

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



The control valves consist of a Type 3260 Globe Valve with a form-fit connection and either an electric, electrohydraulic or pneumatic 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 (ASTM I, II, III) in sizes up to DN 125

Versions with Type 3260 as a globe valve

Electric control valves			
Type 3260/3374	Fig. 1	PN 16	DN 65 to 150
Type 3260/3274 ¹⁾	Fig. 2	PN 16	DN 65 to 150
Pneumatic control valves			
Type 3260/3372		PN 16	DN 65 to 80
Type 3260-1 (Type 3271 Actuator) · Fig. 3		PN 16	DN 65 to 150
Type 3260-7 ²⁾ (Type 3277 Actuator)		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 Globe Valve with electric actuator with fail-safe action, not type tested · Type 3271-21 with rod-type yoke (details on request)
- Type 3260 Three-way Valve with electric or pneumatic actuator (refer to Data Sheet T 5861 EN)
- Type 3260 Three-way Valve mounted on controller with electric actuator (refer to Data Sheet T 5761 EN)

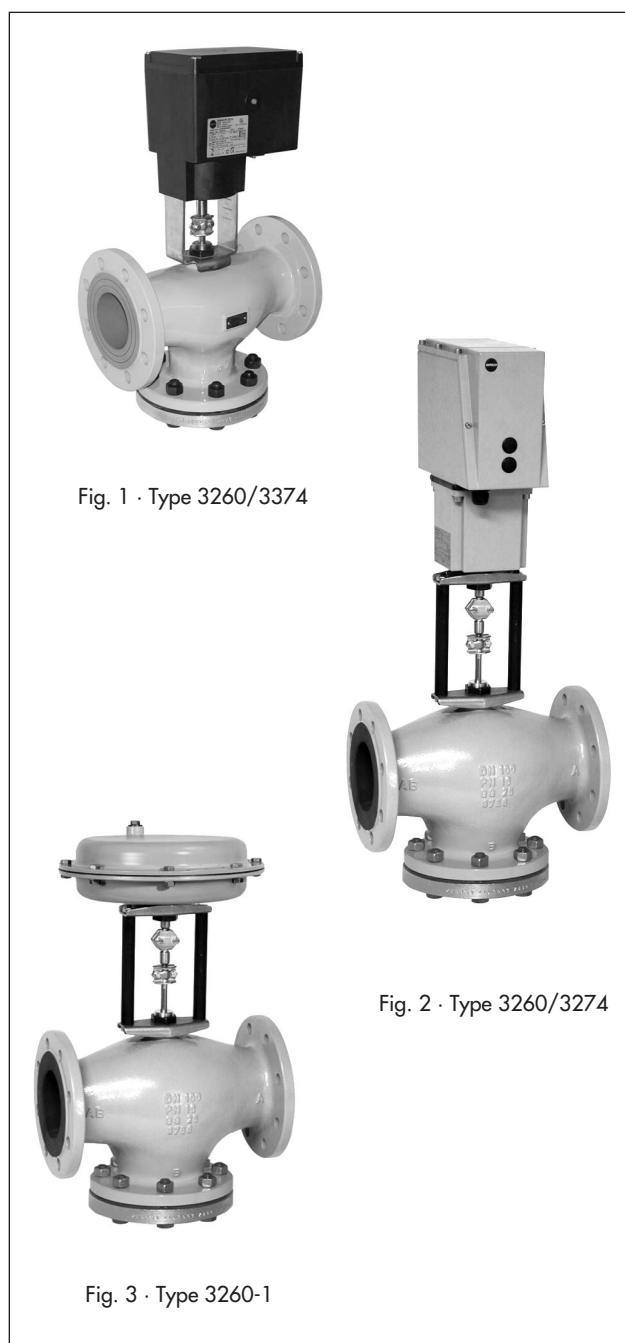


Fig. 1 · Type 3260/3374

Fig. 2 · Type 3260/3274

Fig. 3 · Type 3260-1

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

The plug is moved by changing the control signal acting on the actuator. For Type 3374 Electric Actuator as well as for Type 3274 Electrohydraulic Actuators, this signal is a three-point stepping signal, or when an additional electric positioner is used, a continuous-action signal from 4 to 20 mA or 0(2) to 10 V-.

The pneumatic actuators are operated with various control signals. The Type 3271 and Type 3277 Pneumatic Actuators require a supply pressure of at least 0.2 bar above the upper bench range value. The Type 3372 Pneumatic Actuator requires a minimum supply pressure of 3.7 bar.

Electric actuators

The Type 3260 Valves can be combined with a form-fit connection to Type 3374 or Type 3274 Electric Actuators.

The electric actuators can be equipped with additional accessories.

