

## FEATURES

- High flow due to angled seat design
- Anti-waterhammer design (fluid entry under the disc)
- Actuator rotatable through 360°
- In option closing of the valve in case of power failure
- Fluid isolation between electrical actuator and valve body
- LED valves status display
- The valves satisfy Pressure Equipment Directive 2014/68/EU, article 3.3
- The motorised valves comply with the essential requirements of EMC Directive 2014/30/EU (EN-IEC 61000-6-2 and EN-IEC 61000-6-4) and Low Voltage Directive 2014/35/EU (EN-IEC 60730)
- Vacuum operation up to 10<sup>-2</sup> mbar
- The valves satisfy all relevant EC Directives and with the provisions of the Directive RoHS 2

## GENERAL

**Differential pressure** See «SPECIFICATIONS» [1 bar =100 kPa]  
**Maximum allowable pressure** 10 bar  
**Ambient temperature range** -10°C to +50°C

**Maximum viscosity** -10°C to +40°C (for steam at 145°C)  
**Actuating time** 600 cSt (mm<sup>2</sup>/s)  
 < 1,3 s (opening) / < 1,3 s (closing)

fluids (*)	temperature range (TS)	seal materials (*)
air and gas groups 1 & 2	-10°C to +90°C	NBR (nitrile)
water, oil, liquids groups 1 & 2		
steam	up to +145°C	FPM (fluoroelastomer)

## CONSTRUCTION

MATERIALS IN CONTACT WITH FLUID		
(*) Ensure that the compatibility of the fluids in contact with the materials is verified		
	NBR / PBT «K»	FPM / 316L «X»
<b>Valve body</b>	AISI 316L	AISI 316L
<b>Stuffing box housing</b>	PBT, GF reinforced	AISI 316L
<b>Stem valve</b>	AISI 316L	AISI 316L
<b>Stuffing box packing</b>	NBR	FPM
<b>Wiper seal</b>	NBR	FPM
<b>Disc seal</b>	NBR	FPM

## OTHER MATERIALS

<b>Top cover operator</b>	Translucent polyamide (PA)
<b>AC to DC housing (AC)</b>	PA66, GF reinforced

## ELECTRICAL CHARACTERISTICS

<b>Connector</b>	Spade plug (cable Ø 6-10 mm)
<b>Connector specification</b>	ISO 4400 / EN 175301-803, form A
<b>Motor consumption</b>	12 W in operation, 0 W hold Max. peak current: 0,7 A
<b>Visualisation valve (switching)</b>	LED
<b>Electrical safety (adapter AC to DC)</b>	IEC 335 (EN-IEC 60730), class 2
<b>Electrical enclosure protection</b>	IP65 (EN 60529)
<b>Standard voltages</b>	DC (=) : 24V ±10 %, max. ripple 5%
(EN-IEC 61131-2)	AC (~) : 110V to 250V / 50-60 Hz 24V to 48V ±10 % / 50-60 Hz

## RECOMMENDATION FOR MAXIMUM DUTY CYCLE

### FOR NBR / PBT «K» VERSION

<b>Ambient temperature: +20°C</b>	9 cycles/min <sup>(1)</sup>
<b>+50°C (max.)</b>	4 cycles/min <sup>(1)</sup>

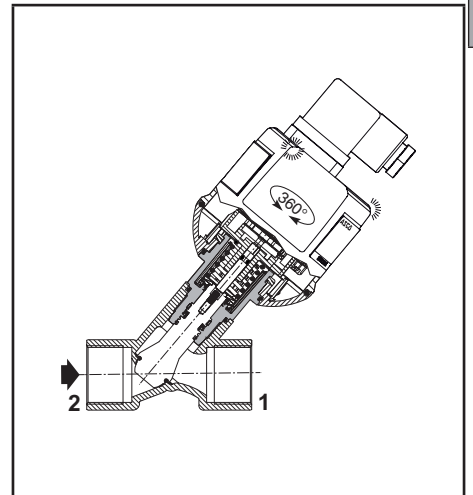
## RECOMMENDATION FOR MAXIMUM DUTY CYCLE

