

## INNOVATION

### NEW-GENERATION SEAL

- Seal life improved optimizing actuating torque
- Tightness under pressure to **18 bar** depending on pressure

## EASIER MAINTENANCE

- Interchangeable seals (for valves produced after 2009)
- Seal maintenance made easier by chamfered external profile

## SIMPLIFIED IDENTIFICATION

- Seal marking:

DEFINOX – DN – DPX3 – production date and seal reference 7-----

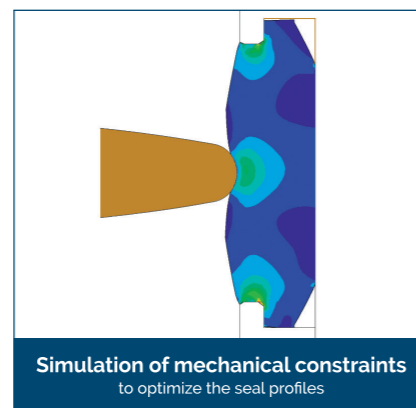
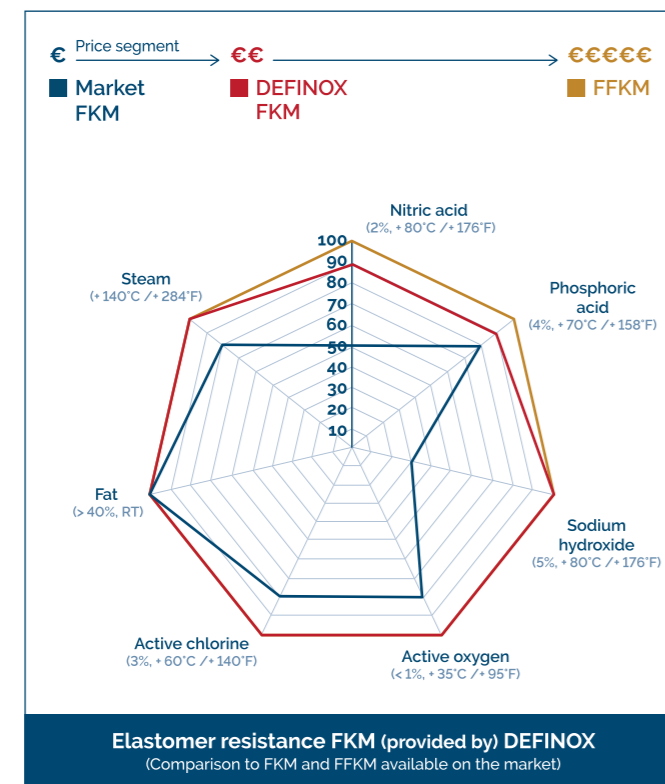
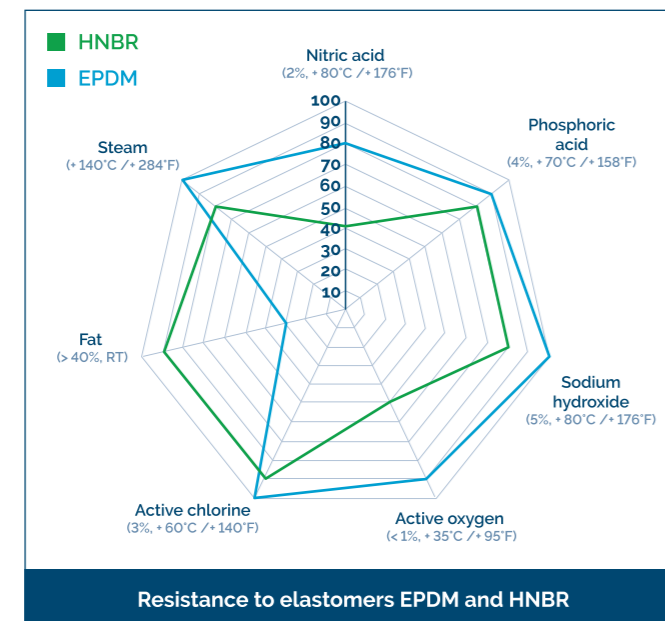
- Valve and disc marking



Butterfly valve NM-039  
maintenance manual



Components dimensions  
NDT-241



- IMPROVED RESISTANCE AND PERFORMANCE
- HYGIENIC DESIGN
- EASIER MAINTENANCE
- EXCELLENT SERVICE LIFE
- INTERCHANGEABLE SEAL



## THE DEFINOX APPLICATION FOR AUGMENTED REALITY

DEFINOX is revolutionizing valve maintenance and monitoring.

- Easier identification of valves and spare parts
- Saves time on valve fleet management
- Safe maintenance with tutorials
- Immediate access to all information
- Reduced risk of error

DOWNLOAD the mobile app



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# DPX3

# TECHNICAL GUIDE

## NEW GENERATION BUTTERFLY VALVE



### CONTENTS

- Selection guide
- Performance
- Dimensions
- Maintenance



# NEW GENERATION DPX3 BUTTERFLY VALVE



## A HIGH-PERFORMANCE HYGIENIC DESIGN

The DPX3 line of butterfly valves benefits from a high-performance hygienic design thanks to its component geometry without a retention zone, combined with new-generation seals.

