DATA SHEET

T 5862 EN

Type 3260 Globe Valve

Type 3260/3374 Electric Control Valves

Types 3260/3372, 3260-1, 3260-7 Pneumatic Control Valves

Application

Globe valves for use in industrial applications as well as heating, ventilation and air-conditioning systems

DN 65 to 150 · PN 16 · Temperatures up to 150 °C



Fig. 1: *Type 3260/3374*



Fig. 2: *Type 3260-1 (Type 3260 Valve with Type 3271 Actuator)*

Special features

- Type 3260 designed as a globe valve
- Connection between valve and actuator: form-fit connection
- Type 3260 Globe Valve in special version for oils, up to DN 125
- Valves to protect panel heating according to DIN 4747 can also be combined with electric actuators with fail-safe action

Versions

Electric control valves with Type 3260 (globe valve)		
Type 3260/3374[1)]	PN 16	DN 65 to 150
Pneumatic control valves with Type 3260 (globe valve)		
Type 3260/3372	PN 16	DN 65 to 150
Type 3260/3271	PN 16	DN 65 to 80
Type 3260/3277[2)]	PN 16	DN 65 to 80

1) Electric actuators with fail-safe action: Type 3374-21, Type 3374-31, Type 3374-25 and Type 3374-35

2) Pneumatic actuator suitable for integrated positioner attachment

Also available:

– Type 3260 Three-way Valve, see Data Sheet ▶ T 5861

SAMSON AKTIENGESELLSCHAFT
Weismüllerstraße 3 · 60314 Frankfurt am Main, Germany
Phone: +49 69 4009-0 · samson@samsongroup.com · www.samsongroup.com

Edition December 2023

Principle of operation

The process medium flows through the valve in the direction indicated by the arrow in the flow-to-open direction. The cross-sectional area of flow between the seat and plug is determined by the position of the valve stem. The plug is moved by changing the control signal applied to the actuator.

The plug stem is designed to form-fit the actuator stem and is sealed by an EPDM or FKM seal.

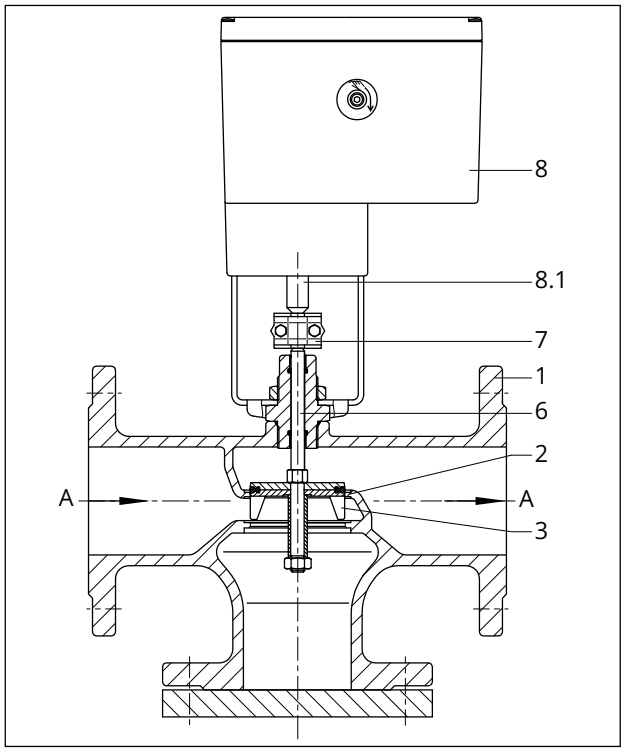


Fig. 3: *Type 3260 Valve (globe valve) with Type 3374 Actuator*

1 Valve body
2 Seat
3 Plug
6 Plug stem
7 Stem connector between actuator stem and plug stem (also travel indicator)
8 Actuator
8.1 Actuator stem
A Process medium

Fail-safe positions

When the valve is combined with a pneumatic actuator with integrated springs or an electric actuator with fail-safe action, the control valve has two different fail-safe positions that become effective when the supply air or control signal fails:

- **Actuator stem extends (fail-close):**
  When the signal pressure is reduced or the air supply fails, the springs move the actuator stem downward. The valve closes upon fail-safe action.
- **Actuator stem retracts (fail-open):**
  When the signal pressure is reduced or the air supply fails, the springs move the actuator stem upward. The valve opens upon fail-safe action.

