

▶ WATERFLUX 3100 - DN 100

KROSS Sizing

2016-01-20

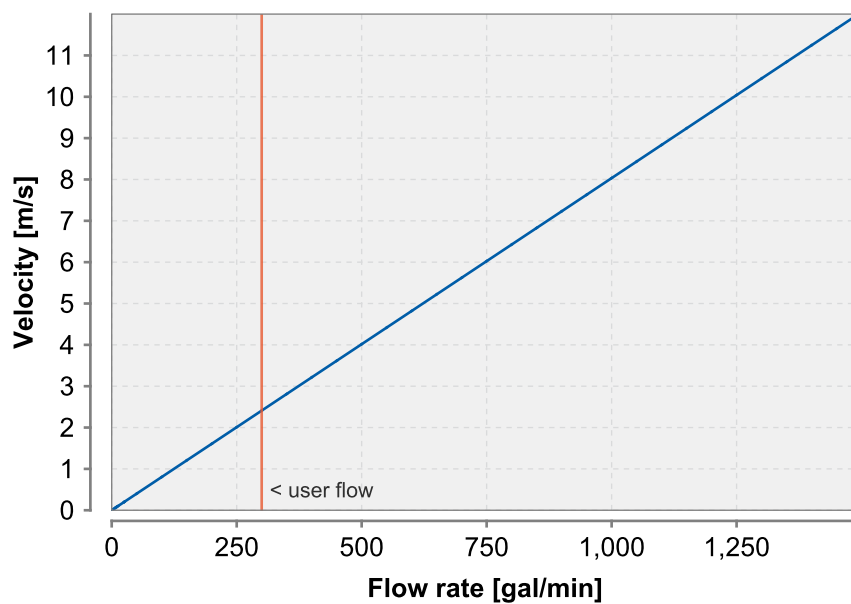
Fluid

Aggregate state	Formula	Fluid
liquid	H2O	Water

Process data

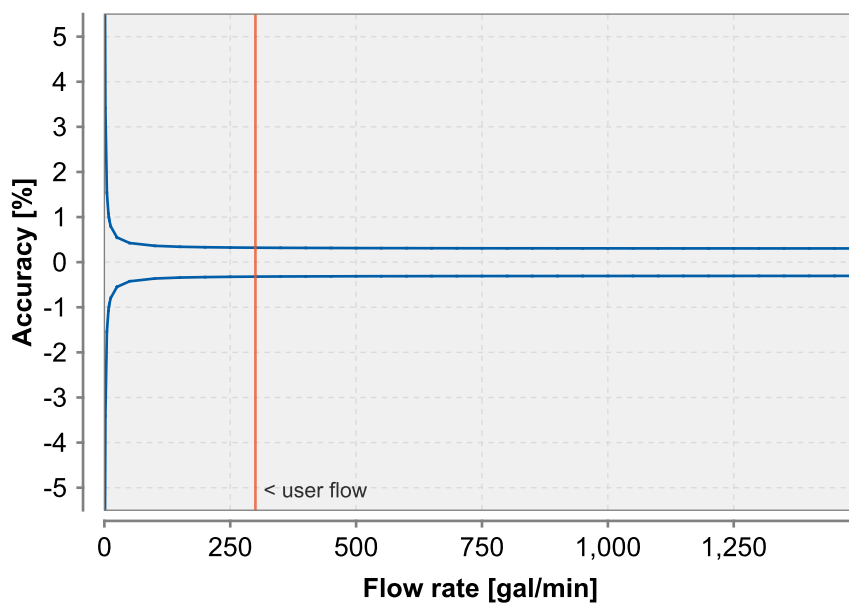
	Minimal	Nominal	Maximal	Unit	
Density (operational)		0.9991		kg/l	
Viscosity		1.139		mPa.s	
Temperature		15.0		°C	
Pressure (gauge)		1.0		bar	
Flow rate		300.0		gal/min	(Volume)

