

Concentric Butterfly Valve to DIN/EN Lug Type

PN10, DN40 ~ DN500

Series 81L(E)-PN10

Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

PMA: See Table A

TMA: See Table B

Selection:

Material of Body:
CF8M/CF8/CI/DI

Standards

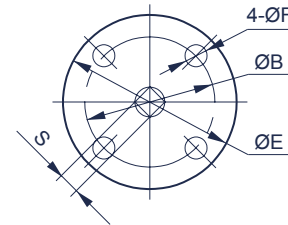
- End dimensions acc. to DIN2633
- Inspection & test acc. to EN12266

Limitation

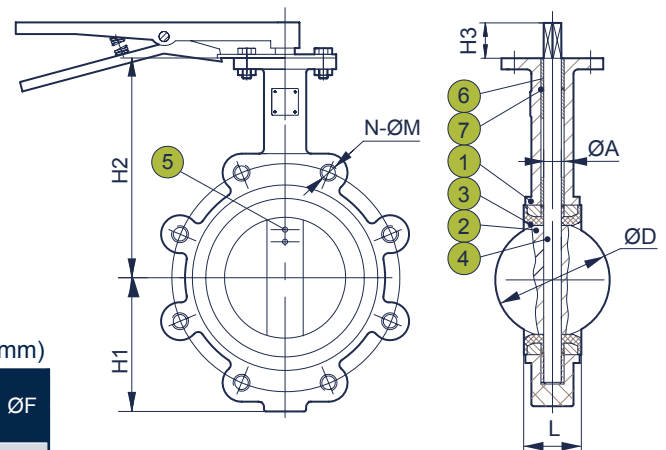
- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes $\geq 4"$.
- End-of-line service at half rating

Options

- Double "half pin" style available for increased performance and lifecycle
- Coated disc available in: rubber, PTFE, nylon



DN40-DN500



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Materials List		
NO	PARTS NAME	MATERIAL
1	BODY	CF8M / CF8 / CI / DI
2	DISC*	CF8M / CF8 / CI / DI
3	SEAT	NBR / EPDM / VITON
4	STEM	SS410
5	TAPER PIN	SS
6	BUSHING	PTFE
7	O-RING	EPDM

*Coated disc option available.
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

Dimensions (mm)

Size		H1	H2	H3	L	ØD	ØC	N-ØM	ØA	S	ØE	ØB	ØF
IN	DN												
1½"	40	70	110	32	35	42.4	110	4-M16	12.7	9	92	70	9
2"	50	76	162	32	45	52.9	125	4-M16	12.7	9	92	70	9
2½"	65	80	175	32	48	64.6	145	4-M16	12.7	9	92	70	9
3"	80	95	181	32	49	79.04	160	4-M16	12.7	9	92	70	9
4"	100	114	200	32	55	104.4	180	8-M16	15.8	11	92	70	9
5"	125	127	213	32	58	129.5	210	8-M16	19.05	14	92	70	9
6"	150	140	225	32	59	155.8	240	8-M20	19.05	14	92	70	9
8"	200	173	260	36	64	202.7	295	8-M20	22.2	17	125	102	11
10"	250	203	292	36	70	250.7	350	12-M20	28.6	22	125	102	11
12"	300	237	337	36	80	301.9	400	12-M20	31.8	22	150	125	13
14"	350	279	368	45	80	333.3	460	16-M20	31.8	22	150	125	13
16"	400	304	400	51	90	389.6	515	16-M20	33.3	22	210	165	22
18"	450	362	422	51	109	439.9	565	20-M24	38.0	27	210	165	22
20"	500	368	479	64	135	491.6	620	20-M24	41.15	27	210	165	22

Table B: Temperature Rating

SEAT	APPLICABLE TEMPERATURE
NBR	-20°C to +80°C(-4°F to 176°F)
EPDM	-20°C to +120°C(-4°F to 248°F)
VITON	-10°C to +200°C(+14°F to 392°F)
PTFE	-20°C to +150°C(-4°F to 302°F)

Concentric Butterfly Valve to DIN/EN Lug Type

PN10, DN600 ~ DN1000

Series 81L(E)-PN10

Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

Standards

- End dimensions acc. to DIN2633
- Inspection & test acc. to EN12266

Limitation

- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes $\geq 4"$.
- End-of-line service at half rating

