



## Y-type Angle Seat Valve

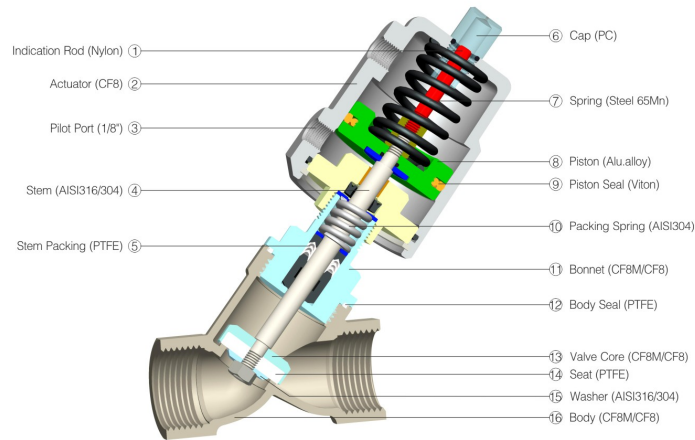
100 Series Threaded Angle Seat Valve



100 Series Welded Angle Seat Valve



100 Series Tri-clamp Angle Seat Valve



100 Series Flanged Angle Seat Valve with Round Bonnet



100 Series Flanged Angle Seat Valve with Square Bonnet



### Technical Specification

- Operating pressure: 0–16bar (0–232psi)
- Control pressure: 3–8bar (43.5–116psi)
- Control fluid: Filtered compressed air or neutral gas
- Body material: CF8/CF8M/CF3M and other special materials
- Seal material: PTFE
- Actuator material: CF8 (40mm–90mm Actuator), AL (125mm Actuator)
- Actuator size: 40mm, 50mm, 63mm, 90mm, 125mm
- Applicable fluid: Water, Alcohol, Oil, Fuel, Steam, Neutral gas or Liquid, Organic solvent, Acid and lye
- Fluid viscosity: Max 600mm<sup>2</sup>/s
- Fluid temperature: –10°C — +180°C  
+25°C — +220°C
- Ambient temperature: –10°C — +80°C
- Control type: Single acting normally closed, Single acting normally open, Double acting normally closed, Double acting without spring
- Connection type: Threaded, Welded, Flanged, Tri-clamp
- Leakage class: DIN EN 12266 Class A

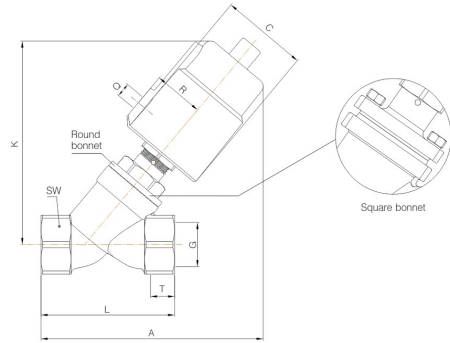
### Advantages

1. Large flux, low resistance, prevent water-hammer.
2. Y-type raises flux by 30% and make flow more smooth.
3. Long working life.
4. The stem adjusts and lubricates itself automatically, minimizing needs for maintenance.
5. The stainless steel actuator can be rotated 360° for flexiable uses.

### Function Principle

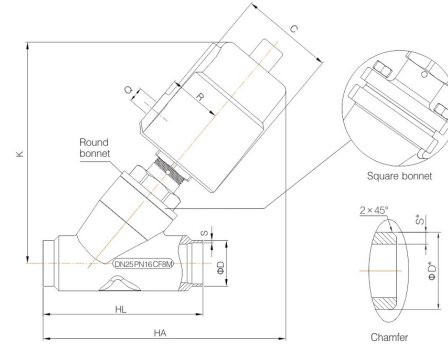
Valve stays closed(open) by spring force in its normal state. When piston is actuated by compressed air, valve becomes opened(closed). For double acting type, valve is opened and closed by compressed air.

