection of Type 2371-00 (K_{VS} 25/C_V 30) is connected to a flexible pipe elbow to discharge any medium escaping.

Type 2371-01 - Version with manual set point adjustment (Fig. 3)

The valve is normally closed by the set point spring (7). The valve starts to open when the inlet pressure p_1 applied to the diaphragm (4) and the resulting force exceed the force of the springs.

The set point is adjusted by an Allen key (8 mm), which is inserted through the adjustment opening (6.1) on top of the housing onto the set point screw (6). The blanking plug must first be removed. If necessary, the set point screw (6) can be secured by the locking screw (12) in the upper plug section (5) to prevent the set point screw from loosening due to vibrations, causing the set point to change.

Turning the set point screw clockwise causes the spring plate (7.1) to move upwards and increases the spring force and the set point. Turning the set point screw counterclockwise relieves the spring tension, reducing the set point.

1 Valve body
2 Seat
3 Plug
4 Diaphragm (Type 2371-01)
4.1 Twin diaphragms (Type 2371-00)
5 Upper plug section
6 Set point screw
6.1 Adjustment opening with blanking plug
7 Set point spring(s)
7.1 Spring plate
8 Actuator housing (manual set point adjustment)
9 Clamp fitting
10 Actuator housing (pneumatic set point adjustment)
11 Test connection (leakage monitoring)
12 Locking screw

p_c Set point pressure (external)
p_1 Inlet pressure (upstream pressure)
p_2 Outlet pressure (downstream pressure)

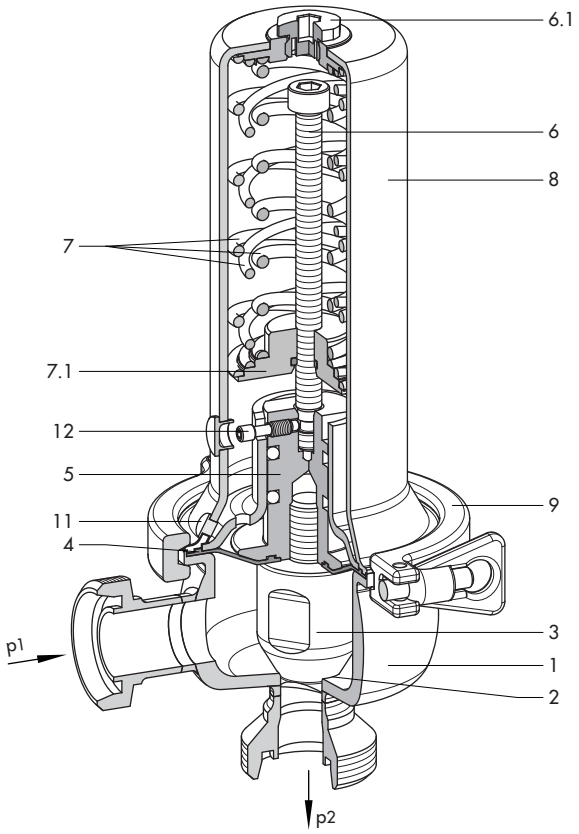


Fig. 3 · Type 2371-01 Excess Pressure Valve with manual set point adjustment

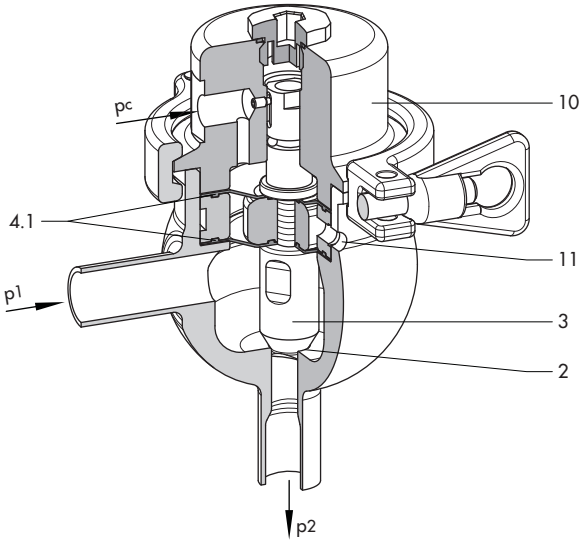


Fig. 4 · Typ 2371-00 with pneumatic set point adjustment

Type 2371-00 - Version with pneumatic set point adjustment (Fig. 4)

In the idle state, the valve is closed by the set point pressure p_c ($p_{c\ max}$ = 8 bar).

When the inlet pressure p_1 applied to the diaphragm (4.1) exceeds the set point pressure p_c, the force exerted on the diaphragm by the pressure of the medium makes the diaphragm move. As a result, the plug (3) moves out of the normally closed position and the valve opens. In this case, the ratio between p_1 and p_c is not necessarily 1:1.

