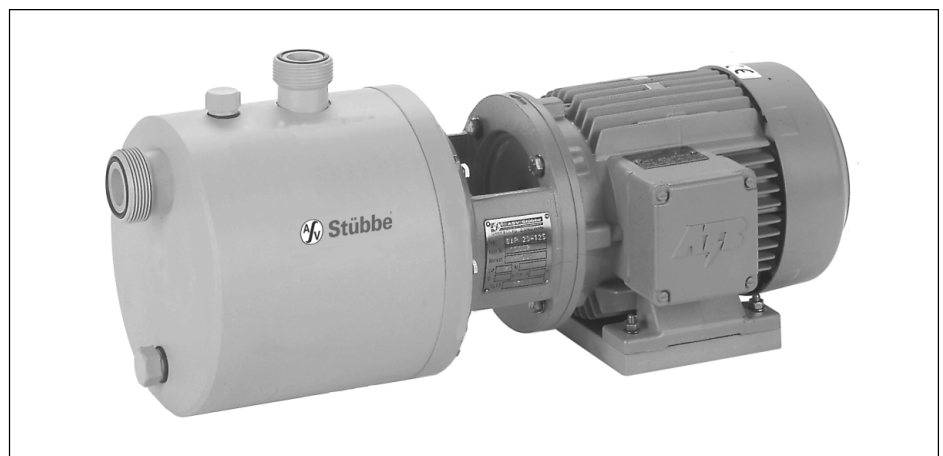


Self priming thermoplastic pump SAP(EP) close coupled version

- Single stage, horizontal centrifugal pump with patented valve technology (EP 06.45.541.A1) and integrated nozzle system to double the delivery rate.
- For the delivery of highly aggressive, corrosive and low viscosity liquids in chemical and application technologies.
- Self priming, max. suction height up to 7.0 m water column.
- Flow rate up to 30 m³/h.
- Head up to 30 m.
- All parts which are in contact with the fluid are of solid plastics, such as PP, PE-HD or PVDF, providing an excellent chemical and wear resistance.
- Rotational direction independent shaft seals, single or double acting mechanical seals, on request also with complete sealing pressure system.
- Universal application with high quality mechanical seals with SIC/SIC sliding pair as well as mechanical seals adapted to the fluid characteristics.
- High availability and operational reliability.
- Audited and certified quality system DIN ISO 9001.



The unique pump combination of the type series SAP, comprising of centrifugal and injection pump, doubles the possible delivery quantity due to the integrated valve technology. Type series SAP pumps offer economic advantages for all applications a suction lift of 7m has to be achieved.

After filling its housing the pump can deliver low viscosity liquids, such as aggressive acids, alkalines as well as mixed liquids of all types. These pumps constructed in accordance with the ASV modular system with directly coupled three phase motor (close coupled) are particularly

suitable for applications in:

- the chemical and application technologies
- metal working and galvanic industries
- water treatment and sewage technology

Materials

The components which come into contact with the delivery liquid are made of high quality and solid plastics. When selecting the suitable material take into consideration decisive parameters such as mechanical, chemical and thermal stress.

• Pump, suction and sealing housing as well as impeller:

PP (Polypropylene)
PE-HD (Polyethylene)
PVDF (Polyvinylidene chloride)

• O-rings:

CSM (Chlorsulfonyl polyethylene)
FPM (Viton®)

• V-ring

FPM (Viton®)

• Mechanical seals:

Single and double acting design mechanical seals (GLRD) from reknown manufacturers are used as shaft seals meeting with the operating conditions or fluid properties. Double acting mechanical seals optional with complete flushing or sealing liquid systems!

• Bolts

High grade steel (1.4301)

• Motor lantern:

Grey cast iron (3.2381.01)

Motor and external metal components are protected by a 2 component protection coat.

Technical data

• Flow rate and height:

Refer to characteristic curve

• Suction height:

max. 7.0 m*

• Material application limits:

Matched to the application conditions (system pressure etc.)

the following approximations are applicable for the pump material, taking the creep strength into consideration:

PP up to +80 °C
PE-HD up to +60 °C
PVDF up to +110 °C

Values below 0°C on request with exact data of operation.

