

EN

Black Bruin

S Series

Industrial Hydraulic Motors



An aerial photograph of a vast, rugged mountain range. The peaks are covered in snow, and the valleys are filled with dense, dark evergreen forests. The terrain is steep and rocky, with numerous ridges and gullies. The sky is a pale, overcast blue.

The New
S Series



Built to last

With robust piston design

For almost 60 years Black Bruin Low-Speed High-Torque motors have powered various industrial applications worldwide. This extensive experience in the field of radial piston-cam ring motors is behind the new S Series. These Industrial Hydraulic Motors with a rotating shaft, are the most powerful Black Bruin's, rated up to 18900 ccm and 500 kW.

S Series motor has robust piston design and no backlash. The construction is ideal for demanding recycling applications with direction changes and shock loads. The power of S Series handles inconsistent waste material effortlessly and clears jamming situations with ease.

The torque transmitting components are easily serviceable if needed to guarantee the maximal uptime of your application.

Get the job done

With high productivity

The foundation drilling industry sets high demands on hydraulic motors. Black Bruin S Series motor is ideal to rotate the massive drill due to the high performance and durability. Contractors rely on S Series because they get the job done!

S Series direct drive transmits hydraulic energy efficiently without gears. With the 2-speed function, drilling speed can be changed on-the-go without stopping the operation. This is a great advantage in varying soil and ground conditions, ensuring the highest productivity possible.

S Series is available with several output shafts, including the useful through hole version. With internal diameter of 110 mm, the flow capacity is superior and a vast amount of material can be fed through motor. Strong tapered roller bearings in S Series handle extreme axial and radial loads.





