## **Pipeline Ancillaries**

### Separators AS 5

Gas Separator with integrated Bleeding and Venting Valve



#### **Technical Data**

Connection DN 50
Nominal Pressure PN 16
Operating Pressure 0 - 16 bar
Flow Velocity < 1 m/s
Temperature 190 °C
Medium liquids

#### Description

By means of a special packed bed, the Mankenberg gas separators ensure that the gases bound with the fluid are separated and automatically discharged. This works without additional auxiliary energy and without pressure loss.

AS 5 gas separators are of straight design. The body and the packing bed are made of stainless steel with excellent corrosion resistance. The valve cone of the integrated bleeding and venting valve is soft sealed.

The special shape of the packing bed components combines high throughput and low fluid resistance with utmost separating effectiveness.

Top and bottom sections of the valve body are connected by a clamp ring and two bolts. Servicing/maintenance is easy and does not call for special tooling.

The fluid flushes the special fillers and, during this process, the gases remain stuck to the fillers in the form of micro bubbles. These bubbles then accumulate and rise. The integrated bleeding valve automatically discharges the gases without any pressure loss.

### Standard

- » All stainless steel construction
- » Quick-release body clamp ring

### **Options**

- » Ozone-resistant design
- » Various seal materials suitable for your medium
- » Special connections: ANSI or JIS flanges, welding spigots; other connections on request
- » Special versions on request

All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



Flow Rate [Nm³/h] Outlet 1/2A					
∆p bar	pressure range bar *				
	0 - 2	0 - 6	0 - 16		
0.1	3.1	1	0.3		
0.2	4.4	1.4	0.4		
0.5	6.8	2.2	0.6		
1	8.6	2.8	0.7		
2	12	4.2	1		
4		7	1.7		
6		9.8	2.4		
8			3.1		
10			3.8		
12			4.5		
16			5.9		

Flow Rate [Nm³/h] Outlet 3/4A					
∆p bar	pressure range bar *				
	0 - 2	0 - 6	0 - 10	0 - 16	
0.1	14	6.4	4.1	3.1	
0.2	20	9	5.7	4.4	
0.5	31	13	8.9	6.8	
1	39	17	11	8.6	
2	59	26	16	12	
4		44	28	21	
6		61	39	30	
8			50	38	
10			62	47	
12				53	
16				73	

The quoted flow volumes apply to a fully open valve i.e. in start-up condition at 0 °C and 1013 mbar. With continuous bleeding e.g. of filter vessels, the maximum flow volume is 30 % less on average.

#### \* Please note:

Smaller seat diameter for higher pressure range. If the selected working pressure range is too high, the flow volume may be inadequate.

# **Pipeline Ancillaries**

## **Separators AS 5**

Gas Separator with integrated Bleeding and Venting Valve



Materials		
Body	CrNiMo-steel	
Body Seal	EPDM	
Internals	CrNiMo-steel	
Filling Basket	CrNiMo-steel	
Packing Bed	CrNi-steel	
Float	CrNiMo-steel	
Valve Seal	EPDM	
Profile Clamp	CrNiMo-steel	

Dimensions [mm]					
size	nominal diameter outlet (size E)				
	G 1/2	G 3/4			
A*	220	220			
A <sub>1</sub> *	36	140			
В	262	243			
D	150 / 200	150 / 200			

<sup>\*</sup> Overall length tolerances in acc. with DIN EN 558

Weights [kg]				
outlet G 1/2	outlet G 3/4			
10.5	11.0			

#### Customs Tariff Number 84818099

Special designs on request.

The pressure has always been indicated as overpressure. Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.

## **Dimensional Drawing**



