

GS 1 series, DN 15 up to DN 125

Motor valve for control and switching of neutral through to highly aggressive media in process engineering, chemical industries and for plant equipment.

- Space saving wafer type construction
- Lowest possible weight
- Low operation noise level (quiet operation)
- Self adaption
- Operating pressures up to 580 psi
- Control of high differential pressures with small actuators
- Actuators with control function also available with safety position

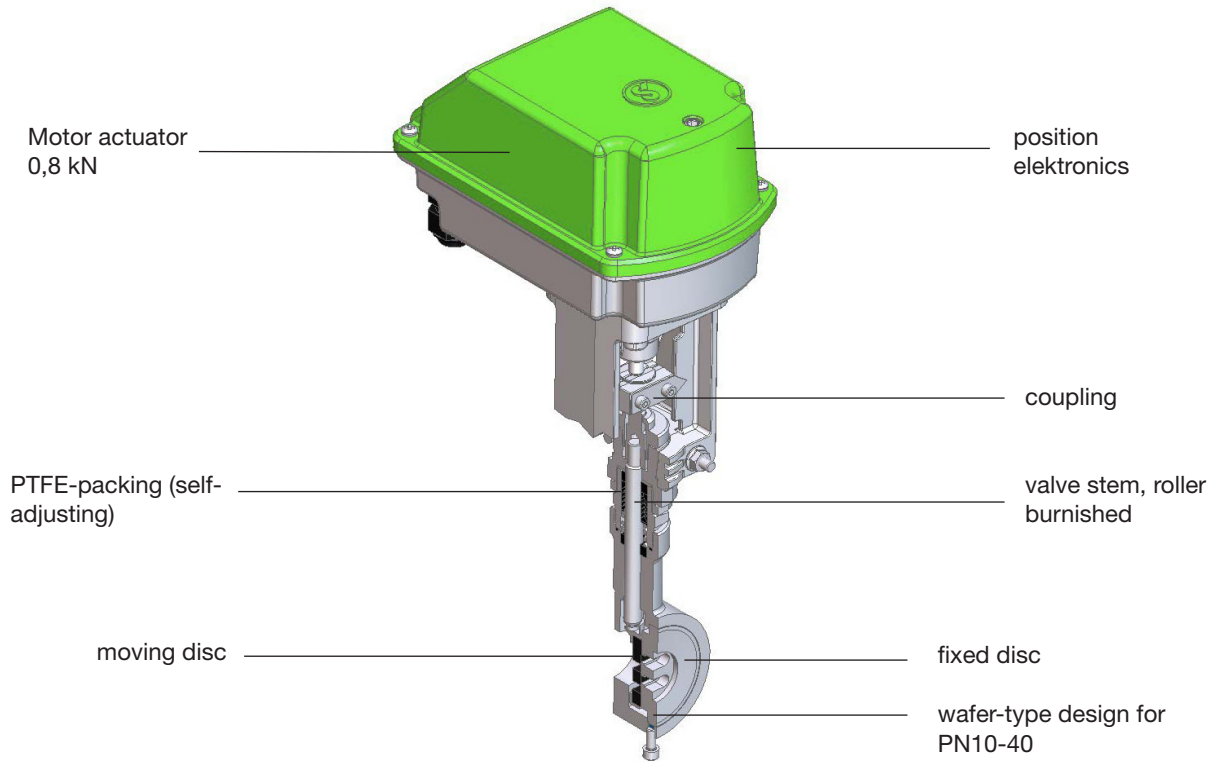


Technical Information Valve

Design	Flangeless design Dimensions acc. DIN EN 558-1 series 20 for flanges acc. DIN EN 1092-1 form B		
Nominal size	DN 15 up to DN 125		
Nominal pressure	PN 40 acc. DIN 2401 also for flanges PN 10 up to PN 25		
Fluid temperature	Body carbon steel: -10 up to +230°C Body stainless steel: -20 up to +230°C optional -60°C up to +230°C		
Rangeability	30 : 1		
Leakage rate * (% of Kvs)	Unit carbon-stainless steel < 0,0001	SFC-unit < 0,0005	STN2-unit < 0,001
Packing leakage	tested according to TA-Luft as defined in DIN EN ISO 15848-1 and VDI 2440		

* With DN15 with reduction of less than 25%, different leakage rates possible.
K_{vs}-values see data sheet 8001.

Motor Valve compact 8231-GS1



Materials

Body	Carbon steel 1.0619	Stainless steel 1.4581 or 1.4408	
Packing	PTFE (carbon filled), spring 1.4310		
Actuating stem	Stainless steel, roller burnished		
Fixed plate	Stainless steel 1.4571, plated	STN2-disc	
Sliding disc	Standard: special carbon material	SFC-disc	STN2-disc
Coupling ring for discs	Stainless steel 1.4581		

