ESG®

Y-type Angle Seat Valve

Order Instruction

100 XXX X XXX X XX X X X X (*) - X···X

- Series No. 100
- Actuator size XXX: A40、A50、A63、A90、125
- Control type X: 0: Normally open; 1: Single acting normally closed; 2: Double acting normally closed; 3: Double acting without spring
- Size XXX: D08、D10、D15、D20、D25、D32、D40、D50、D65、D80、100
- Installation direction X: Y: Above seat; W: Below seat
- Connection type XX: G1: Threaded BSP DIN ISO 228–1; T1: Threaded BSPT DIN 2999–1/ISO7–1; N1: Threaded NPT ASME B1.20.1; H7: Welded DIN11850–2/DIN11866 A; H8: Welded DIN11850–3; H9: Welded chamfer; H*: Welded customized dimension; K7: Tri–clamp ISO2852; K*: Tri–clamp customized dimension; F2: Flange JB/T82 (DIN2543/DIN2576/EN1092–1/HG20592); F*: Flange customized dimension
- Body Material X: 1: CF8; 2: CF8M; 6: CF3M
- Actuator material X (AL only applicable for actuators bigger than 125): 1: CF8; 8: AL
- Spring selection X (A by default): 0: No spring; A: Spring A; B: Spring B; C: Spring C; D: Spring D
- Sealing material X: 2: PTFE Normal temperature; 3: PTFE High temperature; 4: Graphite Normal temperature; 5: Graphite High temperature; *: Customized sealing
- Customization (*): E: Complying with EC1935; *: Special customization
- Angle seat valve accessory X···X

J X XX (*)

- Proximity switch J
- Electrical type X: 1: NPN, NO; 2: NPN, NC; 3: PNP, NO; 4: PNP, NC
- Operating voltage XX: D2: 10–30V DC
- *: Special customization (*)

D X XX (*)

- Solenoid valve D
- Control option X: A: 3/2; B: 5/2
- Operating voltage XX: D1: 24V DC; A1: 220V AC
- *: Special customization (*)

S (*)

- Manual override S (Except the 125 cylinder)
- *: Special customization (*)

0S0 XXX XX XX (*)

- Position indicator 0S0: 0S2: Mechanical type multiple output 4–wire PNP / 4–wire NPN / 3–wire PNP; 0S3: Contactless type/multiple output
- Connection type XXX: G14: G1/4; M26: M26
- Max stroke (mm) XX: 35: 35mm; 30: 30mm
- Operating voltage XX: D3: 12–36V DC; D4: 12–30V DC
- *: Special customization (*)

101 Series Pneumatic Angle Seat Valve

Technical Specification

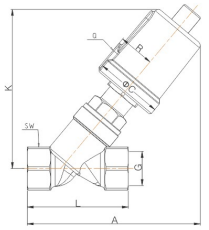
- Operating pressure: 0–10bar (0–145psi)
- Control pressure: 3–8bar (43.5–116psi)
- Control fluid: Filtered compressed air or neutral gas
- Cylinder material: CF8
- Body material: CF8/CF8M/CF3M and other special materials
- Seal material: PTFE
- Applicable medium: Water, Oil, Air, Liquid, Organic solvent, Acid and lye
- Medium temperature: –10℃ — +180℃
- Ambient temperature: –10℃ — +80℃
- 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

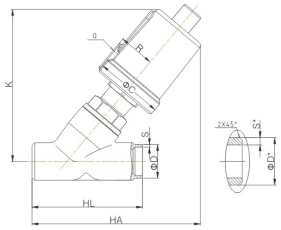
1. Lightweight appearance, compact structure, and excellent performance.
2. Y–shaped structure design of the valve body features high flow rate, low flow resistance, and rapid action response.
3. Stainless steel actuator, better performance for harsh environments and can rotate 360° .

ESG®

Y-type Angle Seat Valve



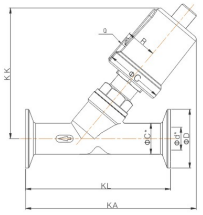
Threaded connection



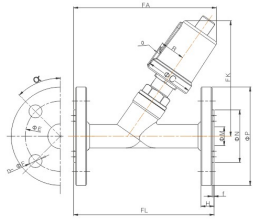
Welded connection

Main Dimension

Size	Actuator (mm)	Q	ΦC	R	K	Threaded connection				Welded connection							
						G	A	L	SW	HA	HL	Chamfer		DIN11850–2		DIN11850–3	
												ΦD*	S*	ΦD	S	ΦD	S
DN8	28	1/8"	42	21	105	1/4"	115	68	27	–	–	–	–	–	–	–	–
DN10	28	1/8"	42	21	105	3/8"	115	68	27	–	–	–	–	–	–	–	–
DN15	28	1/8"	42	21	105	1/2"	115	68	27	105	70	22	3.5	19	1.5	20	2
DN20	40	1/8"	50.5	27	130	3/4"	135	75	32	135	82	29	5	23	1.5	24	2
DN25	40	1/8"	50.5	27	135	1"	145	90	40	145	100	35	5	29	1.5	30	2
DN32	50	1/8"	60	33	165	1 1/4"	180	116	50	175	125	39	4	35	1.5	36	2
DN40	50	1/8"	60	33	170	1 1/2"	180	116	56	180	130	45	4.5	41	1.5	42	2
DN50	50	1/8"	60	33	175	2"	195	138	69	195	155	57	4	53	1.5	54	2



