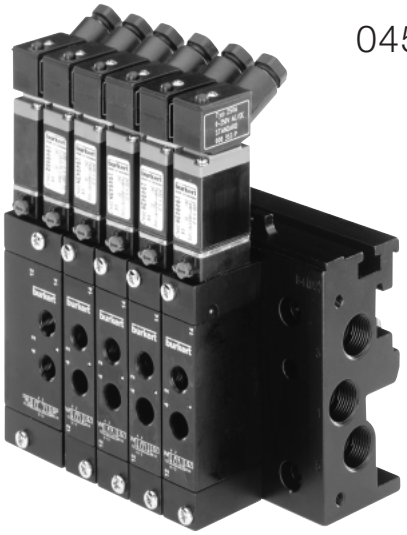
# Process Actuation System for Hazardous Areas





0450 EExi

## High Flow ALUMINUM Valves

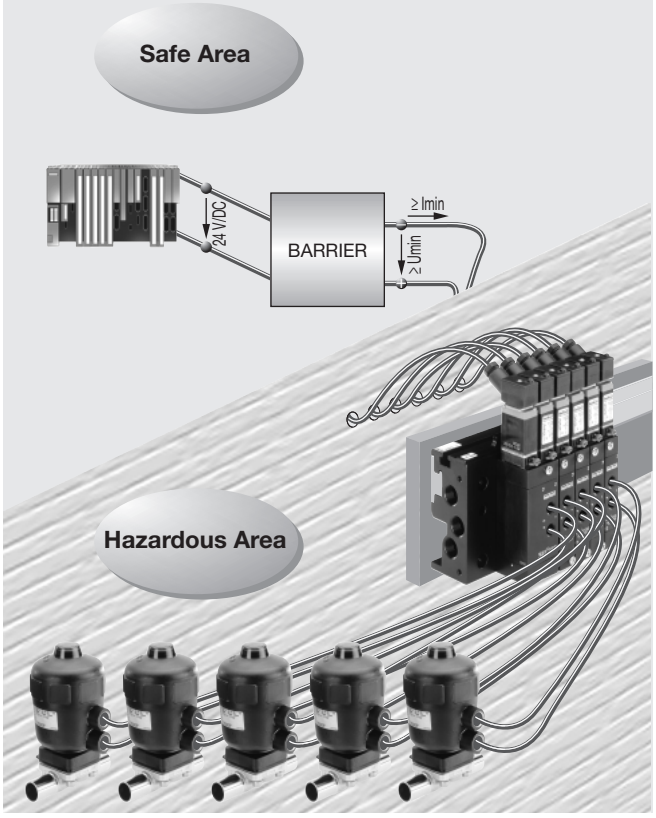
- ✓ **EEx ia IIC T6 approved**
- ✓ **Optimized System Solutions for hazardous areas**
- ✓ **High Flow Rates**
- ✓ **Long service life even with non-lube conditions**
- ✓ **Pre-tested and supplied easy to connect**

The multi-way valve type 0450 Ex brings Burkert's 0450 centralized process actuation solution to hazardous areas. Its high flow rates in combination with the aluminum bodies allow a wide range of applications. Most commonly used safety barriers are approved for applications with the 0450 EExi.
For easy installation, the valves can (on request) be supplied pre-wired to WAGO and Harting junction boxes.

**Specification**

| | |
|---|---|
| Valve type | 0450 EExi |
| Materials | |
| Valve body | Aluminum anodised |
| Valve internals | Al, St.Steel, brass |
| Seals | POM/NBR |
| Pneumatic modules | Aluminum anodised |
| Fluids | Filtered compressed air, lubricated or unlubricated |
| Manual override | Standard |
| Valve port connection | G 1/8 |
| Rating | IP 65 with plugs |
| Power supply | 24 V/DC |
| Certification | EEx ia IIc T6 |
| Intrinsically safe barrier | Required |
| Ambient Temperature | |
| Pi = 0.7 W | –10 up to +50°C at T6 |
| Pi = 0.9 W | –10 up to +60°C at T5 |
| Configuration | To customer requirement |
| Electrical connection options | Cable plug 2506<br>EaseOn cable plug 2510 |
| Prewired junction boxes | WAGO (on request)<br>Harting (on request) |

**Applications:**
- Chemical Industry
- Pharmaceutical Processing Equipment
- Cosmetic Processing Equipment
- Water Treatment / Processing Equipment



