

# ASCO™ Pneumatic Angle and Straight Seat Valves

For Combustible Gases, Entry above the disc

2-way, Pressure Operated, 1/2" to 2", Tapped and Flanges Body

2/2 NC  
Series  
**290**

## Features and Benefits

- Valves for combustible gases with bronze or stainless steel body
- Valves satisfy the Pressure Equipment Directive 2014/68/EU and GAR regulation EU/2016/426 on gas appliances. These valves meet the NF EN 161/A3: 2013, NF EN 16678: 2016 and NF EN 13611 + A2: 2011 standards with EU type examination certificate no.: CERTIGAZ 1312DM6517
- Suitable for Class A, Group 2 service, gas families 1, 2 and 3
- High flow, with fluid entry above the disc
- High-performance, maintenance-free stuffing box
- Large piloting orifice and low hysteresis permit fast cycles

## General

Fluids	Temperature range (TS)	Disc seal (*)
Gas family 1, 2, 3	-10°C to +60°C	PTFE

**Differential pressure** 0 to 10 bar (0 to 150 psi)[1 bar = 100 kPa]

**Time for closing / for opening** 1 s max. with pilot solenoid valve directly connected to valve actuator

**Note: Opening and closing times depend on using pilot valves that meet the requirements in the table below**

**Pilot fluid** Air  
**Max. pilot pressure** 9 bar (135 psi)  
**Min. pilot pressure** See graph on page 6  
**Pilot fluid temperature** -10°C to +60°C (14°F to 140°F)

## Construction

	<b>Angle seat valve</b>
<b>Thread connection</b>	1/2" to 2" (DN 15 to 50)
	<b>Straight seat valve</b>
<b>Connection</b>	Flanges PN40 (DN15 to DN25), PN 25 (DN 32 to DN 50) type 11 (ISO 7005 / EN 1092-1) ANSI Class 150 ASME B16.5
<b>Face-to-face dimensions</b>	EN 558-1
<b>Face de joint</b>	Type B

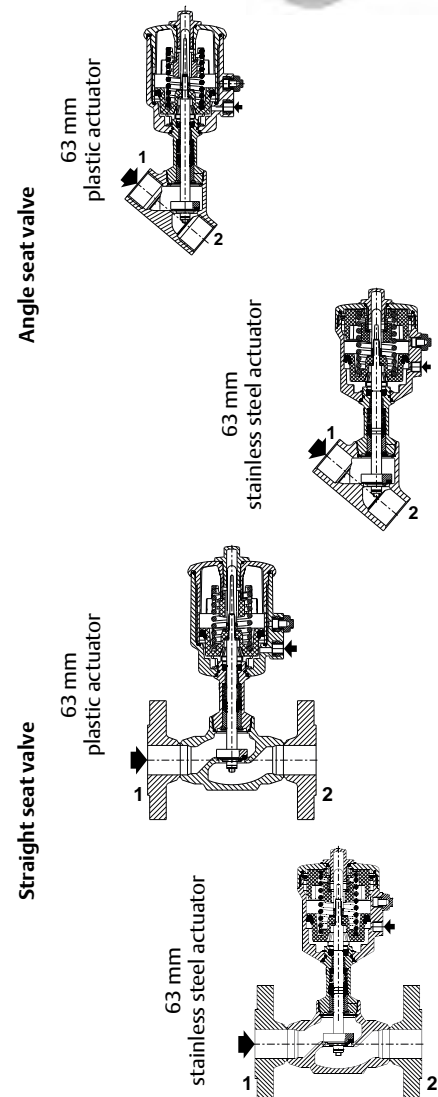
## Materials of components in contact with fluid

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

	<b>Bronze version</b>	<b>Stainless steel version</b>
<b>Body</b>	Bronze	Stainless steel AISI 316L
<b>Stuffing box housing</b>	Brass	Stainless steel AISI 316L
<b>Actuator pilot insert</b>	Brass	Stainless steel AISI 316L
<b>Stem</b>	Stainless steel AISI 431	Stainless steel AISI 431
<b>Disc</b>	Brass	Stainless steel AISI 316L
<b>Disc seal</b>	PTFE	PTFE
<b>Wiper seal</b>	FPM	FPM
<b>Stuffing box packing</b>	PTFE	PTFE
<b>Valve body seal</b>	PTFE	PTFE

## Other components

<b>Actuator (63 mm)</b>	Glass fiber filled PA	Glass fiber filled PA or Stainless steel AISI 316L
<b>Optical position indicator</b>	PA 12	PA 12

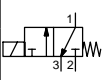


### Certifications and Approvals

- Pressure Equipment Directive 2014/68/EU
- 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
- The valves satisfy all relevant EU and EAC directives
- RoHS compatible only for stainless steel valve body

### Pilot solenoid valve selection

- Must meet European low voltage directive and electromagnetic compatibility requirements
- 3/2 normally closed with non-locking item

	Kv (m <sup>3</sup> /h) min. <sup>(1)</sup> through pilot valve required to		Response time (ms) through pilot valve required to		Designation	Thread type	Pilot valve recommended				
	Close the valve	Open the valve	Close the valve	Open the valve			15-DIGIT PRODUCT CODE				
							Brass	Stainless steel	Voltage code		
				230 V /50-60 Hz	110 V /50 Hz (120 V / 60 Hz)	24 V /50-60 Hz					
	<b>356 pilot / NC - Normally closed (without manual operator)</b>										
	0.04	0.04	10	7	356 G1/8 Ø1.6	G	G356C135S19FM	G356C145S19FM	FH	F0	FQ
						NPT	8356C135S19FM	8356C145S19FM	FH	F0	FQ

<sup>(1)</sup> Including pipe up to main valve.

