



COMPANY OVERVIEW

Manufacturer of hydraulic motors and pumps



You are at the **centre**
of everything we do

ABOUT US

Rotary Power specialises in the design, development and manufacture of axial piston pumps, radial piston motors and power units. With a history dating back over 50 years, we understand the exacting and demanding requirements of today's hydraulic applications. Our years of experience and reputation for quality and innovation have enabled our continued company growth.



OUR BUSINESS

We recognise the importance of developing partnerships with our customers. That's why we offer flexibility in design, delivery and service to meet our customer's requirements.

Partnerships with our supply chain are key to Rotary Power's success and allow us to deliver excellent service in order to exceed expectations.

OUR PEOPLE

People are at the centre of everything we do. As an innovative engineering and manufacturing business we take recruitment and career development very seriously.

As part of the British Engines Group, we operate a training and development programme that maintains a strong focus on in-house manufacturing and a commitment to local employment. Our apprenticeship and graduate schemes also provide the opportunity to develop and nurture engineering talent from an early stage.

OUR FUTURE

Whether in product design or internal processes and systems, our engineers are actively encouraged to innovate. This ensures that we are at the forefront of customer and sector led innovation, whilst continuously improving our business.

Our team of in-house design engineers invest time to understand our customer's application and work with them to deliver value added solutions, customised to their application.



Rotary Power is part of the British Engines Group founded in 1922, which employs over 1,500 people within its eight engineering businesses. It has offices in 17 countries across the world including Australia, USA, India, South Africa, Singapore and Germany. As a part of such a prestigious engineering group, Rotary Power has access to the group's on-going support and stability. The group companies are certified to BS EN 9001, 14001 and 18001 relevant to their operational requirements.

OVER THE YEARS

1968



Reyrolle Hydraulics established

1976



Reyrolle Hydraulics renamed RHL Hydraulics

1970/80's



XM cam motor introduced

Rotary Power USA established



A range series axial piston pump & motor introduced



MH motor acquired from Sauer

SMA radial piston motor acquired



Rotary Power Germany established

1990's



XL cam motor range launched replacing XM

Rotary Power Germany moved to Aachen

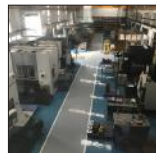


RHL renamed globally to Rotary Power

XK motor developed



2000's



3,000 sq. m. manufacturing facility is opened in India



Rotary Power USA moved from Columbus, OH to Sioux Falls, SD

2011



XF cam motor is launched with displacements up to 1360 cc. A small envelope motor with high power

2014



Rotary Power UK moved to a new 15,000 sq. m. facility



XJ cam motor developed

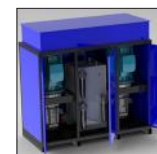


XXJ cam motor developed for large drive systems

2015



Expansion of the Indian manufacturing facility in Bangalore



High pressure, hydraulic power unit developed

2019



North American service facility opened in Sioux Falls, SD



Operating from 18,000 sq. m. of manufacturing facilities, we continue to invest in the latest CNC machinery, automation and testing facilities. We have a clear focus on continuous improvement in lean cellular manufacturing.

Our purpose built factory enables us to cater for large and small volume orders from all over the world.



OUR INDUSTRIES

AGRICULTURE & FORESTRY

We understand the need for manoeuvrability across multiple terrains, as well as the importance of keeping terrain damage to a minimum. That's why our high torque, compact range of hydraulic motors are the ideal solution to power agricultural applications.

- Crop sprayer
- Stump grinder
- Pea harvester
- Flail and tiller
- Composter



CONSTRUCTION

We have the design and manufacturing experience to provide service, power and reliability to a range of applications within the construction industry. Our products have been developed to withstand high mechanical and hydraulic shock loads, whilst also offering an excellent product life, to ensure production demands can be met and down time kept to a minimum.

- Paver
- Drill
- Trencher
- Terrain leveller
- Back hoe loader



MARINE & OFFSHORE

Our engineers know how important reliability and performance are to marine applications, which is why we have earned the reputation of providing dependable, high quality solutions to this sector. We can deliver solutions to power remotely operated vehicles below the surface, as well as motion and deployment systems above the surface.