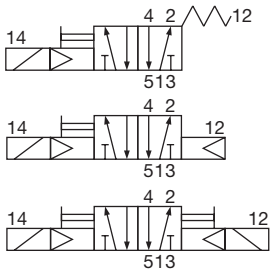



bürkert Fluid Control Systems

# Process Actuation System for Hazardous Areas

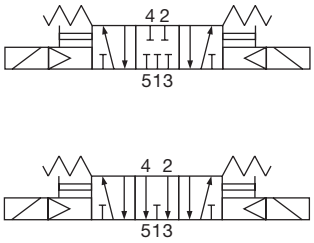
## Technical Data

**Function H**
5/2 way valve, servo-assisted, in de-energized position, port 2 pressurized and port 4 exhausted. Different returns incl. impulse valve




**Function L**
5/3 way valve, servo-assisted, in middle position, all ports locked

**Function N**
5/3 way valve, servo-assisted, in middle position, ports 2 and 4 exhausted



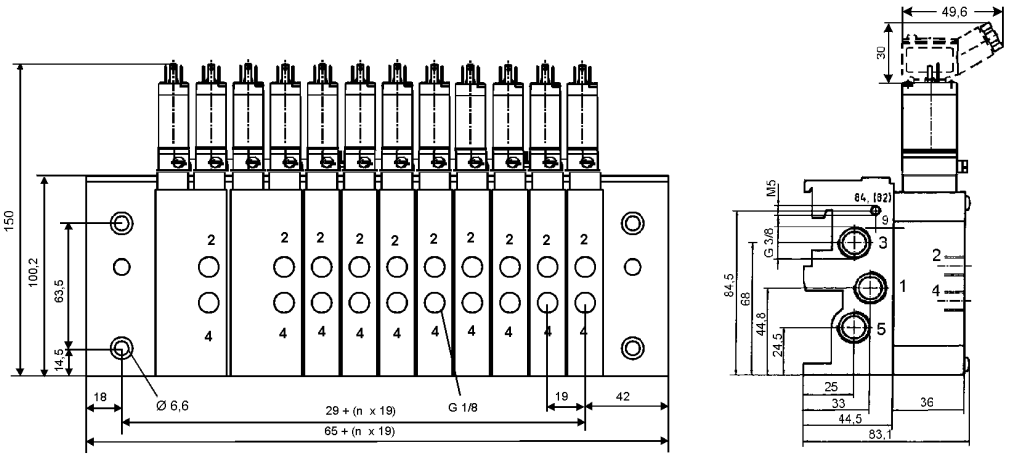

## Valve Characteristics

| Circuit function | Flow rate [l/min] | Pressure range [bar] | Reset | Response times opening [ms] | Response times closing [ms] | Item-No. |
|---|---|---|---|---|---|---|
| H (5/2) | 750 | 2 – 8 | air spring | 19 | 25 | 194 941 L |
| H (5/2) | 750 | 2 – 8 | spring | 17 | 27 | 194 943 N |
| H (5/2) | 750 | 2 – 8 | impulse* | 16 | 16 | 194 944 P |
| L (5/3) | 650 | 2 – 8 | spring* | 17 | 27 | 194 945 Q |
| N (5/3) | 650 | 2 – 8 | spring* | 16 | 16 | 194 946 R |

*) valves have double mounting dimensions (36 mm wide)

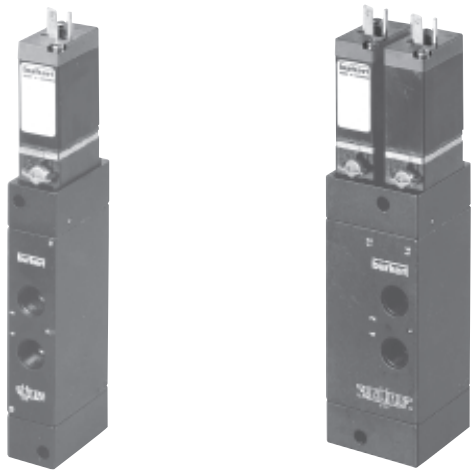
# Process Actuation System for Hazardous Areas

