

# Types 3260/3274, 3260/3374 Electric Control Valves

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

### Type 3260 Globe Valve



#### Application

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

DN 65 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 (up to DN 125)

#### Versions

Electric control valves with Type 3260 Globe Valve		
Type 3260/3374	PN 16	DN 65 to 150
Type 3260/3274 <sup>1)</sup>	PN 16	DN 65 to 150
Pneumatic control valves with Type 3260 Globe Valve		
Type 3260/3372	PN 16	DN 65 to 80
Type 3260-1	PN 16	DN 65 to 150
Type 3260-7 <sup>2)</sup>	PN 16	DN 65 to 150

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

<sup>2)</sup> Pneumatic actuator suitable for integrated positioner attachment

#### Also available:

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

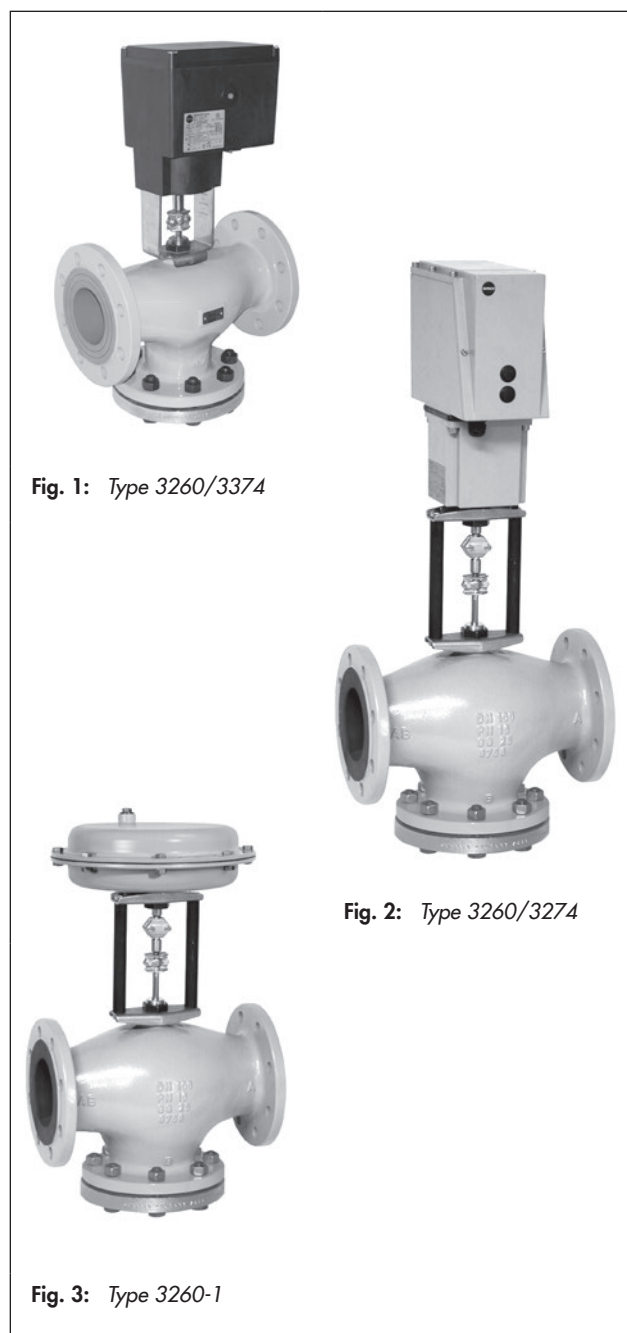


Fig. 1: Type 3260/3374

Fig. 2: Type 3260/3274

Fig. 3: Type 3260-1

### Principle of operation (Fig. 4)

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 (2) and plug (3) 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 (6) is designed to form-fit the actuator stem (8.1) and is sealed by an EPDM or FPM seal.

### Fail-safe action

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 as well the Type 3274 Electrohydraulic Actuator can be controlled either using a three-stepping point signal or, in the version with positioner, with signals from 0/4 to 20 mA or from 0/2 to 10 V. Various electrical accessories can be optionally installed.

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:** Type 3374 Electric Actuator

► **T 8340:** Type 3274 Electrohydraulic Actuator

### Pneumatic actuators

The Types 3271 and 3277 Pneumatic Actuators 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 be mounted onto the actuator.

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

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

► **T 8310-1:** Types 3271 and 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.

