

1121-1125 BUTTERFLY VALVES + SA ELECTRIC ACTUATOR

FEATURES

The butterfly valves 1121 to 1125 are dedicated to the automatic opening/shut-off of common fluid pipes. It has a cast iron body. Thanks to various material possibilities for both the butterfly and the sleeve, it can be used in indifferent applications. The wafer type body enables the mounting between PN10/16 or ANSI 150 flanges. The ISO 5211 pad enables the direct mounting of the SA electric actuator. It is perfectly adapted for an indoor or outdoor industrial use.



LIMITS OF USE

Max. allowable pressure : PS	16 bar until DN 300
Fluid temperature : WT	According to the upper chart
Prohibited use	Steam, natural gas
Room temperature	-10°C / +70°C
Service factor	S2-70%



AVAILABLE MODELS

DN 40 to DN 100

Flanged connections RF PN10/16 and ANSI 150

Supply voltage : 12 Vdc, 24 Vac-dc and 230 Vac

Ref.	Butterfly	Sleeve	Application examples	Min.TS	Max.TS
1121	Stainless steel	NBR	Liquid hydrocarbons - compressed air	-10°C	+90°C
1123	Stainless steel	EPDM	Demineralised water - Alkaline materials	-10°C	+110°C
1125	Ductile iron	EPDM	Cold water - hot water	-10°C	+110°C

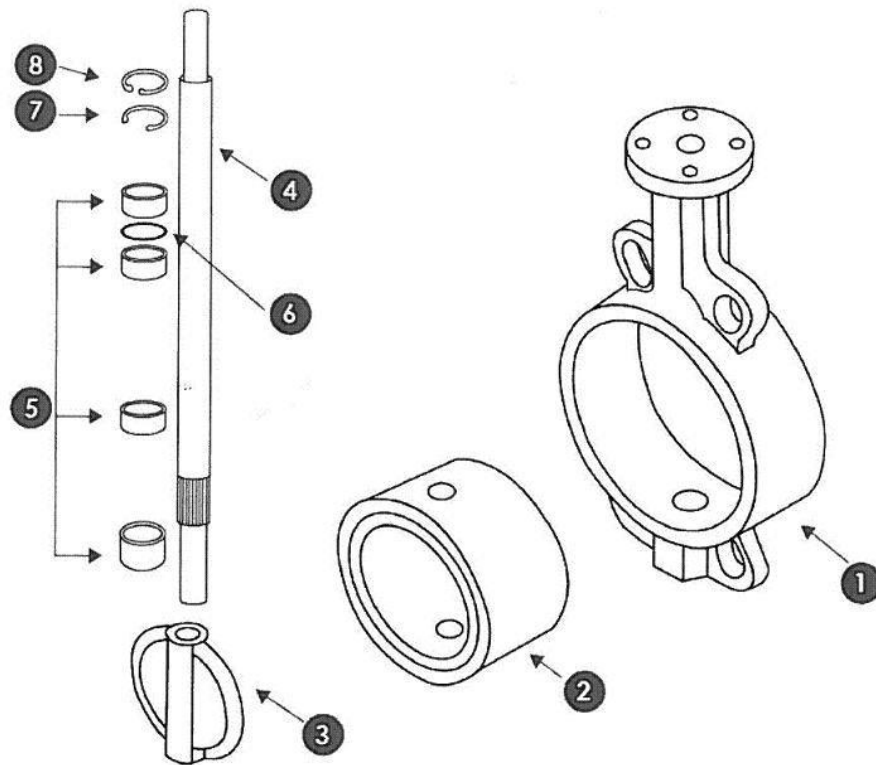
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DIRECTIVES AND MANUFACTURING STANDARDS

OBJET	Standard	ON	OBJET	Standard
2014/68/EC Pressure Equipment Directive	Cat. III module H	0035	Final test	API 598
Face-to-face dimension	ISO 5752 series 20		Actuator pilot connection	NAMUR
Flanges dimension	EN 1092-1		Switch box connection	VDI/VDE 3845
Connection motorization	ISO 5211		SIL 3 level (the actuator alone)	EN 61508



