

## Poppet valve with electric actuator Series SEC04, SE14



Design type	Poppet valve or rather Seat control valve with electric actuator, automatic overload protection and End position shut-off
Connection	G1/4"...G2" according to ISO228 on request: NPT thread, Weld ends, Tri-Clamp connection
Materials	Housing red brass G1/2"...G2" Body stainless steel 1.4408 G1/4"...G2" Standard seat seal PTFE
Application range	gaseous and liquid media (also slightly contaminated) that do not attack the materials used
Viscosity of the medium	max. 600mm <sup>2</sup> /s (600cSt)
Medium temperature	-30...+200°C
Ambient temperature	-10...+60°C
Operating pressure	Vacuum up to 0,001bar absolute, see table
Mounting type	Installation in rigid piping system
Mounting position	any, except hanging downward

### Electrical data:

Voltage type	AC and DC voltage
Standard voltage	see table "Motor data"
Electrical Connection	via cable gland M20x1,5 or rather M12x1,5
End position shut-off	via internal electronics
Duty cycle	100% duty cycle (continuous operation)
Degree of protection	IP65 according to EN 60529 with correctly installed cable entry (protection against dust ingress and splashing water)
Actuation	3-point control, (0)4...20mA or rather (0)2...10V
Special version	Control actuator with fail-safe position, 2-point control, other switching times
Accessories	Actuator heater, Limit switch, Position feedback, Feedback via potentiometer



## Kvs values [m<sup>3</sup>/h Water]

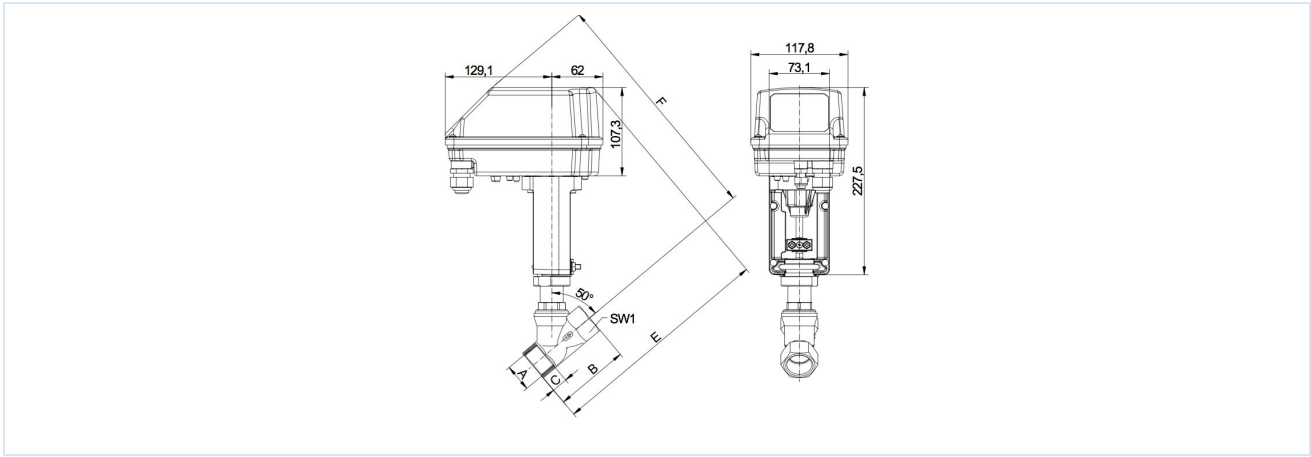
Characteristic curve	linear					equal percentage						Open/Close
	100%	40%	25%	15%	10%	100%	40%	25%	15%	10%	7,5%	
Nominal size DN [mm]												
8	0,6	0,24	0,15	-	-	0,6	-	-	-	-	-	0,95
15	3,8	1,5	0,93	-	0,4	3	1,2	0,8	0,46	-	0,23	3,8
20	8,8	3,5	2,2	-	-	6	2,4	1,5	-	-	-	9
25	14	5,8	3,6	-	-	10	4	2,6	-	-	-	17
32	20	8	-	-	-	16	6	-	-	-	-	28
40	27	11	-	-	-	25	10	-	-	-	-	35
50	37	-	-	-	-	-	-	-	-	-	-	45

