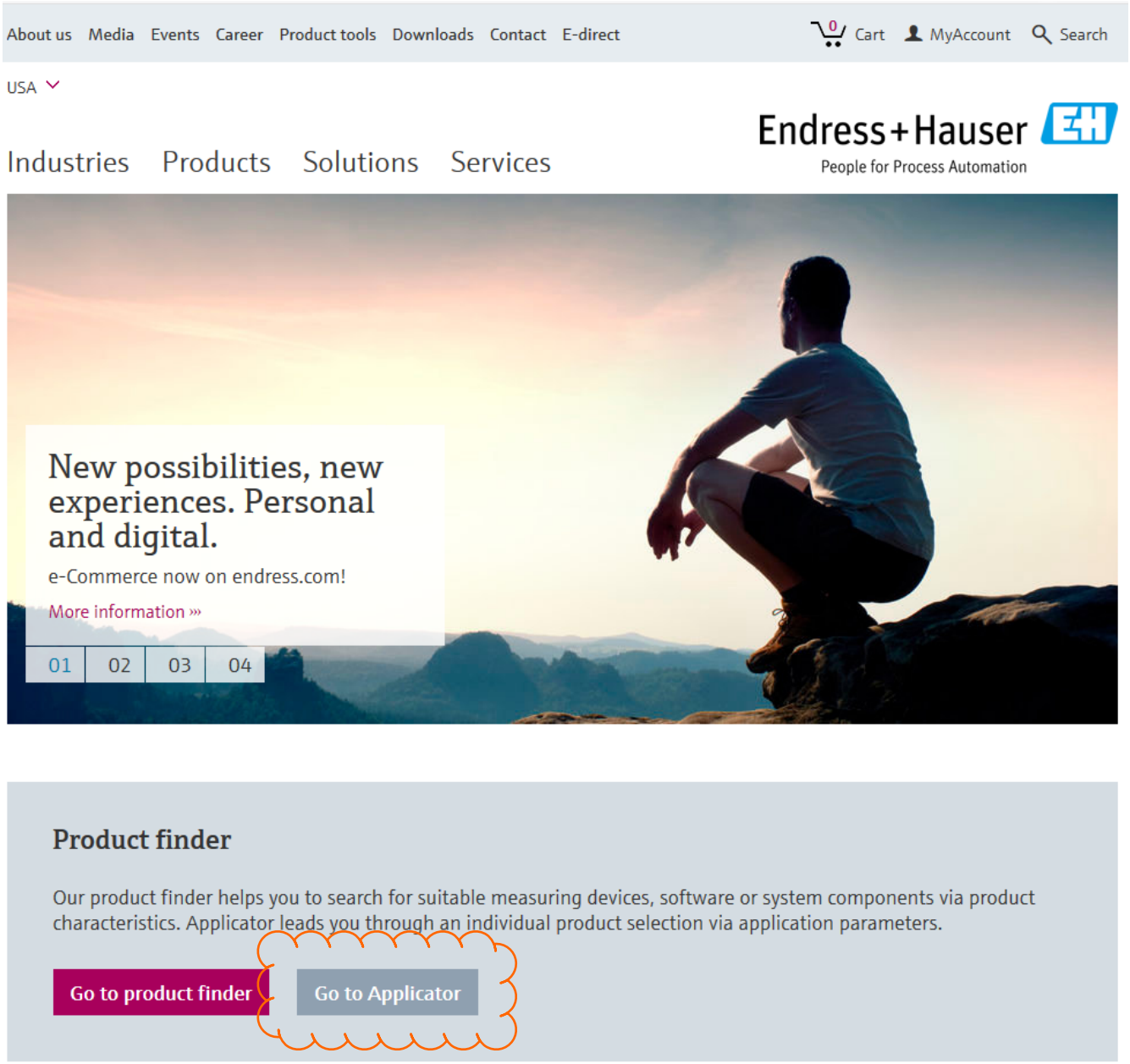
Sizing of Domestic Water Meters

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

2. Click on "Go to Applicator"

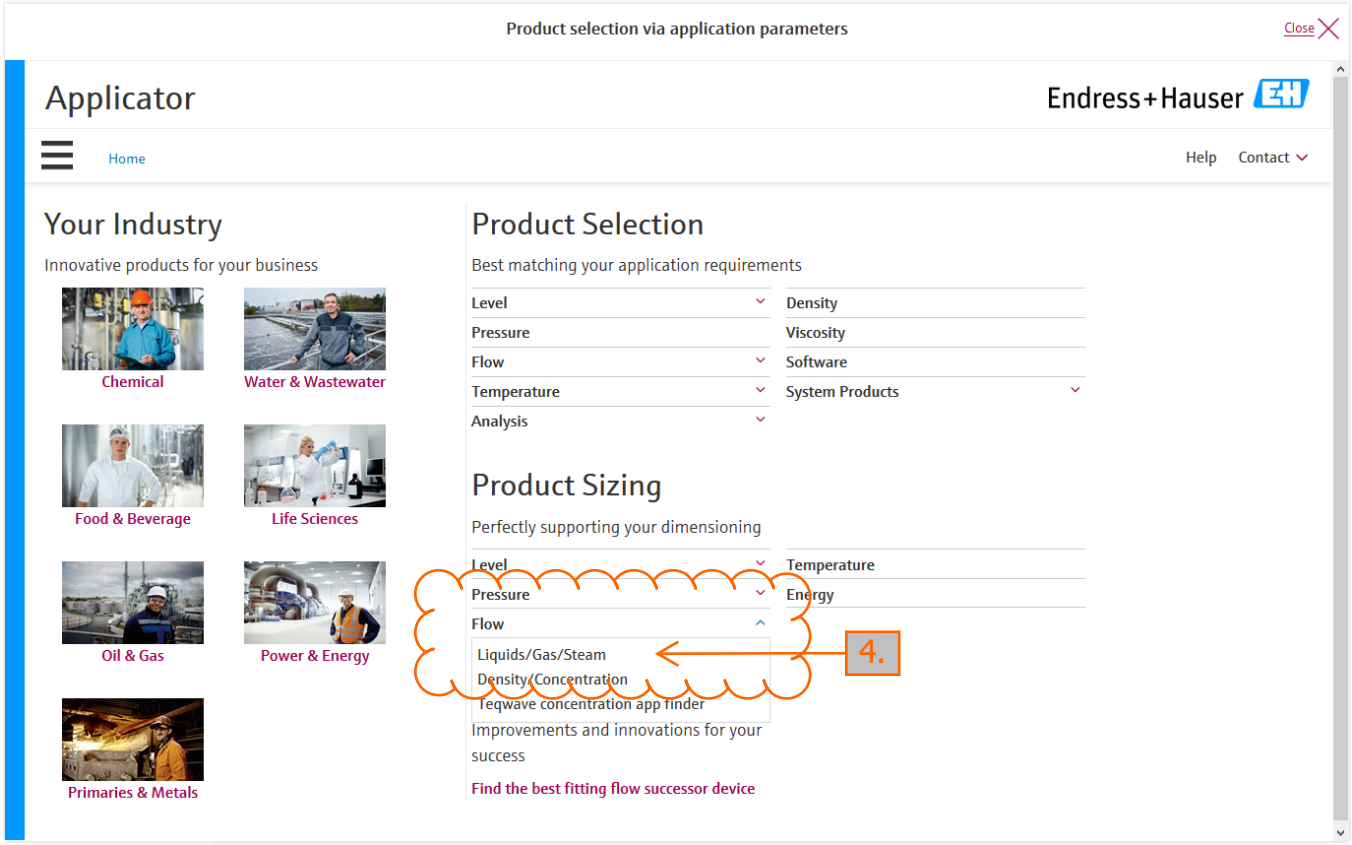