• Medium viscosity:

max. 160 mPas (160 cP)

• Pressure and suction connections:

SAP 20-125 and 25-125
Threaded sockets as per DIN 8063 including O-ring:
SAP 32-125 and 40-125
Flange connection as per DIN 2501 PN 10/16

• Filling and draining connection:

Threaded insert G 1/2" complete with threaded plug R 1/2"

• Drive motor:

IEC three phase motor with extended drive shaft (ASV standard)

Rating : 1.1 up to 5.5 kW

Rotational speed : n = 2,900 r.p.m.

Nominal voltage : 230/400 V, 50 Hz < 3kW
400/690 V, 50 Hz > 3 kW

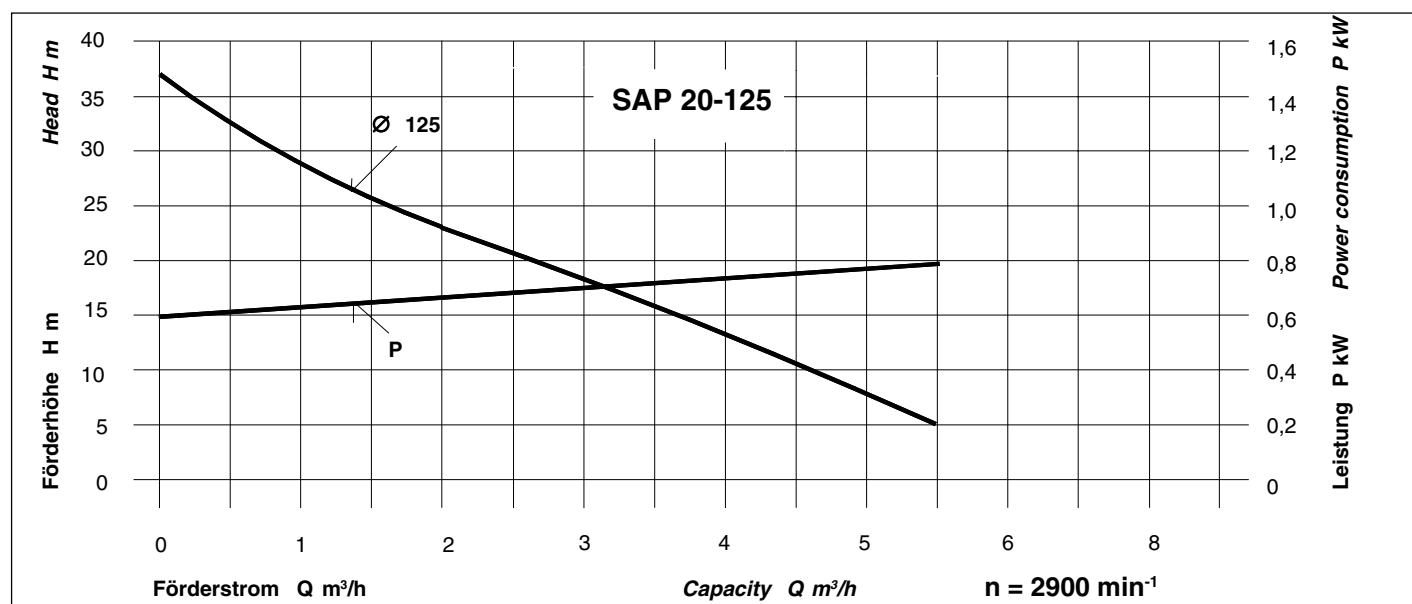
