

Series 42 Self-operated Pressure Regulators

Differential Pressure Regulators with Type 2420/Type 2425 Actuator (opening)

and balanced Type 2422 Valve

Type 42-20 · Type 42-25

ANSI version

Application

Differential pressure regulators for large heating systems and industrial plants · Differential pressure set points Δp from **0.75** to **145 psi** (0.05 to 10 bar) · Valves **NPS ½ to 10¹⁾** (DN 15 to 250) · Pressure rating **Class 125 to 300** · Suitable for **liquids** and **vapors²⁾** from **40 to 660 °F** (5 to 350 °C), for **air** and non-flammable gases up to **175 °F** (80 °C)

SAMSON



The valve **opens** when the differential pressure **rises**.

The differential pressure to be controlled is transmitted to the spring-loaded operating diaphragm in the actuator and converted into a positioning force to move the valve plug. The regulators control the differential pressure according to the adjusted set point.

Special features

- Low-noise, medium-controlled proportional regulator requiring little maintenance
- **Type 42-20:** Fixed set point
Type 42-25: Set point adjustable in wide range
- Single-seated valve with a plug balanced by a stainless steel bellows or diaphragm NPS 2½ to 10 (DN 65 to 250)
- Suitable for circuit water, water/glycol mixtures, steam and air as well as other liquids, gases and vapors, provided these do not affect the characteristics of the operating diaphragm
- Valve body optionally made of cast iron A126B, cast steel A216 WCC or cast stainless steel A351 CF8M

Versions

Differential pressure regulators for installation in a bypass pipe or short-circuit pipe (see Application) · Flanged connections

Type 42-20 (Fig. 1) · Type 2422 · Balanced by a bellows NPS ½ to 4 (DN 15 to 100) · Balanced by a diaphragm NPS 2½ to 4 (DN 65 to 100) · Type 2420 Actuator · Fixed set point, adjusted to $\Delta p = 3, 4, 6$ or 7 psi (0.2, 0.3, 0.4 or 0.5 bar)

Type 42-25 (Fig. 2) · Type 2422 Valve · Balanced by a bellows NPS ½ to 10 (DN 15 to 250) · Balanced by a diaphragm NPS 2½ to 10 (DN 65 to 250) · Type 2425 Actuator · Set point adjustable within the range between 0.75 to 145 psi (0.05 to 10 bar)

Special versions

Actuator with two diaphragms (Type 42-25) · Version with FPM diaphragm, e.g. for mineral oil · Special reduced C_v (K_{VS}) coefficient · Valve in corrosion-resistant version (min. material grade 1.4301) · Valves larger than NPS 10 (DN 250)

¹⁾ Valves larger than NPS 10 (DN 250) on request

²⁾ Version balanced by a bellows only



Fig. 1: Type 42-20 Differential Pressure Regulator



Fig. 2: Type 42-25 Differential Pressure Regulator

Version for temperatures above 430 °F (220 °C) · Backflow prevention (▶ T 3010) · Version for deionized water · Version free of non-ferrous metal · Version for small flow rates · Valve with micro trim with C_v 0.0012 to 0.05 (K_{VS} 0.001 to 0.04) or C_v 0.12, 0.5 and 1.2 (K_{VS} 0.1, 0.4 and 1) without pressure balancing

Accessories

Required accessories, such as compression-type fittings, needle valves, compensation chambers and control lines, are listed in Data Sheet ▶ T 3095.

Principle of operation (see Fig. 3)

The medium flows through the valve in the direction indicated by the arrow. The position of the valve plug (3) determines the differential pressure over the cross-sectional area released between the plug (3) and seat (2).

The Type 2422 Valve is balanced. The forces acting on the valve plug created by the upstream and downstream pressures are balanced by a balancing bellows (5) or balancing diaphragm (5.1).

In valves balanced by a bellows, the upstream pressure p_1 acts on the outside of the metal bellows (5), while the downstream pressure p_2 acts on the inside of the bellows. In a valve balanced by a diaphragm, the downstream pressure p_2 acts on the inside and the upstream pressure p_1 on the outside of the balancing diaphragm (5.1). In both cases, the forces cre-

ated by the upstream and downstream pressures acting on the valve plug are balanced out.

