

# Low and high pressure ejectors

## Ejectors

Pres-Vac ejectors are of a sturdy design and available in two pressure ranges - low pressure from 2-6 bar and high pressure from 5-15 bar.



Ejectors are not harmed by particles that would destroy ordinary pumps and therefore ideal for handling of contaminated liquids. Pres-Vac ejectors are made in bronze (DIN 1705) as standard. For dimensioning the following information is required:

1. Particular application and liquids to be handled
2. Total head and suction head
3. Required suction capacity
4. Materials, execution, and flanges
5. Capacity and pressure available for motive liquid

Pres-Vac ejector

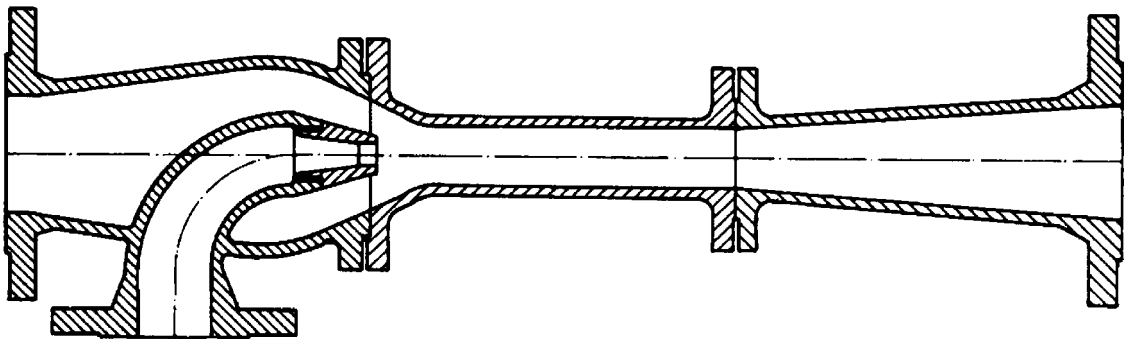
### Features of ejectors:

- Sturdy design
- Low and high pressure range
- Ideal for heavy duty service
- Wide programme
- Minimum maintenance
- Available in all materials

*Ask for Pres-Vac's detailed brochure on ejectors*

# Ejectors

<p><b>Specifications</b></p> <p><b>Type:</b> Pres-Vac ejector</p> <p><b>Dimensions:</b> See drawing</p> <p><b>Capacities:</b> Up to 2,000 m<sup>3</sup>/hr</p> <p><b>Head</b> Up to 30m</p> <p><b>Water consumption:</b> See curves</p> <p><b>Suction lift:</b> See curves</p> <p><b>Motive pressure:</b> 2-15 bar</p>	<p><b>Nominal sizes</b></p> <p>From 40-50-65 to 300-350-400</p>	<p><b>Certification</b></p> <p>Complies with general class requirements. Work shop certificate available on request.</p>
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*Pres-Vac ejector*

*Available with any connection and in any material requested. Please ask for detail drawing and performance data sheets for any specific model and type.*

# PRES-VAC EJECTORS



PRES-VAC ENGINEERING LTD A/S, established in 1956, has specialized in design and construction of tank venting equipment for all kinds of oil, product, and chemical tankers. Included in our production you will also find: **EJECTORS**

PRES-VAC ejectors are of a sturdy design. The ejectors have been designed and constructed to meet the demand for an effective solution to specific pumping needs on board ships and within the industrial applications. As the ejectors are not harmed by particles which would destroy ordinary pumps, they are ideal for handling of contaminated liquids. Own foundry ensures quick delivery time, great flexibility to meet special requirements from customers, and high quality products.

## How to select the PRES-VAC EJECTORS

PRES-VAC's standard program of ejectors comprises high pressure ejectors and low pressure ejectors. The high pressure ejectors are utilizable in the pressure range of 5-15 bar. The low pressure ejectors are utilized in the range of 2-6 bar. To determine the size of ejector to be used for a specific purpose, the first thing to be decided is in which pressure range – high pressure or low pressure – the ejector shall be driven. Hereafter the size of the ejector can be selected from DIAGRAM 1 and 1a.

## SPECIFICATIONS

- Materials: Bronze according to DIN 1705.
- Flanges: According to DIN standard PN 10.
- Test: Before delivery each ejector is subjected to careful testing.
- Special execution of materials on request.