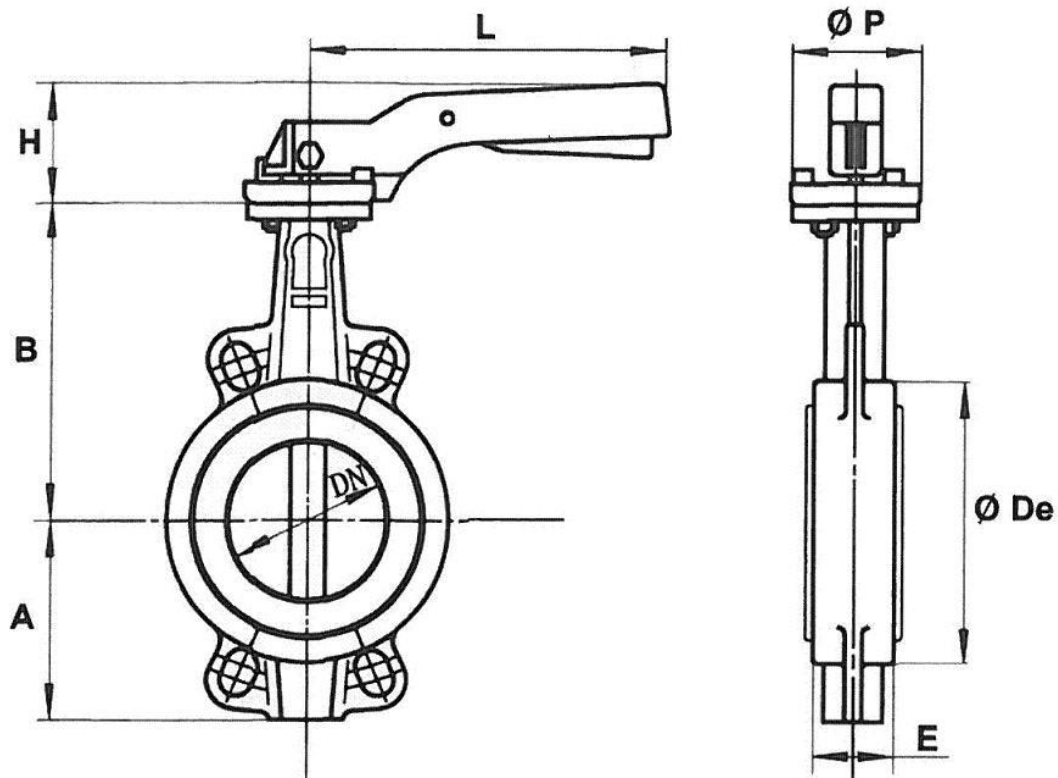
CONSTRUCTION

No.	Name	1121	1123	1125
1	Body	Cast iron EN GJL-250		
2	Seat	NBR	EPDM	EPDM
3	Butterfly	Stainless steel A351 CF8M	Stainless steel A351 CF8M	Nickel plated ductile iron EN GJS-400-15
4	Stem	Inox 416		
5	Bearings	PTFE		
6	O-ring	NBR	NBR	NBR
7	Circlips	Acier		
8	Circlips	Acier		

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DIMENSIONS (mm)



DN	40	50	65	80	100	125	150	200	250	300
A	61	77	87,5	95	107	121	144	171	205	235
B	130	136	142	158	180	192	215	242	280	310
Ø De	82	95	109	127	152	180	207	260	315	370
E	33	43	46	46	52	56	56	60	68	78
H	74	74	74	74	74	79	79	37	37	37
L	200	200	200	200	200	278	278	355	507	507
Ø P	65	65	65	65	65	90	90	125	150	150
Weight (kg)	1,8	2,5	2,9	3,2	4,12	6,7	7,8	14,2	23,4	33,8

