Oil & Gas



Engineered sealing solutions for Oil & Gas applications



With diverse application and harsh environments, Oil and Gas applications present some of the most challenging demands on sealing solutions.

Our Product Capabilities

We design and manufacture engineered sealing solutions; critical not only to the safety, but the reliable and efficient operation of a wide range of onshore and offshore equipment.

Engineering Expertise

Our engineers provide unrivalled technical and design support to ensure best possible seal performance at optimum cost.

Resisting RGD, Sour Gas and Steam

We have a range of materials tested and qualified to ISO23936, NORSOK M-710, API6A and TOTAL GS EP PVV142 to ensure our products used in harsh Oil & Gas drilling and production environments meet the critical demands of these applications.



Materials

Material Type	Compound	Hardness (Shore A/D)	Temp Range °C	ISO 23936-2			NORSOK M-710		TOTAL GS EP PVV142	API6A	NACE TM0187						
				RGD	H ₂ S 10%	H ₂ S 2%	RGD	H ₂ S	RGD	(FF/ HH) H₂S	H ₂ S	Moulded Shapes	Packing Elements	O-rings	Back-up rings	S Seals	PolyPaks
NBR	N0674	70A	-34° to + 120°C									✓		✓			
NBR	N0756	75A	-54°C to + 135°C											✓			
NBR	N1059	90A	-34°C to + 120°C									✓		✓			
NBR	N0300	90A	-34°C to + 120°C												✓		
HNBR	N1173	70A	-32°C to + 148°C									✓		✓			
HNBR	KA270	70A	-32°C to + 148°C									✓	✓				
HNBR	KA183	85A	-48°C to + 148°C	\checkmark	✓			2%		~		\checkmark	✓	✓	✓	\checkmark	
HNBR	KB282	80A	-32°C to + 148°C								✓		✓				
HNBR	KB285	85A	-32°C to + 148°C	×	 ✓ 					✓	✓		✓				
HNBR	KB163	90A	-34°C to + 150°C	✓	✓		 ✓ 	2%		~		✓	~	✓	✓	√	✓
HNBR	KA280	80A	-32°C to + 148°C									✓	~			✓	
HNBR	KA453	80A	-32°C to + 148°C		✓									\checkmark			
HNBR	KB292	95A	-32°C to + 148°C	~	×								~				
HNBR	KB255	90A	-32°C to + 148°C									✓	~				
EPDM	E0962	90A	-51°C to + 260°C	~								✓	✓	\checkmark	✓		
EPDM	E0740	75A	-56 to + 121°C											\checkmark			
TPU	P4615	90A	-54°C to + 93°C		 ✓ 							✓					✓
TPCE	Z4651	60D	-54°C to + 135°C		✓							✓			✓		✓
TFE/P AFLAS®	V1041	85A	-4°C to + 232°C	~			×	2%		✓		✓	~	✓			
TFE/P AFLAS®	VP103	95A	- 4°C to + 232°C	~	✓			2%						✓			
TFE/P AFLAS®	VP101	80	-4 to + 232 °C											✓			
TFE/P AFLAS®	V4461	90	-9 to + 232 °C														✓
TFE/P AFLAS®	VP250	90	-9 to + 232 °C									✓					
FKM	VA075	75	-26 to + 204 °C											✓			
FKM	VG286	80A	-46°C to + 204°C	×						✓		✓		✓			
FKM	VP309	80A	-23 to +204 °C	✓								✓	✓				
FKM	VG109	90A	-46°C to + 204°C	**	✓				✓	✓	\checkmark	✓	✓	✓		\checkmark	✓
FKM	V1238	95A	-26°C to + 204°C	**		✓	×	2%		✓		✓		✓	✓	✓	✓
FKM	VA090	90A	-26°C to + 204°C											✓	✓		
FKM	V1260	75A	-26°C to + 204°C									✓		✓			
FKM	VX065	75A	-53°C to + 204°C									✓		✓			
FKM	VP316	90A	-23°C to + 204°C	✓							✓	✓	✓	✓			
FKM	VX365	90A	-53°C to + 204°C	**	✓					✓		✓		✓			
FFKM	FF580	75A	-15°C to + 275°C		✓					✓		✓		\checkmark			
FFKM	FF400	85A	-40°C to + 270°C	√	~				\checkmark	~	50%	✓		\checkmark			
FFKM	FF156	75A	-15 to + 270 °C		~							✓		\checkmark			
FFKM	FF582	90A	-15°C to + 270°C	✓	✓				√			✓		√			

** ISO 23936-2 RGD Testing performed at 10,000 psi.

Our products

- Wide temperature range sealing
 - O-ring, C-ring (and spring energised versions), E-ring configurations
 - Customise designs available
 - NACE compliant materials

Metal Seals





Back-Up Rings

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S-Seals
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- Elastomer, PEEK and PTFE options
- Used with o-rings to increase pressure rating and reduce extrusion effects
- Custom designs available



- Interchangeable with O-ring grooves • HPHT (high pressure/temperature) sealing
- Can accomodate increased extrusion gaps
- Integral springs
- Wide variety of approved elastomer compounds





Mouldings &

Gaskets

- Detailed and critical groove requirements
- Wide variety of approved elastomer compounds







Packers



- Manufactured in accordance to AS568B and other international standards Non-standard sizes available
 - Suitable for static and dynamic applications Wide variety of approved elastomer compounds



- Variant of S-Seal design but can accomodate sealing over greater tolerance range
- Common applications include tubing/casing hangars
- Wide variety of approved elastomer compounds





PTFE Seals



Inventory management

We are an official supply partner of Parker Hannifin Seal Group and are the accredited and recognised UK distributor of their seals. Our unique partnership allows us to offer their exensive portfolio of materials include a wide range of special elastomers suitable for oil and gas applications, including materials that are RGD and H₂S resistant and fully compliant with NORSOK M-710, ISO 23936, NACE TM0187 and API6A.

With the latest warehouse technology and a Customer Relationship Management System monitoring over 15,000 part numbers, we offer our customers the following advantages in Inventory Management:

- Tailored stock management
- Kan Ban systems
- Annual call-off and scheduled orders
- Kitting Services to reduce assembly times
- Bespoke packaging
- Bar coding
- Colour coding
- Consignment programs

Darker Prädifa



- Standard, deep and type "B" style
- Suitable for static and dynamic applications
- O-ring energiser for low pressure sealing
- Back-up rings for high pressure sealing applications
- PIP ring option for bi-directional sealing (type "B")

Quality Assurance

We maintain strict quality procedures at all stages of our design, development and manufacturing processes.

Our team of Engineers and Inspectors ensure quality planning (APQP) is at the heart of our quality function.

Our stringent quality principles and proactive controls mean our customers have reduced claims, increased change control, and prevention of productivity loss.



With our manufacturing facilities we develop continuous improvements to processes such as follow up-audits, implementation of adequate prevention measures, analysis and review of similar products to prevent future issues, effective root cause analysis and preventative actions review.



Design & Development

We provide unrivalled technical and engineering support to ensure our customers benefit from the best possible seal performance at optimum cost.

We are dedicated to providing a complete design service; from initial seal geometry and profile choice, to material selection and prototyping, through to final production.

We work closely with your engineers to provide the most effective sealing solution for each bespoke application.

Our Application Engineers utilise years of seal design experience and materials expertise, alongside technology such as 3D CAD and FEA analysis programs to simulate performance before finalising each individual seal design.

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