

“Fluid Under Control”  
“Akışkan Kontrol Altında”

**TORK**<sup>®</sup>  
valve & automation  
*high quality*



**PNEUMATIC ACTUATED ANGLE SEAT VALVES**  
PNÖMATİK PİSTONLU VALFLER

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

**TSEK**



**Loyd**



**TS EN264 UKSEPRO**

PP

# PNEUMATIC ACTUATED ANGLE SEAT PISTON VALVES

Pnömatik Pistonlu Valfler

# TORK®

2/2 way // 2 yollu

## Description / Genel Bilgi

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



## UYGULAMA

- Su
- Hava
- Buhar
- Gaz
- Kimyasallar
- Petrol Ürünleri
- Gıda
- İlaç Sanayii
- Steril Ortam
- Aritma
- Boyama makinaları
- Ambalaj makinaları
- İçme suyu istasyonları
- Vakum uygulamalı
- Yağ
- Petrol
- Alkol
- Hidrolik yağ
- Tuzlu su
- Doğalgaz
- Asid

## 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

## Pnömatik Pistonlu Valflerin Avantajları

- Glob Vanadan daha az basınç kaybı
- Kısa açma-kapama zamanı
- Yüksek Debi geçirgenliği
- Tüm gövde 316 AISI paslanmaz çelik, hassas döküm
- Dişli bağlantı, standart üretim

## 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

## Teknik Özellikler

- Tip : Pnömatik Piston Vana
- Bağlantı : Dişli (G (BSP)), kaynaklı, Flanşlı
- Pozisyon : Normalde Kapalı / Normalde Açık
- Çalışma Sıcaklığı : -10°C / +180°C
- Max. Çalışma Basıncı : 16 bar, 40 bar
- Önerilen Hava Kontrol Basıncı : 4 - 6 bar
- Kontrol Havası Bağlantısı : 1/4" G
- Gövde : Bütün gövde AISI 316
- Sızdırmazlık Malzemesi : PTFE (istek üzere viton, EPDM)
- İstek üzere : NPT dişli bağlantı
- Yol adedi : İki yollu (2/2)
- Zor şartlarda çalışabilme

PP 1020  
PP 1021

SERIES

**SCREWED CONNECTION  
PNEUMATIC ACTUATED PISTON VALVES**

*Dişli Bağlantılı Pnömatik Pistonlu Valfler*

**TORK®**

**Normally Closed** / **Normalde Kapalı**  
**Normally Open** / **Normalde Açık**

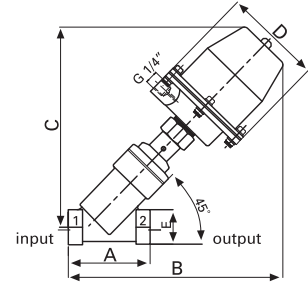


**UYGULAMA**

**APPLICATION**

- Su, hava, buhar
- Gaz
- Kimyasallar
- Petrol Ürünleri
- Gıda
- İlaç Sanayii
- Steril Ortam
- Aritma
- Boyama makinaları
- Ambalaj makinaları
- İçme suyu istasyonları
- Vakum uygulamalı
- Yağ, petrol, alkol
- Hidrolik yağ
- Tuzlu su
- Doğalgaz
- Asid

- 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 / Ölçüler

Type	DN	A	B	C	D	E
Tip	mm Ø	mm	mm	mm	mm	mm
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 / PP1020 serisi Normalde Kapalı

Connection Size	Orifice size	Pressure min / max	Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
					min	max			
G"	mm	bar	Ø	lt/min	°C		PP1020	(kg)	
1/2"	15	16	63	98	-10	180	PTFE	PP1020.03	2.150
3/4"	20	12	63	170	-10	180	PTFE	PP1020.04	2.300
1"	25	8	63	305	-10	180	PTFE	PP1020.05	2.600
1 1/4"	32	12	80	460	-10	180	PTFE	PP1020.06	4.600
1 1/2"	40	8	80	750	-10	180	PTFE	PP1020.07	5.350
2"	50	6	80	1050	-10	180	PTFE	PP1020.08	5.200