**For dimensioning, please forward the following information together with your enquiry.**

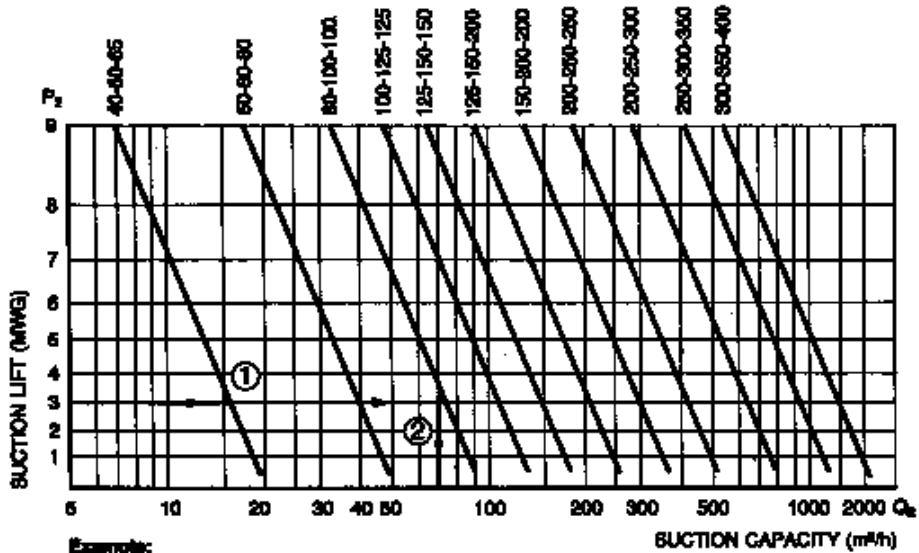
1. Particular application and liquids to be handled.
2. Total head and suction head.
3. Required suction capacity.
4. Requirements regarding materials, execution, and flanges.
5. Capacity and pressure available for motive liquid.

This drawing is for guidance only. Other sizes, materials, flange standards, settings, and versions are available. Request a specific quotation or approval drawing before implementing data.

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### High Pressure Ejectors

Diagram 1

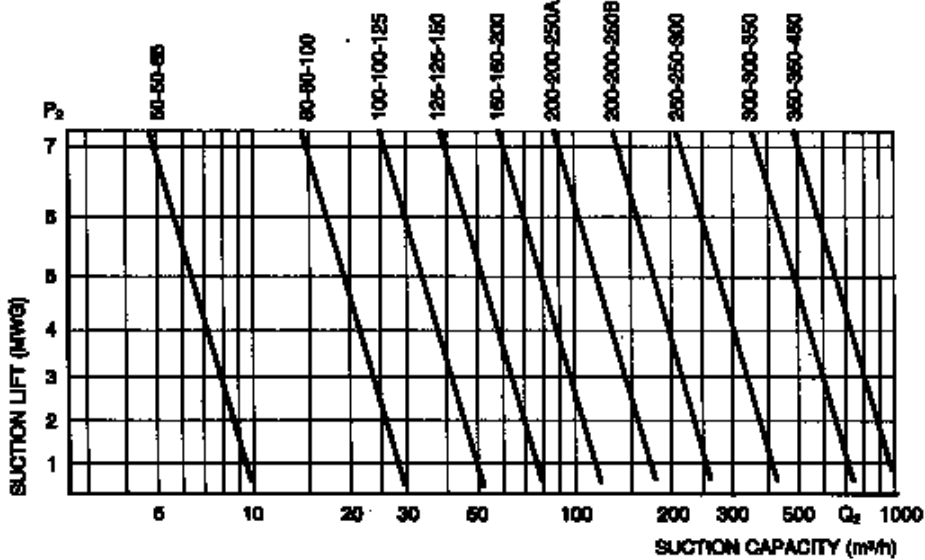


**Example:**  
Required suction capacity: 70 m³/h at 3m suction lift.

- ① Draw a horizontal line through P<sub>s</sub> = 3
  - ② Draw a vertical line through Q<sub>s</sub> = 70
- The intersection of these lines is adjacent to the 80-100-100 ejector curve.  
The size 80-100-100 is chosen.