Sizing of Domestic Water Meters

While in the 'Applicator' page

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

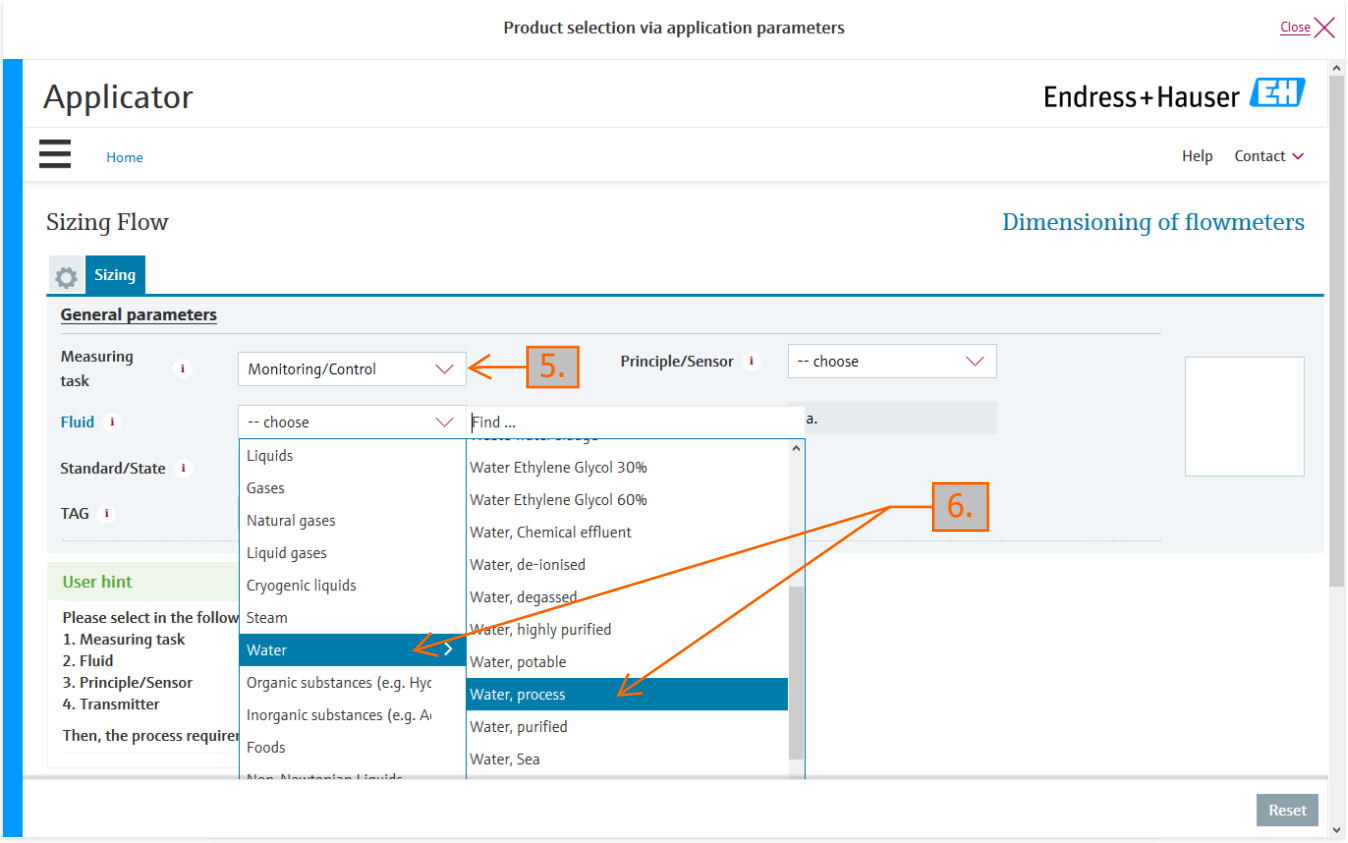
4. Select 'Liquids/Gas/Steam'