### FOR FPM / 316L «X» VERSION

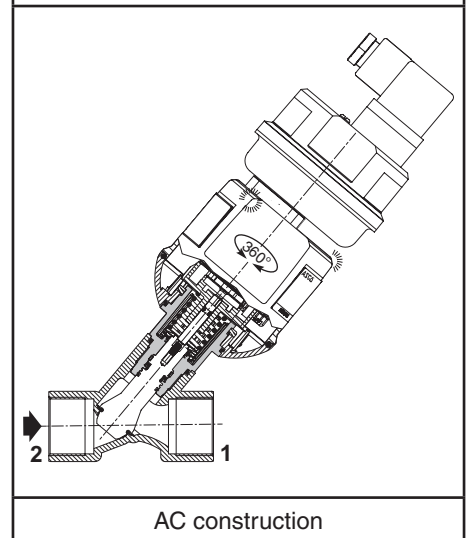
Ambient temperature:		fluid temp.:	
+20°C	9 cycles/min <sup>(1)</sup>	+20°C	
+50°C (max.)	4 cycles/min <sup>(1)</sup>	+50°C	
+50°C (max.)	2 cycles/min <sup>(1)</sup>	+120°C	
+40°C (max.)	2 cycles/min <sup>(1)</sup>	+145°C	

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

<sup>(1)</sup> For other cycles, contact us.



DC construction



AC construction

**ACCESSORIES**

**AC to DC adapter:** 110V to 250V/50-60 Hz  
 code: **P290CA430078001**  
 24V to 48V ±10 % / 50-60 Hz  
 code: **P290CA438907001**

**OPTIONS**

**Fail closed (closing of the valve in case of power failure)**  
**M12 connector adapter <sup>(1)</sup>**

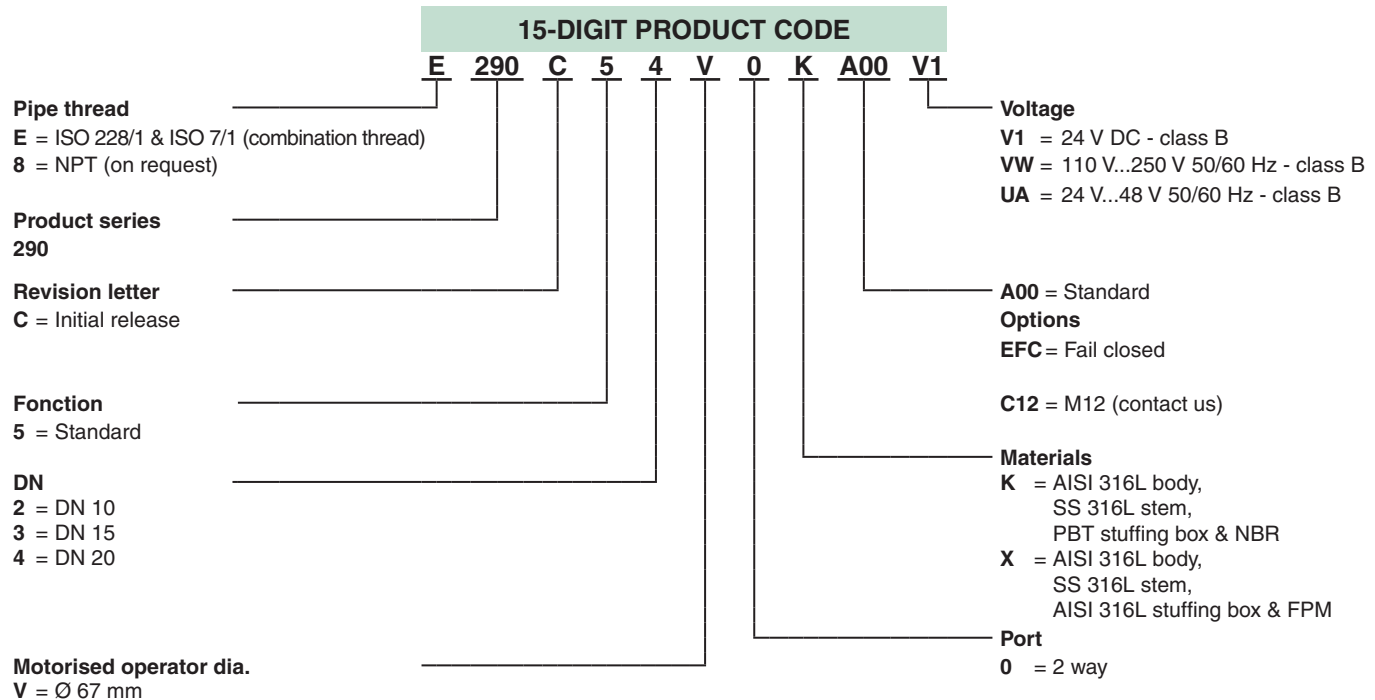
<sup>(1)</sup> Contact us.