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

- Explosive atmospheres, ATEX and IECEx compliant
- Large range of switch boxes certified
- Valve body material composition certificate 3.1 only for stainless steel valve body
- Stroke limiter for opening

<sup>(2)</sup> See Choice of options and accessories (page 7)

## Specifications

Piping (ISO 6708)		Flow [air]		Flow coefficient Kv (Cv)	Pilot pressure bar (psi)		Operating pressure differential bar (psi)		Actuator diameter (mm)	Thread type	Catalog number
Pipe size (G / NPTF)	DN	<sup>(1)</sup>			Min. <sup>(2)</sup>	Max.	NF EN 161	NF EN 16678			
		m <sup>3</sup> /h	(l/min)	m <sup>3</sup> /h (gal/min)			Max.	Max.			
<b>Bronze body</b>											
<b>Type 01 - Angle seat valve - NC - Normally closed, entry above disc</b>										<b>Plastic actuator</b>	
										<b>With G 1/8 piloting connection</b>	
1/2"	15	43	720	6.1 (7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	<b>E290D3250DEGA00</b>
3/4"	20	80	1340	11 (12.7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	<b>E290D3350DEGA00</b>
1"	25	143	2390	18.4 (21.3)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	<b>E290D3450DEGA00</b>
1 1/4"	32	260	4340	30.7 (35.6)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	<b>E290D3550DEGA00</b>
1 1/2"	40	368	6130	43.9 (50.9)	7.5 (110)	9 (135)	5 (75)	10 (150)	63	G*	<b>E290D3650DEGA00</b>
2"	50	486	8100	58 (67.2)	6 (90)	9 (135)	4 (60)	-	63	G*	<b>E290D3750DEGA00</b>
										<b>With NPTF 1/8 piloting connection</b>	
1/2"	15	43	720	6.1 (7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	<b>8290D3260DEGA00</b>
3/4"	20	80	1340	11 (12.7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	<b>8290D3360DEGA00</b>
1"	25	143	2390	18.4 (21.3)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	<b>8290D3460DEGA00</b>
1 1/4"	32	260	4340	30.7 (35.6)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	<b>8290D3560DEGA00</b>
1 1/2"	40	368	6130	43.9 (50.9)	7.5 (110)	9 (135)	5 (75)	10 (150)	63	NPTF	<b>8290D3660DEGA00</b>
2"	50	486	8100	58 (67.2)	6 (90)	9 (135)	4 (60)	-	63	NPTF	<b>8290D3760DEGA00</b>

<sup>(1)</sup> For inlet pressure = 8 bar (120 psi) and ΔP = 100 mb (1.5 psi).

<sup>(2)</sup> Minimum pilot pressure at maximum operating differential pressure.