Sizing of Domestic Water Meters

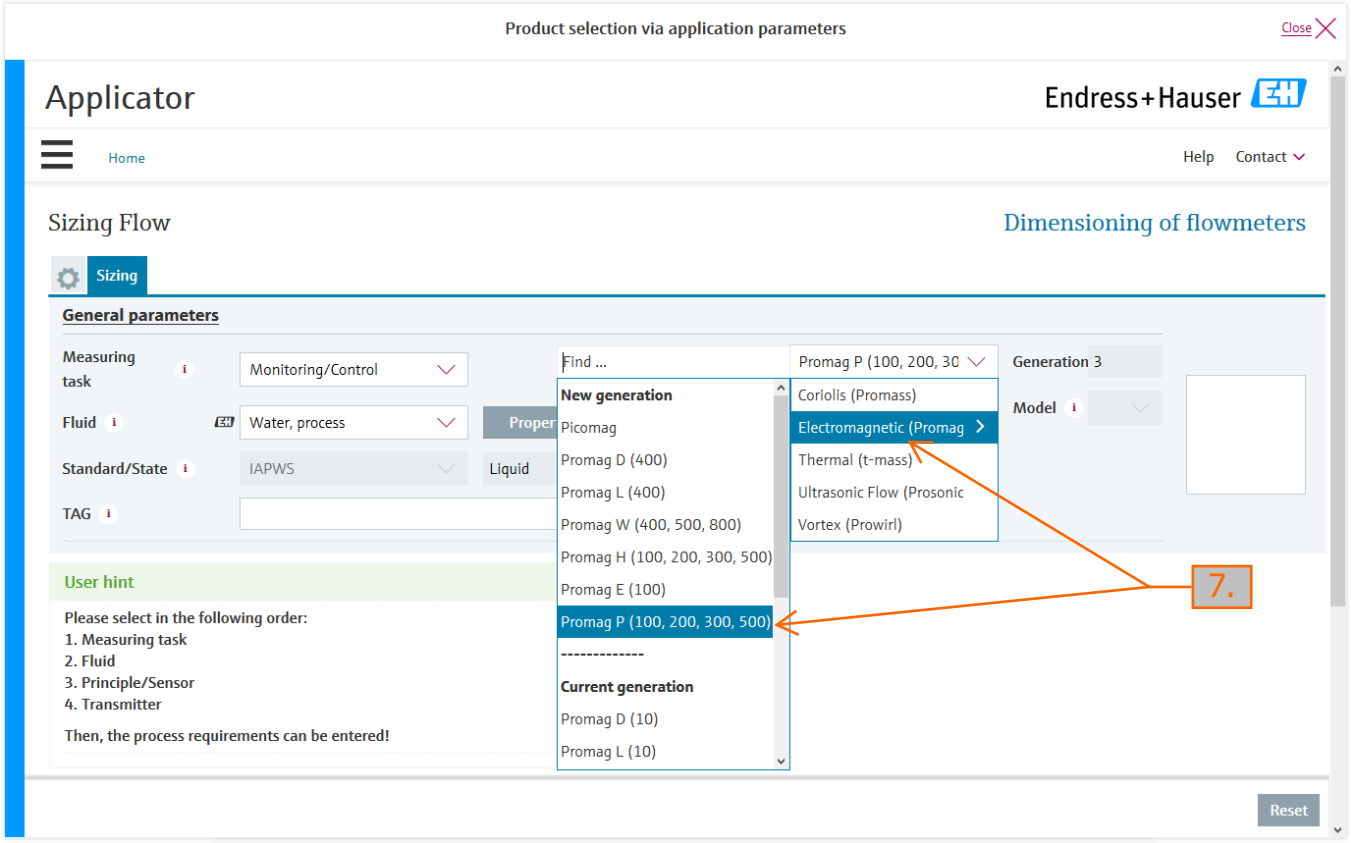
5. Select 'Monitoring/Control' under 'Measuring task'

