

Electric Control Valves/Controller with Electric Actuator Types 3260/5757, 3260/5724, 3260/5725

Three-way Valve Type 3260



Application

Three-way valve designed as a mixing valve for use in heating, ventilation, and air-conditioning systems.

DN 15 to DN 50 · PN 16 · Version up to 150 °C



The control valves consist of a Type 3260 Three-way Valve and either a Type 5757, Type 5724 or Type 5725 Controller with Electric Actuator (Type 5725 with safety function).

Special features

- Type 3260 Three-way Valve in combination with a controller with electric actuator designed as a mixing valve
- Type 3260 Three-way Valve in combination with a Type 5757/-7 Controller with Electric Actuator in a version with a special spring
- Force-locking connection between valve and actuator
- Type 3260 Three-way Valve in a special version for oils (ASTM I, II, III)

Versions

For DHW heating in instantaneous heating systems and mechanical engineering applications		
Type 3260/5757 · Fig. 1	PN 16	DN 15 to 25
Type 3260/5724 · Fig. 2	PN 16	DN 15 to 50
Type 3260/5725 ¹⁾	PN 16	DN 15 to 50
For heating applications		
Type 3260/5757-7	PN 16	DN 15 to 25

- 1) Electric control valve with safety function
Port B of the mixing valve closes when the safety function is triggered (see Fig. 4)

Also available:

- Type 3260 Three-way Valve with electric or pneumatic actuator (refer to Data Sheet T 5861 EN)
- Three-way valve with threaded end connections mounted on controller with electric actuator (refer to Data Sheet T 5763 EN)
- Three-way valve with threaded end connections mounted on electric or pneumatic actuator (refer to Data Sheet T 5863 EN)



Fig. 1 · Type 3260/5757



Fig. 2 · Type 3260/5724

Principle of operation (Fig. 3)

The three-way valve in combination with a controller with electric actuator is only available as a mixing valve. The media to be mixed enter the valve at ports A and B. The combined flow exits the valve at port AB.

The position of the plug stem (6) 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 electric actuator contains a digital controller integrated into the actuator. The controlled variable is recorded over the directly connected Pt 1000 sensor. The output signal of the digital controller acts as a three-point stepping signal on the synchronous motor of the actuator and is transferred over the connected gear as a positioning force onto the actuator stem (8.1).

The **Type 5725 Controller with Electric Actuator with safety function** is fitted with a spring assembly and an electromagnet that can be connected to a safety control circuit. When the control circuit is interrupted or the power supply fails, the magnet disengages the gear from the self-locking motor and releases the spring assembly. The actuator is available with fail-safe action "Actuator stem extends".

Refer to Data Sheet for details

Type 5757-7 → Data Sheet T 5757-7 EN

Type 5757 → Data Sheet T 5757 EN

Type 5724/5725 → Data Sheet T 5724 EN

Installation

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

Make sure that the maximum ambient temperature range for the actuator is not exceeded.

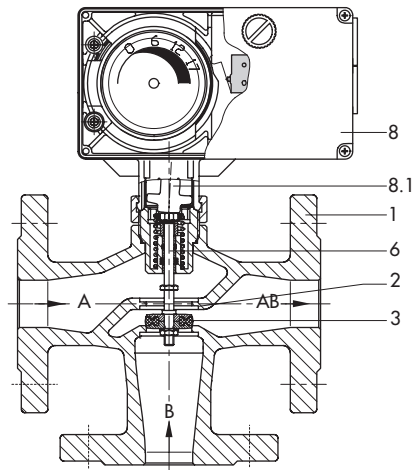
Make sure that the inlet and outlet flows of the plant are correctly assigned to ports A, B, and AB (Fig. 4).

Ordering text

Electric control valve/Controller with electric actuator
Type 3260/5757-7, 3260/5757, 3260/5724, 3260/5725
DN ..., K_{VS} ..., PN 16

Mixing valve

With/without intermediate insulating piece



- 1 Valve body
- 2 Seat
- 3 Plug
- 6 Plug stem
- 8 Controller with electric actuator
- 8.1 Actuator stem

Fig. 3 · Functional diagram of Type 3260/5724 (mixing valve)

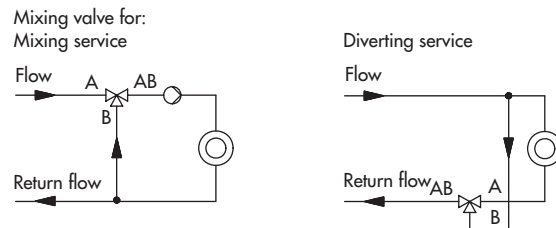


Fig. 4 · Typical installations

Table 1 · Technical data

Nominal size	DN	15	20	25	32	40	50
Nominal pressure		PN 16					
Permissible temperature	°C	5 ¹⁾ to 150 ²⁾					
Seat/plug sealing		Soft sealing					
Rated travel	mm	6			12		
Mixing valve		•			•		
Diverting valve		–			–		
Leakage class acc. to DIN EN 1349		Class IV					
Materials · Material number according to DIN EN							
Valve body and seat		Cast iron EN-JL1040 (GG-25)					
Plug		Brass · CuZn37Pb					
Plug stem		Stainless steel · 1.4305					
Stem sealing		EPDM sealing ring					
Special version for oils (ASTM I, II, III)		FPM seal					