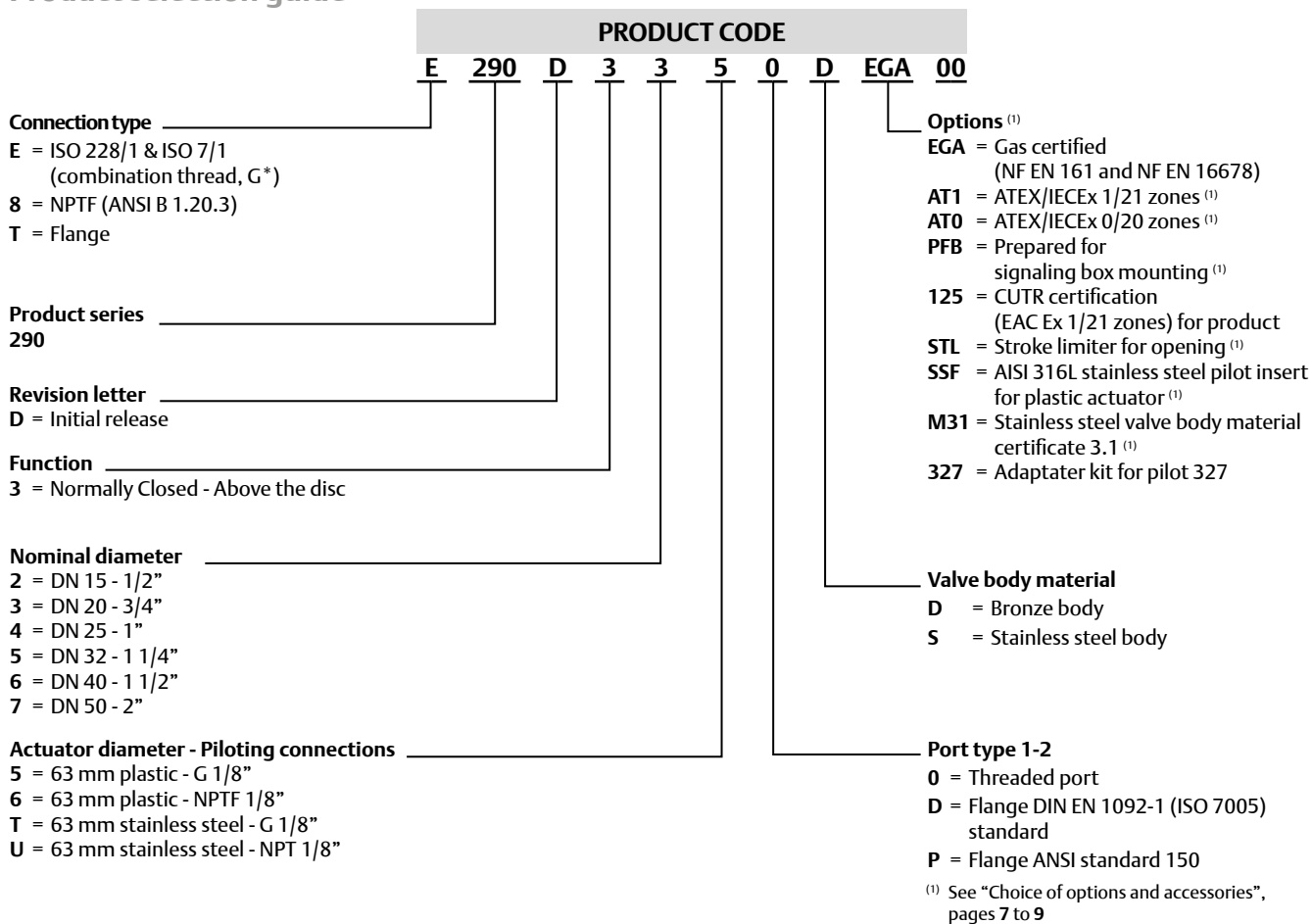
**Specifications**

Piping (ISO 6708)		Flow [air] <sup>(1)</sup>		Flow coefficient Kv (Cv)	Pilot pressure bar (psi)		Operating pressure differential bar (psi)		Actuator diameter (mm)	Thread type	Catalog number	
Pipe size (G / NPTF)	DN	m <sup>3</sup> /h	(l/min)	m <sup>3</sup> /h (gal/min)	Min. <sup>(2)</sup>	Max.	NF EN 161	NF EN 16678				
<b>Stainless steel body</b>												
<b>Type 01 - Angle seat valve - NC - Normally closed, entry above disc</b>											<b>Plastic actuator</b>	<b>Stainless steel actuator</b>
											<b>With G 1/8 piloting connection</b>	
1/2"	15	43	720	6.1 (7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	E290D3250SEGA00	E290D32T0SEGA00
3/4"	20	80	1340	11 (12.7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	E290D3350SEGA00	E290D33T0SEGA00
1"	25	143	2390	18.4 (21.3)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	E290D3450SEGA00	E290D34T0SEGA00
1" 1/4	32	260	4340	30.7 (35.6)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	G*	E290D3550SEGA00	E290D35T0SEGA00
1" 1/2	40	368	6130	43.9 (50.9)	7.5 (110)	9 (135)	5 (75)	10 (150)	63	G*	E290D3650SEGA00	E290D36T0SEGA00
2	50	486	8100	58 (67.2)	6 (90)	9 (135)	4 (60)	-	63	G*	E290D3750SEGA00	E290D37T0SEGA00
											<b>With NPTF 1/8 piloting connection</b>	<b>With NPT 1/8 piloting connection</b>
1/2"	15	43	720	6.1 (7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	8290D3260SEGA00	8290D32U0SEGA00
3/4"	20	80	1340	11 (12.7)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	8290D3360SEGA00	8290D33U0SEGA00
1"	25	143	2390	18.4 (21.3)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	8290D3460SEGA00	8290D34U0SEGA00
1 1/4"	32	260	4340	30.7 (35.6)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	NPTF	8290D3560SEGA00	8290D35U0SEGA00
1 1/2"	40	368	6130	43.9 (50.9)	7.5 (110)	9 (135)	5 (75)	10 (150)	63	NPTF	8290D3660SEGA00	8290D36U0SEGA00
2	50	486	8100	58 (67.2)	6 (90)	9 (135)	4 (60)	-	63	NPTF	8290D3760SEGA00	8290D37U0SEGA00
<b>Type 02 - Straight seat valve - NC - Normally closed, entry above disc</b>											<b>Plastic actuator</b>	<b>Stainless steel actuator</b>
											<b>With G 1/8 piloting connection</b>	
1/2"	15	43	720	3.8 (4.4)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	DIN	T290D325DSEGA00	T290D32TDSEGA00
3/4"	20	80	1340	7.4 (8.4)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	DIN	T290D335DSEGA00	T290D33TDSEGA00
1"	25	143	2390	13.1 (15.2)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	DIN	T290D345DSEGA00	T290D34TDSEGA00
1 1/4"	32	260	4340	19.7 (22.8)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	DIN	T290D355DSEGA00	T290D35TDSEGA00
1 1/2"	40	368	6130	26.8 (31)	7.5 (110)	9 (135)	5 (75)	10 (150)	63	DIN	T290D365DSEGA00	T290D36TDSEGA00
2	50	486	8100	40.3 (46.7)	6 (90)	9 (135)	4 (60)	-	63	DIN	T290D375DSEGA00	T290D37TDSEGA00
											<b>With NPTF 1/8 piloting connection</b>	<b>With NPT 1/8 piloting connection</b>
1/2"	15	43	720	3.8 (4.4)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	ANSI	T290D326PSEGA00	T290D32UPSEGA00
3/4"	20	80	1340	7.4 (8.4)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	ANSI	T290D336PSEGA00	T290D33UPSEGA00
1"	25	143	2390	13.1 (15.2)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	ANSI	T290D346PSEGA00	T290D34UPSEGA00
1 1/4"	32	260	4340	19.7 (22.8)	5.5 (80)	9 (135)	5 (75)	10 (150)	63	ANSI	T290D356PSEGA00	T290D35UPSEGA00
1 1/2"	40	368	6130	26.8 (31)	7.5 (110)	9 (135)	5 (75)	10 (150)	63	ANSI	T290D366PSEGA00	T290D36UPSEGA00
2	50	486	8100	40.3 (46.7)	6 (90)	9 (135)	4 (60)	-	63	ANSI	T290D376PSEGA00	T290D37UPSEGA00

<sup>(1)</sup> For inlet pressure = 8 bar (120 psi) and ΔP = 100 mb (1.5 psi).  
<sup>(2)</sup> Minimum pilot pressure at maximum operating differential pressure.

# ASCO™ Pneumatic Angle and Straight Seat Valves

## Product selection guide



<sup>(1)</sup> See "Choice of options and accessories", pages 7 to 9

**Repair Kits and Service Parts**

**Tapped body (bronze and stainless steel) and flanges body (stainless steel)**

	Ø	DN	Spare parts kits no.			Ø	DN	Spare parts kits no.	
			Plastic actuator					Stainless steel actuator	
	1/2"	15	M29054935100100			1/2"	15	M29054935100100	
	3/4"	20	M29054935100200			3/4"	20	M29054935100200	
	1"	25	M29054935100300			1"	25	M29054935100300	
	1 1/4"	32	M29054935100400			1 1/4"	32	M29054935100400	
	1 1/2"	40	M29054935100500			1 1/2"	40	M29054935100500	
	2	50	M29054935100600			2	50	M29054935100600	

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



NC - Normally closed, entry above the disc			
63 mm actuator			
Angle seat valve		Straight seat valve	
Plastic actuator Bronze body	Stainless steel actuator Stainless steel body	Plastic actuator Stainless steel body	Stainless steel actuator Stainless steel body

