

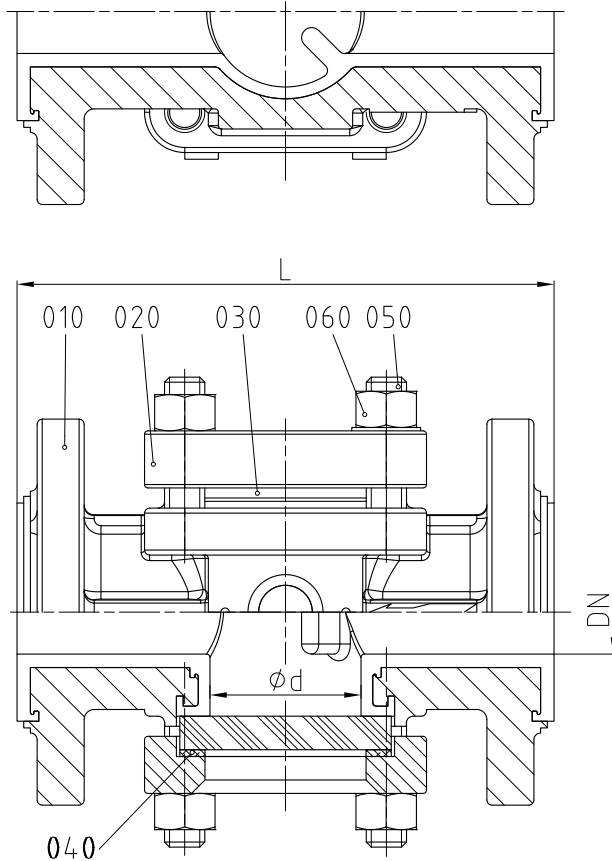
Technical Manual

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Technische Daten ASG (DIN)



Attention!
 Thermal Shock Resistance of Borosilicate-Glass is according to DIN 7080 t= max. 80°C (176°F). Everything else according to **atomac** Pressure / Temperature Diagram.

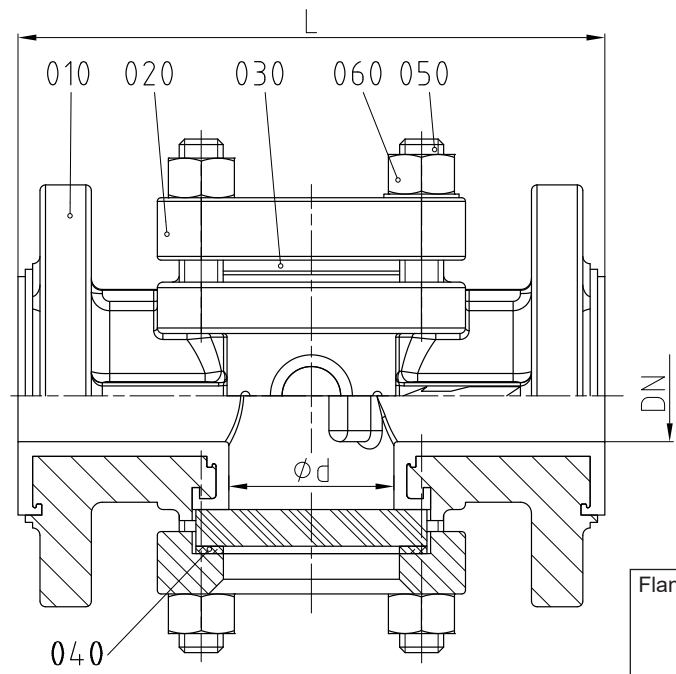
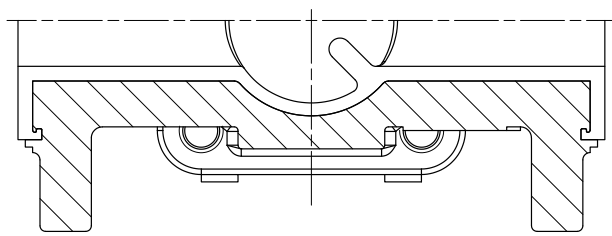
Face-to-Face Dimensions DIN EN 558 (Basic series 1)
 Flange Connections DIN EN 1092-2 PN 16

