

# Screw pumps - PB series

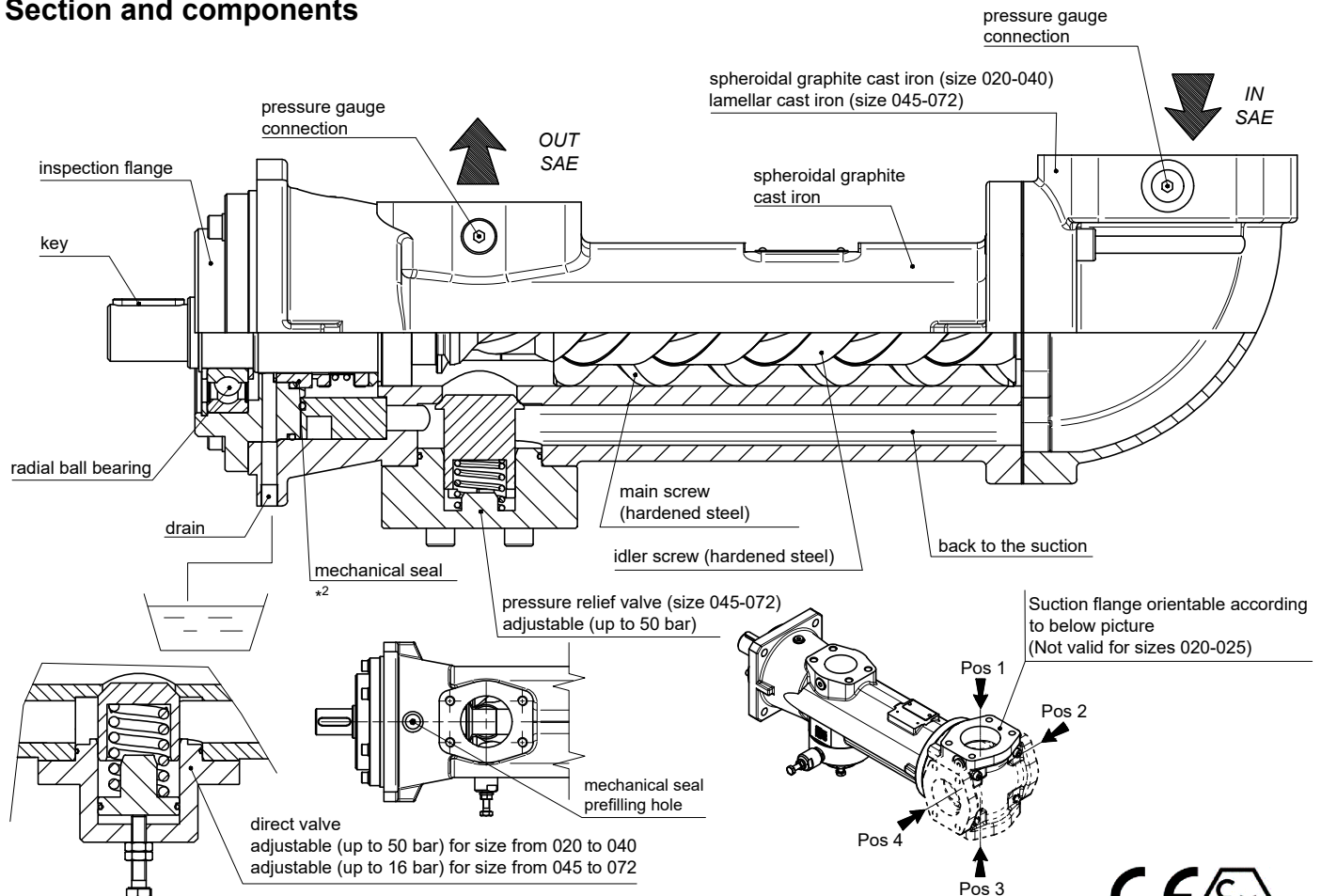
For hydraulic oils, lubricating oils, aqueous emulsions (oil min 5%), HFO, FO, DO, GO, ULSD, LSMGO.



