

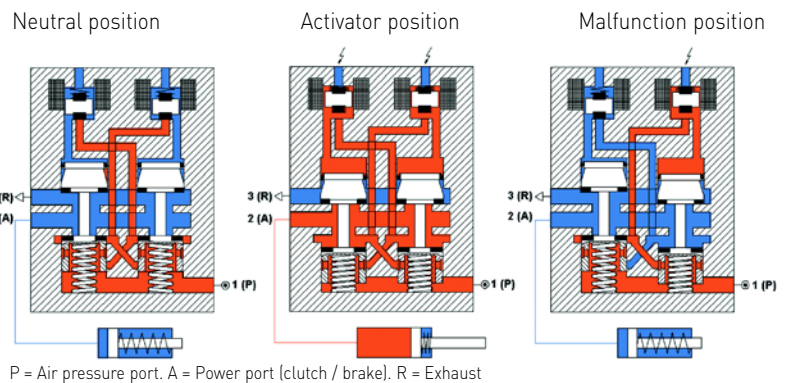
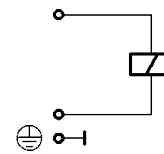
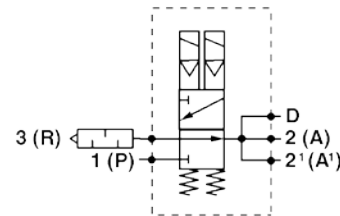
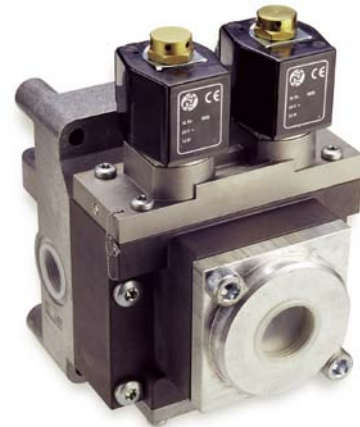
Herion Double valve Series XSz

with dynamic monitoring

- Inherently fail-safe without residual pressure
- Dynamic self monitoring
- Double valve control system
- For use with pneumatic clutch and brake systems and other 3-way safety functions, such as monitored dump valve with feedback system
- Poppet design with feedback signal ports
- Fast exhaust capability
- Meets the intent of Press Safety Standards - ANSI B11-1 2009; CSA Z142-10, BG692, OSHA Code 29 part 1910.217 (b) (7) (I and XI). Conforms to ISO 13849-1 (performance level "e" category IV)
- Improves safety and reduces downtime
- Quick and easy adjustment of 'overlap' on mechanical presses
- No additional electrical monitoring required
- Easily fitted into existing systems
- Norgren-Herion XSz safety valves are also available in 5-port configuration

Medium
Compressed air, filtered, lubricated or non-lubricated
Shell Hydrol DO 32, Esso Febis K 32 (as of July 1992) or comparable oil with DVI values < 8 (DIN 53521) and ISO viscosity class 32-46 (DIN 51519), Filtration 25 - 50 mm
Operating Pressure:
29 to 145 psig (2 to 10 bar)
Temperature range:
14°F to 140°F (-10 to 60°C)
To secure the safety function of the valve at subzero temperatures it is important that the air is dry enough to prevent an icing of valve and silencer.

- Mounting position:
Preferably vertically
- Additional equipment:
Soft clutch module
Soft brake module
Safety silencer
Failure indication elements
Nozzle for overlap adjustment (exclusively XSz32 and 50)
- Materials:
Body: aluminium
Seals: polyurethane (AU), NBR
Materials: Body: aluminium
Seals: polyurethane (AU), NBR



