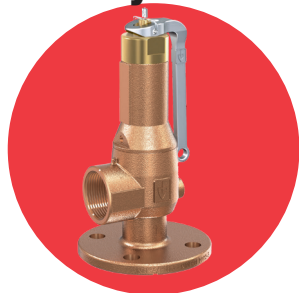


ART 645 FL

Gunmetal High Discharge Safety Valve



Features

- Flanged Connection
- Suitable for gases and liquids
- Fitted with diaphragm to protect spring housing
- Set range 0.5 to 16 Bar
- ISO 4126-1, PED 2014/68/EU
- Marine approvals - GL, DNV
- ATEX approval available at extra cost
- 5 year warranty
- Test certificate to EN10204-3.1 available on request
- High capacity discharge

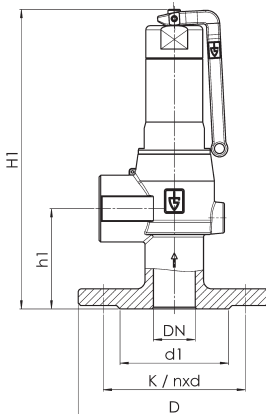


Technical data

Max pressure: 16 Bar

Working temp: EPDM Diaphragm
-50°C to 195°C

See overleaf for discharge capacity.



DN	1"	1 1/4"	1 1/2"	2"
H1 DIN / ANSI	206 / 206	258 / 258	302 / 302	358 / 358
h1 DIN / ANSI	60 / 60	66 / 66	73 / 73	83 / 83
D DIN / ANSI	115 / 110	140 / 115	150 / 125	165 / 150
d1 DIN / ANSI	65 / 50.8	76 / 63.5	84 / 73	99 / 92.1
K / nxd (DIN)	85 / 4x14	100 / 4x18	110 / 4x18	125 / 4x18
K / nxd (ANSI)	79.4 / 4x15.9	88.9 / 4x15.9	98.4 / 4x15.9	120.7 / 4x19.1
Kgs DIN / ANSI	2.6 / 2.4	4.8 / 4.3	7.5 / 6.9	11.3 / 10.8

Part Name	Materials
Body	Gunmetal
Housing Cap	Brass CC499K / Gunmetal
Spring Housing	Brass CC499K / Gunmetal
Lifting Lever	Stainless Steel CF8M
Spring	Stainless Steel 302
Seat - Seal	PTFE
Diaphragm	EPDM

Typical Applications

- Pressure vessels
- Mechanical engineering
- Pump protection
- Pressure booster systems water / air-side
- Cooling / chilling systems
- Steam and industrial boiler systems

ART 645 FL



Discharge Capacities

Nm ³ /h - Air	Kg/h - Steam
M ³ /h - Water	Kw - Heating Water

DN					1 1/4"				
Bar	Nm ³ /h	kg/h	m ³ /h	kW	Nm ³ /h	kg/h	m ³ /h	kW	
0.5	234	191	7.0	118	338	276	10.5	170	
1	338	269	9.5	164	491	392	14.3	239	
2	556	437	13.5	262	816	642	20.2	385	
3	764	595	16.5	352	1128	879	24.8	520	
4	966	748	19.1	436	1430	1107	28.7	646	
5	1163	896	21.3	517	1721	1326	32.1	765	
6	1359	1043	23.4	595	2013	1544	35.1	882	
7	1556	1190	25.2	673	2304	1762	37.9	996	
8	1753	1337	27.0	749	2595	1979	40.6	1109	
9	1950	1483	28.6	825	2887	2196	43.0	1221	
10	2147	1629	30.2	899	3178	2412	45.4	1331	
11	2343	1776	31.7	972	3469	2629	47.6	1439	
12	2540	1922	33.1	1045	3761	2845	49.7	1547	
13	2737	2068	34.4	1116	4052	3061	51.7	1652	
14	2934	2214	35.7	1187	4343	3278	53.7	1758	
15	3130	2361	37.0	1257	4635	3495	55.6	1862	
16	3327	2507	38.2	1327	4926	3711	57.4	1964	

DN					2"				
Bar	Nm ³ /h	kg/h	m ³ /h	kW	Nm ³ /h	kg/h	m ³ /h	kW	
0.5	571	466	17.7	288	864	706	26.8	436	
1	831	662	24.1	404	1258	1003	36.5	612	
2	1379	1085	34.2	650	2089	1643	51.8	985	
3	1907	1486	41.9	878	2888	2251	63.5	1330	
4	2417	1872	48.4	1092	3661	2835	73.4	1654	
5	2909	2241	54.2	1293	4407	3395	82.1	1958	
6	3402	2609	59.4	1490	5153	3953	89.9	2257	
7	3894	2977	64.1	1684	5899	4510	97.1	2551	
8	4386	3344	68.6	1875	6644	5066	103.9	2840	
9	4879	3711	72.7	2063	7390	5621	110.2	3125	
10	5371	4077	76.7	2249	8136	6175	116.1	3407	
11	5863	4443	80.4	2433	8882	6730	121.8	3685	
12	6356	4809	84.0	2614	9627	7284	127.2	3959	
13	6848	5174	87.4	2793	10373	7837	132.4	4230	
14	7340	5541	90.7	2970	11119	8393	137.4	4500	
15	7833	5907	93.9	3146	11865	8948	142.3	4766	
16	8325	6272	97.0	3319	12611	9501	146.9	5028	

Seat-Seal/Diaphragm Options

Option	Materials	Type	Working Temp.
PTFE/EPDM	Polytetrafluorethylen/Ethylen-Propylene-Diene (Standard)	Flat seal and moulded diaphragm	-50°C to +195°C
EPDM/EPDM	Ethylen-Propylene-Diene/Ethylen-Propylene-Diene	Flat seal and moulded diaphragm	-50°C to +150°C
PTFE/FKM	Polytetrafluorethylen/Fluorcarbon	Flat seal and moulded diaphragm	-30°C to +200°C
FKM/FKM	Fluorcarbon/Fluorcarbon	Elastomere seals and moulded diaphragm	-20°C to +200°C

V1. Dimensions in mm

This data sheet is designed as a guide and should not be regarded as wholly accurate in every detail. We reserve the right to amend the specification of any product without notice.