- Dredger
- Remotely operated vehicles
- Subsea trencher
- Winch
- Drill





MINING & BULK MATERIAL HANDLING

From high hydraulic shock loads to long product life expectations, the mining and material handling industry places some of the highest demands on hydraulic equipment. We have been supplying solutions to the industry for over 50 years and are confident that we have continued to adapt with the industry's dramatically changing needs.

- Cutter head
- Monorail
- Conveyor and feeder
- Crusher
- Mining shovel



RECYCLING & MUNICIPAL VEHICLES

Our motors are used to power recycling and materials reclamation vehicles across the planet. Whether it is driving heavy duty shredders or powering mixing applications, we understand the importance of your equipment performing continuously without loss in efficiency.

- Runway sweeper
- Snow blower
- Shredder
- Auger
- Conveyor and feeder
- Composter



OIL & GAS

Our products provide a dependable solution for a wide range of applications within the oil and gas industry. From fan drives to drilling rigs, our readiness to offer customised designs within already mature product lines, allows us to meet your specific application needs.

- Fan drive
- Drilling
- Blender drives

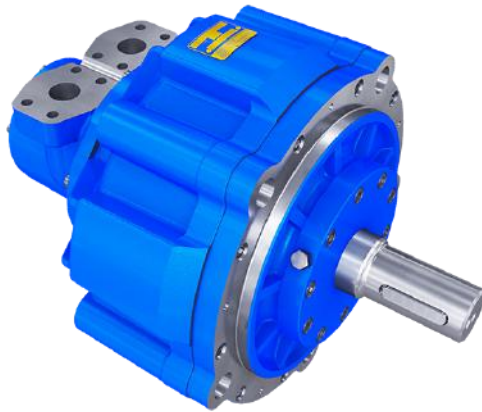


Our facilities, together with the extensive manufacturing resource of the British Engines Group, enable us to offer you a world class service without compromise.



SMA MOTOR

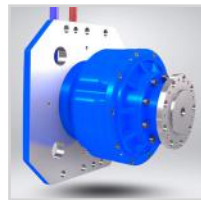
High torque, high power, radial piston eccentric motor



Our SMA heavy duty motor is of radial piston, eccentric configuration. The motor's efficient design includes a hardened high tensile steel crankshaft supported on taper roller bearings. The eccentric element of the crankshaft acts as a hydrodynamic bearing to support the cylinder block and pistons and provides low friction running. The SMA motor range offers displacements from 200 - 16,400 cc/rev.

Motors within this range can withstand both high mechanical and hydraulic shock loads, offering excellent life and continuous high power use. The speed and power ratings of this range are significantly higher than standard high torque low speed (HTLS) motors.

Standard SMA motors are designed for continuous 350 bar and intermittent 490 bar duty.



- 350 bar continuous pressure
- High pressure capability
- High power capability
- High speed
- Fixed displacements
- Robust
- Free wheel capability
- Fluid versatility
- Configuration options available including rotating case drum drive

Ask us about our rotating case motor option which can be used as a direct drive cooling fan motor, as the motor is capable of achieving speeds up to 1000 rpm.

SMA MOTOR DATA

SMA0480	C1	C1/E1	C1/E1	B1	C1/E1
Nominal Displacement (cc/rev)	200	290	350	370	480
Geometric Displacement (cc/rev)	208	289	339	370	481
Specific Torque (Nm/bar)	3.3	4.6	5.4	5.9	7.7
Max Pressure (bar)*	490	490	490	490	490
Max Cont. Speed - Standard Rating (rpm)	480	480	480	480	480
Max Cont. Power - Standard Rating (kW)	28	40	48	48	68
Max Cont. Speed - High Power Rating (rpm)	1000	1000	1000	1000	1000
Max Cont. Power - High Power Rating (kW)	54	76	89	89	126

SMA0500	C1/B1
Nominal Displacement (cc/rev)	500
Geometric Displacement (cc/rev)	502
Specific Torque (Nm/bar)	8.0
Max Pressure (bar)*	490
Max Cont. Speed - Standard Rating (rpm)	430
Max Cont. Power - Standard Rating (kW)	61
Max Cont. Speed - High Power Rating (rpm)	700
Max Cont. Power - High Power Rating (kW)	103

