

Diaphragm Valve

## SISTO-16RGA

PN 16  
DN 15-80 / Rp ½-3 in.  
Gunmetal

### Type Series Booklet



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Type Series Booklet SISTO-16RGA

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## Diaphragm Valves

**Diaphragm Valves – No Dead Volume, Soft-seated, Glandless**

### SISTO-16RGA



#### Main applications

- Pressure boosting
- Fire-fighting systems
- Domestic water supply
- Air-conditioning systems
- Cooling circuits
- Rainwater harvesting

#### Fluids handled

- Service water
- River water, lake water and groundwater
- Drinking water, particularly drinking water installations to DIN 1988

#### Operating data

Operating properties

Characteristic	Value
Nominal pressure	PN 16
Nominal size	DN 15 - 80
Nominal size [inch]	Rp ½ - 3
Max. permissible pressure [bar]	16
Min. permissible temperature [°C]	≥ -10
Max. permissible temperature [°C]	≤ +90 <sup>1)</sup>

#### Body materials

Overview of available materials

Material	Material number	Temperature limit
CuSn5Zn5Pb2	CC499K-GS	≤ 90 °C

#### Design details

##### Design

- Soft-seated shut-off valve in straight-way pattern
- Rising handwheel
- Shut-off and sealing to atmosphere by spiral-supported, completely enclosed diaphragm
- Position indicator with integrated stem protection
- Manufactured and tested to EN 13397
- Marked in accordance with DIN EN 19 (ISO 5209)

##### Product benefits

- Reliable sealing ensured by one single sealing element (the diaphragm), which provides hermetic sealing to atmosphere and absolutely tight shut-off. The specially enclosed diaphragm ensures long service life and high operating reliability.
- Maintenance-free as all moving parts are separated from the fluid by the diaphragm.
- High level of reliability as the thrust bearing minimises the closing torques required.
- Optimised long-term operation as the position indicator with integrated stem protection prevents the ingress of contaminants.
- High level of reliability as the valve hydraulics without dead volume ensure optimum conditions for high-purity fluids.
- Long service life as the diaphragm support increases valve life and extends the pressure limit of the diaphragm.

#### Certifications

Overview

Label	Effective in:	Comment
	Germany	DVGW W570-1
	Switzerland	Approved in accordance with Swiss drinking water regulation
	Belgium	-
	Denmark	BR15

1) Temperatures of +90 °C persisting for periods of up to one hour resultant from one-off incorrect system operation will not impair the valve's function.

## Related documents

Information/documents

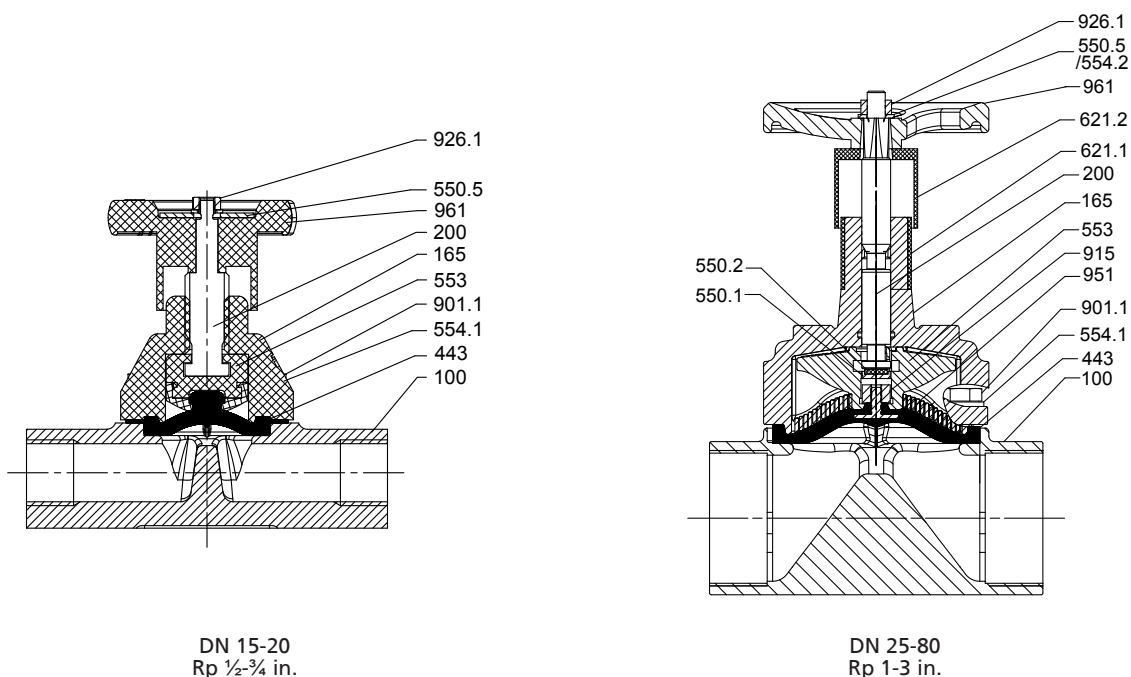
Document	Reference number
Operating manual	0570.82
Engineering information	8638.030

## Purchase order specifications

Please specify the following information in all enquiries or purchase orders:

