hp-Motor pump groups; Series SMG and MMG 3.0

Horizontal single units with hp-Industrial pumps and axial face shaft seal (SMG) or magnetic coupling (MMG) for loads up to max. 5 bar and max. 150 °C. Easy to operate, maximum operational safety, extremely low-noise, high suction power and long service life.

When used as feed units for fuel oil supply to DIN/EN 12514-1, the max. operating pressure of 6 bar must not be exceeded.

When used: as conveying or feed units, designed for up to 9 bar pressure.
as pressure units, designed for up to 30 bar pressure.
with higher pressures, suitable for up to 40 bar.

> The pump units are fitted with standard rotary current motors B3/B14 or B3/B5, 230 V, 400 V, 50 Hz, 1400 RPM, Protection IP 55, insulation class F. From 4 kW the motors are executed for 400/690 V, 50 Hz. Y-Δ-cirquit with power supply must be specified with orders.

> Other voltages and frequencies can be supplied at an additional cost.

> Installation situation: Horizontal, connections upwards

These motor pump units may be equipped with all the pumps of the proven hp-Industrial pump programs.

Model key for determining order specifications for hp-Motor pump groups

E.g.: SMG... – – – –

Type	Direction of rotation [1] viewed from pump shaft	Pressure stage bar	Speed of rotation [1]	Medium	Special design and accessories (add code letters sequentially)
SMG (with axial face seal) e.g.: SMG 1629 MMG (with magnetic coupling) e.g.: MMG 1848	Standard design I = counterclockwise D = clockwise as customer desires	0 = 0.5 - 1.5 1 = 1 - 4 2 = 2 - 9 3 = 6 - 25 4 = 15 - 40	9 = 980 RPM 1 = 1400 RPM 2 = 2800 RPM	0 = heating oil EL MGO / MDO 5 = heavy oil	H1 = electrical auxiliary heating (heating cartridge) (for heating power/item no: see tab. S 20) Wa = fitted on oil pan - for wall mounting (item no.: see Accessories page 46) LH = Fitted with oil pan with leakage detection (item no: see Accessories page 83) S[2] = equipped with electrical pressure switch for monitoring the pressure line (pipe burst check) DT = Pressure transmitter (for description, see page 84)

Max. permitted suction pressure on suction port A of the pump – 0.6 bar.
Warning, gas separation occurs at just – 0.4 bar.

Ordering example: hp-Motor pump groups Series SMG 1568 with hp-Industrial pump type VBHP-I with integrated overflow valve, direction of rotation viewed from pump shaft: I =clockwise, discharge: 700 l/h at 1400 RPM and 30 bar; operating pressure: 25 bar, adjustable from 15 to 30 bar; max. pressure: 30 bar; medium: HFO; viscosity: 6 cSt. at 140 °C; motor. 1.5 kW, 230/400V, 50Hz, protection IP55; accessories: H1 electrical auxiliary heating. Model key: SMG 1568 - I - 4 - 10 - H1

For installation, operation and maintenance, follow the operating instructions that come with each piece of equipment.

hp-Motor pump groups; Series SMG-VD

Single pump units with 1400 RPM and 2800 RPM, with integrated overflow valve, integrated filter insert and AC motor.

Designed as a feed unit with p_{max} 9 bar.

Model	Discharge [l/h]	Motor ~230V, 50 Hz		Item No.:	max. suction height [m]	max. pressure [bar]	Dimensions		
		1400 RPM	2800 RPM				Length	Width	Height
SMG-VD-I-2-10	50	0.18 kW	-	0300001	5	6	290	160	165
SMG-VD-I-2-20	100	-	0.18 kW	0300002	5	6	290	160	165

Suction port: G 1/4"
Delivery port: G 1/8"
Oil pan with wall mounting: 400 x 200 - Item no.: 0820501

[1] The direction of rotation of the pumps can only be changed in the factory.

[2] Note: In the place where it is fitted, as a "lower limiter" an electrical pressure monitor must be provided as a pipe break check. This condition is met by selecting the "S" accessory.

hp-Motor pump groups with magnetic drive - MaG-DrivE 3.1

No more damage due to faulty axial face seals.

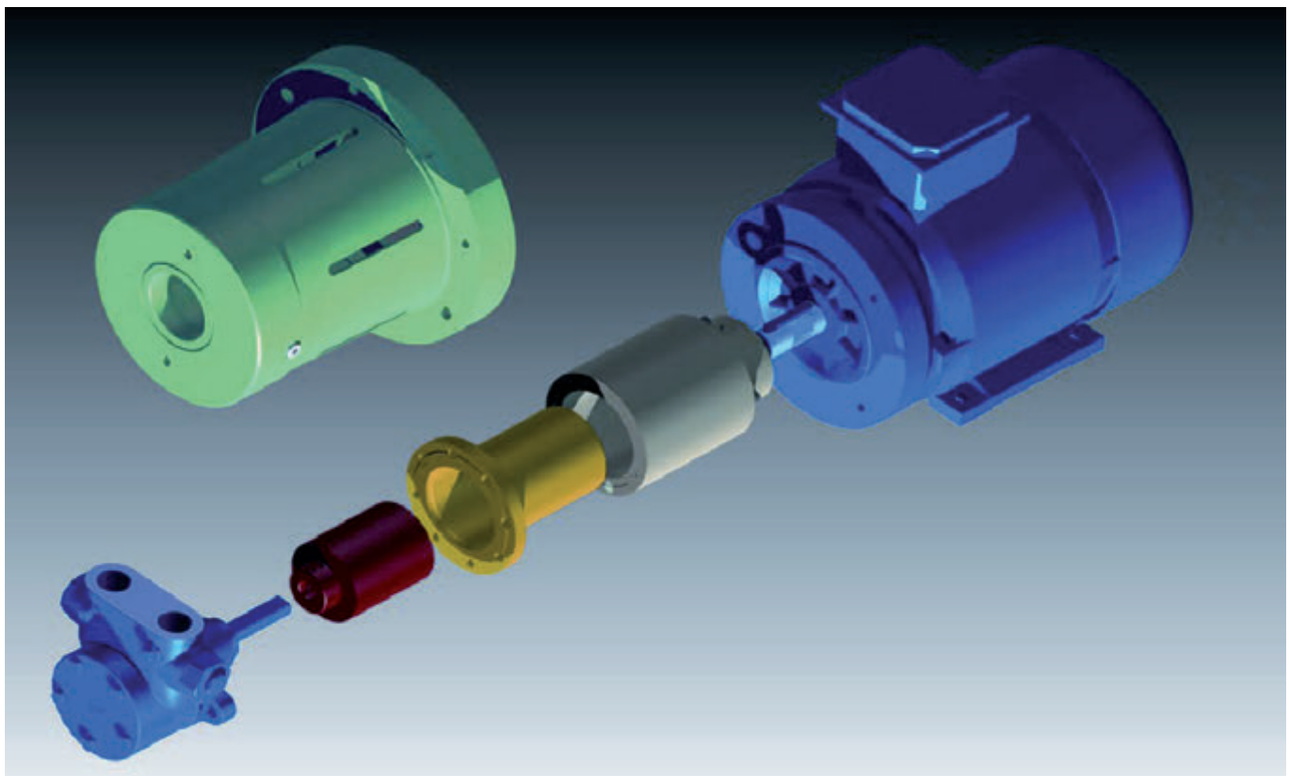
Until now, axial face seals had to be replaced at regular intervals or ahead of schedule due to a fault. The ongoing operating costs were one of the important factors when purchasing a pump. Not any more! The hp-MaG-DrivE is 100% leak-free. Maintenance work or repairs on conventional shaft seals are finally a thing of the past.

The contactless rotational transmission of the magnetic drive provides additional security by destruction-free de-coupling if there is an overload or blockages. As soon as the motor is shut down, the magnetic field is resynchronised, so that the pumps can be restarted.

The use of magnets made of a special samarium cobalt alloy guarantees a stable magnetic field both over a large temperature range and also over a long period.

All the motor pump units of the SMG series can be obtained with our hp-MaG-DrivE and may be equipped in the factory using a set within the shortest possible time. The connection dimensions of the conventional SMG do not change.

As well as all the advantages mentioned, the environmental protection is at the heart of our development work! To protect our environment against damage by our products – for example, caused by the undetected leakage into the environment of damaging media – we will reinforce our efforts with regard to the further development of our hp products.



Conditions of use	
self-lubricating media with a viscosity of 5 – 500 mm²/s	
Discharge	160 - 6,700 l/h
Pressure$_{max.}$	40 bar
Torque$_{max.}$	60 Nm

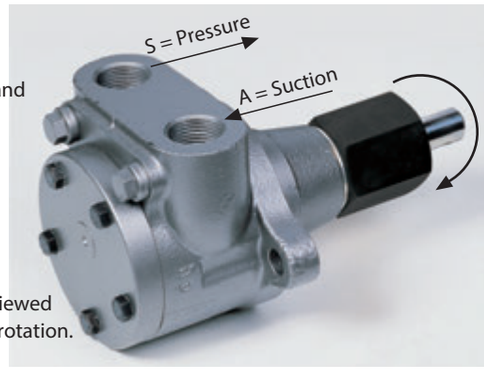
All hp-Aggregats can be retrofitted with the hp-MaG-DrivE.

hp-Motor pump groups; Series SMG 3.2

Series B without overflow valve

Single units with 1400 RPM with hp-Industrial pumps

Suitable for use with hydraulic oils, lubricating oils, all heating oils, coal tar oils, kerosenes and many other self-lubricating fluids.
The motor powers are applicable for fluids with a viscosity up to 80 cSt.
From 80 to 150 cSt. the motor must be designed for a power stage – construction size – that is larger. At an additional cost, on request.