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



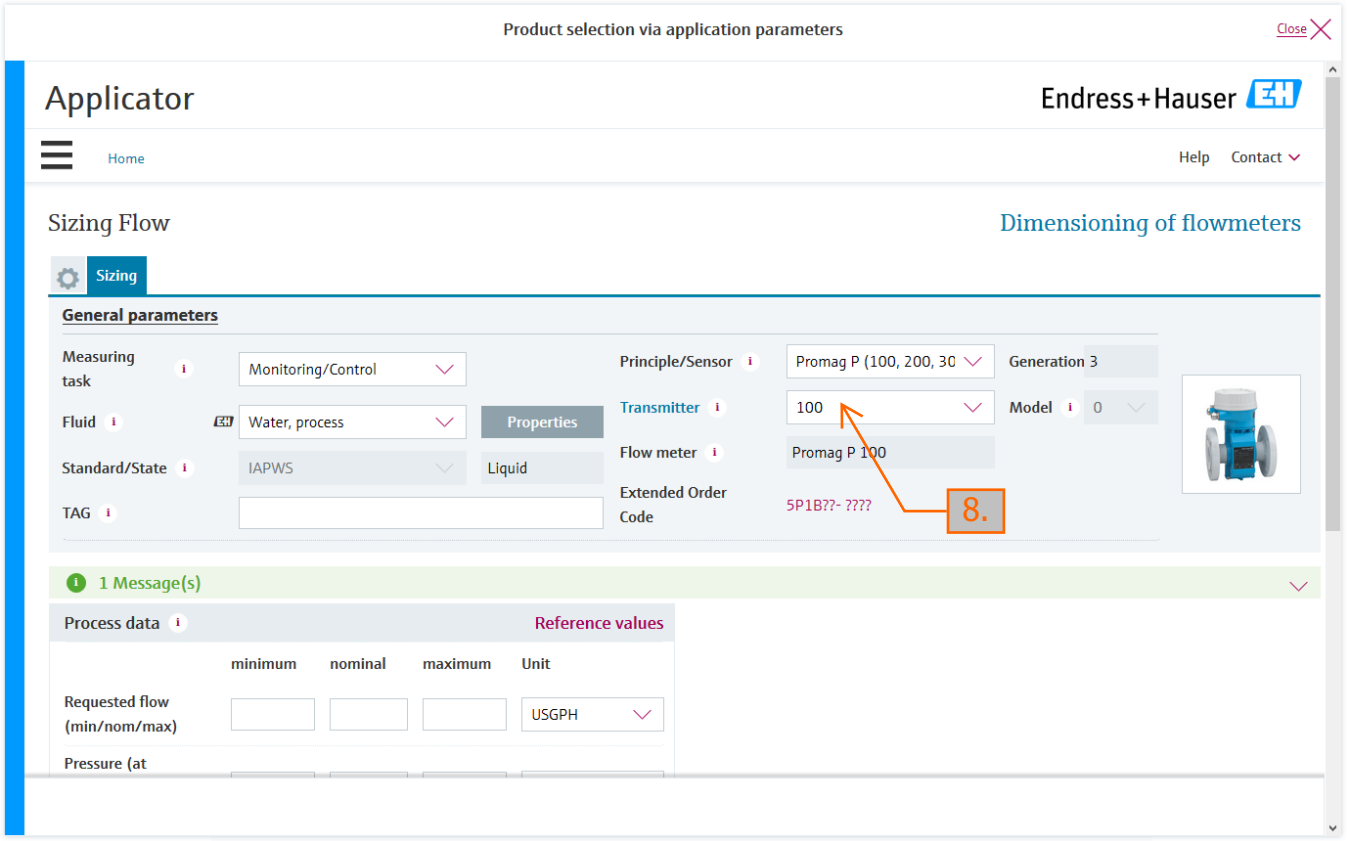
Sizing of Domestic Water Meters

