

# ASCO™ Pneumatic Angle Seat Valves

2-way, Pressure Operated, Bronze Body  
Plastic Actuator, 1/2" to 2 1/2" Tapped

2/2  
Series  
**290**

## Features and Benefits

- Suitable for broad range of industrial machines and manufacturing process.
- High reliability, long service life and exceptional and repeatable tight shutoff
- Adjustable actuator enables 360° access to pilot port
- Modular design provides exceptional flexibility
- Large piloting orifice and low hysteresis creates fast cycle times
- Anti-water hammer design and back pressure resistant
- Extensive range of actuators, options, certifications and accessories
- High performance, maintenance-free actuator and stuffing box
- Easy and fast maintenance without the need to remove valve body from pipework

## General

<b>Differential pressure</b>	See Specification section [1 bar = 100 kPa]
<b>Vacuum</b>	10 <sup>-2</sup> mbar (10 <sup>-2</sup> Torr/mm Hg)
<b>Maximum allowable pressure</b>	16 bar (240 psi)
<b>Ambient temperature range</b>	-10°C to +60°C (14°F to 140°F)
<b>Maximum viscosity</b>	800 cSt (mm <sup>2</sup> /s) (2.700 SSU)
<b>Pilot fluid</b>	Filtered air or water
<b>Maximum pilot pressure</b>	10 bar (150 psi) / bistable function: 8 bar (120 psi)
<b>Minimum pilot pressure</b>	See Specifications section
<b>Response time</b>	See dedicated pilot catalog pages

Fluids (*)	Temperature range (TS) <sup>(1)</sup>	Disc seal (*)
Up to DN 50: air and gas groups 1 and 2 DN 65: air and gas group 2	-10°C to +184°C (14°F to 360°F)	PTFE
All DN: liquids and steam groups 1 and 2	steam ≤ 184°C/360°F	

## Materials of components in contact with fluid

(\*) Ensure that compatibility of materials in contact with fluids is verified.

<b>Body</b>	Bronze
<b>Stuffing box housing</b>	Brass
<b>Stem</b>	Stainless steel AISI 431
<b>Disc</b>	Brass / Stainless steel
<b>Disc seal</b>	PTFE
<b>Wiper seal</b>	FPM
<b>Stuffing box packing</b>	PTFE
<b>Valve body seal</b>	PTFE

## Other components

<b>Actuator</b>	Glass fiber filled PA
<b>Optical position indicator</b>	PA 12

## Certifications and Approvals

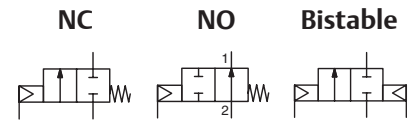
- Pressure Equipment Directive 2014/68/EU, Category 1 (DN > 25) or article 4.3 (DN ≤ 25)
- Functional Safety of Machinery: EN ISO 13849-1
- Reach compliant
- IEC 61508 Standard (2010 route 2<sub>H</sub> version) certified with integrity levels: SIL 2 for HFT = 0
- Valves satisfy all relevant EU and EAC directives

## Options <sup>(2)</sup>

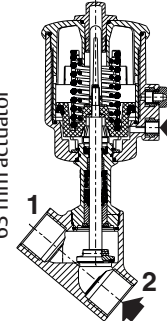
- Oxygen service pressure limited to 15 bar (220 psi), ambient and media temperatures limited to +60°C (140°F)
- Explosive atmospheres, ATEX and IECEx compliant
- Medium vacuum service up to 10<sup>-3</sup> mb (10<sup>-3</sup> Torr)
- Visual position indicator for 50 mm actuator (standard position indicators for other actuator sizes)
- EN 161/EN 16678 compliant versions (see dedicated catalog pages)
- Pilots (see dedicated catalog pages)
- Large range of switch boxes and digital positioners (see dedicated catalog pages)

<sup>(1)</sup> The minimum ambient temperature of the valve is determined by the limitations of minimum temperature indicated.

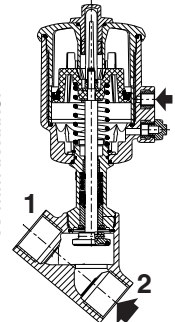
<sup>(2)</sup> See Choice of options and accessories (page 8)



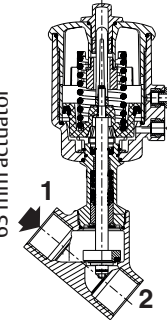
NC function, entry under the disc, 63 mm actuator



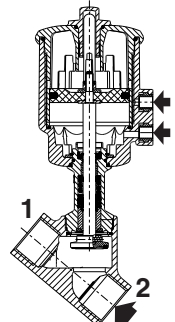
NO function, entry under the disc, 63 mm actuator



NC function, entry above the disc, 63 mm actuator



Bistable function, 63 mm actuator



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**Specifications**

Piping (ISO 6708)		Flow coefficient		Pilot pressure		Operating pressure differential			Actuator diameter	Dimensions / Type <sup>(1)</sup>	Catalog number				
Pipe size	DN					bar (psi)					Air, inert gas (*)	Water, oil, liquids (*)	Steam (*)	Thread type	
						Kv (Cv)	Min.	Max.						(G*)	(NPTF)
		m <sup>3</sup> /h (gal/min)	(l/min)						(mm)						
<b>NC - Normally closed, entry under the disc</b>															
1/2"	15	5.8 (6.7)	96	4.5 (70)	10 (150)	16 (240)	16 (240)	10 (150)	50	01	E290D0230DA0000	8290D0240DA0000			
				2.8 (45)					63	02	E290D0250DA0000	8290D0260DA0000			
3/4"	20	10.7 (12.4)	178	4.5 (70)	10 (150)	10 (150)	10 (150)	10 (150)	50	01	E290D0330DA0000	8290D0340DA0000			
				2.8 (45)					63	02	E290D0350DA0000	8290D0360DA0000			
									63	02	E290D7350DA0000	8290D7360DA0000			
1"	25	15.5 (18)	258	4.5 (70)	10 (150)	6 (90)	6 (90)	6 (90)	50	01	E290D0430DA0000	8290D0440DA0000			
		17.7 (20.5)	295						63	02	E290D0450DA0000	8290D0460DA0000			
		17.8 (20.6)	296						90	03	E290D04B0DA0000	8290D04C0DA0000			
		17.7 (20.5)	295	2.8 (45)					63	02	E290D7450DA0000	8290D7460DA0000			
		17.8 (20.6)	296						90	03	E290D74B0DA0000	8290D74C0DA0000			
1 1/4"	32	25.2 (29.2)	420	4.5 (70)	10 (150)	6 (90)	6 (90)	6 (90)	63	02	E290D0550DA0000	8290D0560DA0000			
		26.2 (30.4)	436						90	03	E290D05B0DA0000	8290D05C0DA0000			
		26.2 (30.4)	436	2.8 (45)					90	01	E290D75B0DA0000	8290D75C0DA0000			
		30.5 (35.4)	508	4 (60)					125	04	E290D05H0DA0000	8290D05J0DA0000			
1 1/2"	40	38.3 (44.4)	638	4.5 (70)	10 (150)	4 (60)	4 (60)	4 (60)	63	02	E290D0650DA0000	8290D0660DA0000			
		40.4 (46.9)	673						90	03	E290D06B0DA0000	8290D06C0DA0000			
		46.1 (53.5)	768	4 (60)					125	04	E290D06H0DA0000	8290D06J0DA0000			
		40.4 (46.9)	673	2.8 (45)					90	03	E290D76B0DA0000	8290D76C0DA0000			
		46.1 (53.5)	768	2.5 (40)					125	04	E290D76H0DA0000	8290D76J0DA0000			
2"	50	51.4 (59.7)	857	4.5 (70)	10 (150)	2.5 (40)	2.5 (40)	2.5 (40)	63	02	E290D0750DA0000	8290D0760DA0000			
		54.9 (63.7)	915						90	03	E290D07B0DA0000	8290D07C0DA0000			
		67.7 (78.5)	1128	4 (60)					125	04	E290D07H0DA0000	8290D07J0DA0000			
		67.7 (78.5)	1128	2.5 (40)					125	04	E290D77H0DA0000	8290D77J0DA0000			
2 1/2"	65	94 (109)	1566	4.5 (70)	10 (150)	2 (30)	2 (30)	2 (30)	90	03	E290D08B0DA0000	8290D08C0DA0000			
		111 (128.8)	1850	4 (60)					125	04	E290D08H0DA0000	8290D08J0DA0000			

