

## BEx-Solution

innovative Ex Remote IO modules with bus-coupling

## FESTO

tried-and-tested Ex i valve terminal

## Exepd

certified system-integration in Ex e field enclosure

Tested system solution from



The 3 in 1 solution, provides plant and machine manufacturer for the first time a decentralized and compact solution to control pneumatic actuators for the hazardous area Zone 1/21

## Customer benefit

- **Compact - Simple - Fast**
  - ✓ Central Ethernet connection, central pneumatic connection
  - ✓ Easy decentralized installation - guarantees short distance to sensors and pneumatic actuators.
  - ✓ No compressed air tubing inside the box
  - ✓ Cost savings and less installation effort

## Application

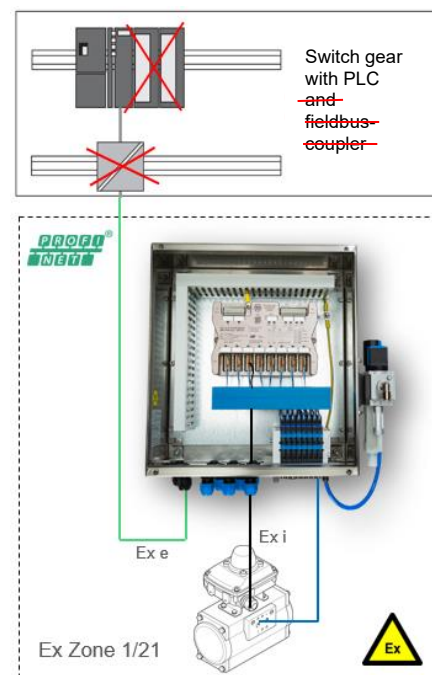
- Paint shops
- Pharmaceutical plants
- Bulk materials handling systems
- Mixing / grinding plants
- Industrial heating / cooling systems
- Sewage treatment plants
- And much more

## Function

- Up to 16 valves 3/2 way
- Up to 8 valves 5/2- or 5/3 way
- Or combinations

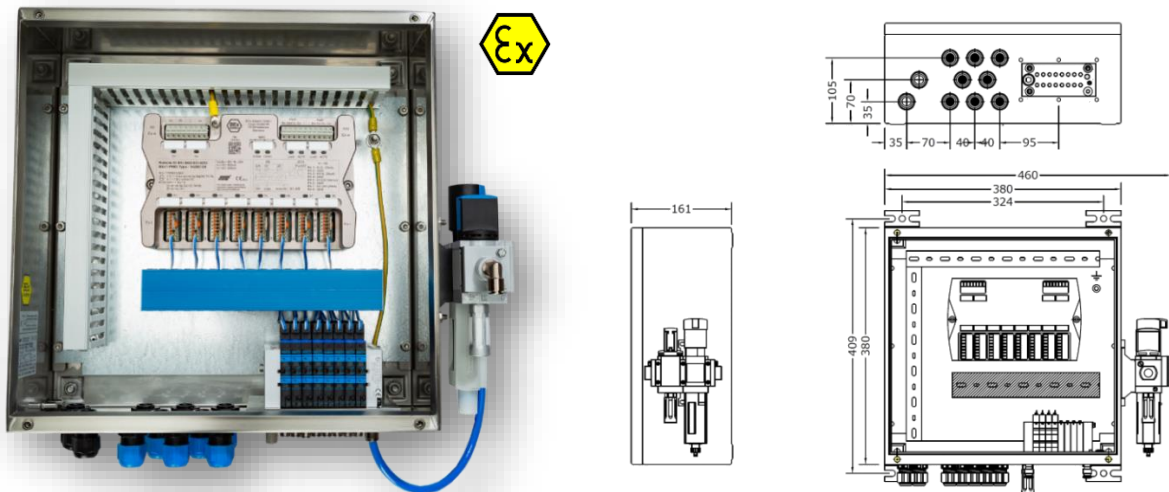
(Valve terminal installed and pre-wired)

- 16 Namur inputs for position feedback



or





## Field box example-variant with 8 valves

Material: stainless steel 1.4404 (V4A), Enclosure type: IP 65, Dimensions (LxWxH): 380 x 380 x 161 mm  
 Service temperature: -5°C\* bis +40°C (\*Pressure dew point: -15 C, alternatively class x:3:x according to ISO 8573-1: 2010)  
 Certificate: TPS 07 ATEX 61951 1  
 Type of protection:  $\text{Ex}$  II 2(1)G/D

Ex e mb ib [ia Ga] IIC T4 Gb

Ex tb [ia Da] IIIC T80°C

10 Cable glands M20x1,5 (2x Ex e, 8x Ex i)

1 BEx1 remote IO module

1 Festo valve terminal CPV10 Ex i 8x valve 3/2 way

1 Pneumatic aluminum multipole

1 Maintenance unit combination MSB4

When using the Ex e cover caps (accessory), the Ex e enclosure may be opened while energized, provided that there are no other open Ex e connections in the enclosure.

## Remote IO module

- include busnode, isolating amplifier and intrinsically safe IO channels (technical data see separate data sheet)

## Valve terminal

The valve terminal CPV10-EX-VI is intrinsically safe

II 2G Ex ib IIC T4 (-5°C\* ≤ Ta ≤ 50°C) \*Pressure dew point: -15 C, alternatively class x:3:x according to ISO 8573-1: 2010

- Pneumatic aluminum multipole, enclosure type IP65
- Valve width 10 mm breit, Flow rate 400 l/min
- Operating pressure: 0 ... 10 bar ; Pilot pressure: 3 ... 8 bar
- Max. 8 valve discs
- Up to 16 valve functions on valve 3/2- way (2 per valve disc)
- Up to 8 valve functions on valve 5/2-, 5/3- way  
single and double solenoid, normally closed, normally open
- Manual override detenting, (optional pushing or blocked)

## Service unit combination MSB4

- Manual On/Off valve (3/2-way), lockable, with exhaust air vent
- Manual pressure regulator with manometer, lockable
- 40µm filter with manual condensate drain, fittings und pneumatic hose Festo on request