**Y-type Angle Seat Valve**



Main Dimension (Threaded Connection)

Size	Actuator (mm)	Q	C	R	K	G	T	A	L	SW
DN8	40	1/8"	50.5	27	112	1/4"	12	124	68	27
	50	1/8"	60	33	125			135		
DN10	40	1/8"	50.5	27	112	3/8"	12	124	68	27
	50	1/8"	60	33	125			135		
DN15	40	1/8"	50.5	27	112	1/2"	15	124	68	27
	50	1/8"	60	33	125			135		
DN20	40	1/8"	60	33	132	3/4"	16	140	75	32
	50	1/8"	60	33	136			150		
DN25	63	1/8"	75	41	162	1"	17	172	90	40
	90	1/8"	75	41	174			190		
DN32	63	1/8"	75	41	174	1 1/4"	21	190	116	50
	90	1/8"	106	55	223			235		
DN40	63	1/8"	75	41	175	1 1/2"	21	190	116	56
	90	1/8"	106	55	223			235		
DN50	63	1/8"	75	41	183	2"	22	205	138	69
	90	1/8"	106	55	232			250		
DN65 Square bonnet	125AL	1/4"	170	85	300	2 1/2"	26	305	178	85
	90	1/8"	106	55	290			275		
DN80 Square bonnet	125AL	1/4"	170	85	330	3"	27	320	210	100
	90	1/8"	106	55	355			340		



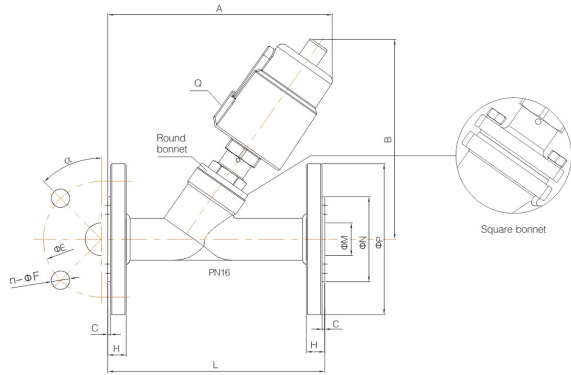
Main Dimension (Welded Connection)

Size	Actuator (mm)	Q	C	R	K	HA	HL	Chamfer		DIN11850-2		DIN11850-3	
								φ D*	S*	φ D	S	φ D	S
DN15	40	1/8"	50.5	27	112	118	70	22	3.5	19	1.5	20	2
	50	1/8"	60	33	125	128							
DN20	50	1/8"	60	33	132	135	82	29	5	23	1.5	24	2
	50	1/8"	60	33	136	150							
DN25	63	1/8"	75	41	162	175	100	35	5	29	1.5	30	2
	63	1/8"	75	41	174	186							
DN32	90	1/8"	106	55	223	232	125	39	4	35	1.5	36	2
	63	1/8"	75	41	175	190							
DN40	90	1/8"	106	55	223	235	130	45	4.5	41	1.5	42	2
	63	1/8"	75	41	183	206							
DN50	90	1/8"	106	55	232	250	155	57	4	53	1.5	54	2
	125AL	1/4"	170	85	300	307							
DN65 Square bonnet	90	1/8"	106	55	280	320	270	75	5	70	2	-	-
	125AL	1/4"	170	85	330	360						-	-
DN80 Square bonnet	90	1/8"	106	55	355	360	284	90	5.5	85	2	-	-
	125AL	1/4"	170	85	355	360						-	-

Note: \* designates design dimension (the actual dimension may vary)



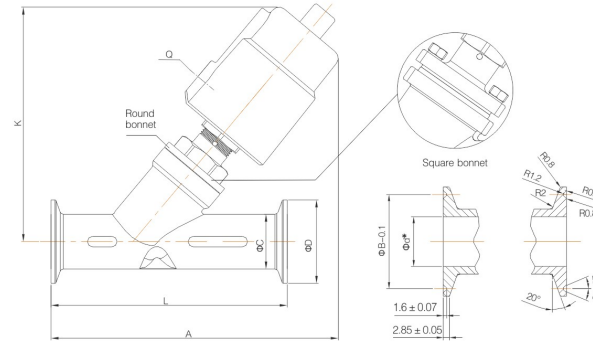
## Y-type Angle Seat Valve



Flange specification: DIN2543/DIN2576/EN1092-1/HG20592; ISO/ANSI/DIN/JIS customization available.

