

2 Technical Information

2-1 Specifications

Size		71	90	125
Displacement	Main pump cm ³	71	90	130
	Charge pump cm ³	20	20	28
Pressure, main	Rated MPa	40		
	Peak MPa	45		
Pressure, charge	Rated MPa	2.5		
	Peak MPa	4.0		
Allowable case pressure MPa		0.2 continuous / 0.6 peak		
Speed	Rated* ¹ min ⁻¹	3,300	3,050	2,850
	Maximum* ² (intermittent) min ⁻¹	4,100	3,800	3,450
	Minimum min ⁻¹	500	500	500
Case volume L		2.5	3.0	4.0
Temperature range °C		-20 to +95 (case drain: 115 maximum, intermittent)		
Viscosity range cSt		10 to 1,000		
Maximum contamination level		ISO 4406 -/18/15		
Allowable through drive torque Nm	SAE A	123	123	123
	SAE B	395	395	395
	SAE BB	455	575	640
	SAE C	455	575	725
	SAE CC	-	575	830
	SAE D	-	575	830
Mass kg		60	72	95
Moment of inertia kg · m ²		8.71×10^{-3}	1.21×10^{-2}	2.35×10^{-2}
Torsional stiffness Nm/rad		7.97×10^4	1.46×10^5	2.04×10^5
Coating		Red synthetic resin primer		

*1 : maximum allowable speed for continuous operation.

*2 : maximum allowable speed for limited operating period and duty. Exceeding this value will result in a reduced service life or the destruction of the pump.

Note: Operation above the maximum values or below the minimum values may result in a loss of function, a reduced service life or the destruction of the pump.

■ Allowable maximum input torque

	SAE C (Ordering code[5]: C1)	SAE CC (Ordering code[5]: C2)	SAE D (Ordering code[5]: D1)	SAE F (Ordering code[5]: D2)
Spline specification	14T DP=12/24	17T DP=12/24	13T DP=8/16	15T DP=8/16
Allowable and maximum input torque (Nm)	600	1,070	1,470	2,255
Pump size	K8V71	K8V71 (Combination pump)	K8V90/125	K8V125 (Combination pump)

Input shaft splines conform to SAE J744.

Involute splines conform to ANSI B92.1a, 30° pressure angle, side fit.

Two mounting options are available each for the K8V71 and the K8V125.

If a combination pump of the K8V71 or the K8V125 requires the input torque higher than the allowable maximum input torque of C1 (600Nm) or D1 (1470Nm), C2 or D2 option must be chosen.

Proper lubrication is required to reduce friction and wear of the shaft.