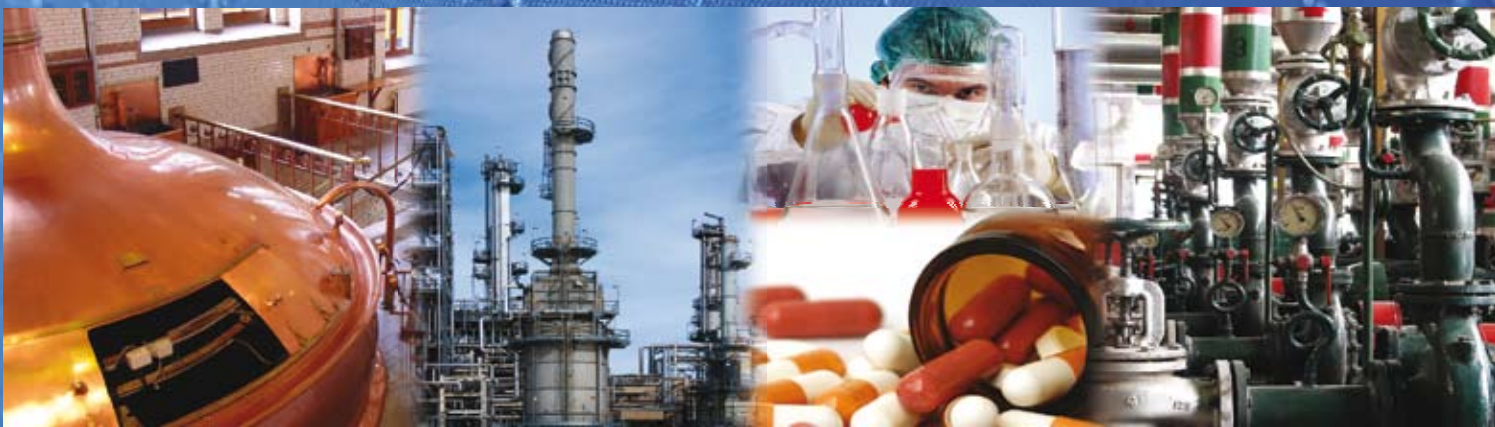




flow & process solutions



Sight glass - Tubular type

with flanged connection acc. to DIN

Bauform 20

Application:

Sight glass - Tubular type with flanges on both sides to use in either horizontal or vertical pipe lines for optical control of fluids and gasses.

Operating conditions:

Connection: Flanges PN 10 / 16
 Pressure: up to DN 100 - 6 bar max
 DN 125 and up – 4 bar max
 Temperature: 200°C max.

Installation:

Optional

Special designs:

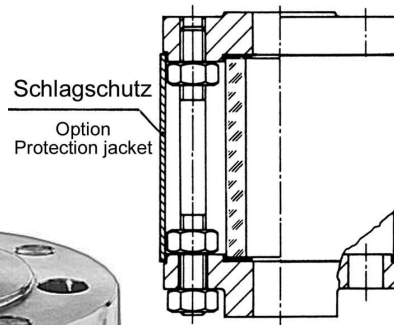
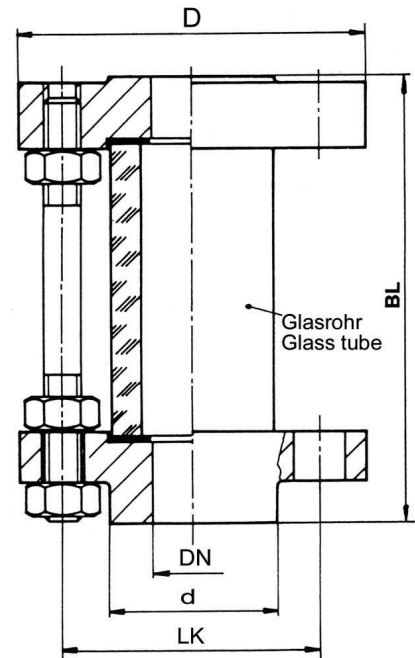
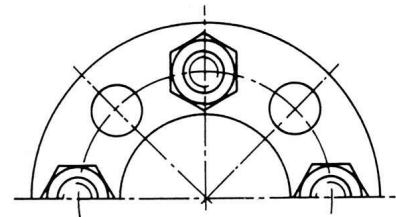
Protection jacket of acrylic glass
 ANSI - Flanges
 Extra length

Materials:

Flanges	WN 1.4571	Steel H II
Screws	A4 - 70	Steel
Glass tube	Borosilicate glass	
Gaskets	Viton or PTFE (or other materials)	

Ordering example:

Sight Glass - Tubular Type Bauform 20
 WN 1.4571, Gaskets Viton
 Max. 6 bar 7 200°C
 DN 50, PN 16



Dimensions:

DN	D	d	BL	Screws	LK
15	95	45	200	4	65
20	105	58	200	4	75
25	115	68	200	4	85
32	140	78	200	4	100
40	150	88	200	4	110
50	165	102	200	4	125
65	185	122	200	4	145
80	200	138	200	4	160
100	220	158	200	4	180
125	250	188	200	8	210
150	285	212	200	8	240
200	340	242	200	8	295

Mounting instructions:

Sight glass tubular type must be mounted without tension by tube, vibrations and pressure pushes.

Modification reserved

Sight glass - Tubular type

with flanged connection acc. to ANSI 150 lbs

Bauform 20-A

Application:

Sight glass - Tubular type with flanges on both sides to use in either horizontal or vertical pipe lines for optical control of fluids and gasses.

Operating conditions:

Connection: ANSI-Flanges 150 lbs-RF
 Pressure: up to DN 100 - 6 bar max
 DN 125 and up – 4 bar max
 Temperature: 200°C max.

Installation:

Optional

Special designs:

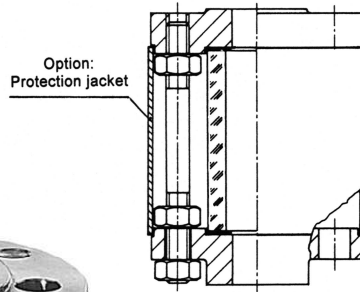
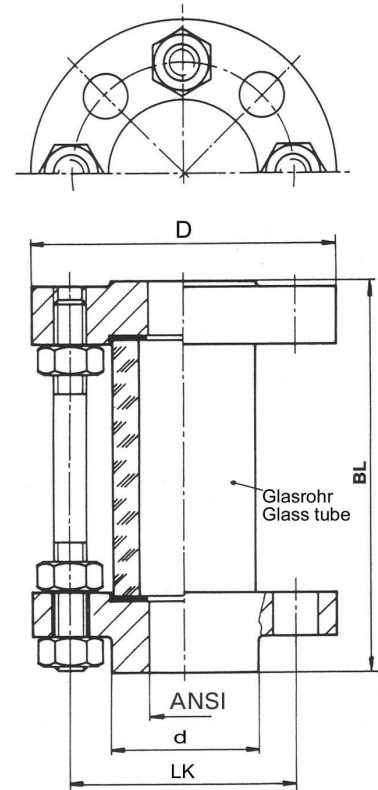
Protection jacket of acrylic glass
 Extra length

Materials:

Flanges	WN 1.4571	Steel / H II
Screws	A4 - 70	Steel
Glass tube	Borosilicate glass (DURAN)	
Gaskets	Viton or PTFE (or other materials)	

Ordering example:

Sight Glass - Tubular Type Bauform 20
 WN 1.4571;
 Max. 6 bar / 200°C
 ANSI 2", 150 lbs



Dimensions:

ANSI	D	d	BL	Screws	LK
1/2"	89	35	200	4	60,3
3/4"	98	43	200	4	69,8
1"	108	51	200	4	79,4
1 1/4"	118	64	200	4	88,9
1 1/2"	127	73	200	4	98,4
2"	152	92	200	4	120,6
2 1/2"	178	105	200	4	139,7
3"	191	127	200	4	152,4
4"	228	157	200	4	190,6
5"	254	186	200	8	215,9
6"	279	216	200	8	241,3
8"	343	270	200	8	298,4

Mounting instructions:

Sight glass tubular type must be mounted without tension by tube, vibrations and pressure pushes.

Modification reserved

Sight glass - Tubular type

with Safety Seal-System, acc. to DIN 28121

Bauform 25

Application:

Sight glass - Tubular type with **DIN**-flanges on both sides, to use in either horizontal or vertical pipe lines for optical control of fluids and gasses.

Operating conditions:

Connection: Flanges PN 10/16
 Pressure: up to DN 100 - 6 bar max
 DN 125 and up – 4 bar max
 Temperature: 200°C max.

Installation:

Optional

Special designs:

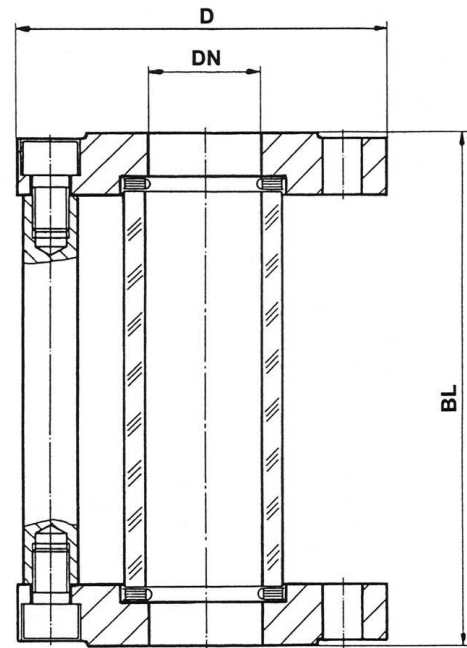
Protection jacket of acrylic glass
 Flanges acc. to ANSI
 Extra length

Materials:

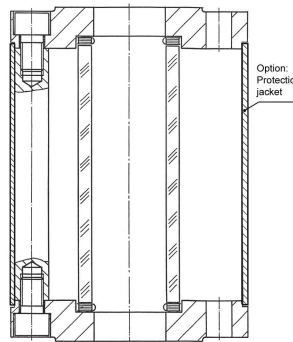
Flanges	WN 1.4571	Steel / H II
Distance-Bars	WN 1.4571	Steel
Screws	A4-70	Steel
Glass tube	Borosilicate glass (DURAN)	
Gaskets	PTFE covered	

Ordering example:

Sight Glass - Tubular Type Bauform 25
 WN 1.4571,
 Max. 6 bar / 200°C
 DN 50, PN 16



(Picture with acrylic-jacket)



Dimensions:

DN	D	BL
25	115	160
40	150	200
50	165	230
80	200	310
100	220	350
125	250	400
150	285	480

Mounting instructions:

Sight glass tubular type must be mounted without tension by tube, vibrations and pressure pushes.