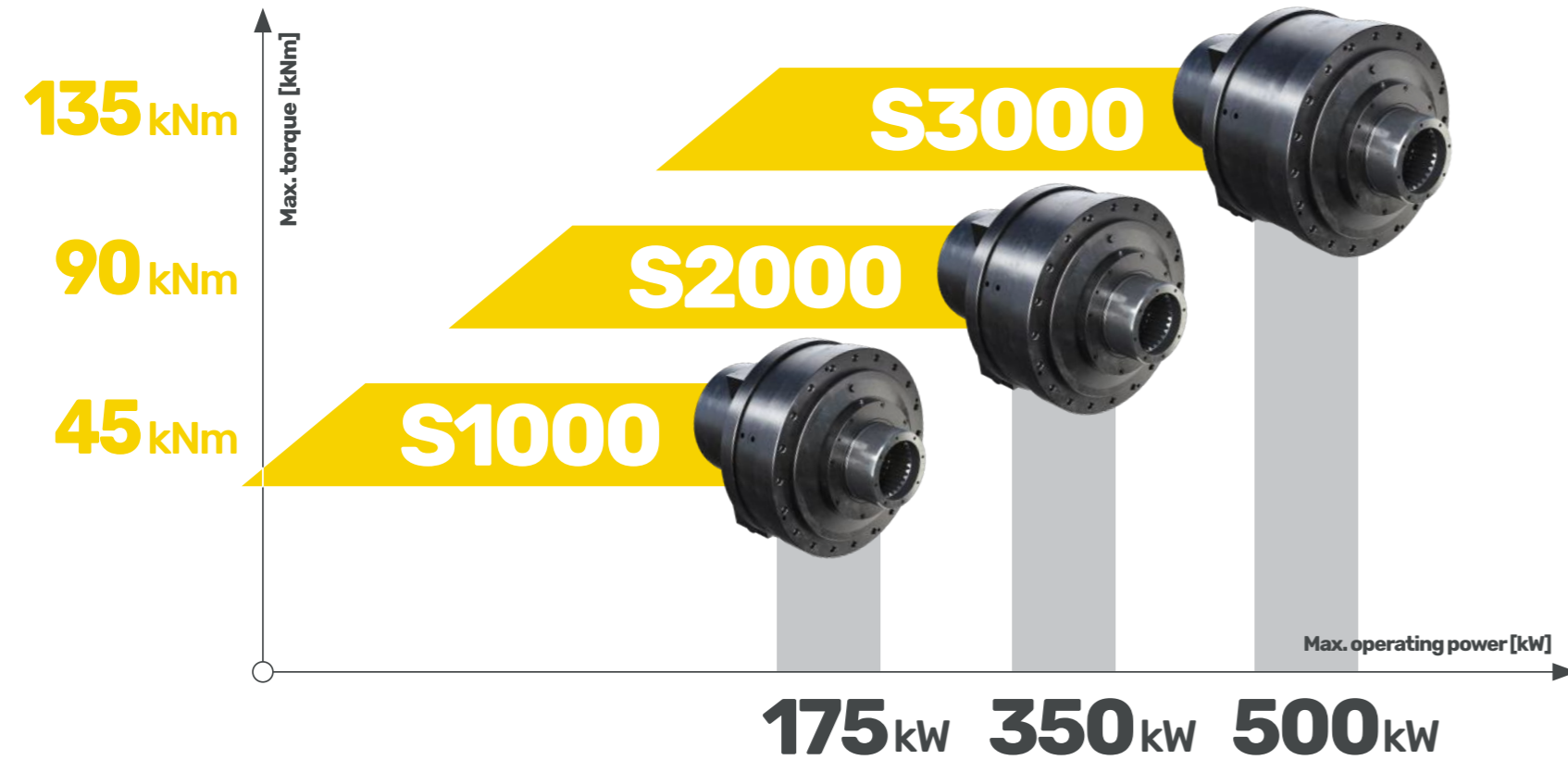
Reliable drives

For challenging conditions

Black Bruin S Series motor with a powerful brake is typically used as a direct winch drive in various marine and offshore applications. The motor runs at constant torque from low to high speeds. Motor can be hydraulically freewheeled when needed.

S Series is designed to operate reliably under demanding conditions and environments. The durable