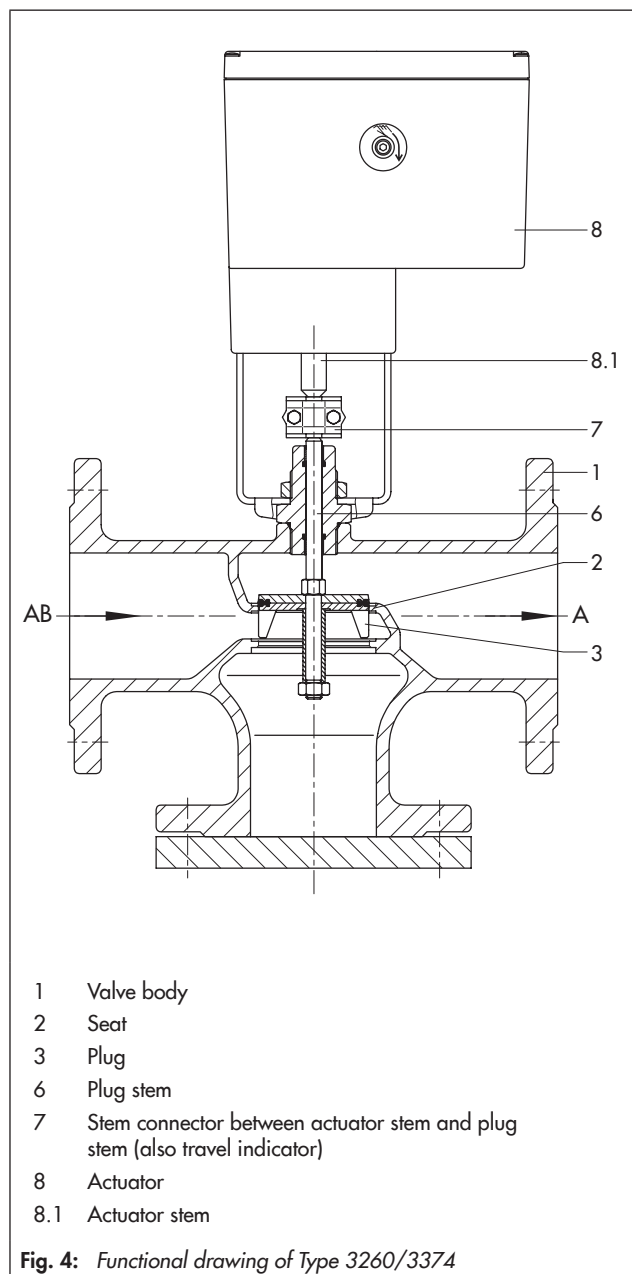


Fig. 4: Functional drawing of Type 3260/3374

### Ordering text

Type ... Control Valve with Type 3260 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 on the electric actuator

- Control:  three-step signal,  positioner
- Power supply ...
- 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**

Type 3260 Globe Valve						
Nominal size	DN	65	80	100	125	150
Nominal pressure	PN	16				
Permissible temperature range	°C	5 to 150				
Plug seal		Soft seal				
Leakage class according to IEC 60534-4		Class I ( $\leq 0.01$ % of $K_{VS}$ coefficient)				
Rated travel	mm	15		30		

**Table 2: Materials · Material numbers according to DIN EN**

Type 3260 Globe Valve	
Valve body and seat	Cast iron EN-JL1040 (GG-25)
Plug	Brass · CuZn37Pb
Plug stem	Stainless steel · 1.4305
Seat/plug seal	EPDM (standard) · FPM (special version up to DN 125)
Stem seal	EPDM seal ring
Special version for oils (up to DN 125)	FPM seal
Yoke	See actuator

**Table 3: 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
<b>Electric actuators</b>								
3374-11	–	–	▶ T 8331	•	•	–		
3374-10	–	–		•	•	•	•	•
3274-11 <sup>1)</sup>	–	–	▶ T 8340	•	•	•	•	•
3274-15 <sup>1)</sup>	–	–		•	•	•	•	•
3274-21 <sup>1)</sup>	•	–		•	•	•	•	•
3274-22 <sup>1)</sup>	–	•		•	•	•	•	•
<b>Pneumatic actuators</b>								
3372	•	•	▶ EB 8313	•	•	–		
3271 <sup>1)</sup>	•	•	▶ T 8310-1	•	•	•	•	•
3277 <sup>1)</sup>	•	•	▶ T 8310-1	•	•	•	•	•