Modification reserved

Sight glass - Tubular type

with Safety Seal-System, acc. to DIN 28121

Bauform 25-A

Application:

Sight glass - Tubular type with **ANSI**-flanges on both sides, to use in either horizontal or vertical pipe lines for optical control of fluids and gasses.

Operating conditions:

Connection: ANSI-flanges 150 lbs
 Pressure: up to ANSI 2" - 6 bar max
 ANSI 5" and up - 4 bar max
 Temperature: 200°C max.

Installation:

Optional

Special designs:

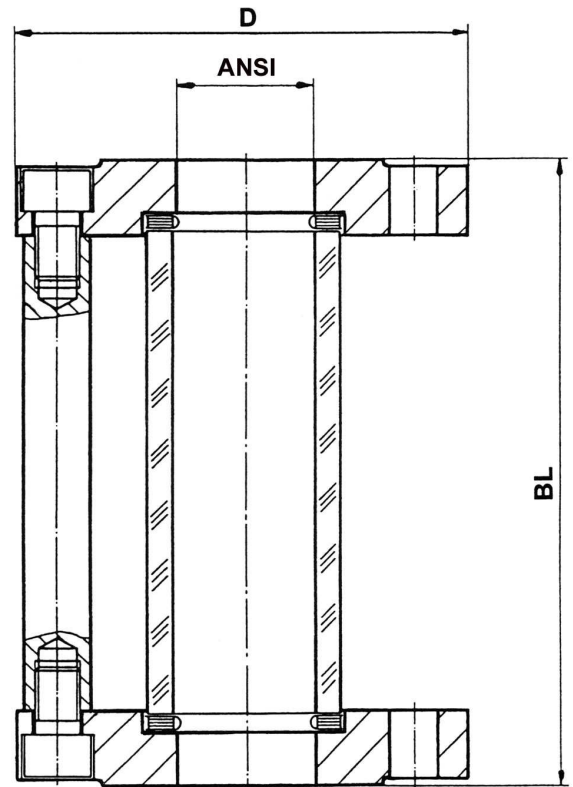
Protection jacket of acrylic glass
 Extra length

Materials:

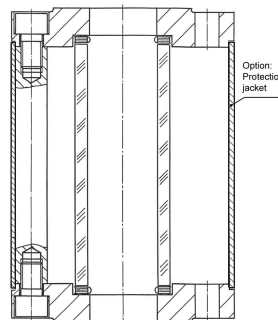
Flanges	WN 1.4571	Steel / H II
Distance-Bars	WN 1.4571	Steel
Screws	A4-70	Steel
Glass tube	Borosilicate glass (DURAN)	
Gaskets	PTFE covered	

Ordering example:

Sight Glass - Tubular Type Bauform 25-A
 WN 1.4571
 ANSI 2" 150 lbs; 6 bar max.



Standard design



Dimensions:

ANSI	D	BL
1"	108	160
1 1/2"	127	200
2"	152	230
3"	190	310
4"	228	350
5"	254	400
6"	279	480

Mounting instructions:

Sight glass tubular type must be mounted without tension by tube, vibrations and pressure pushes.

Modification reserved

Sight Flow Indicators (straight line)

with flanges connecting **DIN PN 16**

Bauform 108

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines.

Operating conditions:

Working pressure: 16 bar
Working temperature: 150°C or 280°C

Installation:

Optional. Take care of flow direction

Options:

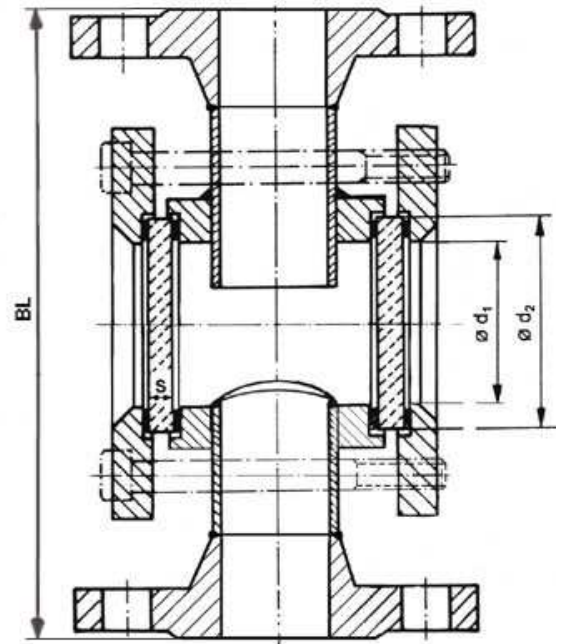
Other materials
Sight glass light-fitting
Spinner or Flap

Materials:

Body	WN 1.4404 / 1.4571
Flanges	DIN 2633; WN 1.4571
Covers	Stainless steel
Screws	A4
Glass	Borosilicate glass acc. to DIN 7080 Soda lime glass acc. to DIN 8902
Gaskets	Graphite (or other materials)

Ordering example:

Sight flow indicators Bauform 108
Stainless steel, borosilicate glass
DN 50 PN 16



Dimensions:

DN	BL	Glass plate			Screws	Weight Kg
		ø d ₁	ø d ₂	S		
25	160	48	63	10	M 10	6,7
32	180	65	80	12	M 10	8,4
40	200	65	80	12	M 12	8,7
50	230	80	100	15	M 12	10,9
65	290	80	100	15	M 12	12,9
80	310	100	125	20	M 12	18,1

Further sizes on Bauform 112

Modification reserved

Sight Flow Indicators (straight line)

with loose connecting flanges (B) **DIN PN10**

Bauform 108-B

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines.

Operating conditions:

Working pressure : 10 bar
Working temperature: 150°C or 280°C

Installation:

Optional. Take care of flow direction

Options:

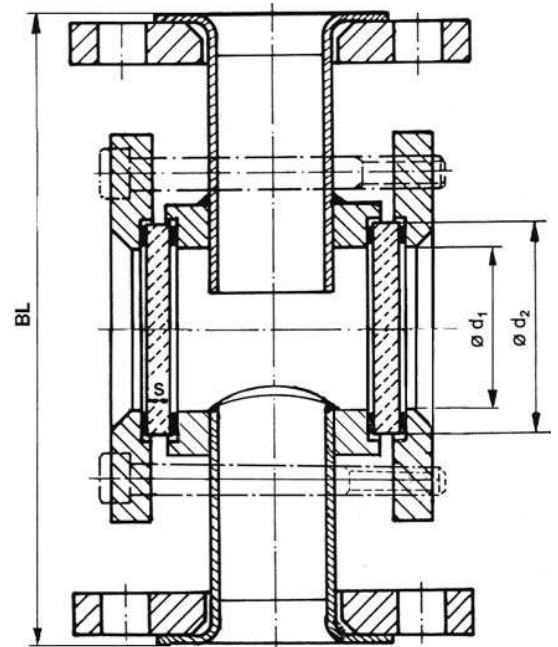
Other materials
Compl. in stainless steel
Sight glass light-fitting
Spinner or Flap

Materials:

Body	WN 1.4404 / 1.4571
Loose flanges	DIN 2642; PN 10; RSt 37-2 galvanized
Covers	RSt 37-2 / C 22.8 galvanized
Screws	DIN 912, steel
Glass	Borosilicate glass acc. to DIN 7080 Soda lime glass acc. to DIN 8902
Gasket	Graphite (or other materials)

Ordering example:

Sight flow indicators Bauform 108-B
Body stainless steel, cover and flanges steel
borosilicate glass 10 bar
DN 50 PN 10



Dimensions:

DN	BL	Glass plate		S	Screws	Weight ca. Kg
		Ø d ₁	Ø d ₂			
15	130	32	45	10	M 8	4,1
20	150	48	63	10	M 10	4,5
25	160	48	63	10	M 10	6,7
32	180	65	80	12	M 10	8,4
40	200	65	80	12	M 12	8,7
50	230	80	100	15	M 12	10,9
65	290	80	100	15	M 12	12,9
80	310	100	125	15	M 12	18,1

Further sizes on Bauform 112-B

Modification reserved

Sight Flow Indicators (straight line)

with **butt weld ends (S)** welding design

Bauform 108-S

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines.

Operating conditions:

Working pressure : 10 or 16 bar
Working temperature: 150°C or 280°C

Installation:

Optional. Take care of flow direction

Option:

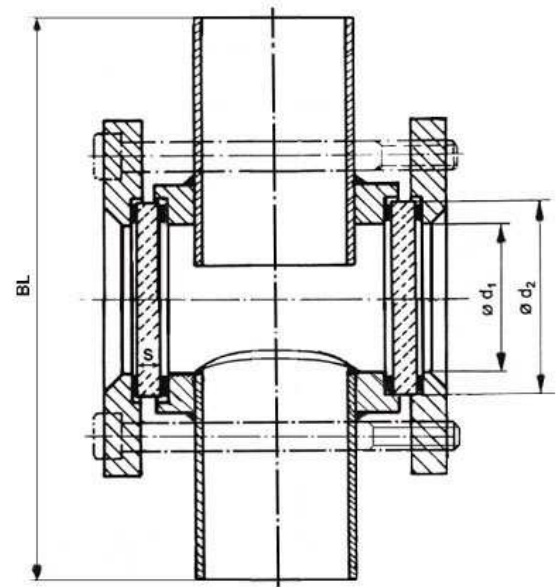
Other materials
Flanges connection
Sight glass light-fitting
Spinner or Flap

Materials:

Bauform	108-S-VV	108-S-VS	108-S-St
Body	1.4404	1.4404	RSt 37-2
Covers	Stainless Steel	Steel	Steel
Screws	A4 - 70	Steel	Steel
Glass	Borosilicate glass acc. to DIN 7080 Soda lime glass acc. to DIN 8902		
Gasket	Graphite (or other materials)		

Ordering example:

Sight flow indicators with butt weld ends
Bauform 108-S-VS
body stainless steel, cover steel
borosilicate glass 16 bar
DN 50 / 60,3



Dimensions:

DN	BL	Glass plate			Screws	Weight ca. Kg
		ø d ₁	ø d ₂	S		
15 / 21,3	124	32	45	10	M 8	1,8
20 / 26,9	144	48	63	10	M 10	2,7
25 / 33,7	154	48	63	10	M 10	2,8
32 / 42,4	174	65	80	12	M 10	4,6
40 / 48,3	194	65	80	12	M 12	4,8
50 / 60,3	224	80	100	15	M 12	6,5
65 / 76,1	284	80	100	15	M 12	7,6
80 / 88,9	304	100	125	20	M 12	11,8

Further sizes on Bauform 112-S

Modification reserved

Sight Flow Indicators (straight line)

with **flanges connection** acc. **DIN PN 16**

Design for horizontal installation

Bauform 111

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines.

Without restfluid in the body in horizontal instalation.

