

# Pipeline Ancillaries

## Sight Glasses / Flow Indicators DA 2.00, 4.00



### Sight Glasses

#### Technical Data

Connection DN	15 - 250
Connection G	3/8 - 1
Nominal Pressure PN	16 - 40
Temperature	280 °C
Medium	liquids, gases and steam

#### Description

Sight glasses with vortex baffle or 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.

DA 2.00 is fitted with one glass and one vortex baffle which induces turbulence in the fluid and thus makes it easier to see the flow.

DA 4.00 is a flow sightglass with two glasses without internal components. A good view of the fluid is provided by the two opposite glasses.

For flow sightglasses with flow indicators see data sheets DA 1.10/2.1.091.1, DA 3.10/2.1.091.1 and DA 6.00/2.1.091.1

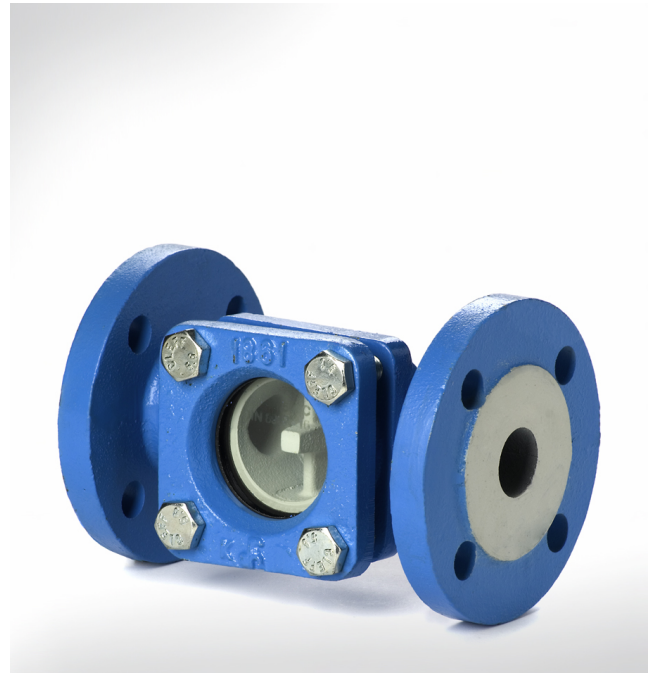
#### Standard

- » soda lime glasses

#### Options

- » various seal materials suitable for your medium
- » rubber or plastic coating for corrosive media
- » borosilicate glasses
- » halogen sightglass light
- » high pressure models up to PN 160
- » 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.



# Pipeline Ancillaries

## Sight Glasses / Flow Indicators DA 2.00, 4.00



### Sight Glasses

#### Materials

Temperature	150 °C	280 °C
Body	PN 16	bis DN 25 grey cast iron, DN 32 - 150 spherical cast iron optional: DN 200 - 250 St 37-2
	PN 25/40	G 3/8 - 2, DN 15 - 65: C 22.8 DN 80 - 200: St 37-2
	PN 16 - 40	CrNiMo-steel
Seal	Nova Universal	graphit
Glasses	soda lime glasses	borosilicate glasses
Screws	5.6 zined	5.6 zined

#### Dimensions [mm] DA 2.00

size	nominal pressure	nominal diameter G			
		3/8	1/2	3/4	1
A	PN 16 (Guss)	100	100	100	135
	PN 16 (SST)	90	90	90	90
	PN 40	90	90	90	90
B	PN 16 (cast iron)	50	50	50	60
	PN 40, PN 16*	70	70	70	70
C	PN 16 (cast iron)	75	75	75	85
	PN 40, PN 16*	110	110	110	110
D	PN 16 (cast iron)	72	72	72	85
	PN 40, PN 16*	115	115	115	115
E	PN 16 (cast iron)	40	40	40	50
	PN 40, PN 16*	50	50	50	50

#### Dimensions [mm] DA 4.00, BSPT female

size	nominal pressure	nominal diameter G			
		3/8	1/2	3/4	1
A	PN 16 (cast iron)	105	105	110	110
	PN 16 (SST)	90	90	90	90
	PN 40	90	90	90	90
B	PN 16 - 40	140	140	140	140
D	PN 16 (cast iron)	85	85	85	85
	PN 40, PN 16*	115	115	115	115
E	PN 16 - 40	50	50	50	50

\*also for PN 16 stainless steel 316L

#### Dimensions [mm] DA 4.00, flange connection

size	nominal pressure	nominal diameter G													
		15	20	25	32	40	50	65	80	100	125	150	200**	250**	
A	PN 16 (cast iron)	140	150	160	180	200	230	200	260	300	350	400	600	650	
	PN 16 (SST)***	164	168	172	178	202	290	200	on request						
	PN 40 (steel)***	166	170	170	174	180	206	290	on request						
	PN 40 (SST)***	164	168	168	172	178	206	290	on request						
B	PN 16 - 40	140	140	140	140	140	180	180	220	250	270	270	460	500	
D	PN 16 (cast iron)	85	85	85	85	85	110	120	130	190	210	210	285	285	
	PN 40, PN 16*	115	115	115	115	15	150	150	on request						
E	PN 16 - 40	50	50	50	50	50	66	66	80	100	110	110	175	175	

\* also for PN 16 stainless steel 316L

\*\* DN 200 and 250 made of St 37-2

\*\*\* tolerance ± 2 mm

#### Weights [kg]

type	nominal pressure	nominal diameter G				nominal diameter DN												
		3/8	1/2	3/4	1	15	20	25	32	40	50	65	80	100	125	150	200	250
2.00	PN 16	1,2	1,2	1,3	1,8													
	PN 40	4,5	4,5	4,5	4,5													
4.00	PN 16	2,6	2,6	2,8	3	3,5	4	5	6	7	10	13	17	26	36	43	80	126
	PN 40	4,5	4,5	4,5	4,5	6	7	7,5	8,5	9	15	15	on request					

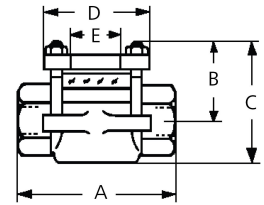
Special designs on request.

The pressure has always been indicated as overpressure.

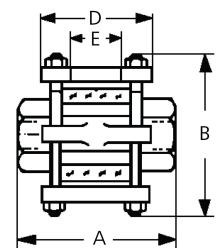
Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.

#### Dimensional Drawing

DA 2.00 sleeve



DA 4.00 sleeve



DA 4.00 flange