<sup>1)</sup> 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 stated in bar)

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

**Table 5.1:** Electric Control Valves Type 3260/...

Type ... Actuator	3374-11	3374-10	3274-11/-15/-21/-22
$K_{VS}$ coefficients	$\Delta p$ 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

**Table 5.2:** Pneumatic Control Valves Type 3260/...

Type ... Actuator	3372		3271 and 3277					
Diaphragm area $\text{cm}^2$	120	120	240	240	350	350	700	
Bench range <sup>1)</sup>	min. bar	1.4	2.1	0.4	0.6	0.4	0.6	0.4
	max. bar	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	
$K_{VS}$ coefficients	$\Delta p$ 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	

<sup>1)</sup> Other bench ranges only on request

**Table 6:** Dimensions and weights**Table 6.1:** Type 3260 Globe Valve

Nominal size	DN	65	80	100	125	150
Overall length L1	mm	290	310	350	400	480
Overall 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	kg (approx.)	24	28	44	59	76

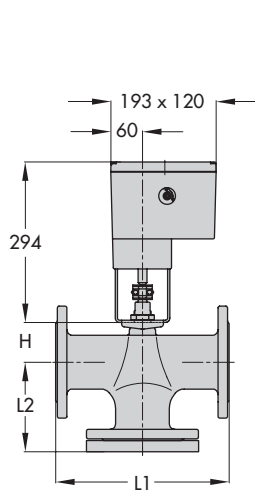
**Table 6.2:** Electric actuators

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

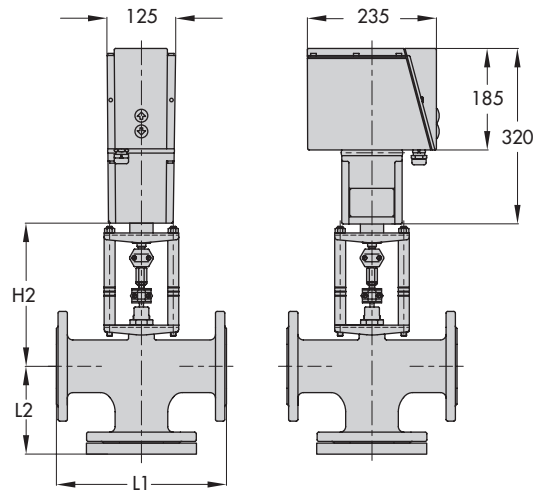
**Table 6.3:** Pneumatic actuators

Type	3372	3271			3277		
Effective area $\text{cm}^2$	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
Signal pressure connection a	G ¼	G ¼	G ⅜	G ⅜	G ¼	G ⅜	G ⅜
Weight kg (approx.)	3.7	5	8	22	9	12	26

**Electric control valves**

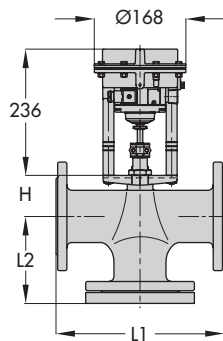


Type 3260/3374: DN 65 to 150

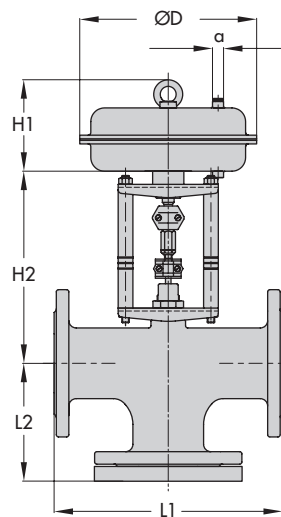


Type 3260/3274: DN 65 to 150

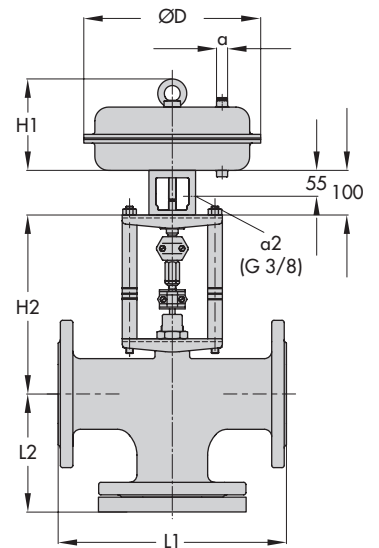
**Pneumatic control valves**



Type 3260/3372: DN 65, 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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2016-09-07 · English