

Round sight glass fitting PN 16 up to PN 320

with welding socket acc. to
DIN 1092-1 Type 11

**Type
390**



APPLICATION:

Round sight glass fittings are used for observation and illumination of the interior of closed vessels (boilers, tanks, silos, etc.) or pipelines. Sight glasses of Type 390 are round flanged fittings with welding sockets according to DIN EN 1092-1 for welding on, each completed with a sight glass plate inserted between the gaskets and screwed firmly.

INSTALLATION NOTE:

After welding the socket on the pressure vessel, the sealing surface must be checked for deformations! Reworking may be required! Observe the listed torque values for remounting the cover flange! The pressure rating does not consider the base flange.

**With welding socket
according to DIN 1091-1
Type 11**

Operating conditions:

Temperature: (depending on glass and gasket)	up to 280 °C with Borosilicate glass acc. to DIN 7080 or similar	
Pressure:	≤ 16 up to 320	bar(g)
Low temperature use and higher temperatures / pressures on request		

Materials:

Flange:	1.4571; 1.4404; 1.4539; 1.4435; 1.4541; 1.4301/7; 1.4876; 1.4828; 2.4602; 2.4610
Glass:	Borosilicate glass acc. to DIN 7080 or similar
Gasket: ¹	PTFE; FKM; NBR; C4400; Silico- ne; EPDM; Graphite
Screws:	A4-70 / A2-70
Special materials on request ¹ See INFO gaskets-leaflet	

ATTENTION!

The pressure-temperature limits according to DIN EN 1092-1 apply to the sightglass fitting type 390!

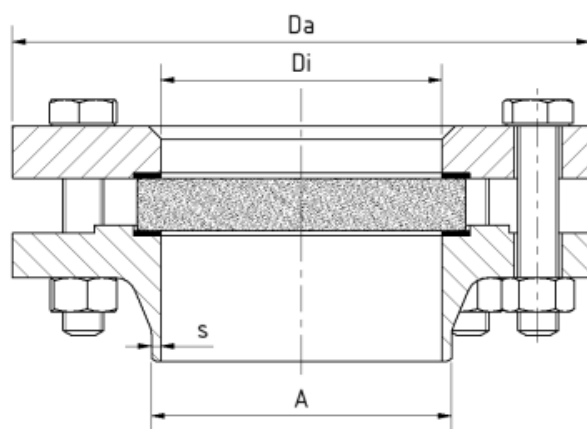
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PN	DN	Da [mm]	Di [mm]	A [mm]	s [mm]	Weight [kg]
16	15	95	17	21,3	2	1,6
	20	105	22	26,9	2,3	2,3
	25	115	28	33,7	2,6	2,7
	32	140	37	42,4	2,6	4,0
	40	150	43	48,3	2,6	4,5
	50	165	54	60,3	2,9	5,3
	65	185	70	76,1	2,9	6,4
	80	200	83	88,9	3,2	9,9
	100	220	107	114,3	3,6	9,7
	125	270	132	139,7	4	19,1
	150	300	160	168,3	4,5	24,9
PS 10*	200	375	207	219,1	6,3	46,4
PS 6*	250	425	259	273	7,1	51,6
PS 6*	300	485	308	323,9	8	69,1
PS 6*	350	555	339	355,6	8	105,2
40	15	95	17	21,3	2	1,6
	20	105	22	26,9	2,3	2,3
	25	115	28	33,7	2,6	2,7
	32	140	37	42,4	2,6	4,0
	40	150	43	48,3	2,6	4,5
	50	165	54	60,3	2,9	6,0
	65	185	70	76,1	2,9	8,0
	80	200	83	88,9	3,2	10,2
	100	235	107	114,3	3,6	13,9
	125	270	132	139,7	4	19,9
	150	300	160	168,3	4,5	25,8
63	15	105	17	21,3	2	2,5
	20	130	22	26,9	2,6	4,3
	25	140	28	33,7	2,6	5,5
	32	155	37	42,4	2,9	6,8
	40	170	43	48,3	2,9	8,7
	50	180	54	60,3	2,9	9,6
	65	205	70	76,1	3,2	12,2
	80	215	82	88,9	3,6	14,4
	100	250	106	114,3	4	20,3
	125	295	131	139,7	4,5	31,8
	150	345	157	168,3	5,6	46,8