SMA1230	C1/E1/C2	C1/E1	C1/E1/B1/C2	C1/E1
Nominal Displacement (cc/rev)	750	850	1000	1230
Geometric Displacement (cc/rev)	757	857	996	1160
Specific Torque (Nm/bar)	12.0	13.6	15.9	18.5
Max Pressure (bar)*	490	490	490	490
Max Cont. Speed - Standard Rating (rpm)	380	350	350	283
Max Cont. Power - Standard Rating (kW)	84	95	100	124
Max Cont. Speed - High Power Rating (rpm)	620	620	600	580
Max Cont. Power - High Power Rating (kW)	137	155	187	196

SMA2200	C1/E1/C2	C1/E1/B1/C2	C1/E1/B1
Nominal Displacement (cc/rev)	1340	1600	2200
Geometric Displacement (cc/rev)	1343	1602	2227
Specific Torque (Nm/bar)	21.4	25.5	35.4
Max Pressure (bar)*	490	490	490
Max Cont. Speed - Standard Rating (rpm)	320	300	216
Max Cont. Power - Standard Rating (kW)	125	140	195
Max Cont. Speed - High Power Rating (rpm)	565	565	406
Max Cont. Power - High Power Rating (kW)	221	264	264

SMA3200	C1/E1	C1/E1	C1/E1	C1/E1
Nominal Displacement (cc/rev)	2000	2500	2800	3200
Geometric Displacement (cc/rev)	2003	2507	2801	3215
Specific Torque (Nm/bar)	31.9	39.9	44.6	51.2
Max Pressure (bar)*	490	490	490	490
Max Cont. Speed - Standard Rating (rpm)	285	285	260	240
Max Cont. Power - Standard Rating (kW)	165	185	200	237
Max Cont. Speed - High Power Rating (rpm)	380	380	380	380
Max Cont. Power - High Power Rating (kW)	222	278	300	357

SMA4350	C1/E1	C1/E1
Nominal Displacement (cc/rev)	3500	4350
Geometric Displacement (cc/rev)	3504	4349
Specific Torque (Nm/bar)	55.8	69.2
Max Pressure (bar)*	490	490
Max Cont. Speed - High Power Rating (rpm)	350	240
Max Cont. Power - High Power Rating (kW)	358	400

SMA6250	C1	C1
Nominal Displacement (cc/rev)	5000	6250
Geometric Displacement (cc/rev)	5019	6250
Specific Torque (Nm/bar)	79.9	99.5
Max Pressure (bar)*	490	490
Max Cont. Speed - High Power Rating (rpm)	210	190
Max Cont. Power - High Power Rating (kW)	450	550

SMA8700	C1/C2	C1/C2
Nominal Displacement (cc/rev)	7000	8700
Geometric Displacement (cc/rev)	7009	8698
Specific Torque (Nm/bar)	111.6	138.4
Max Pressure (bar)*	490	490
Max Cont. Speed - High Power Rating (rpm)	240	240
Max Cont. Power - High Power Rating (kW)	491	609

SMA10L	C1	C1	C1
Nominal Displacement (cc/rev)	7400	8800	10500
Geometric Displacement (cc/rev)	7381	8812	10498
Specific Torque (Nm/bar)	117.5	140.2	167.1
Max Pressure (bar)*	490	490	490
Max Cont. Speed - High Power Rating (rpm)	180	150	125
Max Cont. Power - High Power Rating (kW)	443	528	630

SMA16L	C1	C1
Nominal Displacement (cc/rev)	13000	16000
Geometric Displacement (cc/rev)	13000	16400
Specific Torque (Nm/bar)	206.9	261.0
Max Pressure (bar)*	490	490
Max Cont. Speed - High Power Rating (rpm)	125	125
Max Cont. Power - High Power Rating (kW)	820	900

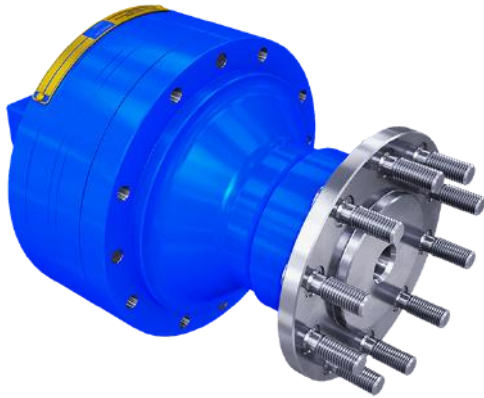
C1 = Rotating Shaft Motors
 E1 = Rotating Case Motors
 B1 = Rotating Case Shaft Motors
 C2 = 2-Speed Rotating Shaft Motors

* Running conditions that utilise the maximum/peak pressure capabilities of the motor should be kept to a minimum and if utilised, done so as part of a known duty cycle.



