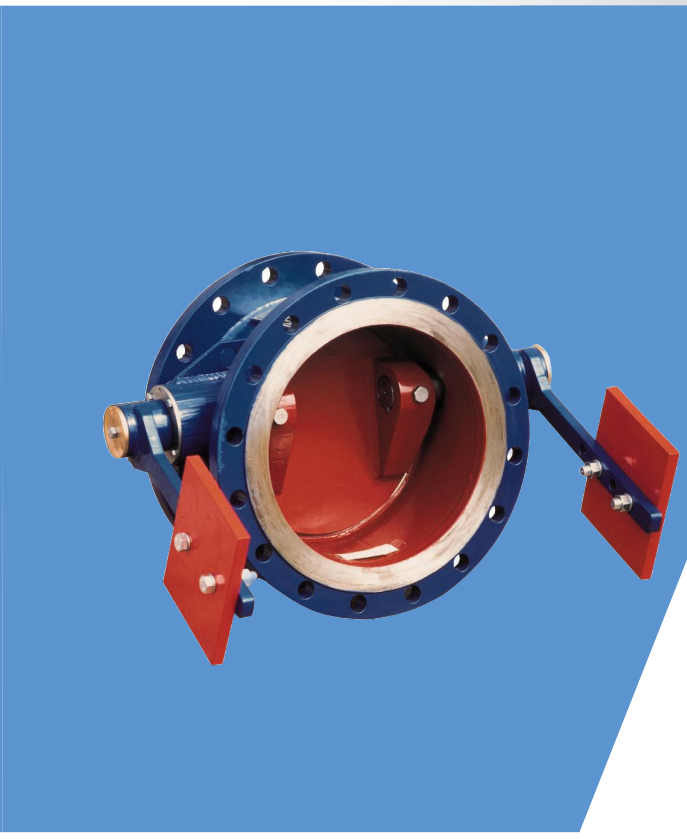
RAPHAEL



E51 Series

TILTING DISC CHECK VALVE

Waterworks Product Catalog

RAPHAEL VALVES INDUSTRIES

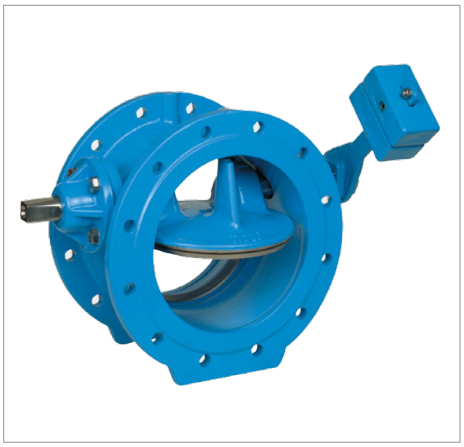
E51-09 Series

TILTING DISC CHECK VALVES

The check valve is designed for use in infrastructure and industrial water supply systems.

The design of the valve disc and its supports create a double-offset free-swinging disc to ensure a low operating torque and a low wear of the disc seal.

Eccentric design with one or two counterwe ights.



FEATURES

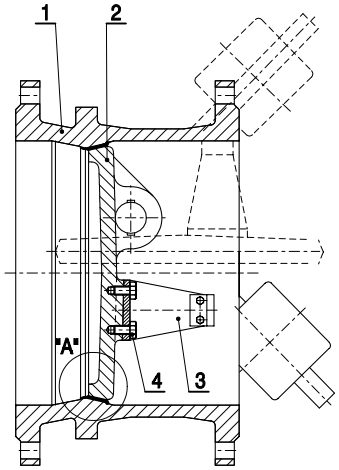
- Metal to metal sealing in bronze or stainles ssteel
- Double Flan ged body to DIN, ANSI, JIS,AWWA
- Self lubric ating shaft bearings to allow fast closing
- Robust con struction with external and internal epoxy body a nticorrosion coating to high industrial standard.
- Optionally can be equipped with hydraulic dampers
- Construction is in accordance o applicable EN and DIN norms

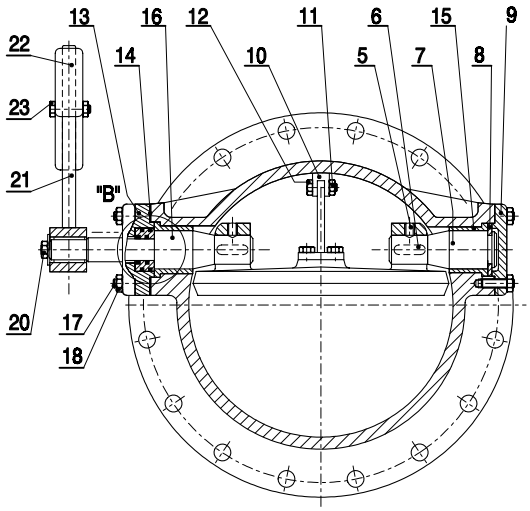
PERFORMANCE

Sizes (mm) :	DU 200 - DU 1600
Working pressure range:	PN6 – PN40
Working Temperature:	29C – 150C
Flange Drilling:	DIN/BS/ ANSI/AWWA

