

POLARIS 40

Από το  1882

MAIN STANDARD FEATURES

- CONSTRUCTION :
BODY IN CAST IRON: GGG40/ASTM 536
DISC IN STAINLESS STEEL: ASTM A351 CF8 (AISI 304)
- General prescriptions: BS 5155 - MSS SP67 - API 609
- DVGW GAS CERTIFICATION
- DIAMETER: from DN 40 to DN 600
- CONNECTIONS with flanges:
PN10-PN16-ANSI 150 from DN40 to DN150
PN10 from DN200 to DN600
- Maximum working pressure (at pipe end):
PN 16 from DN 40 to DN 150
PN 10 from DN 200 to DN 600
- TEMPERATURE LIMITS WITH SEALING SEATS IN:
NBR from -20°C to + 90°C (with peaks up to + 100°C)
VITON from -10°C to + 160°C
- EPDM seals
- FACE TO FACE DIMENSIONS in conformity with:
BS 5155 - ISO 5752 - MSS SP 67 - API 609 - DIN 3202/3-K1
- Top flange with ISO 5211 connection
- BLOW-OUT PROOF stem
- OPERATION device: lever handle from DN40 to DN200
manual reduction gear from DN250 to DN600
- Tests: hydraulic on body: 1.5 x nominal pressure
hydraulic for sealing: 1.1 x nominal pressure
pneumatic for sealing: 6 bar
- Locking device from DN40 to DN200

ΧΡΥΣΑΦΙΔΗΣ Α.Ε.



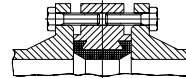
DVGW GAS
CERTIFICATION VALVE
NR NG-4313AU2368



STANDARD PART NUMBERS

Art. **B402** with NBR

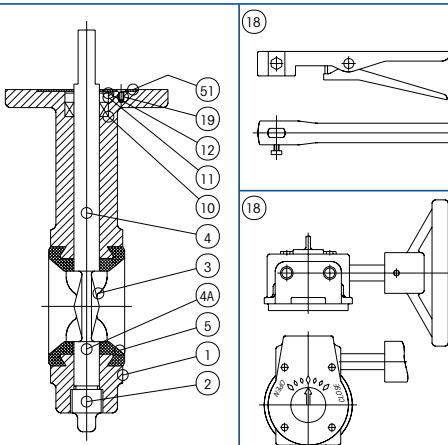
SCREWS DIMENSIONS



SIZE	PN10 Flanging		PN16 Flanging		
	Ø x Length	holes	Ø x Length	holes	
1 1/2"	40	M16 x 30	4	M16 x 30	4
2"	50	M16 x 35	4	M16 x 35	4
2 1/2"	65	M16 x 35	4	M16 x 35	4
3"	80	M16 x 35	8	M16 x 35	8
4"	100	M16 x 40	8	M16 x 40	8
5"	125	M16 x 45	8	M16 x 45	8
6"	150	M20 x 45	8	M20 x 45	8
8"	200	M20 x 50	8	M20 x 50	12
10"	250	M20 x 55	12	M24 x 55	12
12"	300	M20 x 60	12	M24 x 60	12
14"	350	M20 x 60	16	M24 x 60	16
16"	400	M24 x 70	16	M27 x 70	16
20"	500	M24 x 80	20	M30 x 80	20
24"	600	M27 x 90	20	M33 x 90	20

SPECIAL EXECUTIONS

- Black lever handle
- Reduction gear with manual operation also for small DN
- Disc in AISI 316
- VITON seals
- For further special requests please consult our technical/commercial service



APPLICATION FOR:

with NBR Hydrocarbons, natural gas, air, oils and greases

NOT RECOMMENDED FOR:

Solvents, benzene, xylol.