## Main field of application

Pumps for lubrication systems and auxiliary cooling, with relief valve.  
 Fuel supply line (feeder and circulation), transfer and cargo.  
 Also available with magnetic coupling.

## Section and components



## Functional characteristics standard version

ATEX-Compliance

<b>Delivery flow</b>	up to 1000 l/min (up to 264 USGPM)	
<b>Admissible delivery pressure</b> *1 *3	up to 50 bar (725 psi) from 500 to 3600 rpm	
<b>Valve setting</b> *1	up to 50 bar (580 psi)	
<b>Admissible suction pressure</b> *1 *2	from -0,7 to 10 bar (from -10 to 145 psi)	For different values contact SEIM
<b>Kinematics viscosity</b> *3	from 1 to 1500 cSt STD (< 5000 cSt special)	For different values contact SEIM
<b>Admissible temperature</b>	from 0 to 150 °C (32 a 302 °F)	For different values contact SEIM
<b>Driving speed</b>	from 500 to 3600 rpm	
<b>Average noise level</b>	60 - 75 dB(A) at 3600 rpm according to pump dimension	
<b>Suction strainer</b>	See Appendix - table 1	
<b>Raccomended fluid cleanliness level in the system</b>	See Appendix - table 2 - ISO 16889 Bx>1000 / For Emulsions - table 3	
<b>Direction of rotation</b>	Clockwise, as seen from the driving side	

\*1 Reduced pressure limits apply due to fluid viscosity and driving speed.  
 Consult the performance charts for the individual pump size.

\*2 Also available with lip seal.

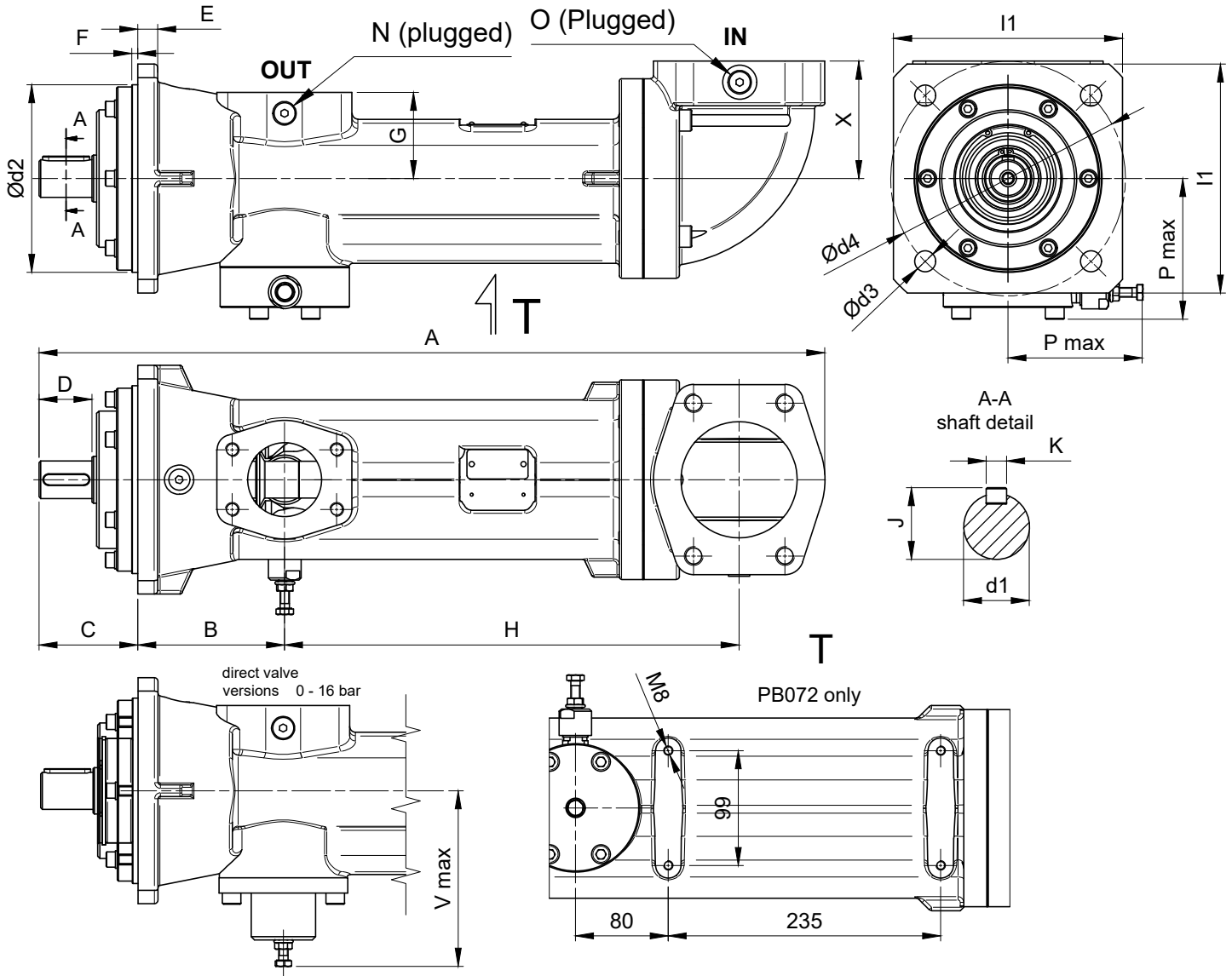
In this case admissible suction pressure shall not be greater than 0,5 bar.