Refer to Data Sheet for details	
Type 3374	-> Data Sheet T 8331 EN
Type 3274	-> Data Sheet T 8340 EN

Pneumatic actuators

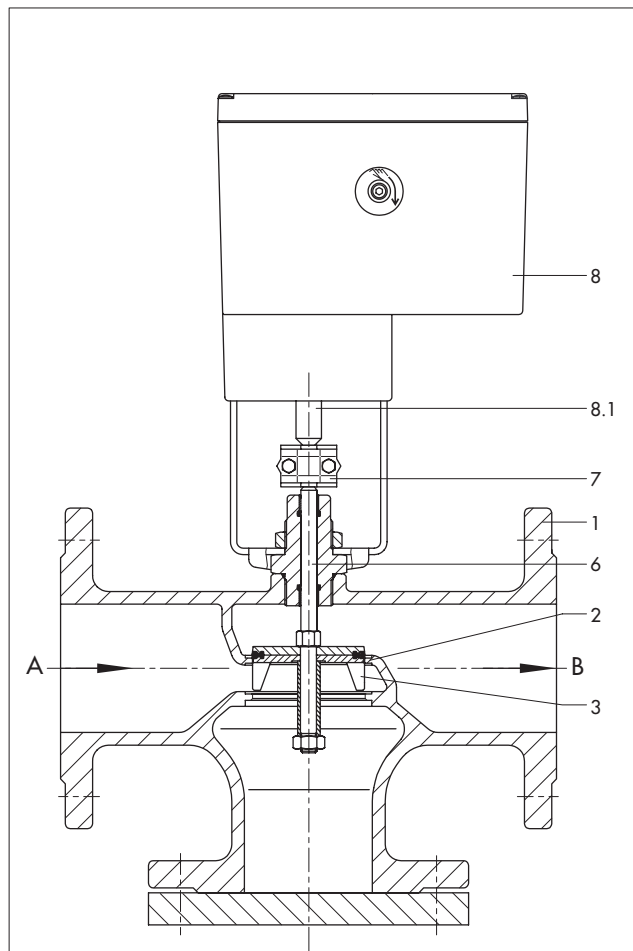
Type 3260 Valves can optionally be combined with the Type 3372 Electropneumatic Actuator or Types 3271 or 3277 Pneumatic Actuators.

All actuators are available for fail-safe position "Actuator stem extends" (FA) or "Actuator stem retracts" (FE).

The Type 3277 Actuator is suitable for integral positioner attachment.

Types 3271 and 3277 Actuators are optionally available with handwheels for manual override, solenoid valves and other accessories designed for attachment to a rod-type yoke.

Refer to Data Sheet/Mounting and Operating Instructions	
Type 3372	-> Mounting and Operating Instructions EB 8313 EN
Type 3271	-> Data Sheet T 8310-1 EN
Type 3277	-> Data Sheet T 8310-1 EN



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

Fig. 4 · Type 3260/3374

Installation

- Type 3374 Actuator 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

- Electric control valve · Types 3260/3374 or 3260/3274 as globe valves
Power supply 24/110/230 V, 50/60 Hz
optionally, additional electrical equipment
- Pneumatic control valve · Types 3260/3372, 3260-1 or 3260-7
Effective diaphragm area... cm², bench range... to ... bar,
Fail-safe action: Actuator stem extends or retracts
- DN ..., K_{V5} ...
- Special version for oils

Table 1 · Technical data of the control valves

Nominal size	DN	65	80	100	125	150
Nominal pressure	PN	16				
Max. permissible temperature	°C	5 to 150				
Plug sealing		Soft sealing				
Leakage rate		Class IV acc. to DIN EN 1349				
Rated travel	mm	15			30	
Materials · Material no. according to DIN EN						
Body and seat		Cast iron EN-JL1040 (GG-25)				
Plug		Brass · CuZn37Pb				
Plug stem		Stainless steel · 1.4305				
Stem sealing ¹⁾		EPDM sealing ring				
Special version for oils ASTM I, II, III		FPM (FKM) seal				
Rod-type yoke		See actuator				

Table 2 · Overview: Nominal sizes, K_{V5} coefficients and seat diameters

Nominal size	DN	65	80	100	125	150
K _{V5} coefficient		60	80	160	250	320
Seat ∅	mm	70	70	100	130	130
Rated travel	mm	15	15	30	30	30

Table 3 · Possible combinations of Type 3260 Globe Valve/actuators

Actuator	Type	Refer to Data Sheet	Nominal size DN				
			65	80	100	125	150
Electric, without fail-safe action	3374-10	T 8331 EN	•	•	•	•	•
	3374-11		•	•	–	–	–
Electrohydraulic, without fail-safe action	3274-11 ¹⁾	T 8340 EN	•	•	•	•	•
	3274-15 ¹⁾		•	•	•	•	•
Electrohydraulic, with fail-safe action	3274-21 ¹⁾	T 8340 EN	•	•	•	•	•
	3274-22 ¹⁾		•	•	•	•	•
Electropneumatic	3372	EB 8313 EN	•	•	–	–	–
Pneumatic	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

Tables 4 · Permissible differential pressures · All pressures in bar (gauge)
The specified differential pressure may be restricted by the pressure-temperature diagram.