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| Size | Type/ model no. | NPT Port Sizes ² | | | Weight lbs. | Flow (Cv) | | Part no. | | |
|--------|--------------------|-----------------------------|-------|-------|----------------|-----------|-------|----------------|----------------------|------------|
| | | 1 (P) | 2 (A) | 3 (R) | | 1 → 2 | 2 → 3 | Valve/solenoid | Voltage ¹ | AC/DC (Hz) |
| 1/4" | XSz-8 | 1/4" | 1/4" | 3/8" | 2.6 | 2.3 | 2.5 | 2492807.3053 | 120V | 60 Hz |
| 1/4" | XSz-8 | 1/4" | 1/4" | 3/8" | 2.6 | 2.3 | 2.5 | 2492807.3053 | 24V | DC |
| 1/2" | XSz-10 | 1/2 | 1/2 | 3/4 | 6 | 2.8 | 5.8 | 2492931.3053 | 120V | 60 Hz |
| 1/2" | XSz-10 | 1/2 | 1/2 | 3/4 | 6 | 2.8 | 5.8 | 2492931.3053 | 24V | DC |
| 3/4" | XSz-20 | 3/4 | 3/4 | 1 | 10 | 8.0 | 13.2 | 2493039.0201 | 120V | 60 Hz |
| 3/4" | XSz-20 | 3/4 | 3/4 | 1 | 10 | 8.0 | 13.2 | 2493039.0201 | 24V | DC |
| 1" | XSz-32 | 1 | 1 | 1-1/2 | 17 | 12 | 23.3 | 2493120.0801 | 120V | 60 Hz |
| 1" | XSz-32 | 1 | 1 | 1-1/2 | 17 | 12 | 23.3 | 2493120.0801 | 24V | DC |
| 1-1/2" | XSz-50 | 1-1/2 | 2 | 2 | 34 | 20.4 | 62.4 | 2493220.0801 | 120V | 60 Hz |
| 1-1/2" | XSz-50 | 1-1/2 | 2 | 2 | 34 | 20.4 | 62.4 | 2493220.0801 | 24V | DC |

1. Additional Voltages available upon request
2. 1 (P) = Pressure port, 2 (A) = Working port, 3 (R) Exhaust Port
3. CSA certification should be requested with the purchase order

| Size | Type/ model | BSPP port | | | Flow (Cv) | | Part number | | |
|--------|----------------|-----------|-------|---------|-----------|-------|----------------|-------------|------------|
| | | 1 (P) | 2 (A) | 3 (R) | 1 → 2 | 2 → 3 | Valve/solenoid | Voltage (1) | AC/DC (Hz) |
| 1/4" | XSz-8 | 1/4" | 1/4" | 3/8" | 2.3 | 2.5 | 2492806.3053 | 120V | 60 Hz |
| 1/4" | XSz-8 | 1/4" | 1/4" | 3/8" | 2.3 | 2.5 | 2492806.3053 | 24V | DC |
| 1/2" | XSz-10 | G 1/2 | G 1/2 | G 3/4 | 2.8 | 5.8 | 2492930.3053 | 120V | 60 Hz |
| 1/2" | XSz-10 | G 1/2 | G 1/2 | G 3/4 | 2.8 | 5.8 | 2492930.3053 | 24V | DC |
| 3/4" | XSz-20 | G 3/4 | G 3/4 | G 1 | 8 | 13.2 | 2493038.0201 | 120V | 60 Hz |
| 3/4" | XSz-20 | G 3/4 | G 3/4 | G 1 | 8 | 13.2 | 2493038.0201 | 24V | DC |
| 1" | XSz-32 | G 1 | G 1 | G 1-1/2 | 12 | 23.3 | 2493130.0801 | 120V | 60 Hz |
| 1" | XSz-32 | G 1 | G 1 | G 1-1/2 | 12 | 23.3 | 2493130.0801 | 24V | DC |
| 1-1/2" | XSz-50 | G 1-1/2 | G 2 | G 2 | 20.4 | 62.4 | 2493230.0801 | 120V | 60 Hz |
| 1-1/2" | XSz-50 | G 1-1/2 | G 2 | G 2 | 20.4 | 62.4 | 2493230.0801 | 24V | DC |

1. Additional Voltages available upon request
2. 1(P) = Pressure port, 2(A) = Working port, 3 (R) = Exhaust Port
3. ISO 228/ 1 (BSPP Threads)

Solenoids

| Solenoid | Power Consumption | | |
|----------|-------------------|--------|---------|
| | DC | AC | |
| | | Inrush | Holding |
| 0201 | 11 W | 22 VA | 15 VA |
| 0801 | 16 W | 50 VA | 27 VA |
| 3053 | 4.8W | 12 VA | 8.5 VA |