(\*) Ensure that compatibility of materials in contact with fluids is verified.  
<sup>(1)</sup> For dimensions, see drawing(s) for each construction type on the following page(s).

# ASCO™ Pneumatic Angle Seat Valves

## Specifications

Piping (ISO 6708)		Flow coefficient		Pilot pressure		Operating pressure differential			Actuator diameter	Dimensions / Type <sup>(1)</sup>	Catalog number	
Pipe size	DN					bar (psi)					Air, inert gas (*)	Water, oil, liquids (*)
		m <sup>3</sup> /h (gal/min)	(l/min)	Min.	Max.	(G*)	(NPTF)					
<b>NO - Normally open, entry under the disc</b>												
1/2"	15	5.8 (6.7)	96	I(*)	10 (150)	16 (240)	16 (240)	10 (150)	50	01	E290D1230DA0000	8290D1240DA0000
				II(*)		16 (240)	16 (240)	10 (150)	63	02	E290D1250DA0000	8290D1260DA0000
3/4"	20	10.7 (12.4)	178	I(*)	10 (150)	16 (240)	16 (240)	10 (150)	50	01	E290D1330DA0000	8290D1340DA0000
				II(*)		16 (240)	16 (240)	10 (150)	63	02	E290D1350DA0000	8290D1360DA0000
1"	25	15.5 (18)	258	I(*)	10 (150)	16 (240)	16 (240)	10 (150)	50	01	E290D1430DA0000	8290D1440DA0000
		17.7 (20.5)	295	II(*)		16 (240)	16 (240)	10 (150)	63	02	E290D1450DA0000	8290D1460DA0000
		17.8 (20.6)	296	III(*)		16 (240)	16 (240)	10 (150)	90	03	E290D1480DA0000	8290D14C0DA0000
1 1/4"	32	25.2 (29.2)	420	II(*)	10 (150)	16 (240)	16 (240)	10 (150)	63	02	E290D1550DA0000	8290D1560DA0000
		26.2 (30.4)	436	III(*)		16 (240)	16 (240)	10 (150)	90	03	E290D1580DA0000	8290D15C0DA0000
		30.5 (35.4)	508	IV(*)		16 (240)	16 (240)	10 (150)	125	04	E290D15H0DA0000	8290D15J0DA0000
1 1/2"	40	38.3 (44.4)	638	II(*)	10 (150)	11 (165)	11 (165)	10 (150)	63	02	E290D1650DA0000	8290D1660DA0000
		40.4 (46.9)	673	III(*)		16 (240)	16 (240)	10 (150)	90	03	E290D1680DA0000	8290D16C0DA0000
		46.1 (53.5)	768	IV(*)		16 (240)	16 (240)	10 (150)	125	04	E290D16H0DA0000	8290D16J0DA0000
2"	50	51.4 (59.7)	857	II(*)	10 (150)	7 (105)	7 (105)	7 (105)	63	02	E290D1750DA0000	8290D1760DA0000
		54.9 (63.7)	915	III(*)		13 (200)	13 (200)	10 (150)	90	03	E290D1780DA0000	8290D17C0DA0000
		67.7 (78.5)	1128	IV(*)		16 (240)	16 (240)	10 (150)	125	04	E290D17H0DA0000	8290D17J0DA0000
2 1/2"	65	94 (109)	1566	III(*)	10 (150)	7 (105)	7 (105)	7 (105)	90	03	E290D1880DA0000	8290D18C0DA0000
		111 (128.8)	1850	IV(*)		16 (240)	16 (240)	10 (150)	125	04	E290D18H0DA0000	8290D18J0DA0000

(\*) Ensure that compatibility of materials in contact with fluids is verified.  
 (\*) Minimum pilot pressure varies with differential pressure, see page 7  
 (1) For dimensions, see drawing(s) for each construction type on the following page(s).

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**Specifications**

Piping (ISO 6708)		Flow coefficient		Pilot pressure		Operating pressure differential			Actuator diameter	Dimensions / Type <sup>(1)</sup>	Catalog number				
Pipe size	DN					bar (psi)					Air, inert gas (*)	Water, oil, liquids (*)	Steam (*)	Thread type	
						Kv (Cv)	Min.	Max.						(G*)	(NPTF)
		m <sup>3</sup> /h (gal/min)	l/min					(mm)							
<b>NC - Normally closed, entry above the disc (version recommended for rapid-cycling steam applications)</b>															
1/2"	15	5.1 (5.9)	85	V(*)	10 (150)	10 (150)	-	10 (150)	50	01	E290D3230DA0000	8290D3240DA0000			
		6.1 (7.1)	101	VI(*)		10 (150)	-	10 (150)	63	02	E290D3250DA0000	8290D3260DA0000			
3/4"	20	10.3 (11.9)	171	V(*)	10 (150)	10 (150)	-	10 (150)	50	01	E290D3330DA0000	8290D3340DA0000			
		11 (12.8)	183	VI(*)		10 (150)	-	10 (150)	63	02	E290D3350DA0000	8290D3360DA0000			
1"	25	14.6 (16.9)	243	V(*)	10 (150)	10 (150)	-	10 (150)	50	01	E290D3430DA0000	8290D3440DA0000			
		18.4 (21.3)	306	VI(*)		10 (150)	-	10 (150)	63	02	E290D3450DA0000	8290D3460DA0000			
		19 (22)	316	VII(*)		10 (150)	-	10 (150)	90	03	E290D34B0DA0000	8290D34C0DA0000			
1 1/4"	32	30.7 (35.6)	511	VI(*)	10 (150)	10 (150)	-	10 (150)	63	02	E290D3550DA0000	8290D3560DA0000			
		31 (36)	516	VII(*)		10 (150)	-	10 (150)	90	03	E290D35B0DA0000	8290D35C0DA0000			
1 1/2"	40	43.9 (50.9)	731	VI(*)	10 (150)	10 (150)	-	10 (150)	63	02	E290D3650DA0000	8290D3660DA0000			
		45 (52.2)	750	VII(*)		10 (150)	-	10 (150)	90	03	E290D36B0DA0000	8290D36C0DA0000			
2"	50	58 (67.3)	966	VI(*)	10 (150)	9 (135)	-	9 (135)	63	02	E290D3750DA0000	8290D3760DA0000			
		59 (68.4)	983	VII(*)		10 (150)	-	10 (150)	90	03	E290D37B0DA0000	8290D37C0DA0000			
2 1/2"	65	94 (109)	1566	VII(*)	10 (150)	10 (150)	-	10 (150)	90	03	E290D38B0DA0000	8290D38C0DA0000			
		111 (128.8)	1850	VIII(*)		10 (150)	-	10 (150)	125	04	E290D38H0DA0000	8290D38J0DA0000			
<b>Bistable function (version recommended for high fast cycling)</b>															
1/2"	15	5.8 (6.7)	96	X(*)	8 (120)	10 (150)	10 (150)	-	50	01	E290D4230DA0000	8290D4240DA0000			
				XI(*)	8 (120)	10 (150)	10 (150)	-	63	02	E290D4250DA0000	8290D4260DA0000			
3/4"	20	10.7 (12.4)	178	X(*)	8 (120)	10 (150)	10 (150)	-	50	01	E290D4330DA0000	8290D4340DA0000			
				XI(*)	8 (120)	10 (150)	10 (150)	-	63	02	E290D4350DA0000	8290D4360DA0000			
1"	25	15.5 (18)	258	X(*)	8 (120)	10 (150)	10 (150)	-	50	01	E290D4430DA0000	8290D4440DA0000			
				XI(*)	8 (120)	10 (150)	10 (150)	-	63	02	E290D4450DA0000	8290D4460DA0000			