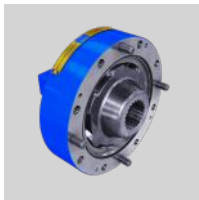
XF MOTOR

Compact, modular design, customisable, multi-lobed radial piston motor



The XF cam motor is of radial piston configuration and is available as a common torque unit or with the option of a shaft or wheel motor housing. The XF motor uses pintle technology to eliminate the need for axial bearing thrust support and to provide a high starting output torque, helping to reduce mechanical losses. The XF motor offers displacements from 150 - 1,360 cc/rev.

Designed to operate up to 420 bar peak pressure, the XF motor is a low maintenance cam motor. All bearings within the shaft and wheel motor housings are provided sealed and lubricated as standard. The small envelope provides a high power to weight ratio with minimum overall dimensions.



- 325 bar continuous pressure
- Radial or axial port options
- Fixed displacement
- Compact design with three output styles
- Free wheel capability
- Fast delivery options available

XF MOTOR DATA

XF02

Nominal Displacement (cc/rev)	150	200	280	340
Geometric Displacement (cc/rev)	150	200	280	340
Specific Torque (Nm/bar)	2.4	3.2	4.5	5.4
Max Pressure (bar)*	420	420	420	420
Max Cont. Speed (rpm)	550	500	390	320
Max Cont. Power (kW)	18	18	18	18

XF04

Nominal Displacement (cc/rev)	300	350	400	480	560	620	680
Geometric Displacement (cc/rev)	300	350	400	480	561	620	680
Specific Torque (Nm/bar)	4.8	5.6	6.4	7.6	8.9	9.9	10.8
Max Pressure (bar)*	420	420	420	420	420	420	420
Max Cont. Speed (rpm)	375	262	250	222	195	178	160
Max Cont. Power (kW)	29	32	35	36	36	36	36

XF05

Nominal Displacement (cc/rev)	390	490	560	680
Geometric Displacement (cc/rev)	393	493	559	681
Specific Torque (Nm/bar)	6.3	7.8	8.9	10.8
Max Pressure (bar)*	420	420	420	420
Max Cont. Speed (rpm)	440	350	320	260
Max Cont. Power (kW)	30	30	30	30

XF10

Nominal Displacement (cc/rev)	780	880	980	1050	1120	1240	1360
Geometric Displacement (cc/rev)	785	886	986	1052	1117	1239	1362
Specific Torque (Nm/bar)	12.5	14.1	15.7	16.7	17.8	19.7	21.7
Max Pressure (bar)*	420	420	420	420	420	420	420
Max Cont. Speed (rpm)	230	200	180	170	160	145	132
Max Cont. Power (kW)	60	60	60	60	60	60	60

* Running conditions that utilise the maximum/peak pressure capabilities of the motor should be kept to a minimum and if utilised, done so as part of a known duty cycle.



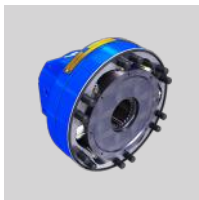
XJ MOTOR

Compact, modular design, customisable, multi-lobe radial piston motor



The XJ motor offers a truly modular design with a wide variety of standard options to suit multiple drive systems. Developed from over 35 years of cam motor experience, the XJ range offers displacements of 260 to 5,010 cc/rev.

The XJ motor is fully customisable, we will work with you to add value to your design.



