



Axiom Hydraulics

2025

Product Catalogue



**Black
Bruin**



Axiom Hydraulics Design House – where ideas become reality

At Axiom Hydraulics, our Design House is the heart of innovation, expertise and precision. This dynamic hub is powered by a team of highly skilled professionals comprised of mechanical and electrical engineers, draftsmen, and other technically adept specialists. With over 150 years of combined experience, this problem-solving powerhouse tackles challenges of any scale, delivering hydraulic solutions with precision and efficiency.

Our team's technical expertise extends beyond design. From initial concept to after-sales support, we are committed to ensuring seamless functionality. Whether troubleshooting critical errors or assisting with system optimization, our experts are always on hand to support every client—big or small. We are passionate about what we do, and that passion drives our dedication to providing world-class service to all our clients.

Using the latest design software, we create system solutions tailored to meet diverse requirements. We pride ourselves on being highly efficient without compromising quality.

Key Capabilities:

- Comprehensive design of complete hydraulic systems
- Custom integrated manifold designs
- Agile design processes with fast lead times
- Dedicated after-sales/project technical support

No challenge is too complex, no detail too small—at Axiom Hydraulics, we bring your ideas to life with expertise, care, and a commitment to excellence.

SITE 2: WORKSHOP & STORES

At Axiom Hydraulics, our Workshop and Stores Team operates as a specialized arm of the company, distinct from our design and production capabilities. This team is dedicated to the repair, reconditioning, and servicing of hydraulic equipment, ensuring our customers receive unmatched support throughout the life-cycle of their systems. Our highly skilled team are able to customize hydraulic systems and products to meet the unique demands of specific applications. By modifying components and configurations, we can deliver tailored solutions that enhance performance, efficiency, and reliability for even the most specialized requirements.

With over 65 years of operational experience, our team of highly trained machinists, fitters, and cutting-edge machinery, perform OEM-specified servicing and repairs to the highest standards.

Our 5,500 m² workshop is meticulously designed to minimize contamination of exposed components, delivering exceptional quality control. No hydraulic component leaves our facility without comprehensive performance and safety testing. Every completed unit undergoes stringent load simulations on our test benches to ensure smooth, efficient, and reliable operation.

In addition, we maintain substantial stock-holding of parts and spares to support our entire hydraulic equipment portfolio, ensuring that our clients' needs are met quickly and efficiently.



Sun Hydraulics is a leading designer and manufacturer of high-performance screw-in hydraulic cartridge valves, valve bodies and valve accessories that control force, speed and motion as integral components in fluid power systems.

Axiom Hydraulics is the distributor of Sun Hydraulic's screw-in cartridge valves and manifolds for sub-Saharan Africa.



Pressure Relief Valves



Relieving Valves



Sequence Valves



Load Reactive Valves



Pilot-to-open Valves



Counterbalance Valves



Check Valves



Flow Divider Valves



Flow Control Valves



Directional Valves



Solenoid Operated Valves



Shuttle Valves



Logic Elements



Flex Series



Standard Valve Blocks



Sun XMD Drivers



Accessories

MOTORS

Axiom Hydraulics is the distributor of Black Bruin's **low speed, high torque** motors and rotators for sub-Saharan Africa. With one of the largest stock-holdings of radial piston motors, we can supply ex-stock. We also provide full aftermarket spares kits and offer complete in-house repair services for the full product range.

Black Bruin

X Series - Rotating Shaft Motors

> Performance

- Displacement [ccm] 2512/3140/4020/5024/6280/7543/8800
- Max. torque [Nm] 15200/19000/24300/32000/40000/48000/56000
- Max. power [kW] 280
- Max. rotating speed [rpm] 400 freewheeling
- Max. pressure [bar] 300-400



X - Series

S Series - Rotating Shaft Motors

> Performance | S1000

- Displacement [ccm] 4400/6300
- Max. torque [Nm] 31500/45100
- Max. power [kW] 175
- Max. rotating speed [rpm] 180
- Max. pressure [bar] 450

> Performance | S2000

- Displacement [ccm] 8800/9900/11000/13200/15000
- Max. torque [Nm] 63000/70900/78700/94500/107400
- Max. power [kW] 350
- Max. rotating speed [rpm] 130/115/103/86/75
- Max. pressure [bar] 450

> Performance | S3000

- Displacement [ccm] 13200/14850/15000/17600/18900/22500
- Max. torque [Nm] 94500/106300/107400/12600/135300/136000
- Max. power [kW] 500
- Max. rotating speed [rpm] 86/75/75/64/60/50
- Max. pressure [bar] 450/450/450/450/450/380



S - Series



B200 Series Rotating Case Motors



Features

Unique mechanical freewheeling.
1- or 2-speed. Well-sealed, compact structure. High load carrying capacity.