(\*) Ensure that compatibility of materials in contact with fluids is verified.  
 (\*) Minimum pilot pressure varies with differential pressure, see page 7  
 (1) For dimensions, see drawing(s) for each construction type on the following page(s).

# ASCO™ Pneumatic Angle Seat Valves

## Product selection guide

Configurator - CAD Files

**PRODUCT CODE**

**E 290 D 0 3 5 0 D A00 00**

**Connection type**

- E = ISO 228/1 & ISO 7/1  
(combination thread, G\*)
- 8 = NPTF (ANSI B 1.20.3)
- J = ISO 7/1 «Rc»

**Product series**  
290

**Revision letter**  
D = Initial release

- Function**
- 0 = Normally Closed
  - 1 = Normally Open
  - 7 = Normally Closed - Low pilot pressure
  - 3 = Normally Closed - Above the disc
  - 4 = Double Acting (bistable)
  - P = Normally closed with profil disc

- Nominal diameter**
- 2 = DN15 - 1/2"
  - 3 = DN20 - 3/4"
  - 4 = DN25 - 1"
  - 5 = DN32 - 1 1/4"
  - 6 = DN40 - 1 1/2"
  - 7 = DN50 - 2"
  - 8 = DN65 - 2 1/2"

**Actuator diameter - Piloting connections**

- 3 = 50 mm plastic - G 1/8"
- 4 = 50 mm plastic - NPTF 1/8"
- 5 = 63 mm plastic - G 1/8"
- 6 = 63 mm plastic - NPTF 1/8"
- B = 90 mm plastic - G 1/4"
- C = 90 mm plastic - NPTF 1/4"
- H = 125 mm plastic - G 1/4"
- J = 125 mm plastic - NPTF 1/4"
- 9 = 63 mm plastic - NAMUR plate<sup>(3)</sup>
- A = 90 mm plastic - NAMUR plate<sup>(3)</sup>
- F = 125 mm plastic - NAMUR plate<sup>(3)</sup>

<sup>(3)</sup> Solenoid pilot valves, series 551, 3/2 NC:

- Aluminum body, catalog number **SCG551A001**
- AISI 316L stainless steel body, catalog number **SCG551A40**

**Options**

- A00 = Without
- PFB = Prepared for signaling box mounting<sup>(1)</sup>
- W0B = Without body<sup>(1)</sup>
- AT1 = ATEX/IECEX 1/21 zones<sup>(1)</sup>
- AT0 = ATEX/IECEX 0/20 zones<sup>(1)</sup>
- 02S = Oxygen service 15 bar / 60°C
- 125 = CUTR certification  
(EAC Ex 1/21 zones) for product
- STL = Stroke limiter for opening<sup>(1)</sup>
- TC6 = Test tightness class VI<sup>(1)</sup>
- VAC = Industrial vacuum 10<sup>-3</sup> mbar<sup>(1)</sup>
- WSP = PTFE wiper seal
- WSF = FPM piston seal
- 11B = Manual safety device<sup>(1)</sup>
- V10 = Visual indicator<sup>(2)</sup>
- SSF = Stainless steel insert for plastic actuator

**Valve body material**

- D = Bronze body

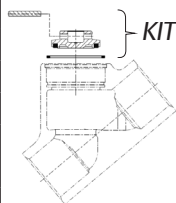
**Port type 1 and 2**

- 0 = Threaded port

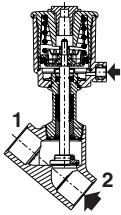
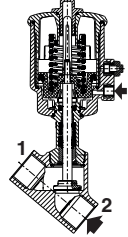
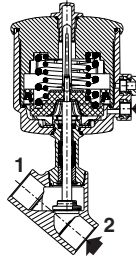
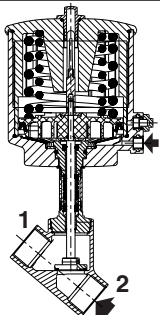
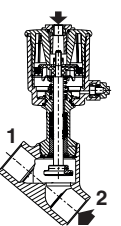
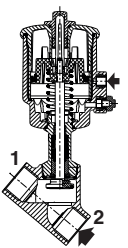
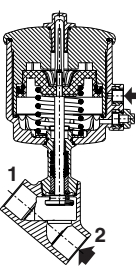
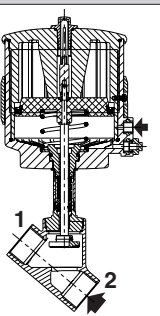
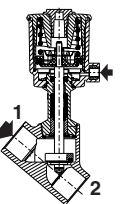
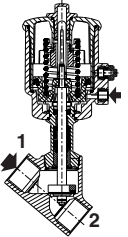
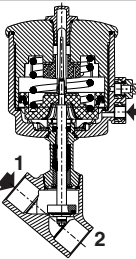
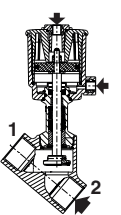
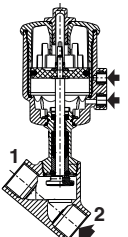
<sup>(1)</sup> See "Choice of options and accessories", pages 8 and 9

<sup>(2)</sup> For 50 mm actuator (standard for 63 mm, 90 mm and 125 mm actuators)

**Repair Kits and Service Parts**

DN	Spare parts kits no. 50-63-90-125 mm entry under the disc		DN	Spare parts kits no. 50-63-90-125 mm entry above the disc
	Normally Closed	Normally Open + Double Acting (bistable)		entry above the disc
		15 M29054935101500		M29054935104500
	20 M29054935101600	M29054935104600		20 M29054935100200
	25 M29054935101700	M29054935104700		25 M29054935100300
	32 M29054935101800	M29054935104800		32 M29054935100400
	40 M29054935101900	M29054935104900		40 M29054935100500
	50 M29054935102000	M29054935105000		50 M29054935100600
	65 M29054935102100	M29054935105100		65 M29054935100700