The pump connections are marked as follows:
A = Suction connection S = Delivery connection

The pumps are designed in the standard version with direction of rotation I = clockwise (viewed from the pump shaft). The position of the pump connections depends on the direction of rotation. (See figure)

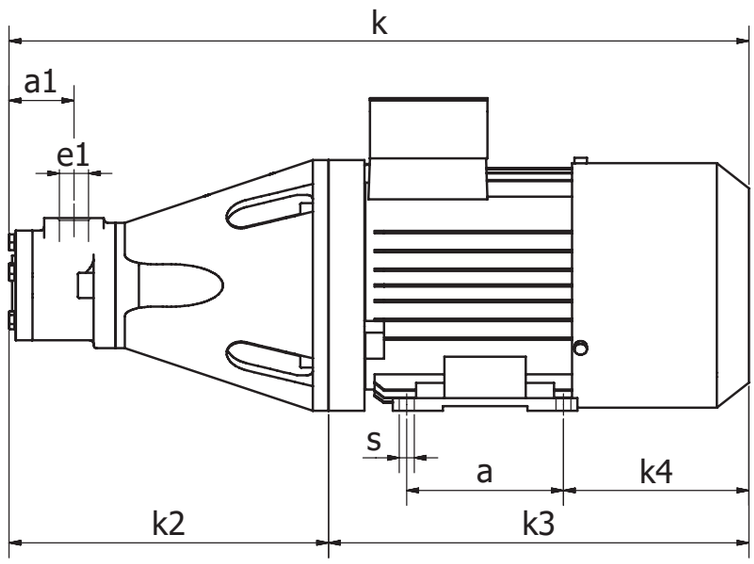
Direction of rotation I = counterclockwise Standard version
For direction of rotation D = clockwise, swap round the oil connection A = suction and S = pressure.
The direction of rotation can only be changed in the factory.

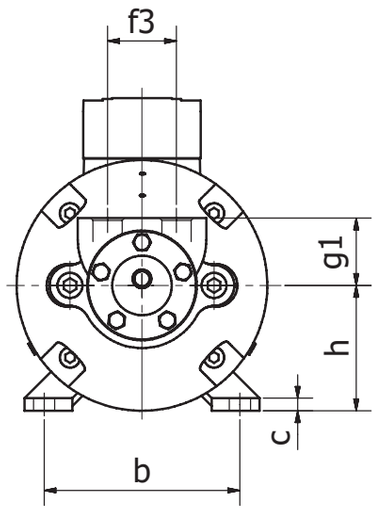
Series size	Pump model	Discharge at 1400 RPM		Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
		at 0 - 9 bar	at 30 bar						
SMG 1501	BP	45 l/h	–	0.18 kW	G 3/8"	100	25/12	0350001	
SMG 1502	BM	80 l/h	–	0.18 kW	G 3/8"	100	25/12	0350002	
SMG 1503	BG	120 l/h	–	0.18 kW	G 3/8"	100	25/12	0350003	
SMG 1504	BF	160 l/h	–	0.18 kW	G 3/8"	100	25/12	0350004	
SMG 1505	BGP	300 l/h	–	0.18 kW	G 1/2"	100	38/12	0350005	
SMG 1506	BGM	450 l/h	–	0.37 kW	G 1/2"	100	38/12	0350006	for max. pressure
SMG 1507	BGG	600 l/h	–	0.37 kW	G 1/2"	100	38/12	0350007	designed from 9 bar
SMG 1508	BHP	1000 l/h	–	0.75 kW	G 3/4"	160	56/18	0350008	
SMG 1509	BHM	1500 l/h	–	0.75 kW	G 3/4"	160	56/18	0350009	to DIN/EN 12514-1
SMG 1510	BHG	2000 l/h	–	1.1 kW	G 3/4"	160	56/18	0350010	on max. pressure
SMG 1511	BHGP	3000 l/h	–	1.5 kW	G 1 1/2"	280	75/22	0350011	limited from 6 bar
SMG 1511-1	BHGPZ	3700 l/h	–	1.5 kW	G 1 1/2"	250	75/22	0350059	and set
SMG 1512	BHGM	4500 l/h	–	2.2 kW	G 1 1/2"	280	75/22	0350012	
SMG 1513	BHGG	6000 l/h	–	3 kW	G 1 1/2"	280	75/22	0350013	
SMG 1521	BP	45 l/h	30 l/h	0.18 kW	G 3/8"	100	25/12	0350014	
SMG 1522	BM	80 l/h	60 l/h	0.18 kW	G 3/8"	100	25/12	0350015	
SMG 1523	BG	120 l/h	100 l/h	0.18 kW	G 3/8"	100	25/12	0350016	
SMG 1524	BF	160 l/h	140 l/h	0.37 kW	G 3/8"	100	25/12	0350017	
SMG 1525	BGP	300 l/h	240 l/h	0.37 kW	G 1/2"	100	38/12	0350018	
SMG 1526	BGM	450 l/h	390 l/h	0.75 kW	G 1/2"	100	38/12	0350019	
SMG 1527	BGG	600 l/h	520 l/h	0.75 kW	G 1/2"	100	38/12	0350020	p_{max} 30 bar
SMG 1528	BHP	1000 l/h	700 l/h	1.5 kW	G 3/4"	160	56/18	0350021	
SMG 1529	BHM	1500 l/h	1200 l/h	2.2 kW	G 3/4"	160	56/18	0350022	
SMG 1530	BHG	2000 l/h	1700 l/h	3 kW	G 3/4"	160	56/18	0350023	
SMG 1531	BHGP	3000 l/h	2200 l/h	4 kW	G 1 1/2"	280	75/22	0350024	
SMG 1531-1	BHGPZ	3700 l/h	3000 l/h	4 kW	G 1 1/2"	280	75/22	0350060	
SMG 1532	BHGM	4500 l/h	3600 l/h	5.5 kW	G 1 1/2"	280	75/22	0350025	
SMG 1533	BHGG	6000 l/h	4800 l/h	7.5 kW	G 1 1/2"	280	75/22	0350026	

Series size	Pump model	Discharge at 1400 RPM		Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
		at 0 bar	at 40 bar						
SMG 1902	BM	80 l/h	50 l/h	0.18 kW	G 3/8"	100	25/12	0390001	
SMG 1903	BG	120 l/h	80 l/h	0.37 kW	G 3/8"	100	25/12	0390002	
SMG 1904	BF	160 l/h	120 l/h	0.37 kW	G 3/8"	100	25/12	0390003	
SMG 1905	BGP	300 l/h	200 l/h	0.75 kW	G 1/2"	100	38/12	0390004	
SMG 1906	BGM	450 l/h	360 l/h	1.1 kW	G 1/2"	100	38/12	0390005	
SMG 1907	BGG	600 l/h	480 l/h	1.5 kW	G 1/2"	100	38/12	0390006	for max. pressure
SMG 1908	BHP	1000 l/h	600 l/h	2.2 kW	G 3/4"	160	56/18	0390007	designed from 40 bar
SMG 1909	BHM	1500 l/h	1000 l/h	3 kW	G 3/4"	160	56/18	0390008	
SMG 1910	BHG	2000 l/h	1400 l/h	4 kW	G 3/4"	160	56/18	0390009	
SMG 1911	BHGP	3000 l/h	2000 l/h	5.5 kW	G 1 1/2"	280	75/22	0390010	
SMG 1911-1	BHGPZ	3700 l/h	2700 l/h	5.5 kW	G 1 1/2"	280	75/22	0390012	
SMG 1912	BHGM	4500 l/h	3200 l/h	7.5 kW	G 1 1/2"	280	75/22	0390011	

[1] Pipe connections pipe thread DIN ISO 228-1
* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Series B without overflow valve 3.2





Series size	Pump model	Discharge	Motor power	Dimensions regardless of motor a	a1	b	c	e1	f3	g1	h	k2	s	for IE-3 k	k3	k4
SMG 1501	BP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1502	BM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1503	BG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1504	BF	160 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1505	BGP	300 l/h	0.18 kW	80	36	100	7	G 1/2"	44	43	63	179	7	359	180	60
SMG 1506	BGM	450 l/h	0.37 kW	90	43	112	7	G 1/2"	44	43	71	186	7	396	210	82
SMG 1507	BGG	600 l/h	0.37 kW	90	43	112	7	G 1/2"	44	43	71	186	7	396	210	82
SMG 1508	BHP	1000 l/h	0.75 kW	100	49	125	8	G 3/4"	67	65	80	268	9.5	555	287	137
SMG 1509	BHM	1500 l/h	0.75 kW	100	49	125	8	G 3/4"	67	65	80	268	9.5	555	287	137
SMG 1510	BHG	2000 l/h	1.1 kW	100	49	140	10	G 3/4"	67	65	90	278	10	615	337	181
SMG 1511	BHGP	3000 l/h	1.5 kW	125	65	140	10	G 1 1/2"	100	90	90	340	10	677	337	156
SMG 1511-1	BHGPZ	3700 l/h	1.5 kW	125	65	140	10	G 1 1/2"	100	90	90	10	10	677	337	156
SMG 1512	BHGM	4500 l/h	2.2 kW	140	65	160	12	G 1 1/2"	100	90	100	350	12	714	364	160
SMG 1513	BHGG	6000 l/h	3.0 kW	140	65	160	12	G 1 1/2"	100	90	100	350	12	670	320	117
SMG 1521	BP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1522	BM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1523	BG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1524	BF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82
SMG 1525	BGP	300 l/h	0.37 kW	90	43	112	7	G 1/2"	44	43	71	186	7	396	210	82
SMG 1526	BGM	450 l/h	0.75 kW	100	43	125	8	G 1/2"	44	43	80	206	9.5	480	287	137
SMG 1527	BGG	600 l/h	0.75 kW	100	43	125	8	G 1/2"	44	43	80	206	9.5	480	287	137
SMG 1528	BHP	1000 l/h	1.5 kW	125	49	140	10	G 3/4"	67	65	90	278	10	615	337	156
SMG 1529	BHM	1500 l/h	2.2 kW	140	49	160	14	G 3/4"	67	65	100	288	12	652	364	160
SMG 1530	BHG	2000 l/h	3.0 kW	140	49	160	14	G 3/4"	67	65	100	288	12	652	364	160
SMG 1531	BHGP	3000 l/h	4.0 kW	140	65	190	15	G 1 1/2"	100	90	112	350	12	697	347	137
SMG 1531-1	BHGPZ	3700 l/h	4.0 kW	140	65	190	12	G 1 1/2"	100	90	112	350	12	697	347	137
SMG 1532	BHGM	4500 l/h	5.5 kW	140	65	216	17	G 1 1/2"	100	90	132	370	12	790	420	199
SMG 1533	BHGG	6000 l/h	7.5 kW	140	65	216	17	G 1 1/2"	100	90	132	370	12	790	420	199
SMG 1902	BM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	43	63	165	7	345	180	60
SMG 1903	BG	120 l/h	0.37 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82
SMG 1904	BF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82
SMG 1905	BGP	300 l/h	0.75 kW	100	43	125	8	G 1/2"	44	43	80	206	9.5	493	287	137
SMG 1906	BGM	450 l/h	1.1 kW	100	43	140	10	G 1/2"	44	43	90	206	10	543	337	182
SMG 1907	BGG	600 l/h	1.5 kW	125	43	140	10	G 1/2"	44	43	90	206	10	543	337	156
SMG 1908	BHP	1000 l/h	2.2 kW	140	49	160	12	G 3/4"	67	65	100	288	12	652	364	160
SMG 1909	BHM	1500 l/h	3.0 kW	140	49	160	12	G 3/4"	67	65	100	288	12	652	364	160
SMG 1910	BHG	2000 l/h	4.0 kW	140	49	190	12	G 3/4"	67	65	112	288	12	635	347	137
SMG 1911	BHGP	3000 l/h	5.5 kW	140	65	216	15	G 1 1/2"	100	90	132	371	12	790	420	199
SMG 1911-1	BHGPZ	3700 l/h	5.5 kW	140	65	216	15	G 1 1/2"	100	90	132	370	12	790	420	199
SMG 1912	BHGM	4500 l/h	7.5 kW	178	65	216	15	G 1 1/2"	100	90	132	370	12	790	420	153