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



Sizing of Domestic Water Meters

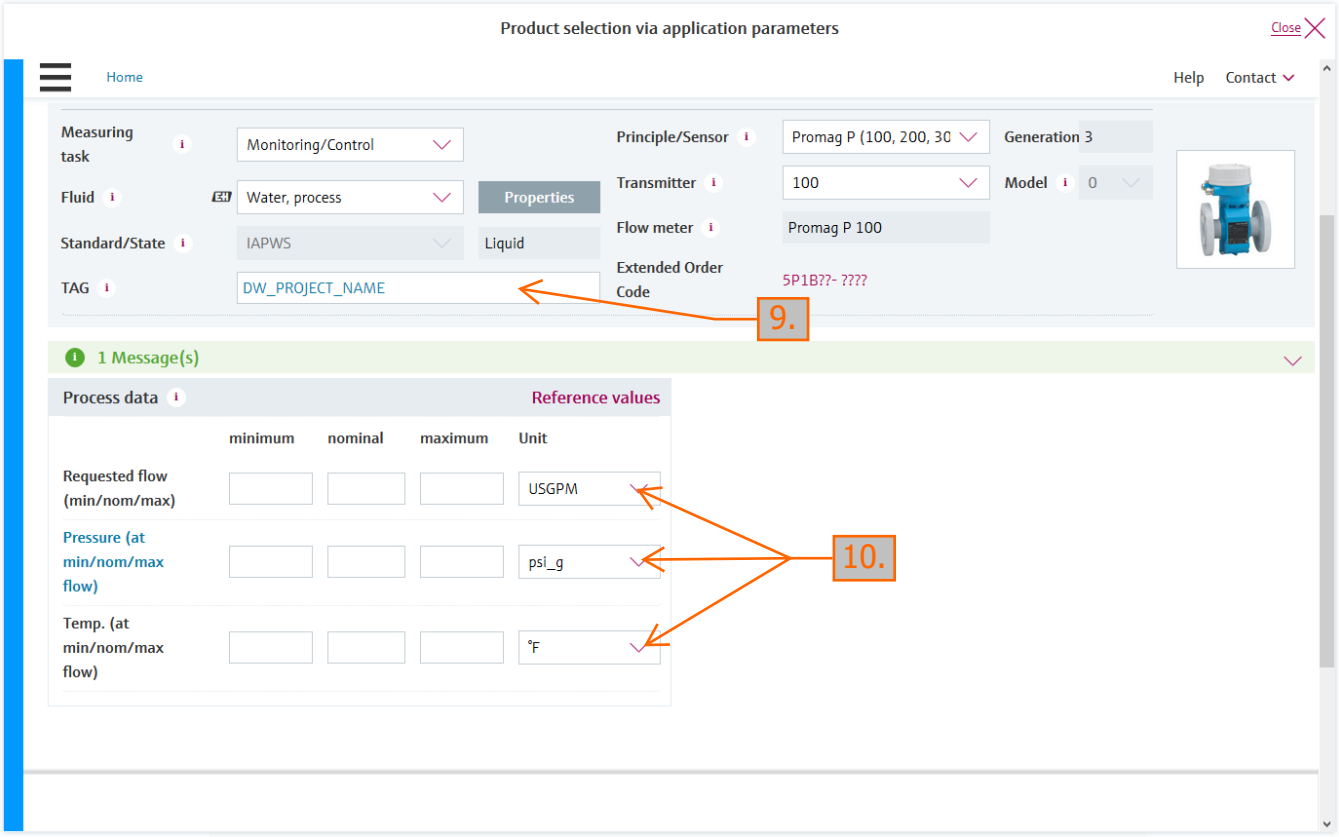
8. Select '100' under 'Transmitter'



