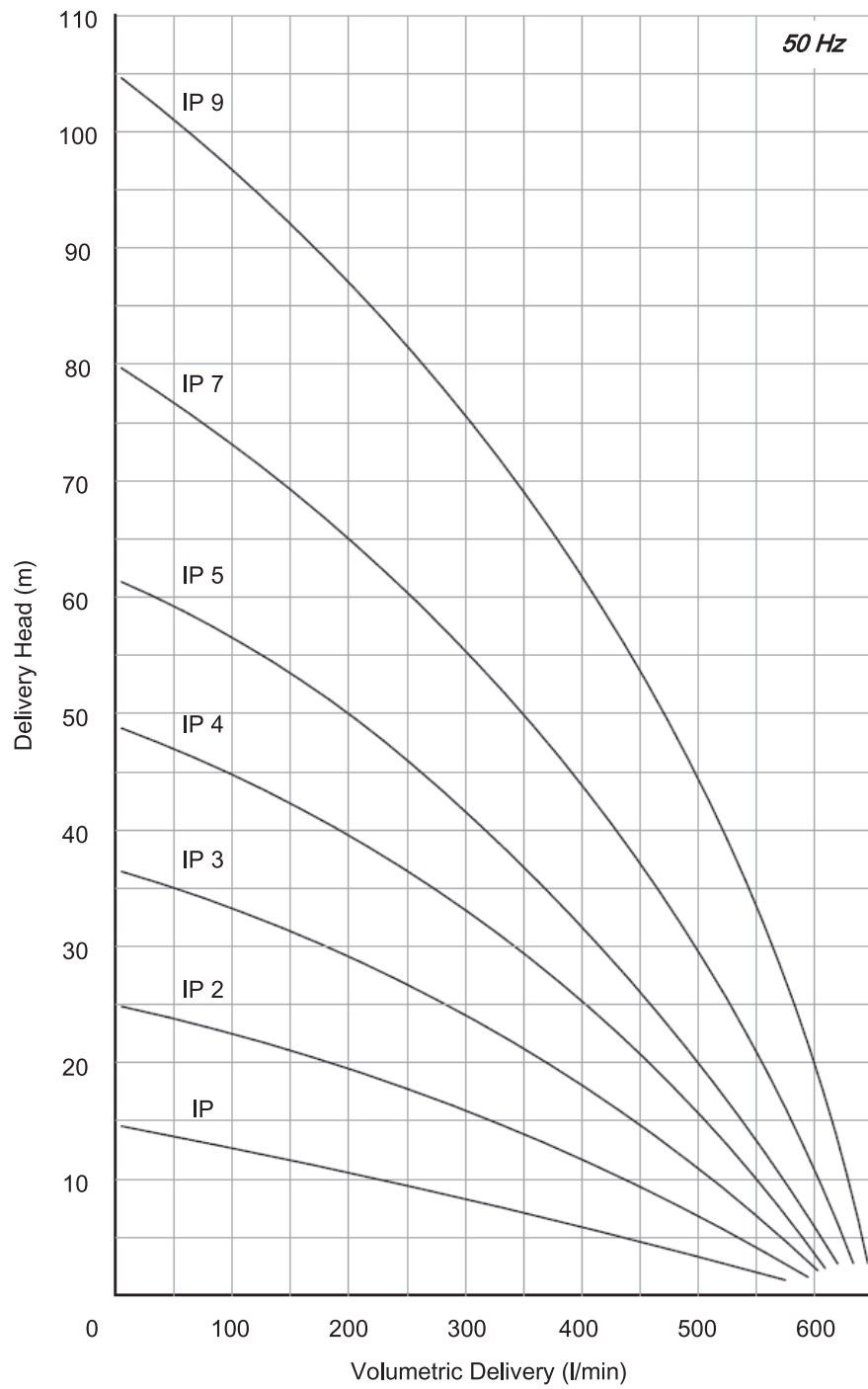


IP PUMP



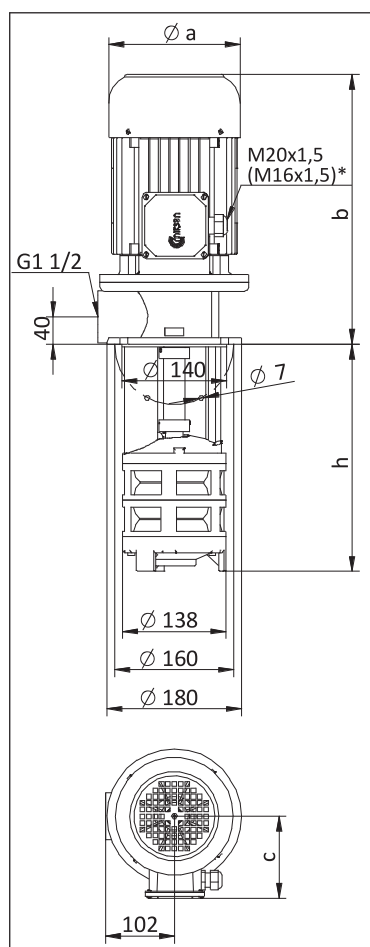
Performance Curve



Applications:

- Machine tools especially on grinding operations,
- Cutting, turning, milling, boring applications,
- Filtration systems,
- Circulation systems. IP Pumps are used for pumping of cutting / cooling fluids.

DIMENSIONS & NOMINAL VALUES



TYPE	Depth of immersion h (mm)	mm			Weight kg	Power		Voltage V(Δ/Y)	Frequency Hz	Rated current A	Speed rpm
		a	b	c		kW					
IP/210	210	157	319	118	24.0	1.1	230/400	50	4.16/2.4	2890	
IP/280	280				25.5						
IP/360	360				26.5						
IP/450	450				28.0						
IP/560	560				30.0						
IP-2/210	210	176	363	139	34.0	2.2	230/400	50	7.79/4.5	2905	
IP-2/270	270				34.5						
IP-2/340	340				35.5						
IP-2/420	420				36.5						
IP-2/510	510				38.0						
IP-2/620	620				40.0						
IP-3/270	270	194	398	150	46.5	4.0	230/400	50	13.68/7.9	2900	
IP-3/330	330				47.0						
IP-3/400	400				48.0						
IP-3/480	480				49.5						
IP-3/570	570				51.0						
IP-3/680	680				53.0						
IP-4/330	330	218	412	163	54.0	5.5	230/400	50	17.15/9.9	2900	
IP-4/390	390				54.5						
IP-4/460	460				55.5						
IP-4/540	540				57.0						
