High Pressure Gear Pumps KP1



Materials

Housing	aluminium
Bearing	double-gland bearing with multicomponent plane bearing bushes
Journals and gears	case hardening steel acc. to DIN 17210 surface hardened and ground
Seals	NBR rotary shaft lip type seal $\vartheta \le 90^{\circ}\text{C}$ (PU-Seal for pressure field)
	FKM rotary shaft lip type seal $\vartheta \le 100^{\circ}\text{C}$ (PU-Seal for pressure field)

Characteristics

Mounting		flange and foot-type
Pipe connection		flange type, threaded flange on request
Direction of rotation		clockwise or anticlockwise
Fitting position		optional
Ambient temperature	$\vartheta_{\text{u min}}$ $\vartheta_{\text{u max}}$	= - 20 °C = 60 °C
Operating pressure Inlet port Operating pressure Short time	Pe min Pe max Pe max	= -0.4 bar (vacuum) = 2 bar = 5 bar
Operating pressure Outlet port	p _{e max}	see technical data
Fluid temperature range	$\vartheta_{m\;max}$ $\vartheta_{m\;max}$	90°C for NBR rotary shaft lip type seal 100°C for FKM rotary shaft lip type seal
Viscosity	$ u_{\text{min}} $	$= 10 \text{ mm}^2/\text{s}$ = 600 mm ² /s
Recommended oil cleanliness		class 19/16 acc. to ISO/DIS 4406 ⇔ class 10 acc. to NAS 1638
Recommended filtration		filter with filtration quotient $\beta_{25} \ge 75$ for 300 bar $\beta_{40} \ge 75$ for 100 bar
Recommended viscosity range v		= 30 45 mm ² /s
Discharge flow		see chart page 6
Input power		see chart page 6
Hydraulic fluids		mineral oil acc. to DIN 51524/25 engine oil acc. to DIN 51511 bio-oils of type "HEES" can be used up to 70°C, max. pressure must be reduced minus 20% (use only on request)