The dimensional specifications of the electric motors vary according to manufacturer, therefore the dimensions of the motor pump units are not binding.

hp-Motor pump groups; Series SMG 3.3

Series VB with integrated overflow valve

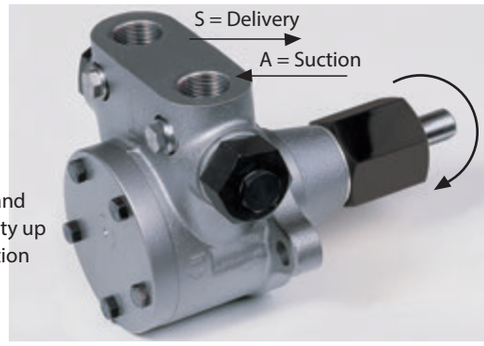
Single units with 1400 RPM with hp-Industrial pumps

Standard design

Units up to 9 bar Pressure stage 2 = 2 to 9 bar. Limited to 6 bar as per DIN/EN 12514-1 .

Units up to 40 bar Pressure stage 4 = 15 to 40 bar

Other pressure stages according to model key on page 32, please specify with order.



Suitable for use with hydraulic oils, lubricating oils, all heating oils, coal tar oils, kerosenes and many other self-lubricating fluids. The motor powers are applicable for fluids with a viscosity up to 80 cSt. From 80 to 150 cSt. the motor must be designed by one power stage – construction size – larger. At an additional cost, on request.

The pump connections are marked as follows:

A = Suction connection S = Delivery connection R = Bypass connection

The pumps are designed in the standard version with direction of rotation I = counterclockwise (viewed from the pump shaft). The position of the pump connections depends on direction of rotation. (See figure)

Direction of rotation I = counterclockwise Standard version

For direction of rotation D = clockwise, swap round the connections A = suction and S = discharge. The middle connection R = bypass remains unchanged. The direction of rotation can only be changed in the factory.

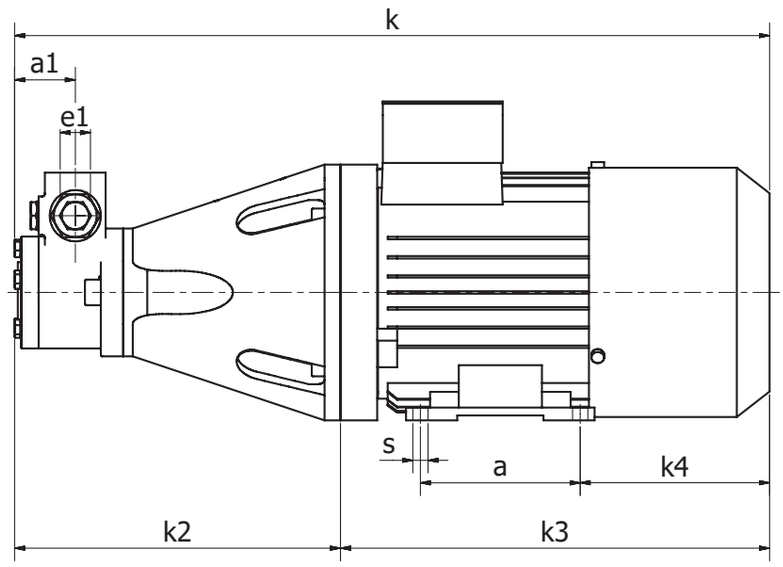
Series size	Pump model	Discharge at 1400 RPM at 0 - 9 bar	Discharge at 1400 RPM at 30 bar	Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
SMG 1541	VBP	45 l/h	–	0.18 kW	G 3/8"	100	25/12	0350027	
SMG 1542	VBM	80 l/h	–	0.18 kW	G 3/8"	100	25/12	0350028	
SMG 1543	VBG	120 l/h	–	0.18 kW	G 3/8"	100	25/12	0350029	
SMG 1544	VBF	160 l/h	–	0.18 kW	G 3/8"	100	25/12	0350030	
SMG 1545	VBGP	300 l/h	–	0.18 kW	G 1/2"	100	38/12	0350031	
SMG 1546	VBGM	450 l/h	–	0.37 kW	G 1/2"	100	38/12	0350032	for max. pressure
SMG 1547	VBGG	600 l/h	–	0.37 kW	G 1/2"	100	38/12	0350033	designed from 9 bar
SMG 1548	VBHP	1000 l/h	–	0.75 kW	G 3/4"	160	56/18	0350034	
SMG 1549	VBHM	1500 l/h	–	0.75 kW	G 3/4"	160	56/18	0350035	to DIN/EN 12514-1
SMG 1550	VBHG	2000 l/h	–	1.1 kW	G 3/4"	160	56/18	0350036	on max. pressure
SMG 1551	VBHGP	3000 l/h	–	1.5 kW	G 1"	280	75/22	0350037	limited from 6 bar
SMG 1551-1	VBHGPZ	3700 l/h	–	1.5 kW	G 1"	280	75/22	0350057	and set
SMG 1552	VBHGM	4500 l/h	–	2.2 kW	G 1"	280	75/22	0350038	
SMG 1553	VBHGG	6000 l/h	–	3 kW	G 1"	280	75/22	0350039	
SMG 1561	VBP	45 l/h	30 l/h	0.18 kW	G 3/8"	100	25/12	0350040	
SMG 1562	VBM	80 l/h	60 l/h	0.18 kW	G 3/8"	100	25/12	0350041	
SMG 1563	VBG	120 l/h	100 l/h	0.18 kW	G 3/8"	100	25/12	0350042	
SMG 1564	VBF	160 l/h	140 l/h	0.37 kW	G 3/8"	100	25/12	0350043	
SMG 1565	VBGP	300 l/h	240 l/h	0.37 kW	G 1/2"	100	38/12	0350044	
SMG 1566	VBGM	450 l/h	390 l/h	0.75 kW	G 1/2"	100	38/12	0350045	
SMG 1567	VBGG	600 l/h	520 l/h	0.75 kW	G 1/2"	100	38/12	0350046	p_{max} 30 bar
SMG 1568	VBHP	1000 l/h	700 l/h	1.5 kW	G 3/4"	160	56/18	0350047	
SMG 1569	VBHM	1500 l/h	1200 l/h	2.2 kW	G 3/4"	160	56/18	0350048	
SMG 1570	VBHG	2000 l/h	1700 l/h	3 kW	G 3/4"	160	56/18	0350049	
SMG 1571	VBHGP	3000 l/h	2200 l/h	4 kW	G 1"	280	75/22	0350050	
SMG 1571-1	VBHGPZ	3700 l/h	3000 l/h	4 kW	G 1"	280	75/22	0350058	
SMG 1572	VBHGM	4500 l/h	3600 l/h	5.5 kW	G 1"	280	75/22	0350051	
SMG 1573	VBHGG	6000 l/h	4800 l/h	7.5 kW	G 1"	280	75/22	0350052	

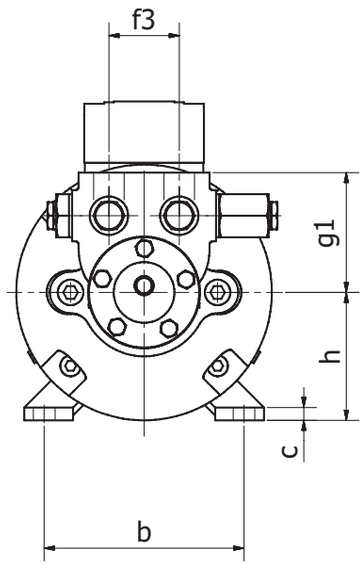
Series size	Pump model	Discharge at 1400 RPM at 0 bar	Discharge at 1400 RPM at 40 bar	Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
SMG 1922	VBM	80 l/h	50 l/h	0.18 kW	G 3/8"	100	25/12	0390023	
SMG 1923	VBG	120 l/h	80 l/h	0.37 kW	G 3/8"	100	25/12	0390024	
SMG 1924	VBF	160 l/h	120 l/h	0.37 kW	G 3/8"	100	25/12	0390025	
SMG 1925	VBGP	300 l/h	200 l/h	0.75 kW	G 1/2"	100	38/12	0390026	
SMG 1926	VBGM	450 l/h	360 l/h	1.1 kW	G 1/2"	100	38/12	0390027	
SMG 1927	VBGG	600 l/h	480 l/h	1.5 kW	G 1/2"	100	38/12	0390028	for max. pressure
SMG 1928	VBHP	1000 l/h	600 l/h	2,2 kW	G 3/4"	160	56/18	0390029	designed from 40 bar
SMG 1929	VBHM	1500 l/h	1000 l/h	3 kW	G 3/4"	160	56/18	0390030	
SMG 1930	VBHG	2000 l/h	1400 l/h	4 kW	G 3/4"	160	56/18	0390031	
SMG 1931	VBHGP	3000 l/h	2000 l/h	5.5 kW	G 1"	280	75/22	0390032	
SMG 1931-1	VBHGPZ	3700 l/h	2700 l/h	5.5 kW	G 1"	280	75/22	0390034	
SMG 1932	VBHGM	4500 l/h	3200 l/h	7.5 kW	G 1"	280	75/22	0390033	