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## Installation



- Install strainer upstream of valve with a mesh size less than 1.5 mm through which a 1 mm dia. rod cannot pass
- The valves can be mounted in any position without affecting operation
- Adjustable actuator enables 360° access to pilot port
- 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
- Pilot thread connection (G) or (NPTF) or (NPT) has a standard thread according to ISO 228/1 or ANSI B 1.20.3 or SAE 71051
- Installation/maintenance instructions in multiple languages are available on our website

## Choice of options and accessories

Options	NC		Actuator diameter compatibility (mm)																																																																
	Fluid entry above the disc																																																																		
			63																																																																
AT0	•	•	<p><i>When a combination of several options are selected (using the product configurator on our website) you will be provided with a specific combination code</i></p> <p><b>ATEX/IECEX</b></p> <ul style="list-style-type: none"> <li>• 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.: <b>LCIE 20 ATEX 3037 X</b> IECEX Certificate of Conformity no.: <b>IECEX LCIE 20.0025X</b></li> <li>• 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</li> <li>• Recommended for applications in the chemical, oil, gas and paint coating industries etc.</li> </ul> <p>ATEX-Directive 2014/34/EU, category 1</p> <table border="1"> <thead> <tr> <th colspan="7">Classification (zones)</th> </tr> <tr> <th colspan="7">Category 1</th> </tr> <tr> <th colspan="3">Dusts</th> <th colspan="3">Gas</th> <th rowspan="2">Safety code</th> </tr> <tr> <th>IIIA</th> <th>IIIB</th> <th>IIIC</th> <th>IIA</th> <th>IIB</th> <th>IIC</th> </tr> </thead> <tbody> <tr> <td colspan="3">Zone 20</td> <td colspan="3">Zone 0</td> <td>                     Ⓢ II 1G Ex h IIC T* Ga                      Ⓢ II 1D Ex h IIIC T*°C Da                 </td> </tr> <tr> <th colspan="2">1GD</th> <th colspan="2">Plastic actuator</th> <th colspan="2">Metallic actuator</th> </tr> <tr> <th>T*°C</th> <th>T*</th> <th>Ts amb</th> <th>T fluid</th> <th>Ts amb</th> <th>T fluid</th> </tr> <tr> <td>135°C</td> <td>T4</td> <td>60°C</td> <td>60°C</td> <td>60°C</td> <td>60°C</td> </tr> <tr> <td>100°C</td> <td>T5</td> <td>60°C</td> <td>60°C</td> <td>60°C</td> <td>60°C</td> </tr> <tr> <td>85°C</td> <td>T6</td> <td>60°C</td> <td>53°C</td> <td>60°C</td> <td>57°C</td> </tr> </tbody> </table> <p></p>	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 IIIC T*°C Da	1GD		Plastic actuator		Metallic actuator		T*°C	T*	Ts amb	T fluid	Ts amb	T fluid	135°C	T4	60°C	60°C	60°C	60°C	100°C	T5	60°C	60°C	60°C	60°C	85°C	T6	60°C	53°C	60°C	57°C
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**Choice of options and accessories**

Options	NC	Actuator diameter compatibility (mm)	
	Fluid entry above the disc		
		63	
PFB	●	●	 <p>Prepared for signaling box mounting</p>
-	●	●	 <p>See the dedicated catalogue pages</p> <ul style="list-style-type: none"> <li>The signaling box fits on compatible actuators to indicate whether the valve is open or closed</li> </ul>

<sup>(1)</sup> When a combination of several options are selected (using the product configurator on our website) you will be provided with a specific combination code

**Product selection guide - Signaling box**

**PRODUCT CODE**

**P 890 A T 1 0 0 1 EGA 00**

**Connection type**  
P = No piloting connection

**Product series**  
890 = Signaling units for air operated valves

**Revision letter**  
A = Initial release

**Enclosure type**  
T = Signaling box

**Sensor type - Enclosure type**

- 1 = Mechanical switch - Plastic/Transparent plastic cover
- 2 = Mechanical switch - Stainless steel cover
- 3 = Mechanical switch - Aluminium cover
- 4 = Inductive switch PNP - Plastic/Transparent plastic cover
- 5 = Inductive switch PNP - Stainless steel cover
- 6 = Inductive switch NPN - Aluminium cover
- 7 = Inductive switch NPN - Plastic/Transparent plastic cover
- 8 = Inductive switch NPN - Stainless steel cover
- 9 = Inductive switch NPN - Aluminium cover
- A = Inductive switch Ex ia NAMUR - Plastic/Transparent plastic cover

**Piloting voltage**  
00 = No pilot

**Options <sup>(1)</sup>**  
EGA = EN 161 gas certified  
V11 = Visualization optimized by LED (360°)



**Valve type (290 NC)**  
1 = Stainless steel actuator 63 mm  
2 = Plastic actuator 63 mm

**Communication features - Electrical connection type**  
0 = No Communication - Cable gland

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## Choice of options and accessories

Options	NC		<p><i>When a combination of several options are selected (using the product configurator on our website) you will be provided with a specific combination code</i></p>
	Fluid entry above the disc	Actuator diameter compatibility (mm)	
		63	
<b>STL</b>	●	●	 <p>Stroke limiter for opening</p>
<b>SSF</b>	●	●	 <p>AISI 316L stainless steel pilot insert for plastic actuator</p>
<b>M31</b>	●	●	Stainless steel valve body material certificate 3.1

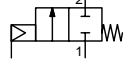
- Available feature

**Dimensions mm (inches)** 

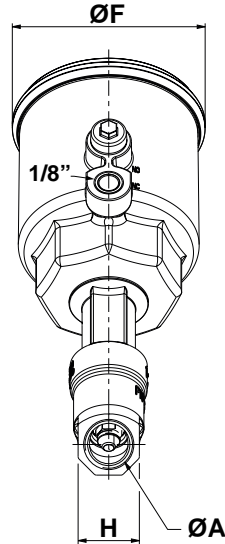
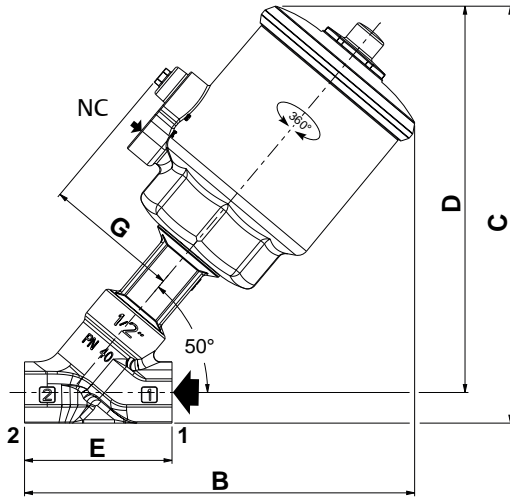