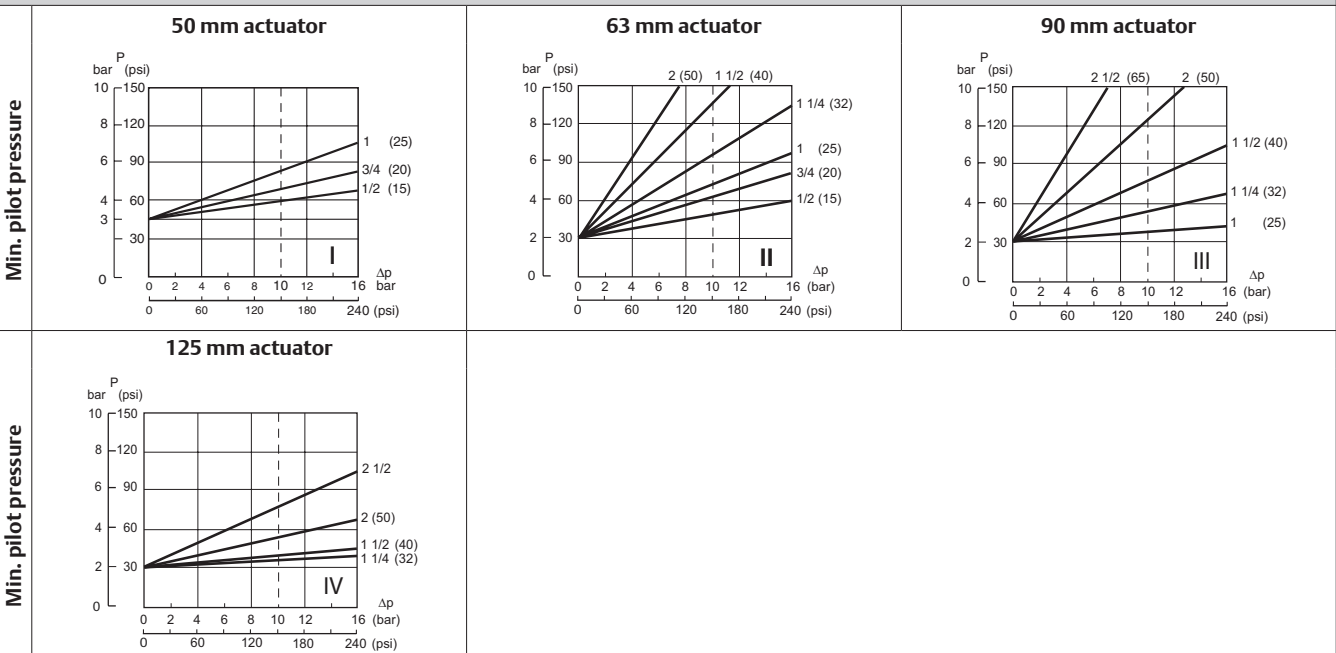
**View showing the function / actuator / flow direction**

50 mm actuator	63 mm actuator	90 mm actuator	125 mm actuator
<b>NC - Normally closed, entry under the disc</b>			
			
<b>NO - Normally open, entry under the disc</b>			
			
<b>NC - Normally closed, entry above the disc</b>			
			-
<b>Bistable function</b>			
		-	-

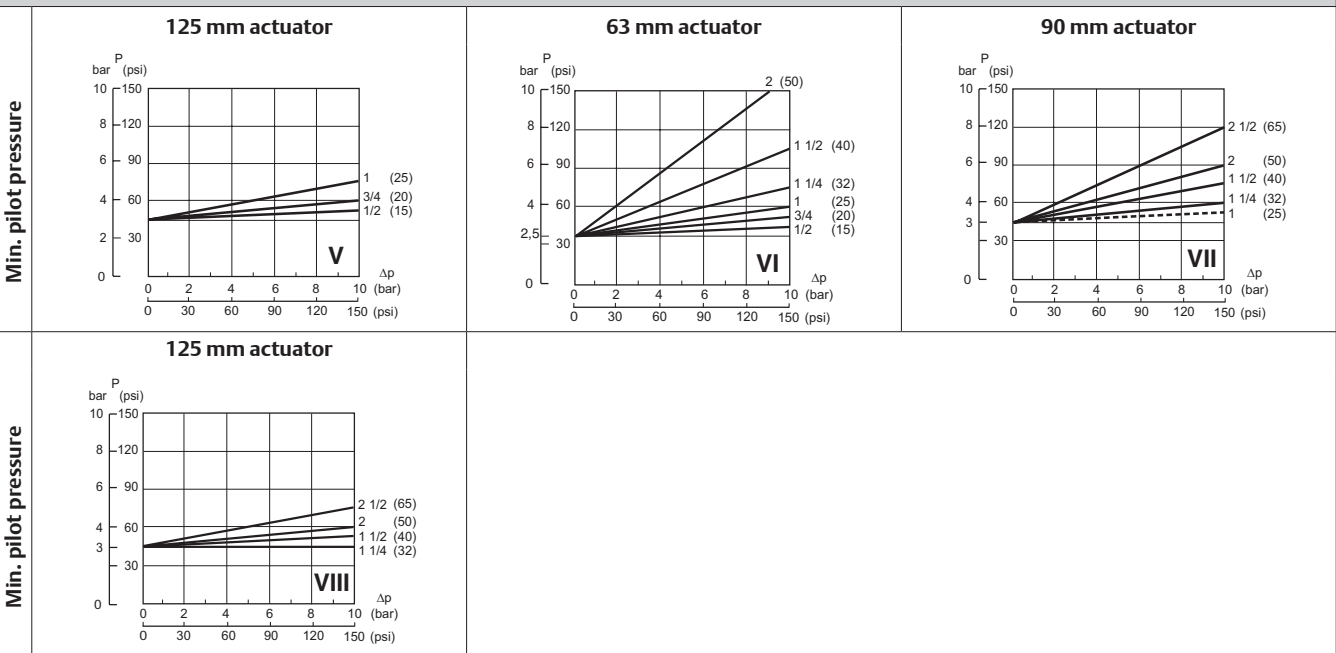
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## Selection of the minimum pilot pressure

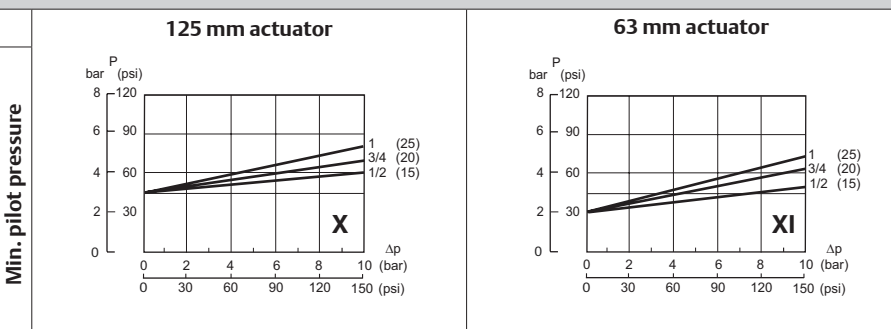
### NO - Normally open, entry under the disc