PP1021 series Normally Open / PP1021 serisi Normalde Açık

Connection Size	Orifice size	Pressure min / max	Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
					min	max			
G"	mm	bar	Ø	lt/min	°C		PP1021	(kg)	
1/2"	15	2 8	63	98	-10	180	PTFE	PP1021.03	2.150
3/4"	20	2 8	63	170	-10	180	PTFE	PP1021.04	2.300
1"	25	2 8	63	305	-10	180	PTFE	PP1021.05	2.600
1 1/4"	32	2 8	80	460	-10	180	PTFE	PP1021.06	4.600
1 1/2"	40	2 8	80	750	-10	180	PTFE	PP1021.07	5.350
2"	50	2 8	80	1050	-10	180	PTFE	PP1021.08	5.200

PP1070

SERIES

HIGH PRESSURE  
PNEUMATIC ACTUATED PISTON VALVES

Yüksek Basınç Pnömatik Pistonlu Valfler

TORK®

Normally Closed / Normalde Kapalı

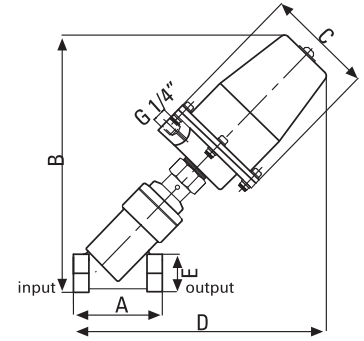


- High pressure max. 40 bar
- Screwed connection

## UYGULAMA

## APPLICATION

• Su	• Water
• Hava	• Air
• Buhar	• Steam
• Gaz	• Gas, natural gas
• Kimyasallar	• Chemicals
• Petrol Ürünleri	• Petroleum products
• Gıda	• Food
• İlaç Sanayii	• Pharmaceutical products
• Steril Ortam	• Sterilization
• Arıtma	• Water treatment
• Boyama makinaları	• Dyeing
• Ambalaj makinaları	• Cleaning plants
• İçme suyu istasyonları	• Aggressive gases and liquids
• Vakum uygulamalı	• Vacuum application
• Yağ	• Oil
• Petrol	• Petrol
• Alkol	• Alcohol
• Hidrolik yağ	• Hydraulic liquids
• Tuzlu su	• Salt solutions
• Doğalgaz	• Hydraulic liquids
• Asid	• Organic solvents
	• Acids



Dimension / Ölçüler

Type	DN		A	B	C	D	E
Tip	mm	Ø	mm	mm	mm	mm	mm
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 / PP1070 serisi Normalde Kapalı

Connection Size	Orifice size	Pressure min / max	Control Cylinder	KV	Fluid Temperature		Seal	Valve Type / Order no	Weight
G"	mm	bar	Ø	lt/min	min	max °C		PP1070	(kg)
1/2"	15	40	80	98	-10	180	PTFE	PP1070.03	3.350
3/4"	20	30	80	170	-10	180	PTFE	PP1070.04	3.580
1"	25	20	80	305	-10	180	PTFE	PP1070.05	4.050

PP1040  
PP1041

SERIES

**WELDING CONNECTION**  
**PNEUMATIC ACTUATED PISTON VALVES**  
*Kaynak Bağlantılı Pnömatik Pistonlu Valfler*

**TORK®**

**Normally Closed** *Normalde Kapalı*  
**Normally Open** *Normalde Açık*

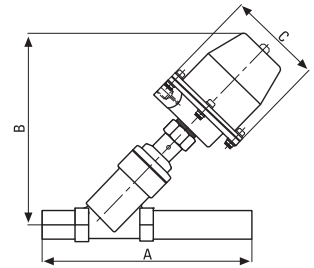


**UYGULAMA**

**APPLICATION**

- Su, hava, buhar
- Gaz
- Kimyasallar
- Petrol Ürünleri
- Gıda
- İlaç Sanayii
- Steril Ortam
- Aritma
- Boyama makinaları
- Ambalaj makinaları
- İçme suyu istasyonları
- Vakum uygulamalı
- Yağ, petrol, alkol
- Hidrolik yağ
- Tuzlu su
- Doğalgaz
- Asid

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- Food
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- Sterilization
- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids



Dimension / Ölçüler

Type	DN	A	B	C
Tip	mm Ø	mm	mm	mm
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 / PP1040 serisi Normalde Kapalı

