



fluid under control



PNEUMATIC ACTUATED ANGLE SEAT VALVES

for air, water, gas, oil, acid, food industry,
vacuum, filling system, etc.



2/2 way - 3/2 way

Description

- AISI 316 Stainless Steel body and actuator
- High flow rate
- High Quality
- Compact
- Suitable for Vacuum application
- N.C. / N.O. position



APPLICATION

- Water
- Air
- Steam
- Gas, natural gas
- Chemicals
- Petroleum products
- Food
- Pharmaceutical products
- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil
- Petrol
- Alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids

Advantage of TORK Pneumatic Piston Valves

- Less pressure drop than the globe valves
- Short open-close time
- High flow rate
- Body and actuator in AISI 316 stainless steel, precision casting
- Flanged and welding connection available on request

Technical Features

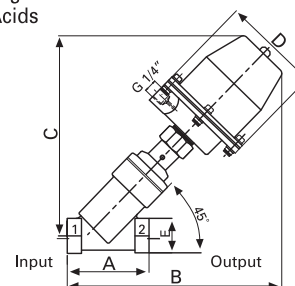
- Type : Pneumatic Actuated Angle Seat Piston Valve
- Connection : Screwed G (BSP), Welding, Flanged.
- Function : Normally Closed, Normally Open
- Working Temperature : -10°C ... +180°C
- Max. Operating Pressure : 16 bar, 40 bar
- Recommended Control Air Supply : 4-6 bar
- Air Supply Connection : 1/4" G
- Body : All body AISI 316 stainless steel
- Sealing material : PTFE (opsiyonel Viton, EPDM)
- On request : NPT screwed connection
- Way : 2/2 way
- Heavy duty applications

Normally Closed *Normally Open*



APPLICATION

- Water, air, steam
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- Pharmaceutical products
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- Water treatment
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- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Hydraulic liquids
- Organic solvents
- Acids



Dimension

Type	DN		A	B	C	D	E
	mm	Ø					
PP1020.03 / PP1021.03	15	1/2"	72	187	178	96	30
PP1020.04 / PP1021.04	20	3/4"	81	191	185	96	36
PP1020.05 / PP1021.05	25	1"	97	195	185	96	42
PP1020.06 / PP1021.06	32	1 1/4"	112	244	234	112	51
PP1020.07 / PP1021.07	40	1 1/2"	127	254	240	112	61
PP1020.08 / PP1021.08	50	2"	142	270	248	112	71

PP1020 series Normally Closed

Connection Size	Orifice size	Operating Pressure		Pilot Pressure		Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
		min	max	min	max			min	max			
G"	mm	bar	bar	bar	bar	Ø	lt/min	min	max	°C	PP1020	(kg)
1/2"	15	0	16	3.6	10	63	98	-10	180	PTFE	PP1020.03	2.260
3/4"	20	0	12	3.6	10	63	170	-10	180	PTFE	PP1020.04	2.420
1"	25	0	8	3.6	10	63	305	-10	180	PTFE	PP1020.05	2.730
1 1/4"	32	0	12	4	10	80	460	-10	180	PTFE	PP1020.06	5.1
1 1/2"	40	0	8	4	10	80	750	-10	180	PTFE	PP1020.07	5.65
2"	50	0	6	4	10	80	1050	-10	180	PTFE	PP1020.08	6

PP1021 series Normally Open

Connection Size	Orifice size	Operating Pressure		Pilot Pressure		Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
		min	max	min	max			min	max			
G"	mm	bar	bar	bar	bar	Ø	lt/min	min	max	°C	PP1021	(kg)
1/2"	15	0	16	3	8	63	98	-10	180	PTFE	PP1021.03	2.260
3/4"	20	0	16	3	8	63	170	-10	180	PTFE	PP1021.04	2.420
1"	25	0	16	3	8	63	305	-10	180	PTFE	PP1021.05	2.730
1 1/4"	32	0	16	2	8	80	460	-10	180	PTFE	PP1021.06	5.1
1 1/2"	40	0	16	2	8	80	750	-10	180	PTFE	PP1021.07	5.65
2"	50	0	16	2	8	80	1050	-10	180	PTFE	PP1021.08	6

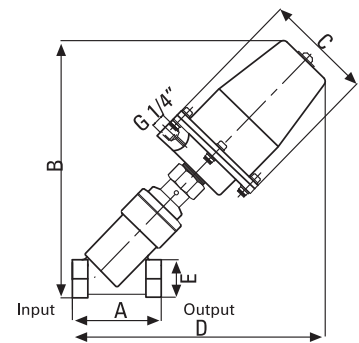
Normally Closed



- High pressure max. 40 bar
- Screwed connection

APPLICATION

- Water
- Air
- Steam
- Gas, natural gas
- Chemicals
- Petroleum products
- Food
- Pharmaceutical products
- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil
- Petrol
- Alcohol
- Hydraulic liquids
- Salt solutions
- Hydraulic liquids
- Organic solvents
- Acids