triple-sealing design protects the motor from dirt and moisture, thus protecting the entire hydraulic system.

The powerful (95 kNm) load-holding brake keeps the load safely and securely and it can be used in emergency situations.



High working pressure

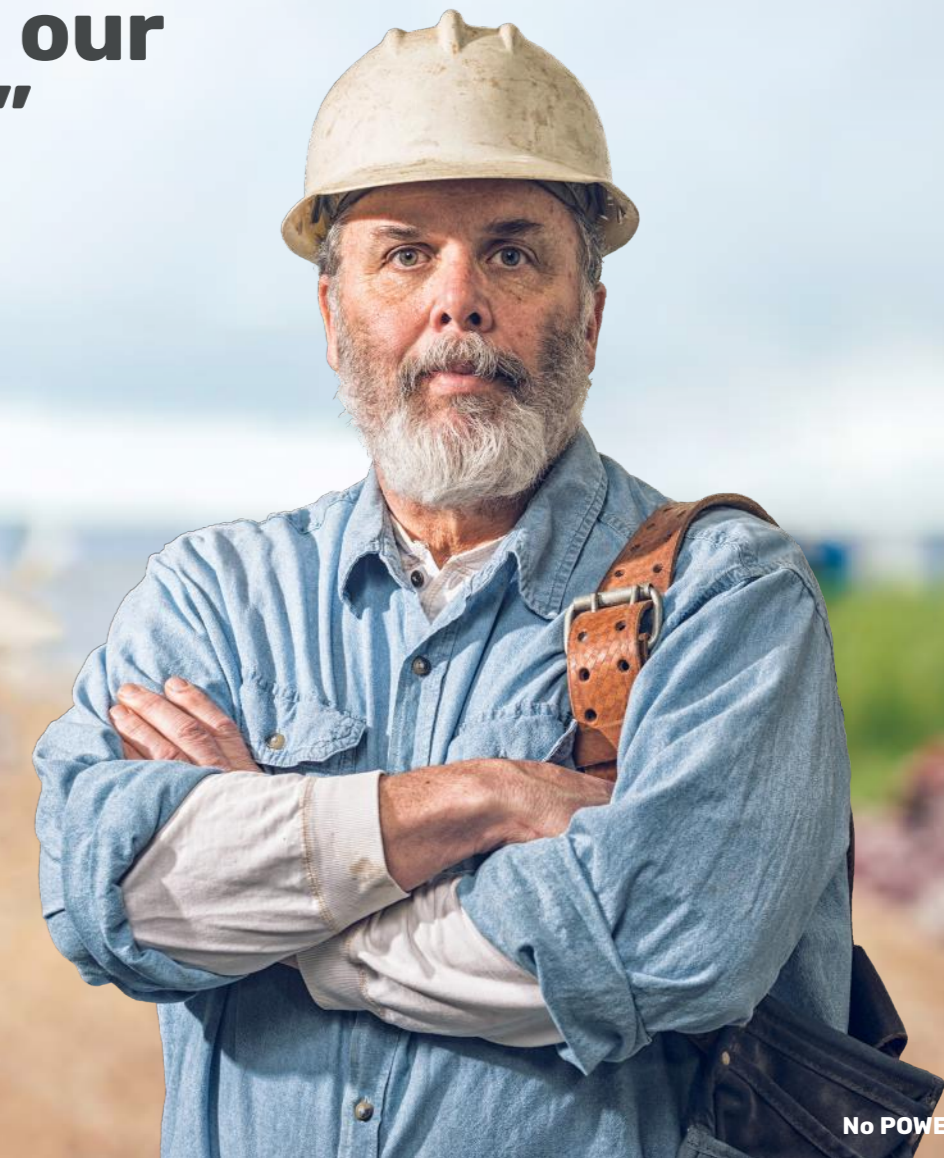
S Series is designed for high pressure, up to 450 bar. This allows optimal component sizing and gives flexibility to hydraulic system design.