[1] Pipe connections pipe thread DIN ISO 228-1

* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Series VB with integrated overflow valve and bypass 3.3





Series size	Pump model	Discharge	Motor power	Dimensions regardless of motor a	a1	b	c	e1	f3	g1	h	k2	s	for IE-3 k	k3	k4
SMG 1541	VBP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1542	VBM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1543	VBG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1544	VBF	160 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1545	VBGP	300 l/h	0.18 kW	80	40	100	7	G 1/2"	44	75	63	179	7	359	180	60
SMG 1546	VBGM	450 l/h	0.37 kW	90	40	112	7	G 1/2"	44	75	71	186	7	396	210	82
SMG 1547	VBGG	600 l/h	0.37 kW	90	40	112	7	G 1/2"	44	75	71	186	7	396	210	82
SMG 1548	VBHP	1000 l/h	0.75 kW	100	49	125	8	G 3/4"	67	90	80	268	9.5	555	287	137
SMG 1549	VBHM	1500 l/h	0.75 kW	100	49	125	8	G 3/4"	67	90	80	268	9.5	555	287	137
SMG 1550	VBHG	2000 l/h	1.1 kW	100	49	140	10	G 3/4"	67	90	90	278	11	615	337	181
SMG 1551	VGHGP	3000 l/h	1.5 kW	125	63	140	10	G 1"	80	120	90	340	11	677	337	156
SMG 1551-1	VGHGPZ	3000 l/h	1.5 kW	125	63	140	10	G 1"	80	120	90	340	10	677	337	156
SMG 1552	VBHGM	4500 l/h	2.2 kW	140	63	160	12	G 1"	80	120	100	350	13	714	364	160
SMG 1553	VBHGG	6000 l/h	3.0 kW	140	63	160	12	G 1"	80	120	100	350	13	714	364	160
SMG 1561	VBP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1562	VBM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1563	VBG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1564	VBF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1565	VBGP	300 l/h	0.37 kW	90	40	112	7	G 1/2"	44	75	71	186	7	396	210	82
SMG 1566	VBGM	450 l/h	0.75 kW	100	40	125	8	G 1/2"	44	75	80	206	9.5	493	287	137
SMG 1567	VBGG	600 l/h	0.75 kW	100	40	125	8	G 1/2"	44	75	80	206	9.5	493	287	137
SMG 1568	VBHP	1000 l/h	1.5 kW	125	49	140	10	G 3/4"	67	90	90	278	10	615	337	156
SMG 1569	VBHM	1500 l/h	2.2 kW	140	49	160	12	G 3/4"	67	80	100	288	12	652	364	160
SMG 1570	VBHG	2000 l/h	3.0 kW	140	49	160	12	G 3/4"	67	90	100	288	12	652	364	160
SMG 1571	VBHGP	3000 l/h	4.0 kW	140	63	190	12	G 1"	80	120	112	350	12	697	347	137
SMG 1571-1	VBHGPZ	3700 l/h	4.0 kW	140	63	190	12	G 1"	80	120	112	350	12	697	347	137
SMG 1572	VBHGM	4500 l/h	5.5 kW	140	63	216	15	G 1"	80	120	132	370	12	790	420	199
SMG 1573	VBHGG	6000 l/h	7.5 kW	178	63	216	15	G 1"	80	120	132	370	12	790	420	153
SMG 1922	VBM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	67	63	165	7	345	180	60
SMG 1923	VBG	120 l/h	0.37 kW	90	36	112	7	G 3/8"	38	67	71	372	7	382	210	82
SMG 1924	VBF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	38	67	71	372	7	382	210	82
SMG 1925	VBGP	300 l/h	0.75 kW	100	40	125	8	G 1/2"	44	75	80	206	9.5	493	287	137
SMG 1926	VBGM	450 l/h	1.1 kW	100	40	140	10	G 1/2"	44	75	90	206	10	543	337	181
SMG 1927	VBGG	600 l/h	1.5 kW	125	40	140	10	G 1/2"	44	75	90	206	10	543	337	156
SMG 1928	VBHP	1000 l/h	2.2 kW	140	49	160	12	G 3/4"	67	90	100	288	12	652	364	160
SMG 1929	VBHM	1500 l/h	3.0 kW	140	49	160	12	G 3/4"	67	90	100	288	12	652	364	160
SMG 1930	VBHG	2000 l/h	4.0 kW	140	49	190	12	G 3/4"	67	90	112	288	12	634	347	137
SMG 1931	VBHGP	3000 l/h	5.5 kW	140	63	216	15	G 1"	80	120	132	370	12	790	420	199
SMG 1931-1	VBHGPZ	3700 l/h	5.5 kW	140	63	216	15	G 1"	80	120	132	370	12	790	420	199
SMG 1932	VBHGM	4500 l/h	7.5 kW	178	63	216	15	G 1"	80	120	132	370	12	790	420	153

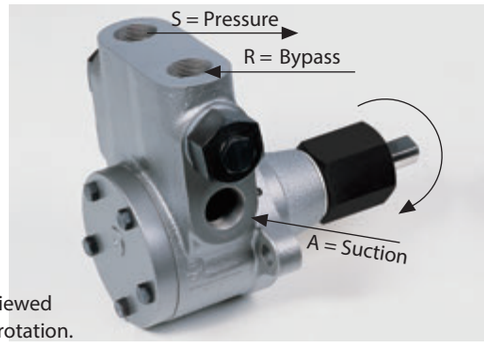
The dimensional specifications of the electric motors vary according to manufacturer, therefore the dimensions of the motor pump units are not binding.

hp-Motor pump groups; Series SMG 3.4

Series VBR with integrated overflow valve and bypass

Single units with 1400 RPM with hp-Industrial pumps

Standard design:
Units up to 9 bar Pressure stage 2 = 2 to 9 bar.
Limited to 6 bar as per DIN/EN 12514-1 .
Units up to 40 bar Pressure stage 4 = 15 to 40 bar.
Other pressure stages according to model key on page 32, please specify with order.



The pump connections are marked as follows:
A = Suction connection S = Delivery connection R = Bypass connection

The pumps are designed in the standard version with direction of rotation I = clockwise (viewed from the pump shaft). The position of the pump connections depends on the direction of rotation. (See figure)

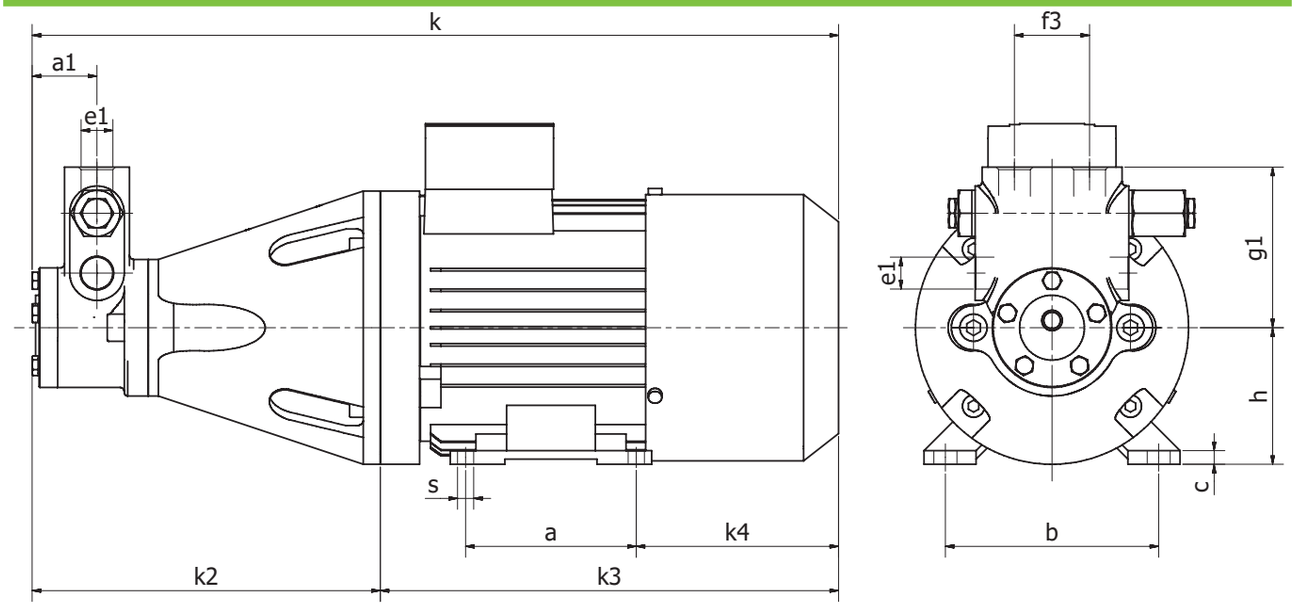
Direction of rotation I = counterclockwise Standard version
For direction of rotation D = clockwise, swap round the oil connections S = Delivery and R = Bypass. Suction port A = Suction is on the other side.