Dimension

Type	DN		A	B	C	D	E
	mm	Ø					
PP1070.03	15	1/2"	72	188	110	210	30
PP1070.04	20	3/4"	81	195	110	215	36
PP1070.05	25	1"	97	197	110	215	42

PP1070 series Normally Closed

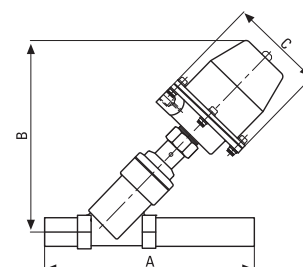
Connection Size	Orifice size	Operating Pressure		Pilot Pressure		Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
		min	max	min	max			min	max			
G"	mm	bar	bar	bar	bar	Ø	lt/min	°C	°C		PP1070	(kg)
1/2"	15	0	40	5	10	63	98	-10	180	PTFE	PP1070.03	3.350
3/4"	20	0	30	5	10	63	170	-10	180	PTFE	PP1070.04	3.580
1"	25	0	20	5	10	63	305	-10	180	PTFE	PP1070.05	4.050

Normally Closed Normally Open



APPLICATION

- Water, air, steam
- Gas, natural gas
- Chemicals
- Petroleum products
- Food
- Pharmaceutical products
- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids



Dimension

Type	DN		A	B	C
	mm	Ø			
PP1040.03 / PP1041.03	15	1/2"	145	178	96
PP1040.04 / PP1041.04	20	3/4"	145	185	96
PP1040.05 / PP1041.05	25	1"	155	185	96
PP1040.06 / PP1041.06	32	1 1/4"	175	234	112
PP1040.07 / PP1041.07	40	1 1/2"	195	240	112
PP1040.08 / PP1041.08	50	2"	225	248	112

PP1040 series Normally Closed

Connection Size	Orifice size	Operating Pressure		Pilot Pressure		Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
G"	mm	min	bar max	min	bar max	Ø	lt/min	min	°C max		PP1040	(kg)
1/2"	15	0	16	3.6	10	63	98	-10	180	PTFE	PP1040.03	2.260
3/4"	20	0	12	3.6	10	63	170	-10	180	PTFE	PP1040.04	2.420
1"	25	0	8	3.6	10	63	305	-10	180	PTFE	PP1040.05	2.730
1 1/4"	32	0	12	4	10	80	460	-10	180	PTFE	PP1040.06	5.1
1 1/2"	40	0	8	4	10	80	750	-10	180	PTFE	PP1040.07	5.65
2"	50	0	6	4	10	80	1050	-10	180	PTFE	PP1040.08	6

PP1041 series Normally Open

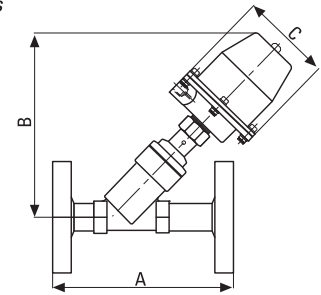
Connection Size	Orifice size	Operating Pressure		Pilot Pressure		Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
G"	mm	min	bar max	min	bar max	Ø	lt/min	min	°C max		PP1041	(kg)
1/2"	15	0	16	3	8	63	98	-10	180	PTFE	PP1041.03	2.260
3/4"	20	0	16	3	8	63	170	-10	180	PTFE	PP1041.04	2.420
1"	25	0	16	3	8	63	305	-10	180	PTFE	PP1041.05	2.730
1 1/4"	32	0	16	2	8	80	460	-10	180	PTFE	PP1041.06	5.1
1 1/2"	40	0	16	2	8	80	750	-10	180	PTFE	PP1041.07	5.65
2"	50	0	16	2	8	80	1050	-10	180	PTFE	PP1041.08	6

Normally Closed **Normally Open**



APPLICATION

- Water, air, steam
- Gas, natural gas
- Chemicals
- Petroleum products
- Food
- Pharmaceutical products
- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids



Dimension

Type	DN		A	B	C
	mm	Ø			
PP1060.03 / PP1061.03	15	1/2"	130	178	96
PP1060.04 / PP1061.04	20	3/4"	150	185	96
PP1060.05 / PP1061.05	25	1"	160	185	96
PP1060.06 / PP1061.06	32	1 1/4"	180	234	112
PP1060.07 / PP1061.07	40	1 1/2"	200	240	112
PP1060.08 / PP1061.08	50	2"	230	248	112