Power and torque

S Series offers displacements from 4400 ccm up to 18900 ccm. The radial piston-cam ring design is precisely balanced, providing a constant ripple-free output torque even at low speeds.

“The Black Bruin powered drills outperform any of our other drills we have in our fleet, hands down!”

Joe Gruber, Goettle, Inc.



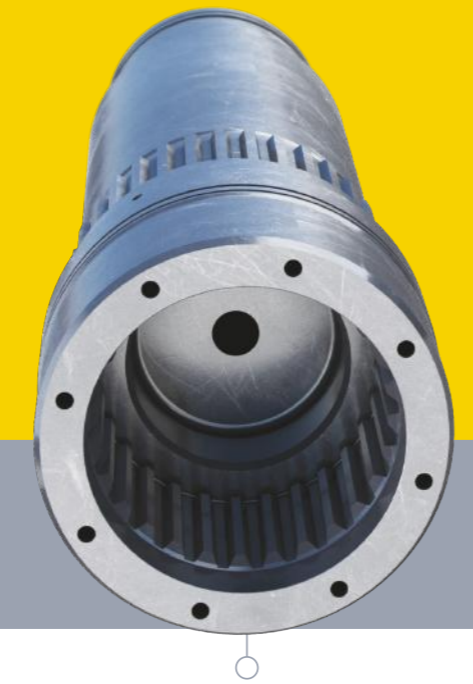
Various output **Shafts**



External splines
Through shaft



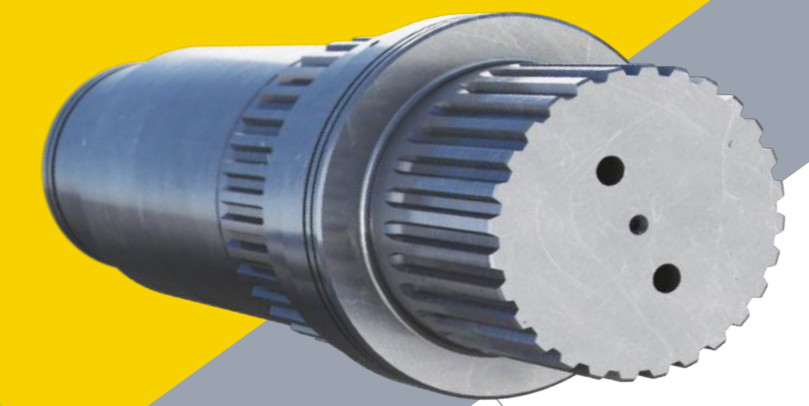
Internal splines
Through shaft



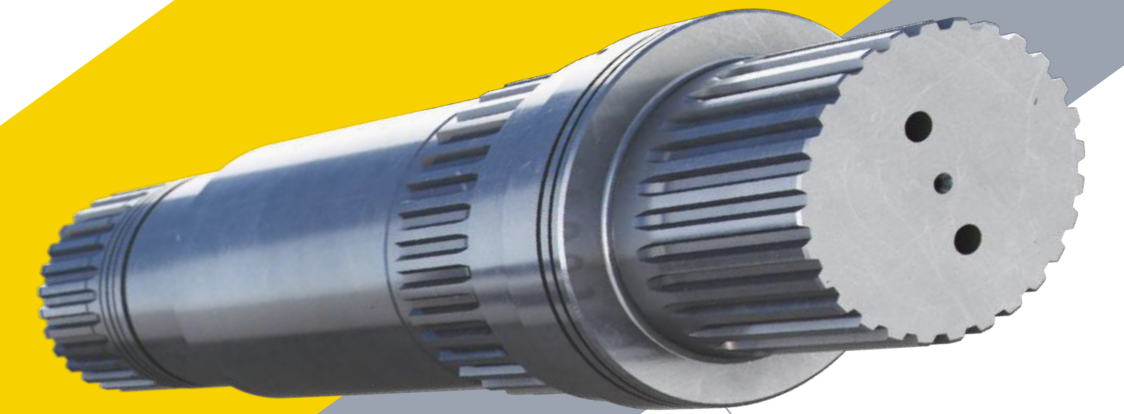
Internal splines



Shrink disc



External splines
Solid shaft



External splines
Solid shaft, motors with brake

Features

● High load capacity

Optimally placed tapered roller bearings give a high radial and axial load capacity.

● Multi-speed function

Superior productivity with shift-on-the-go 2-speed function.

● Speed sensor

All S Series motors can be equipped with a speed sensor with direction detection.

