



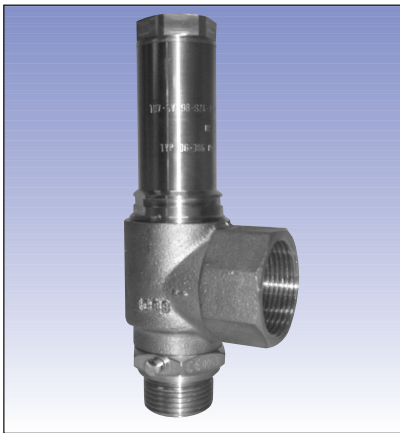
PRESSURE SYSTEMS PTY LTD

Herose Safety Valves

Part No. 06-386/416

Part No. 06-386
Without lifting device

Part No. 06-416
With lifting device



Herose Cryogenic Safety Valves

Standard and full lift safety valves, male x female thread, gun metal type tested

Stainless steel, closed bonnet, stainless steel inlet body and disc, male inlet thread, female outlet thread, available cleaned for oxygen service.

Applications

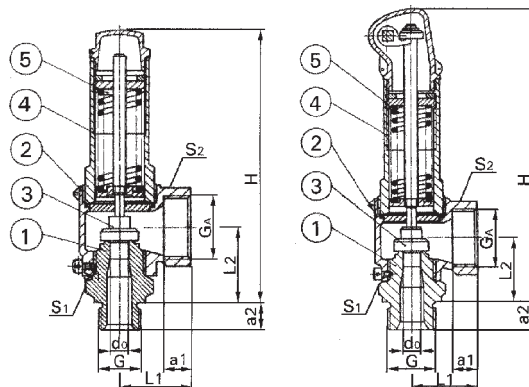
Provided as safety device for protection against excessive pressure in stationary and moveable gas cylinders. Permitted for cryogenic gases such as argon, carbon dioxide, air, oxygen, nitrogen etc. Working temperature -196°C up to +185°C.

Type test approval identification

TUV.SV.824 D/G Permit Number: 11 D 91, 11 D 103 (G1)

Materials

Part	Material No.	
1. Inlet	1.4301	X 5 Cr Ni 18-10
2. Outlet	2.1096.01	G-Cu Sn 5 Zn Pb
3. Disc	1.4541	X 6 Cr Ni Ti 18-10
4. Bonnet	1.4305	X 8 Cr Ni S 18-9
5. Spring	1.4571	X 6 Cr Ni Mo Ti 17-12-2



Dimensions and Weights

Part Number		06-386			06-416		
Nominal Size	G	1/2	3/4	1	1/2	3/4	1
Seat diameter	d0	10.5	10.5	14	10.5	10.5	14
Dimension code	.X.	1004	1006	1410	1004	1006	1410
Set pressure range	Bar	0.2-25	0.2-25	0.2-40	0.2-25	0.2-25	0.2-40
Outlet	Ga	G 1	G 1	G 1 1/4	G 1	G 1	G 1 1/4
Height	H	140	140	160	165	165	185
Length	a1	14	14	14	14	14	14
Length	a2	14	16	18	14	16	18
Length	L1	36	36	40	36	36	40
Length	L2	34.3	34.3	42	34.3	34.3	42
A/F	S1	30	32	41	30	32	41
A/F	S2	41	41	50	41	41	50
Weight	Kg	0.73	0.75	1.1	0.85	0.85	1.2

Valves are delivered pre-set, therefore when ordering please confirm set pressure, medium, temperature and any other relevant details.

Discharge Capacities for Safety Valves

Calculation of mass flow according to AD-Merkblatt A2

Medium:

Air at 0°C (32F) and 1013.25 mbar absolute (m³/h)

The capacity stated below is for a fully opened valve

d_o – Seat diameter

A_o – Flow area

Set Pressure In bar	G	1/2	3/4	1
	Do (mm)	10.5	10.5	14
	Ao (mm)	86.6	86.6	153.9
0.2		23	23	46
0.5		46	46	83
1.0		73	73	129
1.5		96	96	170
2.0		119	119	208
4.0		205	205	365
6.0		288	288	513
8.0		371	371	660
10.0		454	454	808
12.0		537	537	955
14.0		620	620	1102
16.0		703	703	1250
18.0		786	786	1397
20.0		869	869	1545
22.0		952	952	1692
25.0		1077	1077	1914
30.0		-	-	2282
35.0		-	-	2651
40.0		-	-	3020