PP1060 series Normally Closed

Connection Size	Orifice size	Operating Pressure		Pilot Pressure		Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
		min	max	min	max			min	max			
G"	mm	bar	bar	bar	bar	Ø	lt/min	°C	°C		PP1060	(kg)
1/2"	15	0	16	3.6	10	63	98	-10	180	PTFE	PP1060.03	3.450
3/4"	20	0	12	3.6	10	63	170	-10	180	PTFE	PP1060.04	3.690
1"	25	0	8	3.6	10	63	305	-10	180	PTFE	PP1060.05	4.170
1 1/4"	32	0	12	4	10	80	460	-10	180	PTFE	PP1060.06	7.700
1 1/2"	40	0	8	4	10	80	750	-10	180	PTFE	PP1060.07	8.800
2"	50	0	6	4	10	80	1050	-10	180	PTFE	PP1060.08	9.100

PP1061 series Normally Open

Connection Size	Orifice size	Operating Pressure		Pilot Pressure		Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
		min	max	min	max			min	max			
G"	mm	bar	bar	bar	bar	Ø	lt/min	°C	°C		PP1061	(kg)
1/2"	15	0	16	3	8	63	98	-10	180	PTFE	PP1061.03	3.450
3/4"	20	0	16	3	8	63	170	-10	180	PTFE	PP1061.04	3.690
1"	25	0	16	3	8	63	305	-10	180	PTFE	PP1061.05	4.170
1 1/4"	32	0	16	2	8	80	460	-10	180	PTFE	PP1061.06	7.700
1 1/2"	40	0	16	2	8	80	750	-10	180	PTFE	PP1061.07	8.800
2"	50	0	16	2	8	80	1050	-10	180	PTFE	PP1061.08	9.100

SCREWED CONNECTION PNEUMATIC ACTUATED PISTON VALVES

PP 1050 - PP1051 Series

TORK®

Normally Closed **Normally Open**



PP1050 N.C.
PP1051 N.O.

APPLICATION

- Water, air, steam
- Gas, natural gas
- Chemicals
- Petroleum products
- Food
- Pharmaceutical products
- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids

Switching Time : 30-40 ms
 Viscosity of the Fluid : Max. 600mm²/s
 Max. Operating pressure: - 700mbar (For inlet and in Vacuum outlet pressure)
 Material of Actuator : Fibre-glass reinforced polyamide (PAGF30)
 Positioner and Switch : Yes
 Boxd can be mounte
 Connection Type : Threaded or Flanged
 Control Valve : 3/2 TORK solenoid valve
 How should the installation be : Considering the arrow direction on the valve body
 Body : All body AISI 316 stainless steel

PP1050 series Normally Closed

Connection Size	Orifice size	Pressure max	Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
					min	max			
G"	mm	bar	Ø	lt/min	°C			PP1050	(kg)
1/2"	13	16	63	98	-10	180	PTFE	PP1050.03	3.450
3/4"	20	16	63	170	-10	180	PTFE	PP1050.04	3.690
1"	25	16	63	305	-10	180	PTFE	PP1050.05	4.170
1 1/4"	32	16	80	460	-10	180	PTFE	PP1050.06	7.700
1 1/2"	40	16	80	750	-10	180	PTFE	PP1050.07	8.800
2"	50	16	80	1050	-10	180	PTFE	PP1050.08	9.100

PP1051 series Normally Open

Connection Size	Orifice size	Pressure max	Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
					min	max			
G"	mm	bar	Ø	lt/min	°C			PP1051	(kg)
1/2"	13	16	63	98	-10	180	PTFE	PP1051.03	3.450
3/4"	20	16	63	170	-10	180	PTFE	PP1051.04	3.690
1"	25	16	63	305	-10	180	PTFE	PP1051.05	4.170
1 1/4"	32	16	80	460	-10	180	PTFE	PP1051.06	7.700
1 1/2"	40	16	80	750	-10	180	PTFE	PP1051.07	8.800
2"	50	16	80	1050	-10	180	PTFE	PP1051.08	9.100

Normally Closed Normally Open



PP1090 N.C.
PP1091 N.O.
1 - bottom input
2 - top input

1/2" ... 2"

APPLICATION

- Water, air, steam
- Gas, natural gas
- Chemicals
- Petroleum products
- Food
- Pharmaceutical products
- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids

Switching Time : 30-40 ms
 Viscosity of the Fluid : Max. 600mm²/s
 Max. Operating pressure: - 700mbar (For inlet and in Vacuum outlet pressure)
 Material of Actuator : Fibre-glass reinforced polyamide (PAGF30)
 Positioner and Switch : Yes
 Boxd can be mounte
 Connection Type : Threaded or Flanged
 Control Valve : 3/2 TORK solenoid valve
 How should the installation be : Considering the arrow direction on the valve body
 Body : All body AISI 316 stainless steel