● Modular design

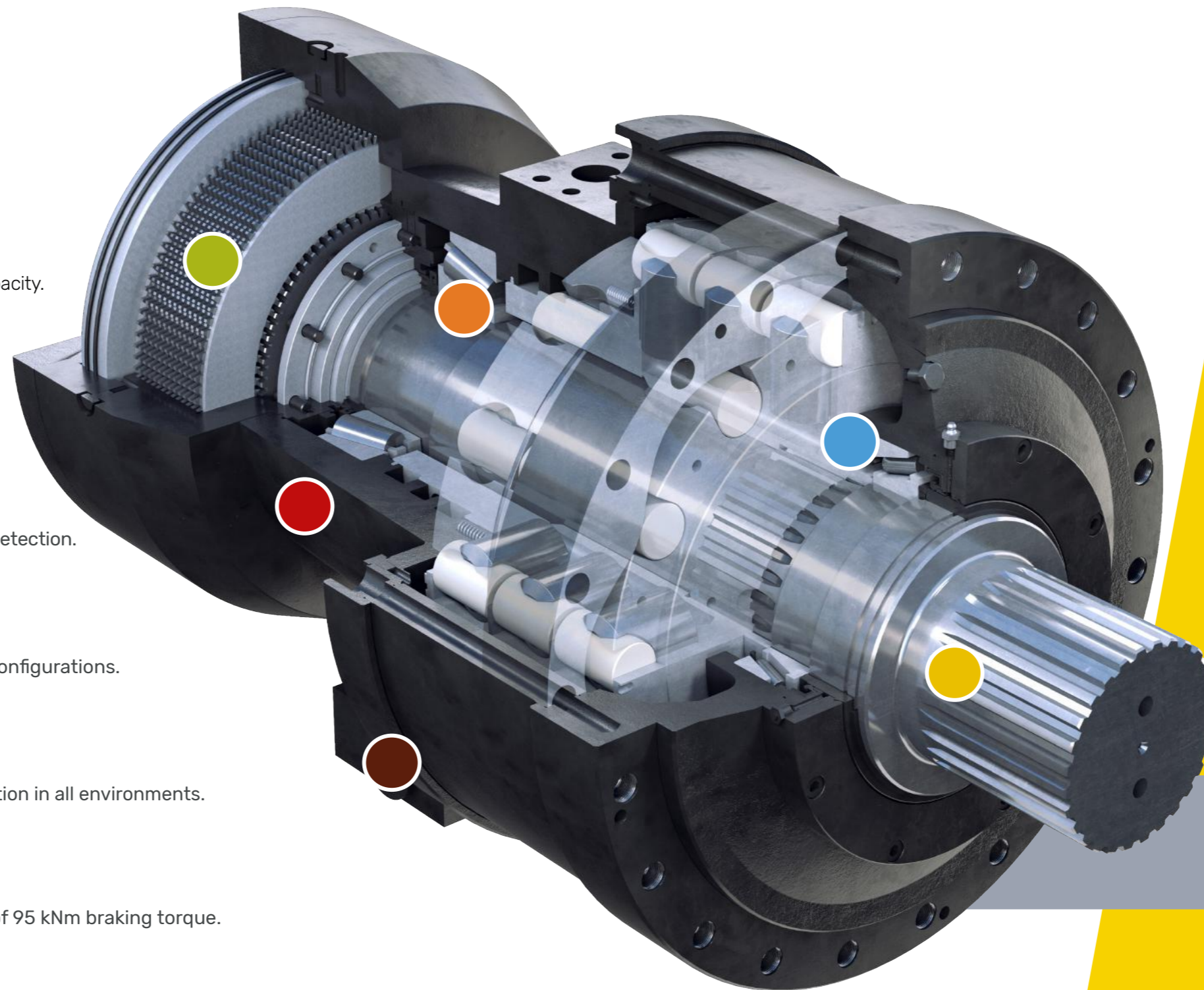
Flexibility in motor design and service. One frame with various shaft configurations.

● Well-sealed structure

The triple-sealing design protects the motor and ensures reliable operation in all environments.

