

HD PUMP

Applications:

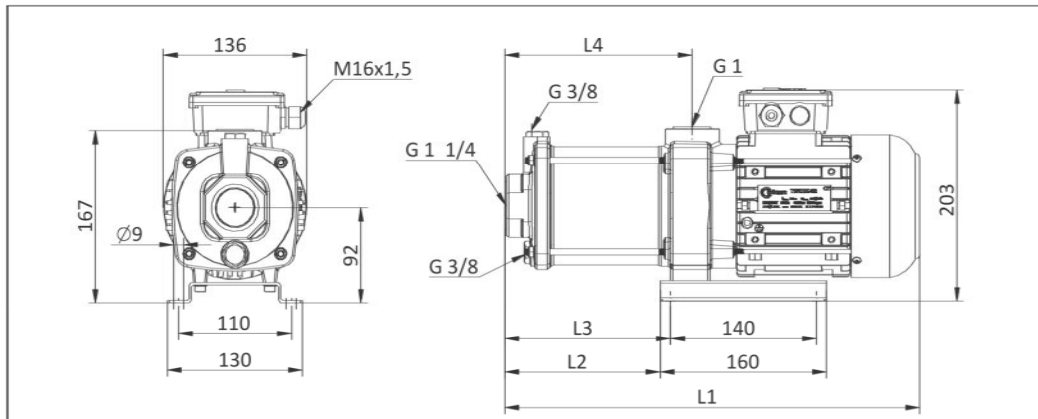
- Cutting, turning, milling, boring, grinding and similar applications of the machine tools,
- Erosion machines,
- Circulation systems. HD Pumps are used for pumping of cutting / cooling fluids.

Fluid Specifications:

- Coolants,
- Cutting oils,
- Grinding oils,
- Water,
- Fluid temperature 0...80 °C
- Kinematic viscosity 1...30 mm²/s

Materials:

Pump body	: Cast iron - DIN GG 25
Inlet body	: Cast iron - DIN GG 25
Diffuser	: Stainless steel - DIN 4301 (AISI 304)
Impeller	: Stainless steel - DIN 4301 (AISI 304)
Stage cover	: Stainless steel - DIN 4301 (AISI 304)
Pump shaft	: Stainless steel - DIN 4401 (AISI 316)
O-ring	: Viton
Mechanical seal	: C - SiC - Viton TC - TC - Viton (Optional)
Electric motor	: 3 phase induction motor - 2 pole, Protection degree IP 55

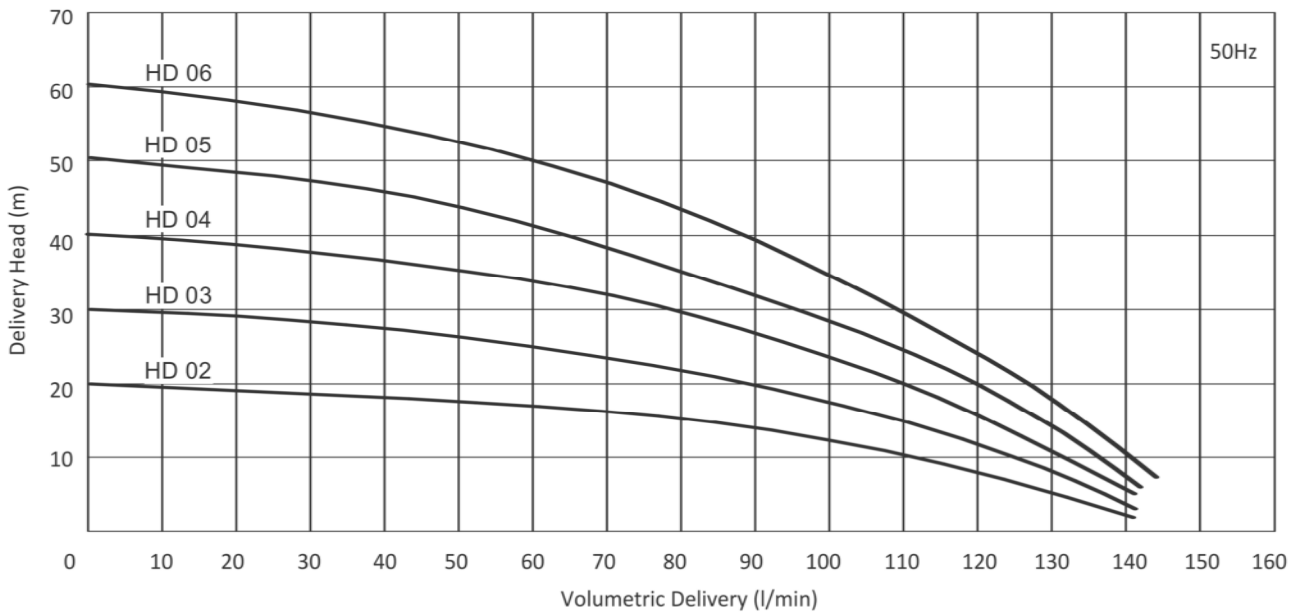


DIMENSIONS & NOMINAL VALUES

TYPE	L4	L3	L2	L1	Weight kg	Power kW	Voltage V(ΔY)	Frequency Hz	Rated current A	Speed rpm
	mm									
HD/02	137	116	106	356	12.9	0.55	230/400	50	2.25/1.3	2780
HD/03	158	137	127	377	13.1	0.55			2.25/1.3	2780
HD/04	179	158	148	398	14.9	1.1			4.85/2.8	2720
HD/05	200	179	169	419	15.1	1.1			4.85/2.8	2720
HD/06	221	200	190	440	15.3	1.1			4.85/2.8	2720