FLOW-RATE COEFFICIENT Kv (m³/h)

DN	40	50	65	80	100	125	150	200	250	300
Kv	78	98	167	258	512	872	1347	2675	4555	7037

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MOTORIZATION ELECTRIQUE SA

Suggested standard SA actuation for the following conditions:

- Electric actuator with an IP 67 epoxy coated aluminium enclosure and steel gears
- A minimum 1.3 safety factor compared with the valve nominal torque rating,
- A maximum pressure differential up/downstream of 10 bar (=ΔP)

The actuator is directly mounted with an aluminium actuation pad.





DN	Actuator	Power	Intensity 230 Vac	Intensity 24 Vac-dc	Time*	Standard equipment of the actuator
40	SA 05	6 W	23 mA	1,8 mA	17 s	2 adjustable limit switches 2 dry auxiliary switches 5 W anti-condensation heater Protection Actuator thermal cut-out Manual override by key Backlit position indicator (except for SA-X) Electrical connection: 2 gland packs M20 x 1.5
50	SA 05	6 W	23 mA	1,8 mA	17 s	
65	SA 05	6 W	23 mA	1,8 mA	17 s	
80	SA 05	6 W	23 mA	1,8 mA	17 s	
100	SA 05	6 W	23 mA	1,8 mA	17 s	
125	See 1125 + NA Actuator					
150						

For any other operating conditions, please contact us.

*indicative time of the no-load actuator for opening or closing.

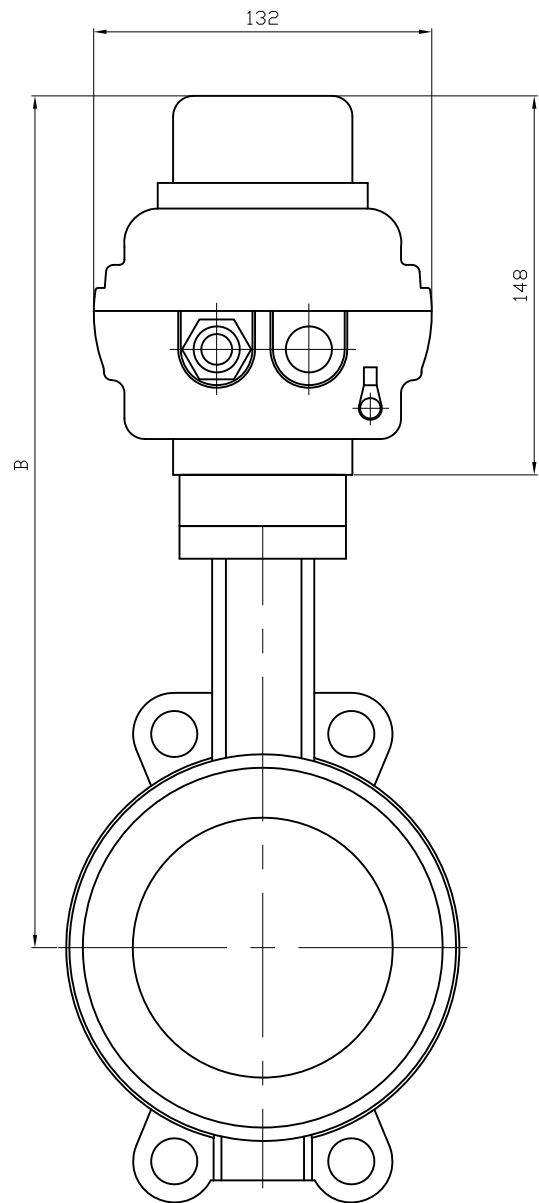
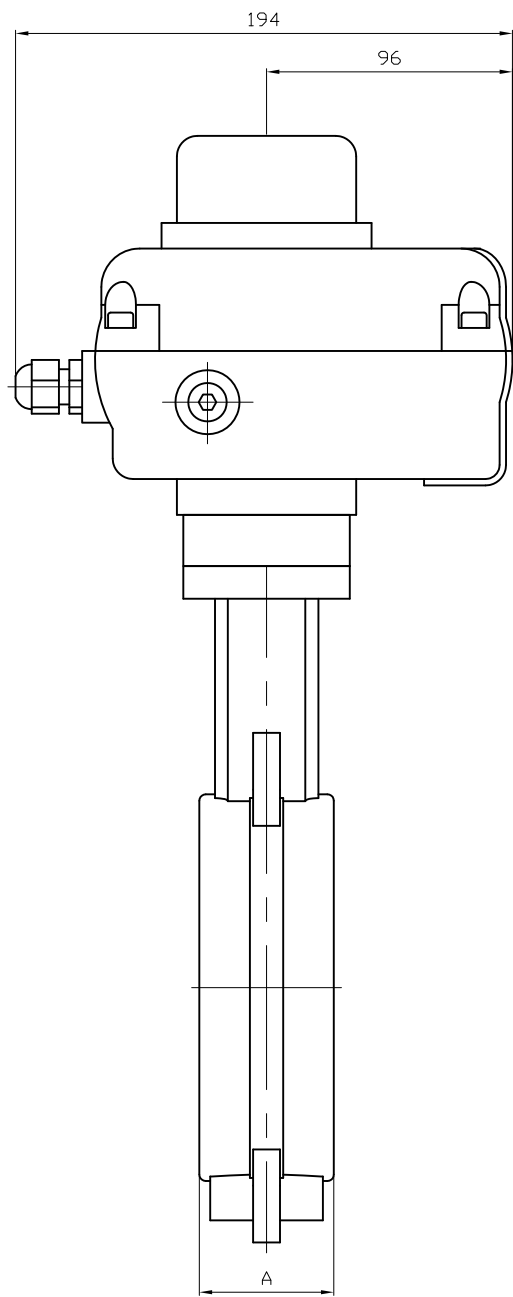
MOTORIZATION OPTION