Velocity



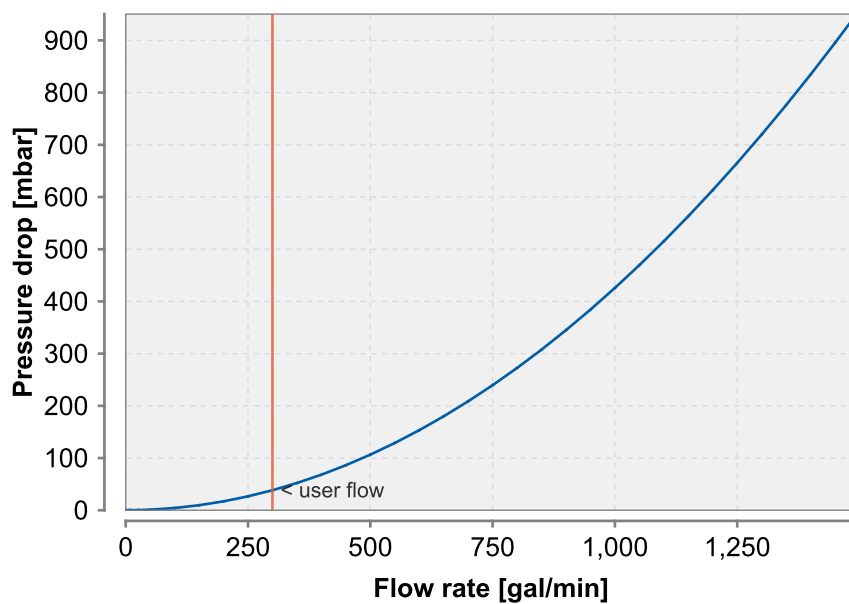
Flow rate [gal/min]	Velocity [m/s]
0.1245	0.001
1.0	0.008
2.0	0.0161
5.0	0.0402
8.0	0.0643
9.0	0.0723
10.0	0.0803
25.0	0.2008
50.0	0.4016
200.0	1.607
300.0	2.41
350.0	2.811
500.0	4.016
650.0	5.221
800.0	6.426
950.0	7.631
1100	8.836
1250	10.04
1400	11.25

Accuracy



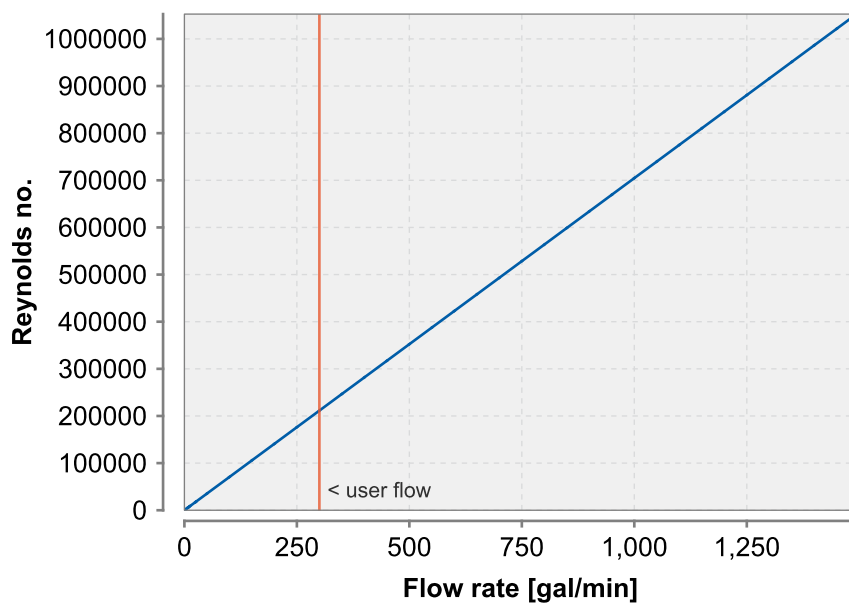
Flow rate [gal/min]	Accuracy [%]
0.1245	50.3
1.0	6.525
2.0	3.412
5.0	1.545
8.0	1.078
9.0	0.9916
10.0	0.9225
25.0	0.549
50.0	0.4245
200.0	0.3311
300.0	0.3207
350.0	0.3178
500.0	0.3124
650.0	0.3096
800.0	0.3078
950.0	0.3066
1100	0.3057
1250	0.305
1400	0.3044

Pressure drop



Flow rate [gal/min]	Pressure drop [mbar]
0.1245	0.0
1.0	0.0004
2.0	0.0017
5.0	0.0106
8.0	0.0273
9.0	0.0345
10.0	0.0426
25.0	0.2662
50.0	1.065
200.0	17.03
300.0	38.33
350.0	52.17
500.0	106.5
650.0	179.9
800.0	272.5
950.0	384.3
1100	515.3
1250	665.4
1400	834.7

Reynolds no.



Flow rate [gal/min]	Reynolds no.
0.1245	87.72
1.0	704.6
2.0	1409
5.0	3523
8.0	5637
9.0	6341
10.0	7046
25.0	17615
50.0	35230
200.0	140920
300.0	211380
350.0	246610
500.0	352300
650.0	457990
800.0	563680
950.0	669369
1100	775059
1250	880749
1400	986439