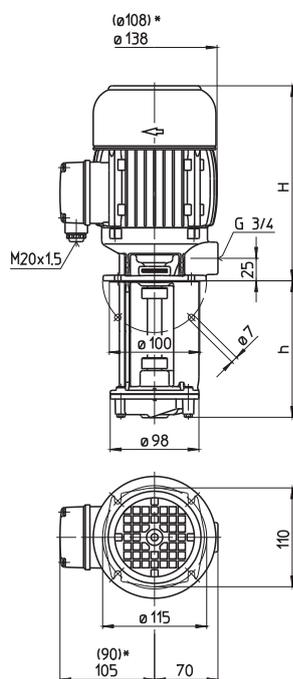


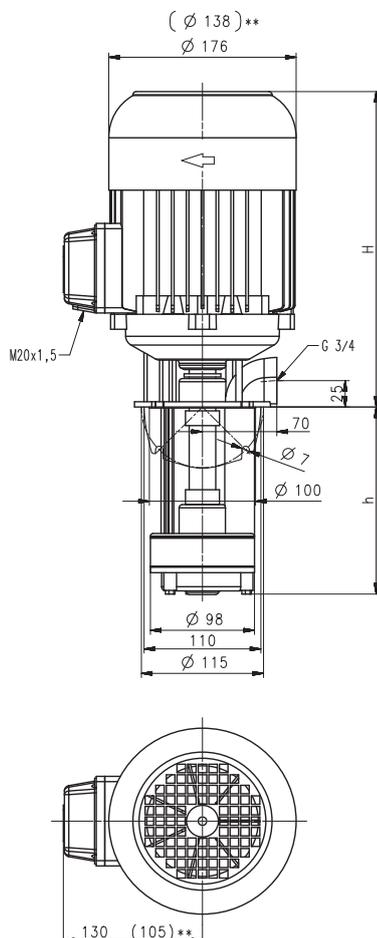
TS12...TS24

Peripheral impellers

TS12, 13, 14, 21, 22



TS15, TS24



*) Dimensions for TS12, 13
 **) Dimensions for TS15

| Type | Vol. del. at manom. del. head l/min / m | Height H mm | Depth of immersion h mm | Weight kg | Power kW | Voltage 3~ V | Fre- quen- cy Hz | Current A | Speed 1/min |
|----------|--|----------------|----------------------------|--------------|-------------|--------------------|---------------------------|--------------|----------------|
| TS12/110 | 20/10 | 236 | 110 | 5.7 | 0.32 | 220-240 | 50 | 1.58 | 2825 |
| | 150 | | 150 | 5.9 | | | | | |
| | 190 | | 190 | 6.3 | 0.365 | 460 | 60 | 0.84 | 3400 |
| | 250 | | 250 | 6.8 | | | | | |
| | 300 | | 300 | 7.3 | | | | | |
| TS13/110 | 20/16 | 236 | 110 | 6.2 | 0.32 | 220-240 | 50 | 1.58 | 2825 |
| | 150 | | 150 | 6.4 | | | | | |
| | 190 | | 190 | 6.8 | 0.365 | 460 | 60 | 0.84 | 3400 |
| | 250 | | 250 | 7.3 | | | | | |
| | 300 | | 300 | 7.8 | | | | | |
| TS14/110 | 20/16 | 243 | 110 | 7.2 | 0.48 | 220-240 | 50 | 2.06 | 2820 |
| | 150 | | 150 | 7.5 | | | | | |
| | 190 | | 190 | 7.9 | 0.55 | 460 | 60 | 1.14 | 3405 |
| | 250 | | 250 | 8.2 | | | | | |
| | 300 | | 300 | 8.5 | | | | | |
| TS15/190 | 20/35 | 285 | 190 | 12.5 | 1.1 | 220-240 | 50 | 4.33 | 2850 |
| | 220 | | 220 | 13.0 | | | | | |
| | | | | | 1.27 | 460 | 60 | 2.4 | 3440 |
| TS21/110 | 40/14 | 258 | 110 | 9.7 | 0.75 | 220-240 | 50 | 3.24 | 2850 |
| | 150 | | 150 | 10.0 | | | | | |
| | 190 | | 190 | 10.5 | 0.86 | 460 | 60 | 1.85 | 3440 |
| | 250 | | 250 | 11.0 | | | | | |
| | 300 | | 300 | 11.5 | | | | | |
| 350 | | 350 | 12.0 | | | | | | |
| TS22/110 | 40/25 | 285 | 110 | 11.8 | 1.1 | 220-240 | 50 | 4.33 | 2850 |
| | 150 | | 150 | 12.2 | | | | | |
| | 190 | | 190 | 12.5 | 1.27 | 460 | 60 | 2.4 | 3440 |
| | 250 | | 250 | 13.0 | | | | | |
| | 300 | | 300 | 13.4 | | | | | |
| 350 | | 350 | 13.7 | | | | | | |
| TS24/140 | 40/35 | 360 | 140 | 26 | 1.9 | 220-240 | 50 | 6.84 | 2900 |
| | 180 | | 180 | 27 | | | | | |
| | 220 | | 220 | 28 | 2.18 | 460 | 60 | 3.9 | 3500 |

Immersion Pumps

Models TS12 to TS24 are suitable for **CNC machine tools** featuring coolant supply through the tool holder or driving spindle or equipped with internally cooled tool.

These pumps are equipped with a peripheral impeller to achieve a compact high pressure unit.

Series TS are suitable for filtered coolant only.

To reduce pump pressure, models TS22 to TS24 are also available with an optional Y/YY (Dahlander) motor configuration for 4 pole operation at half speed.

 Special versions of the TS pumps can be supplied for use with temperature controlling systems carrying thermal oils of up to 150° C resp. 200° C.

Applications

Types of fluid
coolants
cooling/cutting oils

Kinematic viscosity
...45 mm²/s (45 cSt)

Pumping temperature
0...80° C
...150° C (200° C) as special make (TS)

Construction

| | |
|-----------|-----------------------------------|
| Pump body | cast iron |
| Cover | cast iron |
| Impellers | brass |
| Shaft | steel |
| Optional: | |
| Pump body | bronze (TS12...TS14, TS21...TS22) |
| Cover | bronze (TS12...TS14, TS21...TS22) |
| Impellers | CrNi-steel (TS12...TS22) |

Noise level

| | |
|-------------|--------|
| TS12...TS14 | 54 dBA |
| TS21...TS22 | 64 dBA |
| TS15 | 66 dBA |
| TS24 | 67 dBA |

