

## Water Jet pump



<b>Material:</b>	PVC, PP, PVDF
<b>Size:</b>	3/8" - 3"
<b>Pressure Rating:</b>	150 psi
<b>Set Pressure:</b>	7 to 150psi
<b>Seals:</b>	EPDM, FPM
<b>Connections:</b>	T.U. Socket T.U. Spigot Spigot Flanged: ANSI

ISO 9002 CERTIFIED

### Materials of Construction:

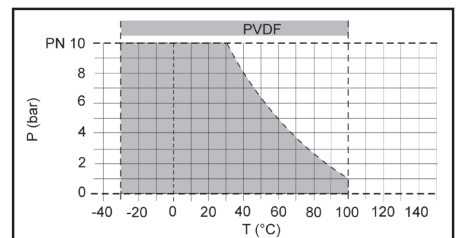
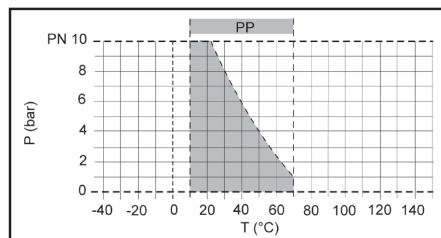
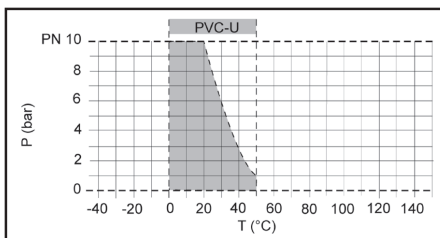
- PVC:** Type 1, Class 12454B, ASTM D1784
- PP:** Class PP 110B76383, ASTM D4101
- PVDF:** Type 1, ASTM D3222
- Seals:** EPDM, FPM

The SIMTECH WJP Series is for mixing, dosing and delivering fluids, for evacuating air in pipes and containers, for pumping out containers or pits. The Propulsion fluid flows in the main flow direction through a nozzle fitted in the water-jet pump. The cross-section constriction caused by the nozzle bore causes acceleration of the propulsion fluid and thus a vacuum in the area of the suction socket that primes any provided fluid or gaseous media. The intake quantity is a function of the propulsion fluid pressure and the nozzle bore.

### Features

- Simple maintenance
- No moving parts
- Very low wear
- Low investment costs
- Can also be used for aggressive media
- Very good mixing effect
- High operating reliability
- Low space requirement

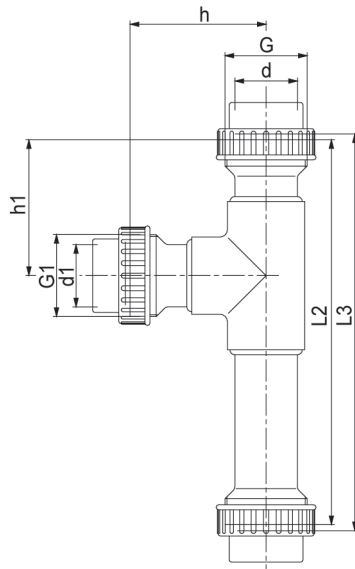
### Pressure/Temperature Graph



P Operating pressure  
T Temperature

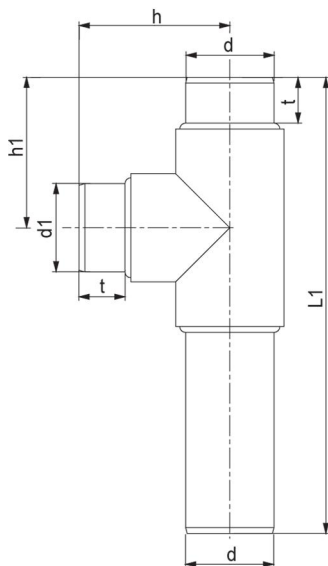
The pressure/temperature limits of the materials are valid for the stated nominal pressures and a service life of 25 years. These values are guide values for flow medium types which do not negatively impact the physical and chemical characteristics of the valve material. It may be necessary to take diminution factors into consideration. The operating life of the wear parts depends on the conditions of use.

### Dimensional Data - Socket / Threaded



Nom. Size	d	d1	G	G1	h	h1	L2	L3
½"	0.79	0.63	1.00	0.75	1.38	1.57	4.33	4.57
¾"	0.98	0.63	1.25	0.75	1.77	1.77	5.71	5.94
1"	1.26	1.26	1.50	1.50	2.80	2.80	7.68	7.91
1¼"	1.57	1.57	2.00	2.00	3.43	3.43	9.41	9.65

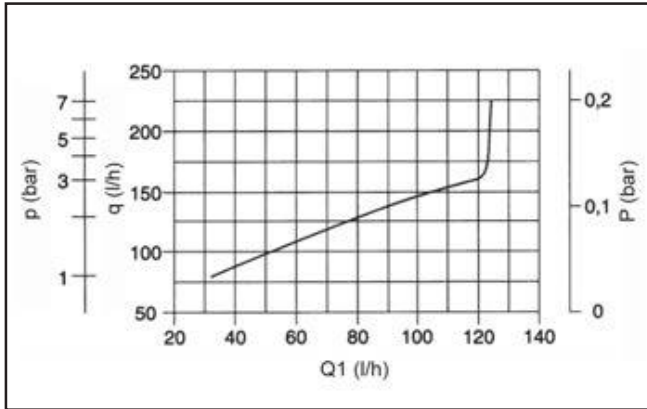
### Dimensional Data - Spigot



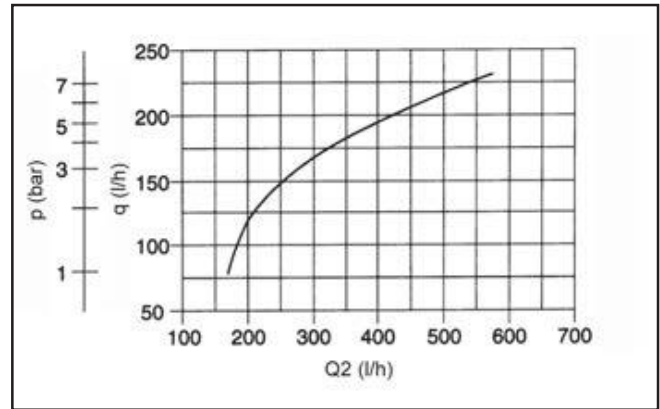
Nom. Size	d	d1	G	G1	h	h1	L1	L2	L3
½"	0.79	0.63	1.00	0.75	1.38	1.57	-	4.33	4.57
¾"	0.98	0.63	1.25	0.75	1.77	1.77	-	5.71	5.94
1"	1.26	1.26	1.50	1.50	2.80	2.80	-	7.68	7.91
1¼"	1.57	1.57	2.00	2.00	3.43	3.43	-	9.41	9.65
1½"	1.97	1.97	2.25	2.25	4.13	4.13	-	11.85	12.09
2"	2.48	2.48	2.75	2.75	5.04	5.04	-	13.82	14.06

## Characteristic Curves

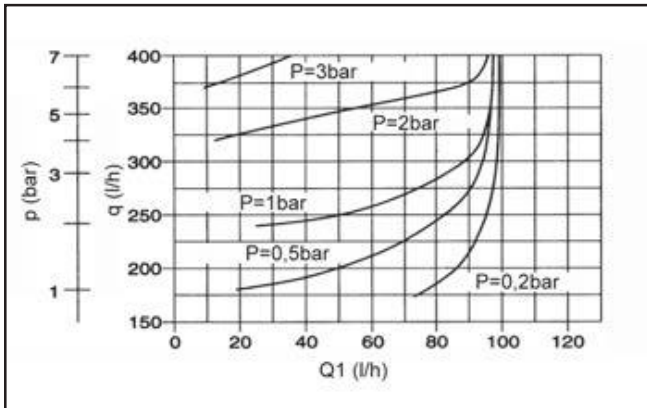
3/8" Nozzle Bore 1.5 mm  
Intake medium water