**SPECIFICATIONS**

piping (ISO 6708)		flow coefficient Kv		operating pressure differential (bar)		operator diameter (mm)	thread type	dimensions / type <sup>(1)</sup>	15-DIGIT PRODUCT CODE				
pipe size	DN	(m <sup>3</sup> /h)	(l/min)	min.	max.				basic code	voltage code			
					air, water, oil (*)	steam			24 V...48 V / 50-60 Hz	110 V...250 V / 50-60 Hz	24 V/DC		
<b>Motorised valve, entry under the disc - NBR / PBT «K» version</b>													
3/8	10	2,7	45	0	6	-	67	G*	1	<b>E290C52V0KA00</b>			
1/2	15	3,8	63	0	5	-	67	G*	1	<b>UA</b>	<b>VW</b>	<b>V1</b>	
3/4	20	6	100	0	4	-	67	G*	1	<b>E290C54V0KA00</b>			
<b>Motorised valve, entry under the disc - FPM / 316L «X» version</b>													
3/8	10	2,7	45	0	6	4	67	G*	1	<b>E290C52V0XA00</b>			
1/2	15	3,8	63	0	5	4	67	G*	1	<b>UA</b>	<b>VW</b>	<b>V1</b>	
3/4	20	6	100	0	4	4	67	G*	1	<b>E290C54V0XA00</b>			

<sup>(1)</sup> For dimensions, see drawing(s) for each construction type on the following page(s).

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

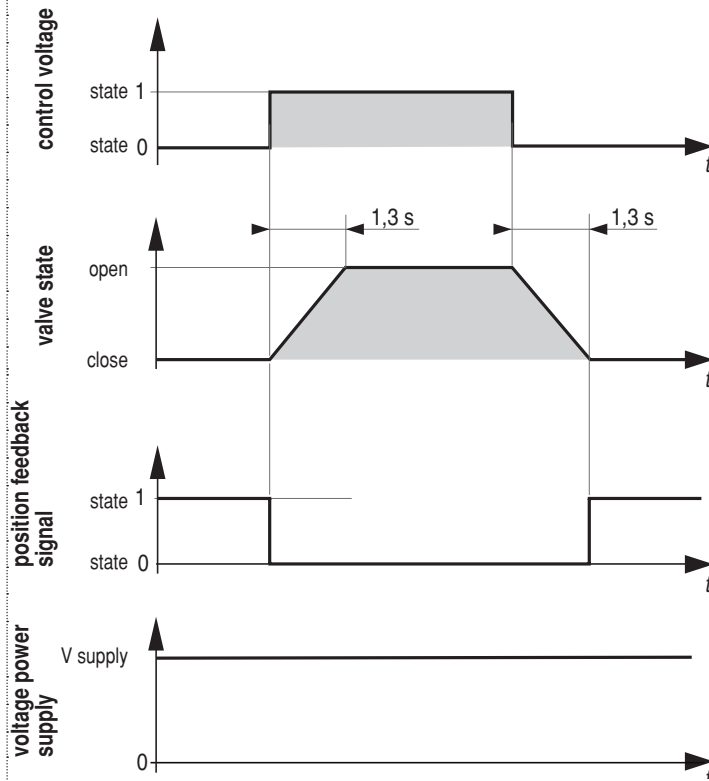


**INSTALLATION**

- The valves can be mounted in any position without affecting operation
  - Pipe connections (G\*) have standard combination thread according to ISO 228/1 and ISO 7/1
  - Other pipe connections are available on request
  - Installation/maintenance instructions are included with each valve
  - 2D/3D CAD models - *In 3D*
  - LED indicators for operating status display
- |        |                      |                 |
|--------|----------------------|-----------------|
| status | valve OPEN           | green           |
|        | valve CLOSED         | orange          |
|        | valve moves to open  | green flashing  |
|        | valve moves to close | orange flashing |

### OPERATING DIAGRAM

standard



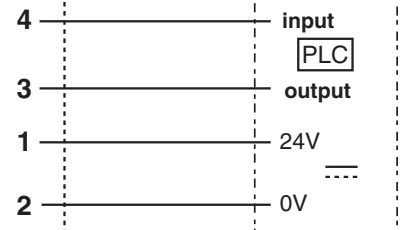
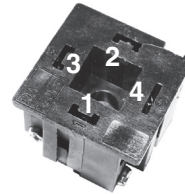
### WIRING DC