### NC - Normally closed, entry above the disc



### Bistable function



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**Installation**

- Valves can be mounted in any position without affecting operation
- Possibility to interchange actuators (sizes/functions) on the same body
- Adjustable actuator enables 360° access to pilot port
- Compatible with ASTM 1, 2 and 3 oils
- Pipe connections (G\*) have standard combination thread according to ISO 228/1 and ISO 7/1
- Thread connection (NPTF) has a standard thread according to ANSI B 1.20.3
- Thread connection (Rc) has a standard thread according to ISO 7/1
- Pilot thread connection (G) or (NPTF) has a standard thread according to ISO 228/1 or ANSI B 1.20.3
- Installation/maintenance instructions in multiple languages are available on our website

**Choice of options and accessories**

Options	NC	NO	NC	-	Actuator diameter compatibility (mm)			
	Fluid entry under the disc	Fluid entry under the disc	Fluid entry above the disc	Bistable function	50	63	90	125
	AT0	•	•	•	•	•	•	•
AT1	•	•	•	•	•	•	•	•

*When a combination of several options are selected (using the product configurator on our website) you will be provided with a specific combination code*

**ATEX/IECEX**

- 2/2 valves NC/NO designed for use in potentially explosive atmospheres in accordance with ATEX-Directive 2014/34/EU  
EC type examination certificate no.: **LCIE 20 ATEX 3037 X**  
IECEX Certificate of Conformity no.: **IECEX LCIE 20.0025X**
- Compliance with the Essential Health and Safety Requirements of the ATEX Directive has been assured by compliance with European Standards EN ISO 80079-36 and EN ISO 80079-37
- Recommended for applications in the chemical, oil, gas and paint coating industries etc.

ATEX-Directive 2014/34/EU, category 1

Classification (zones) Category 1						
Dusts			Gas			Safety code
IIIA	IIIB	IIIC	IIA	IIB	IIC	
Zone 20			Zone 0			⚠ II 1G Ex h IIC T* Ga ⚠ II 1D Ex h IIC T*°C Da



1GD		Plastic actuator	
T*°C	T*	Ts amb	T fluid
300°C	T2	-	-
200°C	T3	60°C	145°C
135°C	T4	60°C	93°C
100°C	T5	60°C	65°C
85°C	T6	60°C	53°C

ATEX-Directive 2014/34/EU, category 2

Classification (zones) Category 2						
Dusts			Gas			Safety code
IIIA	IIIB	IIIC	IIA	IIB	IIC	
Zone 21			Zone 1			⚠ II 2G Ex h IIC T* Gb X ⚠ II 2D Ex h IIC T*°C Db X



2GD		Plastic actuator	
T*°C	T*	Ts amb	T fluid
300°C	T2	-	-
200°C	T3	60°C	180°C
135°C	T4	60°C	115°C
100°C	T5	60°C	80°C
85°C	T6	60°C	60°C

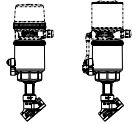




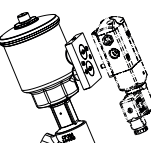




T\*°C = Surface temperature  
 T\* = Temperature class  
 Ts amb = Ambient temperature  
 T fluid = Fluid temperature

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# ASCO™ Pneumatic Angle Seat Valves

## Choice of options and accessories

Options	NC	NO	NC	-	Actuator diameter compatibility (mm)				
	Fluid entry under the disc	Fluid entry under the disc	Fluid entry above the disc	Bistable function	50	63	90	125	
PFB	●	●	●	-	●	●	●	●	 Prepared for signaling box mounting
-	●	●	●	-	●	●	●	●	 <b>See the dedicated catalogue pages</b> • The signaling box fits on compatible actuators to indicate whether the valve is open or closed
-	●	●	●	-	●	●	●	●	 <b>See the dedicated catalogue pages</b> • Signaling unit with reed switch or magneto-resistive (MR) detectors for compatible actuators
W0B	●	●	●	●	●	●	●	●	 Without Body
02S	●	●	●	●	●	●	●	●	 <b>Oxygen service</b> • Special grease and cleaning • Pressure limited to 15 bar/temperature limited to +60°C
See page 5	●	●	●	●	-	●	●	●	 <b>Adapter plate for NAMUR pad-mount pilot</b> • Adaptable on 63 mm, 90 mm and 125 mm actuators • Stainless steel AISI 316L • Solenoid pilot valves, series 551, 3/2 NC: - Aluminum body, catalog number SCG551A001 - AISI 316L stainless steel body, catalog number SCG551A409
STL	●	-	●	-	●	●	●	●	 Stroke limiter for opening
TC6	●	●	●	●	●	●	●	●	Test tightness class VI (FCI 70-2)
VAC	●	●	-	-	●	●	●	●	 Industrial vacuum 10 <sup>-3</sup> mbar (FPM disc)
WSP	●	●	●	-	●	●	●	●	PTFE wiper seal (for filtered / cleaned medium)
WSF	●	●	●	-	●	●	●	-	FPM piston seal
11B	●	-	●	-	●	●	●	●	 Manual safety device • Allows opening of a de-energized valve • For normally closed (NC) valves only (under/above the disc)
V10	●	-	●	-	● (NC)	(1)	(1)	(1)	 Visual position indicator <sup>(1)</sup> • Visual indication of open or closed position for NC valves with 50 mm actuator <sup>(1)</sup> Standard indicator for 63 mm, 90 mm and 125 mm actuators

• Available feature

- Not available

## Choice of pilots

(For information about pilots, please consult the dedicated catalog pages)

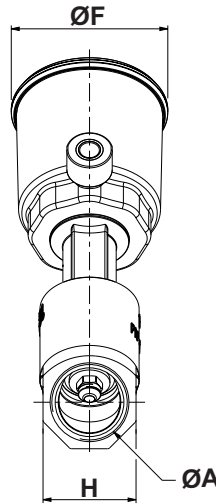
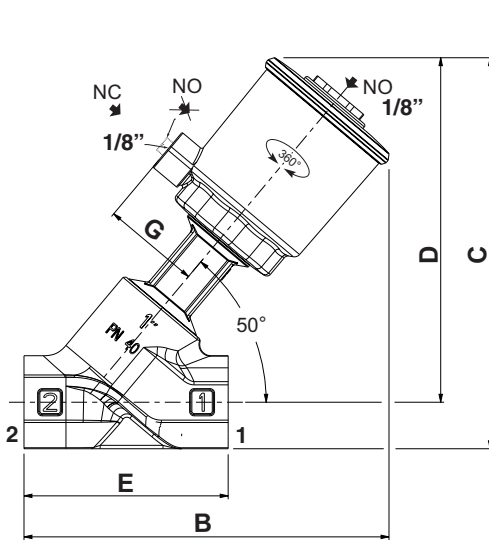
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**Dimensions mm (inches), Weight kg (Lbs)**

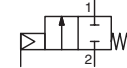
Configurator - CAD Files



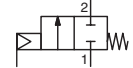
**TYPE 01**  
50 mm actuator  
Fluid entry:  
under the disc at 2  
above the disc at 1



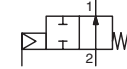
**NC**  
entry  
under the disc at 2



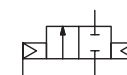
**NC**  
entry  
above the disc at 1



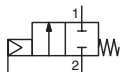
**NO**  
entry  
under the disc at 2



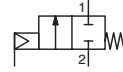
**Bistable**  
entry under the  
disc at 2