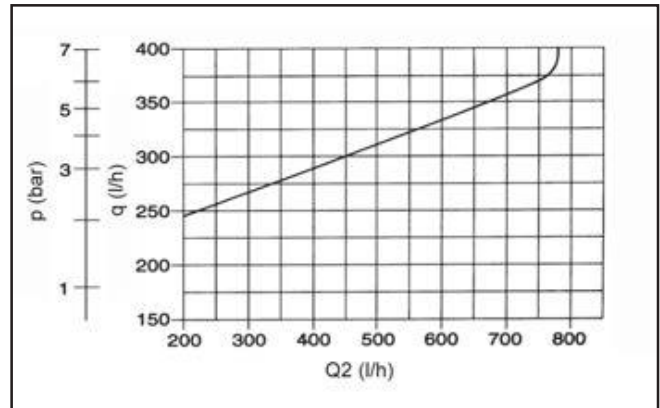
3/8" Nozzle Bore 1.5 mm  
Intake medium air



3/8" Nozzle Bore 2.0 mm  
Intake medium water



3/8" Nozzle Bore 2.0 mm  
Intake medium air



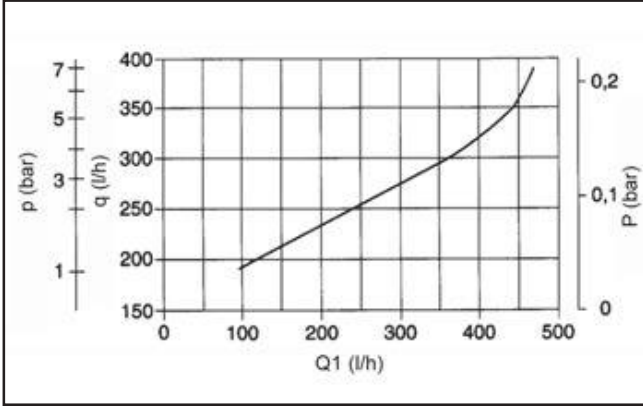
p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

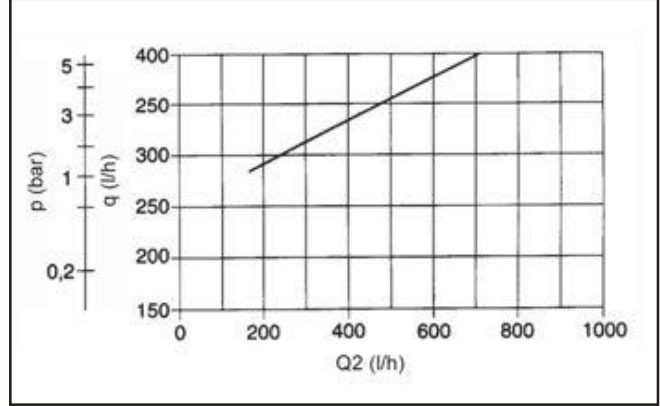


**Characteristic Curves**

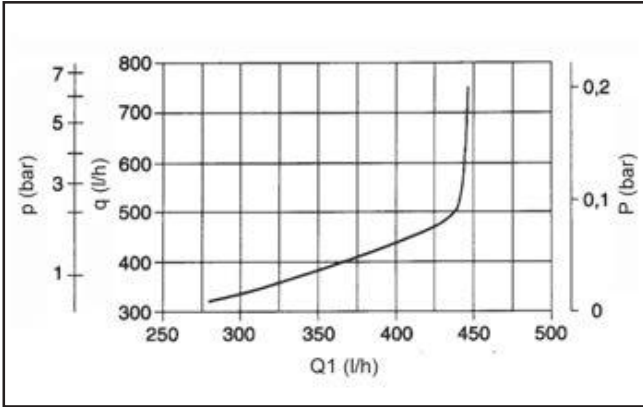
½" Nozzle Bore 2.0 mm  
Intake medium water



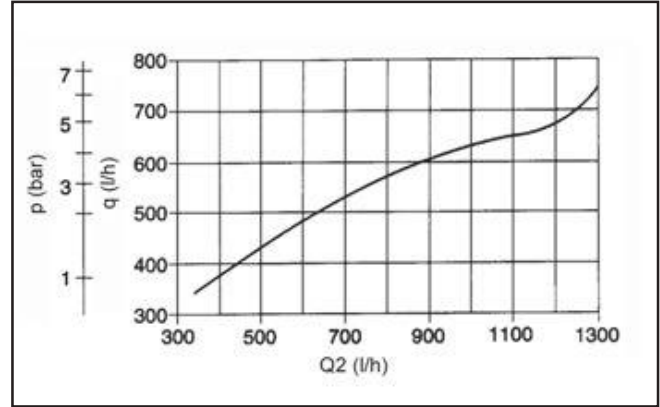
½" Nozzle Bore 2.0 mm  
Intake medium air



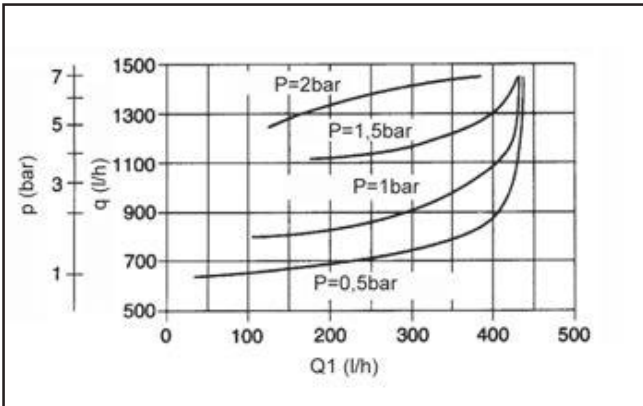
½" Nozzle Bore 3.0 mm  
Intake medium water



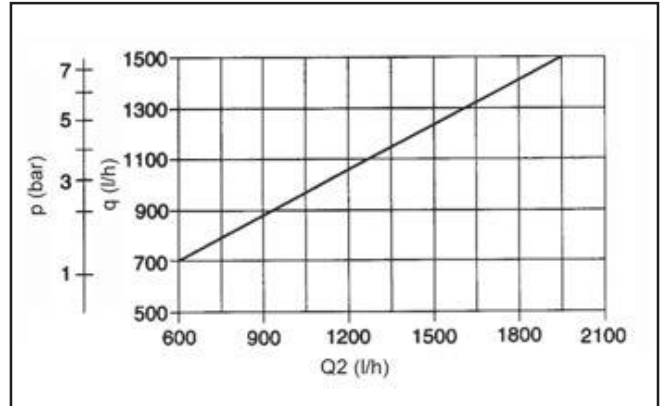
½" Nozzle Bore 3.0 mm  
Intake medium air