### Main Dimension (Flange Connection)

Size	Actuator (mm)	Q	A	B	L	C	H	ΦE	n-ΦF	ΦM	ΦN	ΦP	α
DN15	40	1/8"	135	125	130	2	14	65	4-14	16	45	95	45°
	50		145	140									
DN20	50	1/8"	165	140	150	2	14	75	4-14	19	56	105	45°
	63		170	145									
DN25	63	1/8"	190	175	160	2	14	85	4-14	26	65	115	45°
	63		190	188									
DN32	90	1/8"	230	235	180	2	16	100	4-18	31	78	140	45°
	63		190	188									
DN40	90	1/8"	206	190	200	3	16	110	4-18	38	84	150	45°
	63		235	195									
DN50	90	1/8"	277	245	230	3	16	125	4-18	54	100	165	45°
	125AL		330	310									
DN65 Square bonnet	90	1/8"	330	280	290	3	18	145	4-18	71	120	185	45°
DN80 Square bonnet	125AL	1/4"	375	330									
DN80 Square bonnet	125AL	1/4"	390	355	310	3	20	160	8-18	84	135	200	22.5°
DN100 Square bonnet	125AL	1/4"	420	395									
DN100 Square bonnet	125AL	1/4"	420	395	350	3	20	180	8-18	96	155	215	22.5°



Clamp Specification: ISO 2852; customization available.

### Main Dimension (Tri-clamp Connection)

Size	Actuator (mm)	Q	A	K	L	ΦC	ΦB	Φd*	ΦD
DN15	40	1/8"	130	115	80	20.5	27.5	15	34
	50	1/8"	140	126					
DN20	50	1/8"	158	148	130	25	43.5	19	50.5
	63	1/8"	165	140					
DN25	63	1/8"	188	166	130	32	43.5	27	50.5
	63	1/8"	200	174					
DN32	90	1/8"	245	223	146	37	43.5	31	50.5
	63	1/8"	210	175					
DN40	90	1/8"	255	223	160	40	56.5	34	64
	63	1/8"	221	185					
DN50	90	1/8"	265	235	175	53	56.5	45	64
	125AL	1/4"	325	296					
DN65 Square bonnet	90	1/8"	325	280	278	75	83.5	65	91
	125AL	1/4"	360	330					
DN80 Square bonnet	125AL	1/4"	360	352	290	89.5	97	78.5	106

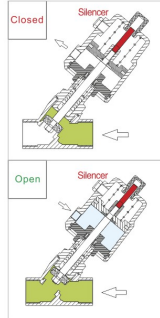
Note: \* designates design dimension (the actual dimension may vary)



## Y-type Angle Seat Valve

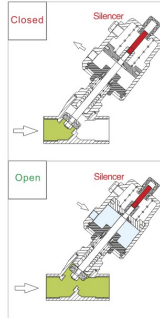
### Single Acting, Normally Closed (NC)-Enter Above Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)		
DN8	G1/4"	9.5	1.8	28	0-1.0	0.5-0.7		
		13	2.2	40	0-1.6	0.4-0.45		
		50		50	0-1.6	0.35-0.4		
DN10	G3/8"	9.5	2.2	28	0-1.0	0.5-0.7		
		13	3.9	40	0-1.6	0.4-0.45		
		50		50	0-1.6	0.35-0.4		
DN15	G1/2"	9.5	2.2	28	0-1.0	0.5-0.7		
		13	4.3	40	0-1.6	0.4-0.45		
		50		50	0-1.6	0.35-0.4		
DN20	G3/4"	18	7.6	50	0-1.6	0.35-0.5		
		DN25	G1"	24	15.8	50	0-1.6	0.35-0.55
				63		63	0-1.6	0.3-0.4
90				90	0-1.6	0.3-0.55		
DN32	G1 1/4"	31	26.0	63	0-1.6	0.3-0.4		
		DN40	G1 1/2"	35	32.0	63	0-1.6	0.3-0.7
				90		90	0-1.6	0.3-0.4
125				125	0-0.9	0.3-0.7		
DN50	G2"	45	52.0	90	0-1.6	0.3-0.45		
		DN65	G2 1/2"	61	83.2	125	0-1.6	0.3-0.4
				DN80	G3"	80	119	125
125						125	0-1.0	0.3-0.6
125		125	0-1.6			0.3-0.4		