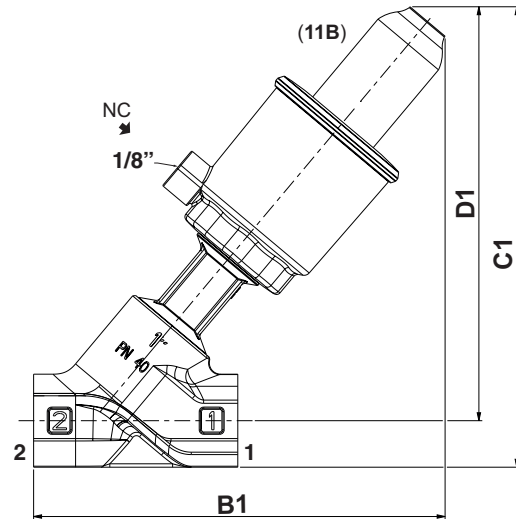
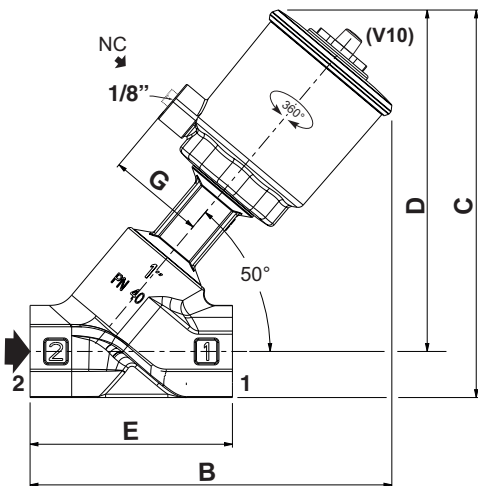
2 x 1/8" orifices for piloting



Visual indicator (V10)  
(NC only)



Manual safety device (11B)  
(NC only)



Type	Actuator diameter	ØA		B	B1	C	C1	D	D1	E	ØF	G	H	Weight <sup>(1)</sup>	
01	50 mm	G* 1/2"	mm	147.5	168	156.5	187	143	173.5	65	69	43	27	0.8	kg
		NPTF 1/2"	(in)	5.807	6.614	6.161	7.362	5.630	6.831	2.559	2.717	1.693	1.063	1.8	(Lbs)
		G* 3/4"	mm	151.5	172	160	191	144	174.5	75	69	43	32	0.9	kg
		NPTF 3/4"	(in)	5.965	6.772	6.299	7.520	5.669	6.870	2.953	2.717	1.693	1.260	2.0	(Lbs)
		G* 1"	mm	161	181.5	172.5	203	152	182.5	90	69	43	41	1.2	kg
		NPTF 1"	(in)	6.339	7.146	6.791	7.992	5.984	7.185	3.543	2.717	1.614	2.6	(Lbs)	

<sup>(1)</sup> Weight of valve without pilot.  
For solenoid pilot valve, see dedicated catalog pages.

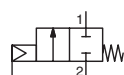
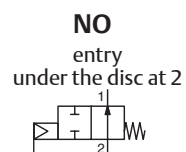
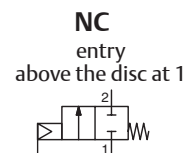
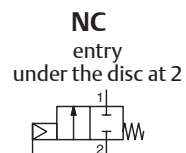
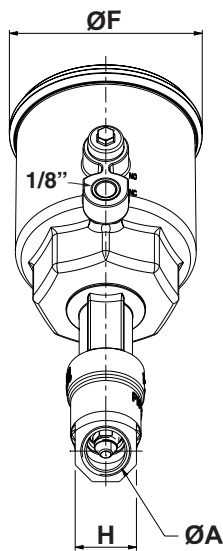
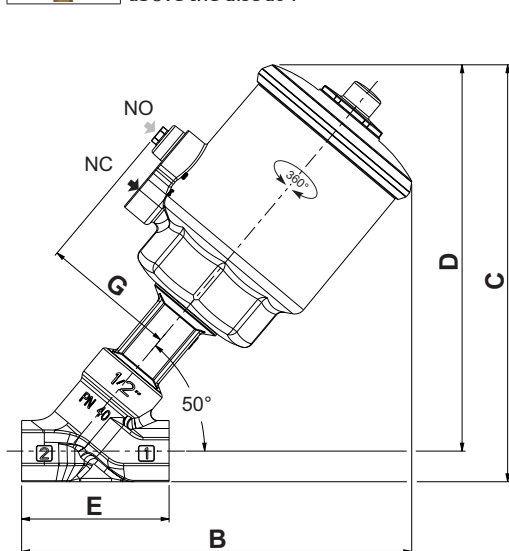
# ASCO™ Pneumatic Angle Seat Valves

Dimensions mm (inches), Weight kg (Lbs)

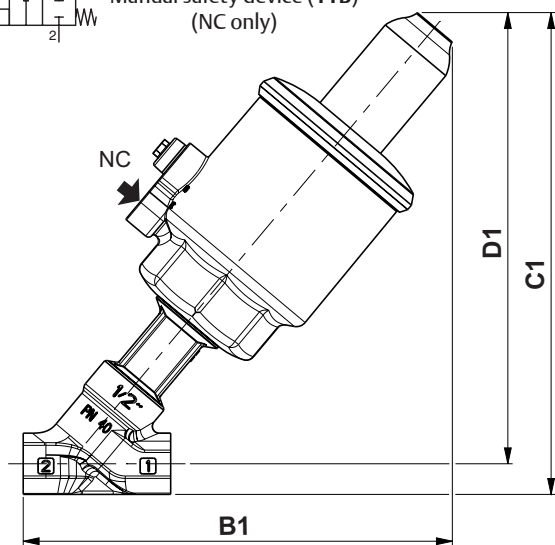
Configurator - CAD Files



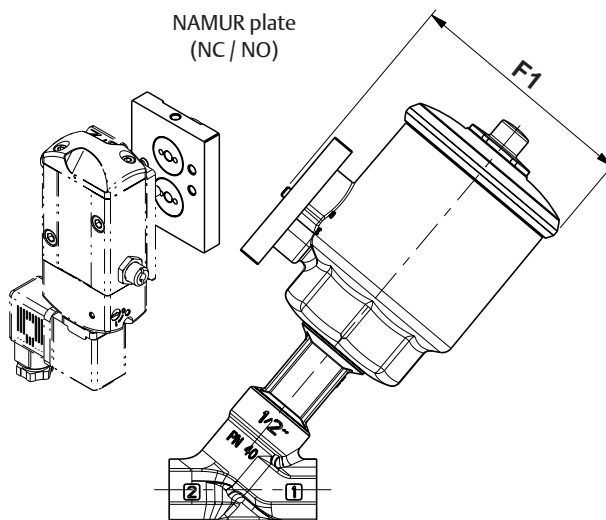
**TYPE 02**  
63 mm actuator  
Fluid entry:  
under the disc at 2  
above the disc at 1



Manual safety device (11B)  
(NC only)



NAMUR plate  
(NC / NO)