½" Nozzle Bore 4.0 mm  
Intake medium water

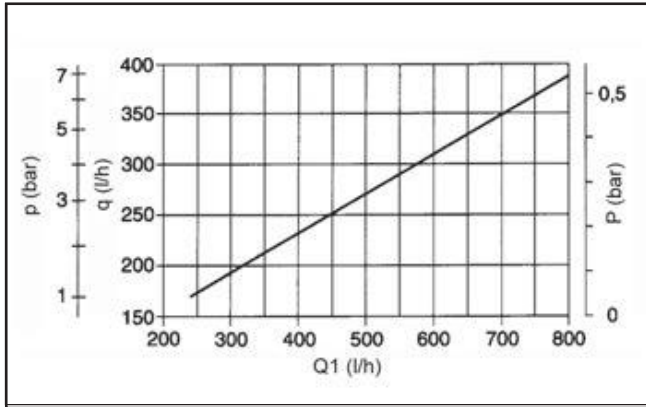


½" Nozzle Bore 4.0 mm  
Intake medium air

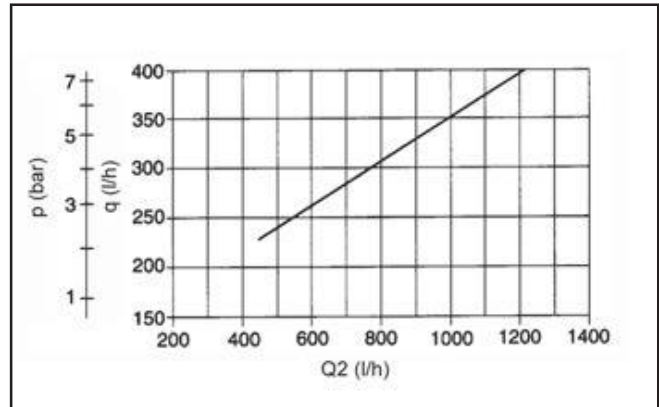


## Characteristic Curves

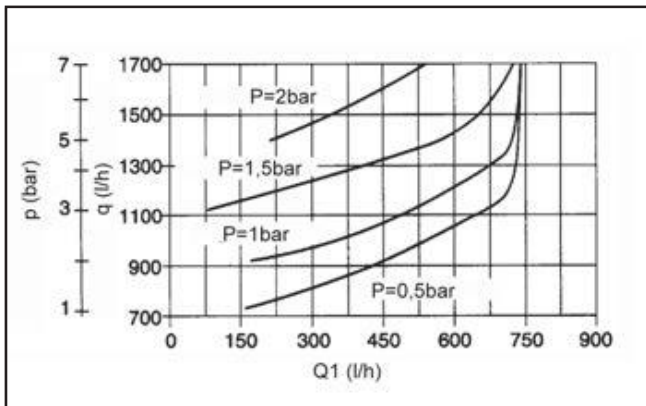
3/4" Nozzle Bore 3.0 mm  
Intake medium water



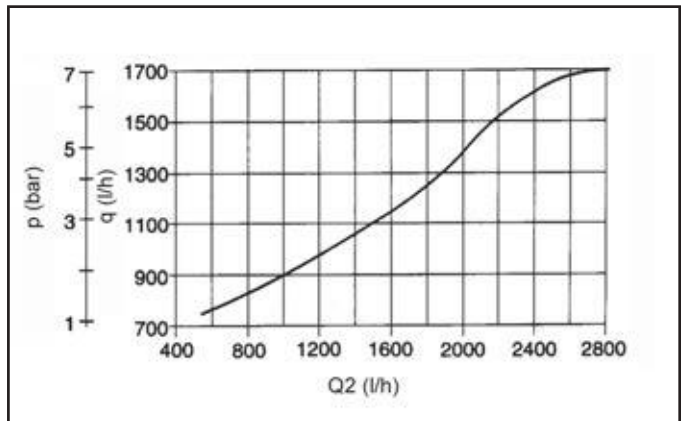
3/4" Nozzle Bore 3.0 mm  
Intake medium air



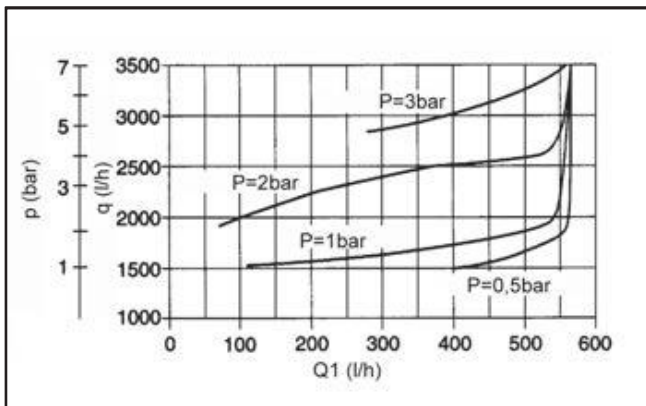
3/4" Nozzle Bore 4.5 mm  
Intake medium water



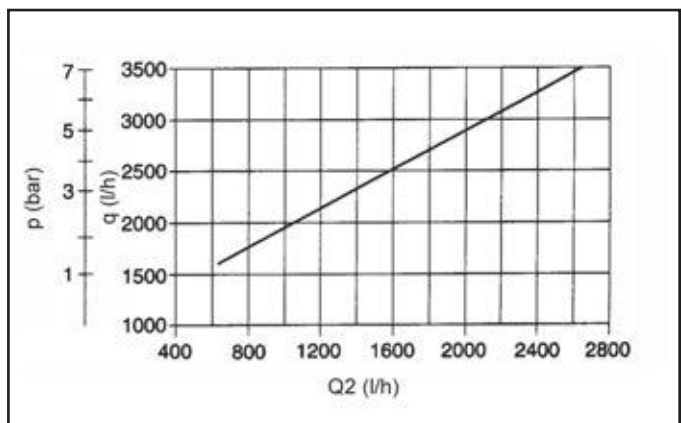
3/4" Nozzle Bore 4.5 mm  
Intake medium air



3/4" Nozzle Bore 6.0 mm  
Intake medium water



3/4" Nozzle Bore 6.0 mm  
Intake medium air

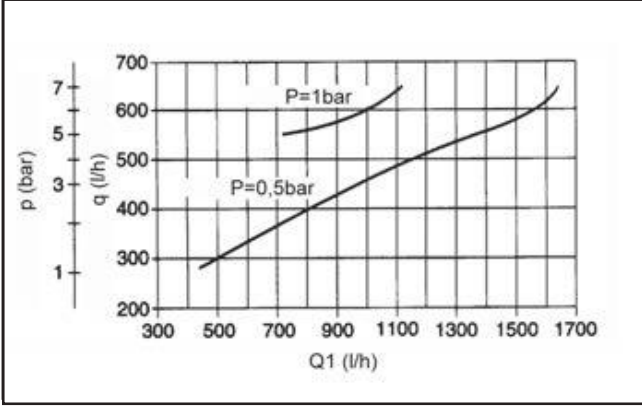


p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

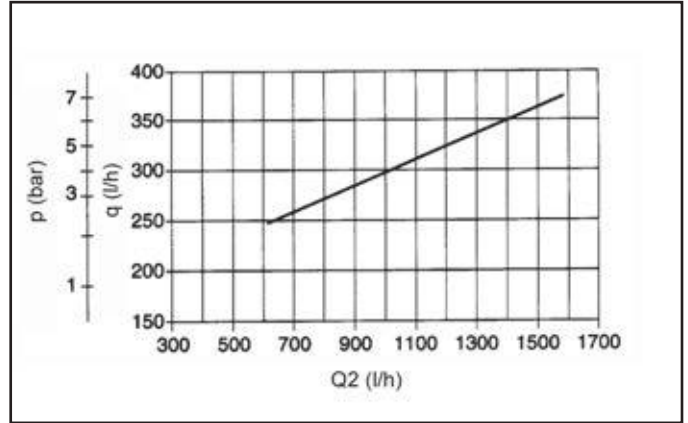
p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

### Characteristic Curves

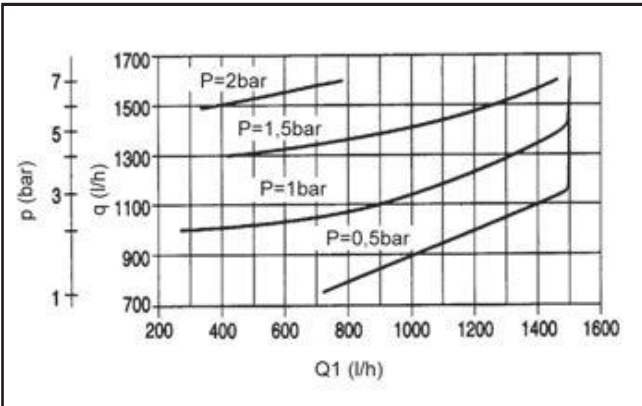
1" Nozzle Bore 2.5 mm  
Intake medium water



