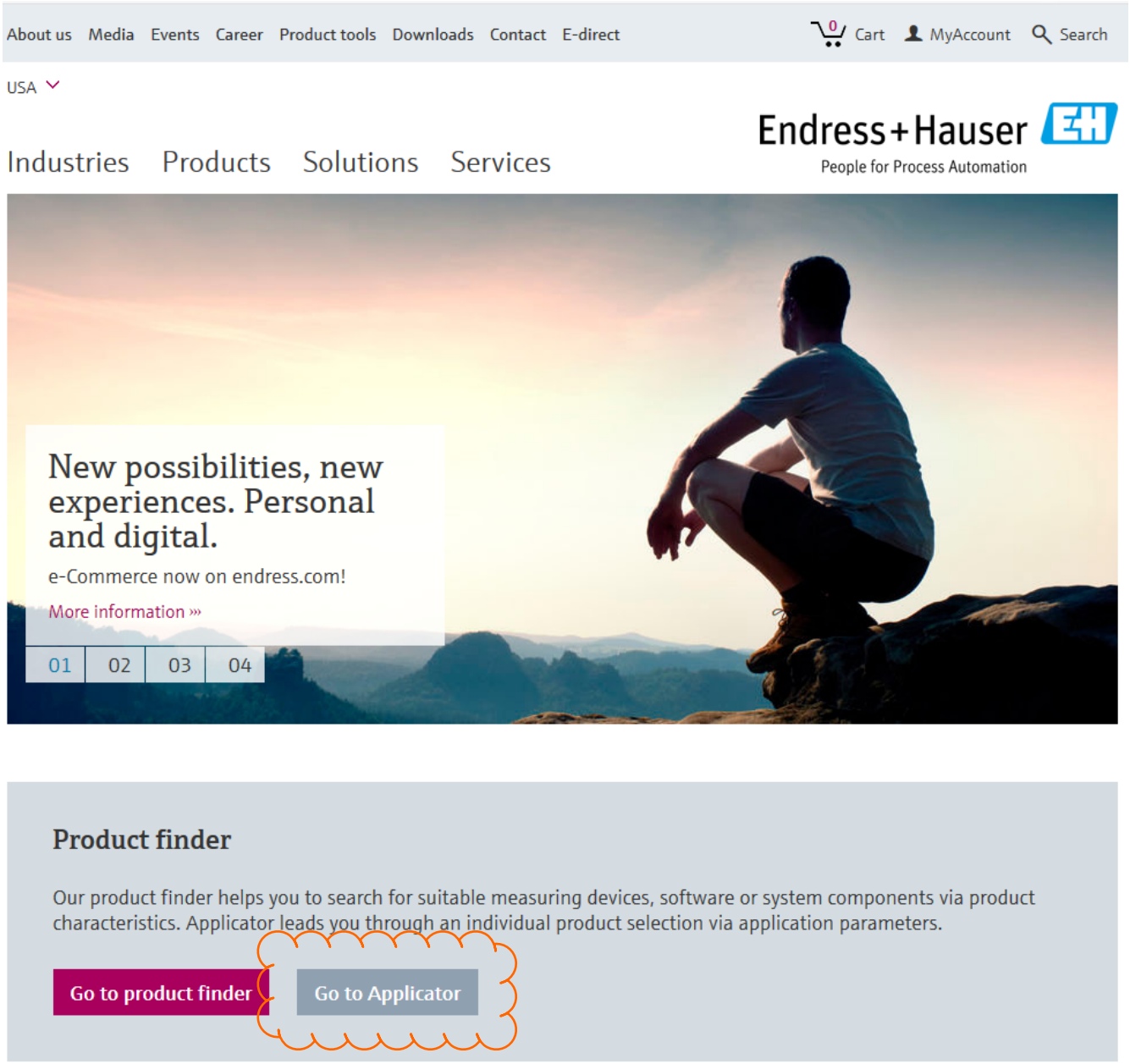
Sizing of Hot Water Meters

1. Go to the Endress Hauser web page: https://www.us.endress.com/en