Type	Actuator diameter	ØA		B	B1	C	C1	D	D1	E	ØF	F1	G	H	Weight <sup>(1)</sup>
02	63 mm	G* 1/2"	mm	172	189.5	184	212.5	170.5	199	65	85	104	59.5	27	1
		NPTF 1/2"	(in)	6.772	7.461	7.244	8.366	6.713	7.835	2.559	3.346	4.094	2.343	1.063	2.2
		G* 3/4"	mm	176	193.5	187	215.5	171	199.5	75	85	104	59.5	32	1.1
		NPTF 3/4"	(in)	6.929	7.618	7.362	8.484	6.732	7.854	2.953	3.346	4.094	2.343	1.260	2.4
		G* 1"	mm	185.5	203	199.5	228	179	207.5	90	85	104	59.5	41	1.5
		NPTF 1"	(in)	7.303	7.992	7.854	8.976	7.047	8.169	3.543	3.346	4.094	2.343	1.614	3.3
		G* 1 1/4"	mm	206	223.5	215.5	244	190.5	219	110	85	104	59.5	50	1.9
		NPTF 1 1/4"	(in)	8.110	8.799	8.484	9.606	7.500	8.622	4.331	3.346	4.094	2.343	1.969	4.2
		G* 1 1/2"	mm	206	223.5	222.5	251	192.5	221	120	85	104	59.5	60	2.5
		NPTF 1 1/2"	(in)	8.110	8.799	8.760	9.882	7.579	8.701	4.724	3.346	4.094	2.343	2.362	5.5
		G* 2"	mm	229	246.5	234.5	263	199.5	228	150	85	104	59.5	70	3.3
		NPTF 2"	(in)	9.016	9.705	9.232	10.354	7.854	8.976	5.906	3.346	4.094	2.343	2.756	7.3

<sup>(1)</sup> Weight of valve without pilot.  
For solenoid pilot valve. see dedicated catalog pages.

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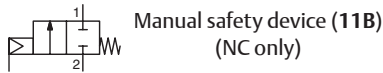
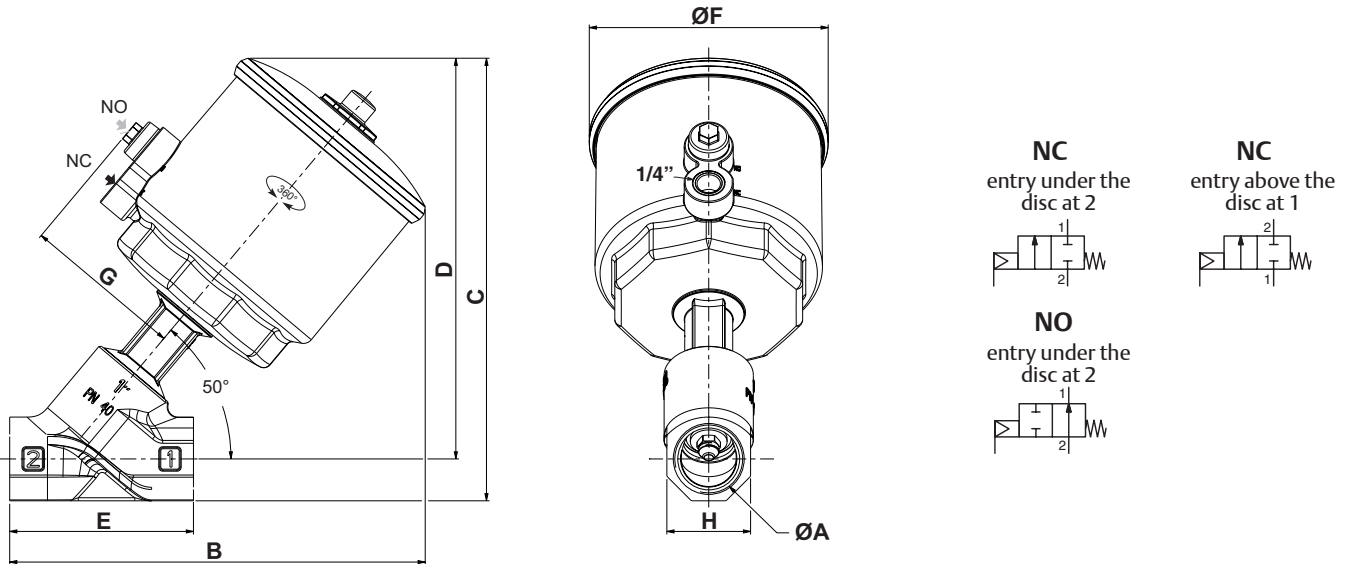
01532GB-2021/R01  
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**Dimensions mm (inches), Weight kg (Lbs)**

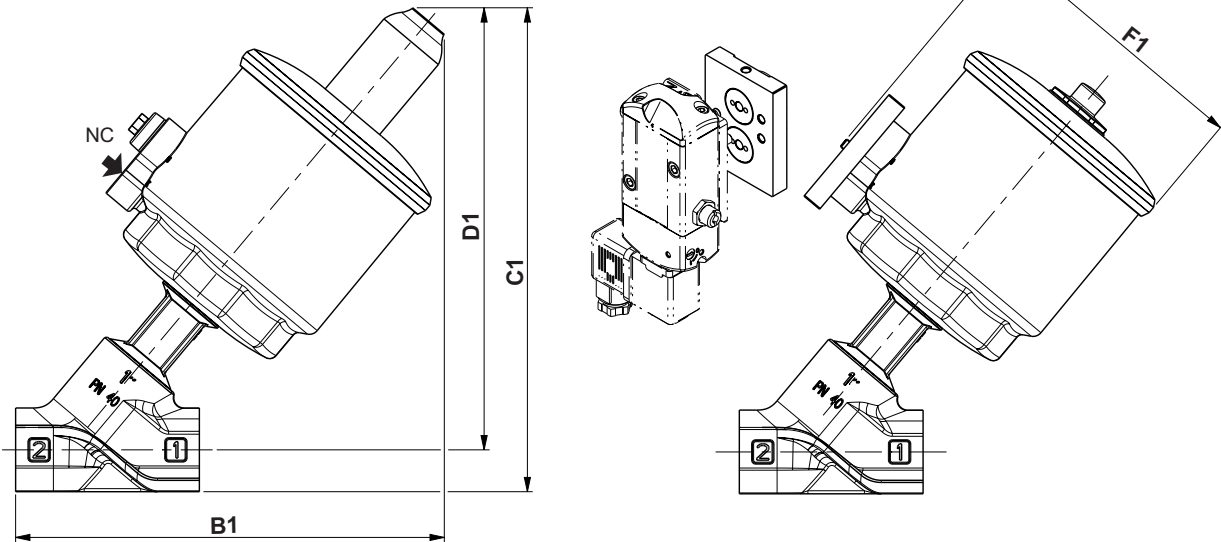
Configurator - CAD Files



**TYPE 03**  
90 mm actuator  
Fluid entry:  
under the disc at 2  
above the disc at 1



NAMUR plate  
(NC / NO)



Type	Actuator diameter	ØA		B	B1	C	C1	D	D1	E	ØF	F1	G	H	Weight <sup>(1)</sup>	
03	90 mm	G* 1"	mm	203.5	210	217	237	196.5	216.5	90	117	137	78.5	41	2.1	kg
		NPTF 1"	(in)	8.012	8.268	8.543	9.331	7.736	8.524	3.543	4.606	5.394	3.091	1.614	4.6	(Lbs)
		G* 1 1/4"	mm	224.5	231	233	233	253	228	110	117	137	78.5	50	2.5	kg
		NPTF 1 1/4"	(in)	8.839	9.094	9.173	9.961	8.189	8.976	4.331	4.606	5.394	3.091	1.969	5.5	(Lbs)
		G* 1 1/2"	mm	224	230.5	240	260	210	230	120	117	137	78.5	60	3.1	kg
		NPTF 1 1/2"	(in)	8.819	9.075	9.449	10.236	8.268	9.055	4.724	4.606	5.394	3.091	2.362	6.8	(Lbs)
		G* 2"	mm	247	253.5	251.5	271.5	216.5	236.5	150	117	137	78.5	70	3.9	kg
		NPTF 2"	(in)	9.724	9.980	9.902	10.689	8.524	9.311	5.906	4.606	5.394	3.091	2.756	8.6	(Lbs)
		G* 2 1/2"	mm	276	282.5	273	293	229.5	249.5	190	117	137	78.5	87	6.0	kg
NPTF 2 1/2"	(in)	10.866	11.122	10.748	11.535	9.035	9.823	7.480	4.606	5.394	3.091	3.425	13.2	(Lbs)		

<sup>(1)</sup> Weight of valve without pilot.  
For solenoid pilot valve, see dedicated catalog pages.

