

VP 380 SCREW PUMP

Applications:

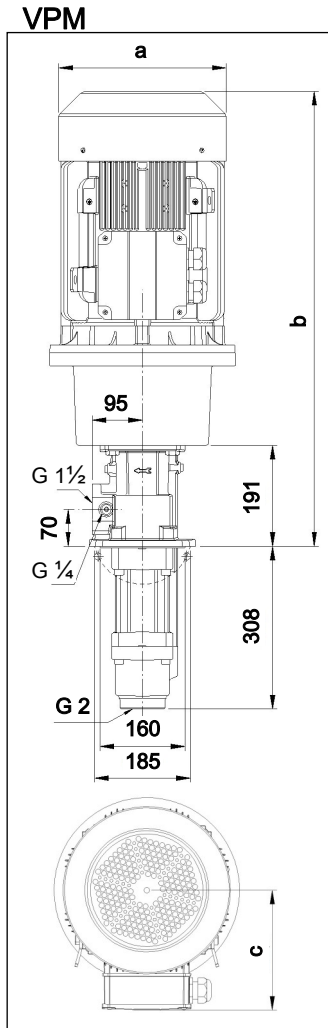
- High pressure pumps with low volumetric delivery,
- Cutting, turning milling, boring, grinding and similar applications of the machine tools,
- Especially used for deep hole boring operations due to the high pressure up to 100 bar,
- Pumping cutting/cooling fluids in circulation systems,

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 26, specially heat treated
Discharge casing	: Cast iron - DIN GG 26
Suction casing	: Cast iron - DIN GG 26
Bell-Housing	: Aluminium
Mechanical seal	: SiC-SiC-Viton
O-ring	: Viton
Suction pipe	: Steel



VPM 380

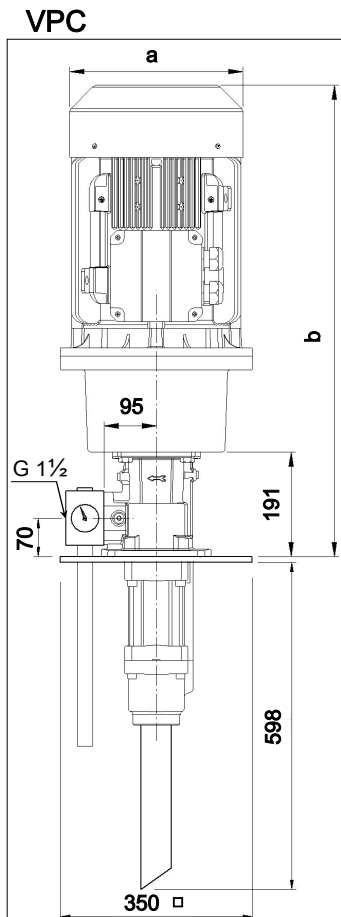
- VP 380 Screw pump,
- Electrical Motor, coupling and pump-housing.

VPC 380

- VP 380 Screw pump,
- Electrical Motor, coupling and pump-housing.
- Pressure regulation valve,
- Pressure gauge,
- Tank lid
- Suction and drain pipes.

Motor

: 3-phase IE3 induction motor
 2-pole, 2900 RPM;
 4-pole, 1450 RPM (Optional)
 Protection degree, IP 55
 Insulation class F



NOMINAL SIZE

Power		Dimensions			Cable Gland
2-Pole	4-Pole	a	b	c	
kW		mm			
4,0	2,2 / 3,0	193	637	149	M20x1,5
5,5	4,0	215	658	161	M20x1,5
7,5 / 11,0	5,5 / 7,5	257	766	182	M25x1,5
15,0 / 18,5 / 22,0	11,0 / 15,0 / 18,5	316	861	224	M32x1,5
30,0	-	396	1023	294	M40x1,5

* VPM and VPC series have the same hydraulic and electrical values.

Pump Performance and Electrical Values

50 Hz		2900 RPM						1450 RPM					
Type	Max. Pressure bar	Flow rate l/min		Power Consumption kW		Motor kW	Weight kg	Flow rate l/min		Power Consumption kW		Motor kW	Weight kg
		1 cSt	20 cSt	1 cSt	20 cSt			1 cSt	20 cSt	1 cSt	20 cSt		
VPM 380 Q _{TH} =167,3 l/min	10	158,1	161,3	3,5	3,7	5,5	72,0	73,2	79,1	1,6	1,7	2,2	63,0
	20	151,4	158,2	6,2	6,6	7,5	92,0	69,1	76,6	3,0	3,1	4,0	73,0
	30	145,9	155,5	9,2	9,5	11,0	96,0	65,7	74,7	4,4	4,6	5,5	92,0
	40	141,3	153,7	11,7	12,1	15,0	128,0	61,2	73,2	5,8	6,0	7,5	100,0
	50	135,7	152,0	14,5	15,0	18,5	137,0	58,3	71,8	7,2	7,5	11,0	113,0
	60	132,1	150,5	17,3	17,8	22,0	156,0	55,5	70,5	8,6	9,1	11,0	113,0
	70	129,3	149,1	20,1	20,7	22,0	156,0	51,1	69,1	10,0	10,5	11,0	113,0
	80	125,2	147,8	22,6	23,2	30,0	223,0	46,8	67,8	11,4	12,0	15,0	140,0
	90	119,9	146,1	25,7	26,3	30,0	223,0	42,9	66,4	12,8	13,5	15,0	140,0
	100	113,5	144,6	28,6	29,3	30,0	223,0	37,4	64,9	14,3	15,0	18,5	157,0

60 Hz		3500 RPM						1750 RPM					
Type	Max. Pressure bar	Flow rate l/min		Power Consumption kW		Motor kW	Weight kg	Flow rate l/min		Power Consumption kW		Motor kW	Weight kg
		1 cSt	20 cSt	1 cSt	20 cSt			1 cSt	20 cSt	1 cSt	20 cSt		
VPM 380 Q _{TH} =201,9 l/min	10	188,1	195,6	4,3	4,9	6,6	72,0	90,1	95,8	2,0	2,2	2,5	63,0
	20	182,3	192,3	7,7	8,4	8,7	92,0	85,6	93,9	3,6	3,9	4,5	73,0
	30	176,6	189,9	11,2	12,0	12,8	96,0	80,3	91,9	5,4	5,8	6,4	92,0
	40	172,8	187,8	14,7	15,7	17,4	128,0	77,0	90,2	7,0	7,5	8,7	100,0
	50	169,3	186,0	18,1	19,3	21,5	137,0	73,9	88,8	8,8	9,3	12,7	113,0
	60	164,4	184,3	21,4	22,7	25,5	156,0	69,2	87,4	10,4	11,0	12,7	113,0
	70	161,2	182,9	24,8	26,2	25,5	156,0	66,3	86,1	12,1	12,7	12,7	113,0
	80	158,0	181,4	28,2	29,7	34,8	223,0	63,3	84,8	13,8	14,6	17,4	140,0
	90	153,1	179,7	31,6	33,2	34,8	223,0	58,1	83,4	15,5	16,4	17,4	140,0
	100	149,7	178,1	34,9	36,6	34,8	223,0	52,2	81,9	17,2	18,0	21,4	157,0