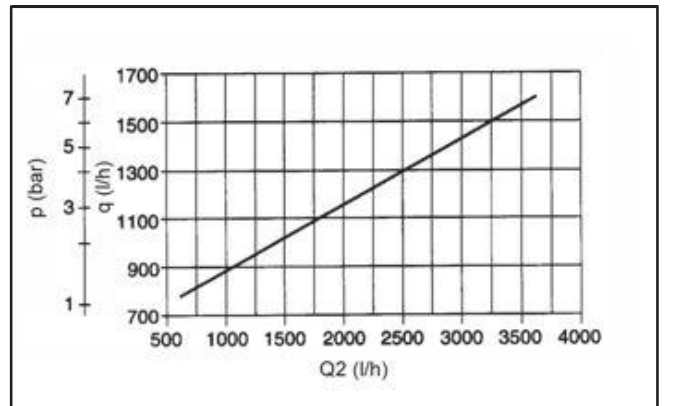
1" Nozzle Bore 2.5 mm  
Intake medium air



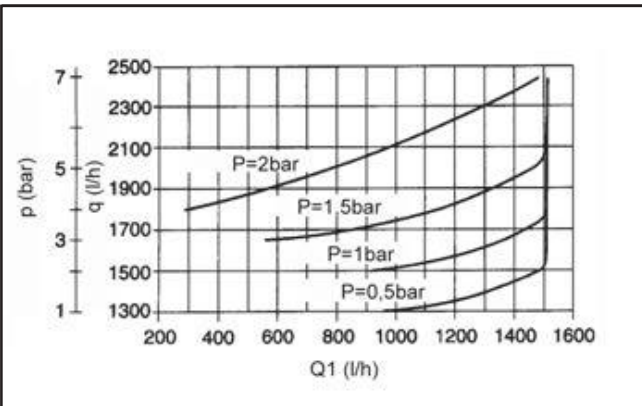
1" Nozzle Bore 4.0 mm  
Intake medium water



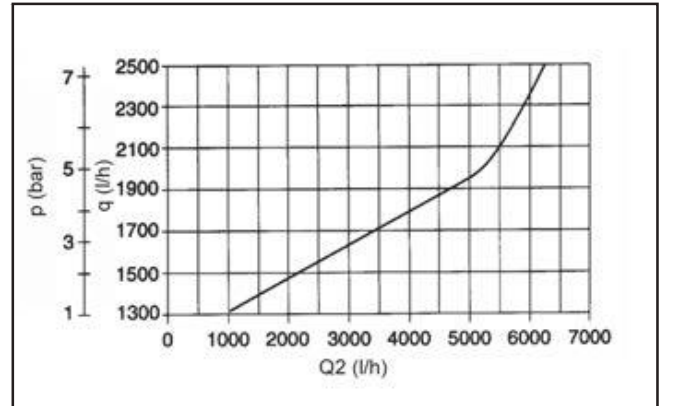
1" Nozzle Bore 4.0 mm  
Intake medium air



1" Nozzle Bore 5.0 mm  
Intake medium water



1" Nozzle Bore 5.0 mm  
Intake medium air

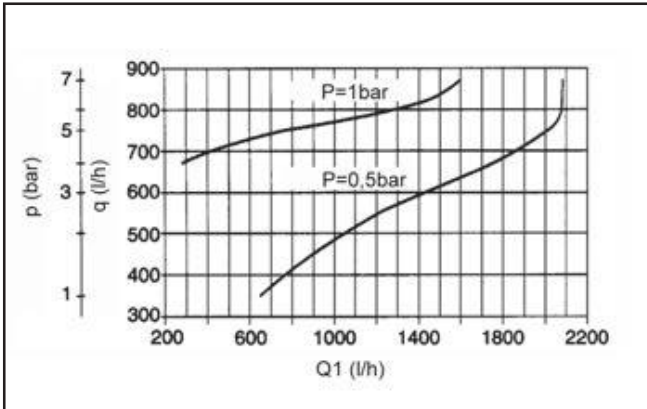


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Q1= Intake quantity (l/h) (Water)

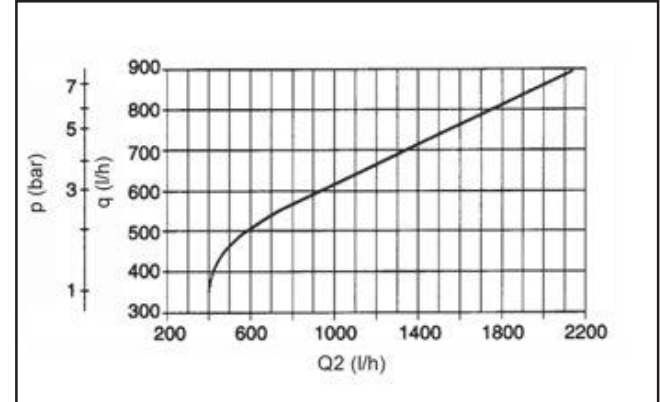
p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

## Characteristic Curves

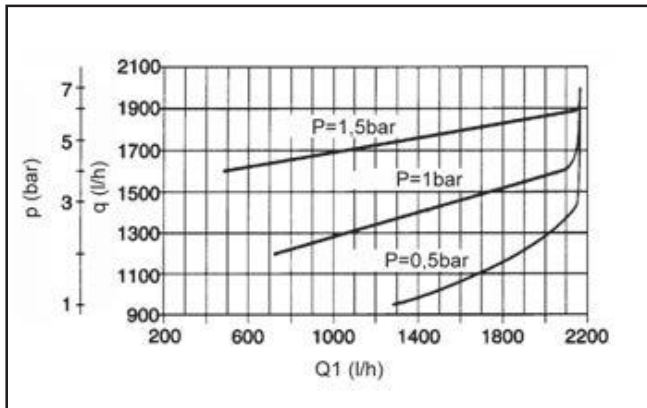
1¼" Nozzle Bore 3.0 mm  
Intake medium water



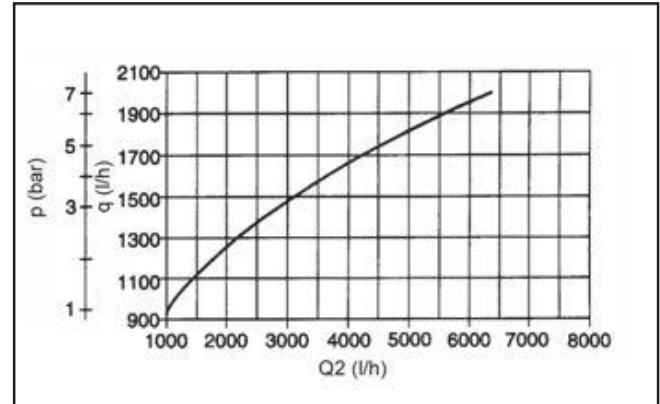
1¼" Nozzle Bore 3.0 mm  
Intake medium air



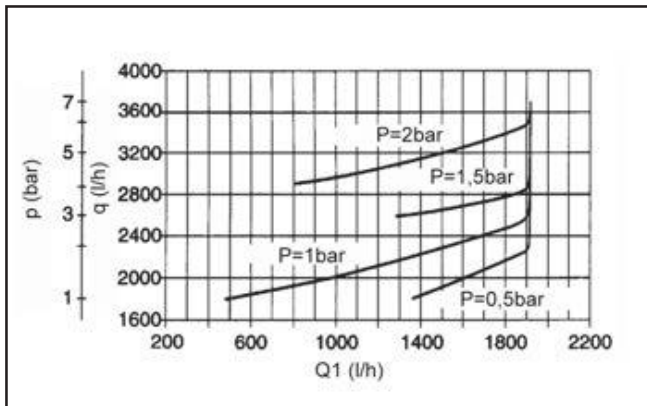
1¼" Nozzle Bore 4.5 mm  
Intake medium water



