

 Aliaxis



FK DN 40÷300

PVC-C

Butterfly valve

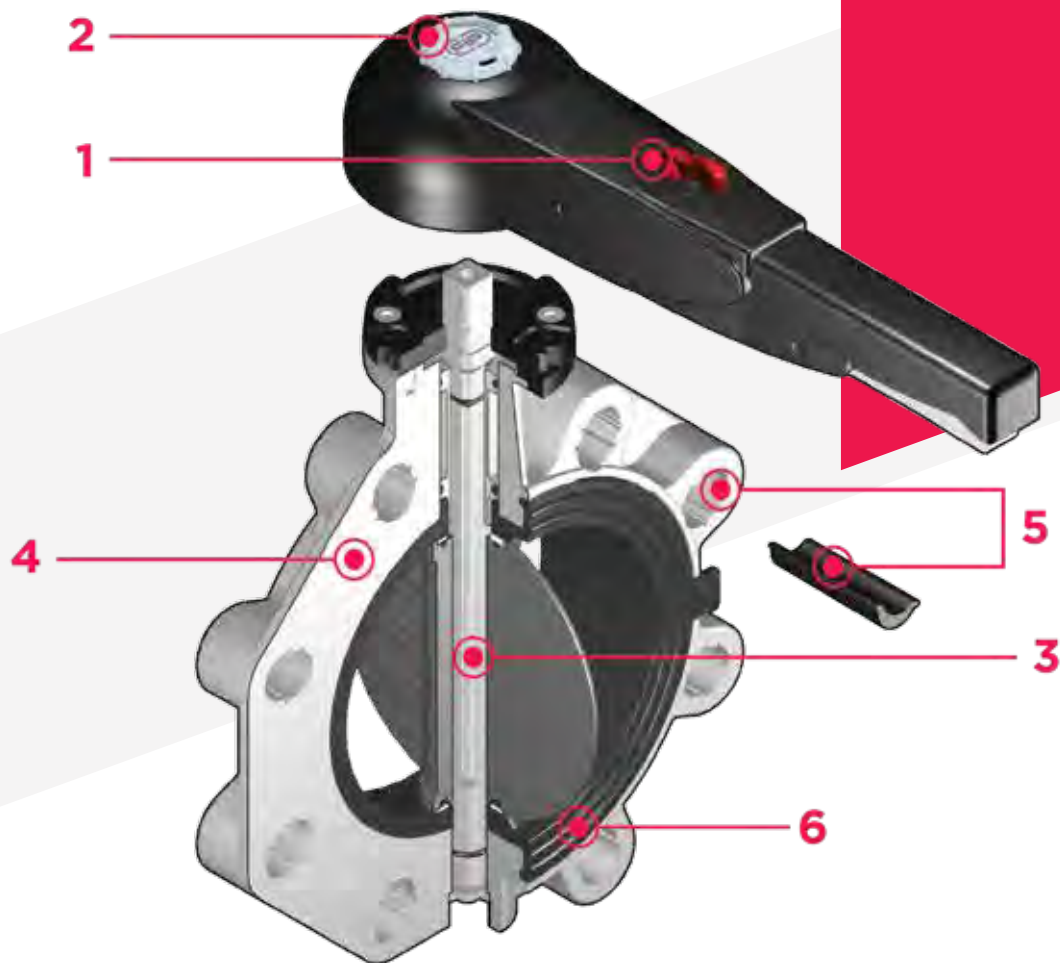
FK DN 40÷300

The FK is a butterfly valve for shutting off or regulating flow, with structural characteristics that make it ideal for industrial applications requiring high performance and longterm reliability. This valve is also equipped with the customisable Labelling System.