Protection rate : IP55

Design : IM B 34 or
IM B 5 or 14

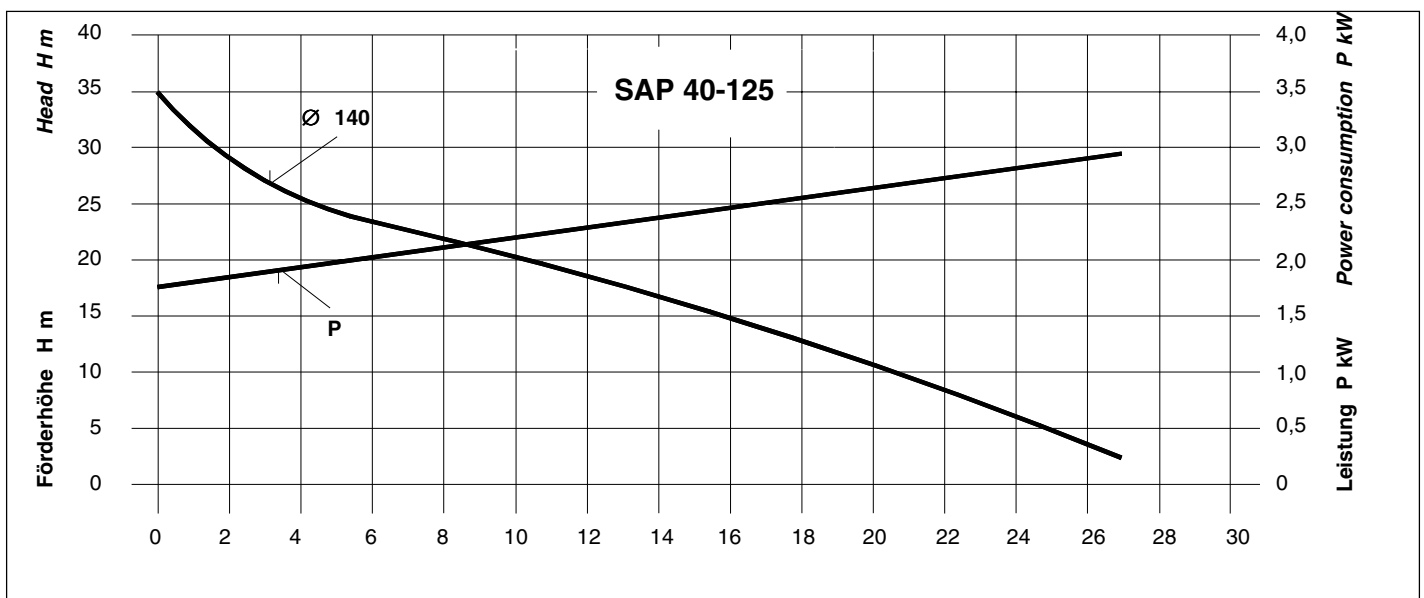
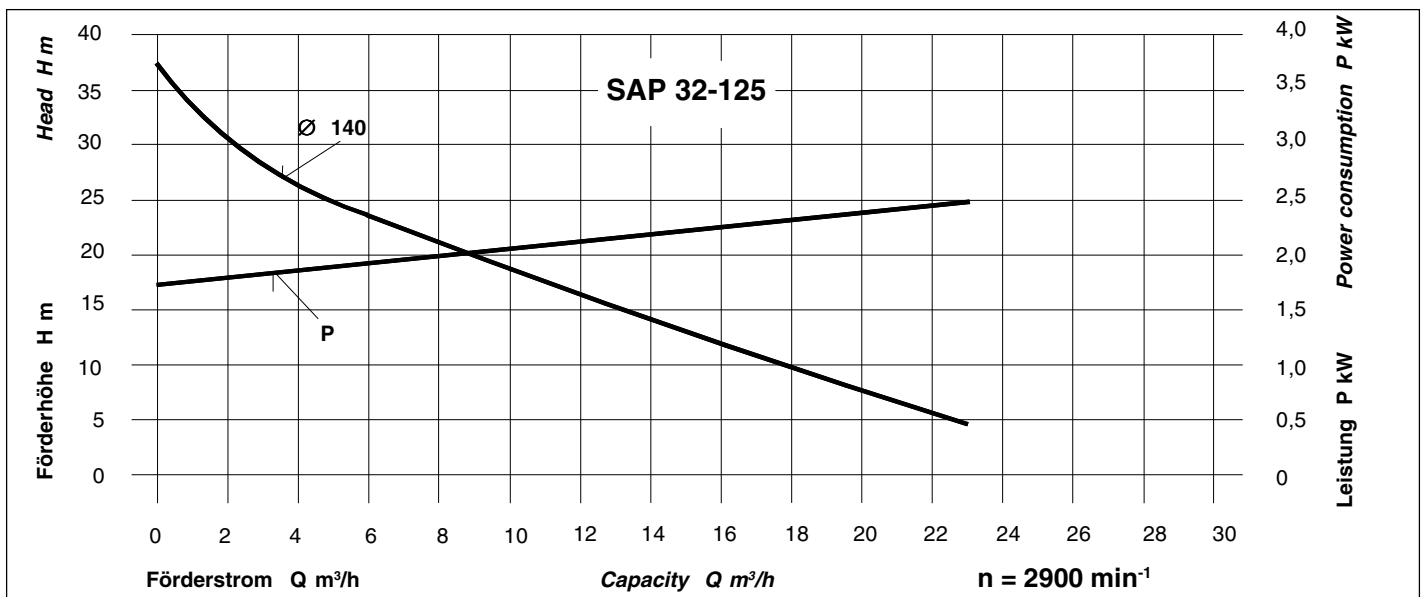
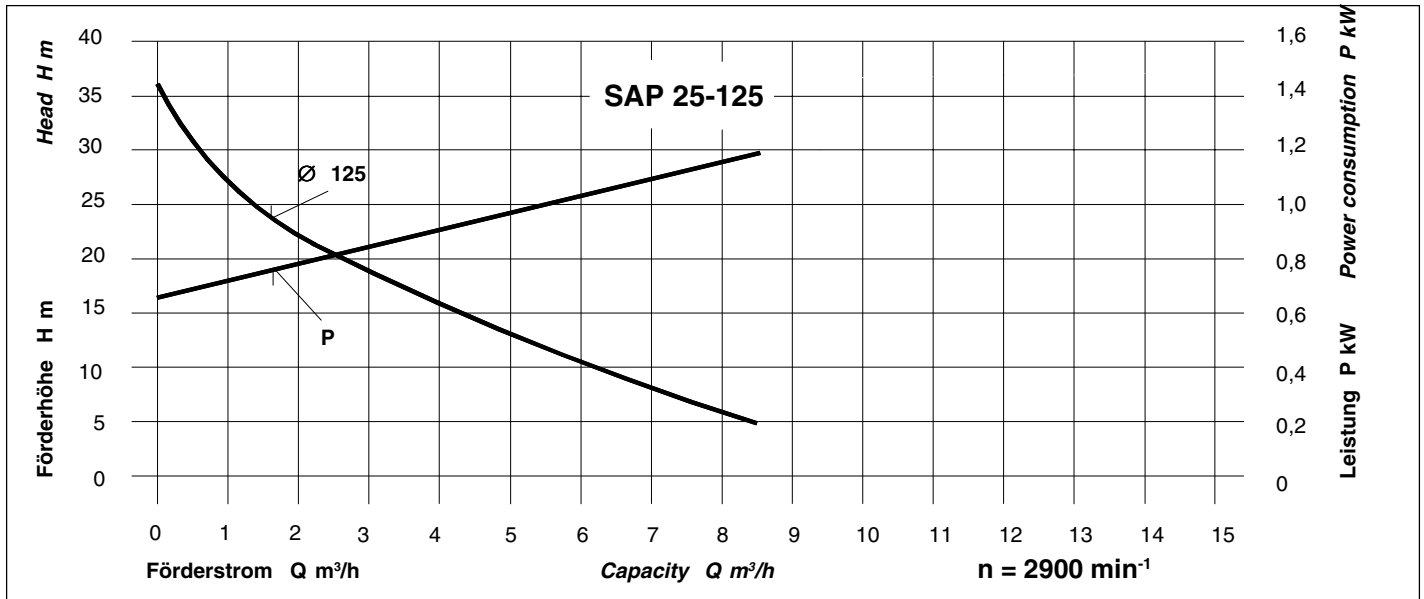
Other materials or technical data or equipment available upon request!