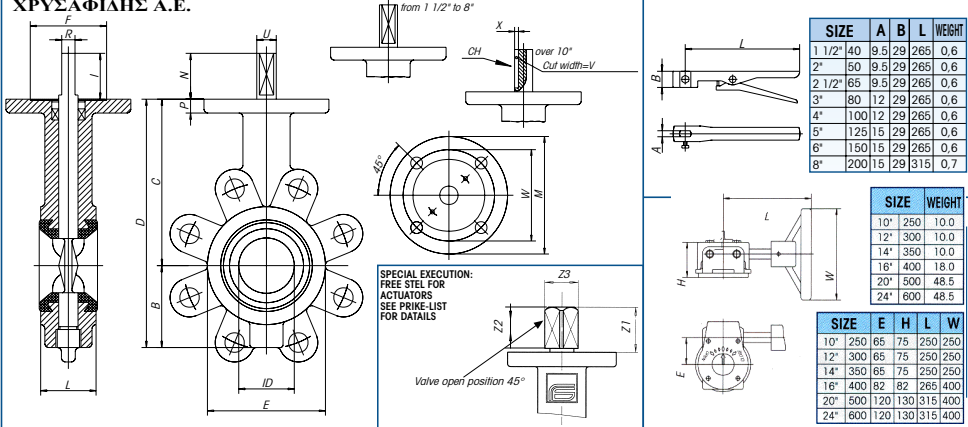
LIST OF VALVE COMPONENTS AND MATERIALS

REF.	PART	Q.ty	MATERIAL
1	BODY	1	DUCTILE IRON GGG40/ASTM A536
2	PLUG	1	NICKEL PLATED C. STEEL
3	DISC	1	CF8 (AISI 304)
4	STEM	1	TYPE 410
4A	LOWER STEM	1	TYPE 410
5	SEAT	1	EPDM or NBR
10	UPPER SEAL	1	EPDM or NBR
11	BUSHING	1	DELRIN
12	RING	1	STEEL FOR SPRINGS
19	SCREW	2	NICKEL PLATED C. STEEL
51	WASHER	1	NICKEL PLATED C. STEEL
18	LEVER HANDLE	1	CARBON STEEL
18	REDUCTION GEAR	1	CAST IRON



POLARIS 40

ΧΡΥΣΑΦΙΔΗΣ Α.Ε.



SIZE	A	B	L	WEIGHT	
1 1/2"	40	9,5	29	265	0,6
2"	50	9,5	29	265	0,6
2 1/2"	65	9,5	29	265	0,6
3"	80	12	29	265	0,6
4"	100	12	29	265	0,6
5"	125	15	29	265	0,6
6"	150	15	29	265	0,6
8"	200	15	29	315	0,7

SIZE	WEIGHT
10"	250 10,0
12"	300 10,0
14"	350 10,0
16"	400 18,0
20"	500 48,5
24"	600 48,5

SIZE	E	H	L	W	
10"	250	65	75	250	250
12"	300	65	75	250	250
14"	350	65	75	250	250
16"	400	82	82	266	400
20"	500	120	130	316	400
24"	600	120	130	316	400