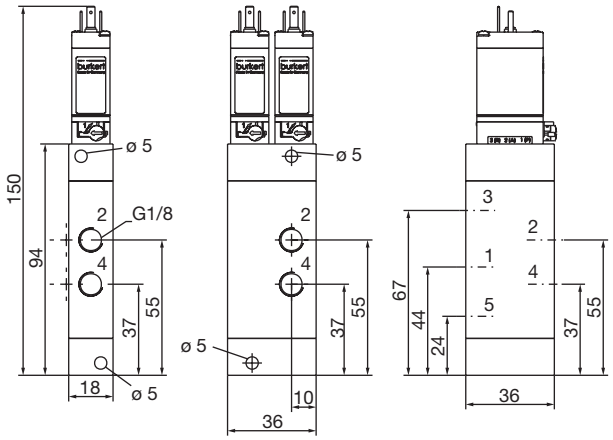
## Dimensions [mm] with 0450 EExi Valves




n = number of valves

## Dimensions [mm] 0450 EExi

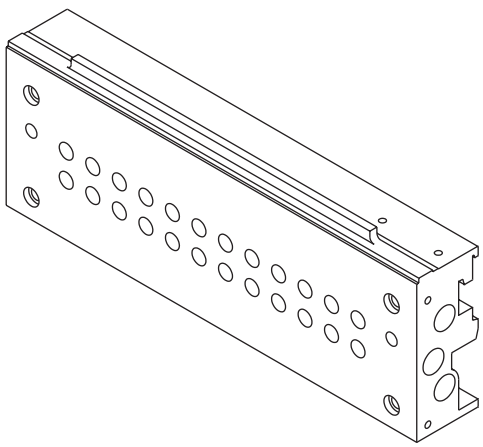





Circuit Function H  Circuit Function H impulse, L and N

## Pneumatic Modules 0450 EExi

| Number of valves | Item-No. |
|---|---|
| 4 | 194 256 V |
| 6 | 194 264 V |
| 8 | 194 265 W |
| 10 | 194 266 X |
| 12 | 194 267 Y |
| 14 | 194 268 H |
| 16 | 194 269 A |
| 18 | 194 270 F |
| 20 | 194 271 U |
| 22 | 194 272 V |
| 24 | 194 273 W |
| Blind cover* | 194 379 G |



# Process Actuation System for Hazardous Areas

## Approved Barriers for Use with 0450 EExi

| Supplier | Type | Max. Resistance at 55°C |
|---|---|---|
| Bartec | Modex 07-7311-93M6/P060 | 144 Ω |
| | 19-100.2801/1010 | 163 Ω |
| CEAG | SB-0728 | 100 Ω |
| | SB-1728 | 100 Ω |
| | 6/915-7 | 70 Ω |
| | 7/915-7 | 70 Ω |
| | 2/915-7 | 70 Ω |
| | 4/915-7 | 70 Ω |
| | 5/915-7 | 70 Ω |
| | LB 2112 | 154 Ω |
| | FB 2112 | 154 Ω |
| Hima | F3328 (Characteristics A or C) | 140 Ω |
| H & B | V17132-55 | 273 Ω |
| | V17332-61 | 200 Ω |
| MTL | 728 | 140 Ω |
| | 4021 | 154 Ω |
| | 4728 | 110 Ω |
| | 7028+ | 108 Ω |
| | 7028- | 108 Ω |
| | 4025 | 93 Ω |
| | 5025 | 68 Ω |
| | 8215-DO-IS | 195 Ω |
| P & F | KFD2-SD-Ex1.48 | 97 Ω |
| | KFD2-SL-Ex1.48 | 97 Ω |
| | KFD2-SD-Ex1.48.90A | 97 Ω |
| | KFD2-SL-Ex1.48.90A | 97 Ω |
| | Z 728 | 140 Ω |
| | Z 828 | 140 Ω |
| | Z 728.CL | 140 Ω |
| | Z 828.CL | 140 Ω |
| | KSD2-BO-Ex | 173 Ω |
| | RSD-BO-Ex4 | 106 Ω |
| | VAA-2EA-G5-N/V1-Ex | 203 Ω |
| | EGA-041-3 | 120 Ω |
| | ED2-VD-Ex.2.1835 | 160 Ω |
| Phoenix Contact | PI/Ex-SD/22/45-C | 191 Ω |
| Stahl | 9351/10-16-10 | 163 Ω |
| | 9151/10-16-10 | 193 Ω |
| | 9475/12-04-21 | 144 Ω |
| | 9475/12-04-31 | 82 Ω |
| | 9475/12-08-51 | 54 Ω |
| | 9651/40-16-10 | 233 Ω |
| | 9001/01-280-100-10 | 138 Ω |
| | 9001/01-252-100-14 | 182 Ω |
| Turck | MC 72-41Ex-T | 157 Ω |
| | MC 72-43Ex-T | 157 Ω |