DN / DIN		L	Ød	weight	
025	mm	160	45	kg	5,2
	inch	6,3	1,77	lbs	11,4
040	mm	200	58	kg	9,1
	inch	7,87	2,28	lbs	20,0
050	mm	230	77	kg	13,0
	inch	9,06	3,03	lbs	28,7
065	mm	290	77	kg	15,0
	inch	11,42	3,03	lbs	33,0
080	mm	310	100	kg	19,8
	inch	12,2	3,94	lbs	43,6
100	mm	350	125	kg	28,1
	inch	13,78	4,92	lbs	61,9
150	mm	480	175	kg	61,0
	inch	18,9	6,89	lbs	134,4
200	mm	457°	208	kg	96,3
	inch	17,99°	8,19	lbs	212,2
250	mm	534°	208	kg	125,7
	inch	21°	8,19	lbs	277,0

◦ Face-to-Face Dimensions acc. to ANSI B 16.10



Technische Daten ASG (ANSI)



Attention!
 Thermal Shock Resistance of Borosilicate-Glass is according to DIN 7080 t= max. 80°C (176°F). Everything else according to **atomac** Pressure / Temperature Diagram.

Flange Connections ANSI B 16.5 Cass 150,
 Min. Flange thickness acc. to ASME B 16.5 Cass 150, Table 9 (Flanged Fittings)

DN / ANSI		L	Ød	weight	
1"	inch	6	1,77	lbs	9,9
	mm	152,4	45	kg	4,5
1½"	inch	7	2,28	lbs	15,2
	mm	178	58	kg	6,9
2"	inch	8	3,03	lbs	23,2
	mm	203	77	kg	10,5
3"	inch	9,5	3,94	lbs	39,6
	mm	241	100	kg	18,0
4"	inch	11,5	4,92	lbs	62,1
	mm	292	125	kg	28,2
6"	inch	18,9	6,89	lbs	134,4
	mm	480	175	kg	61,0
8"	inch	17,99	8,19	lbs	202,8
	mm	457	208	kg	92,0
10"	inch	21,02	8,19	lbs	264,5
	mm	534	208	kg	120,0

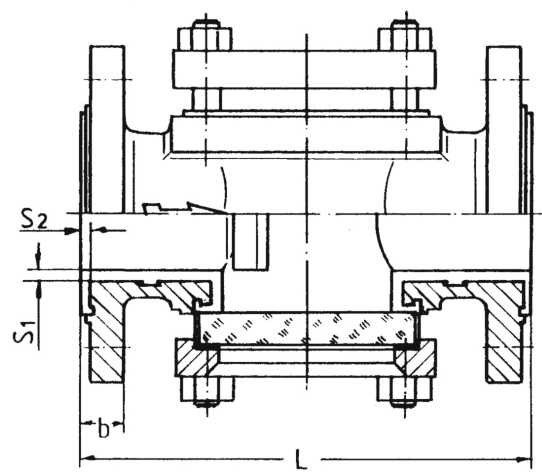
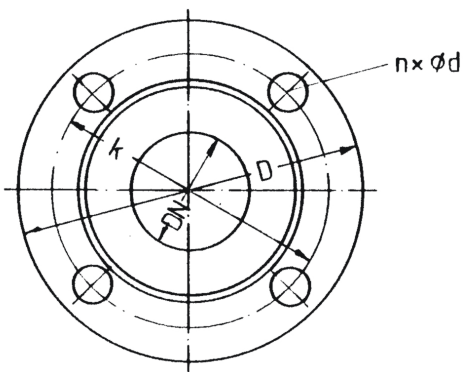
Material specification ASG

No.	Designation	Pieces	Material	Material-No. / DIN	ASTM / AISI
010	body piece	1	ductile iron / PFA	EN-JS1049 (GGG-40.3) / DIN EN 1563	A 395
			ductile iron / PFA conductive	EN-JS1049 (GGG-40.3) / DIN EN 1563	A 395
020	flange	1	ductile iron / PFA	EN-JS1049 (GGG-40.3) / DIN EN 1563	A 395
			ductile iron / PFA conductive	EN-JS1049 (GGG-40.3) / DIN EN 1563	A 395
030	glass	2	borosilicate-glass	DIN 7080	
040	flat gasket	2	UNITEC 300 green	DIN 3535-6	
050	stud bolt	1 set	stainless steel	1.4301-K70 / DIN EN 10088-3	A 193 B8
060	hexagon nut	1 set	stainless steel	1.4301-K70 / DIN EN 10088-3	A 194 8

Valves with conductive lining only contain components with conductive materials

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Dimensions ASG (DIN)