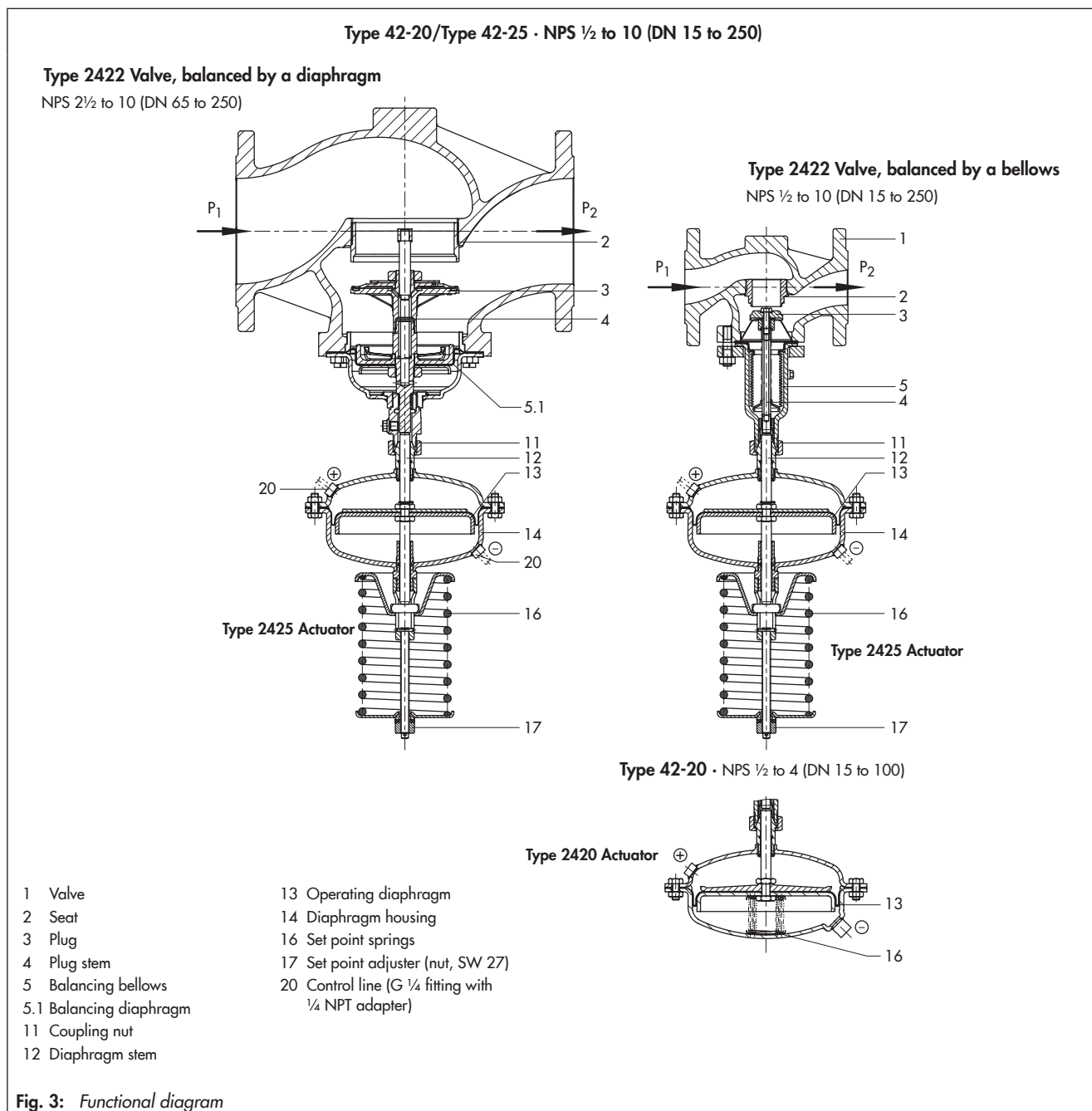
The differential pressure to be controlled is transferred to the operating diaphragm (13) where it is transformed into a positioning force. This force is used to move the plug (3) according to the force of the set point springs. The valve begins to open as soon as the differential pressure exceeds the set point.

In Type 42-25, the set point can be adjusted at the set point adjuster (17).

In Type 42-20, the set point springs (16) in the actuator determines the set point.

All versions have control lines to transfer the high pressure (+) and low pressure (-) to the actuator.