Sizing of Domestic Water Meters

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

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

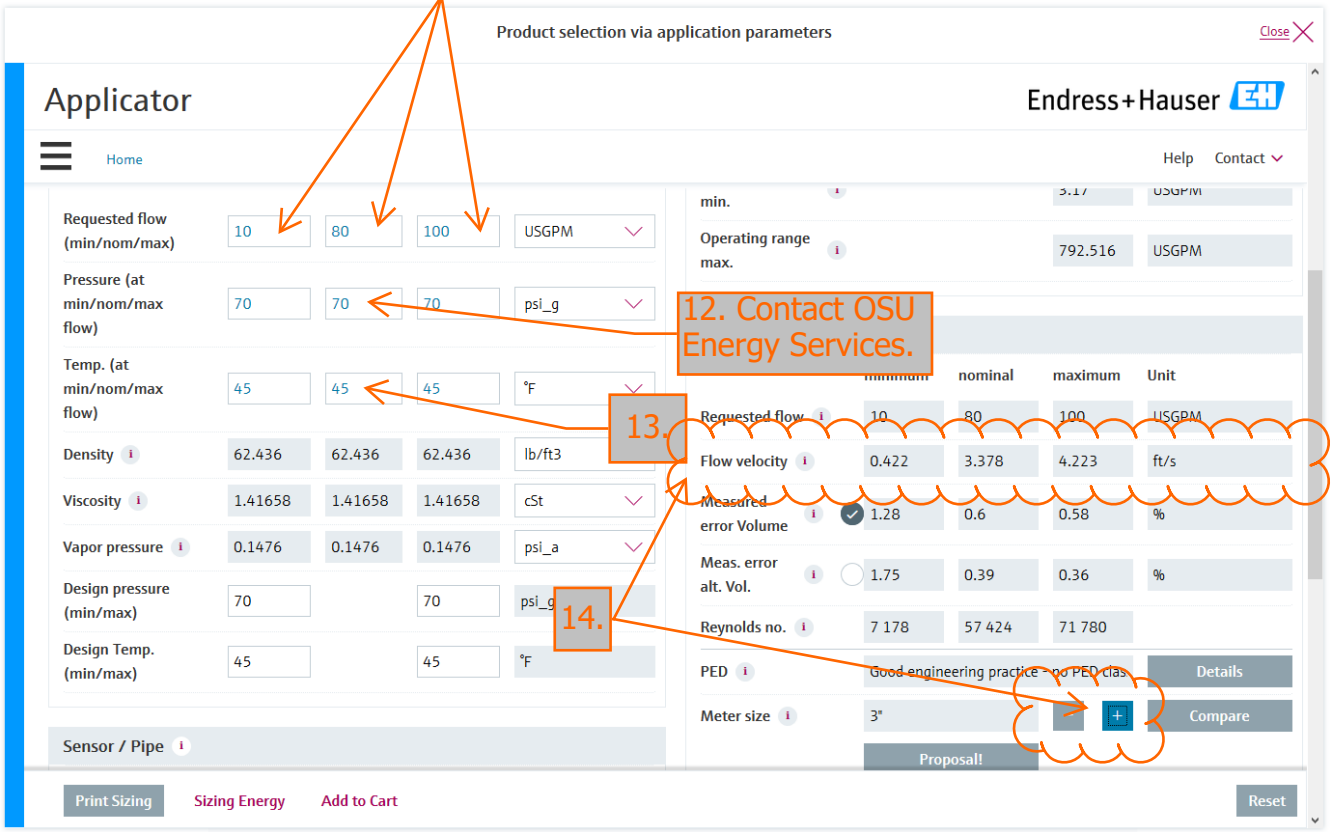


Sizing of Domestic Water Meters

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: domestic 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 domestic water (DW) meters is 45 °F.

