



GUARNIZIONI INDUSTRIALI

Oilfield Sealing Solutions

Name	Material	Hardness Shore A	Colour	Temperature °C		Remarks *approvals available
				from	to	
FKM 90 nero	N9000	90	black	-25	+230 (+250)	Copolymer, oil/gas applications
FKM 90 ED	N9001	90	black	-27	+230 (+250)	oil/gas applications, AED *NORSOK M710 (AED) – 5.33, – 10.82 mm *NACE TM0297 (AED) – 5,33 mm *NACE TM0187 (sour gas environment) – 5% + 20% H ₂ S *TOTALFINA SP-TCS-142 *SHELL (80°C – 138 bar) *API6A (sour gas environment) – 10% H ₂ S *Sour fluid test Arrhenius ISO 23936-2/NORSOK M710-3 *Life prediction & AED test – Arrhenius ISO 23936-2 *Saudi Aramco 06-SAMSS-001
FKM 90 TER	N9002	90	black	-25	+230 (+250)	Terpolymer, oil/gas applications
FKM 90 PLT	N9003	90	black	-40	+225 (+250)	PLT, low temperature
FKM 90 GF	N9004	90	black	-25	+230 (+250)	peroxide cured, oil/gas applications
FKM 90 PLT/ED	N9012	90	black	-41	+220 (+250)	low temperature, AED *NORSOK M710 (AED) – 5.33 mm *NACE TM0297 (AED) – 5,33 mm *TOTALFINA SP-TCS-142 *ITN 84700/A (AED) – 10 mm *NACE TM0187 (sour gas environment) – 5% + 20% H ₂ S *API6A (sour gas environment) – 10% H ₂ S - [FF/HH] *Sour fluid test Arrhenius ISO 23936-2/NORSOK M710-3 *Life prediction & AED test – Arrhenius ISO 23936-2 *SHELL - MESC SPE 85/301 *Saudi Aramco 06-SAMSS-001
FKM 90 BR ED	N90BR	90	black	-30	+220 (+240)	oil/steam applications, AED *NORSOK M710 (AED) – 5.33 mm *NACE TM0187 (sour gas environment) – 5% + 20% H ₂ S *API6A (sour gas environment) – 10% H ₂ S - [FF/HH] *Sour fluid test Arrhenius ISO 23936-2/NORSOK M710-3 *Life prediction & AED test – Arrhenius ISO 23936-2 *Saudi Aramco 06-SAMSS-001
FKM 90 HFLT	N9013	90	black	-37	+230 (+250)	low temperature, high chemical resistance
FKM 90 GFLT ED	N9015	90	black	-40	+230 (+250)	low temperature, high chemical resistance, AED *NORSOK M710 (AED) – 5.33 mm *NACE TM0187 (sour gas environment) – 20% H ₂ S *API6A (sour gas environment) – 10% H ₂ S *Sour fluid test Arrhenius ISO 23936-2/NORSOK M710-3 *Saudi Aramco 06-SAMSS-001 02.2017
FKM 90 GF/ED	N9024	90	black	-25	+230 (+250)	peroxide cured, oil/gas applications, AED *API6A (sour gas environment) – 10% H ₂ S - [FF/HH] *NORSOK M710 (AED) – 5.33 mm *Saudi Aramco 06-SAMSS-001
FKM 90 GBL	N9030	90	black	-20	+230 (+250)	peroxide cured, high mechanical performance
FKM 90 LT40/ED	N9034	90	black	-41	+220	low temperature, AED very good performance in Methanol *NORSOK M710 (AED) – 5.33 mm *SHELL - MESC SPE 85/301 *API6A 10% H ₂ S FFHH *Saudi Aramco 06-SAMSS-001
FKM 90 LT50/ED	N9035	90	black	-51	+225 (+250)	low temperature, AED *NORSOK M710 (AED) – 5.33 mm *NACE TM0187 (sour gas environment) – 5% H ₂ S



