

Technical Manual

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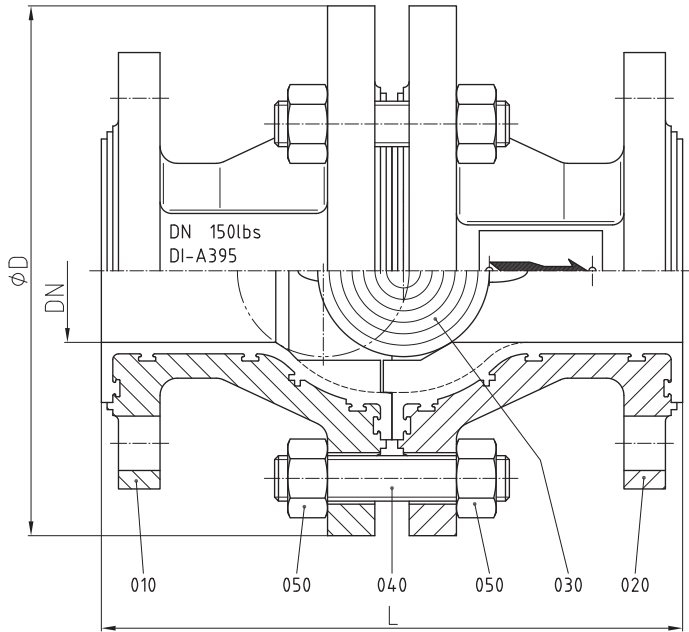
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Technical Data ARV2

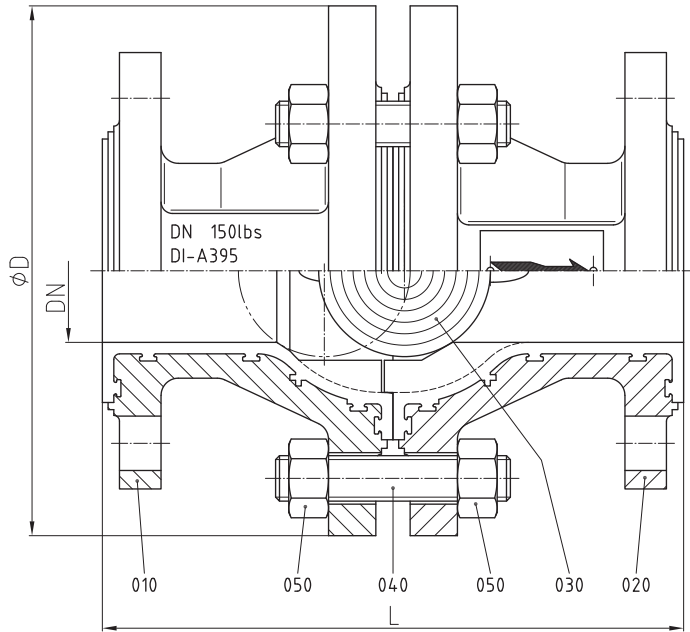


Face-to-Face Dimensions DIN EN 558-1 (Basic series 1)
 Flange Connections DIN 2501-1 PN 16
 DN 200- DIN 2501-1 PN 10
 Tightness test DIN EN 12266-1 (leak rate B)

DN / DIN		L	ØD	weight	
015	mm	130	105	kg	3,5
	inch	5,12	4,13	lbs	7,7
020	mm	150	105	kg	3,9
	inch	5,91	4,13	lbs	8,6
025	mm	160	140	kg	6,5
	inch	6,3	5,51	lbs	14,3
032	mm	180	150	kg	8,2
	inch	7,09	5,91	lbs	18,1
040	mm	200	165	kg	11,0
	inch	7,87	6,5	lbs	24,3
050	mm	230	185	kg	13,7
	inch	9,06	7,28	lbs	30,1
065	mm	290	220	kg	21,2
	inch	11,42	8,66	lbs	46,8
080	mm	310	250	kg	32,6
	inch	12,2	9,84	lbs	71,8
100	mm	350	285	kg	42,0
	inch	13,78	11,22	lbs	92,5
150*	mm	356	395	kg	80,0
	inch	14	15,55	lbs	176,0
200*	mm	457	515	kg	195,0
	inch	18	20,28	lbs	430,0