Table 4.1 · Electric actuators			
Type	3374		3274
	-11	-10	-11/-15/-21/-22 ¹⁾
K_{VS}	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

¹⁾ Only with additional rod-type yoke · DN 65 to 80: order no. 1890-8696 · DN 100 to 150: order no. 1400-8822

Table 4.2 · Pneumatic actuators									
Type	3372			3271 ¹⁾ and 3277 ¹⁾					
	Effective diaphragm area	cm ²	120	120	240	240	350	350	700
Bench range	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	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

¹⁾ Only with additional rod-type yoke: DN 65 to 80: order no. 1890-8696 · DN 100 to 125: order no. 1400-8822

²⁾ With or without integral positioner

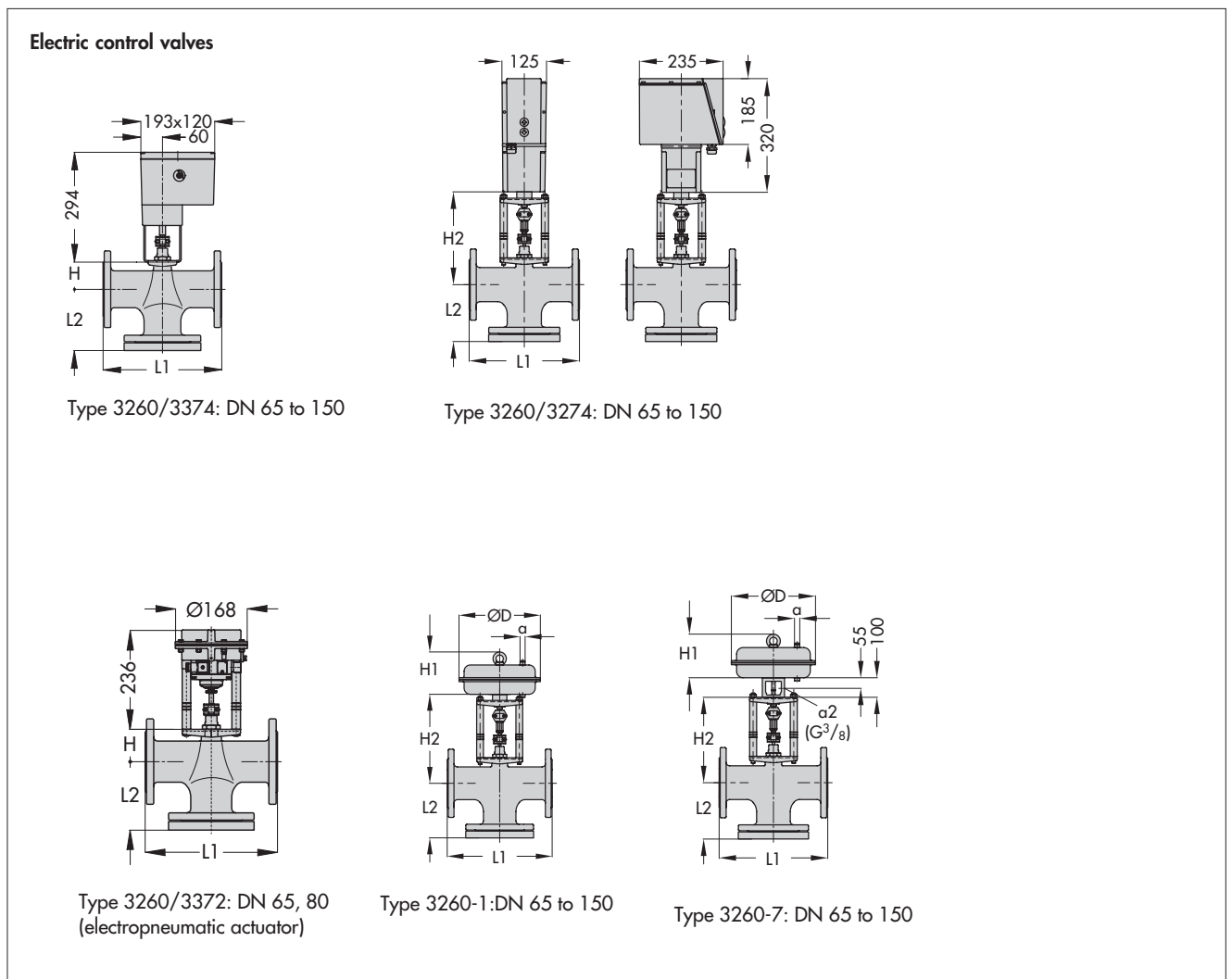
Specifications subject to change without notice.

Table 5 · Dimensions and weights

Table 5.1 · Type 3260 Globe Valve						
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

Table 5.2 · Electric actuators				
Type	3374	3274-11/-21/-22	3274-15	
Weight	Approx. kg	3.2	12	15

Table 5.3 · Pneumatic actuators								
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 Ø D	mm	168	240	280	390	240	280	390
Loading press. connection	a	G ¼	G ¼	G ⅜	G ⅜	G ¼	G ⅜	G ⅜
Weight	Approx. kg	3.7	5	8	22	9	12	26





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