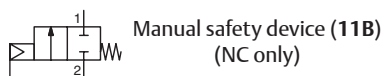
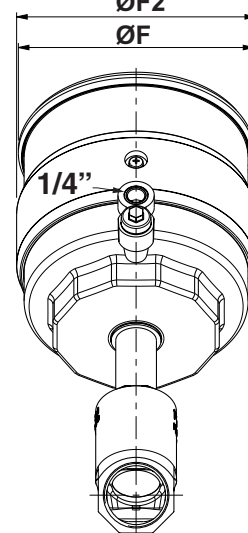
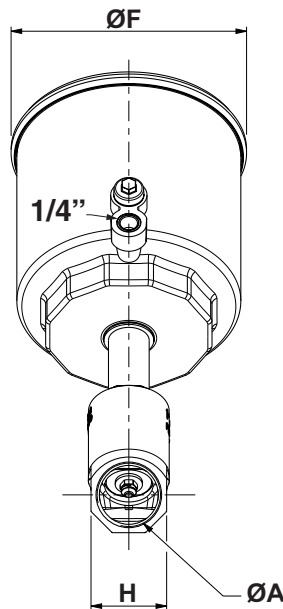
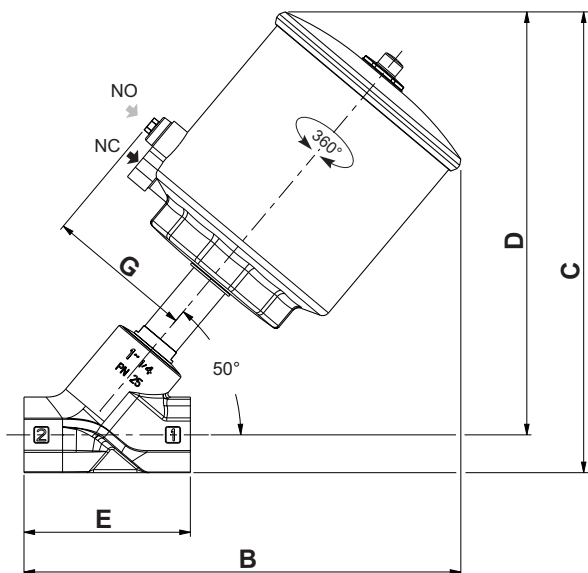
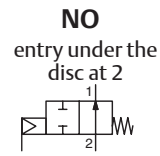
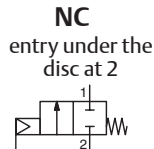
# ASCO™ Pneumatic Angle Seat Valves

Dimensions mm (inches), Weight kg (Lbs)

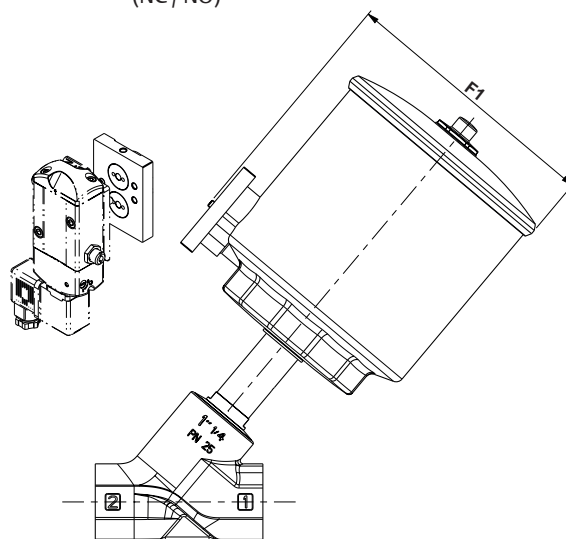
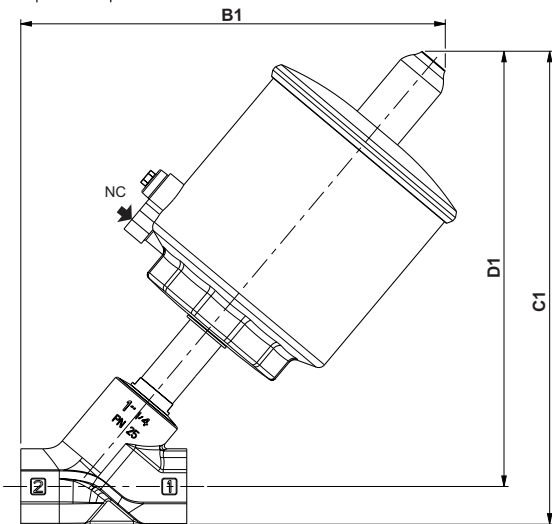
Configurator - CAD Files



**TYPE 04**  
125 mm actuator  
Fluid entry:  
under the disc at 2  
above the disc at 1



NAMUR plate  
(NC / NO)



Type	Actuator diameter	ØA		B	B1	C	C1	D	D1	E	ØF (NC/NO)	F1	ØF2 (NO)	G	H	Weight <sup>(1)</sup>	
04	125 mm	G* 1 1/4"	mm	289	281.5	305	313.5	280	288.5	110	156	175	158	97	50	5.5	kg
		NPTF 1 1/4"	(in)	11.378	11.083	12.008	12.343	11.024	11.358	4.331	6.142	6.890	6.220	3.819	1.969	12.1	(Lbs)
		G* 1 1/2"	mm	290	282.5	313	321.5	283	291.5	120	156	175	158	97	60	6.3	kg
		NPTF 1 1/2"	(in)	11.417	11.122	12.323	12.657	11.142	11.476	4.724	6.142	6.890	6.220	3.819	2.362	13.9	(Lbs)
		G* 2"	mm	314.5	307	327	335.5	292	300.5	150	156	175	158	97	70	7.2	kg
		NPTF 2"	(in)	12.382	12.087	12.874	13.209	11.496	11.831	5.906	6.142	6.890	6.220	3.819	2.756	15.9	(Lbs)
		G* 2 1/2"	mm	346	338.5	351	359.5	307.5	316	190	156	175	158	97	70	7.2	kg
NPTF 2 1/2"	(in)	13.622	13.327	13.819	14.154	12.106	12.441	7.480	6.142	6.890	6.220	3.819	3.425	20.9	(Lbs)		

<sup>(1)</sup> Weight of valve without pilot.  
For solenoid pilot valve. see dedicated catalog pages.

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