PIMATIC

PIMATIC SOLUTIONS FOR
MOBILE APPLICATIONS

PIMATIC has many years of experience in designing and manufacturing pneumatic standard products and customized systems for truck and trailer industry. This has provided us a deep knowledge of this specific industrial field. Our goal is to offer advanced products and ideally suited systems to a wide range of applications. We have our own design department which works closely with our customers to understand their unique requirements and to ensure that the best possible solution is offered to their application. Pimatic products are used in various application worldwide and they have long-life expectation. Our products are maintenance free, even in toughest application. Pimatic mobile product range covers, cylinders, special cylinders, servo valves with wide selection of handles, customized valve cabins, limit valves, fittings and many more…

TYPICAL APPLICATIONS FOR PIMATIC MOBILE PRODUCTS

- Lower/Raiser applications
- Cargo door opening applications
- Container handling systems
- Hatch openings
- Tipping applications
- Fire truck applications
- Fuel systems
- Axle lift systems
- Heavy duty applications
- Drawbar couplings

Pimatic servo valve

Pimatic servo valve is a patented manually operated pneumatic proportional pressure regulator designed to control the actuators of position cylinders in hydraulic systems. The valve is designed for both industrial and mobile applications, such as hook loaders, skip loaders, front loaders, forklifts and proportional speed control of air motors and other applications where proportional pressure control is required. The servo valve adjusts the pressure in two different directions and can be equipped with different kind of handles with integrated electric push buttons. Several different valve modules and LED-modules can be combined with servo valve. The Pimatic servo valve is used in numerous applications, and it has a long-life expectation even in hardest applications.
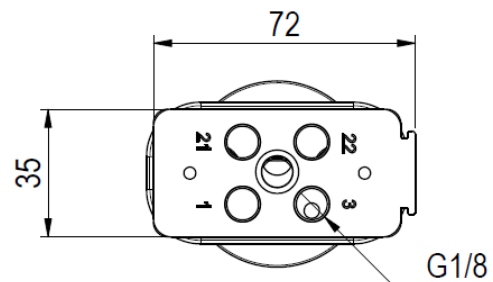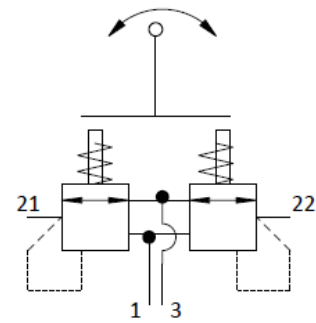
TECHNICAL CHARACTERISTICS

- Double 3/2 proportional pressure regulator
- Wide selection of handles with integrated electrical push buttons
- Body material: Anodized aluminium (black)
- Supply pressure 2..10 bar
- Ambient temperature -30…+80ºC
- Operating medium: Compressed dried air (Filtrated 20µm) lubricated or non-lubricated.
- Nominal flow 600 l/min
- Connection port size G1/8"
- If servo valve has a handle with push buttons. Maximum load of each buttons is 5A . Length of a cable is 0,5m and cable ends are flying leads.

Servo valves that are generally available on the market
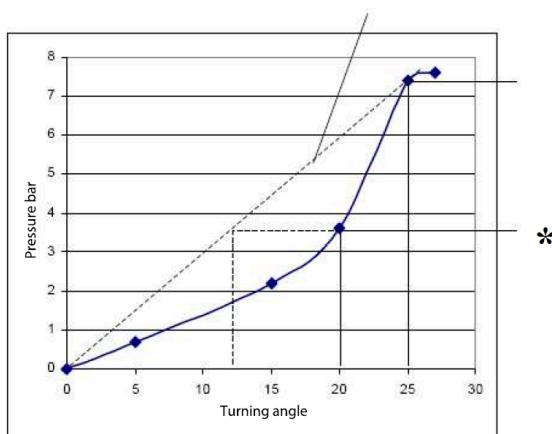
Locking positions A and B
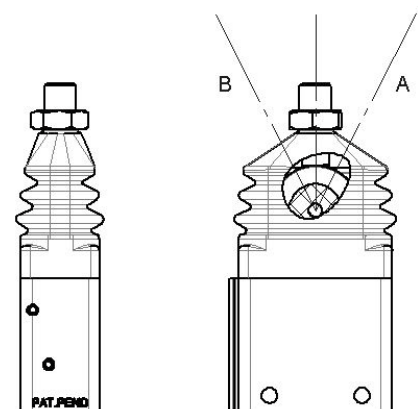
Servo valve + handle combinations

