

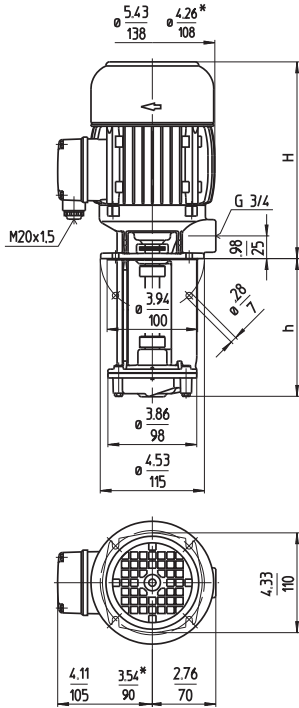
Immersion Pumps

TS12...24

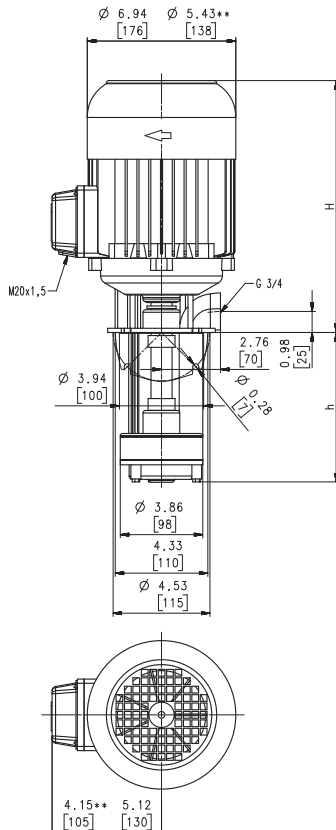
Peripheral impellers



TS12, 13, 21, 22



TS15, TS24



Type	Flow at head	Height	Depth of immersion		Weight		Power HP kW	Voltage 3~ V	Fre- quen- cy Hz	Current Speed	
	GPM /Feet l/min /m	H inch mm	h inch	h mm	Lbs	kg				AMPS	RPM
TS12S110	5/45	7.0	4.33	110	11.9	5.4	0.36	208-230	60	1.26	3300
	20/14	178					0.27	460	60	0.63	3300
	150		5.91	150	12.3	5.6					
	190		7.48	190	13.2	6.0					
	250		9.84	250	14.3	6.5					
300		11.81	300	15.4	7.0						
TS13S110	5/74	8.3	4.33	110	14.3	6.5	0.54	208-230	60	1.8	3200
	20/23	211					0.4	460	60	0.9	3200
	150		5.91	150	15.0	6.8					
	190		7.48	190	15.9	7.2					
	250		9.84	250	16.5	7.5					
300		11.81	300	17.2	7.8						
TS15S190	5/125	11.2	7.48	190	27.6	12.5	1.7	230	60	4.8	3440
	20/35	285					1.27	460	60	2.4	3440
	220		8.66	220	28.7	13.0					
TS21S110	5/90	10.2	4.33	110	21.4	9.7	1.15	230	60	3.70	3440
	20/27	258					0.86	460	60	1.85	3440
	150		5.91	150	22.0	10.0					
	190		7.48	190	23.2	10.5					
	250		9.84	250	24.3	11.0					
300		11.81	300	25.4	11.5						
350		13.78	350	26.5	12.0						
TS22S110	5/125	11.2	4.33	110	26.0	11.8	1.7	230	60	4.8	3440
	20/38	285					1.27	460	60	2.4	3440
	150		5.91	150	26.9	12.2					
	190		7.48	190	27.6	12.5					
	250		9.84	250	28.7	13.0					
300		11.81	300	29.5	13.4						
350		13.78	350	30.2	13.7						
TS24S140	10/124	14.2	5.51	140	57.3	26	2.9	230	60	7.8	3500
	40/36	360					2.18	460	60	3.9	3500
	180		7.09	180	59.5	27					
220		8.66	220	61.7	28						

Dimensions in Inches / mm


*) Dimensions TS12, 13

***) Dimensions TS15



Immersion Pumps

models **TS12 to TS24** are suitable for **CNC machine tools** featuring coolant supply through the tool holder or driving spindle. The TS series is also used for machines equipped with internally cooled tools. TS 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, model TS22 to TS24 is also available with an optional Y/YY (Dahlander) motor configuration for 4 pole operation at half speed.

 Special versions of the pumps can be supplied for use with temperature controlling systems carrying thermal oils of up to 300 °F (150 °C) resp. 390 °F (200 °C).



Applications

Types of fluid
coolants
cooling/cutting oils
Kinematic viscosity
...200 SSU (...45 mm²/s)
Pumping temperature
30...175 °F (0...80 °C)
300 °F (150° C) as special make

Construction

Pump body	cast iron
Cover	cast iron
Impellers	brass
Shaft	steel
Optional:	
Pump body	bronze (TS12...TS13, TS21...TS22)
Cover	bronze (TS12...TS13, TS21...TS22)
Impellers	CrNi-steel (TS12...TS22)
Noise level (Motor only; Tolerance +3 dBA)	
TS12...TS13	61 dBA
TS15...TS22	68 dBA
TS24	74 dBA