PP1090 series Normally Closed

Connection Size	Orifice size	Pressure max	Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
G"	mm	bar	Ø	lt/min	min	max °C		PP1090	(kg)
1/2"	13	16	50	70	-10	180	PTFE	PP1090.03	3.450
3/4"	20	16	50	141	-10	180	PTFE	PP1090.04	3.690
1"	25	16	50	166	-10	180	PTFE	PP1090.05	4.170
1 1/4"	32	16	63	416	-10	180	PTFE	PP1090.06	7.700
1 1/2"	40	16	63	583	-10	180	PTFE	PP1090.07	8.800
2"	50	16	80	666	-10	180	PTFE	PP1090.08	9.100

PP1091 series Normally Open

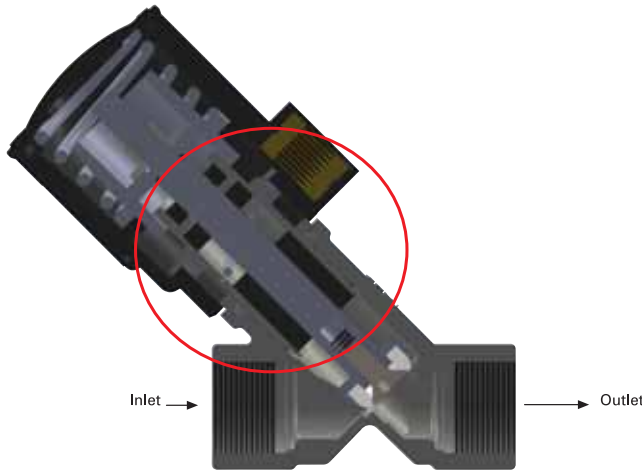
Connection Size	Orifice size	Pressure max	Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
G"	mm	bar	Ø	lt/min	min	max °C		PP1091	(kg)
1/2"	13	16	50	70	-10	180	PTFE	PP1091.03	3.450
3/4"	20	16	50	141	-10	180	PTFE	PP1091.04	3.690
1"	25	16	50	166	-10	180	PTFE	PP1091.05	4.170
1 1/4"	32	16	63	416	-10	180	PTFE	PP1091.06	7.700
1 1/2"	40	16	63	583	-10	180	PTFE	PP1091.07	8.800
2"	50	16	80	666	-10	180	PTFE	PP1091.08	9.100

Normally Closed



Economic
Light and useful
Consumes low air

1/2" ... 1"
PP1030.02 (N.C)



A new developed seal and bedding component is used in mini piston valves. Due to this new development, it's provided that the product has more operating life with no trouble. At this product's life test, it achieved 1 000 000 Open-Close perfectly. It's another important thing in this product; flow direction is reverse of the other piston valves.

Inverse flow provides blocking leakage through pushing the piston. It's a problem always faced in the other piston valves that the leakage because of rising of inlet pressure. But this time, if flow pressure is too high, a problem will come up with the piston spring will be inadequate to close the orifice. So the product is not appropriate to use more than 16 bar pressure.

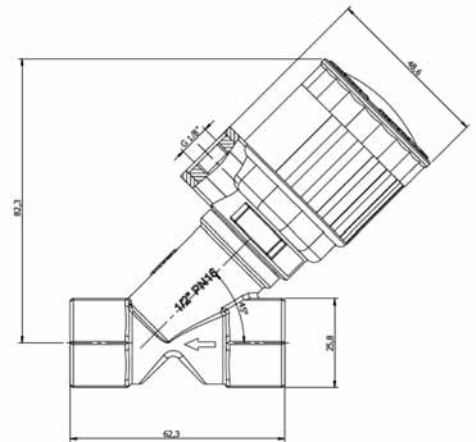
PP1030 series Normally Closed

Connection Size	Operating Pressure bar		Pilot Pressure bar		Control Cylinder mm	KV lt/min	Fluid Temperature °C		Gasket	Weight (kg)
	min	max	min	max			min	max		
1/2"	0	16	4	8	31	70	-10	110	PTFE	0.36

APPLICATION

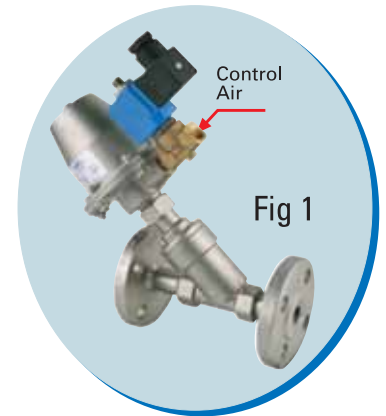
- Water, air, steam
- Gas, natural gas
- Chemicals
- Petroleum products
- Food
- Pharmaceutical products
- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids