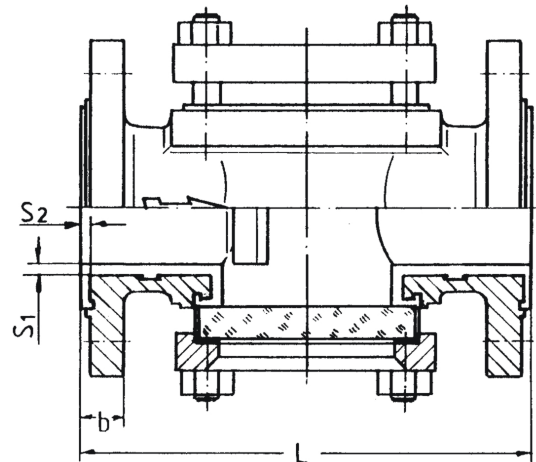
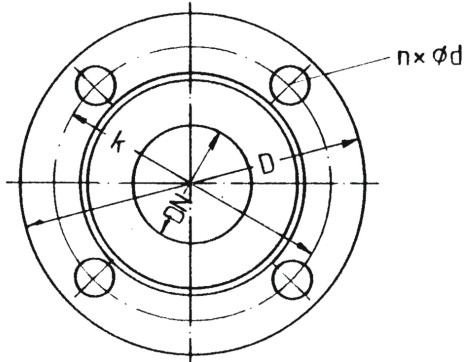
DN / DIN		L	b	D	k	nxØd	S1	S2
025	mm	160	20	115	85	4x14	4	4
	inch	6,3	0,79	4,53	3,35	4x0,55	0,16	0,16
040	mm	200	22	150	110	4x18	4	4
	inch	7,87	0,85	5,91	4,33	4x0,71	0,16	0,16
050	mm	230	23	165	125	4x18	4	4
	inch	9,06	0,91	6,5	4,92	4x0,71	0,16	0,16
065	mm	290	23,5	185	145	4x18	4	4
	inch	11,42	0,93	7,28	5,71	4x0,71	0,16	0,16
080	mm	310	25	200	160	8x18	5	4
	inch	12,2	0,98	7,87	6,3	8x0,71	0,2	0,16
100	mm	350	25	220	180	8x18	5	4
	inch	13,78	0,98	8,66	7,09	8x0,71	0,2	0,16
150	mm	480	29	285	240	8x22	5,5	4
	inch	18,9	1,14	11,22	9,45	8x0,87	0,22	0,16
200°	mm	457	34	343	297	12x23	6	4
	inch	17,99	1,34	13,5	11,69	12x0,91	0,24	0,16
250°	mm	534	36	458,8	350	12x23	6	4
	inch	21	1,42	18,06	13,78	12x0,91	0,24	0,16

° Baulänge nach ANSI B 16.10



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Dimensions ASG (ANSI)



DN / ANSI		L	b	D	k	n x Ød	S1	S2
1"	inch	6	0,63	4,25	3,12	4x0,63	0,16	0,16
	mm	152,4	16	107,9	79,2	4x16	4	4
1½"	inch	7	0,85	5	3,88	4x0,63	0,16	0,16
	mm	178	21,5	127	98,5	4x16	4	4
2"	inch	8	0,87	6	4,74	4x0,75	0,16	0,16
	mm	203	22	152,4	120,5	4x19	4	4
3"	inch	9,5	0,95	7,5	6	4x0,75	0,2	0,16
	mm	241	24	190,5	152,5	4x19	5	4
4"	inch	11,5	1,08	9	7,5	8x0,75	0,2	0,16
	mm	292	27,5	228,6	190,5	8x19	5	4
6"	inch	18,9	1,14	11,22	9,45	8x0,87	0,22	0,16
	mm	480	29	285	240	8x22	5,5	4
8"	inch	17,99	1,34	13,5	11,69	8x0,91	0,24	0,2
	mm	457	34	343	297	8x23	6	5
10"	inch	21	1,42	16	14,25	12x1	0,24	0,16
	mm	534	36	406,5	362	12x25,5	6	4

Spare Parts (item n°) - ASG

DIN	ANSI	Glass Set	Flat gaskets Set
025	1"	0009537	0005257
040	1½"	0009538	0005258
050	2"	0009539	0005259
065	--	0009539	0005259
080	3"	0009540	0009546
100	4"	0009541	0009184
150	6"	0009542	0009548
200	8"	0033640	0033641
250	10"	0033640	0033641