BUTTERFLY VALVE

- Interchangeable Disk in PVC-C with through shaft, available in different thermoplastic materials: PVC-U, PP-H, ABS, PVDF
- Overall dimensions of the valve in accordance with standard ISO 5752 (DN 40÷200 Medium Series 25, DN 250÷ 300 Long Series 16) and DIN 3202 K2 and ISO 5752 (DN 65÷200 K2, DN 250÷300 K3)
- Can also be installed as an end line valve, bottom discharge valve or tank dump valve
- **Special Lug version** PN 10 fully drilled to DIN 2501 or ANSI B16.5 cl.150 with **molded-in AISI 316 stainless steel threaded inserts**
- Possibility of installing a manual reducer or pneumatic and/or electric actuators by applying ISO standard drilling pattern PP-GR flanges. DN 40 ÷ 200 valve fitted with plate with rack in PP-GR. For actuated versions with flange drilled according to ISO 5211 F05, F07, F10
- DN 250÷300 valve, fitted with one-piece top flange in high mechanical strength PP-GR with mounting flange for internal components with drilling according to standard ISO 5211 F10, F12, F14
- Possibility to have handle with integrated LSQT limit micro switch, even as a retrofit in existing installations

Technical specifications	
Construction	Bi-directional centric butterfly valve
Size range	DN 40 ÷ 300
Nominal pressure	Wafer version DN 40 ÷ 50: PN 16 with water at 20° C DN 65÷250: PN 10 with water at 20° C DN 300: PN 8 with water at 20° C Lug version DN 65÷200: PN 10 with water at 20° C DN 250÷300: PN 6 with water at 20° C
Temperature range	0 °C ÷ 100 °C
Coupling standards	Flanging system: EN ISO 15493, DIN 2501, ISO 7005-1, EN 1092-1, ANSI B16.5 Cl.150
Reference standards	Construction criteria: EN ISO 16136, EN ISO 15493 Test methods and requirements: ISO 9393 Actuator couplings: ISO 5211
Valve material	Body: PP-GR Disk: PVC-C Stem: STAINLESS steel AISI 316
Seal material	Liner: EPDM, FKM
Control options	Hand lever operated (DN 40÷200), Gear Box, pneumatic actuator, electric actuator



1 Ergonomic handle in **HIPVC** equipped with **locking and unlocking device, release, quick operation and graduated adjustment** in 10 intermediate positions (DN 40÷200). The operating range, starting from the first few degrees of valve opening, also guarantees extremely low pressure drops.

2 **Customisable Labelling System:** integrated module in the handle, made of a transparent protection plug and a customisable tag holder using the LSE set (available as an accessory). The **customisation** lets you **identify the valve**

on the system according to specific needs.

3 **STAINLESS steel square section 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
 DN 250÷400: 27 mm

4 **Body in polypropylene based compound reinforced with fiberglass (PP-GR) resistant to UV rays** and characterised by **high mechanical strength.**

5 **Drilling pattern using oval slots** that allow coupling to flanges according to numerous international standards. The special **self-centring inserts in ABS** supplied for DN 40÷200 guarantee the **correct axial alignment** of the valve during installation. For DN 250÷400 valves, the drilling pattern for the selfcentring system is of the traditional type according to DIN and ANSI standards.

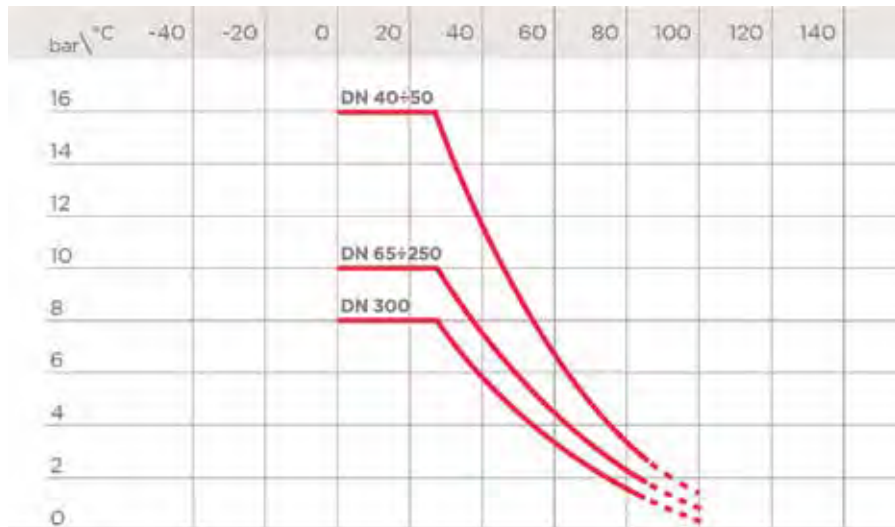
6 **Interchangeable liner** with the dual function of forming a hydraulic seal and isolating the body from the fluid.