- Switching Time : 30-40 ms
- Viscosity of the Fluid : Max. 600mm²/s
- Max. Operating pressure : - 700mbar (For inlet and in Vacuum outlet pressure)
- Material of Actuator : Fibre-glass reinforced polyamide (PAGF30)
- Positioner and Switch : Yes
- Boxd can be mounte
- Connection Type : Threaded or Flanged
- Control Valve : 3/2 TORK solenoid valve
- How should the installation be : Considering the arrow direction on the valve body
- Body : All body AISI 316 stainless steel

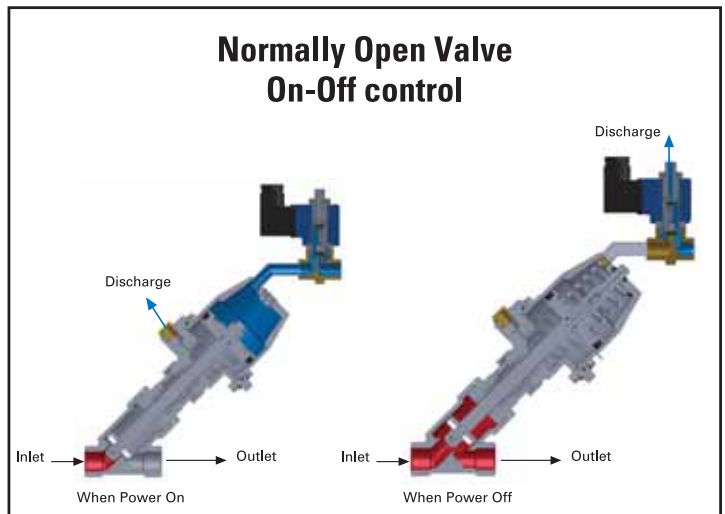
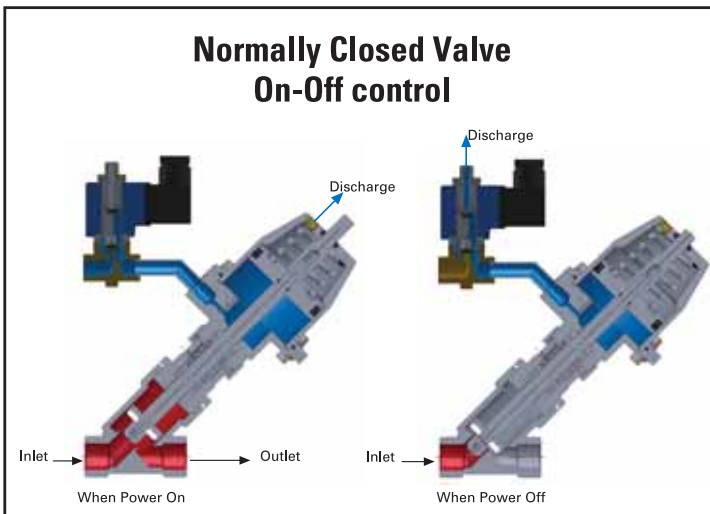




TORK® S1015
1/4" - 3/2" Control Valve



Application Picture



On - Off Control

Pneumatic Actuated Valves need;
a) 1/4" - 3/2 single coil solenoid valve
b) 6 bar filtered compressed air

Normally Closed valve doesn't let fluid pass. It is mounted on the actuator, 1/4" - 3/2 solenoid valve needs 6 bar compressed air to operate (Figure 1). When the coil is energised, compressed air fills the actuator and makes the position of actuator Normally Open (Figure 2) To turn back to the first position it's enough to cut off the coil energy (Figure 1)

Operating Normally Open valve shown on figure 3. Because of being Normally Open, valve lets the fluid pass. When the coil is energised valve will be closed. (Figure 4). To turn back the first position it's enough to cut off the coil energy

Control Solenoid Valves (1/4" - 3/2 TORK® S1015)

Connection Size	Type / Order no	Way	Working Pressure	Coil Voltage and Type
G 1/4"	S1015.01	3/2	0-8 bar	Specify coil voltage

