

Electric Control Valves Types 3260/3274, 3260/3374

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

Globe Valve Type 3260



Application

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

DN 15 to 150 · PN 16 · Version up to 150 °C



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

Versions

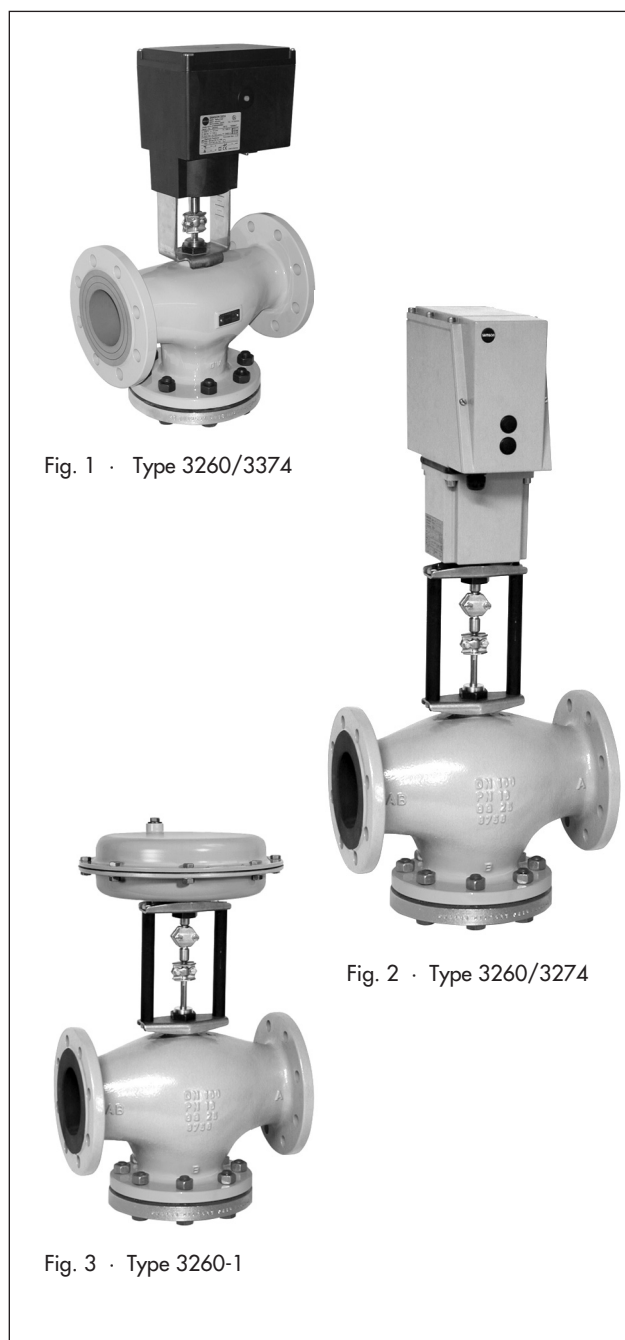
Electric control valves with Type 3260 designed as a globe valve		
Type 3260/3374	PN 16	DN 65 to 150
Type 3260/3274 ¹⁾	PN 16	DN 65 to 150
Pneumatic control valves with Type 3260 designed as a globe valve		
Type 3260/3372	PN 16	DN 65 to 80
Type 3260-1	PN 16	DN 65 to 150
Type 3260-7 ²⁾	PN 16	DN 65 to 150

¹⁾ Electric actuators with fail-safe action: Types 3274-21/-22

²⁾ Pneumatic actuator suitable for integral positioner attachment

Also available:

- Type 3260 Three-way Valve, refer to Data Sheet T 5861 EN



Principle of operation (Fig. 4)

The medium flows through the valve as indicated by the arrow in the flow-to-open direction. The position of the valve plug determines the cross-sectional area of flow between the plug (3) and the seat (2). The plug is moved by changing the control signal acting on the actuator.

The plug stem (6) is designed to form-fit the actuator stem (8.1) and is sealed by an EPDM or FPM seal.

Fail-safe position

For globe valves mounted to an actuator with fail-safe action, the control valve has two different positions which become effective upon power supply failure:

Actuator stem extends

- The globe valve closes upon power supply failure

Actuator stem retracts

- The globe valve opens upon power supply failure

Electric actuators

The Type 3374 Electric Actuator and the Type 3274 Electrohydraulic Actuator can either be controlled using a three-stepping point signal or, in the version with positioner, with continuous signals from 0(4) to 20 mA or 0(2) to 10 V. Various optional electric accessories can be mounted onto the control valve.

Types 3274-21 and 3274-22 Actuators are able to perform a fail-safe action. Refer to Table 4.

Refer to the data sheets for more details on the electric actuators:

- **T 8331 EN:** Type 3374 Electric Actuator
- **T 8340 EN:** Type 3274 Electrohydraulic Actuator

Pneumatic actuators

The Type 3271 and Type 3277 Pneumatic Actuator as well as the Type 3372 Electropneumatic Actuator work with various control signals. Types 3271 and 3277 Pneumatic Actuators require a supply pressure of at least 0.2 bar above the maximum bench range. A supply pressure of at least 3.7 bar is required for Type 3372.

