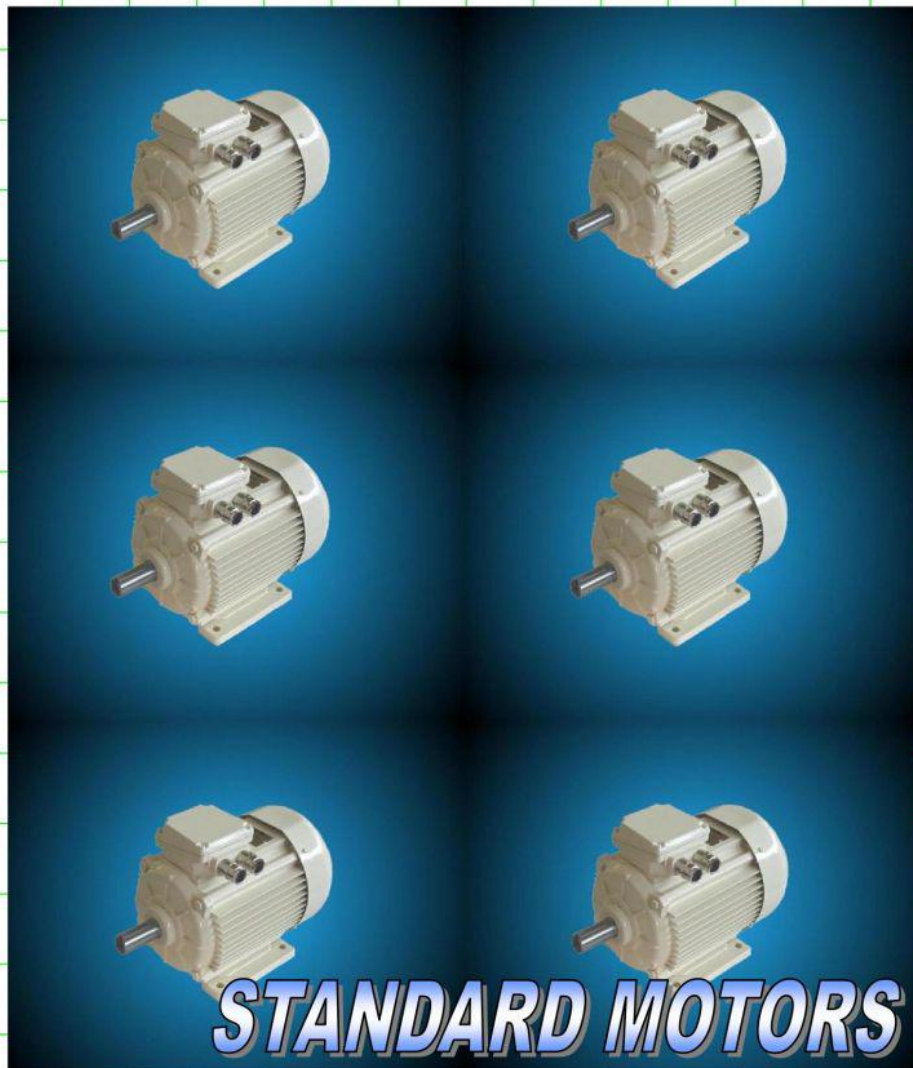




**AUSTRIA**



***STANDARD MOTORS***

FFD COOLING MEDIUM PUMPS are used for pumping of cooling water or other coolants which are typically drilling-, cutting- and shaving machines. These pumps are well known in the industry and have been built in all types of machine tools for many years.

FFD COOLING MEDIUM PUMPS work like centrifugal pumps, so the flow rate of the coolant is affected by pump parts, stuffing-box and sucking up inlets. These pumps are quite resistant to the pollution of coolants.

FFD COOLING MEDIUM PUMPS are manufactured in with 5 different dip length. The dimensions of these pumps are according to DIN 54440. By fully opened valve the pump has the maximum flow rate and the motor is fully loaded, when the valve is closed the load of the motor is lower. It's not possible to overload the motor in these pumps.

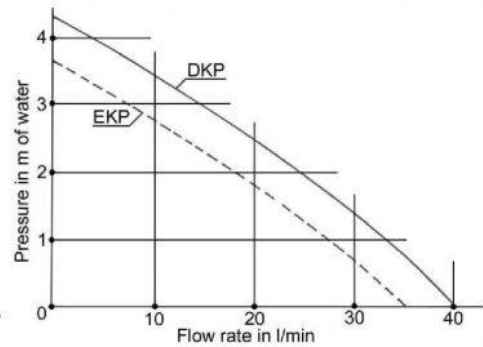
FFD COOLING MEDIUM PUMPS have the advantage of an easy exchangeability of the stator. It's not necessary to disassemble the pump, it's enough to come loose of only two screws to exchange the stator.

