

# 1133-1135 BUTTERFLY VALVES + SA ELECTRIC ACTUATOR

## CHARACTERISTICS

The butterfly valves 1133 to 1135 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 different applications. The lug type body enables the mounting between PN10/16 flanges and the long neck pattern makes the mounting on insulated pipes possible. The ISO 5211 pad enables the direct mounting of the SA electric actuator. It is perfectly adapted for an indoor or outdoor industrial use.



## AVAILABLE ITEMS

DN 40 to DN 100

Flanged connections PN10/16

Voltages: 12 V DC, 24 V AC/DC and 230 V AC

Ref.	Butterfly	Seat	Application examples	Min. TS	Max. TS
1133	Stainless steel	EPDM	Demineralised water – Alkaline materials	-10 °C	+110 °C
1135	Cast iron	EPDM	Cold water – hot water	-10 °C	+110 °C

## LIMITS OF USE

Max. allowable pressure (PS)	16 bar until DN 300
Min./max. allowable temperature (TS)	According to the upper chart
Prohibited use	Steam, natural gas
Room temperature	-10 °C / +70 °C
Service	S2 - 70%



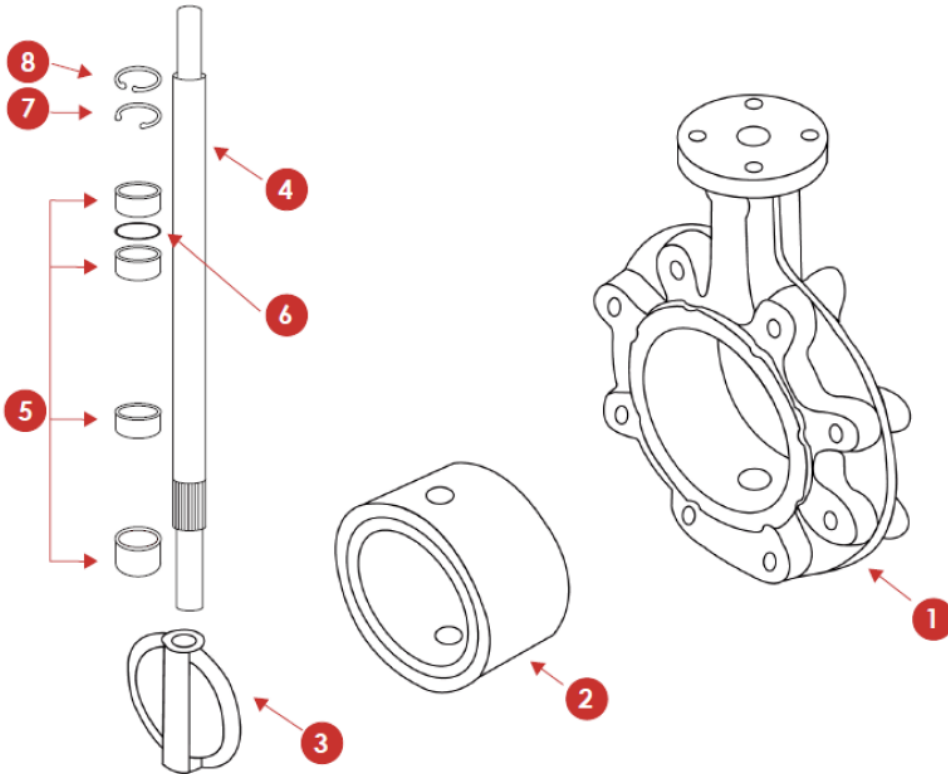
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## DIRECTIVES AND DEVELOPMENT STANDARDS APPLICABLE


	Standard	Notified bodies		Standard
97/23/EC Pressure Equipment Directive	Cat. III module H	#0035	Valve testing	API 598
Face-to-face dimension	ISO 5752 series 20		Actuator attachment	ISO 5211
Flange dimension	EN 1092-1			