TECHNICAL DATA

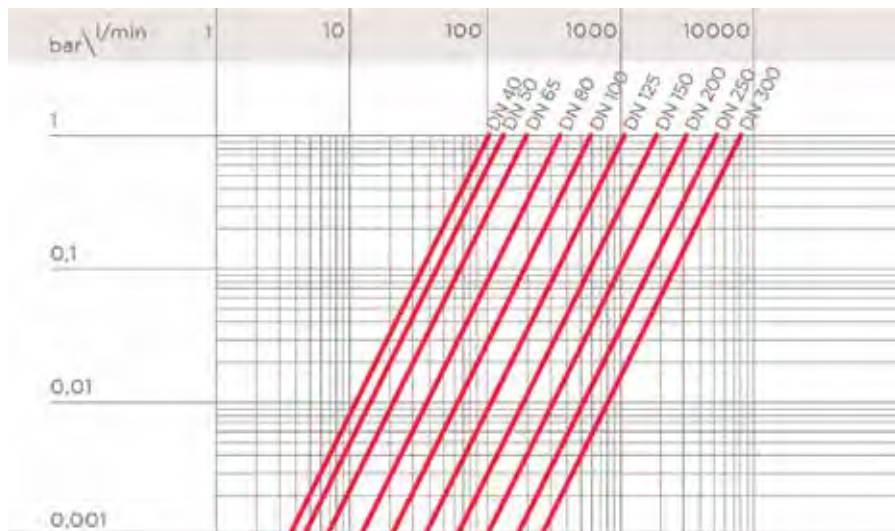
PRESSURE VARIATION ACCORDING TO TEMPERATURE

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

Note: When using PVC-C at working temperatures higher than 90°, it is advisable to first contact the service centre.



PRESSURE DROP GRAPH



K_v100 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 Δp= 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	250	300
Kv100 l/min	1000	1285	1700	3550	5900	9850	18700	30500	53200	81600

RELATIVE FLOW COEFFICIENT GRAPH

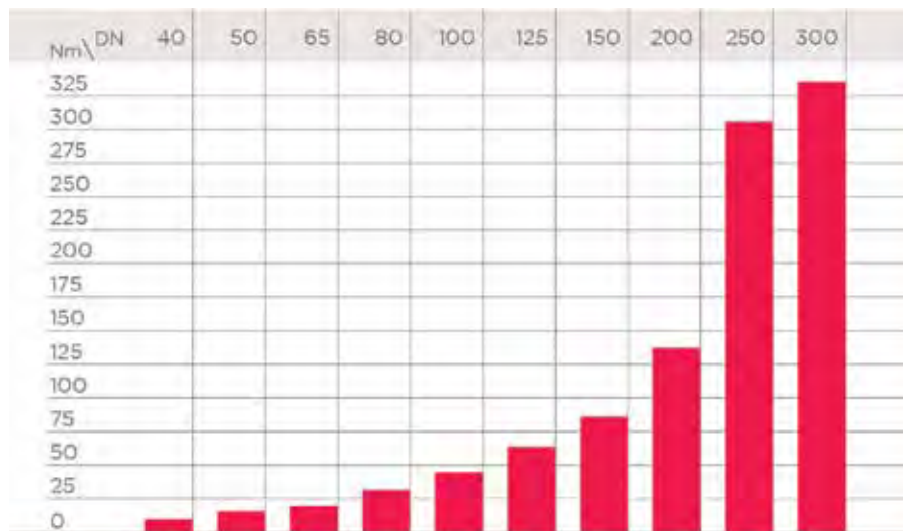
The relative flow coefficient is the flow rate through the valve as a function of the degree of valve opening.