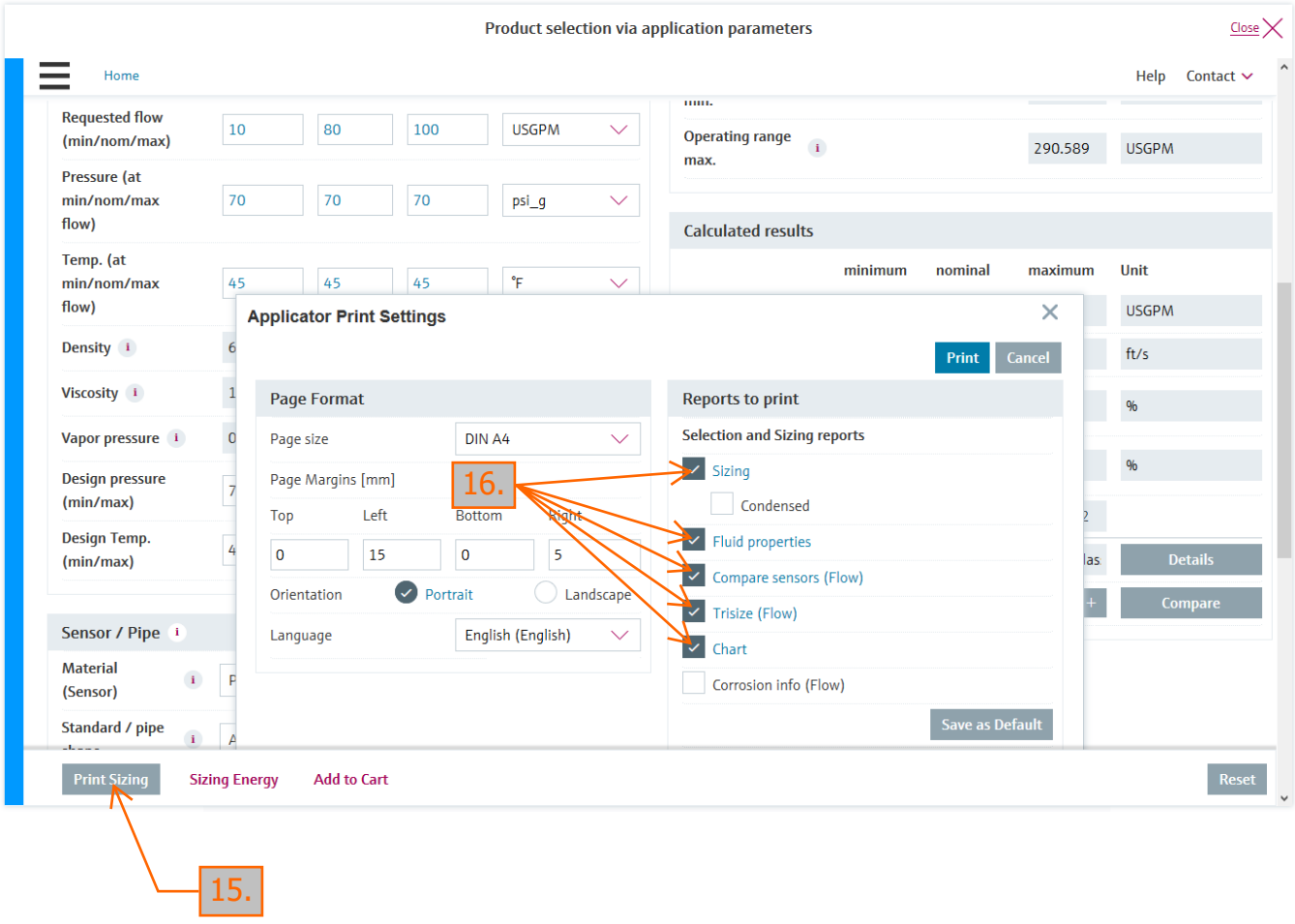
14. Verify 'Flow velocity' stays into the range between 3.3 and 8.2 ft/s. Change the 'Meter size' if it is necessary to keep the 'Flow velocity' in this range.