Connectors

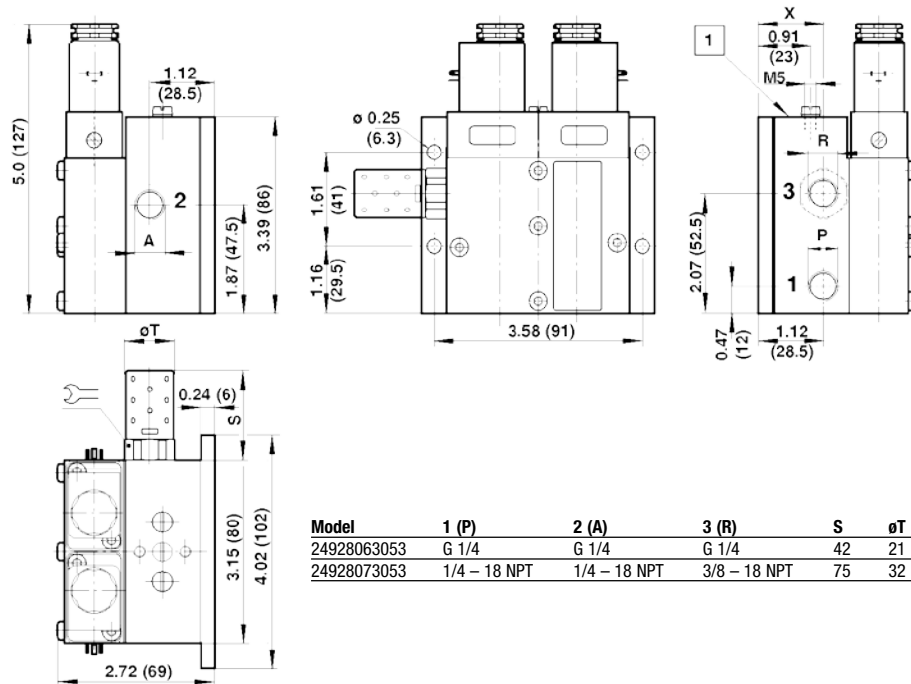
| Connector Type | Standard | Part Number | |
|--------------------------------------|-----------------------|------------------|--------------------|
| | | Lighted 24 DC | Lighted 120 VAC |
| Cable Clamp | 0570275 | 0570818 | 0570816 |
| | 0680003 (XSz8 and 10) | | |
| Conduit – 1/2" | 0661374 | 8110111 | 8110113 |
| Brad Harrison – 5 pin | 8111900 | -- | -- |
| Brad Harrison – 3 pin | 8110100 | -- | -- |
| Cable Clamp with Surge Suppressor | 8111979 | -- | -- |

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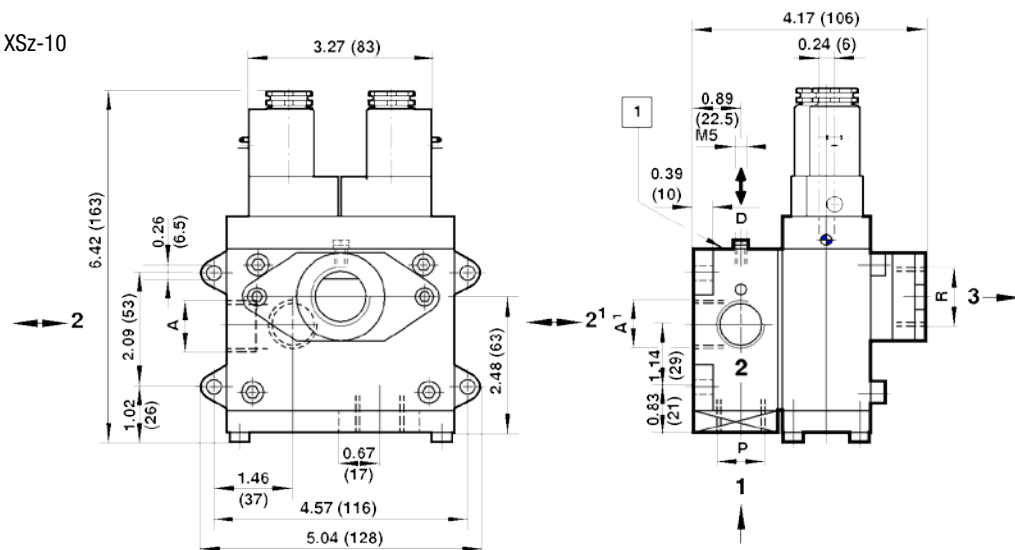
with dynamic monitoring