As the inlet pressure p_1 drops, the resulting force reduces again. The valve is closed when the pressure falls below the set point pressure p_c.

The twin diaphragms (4.1) provide restricted safety when one of the diaphragms ruptures and prevents the process medium and external pressure medium from mixing.

The screw (12) prevents parts from falling apart inadvertently while the regulator is being dismantled.

Stem locking for CIP and SIP

The stem locking is designed to keep the plug in the open position. This allows safe and effective cleaning (CIP or SIP) while the valve is open.

The stem can be locked pneumatically (Type 2371-00/-01) or manually using a lever (Type 2371-01).

The pneumatic and manual stem locking do not effect the control function, provided the stem locking is not engaged.

The pneumatic unit for the pneumatic stem locking is located on top of the regulator. The unit can be mounted in any position since the axial fixture of the unit allows it to turn 360°.

The clamping fixture of the manual stem locking is directly connected with the plug over the set point screw, causing the plug stem and plug to axially shift when the lever is actuated.

Pneumatic stem locking (for Type 2371-00)

To open the valve, a pressure **p_v (= 1 bar)** is applied to the pneumatic unit. This causes the plug stem to move together with the plug out of the valve seat. A set point pressure p_c must not be applied to the regulator in this case.

To switch the valve back to its control function, the pressure p_v (= 1 bar) merely needs to be removed. The spring (16) pulls the actuating unit back, allowing the plug stem to move again for the control task.

The set point pressure p_c must be applied for the regulator to function again.

Pneumatic stem locking (for Type 2371-01)

To open the valve, a pressure **p_v (= 6 bar)** is applied to the pneumatic unit. This causes the plug stem to move together with the plug out of the valve seat.

To switch the valve back to its control function, the pressure p_v (= 6 bar) merely needs to be removed. The spring (16) pulls the actuating unit back, allowing the plug stem to move again for the control task

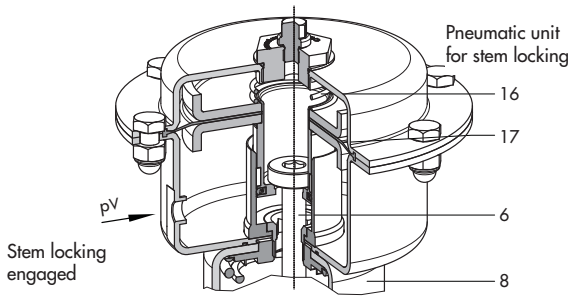


Fig. 5 · Functional diagram of the stem locking

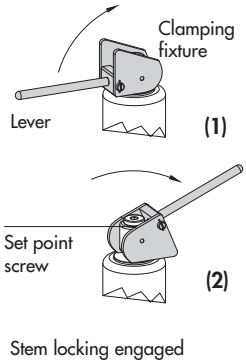
6 Set point screw
8 Actuator housing (Type 3271-01)
16 Spring
17 Diaphragm
p_v Pressure for stem locking

Manual stem locking (for Type 2371-01)

Type 2371-01 can also be fitted with a manually operated stem locking.

The lever together with the clamping fixture is directly connected with the plug over the set point screw (1).

When the lever is pushed manually to the other side, the plug is pushed, opposing the spring force, into the open position and locked in place (2). Pushing the lever back allows the regulator to continue its control task.



Installation

The regulator has an angle-style valve body.

– Install the valve into the pipeline without any tension.

Observe the following points:

– The valve must be installed with actuator housing facing upwards and the inlet port in the horizontal position.
– The medium must flow through the valve in the direction indicated by the arrow on the valve body (inlet port at the side and outlet port at the bottom).

Table 1 · Technical data · All pressures specified as gauge pressures

Type 2371-... Excess Pressure Valve		**DIN**						**ANSI**					
Nominal size		**DN 15**	**DN 20**	**DN 25**	**DN 32**	**DN 40**	**DN 50**	**NPS½**	**NPS¾**	**NPS 1**	**NPS1¼**	**NPS1½**	**NPS 2**
Set point ranges	Type 2371-00	0.3 to 6 bar						5 to 90 psi					
	Type 2371-01	0.3 to 1.2 bar · 1 to 3 bar · 2.5 to 4.5 bar 4 to 6 bar						5 to 18 psi · 15 to 45 psi · 35 to 65 psi 60 to 90 psi					
Maximum pressure		10 bar						150 psi					
Max. perm. temperatures	Operating temp. range	0 to +160 °C						32 to 320 °F					
	Sterilizing temperature	180 °C for max. 30 minutes						356 °F for max. 30 minutes					
Leakage rate acc. to IEC 60534-4 and ANSI/FCI 70-2		Metal-seated plug: Class I (≤ 0.05 % of K_{VS} or C_V coefficient) Soft-seated plug: Class IV (≤ 0.01 % of K_{VS} or C_V coefficient)											
Peak-to-valley height and surface treatment	External	Glass bead blasted [1] · Ra ≤ 0.6 µm, polished											
	Internal	R_a ≤ 0.8 µm, smooth finish [1] · R_a ≤ 0.6 µm, polished · R_a ≤ 0.4 µm, satin finish R_a ≤ 0.4 µm, mirror finish											