### INSTALLATION

At commissioning check the direction of rotation (it has to be the same like shown by the arrow on the frame). The max. level of the cooling medium should be a few cm below the flange and the min. level should flow in a 2inch pipe. The values in the tables below were attained for such a design. Safety valves are not necessary.

### MOTOR

Motors are manufactured acc. to VDE 0530/11.72 with insulation class E. The Insulation system is tropicalized. The winding for 230/400V is so designed that motors work properly within the range of voltage 220 – 250V and 380 – 440V both 50 Hz and 60 Hz. Single phase motors have built on the running capacitor on the frame.



### COOLING MEDIUM PUMPS DKP and EKP

Duty: S1

Degree of protection: IP54

Nominal voltage: 220–250/380–440V, 50/60Hz, 2800/3400rpm

Type	Dip length mm	Flow rate in l/min at oil emulsion 3-5 E°					Consumption of power W
		0m	1m	2m	3m	4m	
DKP 1086	86	40	30	24	16	5,5	115
DKP 112	120						
DKP 117	170						
DKP 122	220						
DKP 127	270						

Nominal current  $I_N = 0,42-0,57A$  at 220–250V, 50/60Hz  
 $I_N = 0,24-0,32A$  at 380–440V, 50/60Hz

Single phase pumps 220–250V, 50/60Hz, 2800/3400rpm

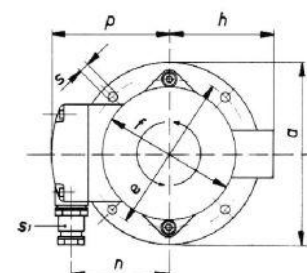
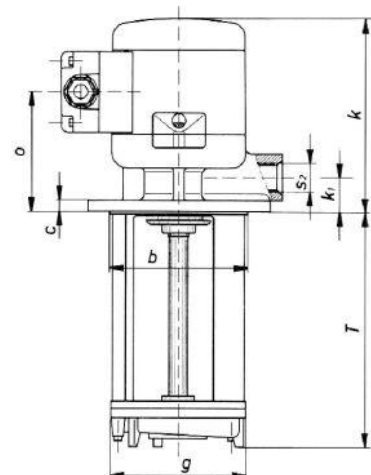
With running capacitor 4µF / 450V

Type	Dip length mm	0m	1m	2m	3m	4m	Consumption of power W
EKP 1086	86	35	27	22	14	4	100
EKP 112	120						
EKP 117	170						
EKP 122	220						
EKP 127	270						

Nominal current  $I_N = 0,6-0,8A$  at 220–250V, 50/60Hz

### Mounting dimensions

Type	a	b	c	e	f	g	h	k	k1	o	p	n	s	X	s <sub>2</sub>	T
DKP a. EKP 1086	130	100	8	115	98	98	75	169	25	118	85	72	6,5	M16 x1,5	R2"	86
DKP a. EKP 112								120								
DKP a. EKP 117								170								
DKP a. EKP 122								220								
DKP a. EKP 127								270								



## OTHER SPECIAL MOTORS AVAILABLE ON REQUEST

- High efficiency motors (IE2)
- Explosion-proof motors acc. to ATEX
- Submersible motors
- Brake motors (with DC or AC brake)
- Multiple-speed motors
- Slip-ring motors for low and high voltage
- Lift motors
- Progressive motors (motors with increased output)
- Motors to be built in
- Low and High voltage motors (up to 11 kV)

## SPECIAL EXTRAS OF THE MOTORS

- Insulation class "H" or "C"
- Windings thermal protection (PTC or Pt100)
- Bearings thermal protection (PTC or Pt100)
- Anti-condensation heater
- External fan
- Special shafts
- Special flanges
- Motors in special design acc. to the customer's specification

---

### FRANK & DVORAK

Elektromaschinenbau- und Vertriebsgesellschaft m.b.H. u. Co.KG

**CONTACT ADDRESS:**

Industriestrasse 1  
A-7033 Pötsching (Burgenland),  
Tel./Phone: +43 2631 / 8005  
Telefax: +43 2631 / 8005 84  
e-mail: [ffd@frank-dvorak.at](mailto:ffd@frank-dvorak.at)  
<http://www.frank-dvorak.at>

---