SIZE	STEM															ISO 5211 CONNECT.							* WEIGHT		
	ID	L	B	C	D	E	P	N	I	R	U	X	V	Z1	Z2	Z3	CH	ISO CONN.	M	W	n	Q		F	
1 1/2"	40	35	40	59	120	179	85	10	33	30	9,5	14			16,5	11	14	F07	90	70	4	9	55	2,7	
2"	50	48	43	64	130	194	92	11	33	30	9,5	14			16,5	11	14	F07	90	70	4	9	55	2,9	
2 1/2"	65	60	46	72	137	209	107	11	33	30	9,5	14			16,5	11	14	F07	90	70	4	9	55	4,1	
3"	80	73	46	85	156	241	122	11	33	30	11,8	16			17,5	11	14	F07	90	70	4	9	55	4,4	
4"	100	100	52	95	170	265	150	11	33	30	11,8	16			17,5	11	14	F07	90	70	4	9	55	4,7	
5"	125	125	56	110	185	295	179	12	33	30	14,5	19			17,5	14	18	F07	90	70	4	9	55	6,3	
6"	150	145	56	123	203	326	206	12	33	30	14,5	19			22,5	14	18	F07	90	70	4	9	55	7,9	
8"	200	190	60	168	238	406	257	13	33	30	14,5	19			22,5	17	22	F07	90	70	4	9	55	12,3	
10"	250	240	68	203	270	473	316	15	65	60	22		4	8	27	22	28	8x7	F10	125	102	4	12	72	19,5
12"	300	290	78	242	310	552	370	15	65	60	28		4	8	27	22	28	8x7	F10	125	102	4	12	72	30,5
14"	350	337	78	290	330	620	410	15	65	60	28		4	8				8x7	F10	125	102	4	12	72	41
16"	400	387	102	330	375	705	468	20	75	70	38		5	12				12x8	F14	175	140	4	18	80	62
20"	500	487	127	400	440	840	578	20	100	95	45		5,5	14				14x9	F16	210	165	4	22	90	111
24"	600	575	154	460	510	970	680	22	100	95	55		5,5	14				14x9	F16	210	165	4	22	105	210

* WEIGHT REFERS TO VELVE WITH BARE SHAFT

BREAKAWAY TORQUES IN Nm

DN size	40	50	65	80	100	125	150	200	250	300	350	400	500	600	
	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	20"	24"	
PN - bar	0	11	14	18	27	40	59	88	157	248	343	485	662	1142	2385
	6	11	20	25	32	41	62	92	173	275	382	549	766	1327	2787
	10	12	23	27	34	54	71	106	186	321	576	680	882	1634	3250
	16	14	25	29	37	56	86	123	262	392	551	1528	2035	3070	5670

The values in Nm may vary as a function of the seals material, temperature and type of medium. For a firm operation of the various types of actuators, in the different working conditions it is necessary to consider a safety factor of 1.5. During operation, with frequent open and close cycles, the operating torque can decrease considerably in comparison with the initial breakaway torque.

Kv AND Cv VALUES AS A FUNCTION OF OPENING ANGLE

SIZE	20°		30°		40°		50°		60°		70°		80°		90°		
	Kv	Cv	Kv	Cv	Kv	Cv	Kv	Cv	Kv	Cv	Kv	Cv	Kv	Cv	Kv	Cv	
	1 1/2"	40	2,6	3	4,3	5	9,5	11	16	18	22	26	39	45	60	70	69
2"	50	6,7	8	7,8	9	16	18	24	28	48	55	62	72	95	110	116	135
2 1/2"	65	8,6	10	13	15	23	27	38	44	73	85	95	110	145	168	181	210
3"	80	13	15	20	23	34	39	56	65	112	130	142	165	216	250	267	310
4"	100	23	27	35	41	61	71	99	115	198	230	259	300	401	465	466	540
5"	125	50	58	74	86	129	150	211	245	414	480	526	610	845	980	948	1100
6"	150	83	96	121	140	211	245	345	400	677	785	871	1010	1392	1615	1647	1910
8"	200	142	165	211	245	354	410	591	685	1099	1275	1478	1715	2302	2670	2746	3185
10"	250	220	255	328	380	560	650	974	1130	1810	2100	2328	2700	3664	4250	4224	4900
12"	300	319	370	466	540	819	950	1353	1570	2629	3050	3405	3950	5129	5950	6336	7350
14"	350	388	450	647	750	1120	1300	1905	2210	3517	4080	4836	5610	6964	8078	9655	11200
16"	400	552	640	776	900	1483	1720	2405	2790	4310	5000	6336	7650	9284	10770	11120	12900
20"	500	785	910	1375	1595	2457	2850	3991	4630	7414	8600	9914	11500	15121	17540	19310	22400
24"	600	1078	1250	1974	2290	3448	4000	5250	6090	10776	12500	14224	16500	20336	23590	24397	28300