## CONSTRUCTION

#	Item	1133	1135
1	Body	Cast iron EN GJL-250	
2	Seat	EPDM	EPDM
3	Butterfly	Stainless steel A351 CF8M /1.4408	Nickel plated cast iron EN GJS-400-15
4	Stem	Stainless steel 416	
5	Bearings	PTFE	
6	O-ring	NBR	NBR
7	Circlips / Security rings	Steel	
8	Circlips / Security rings	Steel	

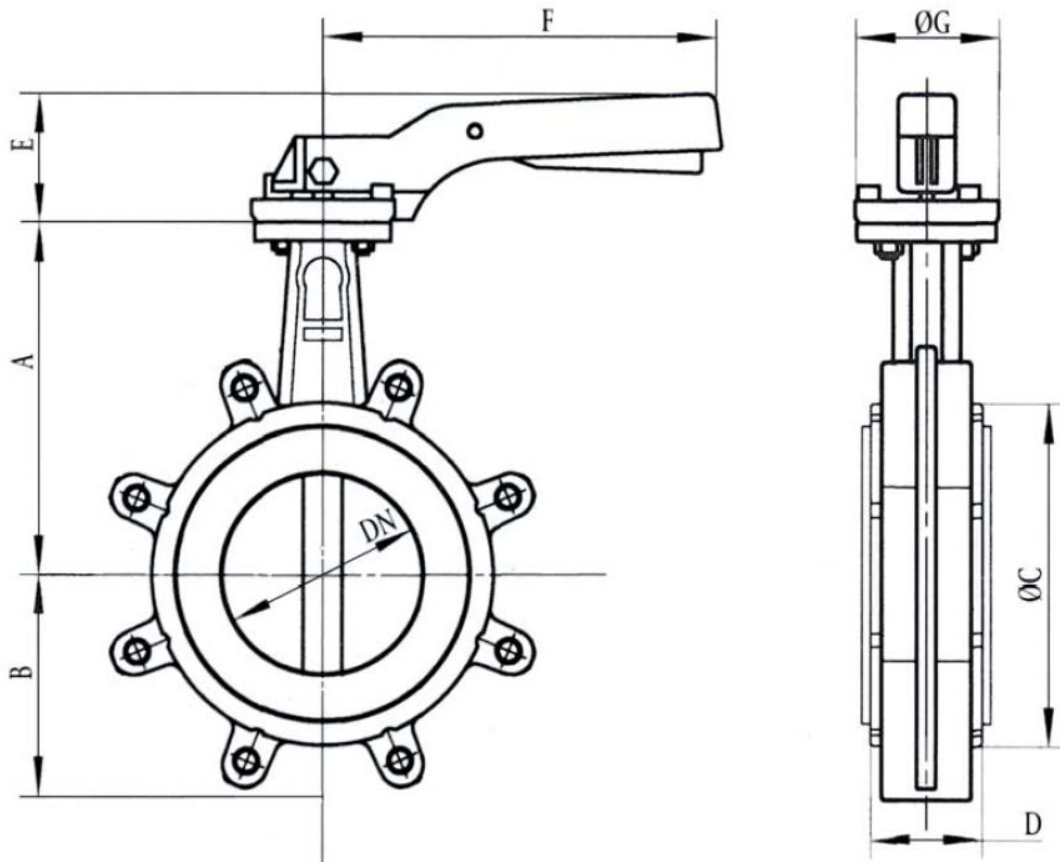
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## DIMENSIONS (mm)


DN	40	50	65	80	100	125	150	200	250	300
A	130	136.5	142	158	180	192	215	242	280	310
B	61	77	87.5	95	107	121	144	171	205	235
Ø C	82	95	109	127	152	180	207	260	315	370
D	33	43	46	46	52	56	56	60	68	78
E	74	74	74	74	74	79	79	37	37	37
F	200	200	200	200	200	278	278	355	507	507
Ø G	65	65	65	65	65	90	90	125	150	150
Weight (kg)	2.43	3.13	3.73	4.98	5.64	9.06	10.9	167	32.3	45



## FLOW FACTOR Kv (m<sup>3</sup>/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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# 1133-1135 BUTTERFLY VALVES + SA ELECTRIC ACTUATOR