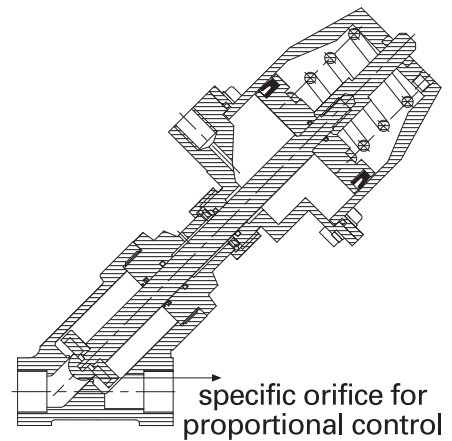
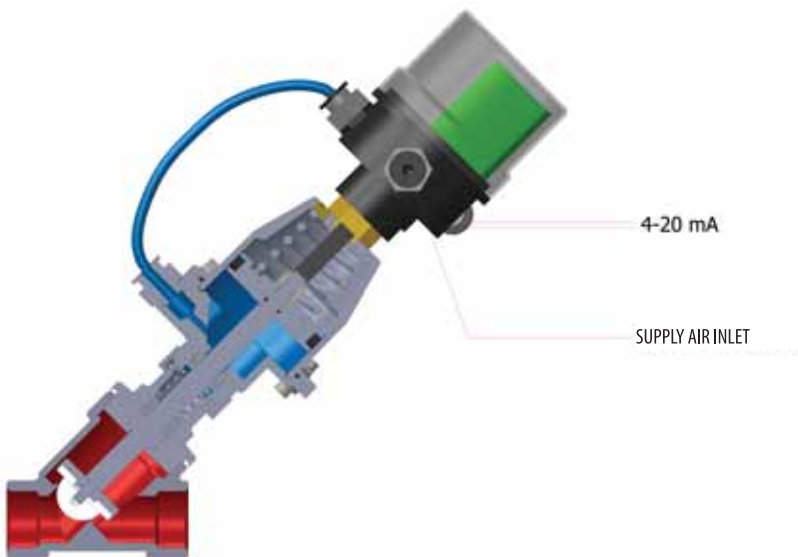
* With order specify solenoid valve type and coil type.



TORK® Angle-Seat Valves can be operated proportionally. Due to proportionally-controlled Angle-Seat Valves have a special seat, please do specify the control type (on-off or proportional) in your order.

Technical Features

- Pilot Air Pressure : 4-8 bar
- Ambient Temperature : 0...50°C
- Electrical Protection : IP66 (EN 60529)
- Voltage Set Point : 0-10 V
- Current Set Point : 4-20 mA
- Supply Voltage : 24 VDC 10%
- Union Connection Dimensions : G 1/8"

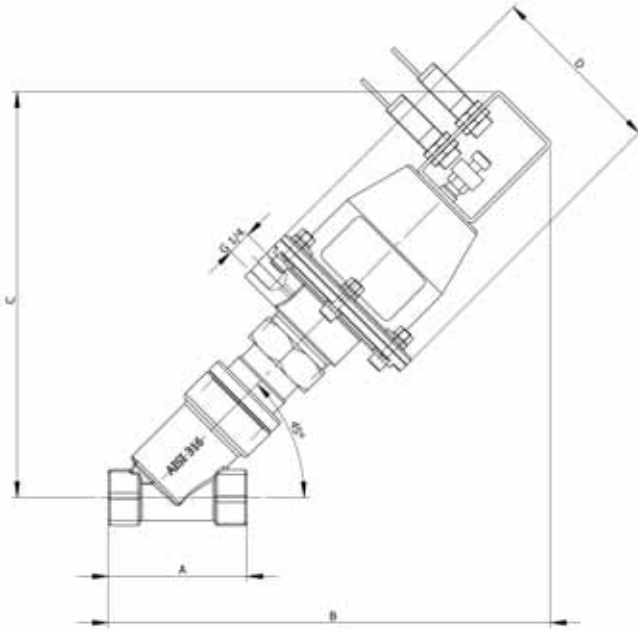


Linear Electro-Pneumatic Positioner is used for proportional control

Type / Order no	Specification	Proportional Valve Type
PP1080 Linear positioner	Input : 4-20 mA 4 - 8 bar compressed air supply	Proportional use should be specified in angle valve orders



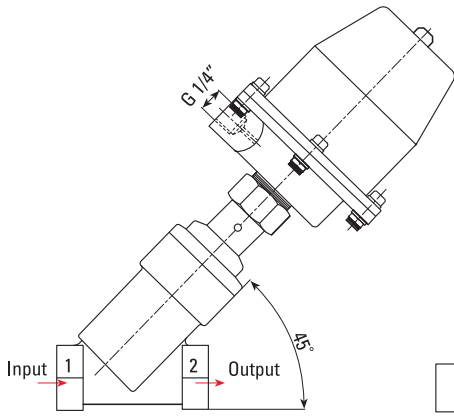
Pistonlu valflerin açık pozisyonlarında ve kapalı pozisyonlarında kontak çıkışı alma istendiğinde, aktüatör kısmının üzerine Şekil C'de görüldüğü gibi sınır şalteri yerleştirilir. Bu şalterler yaklaşım sensörlerinden oluşur