2. Click on "Go to Applicator"

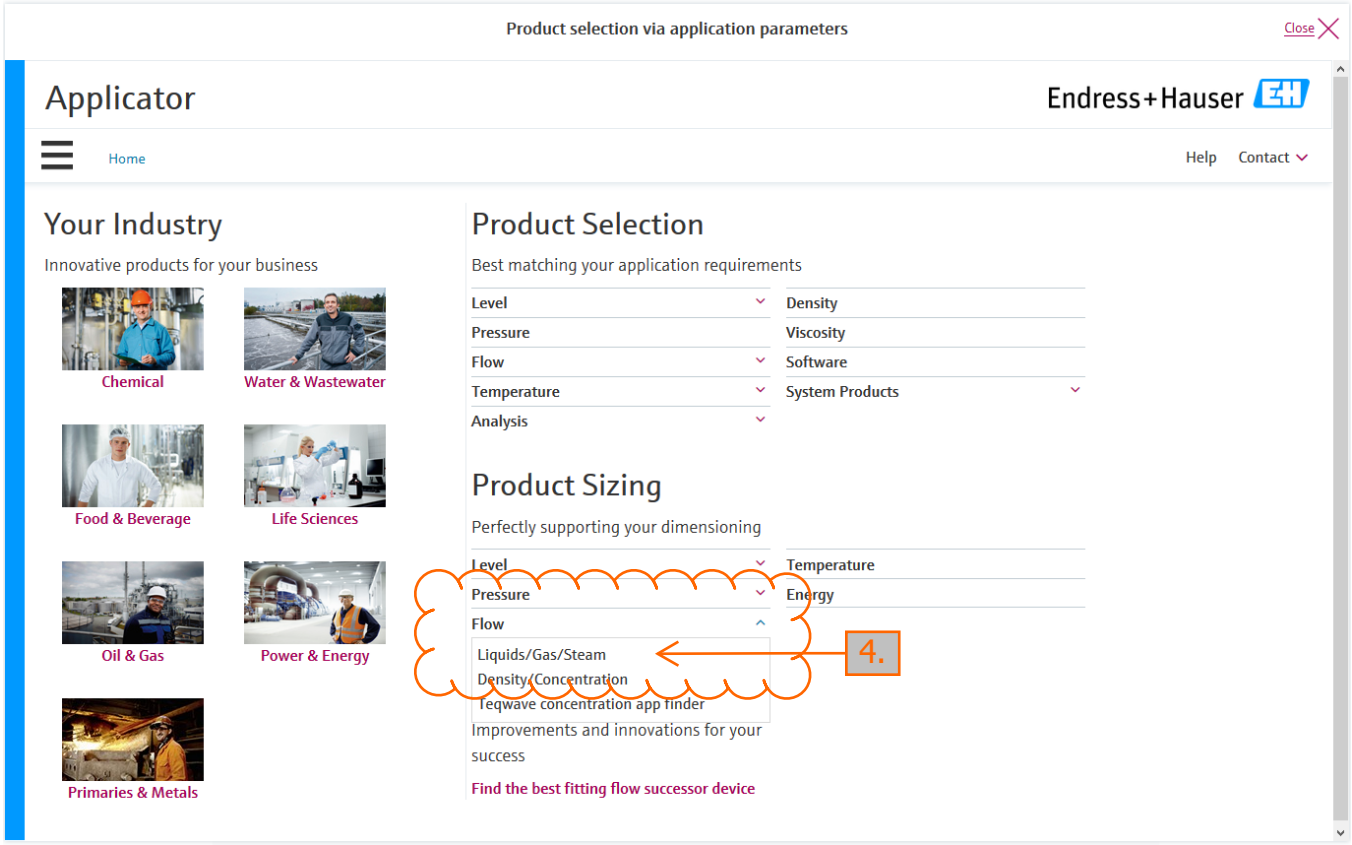


Sizing of Hot Water Meters

While in the 'Applicator' page

