

FE DN 40÷200

Butterfly valve



N.P.V. EQUIPMENT LTD., PART.





N.P.V. EQUIPMENT LTD., PART.

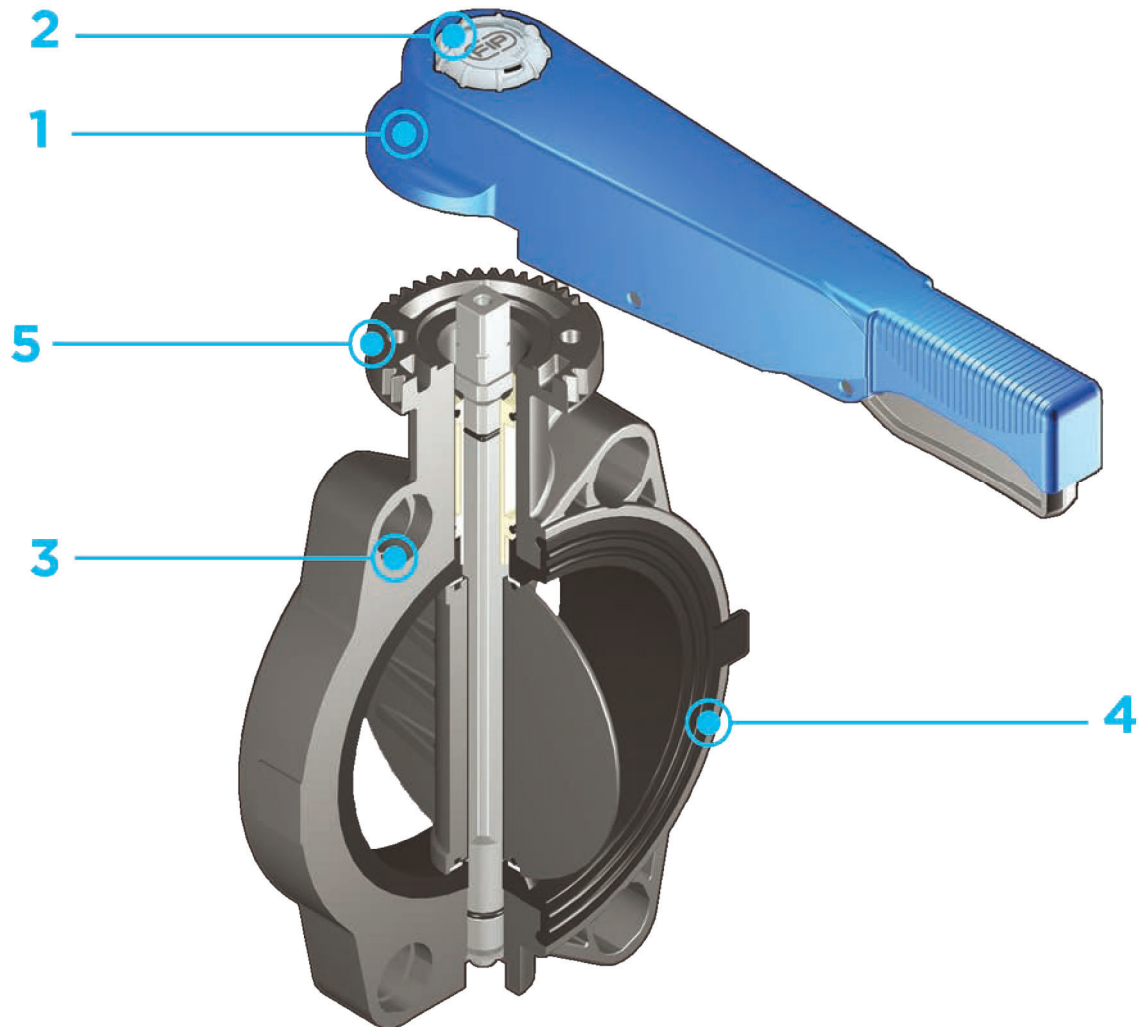
FE DN 40÷200

The FE is a butterfly valve for shutting off or regulating flow, specifically designed for water applications and equipped with a customisable Labelling System.

