

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 10⁻² 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 (mm²/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»
Valve body	AISI 316L	AISI 316L
Stuffing box housing	PBT, GF reinforced	AISI 316L
Stem valve	AISI 316L	AISI 316L
Stuffing box packing	NBR	FPM
Wiper seal	NBR	FPM
Disc seal	NBR	FPM

OTHER MATERIALS

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

ELECTRICAL CHARACTERISTICS

Connector	Spade plug (cable Ø 6-10 mm)
Connector specification	ISO 4400 / EN 175301-803, form A
Motor consumption	12 W in operation, 0 W hold Max. peak current: 0,7 A
Visualisation valve (switching)	LED
Electrical safety (adapter AC to DC)	IEC 335 (EN-IEC 60730), class 2
Electrical enclosure protection	IP65 (EN 60529)
Standard voltages	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

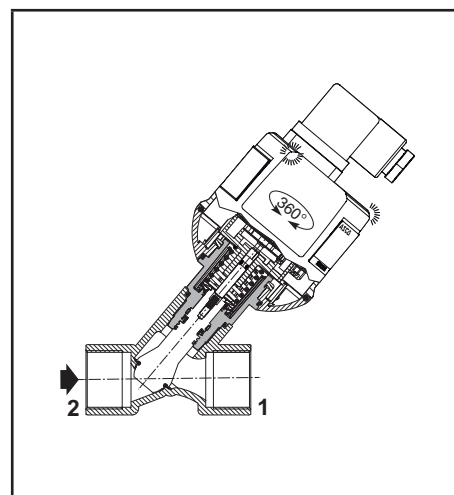
Ambient temperature: +20°C	9 cycles/min ⁽¹⁾
+50°C (max.)	4 cycles/min ⁽¹⁾

RECOMMENDATION FOR MAXIMUM DUTY CYCLE FOR FPM / 316L «X» VERSION

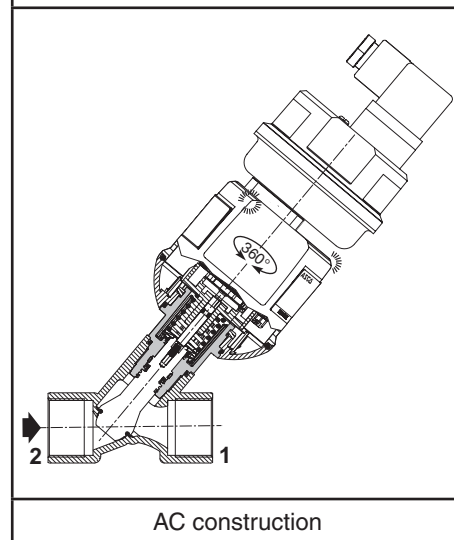
Ambient temperature: +20°C	9 cycles/min ⁽¹⁾	fluid temp.: +20°C
+50°C (max.)	4 cycles/min ⁽¹⁾	+50°C
+50°C (max.)	2 cycles/min ⁽¹⁾	+120°C
+40°C (max.)	2 cycles/min ⁽¹⁾	+145°C

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

⁽¹⁾ 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 $\pm 10\%$ / 50-60 Hz
code: **P290CA438907001**

OPTIONS

Fail closed (closing of the valve in case of power failure)