\*3 For aqueous emulsions exceptions apply. See Table 4.

*For different functional characteristics, please contact our sales department.*

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## Dimensional charts (mm)

MODEL	A	B	C	D	E	F	G	H	I1	X	J	K	IN		OUT		P	V	d1 Ø	d2 Ø	d3 Ø	d4 Ø
													SAE 3000	SAE 3000	GAS	GAS						
PB020	318	65	67	29	16	5	45	151	115	45	16	5	1"	1"	1/8"	1/8"	/	105	14	100	11	125
PB025	318	65	67	29	16	5	45	151	115	45	16	5	1"	1"	1/8"	1/8"	/	105	14	100	11	125
PB032	427	88	82	40	18.5	5	52	211.5	145	60	21.5	6	2"	1 1/2"	1/8"	1/8"	/	118	19	125	13	160
PB040	453	85	82	40	18.5	5	52	240.5	145	60	21.5	6	2"	1 1/2"	1/8"	1/8"	/	139	19	125	13	160
PB045	530	116.5	81	45	15	5	50	280	145	75.5	35	10	2 1/2"	2"	1/8"	1/8"	115	140	32	125	13	160
PB055	574	131	82	55	18	5	62.5	308.5	145	75.5	35	10	2 1/2"	2"	1/8"	1/8"	115	147	32	125	13	160
PB060	669	125	84	45	17	5	73.5	387	195	100	35	10	4"	2 1/2"	1/8"	1/8"	127	147	32	160	18	200
PB072	766	155	101	75	17	5	80	437	195	100	41	10	4"	2 1/2"	1/8"	1/8"	127	150	38	160	18	200

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SEIM reserves the right to introduce dimensional changes or variation to the products of this technical data

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## Appendix

VISCOSITY	MESH STRAINER
< 5 cSt	60 mesh
< 10 cSt	40 mesh
< 20 cSt	20 mesh
< 200 cSt	Perforation 1/8"
< 500 cSt	Perforation 3/16"
> 500 cSt	Perforation 1/4"

