DATA SHEET

T 8357 EN

Type 4740 Electric Limit Switch



CE

Application

Limit switch for mounting on

- Type 3353 Angle Seat Valve
- Type 3354 Globe Valve
- Type 3379 Pneumatic Actuator

The limit switch supplies a signal when the valve travel exceeds or falls below an adjusted limit value. This signal is suitable for transferring control signals, for example, to activate visible or audible alarms as well as for connection to centralized control or alarm systems.

Versions

- Type 4740 · Electric limit switch, degree of protection IP 65
 - With inductive proximity switches or
 - With microswitches

Optionally, both versions can be fitted with a 3/2-way solenoid valve.



Fig. 1: Type 4740 Limit Switch with mounting kit (1400-9922) for mounting on Type 3353 Angle Seat Valve and Type 3354 Globe Valve



Fig. 2: Type 4740 Limit Switch with optional solenoid valve on a Type 3353 Angle Seat Valve

Principle of operation

The inductive proximity switches or microswitches cause signals to be sent to a control or alarm system when the travel exceeds or falls below the adjusted limit.

The limit switch can optionally be fitted with a 3/2-way solenoid valve. When the integrated solenoid valve is energized, supply air is applied to the actuator. When the solenoid valve is de-energized, the actuator is vented and the control valve moves to its fail-safe position.

The switching points of the limit contacts can be changed within the travel range.

Electrical connection

The electrical connection is made using an M20x1.5 cable gland to terminals as shown in the wiring diagram (Fig. 3).

Ordering text

Type 4740 Electric Limit Switch

Version with - Inductive proximity switches

- Microswitches

Options – 3/2-way solenoid valve

Pneumatic – Push-in L-connector

connection QS-G 1/8-6

- ISO 228/1-G 1/8

Table 1: Technical data

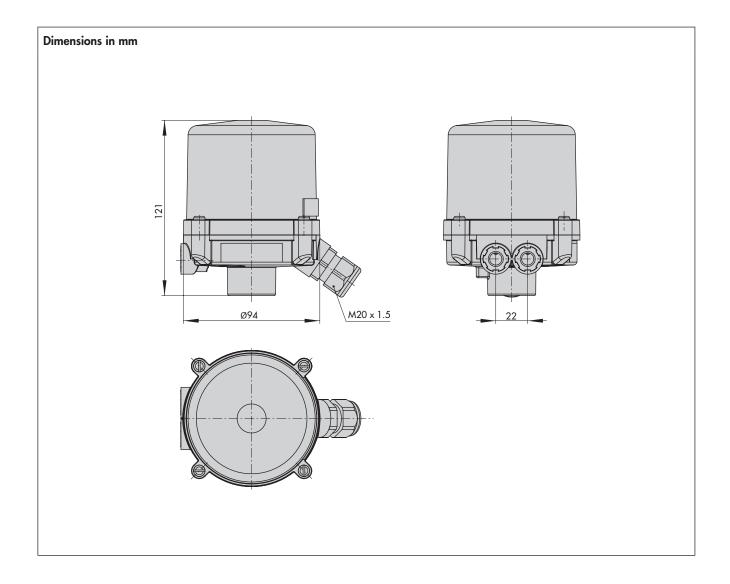
| Electric limit switch | Type 4740 | | | | | |
|---|---|--|--|--|--|--|
| Travel range | 0 to 15 mm | | | | | |
| Ambient temperature range | −20 to +65 °C | | | | | |
| Degree of protection | IP 65 | | | | | |
| Version with inductive proximity switches | | | | | | |
| Nominal voltage | 8.2 V DC over isolating switch amplifiers according to EN 60947-5-6 | | | | | |
| Version with microswitches | | | | | | |
| Switching capacity | 250 V AC, 16 (6) A | | | | | |
| Option: 3/2-way solenoid valve | | | | | | |
| Nominal voltage | 24 V DC | | | | | |
| Capacity | 1.5 W | | | | | |
| Flow rate | $55 l_n / min (K_V = 0.035)$ | | | | | |
| Maximum operating pressure | 7 bar | | | | | |
| Pneumatic connection | Push-in L-connector QS-G 1/8-6 or ISO 228/1-G 1/8 | | | | | |
| Materials | | | | | | |
| Housing | Polyamide | | | | | |
| Cover | Polycarbonate | | | | | |
| Filter | Polyethylene | | | | | |
| Mounting kit | Stainless steel | | | | | |
| Weight | | | | | | |
| Limit switch (including solenoid valve) | Approx. 550 g | | | | | |
| Mounting kit | Approx. 180 g | | | | | |

Table 2: Accessories

| Mounting kit | Order no. | | | |
|--|-----------|--|--|--|
| For mounting the limit switch onto Type 3353 Angle Seat Valve or Type 3354 Globe Valve | 1400-9922 | | | |
| For mounting the limit switch onto Type 3379 Pneumatic Actuator | 1402-1067 | | | |

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Version with inductive proximity switches Version with microswitches Version with microswitches Version with microswitches Microswitches Solenoid valve (option) Fig. 3: Electrical connection



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Article code

| Limit switch | Туре 4740- | 0 | 0 | 0 | х | x | х | х | 0 | 0 | x | х |
|--|------------|---|---|---|---|---|---|---|---|---|---|---|
| Design | | | | | | | | | | | | |
| Inductive proximity sensor NCB2-V3-NO | | | | | 1 | | | | | | | |
| Mechanical microswitch XGG 12-88-S20 | | | | | 5 | | | | | | | |
| Switching element | | | | | | | | | | | | |
| With two switching elements (standard) | | | | | | 2 | | | | | | |
| Solenoid valve | | | | | | | | | | | | |
| Without | | | | | | | 0 | | | | | |
| 24 V DC | | | | | | | 1 | | | | | |
| Pneumatic connection | | | | | | | | | | | | |
| Without | | | | | | | | 0 | | | | |
| Push-in L-connector QS-G 1/8-6 | | | | | | | | 1 | | | | |
| ISO 228/1-G 1/8 | | | | | | | | 2 | | | | |
| Special version | | | | | | | | | | | | |
| Without | | | | | | | | | | | 0 | 0 |