* 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.
 *** HD/04, HD/05 and HD/06 pumps have IE2 motors. According to IEC 60034-30-1:2014 standard these pumps are excluded from efficiency class since their motors are completely integrated into the pump.

Performance Curve



HDA PUMP



Applications:

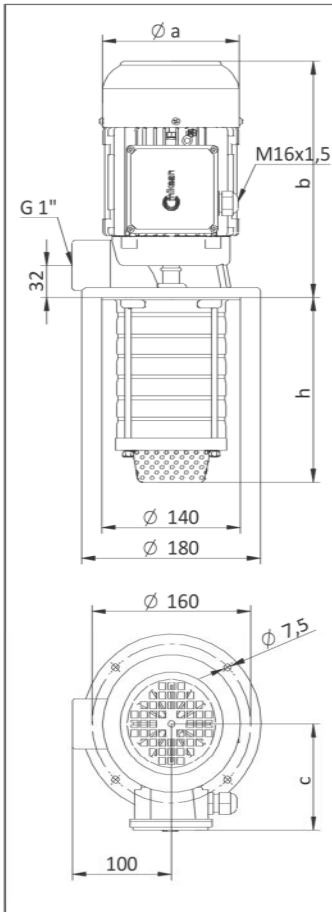
- Cutting, turning, milling, boring, grinding and similar applications of the machine tools,
- Cooling systems,
- Circulation systems. HDA Pumps are used for pumping of cutting / cooling fluids.

Fluid Specifications:

- Coolants,
- Cutting oils,
- Grinding oils,
- Water,
- Fluid temperature 0...80 °C
- Kinematic viscosity 1...30 mm²/s

Materials:

Pump body	: Cast iron - DIN GG 25
Bottom plate	: Sheet iron
Diffuser	: Stainless steel - DIN 4301 (AISI 304)
Impeller	: Stainless steel - DIN 4301 (AISI 304)
Strainer	: Stainless steel - DIN 4301 (AISI 304)
Pump shaft	: Stainless steel - DIN 4401 (AISI 316)
O-ring	: Viton
Mechanical seal	: C - SiC - Viton TC - TC - Viton (Optional)
Electric motor	: 3 phase induction motor IE3 - 2 pole, Protection degree IP 55