**TYPE 01 - Angle seat valve**

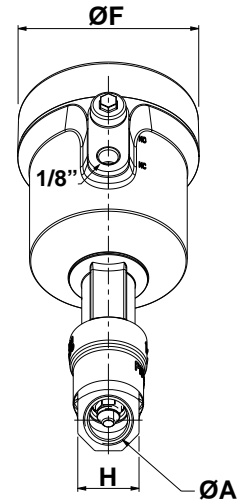
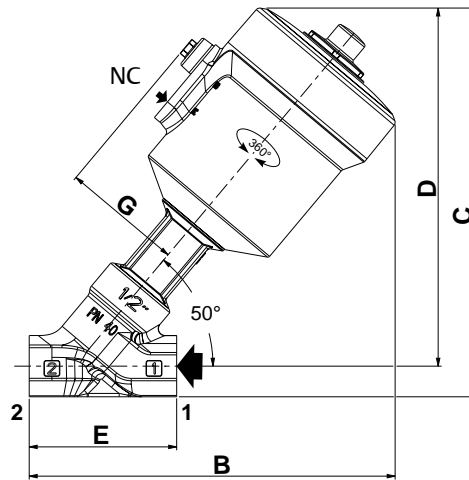
63 mm actuator  
NC - Fluid entry:  
above the disc at 1



**Plastic actuator**



**Stainless steel actuator**



ØA		E	H
G* 1/2"	mm	65	27
NPTF 1/2"	(in)	2.559	1.063
G* 3/4"	mm	75	32
NPTF 3/4"	(in)	2.953	1.260
G* 1"	mm	90	41
NPTF 1"	(in)	3.543	1.614
G* 1 1/4"	mm	110	50
NPTF 1 1/4"	(in)	4.331	1.969
G* 1 1/2"	mm	120	60
NPTF 1 1/2"	(in)	4.724	2.362
G* 2"	mm	150	70
NPTF 2"	(in)	5.906	2.756

Plastic actuator				
B	C	D	ØF	G
172	184	170.5	85	59.5
6.772	7.244	6.713	3.346	2.343
176	187	171	85	59.5
6.929	7.362	6.732	3.346	2.343
185.5	199.5	179	85	59.5
7.303	7.854	7.047	3.346	2.343
206	215.5	190.5	85	59.5
8.110	8.484	7.500	3.346	2.343
206	222.5	192.5	85	59.5
8.110	8.760	7.579	3.346	2.343
229	234.5	199.5	85	59.5
9.016	9.232	7.854	3.346	2.343

Stainless steel actuator				
B5	C5	D5	ØF5	G5
161.5	171.5	158.0	79.5	53.0
6.358	6.752	6.220	3.130	2.087
165.5	175.0	159.0	79.5	53.0
6.516	6.890	6.260	3.130	2.087
175.0	187.0	167.0	79.5	53.0
6.890	7.362	6.575	3.130	2.087
195.5	203.5	178.5	79.5	53.0
7.697	8.012	7.028	3.130	2.087
195.0	210.5	180.5	79.5	53.0
7.677	8.287	7.106	3.130	2.087
218.5	222.5	187.5	79.5	53.0
8.602	8.760	7.382	3.130	2.087

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# ASCO™ Pneumatic Angle and Straight Seat Valves

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



**TYPE 01 + Pilot 356, brass body**  
Coil size 20 mm - Thermoplastic moulded  
IEC 335 / DIN 43650  
IP67

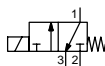
G356C135S19FM



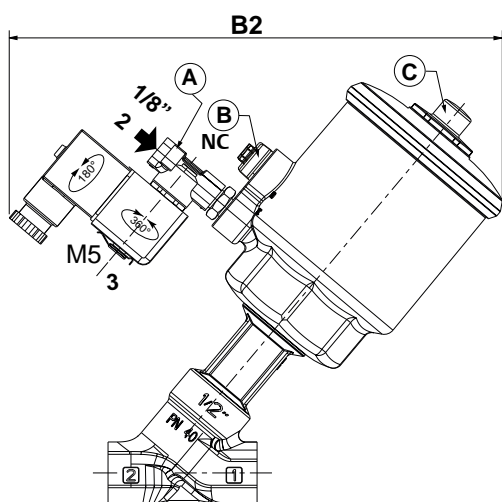
**TYPE 01 + Pilot 356, stainless steel body**  
Coil size 20 mm - Thermoplastic moulded  
IEC 335 / DIN 43650  
IP67

G356C145S19FM

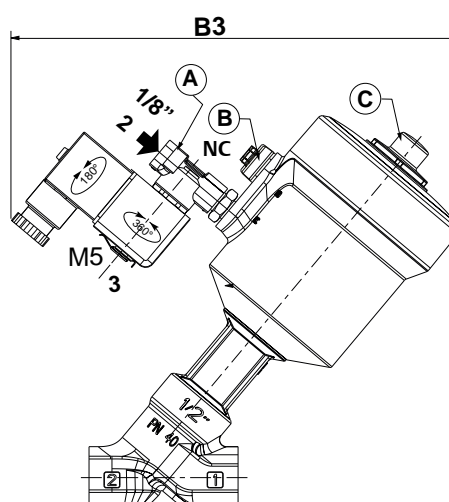
Pilot: NC



Plastic actuator




Stainless steel actuator



- (A) Pilot solenoid valve despatched separately, see page 2
- (B) Filter-plug (non-removable)
- (C) Optical position indicator