3. Select 'Flow' under the 'Product Sizing'

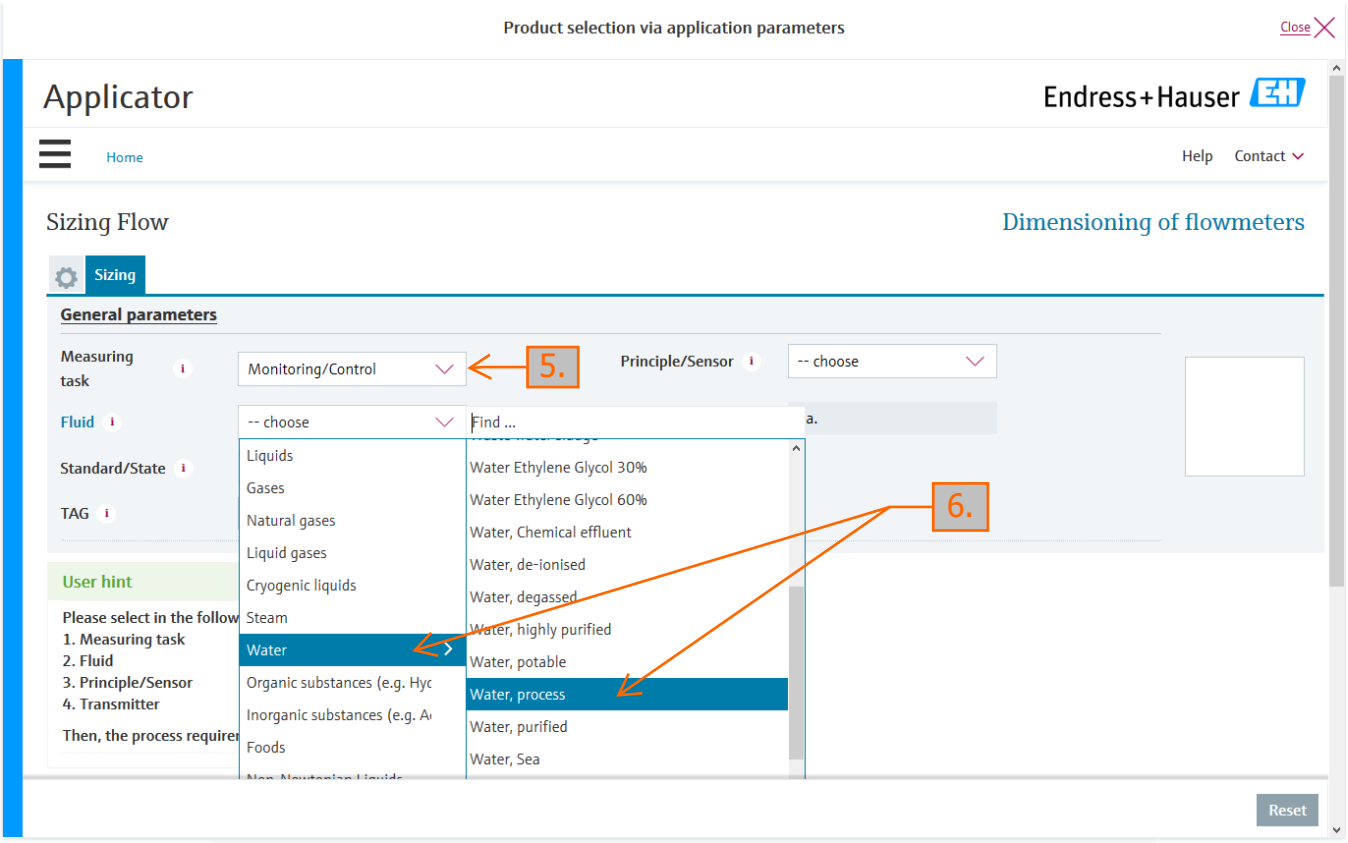
4. Select 'Liquids/Gas/Steam'