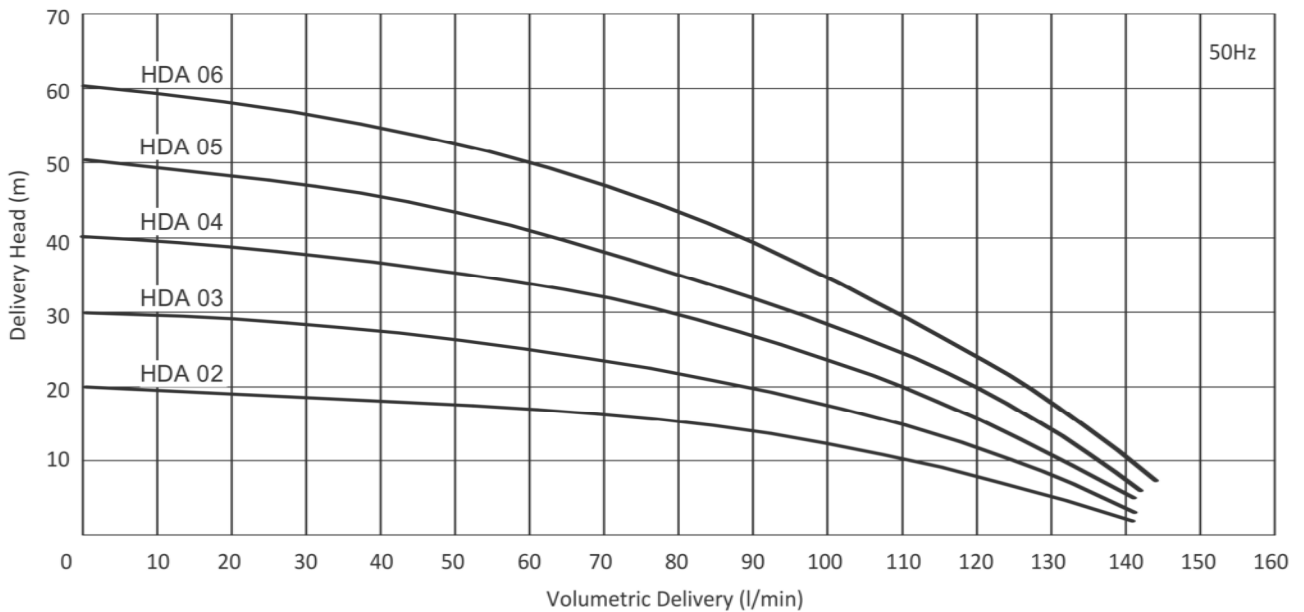


DIMENSIONS & NOMINAL VALUES

TYPE	Depth of immersion h (mm)	a	b	c	Weight kg	Power kW	Voltage V(Δ/Y)	Frequency Hz	Rated current A	Speed rpm
		mm								
HDA/02	143	138	240	111	11.2	0.55	230/400	50	2.25/1.3	2780
HDA/03	143				11.4	0.55	230/400		2.25/1.3	2780
HDA/04	164				13.4	1.1	230/400		4.85/2.8	2720
HDA/05	185				13.6	1.1	230/400		4.85/2.8	2720
HDA/06	206				13.8	1.1	230/400		4.85/2.8	2720

* 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.
 *** HDA/04, HDA/05 and HDA/06 pumps have IE2 motors. According to IEC 60034-30-1:2014 standard these pumps are excluded from efficiency class since their motors are completely integrated into the pump.

Performance Curve





HDB PUMP

Applications:

- Cutting, turning, milling, boring, grinding and similar applications of the machine tools,
- Especially used for deep hole boring operations due to supply 25 bar pressure,
- Circulation systems. HDB Pumps are used for pumping of cutting / cooling fluids.

Fluid Specifications:

- Coolants,
- Cutting oils,
- Grinding oils,
- Water,
- Fluid temperature 0...80 °C
- Kinematic viscosity 1...30 mm²/s

Materials:

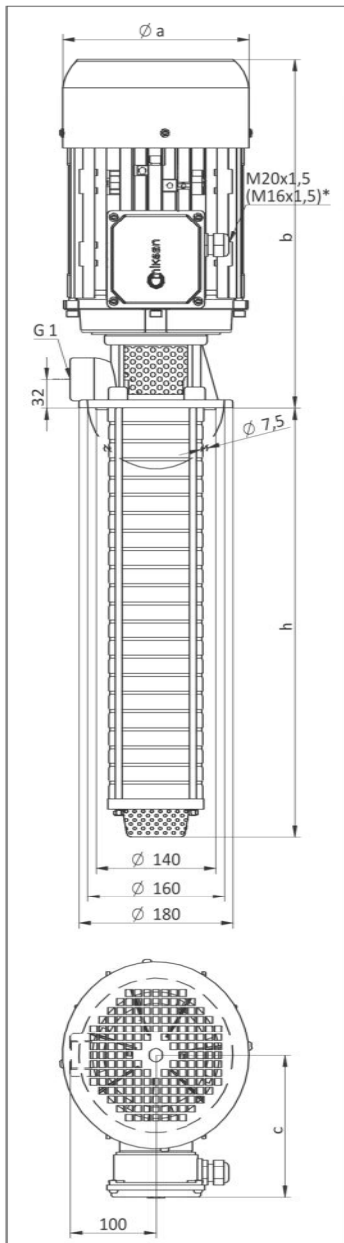
Pump body	: Cast iron - DIN GG 25
Bottom plate	: Sheet iron
Diffuser	: Stainless steel - DIN 4301 (AISI 304)
Impeller	: Stainless steel - DIN 4301 (AISI 304)
Strainer	: Stainless steel - DIN 4301 (AISI 304)
Pump shaft	: Stainless steel - DIN 4401 (AISI 316)
O-ring	: Viton
Mechanical seal	: C - SiC - Viton TC - TC - Viton (Optional)
Electric motor	: 3 phase induction motor IE3 - 2 pole, Protection degree IP 55

* M16x1,5 cable gland is used on HDB/06 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.

DIMENSIONS & NOMINAL VALUES



TYPE	Depth of immersion h (mm)	mm			Weight kg	Power kW	Voltage V(Δ/Y)	Frequency Hz	Rated current A	Speed rpm
		a	b	c						
HDB/06	206	157	319	118	17.0	1.1	230/400	50	4.16/2.4	2890
HDB/08	248	176	340	139	21.5	1.5	230/400		5.72/3.3	2910
HDB/10	291	176	365	139	25.0	2.2	230/400		7.79/4.5	2905
HDB/12	333	194	397	150	32.0	3.0	230/400		10.39/6.0	2905
HDB/15	396	194	397	150	33.0	3.0	230/400		10.39/6.0	2905
HDB/17	438	194	397	150	36.0	4.0	230/400		13.68/7.9	2900
HDB/20	501	194	397	150	37.0	4.0	230/400		13.68/7.9	2900
HDB/22	543	218	406	163	41.5	5.5	230/400		17.15/9.9	2900
HDB/25	606	218	406	163	42.5	5.5	230/400		17.15/9.9	2900

Performance Curve

