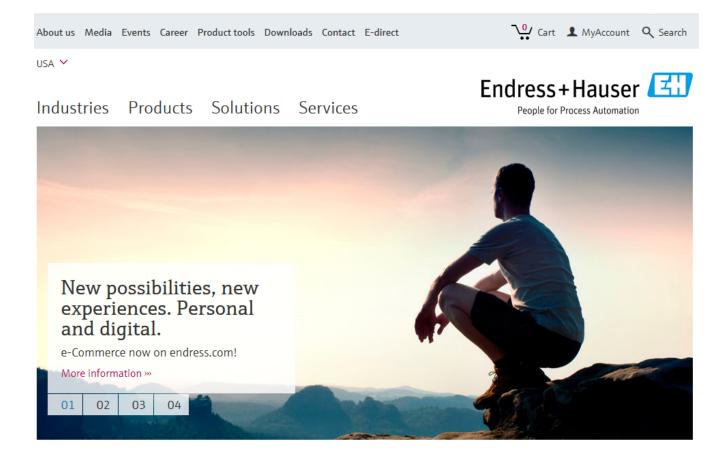
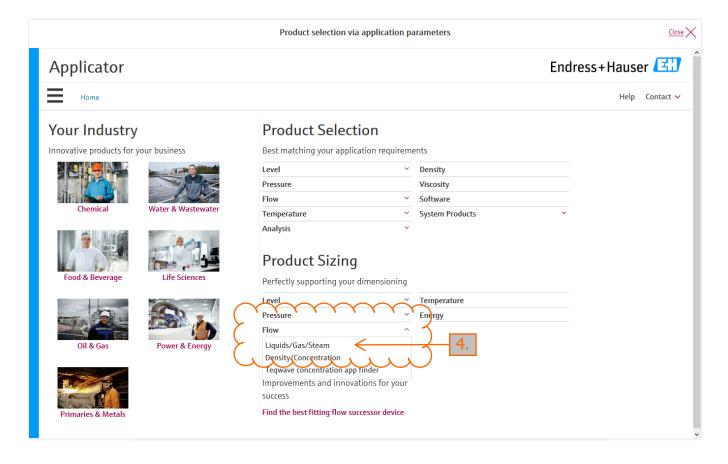
- 1. Go to the Endress Hauser web page: https://www.us.endress.com/en
- 2. Click on "Go to Applicator"





- While in the 'Applicator' page
- 3. Select 'Flow' under the 'Product Sizing'
- 4. Select 'Liquids/Gas/Steam'



- 5. Select 'Monitoring/Control' under 'Measuring task'
- 6. Select 'Water' and then 'Water, process' under 'Fluid'

		Product selection via application parameters	Close
Applicator			Endress+Hauser 🖽
Home			Help Contact 🗸
Sizing Flow			Dimensioning of flowmeters
Sizing			
General parameters Measuring task	Monitoring/Control 🗸	← 5. Principle/Sensor i choose ∨	
Fluid (1)	choose 🗸 🗸	Find a.	
Standard/State (i	Liquids Gases	Water Ethylene Glycol 30%	
TAG (i)	Natural gases Liquid gases	Water Ethylene Glycol 60% 6.	
User hint	Cryogenic liquids	Water, de-ionised Water, degassed	
Please select in the follow 1. Measuring task 2. Fluid	Steam Water	Water, potable	
3. Principle/Sensor 4. Transmitter	Organic substances (e.g. Hyc Inorganic substances (e.g. A	Water, process	
Then, the process require		Water, purified Water, Sea	
	- Nan Naudonian Liquide		Reset

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

			Produ	ct selection via application par	rameters		<u>C</u>
Applicator						Endress+H	auser 🖪
Home							Help Contact
Sizing Flow						Dimensioning of	flowmeter
🔅 Sizing							
General parameters							
Measuring i	Monitoring/Control	\sim		Find	Promag P (100, 200, 30 🗸	Generation 3	
task				New generation '	Coriolis (Promass)	Model i	
Fluid i 🖾	Water, process	\sim	Proper	Picomag	Electromagnetic (Promag ゝ		
Standard/State i	IAPWS		Liquid	Promag D (400)	Thermal (t-mass)		
TAG i				Promag L (400)	Ultrasonic Flow (Prosonic		
				Promag W (400, 500, 800)	Vortex (Prowirl)		
User hint				Promag H (100, 200, 300, 500)			7
Please select in the follow	ving order:			Promag E (100)			/.
1. Measuring task	ning order.			Promag P (100, 200, 300, 500)			
2. Fluid 3. Principle/Sensor							
4. Transmitter				Current generation Promag D (10)			
Then the process require	ments can be entered!			Promag L (10)			
ment are process require				Fromay L (10)			

		Pro	duct selection via a	application parameter	s		<u>Close</u>
Applicator						Endress+H	lauser 🖽
Home							Help Contact 🗸
Sizing Flow						Dimensioning o	f flowmeters
General parameter	<u>s</u>						
Measuring task	Monitoring/Control	\sim	Principle	e/Sensor i Proma	ag P (100, 200, 30 🗸	Generation 3	
	🖾 Water, process	V Pro	operties	itter i 100	\sim	Model i 0 🗸	
Standard/State 🕕	IAPWS	Liquid			ig P 100		
TAG (I			Extende Code	ed Order 5P1B??	- 7777 8.		
1 Message(s)							~
Process data (i			Reference values				
	minimum nomina	l maximum (Unit				
Requested flow (min/nom/max)			USGPH 🗸				
Pressure (at							

8. Select '100' under 'Transmitter'

- 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.

Measuring task	Monitoring/Control	\sim	Principle/Sensor i	Promag P (100, 200, 30 🗸	Generation 3	
Fluid 🕛 🖅	Water, process	✓ Properties	Transmitter i	100 ~	Model i 0 🗸	
Standard/State i	IAPWS	Liquid	Flow meter i	Promag P 100		
TAG i	HW_PROJECT_NAME	~	Extended Order Code	5P1B??- ????		
				9.		
1 Message(s)						
Process data 🕕		Referen	ce values			
n	ninimum nominal	maximum Unit				
Requested flow (min/nom/max)		USGPM	K			
Pressure (at min/nom/max		psi_g		>10.		
min/ nom/ max						
flow)		۴				
flow) Temp. (at min/nom/max						
flow) Temp. (at						

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

Product selection via ap	plication parameters	<u>c</u>
	Operating range	Help Contact
USGPM V	min. Operating range	290.589 USGPM
psi_g V	12. Contact OSU Energy Services.	inal maximum Unit
	Requested flow i 10 80	100 USGPM
lb/ft3	Flow velocity i 1.054 8.4	34 10.54 ft/s
2 cSt 🗸	error Volume	4 0.53 %
psi_a	Meas. error alt. Vol. 0.82 0.2	8 0.26 %
°F		pragtice to PSD Class Details
	Meter size i 2"	+ Compare
	psi_g ~ *F ~ 13. 15. 15. 15. 15. 15. 15. 15. 15	operating range max. psi_g 12. Contact OSU Psi_g 12. Contact OSU *F 13 *F 13 Boft13 13 Flow velocity 1.054 80 10 80 10 81_g 0.81 9si_g 14. *F 1 9bi_g 14. *F 1 Good-engineering

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.