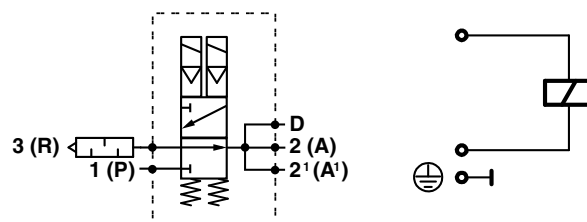


- Inherently fail-safe without residual pressure**
- Dynamic self monitoring**
- Double valve control system**
- For use with pneumatic clutch and brake systems and other 3-way safety functions, such as monitored dump valve with feedback system**
- Poppet design with feedback signal ports**
- Fast exhaust 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**



Technical data

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:

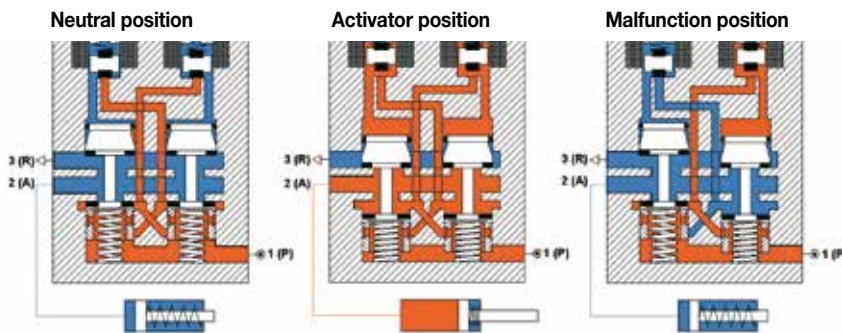
Preferably vertically

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



P = Air pressure port. A = Power port (clutch / brake). R = Exhaust



Size	Type/ model no.	NPT Port Sizes ²			Weight lbs.	Flow (Cv)		Model number valve/solenoid	Voltage ¹	AC/DC (Hz)
		1 (P)	2 (A)	3 (R)		1 → 2	2 → 3			
1/4"	XSz-8	1/4"	1/4"	3/8"	2.6	2.3	2.5	2492807305312060	120V	60 Hz
1/4"	XSz-8	1/4"	1/4"	3/8"	2.6	2.3	2.5	2492807305302400	24V	DC
1/2"	XSz-10	1/2	1/2	3/4	6	2.8	5.8	2492931305312060	120V	60 Hz
1/2"	XSz-10	1/2	1/2	3/4	6	2.8	5.8	2492931305302400	24V	DC
3/4"	XSz-20	3/4	3/4	1	10	8.0	13.2	2493039020112060	120V	60 Hz
3/4"	XSz-20	3/4	3/4	1	10	8.0	13.2	2493039020102400	24V	DC
1"	XSz-32	1	1	1-1/2	17	12	23.3	2493120080112060	120V	60 Hz
1"	XSz-32	1	1	1-1/2	17	12	23.3	2493120080102400	24V	DC
1-1/2"	XSz-50	1-1/2	2	2	34	20.4	62.4	2493220080112060	120V	60 Hz
1-1/2"	XSz-50	1-1/2	2	2	34	20.4	62.4	2493220080102400	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)		Model number valve/solenoid	Voltage (1)	AC/DC (Hz)
		1 (P)	2 (A)	3 (R)	1 → 2	2 → 3			
1/4"	XSz-8	1/4"	1/4"	3/8"	2.3	2.5	2492806305312060	120V	60 Hz
1/4"	XSz-8	1/4"	1/4"	3/8"	2.3	2.5	2492806305302400	24V	DC
1/2"	XSz-10	G 1/2	G 1/2	G 3/4	2.8	5.8	2492930305312060	120V	60 Hz
1/2"	XSz-10	G 1/2	G 1/2	G 3/4	2.8	5.8	2492930305302400	24V	DC
3/4"	XSz-20	G 3/4	G 3/4	G 1	8	13.2	2493038020112060	120V	60 Hz
3/4"	XSz-20	G 3/4	G 3/4	G 1	8	13.2	2493038020102400	24V	DC
1"	XSz-32	G 1	G 1	G 1-1/2	12	23.3	2493130080112060	120V	60 Hz
1"	XSz-32	G 1	G 1	G 1-1/2	12	23.3	2493130080102400	24V	DC
1-1/2"	XSz-50	G 1-1/2	G 2	G 2	20.4	62.4	2493230080112060	120V	60 Hz
1-1/2"	XSz-50	G 1-1/2	G 2	G 2	20.4	62.4	2493230080102400	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)