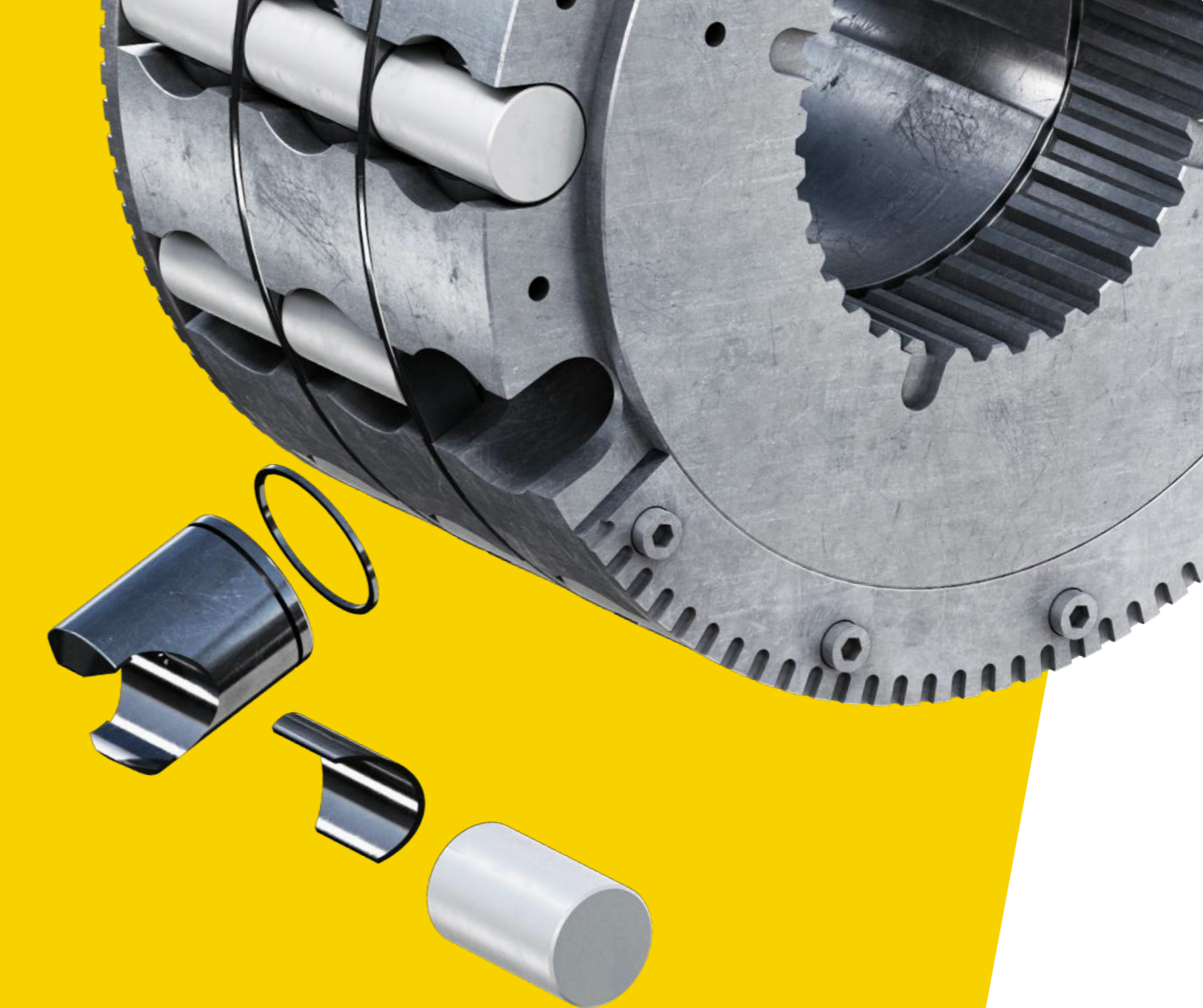
● Strong brake

The spring-applied, hydraulic release wet multi-disc brake is capable of 95 kNm braking torque.



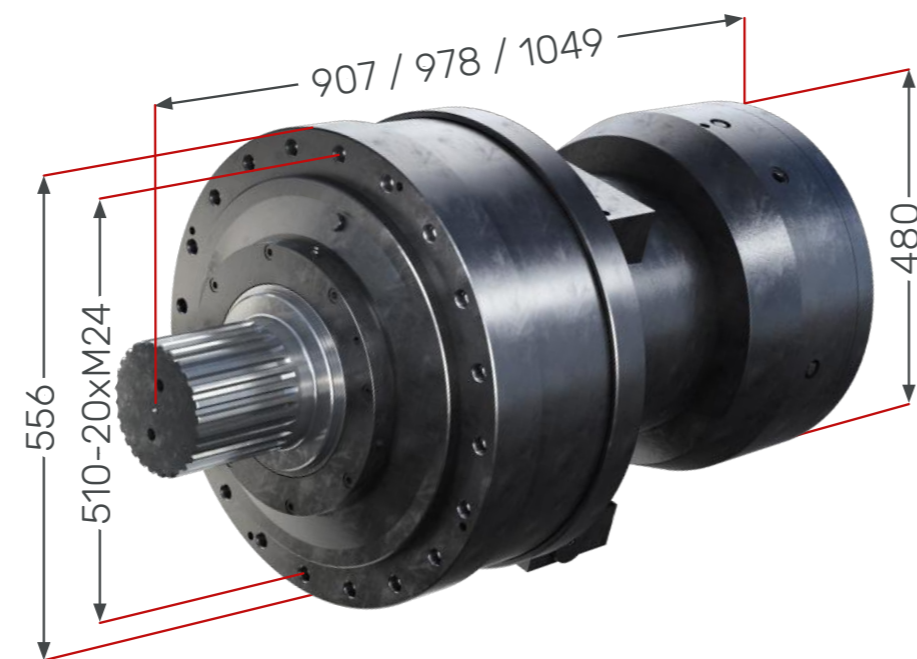
Robust piston design with improved serviceability

Piston design is engineered to last a lifetime!