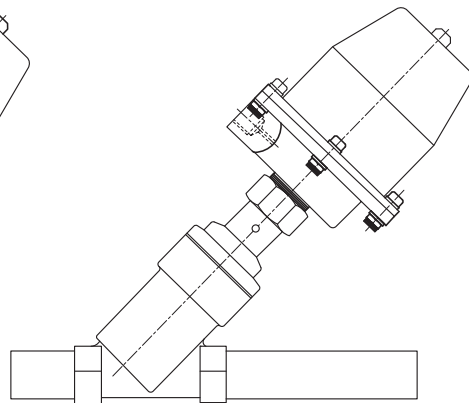
Şekil C 1

Limit Switch Box

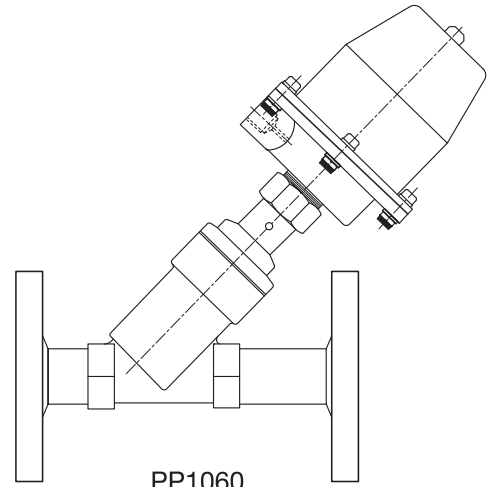
Order Type	Description
PP1092.1P	1 proximity switch
PP1092.2P	2 proximity switches
PP1093.1P	1 Ex-proof proximity switch
PP1093.2P	2 Ex-proof proximity switches



PP1020

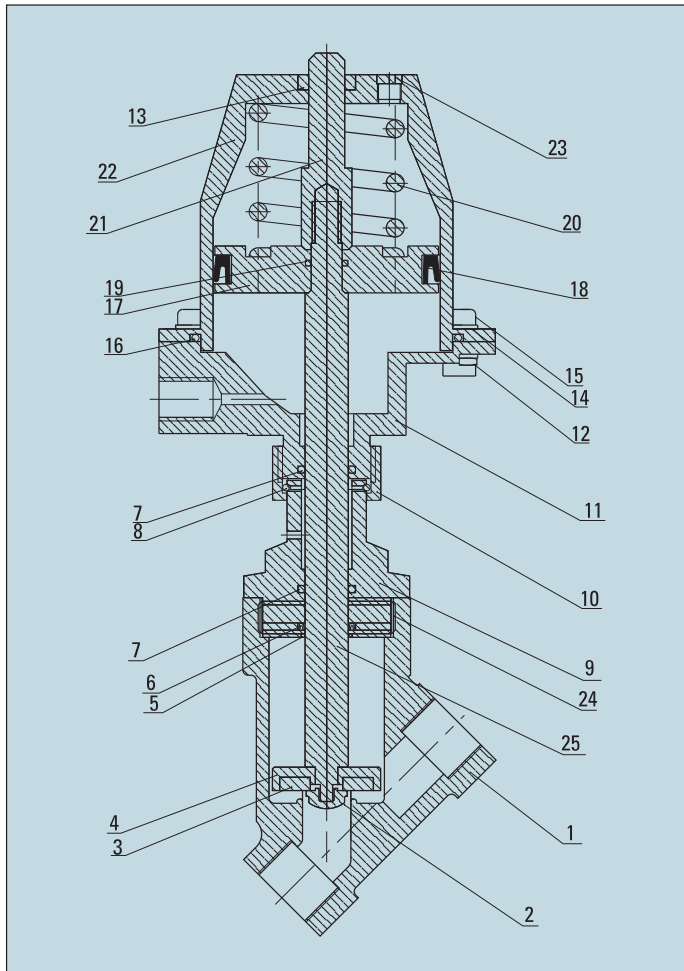


PP1040



PP1060

While ordering spare parts please, specify valve type, size and spare part reference as below fig. S2



- 1- Body
- 2- Nut
- 3- Seal
- 4- Orifice holder
- 5- Seeger
- 6- Springy gasket
- 7- O-ring (FKM)
- 8- Seeger
- 9- Connection part guide
- 10- Adjusting nut
- 11- Cylinder bottom cover
- 12- Nut
- 13- Elastic ring
- 14- Washer
- 15- Cylinder capscrews
- 16- Cylinder O-ring
- 17- Piston
- 18- Piston gasket
- 19- O-ring
- 20- Spring
- 21- Pim
- 22- Cylinder up cover
- 23- Silencer
- 24- Adjusting nut gasket
- 25- Stem

