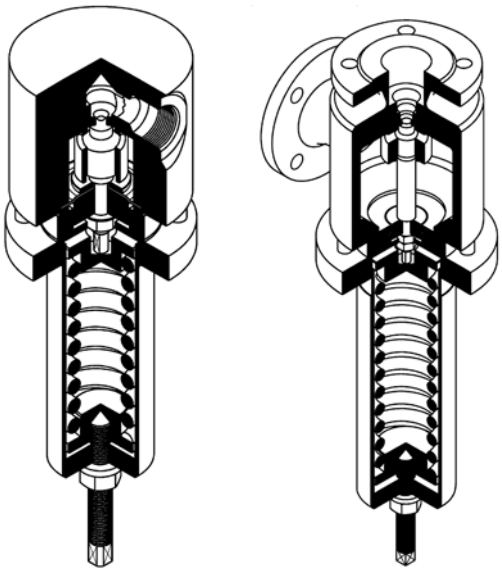
OVERFLOW VALVES

for liquids, gases and steam
up to 80 / 130 / 400 °C

WIR REGELN DAS SCHON.

Type 8.2



TECHNICAL DATA

MEDIUM	liquids, gases, steam
NOM. PRESSURE	PN 6 - 100
CONNECTION	G 3/8 - 2, DN 15 - 50
INLET PRESSURE	2 - 100 bar in 10 adjusting ranges
TEMPERATURE	up to 80 / 130 / 400 °C
KVS-VALUE	0,2 - 5,5 m^3/h
DESIGNS	type 8.2 with diaphragm type 8.2K with piston type 8.2B with corrugated bellows

DESCRIPTION

Overflow valves limit the inlet side pressure to a value no greater than the preset pressure level of the valve.

The type 8.2 overflow valves are spring-loaded proportional control valves for small flow volumes which are controlled by diaphragm, piston or corrugated bellows. Three types of connections can be supplied: sockets, flanges or welding spigots. Depending on the valve size, three different seats may be fitted. The valve cone can be supplied with a soft or metallic seal. The tightness of the valve seal is equal to or better than VDI/ VDE rule 2174.

Whith a depressurized system the valve is kept closed by the spring. An increasing inlet pressure acts on the control section spring system. The inlet pressure is balanced by the force of the valve spring (set pressure). As the inlet pressure rises above the pressure set by means of the setting screw, the valve starts to open. The pressure setting can be increased by turning the setting screw clockwise.

The maximum permitted inlet pressure is 1,5 times the set pressure, unless otherwise specified.

If toxic or hazardous media are used the valve must feature a sealed spring cover (including setting spindle seal) fitted with a leakage line connection. When the pressure reducer is installed on site a leakage line must be fitted capable of safely draining the escaping medium in case the control valve should become defective.

Mankenberg reserves the right, to alter or improve the designs or specifications of the products described herein without notice.

Special designs on request.

KVS-VALUES [m^3/h]						
nominal diameter		G	3/8	1/2	3/4	1
		DN		15	20	25
Kvs-value	seat	I	0,2	0,2	0,25	0,25
		II	0,9	0,9	0,9	0,9
		III	1,7	1,8	2	2,2

KVS-VALUES [m^3/h]					
nominal diameter		G	1 1/4	1 1/2	2
		DN	32	40	50
Kvs-value	seat	I	0,4	0,4	1
		II	2,5	2,5	3,5
		III	3,9	3,9	5,5

SETTING RANGES [bar], NOMINAL PRESSURE*				
2 - 4	4 - 7	7 - 10	5 - 16	10 - 20
PN 6	PN 16	PN 16	PN 25	PN 25

SETTING RANGES [bar], NOMINAL PRESSURE*				
10 - 25	20 - 35	35 - 50	45 - 63	60 - 100
PN 40	PN 63	PN 100	PN 100	PN 100

* nominal pressure for inlet and outlet

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OVERFLOW VALVES

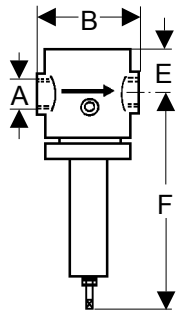
for liquids, gases and steam
up to 80 / 130 / 400 °C

ARMATURENFABRIK MANKENBERG Lübeck
WIR REGELN DAS SCHON.