[1] Standard version

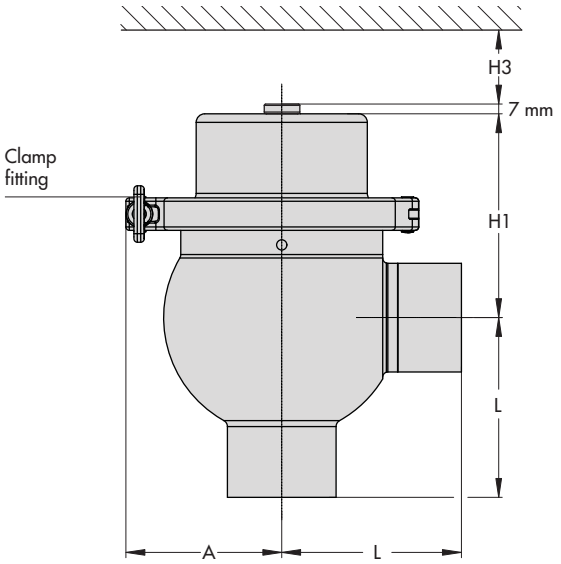
Table 2 · K_{VS} and C_V coefficients

Type 2371-00													
Verison	**DIN** (K_{VS})						**ANSI** (C_V)						
Nominal size	**DN 15**	**DN 20**	**DN 25**	**DN 32**	**DN 40**	**DN 50**	**NPS ½**	**NPS ¾**	**NPS 1**	**NPS 1¼**	**NPS 1½**	**NPS 2**	
K_{VS}/C_V coefficients	–			25			–			30			
	0.1 to 0.25			1			0.12 to 0.3			1.2			
	0.4 to 0.63			1.6 to 2.5			0.5 to 0.75			2 to 3			
	1 to 2.5			4			1.2 to 3			5			
	–			6.3 · 10			–			7.5 to 12			
Type 2371-01													
K_{VS}/C_V coefficients	0.1 to 0.25			1			0.12 to 0.3			1.2			
	0.4 to 0.63			1.6 to 2.5			0.5 to 0.75			2 to 3			
	1 to 1.6			4			1.2 to 2			5			
	2.5			6.3 to 10			3			7.5 to 12			

Table 3 · Materials · Material number according to DIN EN

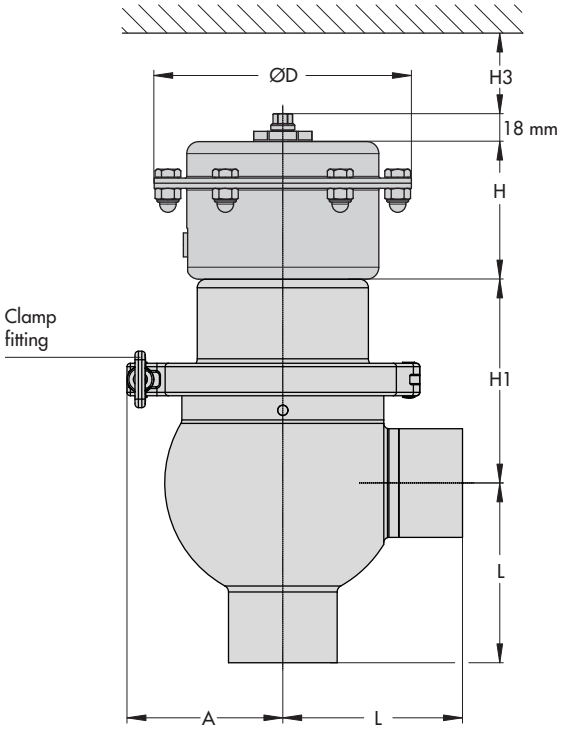
Type ...		**2371-00 (K_{VS} 25/C_V 30)**		**2371-00/-01**	
Version		**DIN**	**ANSI**	**DIN**	**ANSI**
Body		1.4409	CF3M	1.4404	316L
Plug	Metal-seated	1.4409	CF3M	1.4404	316L
	Seal with soft-seated plug	EPDM			
Diaphragm		PTFE-coated EPDM			
Cap		1.4409	CF3M	1.4404	316L
Springs		1.4310			