Sizing of Domestic Water Meters

At this point the sizing of domestic water (DW) meter is complete. The next step is to print the results that shall be email to OSU Energy services for approval.

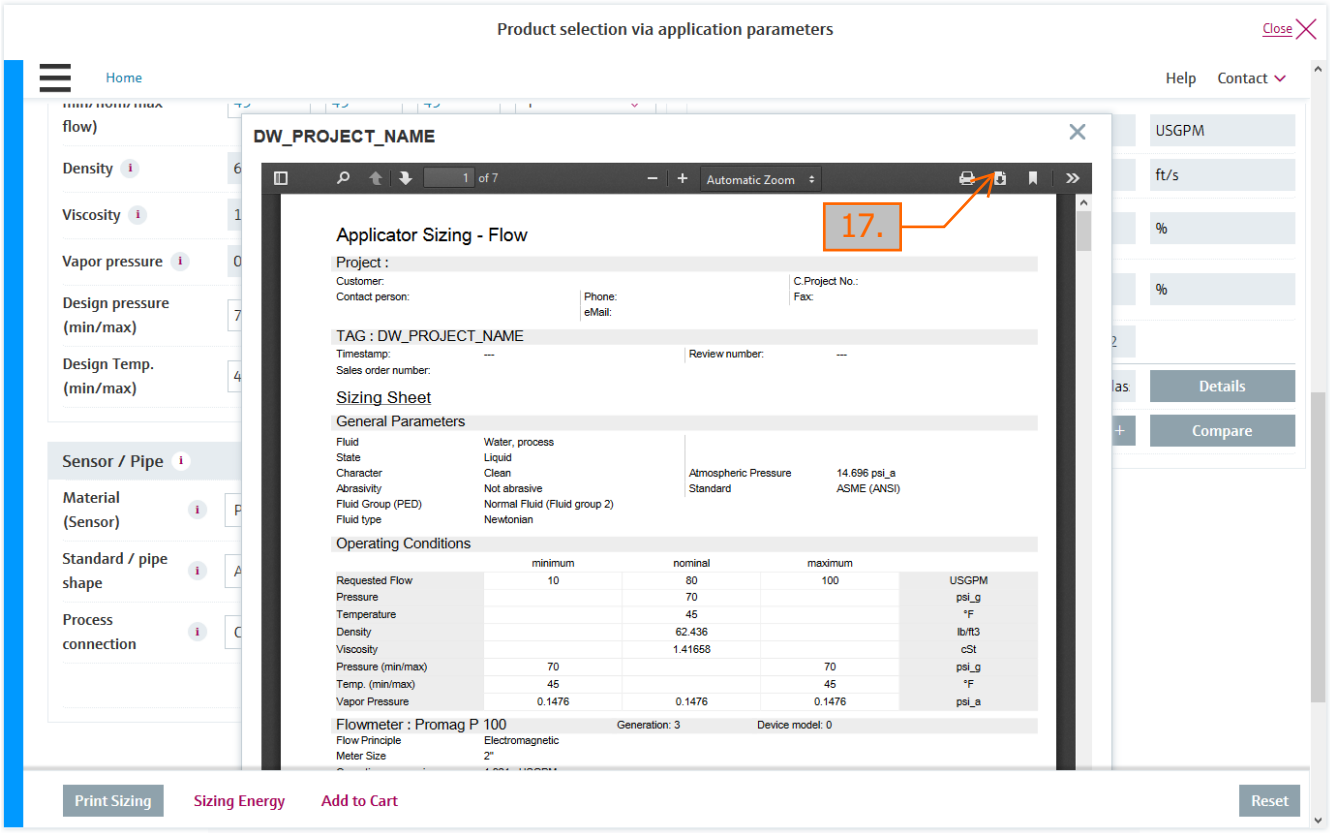
15. Select 'Print Sizing'

16. On the 'Applicator Print Settings' / 'Reports to print', select: 'Sizing', ' Fluid properties', 'Compare sensors (Flow)' 'Trisize (Flow)', and 'Chart'



Sizing of Domestic Water Meters

17. Download the pdf file



18. Save the pdf file