Dimensions in inches (mm)

XSz-8



XSz-10



| Model** | 1 (P) | 2 (A) | 2' (A') | 3 (R) |
|-------------|---------|---------|---------|---------|
| 24929303053 | G 1/2 | G 1/2 | G 1/2 * | G 3/4 |
| 24929313053 | 1/2 NPT | 1/2 NPT | - | 3/4 NPT |

* Closed

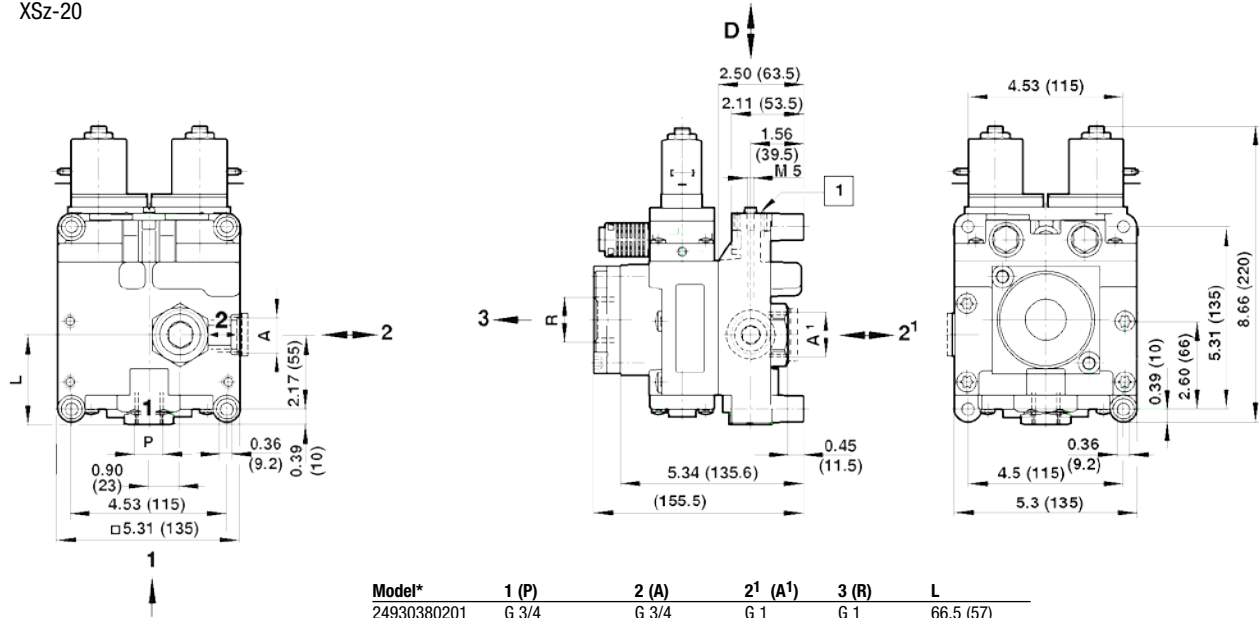
** Dimensions shown are without DIN connectors

Herion Double valve Series XSz

with dynamic monitoring

Dimensions in inches (mm)