Series size	Pump model	Discharge at 1400 RPM at 0 - 9 bar	Discharge at 1400 RPM at 30 bar	Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
SMG 1601	VBRP	45 l/h	–	0.18 kW	G 3/8"	100	25/12	0360001	
SMG 1602	VBRM	80 l/h	–	0.18 kW	G 3/8"	100	25/12	0360002	
SMG 1603	VBRG	120 l/h	–	0.18 kW	G 3/8"	100	25/12	0360003	
SMG 1604	VBRF	160 l/h	–	0.18 kW	G 3/8"	100	25/12	0360004	
SMG 1605	VBGRP	300 l/h	–	0.18 kW	G 1/2"	100	38/12	0360005	
SMG 1606	VBGRM	450 l/h	–	0.37 kW	G 1/2"	100	38/12	0360006	for max. pressure
SMG 1607	VBGRG	600 l/h	–	0.37 kW	G 1/2"	100	38/12	0360007	designed from 9 bar
SMG 1608	VBHRP	1000 l/h	–	0.75 kW	G 3/4"	160	56/18	0360008	
SMG 1609	VBHRM	1500 l/h	–	0.75 kW	G 3/4"	160	56/18	0360009	to DIN/EN 12514-1
SMG 1610	VBHRG	2000 l/h	–	1.1 kW	G 3/4"	160	56/18	0360010	on max. pressure
SMG 1611	VBHGRP	3000 l/h	–	1.5 kW	G 1"	280	75/22	0360011	limited from 6 bar
SMG 1611-1	VBHGRPZ	3700 l/h	–	1.5 kW	G 1"	280	75/22	0360059	and set
SMG 1612	VBHGRM	4500 l/h	–	2.2 kW	G 1"	280	75/22	0360012	
SMG 1613	VBHGRG	6000 l/h	–	3 kW	G 1"	280	75/22	0360013	
SMG 1621	VBRP	45 l/h	30 l/h	0.18 kW	G 3/8"	100	25/12	0360014	
SMG 1622	VBRM	80 l/h	60 l/h	0.18 kW	G 3/8"	100	25/12	0360015	
SMG 1623	VBRG	120 l/h	100 l/h	0.18 kW	G 3/8"	100	25/12	0360016	
SMG 1624	VBRF	160 l/h	140 l/h	0.37 kW	G 3/8"	100	25/12	0360017	
SMG 1625	VBGRP	300 l/h	240 l/h	0.37 kW	G 1/2"	100	38/12	0360018	
SMG 1626	VBGRM	450 l/h	390 l/h	0.75 kW	G 1/2"	100	38/12	0360019	
SMG 1627	VBGRG	600 l/h	540 l/h	0.75 kW	G 1/2"	100	38/12	0360020	p_{max} 30 bar
SMG 1628	VBHRP	1000 l/h	700 l/h	1.5 kW	G 3/4"	160	56/18	0360021	
SMG 1629	VBHRM	1500 l/h	1200 l/h	2.2 kW	G 3/4"	160	56/18	0360022	
SMG 1630	VBHRG	2000 l/h	1700 l/h	3 kW	G 3/4"	160	56/18	0360023	
SMG 1631	VBHGRP	3000 l/h	2200 l/h	4 kW	G 1"	280	75/22	0360024	
SMG 1631-1	VBHGRPZ	3700 l/h	3000 l/h	4 kW	G 1"	280	75/22	0360060	
SMG 1632	VBHGRM	4500 l/h	3600 l/h	5.5 kW	G 1"	280	75/22	0360025	
SMG 1633	VBHGRG	6000 l/h	4800 l/h	7.5 kW	G 1"	280	75/22	0360026	

Series size	Pump model	Discharge at 1400 RPM at 0 bar	Discharge at 1400 RPM at 40 bar	Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
SMG 1942	VBRM	80 l/h	50 l/h	0.18 kW	G 3/8"	100	25/12	0390045	
SMG 1943	VBRG	120 l/h	80 l/h	0.37 kW	G 3/8"	100	25/12	0390046	
SMG 1944	VBRF	160 l/h	120 l/h	0.37 kW	G 3/8"	100	25/12	0390047	
SMG 1945	VBGRP	300 l/h	200 l/h	0.75 kW	G 1/2"	100	38/12	0390048	
SMG 1946	VBGRM	450 l/h	360 l/h	1.1 kW	G 1/2"	100	38/12	0390049	
SMG 1947	VBGRG	600 l/h	480 l/h	1.5 kW	G 1/2"	100	38/12	0390050	for max. pressure
SMG 1948	VBHRP	1000 l/h	600 l/h	2.2 kW	G 3/4"	160	56/18	0390051	designed from 40 bar
SMG 1949	VBHRM	1500 l/h	1000 l/h	3 kW	G 3/4"	160	56/18	0390052	
SMG 1950	VBHRG	2000 l/h	1400 l/h	4 kW	G 3/4"	160	56/18	0390053	
SMG 1951	VBHGRP	3000 l/h	2000 l/h	5.5 kW	G 1"	280	75/22	0390054	
SMG 1951-1	VBHGRPZ	3700 l/h	2700 l/h	5.5 kW	G 1"	280	75/22	0390056	
SMG 1952	VBHGRM	4500 l/h	3200 l/h	7.5 kW	G 1"	280	75/22	0390055	

[1] Pipe connections pipe thread DIN ISO 228-1
[2] For SMG 1611 - 1613, SMG 1631 - 1633, SMG 1951 - 1952 the side suction port is A = G 1 1/2"
* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Series VBR with integrated overflow valve and bypass 3.4



Series size	Pump model	Discharge	Motor power	Dimensions													
				regardless of motor											for IE-3		
				a	a1	b	c	e1	f3	g1	h	k2	s	k	k3	k4	
SMG 1601	VBRP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1602	VBRM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1603	VBRG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1604	VBRF	160 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1605	VBGRP	300 l/h	0.18 kW	80	40	100	7	G 1/2"	44	94	63	179	7	359	180	60	
SMG 1606	VBGRM	450 l/h	0.37 kW	90	40	112	7	G 1/2"	44	94	71	186	7	396	210	82	
SMG 1607	VBGRG	600 l/h	0.37 kW	90	40	112	7	G 1/2"	44	94	71	186	7	396	210	82	
SMG 1608	VBHRP	1000 l/h	0.75 kW	100	49	125	8	G 3/4"	67	115	80	268	9.5	555	287	137	
SMG 1609	VBHRM	1500 l/h	0.75 kW	100	49	125	8	G 3/4"	67	115	80	268	9.5	555	287	137	
SMG 1610	VBHRG	2000 l/h	1.1 kW	100	49	140	10	G 3/4"	67	115	90	278	10	615	337	181	
SMG 1611	VBHGRP	3000 l/h	1.5 kW	125	63	140	10	G 1" [1]	80	120	90	340	10	677	337	156	
SMG 1611-1	VBHGRPZ	3700 l/h	1.5 kW	125	63	140	10	G 1" [1]	80	120	90	340	10	677	337	156	
SMG 1612	VBHGRM	4500 l/h	2.2 kW	140	63	160	12	G 1" [1]	80	120	100	350	12	714	364	160	
SMG 1613	VBHGRG	6000 l/h	3.0 kW	140	63	160	12	G 1" [1]	80	120	100	350	12	714	364	160	
SMG 1621	VBRP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1622	VBRM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1623	VBRG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1624	VBRF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	38	90	71	172	7	382	210	82	
SMG 1625	VBGRP	300 l/h	0.37 kW	90	40	112	7	G 1/2"	44	94	71	186	7	396	210	82	
SMG 1626	VBGRM	450 l/h	0.75 kW	100	40	125	8	G 1/2"	44	94	80	206	9.5	493	287	137	
SMG 1627	VBGRG	600 l/h	0.75 kW	100	40	125	8	G 1/2"	44	94	80	206	9.5	493	287	137	
SMG 1628	VBHRP	1000 l/h	1.5 kW	125	49	140	10	G 3/4"	67	115	90	278	10	615	337	156	
SMG 1629	VBHRM	1500 l/h	2.2 kW	140	49	160	12	G 3/4"	67	115	100	288	12	652	364	160	
SMG 1630	VBHRG	2000 l/h	3.0 kW	140	49	160	12	G 3/4"	67	115	100	288	12	652	364	160	
SMG 1631	VBHGRP	3000 l/h	4.0 kW	140	63	190	12	G 1" [1]	80	120	112	349	12	697	347	137	
SMG 1631-1	VBHGRPZ	3700 l/h	4.0 kW	140	63	190	12	G 1" [1]	80	120	112	350	12	697	347	137	
SMG 1632	VBHGRM	4500 l/h	5.5 kW	140	63	216	15	G 1" [1]	80	120	132	370	12	790	420	199	
SMG 1633	VBHGRG	6000 l/h	7.5 kW	178	63	216	15	G 1" [1]	80	120	132	370	12	790	420	153	
SMG 1942	VBRM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	38	90	63	165	7	345	180	60	
SMG 1943	VBRG	120 l/h	0.37 kW	90	36	112	7	G 3/8"	38	90	71	172	7	382	210	82	
SMG 1944	VBRF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	38	90	71	172	7	382	210	82	
SMG 1945	VBGRP	300 l/h	0.75 kW	100	40	125	8	G 1/2"	44	94	80	206	9.5	493	287	137	
SMG 1946	VBGRM	450 l/h	1.1 kW	100	40	140	10	G 1/2"	44	94	90	206	10	543	337	181	
SMG 1947	VBGRG	600 l/h	1.5 kW	125	40	140	10	G 1/2"	44	94	90	206	10	543	337	156	
SMG 1948	VBHRP	1000 l/h	2.2 kW	140	49	160	12	G 3/4"	67	115	100	288	12	652	364	160	
SMG 1949	VBHRM	1500 l/h	3.0 kW	140	49	160	12	G 3/4"	67	115	100	288	12	652	364	160	
SMG 1950	VBHRG	2000 l/h	4.0 kW	140	49	190	12	G 3/4"	67	115	112	288	12	635	347	137	
SMG 1951	VBHGRP	3000 l/h	5.5 kW	140	63	216	15	G 1" [1]	80	120	132	370	12	790	420	199	
SMG 1951-1	VBHGRPZ	3700 l/h	5.5 kW	140	63	216	15	G 1" [1]	80	120	132	370	12	790	420	199	
SMG 1952	VBHGRM	4500 l/h	7.5 kW	178	63	216	15	G 1" [1]	80	120	132	370	12	790	420	153	

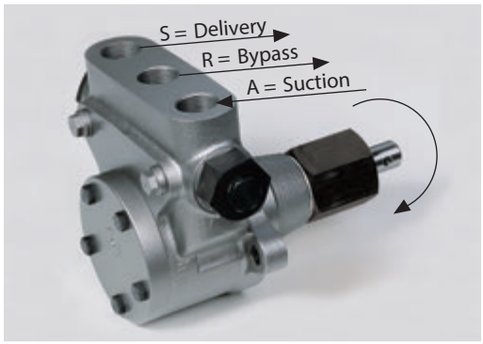
The dimensional specifications of the electric motors vary according to manufacturer, therefore the dimensions of the motor pump units are not binding.

hp-Motor pump groups; Series SMG 3.5

Series NV with integrated overflow valve and bypass

Single units with 1400 RPM with hp-Industrial pumps

Standard design:
Units up to 9 bar Pressure stage 2 = 2 to 9 bar.
Units up to 40 bar Pressure stage 4 = 15 to 40 bar
Other pressure stages according to model key on page 32, please specify with order.



Suitable for use with hydraulic oils, lubricating oils, all heating oils, coal tar oils, kerosenes and many other self-lubricating fluids. The motor powers are applicable for fluids with a viscosity up to 80 cSt. From 80 to 150 cSt. the motor must be designed by one power stage – construction size – larger. At an additional cost, on request.

