

ENGINEERING  
TOMORROW



Brochure

# Vickers® by Danfoss

**Vane Motors, V/VQ Pumps, VMQ Pumps, V10/V20 Pumps, VQ(H) Pumps**



## Attributes that go on and on

### Reliable, Quiet, Compact, Long Life, Serviceable

#### 1. Vane Motors

The cartridge kit design makes for uptime and easy serviceability. Additionally, a low break out force smooths out the start-up speed allowing for vane motors to be more forgiving to system pressure spikes. Vane motors offer an efficient and economical means of applying variable speed, rotary hydraulic power and offer variable horsepower (constant torque). They can be stalled under load without damage when protected by a relief valve.

#### Applications

- Plastic injection molding and conveyors

#### Specifications

- Displacements from 1.32 in<sup>3</sup>/rev (21.6 cc/rev)–19.35 in<sup>3</sup>/rev (317.1 cc/rev)
- Pressures up to 175 bar (2,500 psi) (size dependent)
- Rated Speeds up to 4,000 rpm
- Torque Range up to 119–847 Nm (1,050 to 7,500 lb-in)
- Heavy duty shaft bearing is also available

1.



#### 2. VMQ Pumps

The Vickers VMQ is the **world leader** in pressure capacity and noise levels and is available in a complete range of singles, doubles, triples and thru-drives. The unique wafer plate design of the VMQ allows for the increase in viscosity and pressure rise during cold start-up – something that competitors do not have.

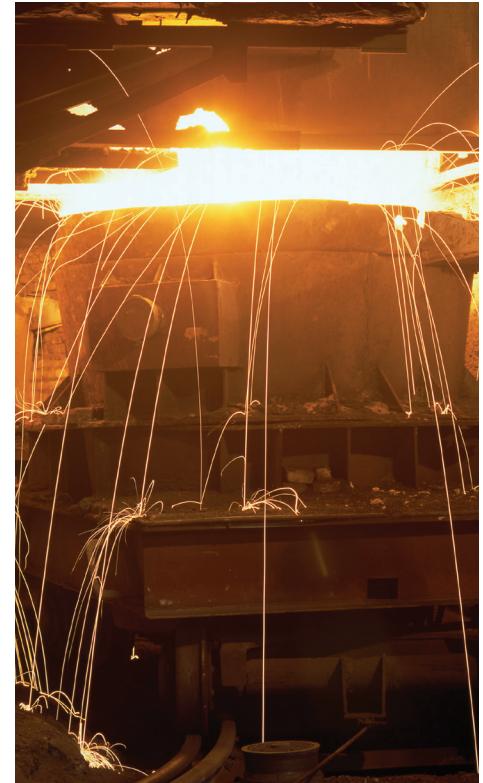
#### Applications

- Winches, oil field and drilling equipment, earthmoving and construction equipment, die casting, molding machines, press machines, trash compactors, balers and primary metals

#### Specifications

- Displacements from .60 in<sup>3</sup>/rev (10 cc/rev)–31.4 in<sup>3</sup>/rev (516 cc rev); using single, double, and triple pump combined flow
- Pressures up to 293 bar (4,250 psi)
- Rated Speed up to 3,000 rpm

2.



Did you know?

**We are the pioneers  
of vane technology!**



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### 3. V Pumps

The V series pumps are designed for medium pressure industrial applications. Its industry-first intra-vane cartridge design provides long operating life, low noise, outstanding volumetric efficiency and excellent serviceability.

#### Applications

- Molding machines, presses, material handling machines, industrial power units and primary metals

#### Specifications

- Displacements from .45 in<sup>3</sup> rev – 20.61 in<sup>3</sup>/rev (7.4–337.8 cc/rev); using single, double, and triple pump combined flow
- Pressures (max.) up to 210 bar (3,000 psi) continuous
- Rated Speeds up to 2,700 rpm

3.



### 4. Square Vane Pumps

V10/V20/V2010/V2020 square vane pumps are designed to work in a variety of low- to medium-pressure mobile and industrial applications. Offering single and double pump options, our square vane pumps are widely used as pilot and auxiliary pumps for complex industrial systems. They are also common in heavy-duty trucks and interstate buses.

The V10H/V20H/V2020H vane pumps are engineered to deliver higher pressure – up to 3000psi – opening the door to even more applications.

#### Applications

- Power units, power steering, skid steers, lift trucks and balers

#### Specifications

- Displacements from 0.2 in<sup>3</sup>/rev (3.3 cc/rev) – 5.18 in<sup>3</sup>/rev (84.8 cc/rev); using single and double pump combined flow
- Pressures (max.) up to 210 bar (3,000 psi) continuous
- Rated Speeds up to 4,800 rpm

4.



### 5. VQ(H) Pumps

The VQ series pumps are designed for medium pressure mobile applications. It's specifically designed for higher pressure and higher speed mobile requirements. It has the industry-first intra-vane cartridge design that provides long operating life, outstanding volumetric efficiency and excellent serviceability. The design is widely adopted by world's leading mobile equipment manufacturers.

The VQH series pumps are the higher pressure and higher performance version of VQ series pumps. VQH pumps use strong ductile iron housings and have the same envelope size as VQ pumps.

#### Applications

- Wheel loaders, lift trucks, refuse trucks and aerial booms

#### Specifications

- Displacements from .45 in<sup>3</sup>/rev (7.4 cc/rev) – 19.22 in<sup>3</sup>/rev (315 cc/rev); using single and double pump combined flow
- Pressures (max.) up to 241 bar (3,500 psi) continuous
- Rated Speeds up to 2,700 rpm

5.