Actuator diameter	ØA		Plastic actuator	Stainless steel actuator	Weight (with pilot)		
			B2	B3	Plastic actuator	Stainless steel actuator	
63 mm	G* 1/2"	mm	213.2	193.2	1.1	1.9	kg
	NPTF 1/2"	(in)	8.394	7.606	2.4	4.2	(Lbs)
	G* 3/4"	mm	213.2	193.2	1.2	2	kg
	NPTF 3/4"	(in)	8.394	7.606	2.6	4.4	(Lbs)
	G* 1"	mm	213.2	193.2	1.6	2.3	kg
	NPTF 1"	(in)	8.394	7.606	3.5	5.1	(Lbs)
	G* 1 1/4"	mm	213.2	193.2	2	2.7	kg
	NPTF 1 1/4"	(in)	8.394	7.606	4.4	6.0	(Lbs)
	G* 1 1/2"	mm	213.2	193.2	2.6	3.3	kg
	NPTF 1 1/2"	(in)	8.394	7.606	5.7	7.3	(Lbs)
	G* 2"	mm	213.2	193.2	3.4	4.1	kg
	NPTF 2"	(in)	8.394	7.606	7.5	9.0	(Lbs)

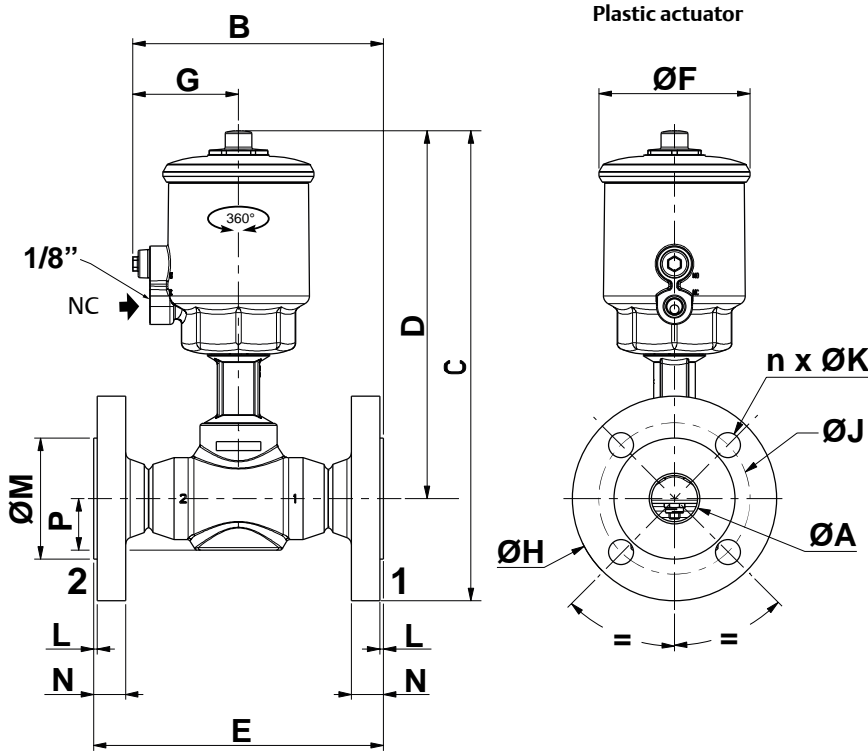
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Dimensions mm (inches), Weight kg (Lbs) 

Configurator - CAD Files



**TYPE 02 - Straight seat valve**  
63 mm actuator  
NC - Fluid entry:  
above the disc at 1



Type	Actuator diameter	DN	ØA	B	C		D	E	ØF	G	ØH		ØJ			
					ISO	ANSI					ISO	ANSI	ISO	ANSI		
03	63 mm	15	mm	17.3	124.5	247	244.5	199.5	130	85	59.5	95	90	65	60.3	
			(in)	0.681	4.902	9.724	9.626	7.854	5.118	3.346	2.343	3.740	3.543	2.559	2.374	
		20	mm	22.3	134.5	251	248.5	198.5	150	85	59.5	105	100	75	69.9	
			(in)	0.878	5.295	9.882	9.783	7.815	5.906	3.346	2.343	4.134	3.937	2.953	2.752	
		25	mm	28.5	139.5	264.5	262	207	160	85	59.5	115	110	85	79.4	
			(in)	1.122	5.492	10.413	10.315	8.150	6.299	3.346	2.343	4.528	4.331	3.346	3.126	
		32	mm	37.2	149.5	293.5	281	223.5	180	85	59.5	140	115	100	88.9	
			(in)	1.465	5.886	11.555	11.063	8.799	7.087	3.346	2.343	5.512	4.528	3.937	3.500	
		40	mm	43.1	159.5	296	283.5	221	200	85	59.5	150	125	110	98.4	
			(in)	1.697	6.280	11.654	11.161	8.701	7.874	3.346	2.343	5.906	4.921	4.331	3.874	
		50	mm	54.5	174.5	314	306.5	231.5	230	85	59.5	165	150	125	120.7	
			(in)	2.146	6.870	12.362	12.067	9.114	9.055	3.346	2.343	6.496	5.906	4.921	4.752	
				DN	ØA	n x ØK		L		M		N		P	Weight <sup>(1)</sup>	
						ISO	ANSI	ISO	ANSI	ISO	ANSI	ISO	ANSI		ISO	ANSI
		15	mm	17.3	4 X 14	4 X 16	2	1.5	45	34.9	16	13.2	19.75	2.5	2.1	kg
			(in)	0.681	4 X 0.551	4 X 0.63	0.079	0.059	1.772	1.374	0.630	0.520	0.778	6.1	5.2	(Lbs)
		20	mm	22.3	4 X 14	4 X 16	2	1.5	58	42.9	18	13.2	23	3.5	2.8	kg
			(in)	0.878	4 X 0.551	4 X 0.63	0.079	0.059	2.283	1.689	0.709	0.520	0.906	7.8	6.2	(Lbs)
		25	mm	28.5	4 X 14	4 X 16	2	1.5	68	50.8	18	14.2	29	4.4	3.7	kg
			(in)	1.122	4 X 0.551	4 X 0.63	0.079	0.059	2.677	2.000	0.709	0.559	1.142	9.6	8.1	(Lbs)
		32	mm	37.2	4 X 18	4 X 16	2	1.5	78	63.5	18	15.8	32.5	6.2	4.7	kg
			(in)	1.465	4 X 0.709	4 X 0.63	0.079	0.059	3.071	2.500	0.709	0.622	1.280	13.7	10.4	(Lbs)
		40	mm	43.1	4 X 18	4 X 16	3	1.5	88	73	18	17.4	36.85	7.2	6.0	kg
			(in)	1.697	4 X 0.709	4 X 0.63	0.118	0.059	3.465	2.874	0.709	0.685	1.451	15.9	13.2	(Lbs)
		50	mm	54.5	4 X 18	4 X 19.1	3	1.5	102	92.1	20	19	42.5	10.0	8.9	kg
			(in)	2.146	4 X 0.709	4 X 0.752	0.118	0.059	4.016	3.626	0.787	0.748	1.673	21.9	19.6	(Lbs)

