

ENGINEERING  
TOMORROW

*Danfoss*

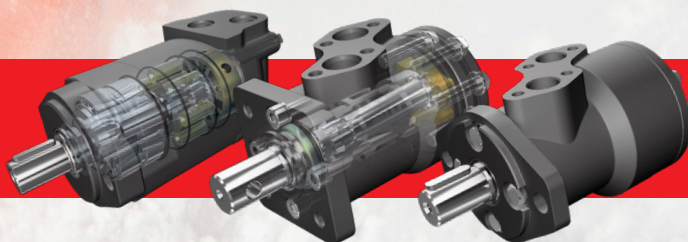
Brochure

# Superior performance and reliability



**Danfoss® Xcel Series**

Low-Speed High-Torque Motors





# A better solution for your toughest light-duty motor challenges.

## Challenge

High-performance motors work well but cost too much because they are over-specified for the application.

## Xcel series solution

Engineered specifically for light- and medium-duty applications. The Xcel Series offers the Danfoss reliability you depend on at a more attractive price point – helping you meet both your machine performance and cost goals.

## Challenge

Low-cost motors meet your price point but may be prone to premature failure.

## Xcel series solution

Compared to competitive two-zone motor designs, Xcel Series motors feature a three-zone architecture that helps extend shaft seal life and enhance overall motor reliability – giving you the durability your application needs at the price point your machine can support.

## Challenge

Low-cost motor failure can damage your company's reputation due to poor quality, limited life, and increased warranty claims.

## Xcel series solution

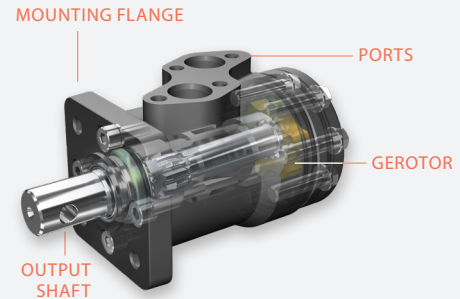
When you choose an Xcel Series motor, you are choosing the same quality and reliability that comes standard with all Danfoss products. Xcel Series motors are backed with a 2-year warranty, giving you complete confidence and peace of mind – and helping protect your reputation.



# Which Xcel Series motor is right for your application?

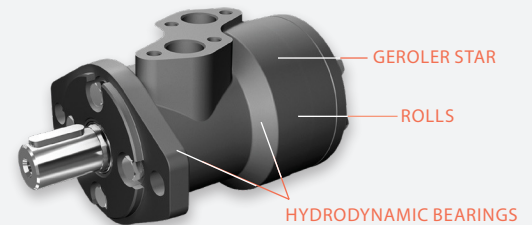
## Danfoss XLH

Uses Danfoss' proven Gerotor motor design and offers a simple, reliable, effective solution for the widest variety of applications. Supported by hydrodynamic bearings, the spool valve design is available with the most popular output shafts, mounts, and displacements.



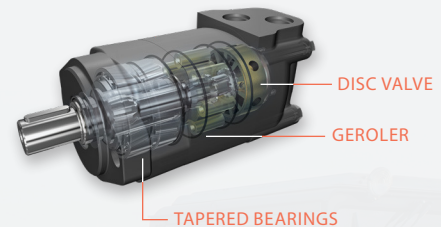
## Danfoss XLS

Leveraging the compact size of the XLH, the XLS incorporates Danfoss Geroler® technology to further reduce internal friction and provide added longevity for applications needing higher-than-normal performance.



## Danfoss XL2, XL4, and XL6

Featuring Danfoss' highly reliable Geroler design, the XL2, XL4, and XL6 motors include a tapered bearing set to support high sideloads plus a rear disc valve to help maintain high efficiency at high pressures and high torque.



Motor	Max Speed	Torque Nm (in-lbs.)*	Flow lpm (gpm)*	Δ Pressure bar (psi)*
XLH	800	507 [4485]	68 [17.6]	138 [2000]
XLS	875	512 [4530]	68 [17.6]	155 [2250]
XL2	924	930 [8225]	115 [30]	310 [4500]
XL4	868	1185 [10470]	150 [40]	310 [4500]
XL6	866	1898 [16800]	225 [60]	310 [4500]

\*Intermittent ratings based on 10% of every minute

» Request an Xcel Series prototype today

Contact your local Danfoss distributor to request an Xcel Series prototype.

Visit [danfoss.com](http://danfoss.com) for more information.



# Where superior performance and reliability meet **exceptional value.**

» In order to manage costs while optimizing machine life, mobile OEMs must specify a motor that matches the duty cycle of the work circuit to the machine's performance requirements. For light- and medium-duty applications, there is no better solution than Danfoss Xcel Series Low-Speed High-Torque motors.

## Three-zone architecture at a two-zone price point

Competitive light- and medium-duty motors are designed with two zones (A and B ports) and no case drain. The problem with these two-zone designs is that in applications requiring bi-directional rotation, the shaft seals are vulnerable to B-port pressure spikes that can damage the motor and cause premature failure. Xcel Series motors feature a three-zone architecture, which dampens pressure spikes in both directions, even without a case drain hose. This helps extend shaft seal life and enhance overall reliability.

Plus, Danfoss' three-zone motors use a "same speed" disc valve that rotates with the output shaft improving mechanical and volumetric efficiency. Competitive two-zone motors have high-speed valves that spin 6X faster than the output shaft, requiring extra horsepower which raises the system's operating temperature and wastes energy.