24 V ±10 % / DC

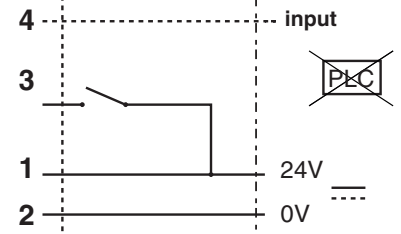
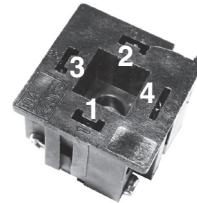


1	24 V / DC
2	0 V
3	control
4	feedback signal

With PLC

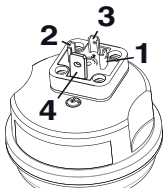


Without PLC



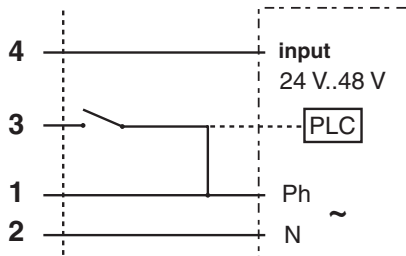
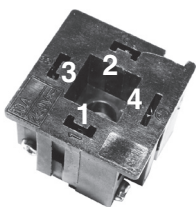
### WIRING AC

24 V...48 V ±10 % / AC 50/60 Hz

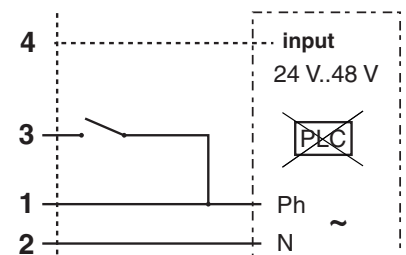
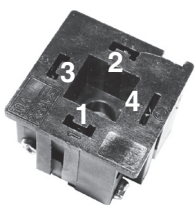


1	phase (Ph)
2	neutral (N)
3	control
4	feedback signal

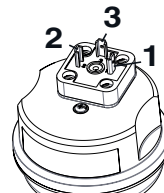
With PLC



Without PLC

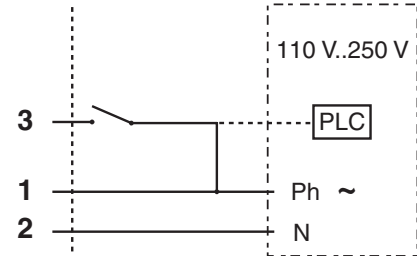
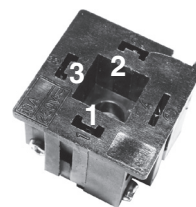


110 V...250 V / AC 50/60 Hz

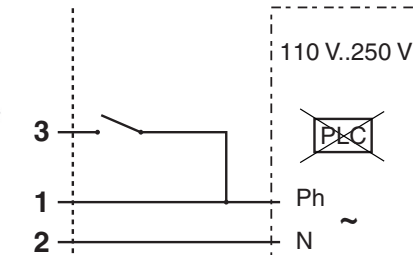
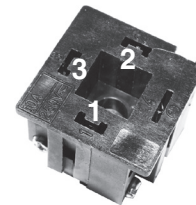