## ACTUATION WITH SA

Suggested standard SA actuation under 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 V AC	Intensity 24 V AC/DC	Operating Time*	Standard equipment of the actuator
40	SA05	6 W	28 mA	1.8 mA	17 s	2 adjustable limit switches 2 dry auxiliary switches 2 W anti-condensation heater 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	SA05	6 W	28 mA	1.8 mA	17 s	
65	SA05	6 W	28 mA	1.8 mA	17 s	
80	SA05	6 W	28 mA	1.8 mA	17 s	
100	SA05	6 W	28 mA	1.8 mA	17 s	
125	Refer to 1135 + NA					
150						


\* Unloaded operating time given for information purpose only. May vary depending on the medium  
 For any other working conditions, please contact us.

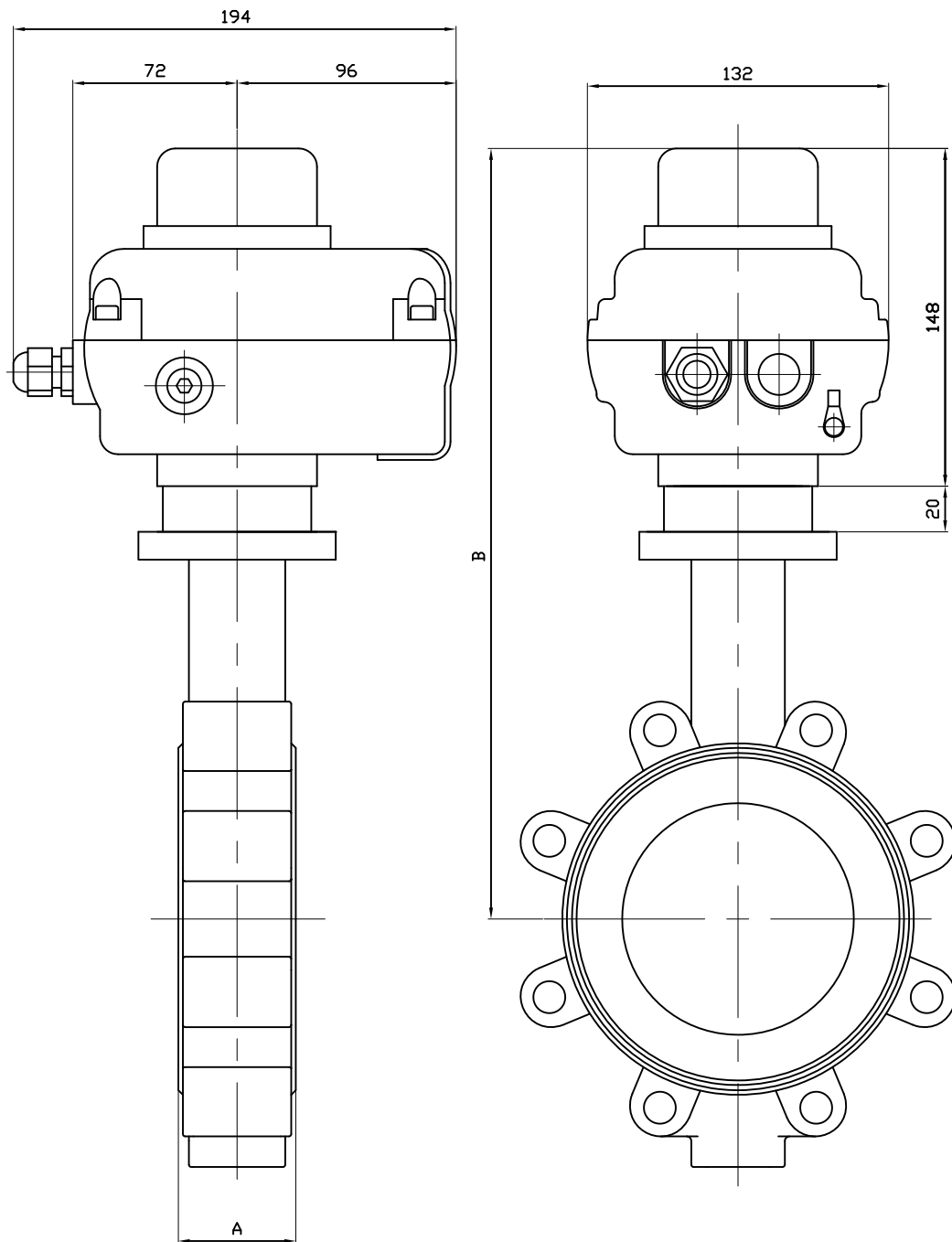
## ACTUATION OPTIONS

There are many different options, please contact our commercial department.

1	2	3	4	5
SA05S: Slow closing electric actuator 100 s	SA05PCU: Regulation actuator 4-20 mA or 0-10 V	SA05RBP: Safety actuator with an integrated battery emergency shutdown	SA 05 X: Actuator for use in ATEX zones 1 and 2	SR 05: Safety spring return 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	46	52
B	298	304.5	310	326	348
KG	5.37	6.07	6.67	7.92	8.58

Informations données à titre indicatif et sous réserve de modifications éventuelles  
data subject to alteration

				Ajout poids	19/06/2012	A
Ech: /	Date :05/10/2006	Dessiné par : LL	Tolérances générales : +/- 0.2	Modifications	Date	REV.
ROBINET A PAPILLON 1133-1135/BUTTERFLY VALVE 1133-1135 + SERVOMOTEUR SA05/ELECTRIC ACTUATOR SA05				Matière :		