C200 Series

Rotating Case Motors

> Performance

The C200-series motors transmit up to 90 kW of power and 22 500 Nm of torque. The displacement ranges from 462 to 3150 ccm.

The C200-series motors are available with static and dynamic wet multi-disc brakes and caliper disc brakes.



B200

C200

Complete range of spares | Comprehensive service and load test facilities | Full repair and maintenance

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MOTORS



Axiom Hydraulics is a distributor of Impro Fluidtek Orbital Motors in South Africa. These Orbital Motors are market leaders and excel in reliability, efficiency, durability and flexibility.

Light Duty Motor – Product Line WM

The WM Product Line is high speed and low weight with intermittent pressures up to 140 bar and torque to 64 Nm.

Light Duty Motor – Product Line WD

The WD Product Line is a cost effective, durable, and compact orbital motor with intermittent pressures up to 173 bar and torque to 582 Nm.

Light Duty Motor – Product Line WG

The WG Product Line provides a light-duty side load platform with intermittent pressures up to 190 bar and torque to 758 Nm.

Light Duty Motor – Product Line WP

The WP Product Line is a cost effective, durable, and compact orbital motor with intermittent pressures up to 175 bar and torque to 625 Nm.

Light Duty Motor – Product Line WR

The WR Product Line is characterized by an increased motor efficiency with intermittent pressures up to 207 bar and torque to 698 Nm.

Medium Duty Motor – Product Line CE

The CE Product Line with its compact size, light weight and low speed efficiency is the perfect fit for wheel drive applications. Intermittent pressures are up to 241 bar, torque to 1237 Nm.

Medium Duty Motor – Product Line RE/RC

The RE/RC Product Line fits for versatile range of applications although they are particular suited for high pressure, low-flow applications. Intermittent pressures are up to 241 bar, torque to 1237 Nm.

Heavy Duty Motor – Product Line WS 360

The WS 360 Product Line is designed for applications that require greater torque under demanding conditions with intermittent pressures up to 275 bar and torque to 1069 Nm.

Heavy Duty Motor – Product Line WS 365/366

The WS 365/366 Product Line is designed for applications that require greater torque under demanding conditions with intermittent pressures up to 276 bar and torque to 1064 Nm.

Heavy Duty Motor – Product Line WZ

The WZ Product Line is designed for applications that require greater torque under demanding conditions with intermittent pressures up to 310 bar and torque to 2027 Nm.

Heavy Duty Motor – Product Line WT

The WT series is specifically designed for use in applications that demand higher torque in challenging operating conditions, with the ability to withstand intermittent pressures up to 241 bar and intermittent torque of up to 3342 Nm respectively.



Light Duty Motors



Medium Duty Motors



Heavy Duty Motors



PUMPS & MOTORS



BREVINI™

Axiom Hydraulics is a distributor of Brevini Fluid Power axial piston pumps and motors for sub-Saharan Africa. Brevini Fluid Power offers our clients state-of-the-art fixed and variable displacement, axial piston pumps and motors for both closed and open circuit applications.

Bent Axis Fixed Displacement Pumps & Motors

H1C SERIES

- Fixed displacement
- For open and closed circuit
- ISO and SAE version
- Displacements 6-12-40-226 cm³/rev
- Nominal pressure 350 bar [5800 psi]
- Peak pressure 450 bar [6530 psi]

SH11C SERIES

- Fixed displacement
- For open circuit
- ISO and SAE version
- Displacements 10-16-20-30-45-55-63-75-90-108-125-160-180 cm³/rev
- Nominal pressure 430 bar [6240 psi]
- Peak pressure 480 bar [6960 psi]

Bent Axis Variable Displacement Pumps & Motors

H1V SERIES

- Variable displacement
- For open circuit
- ISO and SAE version
- Displacements 55-75-108-160-226 cm³/rev
- Nominal pressure 350 bar [5080 psi]
- Peak pressure 450 bar [6530 psi]

SH7V SERIES

- Variable displacement
- For open and closed circuit
- ISO and SAE version
- Displacements 55-75-108-160-200 cm³/rev
- Nominal pressure 430 bar [6240 psi]
- Peak pressure 480 bar [6960 psi]

Variable Displacement Open Loop Pumps

S5AV SERIES

- Variable displacement
- For open circuit
- Displacements 32-45-50-63-75-93 cm³/rev
- Nominal pressure 280÷350 bar [4060÷5080 psi]
- Peak pressure 350÷420 bar [5080÷6090 psi]