**SERVO VALVE
WITH PLAIN HANDLE**
Type 9421-75-501174

**SERVO VALVE
WITH ROCKER SWITCH
ON TOP**
(ON-OFF-ON)
Type 9421-75-501172

**SERVO VALVE
WITH SHORT HANDLE
AND 2 BUTTONS ON TOP**
Type 9421-75-033997

**SERVO VALVE
WITH SHORT HANDLE AND
ROCKER SWITCH ON TOP**
(ON-OFF-ON
Type 9421-75-033999

Servo valve + handle combinations

**SERVO VALVE
WITH PLAIN BALL HANDLE**
Type 9421-75-034000

**SERVO VALVE
WITH BALL HANDLE AND
1PC PUSH BUTTON**
Type 9421-75-034001

**SERVO VALVE
WITH BALL HANDLE AND
1PC ROCKER SWITCH**
(ON-OFF-ON)
Type 9421-75-034002

**SERVO VALVE
WITH BALL HANDLE AND
4PCS PUSH BUTTON**
Type 9421-75-034003

**SERVO VALVE
WITH PLAIN SMALL
BALL HANDLE**
Type 9421-75-034007

Servo valve + handle combinations

**SERVO VALVE
WITH SMALL BALL HANDLE
AND BUTTON ON TOP**
Type 9421-75-034008

**SERVO VALVE
WITH HANDLE INCLUDING 2 BUSH
BUTTON AND ROCKER SWITCH**
(ON-OFF-ON)
Type 9421-75-034009

**SERVO VALVE
WITH HANDLE INCLUDING 2 BUSH
BUTTON AND ROCKER SWITCH**
(ON-OFF-ON)
Type 9421-75-034010

**SERVO VALVE
WITH HANDLE INCLUDING
4 BUSH BUTTON AND 2 PCS
ROCKER SWITCH**
(ON-OFF-ON)
Type 9421-75-034011

More servo valve and handle combinations available upon request. Please contact our sales department
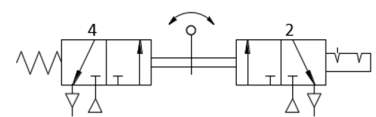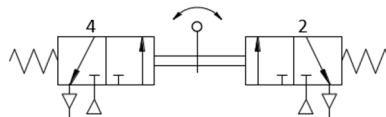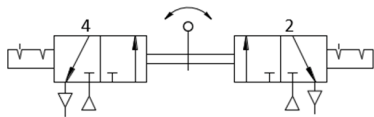
Valve and led modules

DESCRIPTION:

- Valve modules can be easily combined with servo valve, or they can be used without it.
- Easy to connect by two screws
- Compressed air supply and exhaust through main valve body

TECHNICAL CHARACTERISTICS

- Body material: Anodized aluminum (black)
- CAP POM
- Internal valve parts brass
- Springs stainless steel
- Seals PU/NBR
- Supply pressure 2..10 bar
- Ambient temperature -30…+80°C
- Operating medium: Compressed dried air (Filtrated 20μm) lubricated or non-lubricated. Nominal flow 300l/min
- Connection port size M5"

DETENT VALVE MODULE WITH 2X3/2 VALVE
Type 9130-707-030200

SPRING CENTERED VALVE MODULE WITH 2X3/2 VALVE
Type 9130-757-030044

SPRING-DETENT VALVE MODULE WITH 2X3/2 VALVE
Type 9130-7577-030533

Valve and led modules

LED-MODULE WITH GREEN AND RED-LIGHT
0,5m cable with flying leads.
Type 9130-LED-030202

SUPPLY MODULE WITH INLET AND EXHAUST PORTS ON A BOTTOM
Type 9130-SP-030126

SUPPLY MODULE WITH INLET AND EXHAUST PORTS ON A LEFT SIDE
Type 9130-SP-033161
(not possible to combine with a servo valve)