1	phase (Ph)
2	neutral (N)
3	control
-	-

With PLC

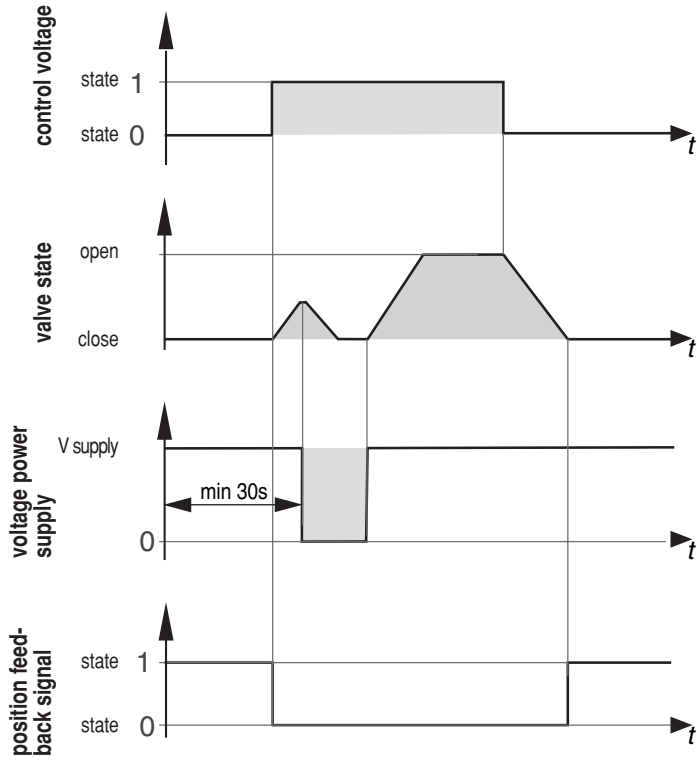


Without PLC



### OPERATING DIAGRAM

fail closed



(\*) Initialisation

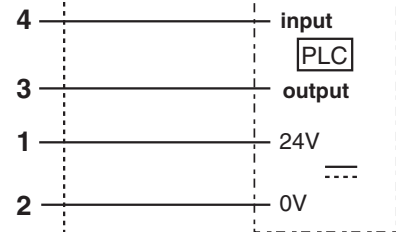
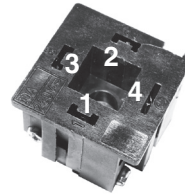
### WIRING DC

24 V ±10 % / DC

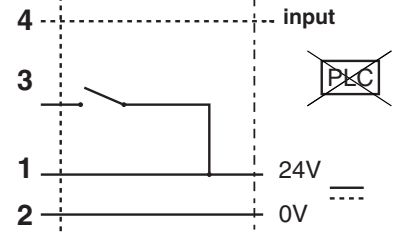
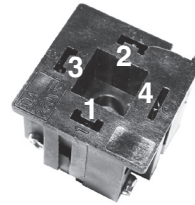


1	24 V / DC
2	0 V
3	control
4	feedback signal

With PLC

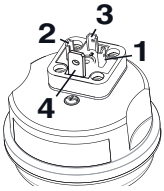


Without PLC



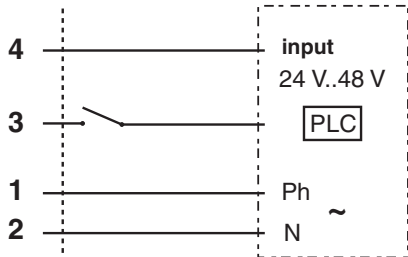
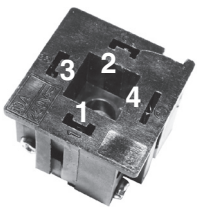
### WIRING AC

24 V...48 V ±10 % / AC 50/60 Hz

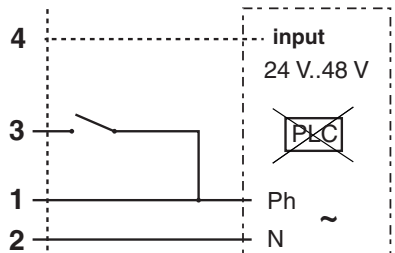


1	phase (Ph)
2	neutral (N)
3	control
4	feedback signal

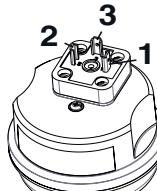
With PLC



Without PLC

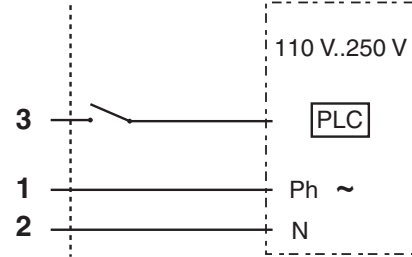
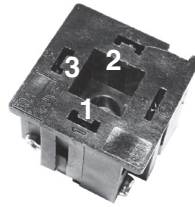


110 V...250 V / AC 50/60 Hz

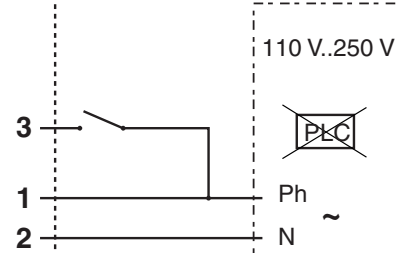
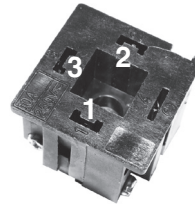