Electric actuators

The Type 3374 Electric Actuator can be controlled by three-step signals or, in the version with positioner, with signals from 0/4 to 20 mA or 0/2 to 10 V. Various electrical accessories can be optionally installed. The Types 3374-21, 3374-31, 3374-25 and 3374-35 are able to perform a fail-safe action (see Table 4).

The Type 3260/3374 Electric Control Valve with fail-safe action is not tested according to DIN EN 14597.

Refer to Data Sheet ▶ T 8331 for more details on the electric actuators: Type 3374 Electric Actuator

Pneumatic actuators

The Types 3271 and 3277 Pneumatic Actuators as well as the Type 3372 Electropneumatic Actuator work with various control signals (see Table 6).

All actuators are available for fail-safe action “actuator stem extends (FA)” or “actuator stem retracts (FE)”.

The Type 3277 Pneumatic Actuator is suitable for integral positioner attachment. Various optional accessories can be mounted onto the actuator.

Types 3271 and 3277 Actuator are also available with handwheel.

Refer to Data Sheet ▶ T 8310-1 for more details on the pneumatic actuators: Type 3271 and Type 3277 Pneumatic Actuators

Installation of the control valve

The control valves can be mounted in any position. However, the electric actuators must not be suspended downwards.

Make sure that the ambient temperature at the point of installation does not exceed or fall below the permissible temperature limits specified for each actuator.

Ordering text

Type ... Control Valve with Type 3260 (globe valve):

❑ 3260/3374-..., ❑ 3260/3372, ❑ 3260-1, ❑ 3260-7

- Nominal size: DN ...
- K_{VS} coefficient: ...
- Special version for oils: ❑ yes, ❑ no

Further specifications on the electric actuator

- Control: ❑ three-step signal, ❑ positioner
- Supply voltage: ...
- Electric additional equipment: ...

Further specifications on the pneumatic actuator

- Effective area: ...
- Bench range: ...
- Fail-safe action: ❑ stem extends (FA), ❑ stem retracts (FE)

Table 1: *Technical data for Type 3260 (globe valve)*

Nominal size	DN	65	80	100	125	150
Pressure rating	PN	16				
Permissible temperature range	°C	5 to 150				
Seat-plug seal		Soft seal				
Rated travel	mm	15		30		
Leakage class according to DIN EN 60534-4		IV (≤0.01 % of K_{VS})				

Table 2: *Materials for Type 3260 (globe valve)*

Nominal size	DN	65	80	100	125	150
Valve body		Cast iron EN-GJL-250 (GG-25)				
Seat		Cast iron EN-GJL-250 (GG-25)				
Plug		Brass · CC754 · CW617				
Plug stem		Stainless steel · 1.4305				
Seat-plug seal		EPDM (standard) · FKM (special version up to DN 125)				
Stem seal		EPDM seal ring				
Special version for oils		FKM seal				–
Rod-type yoke		See actuator				

Table 3: *Nominal sizes, K_{VS} coefficients and seat Ø for Type 3260 (globe valve)*

Nominal size	DN	65	80	100	125	150
K_{VS} coefficient		60	80	160	250	320
Seat Ø	mm	70	70	100	130	130
Rated travel	mm	15	15	30	30	30

Table 4: *Available versions and possible combinations (valve/actuator)*

Type 3260 Globe Valve/actuator								
	Fail-safe action: actuator stem			Nominal size DN				
Type/TROVIS	Extends	Retracts	Details in	65	80	100	125	150
Electric actuators								
3374-11	–	–	▶ T 8331	•	•	–	–	–
3374-10	–	–	▶ T 8331	•	•	•	•	•
3374-21	•	–	▶ T 8331	•	•	–	–	–
3374-31	–	•	▶ T 8331	•	•	–	–	–
3374-25[1)]	•	–	▶ T 8331	•	•	•	•	•
3374-35[1)]	–	•	▶ T 8331	•	•	•	•	•
Pneumatic actuators								
3372	•	•	▶ T 8313	•	•	•	•	•
3271[1)]	•	•	▶ T 8310-1	•	•	–	–	–
3277[1)]	•	•	▶ T 8310-1	•	•	–	–	–