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 also be mounted onto the control valve.

Types 3271 and 3277 Actuator are also available with manual override (handwheel).

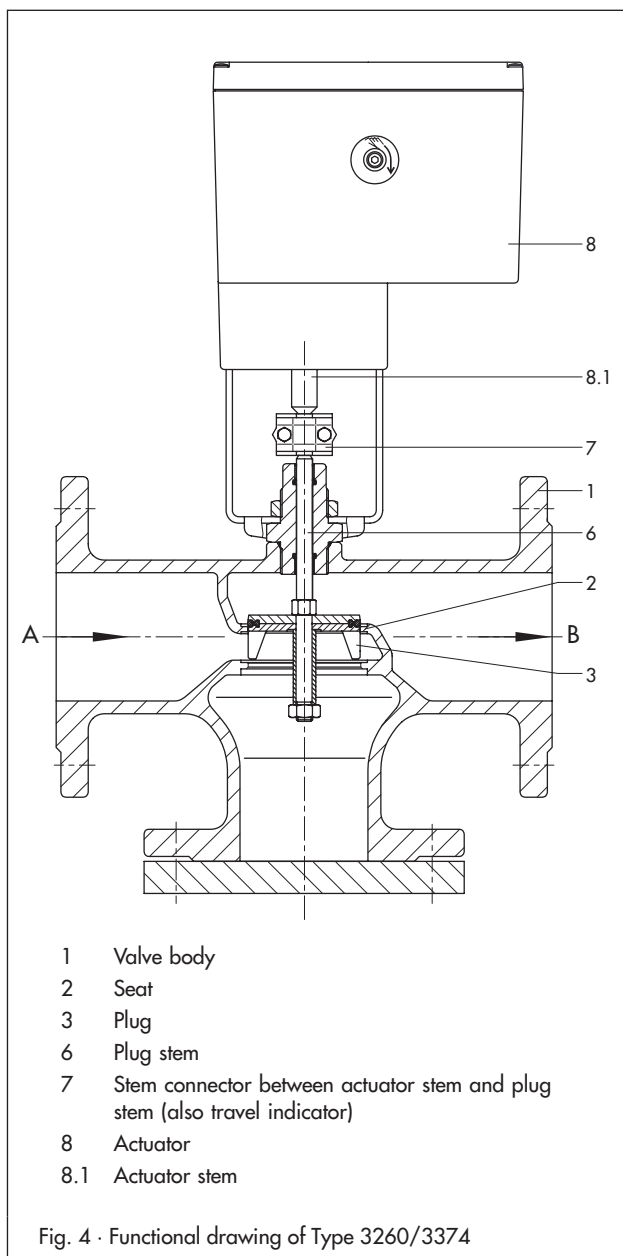
Refer to the data sheet for more details on the pneumatic actuators:

- **T 8310-1 EN:** Types 3271 and 3277 Pneumatic Actuator

Installation of the control valve

Any mounting position may be used, however, the electric actuator may not be installed in a suspended position.

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

Control Valve Type ... with Type 3260 designed as globe valve:

- 3260/3274-..., 3260/3374-...
- 3260/3372, 3260-1, 3260-7

- Nominal size: DN ...
- Kvs coefficient: ...
- Special version for oils: yes, no

Further specifications for electric actuator

- Control signal: three-stepping point signal, continuous (positioner)
- Power supply ...
- Electric additional equipment ...

Further specifications for pneumatic actuator

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

Table 1 · Technical data

Type 3260 Globe Valve						
Nominal size	DN	65	80	100	125	150
Nominal pressure	PN	16				
Permissible temperature range	°C	5 to 150				
Plug sealing		Soft sealing				
Leakage rate acc. to DIN EN 60534-4		Class IV (≤ 0.01 % of the K_{VS} coefficient)				
Rated travel	mm	15		30		

Table 2 · Materials (material number according to DIN EN)

Type 3260 Globe Valve	
Body and seat	Cast iron EN-JL 1040 (GG-25)
Plug	Brass · CuZn37Pb
Plug stem	Stainless steel · 1.4305
Seat/plug sealing	EPDM (standard) · FPM (special version)
Stem sealing	EPDM sealing ring
Special version for oils	FPM seal
Rod-type yoke	See actuator

Table 3 · Overview: Nominal sizes, K_{VS} coefficients and seat diameters

Type 3260 Globe Valve						
Nominal size	DN	65	80	100	125	150
K_{VS} coefficient		60	80	160	250	320
Seat \varnothing	mm	70	70	100	130	130
Rated travel	mm	15	15	30	30	30

Table 4 · Possible combinations

Type 3260 Globe Valve/actuator								
Type	Fail-safe action: Actuator stem		Refer to Data Sheet	Nominal size DN				
	extends	retracts		65	80	100	125	150
Electric actuators								
3374-11	–	–	T 8331 EN	•	•	–		
3374-10	–	–		•	•	•	•	•
3274-11 ¹⁾	–	–	T 8340 EN	•	•	•	•	•
3274-15 ¹⁾	–	–		–	–	•	•	•
3274-21 ¹⁾	•	–		•	•	•	•	•
3274-22 ¹⁾	–	•		•	•	•	•	•
Pneumatic actuators								
3372	•	•	EB 8313 EN	•	•	–		
3271 ¹⁾	•	•	T 8310-1 EN	•	•	•	•	•
3277 ¹⁾	•	•	T 8310-1 EN	•	•	•	•	•