Sizing of Hot Water Meters

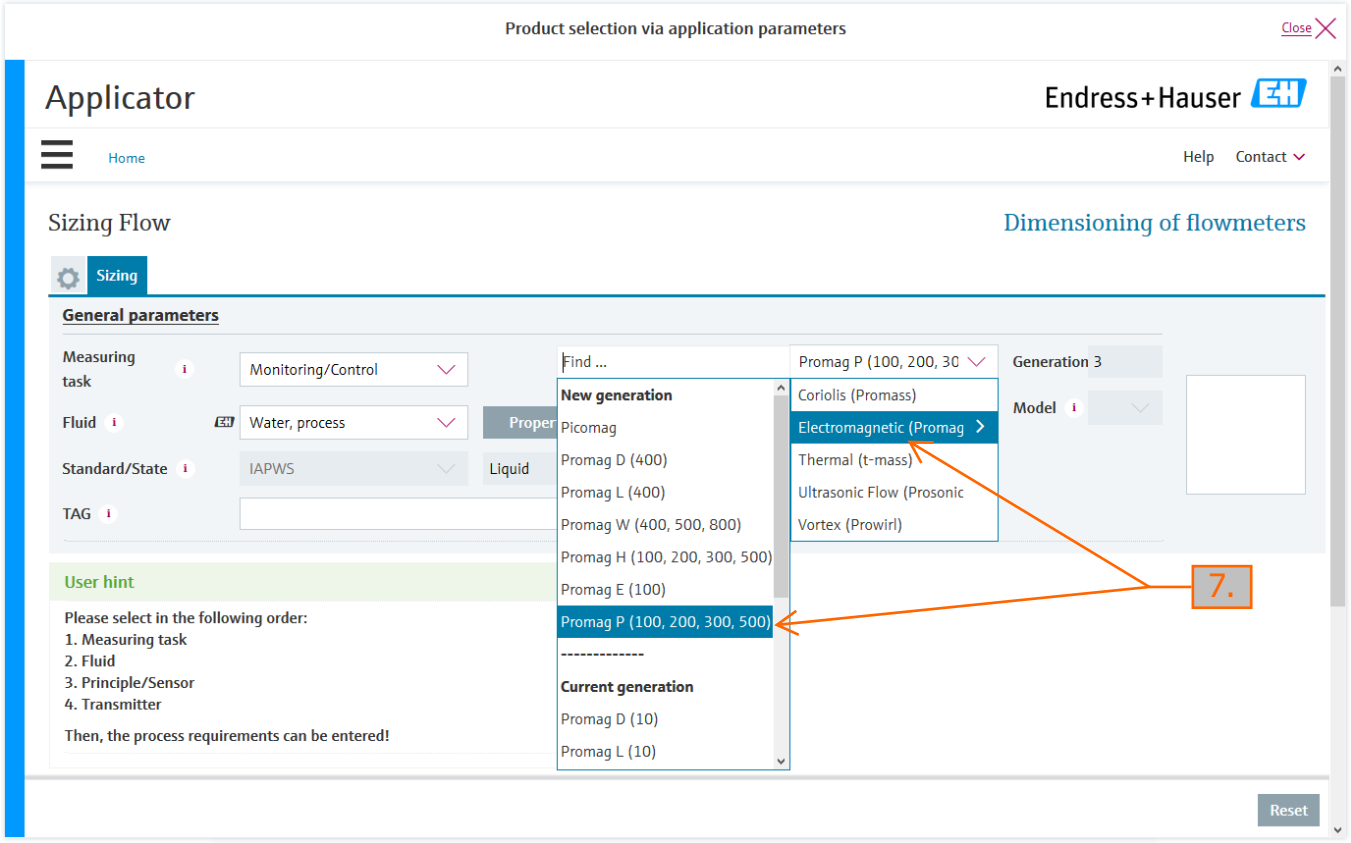
5. Select 'Monitoring/Control' under 'Measuring task'

