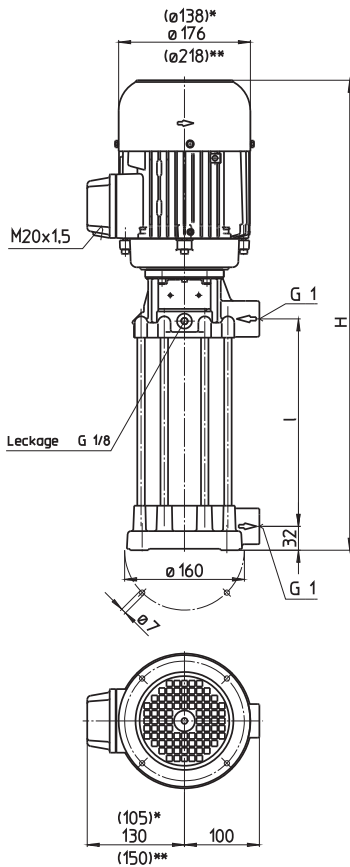


### FH403...423



\*) Dimensions for FH403...FH408  
 \*\*) Dimensions for FH419...FH423

Type	Vol. del. at manom. del. head l/min / m	Height H mm	Length l mm	Weight kg	Power kW	Voltage 3 ~ V	Fre- quency Hz	Rated current A	Speed 1/min
<b>FH403B19</b>	40/29	488	197	17.2	0.54	460	60	1.4	3300
<b>FH404B19</b>	40/39	506	197	19.6	0.75	460	60	2.2	3300
<b>FH405B19</b>	40/49			19.7					
<b>FH406B29</b>	40/58	606	297	21.1	0.92	460	60	2.7	3300
<b>FH407B29</b>	40/68	626	297	22.1	1.1	460	60	2.9	3300
<b>FH408B29</b>	40/78			22.2					
<b>FH409B29</b>	40/88	649	297	29.5	1.3	460	60	3	3400
<b>FH410B29</b>	40/100	649	297	30.1	1.5	460	60	3.8	3400
<b>FH411B39</b>	40/110	749	397	30.6	1.7	460	60	4.1	3400
<b>FH412B39</b>	40/119			31.1					
<b>FH413B39</b>	40/129	773	397	35.1	1.9	460	60	4.9	3400
<b>FH414B39</b>	40/139	773	397	35.7	2.2	460	60	5.3	3400
<b>FH415B39</b>	40/150			35.8					
<b>FH416B49</b>	40/159	883	497	36.8	2.6	460	60	6.3	3400
<b>FH417B49</b>	40/170			36.9					
<b>FH418B49</b>	40/179			37.0					
<b>FH419B49</b>	40/192	938	497	47.2	3.3	460	60	8	3450
<b>FH420B49</b>	40/202			47.3					
<b>FH421B59</b>	40/214	1038	597	47.8					
<b>FH422B59</b>	40/224			47.9					
<b>FH423B59</b>	40/233			48.0					



# Pressure boosting pumps

## Closed impellers

# FH4 - 60 Hz

### Pressure Boosting Pumps

series TH and FH use **closed impellers** in order to minimize power consumption and to optimize hydraulic pump efficiencies. In addition, the 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 26 bar.

For alternating machining using **internally and externally cooled tools**, these models are available with YYY-configured **pole-changing motor** (Dahlander) for optional changeover to **half speed** operation.

**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.



### Applications

Types of fluid  
water  
coolants  
cooling/cutting oils

Kinematic viscosity  
...25 mm<sup>2</sup>/s (25 cSt)

Pumping temperature  
0...80° C

**60 Hz**

### Construction

Pump body	cast iron
Cover	cast iron
Impellers	CrNi-steel
Shaft	CrNi-steel
Diffusers	CrNi-steel
Mechanical seal	SiC
O-rings	Viton

Optional:	
Pole-changing motor	4 - 2 poles
Pump body	bronze
Cover	bronze

Noise level	
FH403...FH408	61 dBA
FH409...FH418	66 dBA
FH419...FH423	75 dBA