1) Use an insulating section for temperatures between –15 and +5 °C

2) **Types 3260/5724 and 3260/5725:** Use an intermediate insulating piece in networks with constant media temperatures between 130 °C and 150 °C

Types 3260/5757 and 3260/5757-7: Use an intermediate insulating piece in networks with constant media temperatures between 120 °C and 150 °C

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

Nominal size	DN	15				20	25	32	40	50
K _{VS} coefficients		1	1.6	2.5	4	6.3	10	16	25	40
Seat Ø	mm	16	16	16	16	20	24	32	40	40
Rated travel	mm	6	6	6	6	6	6	12	12	12

Table 3 · Possible combinations for Type 3260 Three-way Valves/controllers with electric actuators

Type	Refer to Data Sheet for details	Nominal size DN					
		15	20	25	32	40	50
5757 ¹⁾	T 5757 EN	•	•	•	–	–	–
5757-7 ¹⁾	T 5757-7 EN	•	•	•	–	–	–
5724-10	T 5724 EN	•	•	•	–	–	–
5724-20		–	–	–	•	•	•
5725-10		•	•	•	–	–	–
5725-20		–	–	–	•	•	•

1) Type 3260/5757 and 3260/5757-7 Control Valves require a Type 3260 Three-way Valve version with a special spring

Table 4 · Permissible differential pressures (all pressures in bar)

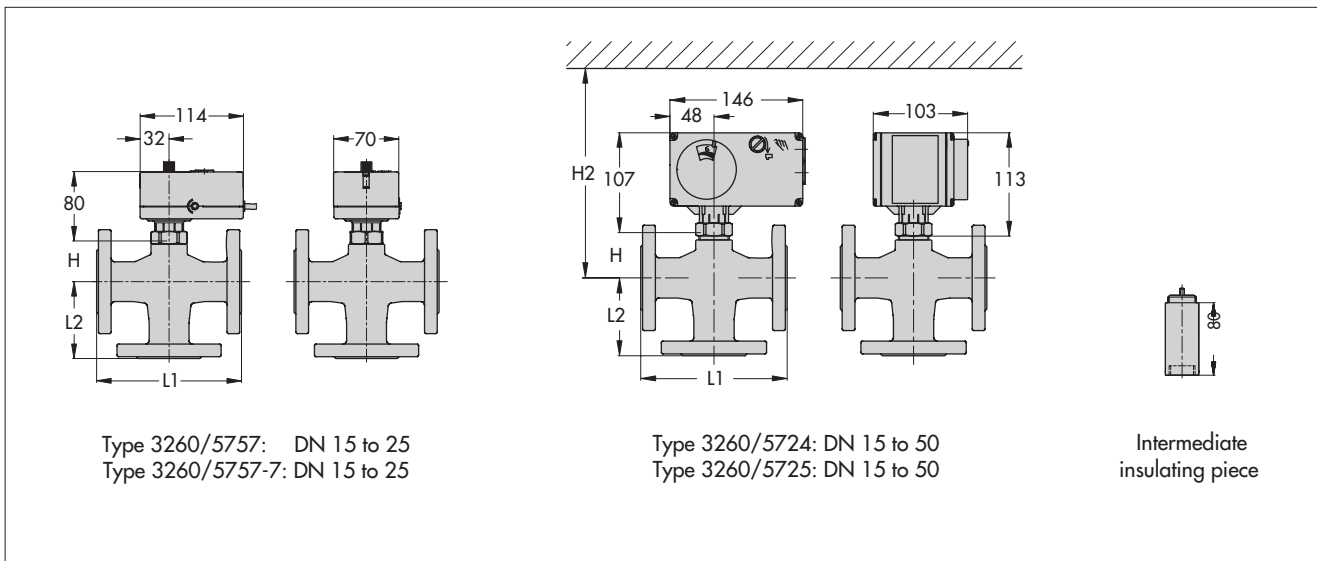
Type	5757/-7	5724/5725
K _{VS} coefficients	Δp when p ₂ = 0 bar	
1 · 1.6 · 2.5 · 4	4	4
6.3	2.6	4
10	1.8	4
16	–	1.7
25	–	1.1
40	–	1.1

Table 5 · Dimensions and weights

Table 5.1 · Dimensions and weights without controller with electric actuators							
Nominal size	DN	15	20	25	32	40	50
Length L1	mm	130	150	160	180	200	230
Length L2	mm	70	80	85	100	105	120
Height H	mm	51	51	51	61	61	61
Height H2	mm	164	164	164	174	174	174
Weight	approx. kg	4.0	5.0	5.5	8.5	10	12

Table 5.2 · Weights of controllers with electric actuators			
Type	5757/-7	5724	5725
Weight approx. kg	0.7	1.1	1.3

Dimensions in mm



Specification subject to change without notice.

