

Mouldings & Gaskets



We specialise in the design and manufacture of custom rubber seals and gaskets. Bespoke designs manufactured in specialist elastomer materials that meet customer hardware specifications; often with detailed and critical groove requirements.



Bespoke elastomer mouldings for individual and specialist seal applications.



Extensive range of materials with compound development capabilities for demanding applications.



Low cost, rapid prototype tooling and sample production allows design to be proven fit for function.



Complete seal design service from experienced application engineers.



Why use gaskets?

There are many ways to seal the static join between two components. Whether this is to keep fluids inside a cavity or to keep fluids or contaminants out of a device or assembly; the options can vary from simple o-rings, moulded elastomer gaskets and flat sheet style materials, to liquid gaskets (or RTV's).

The use of a push-in-place (PIP) gasket, in what is frequently referred to as a racetrack groove, can optimise the overall envelope of the hardware by minimising distances between sealed cavities whilst also reducing part count and associated costs compared to using individual o-rings. Compared to a flat gasket approach, custom moulded seals with a deeper compressed section give advantages in terms of sealing ability and long term endurance due to improved compressive stress relaxation. The use of retention pips can solve issues with components becoming dislodged during handling or inverted assembly requirements.

Precision moulding tolerances

We use ISO3302 Class M1 & M2 tolerances for our precision elastomer mouldings*

Nominal Dimensions		Clas	s M1	Class M2	
Above	Up to & including	F + / - (mm)	C + / - (mm)	F + / - (mm)	C + / - (mm)
0	4	0.08	0.10	0.10	0.15
4	6.3	0.10	0.12	0.15	0.20
6.3	10	0.10	0.15	0.20	0.20
10	16	0.15	0.20 0.20		0.25
16	25	0.20	0.20	0.25	0.35
25	40	0.20	0.25	0.35	0.40
40	63	0.25	0.35	0.40	0.50
63	100	0.35	0.40	0.50	0.70
100	160	0.40	0.50	0.70	0.80
160		0.3%	0.4%	0.5%	0.7%



*For reference. Use ISO master tolerances.

Material overview

Our range of materials includes over 1800 compounds covering all recognised elastomer groups. We develop our base elastomer materials to meet particular ASTM or ISO call-out requirements, or individual customer specifications such as chemical/fluid testing or compressive stress relaxation duration tests. Our extensive range of materials are available with specific approvals relevant to industry standards including; WRAS, NORSOK M710 and ISO10993.



Standard compounds

Compound	Material group	Hardness (Shore A)		erature Max.	Colour	ASTM D2000 Callout
N60C256	NBR	60	-40°C	100°C	Black	M7 BG 607 B14 E014 E034 EF11 EF21 F17
N70C181	NBR	70	-40°C	100°C	Black	M2 BG 714 A14 B14 EA14 EF11 EF21 EO14 EO34
N80C178	NBR	80	-30°C	100°C	Black	M2 BG 814 A14 B14 EA14 EO34 EF11 EF21 F15
HN60CC31	HNBR	60	-25°C	140°C	Black	M4 DH 614 A26 B36 E016 E036
HN70C642	HNBR	70	-35°C	150°C	Black	M4 DH 716 A26 B16 E016 E036 F17
HN80C157	HNBR	80	-30°C	150°C	Black	M3 DH 810 A26 B16 C12 E016 E036 F17
E50CB75	EPDM	50	-50°C	150°C	Black	M3 DA 510 A26 B36 C32 EA14 F19 G21
E65CJ26	EPDM	65	-55°C	120°C	Black	M2 BA 714 A14 B13 C12 Z1
E70CC48	EPDM	70	-50°C	150°C	Black	M4 CA 710 A25 B35 EA14 F17 Z1
A55C819	ACM	55	-20°C	150°C	Black	M2 DH 609 A26 B36 E016 E036 C12 Z1
A70CD66	ACM	70	-20°C	150°C	Black	M5 DF 706 A26 B16 E016 E036
A80CD40	ACM	80	-20°C	150°C	Black	M2 DH 808 A26 B16 E016 E036 Z1
AE70CD10	AEM	70	-30°C	150°C	Black	M4 EE 710 A47 B46 B37 EA14 EO16 EO36 G21
AE75CD37	AEM	75	-30°C	150°C	Black	
VAMCC52	AEM	60	-40°C	150°C	Black	M3 EE 612 A26 B37 E016 F17
V70C873	FKM	70	-20°C	200°C	Black	M2 HK 710 A1-10 A1-11 B37 B38 EF31 E078 E088
V75C646	FKM	75	-20°C	200°C	Black	M2 HK 810 A1-10 B38 EF31 E078 Z1
V85C470	FKM	85	-20°C	200°C	Black	M3 HK 810 A1-10 EF31 Z1 Z2
L50CA29	FVMQ	50	-55°C	175°C	Blue	
L60C344	FVMQ	50	-55°C	175°C	Light Blue	
L70C247	FVMQ	70	-55°C	175°C	Blue	M2 FK 706 A19 EF31 EO36 F19 Z1
S50CC08	VMQ	50	-55°C	205°C	Red	
S60CA19	VMQ	60	-50°C	200°C	Black	
S70C524	VMQ	70	-50°C	205°C	Red	M2 GE 705 A19 B37 EA14 EO16 EO36 G11 F19
P70CH72	AU	70	-55°C	100°C	Transparent	M3 BG 714 B14 EA14 EO14 F19 Z1
P80CJ32	AU	80	-55°C	100°C	Black	M3 BG 814 A14 B14 EA14 EO14 F19
P90CC43	AU	90	-55°C	100°C	Black	M2 BG 910 A14 B34 E014 E034 F17 Z1

Design & Development

Unrivalled technical and engineering support means our customers benefit from the best possible seal performance at optimum cost.

Experienced application engineers support every project; from concept to approval



Complete seal design service

Seal geometry and profile choice

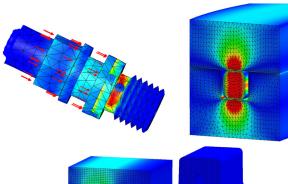
Material selection and development

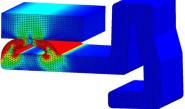
3D CAD modelling and FEA Simulation

3D printing for concept testing

Prototyping through to final production

Online Technical Hub and interactive tools





Quality Assurance

Strict quality procedures at all stages of our design, development and manufacturing processes.

We are ISO9001:2015, ISO13485:2016 and ISO14001:2015 approved



Manufacturing approved to IATF16949:2016 & AS9100



ISO13485 accredited cleanroom production



Worldwide network of global manufacturing facilities

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Advanced product quality planning



Proactive and preventative expertise



Production step	FS209E	ISO14644		
Production step	Cleanroom Class			
Vulcanisation	100 000	8		
Deflashing	100 000	8		
Washing and Cleaning	10 000	7		
Inspection	10 000	7		
Packaging & special inspection	10 000	7		



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