DESCRIPTION & TECHNICAL DATA

NOMINAL SIZE	PRESSURE RATING	FLANGES EN 1092-2	12266 TEST PRESSURE ACC. TO EN 12266 bar	
DN	PN bar	bar	BODY	CLOSED
200-1600	10	10	15	11
200-1600	16	16	24	17.6
200-800	25	25	37.5	27.5
200-400	40	40	60	44



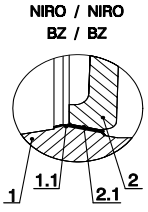


CONSTRUCTION MATERIALS

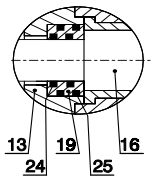
No.	MATERIAL ACC TO EN	MATERIAL ACC TO DIN
1	EN-GJS-500-7	GGG 50
1.1	Cr Ni PLASMA	Cr Ni PLASMA
	--	CuAl 8
2	EN-GJS-500-7	GGG 50
2.1	Cr Ni PLASMA	Cr Ni PLASMA
	--	CuAl 8
3	S235JR	St 37-2
4	A2	A2
5	A2	A2
6	C 45 / A2	C 45 / A2
7	X20 Cr13	X20 Cr13
8	CC491K	CuSn 5 ZnPb
9	EN-GJS-500-7	GGG 50
10	EPDM	EPDM
11	A2	A2

No.	MATERIAL ACC TO EN	MATERIAL ACC TO DIN
12	A2	A2
13	EN-GJS-500-7	GGG 50
14	ARAMID	ARAMID
15	CC 480 K	CuSn 10
	PTFE - Compound	PTFE - Compound
16	X20Cr13	X20Cr13
17	8.8 gal. Zn / A2	8.8 gal. Zn / A2
18	8 gal. Zn / A2	8 gal. Zn / A2
19	CC 480 K	CuSn 10
20	8.8 gal. Zn / A2	8.8 gal. Zn / A2
21	S235JR	St 37-2
22	EN-GJL-250	GG 25
23	8.8 gal. Zn / A2	8.8 gal. Zn / A2
24	EPDM	EPDM
25	EPDM	EPDM