				Poids (Kg) :		
 45, Rue du Ruisseau 38297 SAINT QUENTIN FALLAVIER				Traitement : SANS		
				Plan n° Ens 1003A		

# ELECTRIC ACTUATOR SA05

## GENERAL DESCRIPTION

The SA05 electric actuator is dedicated to the actuation of industrial ¼ turn valve. The torque value is 50 Nm. With a compact design, an IP 67 cast aluminium enclosure and an epoxy protection, the SA electric actuator is especially adapted to the actuation of ball valves and butterfly valves in outdoor or indoor areas. The SA05 is equipped with a visual 3D position indicator and a manual override driven by an Allen key. It complies with the EN 15714-2 standard.

## AVAILABLE ITEMS

Voltage: 230 V AC (50-60 Hz), 24 V AC/DC and 12 V DC



## LIMITS OF USE

Protection rating	IP 67
Temperature range	-20 °C / +70 °C
Service	S2 - 70%

## MECHANICAL CHARACTERISTICS

Gears	Treated steel pinions
Torque	50 Nm
Rotation angle	90° +/-5°
Decutching	N/A
Manual override	Allen key (except for SA05S)



Electric actuator	SA05			SA05S	
Voltage	230 V AC	24 V AC/DC	12 V DC	230 V AC	24 V AC/DC
Torque	50 Nm				
Operating time	17 s	17 s	17 s	100 s	100 s
ISO 5211 pad	F03/F05/F17 star 14				

## ELECTRICAL CHARACTERISTICS

Motor protection	Thermal cut-out	Anti-condensation	2 W heater
Limit switches	2 adjustable switches	Electrical connection	2 gland packs M20x1.5
Auxiliary switches	2 adjustable dry switches		

Electric actuator	SA05			SA05S	
Voltage	230 V AC	24 V AC/DC	12 V DC	230 V AC	24 V AC/DC
Power	6 W	15 W	15 W	6 W	6 W
Intensity	0.24 A	1.8 A	3.6 A	0.24 A	1.8 A

