

MPS 03 SCREW PUMP

Applications:

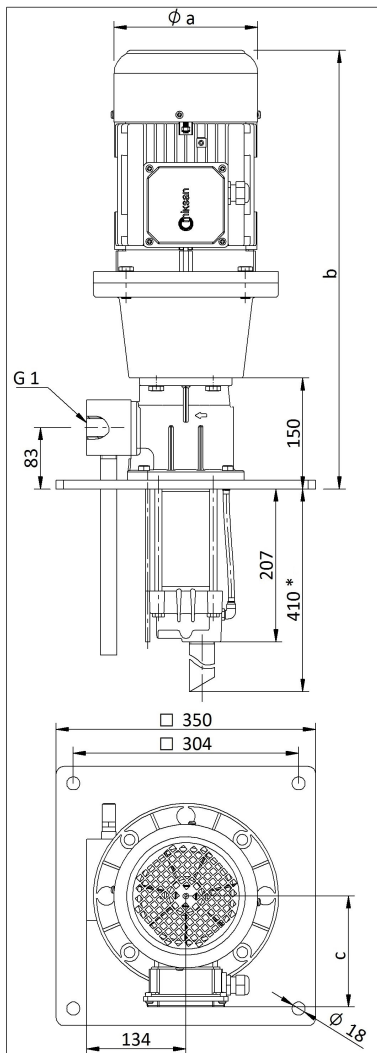
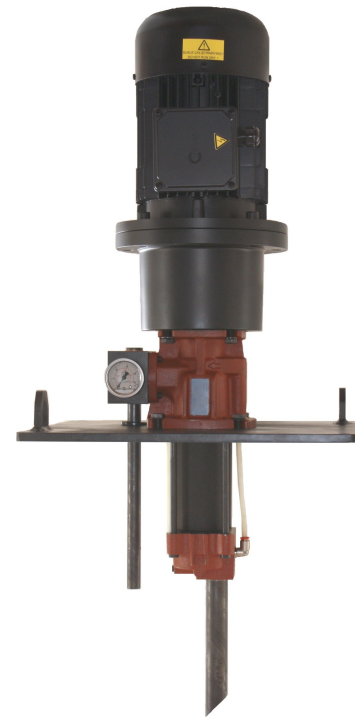
- High pressure pumps with low volumetric delivery,
- Cutting, turning milling, boring, grinding and similar applications of the machine tools,
- Especially used for deep hole boring operations due to the high pressure up to 100 bar,
- Pumping cutting/cooling fluids in circulation systems,

Fluid Specifications:

- Coolants,
- Cutting oils,
- Grinding oils,
- Emulsions (minimum 5% oil),
- Thermal oils (contact for detailed information)
- Kinematic viscosity 1...400 mm²/s (contact for higher viscosities)

Materials:

Spindles	: High performance steel, hardened steel
Pump body	: Cast iron - DIN GG 25
Suction casing	: Cast iron - DIN GG 25
Discharge casing	: Cast iron - DIN GG 25
Housing and coupling	: Aluminium
Rotary shaft lip-type seal	: PTFE
O-ring	: FKM(FPM)
Suction pipe	: Steel
Motor	: IE2 3-phase induction motor 2-pole, 3000 RPM; 4-pole, 1500 RPM (Optional) Protection degree, IP 55 Insulation class F



