Rubber Fab
a Garlock Hygienic Technolo ies company

Flex-Pure™
Peroxide Cured FKM Fluoroelastomer

FKM (Fluoroelastomer, formerly FPM) has excellent temperature resistance from -34°C (-29°F) to 204°C (399°F) and high chemical stability. FKM has very good resistance to ozone, oxygen, mineral oils, greases and non-polar media. FKM gaskets are not suitable for use in polar solvents such as amines and ketones. FKM is suitable for a variety of applications, however the service life of the gaskets should always be considered depending on the application parameters and process requirements and a preventive maintenance program should be implemented. For more aggressive media, a PTFE quality should be used for safety reasons.

MAIN SEGMENTS

Pharmaceutical
Food

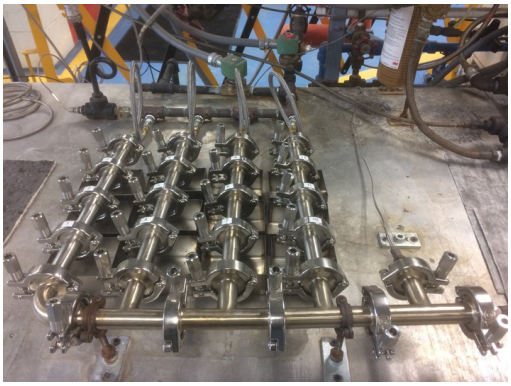
CERTIFICATES/DECLARATIONS

- USP Class VI <87>, <88> (121ºC)
- 3A Sanitary Standard 18-03 Class I
- FDA 21 CFR177.2600 (Formulation & Extraction)
- Simulated SIP Testing (500 Cycles) in accordance with ASME BPE-2019 (SG-4.2 Static Seal Performance)
- EC1935/2004 (EU Food Contact Regulation)
- Manufactured in compliance with EC2023/2006 (GMP)
- Manufactured in compliance with FDA 21 CFR174.5 (cGMP)
- ADI free (EMEA 410/01)

Laser marked by default with lot number and material name

KEY BENEFITS

- Laser marked by default
- Lot number for Full and Easy Traceability
- Material Identification
- Exceptional Flexibility
- Very low Compression Set for best Sealing Performance
- High Dimensional Stability
- Clean and Easy Removal of gaskets - No sticking to the stainless-steel flanges even after prolonged contact at elevated temperatures
- Suitable for SIP and CIP processes
- Good Steam Resistance - Very low swell and minimal loss of physical properties after repeated steam cycling
- Low Extractable values
- High Purity Compound
- Good Chemical resistance
- Wide Temperature range



Steam-in-Place test stand for hygienic gaskets

Flex-Pure™- Peroxide Cured FKM Fluoroelastomer

Gasket Dimensions and Item Numbers

DIN11850/10357 (DIN32676: Row A) (Pipe connection DIN 11866 Row A)			
Item No.	DN	ID[4] (mm)	OD (mm)
DIN32676-06-FKM-NG-LE	06	9,70	21,8
DIN32676-08-FKM-NG-LE	08	11,20	21,8
DIN32676-10-FKM-NG-LE	10	12,70	34,0
DIN32676-15-FKM-NG-LE	15	18,70	34,0
DIN32676-20-FKM-NG-LE	20	22,70	34,0
DIN32676-25-FKM-NG-LE	25	27,70	50,5
DIN32676-32-FKM-NG-LE	32	33,20	50,5
DIN32676-40-FKM-NG-LE	40	38,70	50,5
DIN32676-50-FKM-NG-LE	50	50,70	64,0
DIN32676-65-FKM-NG-LE	65	≥66,2	91,0
DIN32676-80-FKM-NG-LE	80	≥81,2	106,0
DIN32676-100-FKM-NG-LE	100	≥100,2	119,0
DIN32676-125-FKM-NG-LE	125	≥125,2	155,0
DIN32676-150-FKM-NG-LE	150	≥150,2	183,0
DIN32676-200-FKM-NG-LE	200	≥200,2	233,5

ISO1127 (DIN32676: Row B) (Pipe connection DIN 11866 Row B)			
Item No.	DN	ID[4] (mm)	OD (mm)
ISO1127-06-FKM-NG-LE	10,2	10,20	21,8
ISO1127-08-FKM-NG-LE	13,5	12,50	21,8
ISO1127-10-FKM-NG-LE	17,2	15,70	21,8
ISO1127-15-FKM-NG-LE	21,3	19,80	50,5
ISO1127-20-FKM-NG-LE	26,9	24,90	50,5
ISO1127-25-FKM-NG-LE	33,7	30,90	50,5
ISO1127-32-FKM-NG-LE	42,4	39,10	64,0
ISO1127-40-FKM-NG-LE	48,3	45,00	64,0
ISO1127-50-FKM-NG-LE	60,3	57,00	77,5
ISO1127-65-FKM-NG-LE	76,1	≥72,3	91,0
ISO1127-80-FKM-NG-LE	88,9	≥84,5	106,0
ISO1127-100-FKM-NG-LE	114,3	≥109,9	130,0
ISO1127-125-FKM-NG-LE	139,7	≥134,7	155,0
ISO1127-150-FKM-NG-LE	168,3	≥163,3	183,0
ISO1127-200-FKM-NG-LE	219,1	≥214,1	233,5

ASME BPE (DIN32676: Row C) (Pipe connection DIN 11866 Row C)			
Item No.	DN	ID[4] (mm)	OD (mm)
42MPSFY-025-NG-LE[1]	¼"	9,30	21,8
42MPSFY-0375-NG-LE[1]	3/8"	11,00	21,8
42MPSFY-050-NG-LE[1]	1/2"	12,60	21,8
42MPSFY-075-NG-LE[1]	3/4"	17,50	21,8
40MPSFY-100-NG-LE	1"	23,80	50,5
40MPSFY-150-NG-LE	1 1/2"	36,00	50,5
40MPSFY-200-NG-LE	2"	48,20	64,0
40MPSFY-250-NG-LE	2 1/2"	60,90	77,5
40MPSFY-300-NG-LE	3"	≥73,1	91,0
40MPSFY-400-NG-LE	4"	≥97,6	119,0
40MOFSFY-600-NG-LE[2]	6"	≥147,1	167,0
40MOFSFY-800-NG-LE[2]	8"	≥197,9	217,7
40MOFSFY-1000-NG-LE[2]	10"	≥247,4	268.5
40MOFSFY-1200-NG-LE[2]	12"	≥298,2	319,3

Physical Properties[3]		
Property	Test method	Result
Hardness (Shore A)	ASTM D 2240	71 ±5
Tensile Strength (MPa)	DIN 53504/S2	14,5 (2103 psi)
Elongation (%)	DIN 53504/S2	344
Specific Gravity (g/cm³)	ASTM D 297	2,09
100% Modulus (MPa)	DIN 53504/S2	2,6 (377 psi)
Compression Set (%) 22 hours @ 150°C	ASTM D 395/B	11
Compression Set (%) 22 hours @ 200°C	ASTM D 395/B	12
Color	Black	
Storage Stability	10 years	

1) 42 Part designation number for mini size gaskets
2) Type II Flanged
3) The preceding Physical Properties data gives the typical properties of the mentioned material.
4) The Inner Diameter values are optimized by Rubber Fab. And are tested at 30 in/lbs (3,3Nm) tightening torque, to obtain the best possible fit during installation and service.

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