### Ideal applications

- Salt and sand spreaders
- Street cleaner brushes
- Car washes
- Combine reel drives
- Feed-grinding augers
- Auger swing drives
- Stake-down motors
- Post-hole drives

In a brush cutter comparison test, the Xcel Series motor was

**40%**  
more efficient  
than competitive  
two-zone motors.

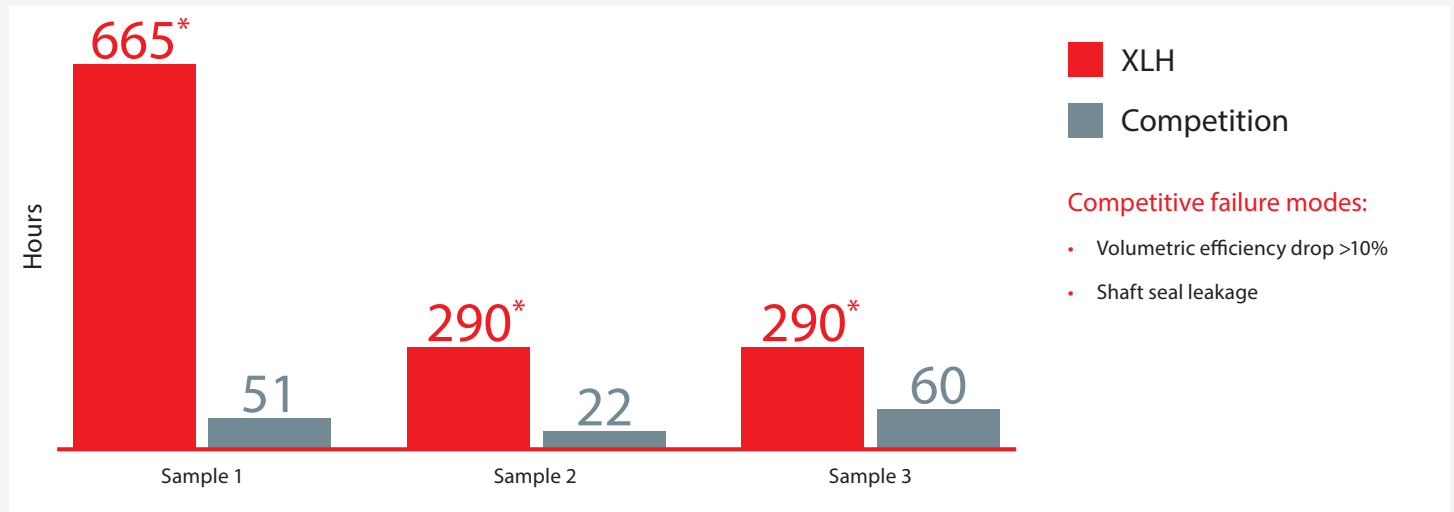
The Xcel Series is available at a comparable price point to competitive two-zone motors, making it easier than ever to make the switch.



# Xcel Series motors vs. offshore competitors: the difference is clear.

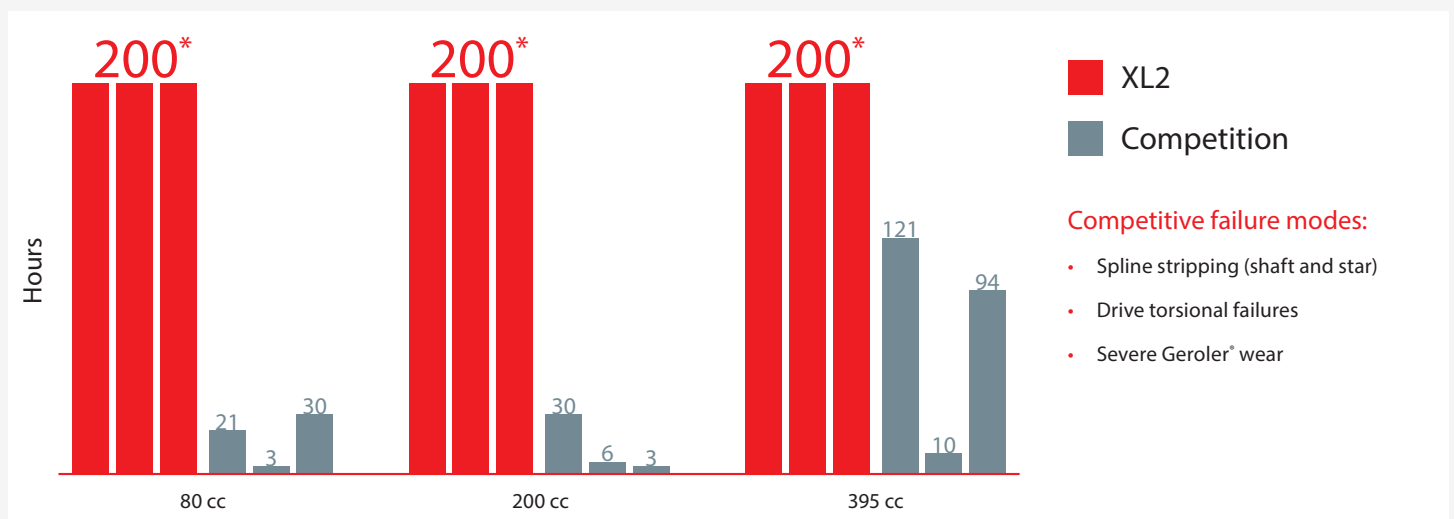
» In accelerated life tests (continuous operation at maximum intermittent pressure and maximum continuous flow), Danfoss Xcel Series motors exponentially exceeded the performance of competitive motors.

## Accelerated life test: XLH vs Competition at 200cc



\*No failure

## Accelerated life test: XL2 vs Competition



\*Test goal met at 200 hours



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