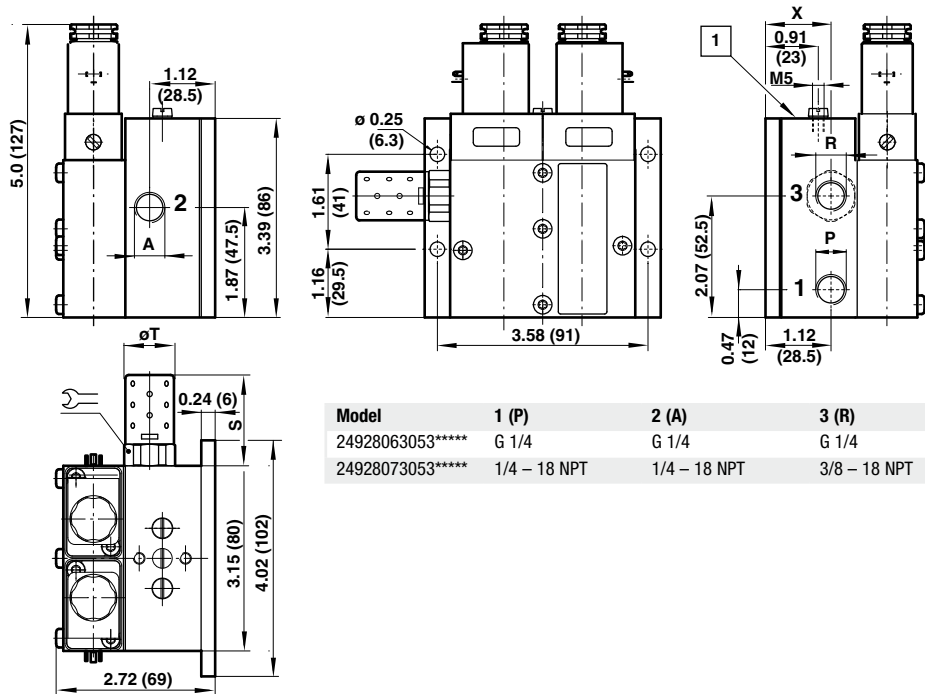
Solenoids

Solenoid	Power Consumption			Sold Separate Coil Code	Coil Code
	DC	AC			
		Inrush	Holding		
0201	11 W	-	-	000000020102400	020102400
	-	50 VA	27 VA	000000020112060	020112060
0801	16 W	-	-	000000080102400	080102400
	-	50 VA	27 VA	000000080112060	080112060
3053	4.8W	-	-	000000305302400	305302400
	-	12 VA	8.5 VA	000000305312060	305312060

Connectors

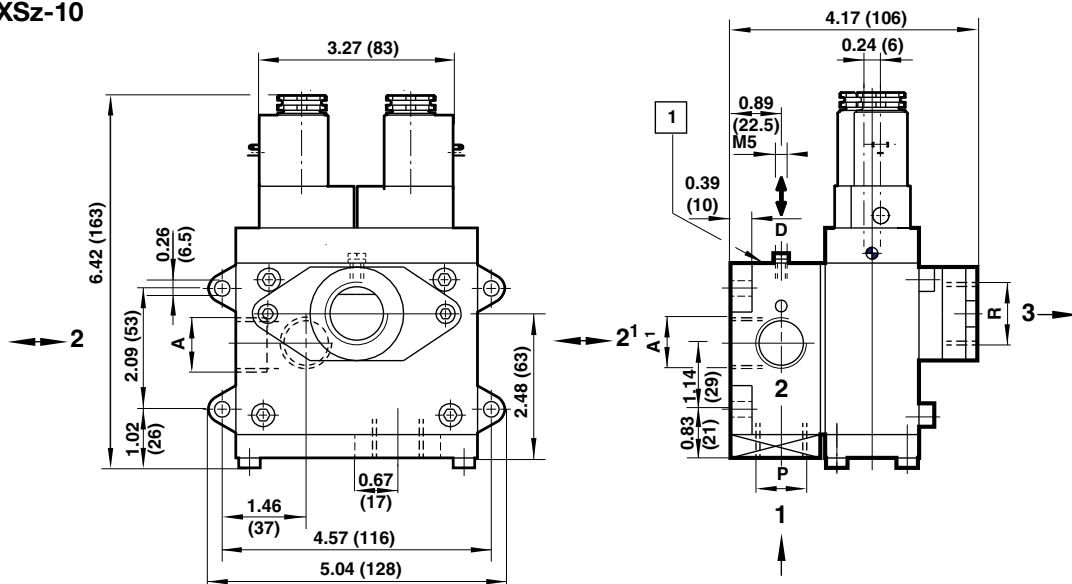
Connector Type	Standard	Part Number	
		Lighted 24 DC	Lighted 120 VAC
Cable Clamp	0570275000000000 0680003000000000 (XSz8 and 10)	0570818000000000	0570816000000000
Conduit – 1/2"	0661374000000000	—	8110113000000000
Cable Clamp with Surge Suppressor	8111979000000000	—	—