S1100/S2100/S3100

Motors with brake

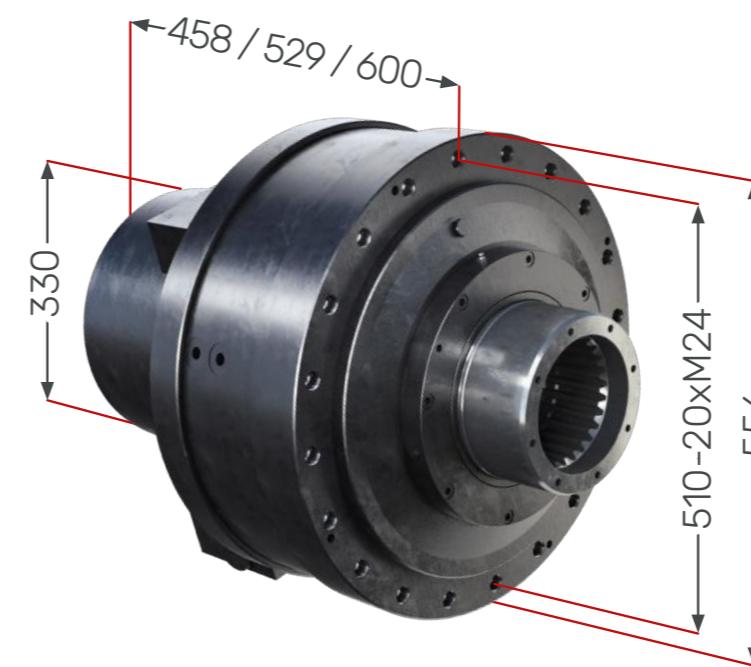


Options	S1100	S2100	S3100
1-speed	X	X	X
2-speed valve	X	X	X
Shaft type			
External splines, solid shaft	X	X	X

Technical data	S1100	S2100	S3100
Displacement [ccm]	4400 / 6300	8800 / 10000 / 12600	15000 / 18900
Max. theoretical torque [Nm]	31500 / 45100	63000 / 71600 / 90200	107400 / 135300
Max. torque with 100 bar [Nm]	7000 / 10000	14000 / 15900 / 20000	23900 / 30000
Max. operating power [kW]	175	350	500
Max. rotating speed [rpm]	180	130 / 110 / 90	75 / 60
Max. working pressure [bar]	450	450	450
Weight [kg]	748 - 766	850 - 868	957 - 975
Brake torque [Nm]	55000	95000	95000

S1000/S2000/S3000

Motors without brake



Options	S1000	S2000	S3000
1-speed	X	X	X
2-speed valve	X	X	X
Shaft type			
Internal splines	X	X	X
Internal splines, through shaft	n/a	X	X
External splines, through shaft	n/a	X	X
External splines, solid shaft	n/a	X	X
Shrink disc	n/a	X	X

Technical data	S1000	S2000	S3000
Displacement [ccm]	4400 / 6300	8800 / 10000 / 12600	15000 / 18900
Max. theoretical torque [Nm]	31500 / 45100	63000 / 71600 / 90200	107400 / 135300
Max. torque with 100 bar [Nm]	7000 / 10000	14000 / 15900 / 20000	23900 / 30000
Max. operating power [kW]	175	350	500
Max. rotating speed [rpm]	180	130 / 110 / 90	75 / 60
Max. working pressure [bar]	450	450	450
Weight [kg]	430 - 448	540 - 618	642 - 725

Visit www.blackbruin.com for more information or contact sales@blackbruin.com

**Black
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