ASSEMBLY INSTRUCTIONS ASG

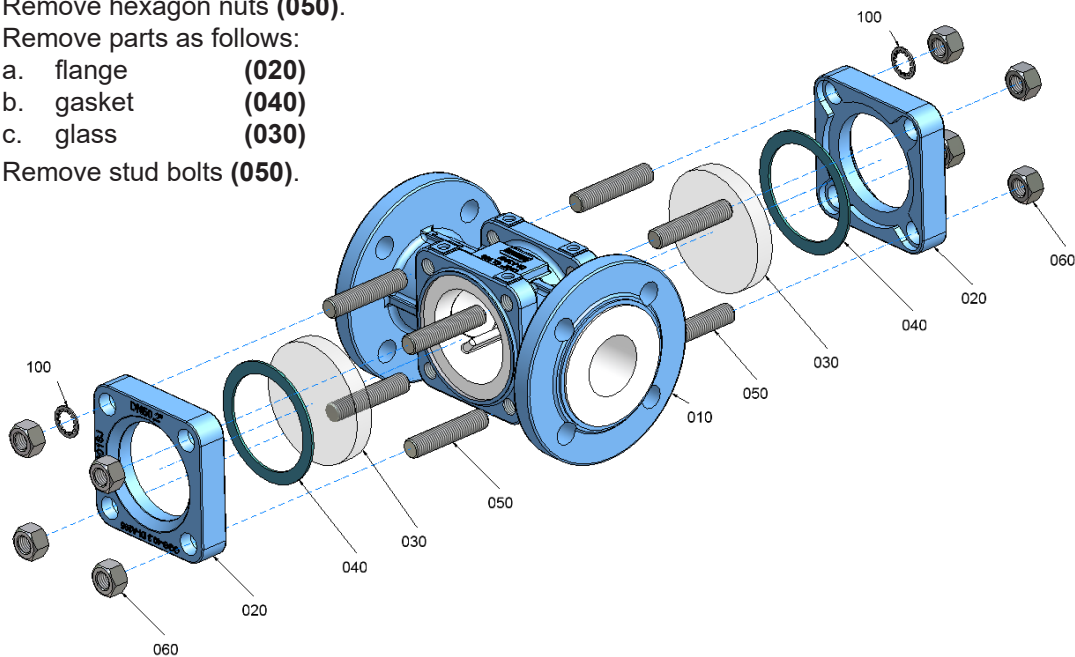
The general installation and maintenance instructions must be observed.

1. When assembling ASG, special care must be taken that sealing surfaces are absolutely clean and free from any damage.
2. Screw in stud bolts (050).
3. Insert glass (030).
4. Insert gasket (040).
5. Put on flange (020).
6. Tighten hexagon nuts (060) by criss-cross method acc. to recommended torques.

DISASSEMBLY INSTRUCTIONS ASG

For all jobs which are to be carried out on an installed valve, the works safety requirements and the general installation and maintenance instructions for flourcarbon resin lined atomac valves must be observed.

1. Prior to disassembly, the valve must be drained of all line media, acc. to the above-mentioned instructions. After having removed the flange connection, put valve on workbench with a soft cover (rubber mat).
2. Remove hexagon nuts (050).
3. Remove parts as follows:
 - a. flange (020)
 - b. gasket (040)
 - c. glass (030)
4. Remove stud bolts (050).



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ASG - recommended tightening torques*

DN	tie rods (050/060)		connection flange	
	Nm	lbf · in	Nm	lbf · in
025	14	124	25	221
1"	15	133	15	133
040	22	195	50	442
1½"	24	212	26	230
050	40	195	65	575
2"	42	372	60	531
065	40	354	90	796
080	55	487	55	487
3"	59,5	527	100	885
100	47	416	64	566
4"	50	442	76	672
150	51	451	130	1151
6"	53	470	129	1142
200	116	1027	190	1682
8"	123	1089	193	1708
250	116	1027	175	1549
10"	123	1089	152	1345

*** maximum value
 When bolting together dissimilar materials, always tighten to the lowest recommended torque of the components in the joint. Using higher torques may cause excessive deformation of the „softer“ material in the joint*

ASG - K_v Data and C_v Data (DIN EN 60534-2-3)

DIN	ANSI	K _v m³/h	C _v gal/min
025	1"	27,3	31,7
040	1 ½"	82,5	95,9
050	2"	125,8	146,2
065	-	215,4	250,4
080	3"	330,5	384,1
100	4"	515,1	598,7
150	6"	1224,7	1423,5
200	8"	at time not available	
250	10"		