1. Type
2. Nominal pressure
3. Nominal size
4. Operating pressure
5. Differential pressure
6. Operating temperature
7. Fluid handled
8. Pipe connection
9. Variants
10. Number of type series booklet
11. Certificate

## Materials of SISTO-16RGA manually operated valve

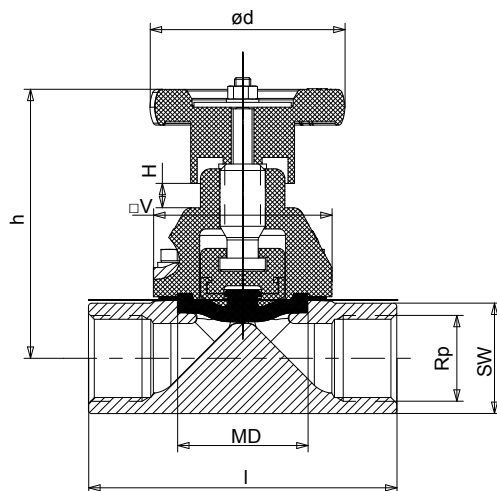


### Parts list

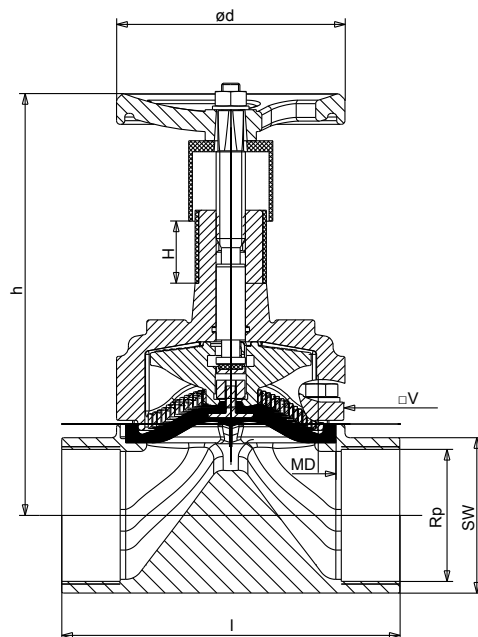
Part No.	Description	Diaphragm diameter 40 DN 15-20 Rp ½-¾ in.		Diaphragm diameter 65 DN 25-40 Rp 1-1 ½ in.		Diaphragm diameters 92-168 DN 50-80 Rp 2-3 in.	
		Material		Material		Material	
		Designation	Number	Designation	Number	Designation	Number
100	Body	CC499K-GS	-	CC499K-GS	-	CC499K-GS	-
165	Bonnet	POM	-	EN-GJL-250 Rilsan (white)	5.1301	EN-GJL-250 Rilsan (white)	5.1301
200	Stem	CuZn39Pb3	CW614N	X14CrMoS17	1.4104	X14CrMoS17	1.4104
443 <sup>2)</sup>	Diaphragm	EPDM/W270	-	EPDM/W270	-	EPDM/W270	-
550.1	Bearing disc	-	-	-	-	11SMnPb30	1.0718
550.2	PTFE disc	-	-	-	-	PTFE/graphite	-
550.5	Identification disc	Aluminium red/green	-	Aluminium red/green	-	Aluminium red/green DN 50 only	-
553	Compressor	Ultramid	-	GD-ZnAl4Cu1	-	EN-GJS-400-15	5.3106
554.1	Washer	A2-70	-	A2-70	-	A2-70	-
554.2	Washer	-	-	-	-	A2-70 (DN 65-80) only	-
621.1	Position indicator, lower part	-	-	ASA Luran	-	ASA Luran	-
621.2	Position indicator, upper part	-	-	ASA Luran	-	ASA Luran	-
901.1	Hexagon head bolt	A2-70	-	A2-70	-	A2-70	-
915	Floating nut	-	-	11SMnPb30	1.0718	11SMnPb30	1.0718
926.1	Prevailing torque nut	A2-70	-	A2-70	-	A2-70	-
951	Support spiral	-	-	St 2K BK	-	St 2K BK	-
961	Handwheel	Polycarbonate	-	EN-GJL-200/Rilsan (white)	5.1300	EN-GJL-200/Rilsan (white)	5.1300

2) Recommended spare parts

### Dimensions and weights of SISTO-16RGA manually operated valve



DN 15-20  
Rp ½-¾ in.



DN 25-80  
Rp 1-3 in.

### Dimensions and weights

DN	[inch]	MD [mm] <sup>3)</sup>	l [mm]	h [mm]	Ø d [mm]	□V [mm]	SW [mm]	H [mm]	[kg]
15	½	40	85	87	63	55	28	7	0,5
20	¾	40	95	90	63	55	34	7	0,6
25	1	65	105	151	100	80	41	13	2,5
32	1¼	65	120	154	100	80	50	13	2,5
40	1½	65	130	157	100	80	58	13	3,0
50	2	92	150	201	100	105	70	22	5,0
65	2½	115	185	248	125	125	85	30	8,0
80	3	168	220	329	200	190	100	45	16,5

### Mating dimensions as per standard

Pipe threads: DIN EN 10226-1 (ISO 7/1)

Face-to-face length: prEN 16722: 2014

3) MD = diaphragm diameter