BUTTERFLY VALVE

- Disk in PVC-U with through shaft
- **Zinc plated square section steel stem completely isolated from the fluid** complying with standard ISO 5211: DN 40 ÷ 65: 11 mm DN 80 ÷ 100: 14 mm DN 125 ÷ 150: 17 mm DN 200: 22 mm
- Can also be installed as a bottom discharge valve or tank dump valve
- **Valve material compatibility** (PVC-U) with water conveyance, drinking water and other food substances according to **current regulations**
- Possibility of directly installing a gearbox or pneumatic and/or electric actuators with a standard drilling pattern according to standard ISO 5211 F05, F07, F10

Technical specifications	
Construction	Bi-directional centric butterfly valve
Size range	DN 40 ÷ 200
Nominal pressure	Wafer version DN 40 ÷ 50: PN 16 with water at 20 °C DN 65÷200: PN 10 with water at 20 °C
Temperature range	0 °C ÷ 60 °C
Reference standards	Flanging system: EN ISO 1452, EN ISO 15493, ISO 7005-1, EN 1092-1, ANSI B16.5 Cl.150, JIS B2220
Riferimenti Reference standards	Construction criteria: EN ISO 16136, EN ISO 1452, EN ISO 15493 Test methods and requirements: ISO 9393 Actuator couplings: ISO 5211
Valve material	Body: PVC-U Disk: PVC-U Stem: Zinc plated carbon steel (C45). On request STAINLESS steel AISI 316
Seal material	Liner: EPDM, FKM. On request NBR
Control options	Hand lever operated; Gearbox, pneumatic actuator, electric actuator



1 Ergonomic multifunctional handle in HIPVC with the option for **quick operation, graduated adjustment** in 12 positions (every 7.5°). 180° reversible mounting

2 Customisable Labelling System: integrated module, made of a transparent protection plug customisable tag holder using the LSE set (available as accessory).

The customisation lets you identify the valve on the system according to the specific needs

3 Drilling pattern with oval slots that allow coupling to flanges according to numerous international standards

4 Interchangeable liner with

the dual function of forming a hydraulic seal and isolating the body from the fluid.

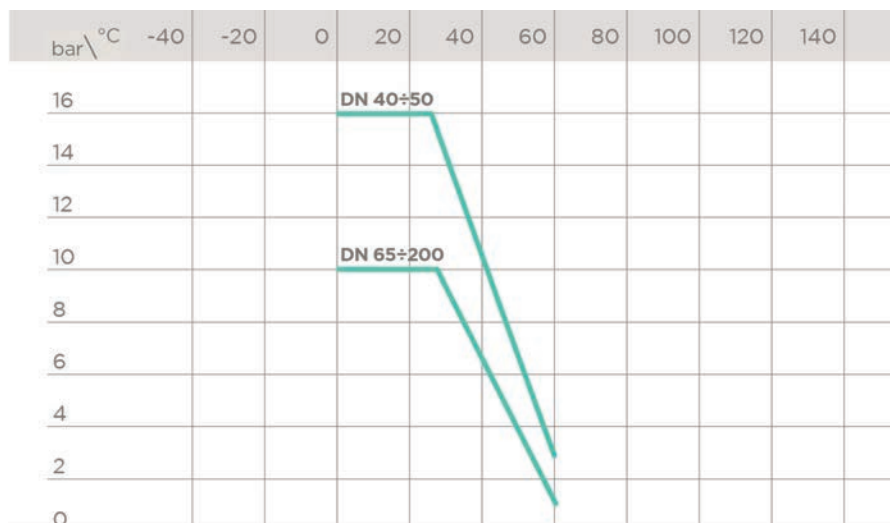
5 One-piece top flange with PVC-U rack. Drilling according to standard ISO 5211 for direct drive:
DN 40 ÷ 65: F05
DN 80 ÷ 150: F07
DN 200: F10