Variable Displacement Closed Loop Pumps

S6CV SERIES

- Variable displacement
- For closed circuit
- ISO and SAE version
- Displacements 75-128 cm³/rev
- Nominal pressure 400 bar [5800 psi]
- Peak pressure 450 bar [6530 psi]

HD1 SERIES

- Variable displacement
- For closed circuit
- ISO and SAE version
- Displacements 55 cm³/rev
- Nominal pressure 420 bar [6090 psi]
- Peak pressure 450 bar [6530 psi]

MD10V SERIES

- MD10V 46/50/64 series is a family of variable displacement axial piston pumps for use in closed circuits. The displacement is infinitely variable by means of a tilting swash plate, the oil flow can be reversed over the neutral point.
- Each pump has a built in boost pump that makes up for internal leakage, maintains a positive pressure in the main circuit and provides oil to the control system.
- All pumps have pre-set pressure relief valves and can be supplied single or in tandem version.
- Every pump is supplied with a boost pressure filter positioned on the pressure outlet of the boost pump.



➤ SH11C - Fixed Displacement



➤ HD1 - Variable Displacement

➤ SPARES

Need spares for your Brevini pump or motor?

We've got you covered. We stock complete spares kits for every Brevini axial piston pump and motor series.

Eckerle's gap compensated high pressure internal gear pumps have been especially developed to suit the mobile, industrial, and automotive sectors. They impress with their exceptionally low noise, ease of combination to create multiple pumps, long service life and ability to withstand peak pressures of up to 400 bar even at low input RPM.

EIPC INDUSTRIAL PUMPS WITH ALUMINIUM HOUSING

Performance | EIPC3/EIPC5/EIPC6

- sizes 3-6
- nominal sizes 20-250 cm³/ U
- permanent operating pressure up to 250 bar
- peak operating pressure up to 320 bar



Industrial Pump

EIPH INTERNAL GEAR HIGH PRESSURE PUMP

Performance | EIPH2

- sizes 004 - 025
- Spec. volume [cm³/rev] 4.2 - 24.8
- continuous operating pressure up to 330 bar
- peak operating pressure up to 350 bar

Performance | EIPH3

- sizes 014 - 064
- Spec. volume [cm³/rev] 14.3 - 65.3
- continuous operating pressure up to 330 bar
- peak operating pressure up to 350 bar

Performance | EIPH5

- sizes 040 - 100
- Spec. volume [cm³/rev] 40.2 - 100.5
- continuous operating pressure up to 300 bar
- peak operating pressure up to 330 bar

Performance | EIPH6

- sizes 040 - 250
- Spec. volume [cm³/rev] 40.8 - 249.9
- continuous operating pressure up to 330 bar
- peak operating pressure up to 340 bar

EIPQ INTERNAL GEAR REVERSING PUMP

Performance | EIPQ0

- sizes 060 & 100
- Spec. volume [cm³/rev] 0.6 - 1.0
- continuous operating pressure up to 250 bar
- peak operating pressure up to 280 bar

Performance | EIPQ1

- sizes 016 - 032
- Spec. volume [cm³/rev] 1.6 - 3.2
- continuous operating pressure up to 250 bar
- peak operating pressure up to 280 bar

Performance | EIPQ2

- sizes 005 - 013
- Spec. volume [cm³/rev] 5.4 - 13.3
- continuous operating pressure up to 250 bar
- peak operating pressure up to 280 bar

Performance | EIPQ3

- sizes 016 - 025
- Spec. volume [cm³/rev] 15.8 - 24.5
- continuous operating pressure up to 250 bar
- peak operating pressure up to 280 bar

Performance | EIPQ5

- sizes 032 & 040
- Spec. volume [cm³/rev] 32.7 - 40.2
- continuous operating pressure up to 250 bar
- peak operating pressure up to 280 bar



High Pressure Pump



Reversing Pump



Segmental Pump

EIPS SEGMENT PUMP

Performance | EIPS1

- sizes 016 - 050
- Spec. volume [cm³/rev] 1.6 - 5.0
- continuous operating pressure up to 300 bar
- peak operating pressure up to 320 bar

Performance | EIPS2

- sizes 005 - 025
- Spec. volume [cm³/rev] 5.4 - 24.8
- continuous operating pressure up to 250 bar
- peak operating pressure up to 320 bar

BRAKES



For over 100 years, Ausco has engineered innovative brake designs, including this range of service, park and emergency mechanical brakes. Axiom Hydraulics is able to customize the Ausco range of braking systems to suit your unique application requirements.

