

Pilot-Operated Solenoid Valve for Process Actuation



6516/6517 EExi



3/2- or 5/2-Way, PN 2 – 8 bar

- ✓ II2G EEx ia IIC T6 approved
PTB 01 ATEX 2175
- ✓ FM IS / I, II, III /1/ ABCDEFG
approved
- ✓ High flow rates
- ✓ Long service life

Hazardous Areas

6516
6517
EExi

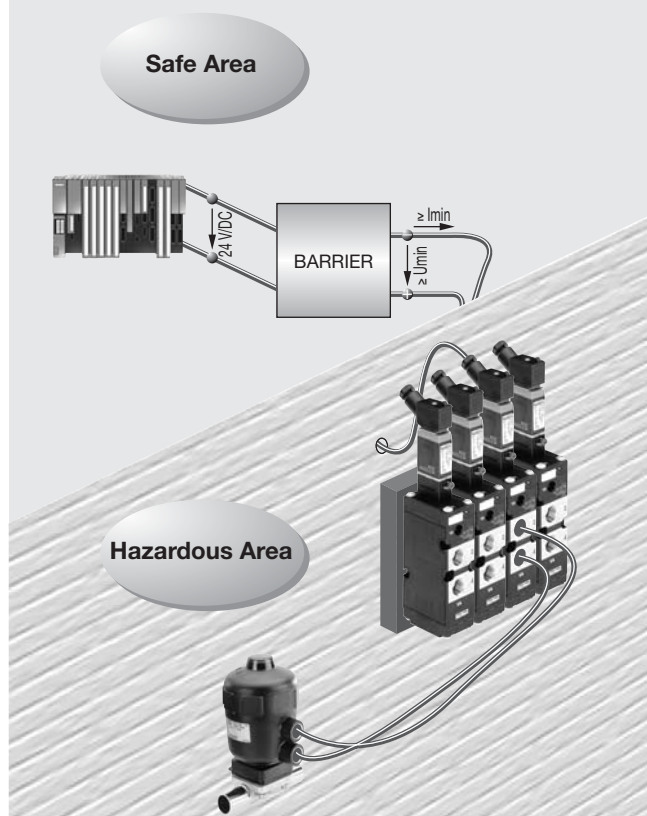
The 6516/6517 EExi valves are used for process actuation in hazardous areas. Thanks to the intrinsically safe design and the possibility of block mounting, the valves can be used in a wide variety of demanding applications.

Process Specification

| | |
|------------------------|--|
| Nominal voltage | 24 V/DC <small>(for further information also consult our data sheet „Recommended Barriers“)</small> |
| Duty cycle | 100% continuously rated |
| Protection class | IP 65 with cable plug |
| Materials | |
| Body | PA |
| Threaded port material | Brass or stainless steel |
| Seal | PB (NBR and PUR) |
| Fluids | Lubricated or unlubricated compressed air, instrument air and nitrogen |
| Ambient temperatures | |
| Block assembly | -10 up to +50°C (T6) -10 up to +55°C (T5) |
| Single mounting | -10 up to +55°C (T6) |
| Mounting position | Any, preferably solenoid system upright |

Applications: Target markets

- Chemical industry
- Pharmaceutical processing equipment
- Industrial waste water treatment
- Oil and gas industry



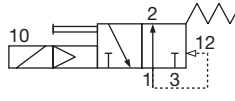
Pilot-Operated Solenoid Valve for Process Actuation



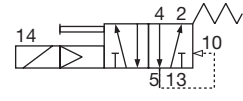
Technical Data

Circuit Function

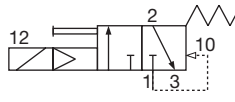
C 3/2-way valve, servo-assisted, in de-energized position, port 2 pressure relieved



H 5/2-way valve, servo-assisted, in de-energized position, pressure port 1 connected to port 2, port 4 exhausted



D 3/2-way valve, servo-assisted, in de-energized position, port 2 pressurized



| Type | Circuit function | Orifice DN [mm] | QNn-Value (air) [l/min] | Pressure range [bar] | Response times [ms] | | Weight [g] |
|-----------|------------------|-----------------|-------------------------|----------------------|---------------------|---------|------------|
| | | | | | opening | closing | |
| 6516 EExi | C (3/2-way) | 8.0 | 1300 | 2 - 8 | 35 | 120 | 200 |
| 6516 EExi | D (3/2-way) | 8.0 | 1300 | 2 - 8 | 35 | 120 | 200 |
| 6517 EExi | H (5/2-way) | 8.0 | 1300 | 2 - 8 | 60 | 200 | 250 |

Flow rate: QNn-value air [l/min]

Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference

Pressure ranges [bar]

Measured as overpressure to the atmospheric pressure

Response times [ms]