Tri–clamp connection



Flange connection

Main Dimension

Size	Tri–clamp connection (Chuck standard ISO 2852)						Flange connection (Flange standard JB/T 82.1)										
	KK	KA	KL	ΦC*	Φd*	D	FK	FA	FL	f	H	E	N–F	M	N	P	α
DN15	105	120	80	20.5	15	34	110	130	130	2	14	65	4–14	16	45	95	45°
DN20	135	145	130	25	19	50.5	135	155	150	2	14	75	4–14	19	56	105	45°
DN25	135	155	130	33	27	50.5	140	160	160	2	14	85	4–14	26	65	115	45°
DN32	160	185	146	37	31	50.5	175	180	180	2	16	100	4–18	31	78	140	45°
DN40	165	200	160	40	34	64	180	200	200	3	16	110	4–18	38	84	150	45°
DN50	180	210	175	53	45	64	185	230	230	3	16	125	4–18	54	100	165	45°

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

101 Series Pressure Parameter

Single Acting, Normally Closed (NC) –Enter Above Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range P/MPa	Control pressure (MPa)
DN8	G1/4"	13	1.7	28	0–1.0	0.5–0.7
DN10	G3/8"	13	3.6	28	0–1.0	0.5–0.7
DN15	G1/2"	13	4.1	28	0–1.0	0.5–0.7
DN20	G3/4"	18	7.1	40	0–1.0	0.4–0.6
DN25	G1"	24	11.9	40	0–1.0	0.4–0.65
DN32	G1 1/4"	31	24.8	50	0–1.0	0.35–0.7
DN40	G1 1/2"	35	28.7	50	0–0.7	0.35–0.7
DN50	G2"	45	44.3	50	0–0.45	0.35–0.7

Single Acting, Normally Closed (NC) –Enter Below Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range P/MPa	Control pressure (MPa)
DN8	G1/4"	13	1.7	28	0–1.0	⩾0.5
DN10	G3/8"	13	3.6	28	0–1.0	⩾0.5
DN15	G1/2"	13	4.1	28	0–1.0	⩾0.5
DN20	G3/4"	18	7.1	40	0–0.8	⩾0.4
DN25	G1"	24	11.9	40	0–0.3	⩾0.4
DN32	G1 1/4"	31	24.8	50	0–0.5	⩾0.5
DN40	G1 1/2"	35	28.7	50	0–0.4	⩾0.5
DN50	G2"	45	44.3	50	0–0.15	⩾0.5

Double Acting, Normally Closed (NC) –Enter Above Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range P/MPa	Control pressure (MPa)
DN8	G1/4"	13	1.7	28	0–1.0	0.5–0.7
DN10	G3/8"	13	3.6	28	0–1.0	0.5–0.7
DN15	G1/2"	13	4.1	28	0–1.0	0.5–0.7
DN20	G3/4"	18	7.1	40	0–1.0	0.4–0.6
DN25	G1"	24	11.9	40	0–1.0	0.4–0.65
DN32	G1 1/4"	31	24.8	50	0–1.0	0.35–0.7
DN40	G1 1/2"	35	28.7	50	0–0.7	0.35–0.7
DN50	G2"	45	44.3	50	0–0.45	0.35–0.7

Double Acting, Normally Closed (NC) –Enter Below Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range P/MPa	Control pressure (MPa)
DN8	G1/4"	13	1.7	28	0–1.0	0.5–0.7
DN10	G3/8"	13	3.6	28	0–1.0	0.5–0.7
DN15	G1/2"	13	4.1	28	0–1.0	0.5–0.7
DN20	G3/4"	18	7.1	40	0–1.0	0.4–0.5
DN25	G1"	24	11.9	40	0–1.0	0.4–0.5
DN32	G1 1/4"	31	24.8	50	0–1.0	0.35–0.6
DN40	G1 1/2"	35	28.7	50	0–1.0	0.35–0.6
DN50	G2"	45	44.3	50	0–0.45	0.35–0.7

Double Acting Without Spring –Enter Above Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range P/MPa	Control pressure (MPa)
DN8	G1/4"	13	1.7	28	0–1.0	0.3–0.6
DN10	G3/8"	13	3.6	28	0–1.0	0.3–0.6
DN15	G1/2"	13	4.1	28	0–1.0	0.3–0.6
DN20	G3/4"	18	7.1	40	0–1.0	0.3–0.4
DN25	G1"	24	11.9	40	0–1.0	0.3–0.5
DN32	G1 1/4"	31	24.8	50	0–1.0	0.3–0.5
DN40	G1 1/2"	35	28.7	50	0–1.0	0.3–0.6
DN50	G2"	45	44.3	50	0–0.65	0.3–0.7