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

PP1041 series Normally Open / PP1041 serisi Normalde Açık

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

PP1060  
PP1061

SERIES

**FLANGED CONNECTION  
PNEUMATIC ACTUATED PISTON VALVES**

*Flanş Bağlantılı Pnömatik Pistonlu Valfler*

**TORK®**

**Normally Closed** / **Normalde Kapalı**  
**Normally Open** / **Normalde Açık**

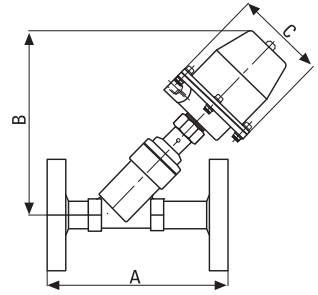


**UYGULAMA**

**APPLICATION**

- Su, hava, buhar
- Gaz
- Kimyasallar
- Petrol Ürünleri
- Gıda
- İlaç Sanayii
- Steril Ortam
- Aritma
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- Ambalaj makinaları
- İçme suyu istasyonları
- Vakum uygulamalı
- Yağ, petrol, alkol
- Hidrolik yağ
- Tuzlu su
- Doğalgaz
- Asid

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- Water treatment
- Dyeing
- Cleaning plants
- Aggressive gases and liquids
- Vacuum application
- Oil, petrol, alcohol
- Hydraulic liquids
- Salt solutions
- Organic solvents
- Acids



Dimension / Ölçüler

Type	DN		A	B	C
Tip	mm	Ø	mm	mm	mm
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 / PP1060 serisi Normalde Kapalı

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

PP1061 series Normally Open / PP1061 serisi Normalde Açık

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

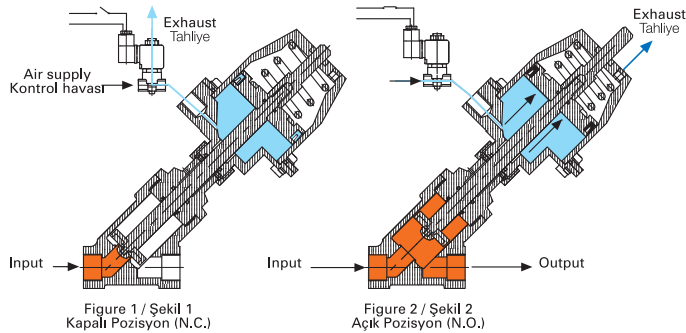


TORK® S1015  
1/4" - 3/2" Control Valve

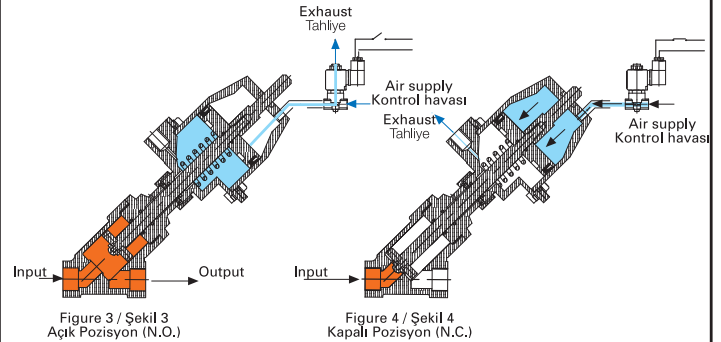


Application Picture  
Uygulama Resmi

**Normally Closed Valve / Normalde Kapalı Valf**  
**On-Off control**



**Normally Open Valve / Normalde Açık Valf**  
**On-Off control**



**On - Off Control**

- Pneumatic Actuated Valves need;
- 1/4" - 3/2 single coil solenoid valve
  - 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

**Açık - Kapalı Kontrol**

- TORK® Pnömatik Piston Vanalar, on-off kontrol için gerekli olanlar;
- 1/4" - 3/2 tek bobinli solenoid vana
  - 6 bar filtre edilmiş basınçlı hava

**Vana Normalde Kapalı** pozisyonda akışkanın geçmesine müsaade etmez. Vananın aktüatörü üzerine bağlanan 1/4" - 3/2 solenoid vana, 6 bar basınçlı hava ile beslenir (şekil 1). Solenoid vana'nın bobinine elektrik enerjisi verildiğinde basınçlı hava, aktüatörün içine girer ve vanayı Normalde Açık pozisyonuna getirir (Şekil 2). Bobin üzerinden enerji kesilince, valf ilk pozisyonuna geri döner. Normalde Kapalı (Şekil 1)

Şekil 3'de **Normalde Açık vana** çalışması görülmektedir. Vana ilk pozisyonda açık olduğundan akışkanın geçmesine müsaade eder. Bobin enerjilenir ve valf kapanır (Şekil 4). Elektrik enerjisi kesilince vana şekil3'deki pozisyona döner.