Type 2371-00 · Regulator with pneumatic set point adjustment

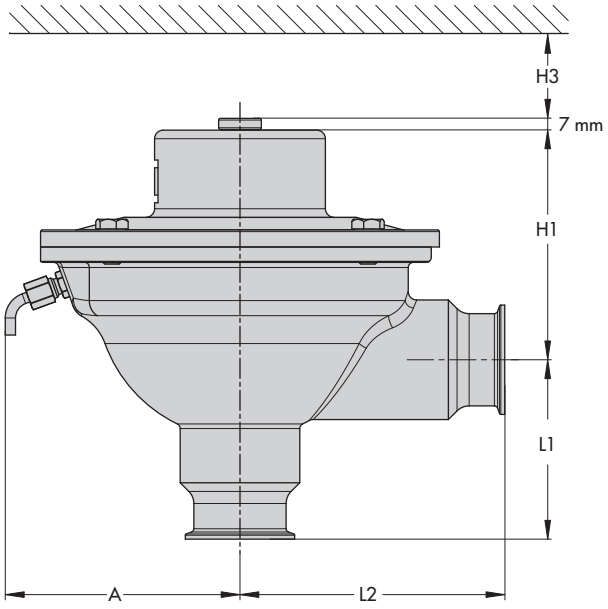


Type 2371-00 · DN 15 to 25/NPS ½ to 1
– without stem locking –

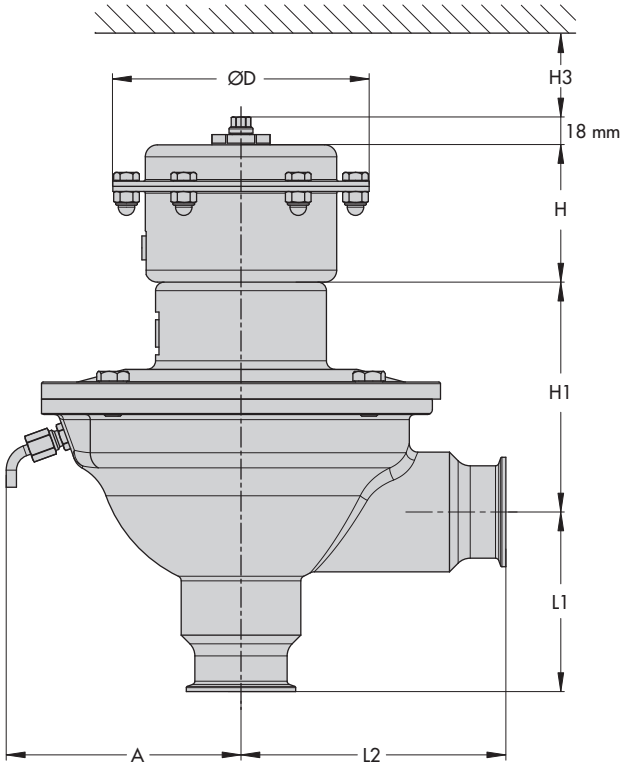
The clamp fitting is turned by 90° in the drawing



Type 2371-00 · DN 32 to 50/NPS 1¼ to 2
– with pneumatic stem locking –



Type 2371-00 · DN 32 to 50; K_{VS} 25/NPS 1¼ to 2; C_V 30
– without stem locking –

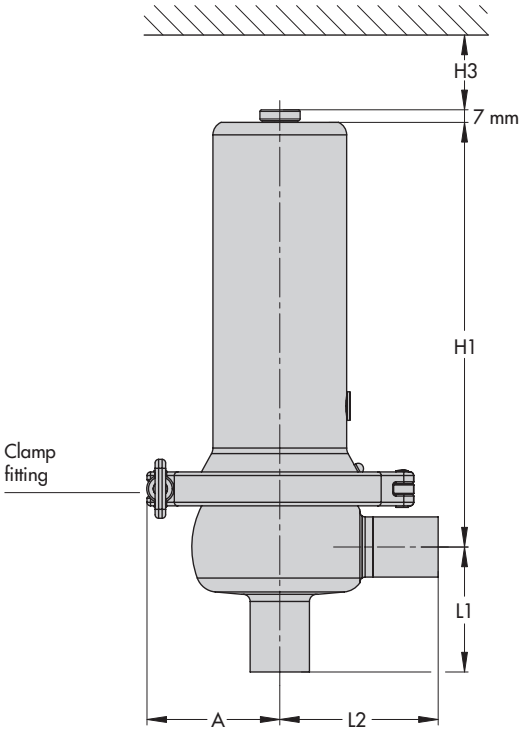


Type 2371-00 · DN 32 to 50; K_{VS} 25/NPS 1¼ to 2; C_V 30
– with pneumatic stem locking –