GUARNIZIONI INDUSTRIALI

Oilfield Sealing Solutions

Name	Material	Hardness Shore A	Colour	Temperature °C		Remarks *approvals available
				from	to	
FKM 90 LT60/ED	N9036	90	black	-61	+225 (+250)	ultra low temperature, AED *NORSOK M710 (AED) – 5.33 mm *NACE TM0187 (sour gas environment) – 5%, 20% H ₂ S *API6A (sour gas environment) – 10% H ₂ S - [FF/HH] *Sour fluid test Arrhenius ISO 23936-2/NORSOK M710-3
FKM 98 nero	N9800	98	black	-25	+230 (+250)	Copolymer, oil/gas applications
FKM 98 ED	N9801	98	black	-27	+230 (+250)	oil/gas applications, AED *BS EN ISO 23936-2
FKM 98 TER	N9802	98	black	-25	+230 (+250)	Terpolymer, oil/gas applications
FKM 98 PLT	N9803	98	black	-40	+225 (+250)	PLT, low temperature
FKM 98 GF	N9804	98	black	-25	+230 (+250)	peroxide cured, oil/gas applications
FKM 98 PLT/ED	N9812	98	black	-40	+225 (+250)	PLT, low temperature, AED
FKM 98 HFLT	N9813	98	black	-37	+230 (+250)	low temperature, high chemical resistance
FKM 98 GFLT/ED	N9815	98	black	-37	+230 (+250)	low temperature, high chemical resistance, AED
FKM 98 GF/ED	N9824	98	black	-25	+230 (+250)	peroxide cured, oil/gas applications, AED
FKM 98 GBL	N9830	98	black	-20	+230 (+250)	peroxide cured, high mechanical performance
FKM 98 LT50/ED	N9835	98	black	-50	+225 (+250)	low temperature, AED
FKM 98 LT60/ED	N9836	98	black	-61	+225 (+250)	ultra low temperature, AED
AFLAS® 90 ED	AFL9G	90	black	-20	+200 (+230)	oil/steam, AED , *NORSOK M710 (AED) – 5.33 mm *NACE TM0187 (sour gas environment) – 5%, 20% H ₂ S *API6A (sour gas environment) – 10% H ₂ S - [FF/HH]
HNBR 90 NERO	HN90N	90	black	-25	+160 (+180)	oil/gas applications
HNBR 90 ED	HN90G	90	black	-35	+160 (+180)	oil/gas applications, AED *ED Total Fina-Shell, *NORSOK M710 (AED) – 5.33 mm *NORSOK M710 (sour fluid resistance) 2% H ₂ S *EN 14141-2003 (natural gas transportation pipeline) *NACE TM0187 (sour gas environment) – 2%, 5%, 20% H ₂ S *API6A (sour gas environment) – 10% H ₂ S *Sour fluid test Arrhenius ISO 23936-2/NORSOK M710-3 *Saudi Aramco 06-SAMSS-001
HNBR 90 ED-L	HN90L	90	black	-55	+160 (+180)	oil/gas applications, low temperature, AED *NORSOK M710 (AED) – 5.33 mm *NACE TM0187 (sour gas environment) – 5% H ₂ S *SHELL *MESOC SPE 85/301 *API6A (sour gas environment) – 10% H ₂ S - [FF/HH]
HNBR 98 NERO	HN98N	98	black	-25	+160 (+180)	oil/gas applications
HNBR 98 ED	HN98G	98	black	-35	+160 (+180)	oil/gas applications, AED
HNBR 98 ED-L	HN98L	98	black	-55	+160 (+180)	oil/gas applications, low temperature, AED
evolast® N9ED	PN9ED	90	black	-15	+260 (+280)	AED *NORSOK M710 (AED) – 5.33 mm *NACE TM0187 (sour gas environment) – 5% - 20% H ₂ S *Sour fluid test Arrhenius ISO 23936-2/NORSOK M710-3 *API6A (sour gas environment) – 10% H ₂ S - [FF/HH]
evolast® N9EX	PN9EX	90	black	-15	+320 (+340)	high temperature, AED NORSOK M710 (rapid gas decompression)
evolast® N9LT	PN9LT	90	black	-46	+250 (+270)	low temperature, AED NORSOK M710 (rapid gas decompression)