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

Connection Size	Type / Order no	Way	Working Pressure	Coil Voltage and Thype
G 1/4"	S1015.01	3/2	0-12 bar	Specify coil voltage

\* With order specify solenoid valve type and coil type (siparişte valf tipini belirtiniz.)

## PROPORTIONAL CONTROL OPTION

### Pnömatik Piston Valflerde Oransal Kontrol Şekli

# TORK®

TORK® pnömatik pistonlu vanalar oransal kontrol edilebilir. Oransal vanalarda orifisi kapatan mil siti özel bir formda yapılır. Bu nedenle siparişlerde vananın oransal kullanılacağı belirtilmelidir.

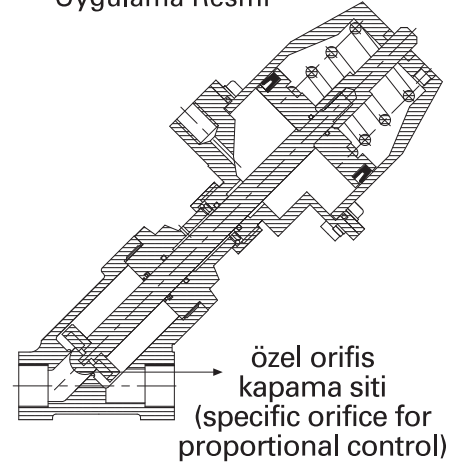


Linear Positioner  
Air Supply: 4-6 bar  
Input : 4-20 mA



Fig A / Şekil A

Application Picture  
Uygulama Resmi



özel orifis kapama sitesi  
(specific orifice for proportional control)

Linear Electro-Pneumatic Positioner is used for proportional control

Type / Order no	Specification	Proportional Valve Type
PP1080	In-put : 4-20 mA 4 - 6 bar compressed air supply	Siparişte Pistonlu Valflerin Oransal kullanılacağı belirtilmelidir.

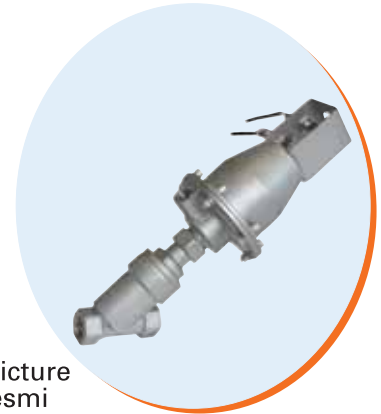
## LIMIT SWITCH BOX OPTION

### Sınır Şalteri Montajlı Pnömatik Pistonlu Valfler

# TORK®



Fig C 1 / Şekil C 1



Application Picture  
Uygulama Resmi

Fig C / Şekil C

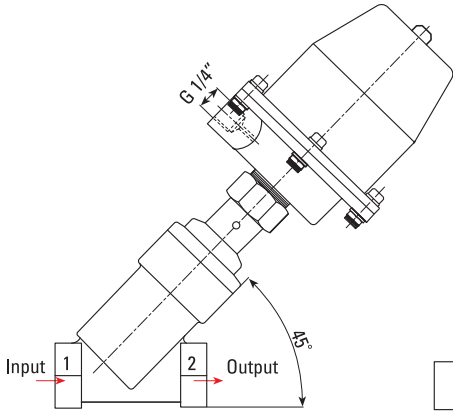
When you need to get a signal for opened and closed positions, limit switches (proximity sensors) have to be mounted on the actuator part as shown on fig. C

*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*

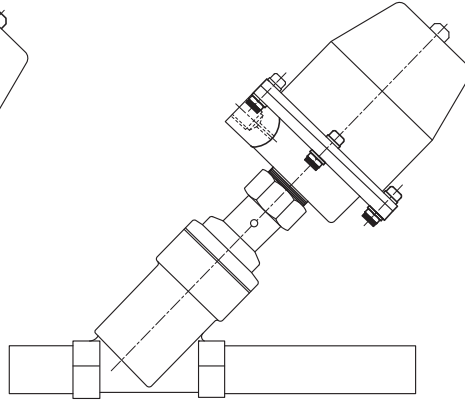
### Limit switch box

Order type Sip. No	Description / Açıklama
PP1092.1P	1 proximity switch 1 adet proximity switch
PP1092.2P	2 proximity switches 2 adet proximity switch
PP1093.1P	1 Ex-proof proximity switch 1 adet Ex-proof proximity switch
PP1093.2P	2 Ex-proof proximity switches 2 adet Ex-proof proximity switch