TECHNICAL DATA

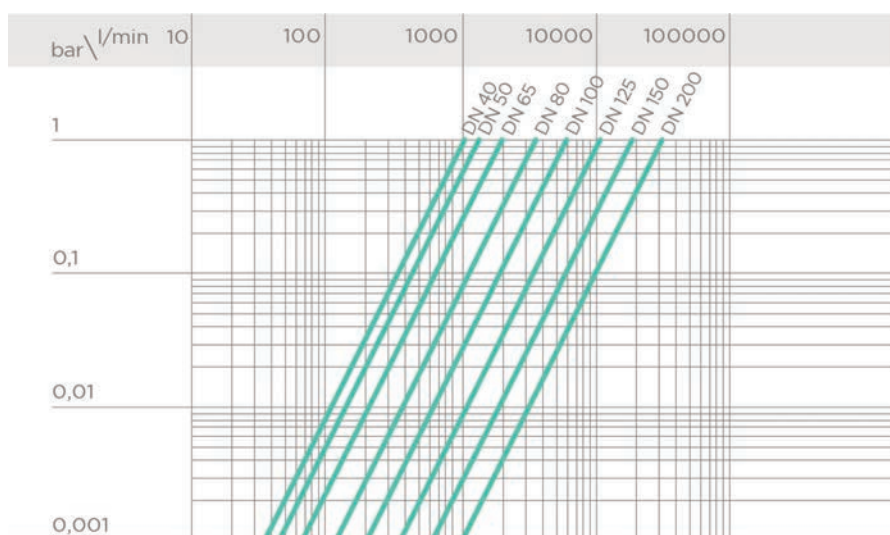


PRESSURE VARIATION ACCORDING TO TEMPERATURE

For water and non-hazardous fluids with regard to which the material is classified as CHEMICALLY RESISTANT. In other cases, a reduction of the nominal pressure PN is required (25 years with safety factor).



PRESSURE DROP GRAPH



K_v 100 FLOW COEFFICIENT

The K_v100 flow coefficient is the Q flow rate of litres per minute of water at a temperature of 20°C that will generate $\Delta p = 1$ bar pressure drop at a certain valve position. The Kv100 values shown in the table are calculated with the valve completely open.

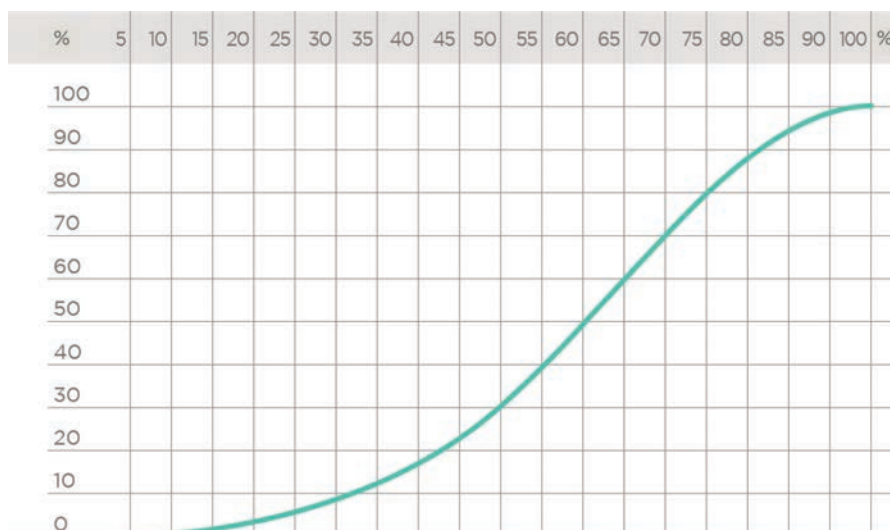
DN	40	50	65	80	100	125	150	200
Kv100 l/min	1000	1285	1700	3550	5900	9850	18700	30500

RELATIVE FLOW COEFFICIENT GRAPH

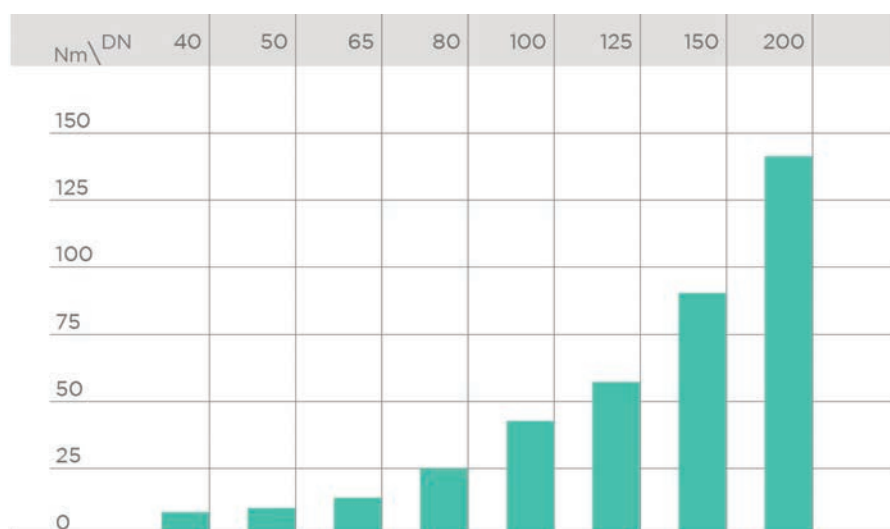
The relative flow coefficient is the flow rate through the valve as a function of the degree of valve opening.