M12 connector adapter ⁽¹⁾

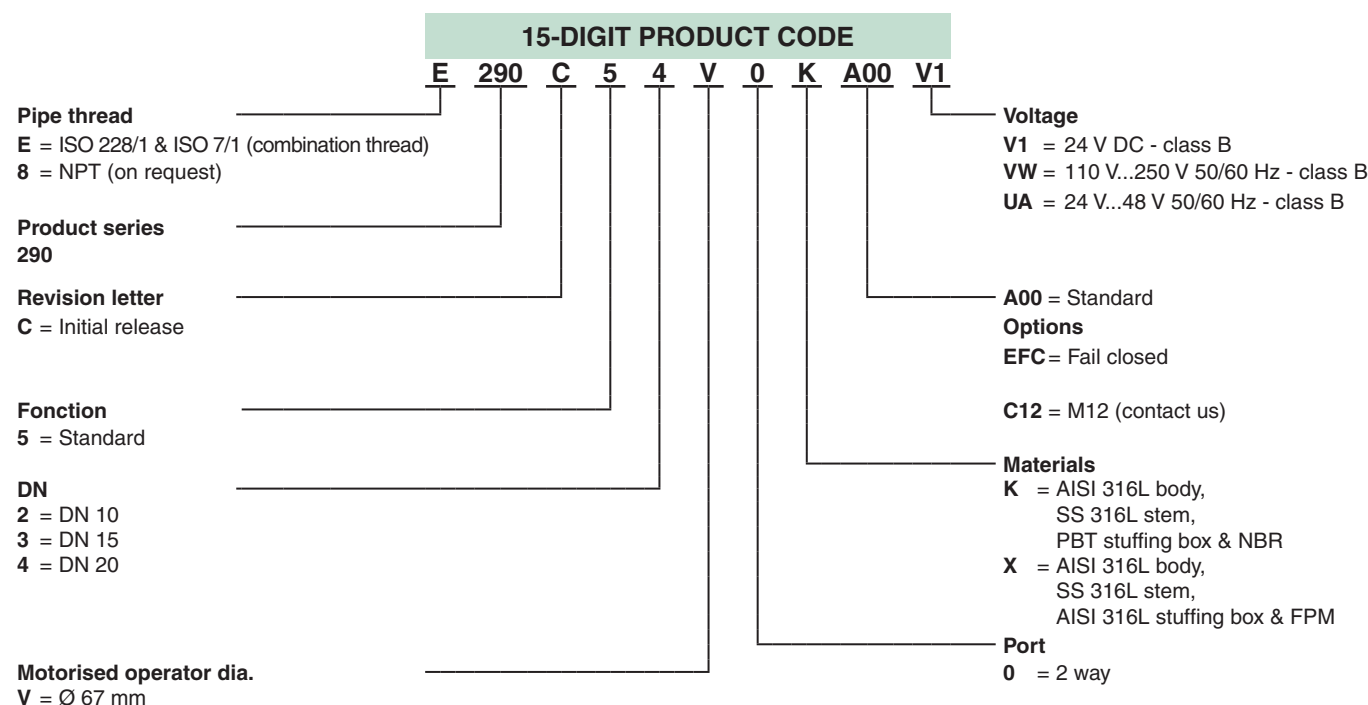
⁽¹⁾ Contact us.

SPECIFICATIONS

SPECIFICATIONS										15-DIGIT PRODUCT CODE				
piping (ISO 6708)		flow coefficient Kv		operating pressure differential (bar)			operator diameter	thread type	dimensions / type ⁽¹⁾	basic code	voltage code			
pipe size	DN			min.	max.						(mm)	24 V...48 V / 50-60 Hz	110 V...250 V / 50-60 Hz	24 VDC
					(m³/h)	(l/min)	air, water, oil (*)							
Motorised valve, entry under the disc - NBR / PBT «K» version														
3/8	10	2,7	45	0	6	-	67	G*	1	E290C52V0KA00	UA	VW	V1	
1/2	15	3,8	63	0	5	-	67	G*	1	E290C53V0KA00				
3/4	20	6	100	0	4	-	67	G*	1	E290C54V0KA00				
Motorised valve, entry under the disc - FPM / 316L «X» version														
3/8	10	2,7	45	0	6	4	67	G*	1	E290C52V0XA00	UA	VW	V1	
1/2	15	3,8	63	0	5	4	67	G*	1	E290C53V0XA00				
3/4	20	6	100	0	4	4	67	G*	1	E290C54V0XA00				

⁽¹⁾ 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.