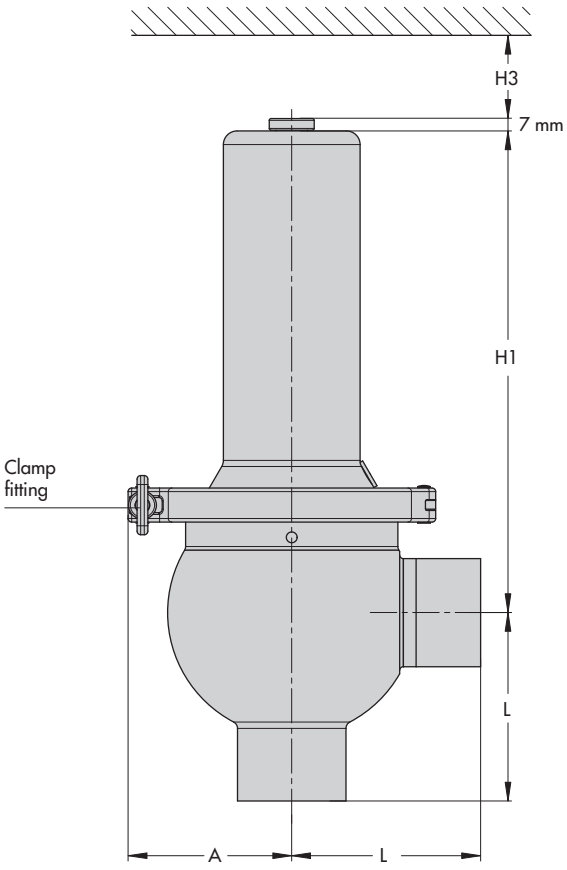
The dimensions of the stem locking are identical for all nominal sizes of the regulator.

Fig. 6 · Dimensional diagrams of Type 2371-00

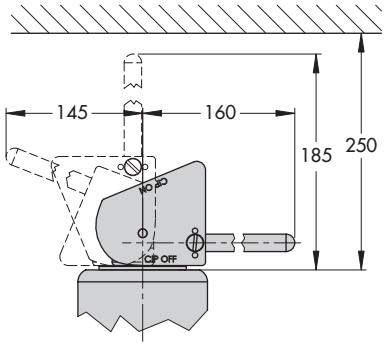
Type 2371-01 · Regulator with manual set point adjustment



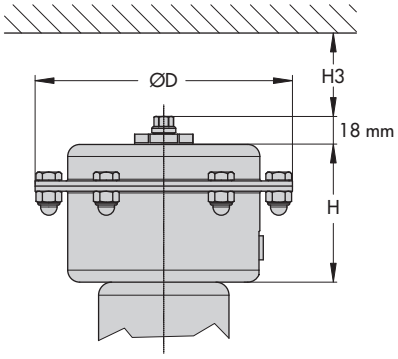
Type 2371-01 · DN 15 to 25/NPS ½ to 1



Type 2371-01 · DN 32 to 50/NPS 1¼ to 2



Type 2371-01 · with manual stem locking



Type 2371-01 · with pneumatic stem locking

The Type 2371-01 Regulators in the drawings have welding ends.
The dimensions of the stem locking are identical for all nominal sizes of the regulator.

Fig. 7 · Dimensional diagrams of Type 2371-01

Dimensions – End connections – · See in Tables 4 to 8

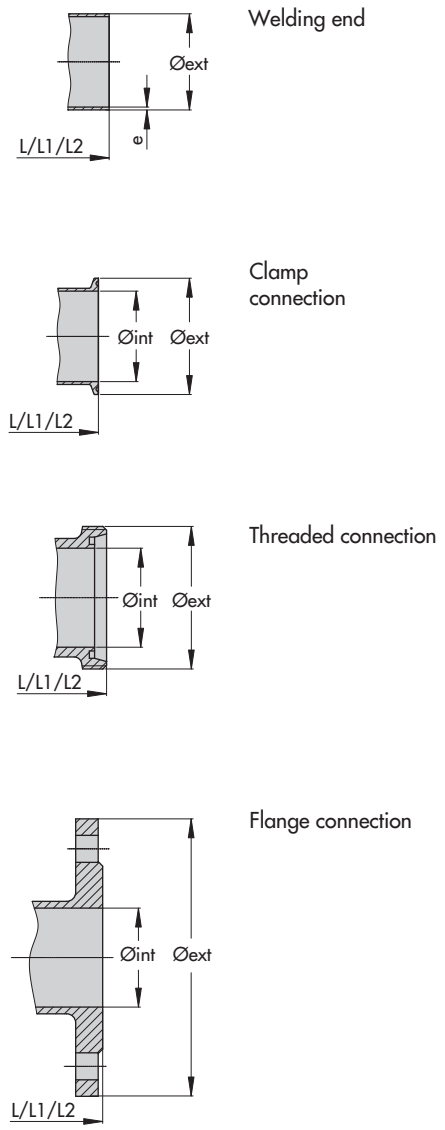


Fig. 8 · Dimensional drawings of end connections

Ordering text

Type 2371-00/Type 2371-01 Excess Pressure Valve

Type 2371-00 · Pneumatic set point adjustment
Set point range 0.3 to 6 bar (5 to 90 psi)