6. Select 'Water' and then 'Water, process' under 'Fluid'



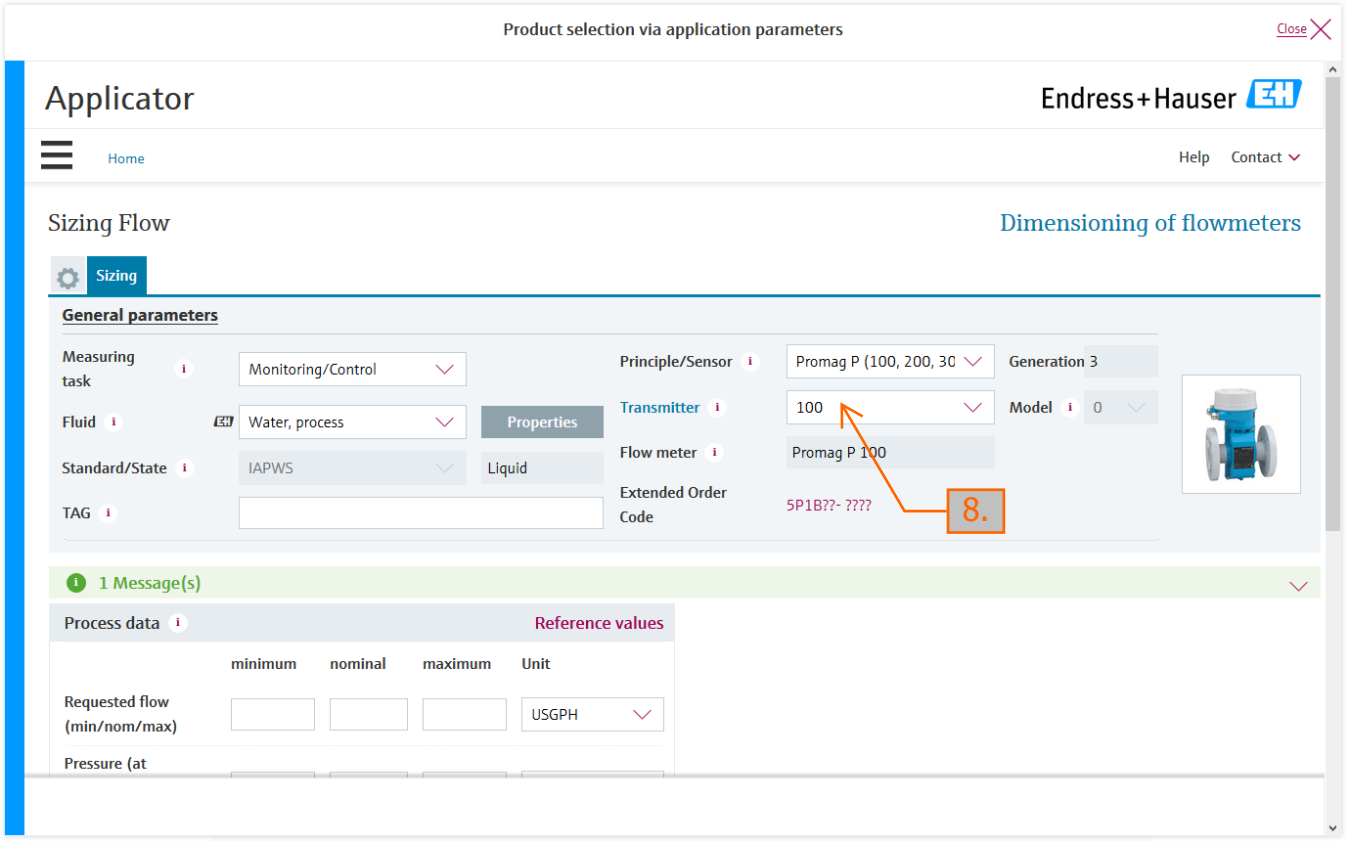
Sizing of Hot Water Meters

7. Select 'Electromagnetic (Promag' and