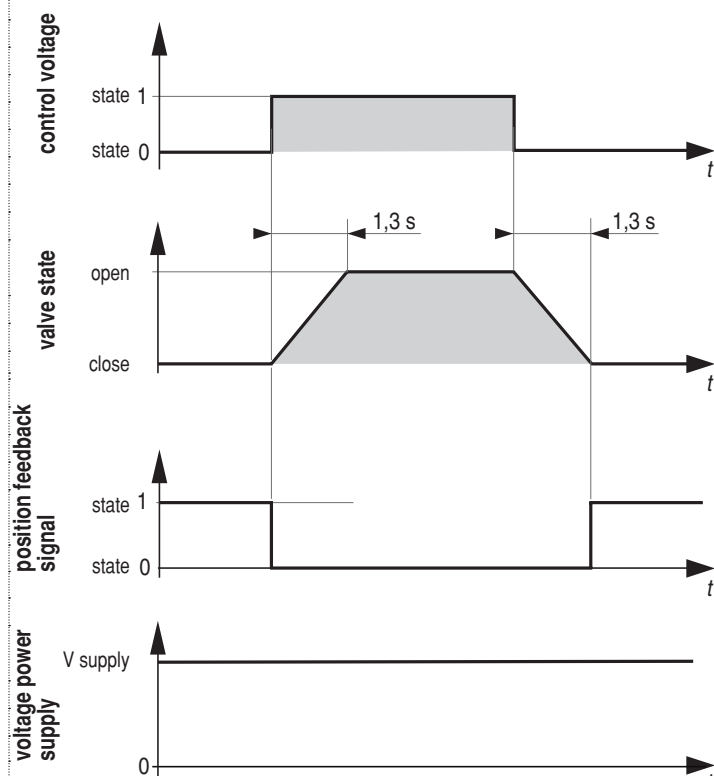
INSTALLATION

- 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



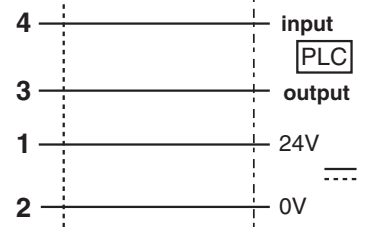
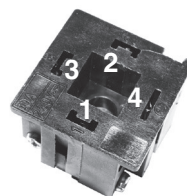
WIRING DC

24 V $\pm 10\%$ / DC

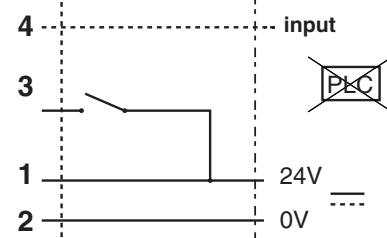
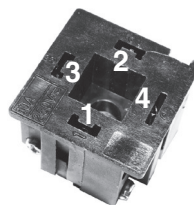


1	24 V / DC
2	0 V
3	control
4	feedback signal

With PLC

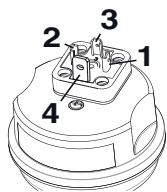


Without PLC



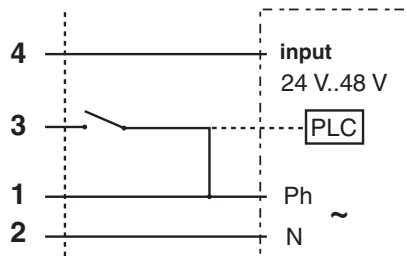
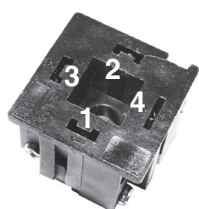
WIRING AC

24 V...48 V $\pm 10\%$ / AC 50/60 Hz

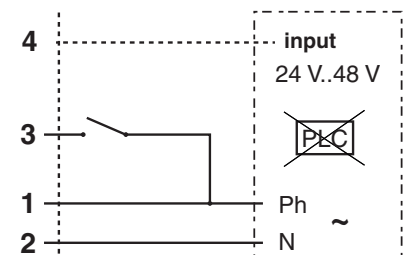
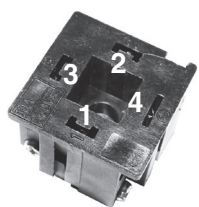


1	phase (Ph)
2	neutral (N)
3	control
4	feedback signal

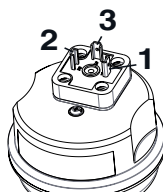
With PLC



Without PLC

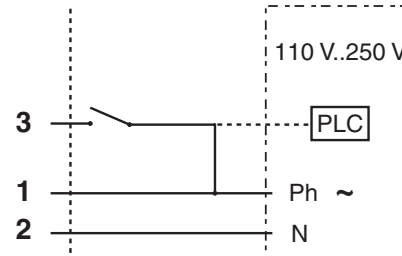
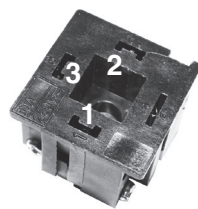


110 V...250 V / AC 50/60 Hz

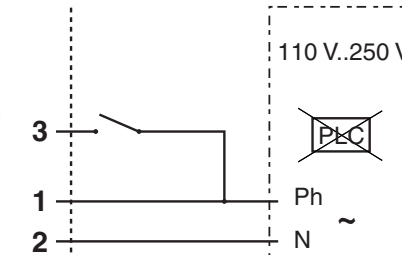
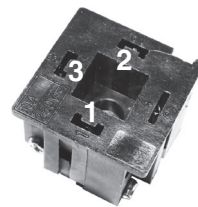