Horizontal axis: Percentage opening of the disk

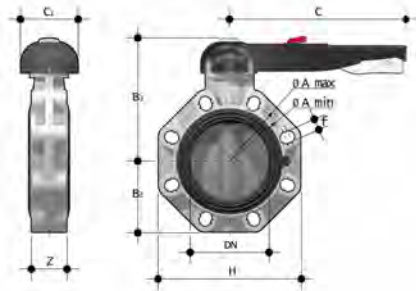
Vertical axis: Relative flow coefficient



OPERATING TORQUE AT MAXIMUM WORKING PRESSURE



DIMENSIONS

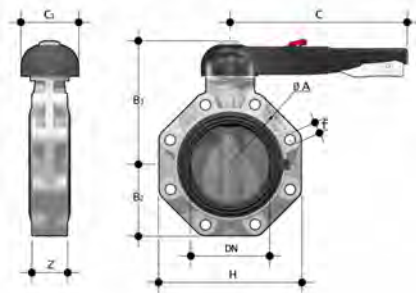


FKOC/LM

Hand operated Butterfly valve

d-Size	DN	PN	A min	A max	B ₂	B ₃	C	C ₁	H	U	Z	g	EPDM code	FKM code
50 - 1"1/2	40	16	99	109	60	137	175	100	132	4	33	918	FKOCLM050E	FKOCLM050F
63 - 2"	50	16	115	125,5	70	143	175	100	147	4	43	1081	FKOCLM063E	FKOCLM063F
75 - 2"1/2	65	10	128	144	80	164	175	110	165	4	46	1254	FKOCLM075E	FKOCLM075F
90 - 3"	80	10	145	160	93	178	272	110	185	12	49	1987	FKOCLM090E	FKOCLM090F
110 - 4"	100	10	165	190	107	192	272	110	211	8	56	2405	FKOCLM110E	FKOCLM110F
140 - 5"	125	10	204	215	120	212	330	110	240	8	64	3347	FKOCLM140E	FKOCLM140F
160 - 6"	150	10	230	242	134	225	330	110	268	8	70	4212	FKOCLM160E	FKOCLM160F
225 - 8"	200	10	280	298	161	272	420	122	323	8	71	7250	FKOCLM225E	FKOCLM225F

Note: for d75 ÷ d225 NBR primary liner available

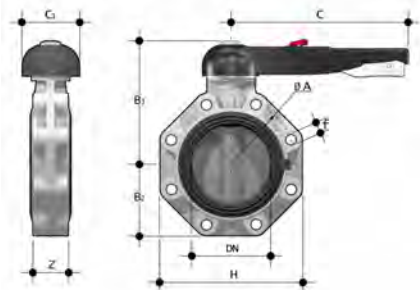


FKOC/LM LUG ISO-DIN

Hand operated Butterfly valve, version Lug ISO-DIN

d	DN	PN	øA	B ₂	B ₃	C	C ₁	f	H	U	Z	g	EPDM code	FKM code
75	65	10	145	80	164	175	110	M16	165	4	46	1554	FKOLCLM075E	FKOLCLM075F
90	80	10	160	93	178	272	100	M16	185	12	49	2342	FKOLCLM090E	FKOLCLM090F
110	100	10	180	107	192	272	110	M16	211	8	56	3257	FKOLCLM110E	FKOLCLM110F
140	125	10	210	120	212	330	110	M16	240	8	64	4345	FKOLCLM140E	FKOLCLM140F
160	150	10	240	134	225	330	110	M20	268	8	70	5820	FKOLCLM160E	FKOLCLM160F
225	200	10	295	161	272	420	122	M20	323	8	71	8896	FKOLCLM225E	FKOLCLM225F