SAMSON offers a special version of Type 42-25 Regulator with an actuator with two diaphragms.



Type 42-25 Differential Pressure Regulator with two diaphragms

SAMSON offers a special version of Type 42-25 with an actuator with two diaphragms. The actuator with two diaphragms provides increased functional reliability.

An actuator with two diaphragms is always required when an FPM (FKM) diaphragm. It is especially suitable for applications with thin oils (e.g. heat transfer oil).

The two diaphragms separate both diaphragm chambers connected to the high-pressure and low-pressure connections. They generate a positioning force from the differential pressure. A mechanical diaphragm rupture indicator (22) is located between the two diaphragms, which responds at approx. 22 psi (1.5 bar). In the event of a diaphragm rupture, the pressure in the space between the two operating diaphragm starts to increase. This causes the pin in the diaphragm rupture indicator to be pushed outwards and a red ring appears, indicating the diaphragm rupture. The intact operating diaphragm takes on the control task of the ruptured diaphragm.

A pressure switch can be optionally mounted to the actuator to trigger an alarm.

If a diaphragm rupture is indicated, we recommend replacing both diaphragms.

Installing the valve and mounting the actuator

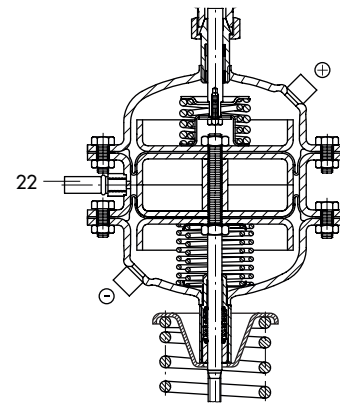
Valve and actuator are delivered unattached.

A coupling nut is used to attach the actuator to the valve. The actuator is to be mounted preferably after the valve is installed in the pipeline.



The following points must be observed:

- Installation of the valve in horizontal pipelines
- The direction of flow must match the direction indicated by the arrow on the body
- Install a strainer (e.g. SAMSON Type 2 NI) upstream of the valve.



Actuator with two diaphragms

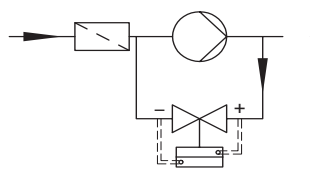
22 Diaphragm rupture indicator

Fig. 4: Type 42-25 with two diaphragms (special version)

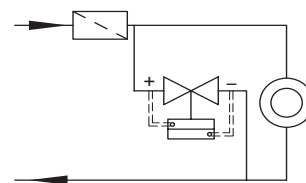
Permissible mounting positions

- Actuator suspended (see photo): standard installation, all versions, above 175 °F (80 °C) and for applications with steam
 - Actuator upright (actuator on top of the valve): all versions NPS 1/2 to 3 (DN 15 to 80) and max. 175 °F (80 °C)
 - Actuator sideways: versions with fixed plug guide only
- Refer to ► EB 3007 for details.

Application



Installation in bypass pipe



Installation in short-circuit pipe

==== Control line to be attached on installing the regulator in the pipeline

Fig. 5: Sample applications

Table 1: Technical data

| Type | 42-25 | | | | 42-20 | |
|--|--|--|--|---|---|---|
| Valve size | NPS ½ to 10 · DN 15 to 250 | | | | NPS ½ to 4 · DN 15 to 100 | |
| Pressure rating | Class 125, 150 and 300 | | | | | |
| Max. permissible temperature | Valve | See pressure-temperature diagram in ► T 3000 | | | | |
| | Actuator ¹⁾ | With compensation chamber: Steam and liquids up to 660 °F (350 °C) ²⁾ Without compensation chamber: Liquids up to 300 °F (150 °C) · Air and gases up to 175 °F (80 °C) | | | | |
| Set point ranges | psi | 0.75 to 3.5 · 1.5 to 8.5 · 3 to 14.5 · 7 to 20 14.5 to 35 · 30 to 75 · 65 to 145 | | | 3, 4, 6 or 7 | |
| | bar | 0.05 to 0.25 · 0.1 to 0.6 · 0.2 to 1 0.5 to 1.5 · 1 to 2.5 · 2 to 5 · 4.5 to 10 | | | 0.2 · 0.3 · 0.4 or 0.5 | |
| Actuator area A | 12 in ² (80 cm ²) | 25 in ² (160 cm ²) | 50 in ² (320 cm ²) | 100 in ² (640 cm ²) | 25 in ² (160 cm ²) | 50 in ² (320 cm ²) |
| Max. perm. operating pressure for actuator with two diaphragms | 580 psi (40 bar) | 580 psi (40 bar) | 360 psi (25 bar) | 360 psi (25 bar) | - | |
| Leakage class according to ANSI/FCI 70-2 | ≤0.05 % of C _v (K _{vS}) coefficient | | | | | |
| Compliance | CE · EAC | | | | | |