Table 1

	bar	1450 rpm				2900 rpm				3600 rpm			
		10	16	25	40	10	16	25	40	10	16	25	40
PB20	Bx>1000	15 um								25 um			
PB 25	Bx>1000	15 um											
PB 32	Bx>1000	15 um											
PB 40	Bx>1000	25 um											
PB 45	Bx>1000	25 um											
PB 55	Bx>1000	25 um											
PB 60	Bx>1000	25 um											
PB 72	Bx>1000	25 um											

Fluido > 5 cSt

	bar	1450 rpm				2900 rpm				3600 rpm			
		10	16	25	40	10	16	25	40	10	16	25	40
PB 20	Bx>1000	Contatare Seim								10 um			
PB 25	Bx>1000	Contatare Seim											
PB 32	Bx>1000	Contatare Seim											
PB 40	Bx>1000	Contatare Seim											
PB 45	Bx>1000	Contatare Seim											
PB 55	Bx>1000	Contatare Seim											
PB 60	Bx>1000	Contatare Seim											
PB 72	Bx>1000	Contatare Seim											

Fluido < 5 cSt

Table 2 - Recommended fluid cleanliness level in the system

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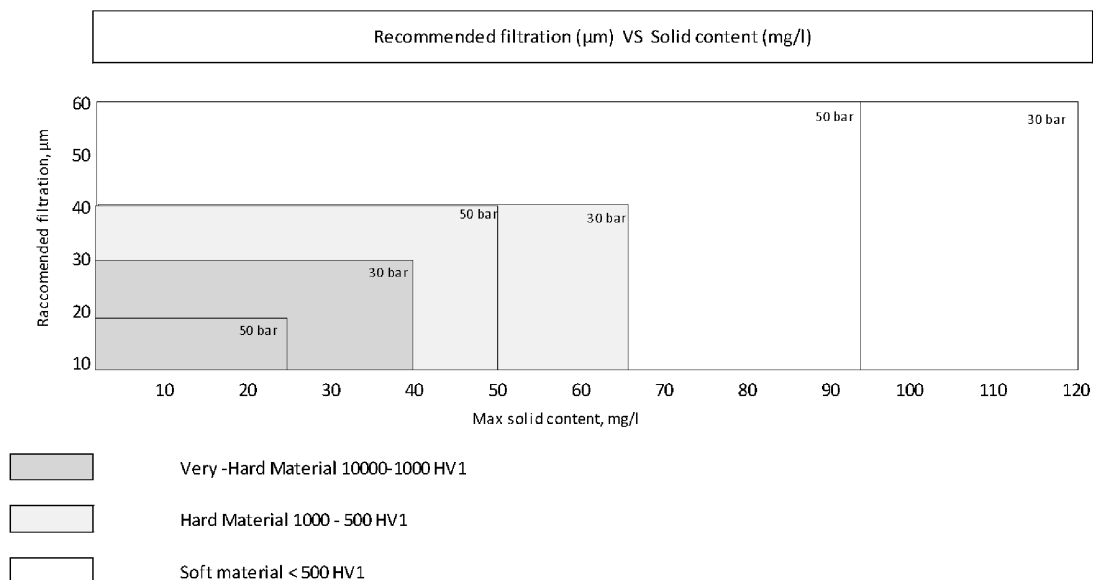


Table 3 - Recommended fluid cleanliness level in the system in case of aqueous emulsions

		Emulsion 1 cSt to 5 %			
		1450	1750	3000	3600
rpm		1450	1750	3000	3600
Pressure		bar	bar	bar	bar
Pump size	PB045#4A	50	50	50	50
	PB045#4B	45	50	50	50
	PB055#4A	50	50	50	50
	PB055#4B	50	50	50	50
	PB055#4C	50	50	50	42
	PB060#4A	50	50	50	40
	PB060#4B	50	50	45	36
	PB072#4A	50	50	45	32
	PB072#4B	50	50	40	28
	PB072#4C	50	50	35	25

Table 4 - Functional limits Pressure / rpm for aqueous emulsions

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