then 'Promag P (100, 200, 300, 500)' under 'Principle/Sensor'



Sizing of Hot Water Meters

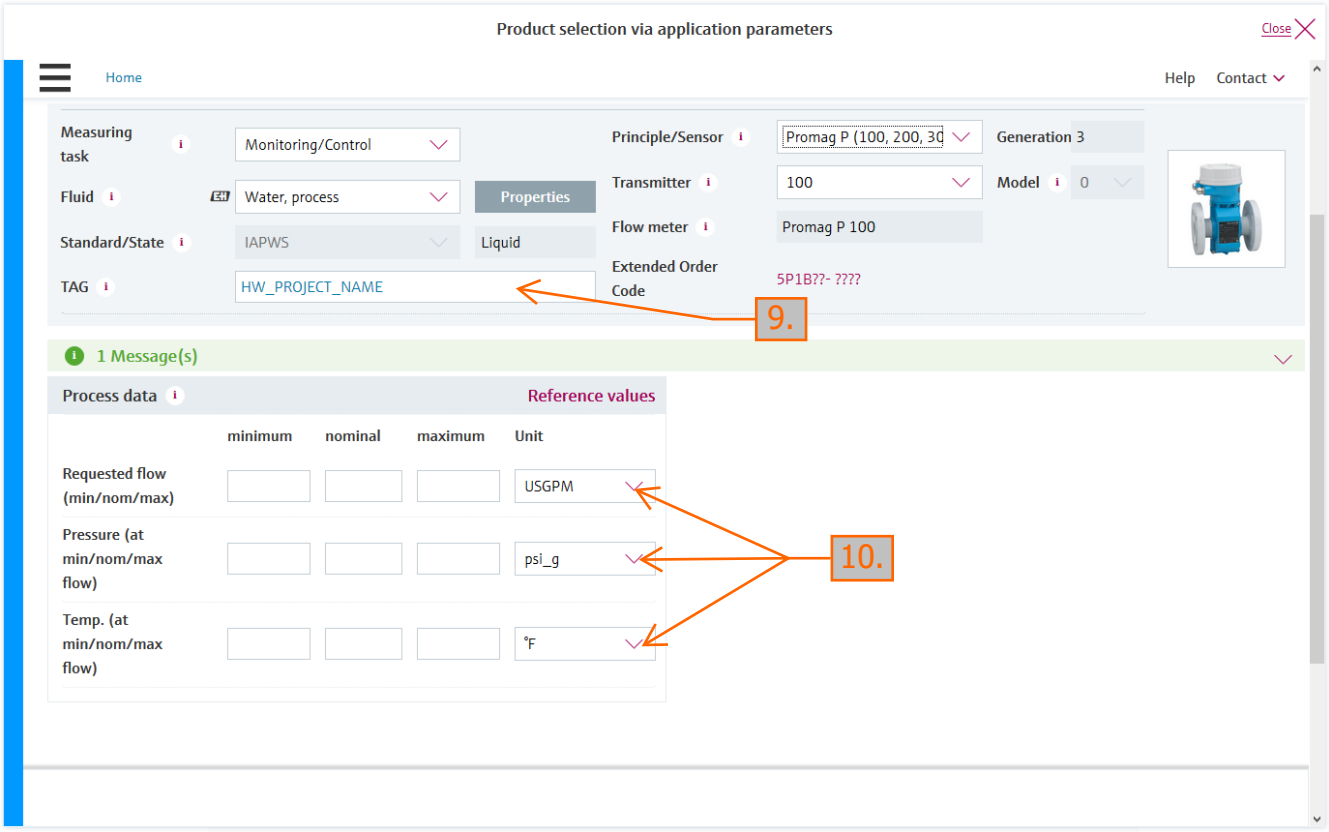
8. Select '100' under 'Transmitter'