### Single Acting, Normally Closed (NC)-Enter Below Seat (Minimize water-hammer)

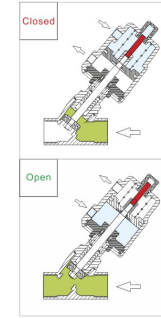
Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)		
DN8	G1/4"	9.5	1.8	28-A	0-1.0	≥0.5		
		13	2.2	40-A	0-1.3	≥0.4		
		50-A	0-1.4	≥0.45				
DN10	G3/8"	9.5	2.2	28-A	0-1.0	≥0.5		
		13	3.9	40-A	0-1.3	≥0.4		
		50-A	0-1.4	≥0.45				
DN15	G1/2"	9.5	2.2	28-A	0-1.0	≥0.5		
		13	4.3	40-A	0-1.3	≥0.4		
		50-A	0-1.4	≥0.45				
DN20	G3/4"	18	7.6	50-A	0-1.4	≥0.45		
		DN25	G1"	24	15.8	50-A	0-0.8	≥0.45
				63-A	0-1.3	≥0.5		
63-B	0-0.8			≥0.3				
DN32	G1 1/4"	31	26.0	63-A	0-0.6	≥0.5		
		90-A	0-1.6	≥0.6				
		90-B	0-1.3	≥0.45				
DN40	G1 1/2"	35	32.0	63-A	0-0.5	≥0.5		
		90-A	0-1.6	≥0.6				
		90-B	0-1.1	≥0.45				
DN50	G2"	45	52.0	63-A	0-0.2	≥0.5		
		90-A	0-1.0	≥0.6				
		90-B	0-0.7	≥0.45				
DN65	G2 1/2"	61	83.2	125-A	0-1.6	≥0.55		
		125-B	0-1.1	≥0.45				
		90-A	0-0.5	≥0.6				
DN80	G3"	80	119	90-B	0-0.2	≥0.45		
		125-A	0-0.9	≥0.55				
		125-B	0-0.6	≥0.45				
DN100	G4"	90	132	125-D	0-0.5	≥0.35		
		125-A	0-0.5	≥0.55				
		125-B	0-0.3	≥0.45				



Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

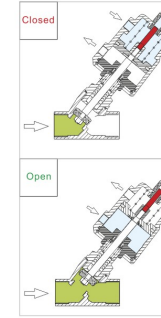
### Double Acting, Normally Closed (NC)-Enter Above Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)				
DN8	G1/4"	13	2.2	40	0-1.6	0.4-0.45				
				50	0-1.6	0.35-0.4				
				50	0-1.6	0.35-0.4				
DN10	G3/8"	13	3.9	40	0-1.6	0.4-0.45				
				50	0-1.6	0.35-0.4				
				50	0-1.6	0.35-0.4				
DN15	G1/2"	13	4.3	40	0-1.6	0.4-0.45				
				50	0-1.6	0.35-0.4				
				50	0-1.6	0.35-0.5				
DN20	G3/4"	18	7.6	50	0-1.6	0.35-0.5				
				DN25	G1"	24	15.8	50	0-1.6	0.35-0.55
						63		63	0-1.6	0.3-0.4
90		90	0-1.6			0.3-0.55				
DN32	G1 1/4"	31	26.0	63	0-1.6	0.3-0.55				
				DN40	G1 1/2"	35	32.0	63	0-1.6	0.3-0.7
						90		90	0-1.6	0.3-0.4
125		125	0-1.6			0.3-0.7				
DN50	G2"	45	52.0	90	0-1.6	0.3-0.45				
				DN65	G2 1/2"	61	83.2	125	0-1.6	0.3-0.4
						DN80	G3"	80	119	125
125		125	0-1.6					0.3-0.4		
125		125	0-1.2	0.3-0.7						