Note: for d75 ÷ d225 NBR primary liner available

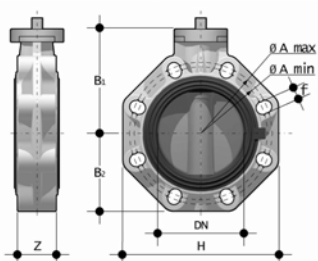


FKOC/LM LUG ANSI

Hand operated Butterfly valve, version Lug ANSI

d	DN	PN	øA	B ₁	B ₂	C	C ₁	f	H	U	Z	g	EPDM code	FKM code
2" 1/2	65	10	139,7	119	80	175	110	5/8"	165	4	46	1554	FKOALCLM212E	FKOALCLM212F
3"	80	10	152,4	133	93	175	110	5/8"	185	12	49	2342	FKOALCLM300E	FKOALCLM300F
4"	100	10	190,5	147	107	272	110	5/8"	211	8	56	3257	FKOALCLM400E	FKOALCLM400F
5"	125	10	215,9	167	120	330	110	3/4"	240	8	64	4345	FKOALCLM500E	FKOALCLM500F
6"	150	10	241,3	180	134	330	110	3/4"	268	8	70	5820	FKOALCLM600E	FKOALCLM600F
8"	200	10	298,4	227	161	420	122	3/4"	323	8	71	8896	FKOALCLM800E	FKOALCLM800F

Note: for d 2"1/2 ÷ d 8" NBR primary liner available



FKOC/FM

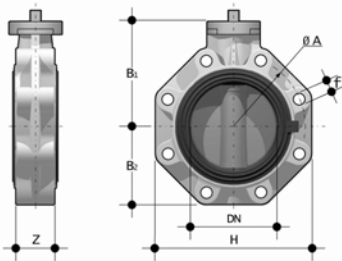
Butterfly valve with bare shaft

d - Size	DN	PN	A min	A max	øA	B ₁	B ₂	f	H	U	Z	g	EPDM code	FKM code
50 - 1"1/2	40	16	99	109	-	106	60	19	132	4	33	597	FKOCFM050E	FKOCFM050F
63 - 2"	50	16	115	125,5	-	112	70	19	147	4	43	760	FKOCFM063E	FKOCFM063F
75 - 2"1/2	65	10	128	144	-	119	80	19	165	4	46	933	FKOCFM075E	FKOCFM075F
90 - 3"	80	10	145	160	-	133	93	19	185	12	49	1388	FKOCFM090E	FKOCFM090F
110 - 4"	100	10	165	190	-	147	107	19	211	8	56	1806	FKOCFM110E	FKOCFM110F
140 - 5"	125	10	204	215	-	167	120	23	240	8	64	2659	FKOCFM140E	FKOCFM140F
160 - 6"	150	10	230	242	-	180	134	23	268	8	70	3524	FKOCFM160E	FKOCFM160F
225 - 8"	200	10	280	298	-	227	161	23	323	8	71	6284	FKOCFM225E	FKOCFM225F
280	*250	10	-	-	350	248	210	22	405	12	114	13654	FKOCFM280E	FKOCFM280F
315	*300	8	-	-	400	305	245	29	475	12	114	17931	FKOCFM315E	FKOCFM315F
10"	**250	10	-	-	350	248	210	25,4	405	12	114	13654	FKOACFM810E	FKOACFM810F
12"	**300	8	-	-	400	305	245	25,4	475	12	114	17931	FKOACFM812E	FKOACFM812F

