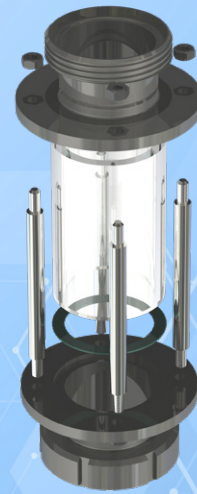




Tubular sight glass PN 10

with screw connections according to DIN 11851

Type 650



APPLICATION:

For observation of filling and flow in pipelines. The sight glass provides reliable 360° monitoring of the function and performance of individual devices as well as entire systems.

Type 650 sight glasses are suitable for installation in pipelines according to DIN 11851 at operating pressures of up to 10 bar. Apart from the screw connections, Type 645 has no dead space.

INSTALLATION NOTE:

The screw connection is required and taken into account for design tightness. Gaskets matching the sealing surfaces should be used. Tubular sight glasses must be installed in such a way to prevent pipe forces (tension, pressure and torsion), vibrations and pressure shocks from affecting the fitting!

**With screw connections
according to DIN 11851
($\Delta P \leq 10$ bar)**

Operating conditions:

Temperature: (depending on glass and gasket)	120 °C (short term)	
Pressure:	$\leq 10^1$	Bar
¹ higher see type 645		

CONNECTIONS:

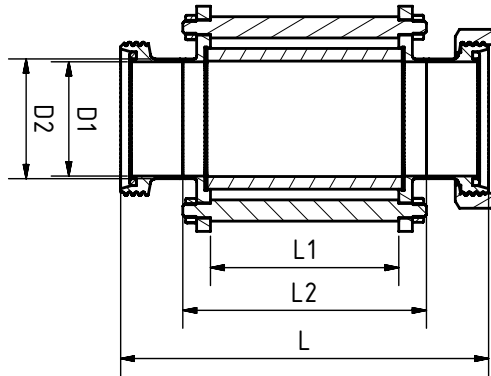
The sightglasses can optionally be supplied with threaded ends and tapered sockets, threaded ends on both sides, tapered sockets on both sides or weld ends. See comparison on next page.

Materials:

Flange:	1.4404; 1.4301
Glass tube:	borosilicate glass
Gasket:	NBR; PTFE
Screws:	A4-70
Special materials on request	

IMPACT PROTECTION COVER (OPTIONAL):

Optionally, our tubular sight glasses type 650 can be equipped with an elastic impact protection jacket to protect the glass tube. The impact protection jacket is made of either perforated sheet metal or polycarbonate and is therefore very durable, UV and weather resistant.

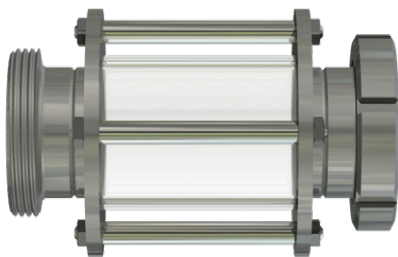


DN	10	15	20	25	32	40	50	65	80	100	125	150
D1	10	16	20	26	32	38	50	66	81	100	125	150
(Form A-C) L	122	122	124	142	154	164	168	191	209	257	270	290
(Form D) L2	88	88	88	98	104	112	112	127	135	169	202	216
L1	60	60	60	70	70	70	70	85	85	115	160	170
D2	15	21	25	31	37	43	55	72	87	106	132	157
Pmax	10	10	10	10	10	10	10	10	9	8	7	7

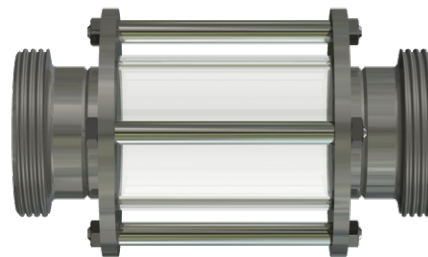
CONNECTIONS:

The sightglasses can optionally be supplied with threaded ends and tapered sockets, threaded ends on both sides, tapered sockets on both sides or weld ends.

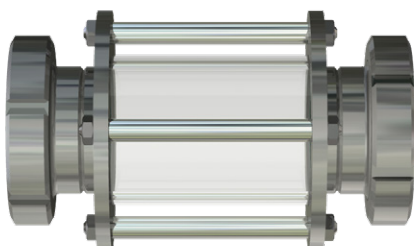
FORM A



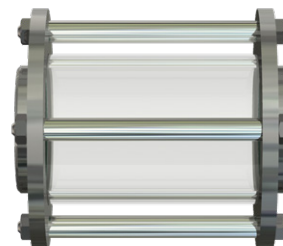
FORM B



FORM C



FORM D





Tubular sight glass PN 10

with screw connections according to DIN 11851

Type 650

PRODUCTCODE:

Group	TYPE	Connections	DN	Flange	Impact protection	Gasket	Overall length
11	650	A: thread + nut B: thread + thread C: nut + nut D: welding ends	10 15 20 25 32 40 50 65 80 100 125 150	1: 1.4404 2: 1.4301	1: without impact protection 2: Perforated plate 3: Polycarbonate	1: PTFE 3: NBR	Assigned by ACI as required

SPECIAL DESIGNS/OPTIONS:

- a) Impact protection cover
- b) High pressure version (type 645 PN 16)
- c) Additional options on request

EXAMPLE:

11-650-A-100-1-1-3-0 equals the product code:

ACI Type 650

Form A

DN100

flange 1.4404

with impact protection jacket made of perforated plate
gasket NBR

HIGHER OPERATING PRESSURES:

In individual cases, higher operating pressures than those specified may be possible. Please contact us if necessary.