The pump connections are marked as follows:
A = Suction connection S = Delivery connection R = Bypass connection

The pumps are designed in the standard version with direction of rotation I = counterclockwise (viewed from the pump shaft). The position of the pump connections depends on direction of rotation. (See figure)

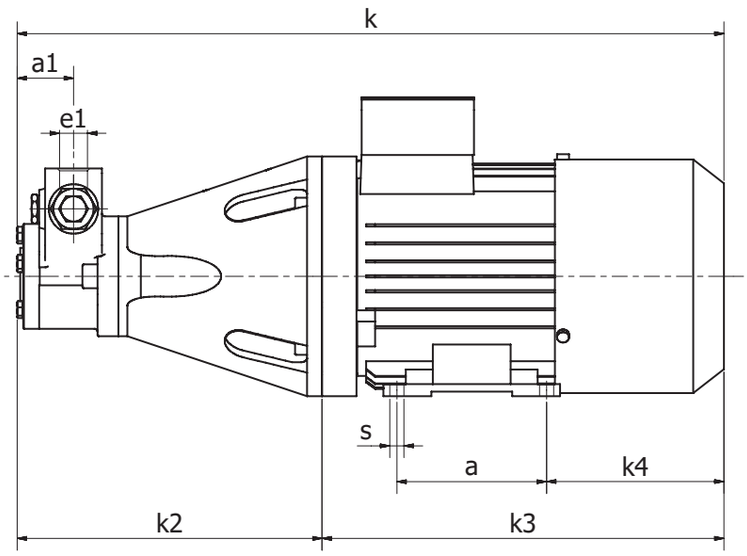
Direction of rotation I = counterclockwise Standard version
For direction of rotation D = clockwise, swap round the connections A = suction and S = discharge. The middle connection R = bypass remains unchanged. The direction of rotation can only be changed in the factory.

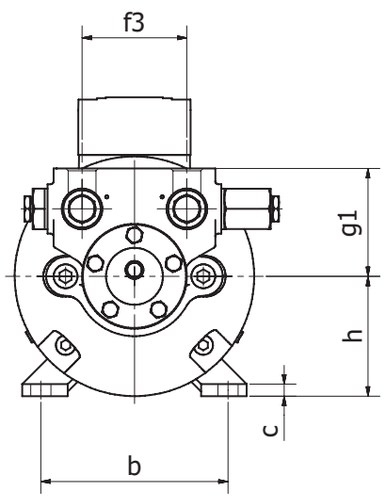
Series size	Pump model	Discharge at 1400 RPM at 0 - 9 bar	Discharge at 1400 RPM at 30 bar	Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
SMG 1701	NVBRP	45 l/h	–	0.18 kW	G 3/8"	100	25/12	0370001	
SMG 1702	NVBRM	80 l/h	–	0.18 kW	G 3/8"	100	25/12	0370002	
SMG 1703	NVBRG	120 l/h	–	0.18 kW	G 3/8"	100	25/12	0370003	
SMG 1704	NVBRF	160 l/h	–	0.18 kW	G 3/8"	100	25/12	0370004	
SMG 1705	NVBGRP	300 l/h	–	0.18 kW	G 1/2"	100	38/12	0370005	for max. pressure designed from 9 bar
SMG 1706	NVBGRM	450 l/h	–	0.37 kW	G 1/2"	100	38/12	0370006	
SMG 1707	NVBGRG	600 l/h	–	0.37 kW	G 1/2"	100	38/12	0370007	
SMG 1708	NVBHRP	1000 l/h	–	0.75 kW	G 3/4"	160	56/18	0370008	to DIN/EN 12514-1 on max. pressure limited from 6 bar and set
SMG 1709	NVBHRM	1500 l/h	–	0.75 kW	G 3/4"	160	56/18	0370009	
SMG 1710	NVBHRG	2000 l/h	–	1.1 kW	G 3/4"	160	56/18	0370010	
SMG 1721	NVBRP	45 l/h	30 l/h	0.18 kW	G 3/8"	100	25/12	0370011	p_{max} 30 bar
SMG 1722	NVBRM	80 l/h	60 l/h	0.18 kW	G 3/8"	100	25/12	0370012	
SMG 1723	NVBRG	120 l/h	100 l/h	0.18 kW	G 3/8"	100	25/12	0370013	
SMG 1724	NVBRF	160 l/h	140 l/h	0.37 kW	G 3/8"	100	25/12	0370014	
SMG 1725	NVBGRP	300 l/h	240 l/h	0.37 kW	G 1/2"	100	38/12	0370015	
SMG 1726	NVBGRM	450 l/h	390 l/h	0.75 kW	G 1/2"	100	38/12	0370016	
SMG 1727	NVBGRG	600 l/h	520 l/h	0.75 kW	G 1/2"	100	38/12	0370017	
SMG 1728	NVBHRP	1000 l/h	700 l/h	1.5 kW	G 3/4"	160	56/18	0370018	
SMG 1729	NVBHRM	1500 l/h	1200 l/h	2.2 kW	G 3/4"	160	56/18	0370019	
SMG 1730	NVBHRG	2000 l/h	1700 l/h	3.0 kW	G 3/4"	160	56/18	0370020	

Series size	Pump model	Discharge at 1400 RPM at 0 bar	Discharge at 1400 RPM at 40 bar	Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
SMG 1962	NVBRM	80 l/h	50 l/h	0.18 kW	G 3/8"	100	25/12	0390067	
SMG 1963	NVBRG	120 l/h	80 l/h	0.37 kW	G 3/8"	100	25/12	0390068	
SMG 1964	NVBRF	160 l/h	120 l/h	0.37 kW	G 3/8"	100	25/12	0390069	
SMG 1965	NVBGRP	300 l/h	200 l/h	0.75 kW	G 1/2"	100	38/12	0390070	
SMG 1966	NVBGRM	450 l/h	360 l/h	1.1 kW	G 1/2"	100	38/12	0390071	for max. pressure designed from 40 bar
SMG 1967	NVBGRG	600 l/h	480 l/h	1.5 kW	G 1/2"	100	38/12	0390072	
SMG 1968	NVBHRP	1000 l/h	600 l/h	2.2 kW	G 3/4"	160	56/18	0390073	
SMG 1969	NVBHRM	1500 l/h	1000 l/h	3 kW	G 3/4"	160	56/18	0390074	
SMG 1970	NVBHRG	2000 l/h	1400 l/h	4 kW	G 3/4"	160	56/18	0390075	

[1] Pipe connections pipe thread DIN ISO 228-1
* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Series NV with integrated overflow valve and bypass 3.5





Series size	Pump model	Discharge	Motor power	Dimensions													
				regardless of motor											for IE-3		
				a	a1	b	c	e1	f3	g1	h	k2	s	k	k3	k4	
SMG 1701	NVBRP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	32.5	65	63	165	7	345	180	60	
SMG 1702	NVBRM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	32.5	65	63	165	7	345	180	60	
SMG 1703	NVBRG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	32.5	65	63	165	7	345	180	60	
SMG 1704	NVBRF	160 l/h	0.18 kW	80	36	100	7	G 3/8"	32.5	65	63	165	7	345	180	60	
SMG 1705	NVBGRP	300 l/h	0.18 kW	80	40	100	7	G 1/2"	35	70	63	179	7	359	180	60	
SMG 1706	NVBGRM	450 l/h	0.37 kW	90	40	112	7	G 1/2"	35	70	71	186	7	396	210	82	
SMG 1707	NVBGRG	600 l/h	0.37 kW	90	40	112	7	G 1/2"	35	70	71	186	7	396	210	82	
SMG 1708	NVBHRP	1000 l/h	0.75 kW	100	49	125	8	G 3/4"	50	100	80	268	9.5	555	287	137	
SMG 1709	NVBHRM	1500 l/h	0.75 kW	100	49	125	8	G 3/4"	50	100	80	268	9.5	555	287	137	
SMG 1710	NVBHRG	2000 l/h	1.1 kW	100	49	140	10	G 3/4"	50	100	90	278	10	615	337	181	
SMG 1721	NVBRP	45 l/h	0.18 kW	80	36	100	7	G 3/8"	32.5	65	63	165	7	345	180	60	
SMG 1722	NVBRM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	32.5	65	63	165	7	345	180	60	
SMG 1723	NVBRG	120 l/h	0.18 kW	80	36	100	7	G 3/8"	32.5	65	63	165	7	345	180	60	
SMG 1724	NVBRF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	32.5	65	71	172	7	382	210	82	
SMG 1725	NVBGRP	300 l/h	0.37 kW	90	40	112	7	G 1/2"	35	70	71	186	7	396	210	82	
SMG 1726	NVBGRM	450 l/h	0.75 kW	100	40	125	8	G 1/2"	35	70	80	206	9.5	493	287	137	
SMG 1727	NVBGRG	600 l/h	0.75 kW	100	40	125	8	G 1/2"	35	70	80	206	9.5	493	287	137	
SMG 1728	NVBHRP	1000 l/h	1.5 kW	125	49	140	10	G 3/4"	50	100	90	278	10	615	337	156	
SMG 1729	NVBHRM	1500 l/h	2.2 kW	140	49	160	12	G 3/4"	50	100	100	288	12	652	364	160	
SMG 1730	NVBHRG	2000 l/h	3.0 kW	140	49	160	12	G 3/4"	50	100	100	288	12	608	320	117	
SMG 1962	NVBRM	80 l/h	0.18 kW	80	36	100	7	G 3/8"	65	67	63	165	7	345	180	60	
SMG 1963	NVBRG	120 l/h	0.37kW	90	36	112	7	G 3/8"	65	67	71	172	7	382	210	82	
SMG 1964	NVBRF	160 l/h	0.37 kW	90	36	112	7	G 3/8"	65	67	71	172	7	382	210	82	
SMG 1965	NVGRP	300 l/h	0.75 kW	100	40	125	8	G 1/2"	70	75	80	206	9.5	493	287	160	
SMG 1966	NVBGRM	450 l/h	1.1 kW	100	40	140	10	G 1/2"	70	75	90	206	10	543	337	181	
SMG 1967	NVBGRG	600 l/h	1.5 kW	125	40	140	10	G 1/2"	70	75	90	206	10	543	337	156	
SMG 1968	NVBHRP	1000 l/h	2.2 kW	140	49	160	12	G 3/4"	100	105	100	288	12	652	364	160	
SMG 1969	NVBHRM	1500 l/h	3.0 kW	140	49	160	12	G 3/4"	100	105	100	288	12	652	364	160	
SMG 1970	NVBHRG	2000 l/h	4.0 kW	140	49	190	12	G 3/4"	100	105	112	288	12	635	347	137	

The dimensional specifications of the electric motors vary according to manufacturer, therefore the dimensions of the motor pump units are not binding.