¹⁾ Higher temperatures on request

²⁾ Steam version only with valves balanced by a bellows

Terms for control valve sizing according to IEC 60534, Parts 2-1 and 2-2: $F_L = 0.95$, $X_T = 0.75$

Table 2: Materials · Material numbers according to ASTM and DIN EN
Valve

| Type 2422 Valve, balanced by a bellows | | | |
|--|--|--|--------------------------------|
| Valve size | NPS ½ to 10 · DN 15 to 250 | | |
| Pressure rating | Class 125 | Class 150/300 | Class 150/300 |
| Valve body | Cast iron A126B | Cast steel A216 WCC | Cast stainless steel A351 CF8M |
| Valve seat | Stainless steel 1.4104 or 1.4006 | | 1.4404 |
| Plug | Up to NPS 4 (DN 100) | Stainless steel 1.4104, 1.4112 or 1.4006 ¹⁾ | |
| | NPS 6 to 10 (DN 150 to 250) | 1.4404, with PTFE soft seal | |
| Plug stem | 1.4301 | | |
| Metal bellows | 1.4571 · NPS 6 (DN 150) and larger: 1.4404 | | |
| Bottom section | P265GH | | 1.4571 |
| Body gasket | Graphite on metal core | | |
| Type 2422 Valve, balanced by a diaphragm | | | |
| Valve size | NPS 2½ to 4 · DN 65 to 100 | | |
| Pressure rating | Class 125 | Class 150 | |
| Valve body | Cast iron A126B | Cast steel A216 WCC | |
| Valve seat | 1.4408 | | |
| Plug | CW617N | | |
| Pressure balancing | Diaphragm plate EN-JS1030 · EPDM balancing diaphragm, max. 300 °F (150 °C) or NBR diaphragm, max. 175 °F (80 °C) | | |
| Valve size | NPS 6 to 10 · DN 150 to 250 | | |
| Pressure rating | Class 125 | Class 150/300 | Class 150/300 |
| Valve body | Cast iron A126B | Cast steel A216 WCC | Cast stainless steel A351 CF8M |
| Valve seat | CC499K ²⁾ | | |
| Plug | CC499K ²⁾ · With EPDM soft seal, max. 300 °F (150 °C) or with PTFE soft seal, max. 300 °F (150 °C) | | |
| Pressure balancing | Diaphragm plate EN-JS1030 (EN-GJ2-400-15) · EPDM balancing diaphragm, max. 300 °F (150 °C) or NBR diaphragm, max. 175 °F (80 °C) | | |

¹⁾ Optionally with soft seal with standard C_v (K_{vS}) coefficients

²⁾ Special version 1.4409

Type 2420/Type 2425 Actuator

| Type 2420/Type 2425 Actuator | | | |
|------------------------------|--|---------------------|--------------------------------|
| Valve body | Cast iron A126B | Cast steel A216 WCC | Cast stainless steel A351 CF8M |
| Diaphragm cases | DD 11 | | 1.4301 |
| Diaphragm | EPDM ¹⁾ with fabric reinforcement | | |
| Guide bushing | DU bushing | | PTFE |
| Seals | EPDM/PTFE ¹⁾ | | |

¹⁾ Special version, e.g. for mineral oils: FPM (FKM)