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

Technical Data ARV2



Flange Connections ANSI B 16.5 150lbs
 Tightness test DIN EN 12266-1 (leak rate B)

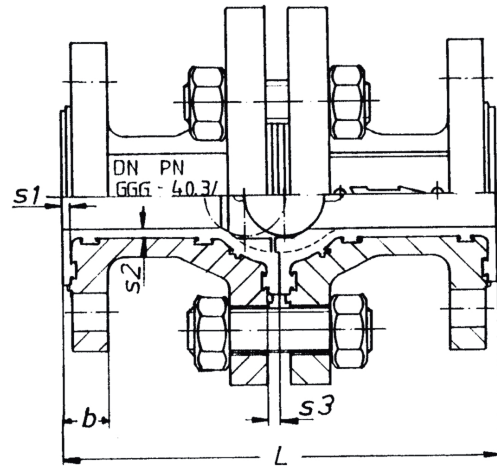
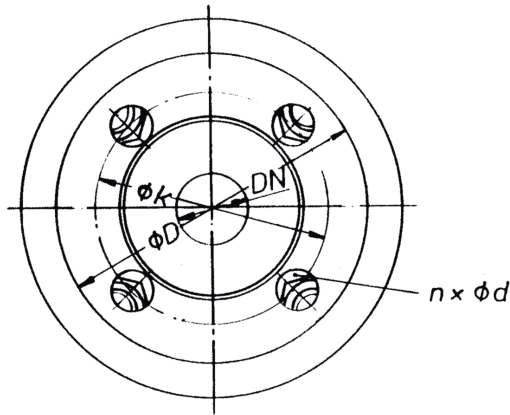
DN / ANSI		L	ØD	weight	
½"	inch	5,16	4,13	lbs	7,5
	mm	131	105	kg	3,4
¾"	inch	5,91	4,13	lbs	8,4
	mm	150	105	kg	3,8
1"	inch	6	5,51	lbs	13,2
	mm	152,4	140	kg	6,0
1½"	inch	7	6,5	lbs	20,5
	mm	178	165	kg	9,3
2"	inch	8	7,3	lbs	29,1
	mm	203	185	kg	13,2
3"	inch	9,5	9,84	lbs	61,6
	mm	241	250	kg	28,0
4"	inch	11,5	11,22	lbs	92,5
	mm	292	285	kg	42,0
6"	inch	14	15,55	lbs	171,8
	mm	356	395	kg	78,0
8"	inch	18	20,28	lbs	365,0
	mm	457	515	kg	166,0

Material specification ARV2

No.	Designation	Pieces	Material	Material-No. DIN	ASTM / AISI
010	body piece	1	ductil iron / PFA° ductil iron / FEP°	EN-JS1049 (GGG-40.3) / DIN EN 1563	A 395
020	body piece	1	ductil iron / PFA° ductil iron / FEP°	EN-JS1049 (GGG-40.3) / DIN EN 1563	A 395
030	ball	1	PTFE-solid ball	pure-PTFE	
040	stud bolt	1 set	stainless steel	1.4301-K70 / DIN EN 10088-3	A 193 B8
050	hexagon nut	1 set	stainless steel	1.4301-K70 / DIN EN 10088-3	A 194 8