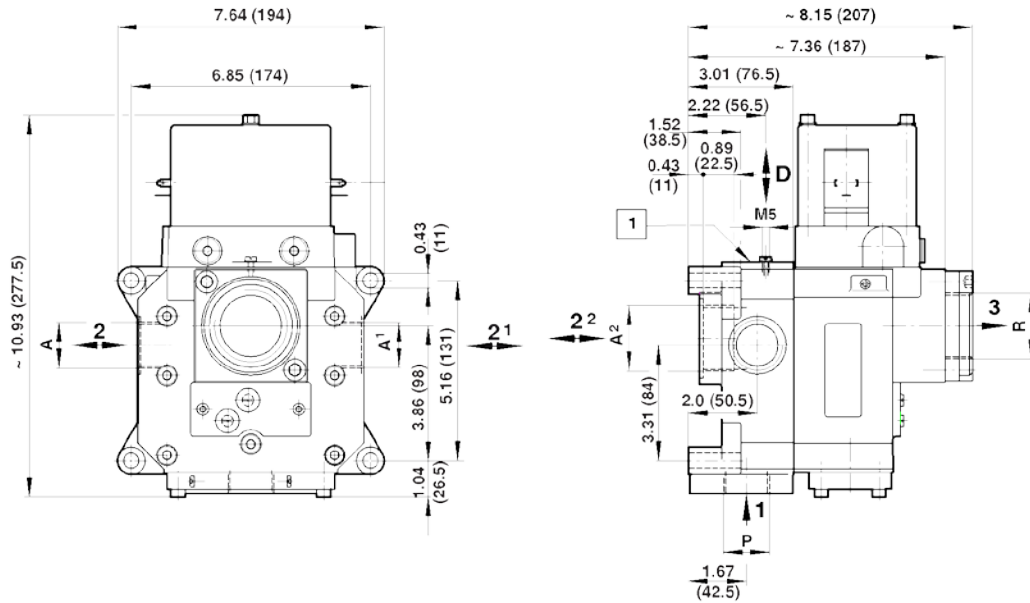
XSz-20



| Model* | 1 (P) | 2 (A) | 2 ¹ (A ¹) | 3 (R) | L |
|-------------|---------|---------|----------------------------------|-------|-----------|
| 24930380201 | G 3/4 | G 3/4 | G 1 | G 1 | 66,5 (57) |
| 24930390201 | 3/4 NPT | 3/4 NPT | — | 1 NPT | 77 (57) |

* Dimensions shown are without DIN connectors

XSz-32



| Model* | 1(P) | 2(A) | 3(R) |
|--------------|-------|-------|-----------|
| 2493120.0801 | 1"NPT | 1"NPT | 1-1/2"NPT |
| 2493130.0801 | G1" | G1" | G1-1/2" |

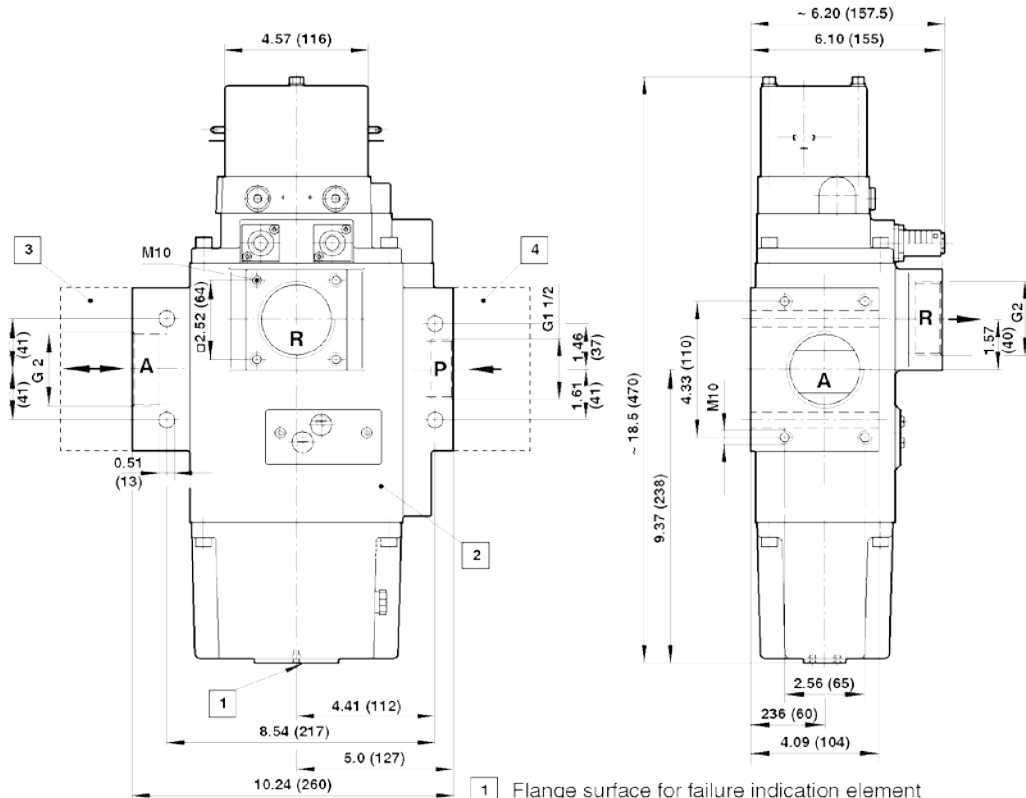
* Dimensions shown are without DIN connectors