Type 2371-01 · Manual set point adjustment
Set point range 0.3 to 1.2 bar (5 to 18 psi)/1.0 to 3.0 bar (15 to 45 psi)/2.5 to 4.5 bar (35 to 65 psi)/4.0 to 6.0 bar (60 to 90 psi)

Nominal size DN (NPS) …

Metal-seated or soft-seated plug

Type of connections: Threaded connection acc. to .../clamp connection acc. to .../flange connection acc. to …/welding ends acc. to ...

Stem locking: Pneumatic/manual

Table 4 · Clamp connections · All dimensions in mm

Standard		Type 2371-00 and Type 2371-01						Type 2371-00 (K_{VS} 25/C_V 30)		
		DN 15 NPS ½	**DN 20 NPS ¾**	**DN 25 NPS 1**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**
DIN 11864-3 NKS Form A Series A	p_{max}	10 bar/150 psi								
	L	60.3	60.3	60.3	88.9	88.9	88.9	–	–	–
	L1	60	60	60	88.9	88.9	88.9	105	105	105
	L2	90	90	90	88.9	88.9	88.9	155	155	155
	Øint	16	20	26	32	38	50	32	38	50
	Øext	34	50.5	50.5	50.5	64	77.5	50.5	64	77.5
DIN 11864-3 NKS Form A Series B	p_{max}	10 bar/150 psi								
	L	60.3	60.3	60.3	88.9	88.9	88.9	–	–	–
	L1	60	60	60	88.9	88.9	88.9	105	105	105
	L2	90	90	90	88.9	88.9	88.9	155	155	155
	Øint	18.1	23.7	29.7	38.4	44.3	56.3	38.4	44.3	56.3
	Øext	34	50.5	50.5	64	64	91	64	64	91
DIN 11864-3 NKS Form A Series C	pmax	10 bar/150 psi								
	L	60.3	60.3	60.3	–	88.9	88.9	–	–	–
	L1	55	55	60	–	88.9	88.9	–	105	105
	L2	90	90	90	–	88.9	88.9	–	155	155
	Øint	9.4	15.75	22.1	–	34.8	47.5	–	34.8	47.5
	Øext	34	34	50.5	–	64	77.5	–	64	77.5
DIN 32676 Reihe A	p_{max}	10 bar/150 psi								
	L	60.3	60.3	60.3	88.9	88.9	88.9	–	–	–
	L1	60	60	60	88.9	88.9	88.9	105	105	105
	L2	90	90	90	88.9	88.9	88.9	155	155	155
	Øint	16	20	26	32	38	50	32	38	50
	Øext	34	34	50.5	50.5	50.5	64	50.5	50.5	64
DIN 32676 Series B	p_{max}	10 bar/150 psi								
	L	60.3	60.3	60.3	88.9	88.9	88.9	–	–	–
	L1	60	60	60	88.9	88.9	88.9	105	105	105
	L2	90	90	90	88.9	88.9	88.9	155	155	155
	Øint	18.1	23.7	29.7	38.4	44.3	56.3	38.4	44.3	56.3
	Øext	50.5	50.5	50.5	64	64	77.5	64	64	77.5
DIN 32676 Series C	p_{max}	10 bar/150 psi								
	L	60.3	60.3	60.3	–	88.9	88.9	–	–	–
	L1	60	60	60	–	88.9	88.9	–	105	105
	L2	90	90	90	–	88.9	88.9	–	155	155
	Øint	9.4	15.75	22.1	–	34.8	47.5	–	34.8	47.5
	Øext	25	25	50.5	–	50.5	64	–	50.5	64
ISO 2852	p_{max}	10 bar/150 psi								
	L	–	–	60.3	88.9	88.9	88.9	–	–	–
	L1	–	–	60	88.9	88.9	88.9	105	105	105
	L2	–	–	90	88.9	88.9	88.9	155	155	155
	Øint	–	–	22.6	31.3	35.6	48.6	31.3	35.6	48.6
	Øext	–	–	50.5	50.5	50.5	64	50.5	50.5	64
BS 4825 Part 3 = ASME BPE	p_{max}	10 bar/150 psi								
	L	60.3 [1]	60.3 [1]	60.3	–	88.9	88.9	–	–	–
	L1	60 [1]	60 [1]	60	–	88.9	88.9	–	105	105
	L2	90 [1]	90 [1]	90	–	88.9	88.9	–	155	155
	Øint	9.4 [1]	15.75 [1]	22.2	–	34.9	47.6	–	34.9	47.6
	Øext	25 [1]	25 [1]	50.5	–	50.5	64	–	50.5	64