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

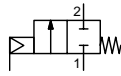
# ASCO™ Pneumatic Angle and Straight Seat Valves

## Dimensions mm (inches)

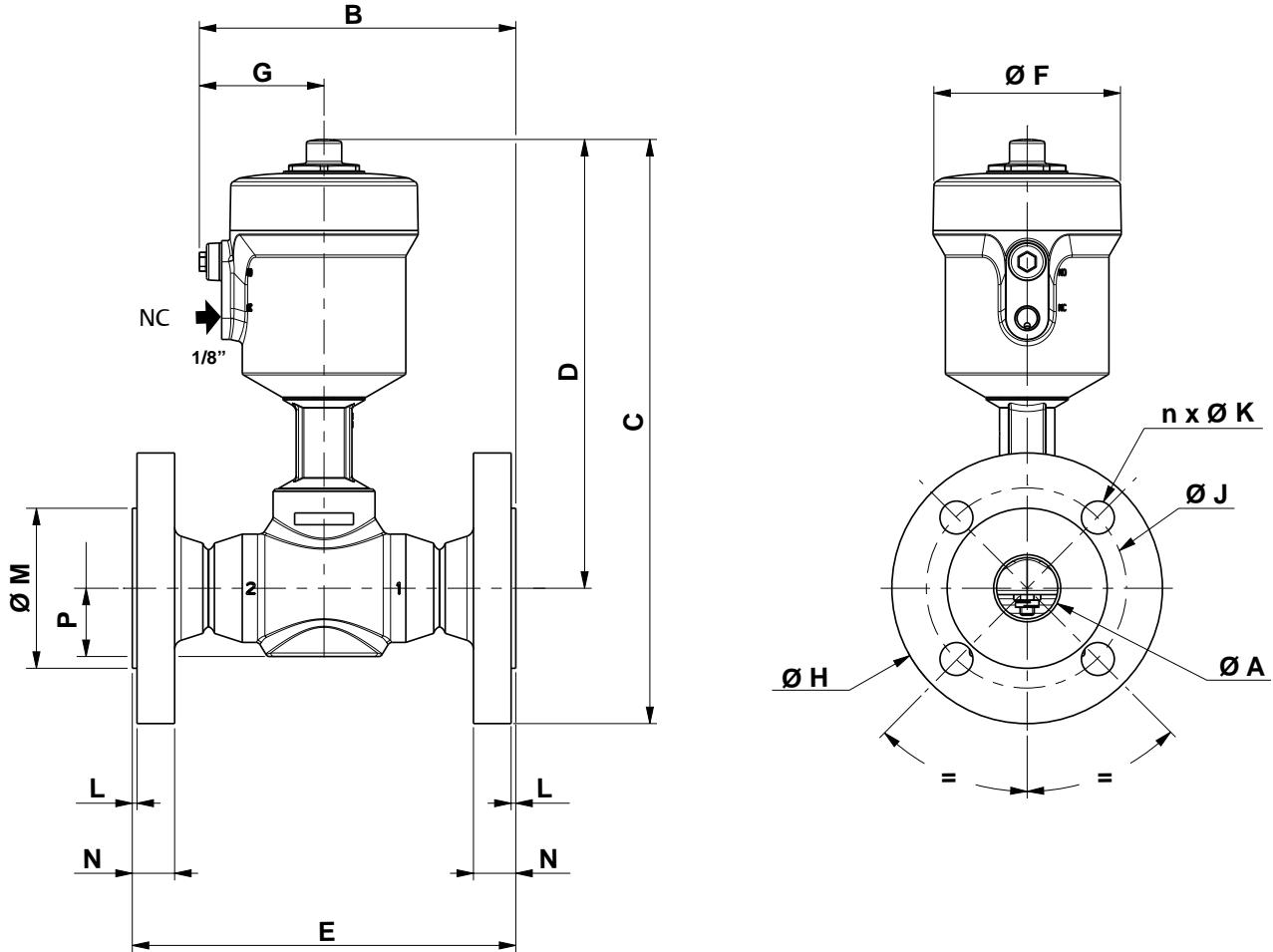


### TYPE 02 - Straight seat valve

63 mm actuator  
NC - Fluid entry:  
above the disc at 1




Stainless steel actuator



DN	ØA	B	C		D	E	ØF	G	ØH		ØJ		n x ØK		L		M		N		P	
			ISO	ANSI					ISO	ANSI	ISO	ANSI	ISO	ANSI	ISO	ANSI	ISO	ANSI				
15	mm	17.3	118.0	231.0	228.5	183.5	130.0	79.5	53.0	95.0	90.0	65.0	60.3	4 x 14	4 x 16	2.0	1.5	45.0	34.9	16.0	13.2	19.8
	(in)	0.681	4.646	9.094	8.996	7.224	5.118	3.130	2.087	3.740	3.543	2.559	2.374	4 x 0.551	4 x 0.630	0.079	0.059	1.772	1.374	0.630	0.520	0.778
20	mm	22.3	128.0	235.0	232.5	182.5	150.0	79.5	53.0	105.0	100.0	75.0	69.9	4 x 14	4 x 16	2.0	1.5	58.0	42.9	18.0	13.2	23.0
	(in)	0.878	5.039	9.252	9.154	7.185	5.906	3.130	2.087	4.134	3.937	2.953	2.752	4 x 0.551	4 x 0.630	0.079	0.059	2.283	1.689	0.709	0.520	0.906
25	mm	28.5	133.0	248.5	246.0	191.0	160.0	79.5	53.0	115.0	110.0	85.0	79.4	4 x 14	4 x 16	2.0	1.5	68.0	50.8	18.0	14.2	29.0
	(in)	1.122	5.236	9.783	9.685	7.520	6.299	3.130	2.087	4.528	4.331	3.346	3.126	4 x 0.551	4 x 0.630	0.079	0.059	2.677	2.000	0.709	0.559	1.142
32	mm	37.2	143.0	278.0	265.5	208.0	180.0	79.5	53.0	140.0	115.0	100.0	88.9	4 x 18	4 x 16	2.0	1.5	78.0	63.5	18.0	15.8	32.5
	(in)	1.465	5.630	10.945	10.453	8.189	7.087	3.130	2.087	5.512	4.528	3.937	3.500	4 x 0.709	4 x 0.630	0.079	0.059	3.071	2.500	0.709	0.622	1.280
40	mm	43.1	153.0	280.0	267.5	205.0	200.0	79.5	53.0	150.0	125.0	110.0	98.4	4 x 18	4 x 16	3.0	1.5	88.0	73.0	18.0	17.4	36.9
	(in)	1.697	6.024	11.024	10.531	8.071	7.874	3.130	2.087	5.906	4.921	4.331	3.874	4 x 0.709	4 x 0.630	0.118	0.059	3.465	2.874	0.709	0.685	1.451