1	phase (Ph)
2	neutral (N)
3	control
-	-

With PLC

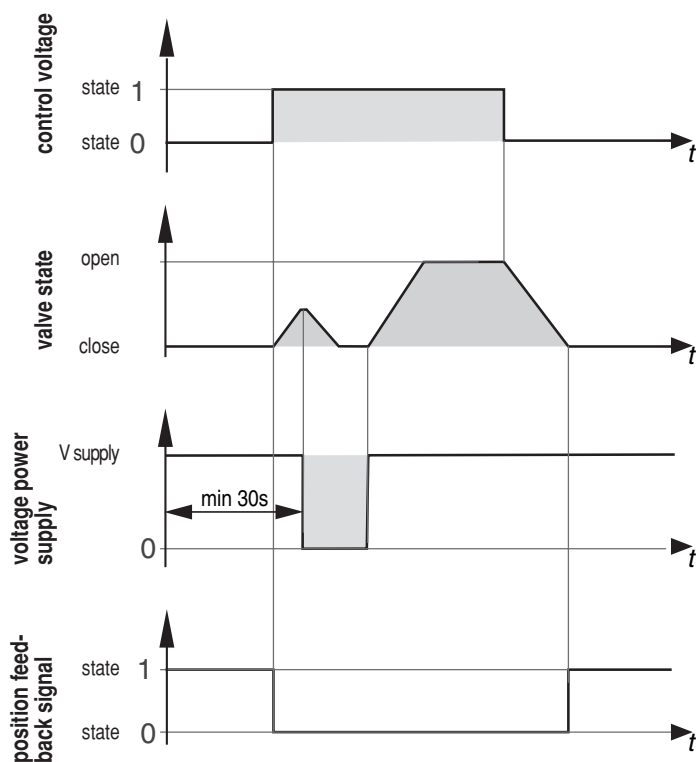


Without PLC



OPERATING DIAGRAM

fail closed



(*) Initialisation

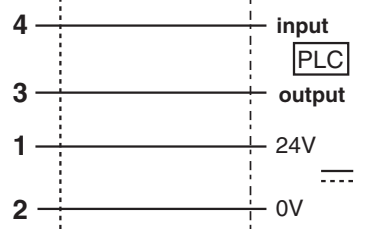
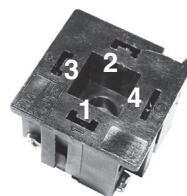
WIRING DC

24 V $\pm 10\%$ / DC

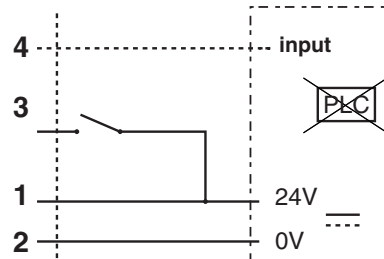
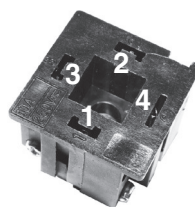


1	24 V / DC
2	0 V
3	control
4	feedback signal

With PLC

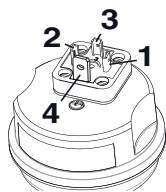


Without PLC



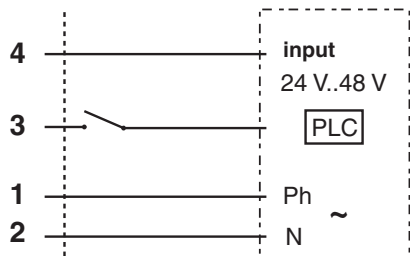
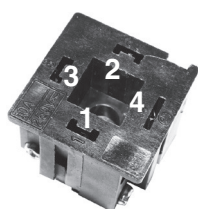
WIRING AC

24 V...48 V $\pm 10\%$ / AC 50/60 Hz

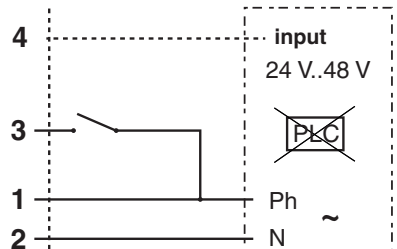
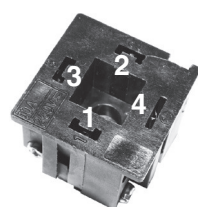


1	phase (Ph)
2	neutral (N)
3	control
4	feedback signal

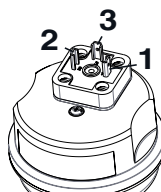
With PLC



Without PLC

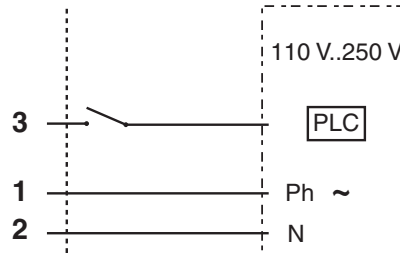
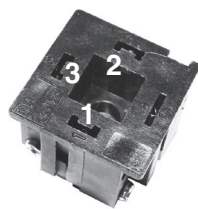