PN	DN	Da [mm]	Di [mm]	A [mm]	s [mm]	Weight [kg]
100	15	105	17	21,3	2	2,5
	20	130	22	26,9	2,6	4,4
	25	140	28	33,7	2,6	5,5
	32	155	37	42,4	2,9	6,8
	40	170	43	48,3	2,9	8,7
	50	195	54	60,3	3,2	12,5
	65	220	69	76,1	3,6	16,7
	80	230	81	88,9	4	19,1
	100	265	104	114,3	5	28,4
	125	315	127	139,7	6,3	45,0
	150	375	160	168,3	8	74,9
160	15	105	17	21,3	2	2,5
	25	140	28	33,7	2,9	5,5
	40	170	41	48,3	3,6	9,4
	50	195	52	60,3	4	13,5
	65	230	60	76,1	5	26,4
	80	255	79	101,6	11	34,8
250	15	130	16	21,3	2,6	5,3
	25	150	27	33,7	3,6	7,6
	40	185	38	48,3	5	14,0
	50	200	48	60,3	6,3	17,8
	65	230	60	76,1	8	26,5
	80	255	79	101,6	11	34,8
320	15	130	15	21,3	3,2	5,3
	25	160	24	33,7	5	10,6
	40	195	36	48,3	6,3	17,6
	50	210	48	63,5	8	22,2



*max. operating pressure 6 bar(g) resp. 10 bar(g) for these nominal sizes

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PRODUCTCODE:

Group	TYPE	DN	PN	Base flange*	Glass	Gasket	Variant
11	390	1: 15	1: 16	2: 1.4571	1: Borosilicate glass (Boro)	1: PTFE	Assigned by LUMISTAR if required
		2: 20	2: 40	3: 1.4404	acc. to DIN 7080 or similar	2: FKM	
		3: 25	3: 63	4: 1.4306	6: Boro with PTFE wiper	3: NBR	
		4: 32	4: 100	5: 1.4539		4: C4400	
		5: 40	5: 160	7: 1.4435		5: Silicone	
		6: 50	6: 250	8: 1.4541		6: EPDM	
		7: 65	7: 320	9: Special		7: Graphite	
		... ²				8: Special	
		13: 250					
		14: 300					
		15: 350					

INFO: Unless otherwise stated, the factory standard highlighted is supplied.

*Cover flange according to quotation / order confirmation. See table on page 2

SPECIAL DESIGNS/OPTIONS:

- a) High and low temperature version on request
- b) Vacuum version (390V)
- c) Wiper SGW
- d) LED lights, for EX and Non-EX areas
- e) FEP protective screen (for higher pH-values)
- f) Mica protection (up to 320 °C with borosilicate glass acc. to DIN 7080 or similar)
- g) Thread connection (Type 392)
- h) Pipe connection (Type 391)



Version g) (Type 392)



Version h) (Type 391)

EXAMPLE:

11-390-13-1-2-1-4-0 equivalent to:

LUMISTAR Type 390

DN 200

PN 16

Base flange made of 1.4571

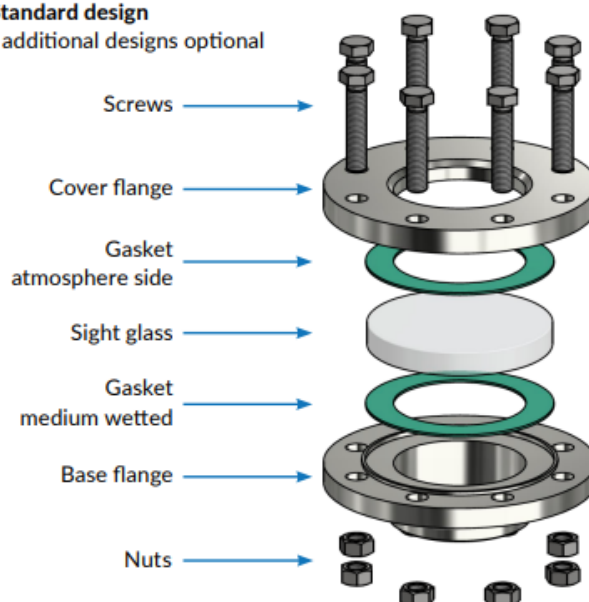
Cover flange made of 1.4571

Borosilicate glass acc. to DIN 7080 or similar

Gasket C4400

Standard design

- additional designs optional



RECOMMENDATION:

For aggressive media or steam, mica discs should be used to protect the glass.