- 350 bar continuous pressure
- Two speed options
- Parking brake options
- Free wheel capability
- Radial piston, multi-stroke design
- Face valve distribution
- Fast delivery options available
- Customisable

XJ MOTOR DATA

XJ05

Nominal Displacement (cc/rev)	260	380	430	470	520	570
Geometric Displacement (cc/rev)	260	376	425	472	519	565
Specific Torque (Nm/bar)	4.1	6.0	6.8	7.5	8.3	9.0
Max Pressure (bar)*	450	450	450	450	450	450
Max Cont. Speed - 1 Displacement (rpm)	300	250	235	240	220	200
Max Cont. Speed - 2 Displacement (rpm)	300	250	235	240	220	200
Max Cont. Power (kW)	29	29	29	29	29	29

XJ08

Nominal Displacement (cc/rev)	460	600	730	870	1000	1150
Coming soon						

XJ12

Nominal Displacement (cc/rev)	730	890	1050	1200	1350	1540
Coming soon						

XJ20

Nominal Displacement (cc/rev)	1670	1880	2100	2300	2500
Geometric Displacement (cc/rev)	1666	1884	2092	2301	2505
Specific Torque (Nm/bar)	26.5	30.0	33.3	36.6	39.9
Max Pressure (bar)*	450	450	450	450	450
Max Cont. Speed - 1 Displacement (rpm)	125	115	100	90	85
Max Cont. Speed - 2 Displacement (rpm)	150	135	125	110	100
Max Cont. Power (kW)	70	70	70	70	70

XJ40

Nominal Displacement (cc/rev)	3330	3770	4180	4600	5010
Geometric Displacement (cc/rev)	3332	3768	4184	4602	5010
Specific Torque (Nm/bar)	53.0	60.0	66.6	73.2	79.7
Max Pressure (bar)*	450	450	450	450	450
Max Cont. Speed - 1 Displacement (rpm)	150	145	140	120	110
Max Cont. Speed - 2 Displacement (rpm)	150	145	140	130	120
Max Cont. Power (kW)	110	110	110	110	110

* Running conditions that utilise the maximum/peak pressure capabilities of the motor should be kept to a minimum and if utilised, done so as part of a known duty cycle.



C RANGE PUMP FOR CHEMICAL METERING APPLICATIONS

High accuracy fluid metering with precision flow control and a high-pressure capability



The C range metering pump was designed specifically for the polyurethane foam industry, to provide high accuracy fluid metering with precision flow control and high-pressure capability. The C range pump has capacities from 2 cc to 62 cc per revolution.

Used for chemical metering in foam machines, the pump has been applied with the isocyanate's TDI, MDI and TDI/MDI mixes, as well as polyether and polyester resins and methylene chloride.



- High efficiency and metering accuracy from a seven piston design
- Five frame sizes from 2 cc to 62 cc per revolution
- Corrosion resistant main cases
- High outlet pressures
- Fixed flow outputs with accurate adjustment options
- Easy installation, maintenance and service
- Various seal options including magnetic drive couplings
- Large bearings for long service life

C RANGE PUMP DATA

C01

Geometric displacement (cc/rev)	2
Maximum speed (rpm)	1800
Minimum speed (rpm)	200
Max outlet pressure TDI (bar)	210.0
Max outlet pressure MDI (bar)	250

C04

Geometric displacement (cc/rev)	6
Maximum speed (rpm)	1800
Minimum speed (rpm)	200
Max outlet pressure TDI (bar)	210
Max outlet pressure MDI (bar)	250

C07

Geometric displacement (cc/rev)	11.5
Maximum speed (rpm)	1800
Minimum speed (rpm)	200
Max outlet pressure TDI (bar)	210
Max outlet pressure MDI (bar)	250

C20

Geometric displacement (cc/rev)	33
Maximum speed (rpm)	1800
Minimum speed (rpm)	200
Max outlet pressure TDI (bar)	210
Max outlet pressure MDI (bar)	250

C38

Geometric displacement (cc/rev)	62
Maximum speed (rpm)	1800
Minimum speed (rpm)	200
Max outlet pressure TDI (bar)	210
Max outlet pressure MDI (bar)	250





AFTER SALES & SERVICING

We provide a full and comprehensive after sales service to all of our customers as standard.

We have service centres in the United Kingdom, Germany and United States.

Our service technicians support you from the moment you purchase your product to ensure any potential downtime is kept to a minimum. We can also provide on-site commissioning alongside servicing and technical support throughout the life cycle of your product.

SO, HOW CAN WE HELP?

We have supplied high quality hydraulic solutions to a number of sectors for over 50 years. We understand that every sector's requirements vary, from high power and high speed, to accuracy, reliability and compactness.

So whether your application is in the frozen northern territories, or the outback of Australia, we promise to invest our time to work alongside you in order to develop a solution.

All of our products are available as standard or can be customised in order to suit your application.

Contact one of our experts to discuss your application.



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