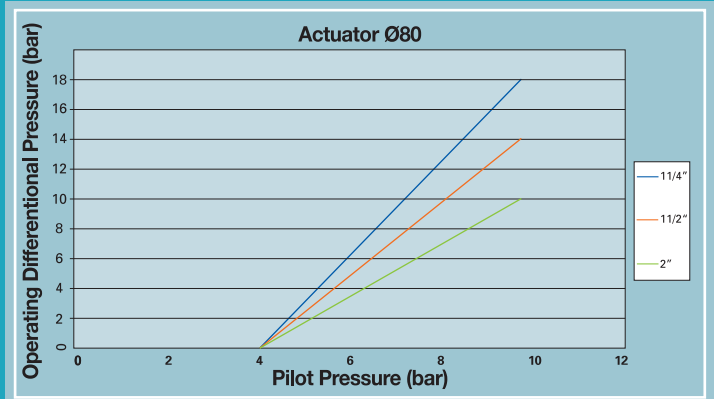
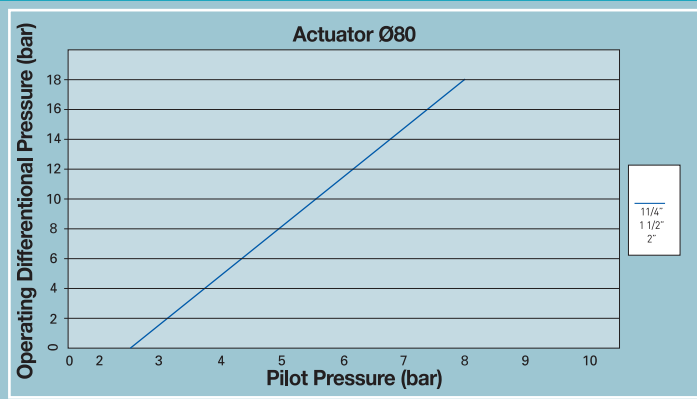
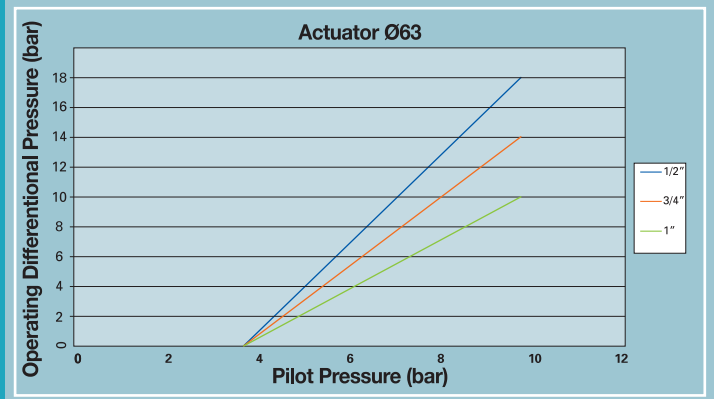
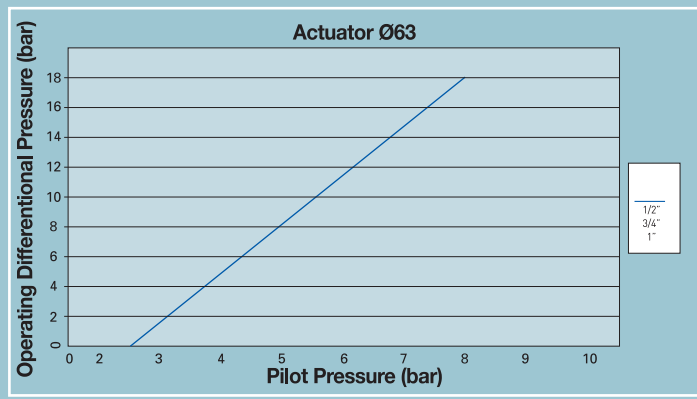
Figure S1

NORMALLY OPEN and CLOSED VALVE WORKING DIAGRAM



Normally Open

Normally Closed



QUALITY CERTIFICATES





YENIKÖY 212 2176655 PVENIG25-12.2013

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Solenoid Valves



Pneumatic Actuators



Angle - Seated Piston Valves



Limit Switch Boxes



Pneumatic Actuated Valves



Electric Actuated Valves



Flow Measuring Instruments



Pressure Measuring Instruments



Level Measuring Instruments



Temperature Measuring Instruments