*ISO-DIN

**ANSI B.16.5 cl.150

Note: for d75 ÷ d225 NBR primary liner available

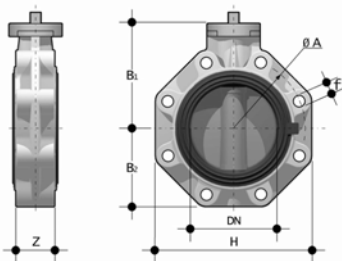


FKOC/FM LUG ISO-DIN

Butterfly valve with bare shaft, version Lug ISO-DIN

d	DN	PN	øA	B ₁	B ₂	f	H	U	Z	g	EPDM code	FKM code
75	65	10	145	119	80	M16	165	4	46	1233	FKOLCFM075E	FKOLCFM075F
90	80	10	160	133	93	M16	185	12	49	1743	FKOLCFM090E	FKOLCFM090F
110	100	10	180	147	107	M16	211	8	56	2658	FKOLCFM110E	FKOLCFM110F
140	125	10	210	167	120	M16	240	8	64	3657	FKOLCFM140E	FKOLCFM140F
160	150	10	240	180	134	M20	268	8	70	5132	FKOLCFM160E	FKOLCFM160F
225	200	10	295	227	161	M20	323	8	71	7930	FKOLCFM225E	FKOLCFM225F

Note: for d75-d225 NBR primary liner available

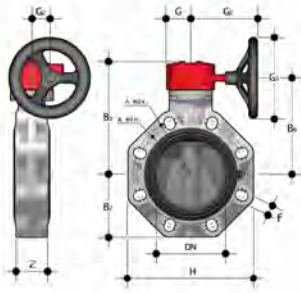


FKOC/FM LUG ANSI

Butterfly valve with bare shaft, version Lug ANSI

d	DN	PN	øA	B ₁	B ₂	f	H	U	Z	g	EPDM code	FKM code
2" 1/2	65	10	139,7	119	80	5/8"	165	4	46	1233	FKOALCFM212E	FKOALCFM212F
3"	80	10	152,4	133	93	5/8"	185	12	49	1743	FKOALCFM300E	FKOALCFM300F
4"	100	10	190,5	147	107	5/8"	211	8	56	2658	FKOALCFM400E	FKOALCFM400F
5"	125	10	215,9	167	120	3/4"	240	8	64	3657	FKOALCFM500E	FKOALCFM500F
6"	150	10	241,3	180	134	3/4"	268	8	70	5132	FKOALCFM600E	FKOALCFM600F
8"	200	10	298,4	227	161	3/4"	323	8	71	7930	FKOALCFM800E	FKOALCFM800F
10"	250	6	362	248	210	7/8"	405	12	114	16800	FKOALCFM810E	FKOALCFM810F
12"	300	6	431,8	305	245	7/8"	475	12	114	23800	FKOALCFM812E	FKOALCFM812F

Note: for d 2"1/2 ÷ d 8" NBR primary liner available



FKOC/RM

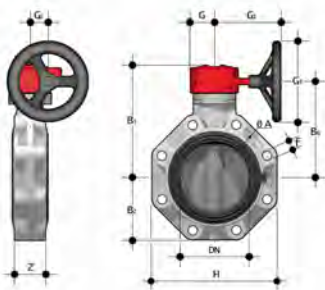
Gearbox operated Butterfly valve

d - Size	DN	PN	A min	A max	øA	B ₂	B ₅	B ₆	G	G ₁	G ₂	G ₃	H	U	Z	g	EPDM code	FKM code
75 - 2"1/2	65	10	128	144	-	80	174	146	48	135	39	125	165	4	46	2608	FKOCRM075E	FKOCRM075F
90 - 3"	80	10	145	160	-	93	188	160	48	135	39	125	185	12	49	3063	FKOCRM090E	FKOCRM090F
110 - 4"	100	10	165	190	-	107	202	174	48	135	39	125	211	8	56	3481	FKOCRM110E	FKOCRM110F
140 - 5"	125	10	204	215	-	120	222	194	48	144	39	200	240	8	64	4434	FKOCRM140E	FKOCRM140F
160 - 6"	150	10	230	242	-	134	235	207	48	144	39	200	268	8	70	5299	FKOCRM160E	FKOCRM160F
225	200	10	280	298	-	161	287	256	65	204	60	200	323	8	71	8945	FKOCRM225E	FKOCRM225F
250	*250	10	335	362	350	210	317	281	88	236	76	250	405	8	114	8945	FKOCRM280E	FKOCRM280F
280	*250	10	335	362	350	210	317	281	88	236	76	250	405	8	114	18727	FKOCRM280E	FKOCRM280F
315	*300	8	390	432	400	245	374	338	88	236	76	250	475	12	114	23004	FKOCRM315E	FKOCRM315F
10"	**250	10	-	362	350	210	317	281	88	236	-	250	405	12	114	18727	FKOACRM810E	FKOACRM810F
12"	**300	8	-	431,8	450	245	374	338	88	236	-	250	475	12	114	23004	FKOACRM812E	FKOACRM812F

