

Relief / Overflow valve, straightway form Article 190-VA and 190-VA/V

diameter G 1/2" up to G 2"



Overflow valves with proportional opening and closing characteristic are used for example in pumping circuits and pipeline systems, in which a constant pressure condition must be ensured.

The relief valves serve as protection of:

- pumps against overloading in closed circuits for neutral / non-neutral, non-sticky liquids

For regulation in:

- pressure systems for neutral / not neutral gases and steams -depending on the sealing- also for water vapour

The medium can circulate in the bypass line of a pump or pipeline. The preset overflow valves can be adjusted within the spring range.

Connections:

Standard threaded connections

external thread BSP-T DIN EN 10226, ISO 7-1

Optional version with female thread BSP-P DIN EN ISO 228-1

available in sizes G 1/2" (DN 15), G 3/4" (DN 20) and G 1" (DN 25)

The appropriate valve design and sealing must be used according to the application.

	DGRL 2014/68/EU
	ambient -10°C ... +60°C
	medium -10°C ... +95°C

Approvals

European Pressure Equipment Directive
TR ZU 032/2013 - TR ZU 010/2011

Valve version:

m

with diaphragm

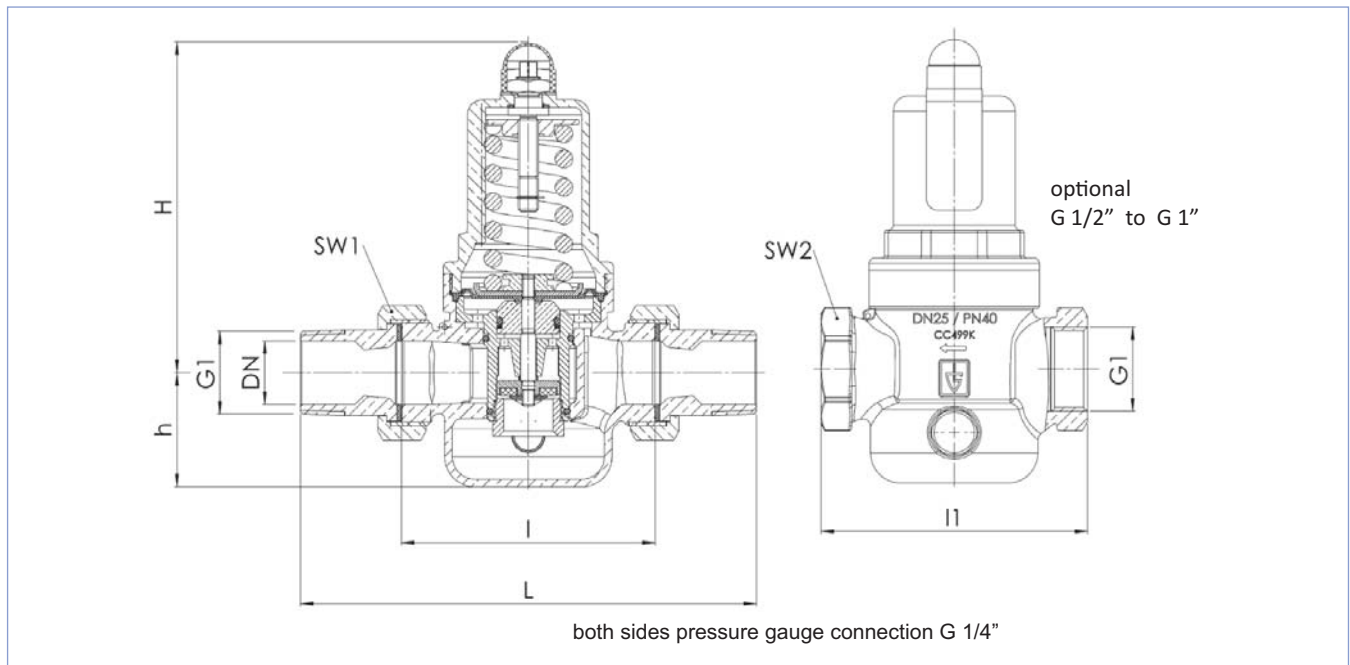
High-quality, heat-resistant moulded elastomere fabric-reinforced diaphragm. Valves in straightway form, closed version. Can be adjusted under operating conditions without medium escaping into the atmosphere. Adjustment can be directly read-off an optional pressure gauge (accessory). Optimal control response and large flow volumes even in cases of small pressure differences due to diaphragm operating principle.