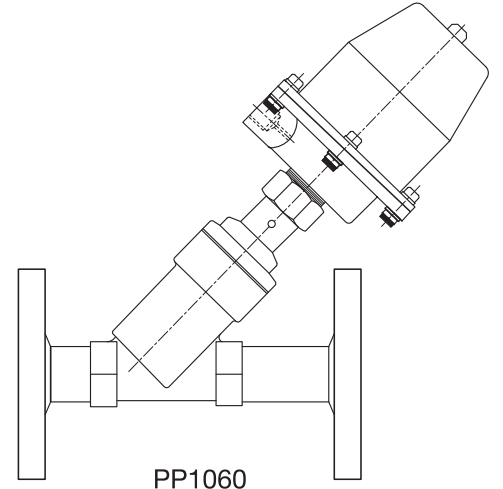




PP1020



PP1040

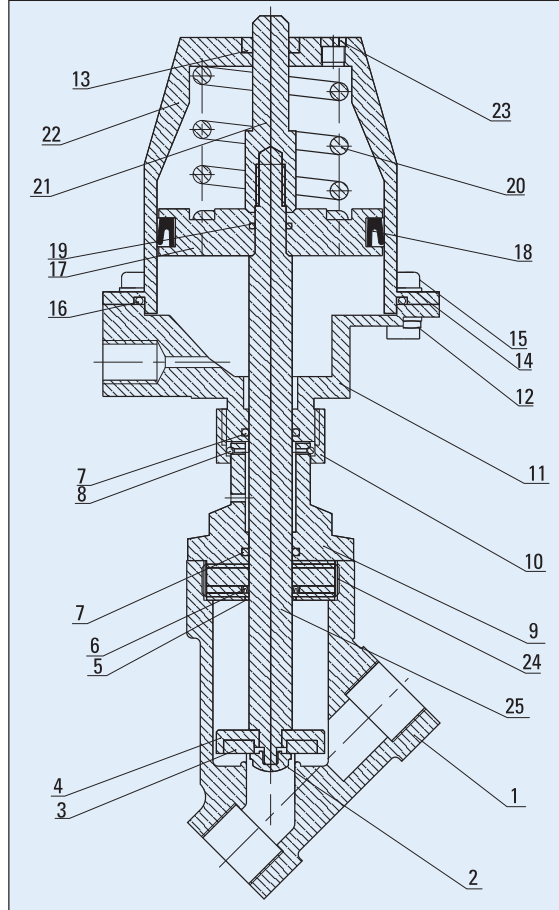


PP1060

Yedek parça siparişlerinde vana tip numarası, ölçüsü ve parça adı ve numarasını belirtiniz Şekil 2.

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

- 1- Gövde
- 2- Kör somun
- 3- Conta (PTFE)
- 4- Orifis basıcısı
- 5- Yaylı segman
- 6- Yaylı conta (PTFE)
- 7- O-ring (FKM)
- 8- Yaylı segman
- 9- Ara bağlantı
- 10- Ayarlama somunu
- 11- Silindirik kapak
- 12- Somun
- 13- Elastik ring
- 14- Rondela
- 15- Silindir cıvatası
- 16- Silindir O - ring
- 17- Piston
- 18- Piston nutril
- 19- O - ring(NBR)
- 20- Yay
- 21- Saplama
- 22- Silindir
- 23- Susturucu
- 24- Ayarlama Somunu Contası(PTFE)
- 25- Mil



- 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- Nut
- 12- O-ring
- 14- Washer
- 15- Cylinder capscrews
- 16- Cylinder O-ring
- 17- Piston
- 18- Piston gasket
- 19- O-ring
- 20- Spring
- 21- Pim
- 22- Cylinder
- 23- Silencer
- 24- Adjusting nut gasket
- 25- Stem