Axiom Hydraulics is the distributor of Ausco Products for sub-Saharan Africa.

Ausco Enclosed Wet Service & Failsafe Brakes for LC mining vehicles.

Rear Only Wet Brakes with Service & Park

This 2-wheel wet braking system provides a:

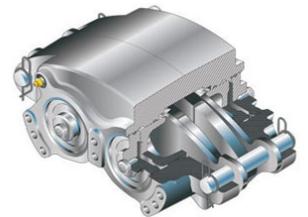
- *Simpler Solution* – Comes pre-assembled, ready to drop in and bolt in place at the rear wheels. No vehicle modifications or engine lift are needed for installation or servicing.
- *Safer Solution* – Spring applied parking brake fails-to-safe even on steep slopes. The corrosion and contamination resistant enclosure prevents premature failure.
- *Less Costly Solution* – Internal oil cooling chamber runs cooler so the brake experiences less heat, causing less wear, providing less downtime, less maintenance and replacement costs. Spend more time mining.



Mining application Brakes

Multi-Disc Brakes / Fail Safe Brakes

Spring-applied hydraulic released multi-disc brakes, featuring wet or dry designs with standard and specialty splines, these compact brakes deliver reliable dynamic (service) and static (parking) torque to suit nearly any application.



Caliper Brakes

- | | | |
|-----------------------|------------|-----------------------|
| • SAE "C" Mount Brake | 14 T Dry | Rated Torque: 610 Nm |
| • SAE "C" Mount Brake | 21 T Dry | Rated Torque: 746 Nm |
| • SAE "C" Mount Brake | 14 T Wet | Rated Torque: 610 Nm |
| • SAE "B" Mount Brake | 13 T Wet | Rated Torque: 294 Nm |
| • SAE "B" Mount Brake | 13 T Dry | Rated Torque: 294 Nm |
| • SAE "B" Mount Brake | 15 T Wet | Rated Torque: 362 Nm |
| • SAE "D" Mount Brake | 13 T Wet | Rated Torque: 1356 Nm |



Driveline Brake

Driveline Brakes

Ausco's enclosed driveline brakes are specifically designed to overcome common off-highway challenges. Completely enclosed, robust designs safely stop and hold all day long.

- Large (Wet and Dry)
- Small (Wet and Dry)

Calipers

- Hydraulic
- Mechanical



Multi-Disc Brake

Axiom Hydraulics is the largest stockholder of the ASA Hydraulik range of air blast coolers in Southern Africa. This range of low-noise and compact coolers is ideal for mobile and industrial hydraulic systems. Designed in Austria, these state-of-the-art air blast coolers provide consistent, heat-reducing performance while eliminating the threats of contamination and corrosion to your system!

Axiom Hydraulics is able to customize ASA Hydraulik's range of air blast coolers to suit your unique application requirements.

ASA Air Blast Coolers (from 60 - 600 L/min)

D.C - 12 / 24 Volt Coolers

- Rail Series
- ECO Series
- ASA Series

A.C - 230-400/525 Volt Coolers

- Compact A.C. Coolers (Pancake 220v Motor)
- Circulation/Off-line Coolers
- Rail Series
- ECO Series
- ASA Series

Hydraulic Drive Coolers

- Rail Series
- ASA Series

Fan Assembly 12/24 Volt D.C.

- Puller Fans
- Pusher Fans

- Thermostat Switches
- ASA Connectors
- Radiator ONLY
- Coolers with Integrated filter and Tank
- H-Cube System - Modular Cooler, Filter, Tank & Control Link
- Butterfly Valves

Accessories

- Rubber Vibration Damper (M8)
- Bypass Valve (2bar)
- Filter Element
- Temperature Control