XSz-8



Model	1 (P)	2 (A)	3 (R)	S	øT	X	⊕
24928063053*****	G 1/4	G 1/4	G 1/4	42	21	-	21
24928073053*****	1/4 - 18 NPT	1/4 - 18 NPT	3/8 - 18 NPT	75	32	26,5	32

XSz-10



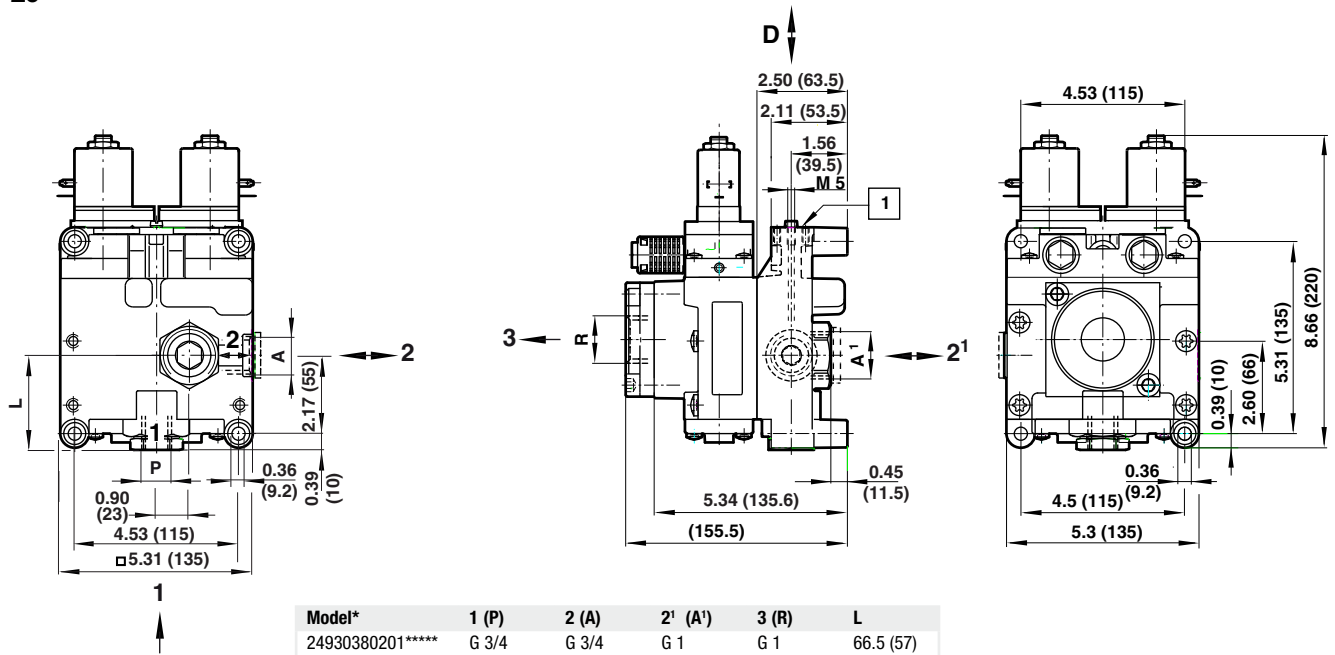
Model**	1 (P)	2 (A)	2' (A')	3 (R)
24929303053*****	G 1/2	G 1/2	G 1/2 *	G 3/4
24929313053*****	1/2 NPT	1/2 NPT	-	3/4 NPT

* Closed

** Dimensions shown are without DIN connectors

Dimensions in inches (mm)