## Type code

Seat control valve SEC04 Poppet valve SE14 - N 112 - R T E04 - 01												
<b>Type</b>												
<b>Connection type</b>	no specification, if female thread ISO228/1											
	Weld ends to DIN											D
	Weld ends to ISO											I
	NPT thread											N
<b>Connection</b>	DN8-1/4", only with seat seal PEEK											14
	DN15-1/2"											12
	DN20-3/4"											34
	DN25-1"											10
	DN32-1 1/4"											114
	DN40-1 1/2"											112
	DN50-2"											20
<b>Materials</b>	Red brass (DN15 - DN50)											R
	Stainless steel 1.4408 (DN8 - DN50)											S
<b>Seat seal</b>	EPDM											E
	PEEK											P
	NBR											N
	PTFE											T
	FKM											V
<b>Actuator</b>	Control drive CA260C											EC6
	Control drive CA24C											EC7
	On-off actuator CA24											E04
	On-off actuator CA260											E05
<b>Special version</b>	described in the item text											01,02,03....



## Dimensions



Connection A	Nominal size DN [mm]	max. operating pressure [bar]			B	C	E	F	SW1	SW2	Stroke	Actuation time Open/Close [Seconds]	Weight [approx. kg]	
		Housing red brass		Stainless steel housing										
		On-off operation*	On-off operation	Normal operation										
G1/4"	8	-	40	16	60	12	258	306	20	30	8,5	26	2,3	
G1/2"	15	16	40	16	65	15	263	310	25	30	9	27	2,4	
G3/4"	20	16	20	16	75	16,3	270	310	31	30	14	32	2,6	
G1"	25	12	12	12	90	19,1	275	314	39	30	18	54	2,8	
G1"1/4	32	7	7	7	110	21,4	291	330	48	30	21	63	3,2	
G1"1/2	40	4,8	4,8	4,8	120	21,1	295	334	55	30	22	66	3,5	
G2"	50	2,8	2,8	2,8	150	25,7	311	341	68	32	22	66	4,1	

\*Angle seat valves with control plug only available with stainless steel body

## Motor data

Function	Rated voltage	Setpoint input	Burden [Ω]	Position feedback	external load [Ω]	Limit switch	max. switching capacity	Power [W]	Actuation time [s/mm]	Actuator type
Open/Close	24V AC/DC	3-point	-	optional available	-	optional available	250V AC/DC 1A	13	3	CA24
Open/Close	90-260V AC	3-point	-	optional available	-	optional available	250V AC/DC 1A	12	3	CA260
Control	24V AC/DC	(0)4-20mA (0)2-10V*	500 95k	(0)4-20mA (0)2-10V*	500 >5k	2x	24V AC/DC 200mA	13	2	CA24C
Control	90-260V AC	(0)4-20mA (0)2-10V*	500 95k	(0)4-20mA (0)2-10V*	500 >5k	2x	24V AC/DC 200mA	12	2	CA260C

\*(0)2-10V (Switching via a switch on the PCB)



## Electrical connection

On-off actuators	
<b>Actuator CA24</b>	<b>Actuator CA260</b>
Control drives	
<b>Actuator CA24C</b>	<b>Actuator CA260C</b>

Position	Description	Note
S1	Bottom limit switch	Standard for control actuators - optional for open-close actuators
S2	Top limit switch	Standard for control actuators - optional for open-close actuators
S3	Fault message	Standard for control actuators - max. 0,2A/24V AC/DC
Y	Setpoint input	Standard 4-20mA 2-10V (Switching via a switch on the PCB)
Z	Position feedback	Standard 4-20mA 2-10V (Switching via a switch on the PCB)

### Illustrations non-binding

Design, dimensional and material changes reserved

Armatures / Valves, butterfly valves and gate valves - automatically operated / Seat valves - electrically operated / Electrical seat valve Series SE14-RTE

