

► OPTIMASS 6000 - H 08

KROSS Sizing

2014-12-18

Project

Project	cern
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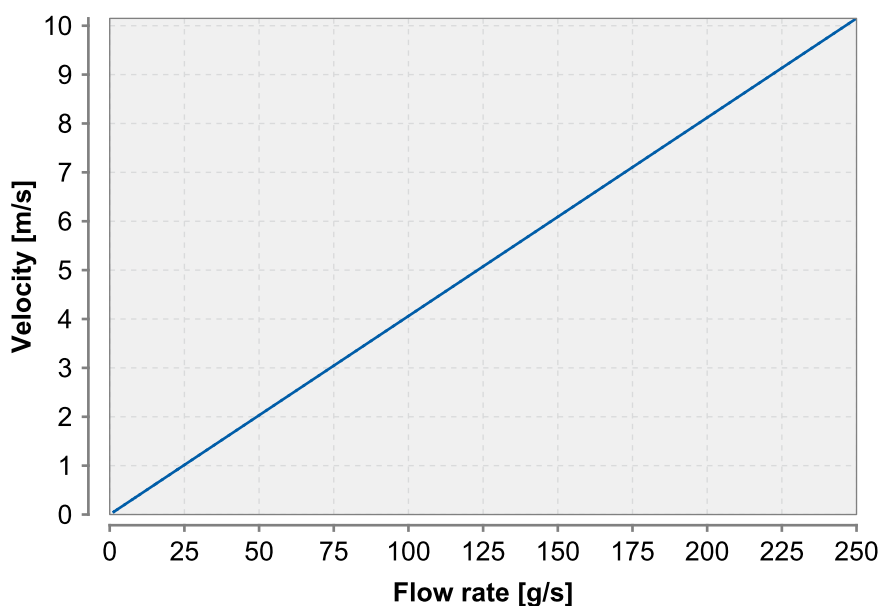
Fluid

Aggregate state	Formula	Fluid
liquid	CO2	Carbondioxide (liquid)

Process data

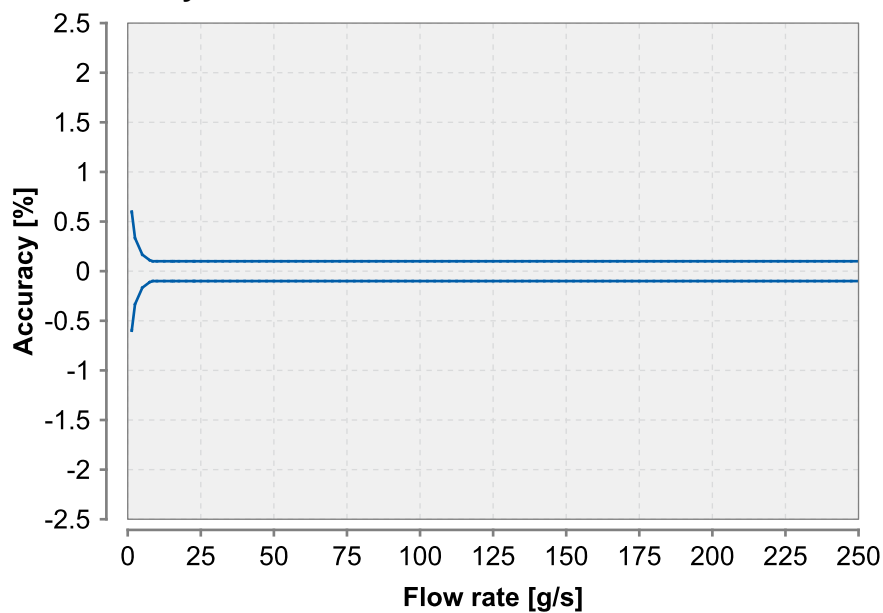
	Minimal	Nominal	Maximal	Unit	
Density (operational)		1.005		kg/l	
Viscosity		0.128		mPa.s	
Temperature		-15.0		°C	
Pressure (gauge)		20.0		bar	
Flow rate	1.4	30.0	250.0	g/s	(Mass)

Velocity



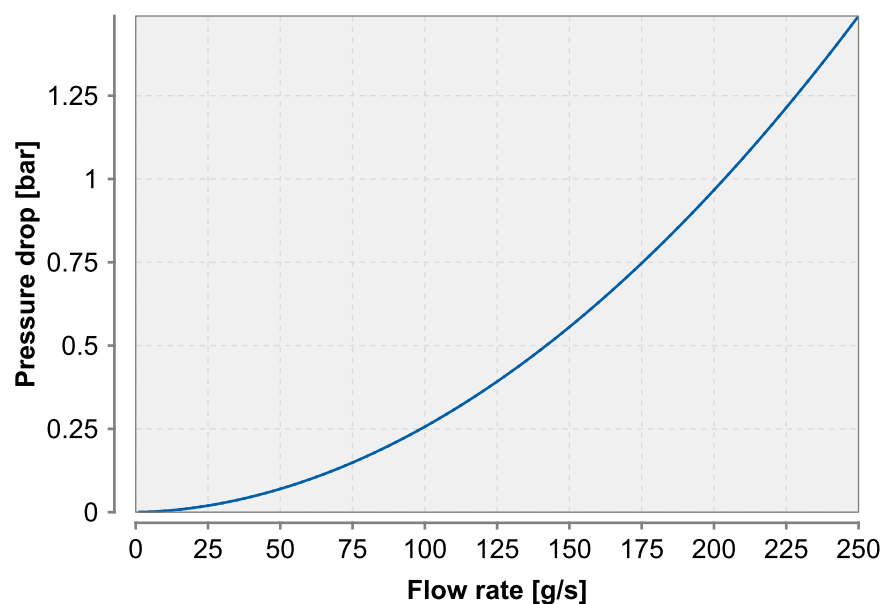
Flow rate [g/s]	Velocity [m/s]
1.389	0.0564
1.4	0.0568
20.0	0.812
30.0	1.218
45.0	1.827
72.5	2.943
100.0	4.06
127.5	5.176
155.0	6.293
182.5	7.409
210.0	8.526
237.5	9.642
250.0	10.15

Accuracy



Flow rate [g/s]	Accuracy [%]
1.389	0.6
1.4	0.5952
20.0	0.1
30.0	0.1
45.0	0.1
72.5	0.1
100.0	0.1
127.5	0.1
155.0	0.1
182.5	0.1
210.0	0.1
237.5	0.1
250.0	0.1

Pressure drop



Flow rate [g/s]	Pressure drop [bar]
1.389	0.0001
1.4	0.0001
20.0	0.0131
30.0	0.0273
45.0	0.0574
72.5	0.1398
100.0	0.2564
127.5	0.4071
155.0	0.5918
182.5	0.8102
210.0	1.062
237.5	1.348
250.0	1.489