### Double Acting, Normally Closed (NC)-Enter Below Seat (Minimize water-hammer)

Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)				
DN8	G1/4"	13	2.2	40	0-1.6	≥0.4				
				50	0-1.6	≥0.35				
				50	0-1.6	≥0.4				
DN10	G3/8"	13	3.9	40	0-1.6	≥0.4				
				50	0-1.6	≥0.35				
				50	0-1.6	≥0.4				
DN15	G1/2"	13	4.3	40	0-1.6	≥0.4				
				50	0-1.6	≥0.35				
				50	0-1.6	≥0.35				
DN20	G3/4"	18	7.6	50	0-1.3	≥0.35				
				DN25	G1"	24	15.8	50	0-1.3	0.3-0.6
						63		63	0-1.6	0.3-0.4
90		90	0-1.6			0.3-0.6				
DN32	G1 1/4"	31	26.0	63	0-1.6	0.3-0.6				
				DN40	G1 1/2"	35	32.0	90	0-1.6	0.3-0.4
						90		90	0-1.6	0.3-0.7
125		125	0-1.6			0.3-0.5				
DN50	G2"	45	52.0	63	0-0.8	0.3-0.75				
				DN65	G2 1/2"	61	83.2	90	0-1.6	0.3-0.6
						125		125	0-1.6	0.3-0.4
90		90	0-1.1			0.3-0.7				
DN80	G3"	80	119	125	0-1.6	0.3-0.55				
				DN100	G4"	90	132	125	0-1.6	0.3-0.7
						125		125	0-1.2	0.4-0.6



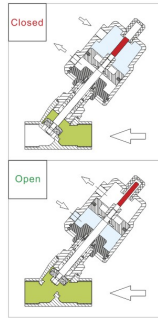
Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range



## Y-type Angle Seat Valve

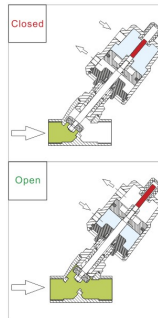
### Double Acting Without Spring—Enter Above Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)
DN8	G1/4"	13	2.2	40	0-1.6	0.3-0.45
				50	0-1.6	0.3-0.35
DN10	G3/8"	13	3.9	40	0-1.6	0.3-0.45
				50	0-1.6	0.3-0.35
DN15	G1/2"	13	4.3	40	0-1.6	0.3-0.45
DN20	G3/4"	18	7.6	50	0-1.6	0.3-0.4
				50	0-1.6	0.3-0.45
DN25	G1"	24	15.8	63	0-1.6	0.3-0.35
DN32	G1 1/4"	31	26.0	63	0-1.6	0.3-0.55
				90	0-1.6	0.3-0.4
DN40	G1 1/2"	35	32.0	63	0-1.6	0.3-0.65
				90	0-1.6	0.3-0.4
DN50	G2"	45	52.0	63	0-1.0	0.3-0.7
				90	0-1.6	0.3-0.45
DN65	G2 1/2"	61	83.2	125	0-1.6	0.3-0.4
				90	0-1.0	0.3-0.6
DN80	G3"	80	119	125	0-1.6	0.3-0.4
				125	0-1.2	0.3-0.7



### Double Acting Without Spring—Enter Below Seat (Minimize water-hammer)

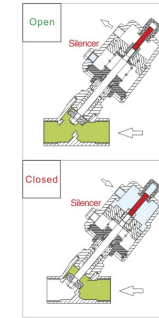
Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)
DN8	G1/4"	13	2.2	40	0-1.6	0.3-0.4
				50	0-1.6	0.3-0.4
DN10	G3/8"	13	3.9	40	0-1.6	0.3-0.4
				50	0-1.6	0.3-0.4
DN15	G1/2"	13	4.3	40	0-1.6	0.3-0.4
DN20	G3/4"	18	7.6	50	0-1.6	0.3-0.4
				50	0-1.6	0.3-0.65
DN25	G1"	24	15.8	63	0-1.6	0.3-0.55
DN32	G1 1/4"	31	26.0	63	0-1.6	0.3-0.7
				90	0-1.6	0.3-0.45
DN40	G1 1/2"	35	32.0	63	0-1.2	0.3-0.75
				90	0-1.6	0.3-0.5
DN50	G2"	45	52.0	63	0-0.4	0.3-0.75
				90	0-1.6	0.3-0.6
DN65	G2 1/2"	61	83.2	125	0-1.6	0.3-0.4
				90	0-1.0	0.3-0.75
DN80	G3"	80	119	125	0-1.6	0.3-0.6
DN100	G4"	90	132	125	0-0.8	0.3-0.75



Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range

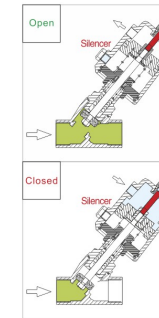
### Normally Open(NO)—Enter Above Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)
DN8	G1/4"	13	2.2	40	0-1.6	≥0.3
				50	0-1.6	≥0.3
DN10	G3/8"	13	3.9	40	0-1.6	≥0.3
				50	0-1.6	≥0.3
DN15	G1/2"	13	4.3	40	0-1.6	≥0.3
DN20	G3/4"	18	7.6	50	0-1.6	≥0.3
				50	0-1.2	≥0.3
DN25	G1"	24	15.8	50	0-0.3	≥0.3
DN32	G1 1/4"	31	26.0	63	0-1.6	≥0.45
				63	0-1.4	≥0.45
DN40	G1 1/2"	35	32.0	63	0-1.4	≥0.45
DN50	G2"	45	52.0	63	0-0.6	≥0.45



### Normally Open(NO)—Enter Below Seat (Minimize water-hammer)

Size	Thread end	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Actuator (mm)	Differential pressure range P(MPa)	Control pressure (MPa)
DN8	G1/4"	13	2.2	40	0-1.6	0.3-0.5
				50	0-1.6	0.3-0.4
DN10	G3/8"	13	3.9	40	0-1.6	0.3-0.5
				50	0-1.6	0.3-0.4
DN15	G1/2"	13	4.3	40	0-1.6	0.3-0.5
DN20	G3/4"	18	7.6	50	0-1.6	0.3-0.4
				50	0-1.6	0.3-0.6
DN25	G1"	24	15.8	63	0-1.3	0.3-0.6
DN32	G1 1/4"	31	26.0	63	0-1.6	0.3-0.5
				63	0-0.7	0.3-0.6
DN40	G1 1/2"	35	32.0	90	0-1.6	0.3-0.45
				63	0-0.5	0.3-0.6
DN50	G2"	45	52.0	90	0-1.2	0.3-0.6
				90	0-1.2	0.3-0.6
DN65	G2 1/2"	61	83.2	90	0-0.75	0.3-0.6
				125	0-1.4	0.3-0.7
DN80	G3"	80	119	125	0-1.2	0.3-0.7



Note: In order to ensure product performance, it is recommended to select product according to the highest value in the <= 90% pressure range



## Y-type Angle Seat Valve

Angle Seat Valve with Proximity Switch



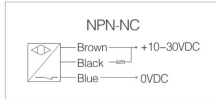
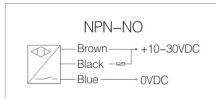
### Proximity Switch

Proximity switch can be mounted on angle seat valves of all sizes to monitor and feedback open state of the valve.

### Technical Specification

- Operating pressure: 10–30V DC
- Protection class: IP67
- Detection distance: 3mm ± 10% (Customization available)
- Temperature range: -25°C — +70°C
- Enclosure material: brass nickel plating
- Probe material: ABS
- Leakage class: DIN EN 12266 Class A

### Output signal



Angle Seat Valve with Solenoid Valve



### Solenoid Valve

Apply to angle seat valve with any aperture size. Connect to 5/2 or 3/2 way solenoid valve.

### Technical Specification

- Applicable Medium: Air (Filtered by 40µm mesh)
- Protection level: IP65
- Connection type: G1/8"
- Power: 24V DC or 220V AC
- Air pressure: 1.5–8bar (22–116psi)
- Temperature range: -5°C — +50°C
- Leakage class: DIN EN 12266 Class A

Angle Seat Valve with Manual Override



### Manual Override

It can adjust piston position, restrict travel, and regulate flow. Applicable to all types of angle seat valves. It can be used for emergency control, in case of lack of control fluids or electrical/mechanical failure.

### Technical Specification

- Handwheel material: Die-casted Aluminum
- Control type: Single acting normally closed
- Leakage class: DIN EN 12266 Class A
- Suitable for 40/50/63/90mm actuator

Angle Seat Valve with Position Indicator



### Position Indicator

Position Indicator can be mounted on angle seat valves of all sizes to monitor and feedback both open and close states of the valve.