[1)] Type 3260 Globe Valve in combination with these actuators with rod-type yoke:
DN 65 to 80: order no. 1890-8696
DN 100 to 150: order no. 1400-8822

Permissible differential pressures

The specified differential pressure may possibly be restricted by the pressure-temperature diagram.

All pressures in bar

Table 5: *Type 3260/... Electric Control Valves*

Type ... Actuator	3374-11[1)]	3374-10[1)]	3374-21/-31	3374-25/-35
K_{VS} coefficient	Δp when p_2 = 0 bar			
60	4.0	4.0	4.0	4.0
80	4.0	4.0	4.0	4.0
160	–	2.8	–	1.9
250	–	1.7	–	1.1
320	–	1.7	–	1.1

1) The maximum differential pressure is reduced by 50 % when actuators with positioners in the version with faster motors are used.

Table 6: *Type 3260/... Pneumatic Control Valves*

Type ... Actuator		3372				3271 and 3277			
Actuator area[4)]	**cm²**	**120**	**120[2)]**	**350[2)]**	**350[3)]**	**175v2**	**175v2**	**350**	**350**
Bench range min.[1)]	**bar**	**1.4**	**2.1**	**0.8**	**0.9**	**0.6**	**1.3**	**0.4**	**0.6**
Bench range max.[1)]	**bar**	**2.3**	**3.3**	**1.3**	**1.65**	**3.0**	**2.9**	**2.0**	**3.0**
Maximum supply pressure	**bar**	**4.0**	**5.0**	**2.3**	**2.5**	**3.7**	**4.3**	**2.5**	**3.7**
K_{VS} coefficient		Δp when p_2 = 0 bar							
60		3.8	4.0	–	–	2.1	4.0	3.0	4.0
80		3.8	4.0	–	–	2.1	4.0	3.0	4.0
160		–	–	3.1	3.1	–	–	–	–
250		–	–	1.8	1.8	–	–	–	–
320		–	–	1.8	1.8	–	–	–	–

1) Other bench ranges only on request

2) Actuator stem extends

3) Actuator stem retracts

4) v2 is added to the actuator area (e.g. 175v2 cm²) to indicate that Type 3271 and Type 3277 Actuators have a full diaphragm.

Table 7: *Face-to-face dimensions and overall heights for Type 3260 (globe valve)*

Nominal size	DN	65	80	100	125	150
L1	mm	290	310	350	400	480
L2	mm	159	171	181	233	246
H	mm	71	71	112	112	112
H1 with Type 3372 Pneumatic Actuator (350 cm²)	mm	–	–	382	382	382
H2	mm	265	265	306	306	306

Table 8: *Weights for Type 3260 (globe valve)*

Nominal size	DN	65	80	100	125	150
Weight (without actuator)	kg (approx.)	24	28	44	59	76

Table 9: *Weights for electric actuators*

Type		3374-10/-11	3374-21/-31	3374-25/-35
Weight	kg (approx.)	3.2	3.9	6.2

Dimensional drawings of electric control valves (globe valve)

Dimensions in mm

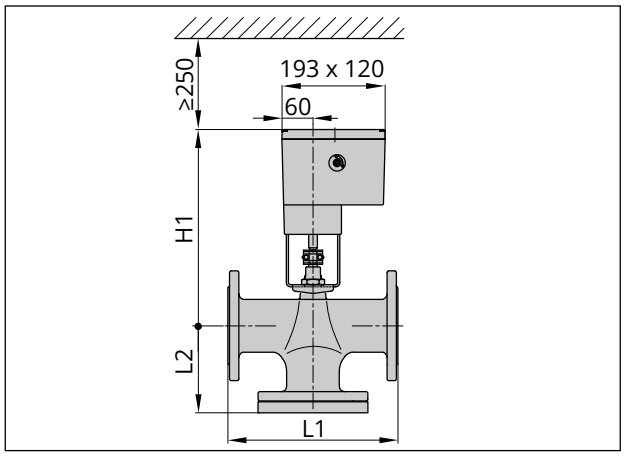


Fig. 4: *Type 3260/3374-10 and -11 · DN 65 to 150*
Type 3260/3374-21 and -31 · DN 65 to 80