Double Acting Without Spring –Enter Below Seat

Size	Thread end	Orifice (mm)	Flow value Kv(m³/h)	Actuator (mm)	Differential pressure range P/MPa	Control pressure (MPa)
DN8	G1/4"	13	1.7	28	0–1.0	0.3–0.6
DN10	G3/8"	13	3.6	28	0–1.0	0.3–0.6
DN15	G1/2"	13	4.1	28	0–1.0	0.3–0.6
DN20	G3/4"	18	7.1	40	0–1.0	0.3–0.5
DN25	G1"	24	11.9	40	0–1.0	0.3–0.7
DN32	G1 1/4"	31	24.8	50	0–1.0	0.3–0.6
DN40	G1 1/2"	35	28.7	50	0–1.0	0.3–0.7
DN50	G2"	45	44.3	50	0–0.35	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

ESG®

Y-type Angle Seat Valve

Order Instruction

101 XXX X XXX X XX X X X X (*) - X···X

- Series No.: 101
- Actuator size: A28、A40、A50、
- Control type: 1: Single acting normally closed; 2: Double acting normally closed; 3: Double acting without spring
- Size: D08、D10、D15、D20、D25、D32、D40、D50
- Installation direction: Y: Above seat; W: Below seat
- Connection type: G1: Threaded BSP DIN ISO 228–1; T1: Threaded BSPT DIN 2999–1/ISO7–1; N1: Threaded NPT ASME B1.20.1; H7: Welded DIN11850–2/DIN11866 A; H8: Welded DIN11850–3; H9: Welded chamfer; H*: Welded customized dimension; K7: Tri–clamp ISO2852; K*: Tri–clamp customized dimension; F2: Flange JB/T82 (DIN2543/DIN2576/EN1092–1/HG20592)
- Spring selection: 0: No spring; A: Spring A; *: Customized spring
- Actuator material 1: CF8
- Body Material: 1: CF8; 2: CF8M; 6: CF3M
- Sealing material: 2: PTFE Normal temperature; 4: Graphite Normal temperature
- Customization: E: Complying with EC1935; *: Special customization
- Angle seat valve accessory: X···X

J X XX (*)

- Proximity switch
- Electrical type: 1: NPN, NO; 2: NPN, NC; 3: PNP, NO; 4: PNP, NC
- Operating voltage: D2: 10–30V DC
- *: Special customization

D X XX (*)

- Solenoid valve
- Control option: A: 3/2; B: 5/2
- Operating voltage: D1: 24V DC; A1: 220V AC
- *: Special customization

S (*)

- Manual override
- *: Special customization

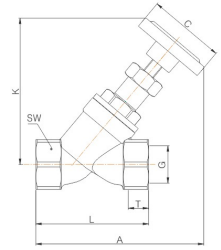
0S0 XXX XX XX (*)

- Position indicator: 0S2: Mechanical type multiple output 4–wire PNP / 4–wire NPN /3–wire PNP; 0S3: Contactless type/multiple output
- Connection type: G14: G1/4; M26: M26
- Max stroke (mm): 35: 35mm; 30: 30mm
- Operating voltage: D3: 12–36V DC; D4: 12–30V DC
- *: Special customization

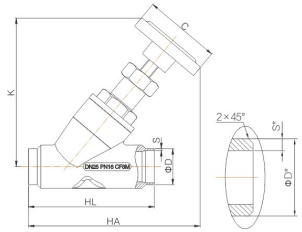
All the actuators except 28mm can be customized with accessary.

107 Series Threaded Manual Angle Seat Valve

107 Series Welded Manual Angle Seat Valve



Threaded connection



Welded connection Chamfer

Main Dimension

Size	C	K	Threaded connection					Welded connection							
			G	T	A	L	SW	HA	HL	Chamfer		DIN11850–2		DIN11850–3	
										ΦD*	S*	ΦD	S	ΦD	S
DN8	62	115	1/4"	12	128	68	27	–	–	–	–	–	–	–	–
DN10	62	115	3/8"	12	128	68	27	–	–	–	–	–	–	–	–
DN15	62	115	1/2"	15	128	68	27	120	70	22	3.5	19	1.5	20	2
DN20	62	120	3/4"	16	133	75	32	128	82	29	5	23	1.5	24	2
DN25	62	125	1"	17	142	90	40	144	100	35	5	29	1.5	30	2
DN32	62	146	1 1/4"	21	166	116	50	165	125	39	4	35	1.5	36	2
DN40	62	148	1 1/2"	21	168	116	56	168	130	45	4.5	41	1.5	42	2
DN50	62	155	2"	22	182	138	69	182	155	57	4	53	1.5	54	2
DN65 Square bonnet	80	211	2 1/2"	26	226	178	85	270	270	75	5	70	2		

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