**KRACHT®**

Gear pumps with universal valve

## l KF gear pumps with flange-mounted universal valve

Our KF series pumps with flange-mounted universal valve maintain direction of pump toward the same connection even when the direction of rotation of the drive shaft changes. This means that the pressure and suction connection remain constant, thus ensuring lubrication of the gear of wind turbines in rolling operation or vessels in „forward-backward operation" when the direction of rotation changes.
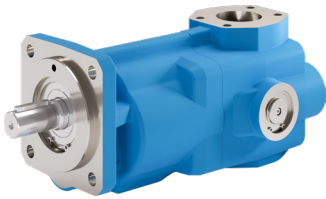
Example: Gear pump KF 112 with universal valve

l Special pumps with integrated universal valve

In close collaboration with our customers, we have also developed space-optimised special pumps with casings tailor-designed to fit the available space. A multitude of components such as gear shafts, bearings etc. are identical with their counterparts in standard KF series. We have combined the advantages of external gear pumps (ruggedness and reliability also with fouled media) with the space-saving benefits only afforded by other pump principles. External gear pumps offer excellent suction characteristics in comparison with other pump principles, thus allowing for a deeper cold start temperature. High speeds at high viscosities are likewise possible.
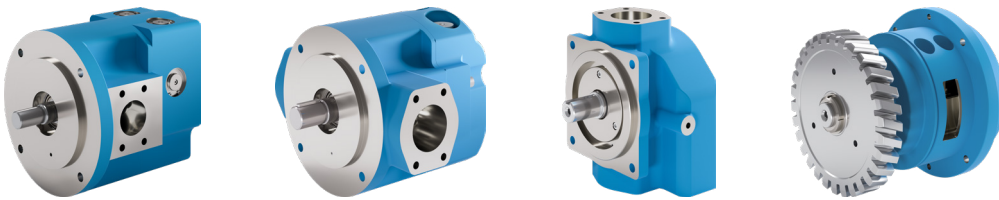
Technical data

Displacement	2.5 ... 315 cm³/rev
Media temperature	-50 … 150 °C
Operating pressure	... 25 bar
Speed	... 3600 1/min
Viscosity	... 200 000 mm²/s
Suction vacuum	up to -0.6 bar

Characteristics

– degassing of the gear sump

– change of rotation direction is possible even under pressure (no non-return valve required)

– component parts interchangeable between all special pumps with the same nominal size

– casing tailored to fit the available space

Options

– outboard bearing

– noise-optimising and cavitation-reducing features

Shaft versions

– cylindrical shaft

– SAE interleaving

– DIN versions

– customer-specific shaft versions

Drive

– cylindrical shaft end with parallel key

– drive wheel with additional bearing

– can be combined with coupling