1	phase (Ph)
2	neutral (N)
3	control
-	-

With PLC



Without PLC

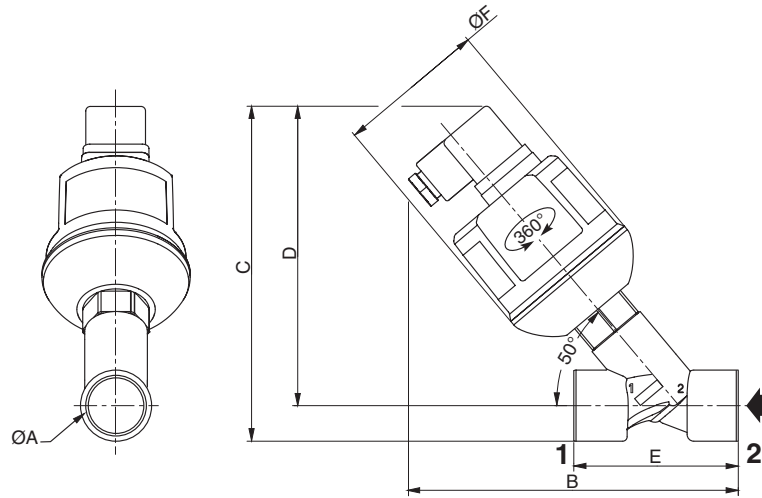


### DIMENSIONS (mm), WEIGHT (kg)



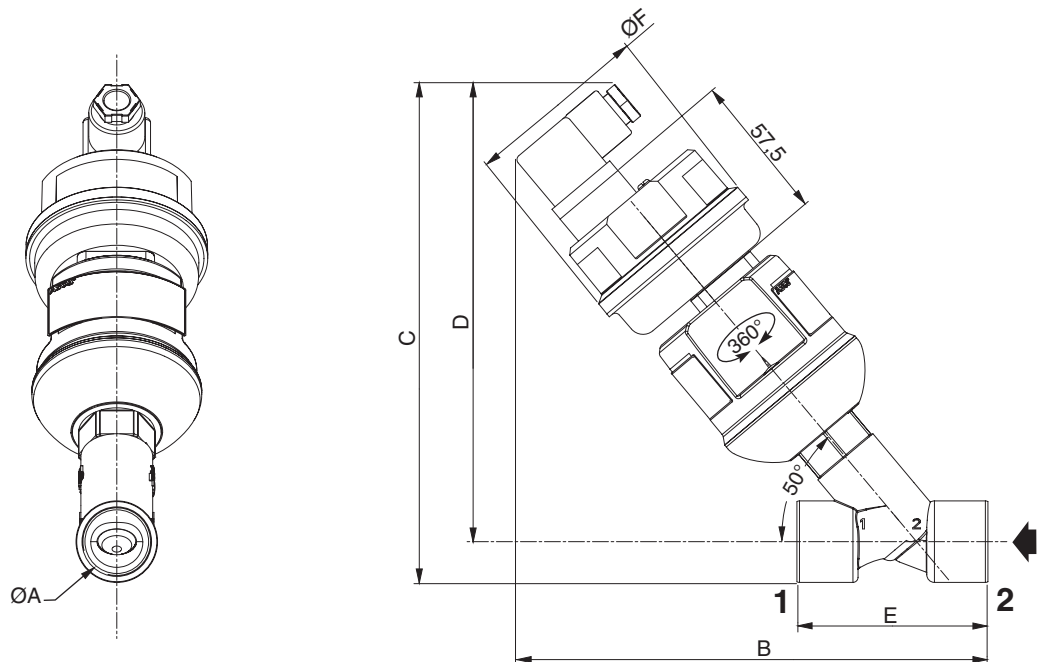
#### TYPE 01

DC version  
67 mm motorised operator  
Fluid entry: under the disc at 2  
ISO 4400 connector



#### TYPE 02

AC version (accessories)  
67 mm motorised operator with AC adapter  
Fluid entry: under the disc at 2  
ISO 4400 connector



type	Ø A	B	C	D	E	Ø F	weight <sup>(1)</sup>	
							NBR / PBT «K»	FPM / 316L «X»
<b>DC version</b>								
01	3/8	135	141	129	55	67	0,40	0,45
	1/2	142	145	131	65	67	0,45	0,55
	3/4	150	152	136	75	67	0,55	0,65
<b>AC version</b>								
02	3/8	171	189	175	55	71	0,50	0,60
	1/2	178	191	177	65	71	0,55	0,65
	3/4	186	196	180	75	71	0,65	0,75

<sup>(1)</sup> Incl. connector.