### EHEDG CERTIFIED SOLUTION

EHEDG certified valve and seal

### NEW CERTIFIED SEAL

DPX3	EPDM	FKM	HNBR
<b>CERTIFICATIONS</b>			
FDA 21 CFR 177.2600	✓	✓	✓
CE 1935 / 2004	✓	✓	✓
ADI free	✓	✓	✓
3-A@ Sanitary Standards	✓	✓	✓
USP Ch. 87 and Ch. 88 - Class VI	-	✓	-
NSF 51	-	✓	-
BNIC	-	✓	-

\*\* with maximum alcohol concentration to 10%

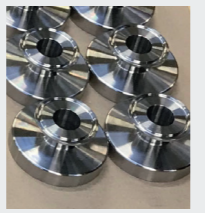
### OPERATING DEVICES

- Manual version: full stainless-steel handle, customizable sleeve
- Other versions: micrometric - with detection - lockable - multiposition handle
- Automatic version: pneumatic actuator (easily transformed into NO: Normally Open - NC: Normally Closed or Double acting)

### CONNECTION OPTIONS

Liner part + nut • Threaded part • Solid machined clamp according to DIN standard 11851 or DIN aseptic 11864

Norms for tube  
 DIN DIN11850 Serie 2  
 US ASME BPE 2009  
 SMS EN10357 Serie D



Solid machined clamp

## EXCELLENT OPERATING PERFORMANCE

3 SEAL TYPES to cover any need in the food, pharmaceutical or cosmetic industry.

DPX3 seals have an excellent service life. The quality of the latest-generation elastomers improve their chemical resistance.

The body thickness can support thermal distortion stresses associated with welds.

The seal profile is designed to support distortion stresses on the full temperature range.



### EPDM

For applications with water, steam, acids and bases (not suitable for fats).  
 The most widespread solution in the food industry.



### FKM

Excellent resistance to oils, fats and chemical products (concentrated acids, bases and peroxides).  
 Good resistance to high temperatures.



### HNBR

Good resistance to oils and fats.  
 Average resistance to CIP/SIP.

	EPDM		FKM		HNBR	
<b>COLOR</b>	Black		Blue		Green	
<b>INFORMATION</b>	For application with water, steam, acids and bases. Not suitable for fats. The most widespread solution in agro-food		Excellent resistance to oils, fats and chemical products (concentrated acids, bases and peroxides). Good resistance to high temperatures.		Good resistance to oils and fats. Average resistance to CIP/SIP.	
<b>PRODUCT</b>	Static	Dynamic	Static	Dynamic	Static	Dynamic
Min. temperature (°C)	-30°C	-10°C	0°C	1°C	-30°C	-10°C
Max. temperature (°C)	150°C	130°C	150°C	130°C	140°C	120°C
<b>STEAM</b>	Static	Dynamic	Static	Dynamic	Static	Dynamic
Max. continuous temperature	140°C	120°C	150°C	130°C	125°C	100°C
Max. temperature flash (15-20 min)	160°C	-	170°C	-	145°C	-
<b>CHARACTERISTICS / RESISTANCE</b>						
Oils	★		★★		★★	
Fats*	★* [see fig. 1]		★★		★★	
CIP	★★		★★		★	
SIP	up to 140°C		up to 120°C		up to 125°C	
Aggressive chemical products	★		★★		★	
Essential oils and concentrated perfumes	★		★★		★	
Abrasion resistance	★		★		★★	
Elasticity	★★		★		★★	
Low temperatures	★★		★		★★	

\* for a water flow based on a speed of 2 m/s

★★ Very good    ★ Correct    ★ Low performance

SERVICE CONDITIONS			MAX. PRESSURE (bar) static	MAX. PRESSURE (bar) dynamic*	Greased actuating torque per sec (Nm) EPDM-FKM-HNBR	Greased actuating torque per sec (Nm) EPDM-FKM-HNBR	Pressure drop Kv SMS - DIN - US	Max. a particle passage (mm)
SMS	DIN	US						
25	25	1"	18	14	1 - 2 - 1	2 - 2 - 2	42 - 49 - 42	8
38	40	1 1/2"	18	14	3 - 4 - 3	5 - 5 - 5	78 - 85 - 78	14
51	50	2"	16	14	4 - 6 - 4	7 - 7 - 6	185 - 190 - 185	20
63	65	2 1/2"	14	12	6 - 9 - 6	8 - 10 - 8	360 - 395 - 360	26
76	80	3"	14	12	13 - 19 - 13	18 - 24 - 18	430 - 552 - 430	32
104	100	4"	12	10	16 - 20 - 16	19 - 26 - 19	860	44
-	125	-	10	8	16 - 20 - 16	24 - 28 - 24	1350	53
-	150	6"	10	8	25 - 29 - 25	32 - 35 - 32	1980	64

