



Oil & Gas Industry Reference Guide (ORD 5801) 06/2019

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Material	Temperature Range (°F)*	Hardness (Shore A)	Recommended Parts					Certifications						Comments	
			O-Rings	Molded Shapes	Packing Elements	Extruded Product	Back-up Rings	*ISO 23936 RGD	ISO 23936 H ₂ S	Norsok M-710 RGD	*Norsok M-710 H ₂ S	NACE TM0187 H ₂ S	API 6A Tested		
Acrylonitrile-Butadiene (Nitrile, Buna-N) - NBR															
N0674-70	-30 to 250	70	X	X	---	X	---	---	---	---	---	---	---	---	General purpose material
NM304-75	-65 to 250	75	X	X	---	X	---	---	---	---	---	---	---	---	Low temperature material
N1059-90	-30 to 250	90	X	X	---	---	---	---	---	---	---	---	---	---	Low compression set, Extrusion resistant
N0300-90	-30 to 250	90	---	---	---	---	X	---	---	---	---	---	---	---	Parbak rings, Extrusion resistant
Hydrogenated Nitrile - HNBR, HSN															
N1173-70	-25 to 300	70	X	---	---	---	---	---	---	---	---	---	---	---	General purpose material
KA270-70	-25 to 300	70	---	X	X	X	---	---	---	---	---	---	---	---	Low set force, High tear strength
KA453-80	-25 to 300	80	X	---	---	---	---	---	10%	---	---	---	---	---	Good chemical resistance
KB282-80	-25 to 300	80	---	---	---	---	---	---	---	---	---	X	---	---	Low set force, High tear strength, Excellent compression set
KA280-80	-25 to 300	80	---	X	X	X	---	---	---	---	---	---	---	---	Low set force, High tear strength
KA183-85	-50 to 300	85	X	X	X	X	---	X	10%	---	2%	---	FF/HH	---	Low temperature material, Explosive decompression resistant
KB285-85	-25 to 300	85	---	X	X	X	---	X	10%	---	---	X	FF/HH	---	Excellent extrusion resistance, Explosive decompression resistant
KB255-90	-25 to 300	90	---	---	---	X	---	---	---	---	---	---	---	---	General purpose material
KB163-90	-30 to 300	90	X	X	X	X	---	X	10%	X	2%	---	FF/HH	---	Explosive decompression resistant, Extrusion resistance
KB292-95	-25 to 300	95	X	---	---	---	---	X	10%	---	---	---	---	---	Excellent extrusion resistance, Explosive decompression resistant
Ethylene Propylene Rubber - EPDM, EPM, EP, EPR															
E0740-75	-70 to 250	75	X	X	X	X	---	---	---	---	---	---	---	---	Low compression set
E0962-90	-60 to 500	90	X	X	X	X	---	X	---	---	---	---	---	---	Excellent steam resistance to 500°F
Fluorocarbon - FKM															
VM330-75	-15 to 400	75	X	X	X	X	---	---	---	---	---	---	---	---	General purpose material, Low compression set
V1260-75	-15 to 400	75	X	X	---	X	---	---	---	---	---	---	---	---	ETP-type FKM, Excellent chemical resistance
VX065-75	-65 to 400	75	X	X	---	---	---	---	---	---	---	---	---	---	Excellent low temperature, Low compression set
VG286-80	-50 to 400	80	X	X	X	X	---	X	---	---	---	---	FF/HH	---	Excellent low temperature, Low compression set, Excellent fluid resistance
VP306-80	-10 to 400	80	X	X	X	X	---	X	---	---	---	---	---	---	Broad range of chemical resistance. Low compression set.
VP104-85	-15 to 400	85	X	X	---	---	---	X	10%	---	2%	---	---	---	Excellent chemical resistance
VP316-90	-10 to 400	90	X	X	X	X	---	X	---	---	---	X	---	---	Broad range of chemical resistance. Low compression set.
V0709-90	-15 to 400	90	X	X	X	X	---	---	---	---	---	---	---	---	General purpose material, Low compression set
VG109-90	-50 to 400	90	X	X	X	X	---	X	10%	---	---	X	FF/HH	---	Excellent low temperature & Fluid resistance, Low compression set, Extrusion resistance
VX165-90	-65 to 400	90	X	X	---	---	---	X	2%	---	---	---	---	---	Excellent low temperature, Low compression set
V1238-95	-15 to 400	95	X	X	---	---	---	X	2%	X	2%	---	FF/HH	---	Extreme extrusion resistance
Tetrafluoroethylene-Propylene - (Aflas®) - FEPM, TFE/P															
VP102-80	15 to 450	80	X	X	X	X	---	---	---	---	---	---	---	---	Low compression set
V1041-85	25 to 450	85	X	X	X	---	---	X	---	X	2%	---	---	---	Broad chemical resistance
VP103-90	25 to 450	90	X	---	---	---	---	X	10%	---	2%	---	---	---	Extrusion resistant
V4461-90	15 to 450	90	---	X	X	X	---	---	---	---	---	---	---	---	General purpose material
VP250-90	15 to 450	90	---	X	X	---	---	---	---	---	---	---	---	---	Good compression set, Extrusion resistance
Perfluoroelastomer - FFKM															
FF580-75	5 to 525	75	X	X	---	---	---	---	10%	---	---	---	FF/HH	---	Steam resistant, Broad chemical resistance, Low compression set
FF400-80	-40 to 525	90	X	X	---	---	---	X	10%	---	---	---	---	---	Excellent low temperature
FF202-90	5 to 608	90	X	X	---	---	---	---	---	---	2%	---	---	---	High temperature, Low compression set, Extrusion resistance
FF582-90	5 to 525	90	X	X	---	---	---	X	10%	---	---	---	---	---	Steam resistant, Broad chemical resistance, Low compression set

*The listed temperature range is a starting recommendation only. Information about fluids and exposure durations should be taken into consideration when determining the suitability of any material in a specific application environment.