Table 3: C_V (K_{VS}) coefficients, x_{FZ} values and max. permissible differential pressures

| Type 2422 Valve, balanced by a bellows | | | | | | | | | | | | |
|---|------------------|-----------------|-----------------|-----------------|-----|----|------------------|------|------------------|------------------|------------------|-----|
| Valve size | NPS | ½ ¹⁾ | ¾ ¹⁾ | 1 ¹⁾ | 1½ | 2 | 2½ | 3 | 4 | 6 | 8 | 10 |
| | DN | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 |
| Valve travel | 0.4" (10 mm) | | | | | | 0.6" (16 mm) | | | 0.9" (22 mm) | | |
| Standard C_V (K_{VS}) coefficient | C_V | 5 | 7.5 | 9.4 | 23 | 37 | 60 | 94 | 145 | 330 | 490 | 590 |
| | K_{VS} | 4 | 6.3 | 8 | 20 | 32 | 50 | 80 | 125 | 280 | 420 | 500 |
| Max. permissible differential pressure Δp | 360 psi (25 bar) | | | | | | 290 psi (20 bar) | | 230 psi (16 bar) | 175 psi (12 bar) | 145 psi (10 bar) | |
| Reduced C_V (K_{VS}) coefficient | C_V | – | – | 5 | 9.4 | 20 | 37 | | 60 | 145 | 330 | |
| | K_{VS} | – | – | 4 | 8 | 16 | 32 | | 50 | 125 | 280 | |
| Max. permissible differential pressure Δp | 360 psi (25 bar) | | | | | | | | 290 psi (20 bar) | 230 psi (16 bar) | 175 psi (12 bar) | |
| x_{FZ} value | 0.65 | 0.6 | 0.55 | 0.45 | 0.4 | | | 0.35 | | | 0.3 | |

¹⁾ Special valve version with micro-trim: C_V 0.0012 to 0.05 (K_{VS} 0.001 to 0.04) or C_V 0.12, 0.5 and 1.2 (K_{VS} 0.1, 0.4 and 1) without pressure balancing

| Type 2422 Valve, balanced by a diaphragm | | | | | | | | |
|---|------------------|----|------|-----|------------------|-----|------------------|--|
| Valve size | NPS | 2½ | 3 | 4 | 6 | 8 | 10 | |
| | DN | 65 | 80 | 100 | 150 | 200 | 250 | |
| Valve travel | 0.6" (15 mm) | | | | 1.4" (35 mm) | | | |
| C_V (K_{VS}) coefficient | C_V | 60 | 95 | 150 | 445 | 760 | 930 | |
| | K_{VS} | 50 | 80 | 125 | 380 | 650 | 800 | |
| Max. permissible differential pressure Δp | 145 psi (10 bar) | | | | 175 psi (12 bar) | | 145 psi (10 bar) | |
| x_{FZ} value | 0.4 | | 0.35 | | | 0.3 | | |

Dimensions

Dimensional drawing · Type 42-20 and Type 42-25 balanced by a bellows · See Table 4

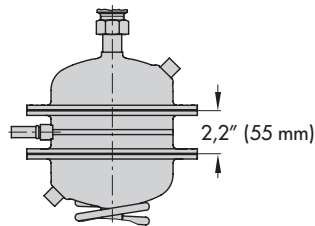


Type 42-25 · Type 2422 Valve balanced by a bellows
with Type 2425 Actuator

Type 42-20 · Type 2422 Valve balanced by a bellows
with Type 2420 Actuator

Fig. 6: Dimensions · Valve balanced by a bellows

Dimensional drawing of actuator with two diaphragms



Type 42-25 with two diaphragms (special version). Add approx. 2.2" (55 mm) to the total height H.

Fig. 7: Dimensions · Actuator with two diaphragms

Ordering text

Type 42-25 and Type 42-20 Differential Pressure Regulator

NPS ... (DN ...), valve balanced by a bellows/diaphragm

Class ..., body material ...

Set point or set point range ... psi (bar)

Accessories ...

Special version

Table 4: Dimensions and weights for Type 42-20 and Type 42-25 · Balanced by a bellows