Options

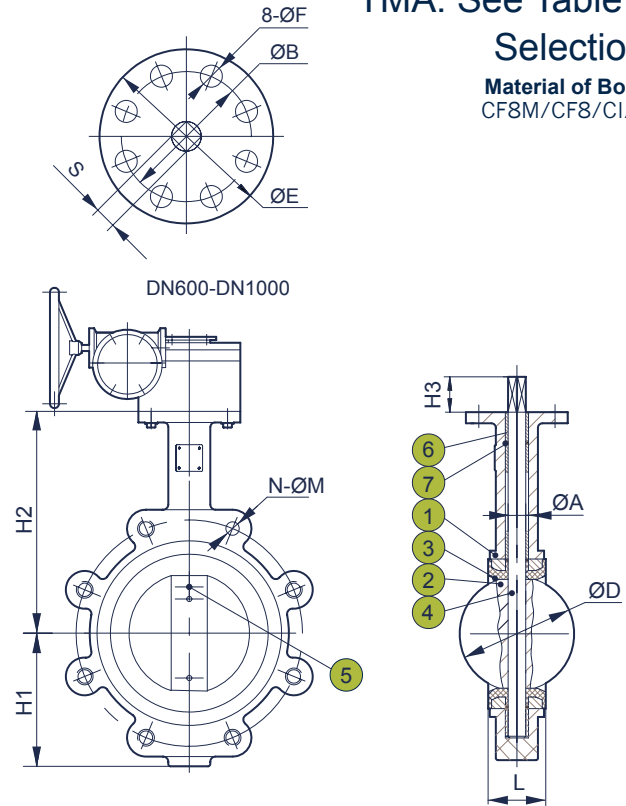
- Double "half pin" style available for increased performance and lifecycle
- Coated disc available in: rubber, PTFE, nylon

PMA: See Table A

TMA: See Table B

Selection:

Material of Body:
CF8M/CF8/CI/DI



Materials List		
NO	PARTS NAME	MATERIAL
1	BODY	CF8M / CF8 / CI / DI
2	DISC*	CF8M / CF8 / CI / DI
3	SEAT	NBR / EPDM / VITON
4	STEM	SS410
5	TAPER PIN	SS
6	BUSHING	PTFE
7	O-RING	EPDM

*Coated disc option available.
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

Table A: Maximum Pressure Rating			
SIZE	RUBBER SEAT	PTFE SEAT	PTFE SEAT+ PTFE COATED DISC
\leq DN150 (6")	13.7 bar (200psi)	13.7 bar (200psi)	10.3 bar (150 psi)
DN200 (8")	13.7 bar (200psi)	10.3 bar (150 psi)	10.3 bar (150 psi)
DN250(10")~ DN300(12")	13.7 bar (200psi)	10.3 bar (150 psi)	6.9 bar (100 psi)
DN350(14")~ DN600(24")	10.3 bar (150 psi)	6.9 bar (100 psi)	6.9 bar (100 psi)
\geq DN600 (24")	6.9 bar (100 psi)	-	-
Gear Operation Recommendation	\geq DN300 (12")	\geq DN150 (6")	\geq DN100 (4")

Size		Dimensions (mm)											
IN	DN	H1	H2	H3	L	ØD	ØC	N-ØM	ØA	S	ØE	ØB	ØF
24"	600	444	562	70	156	592.3	725	20-M27	50.65	36	300	254	18
28"	700	520	630	70	156	694.1	840	24-M27	63.35	40	300	254	18
30"	750	621	648	72	169	744.2	-	-	63.35	40	300	254	18
32"	800	590	690	72	169	794.2	950	24-M30	63.35	40	300	254	18
36"	900	623	768	77	211	863.4	1050	28-M30	74.25	53	300	254	18
40"	1000	670	850	77	211	963.4	1160	28-M33	84.2	60	300	254	18

Table B: Temperature Rating	
SEAT	APPLICABLE TEMPERATURE
NBR	-20°C to +80°C(-4°F to 176°F)
EPDM	-20°C to +120°C(-4°F to 248°F)
VITON	-10°C to +200°C(+14°F to 392°F)
PTFE	-20°C to +150°C(-4°F to 302°F)

Concentric Butterfly Valve to DIN/EN Lug Type

PN16, DN40 ~ DN500

Series 81L(E)-PN16

Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

PMA: See Table A

TMA: See Table B

Selection:

Material of Body:
CF8M/CF8/CI/DI

Standards

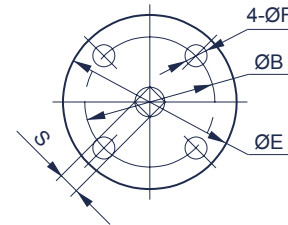
- End dimensions acc. to DIN2633
- Inspection & test acc. to EN12266

Limitation

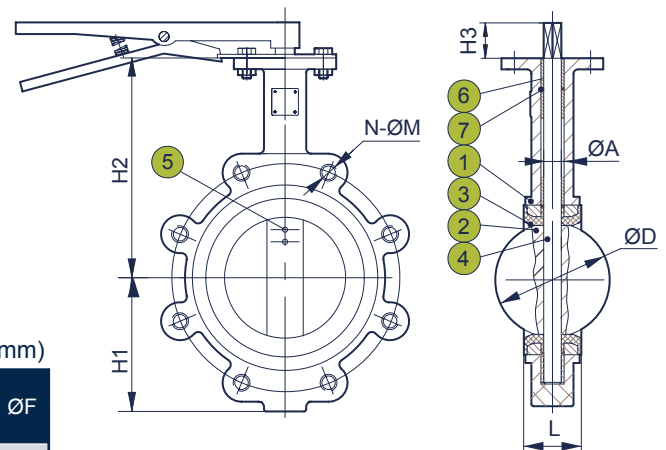
- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes $\geq 4"$.
- End-of-line service at half rating

Options

- Double "half pin" style available for increased performance and lifecycle
- Coated disc available in: rubber, PTFE, nylon



DN40-DN500



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Materials List		
NO	PARTS NAME	MATERIAL
1	BODY	CF8M / CF8 / CI / DI
2	DISC*	CF8M / CF8 / CI / DI
3	SEAT	NBR / EPDM / VITON
4	STEM	SS410
5	TAPER PIN	SS
6	BUSHING	PTFE
7	O-RING	EPDM

*Coated disc option available.
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

Dimensions (mm)

Size		H1	H2	H3	L	ØD	ØC	N-ØM	ØA	S	ØE	ØB	ØF
IN	DN												
1½"	40	70	110	32	35	42.4	110	4-M16	12.7	9	92	70	9
2"	50	76	162	32	45	52.9	125	4-M16	12.7	9	92	70	9
2½"	65	80	175	32	48	64.6	145	4-M16	12.7	9	92	70	9
3"	80	95	181	32	49	79.04	160	8-M16	12.7	9	92	70	9
4"	100	114	200	32	55	104.4	180	8-M16	15.8	11	92	70	9
5"	125	127	213	32	58	129.5	210	8-M16	19.05	14	92	70	9
6"	150	140	225	32	59	155.8	240	8-M20	19.05	14	92	70	9
8"	200	173	260	36	64	202.7	295	12-M20	22.2	17	125	102	11
10"	250	203	292	36	70	250.7	355	12-M24	28.6	22	125	102	11
12"	300	237	337	36	80	301.9	410	12-M24	31.8	22	150	125	13
14"	350	279	368	45	80	333.3	470	16-M24	31.8	22	150	125	13
16"	400	304	400	51	90	389.6	525	16-M27	33.3	22	210	165	22
18"	450	362	422	51	109	439.9	585	20-M27	38.0	27	210	165	22
20"	500	368	479	64	135	491.6	650	20-M30	41.15	27	210	165	22

Table B: Temperature Rating

SEAT	APPLICABLE TEMPERATURE
NBR	-20°C to +80°C(-4°F to 176°F)
EPDM	-20°C to +120°C(-4°F to 248°F)
VITON	-10°C to +200°C(+14°F to 392°F)
PTFE	-20°C to +150°C(-4°F to 302°F)

Concentric Butterfly Valve to DIN/EN Lug Type

PN16, DN600 ~ DN1000

Series 81L(E)-PN16

Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

Standards

- End dimensions acc. to DIN2633
- Inspection & test acc. to EN12266

Limitation

- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes $\geq 4"$.
- End-of-line service at half rating