[1] Only for version according to ASME BPE

Table 5 · Welding ends · All dimensions in mm

Standard		Type 2371-00 and Type 2371-01						Type 2371-00 (K_{VS} 25/C_V 30)		
		DN 15 NPS ½	**DN 20 NPS ¾**	**DN 25 NPS 1**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**
DIN 11866 Series A = DIN 11850 Series 2	p_{max}	10 bar/150 psi								
	L	70	70	70	105	105	105	–	–	–
	L1	70	70	70	105	105	105	105	105	105
	L2	90	90	90	105	105	105	155	155	155
	Øext	19	23	29	35	41	53	35	41	53
	e	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
DIN 11866 Series B	p_{max}	10 bar/150 psi								
	L	70	70	70	105	105	105	–	–	–
	L1	70	70	70	105	105	105	105	105	105
	L2	90	90	90	105	105	105	155	155	155
	Øext	21.3	26.9	33.7	42.4	48.3	60.3	42.4	48.3	60.3
	e	1.6	1.6	2	2	2	2	2	2	2
DIN 11866 Reihe C = ASME-BPE 2007 = ASTM A-270 = BS 4825	pmax	10 bar/150 psi								
	L	70	70	70	–	105	105	–	–	–
	L1	70	70	70	–	105	105	–	105	105
	L2	90	90	90	–	105	105	–	155	155
	Øext	12.7	19.05	25.4	–	38.1	50.8	–	38.1	50.8
	e	1.65	1.65	1.65	–	1.65	1.65	–	1.65	1.65
DIN EN ISO 1127 Series 1	p_{max}	10 bar/150 psi								
	L	70	70	70	105	105	105	–	–	–
	L1	70	70	70	105	105	105	105	105	105
	L2	90	90	90	105	105	105	155	155	155
	Øext	21.3	26.9	33.7	42.4	48.3	60.3	42.4	48.3	60.3
	e	1.6	1.6	2	2	2	2.6	2	2	2.6
ISO 2037	p_{max}	10 bar/150 psi								
	L	70	70	70	105	105	105	–	–	–
	L1	70	70	70	105	105	105	105	105	105
	L2	90	90	90	105	105	105	155	155	155
	Øext	17.2	21.3	25	33.7	38	51	33.7	38	51
	e	1	1	1.2	1.2	1.2	1.2	1.2	1.2	1.2
SMS 3008 = NF A 49-249	p_{max}	10 bar/150 psi								
	L	–	–	70	105	105	105	–	–	–
	L1	–	–	70	105	105	105	105	105	105
	L2	–	–	90	105	105	105	155	155	155
	Øext	–	–	25	33.7	38	51	33.7	38	51
	e	–	–	1.2	1.2	1.2	1.2	1.2	1.2	1.2