NOMINAL SIZE

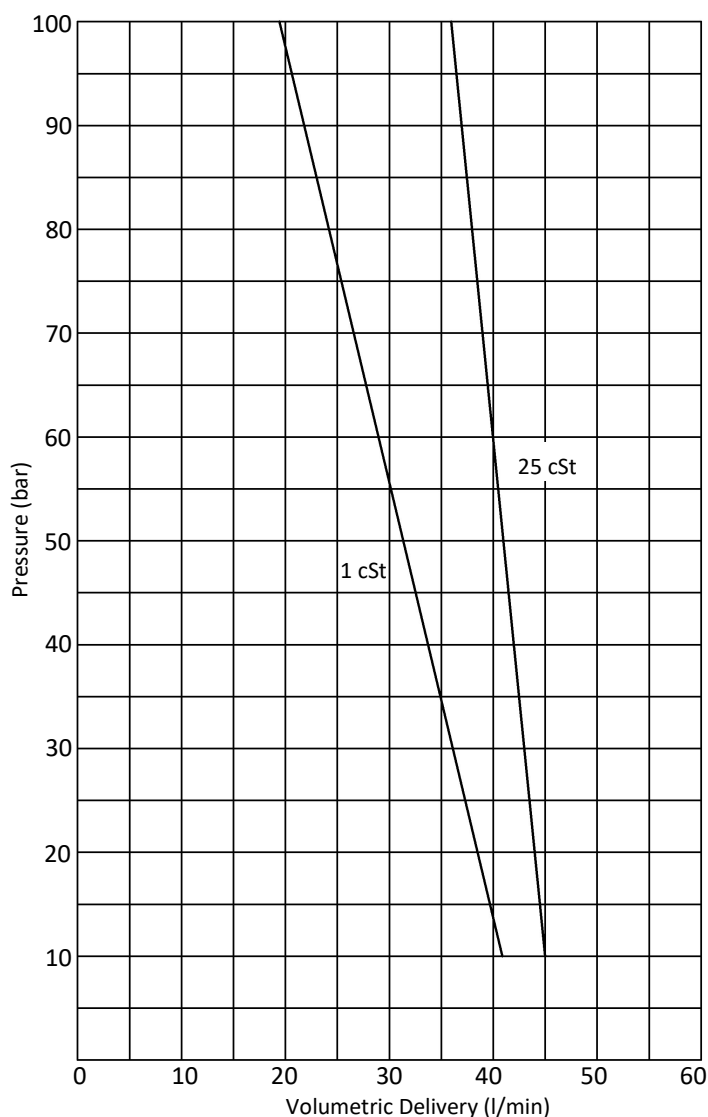
Motor		Dimensions			Cable Gland
2-Pole	4-Pole	a	b	c	
kW		mm			
1.1	0.55	157	495	118	M16x1.5
-	1.1	176	415	139	M20x1.5
2.2	1.5	176	540	139	M20x1.5
3/4	2.2/3	194	570	150	M20x1.5
5.5	4	218	590	163	M20x1.5
7.5	-	258	700	177	M25x1.5
11	-	258	700	177	M25x1.5

* Standard immersion depth of MPS 03 pump is 410mm. Length of suction pipe can be changed on request.

Pump Performance and Electrical Values

Type	50 Hz	3000 RPM					1500 RPM				
	Max. Pressure bar	Flow Rate l/min		Motor kW		Weight kg	Flow Rate l/min		Motor kW		Weight kg
		1 cSt	25 cSt	1 cSt	25 cSt		1 cSt	25 cSt	1 cSt	25 cSt	
MPS 03	10	41,0	44,9	1,1	1,1	29,0	17,1	21	0,55	0,55	26,0
	20	38,2	43,7	2,2	2,2	36,5	14,3	19,8	1,1	1,1	32,5
	30	35,8	42,7	3,0	3,0	38,0	-	18,8	-	1,5	34,0
	40	33,8	41,7	4,0	4,0	48,0	-	17,8	-	2,2	39,0
	50	31,0	40,7	5,5	5,5	58,0	-	16,8	-	2,2	39,0
	60	28,6	39,7	5,5	5,5	58,0	-	15,8	-	3,0	43,0
	70	26,2	38,7	7,5	7,5	62,0	-	14,8	-	3,0	43,0
	80	23,8	37,6	7,5	7,5	62,0	-	13,8	-	4,0	49,0
	90	21,4	36,6	11,0	11,0	70,0	-	12,8	-	4,0	49,0
	100	19,1	35,6	11,0	11,0	70,0	-	11,7	-	5,5	61,0

Performance Curve



*Performance curves of the MPS 03 series screw pumps at 3000 RPM and viscosity of 1 cSt and 25 cSt. MPS 03 can also be operated at 1500 RPM. In this case, performance curves have to be shifted to the left side to decrease volumetric delivery by half.