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

Table 5 · Permissible differential pressures (all pressures in bar)

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

Actuator Type		3374-11	3374-10	3274-11/-15/-21/-22
K_{VS} coefficient		Δp when $p_2 = 0$ bar		
60		4	4	4
80		4	4	4
160		–	2.8	1.9
250		–	1.7	1.1
320		–	1.7	1.1

Actuator Type		3372		3271 and 3277					
Effective diaphragm area	cm ²	120	120	240	240	350	350	700	
Bench range	min.	1.4	2.1	0.4	0.6	0.4	0.6	0.4	
	max.	2.3	3.3	2.0	3.0	2.0	3.0	2.0	
Maximum supply pressure	bar	4	5	2.5	3.7	2.5	3.7	2.4	
K_{VS} coefficient		Δp when $p_2 = 0$ bar							
60		3.8	4	1.9	3.1	3	4	–	
80		3.8	4	1.9	3.1	3	4	–	
160		–							3.1
250		–							1.8
320		–							1.8

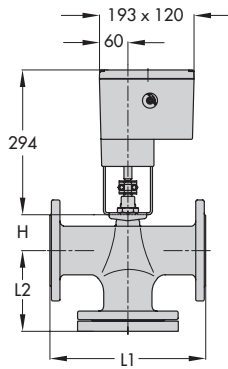
Table 6 · Dimensions and weights

Nominal size	DN	65	80	100	125	150
Length L1	mm	290	310	350	400	480
Length L2	mm	159	171	181	233	246
Height H	mm	71	71	112	112	112
Height H2	mm	265	265	306	306	306
Weight	approx. kg	24	28	44	59	76

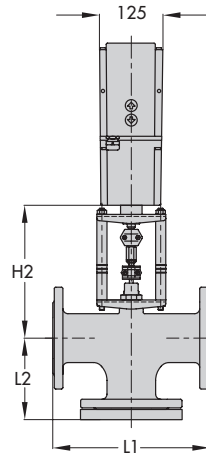
Type	3374	3274-11/-21/-22	3274-15	
Weight	approx. kg	3.2	12	15

Type	3372	3271			3277			
Effective area	cm ²	120	240	350	700	240	350	700
Height H1	mm	–	65	80	199	65	80	199
Diaphragm \varnothing D	mm	168	240	280	390	240	280	390
Loading pressure connection	a	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{1}{4}$	G $\frac{3}{8}$	G $\frac{3}{8}$
Weight	approx. kg	3.7	5	8	22	9	12	26

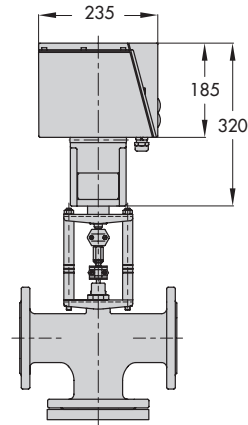
Electric control valves



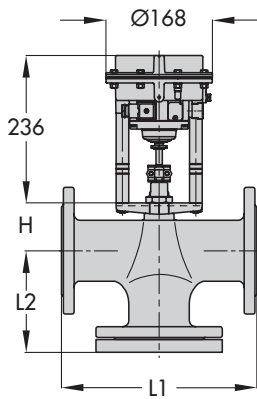
Type 3260/3374: DN 65 to 150



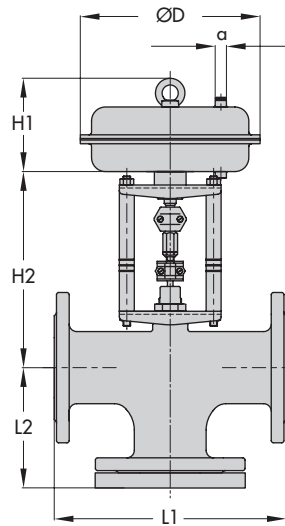
Type 3260/3274: DN 65 to 150



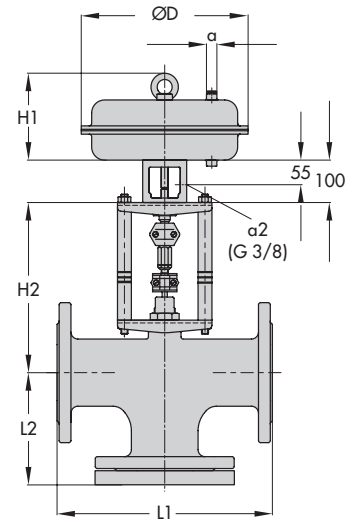
Pneumatic control valves



Type 3260/3372: DN 65 and 80



Type 3260-1: DN 65 to 150



Type 3260-7: DN 65 to 150

Specifications subject to change without notice.



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