TÜV/CE atmospheric discharge safety valves for industrial applications

→ Series 413

413

Safety valves made of stainless steel, atmospheric discharge, with threaded connections



SUITABLE FOR

Air, gases and vapours	neutral

EXAMPLES OF USE

For the protection of:
- stationary pressure tanks and
- bulk transport vehicles

for liquid, granular and dusty media. Please observe plant-specific regulations and use of appropriate valve version and sealing material.

- stationary silos
- bulk transport vehicle manufacturers and service companies
- paint spray shops
- secondary areas in the food-, pharmaceutical- and cosmetics-industries

Safety valves are set and sealed at the factory.

MATERIAL

SPECIFICATION

1/2“ – 2“	– 60°C to + 225°C depending on version	0,2 – 6 bar

APPROVALS

TÜV Type test approval 2003	**D/G, F/K/S**
EC type examination	**S/G, F/K/S**
GOST-R	**D/G (S/G), F/K/S**

Requirements

AD 2000 Data sheet A2
TRB 801 Nr. 22 and Nr. 23
DIN EN ISO 4126-1
PED 97/23/EC

Classification society

Germanischer Lloyd	GL
Lloyd's Register EMEA	LR EMEA
American Bureau of Shipping	ABS
Det Norske Veritas	DNV
Bureau Veritas	BV

MATERIALS

Component	Material	DIN EN	ASME
Inlet body	Stainless steel	1.4404	316 L
Outlet body	Stainless steel	1.4404	316 L
Internal parts	Stainless steel	1.4404	316 L
Spring	Stainless steel	1.4310	302
Deflector	Stainless steel	1.4301	304
Sealing cap	Stainless steel	1.4301	304

VALVE VERSION

m	with diaphragm	cylindrical form, atmospheric discharge, for air and similar neutral gases. Spring and moving parts protected from being affected by the medium. Standard version with deflector made of stainless steel.

MEDIUM

G	gaseous	Air and similar neutral gases

TYPE OF LIFTING MECHANISM

K	Standard with twist-type lifting mechanism

AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter DN	**15**	**20**	**25**	**32**	**40**	**50**
Inlet	1/2“ (15)	3/4“ (20)	1“ (25)	1 1/4“ (32)	1 1/2“ (40)	2“ (50)
Atmospheric discharge via outlet apertures	■	■	■	■	■	■

TYPE OF CONNECTION INLET / OUTLET THREADED CONNECTIONS

m / –	Standard	Male thread BSP-P / –	DIN EN ISO 228-1 / –
Against surcharge			
BSP-Tm / –		Male thread BSP-T / –	DIN EN 10226, ISO 7-1 / –
NPT-m / –		Male thread NPT / –	ANSI B1.20.1 / –
Further connection types available on request			

SEALS

FKM	Fluorocarbon	Elastomere flat seal	–20°C to +200°C
On request			
PTFE	Polytetrafluoroethylene	Flat seal from 1 bar	–60°C to +225°C

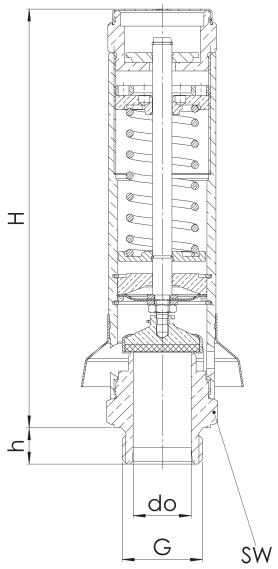
OPTIONS

Special versions on request.

NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 413: Connection, installation dimensions, ranges of adjustment							
Nominal diameter	**DN**	**15**	**20**	**25**	**32**	**40**	**50**
Connection DIN EN ISO 228	**G**	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Installation dimensions in mm	**H**	144	177	177	177	177	282
	h	12	15	15	22,5	22,5	26
	SW	32	41	41	55	55	80
	do	14	20	24	31	31	48
Weight	**kg**	0,6	1,3	1,3	2,6	2,6	5,4
Range of adjustment	**bar**	0,2-6	0,2-6	0,2-6	0,2-6	0,2-6	0,2-6

MAIN DIMENSIONS, INSTALLATION DIMENSIONS



INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Lifting device	Nominal diameter DN	Connection type		Connection size		Seal	Options	Set pressure	Quantity
					Inlet	Outlet	Inlet	Outlet				
413	**m**	**G**	**K**	*32*	*m*	–	*32*	–	*FKM*		*2,0*	*5*
413	**m**	**G**	**K**			–		–				
413	**m**	**G**	**K**			–		–				
413	**m**	**G**	**K**			–		–				

In this table you can configure a valve according to your individual requirements (similar to the *example* shown, which should be deleted before you enter your own data). Please complete the table by hand using the abbreviations in this datasheet and then fax it to: +49(0)7141.4889488
Please do not forget to add your personal data so that our sales team can contact you.

Name _____

First Name _____

Company _____

Telephone _____

E-Mail _____

CAPACITY TABLE

Series 413: Blowing-off rates at 10% above set pressure							
Nominal diameter DN		15	20	25	32	40	50
Set pressure bar							
	0,2	61	167	240	401	401	768
Air	0,3	76	189	272	453	453	827
Nm³/h	0,4	88	205	296	493	493	887
	0,5	99	222	320	534	534	946
	0,6	110	243	351	585	585	1005
	0,7	121	262	377	629	629	1064
	0,8	129	280	404	673	673	1123
	0,9	138	299	431	719	719	1182
	1	147	319	459	766	766	1370
	1,2	168	357	514	858	858	1514
	1,4	186	396	571	952	952	1658
	1,6	208	437	629	1049	1049	1903
	1,8	225	478	688	1148	1148	2055
	2	245	520	749	1249	1249	2325
	2,5	291	617	889	1483	1483	2724
	3	338	717	1032	1723	1723	3177
	3,5	386	809	1165	1943	1943	3583
	4	436	923	1330	2219	2219	4056
	4,5	480	1018	1465	2445	2445	4469
	5	524	1112	1601	2671	2671	4962
	5,5	569	1206	1736	2897	2897	5382
	6	613	1300	1872	3123	3123	5802