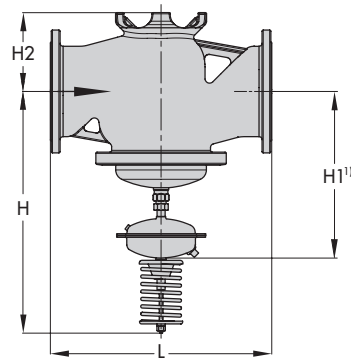
| Valve size | | NPS | ½ | ¾ | 1 | 1½ | 2 | 2½ | 3 | 4 | 6 | 8 | 10 | |
|---|----------------------|---|------|------|------|------|---|------|----------------|---|-----------------|------|------|-------|
| | | DN | 15 | 20 | 25 | 40 | 50 | 65 | 80 | 100 | 150 | 200 | 250 | |
| Length L | Class 125/150 | inch | 7.25 | | | 8.75 | 10 | 10.9 | 11.75 | 13.9 | 17.75 | 21.4 | 26.5 | |
| | | mm | 184 | | | 222 | 254 | 276 | 298 | 352 | 451 | 543 | 673 | |
| | Class 300 | inch | 7.5 | 7.6 | 7.75 | 9.25 | 10.5 | 11.5 | 12.5 | 14.5 | 18.6 | 22.4 | 27.9 | |
| | | mm | 190 | 194 | 197 | 235 | 267 | 292 | 318 | 368 | 473 | 568 | 708 | |
| Height H1 | inch | 8.9 | | | | | 11.8 | | | 14 | 23.2 | 28.7 | | |
| | mm | 225 | | | | | 300 | | | 355 | 590 | 730 | | |
| Height H2 | inch | 1.7 | | | 2.8 | | | 3.9 | | 4.7 | 6.9 | 9.6 | 10.6 | |
| | mm | 44 | | | 72 | | | 98 | | 118 | 175 | 245 | 270 | |
| Type 42-20 Differential Pressure Regulator | | | | | | | | | | | | | | |
| Set points | | Type 2420 Actuator | | | | | | | | | | | | |
| 3, 4, 6, 7 psi (0.2, 0.3, 0.4, 0.5 bar) | Height H | 15.4" (390 mm) | | | | | 18.3" (465 mm) | | | 20.5" (520 mm) | | | | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) ²⁾ | | | | | ØD = 11.2" (285 mm) · A = 50 in ² (320 cm ²) | | | | | | | |
| | Weight ³⁾ | lb | 25 | 27 | 29 | 44 | 50 | 84 | 95 | 126 | - | | | |
| | | kg | 11.5 | 12 | 13 | 20 | 22.5 | 38 | 43 | 57 | | | | |
| Type 42-25 Differential Pressure Regulator | | | | | | | | | | | | | | |
| Set points | | Type 2425 Actuator | | | | | | | | | | | | |
| 0.75 to 3.5 psi (0.05 to 0.25 bar) | Height H | 24.6" (625 mm) | | | | | 27.6" (700 mm) | | 29.7" (755 mm) | 44.1" (1120 mm) | 49.6" (1260 mm) | | | |
| | Actuator | ØD = 11.2" (285 mm) · A = 50 in ² (320 cm ²) ¹⁾ | | | | | ØD = 11.2" (285 mm) A = 100 in ² (640 cm ²) | | | ØD = 15.4" (390 mm) A = 100 in ² (640 cm ²) | | | | |
| | Weight ³⁾ | lb | 46 | 47 | 50 | 65 | 71 | 111 | 113 | 143 | 408 | 937 | 1069 | |
| | | kg | 21 | 21.5 | 22.5 | 29.5 | 32 | 46 | 51 | 65 | 185 | 425 | 485 | |
| 1.5 to 8.5 psi (0.1 to 0.6 bar) | Height H | 24.6" (625 mm) | | | | | 27.6" (700 mm) | | 29.7" (755 mm) | 44.1" (1120 mm) | 49.6" (1260 mm) | | | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) ²⁾ | | | | | ØD = 11.2" (285 mm) A = 50 in ² (320 cm ²) | | | ØD = 15.4" (390 mm) A = 100 in ² (640 cm ²) ²⁾ | | | | |
| | Weight ³⁾ | lb | 35.3 | 36.3 | 38.5 | 54 | 60 | 111 | 113 | 143 | 408 | 937 | 1069 | |
| | | kg | 16 | 16.5 | 17.5 | 24.5 | 27 | 46 | 51 | 65 | 185 | 425 | 485 | |
| 3 to 14.5 psi (0.2 to 1 bar) | Height H | 24.6" (625 mm) | | | | | 27.6" (700 mm) | | 29.1" (740 mm) | 44.1" (1120 mm) | 49.6" (1260 mm) | | | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) ²⁾ | | | | | ØD = 15.4" (390 mm) A = 100 in ² (640 cm ²) | | | | | | | |
| | Weight ³⁾ | lb | 35 | 36 | 39 | 54 | 60 | 93 | 104 | 135 | 408 | 937 | 1069 | |
| | | kg | 16 | 16.5 | 17.5 | 24.5 | 27 | 42 | 47 | 61 | 185 | 425 | 485 | |
| 7 to 20 psi (0.5 to 1.5 bar) | Height H | 24.6" (625 mm) | | | | | 30" (700 mm) | | 29.7" (755 mm) | 42.1" (1070 mm) | 47.6" (1210 mm) | | | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) ²⁾ | | | | | ØD = 11.2" (285 mm) A = 50 in ² (320 cm ²) | | | | | | | |
| | Weight ³⁾ | lb | 35 | 36 | 39 | 54 | 60 | 93 | 104 | 135 | 386 | 915 | 1047 | |
| | | kg | 16 | 16.5 | 17.5 | 24.5 | 27 | 42 | 47 | 61 | 175 | 415 | 475 | |
| 14.5 to 35 psi (1 to 2.5 bar) | Height H | 24.6" (625 mm) | | | | | 27.6" (700 mm) | | 29.7" (755 mm) | 42.1" (1070 mm) | 47.6" (1210 mm) | | | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) | | | | | | | | | | | | |
| | Weight ³⁾ | lb | 35 | 36 | 38 | 54 | 59 | 93 | 104 | 135 | 386 | 915 | 1047 | |
| | | kg | 16 | 16.5 | 17.5 | 24.5 | 27 | 42 | 47 | 61 | 175 | 415 | 475 | |
| 30 to 75 psi (2 to 5 bar) | Height H | 24.6" (625 mm) | | | | | 27.6" (700 mm) | | 29.7" (755 mm) | 42.1" (1070 mm) | 47.6" (1210 mm) | | | |
| | Actuator | ØD = 6.7" (170 mm) · A = 12 in ² (80 cm ²) | | | | | ØD = 8.9" (225 mm) A = 25 in ² (160 cm ²) | | | | | | | |
| | Weight ³⁾ | lb | 35 | 36 | 39 | 54 | 60 | 93 | 104 | 135 | 375 | 904 | 1036 | |
| | | kg | 16 | 16.5 | 17.5 | 24.5 | 27 | 42 | 47 | 61 | 170 | 410 | 470 | |
| 65 to 145 psi (4.5 to 10 bar) | Height H | 24.6" (625 mm) | | | | | 27.6" (700 mm) | | 29.7" (755 mm) | On request | | | | |
| | Actuator | ØD = 6.7" (170 mm) · A = 12 in ² (80 cm ²) | | | | | | | | | | | | |
| | Weight ³⁾ | lb | 35.3 | 36.3 | 38.5 | 54 | 59.5 | 92.6 | 103.6 | | | | | 134.5 |
| | | kg | 16 | 16.5 | 17.5 | 24.5 | 27 | 42 | 47 | | | | | 61 |