Operating conditions:

Working pressure : 16 bar

Working temperature: 150°C or 280°C

Installation:

Horizontal

Options:

Light-fitting
ANSI-flanges
butt weld ends

Materials:

Body	1.4404 / 1.4571
Covers	Stainless steel
Screws	A4 - 70
Glass	Borosilicate glass acc. to DIN 7080 Soda lime glass acc. to DIN 8902
Gasket	Graphite; (or other materials)

Ordering example:

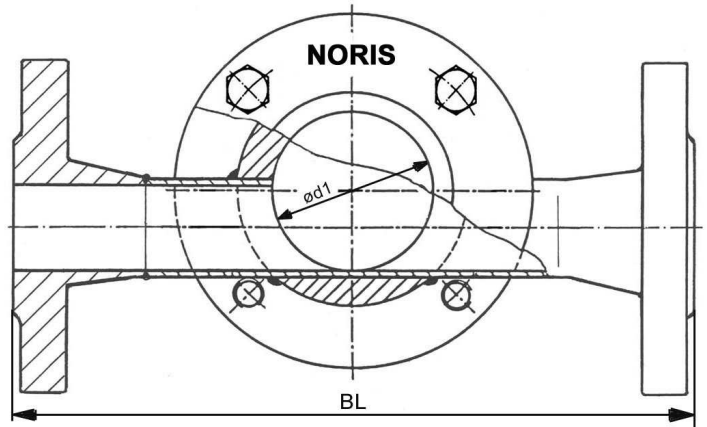
Sight flow indicators Bauform 111

Body: Stainless steel

Cover: Stainless steel

Glass: Borosilicate glass 16 bar,
DN 50 PN 16

*Without rest fluid
in the body!*



Dimensions:

DN	BL	ø d ₁	Glass Ød x S	Screws
15	130	32	45 x 10	M 8
20	150	45	63 x 10	M 8
25	160	45	63 x 10	M 10
32	180	60	80 x 12	M 10
40	200	60	80 x 12	M 10
50	230	80	100 x 15	M 12
65	290	80	100 x 15	M 12
80	310	100	125 x 15	M 12

Further sizes on Bauform 112

Modification reserved

Sight Flow Indicators (straight line)

with **butt weld ends (S)** for **horizontal** installation

Bauform 111-S

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines. Without rest fluid in the body in horizontal installation.

Operating conditions:

Working pressure : 16 bar
Working temperature: 150°C or 280°C

Installation:

Optional. Take care of flow direction

Options:

Flanges
Light-fitting

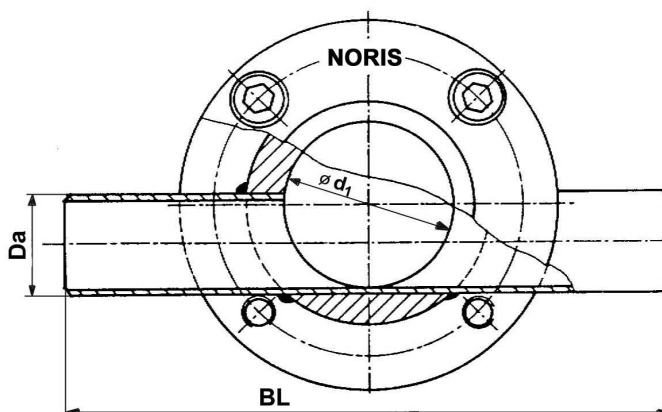
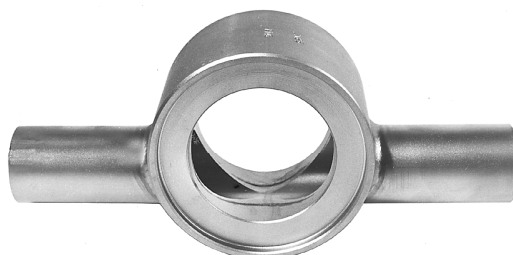
Materials:

Body	WNR 1.4404	
Covers	Steel galvanized	Bauform 111-S-VS
	Stainless steel	Bauform 111-S-VV
Screws	DIN 912, 8.8 or A4-70	
Glass	Borosilicate glass acc. to DIN 7080	
	Soda lime glass acc. to DIN 8902	
Gasket	Graphite (or other materials)	

Ordering example:

Sight flow indicators Bauform 111-S-VS
Body: Stainless steel
Cover: Steel
Borosilicate glass 16 bar,
DN 50 / Ø 60,3

Without rest fluid
in the body



Dimensions:

DN / Da	BL	ø d ₁	Glass Ød x S	Screws
10 / 17,2	184	32	45 x 10	M 8
15 / 21,3	184	32	45 x 10	M 8
20 / 26,9	184	45	63 x 10	M 10
25 / 33,7	184	45	63 x 10	M 12
32 / 42,4	206	60	80 x 12	M 12
40 / 48,3	206	60	80 x 12	M 12
50 / 60,3	224	80	100 x 15	M 12
65 / 76,1	254	80	100 x 15	M 12
80 / 88,9	266	100	125 x 20	M 12

Further sizes on Bauform 112-S

Modification reserved

Sight Flow Indicators (straight line)

with *DIN - flanges*

Bauform 112

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines. Without rest fluid in the body in horizontal installation.

Operating conditions:

Working pressure : 16 bar
Working temperature: 150°C or 280°C

Installation:

Optional

Options:

Flanges in ANSI
Light-fitting
Extra length
Body in steel

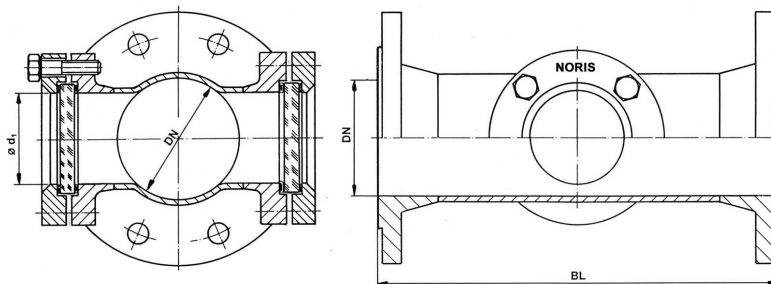
Materials:

Body	WN 1.4571 or 1.4404
Covers	Stainless steel
Screws	A4-70
Glass	Borosilicate glass acc. to DIN 7080 Soda lime glass acc. to DIN 8902
Gasket	Graphite; (or other materials)

Ordering example:

Sight flow indicators Bauform 112
Body: WN 1.4571; Borosilicate glass
DN 100 PN 16

Without rest fluid
in the body



Dimensions:

DN	BL	ø d ₁	Glass Ød x S
25	160	23	45 x 10
40	200	39	63 x 10
50	230	44	63 x 10
80	310	64	80 x 12
100	350	80	100 x 15
125	400	80	100 x 15
150	480	100	125 x 20
200	600	125	150 x 25
250	730	150	175 x 25
300	850	150	175 x 25
350	980	150	175 x 25
400	1100	150	175 x 25

Modification reserved

Sight Flow Indicators (straight line)

with *flanged connection* acc. to **ANSI 150 / 300 lbs**

Bauform 112-A

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines. Without rest fluid in the body in horizontal installation.

Operating conditions:

Working pressure: 16 bar at 150 lbs
40 bar at 300 lbs
Working temperature: 150°C or 280°C

Installation:

Optional

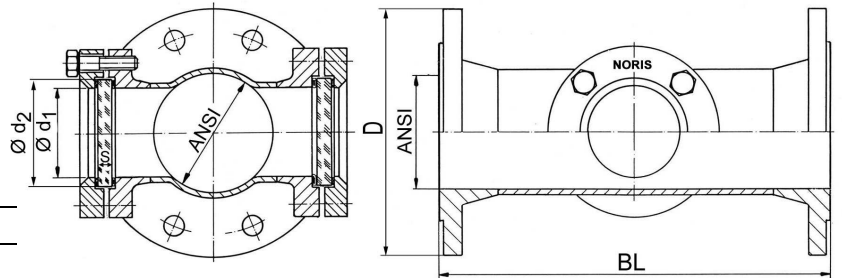
Options:

Flanges in DIN
Body in steel
Extra length
Light-fitting

Materials:

Body	WN 1.4571 (1.4404)
Covers	Stainless steel
Screws	A4-70
Glass	Borosilicate glass acc. to DIN 7080 Soda lime glass acc. to DIN 8902
Gasket	Graphite; (or other materials)

Without rest fluid
in the body



Ordering example:

Sight flow indicators Bauform 112-A
Body: WN 1.4571; Borosilicate glass
ANSI 4" 150 lbs



Dimensions:

ANSI	D		BL (DIN F1)	d ₁	Glass plate		
	150 lbs	300 lbs			d ₂	S	
						16 bar	40 bar
1"	108,0	123,8	160	23	45	10	10
1 1/4"	117,5	133,4	180	23	45	10	15
1 1/2"	127,0	155,6	200	39	63	10	15
2"	152,4	165,1	230	44	63	10	15
2 1/2"	177,8	190,5	290	44	63	15	25
3"	190,5	209,6	310	64	80	12	20
4"	228,6	254,0	350	80	100	15	25
5"	254,0	279,4	400	80	100	15	25
6"	279,4	317,5	480	100	125	20	30
8"	342,9	381,0	600	125	150	25	a.A.
10"	406,4	444,5	730	150	175	25	a.A.
12"	482,6	520,7	850	150	175	25	a.A.
14"	533,4	584,2	980	150	175	25	a.A.
16"	596,9	647,7	1100	150	175	25	a.A.

Modification reserved

Sight Flow Indicators (straight line)

with **butt weld ends (S)**

Bauform 112-S

Application:

Sight Flow Indicators are used for optical control and the observation of filling and current in pipelines. Without rest fluid in the body in horizontal installation.