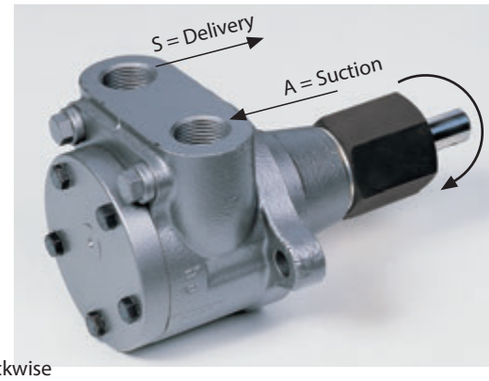
hp-Motor pump groups; Series SMG 3.6

Series B without overflow valve

Single units with 950 RPM with hp-Industrial pumps

Suitable for use with hydraulic oils, lubricating oils, all heating oils, coal tar oils, kerosenes and many other self-lubricating fluids.

The motor powers are applicable for fluids with a viscosity up to 400 cSt.
From 400 to 1000 cSt. the motor must be designed
by one power stage – construction size – larger.
At an additional cost, on request.



The pump connections are marked as follows:
A = Suction connection
S = Delivery connection

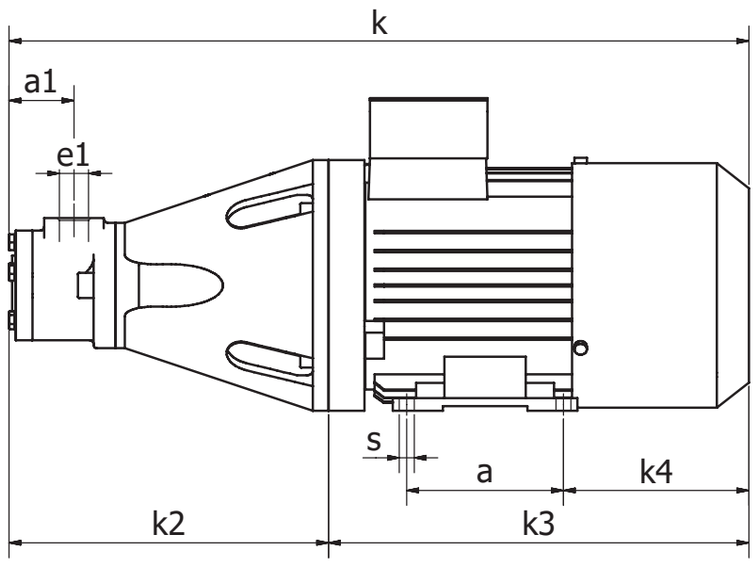
The pumps are designed in the standard version with direction of rotation I = counterclockwise (viewed from the pump shaft). The position of the pump connections depends on the direction of rotation. (See figure)

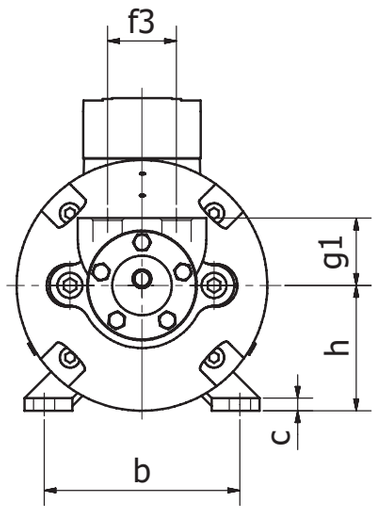
Direction of rotation I = counterclockwise Standard version
For direction of rotation D = clockwise, swap round the connections A = suction and S = delivery.
The direction of rotation can only be changed in the factory.

Series size	Pump model	Discharge at 950 RPM		Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
		at 0 - 9 bar	at 30 bar						
SMG 1801	BP	30 l/h	–	0.25 kW	G 3/8"	100	25/12	0380001	
SMG 1802	BM	55 l/h	–	0.25 kW	G 3/8"	100	25/12	0380002	
SMG 1803	BG	80 l/h	–	0.25 kW	G 3/8"	100	25/12	0380003	
SMG 1804	BF	105 l/h	–	0.25 kW	G 3/8"	100	25/12	0380004	
SMG 1805	BGP	200 l/h	–	0.25 kW	G 1/2"	100	38/12	0380005	
SMG 1806	BGM	300 l/h	–	0.25 kW	G 1/2"	100	38/12	0380006	
SMG 1807	BGG	400 l/h	–	0.37 kW	G 1/2"	100	38/12	0380007	for max. pressure designed from 9 bar
SMG 1808	BHP	670 l/h	–	0.55 kW	G 3/4"	160	56/18	0380008	
SMG 1809	BHM	1000 l/h	–	0.75 kW	G 3/4"	160	56/18	0380009	
SMG 1810	BHG	1330 l/h	–	1.1 kW	G 3/4"	160	56/18	0380010	
SMG 1811	BHGP	2000 l/h	–	1.5 kW	G 1 1/2"	280	75/22	0380011	
SMG 1811-1	BHGPZ	2400 l/h	–	1.5 kW	G 1 1/2"	280	75/22	0380053	
SMG 1812	BHGM	3000 l/h	–	2.2 kW	G 1 1/2"	280	75/22	0380012	
SMG 1813	BHGG	4000 l/h	–	3.0 kW	G 1 1/2"	280	75/22	0380013	
SMG 1821	BP	30 l/h	20 l/h	0.25 kW	G 3/8"	100	25/12	0380014	p_{max} 30 bar
SMG 1822	BM	55 l/h	40 l/h	0.25 kW	G 3/8"	100	25/12	0380015	
SMG 1823	BG	80 l/h	60 l/h	0.25 kW	G 3/8"	100	25/12	0380016	
SMG 1824	BF	105 l/h	90 l/h	0.25 kW	G 3/8"	100	25/12	0380017	
SMG 1825	BGP	200 l/h	160 l/h	0.55 kW	G 1/2"	100	38/12	0380018	
SMG 1826	BGM	300 l/h	260 l/h	0.75 kW	G 1/2"	100	38/12	0380019	
SMG 1827	BGG	400 l/h	360 l/h	1.1 kW	G 1/2"	100	38/12	0380020	
SMG 1828	BHP	670 l/h	470 l/h	1.5 kW	G 3/4"	160	56/18	0380021	
SMG 1829	BHM	1000 l/h	800 l/h	2.2 kW	G 3/4"	160	56/18	0380022	
SMG 1830	BHG	1330 l/h	1100 l/h	3.0 kW	G 3/4"	160	56/18	0380023	
SMG 1831	BHGP	2000 l/h	1400 l/h	4.0 kW	G 1 1/2"	280	75/22	0380024	
SMG 1831-1	BHGPZ	2400 l/h	2000 l/h	4.0 kW	G 1 1/2"	280	75/22	0380054	
SMG 1832	BHGM	3000 l/h	2400 l/h	5.5 kW	G 1 1/2"	280	75/22	0380025	
SMG 1833	BHGG	4000 l/h	3200 l/h	7.5 kW	G 1 1/2"	280	75/22	0380026	

[1] Pipe connections pipe thread DIN ISO 228-1
* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Series B without overflow valve 3.6





Series size	Pump model	Discharge	Motor power	Dimensions													
				regardless of motor											for IE-3		
				a	a1	b	c	e1	f3	g1	h	k2	s	k	k3	k4	
SMG 1801	BP	30 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1802	BM	55 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1803	BG	80 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1804	BF	105 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1805	BGP	200 l/h	0.25 kW	90	43	112	7	G 1/2"	44	43	71	186	7	396	210	82	
SMG 1806	BGM	300 l/h	0.25 kW	90	43	112	7	G 1/2"	44	43	71	186	7	396	210	82	
SMG 1807	BGG	400 l/h	0.37 kW	100	43	125	8	G 1/2"	44	43	80	206	9.5	493	287	137	
SMG 1808	BHP	670 l/h	0.55 kW	100	49	125	8	G 3/4"	67	65	80	268	9.5	555	287	137	
SMG 1809	BHM	1000 l/h	0.75 kW	100	49	140	10	G 3/4"	67	65	90	278	10	615	337	181	
SMG 1810	BHG	1330 l/h	1.1 kW	125	49	140	10	G 3/4"	67	65	90	278	10	615	337	156	
SMG 1811	BHGP	2000 l/h	1.5 kW	140	65	160	12	G 1"	100	90	100	350	12	714	364	160	
SMG 1811-1	BHGPZ	2400 l/h	1.5 kW	140	65	190	12	G 1"	100	90	112	350	12	697	347	137	
SMG 1812	BHGM	3000 l/h	2.2 kW	140	65	190	12	G 1"	100	90	112	350	12	697	347	137	
SMG 1813	BHGG	4000 l/h	3.0 kW	140	65	216	15	G 1"	100	90	132	370	12	790	420	190	
SMG 1821	BP	30 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1822	BM	55 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1823	BG	80 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1824	BF	105 l/h	0.25 kW	90	36	112	7	G 3/8"	38	43	71	172	7	382	210	82	
SMG 1825	BGP	200 l/h	0.55 kW	100	43	125	8	G 1/2"	44	43	80	206	9.5	493	287	137	
SMG 1826	BGM	300 l/h	0.75 kW	100	43	140	10	G 1/2"	44	43	90	206	10	543	337	181	
SMG 1827	BGG	400 l/h	1.1 kW	125	43	140	10	G 1/2"	44	43	90	206	10	543	337	156	
SMG 1828	BHP	670 l/h	1.5 kW	140	49	160	12	G 3/4"	67	65	100	288	12	652	364	160	
SMG 1829	BHM	1000 l/h	2.2 kW	140	49	190	12	G 3/4"	67	65	112	288	12	635	347	137	
SMG 1830	BHG	1330 l/h	3.0 kW	140	49	216	15	G 3/4"	67	65	132	308	12	728	420	199	
SMG 1831	BHGP	2000 l/h	4.0 kW	178	65	216	15	G 1"	100	90	132	370	12	790	420	153	
SMG 1831-1	BHGPZ	2400 l/h	4.0 kW	178	65	216	15	G 1"	100	90	132	370	12	790	420	153	
SMG 1832	BHGM	3000 l/h	5.5 kW	178	65	216	15	G 1"	100	90	132	370	12	790	420	153	
SMG 1833	BHGG	4000 l/h	7.5 kW	210	65	254	18	G 1"	100	90	160	370	15	864	494	166	

The dimensional specifications of the electric motors vary according to manufacturer, therefore the dimensions of the motor pump units are not binding.

