

44400000 Safety valves

- Port size: G1/4 ... G3/4
- Component-tested in accordance with AD Code of Practice A
- Component code Model: 4440101 - 4440340 CE 2266.SV.02-2.8. D/G.0,23.p
- Model: 4440402 - 4440420 CE 0685.SV.02-1.10. D/G.0.43.p



Technical features

Operating medium:
Compressed airannon-toxic gases

Safety valves:
Component-tested in accordance with VdTÜV Code of Practice for safety valve 100.
Safety valves are used to release non-toxic and non-flammable gases into the atmosphere to protect pressure systems against excess pressure.

Important note:
Only safety valves set in the factory are delivered with a component code.
It is therefore imperative that the set pressure in bar is specified on ordering. Repairs may only be carried out by the manufacturer.

Operating pressure:
1 ... 40 bar (14,5 ... 580 psi)

Direction of flow:
Fixed

Installation position:
Vertical

Port sizes:
G1/4, G3/8, G1/2 or G3/4

Fluid/ambient temperature:
-10 ... +180°C max.
(+14 ... +356°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Materials:
Body & end cover: brass
Valve seat: brass/FPM

Technical data

Symbol	Port sizes	Orifice	Response pressure (bar)	Weight (kg)		Model
				Response pressure (bar)	Response pressure (bar)	
	G 1/4	8	1 ... 40	0,13	0,14	See page 2
	G 3/8	8	1 ... 40	0,14	0,15	
	G 1/2	8	1 ... 40	0,16	0,17	
	G 3/4	10	1 ... 20	0,33	0,33	

Performance table/Order numbers

Volume flow rate to be dissipated in Nm ³ /h (at 0°C and 1.013 bar)								
Set pressure (bar)	G1/4 Nm ³ /h	Model	G3/8 Nm ³ /h	Model	G1/2 Nm ³ /h	Model	G3/4 Nm ³ /h	Model
1	23,5	4440101	23,5	4440201	23,5	4440301	—	—
2	35,5	4440102	35,5	4440202	35,5	4440302	74,5	4440402
3	47	4440103	47	4440203	47	4440303	99	4440403
4	59	4440104	59	4440204	59	4440304	124	4440404
5	61	4440105	61	4440205	61	4440305	149	4440405
6	63	4440106	63	4440206	63	4440306	174	4440406
7	84	4440107	84	4440207	84	4440307	198	4440407
8	106	4440108	106	4440208	106	4440308	223	4440408
9	118	4440109	118	4440209	118	4440309	248	4440409
10	130	4440110	130	4440210	130	4440310	273	4440410
11	142	4440111	142	4440211	142	4440311	298	4440411
12	154	4440112	154	4440212	154	4440312	323	4440412
13	166	4440113	166	4440213	166	4440313	347	4440413
14	177	4440114	177	4440214	177	4440314	372	4440414
15	189	4440115	189	4440215	189	4440315	397	4440415
16	201	4440116	201	4440216	201	4440316	422	4440416
17	213	4440117	213	4440217	213	4440317	447	4440417
18	225	4440118	225	4440218	225	4440318	471	4440418
19	236	4440119	236	4440219	236	4440319	496	4440419
20	248	4440120	248	4440220	248	4440320	521	4440420
22	272	4440122	272	4440222	272	4440322	571	4440421
24	296	4440124	307	4440224	307	4440324	—	—
26	320	4440126	320	4440226	320	4440326	—	—
28	343	4440128	343	4440228	343	4440328	—	—
30	367	4440130	367	4440230	367	4440330	—	—
33	403	4440133	403	4440233	403	4440333	—	—
36	426	4440136	426	4440236	426	4440336	—	—
40	485	4440140	485	4440240	485	4440340	—	—

Interim values can be interpolated

The specified outflows are achieved as a minimum with a 10% pressure increase above the set pressure

The discharge capacity for compressed air above 10°C and the discharge capacity for other neutral gases cannot be taken directly from the performance table. The required capacity must then be multiplied by a correction factor that can be determined from the chart below. On the basis of the performance table, the size of the connection for the safety valve is thus established according to the corrected performance value.

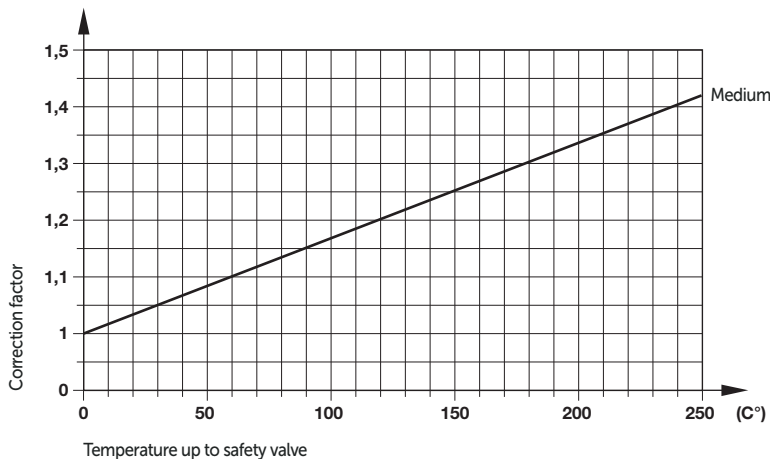
Example:

For a capacity of 200 Nm³/h compressed air based on a ambient pressure of 1013 mbar and a temperature of 60°C, a safety valve with a response pressure of 8 bar must be specified.

Corrections factor 1,1 from chart:

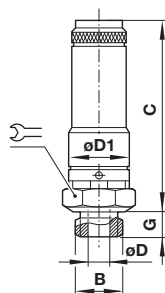
200 Nm³/h x 1,1 = 220 Nm³/h

With this value, the nominal size G3/4 - 8 bar is selected from the performance table.



Dimensions

Dimensions in mm
Projection/First angle



B	Response pressure (bar)		$\varnothing D$	$\varnothing D1$	G	Σ
	1 ... 15 C	16 ... 40 C				
G 1/4	85	90	8	20	10	20
G 3/8	85	90	8	20	10	20
G 1/2	87	92	8	20	12	24
G 3/4	120	120	10	27	12	30

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.