Sizing of Hot Water Meters

9. In the 'TAG', write the name of the project preceded by HW that stands for Hot Water.

10. Selection of units: USGPM for flow, 'psi_g' for pressure, and '°F' for temperature.

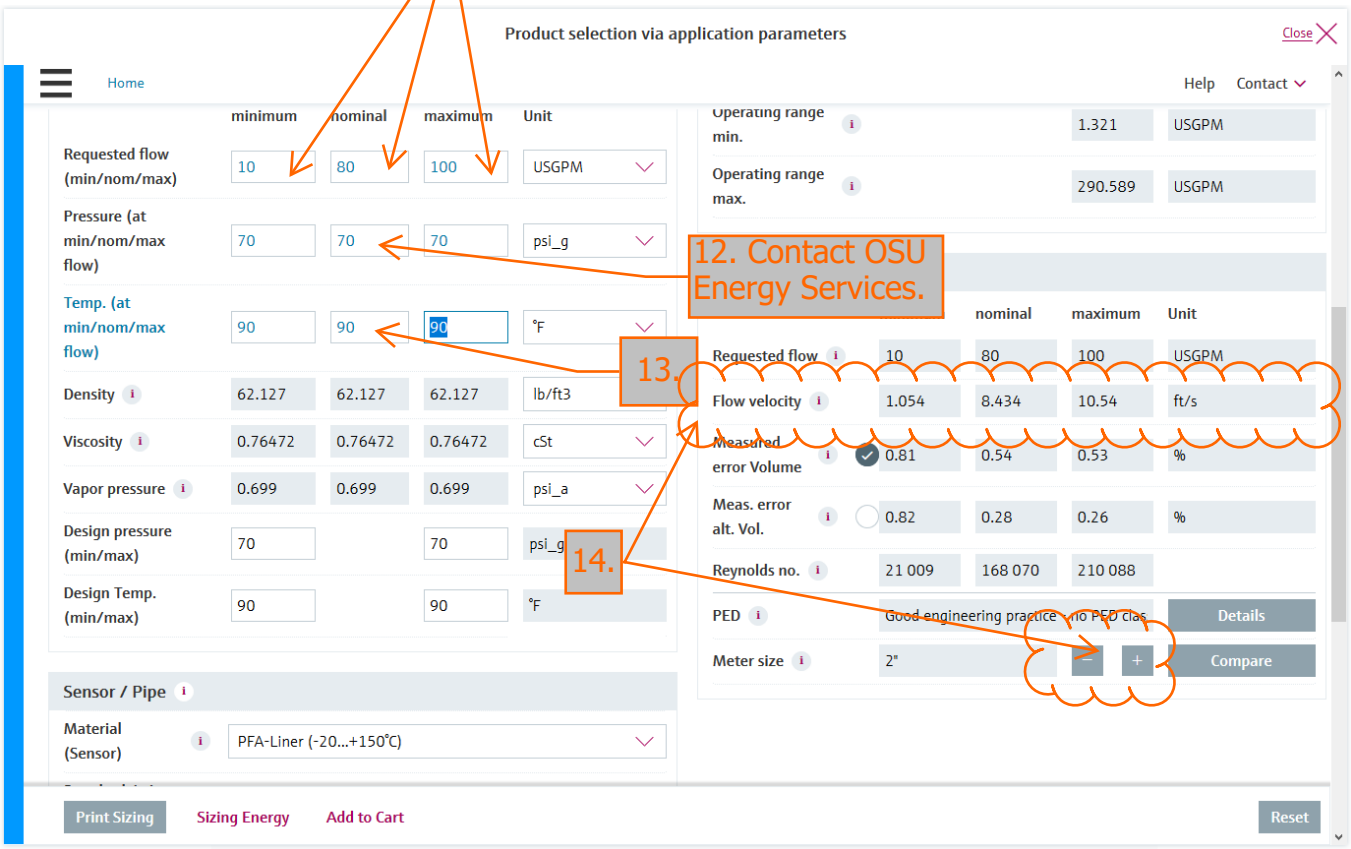


Sizing of Hot Water Meters

11. Using the peak flow, fill the 'Requested flow' cells: minimum, nominal, and maximum.

Maximum = Peak Flow
Minimum = 10% of peak flow
Nominal = 80% of peak flow

Example: hot water peak flow = 100 gpm (designer)
Minimum = 10 gpm
Nominal = 80 gpm
Maximum = 100 gpm



12. Contact OSU Utilities Engineering in order to obtain the nominal pressure. It depends on the location of the project.

13. The nominal temperature used for sizing hot water (HW) meters is 90 °F.

14. Verify 'Flow velocity' stays into the range between 3.3 and 8.2 ft/s. Change the 'Meter size' if it is necessary to keep the 'Flow velocity' in this range.

From this point, please follow steps 15 through 18 of the "Sizing Domestic Water" document.