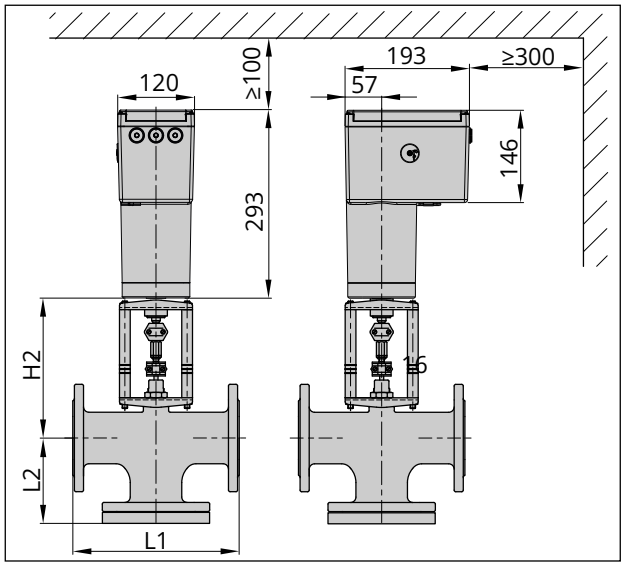


Fig. 5: *Type 3260/3374-25 and -35 · DN 65 to 150*

Dimensional drawings of pneumatic control valves (globe valve)

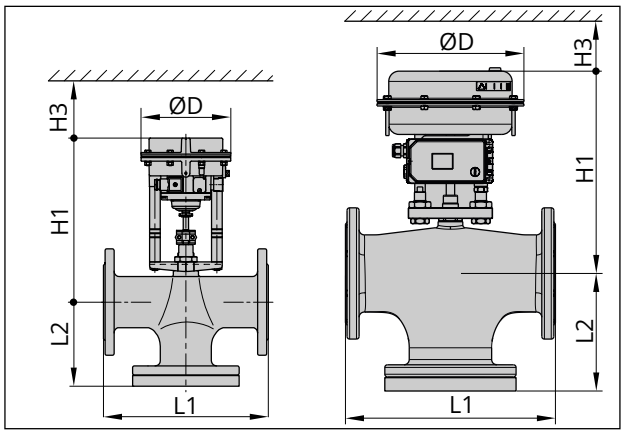


Fig. 6: *Left: Type 3260/3372 (120 cm²) · DN 65 to 80*
Right: Type 3260/3372 (350 cm²) · DN 100 to 150

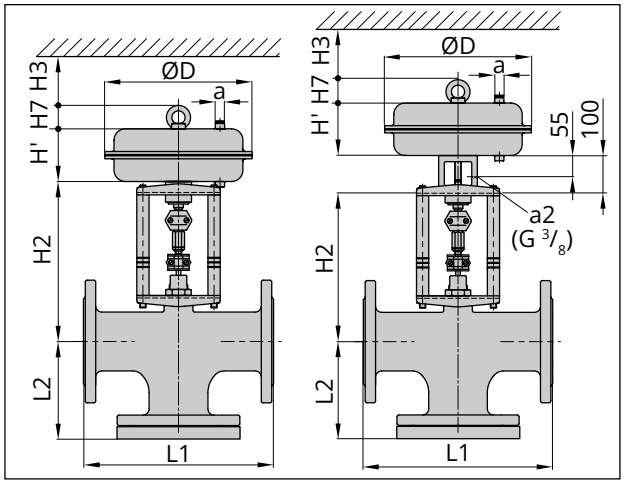


Fig. 7: *Left: Type 3260-1 · DN 65 to 80*
Right: Type 3260-7 · DN 65 to 80