110 V...250 V / AC 50/60 Hz

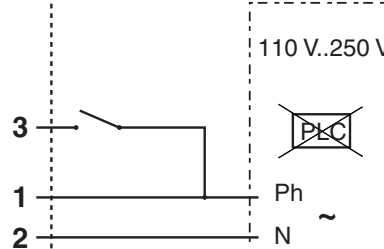
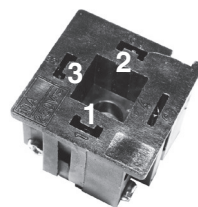


1	phase (Ph)
2	neutral (N)
3	control
-	-

With PLC



Without PLC

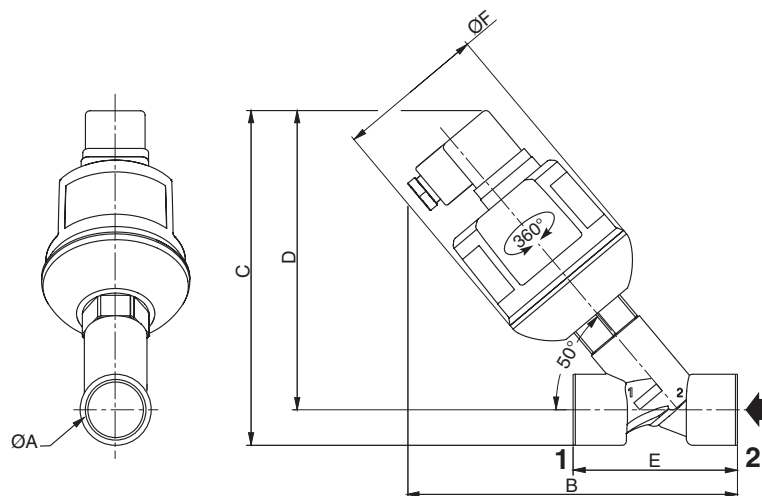


DIMENSIONS (mm), WEIGHT (kg)



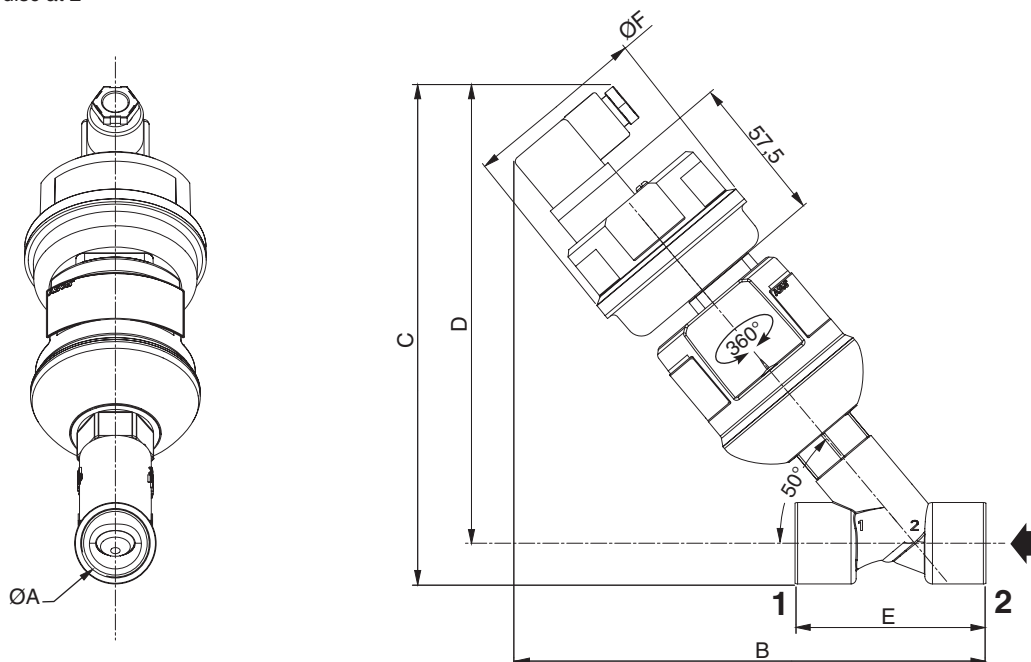
TYPE 01

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 ⁽¹⁾	
							NBR / PBT «K»	FPM / 316L «X»
DC version								
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
AC version								
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

⁽¹⁾ Incl. connector.

