

# 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

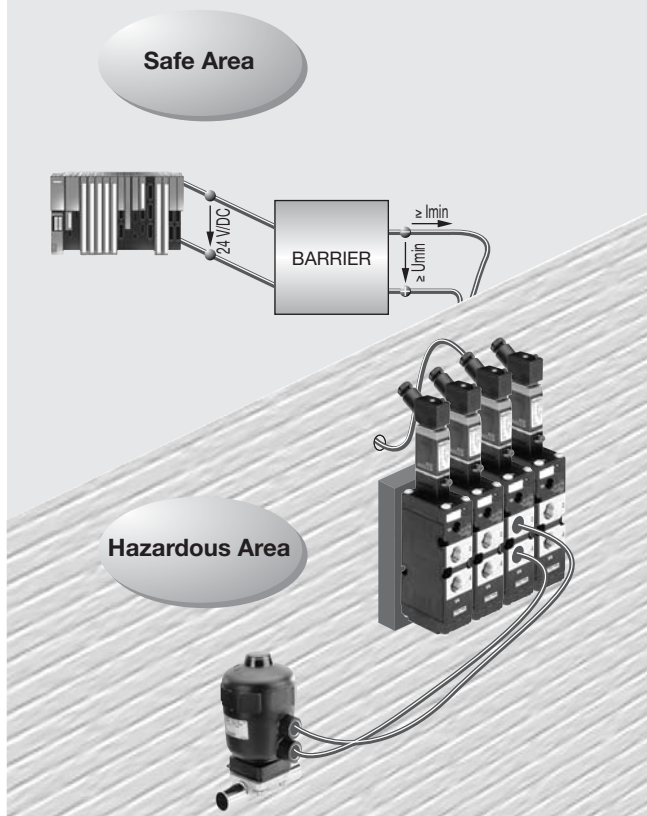
The 6516/6517 EExi valves are used for process actuation in hazardous areas. Thanks to the intrinsically safe design and the possibility of block mounting, the valves can be used in a wide variety of demanding applications.

## 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



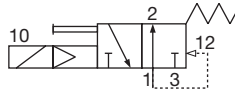
# Pilot-Operated Solenoid Valve for Process Actuation



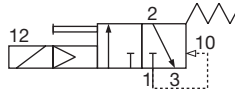
## Technical Data

### Circuit Function

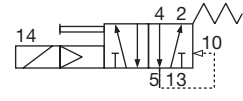
**C** 3/2-way valve, servo-assisted, in de-energized position, port 2 pressure relieved



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



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



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]

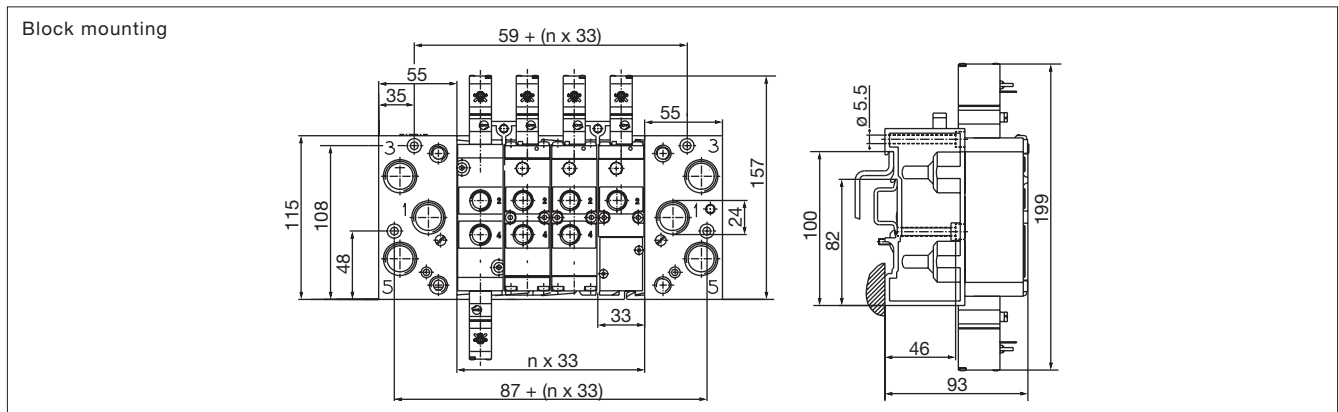
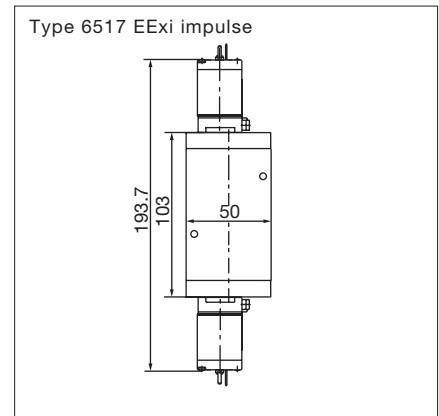
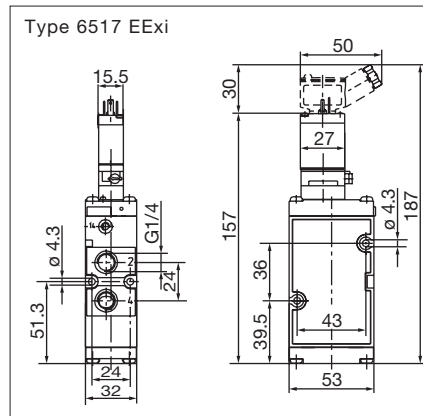
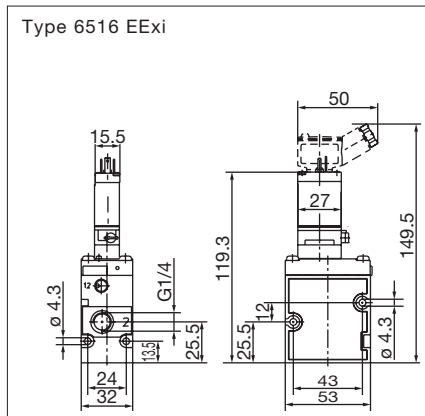
Measured at valve outlet at 6 bar and +20°C  
Opening Pressure rise from 0 to 90%  
Closing Pressure drop from 100 to 10%

## Specifications - Ordering Chart (Other Versions on Request)

All valves in EEx 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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