Horizontal axis: Percentage opening of the disk

Vertical axis: Relative flow coefficient

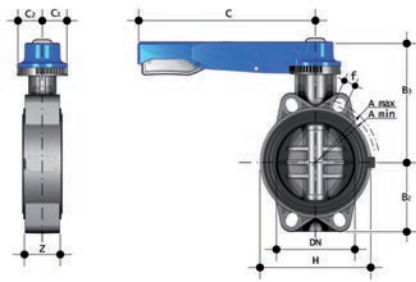


OPERATING TORQUE AT MAXIMUM WORKING PRESSURE



The information in this leaflet is provided in good faith. No liability will be accepted concerning technical data that is not directly covered by recognised international standards. FIP reserves the right to carry out any modification. Products must be installed and maintained by qualified personnel.

DIMENSIONS



FEOV/LM

Hand operated Butterfly valve

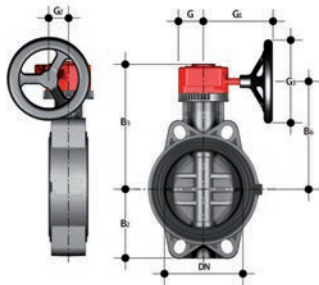
d	DN	PN	A min	A max	B ₂	B ₃	C	C ₁	C ₂	f	H	U	Z	g	EPDM code	FKM code
50 - 1 1/2"	40	16	93,5	109	60	136	175	45	42	19	132	4	33	827	FEOVLM050E	FEOVLM050F
63 - 2"	50	16	108	124	70	143	175	45	42	19	147	4	43	1012	FEOVLM063E	FEOVLM063F
75 - 2 1/2"	65	10	128	144	80	168	175	45	45	19	165	4	46	1420	FEOVLM075E	FEOVLM075F
90 - 3"	80	10	145	159	90	182	250	45	45	19	130	4	49	1640	FEOVLM090E	FEOVLM090F
110 - 4"	100	10	165	190	105	196	250	45	45	19	150	4	56	1990	FEOVLM110E	FEOVLM110F
*125 - 5"	125	10	204	215	121	215	335	45	45	23	185	4	64	3030	FEOVLM140E	FEOVLM140F
*140 - 5"	125	10	204	215	121	215	335	45	45	23	185	4	64	3030	FEOVLM140E	FEOVLM140F
160 - 6"	150	10	230	242	132	229	335	45	45	23	210	4	70	3730	FEOVLM160E	FEOVLM160F
**200 - 8"	200	10	280	298	161	309	425	65	82	23	325	8	71	8240	FEOVLM225E	FEOVLM225F
**225 - 8"	200	10	280	298	161	309	425	65	82	23	325	8	71	8240	FEOVLM225E	FEOVLM225F

Note:

FE is suitable for flanged JIS K10 wafer installation in the range DN40 (1 1/2") - DN150 (6")

* d125, FEOV d140 with special QPV FE-FK d125 for butterfly valve (QPV125FKE)

** d200, FEOV d225 with special QPV FE-FK d200 for butterfly valve (QPV200FKE)



FEOV/RM

Gearbox operated Butterfly valve

d	DN	PN	B ₂	B ₃	B ₆	G	G ₁	G ₂	G ₃	U	g	EPDM code	FKM code
75 - 2 1/2"	65	10	80	173	145	48	135	39	125	4	2380	FEOVRM075E	FEOVRM075F
90 - 3"	80	10	90	187	159	48	135	39	125	4	2600	FEOVRM090E	FEOVRM090F
110 - 4"	100	10	105	201	173	48	135	39	125	4	2950	FEOVRM110E	FEOVRM110F
*125 - 5"	125	10	121	220	192	48	144	39	200	4	4400	FEOVRM140E	FEOVRM140F
*140 - 5"	125	10	121	220	192	48	144	39	200	4	4400	FEOVRM140E	FEOVRM140F
160 - 6"	150	10	132	235	207	48	144	39	200	4	5100	FEOVRM160E	FEOVRM160F
**200 - 8"	200	10	161	288	257	65	175	60	200	8	9260	FEOVRM225E	FEOVRM225F
**225 - 8"	200	10	161	288	257	65	175	60	200	8	9260	FEOVRM225E	FEOVRM225F

Note:

FE is suitable for flanged JIS K10 wafer installation in the range DN40 (1 1/2") - DN150 (6").

* d125, FEOV d140 with special QPV FE-FK d125 for butterfly valve (QPV125FKE)

** d200, FEOV d225 with special QPV FE-FK d200 for butterfly valve (QPV200FKE)