60	mm	54.5	168.0	298.0	290.5	215.5	230.0	79.5	53.0	165.0	150.0	125.0	120.7	4 x 18	4 x 19.1	3.0	1.5	102.0	92.1	20.0	19.0	42.5
	(in)	2.146	6.614	11.732	11.437	8.484	9.055	3.130	2.087	6.496	5.906	4.921	4.752	4 x 0.709	4 x 0.752	0.118	0.059	4.016	3.626	0.787	0.748	1.673

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



**TYPE 01 + Pilot 356, brass body**  
Coil size 20 mm - Thermoplastic moulded  
IEC 335 / DIN 43650  
IP67

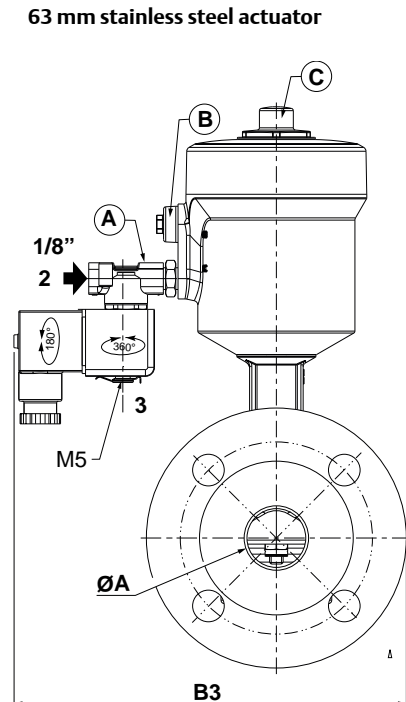
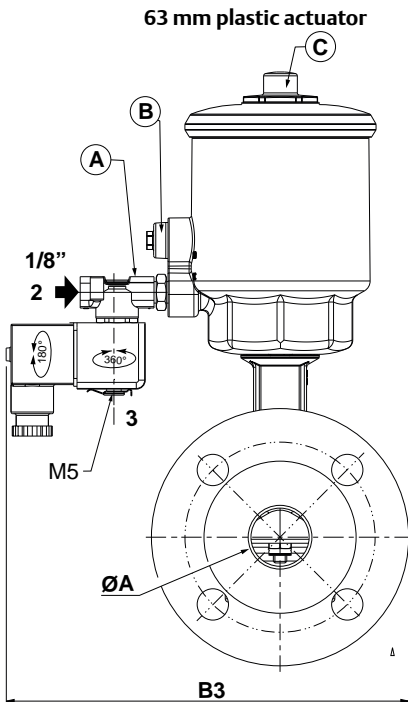
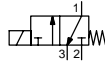
G356C135S19FM



**TYPE 01 + Pilot 356, stainless steel body**  
Coil size 20 mm - Thermoplastic moulded  
IEC 335 / DIN 43650  
IP67

G356C145S19FM

Pilot: NC



- (A) Pilot solenoid valve despatched separately, see on page 2
- (B) Filter-plug (non-removable)
- (C) Optical position indicator

Type	Actuator diameter	DN	ØA	Plastic actuator		Stainless steel actuator		Weight (with pilot)						
				B3		B3		Plastic		Stainless steel				
				ISO	ANSI	ISO	ANSI	ISO	ANSI	ISO	ANSI			
02	63 mm	15	17.3	mm	169	166.5	162.5	160	2.9	2.5	3.6	3.2	kg	
			0.681	(in)	6.654	6.555	6.398	6.299	6.4	5.5	7.9	7.0	(Lbs)	
		20	22.3	mm	174	171.5	167.5	165	3.6	2.9	4.4	3.7	kg	
			0.878	(in)	6.850	6.752	6.594	6.496	8.0	6.4	9.7	8.1	(Lbs)	
		25	28.5	mm	179	176.5	172.5	170	4.5	3.8	5.1	4.4	kg	
			1.122	(in)	7.047	6.949	6.791	6.693	9.9	8.4	11.3	9.8	(Lbs)	
		32	37.2	mm	191.5	179	185	172.5	170	6.3	4.8	7.0	5.5	kg
			1.465	(in)	7.539	7.047	7.283	6.791	13.9	10.6	15.4	12.2	(Lbs)	
		40	43.1	mm	196.5	184	190	177.5	170	7.3	6.1	8.1	6.8	kg
			1.697	(in)	7.736	7.244	7.480	6.988	16.1	13.5	17.8	15.0	(Lbs)	
		50	54.5	mm	204	196.5	197.5	190	190	10.1	9.0	10.8	9.8	kg
			2.146	(in)	8.031	7.736	7.776	7.480	22.3	19.9	23.8	21.5	(Lbs)	

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