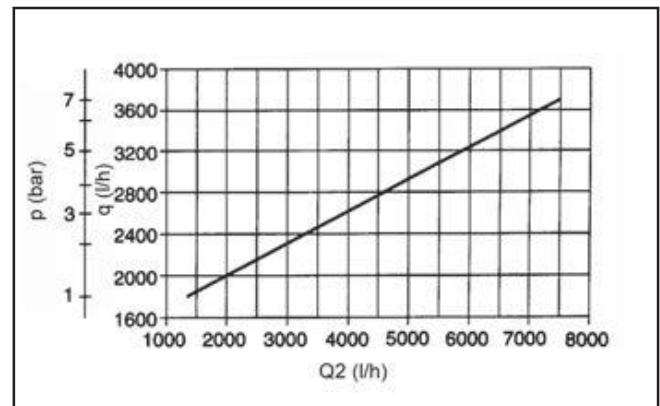
1¼" Nozzle Bore 4.5 mm  
Intake medium air



1½" Nozzle Bore 6.0 mm  
Intake medium water



1½" Nozzle Bore 6.0 mm  
Intake medium air

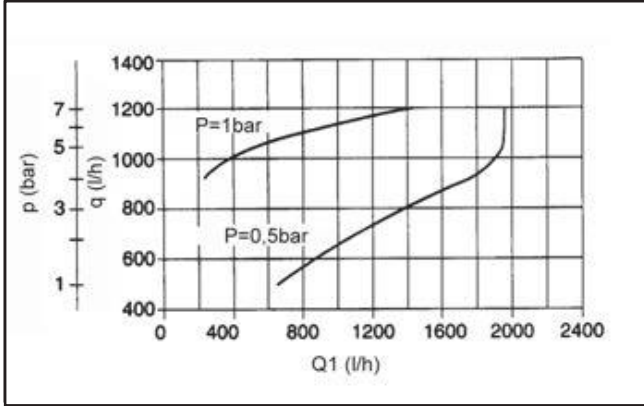


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P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

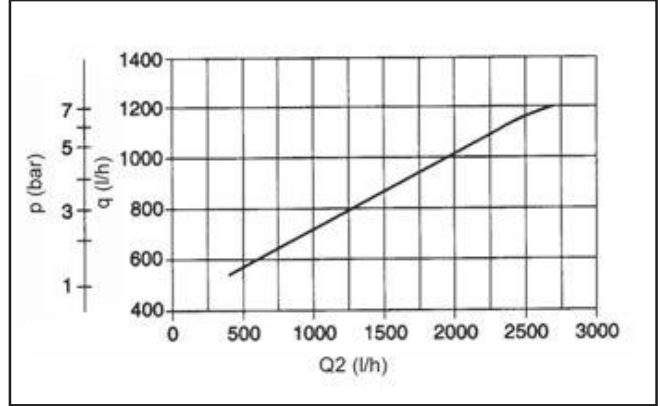
p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

## Characteristic Curves

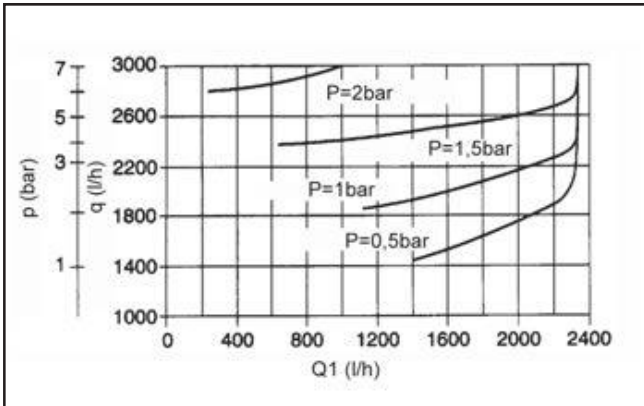
1½" Nozzle Bore 3.5 mm  
Intake medium water



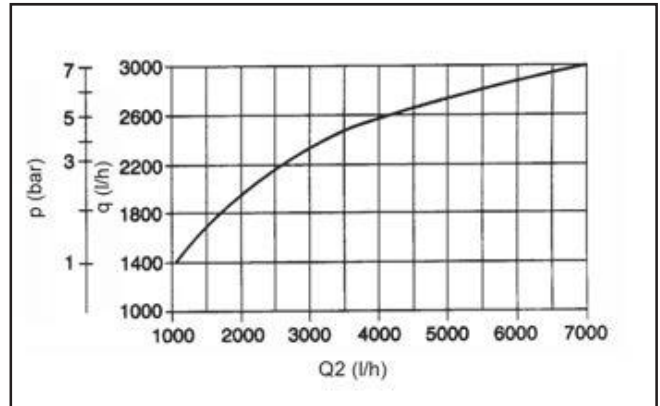
1½" Nozzle Bore 3.5 mm  
Intake medium air



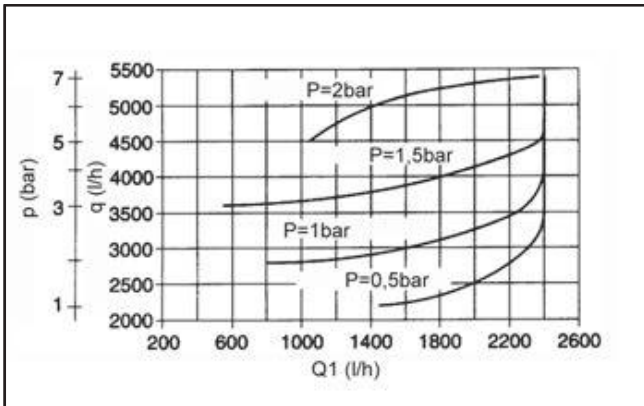
1½" Nozzle Bore 3.5 mm  
Intake medium water



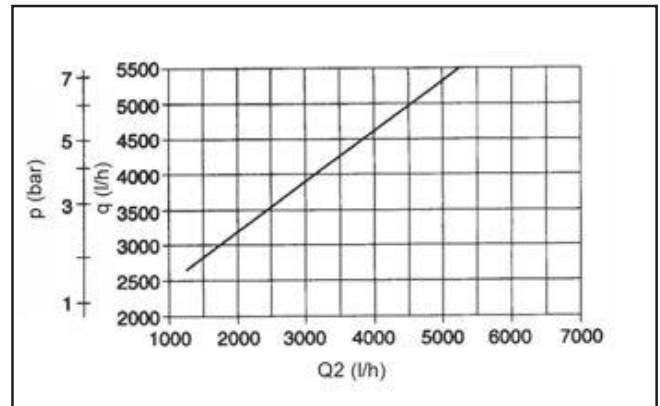
1½" Nozzle Bore 5.5 mm  
Intake medium air



1½" Nozzle Bore 7.5 mm  
Intake medium water



1½" Nozzle Bore 7.5 mm  
Intake medium air



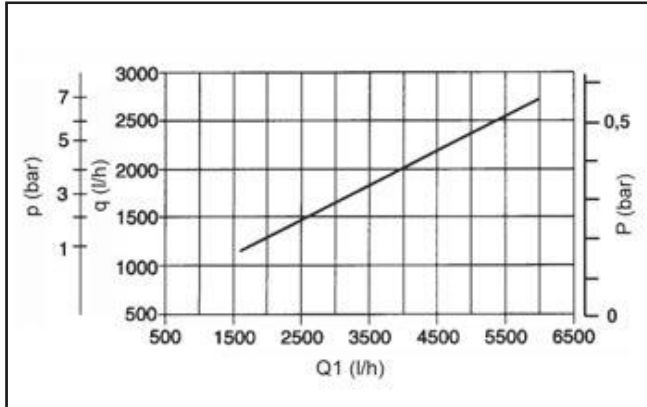
p= Propulsion water pressure (bar)  
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P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