Options

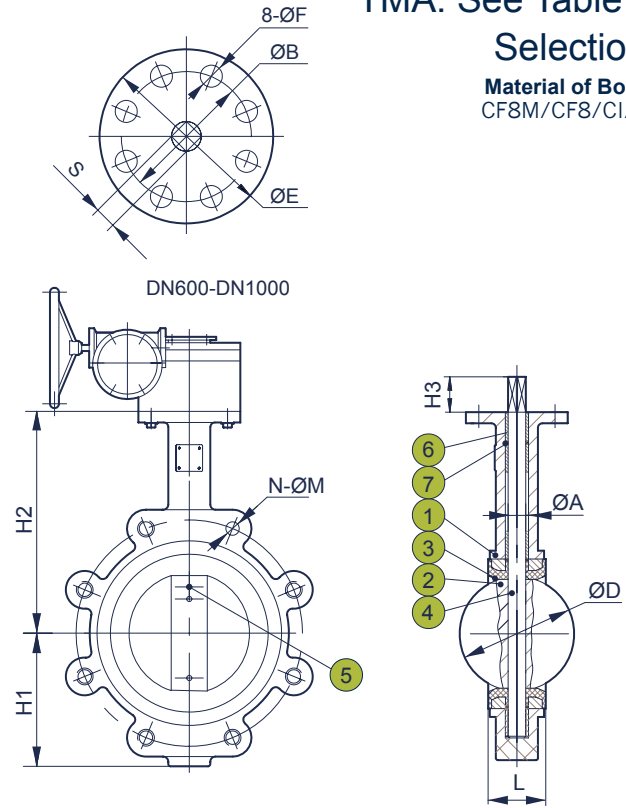
- Double "half pin" style available for increased performance and lifecycle
- Coated disc available in: rubber, PTFE, nylon

PMA: See Table A

TMA: See Table B

Selection:

Material of Body:
CF8M/CF8/CI/DI



Materials List		
NO	PARTS NAME	MATERIAL
1	BODY	CF8M / CF8 / CI / DI
2	DISC*	CF8M / CF8 / CI / DI
3	SEAT	NBR / EPDM / VITON
4	STEM	SS410
5	TAPER PIN	SS
6	BUSHING	PTFE
7	O-RING	EPDM

*Coated disc option available.
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

Table A: Maximum Pressure Rating			
SIZE	RUBBER SEAT	PTFE SEAT	PTFE SEAT+ PTFE COATED DISC
\leq DN150 (6")	13.7 bar (200psi)	13.7 bar (200psi)	10.3 bar (150 psi)
DN200 (8")	13.7 bar (200psi)	10.3 bar (150 psi)	10.3 bar (150 psi)
DN250(10")~ DN300(12")	13.7 bar (200psi)	10.3 bar (150 psi)	6.9 bar (100 psi)
DN350(14")~ DN600(24")	10.3 bar (150 psi)	6.9 bar (100 psi)	6.9 bar (100 psi)
\geq DN600 (24")	6.9 bar (100 psi)	-	-
Gear Operation Recommendation	\geq DN300 (12")	\geq DN150 (6")	\geq DN100 (4")

Size		Dimensions (mm)											
IN	DN	H1	H2	H3	L	ØD	ØC	N-ØM	ØA	S	ØE	ØB	ØF
24"	600	444	562	70	156	592.3	770	20-M33	50.65	36	300	254	18
28"	700	520	630	70	156	694.1	840	24-M33	63.35	40	300	254	18
30"	750	621	648	72	169	744.2	-	-	63.35	40	300	254	18
32"	800	590	690	72	169	794.2	950	24-M36	63.35	40	300	254	18
36"	900	623	768	77	211	863.4	1050	28-M36	74.25	53	300	254	18
40"	1000	670	850	77	211	963.4	1170	28-M39	84.2	60	300	254	18

Table B: Temperature Rating	
SEAT	APPLICABLE TEMPERATURE
NBR	-20°C to +80°C(-4°F to 176°F)
EPDM	-20°C to +120°C(-4°F to 248°F)
VITON	-10°C to +200°C(+14°F to 392°F)
PTFE	-20°C to +150°C(-4°F to 302°F)

Concentric Butterfly Valve to ANSI/ASME Lug Type

CLASS125/CLASS150, 1½" ~ 20"

Series 81L(E)-CL125/CL150

Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

PMA: See Table A

TMA: See Table B

Selection:

Material of Body:
CF8M/CF8/CI/DI

Standards

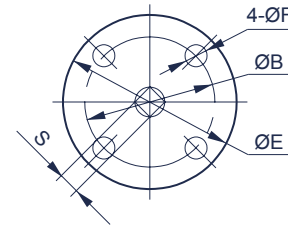
- End dimensions acc. to B16.5 (<28") and B16.47A (≥28")
- Inspection & test acc. to API598

Limitation

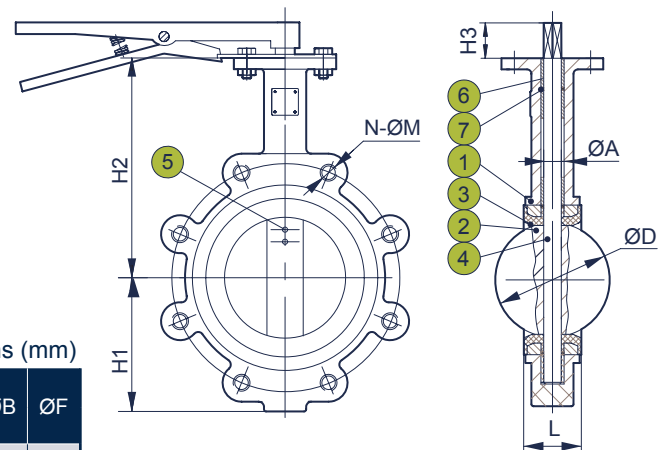
- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes ≥ 4".
- End-of-line service at half rating

Options

- Double "half pin" style available for increased performance and lifecycle
- Coated disc available in: rubber, PTFE, nylon



DN40-DN500



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Materials List		
NO	PARTS NAME	MATERIAL
1	BODY	CF8M / CF8 / CI / DI
2	DISC*	CF8M / CF8 / CI / DI
3	SEAT	NBR / EPDM / VITON
4	STEM	SS410
5	TAPER PIN	SS
6	BUSHING	PTFE
7	O-RING	EPDM

*Coated disc option available.
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

Dimensions (mm)

Size		H1	H2	H3	L	ØD	ØC	N-ØM	ØA	S	ØE	ØB	ØF
IN	DN												
1½"	40	70	110	32	35	42.4	98.5	4-1/2"-13	12.7	9	92	70	9
2"	50	76	162	32	45	52.9	120.5	4-5/8"-11	12.7	9	92	70	9
2½"	65	80	175	32	48	64.6	139.5	4-5/8"-11	12.7	9	92	70	9
3"	80	95	181	32	49	79.04	152.5	4-5/8"-11	12.7	9	92	70	9
4"	100	114	200	32	55	104.4	190.5	8-5/8"-11	15.8	11	92	70	9
5"	125	127	213	32	58	129.5	216.0	8-3/4"-10	19.05	14	92	70	9
6"	150	140	225	32	59	155.8	241.5	8-3/4"-10	19.05	14	92	70	9
8"	200	173	260	36	64	202.7	298.5	8-3/4"-10	22.2	17	125	102	11
10"	250	203	292	36	70	250.7	362.0	12-7/8"-9	28.6	22	125	102	11
12"	300	237	337	36	80	301.9	432.0	12-7/8"-9	31.8	22	150	125	13
14"	350	279	368	45	80	333.3	476.0	12-1"-8	31.8	22	150	125	13
16"	400	304	400	51	90	389.6	539.5	16-1"-8	33.3	22	210	165	22
18"	450	362	422	51	109	439.9	578.0	16-1½"-7	38.0	27	210	165	22
20"	500	368	479	64	135	491.6	635.0	20-1½"-7	41.15	27	210	165	22

Table B: Temperature Rating

SEAT	APPLICABLE TEMPERATURE
NBR	-20°C to +80°C (-4°F to 176°F)
EPDM	-20°C to +120°C (-4°F to 248°F)
VITON	-10°C to +200°C (+14°F to 392°F)
PTFE	-20°C to +150°C (-4°F to 302°F)

Concentric Butterfly Valve to ANSI/ASME Lug Type

CLASS125/CLASS150, 24" ~ 40"

Series 81L(E)-PN125/CL150

Features

- Suitable for use in HVAC, irrigation, industrial applications where positive shutoff is required
- Single through-put shaft provides most economical pricing
- 10 position lever or gear operation
- Alloy material available on request