Standard seals:

EPDM (190-VA)	Ethylene propylene Diene	Elastomere moulded diaphragm and seals approvals according to drinking water directive	-10°C to +95°C
against surcharge			
FKM (190-VA/V)	Fluorcarbon	Elastomere moulded diaphragm and seals	-10°C to +95°C

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diameter	article number		weight (kg)	L (mm)	I (mm)	I1 (mm)	SW1 (mm)	SW2 (mm)	H (mm)	h (mm)	range of adjustment (bar)
	190-VA EPDM-sealing	190-VA/V FKM-sealing									
G 1/2"	19.1674.6.63	19.1674.6.63-V	1,2	142	80	85	30	28	102	33	0,5 to 2,0 1,5 to 6,0 5,5 to 10,0
G 3/4"	19.1674.6.65	19.1674.6.65-V	1,3	158	90	95	37	35	102	33	
G 1"	19.1674.6.67	19.1674.6.67-V	2,3	180	100	105	46	43	130	45	
G 1 1/4"	19.1674.6.68	19.1674.6.68-V	2,5	193	105		52		130	45	
G 1 1/2"	19.1674.6.69	19.1674.6.69-V	5,2	226	130		65		165	70	
G 2"	19.1674.6.71	19.1674.6.71-V	5,7	252	140		75		165	70	

Article 190-VA

	190-VA	190-VA/V
description	material	material
inlet body	stainless steel 1.4408	stainless steel 1.4408
outlet body	stainless steel 1.4408	stainless steel 1.4408
internal parts	stainless steel 1.4408 stainless steel 1.4404	stainless steel 1.4408 stainless steel 1.4404
valve seat	stainless steel 1.4404	stainless steel 1.4404
spring	spring steel 1.1200	spring steel 1.1200
sealing	EPDM	FKM (Viton)
area of application	for neutral media approval acc. to drinking water ordinance	for non-neutral media p. ex. oils fuels, oil-laden compressed air etc.

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Performance table: KV-values at 1 bar overpressure:

Kv values at 1 bar overpressure												
Nominal diameter DN	15		20		25		32		40		50	
	Air [Nm³/h]		Air [Nm³/h]		Air [Nm³/h]		Air [Nm³/h]		Air [Nm³/h]		Air [Nm³/h]	
Pressure range bar	0,5-2	5,5-10	1,5-6		0,5-2		5,5-10		1,5-6		0,5-2	
	1,5-6		0,5-2	5,5-10	1,5-6		0,5-2	5,5-10	1,5-6		0,5-2	5,5-10
Set pressure bar												
0,5	73		77		189		193		417		445	
1	89		94		231		239		498		537	
1,5	102	103	108	107	264	185	273	196	587	370	624	408
2	117	119	121	126	303	226	314	238	636	429	683	472
3	146		153		282		291		506		557	
4	170		176		330		338		543		615	
5	187		194		367		379		625		684	
5,5	195	139	206	157	386	183	394	186	653	375	719	417
6	203	147	216	163	405	194	418	202	708	395	760	443
7	162		178		223		229		400		502	
8	179		190		259		264		407		517	
9	218		225		285		289		432		564	
10	255		261		303		314		465		601	

Kv values at 1 bar overpressure												
Nominal diameter DN	15		20		25		32		40		50	
	Water [m³/h]		Water [m³/h]		Water [m³/h]		Water [m³/h]		Water [m³/h]		Water [m³/h]	
Pressure range bar	0,5-2	5,5-10	1,5-6		0,5-2		5,5-10		1,5-6		0,5-2	
	1,5-6		0,5-2	5,5-10	1,5-6		0,5-2	5,5-10	1,5-6		0,5-2	5,5-10
Set pressure bar												
0,5	2,7		2,9		5,5		6,2		12,4		12,9	
1	2,9		3,3		6,1		6,9		12,9		13,8	
1,5	3,4	3,1	3,6	3,4	6,6	5,6	7,5	6,4	13,2	9,0	14,4	9,4
2	3,6	3,2	3,9	3,4	6,9	5,7	7,8	6,4	13,5	9,1	14,9	9,4
3	3,3		3,5		5,9		6,5		9,3		9,5	
4	3,4		3,7		6,1		7,2		9,5		9,9	
5	3,3		3,7		6,2		7,5		9,7		10,2	
5,5	3,0	2,3	3,6	2,7	5,8	3,2	6,9	4,1	10,1	7,2	10,5	7,7
6	2,9	2,4	3,6	2,7	5,4	3,3	6,7	4,2	10,4	7,3	10,9	8,0
7	2,4		2,6		3,9		4,5		7,5		8,1	
8	2,4		2,6		3,8		4,4		7,3		7,8	
9	2,3		2,5		3,7		4,2		6,9		7,4	
10	2,2		2,5		3,6		4,0		6,5		7,1	

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