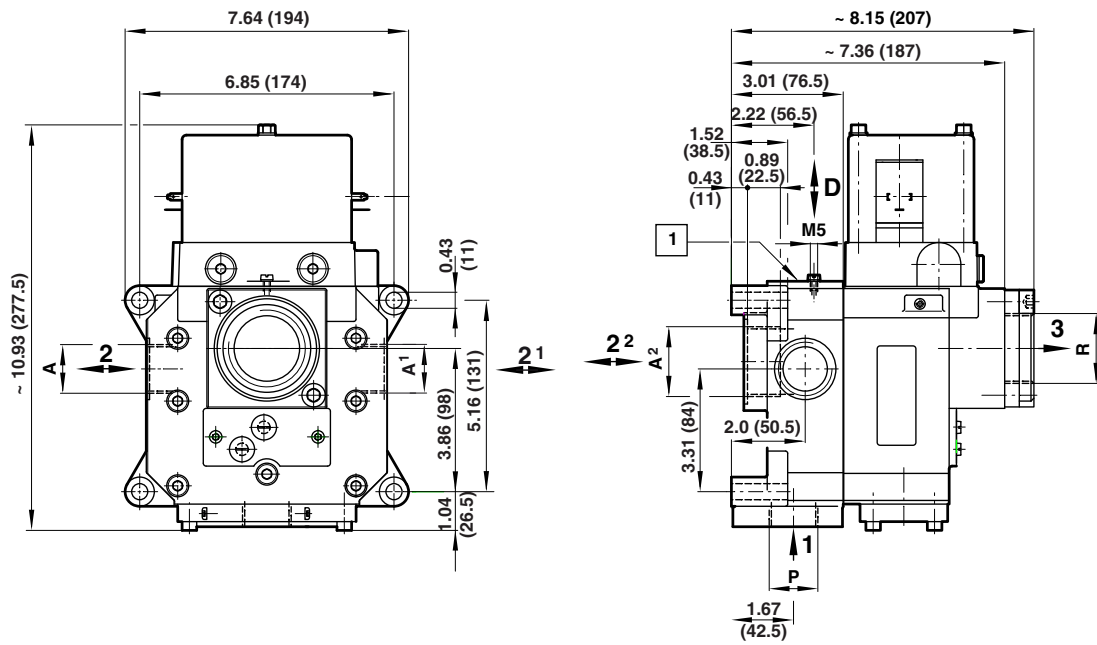
XSz-20



Model*	1 (P)	2 (A)	2' (A')	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

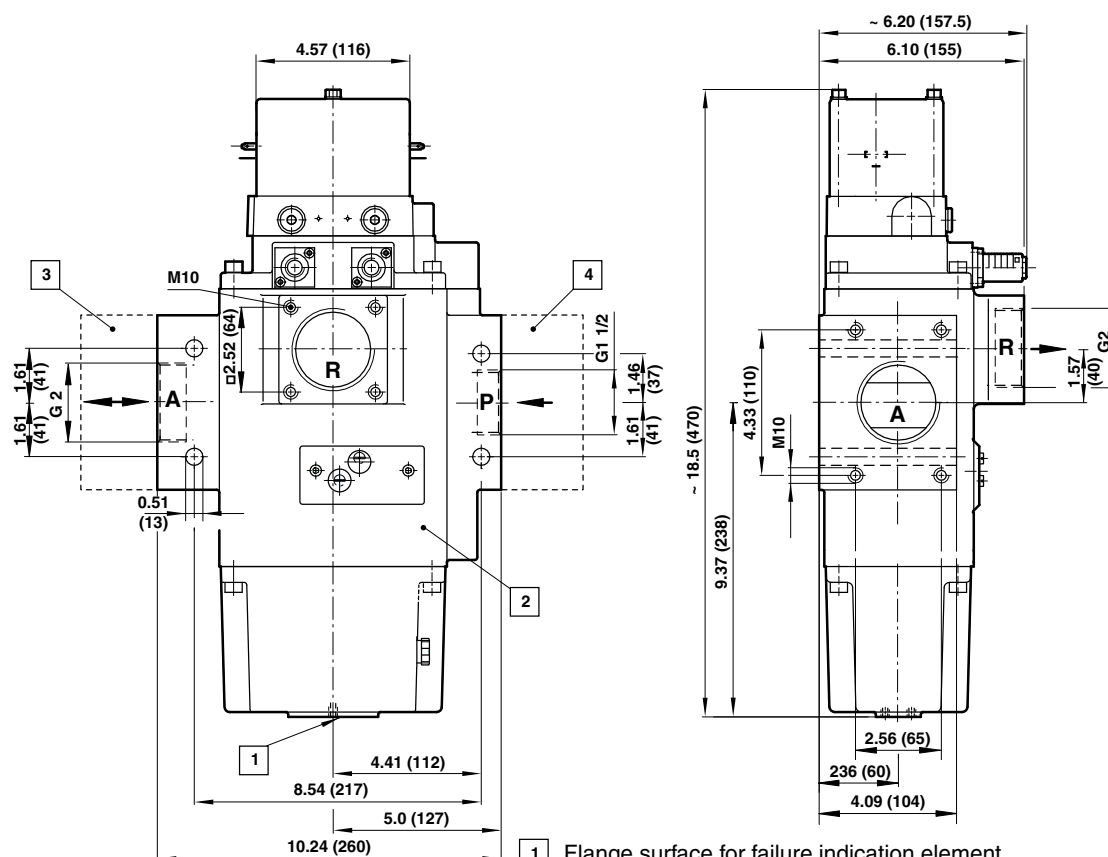


Model*	1(P)	2(A)	3(R)
24931200801****	1"NPT	1"NPT	1-1/2"NPT
24931300801****	G1"	G1"	G1-1/2"

