# **Pipeline Ancillaries**

## Sight Glasses / Flow Indicators DA 1.10, 1.30, 1.40

Small-sized Flow Indicator



#### **Technical Data**

Connection G 3/8 - 3/4
Nominal Pressure PN 16 - 40
Temperature 280 °

Medium liquids, gases and steam

#### Description

Sight glasses without flow indicator may be used for easy checking of fill levels, consistency, bi- or multiphase flows or condensate. They may also be used for mixtures of liquids, gases and vapours. Flow indicators fitted with a vane can be used for monitoring the flow of liquids, gases and biphase fluids. Flow indicators fitted with an impeller are used for liquids and small flow volumes. Flow indicators fitted with a ball can be used for liquids and gases.

DA 1.10, DA 1.30 and DA 1.40 are small flow indicators with one sightglass. Body and cover are either cast or machined from the solid; internal components are manufactured from corrosion-resistant stainless steel and plastic.

DA 1.10 with internal indicating vane, for uniform flow direction:

- » horizontal or vertical installation
- » no return spring
- » if installed vertically, flow must be upward

DA 1.30 with impeller wheel, for uniform flow direction:

- » horizontal or vertical installation
- » for small flow volumes (v < 1 m/s)

DA 1.40 with indicating ball, for uniform flow direction:

- » vertical installation
- » flow must be upward

#### Standard

- » internal components made of stainless steel and plastic
- » soda lime glass

### **Options**

- » various seal materials suitable for your medium
- » PTFE indicating vane or ball
- » borosilicate glass
- » special versions on request

Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



Sensitivy [l/h]					
type	PN	resetting spring	nominal diameter G		
			3/8	1/2	3/4
1.10	16	with	380	400	450
		without	50	70	75
	40	with	400	450	450
		without	90	110	120
1.30	16	without	90	90	110
	40	without	120	150	220
1.40	16	without	100	150	150
	40	without	70	100	100

sensitivy for water, 20 °C, horizontal istallation (DA 1.40 vertical), app. rate in  $\emph{l}$ /h

# **Pipeline Ancillaries**

# Sight Glasses / Flow Indicators DA 1.10, 1.30, 1.40





Small-sized Flow Indicator

Materials DA 1.10				
Temperature		150 °C	280 °C	
Body	PN 16	grey cast iron	grey cast iron	
	PN 25 - 40	C 22.8	C 22.8	
	PN 16 - 40	CrNiMo-steel	CrNiMo-steel	
Seal		Nova Universal	Graphit	
Glass		soda lime glass	borosilicate glass	
Internals		CrNiMo-steel	CrNiMo-steel	
Screws		5.6 zinced	5.6 zinced	

Materials DA 1.30			
Temperature max.		80 °C	
Body	PN 16	grey cast iron	
	PN 25 - 40	C22.8	
	PN 16 - 40	CrNiMo-steel	
Seal		Nova Universal	
Glass		soda lime glass optional borosilicate glass	
Internals		CrNiMo-steel and PBTP	
Screws		5.6 zinced	

Materials DA 1.40			
Temperature max.		100 °C	
Body	PN 16	grey cast iron	
	PN 25 - 40	C22.8	
	PN 16 - 40	CrNiMo-steel	
Seal		Nova Universal	
Glass		soda lime glass optional borosilicate glass	
Internals		CrNiMo-steel and PA	
Screws		5.6 zinced	

cover made of R-St37-2

nominal diameter G			

Weights [kg]					
nominal pressure	nominal diameter G				
	3/8	1/2	3/4		
PN 16	1,4	1,4	1,4		
PN 25/40	2,3	2,3	2,3		

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**