Operating conditions:

Working pressure : 16 bar
Working temperature: 150°C or 280°C

Installation:

Optional

Options:

Flanges in DIN or ANSI
Body in steel
Extra length
Light-fitting

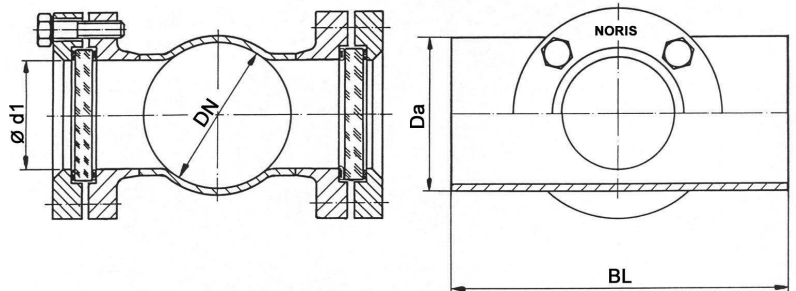
Materials:

Body	WN 1.4571 or 1.4404
Covers	Stainless steel
Screws	A4-70
Glass	Borosilicate glass acc. to DIN 7080 Soda lime glass acc. to DIN 8902
Gasket	Graphite (or other materials)

Ordering example:

Sight flow indicators Bauform 112-S
with butt weld ends
Body: WN 1.4571; Borosilicate glass 16 bar
DN 100 / Ø 114,3

Without rest fluid
in the body



Dimensions:

DN / Da	BL	ø d ₁	Glass ø d x s
25 / 33,7	160	23	45 x 10
40 / 48,3	200	39	63 x 10
50 / 60,3	230	44	63 x 10
80 / 88,9	310	64	80 x 12
100 / 114,3	350	80	100 x 15
125 / 139,7	400	80	100 x 15
150 / 168,3	480	100	125 x 20
200 / 219,1	600	125	150 x 25
250 / 273,0	730	150	175 x 25
300 / 323,9	850	150	175 x 25
350 / 355,6	980	150	175 x 25
400 / 406,4	1100	150	175 x 25

Modification reserved

Sight Flow Indicator (straight line) DIN 3237

with *flanged*-Connection acc. to **DIN - PN 16, PN 25 and PN 40**

Bauform 880

Application:

The flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines.

Operating conditions:

Working pressure: 16 / 25 / 40 bar
Working temperature: 150°C or 280°C

Installation:

Optional; Take care of flow direction

Options:

with ANSI-flanges
with Butt weld ends
with Spinner or Flap
with Heating jacket
with Sight glass light - fittings

Materials:

Cast Iron GG 25 (EN-GJL-250) max 16 bar
Cast Steel GS-C 25 (1.0619 / GP240GH)
Stainless Steel WN 1.4408

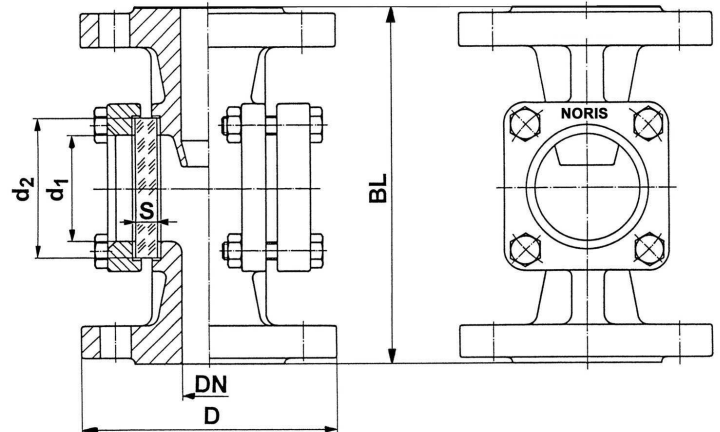
Body	GG 25	GS-C 25	1.4408
Covers	GG 25 / S235JRG2	GS-C 25 / S235JRG2	1.4408 / 1.4301
Screws	4.6 / 5.6 gal.		A4-70
Glass	Borosilicate glass DIN 7080 Soda lime glass DIN 8902		
Gaskets	Graphite, (or other materials)		

Certificate: (Option)

Acc. to EN 10204 - 2.2 or 3.1

Ordering example:

Sight Flow Indicators Bauform 880,
GG 25, with borosilicate glass DIN 7080
DN 50, PN 16



DN 15 - 50
(Covers square)

DN 65 - 250
(Covers round)

Dimensions:

DN	D	BL	d ₁	Glass plate			
				d ₂	S		
					PN 16	PN 25	PN 40
15	95	130	32	45	10	10	10
20	105	150	32	45	10	10	10
25	115	160	48	63	10	12	15
32	140	180	48	63	10	12	15
40	150	200	65	80	12	15	20
50	165	230	80	100	15	20	25
65	185	290	80	100	15	20	25
80	200	310	100	125	20	25	30
100	220(235) *	350	125	150	25	30	35
125	250(270) *	400	150	175	25	30	a.A.
150	285(300) *	480	175	200	30 **	35	a.A.
200	340(360/375) *	600	175	200	30 **	35	a.A.

* D in () acc. to PN 25 / PN 40

** 16 bar only with borosilicate glass possible

Modification reserved

Sight Flow Indicators (straight line)

with **flanged** connection acc. to **ANSI - 150 / 300 lbs**

Bauform 880-A

Application:

The flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines. Also available with internal spinner or flap.

Operating conditions:

Working pressure: 16 bar by 150lbs
40 bar by 300lbs
Working temperature: 150°C or 280°C

Installation:

Optional; Take care of flow direction

Options:

with - Spinner or Flap
- Heating jacket
- Sight glass light - fitting

Materials:

Cast Iron GG 25 (EN-GJL-250) max. 16bar
Cast Steel GS-C 25 (1.0619 / GP240GH)
Stainless Steel WN 1.4408

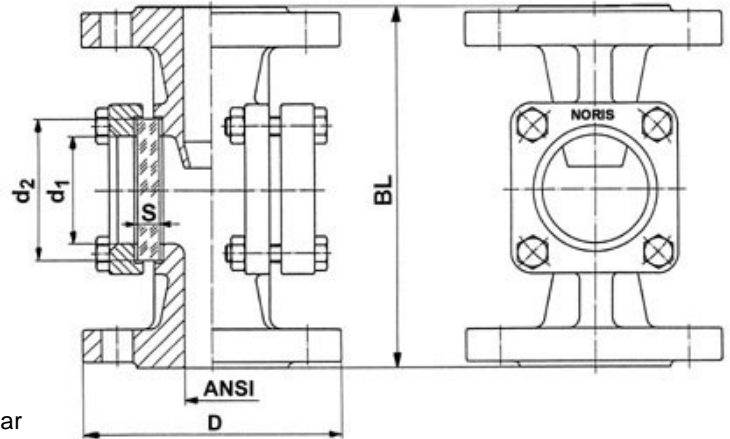
Body	GG 25	GS-C 25	1.4408
Covers	GG 25 / S235JRG2	GS-C 25 / S235JRG2	1.4408 / 1.4301
Screws	4.6 / 5.6 gal.		A4-70
Glass	Borosilicate glass DIN 7080 Soda-lime glass DIN 8902		
Gaskets	Graphite, (or other materials)		

Certificate: (Option)

Acc. to EN 10204-2.2 or 3.1

Ordering example:

Sight Flow Indicators Bauform 880-A,
GS-C 25, borosilicate glass DIN 7080-16 bar
ANSI 2"; 150 lbs



Dimensions:

ANSI	D		BL (DIN F1)	d ₁	Glass plate		
	150 lbs	300 lbs			d ₂	S	
					16 bar	40 bar	
1/2"	89	95,2	130	32	45	10	10
3/4"	98	117,3	150	32	45	10	10
1"	108	123,8	160	48	63	10	15
1 1/4"	118	133,4	180	48	63	10	15
1 1/2"	127	155,6	200	65	80	12	20
2"	152	165,1	230	80	100	15	25
2 1/2"	178	190,5	290	80	100	15	25
3"	191	209,6	310	100	125	20	30
4"	228 *	254,0	350	125	150	25	32
5"	254 *	279,4	400	150	175	25	a.A.
6"	279	317,5	480	175	200	30 **	a.A.
8"	343 *	381,0	600	175	200	30 **	a.A.

* by cast iron different diameter by D acc. to DIN

** 16 bar only with borosilicate glass possible

Modification reserved

Sight Flow Indicators (straight line)

with NORIS - **Dual-Glass-Windows**

Bauform 880-D

Application:

The double glasses are more protection from outside

Dimensions and Materials

see NORIS-Bauform 880

Available are all

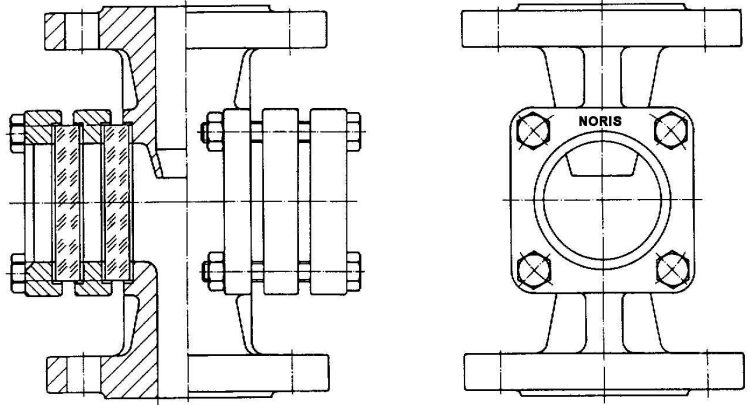
Sizes
Pressures
Materials

Option:

With electric heating-component between both glass-plates against moisture

Safety - Dual-Glass-Windows:

See our **Bauform 885-D**



Modification reserved

Sight Flow Indicators (straight line) with heating jacket

Bauform 880-HM

Application:

To keep cold- or heat- loss at sight flow indicators as low as possible, they are surrounded with a heating jacket. Within the resulting cavity, a corresponding medium can flow to avoid cold- or heat- loss.

Dimension:

Body corresponds Bauform 880
Measures see at Bauform 880
With DIN- and ANSI - Flanges
All dimensions and all pressures

Materials:

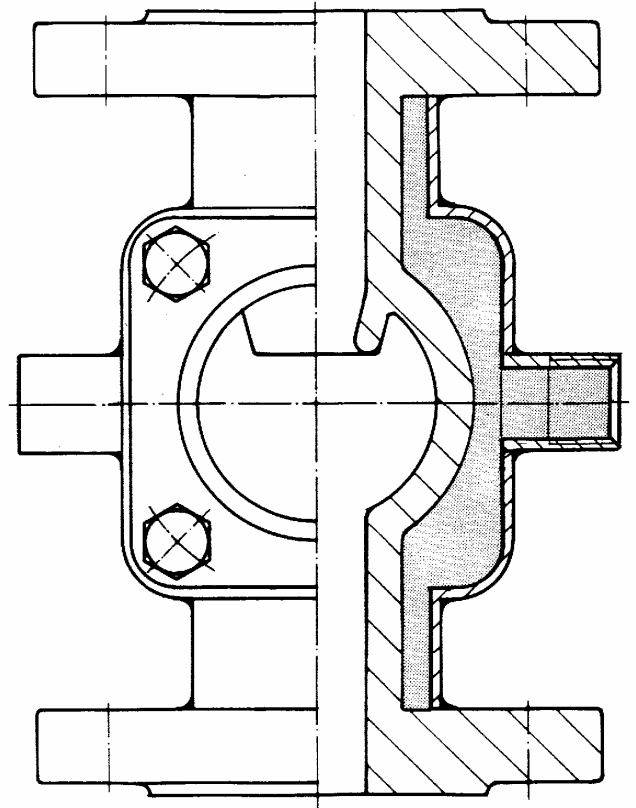
Body:	WN 1.4408
Heating jacket:	WN 1.4571

Connections for heating jacket:

Buttweld ends
Inside or outside thread
Flange connection
Screwing

Standard design:

Inside thread acc. to sketch



<i>Heating jacket connections</i>		
Butt weld ends	Inside or outside thread	Flanged connections

Modification reserved

Sight flow indicator

Special design with **Spray Washer**

Bauform 880-I

Application:

Inside surface of the glass can be cleaned inside with the built-in spray head. There is a choice of two spray heads for both glass plates. For the cleaning medium the spray head connection is leaded to outside between the flanges which hold the glass plates.