OTHER CHARACTERISTICS	
Vacuum resistance (static only)	-0.9 bar
PNEUMATIC ACTUATOR	
Min. pressure	4.5 bar
Max. pressure	7 bar
Wetted part with process flow	Stainless steel 1.4404 (316L)
Actuator material	Stainless steel 1.4301 (304)
Operating time DN25/80	3 sec
Operating time DN100/150	6 sec
Air consumption DN25/80	0.33 x [p[bar] NI
Air consumption DN100/150	0.66 x [p[bar] NI

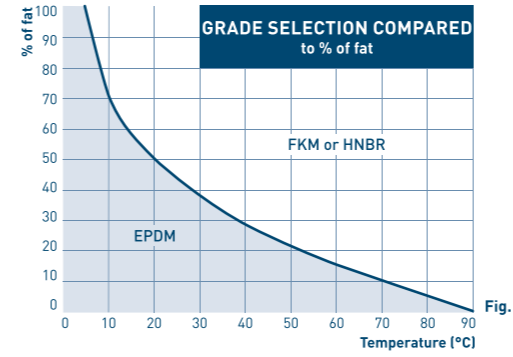


Fig. 1

## COMPONENT DIMENSIONS

HALF-BODY, DISCS AND BUTTERFLY SEALS

DN	DIMENSIONS			REFERENCES
	SMS	DIN	US	
-	25	-	-	
25	-	-	-	
-	-	-	1"	
-	32	-	-	
38	-	-	-	
-	-	-	1 1/2"	
51	-	-	-	
-	-	-	2"	
63	-	-	2 1/2"	
-	65	-	-	
76	-	-	3"	
-	80	-	-	
104	100	-	4"	
-	125	-	-	
-	150	-	-	

DN	DIMENSIONS					REFERENCES
	Ø A	Ø B	Ø C	D	E	
26.1	29	78.9	15	25	7002936	
22.6	25	78.9	15	25	7008838	
22.1	25.4	78.9	15	25	7008832	
32.1	35	78.9	15	25	7002937	
35.6	38	78.9	15	25	7008839	
34.8	38.1	78.9	15	25	7008834	
38.1	41	78.9	15	25	7002938	
50	53	88.9	15	25	7002814	
48.5	51	88.9	15	25	7008840	
47.5	50.8	88.9	15	25	7008836	
60.3	63.5	103.9	15	25	7600051	
66.1	70	118.9	15	25	7009286	
73	76.2	118.9	15	25	7600052	
81.1	85	118.9	15	25	7003545	
100.1	104	148.4	19	29	7002919	
125	129	179	19	29	7002679	
150.1	154	204	19	29	7003149	

PREVIOUS HALF-BODY VERSIONS (BEFORE 2016)

DN	DIMENSIONS			REFERENCES
	SMS	DIN	US	
25	-	-	1"	
38	-	-	1 1/2"	
51	-	-	2"	

DN	DIMENSIONS					REFERENCES
	Ø A	Ø B	Ø C	D	E	
22.2	25.4	78.9	15	25	7600048	
34.9	38.1	78.9	15	25	7600049	
47.6	50.8	88.9	15	25	7600050	

DN	DIMENSIONS				REFERENCES			DIMENSIONS	REFERENCES
	Ø F	G	Ø H	Ø I	FKM	EPDM	HNBR		
41.4	19.2	14.2	25.1	7006528	7006495	7008636	26.6	7002774	
35.3	19.7	10.2	21.1	7008818	7008817	7008819	22.1	7008833	
55.4	20.9	14.2	38.8	7006501	7006496	7008637	40.3	7002775	
48.4	22.7	14.2	34.2	7008821	7008820	7008822	35.1	7008835	
55.4	20.9	14.2	38.8	7006501	7006496	7008637	40.3	7002775	
65.1	20.8	14.2	48.2	7006502	7006660	7008638	50.1	7002776	
61.4	23.7	14.2	47.1	7008824	7008823	7008825	48	7008837	
75.2	25.3	14.2	58.2	7006583	7006497	7008666	59.6	7002777	
83.1	25.4	14.2	63.6	7009291	7009290	7009292	65.1	7009285	
90.5	25.4	14.2	71	7006586	7006498	7008667	72	7002778	
98.5	25.4	14.2	78.7	7006594	7008786	7008668	79.6	7003544	
117.3	31.9	18.3	97.7	7006638	7006662	7008669	98.8	7002912	
150.1	34	18.2	124.7	7006556	7006499	7008678	125	7002781	
175.1	34.2	18.2	149.5	7008543	7008544	7008679	150	7003153	

DN	DIMENSIONS				REFERENCES			DIMENSIONS	REFERENCES
	Ø F	G	Ø H	Ø I	FKM	EPDM	HNBR		
41.4	19.2	14.2	25.1	7006528	7006495	7008636	26.6	7002774	
55.4	20.9	14.2	38.8	7006501	7006496	7008637	40.3	7002775	
65.1	20.8	14.2	48.2	7006502	7006660	7008638	50.1	7002776	