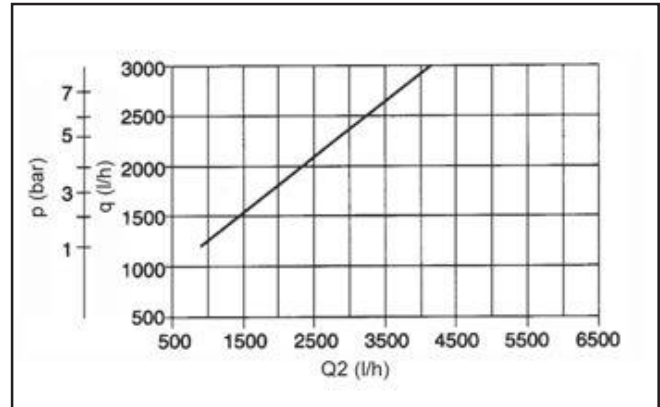


## Characteristic Curves

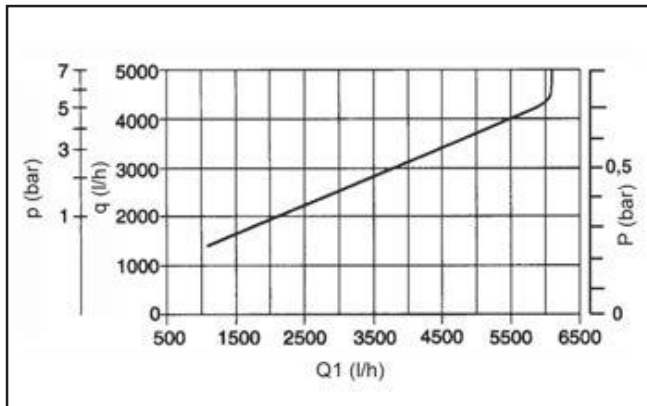
2" Nozzle Bore 5.0 mm  
Intake medium water



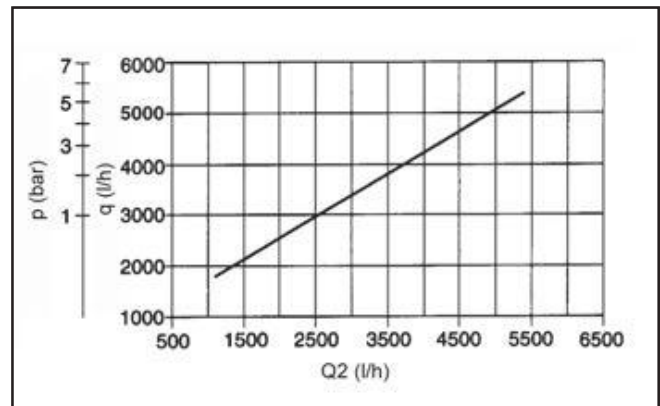
2" Nozzle Bore 5.0 mm  
Intake medium air



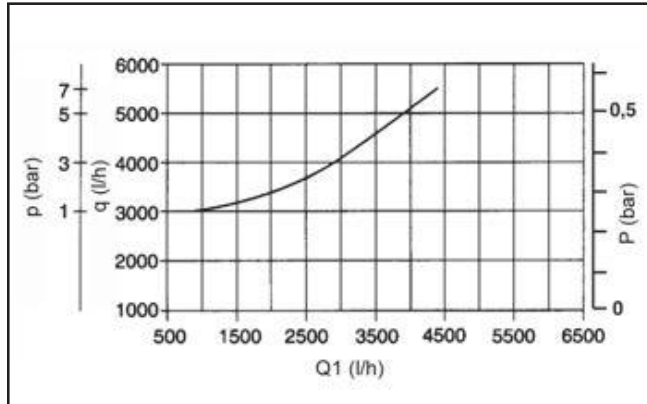
2" Nozzle Bore 7.0 mm  
Intake medium water



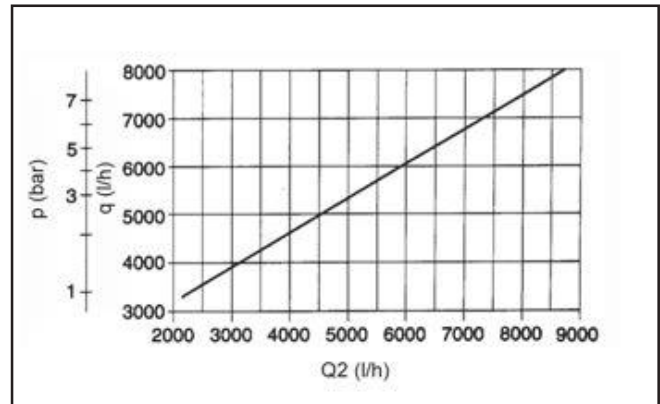
2" Nozzle Bore 7.0 mm  
Intake medium air



2" Nozzle Bore 9.0 mm  
Intake medium water



2" Nozzle Bore 9.0 mm  
Intake medium air



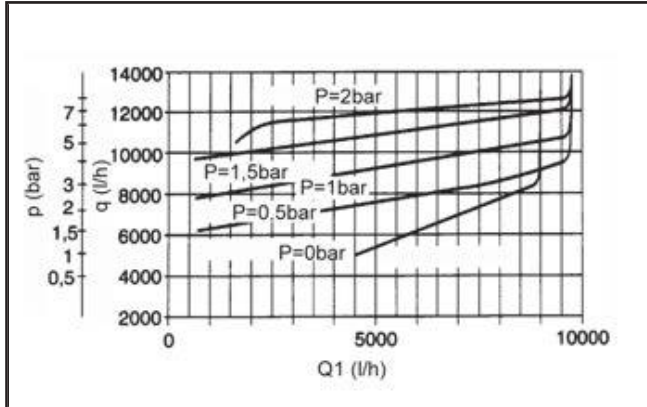
p= Propulsion water pressure (bar)  
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P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

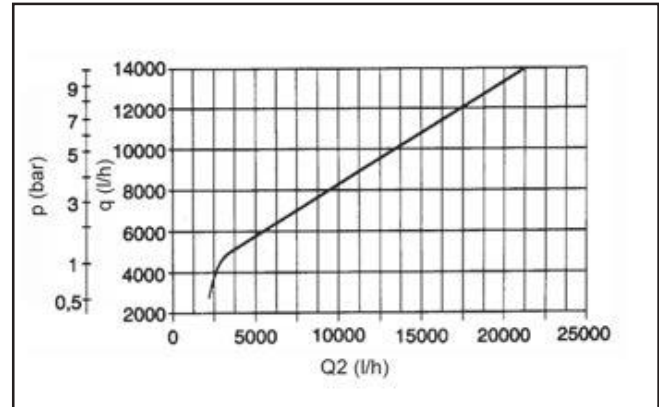


## Characteristic Curves

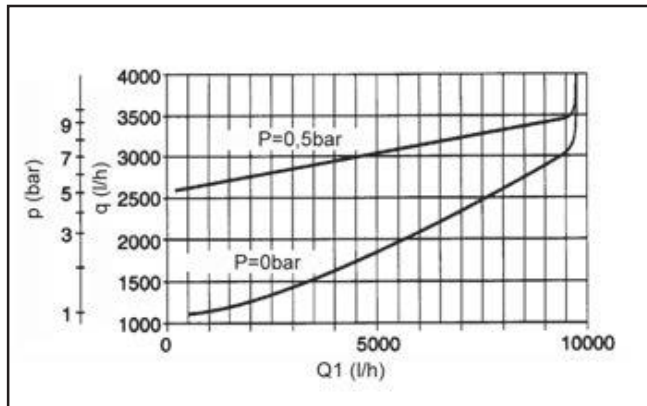
2½" Nozzle Bore 11.5 mm  
Intake medium water



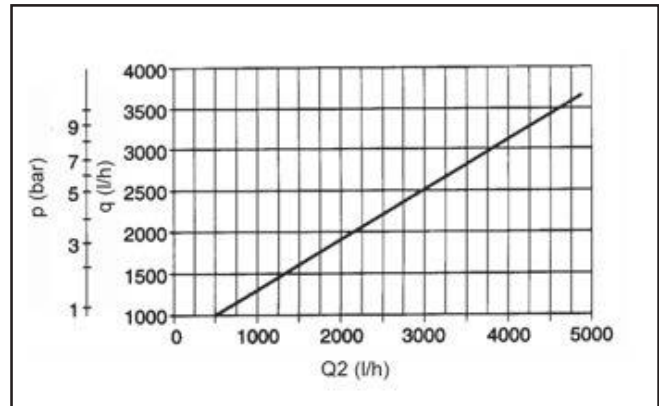
2½" Nozzle Bore 11.5 mm  
Intake medium air