Material:

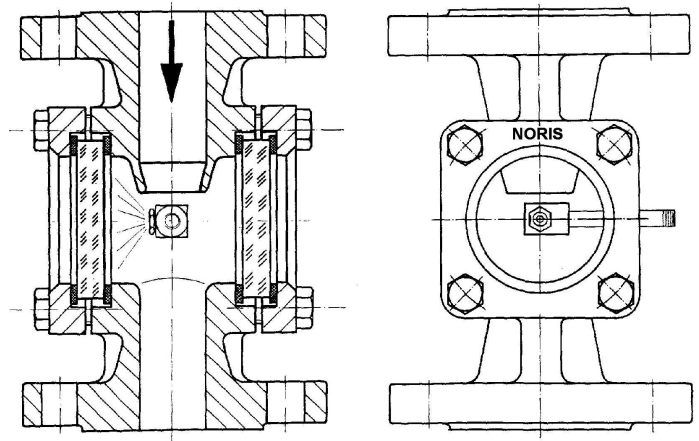
Steel	GS-C 25 (1.0619)
Stainless steel	WN 1.4408

Standard version:

One spray head for one side
Spray head in stainless steel
Spray connection: Tube G 1/4" with male thread

Special version:

Two spray heads, for both glass plates
Other spray connection: e.g. V-flanges



Modification reserved

Sight Flow Indicators

(Straight line) with *butt weld ends*

Bauform 880-S

Application:

The NORIS flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines. Also available with internal spinner or flap.

Operating conditions:

Working pressure: 16 / 25 / 40 bar
Working temperature: 150°C or 280°C

Installation:

Optional: Take care of flow direction

Options:

- with - Spinner or Flap
- Heating jacket
- Sight glass light - fitting

Materials:

Cast Steel GS-C 25 (1.0619 / GP240GH)
Stainless steel WN 1.4408

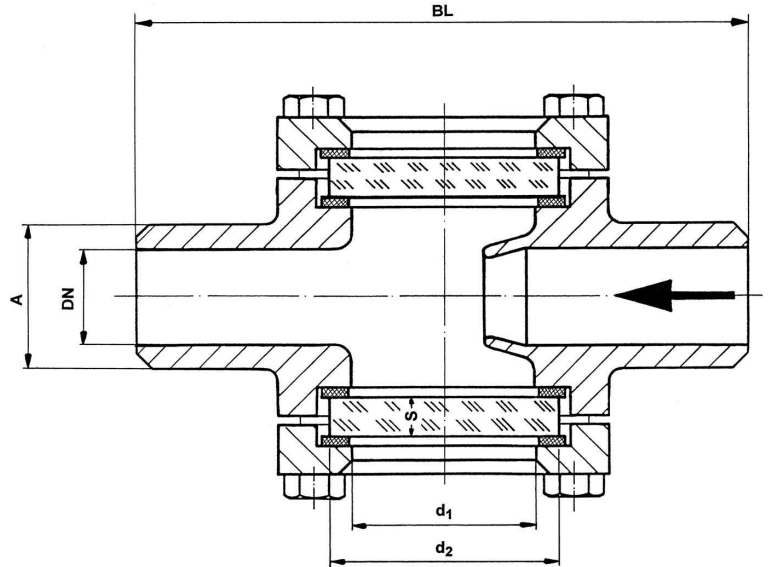
Body	GS-C 25	1.4408
Covers	GS-C 25 / S235JRG2	1.4408 / 1.4301
Screws	4.6 / 5.6	A4-70
Glass	Borosilicate glass DIN 7080 Soda-lime glass DIN 8902	
Gaskets	Graphite, (or other materials)	

Certificate: (Option)

Acc. to EN 10204-2.2 or 3.1

Ordering example:

Sight Flow Indicators, butt weld ends
Bauform 880-S,
GS-C 25, borosilicate glass DIN 7080-16 (bar)
DN 50 / Ø 61,0 mm



Dimensions:

DN / A	BL	d ₁	d ₂	S		
				PN 16	PN 25	PN 40
15 / 22,0	100	32	45	10	10	10
20 / 28,0	100	32	45	10	10	10
25 / 34,0	120	48	63	10	12	15
32 / 42,0	120	48	63	10	12	15
40 / 49,0	160	65	80	12	15	20
50 / 61,0	230	80	100	15	20	25
65 / 77,0	290	80	100	15	20	25
80 / 90,0	310	100	125	20	25	30
100 / 115,0	350	125	150	25	30	35
125 / 141,0	400	150	175	25	30	a.A.
150 / 170,0	480	175	200	30	35	a.A.
200 / 222,0	600	175	200	30	35	a.A.

Modification reserved

Sight Flow Indicators (straight line)

with **pipe - socket weld** connection

Bauform 880-SOW

Application:

The flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe-lines. Also available with internal spinner or flap.

Operating conditions:

Working pressure: 16 / 25 / 40 bar
Working temperature: 150°C or 280°C

Installation:

Optional. Take care of flow direction

Options:

with Rotor or Flap
with Sight glass light - fittings

Materials:

Cast Steel GS-C 25 (1.0619 / GP240GH)
Stainless Steel WN 1.4408

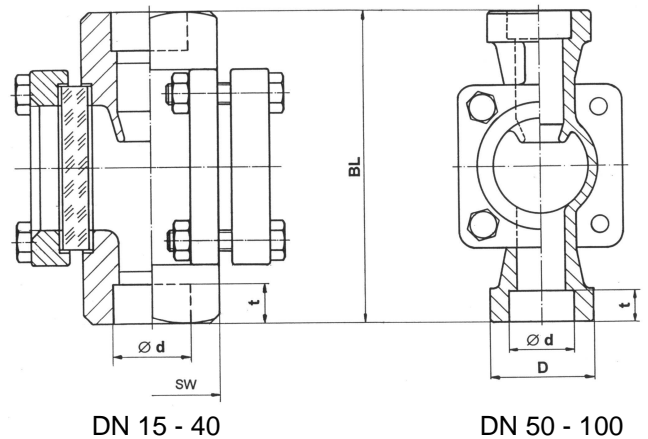
Body	GS-C 25	1.4408
Covers	GS-C 25	1.4408
Screws	4.6 / 5.6 gal.	A4-70
Glass	Borosilicate glass DIN 7080 Soda-lime glass DIN 8902	
Gaskets	Graphite, (or other materials)	

Certificate: (Option)

Acc. to EN 10204 - 2.2 or 3.1

Ordering example:

Sight Flow Indicators with socket weld ends
Bauform 880-SOW
Body GS-C 25, Borosilicate glass DIN 7080 - 16 bar
DN20 (3/4") / Ø 27.5



Dimensions:

nom. size DN / SW	D	BL	Ø d	t
15 (1/2")	SW 36	100	22	10
20 (3/4")	SW 36	100	27,5	10
25 (1")	SW 46	120	34,5	13
32 (1 1/4")	SW 75	160	43	13
40 (1 1/2")	SW 75	160	49	13
50 (2")	Ø 75	230	61,5	16
80 (3")	Ø 120	310	90	16
100 (4")	Ø 150	350	115,5	20

Modification reserved

Sight flow indicator

with *O-Ring sealing* for *Vacuum*

Bauform 880-V

Application:

Using a sight glass with standard sealing in vacuum mode can lead to leakage.

We recommend:

For medium vacuum rates: PTFE gaskets

For higher vacuum rates: o-ring sealing

Operating conditions:

Working pressure: 16 / 25 / 40 bar

Working temperature: 150°C or 200°C

Installation:

Optional; Take care of flow direction

Options:

Other Materials

Butt weld ends

Sight glass light fittings

Heating jacket

Spinner or flapper

Materials:

Steel GS-C 25 (1.0619 / GP240GH)

Stainless steel WN 1.4408

Body	GS-C 25	1.4408
Cover	GS-C 25 / S235JRG2	1.4408 / 1.4301
Screw	5.6	A4-70
Glass	Borosilicate glass DIN 7080 Soda lime glass DIN 8902	
Gaskets	Graphite (or other materials)	

Certificate (Option)

Acc. to EN 10204 - 2.2 or 3.1

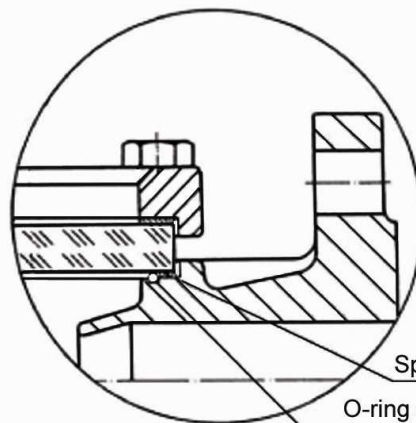
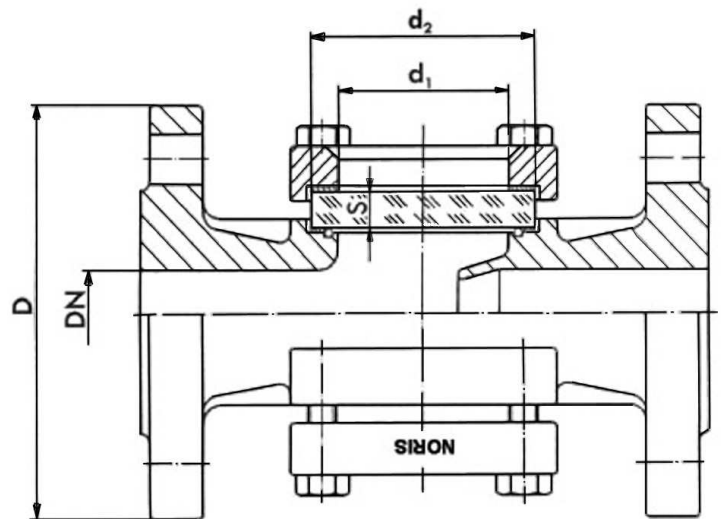
Ordering example:

Sight flow indicator Bauform 880-V

with O-ring sealing

WN 1.4408, Borosilicate glass

DN 50, PN 16



Spacer ring for safeness

O-ring sealing

Modifications reserved

Sight flow indicator

with wiper system

Bauform 880-W

Application:

NORIS wiper system is used to keep glass plates free of crystallized mediums, dust and dirt.
Wiper system on both sides is possible.

