

## Medium Pressure Pumps (S)TC | (S)TH | FH

Our multistage pump models (S)TC25 to (S)TC460 have been especially developed to supply internally cooled tools with coolant fluid.

Closed impellers provide optimal hydraulic efficiencies while minimizing power consumption.

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point. See page "Control/Regulation" in the Technical Information section of this catalog for further information.



(S)TC63



(S)TC260

### SAE Flange for TC Pumps

Upon request all TC pumps are available with an SAE flange. The flange allows for either vertical or horizontal pipe connection and offers a NPT 1/4 (G 1/4) pressure gauge connection port. A surcharge applies for pumps ordered with SAE flange.

### Pump Curves

One key feature of the (S)TC series pumps is their non-overloading motors. These pumps can be operated across the entire pump curve without damaging the motor. This key advantage applies for all allowed fluids, including coolant oils. For specific applications where only one working point is required, the pump/motor combinations can be reviewed and a smaller motor size might be applicable.

### Number of Stages

(S)TC pump curves are determined by the number of impeller used within the pump.

Within the range the immersion depth can be extend up to the maximum mentioned length.

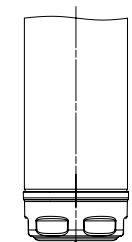
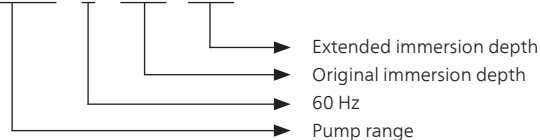
Example: STC63S350-750

### Pump suction with threaded inlet

The TC25 to TC160 series pumps are also available with threaded suction ports upon request. This feature increases the standard immersion depth by 1.57 inch (40 mm).

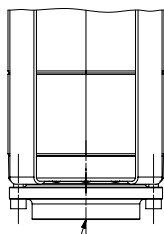
### Type Designation

(S)TC63 S 270 - 750



G1 1/4

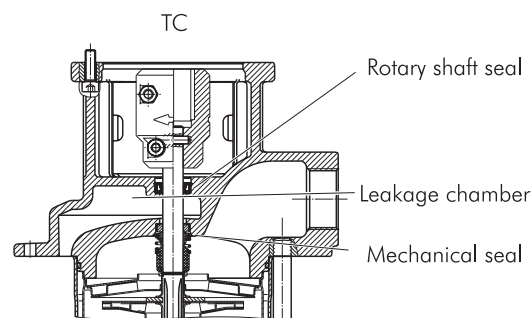
TC25-160



G2 1/2

TC260-460

### Leakage chamber / Leakage connections



## Medium Pressure Pumps (S)TC | (S)TH | FH

Series (S)TH and FH use closed impellers in order to minimize power consumption and to optimize hydraulic pump efficiencies. In addition, the (S)TH series offers high pressures at short immersion depths. Inline pumps of the series FH can be used as boosting pumps if provided with positive inlet pressure. This inlet pressure can be provided by the central coolant supply or a feed pump. In such a setup, pumps of the series FH can raise the incoming pressure by up to 375 PSI (26 bar).

A **frequency converter** can be supplied for **special applications** or for matching the pump characteristic to a specific duty point. See page "Control/Regulation" in the Technical Information section of this catalog for further information.



(S)TH



FH

### SAE Flange for TH Pumps

Upon request all TH pumps are available with an SAE flange (STH). The flange allows for either vertical or horizontal pipe connection and offers a NPT 1/4 (G 1/4) pressure gauge connection port. A surge charge applies for pumps ordered with SAE flange.

### Pump Curves

One key feature of the (S)TH/FH series pumps is their non-overloading motors. These pumps can be operated across the entire pump curve without damaging the motor. This key advantage applies for all allowed fluids, including coolant oils. For specific applications where only one working point is required, the pump/motor combinations can be reviewed and a smaller motor size might be applicable.

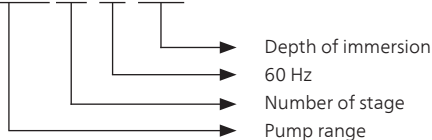
### Number of Stages

(S)TH/FH pump curves are determined by the number of impeller used within the pump.

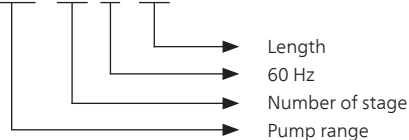
Within the range the immersion depth can be extend up to the maximum mentioned length.  
Example: STH203S690 (3 impeller, 27.17 inch / 690 mm immersion depth)

### Type Designation

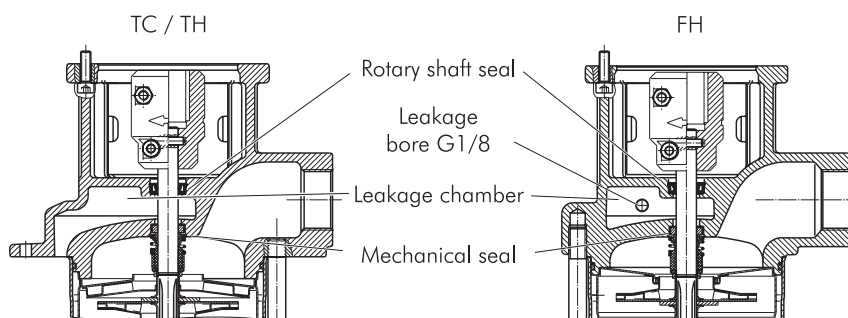
(S)TH4 11 S 290



FH4 11 S 39



### Leakage chamber / Leakage connections



Small leaks flow back through the leakage chamber into the tank without reaching the outside.