Technical Information CA-Actuator

Function	Control				On/Off	
	CA24C	CA260C	CA24C-R	CA260C-R	CA24	CA260
Motor type	24V AC/DC	90-260V AC	24V AC/DC	90-260V AC	24V AC/DC	90-260V AC
Mains connection	(0)2-10V / (0)4-20mA				3-term**	
Set point range	(0)2-10V / (0)4-20mA				optional	
Feedback	2				optional	
Limit switch	-				optional	
Potentiometer feedback	24V AC/DC 200 mA				250V AC/DC 1A	
Max. switching capacity	1.5 / 2 / 3 s/mm (Standard: 2 s/mm)				2 or 3 s/mm (Standard: 3 s/mm)	
Actuating speed	Monitoring of tensile force, set point, temperature of the electronics, etc.				Tensile force monitoring	
Safety functions	Storage of motor and total operating time, temperature and directional classes, etc.				-	
Diagnostic functions	-	-	freely adjustable		-	
Fail Safe position	500 Ω for current set point / 95 kΩ for voltage set point					
Load	13 W	12 W	13 W	12 W	13 W	12 W
Max. input	10 W					
Input heating resistor	6 A	2,5 A	6 A	2,5 A	6 A	2,5 A
Starting current heating resistor	800 N					
Actuating power	IP 65					
Protection class (EN 60529)	-10°C to +60°C					
Adm. Ambient temperature	100%					
Duty cycle						

*: for control with volt-signal split range adjustments are possible

** : minimum switch on time 200ms

Wiring diagrams of the actuators can be found in the manual.

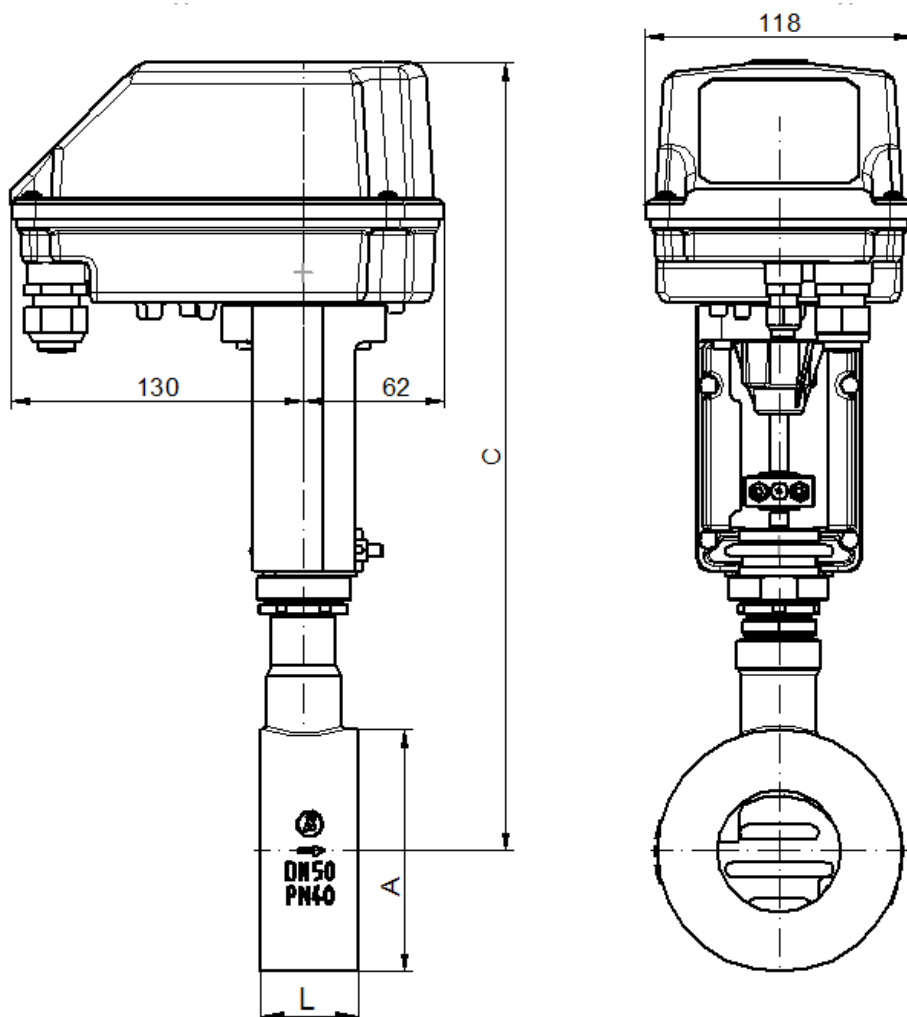
Motor Stroking Times for CA-actuators

Stroking times in seconds			
Setting	DN 15 - DN 40	DN 50 - DN 80	DN 100 - DN 125
1,5 s/mm	9,5	12,5	13
2 s/mm	12,5	16,5	17
3 s/mm	19	25	26

Admissible Differential Pressures

Nominal Size	maximum differential pressure [bar]									
	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125
Unit carbon/SFC-stainless steel	40	40	40	40	30	20	17	11	7	4,5
STN 2-unit	40	37	28	20	14	8,5	7	4	2,5	1,5

Dimensions and Weights CA-Actuators



DN	A	C		L	stroke	weight kg
		stainless steel body	carbon steel body			
15	53	311	334	33	6	3,0
20	62	316	339	33	6	3,1
25	72	323	344	33	6	3,2
32	82	325	347	33	6	3,2
40	92	330	352	33	6	3,4
50	108	353	353	43	8	4,5
65	126	365	365	46	8	5,0
80	142	375	375	46	8	5,7
100	164	385	385	52	8,5	6,9
125	194	398	398	56	8,5	8,7

Dimensions in mm