Herion Double valve Series XSz

with dynamic monitoring

XSz-50

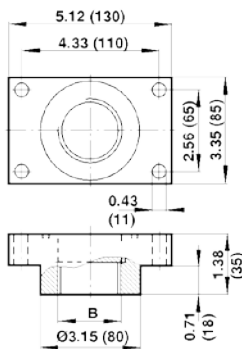
Dimensions in inches (mm)



- 1 Flange surface for failure indication element
- 2 Flange surface for Pressure Balance element
- 3 Flange surface for standard flange or 18D Pressure Switch flange model number 0545005
- 4 Flange surface for standard flange or optional flange 0547365
- 5 Flange surface for 18D Pressure Switch

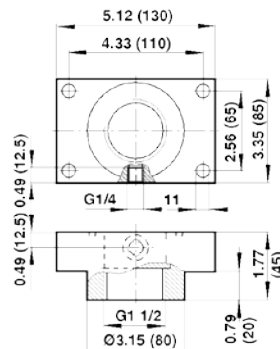
| Model* | 1(P) | 2(A) | 3(R) |
|--------------|-----------|-------|-------|
| 2493220.0801 | 1-1/2"NPT | 2"NPT | 2"NPT |
| 2493230.0801 | G1-1/2" | G2" | G2" |

* Dimensions shown are without DIN connectors and port flanges



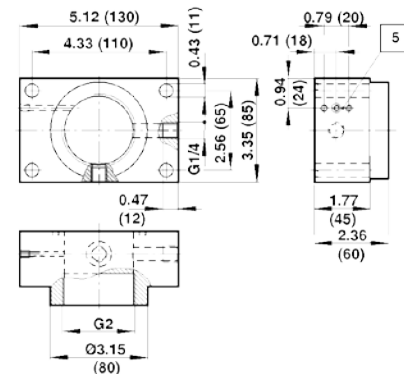
Standard flange

Port (P)1 G 1-1/2" or 1-1/2" NPT
 Port (A)2 G 2" or 2" NPT



Optional flange, G threads only

Model number
 0547365 Port (P)1
 0545005 Port (A)1



XSz ACCESSORIES

XSz Safety silencer – flange connection

| Type | Models |
|--------------------|---------|
| XSz 8 | MB002B |
| XSz 10/XSz 10 V | 0016422 |
| XSz 20 | 0016522 |
| XSz 32 | 0016622 |
| Low noise silencer | |
| Size | Model |
| 3/4" | 0016480 |
| 1" | 0016580 |
| 1-1/4" | 0016880 |
| 1-1/2" | 0016680 |
| 2" | 0016780 |

Can be mounted directly to the valve
 Direct flange mounting
 Low weight
 Small size
 Meets requirements contained in the safety regulations
 The free passage inside the silencer eliminates possible obstruction



For standard threaded silencers please see the Quietaire heavy duty mufflers.

XSz Damping module – soft start

| Operating pressure (bar) | Control pressure (bar) | Smooth start | Voltage | MODELS |
|--------------------------|------------------------|------------------|---------|--------------|
| 0,6 ... 8 | 0,6 ... 8 | From 2 bar | d.c. | 1020113.0700 |
| 0,6 ... 8 | 0,6 ... 8 | From 0 ... 2 bar | a.c. | 1020113.3703 |
| 0,6 ... 8 | 0,6 ... 8 | From 0 ... 2 bar | d.c. | 1020141.0800 |
| 0,6 ... 8 | 0,6 ... 8 | From 0 ... 2 bar | a.c. | 1020141.3803 |

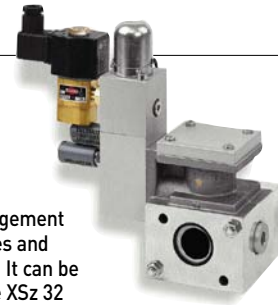
Adapter plate for flanged version, type XSz 50, model 0557164

All solenoids are delivered without plugs. If required, select model 0570275

CAUTION: For mounting the soft start valve on an XS/XSz 50 valve, an adapter flange plate (pn 0557164) is necessary. It is ordered separately.

