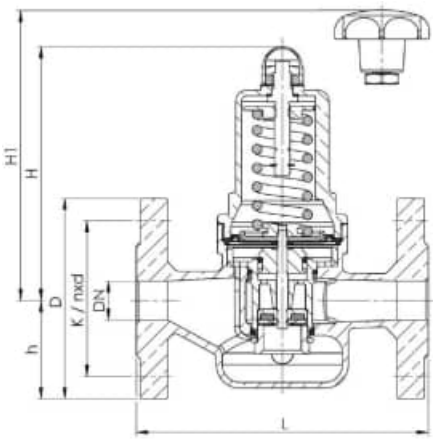

GOE-431

Stainless Steel In-Line Discharge Overflow & Pressure Control Valve For Air, Gasses, Oil & Water*

PN16/40 Flanged

The GOE-431 in-line discharge overflow and pressure control valve is designed for pump protection and bypass control applications.

User pressure adjustment is achievable on site or these valves can be set to your requirements.

Features, Benefits & Approvals

- Lloyds, DNV, BV type approved**
- ABS & GL type approved**
- Straight in-line discharge
- Set, tested and certified prior to despatch
- User adjustable if necessary

Pressure & Temperature

Pressure range:-

DN15-50: 0.5 to 10.0 bar
DN65-80: 1.0 to 6.0 bar
DN100: 1.0 to 5.5 bar
***See range of adjustment below

Temperature range:-

EPDM Disc: <8 bar -20°C to 120°C
EPDM Disc: >8 bar -20°C to 95°C

FKM Disc: <8 bar -10°C to 120°C
FKM Disc: >8 bar -10°C to 95°C

DN	15	20	25	32	40	50	65	65	80	100
Flange PN	40	40	40	40	40	40	16	40	40	16
L	130	150	160	180	200	230	290	290	310	350
D	95	105	115	140	150	165	185	185	200	220
H	102	130	130	130	166	166	245	245	245	320
H1	124	161	161	161	198	198	-	-	-	-
h	46	50	55	68	73	80	89	89	97	112
K/nxd	65 / 4xM12	75 / 4xM12	85 / 4xM12	100 / 4xM16	110 / 4xM16	125 / 4xM16	145 / 4xM16	145 / 8xM16	160 / 8xM16	180 / 8xM16
Gauge Connection BSP	¼"	¼"	¼"	¼"	¼"	¼"	¼"	¼"	¼"	¼"
Weight	2.8	3.9	4.3	5.5	8.4	10.2	18.7	19	20.5	38
Coefficient of Flow K_{vs}	2.1	4.7	5.1	5.5	10.5	11.5	20.5	20.5	21.5	43.8
*** Range of Adjustment	0.5 - 2 bar • 1.5 - 6 bar • 5.5 - 10 bar (Specify when ordering)						1.5 - 6 bar			1.5 - 5.5 bar

Materials	
Body	Stainless Steel (CF8M)
Internal Parts	Stainless Steel (CF8M / 316L)
Spring	Spring Steel
Valve Seat	Stainless Steel (316L)
Disc	EPDM • FKM

* Dependent on version, please check compatibility ** On request

All data is designed as a guide and should not be regarded as wholly accurate in every detail
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Datasheet No. 130033a - 06/25

GOE-431

Capacity Charts/Sizing

Kv VALUES AIR (Nm^3/h) @ 1 bar overpressure									
Set Pressure (bar)	**DN15**	**DN20**	**DN25**	**DN32**	**DN40**	**DN50**	**DN65**	**DN80**	**DN100**
0.5	73	175	189	193	417	445	-	-	-
1.0	89	208	231	239	498	537	945	1010	1230
1.5(1)	102 (103)	247 (175)	264 (185)	273 (196)	587 (370)	624 (408)	1020	1115	1350
2.0(1)	117 (119)	285 (214)	303 (226)	314 (238)	636 (429)	683 (472)	1255	1315	1510
3.0	146	245	282	291	506	557	1480	1620	1820
4.0	170	292	330	338	543	615	1810	1890	2090
5.0	187	329	367	379	625	684	1895	2060	2320
5.5(2)	195 (139)	354 (173)	386 (183)	394 (186)	653 (375)	719 (417)	1930	2150	2450
6.0(2)	203 (147)	375 (186)	405 (194)	418 (202)	708 (395)	760 (443)	1965	2230	-
7.0	162	210	223	229	400	502	-	-	-
8.0	179	249	259	264	407	517	-	-	-
9.0	218	273	285	289	432	564	-	-	-
10.0	255	294	303	314	465	601	-	-	-

Kv VALUES WATER (m^3/h) @ 1 bar overpressure									
Set Pressure (bar)	**DN15**	**DN20**	**DN25**	**DN32**	**DN40**	**DN50**	**DN65**	**DN80**	**DN100**
0.5	2.7	5.1	5.5	6.2	12.4	12.9	-	-	-
1.0	2.9	5.4	6.1	6.9	12.9	13.8	23.0	26.0	31.0
1.5(1)	3.4 (3.1)	5.9 (5.2)	6.6 (5.6)	7.5 (6.4)	13.2 (9.0)	14.4 (9.4)	24.0	26.0	31.7
2.0(1)	3.6 (3.2)	6.3 (5.2)	6.9 (5.7)	7.8 (6.4)	13.5 (9.1)	14.9 (9.4)	25.0	27.0	33.0
3.0	3.3	5.3	5.9	6.5	9.3	9.5	26.0	29.0	34.5
4.0	3.4	5.3	6.1	7.2	9.5	9.9	28.0	30.0	36.0
5.0	3.3	5.4	6.2	7.5	9.7	10.2	28.0	31.0	38.7
5.5(2)	3.0 (2.3)	5.2 (2.9)	5.8 (3.2)	6.9 (4.1)	10.1 (7.2)	10.5 (7.7)	28.0	32.0	40.0
6.0(2)	2.9 (2.4)	5.1 (3.0)	5.4 (3.3)	6.7 (4.2)	10.4 (7.3)	10.9 (8.0)	29.0	32.0	-
7.0	2.4	3.3	3.9	4.5	7.5	8.1	-	-	-
8.0	2.4	3.2	3.8	4.4	7.3	7.8	-	-	-
9.0	2.3	3.1	3.7	4.2	6.9	7.4	-	-	-
10.0	2.2	3.1	3.6	4.0	6.5	7.1	-	-	-

(1) Figures in brackets are with spring range 1.5 - 6 bar (2) Figures in brackets are with spring range 5.5 - 10

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