SUPPLY MODULE MIDDLE. INLET AND EXHAUST PORTS ON THE BOTTOM
Type 9130-MSP-030557
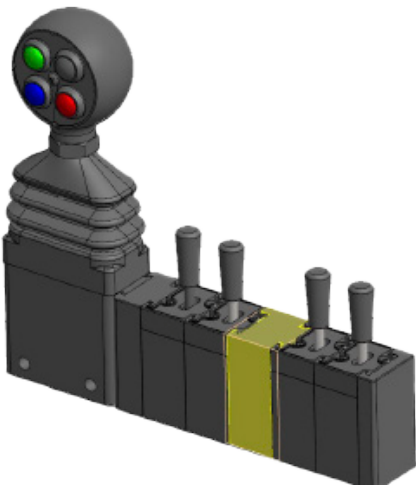
SUPPLY MODULE 45° ANGLE INCLUDING LED MODULE AND 0,5M CABLE WITH FLYING LEADS. INLET AND EXHAUST PORTS ON A BOTTOM.
Type 9130-ASP-033789

END PLATE
Type 9130-EP-030046

Pimatic can deliver complete assembled units. Including for example cable connectors, fittings customized modules etc. This provides the best possible option to full fill your specific requirements. Please contact our sales department for more information.

Limit valve for controlling tipping hydraulics

DESCRIPTION:

- Pneumatic limit valve for tipping systems
- Assembly between pneumatic servo valve and hydraulic valve

TECHNICAL CHARACTERISTICS

- Body material: Anodized aluminum (black)
- Internal valve parts brass
- Springs stainless steel
- Seals PU/NBR
- Gaiter EPDM
- Supply pressure 2..10 bar
- Ambient temperature -30…+80°C
- Operating medium: Compressed dried air (Filtrated 20µm) lubricated or non-lubricated.
- Nominal flow 600l/min
- Connection port size G1/8", 6mm tube push in fittings (exhaust 8mm push in fitting)
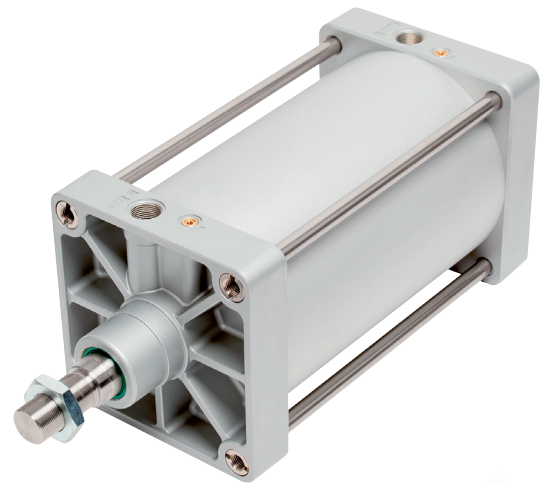
Order code: PT0019728

Pimatic cylinders for mobile applications

ISO 15552 cylinders P2720 series

TECHNICAL CHARACTERISTICS

- Double acting and spring return version
- Magnetic piston as standard feature
- ISO15552 construction
- Diecast aluminium covers
- Hard anodized profile tube or round tube with tie rod construction available
- Chromed piston rod
- Pressure range 0…10 bar
- Temperature range -35…+80°C with standard seals (PU) and 0…150°C with high temperature seals. Metal piston rod scrapper upon request. Temperature -40°C)
- Media: Pressurized air (Filtered 40μm) or inert gases, lubricated or dry
- Diameter: 32, 40, 50, 63, 80, 100, 125, 160, 200, 250 and 320mm
- Stroke lengths of spring return cylinders 25,50,80,100,125 and 160mm (profiled tube only available)

ISO 6432 cylinders O series

TECHNICAL CHARACTERISTICS

- Double acting and spring return version
- Magnetic piston as standard feature
- ISO6432 construction
- Diecast aluminium covers
- Tube AISI304, Piston rod AISI303
- Pressure range 0…10 bar
- Temperature range -35…+80°C with standard seals (PU)
- Media: Pressurized air (Filtered 40μm), non-lubricated
- Diameter: 8, 10,12,16,20 and 25mm
- Maximum stroke 1000mm

Valves for mobile applications

2-way ball valves with pneumatic actuator

SPECIFICATIONS

- Material of valve body: Brass (nickel plated)
- Working temperature -20…+150ºC
- Material of seals PTFE and FKM O-rings
- Product code includes valve body and actuator
- Ex-approval available upon request

DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
10	3/8"	PN64	D101H003	SG101H003
15	1/2"	PN64	D101H004	SG101H004
20	3/4"	PN50	DG101H005	SG101H005
25	1"	PN50	DG101H006	SG101H006
32	1 1/4"	PN40	DG101H007	SG101H007
40	1 1/2"	PN40	DG101H008	SG101H008
50	2"	PN32	DG101H009	SG101H009
65	2 1/2"	PN25	DG101H010	SG101H010
80	3"	PN25	DG101H011	SG101H011

2-way butterfly valve with pneumatic actuator

SPECIFICATIONS

- Materials: Body valve, cast iron, epoxy coated, Disc: AISI316, Liner: NBR
- Wafer construction (mounting between flanges)
- Working temperature -23…+82ºC
- Product code includes valve body and actuator
- Available up to Dn600.
- Ex-approved version available upon request

DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
50	Wafer	PN16	DG376XN69	SG376XN69
65	Wafer	PN16	DG376XN70	SG376XN70
80	Wafer	PN16	DG376XN71	SG376XN71
100	Wafer	PN16	DG376XN72	SG376XN72
125	Wafer	PN16	DG376XN73	SG376XN73
150	Wafer	PN16	DG376XN74	SG376XN74
200	Wafer	PN10	DG376KN75	SG376KN75
250	Wafer	PN10	DG376KN76	SG376KN76
300	Wafer	PN10	DG376KN77	SG376KN77

Valves for mobile applications

2-way ball valves with AISI316 valve body and pneumatic actuator

SPECIFICATIONS

- Material of valve body: AISI316
- Working temperature -20…+180ºC
- Material of seals PTFE and FKM O-rings
- Product code includes valve body and actuator
- Ex-approval available upon request

DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
8	1/4"	PN63	DG424H402	SG424H402
10	3/8"	PN63	DG424H403	SG424H403
15	1/2"	PN63	DG424H404	SG424H404
20	3/4"	PN63	DG424H405	SG424H405
25	1"	PN63	DG424H406	SG424H406
32	1 1/4"	PN63	DG424H407	SG424H407
40	1 1/2"	PN63	DG424H408	SG424H408
50	2"	PN63	DG424H409	SG424H409
65	2 1/2"	PN63	DG424H410	SG424H410
80	3"	PN63	DG424H411	SG424H411
100	4"	PN63	DG424H412	SG424H412

2-way ball valves for high pressure applications with pneumatic actuator

SPECIFICATIONS

- Material of valve body: Carbon steel (AISI316 body available upon request
- Working temperature -20…+80ºC
- Material of seals NBR
- Product code includes valve body and actuator
- Ex-approval available upon request

DN	THREAD	PRESSURE RATNG	PRODUCT CODE (DOUBLE ACTING ACTUATOR)	PRODUCT CODE (SPRING RETURN ACTUATOR)
10	3/8"	PN400	DHA5BABAP03AFCA0	SHA5BABAP03AFEA0
15	1/2"	PN400	DHA5BABAP04AFDA0	SHA5BABAP04AFGA0
20	3/4"	PN320	DHA5BABAP05AFEA0	SHA5BABAP05AFHA0
25	1"	PN320	DHA5BABAP06AFGA0	SHA5BABAP06AFIA0

5/2 Valves for mobile applications

In-line mounted valves / Series 4A and 4V

4V200/4V400 SERIES, ELECTRIC

Valve type and control mode
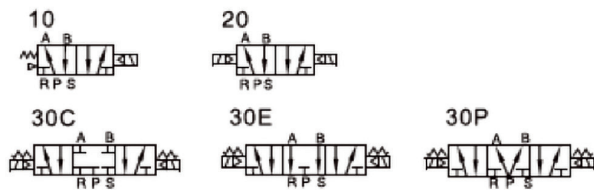
SERIES	4V110-06 4V120-06	4V130C-06 4V130E-06 4V130P-06	4V210-08 4V220-08	4V230C-08 4V230E-08 4V230P-08	4V410-15 4V420-15	4V430C-15 4V430E-15 4V430P-15
Flow-through opening mm²	10,2	8,6	16	12	50	30
Working fluid	Dry or spray-lubricated air or neutral gases, filtration 40µm					
Connector size	Input/output G1/8, outlet G1/8		Input/output G1/4, outlet G1/8		Input/output/outlet G1/2	
Type of action	Electrical					
Lubrication (Note 1)	Additional					
Valve type	5/2	5/3	5/2	5/3	5/2	5/3
Pressure range	1.5-8bar (0.15-0.8MPa)					
Temperature range	-40…+70 ºC					
Max. operating frequency	5 actions/sec	3 actions/sec	5 actions/sec	3 actions/sec		
Voltage range	AC:-/+15% DC:-/+10%					
Power requirement:	110/220VAC:4,5VA 24VAC:5VA 12/24VDC:3W					
Duty cycle	100%ED					
Insulation class	B					
Protection class	IP65					
Electrical connection	Led connector DINB Pg07, cable diameter 6 to 8 mm					