There are many options for which you are invited to contact our sales service :

1	2	3	4
SA 05 S : Slow actuator 100s	SA 05 PCU : 4-20mA ou 0-10V proportional control unit actuator	SA 05 RBP : Safety actuator with an integrated battery emergency shutdown	SR 05 : Spring return fail safe actuator
			
6	SAPUI electric actuator with a feedback potentiometer		
7	Electric actuator sized for a maximum pressure differential up/downstream over 10 bar (=ΔP)		
8	NA electric actuator with a declutchable manual override by handwheel		

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DN	40	50	65	80	100
A	33	43	46	52	56
B	298	304	310	326	348
KG	4.8	5.5	5.9	6.2	7.1

SA 05 ELECTRIC ACTUATOR

FEATURES

The SA 05 electric actuator is intended for motorising industrial 1/4" turn valves. The torque is of 50 Nm. With a compact, robust construction and IP67 epoxy-coated aluminium housing, the SA actuator is especially well suited for motorising ball valves and butterfly valves installed in workshops or outdoors. The SA 05 has a manual key control and a 3D visual position indicator. Compliant with the EN 15714-2 standard.

AVAILABLE MODELS

Supply voltages: 230 Vac (50-60Hz), 24 Vac/dc and 12 Vdc.

Options: 110 Vac, feedback potentiometer, local command.



LIMITS OF USE

IP Code	IP 67
Ambient temperature	- 20°C / +70°C
Service factor	S2: 15mn - S4: 50%



MECHANICAL FEATURES

Gear box	treated steel pinions
Torque	50 Nm
Angle of rotation	90° +/- 5°
Declutching	Without
Override control	by key (except for SA 05 S)

Actuator	SA 05			SA 05 S	
	Voltage	230V AC	24V AC/DC	12V DC	230V AC
Torque (Nm)	50				
Manoeuvring time (s)	17	10	11	100	100
ISO 5211	F03/F05/F07 star 14				