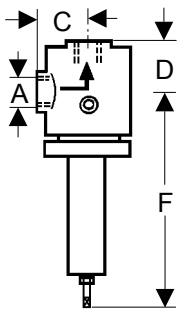
Type 8.2

MATERIALS						
NOMINAL DIAMETER	DN 15 - 25 , G 3/8 - 1			DN 32 - 50 , G 1 1/4 - 2		
TEMPERATURE	80 °C	130 °C	400 °C	80 °C	130 °C	400 °C
BODY	C 22.8			welded steel		
	CrNiMo-steel					
SPRING COVER	welded steel					
INTERNAL COMPONENTS	Rg/CrMo-steel/CrNiMo-steel		CrNiMo-st	CrMo-steel / CrNiMo-steel		CrNiMo-st
VALVE SEAL	EU	FPM / EPDM / PTFE	CrNiMo-st	EU	FPM / EPDM / PTFE	CrNiMo-st
	CrMo-steel / CrNiMo-steel			CrMo-steel / CrNiMo-steel		
DIAPHRAGM	CR	FPM / EPDM	-	CR	FPM / EPDM	-
PROTECTION FILM	PTFE (if required)					
O-RING = K	NBR	FPM / EPDM / PTFE	-	NBR	FPM / EPDM / PTFE	-
CORRUGATED BELLOWS = B	CrNiMo-steel					

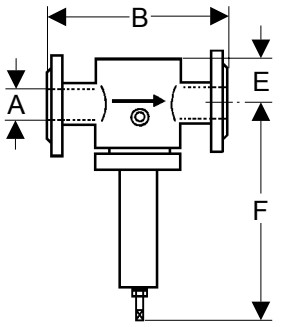
Type 8.2



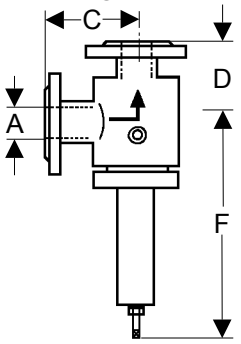
Type 8.2 angled version



Type 8.2F



Type 8.2F angled version



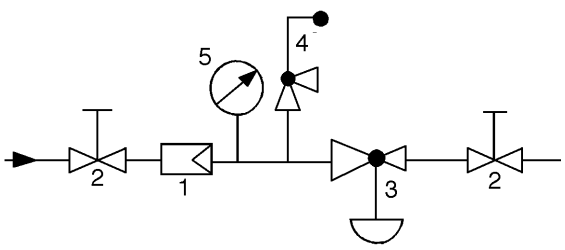
DIMENSIONS [mm]									
		Nom. dia. BSPT (size A)				Nom. dia. DN (size A)			
Type	size	3/8-1	1 1/4	1 1/2	2	15-25	32	40	50
all	B	110	-	-	-	220	-	-	-
	C	55	100	100	100	110	*	*	*
	D	65	108	108	108	120	*	*	*
	E	30	-	-	-	30	-	-	-
	F	420	650	650	650	420	650	650	650
B	F	550	780	780	780	550	780	780	780

* on request

WEIGHTS [kg]							
	Nominal diameter (size A)						
Type	3/8	1/2	3/4	1	1 1/4	1 1/2	2
8.2	13	13	13	13	21	21	21
8.2B	17	17	17	17	25	25	25

WEIGHTS [kg]						
Type 8.2F (weight per flange + weight of type 8.2/8.2B)						
Weight per flange (kg)						
nom. pressure	Nominal diameter (size A)					
PN	15	20	25	32	40	50
16 - 40	1,5	1,6	1,8	2,4	2,9	3,4
63	1,7	2,3	3,2	3	4,8	5,2
100	1,7	2,3	3,2	3,2	4,8	7,7
160	1,7	2,3	3,2	3,6	6,1	8
250	3	3,5	4	-	7,2	8,8
315	3,5	4,5	5,5	-	8,7	10,3

RECOMMENDED INSTALLATION



1 Strainer *
2 Shut-off valves
3 Overflow valve
4 Safety valve *
5 Pressure gauge *

* use MANKENBERG-products

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