ORDER EXAMPLE
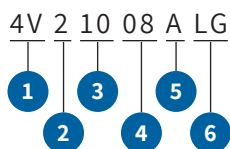
1. Kit, electrically
2. Size
   1: 100 (G1/8)
   2: 200 (G1/4)
   4: 400 (G1/2)
3. Valve type
   10: electric-spring 5/3
   20: electric-electric 5/2
   30C: electric-electric, spring centering, closed centre position
   30E: electric-electric, spring centering 5/3 open centre position
   30P: electric-electric, spring centering

   5/3 Y-spindle
4. Connector size
   08: 1/4 (koko 200)
   15: 1/2 (koko 400)
5. Voltage
   A: 220VAC
   B: 24VDC
   C: 110VAC
   E: 24VAC
   F: 12VDC
6. LG: Low temperature -40ºC, Thread type G

Availlable also 3-way valve 3V21008… (G1/4)

Maintenance equipment GA Series

SPECIFICATIONS

- Modular service kit for handling compressed air
- Materials: Frame: Aluminium
  Cup: Polycarbonate (G1/4–1/2), metal (G1)

- Pressure range 1.5–9 bar
- Temperature range: Filter –40 °C to +70 °C,
  regulator –40 °C to +70 °C
- Filter degree: Standard 40 µm, on order 5 µm
- Wall mount as standard on maintenance device
- Pressure regulators have a gauge as a standard
  accessory

BASE COMPONENTS

FILTER		
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm3/s
GAF20008LG	G1/4	25
GAF40015LG	G1/2	75
GAF600C25ALG	G1	170

PRESSURE REGULATOR			
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm3/s	GAUGE
GAR20008SLG	G1/4	25	Fixed
GAR40015SLG	G1/2	80	Fixed
GAR60025SLG	G1	130	Fixed

On order 0 to 4 bar L. On order with a non-return valve K.

FILTER REGULATOR			
ORDER NUMBER	CONNECTOR SIZE Ø	FLOW dm3/s	GAUGE
GAFR20008SLG	G1/4	25	Fixed
GAFR40015SLG	G1/2	80	Fixed
GAFR60025SLG	G1	130	Fixed