Figure S1 / Şekil S1

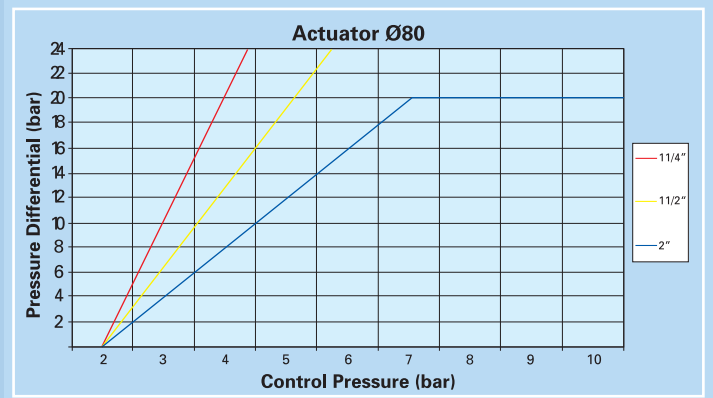
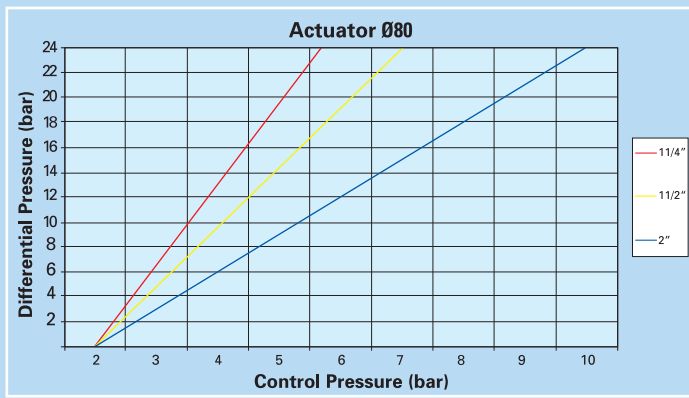
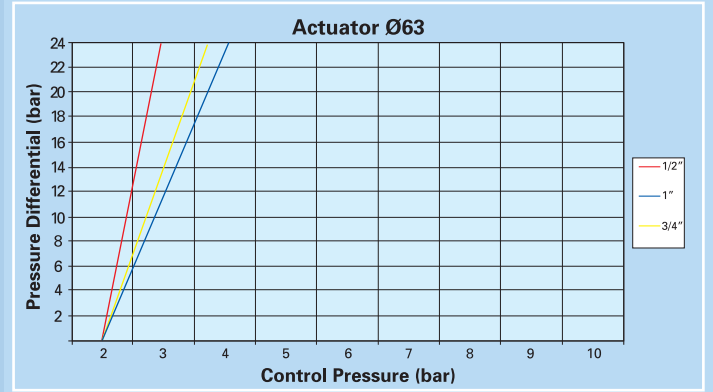
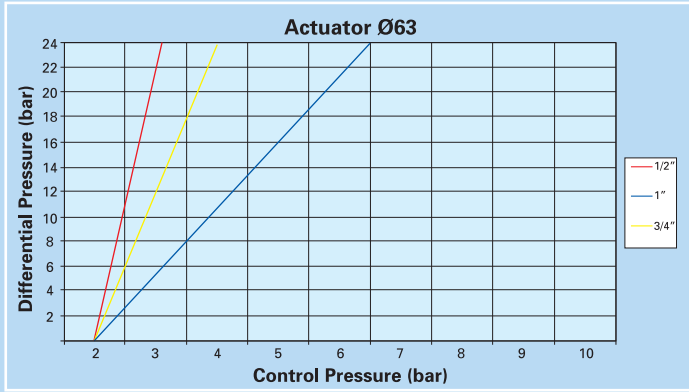
# NORMALLY OPEN and CLOSED VALVE WORKING DIAGRAM

# TORK®

## Normalde Açık ve Kapalı Çalışma Diagramı

### Normally Open / Normalde Açık

### Normally Closed / Normalde Kapalı



## QUALITY CERTIFICATES

### Kalite Belgeleri

# TORK®





VENIKOV 212 2110005 / 02. 2010

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AUSTRALIA  
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Pneumatic Actuators



Angle-Seated Plug Valves



Limit Switch Boxes



Pneumatic Actuated Valves



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Flow Measuring Instruments



Pressure Measuring Instruments



Level Measuring Instruments



Temperature Measuring Instruments