Operating conditions:

Temperature: max. 180°C for silicone wiper blade
max. 200°C for PTFE-wiper-blade
Pressure: reduced due to central hole in the glass plate.
See Bauform 190

Materials:

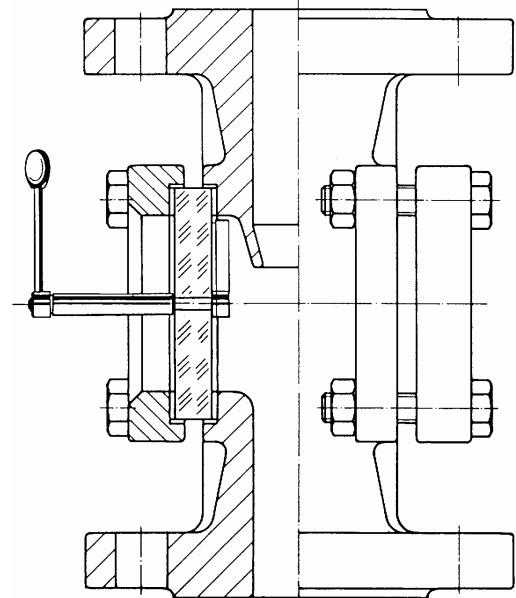
Cast Iron	GG 25 (EN-GJL-250)
Cast Steel	GS-C 25 (1.0619 / GP240GH)
Stainless Steel	WN 1.4408
Wiper	Stainless steel

Standard version:

Wiper system on one side
Wiper blade in silicone

Option:

Two wiper systems
Wiper blade in PTFE
Sight glass light fitting



Modification reserved

Sight Flow Indicators (straight line) with *pipe - thread* connection **BSP (G)** or **NPT**

Bauform 881

Application:

The NORIS flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe-lines. Also available with internal spinner or flap.

Operating conditions:

Working pressure: max. 16 / 25 / 40 bar
Working temperature: max. 150°C or 280°C

Installation:

Optional
Take care of flow direction

Options:

with - Spinner
- Flap
- Sight glass light - fittings

Werkstoffe:

Cast Iron GG 25 (EN-GJL-250) max. 16 bar

Cast Steel GS-C 25 (1.0619 / GP240GH)

Stainless SteelWN 1.4408

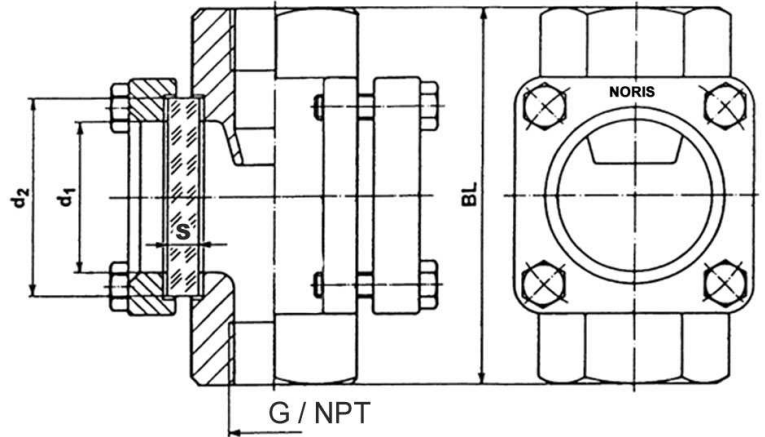
Body	GG 25	GS-C 25	1.4408
Covers	GG 25	GS-C 25	1.4408
Screws	4.6 / 5.6 gal.		A4-70
Glass	Borosilicate glass DIN 7080 (280°C) Soda lime glass DIN 8902 (150°C)		
Gaskets	Graphite, (or other materials)		

Certificate: (Option)

Acc. to EN 10204 - 2.2 or
Acc. to EN 10204 - 3.1

Ordering example:

Sight Flow Indicators Bauform 881
Body 1.4408
Borosilicate glass DIN 7080-16bar
G 3/4"



Dimensions:

BSP (G) or NPT	BL	d ₁	d ₂	Glass plate		
				S		
				16 bar	25 bar	40 bar
1/4" 3/8" 1/2"	100	32	45	10	10	10
3/4" 1"	120	48	63	10	12	15
1 1/4" 1 1/2"	160	65	80	12	15	20
2"	230 180 (GG)	80	100	15	20	25

NPT-thread only in GS-C 25 or 1.4408

Modification reserved

Sight flow indicator acc. to DIN 3236

Flange connection acc. to **DIN** - PN 16, PN 25

Bauform 885

Application:

The flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines.

Operating conditions:

Working pressure: 16 or 25 bar
 Working temperature: 200°C.
 Special gasket for temperatures higher than 200°C on request

Installation:

Optional; Take care of flow direction

Options:

Other Materials
 Butt weld ends
 Light fittings
 Spinner or Flapper
 for higher temperature

Materials:

Cast Steel GS-C 25 (1.0619 / GP240GH)

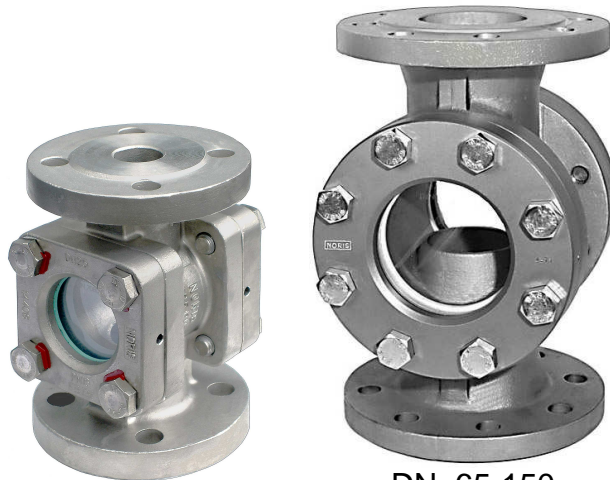
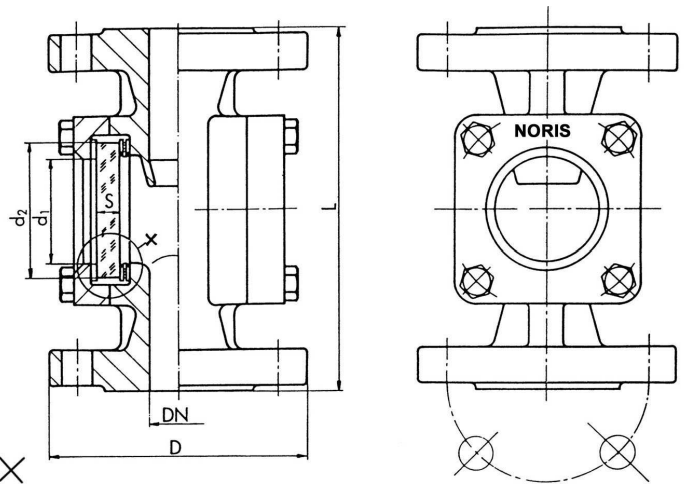
Stainless Steel WN 1.4408

Body	GS-C 25	WN 1.4408
Covers	GS-C 25 / S235JRG2	1.4408 / 1.4571
Screws	5.6 gal.	A4-70
Glass	Borosilicate glass DIN 7080	
Gaskets	PTFE covered	
Cushion gasket	asbestos free	
Protection ply	asbestos free	

Ordering example:

Sight flow indicator Bauform 885
 sight glass flange socket acc. DIN 28121
 WN 1.4408;
 Borosilicate glass
 DN 50, PN 16

Safety Sight flow indicator
 in straight line
Glass plate are sealed acc. to **DIN 28121**
 with modern PTFE-covered
 permanently elastic sealing system



DN 15-50
(Cover quadratic)

DN 65-150
(Cover round)

Dimensions

DN	D	L	d ₁	d ₂	S	
					PN 16	PN 25
15	95	130	32	45	10	10
(20)	105	150	32	45	10	10
25	115	160	48	63	10	12
(32)	140	180	48	63	10	12
40	150	200	65	80	12	15
50	165	230	80	100	15	20
(65)	185	290	80	100	15	20
80	200	310	100	125	20	25
100	220/235	350	125	150	25	30
150	285/300	480	175	200	30	(35)

Modifications reserved

Safety double windows sight flow indicator acc. to DIN 3236

Bauform 885-D

Application:

The construction guarantees that every single glass plate resists the fully nominal pressure.
In case of failure of one plate no leakage results.
To provide fog, the "between-space" can be assembled with a heating unit.

Operating conditions:

Working pressure: 16 or 25 bar
Working temperature: 200°C.
Special gasket for temperatures higher than 200°C on request

Installation:

Optional; Take care of flow direction

Options:

Other Materials
Light fittings
Spinner or Flap
Higher temperature

Materials:

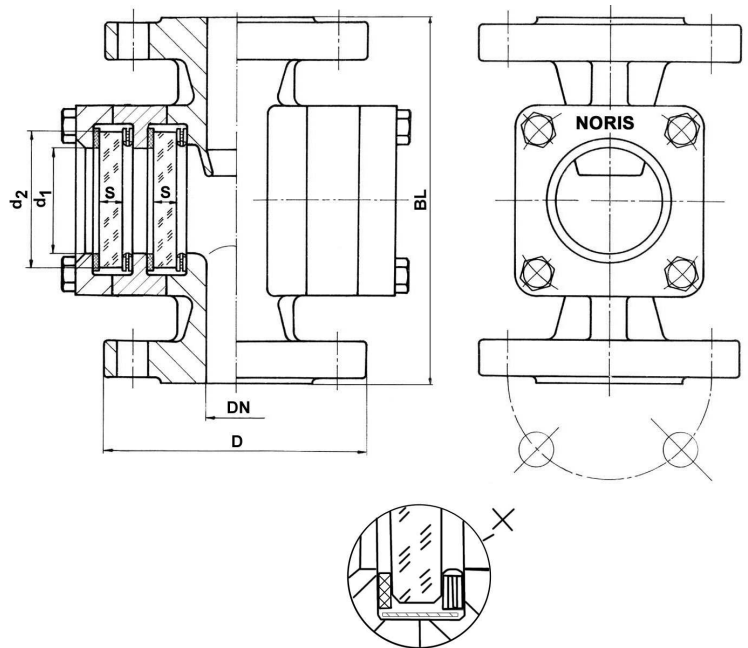
Body	GS-C 25	WN 1.4408
Covers	GS-C 25 / S235JRG2	1.4408 / 1.4571
Screws	5.6 gal.	A4-70
Glass	Borosilicate glass DIN 7080	
Gaskets	PTFE covered	
Cushion gasket	asbestos free	
Protection ply	asbestos free	

Ordering example:

Sight flow indicator Bauform 885-D
with double windows
WN 1.4408; Borosilicate glass
DN 50, PN 16

**Safety double windows
sight flow indicator
in straight line**

Glass plate are sealed acc. to **DIN 28121**
with modern PTFE-covered
permanently elastic sealing system



Dimensions

DN	D	BL	d ₁	d ₂	S	
					PN 16	PN 25
15	95	130	32	45	10	10
25	115	160	48	63	10	12
40	150	200	65	80	12	15
50	165	230	80	100	15	20
80	200	310	100	125	20	25
100	220/235	350	125	150	25	30
150	285/300	480	175	200	30	---

Modifications reserved

Sight Flow Indicators with METAGLAS®

Flange-connection acc. to **DIN - PN 16 / 40**

Bauform 887

Application:

The sight flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines.

