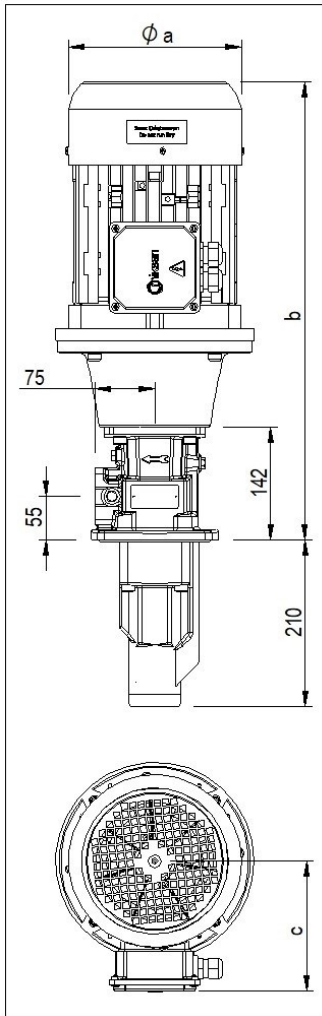


## VP 160 SCREW PUMP

### VPM



#### 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 mm<sup>2</sup>/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
Housing	: Aluminium
Mechanical seal	: SiC-SiC-Viton
O-ring	: Viton
Suction pipe	: Steel

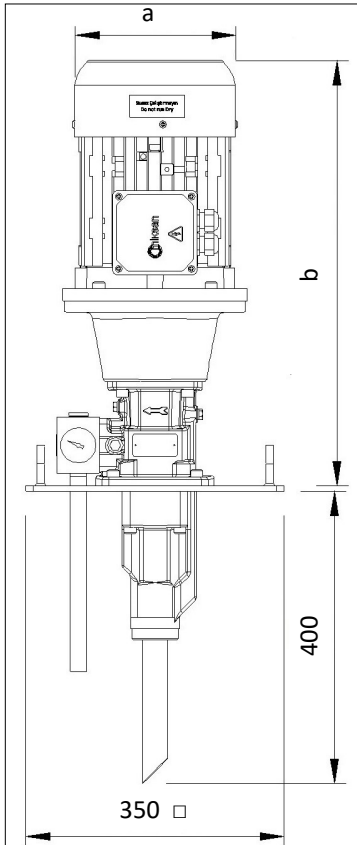
### VPM 160

- \* VP 160 Screw pump,
- \* Electrical Motor , coupling and pump-housing.

### VPC 160

- \* VP 160 Screw pump,
- \* Electrical Motor , coupling and pump-housing.
- \* Pressure regulation valve,
- \* Pressure gauge,
- \* Tank lid
- \* Suction and drain pipes.

### VPC



#### Motor

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

#### NOMINAL SIZE

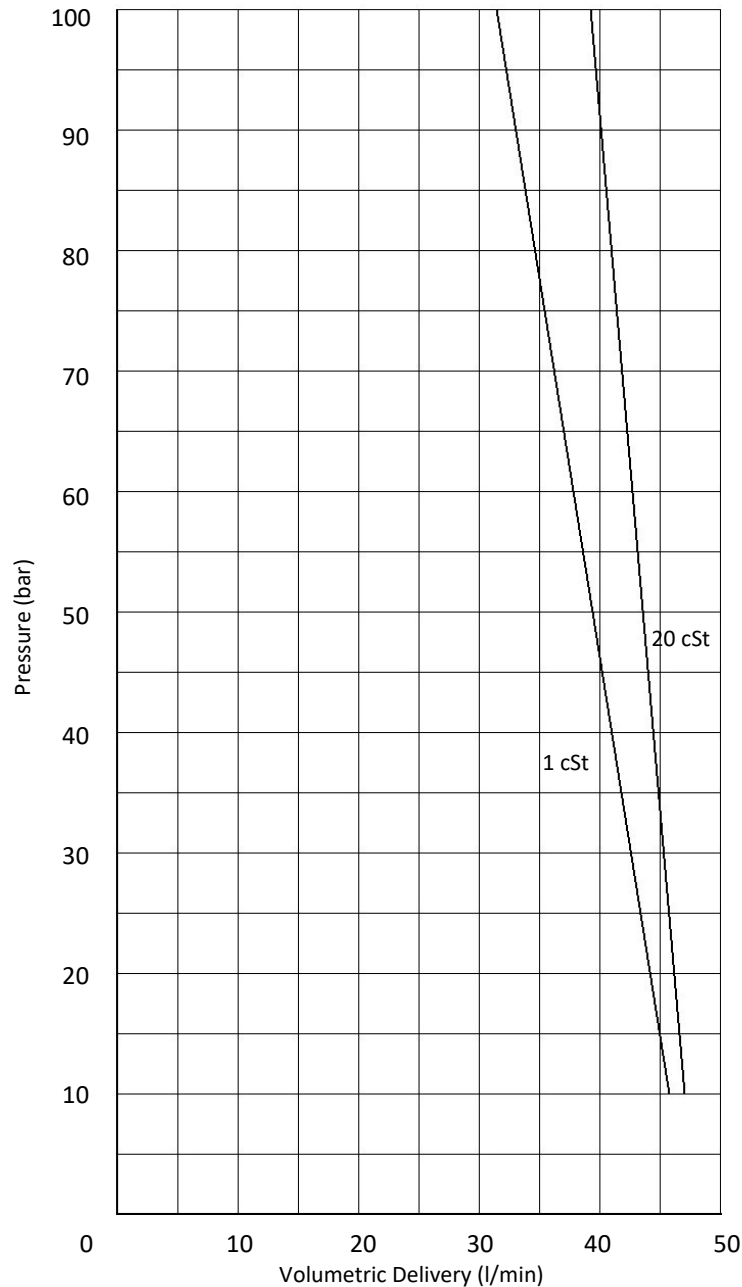
Motor		Dimensions			Cable Entry
2-Pole	4-Pole	a	b	c	
kW		mm			
1,5	1,1	176	495	124	M20x1,5
2,2	-	176	520	124	M20x1,5
3	2,2	194	560	145	M20x1,5
4	3	218	580	157	M20x1,5
5,5	4	258	630	198	M20x1,5
7,5	5,5	258	705	198	M25x1,5
11	-	258	705	198	M25x1,5

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

## Pump Performance and Electrical Values

Type Q <sub>TH</sub> =49,2 l/min	50 Hz	2900 RPM				Weight kg
	Max. Pressure bar	Flow Rate l/min		Motor kW		
		1 cSt	20 cSt	1 cSt	20 cSt	
VPM 160	10	45,5	47,6	1,5	1,5	36,0
	20	43,9	44,5	2,2	2,2	37,5
	30	41,2	42,7	3	3	43,5
	40	39,6	41,6	4	4	46,5
	50	38,1	41	5,5	5,5	53,0
	60	36	40,5	5,5	5,5	53,0
	70	34,5	40,2	7,5	7,5	74,0
	80	33,4	39,8	7,5	7,5	74,0
	90	31,9	39,5	11	11	81,0
	100	31,3	39,2	11	11	81,0

Performance Curve



\*Performance curves of the VP 160 series screw pumps at 2900 rpm and viscosity of 1 cSt and 20 cSt. VP 160 can also be operated at 1450 RPM.