ENGINEERING TOMORROW



**Brochure** 

# Superior performance and reliability



# 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 lightand 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**

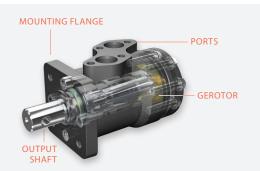
When you choose an Xcel Series motor, you are choosing the same quality and reliability that comes standard with all Danfoss products. Xcel Series motors are backed with a 2-year warranty, giving you complete confidence and peace of mind – and helping protect your reputation.



# 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 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.

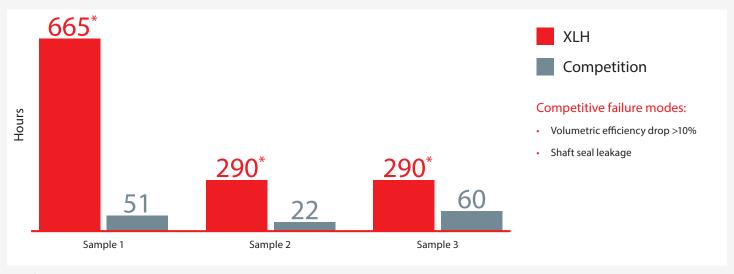
The Xcel Series is available at a comparable price point to competitive two-zone motors, making it easier than ever to make the switch.



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

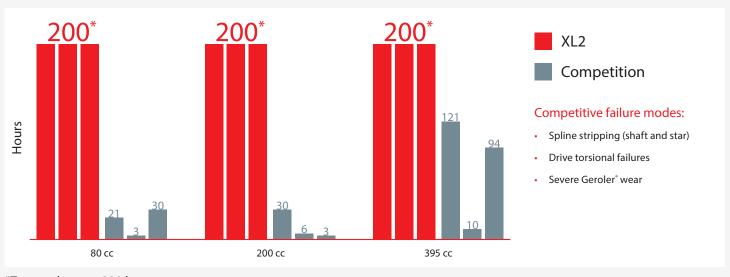
)) In accelerated life tests (continuous operation at maximum intermittent pressure and maximum continuous flow), Danfoss Xcel Series motors exponentially exceeded the performance of competitive motors.

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



<sup>\*</sup>No failure

## Accelerated life test: XL2 vs Competition



<sup>\*</sup>Test goal met at 200 hours





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