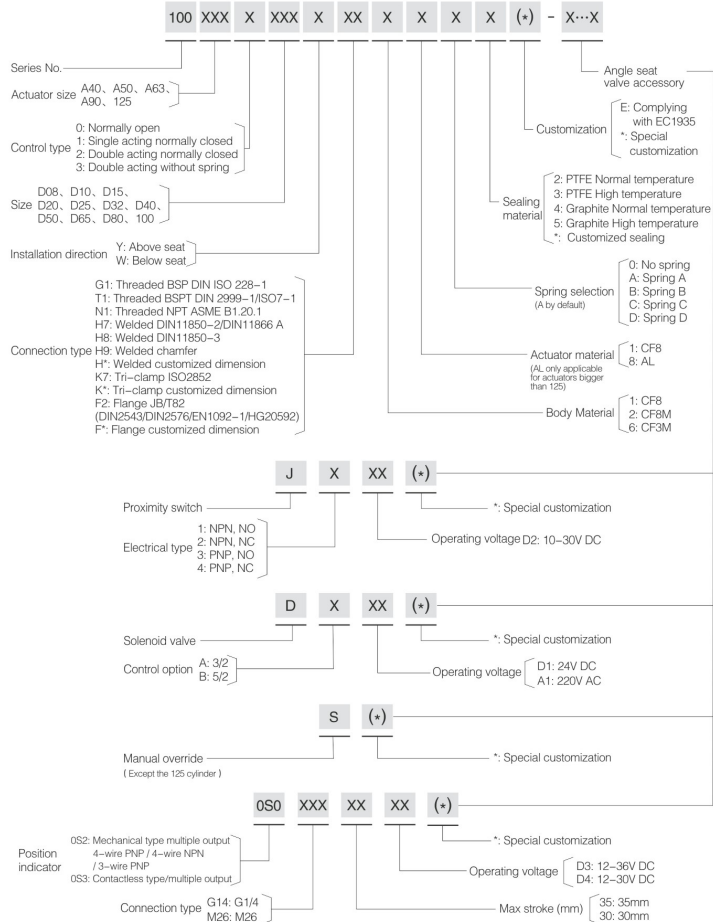
### Technical Specification

- Operating Voltage: DC12V–DC36V (mechanical type)/DC12V–DC30V(contactless type)
- Operating Current: MAX.300mA(mechanical type)/MAX.100mA(contactless type)
- Indicator Light: Visually feedbacks the valve's open/close status
- Temperature Range: -10°C — +70°C
- Environment humidity: ≤90%RH
- Protection Level: IP65
- Explosion-Proof: Ex nA IIC T4
- Shell Material: PA6–GF30+PC
- On–Off Mode: mechanical type/contactless type
- Output Mode: OS2– 4–wire PNP/4–wire NPN/3–wire PNP OS3– Multiple output/contactless
- Electrical Principle: refer the position indicator
- Wiring Method: Unscrew the transparent cover, thread the cable through the cable opening and connect it to the required terminal.
- Leakage Class: DIN EN 12266 Class A



# Y-type Angle Seat Valve

## Order Instruction



101 Series Pneumatic Angle Seat Valve



## Technical Specification

- Operating pressure: 0-10bar (0-145psi)
- Control pressure: 3-8bar (43.5-116psi)
- Control fluid: Filtered compressed air or neutral gas
- Cylinder material: CF8
- Body material: CF8/CF8M/CF3M and other special materials
- Seat material: PTFE
- Applicable medium: Water, Oil, Air, Liquid, Organic solvent, Acid and lye
- Medium temperature: -10°C — +180°C
- Ambient temperature: -10°C — +80°C
- Control type: Single acting normally closed, Double acting normally closed, Double acting without spring
- Connection type: Threaded, Welded, Tri-clamp, Flanged
- Leakage class: DIN EN 12266 Class A

## Advantages

- Lightweight appearance, compact structure, and excellent performance.
- Y-shaped structure design of the valve body features high flow rate, low flow resistance, and rapid action response.
- Stainless steel actuator, better performance for harsh environments and can rotate 360°.