

Overflow and pressure control valves
made of gunmetal, straightway form
with threaded connections
–externally adjustable–

→ Series 630



■ MATERIAL



■ SPECIFICATION



1/2" – 2"



– 10°C to + 95°C



0,5 – 10 bar

■ SUITABLE FOR

Liquids	neutral and non-neutral	
Air, gases and vapours	neutral and non-neutral	

■ EXAMPLES OF USE

For the protection of:

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

For the control of:

- systems under pressure for air, neutral / non-neutral gases and vapours

- test rig construction
- process equipment construction
- de-icing technology
- mechanical engineering
- industrial applications

■ APPROVALS

European Pressure Equipment Directive

GOST-R

Requirements

PED 97/23/EC

Classification society

Germanischer Lloyd
Lloyd's Register EMEA
American Bureau of Shipping
Bureau Veritas

GL
LR EMEA
ABS
BV

■ MATERIALS

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Gunmetal	CC499K	CC499K
	Brass	CW614N	CW614N
Valve seat	Stainless steel	1.4404	316 L
Spring	Spring steel with anti-rust protection	1.1200	ASTM A228

■ 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.
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Complete valve cartridge available as replacement part (order code: 630 cartridge-DN..-seal) can be exchanged without removing the valve.

Valves can be delivered unset within a pressure range or set and sealed at the factory (against surcharge).

■ MEDIUM

GF	gaseous and liquid	for water, neutral and non-sticking liquids, compressed air and neutral gases; optionally with FPM elastomere seals for non-neutral media i.e. oils, fuels, oil-laden compressed air, etc.
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■ TYPE OF LIFTING MECHANISM

0	without lifting device
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■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter DN	15	20	25	32	40	50
Inlet threaded connection	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Outlet threaded connection	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)

■ TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

BSP-Tm / BSP-Tm	Standard threaded connections	Male thread BSP-T / Male thread BSP-T	DIN EN 10226, ISO 7-1 / DIN EN 10226, ISO 7-1
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■ SEALS

EPDM	Ethylene propylene diene	Elastomere moulded diaphragm and seals approvals according to drinking water directive	-10°C to +95°C
Against surcharge			
FKM	Fluorocarbon	Elastomere moulded diaphragm and seals	-10°C to +95°C

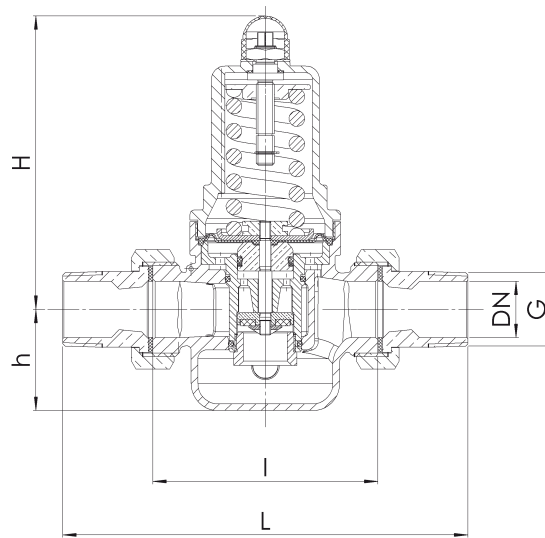
■ OPTIONS

Against surcharge	
Pressure gauges 36, 39 or 40	Chapter Accessories

■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 630: Connection, installation dimensions, ranges of adjustment							
Nominal diameter	DN	15	20	25	32	40	50
Inlet DIN EN 10226	G	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Outlet DIN EN 10226	G	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Installation dimensions in mm	L	142	158	180	193	226	252
	I	80	90	100	105	130	140
	H	102	102	130	130	165	165
	h	33	33	45	45	70	70
Weight	kg	1,2	1,4	2,4	2,6	5,5	6
Set pressure	bar	0,5-10	0,5-10	0,5-10	0,5-10	0,5-10	0,5-10
Range of adjustment	bar	0,5-2	0,5-2	0,5-2	0,5-2	0,5-2	0,5-2
		1,5-6	1,5-6	1,5-6	1,5-6	1,5-6	1,5-6
		5,5-10	5,5-10	5,5-10	5,5-10	5,5-10	5,5-10

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Lifting device	Nominal diameter DN	Connection type		Connection size		Seal	Options	Pressure range / set pressure	Quantity
					Inlet	Outlet	Inlet	Outlet				
630	m	GF	0	15	BSP-T m	BSP-T m	15	15	EPDM	Manometer 36	1,5 - 6	5
630	m	GF	0	25	BSP-T m	BSP-T m	25	25	FKM		7,0	1
630	m	GF	0		BSP-T m	BSP-T m						
630	m	GF	0		BSP-T m	BSP-T m						

■ CAPACITY TABLE

Series 630: Kv values at 1 bar overpressure																		
Nominal diameter DN	15			20			25			32			40			50		
	Air [Nm ³ /h]		Air [Nm ³ /h]	Air [Nm ³ /h]		Air [Nm ³ /h]	Air [Nm ³ /h]		Air [Nm ³ /h]	Air [Nm ³ /h]		Air [Nm ³ /h]	Air [Nm ³ /h]		Air [Nm ³ /h]			
Pressure range bar	0,5-2	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	
	Set pressure bar	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6	5,5-10
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 [m ³ /h]		Water [m ³ /h]	Water [m ³ /h]		Water [m ³ /h]	Water [m ³ /h]		Water [m ³ /h]	Water [m ³ /h]		Water [m ³ /h]	Water [m ³ /h]		Water [m ³ /h]			
Pressure range bar	0,5-2	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	0,5-2	1,5-6	5,5-10	
	Set pressure bar	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6		5,5-10	1,5-6	5,5-10
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