Characteristic curves

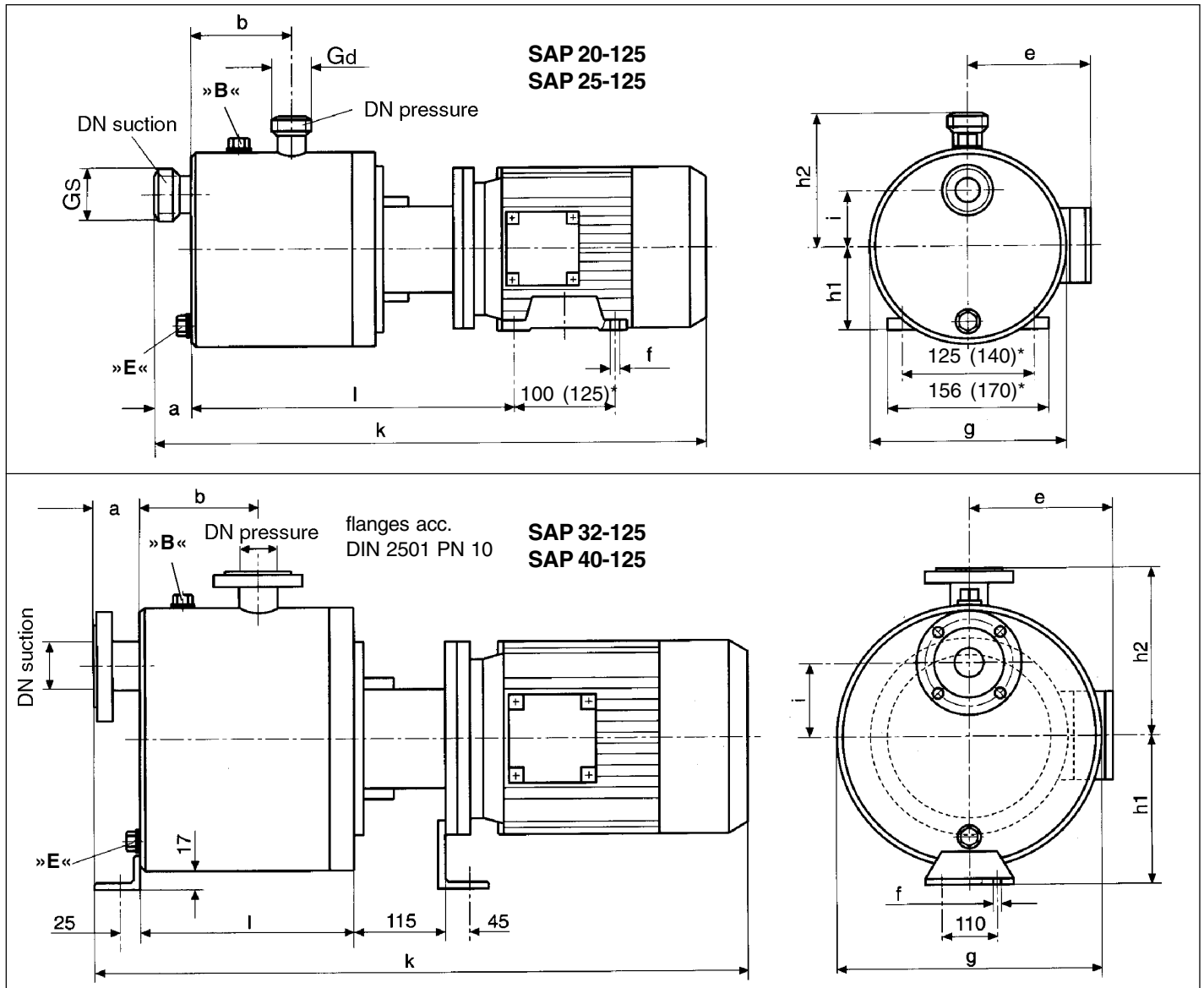
The curves show the sequence at a suction height of 0 m. The head changes in accordance with the suction height.



* Determined with water at 20° C and an air pressure of 1033 hPa.
Please contact us for other fluids!



Dimensions SAP



>>B<< Filling connection

>>E<< Draining

(*) Motor dimension for 2.2 kW

Size	Motor kW	Motor BG	Dimensions mm												Suction con. DN	Pressure con. DN	Filling quantity ¹⁾ dm ³	Weight ²⁾ kg
20-125	1,1+1,5	80	a	b	GS	Gd	e	f	g	h1	h2	i	k	l				
20-125	2,2	90	32	104	1 1/2"	1 1/4"	122	9	190	80	126	55	532	322	25	20	2	16,5
25-125	1,1+1,5	80	32	110	2"	1 1/2"	122	9	210	80	138	55	532	322	32	25	3	16,5
25-125	2,2	90	32	110	2"	1 1/2"	139	9	210	90	138	55	542	328	32	25	3	19,5
32-125	2,2	90	80	160	-	-	139	14	350	192	245	90	714	280	50	32	10	34,0
32-125	3,0	100	80	160	-	-	154	14	350	192	245	90	773	280	50	32	10	39,0
32-125	4,0+5,5	112	80	160	-	-	170	14	350	192	245	90	790	280	50	32	10	69,0
40-125	2,2	90	80	160	-	-	139	14	350	192	245	90	714	280	65	40	10	34,0
40-125	3,0	100	80	160	-	-	154	14	350	192	245	90	773	280	65	40	10	39,0
40-125	4,0+5,5	112	80	160	-	-	170	14	350	192	245	90	790	280	65	40	10	69,0

Important: Prior to starting up fill the pump housing with the fluid quantity¹⁾ shown in the table via the filling connection. A suitable non-return valve is required to interrupt the lifting effect.

²⁾ approx. value

All rights for technical changes withheld