Operating conditions:

Working pressure: 16 bar / 40 bar
Working temperature: 280°C

Installation:

Optional; Take care of flow direction

Options:

- with - Spinner or Flap
- Heating jacket
- Sight glass light - fitting

Materials:

Cast Steel GS-C 25 (1.0619 / GP240GH)
Stainless Steel WN 1.4408

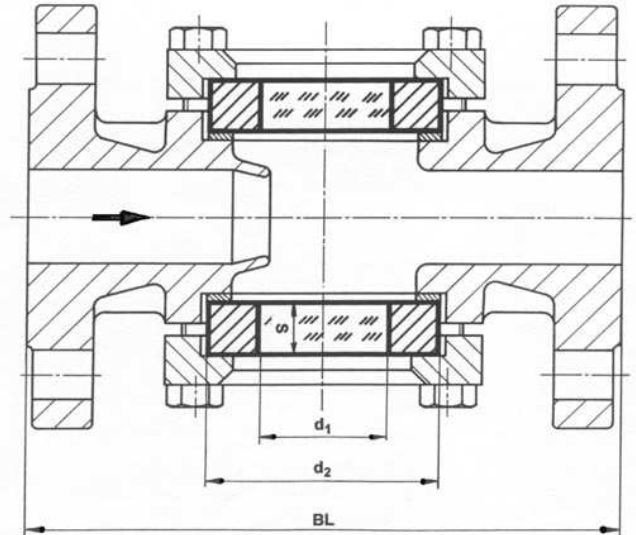
Body	GS-C 25 (1.0619)	1.4408
Covers	GS-C 25 / S235JRG2	1.4408 / 1.4301
Screws	5.6 gal.	A4-70
Glass	Sight glass fused to metal to DIN 7079 METAGLAS® max. 280°C	
Gaskets	Graphite, (or other materials)	

Certificate: (Option)

Acc. to EN 10204-2.2 or 3.1

Ordering example:

Sight Flow Indicators Bauform 887
WN 1.4408
METAGLAS® DIN 7079
DN 50; PN 40



Dimensions:

DN	BL	d ₁	d ₂	S	
				PN 16	PN 40
15	130	25	45	10	10
(20)	150	25	45	10	10
25	160	35	63	10	15
(32)	180	35	63	10	15
40	200	45	80	12	20
50	230	55	100	15	25
65	290	55	100	15	25
80	310	65	125	20	25
100	350	70	150	25	30



METAGLAS® is made by melting circular glass inside a metal frame. This results in the fusion of glass and metal. Upon cooling, the glass solidifies and the difference in the linear coefficient of thermal expansion between glass and metal then produces forces that create a uniform compressive stress throughout the glass. This high degree of mechanically induced compressive stress makes METAGLAS® the strongest and most secure sight glass for sight window or visual flow indicator application.

SECURITY AGAINST TOTAL FAILURE

Modification reserved

Sight flow Indicator *eccentric*

with **butt weld ends** for pressure up to 160 bar
by Special design (for horizontal installation)

Bauform 911-S

Application:

Through eccentric connections it is possible to work without any rest fluid. Provided that the indicator will be mounted horizontal..

Without rest fluid in the body.

Operating conditions:

Working pressure: 10 until 160 bar
Working temperature: 150 or 280°C

Installation:

Horizontal,

Options:

Flange connection
Light fittings

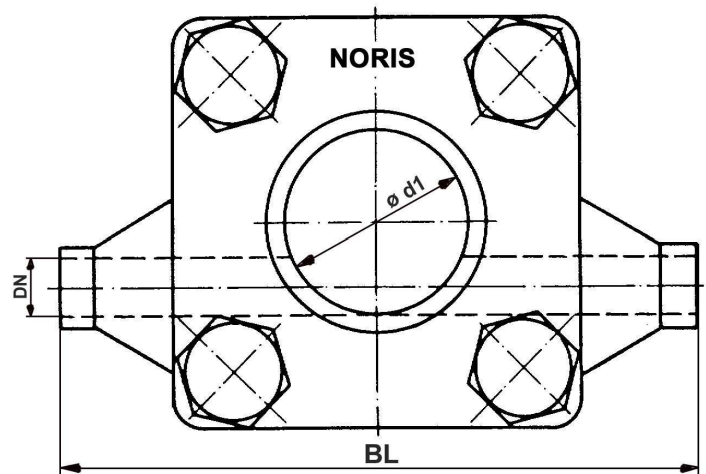
Materials:

Body	Carbon steel or Stainless steel
Glass	Borosilicate glass DIN 7080 Soda lime glass DIN 8902
Gaskets	Graphite (or other materials)

Ordering example:

Sight flow indicator Bauform 911-S
WN 1.4571; Borosilicate glass
Working pressure max. 85 bar
DN 50 / 60,3

Without rest fluid in
the body



Dimensions:

DN 10 until DN 80

Butt weld ends acc. to DIN 3239, part1



Modifications reserved

High pressure Sight Glass Indicator

Bauform 912

Application:

The flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines.

Operating conditions:

Working pressure: up to 160 bar
Working temperature: with borosilicate glass max. 280°C
with quartzglass up to 500°C

Installation:

Optional

Possible Connection:

Flange connection acc. to DIN up to PN 160
Flange connection acc. to ANSI up to 1.500 LBS
Butt weld ends
Female-threaded

Dimensions:

Working pressure and nominal diameter have an affect on the length.

Options:

with - ANSI-flanges
- Butt weld ends
- Heating jacket
- Sight glass light - fittings

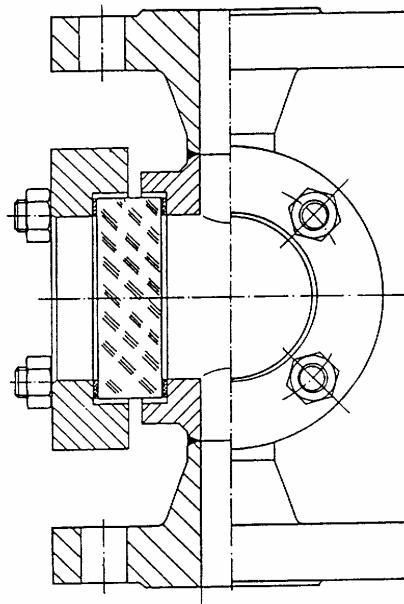
Materials:

All materials which can be welded are possible.

Certificate: (Option)

Acc. to EN 10204 - 2.2 or
Acc. to EN 10204-3.1

High pressure -
design



Modification reserved

Angle Sight flow indicator

with flanged connection acc. to *DIN*

Bauform 920

Application:

The flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines.

Operating conditions:

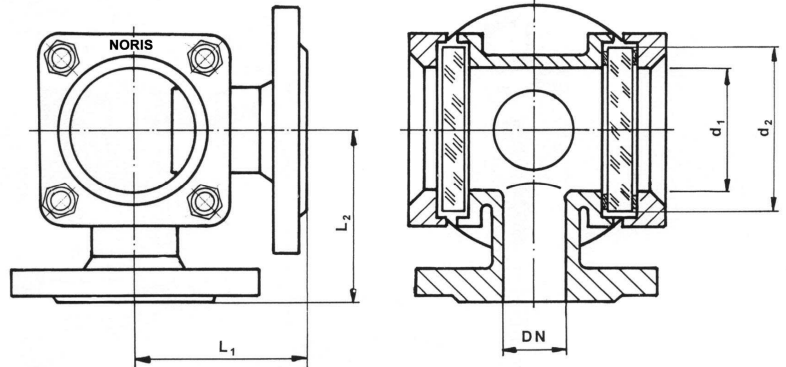
Working pressure: up to 40 bar
Working temperature: 150°C or 280°C

Installation:

Optional; Take care of flow direction

Options:

- with - ANSI flanges
- butt weld ends
- Extra length
- Different nom. sizes for connection
- Sight glass light - fitting
- Special sealing system acc. to DIN 28121
- Special design acc. to customer



Materials:

Body	Steel	Stainless steel
Covers	S235JRG2 GS-C 25	WN 1.4408
Screws	4.6 / 5.6 gal.	A4-70
Glass	Borosilicate glass DIN 7080 Soda lime glass DIN 8902	
Gaskets	Graphite, (or other materials)	

Certificate: (Option)

Acc. to EN 10204 - 2.2 or 3.1

Ordering example:

Angle Sight Flow Indicators Bauform 920
Steel, borosilicate glass DIN 7080
DN 50, PN 16



Dimensions:

DN	L ₁ = L ₂	d ₁	d ₂
15	90	48	63
20	95	48	63
25	100	65	80
32	105	80	100
40	115	80	100
50	125	100	125
65	145	100	125
80	155	100	125
100	175	125	150

DN 125 - DN 250 on request

Modification reserved

3-Way Sight Flow Indicators

with **flanged** connection acc. to **DIN - PN 16,25,40**

Bauform 972

Application:

The flow indicators are used for optical control of fluids and gases, for horizontal and vertical pipe lines.