Standards

- End dimensions acc. to B16.5 (<28") and B16.47A (≥28")
- Inspection & test acc. to API598

Limitation

- Do not use EPDM when hydrocarbons are present.
- Kindly anticipate increased torque for PTFE coated disc + PTFE seat option; gear operation recommended for sizes ≥ 4".
- End-of-line service at half rating

Options

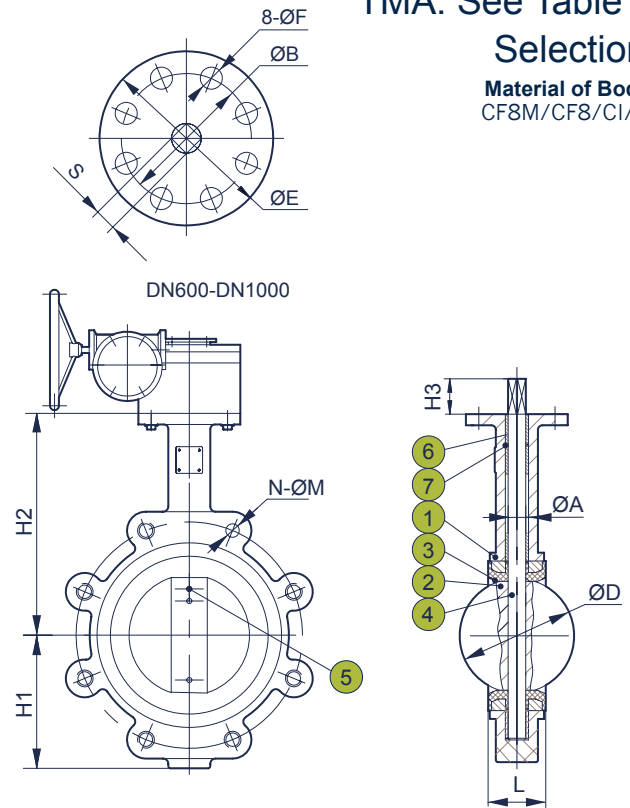
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- Coated disc available in: rubber, PTFE, nylon

PMA: See Table A

TMA: See Table B

Selection:

Material of Body:
CF8M/CF8/CI/DI



Materials List		
NO	PARTS NAME	MATERIAL
1	BODY	CF8M / CF8 / CI / DI
2	DISC*	CF8M / CF8 / CI / DI
3	SEAT	NBR / EPDM / VITON
4	STEM	SS410
5	TAPER PIN	SS
6	BUSHING	PTFE
7	O-RING	EPDM

*Coated disc option available.
Enclosed a condensed table, for complete options, contact DIE ERSTE directly.

Table A: Maximum Pressure Rating			
SIZE	RUBBER SEAT	PTFE SEAT	PTFE SEAT+ PTFE COATED DISC
≤ DN150 (6")	13.7 bar (200psi)	13.7 bar (200psi)	10.3 bar (150 psi)
DN200 (8")	13.7 bar (200psi)	10.3 bar (150 psi)	10.3 bar (150 psi)
DN250(10")~ DN300(12")	13.7 bar (200psi)	10.3 bar (150 psi)	6.9 bar (100 psi)
DN350(14")~ DN600(24")	10.3 bar (150 psi)	6.9 bar (100 psi)	6.9 bar (100 psi)
≥ DN600 (24")	6.9 bar (100 psi)	-	-
Gear Operation Recommendation	≥ DN300 (12")	≥ DN150 (6")	≥ DN100 (4")

Size		Dimensions (mm)											
IN	DN	H1	H2	H3	L	ØD	ØC	N-ØM	ØA	S	ØE	ØB	ØF
24"	600	444	562	70	156	592.3	749.5	20-1¼"-7	50.65	36	300	254	18
28"	700	520	630	70	156	694.1	-	-	63.35	40	300	254	18
30"	750	621	648	72	169	744.2	914.5	28-1¼"-7	63.35	40	300	254	18
32"	800	590	690	72	169	794.2	-	-	63.35	40	300	254	18
36"	900	623	768	77	211	863.4	1086.0	32-1½"-6	74.25	53	300	254	18
40"	1000	670	850	77	211	963.4	-	-	84.2	60	300	254	18

Table B: Temperature Rating	
SEAT	APPLICABLE TEMPERATURE
NBR	-20°C to +80°C(-4°F to 176°F)
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