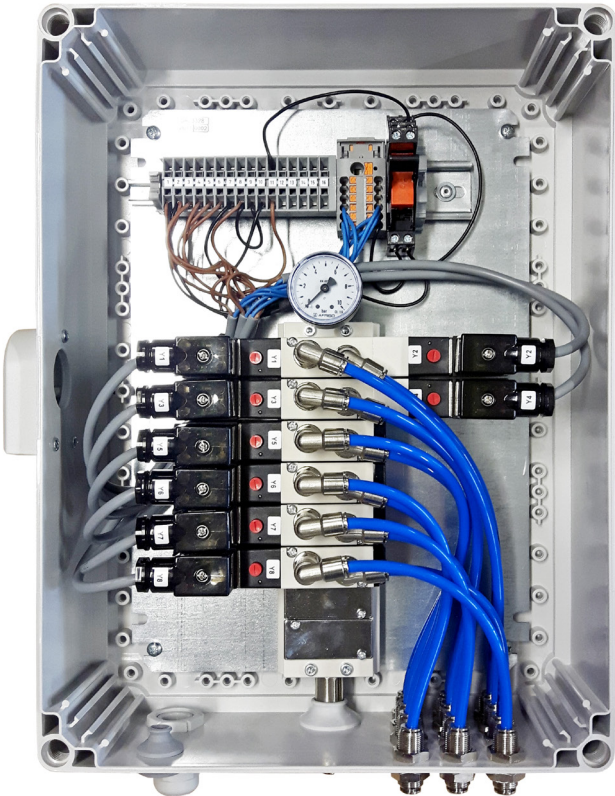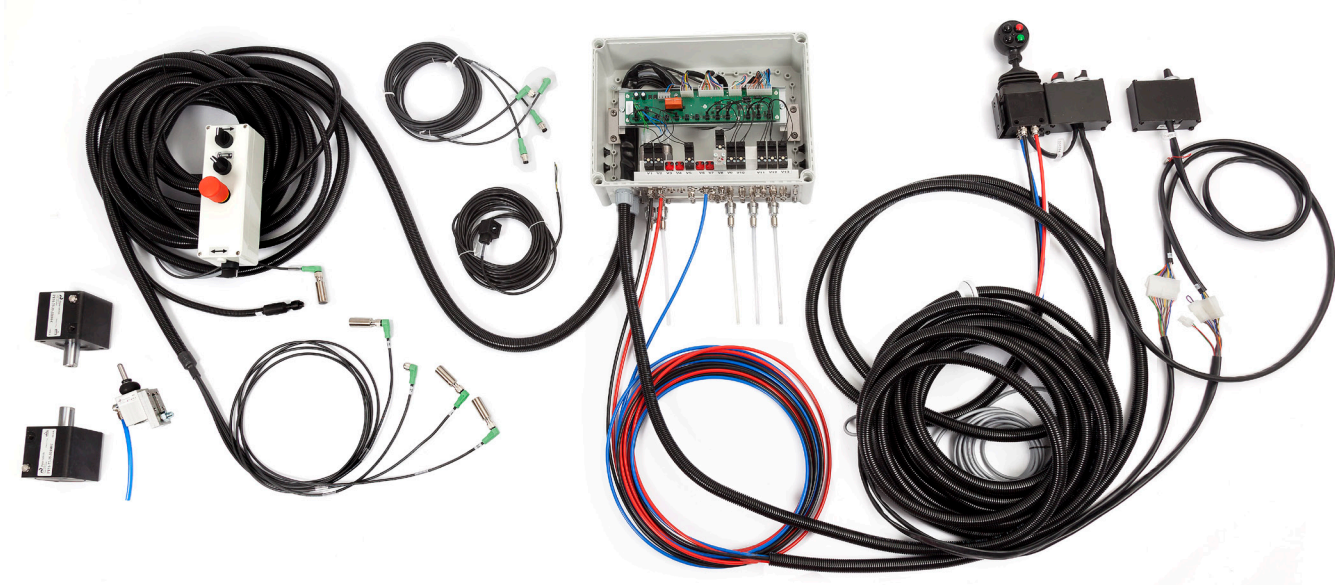# Special products and assemblies
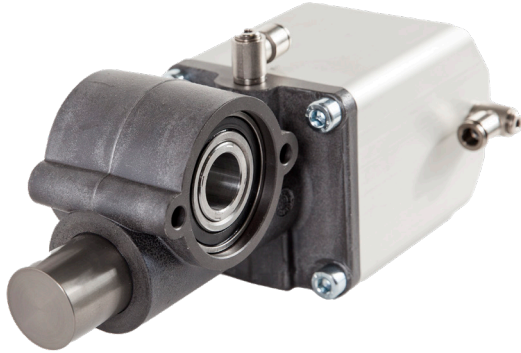
**Pneumatic rotary actuator
for coupling applications**
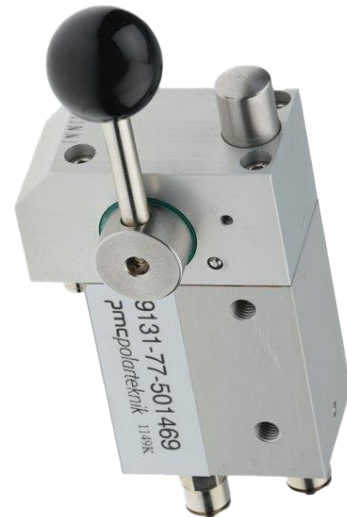
**Pneumatic control valve 5/3,
normally open, detent**
Designed for outdoor use, robust design,
additional enclosure is not required

Valve cabinets and assemblies

Please contact
our sales department
for more information.

PIMATIC