ELECTRICAL FEATURES

Motor protection	Thermal switch	Anti-condensation	5W heater
Limit switches	2 adjustable switches	Electrical connection	2 x P.E. M20x1.5
Auxiliary switches	2 adjustable dry switches		

Actuator	SA 05			SA 05 S	
	Voltage	230V AC	24V AC/DC	12V DC	230V AC
Power (W)	6 W	15 W	6 W	6 W	6 W
Current (A)	0.23	1.8	3.2	0.23	1.8

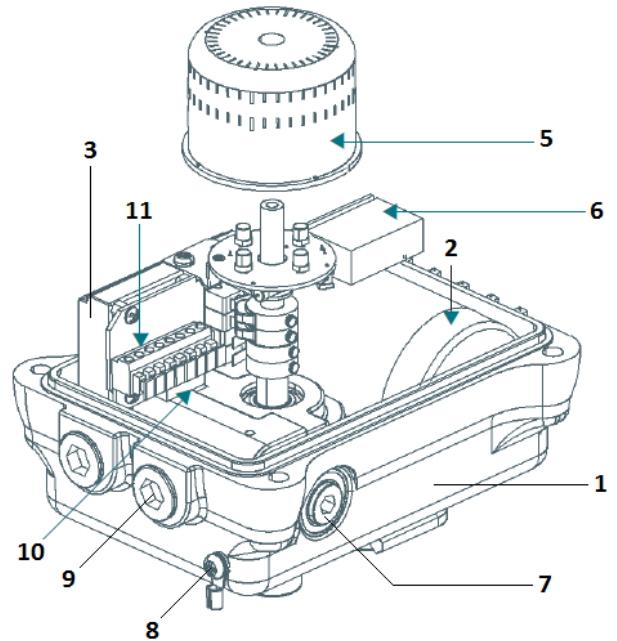
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SA 05 ELECTRIC ACTUATOR