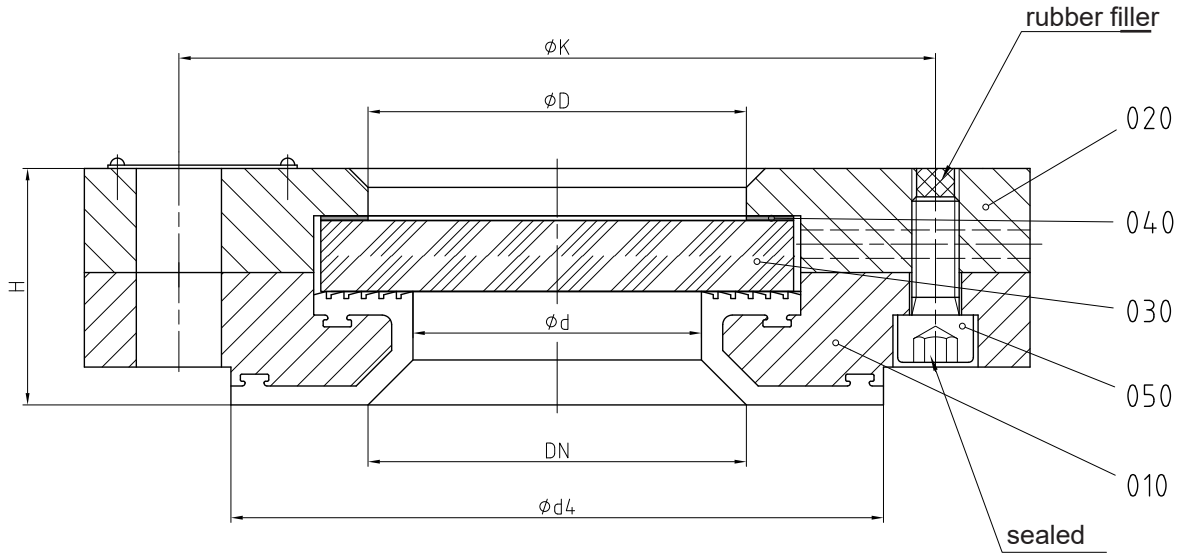
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Technical Data ASG/B

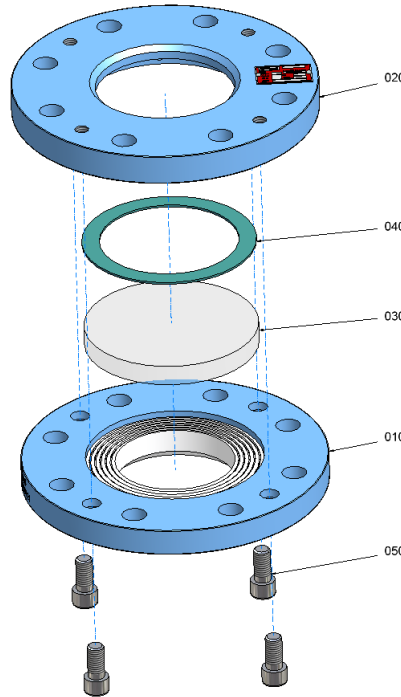


„DBGM“

Max. allowed overpressure 145 psi DIN 28121
 Flange Connections DIN EN 1092-2 PN 10

DN / DIN		H	ØD	Ød	Ød4	ØK	weight	
080	mm	50	80	61	138	160	kg	8,2
	inch	1,97	3,15	2,4	5,43	6,3	lbs	18,1
100	mm	50	100	86	158	180	kg	11,0
	inch	1,97	3,94	3,39	6,22	7,09	lbs	24,3
125	mm	58	125	110	188	210	kg	15,7
	inch	2,28	4,92	4,33	7,4	8,27	lbs	34,7
150	mm	58	125	110	212	240	kg	19,0
	inch	2,28	4,92	4,33	8,35	9,45	lbs	41,9
200	mm	58	150	135	268	295	kg	33,0
	inch	2,28	5,91	5,31	10,55	11,61	lbs	72,8

Material specification ASG/B



No.	Designation	Pieces	Material	Material-No. / DIN	ASTM / AISI
010	basic flange	1	steel / PFA	1.0038 DIN EN 10025-2	A 283-78
020	counter flange	1	steel	1.0038 DIN EN 10025-2	A 283-78
030	glass	1	borosilicate-glass	DIN 7080	
040	flat gasket	1	UNITEC 300 green	DIN 3535-6	
050	hexagonal socket head	4	steel	8.8 / DIN EN ISO 4762	

ASG/B - recommended tightening torques

DN	Nm
80	55
100	67
125	90
150	130
200	190