### Low Pressure Ejectors

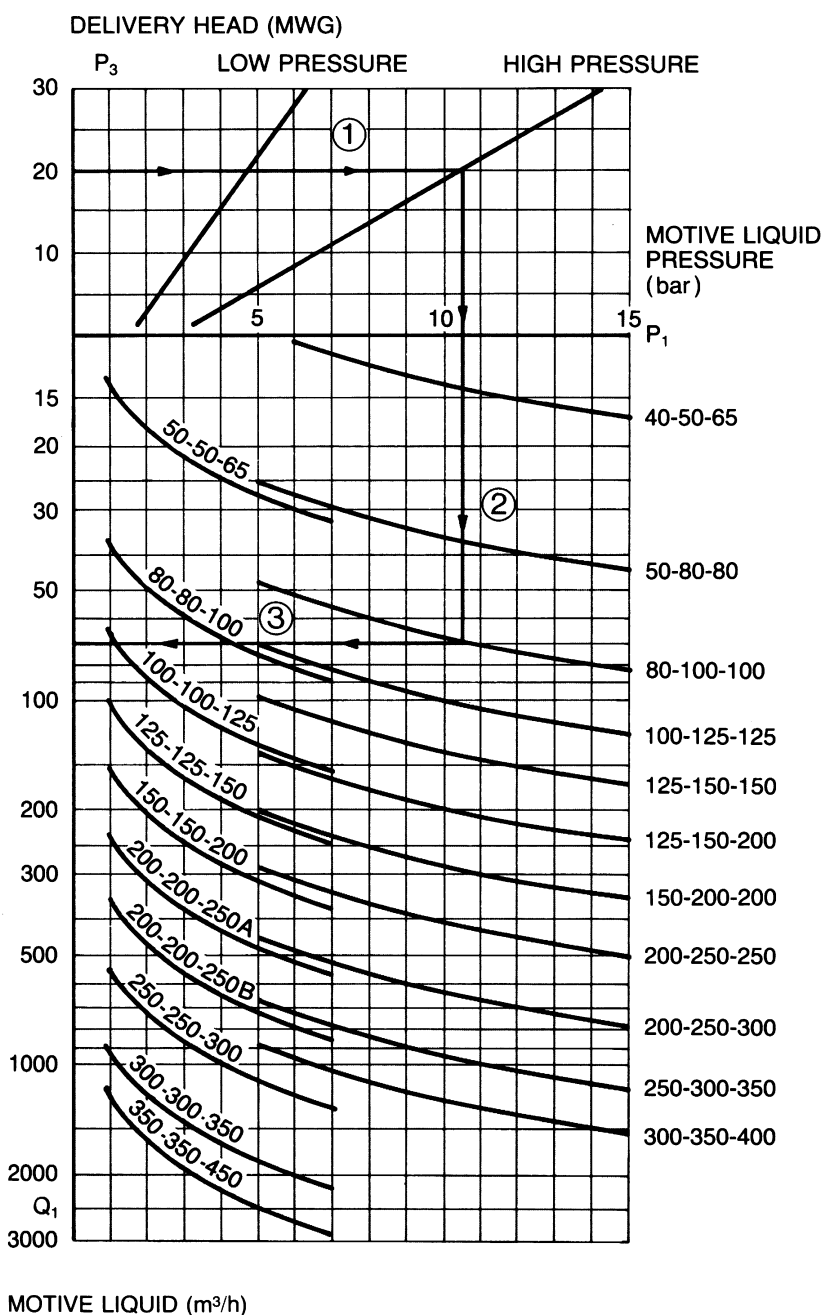
Diagram 1a



# Motive liquid

For the selected ejector-size, the pressure  $P_1$  and capacity  $Q_1$  of the motive liquid necessary, depends on the delivery head  $P_3$ .  $P_1$  and  $Q_1$  can be established using **DIAGRAM 2**.

Diagram 2



- Example:  
 (the previous selected ejector 80-100-100 is used)  
 Wanted delivery head:  
 $P_3 = 20$  MWG
- 1 Draw a horizontal line through  $P_3 = 20$ .
  - 2 Identify the intersection with the high pressure curve, and draw a vertical line.
  - 3 Draw a horizontal line through the intersection of line 2 and the 80-100-100 curve.

From 2:  $P_1 = 10.5$  bar  
 From 3:  $Q_1 = 70$  m<sup>3</sup>/h

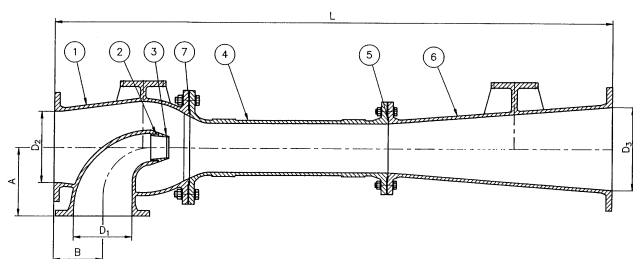
This drawing is for guidance only. Other sizes, materials, flange standards, settings, and versions are available. Request a specific quotation or approval drawing before implementing data.

drwg. no.: 2352	
date: 940916	drwg.: JAS
model: -	scale: -
drw. rev.: 0	material: -

# Ejector

This drawing is for guidance only. Other sizes, materials, flange standards, settings, and versions are available. Request a specific quotation or approval drawing before implementing data.

Ejector type	A	B	L	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>
40-50-65	110	105	575	40	50	65
50-80-80	125	115	750	50	80	80
80-100-100	150	110	840	80	100	100
100-125-125	165	120	1000	100	125	125
125-150-150	190	140	1250	125	150	150
125-150-200	190	140	1550	125	150	200
150-200-200	210	150	1550	150	200	200
200-250-250	250	180	1920	200	250	250
200-250-300	250	180	2100	200	250	300
250-300-300	290	210	2400	250	300	300
300-350-400	320	250	2600	300	350	400
<b>High pressure</b>						
50-50-65	115	115	650	50	50	65
80-80-100	135	110	900	80	80	100
100-100-125	150	125	1060	100	100	125
125-125-150	170	135	1250	125	125	150
150-150-200	195	150	1675	150	150	200
200-200-250A	225	180	1850	200	200	250
200-200-250B	225	180	1850	200	200	250
250-250-300	260	210	2100	250	250	300
300-300-350	300	250	2440	300	300	350
350-350-450	330	280	2690	350	350	450
<b>Low pressure</b>						



## Parts list

Item	Description	Spec. 1
1	House	Bronze
2	Gasket	Non asbest.
3	Nozzle	Bronze
4	Chamber	Bronze
5	Gasket	Nitril
6	Diffusor	Bronze
7	Gasket	Nitril

Flange standard: DIN PN 10