¹⁾ Optionally with actuator 100 in² (640 cm²)

²⁾ Optionally with actuator 50 in² (320 cm²)

³⁾ The weight applies to the version with the material specifications A126B. Add +10 % for all other materials.

Dimensional drawing · Type 42-25 and Type 42-20 · Balanced by a diaphragm



Type 2422 Valve balanced by a diaphragm with Type 2425/2420 Actuator (Type 2425 in diagram)

Type 42-25 with two diaphragms (see Fig. 7): add approx. 2.2" (55 mm) to the total height H.

¹⁾ Type 42-20 only

Fig. 8: Dimensions · Valve balanced by a diaphragm

Table 5: Dimensions and weights for Type 42-20 and Type 42-25 · Balanced by a diaphragm

| Valve size | NPS | 2½ | 3 | 4 | 6 | 8 | 10 | |
|------------|-------------------|------|------|-------|------|-------|------|------|
| | DN | 65 | 80 | 100 | 150 | 200 | 250 | |
| Length L | Class 125/ 150 | inch | 10.9 | 11.75 | 13.9 | 17.75 | 21.4 | 26.5 |
| | | mm | 276 | 298 | 352 | 451 | 543 | 673 |
| | Class 300 | inch | 11.5 | 12.5 | 14.5 | 18.6 | 22.4 | 27.9 |
| | | mm | 292 | 318 | 368 | 473 | 568 | 708 |
| Height H2 | inch | 3.1 | | 4.6 | 6.9 | 10.2 | | |
| | mm | 98 | | 118 | 175 | 260 | | |