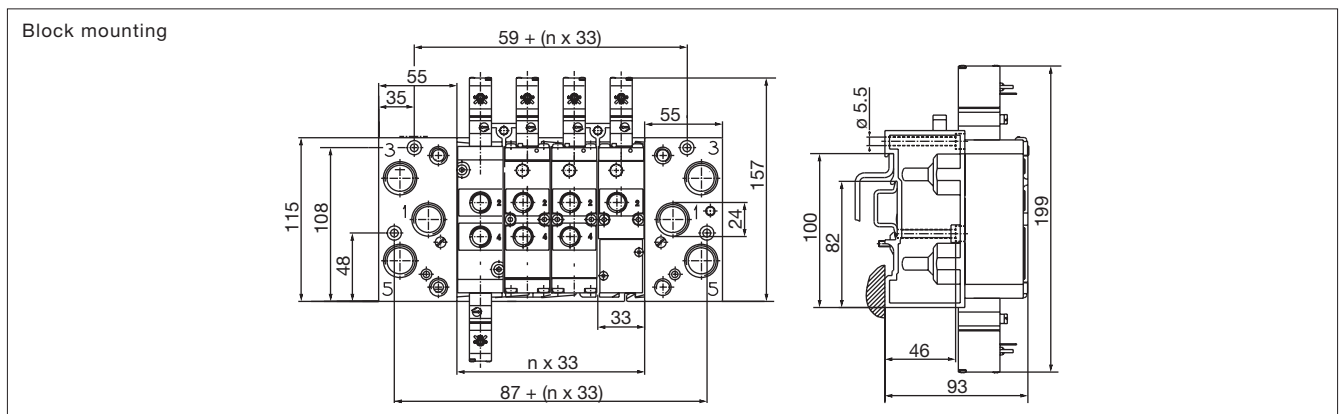
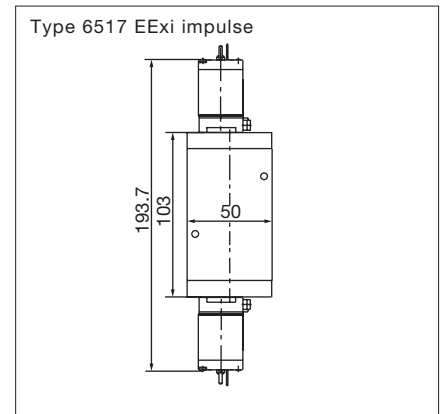
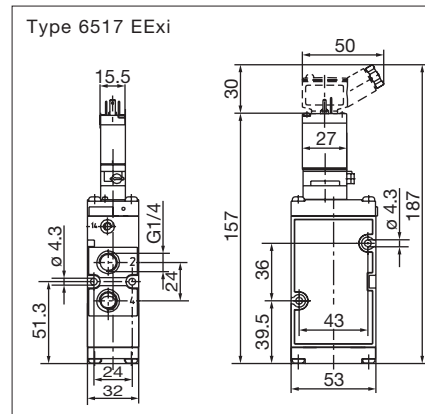
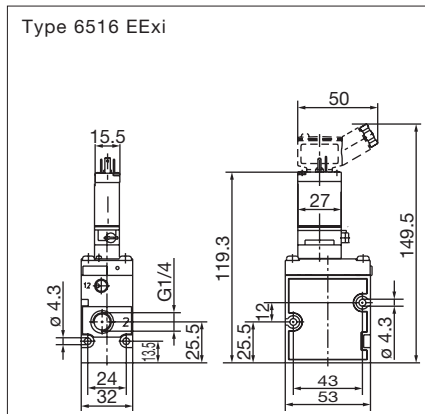
Measured at valve outlet at 6 bar and +20°C
Opening Pressure rise from 0 to 90%
Closing Pressure drop from 100 to 10%

Specifications - Ordering Chart (Other Versions on Request)

All valves in EExi ia IIC T6 versions with manual override, G 1/4 threads

| Type | Circuit function | Orifice DN [mm] | QNn-Value (air) [l/min] | Supply port material | Pressure range [bar] | Item-No. |
|-----------|------------------|-----------------|-------------------------|----------------------|----------------------|-----------|
| 6516 EExi | C (3/2-way) | 8.0 | 1300 | Brass, nickel-plated | 2 - 8 | 140 500 L |
| 6516 EExi | D (3/2-way) | 8.0 | 1300 | Brass, nickel-plated | 2 - 8 | 140 502 A |
| 6517 EExi | H (5/2-way) | 8.0 | 1300 | Brass, nickel-plated | 2 - 8 | 140 315 B |
| 6517 EExi | H impulse | 8.0 | 1300 | Brass, nickel-plated | 2 - 8 | 140 505 B |

Dimensions [mm]



In case of special requirements please consult for advice.

We reserve the right to make technical changes without notice.
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