AC Air Blast Coolers



DC Air Blast Coolers



Hydraulically Driven Air Blast cooler



Truck-mounted Air Blast cooler



BILLETS

SAE INTERNAL/EXTERNAL BILLETS					
Internal			External		
Spline	Description	Spline OD	Spline	Description	Spline OD
9T	16/32	5 / 8 "	13T	7/8"	16/32
9T	16/32	5 / 8 "	13T	1 3 / 4 "	8/16
9T	16/32	5 / 8 "	14T	1 1 / 4 "	12/24
9T	16/32	5 / 8 "	15T	1 "	16/32
9T	16/32	5 / 8 "	18T	35 / 31 "	1.75
11T	16/32	3 / 4 "	14T	1 1 / 4 "	12/24
11T	16/32	3 / 4 "	18T	METRIC	
13T	16/32	7 / 8 "	13T	1 3 / 4 "	8/16
13T	16/32	7 / 8 "	14T	1 1 / 4 "	12/24
13T	16/32	7 / 8 "	21T	1 3 / 8 "	16/32
13T	16/32	7 / 8 "	18T	35 / 31 "	1.75
13T	16/32	7 / 8 "	13T	1 3 / 4 "	8/16
14T	12 / 24	1 1 / 4 "	13T	1 3 / 4 "	8/16
14T	12 / 24	1 1 / 4 "	18T	METRIC	
14T	12 / 24	1 1 / 4 "	27T	1 3 / 4 "	16/32
14T	12 / 24	1 1 / 4 "	15T	2 "	8/16
14T	12/24	1 1 / 4 "	23T	1 1 / 2 "	16/32
15T	16/32	1 "	21T	1 3 / 8 "	16/32
15T	16/32	1 "	13T	1 3 / 4 "	
15T	16/32	1 "	18T	35 / 31 "	
15T	16/32	1 "	23T	1 1 / 2 "	16/32
21T	16/32	1 3 / 8 "	13T	1 3 / 4 "	8/16
21T	16/32	1 3 / 8 "	15T	2 "	8/16
21T	16/32	1 3 / 8 "	24T	METRIC	
27T	16/32	1 3 / 4 "	15T	2 "	8/16

SAE INTERNAL BILLETS		
Spline	Description	Spline OD
9 T	16 / 32	5 / 8 " (16 mm)
9 T	16 / 32	5 / 8 " (16 mm)
11T	16 / 32	3 / 4 " (19 mm)
13T	16 / 32	7 / 8 " (22 mm)
13T	8 / 16	1 3/4 " (44 mm)
14T	12 / 24	1 1/4 " (32 mm)
15T	16 / 32	1 " (25 mm)
15T	8 / 16	2 " (50 mm)
19T	16 / 32	1 1/4 " (32 mm)
21T	16 / 32	1 3 / 8 " (35 mm)
23T	16 / 32	1 1/2 " (38 mm)
27T	16 / 32	1 3/4 " (44 mm)
40T	16 / 32	2 9/16 " (65 mm)
23T	8 / 16	3 " (75 mm)
13T Long - 1/2 Blank		7 / 8 "
15T Long - 1/2 Blank		1"
14T Long - 1/2 Blank		1 1/4"

Metric Internal Billets

N30 x 2 x 30 x 14T - DIN 5480
 N35 x 2 x 30 x 16T - DIN 5480
 N40 x 2 x 30 x 18T - DIN 5480

METRIC - 30 I/D x 50 O/D
 METRIC - 35 I/D x 50 O/D
 METRIC - 40 I/D x 65 O/D

Metric Internal/External Billets

W50 x 2 x 30 x 24 x 11/2" x 23T23T-INT. METRIC x 24T-EXT. METRIC
 W50 x 2 x 30 x 30 x 11/2" x 21T21T-INT. METRIC x 24T-EXT. METRIC

Guardex is the chosen coupling brand for Axiom Hydraulics' range of FL flywheel couplings and Flexible Drive Shaft Couplings. This 2-piece flywheel coupling is designed for use on off-highway construction equipment and other mobile hydraulic applications.

The FL series flywheel coupling range is Axiom Hydraulics' longest standing and most economical product line. With decades of proven success in the field, the design consists of a glass reinforced nylon flywheel flange that fit SAE flywheels.

The mating hub is produced from steel and is ideal for use on both splined and straight shafts. It has a torsionally stiff design, which is interchangeable with other popular coupling brands and does not require any lubrication.

Axiom Hydraulics holds critical spare parts to minimize downtime for clients.

FLY-WHEELS				
SAE	6 ½"	Flywheel ONLY "C"	215.9 - Dia.	M48
SAE	7 ½"	Flywheel ONLY "C"	241.3 - Dia.	M48
SAE	8"	Flywheel ONLY "C"	263.52 - Dia.	M48
SAE	10"	Flywheel ONLY "C"	314.32 - Dia.	M48
SAE	10"	Flywheel ONLY "D"	314.32 - Dia.	M65
SAE	11 ½"	Flywheel ONLY "D"	352.42 - Dia.	M65
SAE	11 ½"	Flywheel ONLY "E"	352.42 - Dia.	M80

HUBS			
M	42/48	Hub	50T
M	65	Hub	42T
M	80	Hub	46T

NYLON SLEEVES		
M	42/48	Sleeve
M	65	Sleeve
M	80	Sleeve





Axiom Hydraulics

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**Black
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