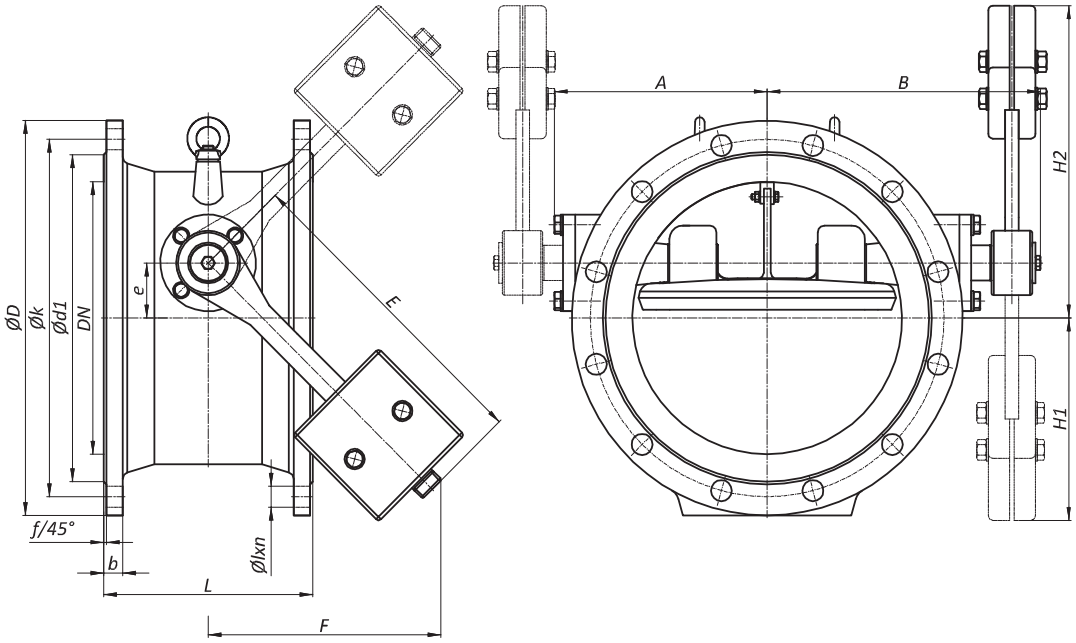
DETAIL A



DETAIL B



DESCRIPTION & TECHNICAL DATA



PN10

DN	L	D	k	d1	n	l	b	f	e	A	B	F	E	H1	H2	m (kg)
200	230	340	295	266	8	23	20	3	40	204.5	254.5	213	300	213	293	54
250	250	395	350	319	12	23	22	3	48	237	306	213	300	205	301	70
300	270	445	400	370	12	23	24.5	4	62	260	400	319	450	305	429	95
350	290	505	460	429	16	23	24.5	4	70	276	359	319	450	298	438	140
400	310	565	515	480	16	28	24.5	4	81	315	446.5	425	600	407	569	190
450	330	615	565	530	20	28	25.5	4	90	360	454.5	425	600	398	578	210
500	350	670	620	582	20	28	26.5	4	100	365	464	425	600	388	588	240
600	390	780	725	682	20	31	30	5	124	500	622	460	650	421	669	360
700	430	895	840	794	24	31	32.5	5	145	480	610	531	750	471	761	520
800	470	1015	950	901	24	34	35	5	165	550	670	601	850	521	851	650
900	510	1115	1050	1001	28	34	37.5	5	160	606	855	691	980	636	956	910
1000	550	1230	1160	1112	28	37	40	5	203	642.5	810	601	850	499	905	1200
1200	630	455	1380	1218	32	41	45	5	300	800	940	750	1100	609	1209	2000

* other nominal sizes on request

DESCRIPTION & TECHNICAL DATA

PN16

DN	L	D	k	d1	n	l	b	f	e	A	B	F	E	H1	H2	m (kg)
200	230	340	295	266	12	23	20	3	40	204.5	254.5	213	300	213	293	54
250	250	405	355	319	12	28	22	3	48	237	306	213	300	205	301	70
300	270	460	410	370	12	28	24.5	4	62	26	0400	319	45	305	429	95
350	290	520	470	429	16	28	26.5	4	70	276	359	319	450	298	438	140
400	310	580	525	480	16	31	28	4	81	315	446.5	425	600	407	569	190
450	330	640	585	548	20	31	30	4	90	360	454.5	425	600	398	578	210
500	350	715	650	609	20	34	31.5	4	100	365	464	425	600	388	588	240
600	390	840	770	720	20	37	36	5	124	500	622	460	650	421	669	360
700	430	910	840	794	24	37	39.5	5	145	480	610	531	750	471	761	520
800	470	1025	950	901	24	41	43	5	165	550	670	601	850	521	851	650
900	510	1125	1050	1001	28	41	46.5	5	160	606	855	691	980	636	956	910
1000	550	1255	1170	1112	28	44	50	5	203	642.5	810	601	850	499	905	1200
1200	630	1485	1390	1218	32	50	57	5	300	800	940	750	1100	609	1209	2000

* other nominal sizes on request

PN25

DN	L	D	k	d1	n	l	b	f	e	A	B	F	E	H1	H2	m (kg)
200	230	360	310	274	12	28	22	3	40	204.5	254.5	213	300	213	293	60
250	250	425	370	330	12	31	24.5	3	48	237	306	213	300	205	301	77
300	270	485	430	389	16	31	27.5	4	62	26	0400	319	45	305	429	105
350	290	555	490	448	16	34	30	4	70	276	359	319	450	298	438	153
400	310	620	550	503	16	38	32	4	81	315	446.5	425	600	407	569	200
500	350	730	660	609	20	38	36.5	4	100	365	464	425	600	388	588	264
600	390	845	770	720	20	41	42	5	124	500	622	460	650	421	669	396
700	430	960	875	820	24	44	46.5	5	145	480	610	531	750	471	761	572
800	470	1085	990	928	24	50	51	5	165	550	670	601	850	521	851	715

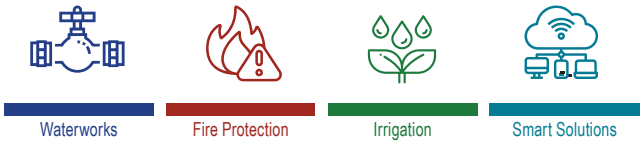
* other nominal sizes on request

PN40

DN	L	D	k	d1	n	l	b	f	e	A	B	F	E	H1	H2	m (kg)
200	230	375	320	284	12	31	30	3	40	204.5	254.5	213	300	213	293	64
250	250	450	385	345	12	34	34.5	3	48	237	306	213	300	205	301	85
300	270	515	450	409	16	34	39.5	4	62	260	400	319	450	305	429	110
350	290	580	510	465	16	38	44	4	70	276	359	319	450	298	438	158
400	310	660	585	535	16	41	48	4	81	315	446.5	425	600	407	569	210

* other nominal sizes on request

RAPHAEL, founded in 1949, is the first Israeli manufacturer of water control valves. RAPHAEL´s research department constantly strives to introduce new and innovative products and solutions for water control systems including water works, fire-protection and irrigation systems.



RAPHAEL

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