° optional

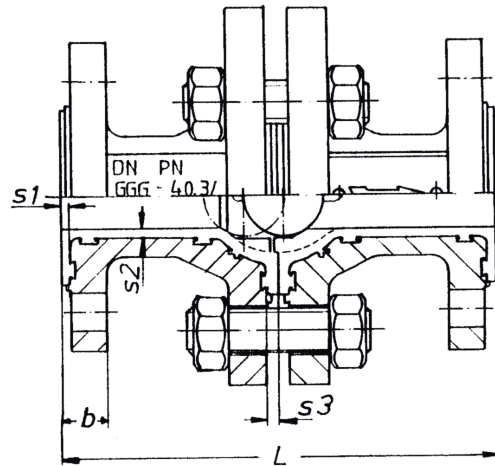
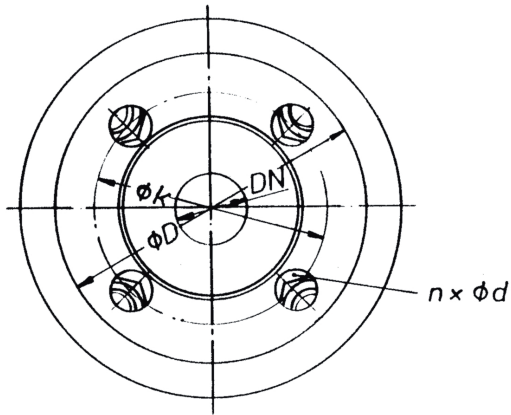
Dimensions ARV2



DN / DIN		L	b	ØD	Øk	nxØd	S1	S2	S3
015	mm	130	14	95	65	4x14	3,5	3,5	3,5
	inch	5,12	0,55	3,74	2,56	4x0,55	0,14	0,14	0,14
020	mm	150	15	105	75	4x14	3,5	3,5	3,5
	inch	5,91	0,59	4,13	2,95	4x0,55	0,14	0,14	0,14
025	mm	160	16,5	115	85	4x14	3,5	3,5	4
	inch	6,3	0,65	4,53	3,35	4x0,55	0,14	0,14	0,16
032	mm	180	18	140	100	4x18	4	4	4
	inch	7,09	0,71	5,51	3,94	4x0,71	0,16	0,16	0,16
040	mm	200	19	150	110	4x18	4	4	4
	inch	7,87	0,75	5,91	4,33	4x0,71	0,16	0,16	0,16
050	mm	230	20,5	165	125	4x18	4	4	4
	inch	9,06	0,81	6,5	4,92	4x0,71	0,16	0,16	0,16
065	mm	290	22	185	145	4x18	4	4,5	4
	inch	11,42	0,87	7,28	5,71	4x0,71	0,16	0,18	0,16
080	mm	310	25	200	160	8x18	4	4,5	4
	inch	12,2	0,98	7,87	6,3	8x0,71	0,16	0,18	0,16
100	mm	350	27	220	180	8x18	4	5	4
	inch	13,78	1,06	8,66	7,09	8x0,71	0,16	0,2	0,16
150*	mm	256	30,5	279,4	240	8x22	4	6	4
	inch	14	1,2	11	9,45	8x0,87	0,16	0,24	0,16
200*	mm	457	36,5	343	295	8x22	4	6	4
	inch	18	1,44	13,5	11,61	8x0,87	0,16	0,24	0,16

* Face-to-Face Dimensions acc. ANSI B, 16.10

Dimensions ARV2



DN / ANSI		L	b	ØD	Øk	nxØd	S1	S2	S3
1/2"	inch	5,16	0,55	3,5	2,38	4x0,63	0,14	0,14	0,14
	mm	131	14	88,9	60,5	4x16	3,5	3,5	3,5
3/4"	inch	5,91	0,59	3,88	2,75	4x0,63	0,14	0,14	0,14
	mm	150	15	98,5	70	4x16	3,5	3,5	3,5
1"	inch	6	0,63	4,25	3,13	4x0,63	0,14	0,14	0,16
	mm	152,4	16	107,9	79,2	4x16	3,5	3,5	4
1 1/2"	inch	7	0,98	5	3,88	4x0,63	0,16	0,16	0,16
	mm	178	19	127	98,5	4x16	4	4	4
2"	inch	8	0,81	6	4,75	4x0,75	0,16	0,16	0,16
	mm	203	20,5	152,4	120,5	4x19	4	4	4
3"	inch	9,5	0,98	7,5	6	4x0,75	0,16	0,18	0,16
	mm	241	25	190,5	152,5	4x19	4	4,5	4
4"	inch	11,5	11,4	9	7,5	8x0,75	0,16	0,2	0,16
	mm	292	29	228,6	190,5	8x19	4	5	4
6"	inch	14	1,2	11	9,5	8x0,87	0,16	0,24	0,16
	mm	356	30,5	279,4	241,5	8x22	4	6	4
8"	inch	18	1,44	13,5	11,68	8x0,87	0,16	0,24	0,16
	mm	457	36,5	342,9	296,7	8x22	4	6	4