*ISO-DIN

**ANSI B.16.5 cl.150

Note: for d75÷d225 NBR primary liner available

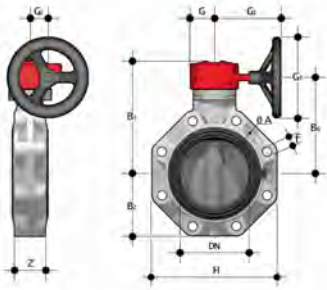


FKOC/RM LUG ISO-DIN

Gearbox operated Butterfly valve, version Lug ISO-DIN

d	DN	PN	øA	B ₂	B ₅	B ₆	f	G	G ₁	G ₂	G ₃	H	U	Z	g	EPDM code	FKM code
75	65	10	145	80	174	146	M16	48	135	39	125	165	4	46	2908	FKOLCRM075E	FKOLCRM075F
90	80	10	160	93	188	160	M16	48	135	39	125	185	12	49	3418	FKOLCRM090E	FKOLCRM090F
110	100	10	180	107	202	174	M16	48	135	39	125	211	8	56	4333	FKOLCRM110E	FKOLCRM110F
140	125	10	210	120	222	194	M16	48	144	39	200	240	8	64	5432	FKOLCRM140E	FKOLCRM140F
160	150	10	240	134	235	207	M20	48	144	39	200	268	8	70	6907	FKOLCRM160E	FKOLCRM160F
225	200	10	295	161	287	256	M20	65	204	60	200	323	8	71	10591	FKOLCRM225E	FKOLCRM225F

Note: for d75÷d225 NBR primary liner available



FKOC/RM LUG ANSI

Gearbox operated Butterfly valve, version Lug ANSI

d	DN	PN	øA	B ₂	B ₅	B ₆	f	G	G ₁	G ₂	G ₃	H	U	Z	g	EPDM code	FKM code
2" 1/2	65	10	139,7	80	174	146	5/8"	48	135	39	125	165	4	46	2908	FKOALCRM212E	FKOALCRM212F
3"	80	10	152,4	93	188	160	5/8"	48	135	39	125	185	12	49	3418	FKOALCRM300E	FKOALCRM300F
4"	100	10	190,5	107	202	174	5/8"	48	135	39	125	211	8	56	4333	FKOALCRM400E	FKOALCRM400F
5"	125	10	215,9	120	222	194	3/4"	48	144	39	200	240	8	64	5432	FKOALCRM500E	FKOALCRM500F
6"	150	10	241,3	134	235	207	3/4"	48	144	39	200	268	8	70	6907	FKOALCRM600E	FKOALCRM600F
8"	200	10	298,4	161	287	256	3/4"	65	204	60	200	323	8	71	10591	FKOALCRM800E	FKOALCRM800F
10"	250	6	362	210	317	281	7/8"	88	236	76	250	405	12	114	23400	FKOALCRM810E	FKOALCRM810F
12"	300	6	431,8	245	374	338	7/8"	88	236	76	250	475	12	114	30400	FKOALCRM812E	FKOALCRM812F

Note: for d 2" 1/2 ÷ d 8" NBR primary liner available