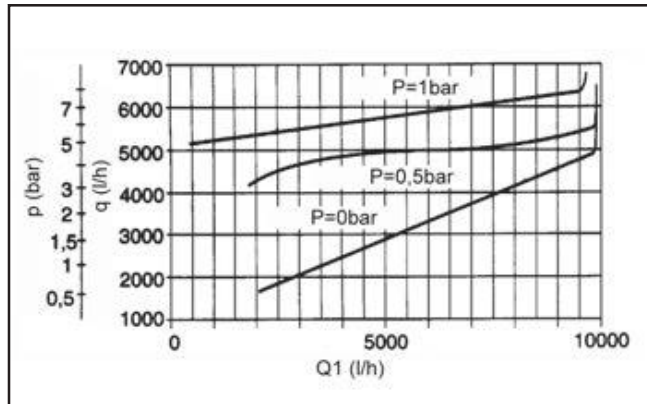
2½" Nozzle Bore 6.5 mm  
Intake medium water



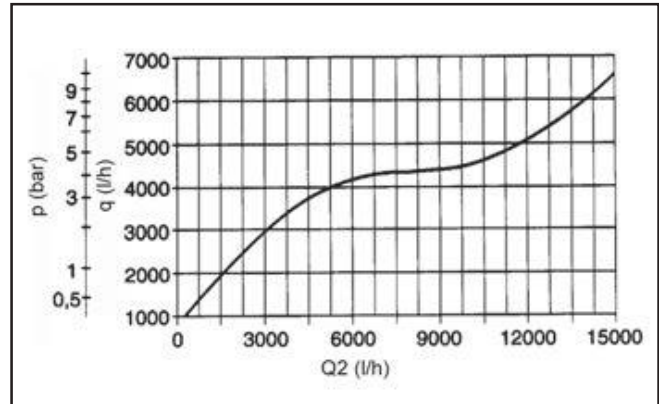
2½" Nozzle Bore 6.5 mm  
Intake medium air



2½" Nozzle Bore 9.0 mm  
Intake medium water



2½" Nozzle Bore 9.0 mm  
Intake medium air

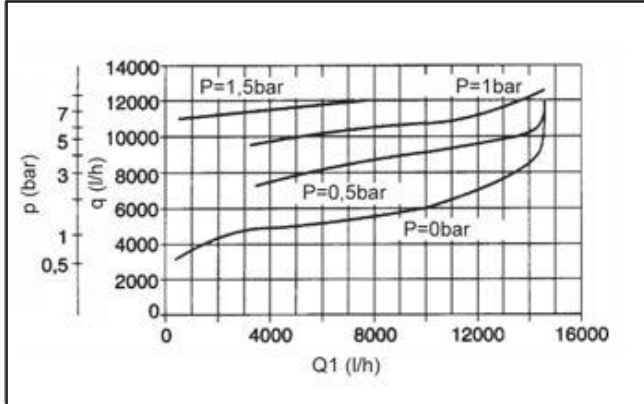


p= Propulsion water pressure (bar)  
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P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

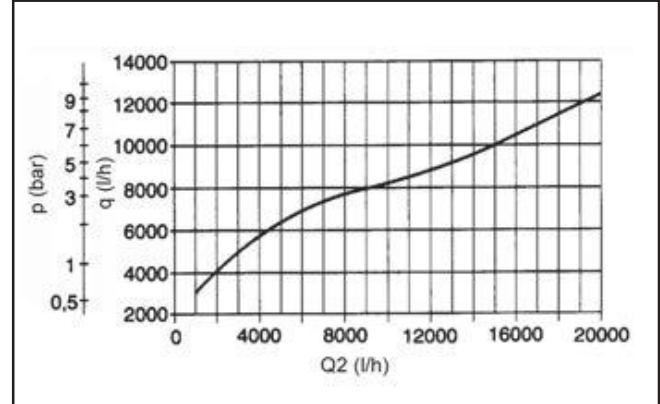
p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

## Characteristic Curves

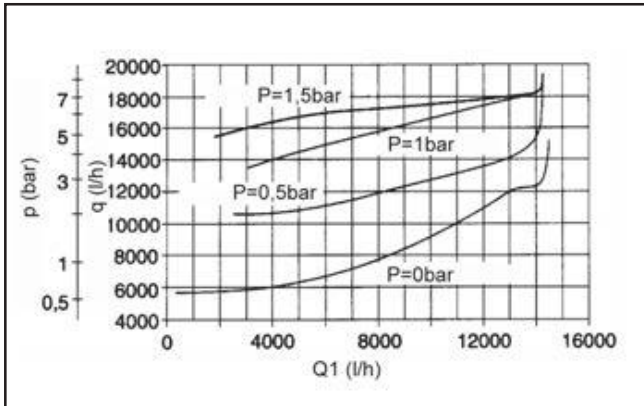
3" Nozzle Bore 11.0 mm  
Intake medium water



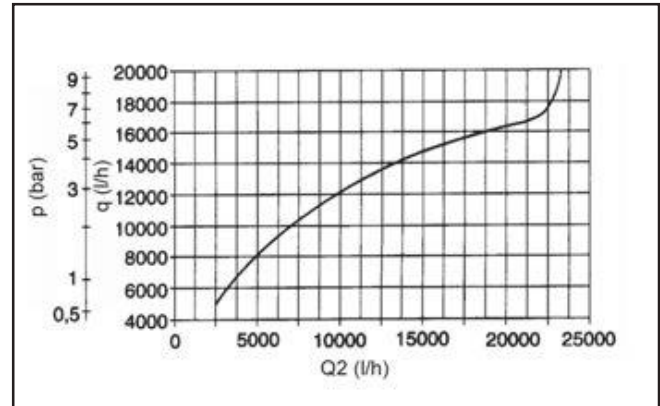
3" Nozzle Bore 11.0 mm  
Intake medium air



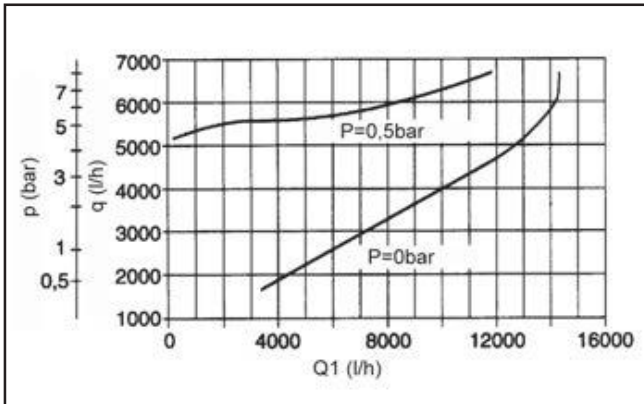
3" Nozzle Bore 14.0 mm  
Intake medium water



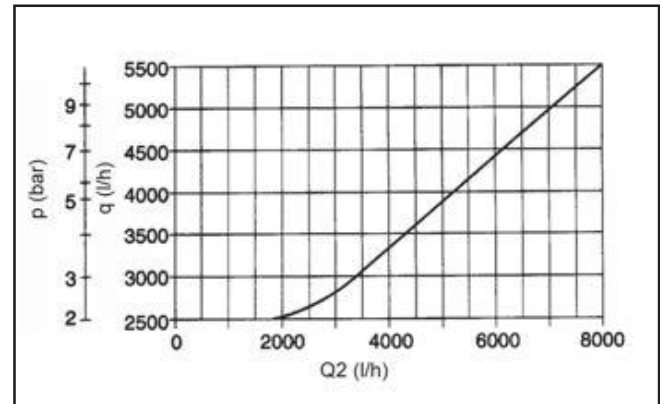
3" Nozzle Bore 14.0 mm  
Intake medium air