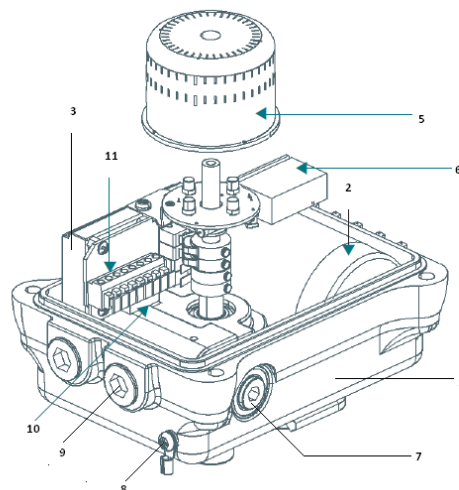
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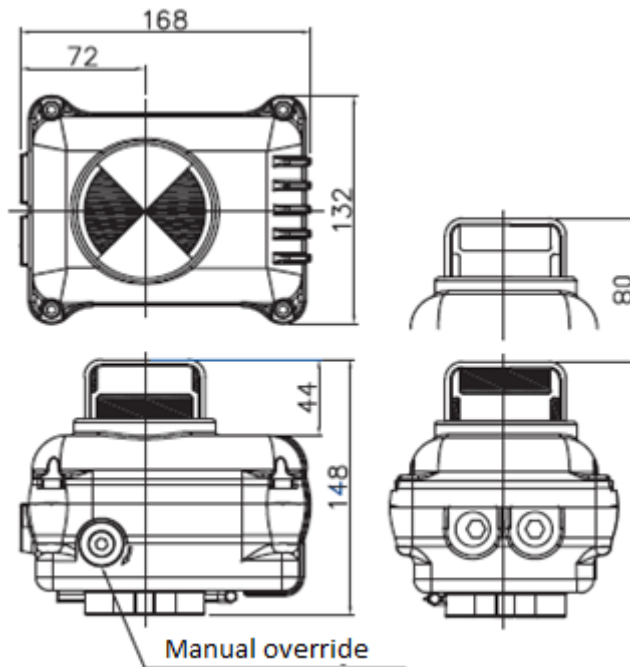
# ELECTRIC ACTUATOR SA05

## CONSTRUCTION


1	Enclosure	Polyester coated aluminium
2	Electric motor	
3	Gear	Treated steel pinions
4	Cover	Polyester coated aluminium
5	Position indicator	Polycarbonate plastic
6	Condenser	
7	Manual override	
8	Connection to ground	
9	Cable inlet	
10	Anti-condensation heater	
11	Terminal block	



## DIMENSIONS (mm)



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# ELECTRIC ACTUATOR SA05

## WIRING SCHEME 230 V AC

1	Common	<p>                     CLS : CLOSE LIMIT SWITCH (250VCA 3A)                      OLS : OPEN LIMIT SWITCH (250VCA 3A)                      ACLS : AUX. CLOSE LIMIT SWITCH (250VCA 3A)                      AOLS : AUX. OPEN LIMIT SWITCH (250VCA 3A)                      TP : THERMAL PROTECTOR                 </p>
2	Anti-condensation heater	
3	Closing control	
4	Opening control	
5	Auxiliary switch closing	
6	Auxiliary switch closing	
7	Auxiliary switch opening	
8	Auxiliary switch opening	

## WIRING SCHEME 24 V AC/DC

1	Common or +	<p>                     CLS : CLOSE LIMIT SWITCH (250VCA 3A)                      OLS : OPEN LIMIT SWITCH (250VCA 3A)                      ACLS : AUX. CLOSE LIMIT SWITCH (250VCA 3A)                      AOLS : AUX. OPEN LIMIT SWITCH (250VCA 3A)                      TP : THERMAL PROTECTOR                      RM : MOTOR REGULATION                 </p>
2	Closing control	
3	Opening control	
4	Auxiliary switch closing	
5	Auxiliary switch opening	
6	Auxiliary common	
7-8	Anti-condensation heater power supply	

## OPTIONS

1	SA05X: ATEX area version
2	SA05PIU: feedback potentiometer version
3	SA05CPT: 4-20 mA position transmitter version
4	SA05PCU: 0-10, 2-10 V, 2-20 mA, 4-20 mA regulation card version
5	SA05LCU: local control version
6	SA05RBP: integrated battery emergency shutdown device version

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