Table 6 · Threaded connections · All dimensions in mm

Standard		Type 2371-00 and Type 2371-01						Type 2371-00 (K_{VS}/C_V 25/30)		
		DN 15 NPS ½	**DN 20 NPS ¾**	**DN 25 NPS 1**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**
DIN 11864-1 GS Form A Series A	p_{max}	10 bar/150 psi								
	L	64	64	64	100	100	100	–	–	–
	L1	60	60	60	100	100	100	105	105	105
	L2	90	90	90	100	100	100	155	155	155
	Øint	16	20	26	32	38	50	32	38	50
	Øext	RD 34x1/8"	RD 44x1/6"	RD 52x1/6"	RD 58x1/6"	RD 65x1/6"	RD 78x1/6"	RD 58x1/6"	RD 65x1/6"	RD 78x1/6"
DIN 11864-1 GS Form A Series B	p_{max}	10 bar/150 psi								
	L	64	64	64	100	100	100	–	–	–
	L1	60	60	60	100	100	100	105	105	105
	L2	90	90	90	100	100	100	155	155	155
	Øint	18.1	23.7	29.7	38.4	44.3	56.3	38.4	44.3	56.3
	Øext	RD 44x1/6"	RD 52x1/6"	RD 58x1/6"	RD 65x1/6"	RD 78x1/6"	RD 95x1/6"	RD 65x1/6"	RD 78x1/6"	RD 95x1/6"
DIN 11864-1 GS Form A Series C	pmax	10 bar/150 psi								
	L	64	64	64	–	100	100	–	–	–
	L1	60	60	60	–	100	100	–	105	105
	L2	90	90	90	–	100	100	–	155	155
	Øint	9.4	15.75	22.1	–	34.8	47.5	–	34.8	47.5
	Øext	RD 28x1/8"	RD 44x1/6"	RD 52x1/6"	–	RD 65x1/6"	RD 78x1/6"	–	RD 65x1/6"	RD 78x1/6"
DIN 11887 A Series 1	p_{max}	10 bar/150 psi								
	L	64	64	64	100	100	100	–	–	–
	L1	60	60	60	100	100	100	105	105	105
	L2	90	90	90	100	100	100	155	155	155
	Øint	16	20	26	32	38	50	32	38	50
	Øext	RD 34x1/8"	RD 44x1/6"	RD 52x1/6"	RD 58x1/6"	RD 65x1/6"	RD 78x1/6"	RD 58x1/6"	RD 65x1/6"	RD 78x1/6"
ISO 2853 = IDF	p_{max}	10 bar/150 psi								
	L	–	–	64	100	100	100	–	–	–
	L1	–	–	60	100	100	100	105	105	105
	L2	–	–	90	100	100	100	155	155	155
	Øint	–	–	22.6	31.3	35.6	48.6	31.3	35.6	48.6
	Øext	–	–	37x1/8"	45.9x1/8"	50.6x1/8"	64.1x1/8"	45.9x1/8"	50.6x1/8"	64.1x1/8"
SMS 1146	p_{max}	10 bar/150 psi								
	L	–	–	55	105	105	105	–	–	–
	L1	–	–	60	105	105	105	105	105	105
	L2	–	–	90	105	105	105	155	155	155
	Øint	–	–	22.6	29.6	35.6	48.6	29.6	35.6	48.6
	Øext	–	–	RD 40x1/6"	RD 48x1/6"	RD 60x1/6"	RD 70x1/6"	RD 48x1/6"	RD 60x1/6"	RD 70x1/6"

Table 7 · Flange connections · All dimensions in mm

Standard		Type 2371-00 and Type 2371-01						Typ 2371-00 (K_{VS}/C_V 25/30)		
		DN 15 NPS ½	**DN 20 NPS ¾**	**DN 25 NPS 1**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**
DIN 11864-2 NF Form A Series A	p_{max}	10 bar/150 psi								
	L	90	95	100	105	115	125	–	–	–
	L1	90	95	100	105	115	125	105	105	105
	L2	90	95	100	105	115	125	155	155	155
	Øint	16	20	26	32	38	50	32	38	50
	Øext	59	64	70	76	82	94	76	82	94
DIN 11864-2 NF Form A Series B	p_{max}	10 bar/150 psi								
	L	90	95	100	105	115	125	–	–	–
	L1	90	95	100	105	115	125	105	105	105
	L2	90	95	100	105	115	125	155	155	155
	Øint	18.1	23.7	29.7	38.4	44.3	56.3	38.4	44.3	56.3
	Øext	62	69	74	82	88	103	82	88	103
DIN 11864-2 NF Form A Series C	p_{max}	10 bar/150 psi								
	L	90	90	100	–	115	125	–	–	–
	L1	90	90	100	–	115	125	–	105	105
	L2	90	90	100	–	115	125	–	155	155
	Øint	9.4	15.75	22.1	–	34.8	47.5	–	34.8	47.5
	Øext	54	59	66	–	79	92	–	79	92
DIN EN 1092-1 B2 or ASME B16.5 Cl 150		On request								

Table 8 · General · All dimensions in mm

Nominal size		Type 2371-00 and Type 2371-01						Typ 2371-00 (K_{VS}/C_V 25/30)		
		DN 15 NPS ½	**DN 20 NPS ¾**	**DN 25 NPS 1**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**	**DN 32 NPS 1¼**	**DN 40 NPS 1½**	**DN 50 NPS 2**
Common dimensions	A (Type 2171-00)	70			100			145		
	A (Type 2171-01)	85			100			–		
	H	80								
	H1 (Type 2171-00)	80			120			135		
	H1 (Type 2171-01)	240			290			–		
	H3	≥ 200								
	ØD	150								
Weight, approx.										
Type 2371-00		3 kg			11 kg			15 kg		
Type 2371-01		8.5 kg			12 kg			–		
Stem locking										
Pneumatic unit		2.5 kg								
Manual stem locking		0.7 kg								

Specifications subject to change without notice

SAMSON AG · MESS- UND REGELTECHNIK
Weismüllerstraße 3 · 60314 Frankfurt am Main · Germany
Phone: +49 69 4009-0 · Fax: +49 69 4009-1507
Internet: http://www.samson.de

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