| Type 42-20 Differential Pressure Regulator | | | | | | | |
|--|--------------------|---|----------------|----------------|---|-----------------|-----------------|
| Height H1 ¹⁾ | | 14" (355 mm) | | | 14.8" (375 mm) | | |
| Actuator | | ØD = 11.2" (285 mm) · A = 50 in ² (320 cm ²) | | | | | |
| Weight, approx. | | 84 lb (38 kg) | 95 lb (43 kg) | 113 lb (51 kg) | | | |
| Type 42-25 Differential Pressure Regulator | | | | | | | |
| 0.75 to 3.5 psi (0.05 to 0.25 bar) | Height H | 23.2" (590 mm) | | 24" (610 mm) | 33" (840 mm) | 35.8" (910 mm) | |
| | Actuator | ØD = 15.4" (390 mm) · A = 100 in ² (640 cm ²) | | | | | |
| | Weight, approx. kg | 93 lb (42 kg) | 104 lb (47 kg) | 121 lb (55 kg) | 209 lb (95 kg) | 551 lb (250 kg) | 595 lb (270 kg) |
| 1.5 to 8.5 psi (0.1 to 0.6 bar) | Height H | 23.2" (590 mm) | | 24" (610 mm) | 33" (840 mm) | 35.8" (910 mm) | |
| | Actuator | ØD = 11.2" (285 mm) · A = 50 in ² (320 cm ²) ²⁾ | | | ØD = 15.4" (390 mm) · A = 100 in ² (640 cm ²) | | |
| | Weight, approx. kg | 93 lb (42 kg) | 104 lb (47 kg) | 121 lb (55 kg) | 209 lb (95 kg) | 551 lb (250 kg) | 595 lb (270 kg) |
| 3 to 14.5 psi (0.2 to 1 bar) | Height H | 23.2" (590 mm) | | 24" (610 mm) | 31.1" (790 mm) | 33.9" (860 mm) | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) ³⁾ | | | ØD = 11.2" (285 mm) · A = 50 in ² (320 cm ²) ²⁾ | | |
| | Weight, approx. kg | 93 lb (42 kg) | 104 lb (47 kg) | 121 lb (55 kg) | 209 lb (95 kg) | 551 lb (250 kg) | 595 lb (270 kg) |
| 7 to 20 psi (0.5 to 1.5 bar) | Height H | 23.2" (590 mm) | | 24" (610 mm) | 31.1" (790 mm) | 33.9" (860 mm) | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) ³⁾ | | | ØD = 11.2" (285 mm) · A = 50 in ² (320 cm ²) ²⁾ | | |
| | Weight, approx. kg | 93 lb (42 kg) | 104 lb (47 kg) | 121 lb (55 kg) | 209 lb (95 kg) | 551 lb (250 kg) | 595 lb (270 kg) |
| 14.5 to 35 psi (1 to 2.5 bar) | Height H | 23.2" (590 mm) | | 24" (610 mm) | 31.1" (790 mm) | 33.9" (860 mm) | |
| | Actuator | ØD = 8.9" (225 mm) · A = 25 in ² (160 cm ²) ³⁾ | | | | | |
| | Weight, approx. kg | 93 lb (42 kg) | 104 lb (47 kg) | 121 lb (55 kg) | 209 lb (95 kg) | 551 lb (250 kg) | 595 lb (270 kg) |
| 30 to 75 psi (2 to 5 bar) | Height H | 23.2" (590 mm) | | 24" (610 mm) | 31.1" (790 mm) | 33.9" (860 mm) | |
| | Actuator | ØD = 225 mm · A = 160 cm ² ³⁾ | | | | | |
| | Weight, approx. kg | 93 lb (42 kg) | 104 lb (47 kg) | 121 lb (55 kg) | 209 lb (95 kg) | 551 lb (250 kg) | 595 lb (270 kg) |

¹⁾ Type 42-25, all set points

²⁾ Optionally with actuator 100 in² (640 cm²)

³⁾ Optionally with actuator 50 in² (320 cm²)

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
samson@samson.de · www.samson.de

T 3008 EN

2016-12-01 · English