Operating conditions:

Working pressure: up to 40 bar
Working temperature: 150°C or 280°C

Installation:

Optional; Take care of flow direction

Options:

- with - ANSI flanges
- Extra length
- butt weld ends
- Heating jacket
- Sight glass light - fitting
- Special design acc. to customer

Material:

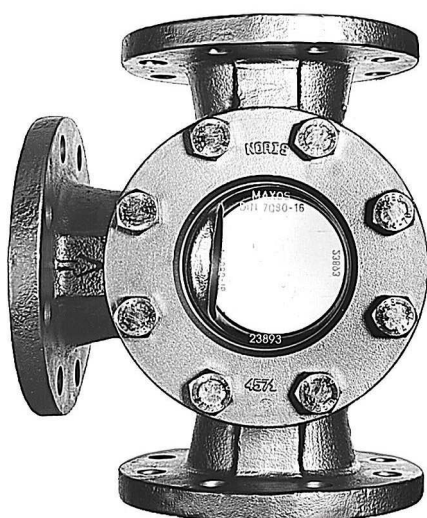
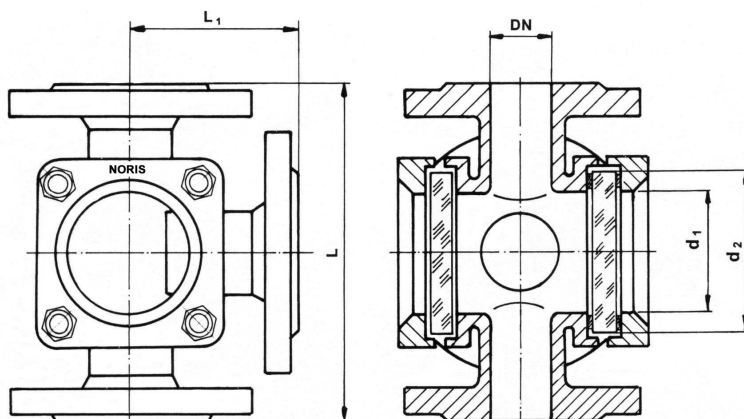
Body	Steel	Stainless steel
Covers	S235JRG2 GS-C 25	WN 1.4408
Screws	4.6 / 5.6 gal.	A4-70
Glass	Borosilicate glass DIN 7080 Soda lime glass DIN 8902	
Gaskets	Graphite, (or other materials)	

Certificate (Option) :

Acc. to EN 10204 - 2.2 or
Acc. to EN 10204 - 3.1

Ordering example:

3 Way Sight Flow Indicators Bauform 972
Steel, borosilicate glass DIN 7080
DN 50, PN 16



Dimensions:

DN	L	L ₁	d ₁	d ₂
15	130	65	32	45
20	150	75	32	45
25	160	80	48	63
32	180	90	65	80
40	200	100	65	80
50	230	115	80	100
65	290	145	80	100
80	310	155	100	125
100	350	175	125	150

Details to dimensions about glass plates see our
NORIS-Bauform 880
DN 125 to DN 250 on request

Modification reserved

4 - Wege-Schaugläser

mit Flansch-Anschluss nach **DIN** - PN 16, PN 25; PN 40

Bauform 974

Verwendung:

Zur Sichtkontrolle von Füllung und Strömung in Rohrleitungen.
NORIS-Schaugläser ermöglichen eine zuverlässige Überwachung der Funktion und Leistung von einzelnen Apparaten sowie von ganzen Anlagen

Betriebsbedingungen:

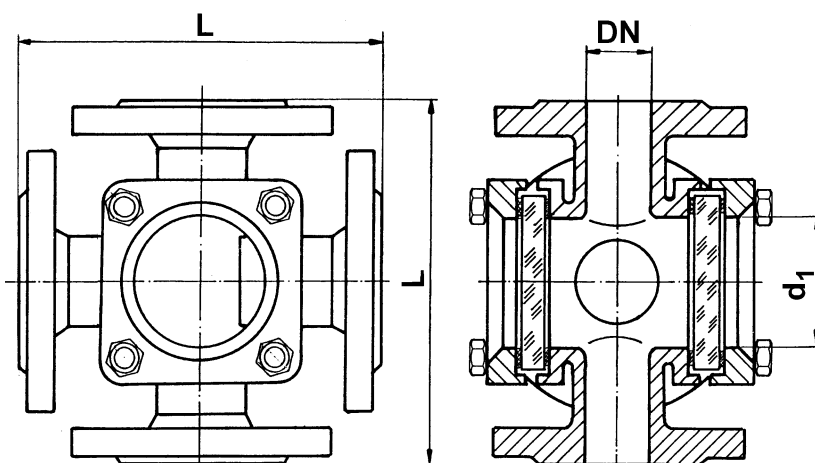
Betriebsdruck: 16 bis 40 bar
Betriebstemperatur: 150°C oder 280°C

Einbaulage:

beliebig

Sonderausführung:

mit ANSI-Flanschen
mit anderen Baulängen
mit unterschiedlichen Anschluss-Nennweiten
mit Anschweißenden
mit Schauglas-Leuchten
mit Sicherheitsabdichtung
entsprechend NORIS Bauform 885



Werkstoffe:

Alle schweißbaren Werkstoffe

Gehäuse	Stahl oder Edelstahl nach Kundenwunsch
Glasplatten	Borosilikatglas DIN 7080 Natronkalkglas DIN 8902
Dichtungen	Graphit (oder nach Wunsch)

Bestellbeispiel:

Vierwege-Schauglas Bauform 974
WN 1.4571 mit Borosilikatglas
DN 50 PN 16



Abmessungen:

DN	L	d ₁	d ₂
15	130	32	45
20	150	32	45
25	160	48	63
32	180	48	63
40	200	65	80
50	230	80	100
65	290	80	100
80	310	100	125
100	350	125	150

Werkstoffe und Stärken der Schauglasplatten
siehe dazu NORIS-Bauform 880
DN 125 - 200 auf Anfrage lieferbar.

Änderungen vorbehalten

Steam- / condensate - operation with Sight flow indicator

Bauform 880 / 881

Application:

NORIS Sight flow indicators offer the possibility to detect the condition of the condensate. There by it shows the actual function of the steam trap. The standard drop nose indicates also smallest flowing volumes.

Operating conditions:

Working pressure: until 40 bar
Working temperature: 150°C or 280°C

Installation:

Best indication: horizontal; Flow direction to pay attention

Connections:

Flange: DIN or ANSI
Thread: G (BSP) or NPT-thread
Weld ends: ISO

Materials:

Body: Cast Iron; GG 25 (EN-GJL-250)
Cast Steel; GS-C 25 (1.0619 / GP240GH)
Stainless Steel; WN 1.4408
Glass: Borosilicate glass DIN 7080
Soda lime glass DIN 8902

Options:

Spinner Light fittings Flapper

Selection criteria:

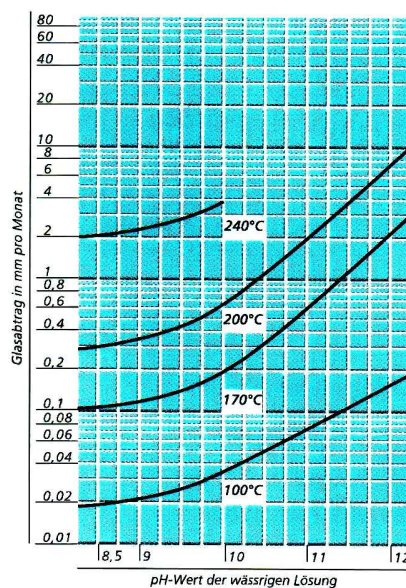
Pipe diameter Nominal pressure
Working pressure Working temperature
Connection Body materials
Glass Mica shield

Glass removed by DIN 7080 by boiler water:

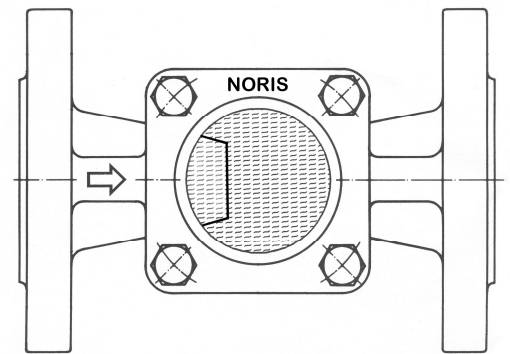
The reduction of the glass thickness is shown in the diagram.

It depends on the ph-value and the working temperature.

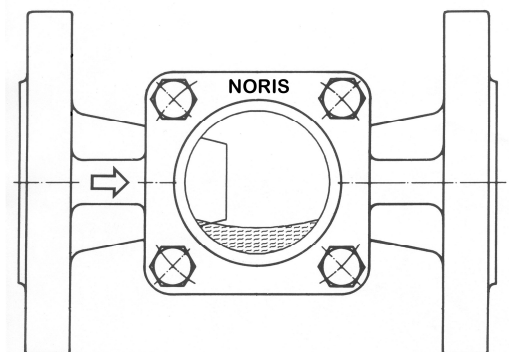
To protect the glass surface, you have to use, mica shields by ph-value >8 and temperature > 100°C



State picture by glass perspective



Picture 1: **Condensate backwatering**
Show by fully flooded sight glass.



Picture 2: **Steam pressure**
Steam came through is shown by a low fluid level. Intensive bubbles and turbulences are resulted by mixing steam and water.

Modifications reserved

Sight glass light fitting

Light

General:

Visibility will be essential improved with lights. Due to brightness the medium can be watched more detailed. As result misinterpretation is nearly removed.

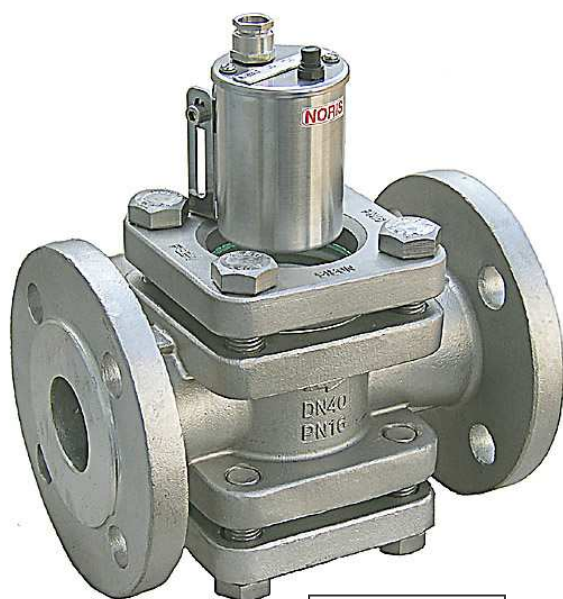
Design:

You can choose

- different terminal voltage rating
- different candlepower
- Ex-construction
- Lights complete in stainless steel

Assembly:

The lights will be mounted on the sight glass with the necessary fixtures in our works.



Light BKVLR



Light KEL

Modification reserved

Protective fence

for stroke protection

Protective fence

Application:

The protective fence is to protect the glass plate against damage from outside.

Option:

Construction according to agreement.
There are different models available.
For sight flow indicators with flange connection there is a protective fence available for Bauform 880 up to Bauform 887.

Material:

Stainless steel and Steel



Protective fence on a sight flow indicator NORIS Bauform 880



Protective fence on a round sight flow indicator acc. to DIN 28120 NORIS Bauform 120

Modification reserved



REGOM INSTRUMENTS s.r.o.

Brabcova 1159 / 2

147 00 Praha 4

CZECH REPUBLIC

Tel: +420 241 402 206

Fax: +420 241 400 290

Mail: regom@regom.cz

Skype: regom-office

www.regom.cz