By connecting a leakage line it is possible to direct minor leaks back into the tank.

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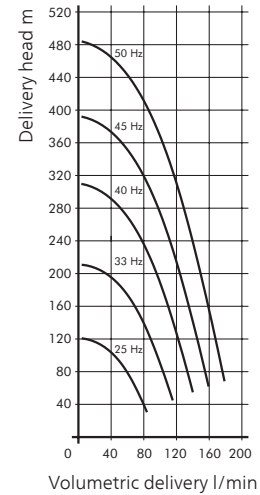
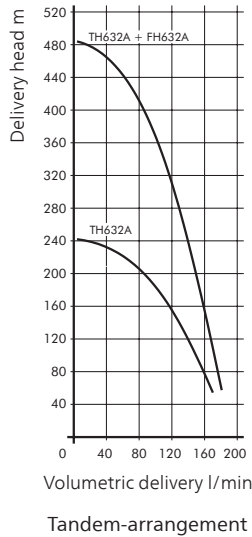
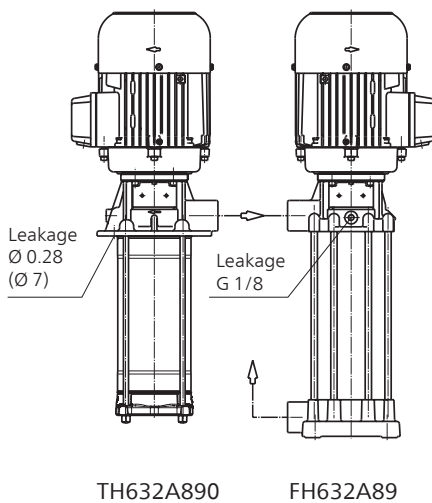
### Applying (S)TH/FH pumps in grinding applications

Grinding versions (S)TH/FH pumps (-E). (S)TH/FH series pumps can be supplied upon request as a special grinding version for applications with heavy loads of abrasive particles (>50HRC).  
Ordering description: e.g. TH224A590-E

In this version pumps are supplied without internal diffuser gaskets in order to prevent increased wear caused by the abrasive particles in the fluid. As a result, however, the internal losses of the pump increase and the pump curves are reduced.

These curves are available upon request.

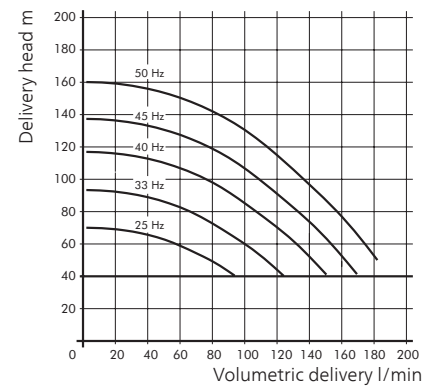
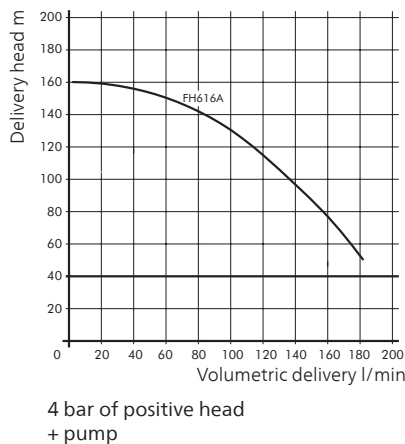
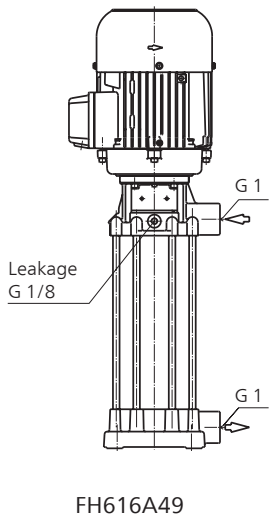
### Examples for pressure boosting: TH632A890 + FH632A89 in tandem-arrangement



Tandem-arrangement  
Both pumps controlled by one variable frequency converter

Dimensions in Inches / mm

### Examples for pressure boosting: FH616A49 + 4 bar of positive head from central coolant supply



4 bar of positive head  
+ pump controlled by frequency converter