Compact design
 Simple installation
 Reduction wear and tear
 Noise-reduction

The soft start valve can be used for a soft engagement of the pneumatically operated clutch on presses and also for a soft pressure build-up on a machine. It can be directly flanged on port 1 (P) of the safety valve XSz 32 and with an adapter plate on the XSz 50. It has an interchangeable bypass orifice to adapt to individual operating conditions.



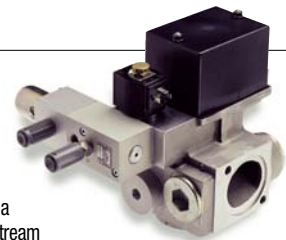
XSz Damping module – soft stop

| Type | Control pressure (bar) | Voltage | MODELS |
|--------|------------------------|-----------|--------------|
| XSz 32 | 2 ... 8 | a.c./d.c. | 1022023.0200 |
| XSz 50 | 2 ... 8 | a.c./d.c. | 1022035.0800 |

Compact design
 Adapts easily to prevailing operating conditions
 Reduction of noise, wear and tear

The soft stop valve can be used for a soft engagement of the pneumatically operated brake on presses and for a soft pressure drop on a machine. It is connected downstream of the safety valve and functions as a 2/2 directional control valve which is normally open. The switching position is monitored via a mechanical or proximity switch.

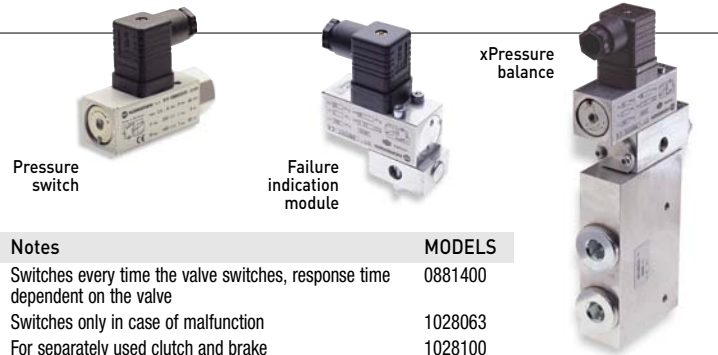
The soft stop valve can be directly flanged on port 3 (R) of the safety valves XSz 32 and XSz 50



Failure indication elements for XSz safety valves

Although the XSz safety valves do not require any external electrical monitoring to fulfil the safety function, some applications need to have a visual electrical or acoustic signalling of a malfunction.

This can be achieved by failure indication elements mounted on the XSz safety valve.



| Description | XSz8 | XSz 10 | XSz 20 | XSz32 | XSz 50 | XSz 10 V | Notes | MODELS |
|--------------------|------|--------|--------|-------|--------|----------|--|---------|
| Pressure switch | ● | ● | ● | ● | ● | ● | Switches every time the valve switches, response time dependent on the valve | 0881400 |
| Failure indication | ● | ● | ● | ● | ● | ● | Switches only in case of malfunction | 1028063 |
| Pressure balance | | | | ● | ● | | For separately used clutch and brake | 1028100 |

* Mounting only possible with flange model 0545005

Counter Balance Pressure Control Module

Counter Balance Pressure Control Module valve is used to control the pressure of large air volumes such as cushions, rams, and counterbalance systems on mechanical power presses.

Excellent for automatic counterbalance control through PC, PLC, or other control systems

Excelon Modular Quickclamp system makes it a compact unit with no piping

Manual pressure regulation and manual operated dump lockout/tag-out

Can be locked through manual lockout valve during service

Contact Norgren for additional information.