Spare Parts (item n°) - ARV2

DIN	ANSI	ball PTFE
015	1/2"	0001449
020	3/4"	0001450
025	1"	0001451
032	--	0005749
040	1 1/2"	0001452
050	2"	0001453
065	--	0001458
080	3"	0001454
100	4"	0001455
150	6"	0001456
200	8"	0005967

Assembly Instructions ARV2

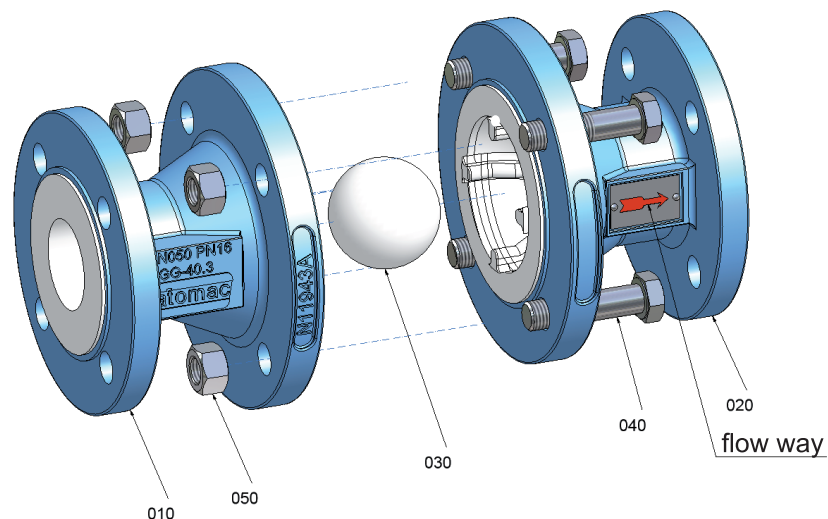
The general installation and maintenance instructions must be observed.

1. Put the body piece **(010)** on a work bench with a soft cover (rubber mat).
2. Insert ball **(030)** carefully into body piece **(010)**.
3. During assembly of the two body pieces **(020)** and **(010)**, it is important that the ball guide rails are laying exactly opposite to each other.
4. Assemble body bolts **(040)** and nuts **(050)**. Tighten them by criss-cross method acc. to the recommended torques.

Disassembly Instructions ARV2

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 fluorcarbon 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 soft cover (rubber mat).
2. Remove hexagon nuts **(050)**.
3. Remove body piece **(020)** from side piece **(010)**.
4. Remove ball **(030)**. Inspect ball on damages (replace ball, if necessary).
5. Inspect ball seat on damages (replace side piece **(010)** if (necessary).



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ARV2 - recommended tightening torques*

DN	tie rods (040/050)		connection flange	
	Nm	in.lbs	Nm	in.lbs
015	15	133	11	97
½"	16	142	8	71
020	14	124	19	168
¾"	15	133	11	97
025	33	292	33	292
1"	35	310	15	133
032	40	354	41	363
040	46	407	52	460
1½"	47	416	29	257
050	61	540	67	593
2"	69	611	59	522
065	54	478	93	823
080	75	664	55	487
3"	77	681	100	885
100	98	867	64	566
4"	98	867	76	673
150	190	1682	131	1159
6"	190	1682	129	1142
200	330	2920	206	1823
8"	354	3133	206	1823

* max. value



ARV2 - K_v Data and C_v Data (DIN EN 60534-2-3)

DIN	ANSI	K_v m ³ /h	C_v gal/min
015	½"	7,0	8,1
020	¾"	16,0	18,6
025	1"	23,5	27,3
032	--	40,3	46,8
040	1 ½"	58,0	67,4
050	2"	125,0	145,3
065	--	179,2	208,3
080	3"	272,4	316,6
100	4"	493,7	573,8
150	6"	1072,8	1246,9
200	8"	1870,0	2173,5