IP-4/630	630				58.5						
IP-4/740	740				60.5						
IP-5/390	390	218	412	163	57.5	5.5	230/400	50	17.15/9.9	2900	
IP-5/450	450				58.0						
IP-5/520	520				59.0						
IP-5/600	600				60.5						
IP-5/690	690				62.0						
IP-7/510	510	258	495	177	88.5	7.5	400Δ	50	14.0	2930	
IP-7/570	570				89.0						
IP-7/640	640				90.0						
IP-7/720	720				91.5						
IP-7/810	810				93.0						
IP-9/630	630	258	495	177	105.0	11.0	400Δ	50	19.7	2930	
IP-9/690	690				105.5						
IP-9/760	760				106.5						

* M16x1,5 cable gland is used on IP 1 pump.

** The performance curves are based on 1 mm²/s (cSt) kinematic viscosity values and 997 kg/m³ density

*** Curve tolerance according to ISO 9906:2012 Grade 3B.

Fluid Specifications:

- Coolants,
- Cutting oils,
- Grinding oils,
- Water,
- Chip contains liquids (max. 8mm)
- Fluid temperature 0...80 °C
- Kinematic viscosity 1...90 mm²/s

Materials:

- Pump body : Cast iron - DIN GG 25
- Volute : Cast iron - DIN GG 25
- Impeller : Investment casting steel - AISI 4140 (DIN 42CrMo4)
- Pump shaft : Engineering steel - AISI 1040 (DIN C35)
- Electric motor : 3 phase induction motor IE3 - 2 pole
- Protection degree IP 55