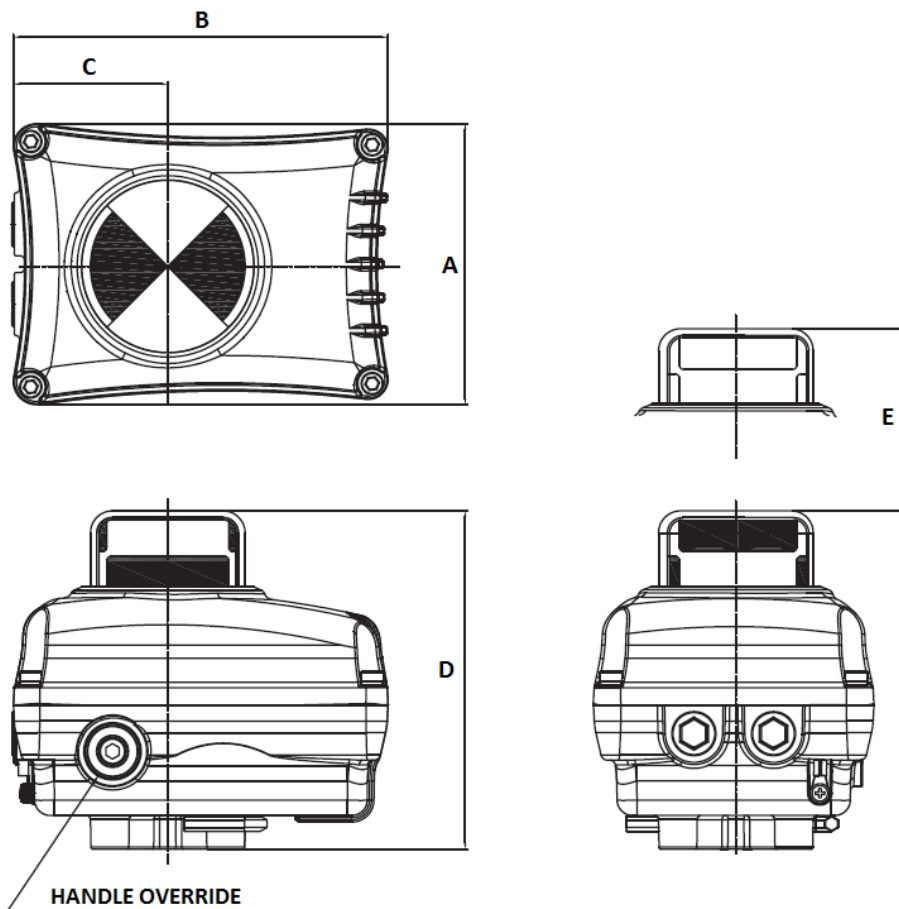
CONSTRUCTION

1	Housing	Polyester-coated aluminium
2	Electrical motor	
3	Gear box	Treated steel pinions
4	Cover	Polyester-coated aluminium
5	Position indicator	Polycarbonate plastic
6	Condenser	
7	Handle override	
8	Earthing	
9	Cable inlet	
10	Anti-condensation heater	
11	Terminal box	



DIMENSIONS (mm) AND WEIGHT (kg)

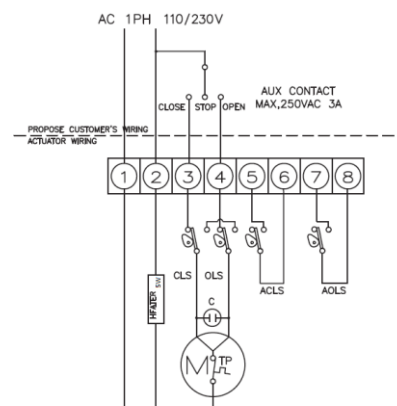
Dimensions (mm)	A	B	C	D	E	Weight (kg)
SA 05	127	170	70	153	80	3.2



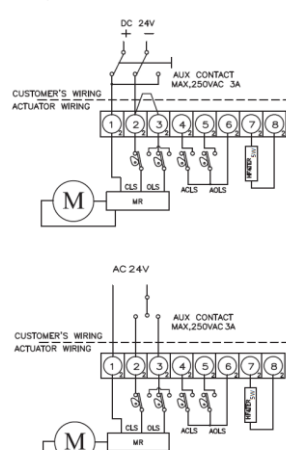
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SA 05 ELECTRIC ACTUATOR

WIRING DIAGRAM 230V AC 50Hz/60Hz

1	common	<p>CLS : Close Limit Switch (250VAC 3A) OLS : Open Limit Switch (250VAC 3A) ACLS : Aux Close Limit Switch (250VAC 3A) AOLS : Aux Open Limit Switch (250VAC 3A) TP : Thermal Protector (250VAC 3A) RM : Motor Regulation</p> 
2	Anti-condensation heater	
3	closing command	
4	opening command	
5	closing auxiliary	
6	closing auxiliary	
7	opening auxiliary	
8	Opening auxiliary	

WIRING DIAGRAM 24V AC/DC-12V DC

1	Common or +	<p>CLS : Close Limit Switch (250VAC 3A) OLS : Open Limit Switch (250VAC 3A) ACLS : Aux Close Limit Switch (250VAC 3A) AOLS : Aux Open Limit Switch (250VAC 3A) TP : Thermal Protector (250VAC 3A) RM : Motor Regulation</p> 
2	Closing command	
3	Opening command	
4	closing auxiliary	
5	opening auxiliary	
6	Auxiliaries common	
7	Anti-condensation heater power supply	
8	Anti-condensation heater power supply	

OPTIONS

1	SA 05 X: version for ATEX zone
2	SA 05 PIU: version with feedback potentiometer
3	SA 05 CPT: version with position transmitter 4-20 mA
4	SA 05 PCU: version with adjustment card 0-10, 2-10V, 2-20 mA, 4-20 mA
5	SA 05 LCU: version with local control
6	SA 05 RBP: version with in-built fail safe/security

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