3" Nozzle Bore 8.0 mm  
Intake medium water



3" Nozzle Bore 9.0 mm  
Intake medium air



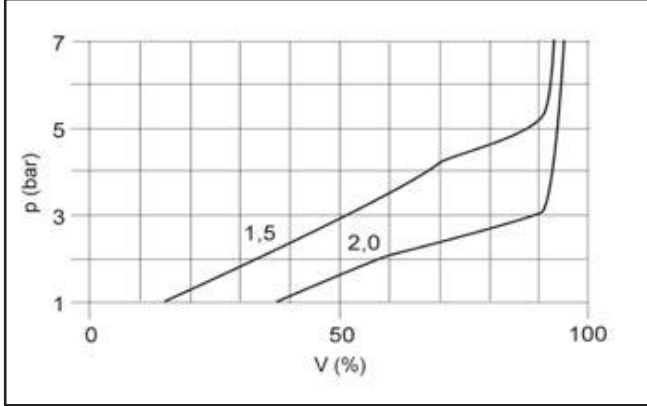
p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

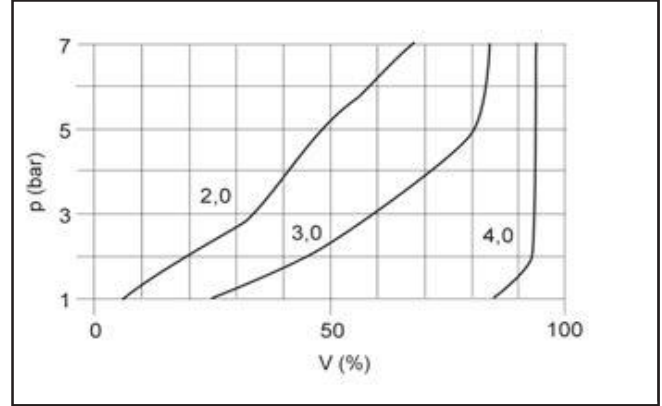


**Maximum Vacuum**

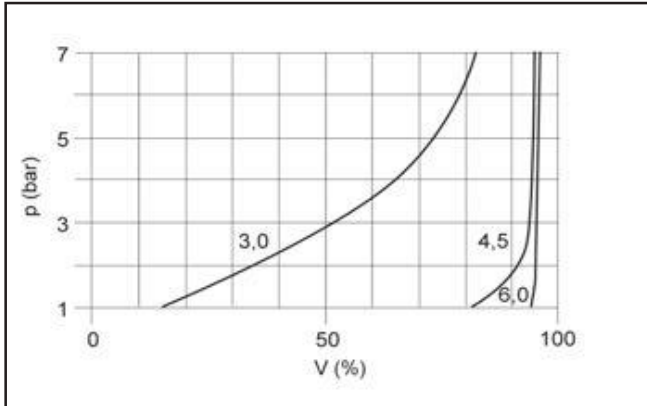
**3/8" Nozzle Bore: 1.5, 2.0**



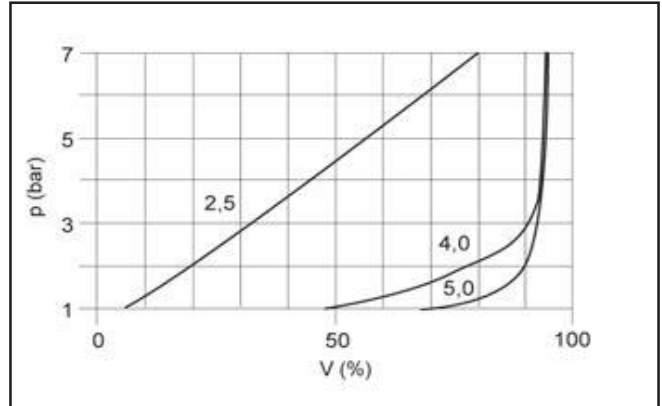
**1/2" Nozzle Bore: 2.0, 3.0, 4.0**



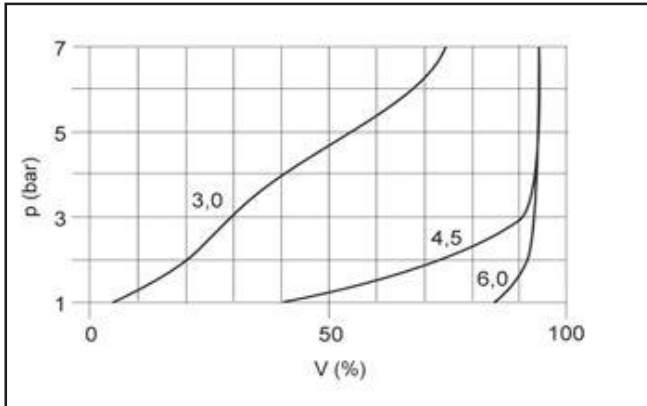
**3/4" Nozzle Bore: 3.0, 4.5, 6.0**



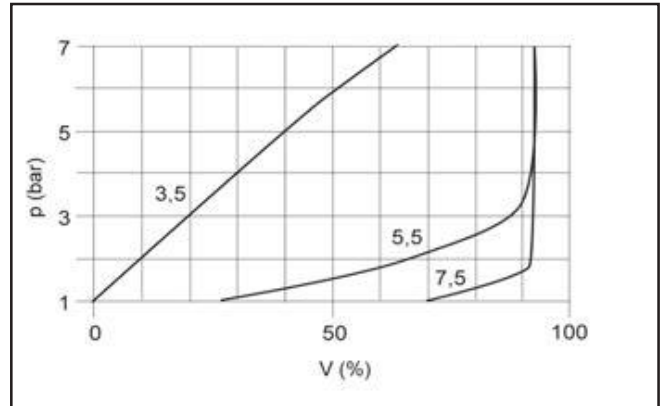
**1" Nozzle Bore: 2.5, 4.0, 5.0**



**1 1/4" Nozzle Bore: 3.0, 4.5, 6.0**



**1 1/2" Nozzle Bore: 3.5, 5.5, 7.5**



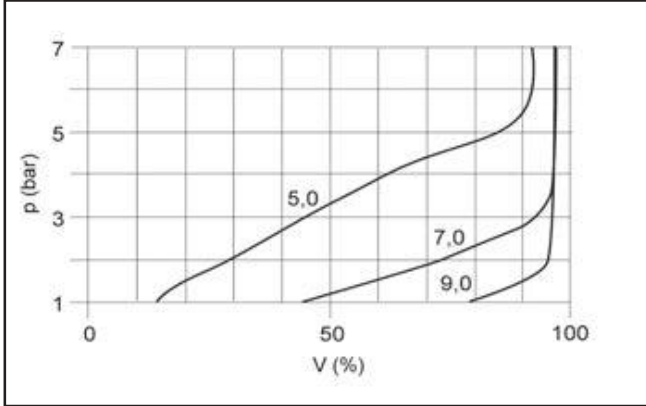
p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q1= Intake quantity (l/h) (Water)

p= Propulsion water pressure (bar)  
q= Propulsion water quantity (l/h)  
P= Counterpressure (bar)  
Q2= Intake quantity (l/h) (Air)

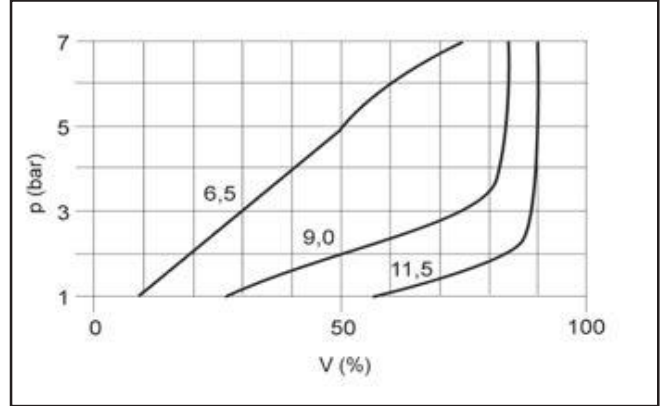


**Maximum Vacuum**

2" Nozzle Bore: 5.0, 7.0, 9.0



2½" Nozzle Bore: 6.5, 9.0, 11.5



3" Nozzle Bore: 8.0, 11.0, 14.0