* Dimensions shown are without DIN connectors

Dimensions in inches (mm)

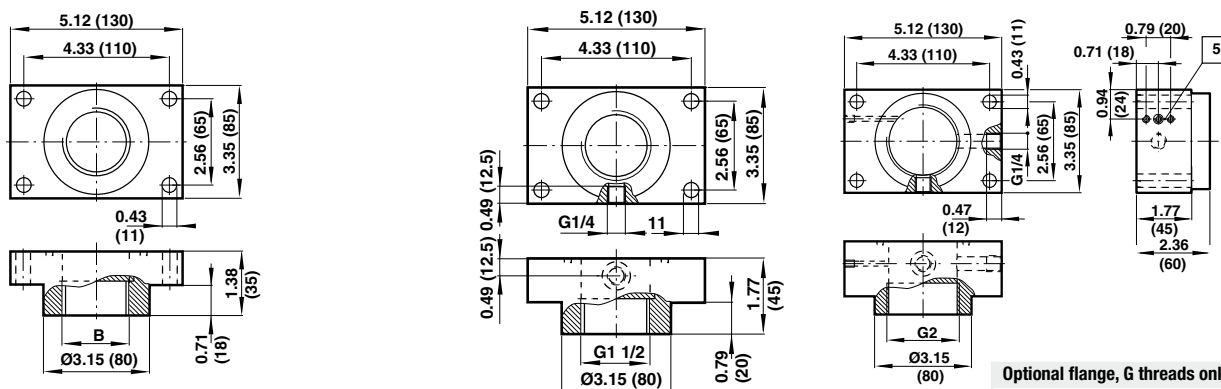
XSz-50



- 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)
24932200801*****	1-1/2" NPT	2" NPT	2" NPT
24932300801*****	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

Dimensions in inches (mm)

XSz Safety silencer – flange connection

Type	Models
XSz 8	MB002B000000000
XSz 10/XSz 10 V	0016422000000000
XSz 20	0016522000000000
XSz 32	0016622000000000
Low noise silencer	
Size	Model
3/4" NPT	0016480000000000
1" NPT	0016580000000000
1-1/4" NPT	0016880000000000
1-1/2" NPT	0016680000000000
2" NPT	0016780000000000

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

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

**XSz Damping module – soft start**

Operating pressure (bar)	Control pressure (bar)	Smooth start	Voltage	MODELS
0.6 to 8	0.6 to 8	From 2 bar	DC	1020113070002400
0.6 to 8	0.6 to 8	From 0 to 2 bar	DC	1020113370302400
0.6 to 8	0.6 to 8	From 0 to 2 bar	DC	1020141080002400
0.6 to 8	0.6 to 8	From 0 to 2 bar	DC	1020141380302400

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 to 8	DC	1022023020002400
XSz 50	2 to 8	DC	1022035080002400

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.

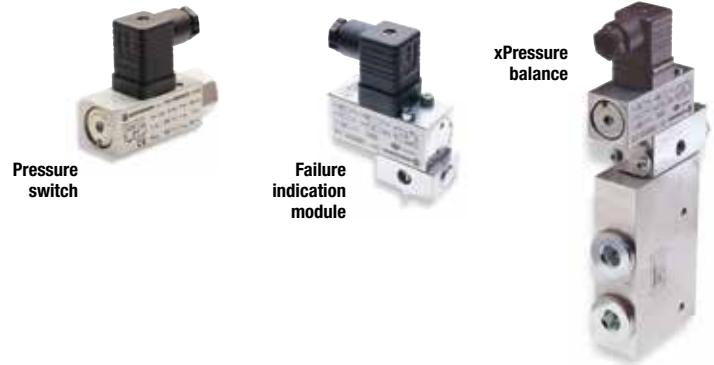
The soft stop valve can be directly flanged on port 3 (R) of the safety valves XSz 32 and XSz 50



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	088140000000000
Failure indication	●	●	●	●	●	●	Switches only in case of malfunction	102806300000000
Pressure balance				●	●		For separately used clutch and brake	102810000000000

* 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 technical support for additional information.