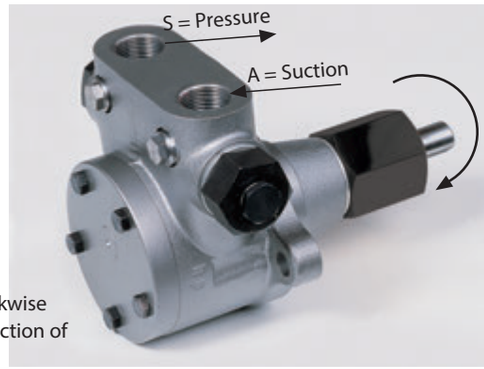
hp-Motor pump groups; Series SMG 3.7

Series VB with integrated overflow valve

Single units with 950 RPM with hp-Industrial pumps

Standard design:
Units up to 9 bar Pressure stage 2 = 2 to 9 bar.
Units up to 30 bar Pressure stage 4 =15 to 40 bar.
Other pressure stages according to model key on page 32, please specify with order.

The pump connections are marked as follows:
A = Suction connection
S = Delivery connection



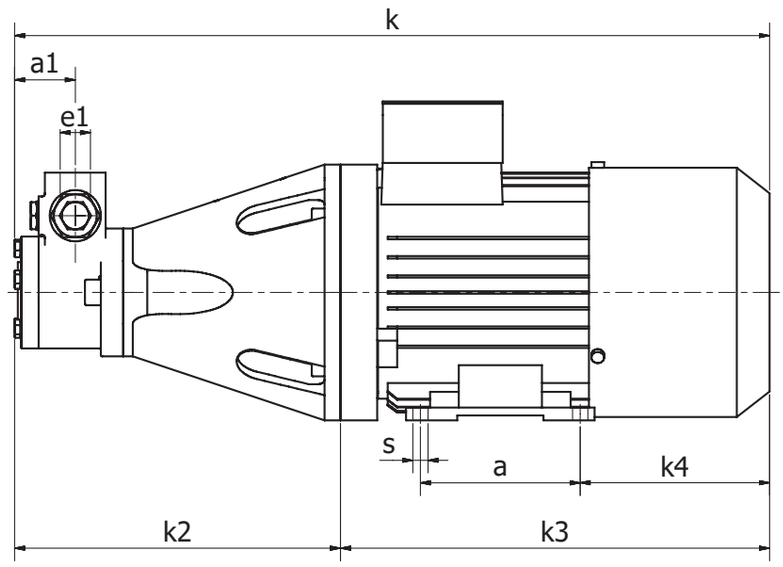
The pumps are designed in the standard version with direction of rotation I = counterclockwise (viewed from the pump shaft). The position of the pump connections depends on the direction of rotation. (See figure)

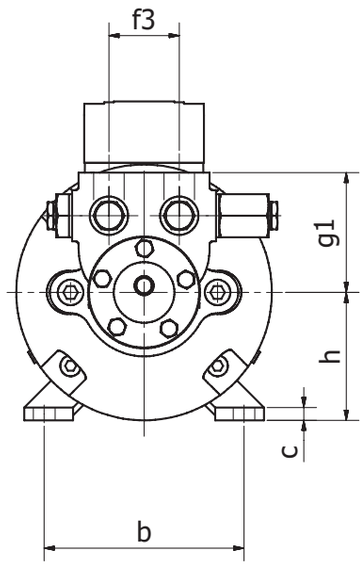
Direction of rotation I = counterclockwise Standard version
For direction of rotation D = clockwise, swap round the connections A = suction and S = delivery.
The direction of rotation can only be changed in the factory.

Series size	Pump model	Discharge at 950 RPM		Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
		at 0 - 9 bar	at 30 bar						
SMG 1841	VBP	30 l/h	–	0.25 kW	G 3/8"	100	25/12	0380027	
SMG 1842	VBM	55 l/h	–	0.25 kW	G 3/8"	100	25/12	0380028	
SMG 1843	VBG	80 l/h	–	0.25 kW	G 3/8"	100	25/12	0380029	
SMG 1844	VBF	105 l/h	–	0.25 kW	G 3/8"	100	25/12	0380030	
SMG 1845	VBGP	200 l/h	–	0.25 kW	G 1/2"	100	38/12	0380031	
SMG 1846	VBGM	300 l/h	–	0.25 kW	G 1/2"	100	38/12	0380032	for max. pressure
SMG 1847	VBGG	400 l/h	–	0.37 kW	G 1/2"	100	38/12	0380033	designed from 9 bar
SMG 1848	VBHP	670 l/h	–	0.55 kW	G 3/4"	160	56/18	0380034	
SMG 1849	VBHM	1000 l/h	–	0.75 kW	G 3/4"	160	56/18	0380035	
SMG 1850	VBHG	1330 l/h	–	1.1 kW	G 3/4"	160	56/18	0380036	
SMG 1851	VBHGP	2000 l/h	–	1.5 kW	G 1"	280	75/22	0380037	
SMG 1851-1	VBHGPZ	2400 l/h	–	1.5 kW	G 1"	280	75/22	0380055	
SMG 1852	VBHGM	3000 l/h	–	2.2 kW	G 1"	280	75/22	0380038	
SMG 1853	VBHGG	4000 l/h	–	3 kW	G 1"	280	75/22	0380039	
SMG 1861	VBP	30 l/h	20 l/h	0.25 kW	G 3/8"	100	25/12	0380040	
SMG 1862	VBM	55 l/h	40 l/h	0.25 kW	G 3/8"	100	25/12	0380041	
SMG 1863	VBG	80 l/h	60 l/h	0.25 kW	G 3/8"	100	25/12	0380042	
SMG 1864	VBF	105 l/h	90 l/h	0.25 kW	G 3/8"	100	25/12	0380043	
SMG 1865	VBGP	200 l/h	160 l/h	0.55 kW	G 1/2"	100	38/12	0380044	
SMG 1866	VBGM	300 l/h	260 l/h	0.75 kW	G 1/2"	100	38/12	0380045	
SMG 1867	VBGG	400 l/h	360 l/h	1.1 kW	G 1/2"	100	38/12	0380046	
SMG 1868	VBHP	670 l/h	470 l/h	1.5 kW	G 3/4"	160	56/18	0380047	p_{max} 30 bar
SMG 1869	VBHM	1000 l/h	800 l/h	2.2 kW	G 3/4"	160	56/18	0380048	
SMG 1870	VBHG	1330 l/h	1100 l/h	3 kW	G 3/4"	160	56/18	0380049	
SMG 1871	VBHGP	2000 l/h	1400 l/h	4 kW	G 1"	280	75/22	0380050	
SMG 1871-1	VBHGPZ	2400 l/h	2000 l/h	4 kW	G 1"	280	75/22	0380056	
SMG 1872	VBHGM	3000 l/h	2400 l/h	5.5 kW	G 1"	280	75/22	0380051	
SMG 1873	VBHGG	4000 l/h	3200 l/h	7.5 kW	G 1"	280	75/22	0380052	

[1] Pipe connections pipe thread DIN ISO 228-1
* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Series VB with integrated overflow valve 3.7





Series size	Pump model	Discharge	Motor power	Dimensions regardless of motor a	a1	b	c	e1	f3	g1	h	k2	s	for IE-3 k	k3	k4
SMG 1841	VBP	30 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1842	VBM	55 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1843	VBG	80 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1844	VBF	105 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1845	VBGP	200 l/h	0.25 kW	90	40	112	7	G 1/2"	44	75	71	186	7	396	210	82
SMG 1846	VBGM	300 l/h	0.25 kW	90	40	112	7	G 1/2"	44	75	71	186	7	396	210	82
SMG 1847	VBGG	400 l/h	0.37 kW	100	40	125	8	G 1/2"	44	75	80	206	9.5	493	287	137
SMG 1848	VBHP	670 l/h	0.55 kW	100	49	125	8	G 3/4"	67	90	80	268	9.5	555	287	137
SMG 1849	VBHM	1000 l/h	0.75 kW	100	49	140	10	G 3/4"	67	90	90	278	10	615	337	181
SMG 1850	VBHG	1330 l/h	1.1 kW	125	49	140	10	G 3/4"	67	90	90	278	10	615	337	156
SMG 1851	VBHGP	2000 l/h	1.5 kW	140	63	160	12	G 1"	80	120	100	350	12	714	364	160
SMG 1851-1	VBHGPZ	2400 l/h	1.5 kW	140	63	160	12	G 1"	80	120	100	350	12	714	364	160
SMG 1852	VBHGM	3000 l/h	2.2 kW	140	63	190	12	G 1"	80	120	112	350	12	697	347	137
SMG 1853	VBHGG	4000 l/h	3.0 kW	140	63	216	15	G 1"	80	120	132	370	12	790	420	199
SMG 1861	VBP	30 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1862	VBM	55 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1863	VBG	80 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1864	VBF	105 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1865	VBGP	200 l/h	0.55 kW	100	40	125	8	G 1/2"	44	75	80	206	9.5	493	287	137
SMG 1866	VBGM	300 l/h	0.75 kW	100	40	140	10	G 1/2"	44	75	90	206	10	543	337	181
SMG 1867	VBGG	400 l/h	1.1 kW	125	40	140	10	G 1/2"	44	75	90	206	10	543	337	156
SMG 1868	VBHP	670 l/h	1.5 kW	140	49	160	12	G 3/4"	67	90	100	288	12	652	364	160
SMG 1869	VBHM	1000 l/h	2.2 kW	140	49	190	12	G 3/4"	67	90	112	288	12	635	347	137
SMG 1870	VBHG	1330 l/h	3.0 kW	140	49	216	15	G 3/4"	67	90	132	308	12	728	420	199
SMG 1871	VBHGP	2000 l/h	4.0 kW	178	63	216	15	G 1"	80	120	132	370	12	790	420	153
SMG 1871-1	VBHGPZ	2400 l/h	4.0 kW	178	63	216	15	G 1"	80	120	132	370	12	790	420	153
SMG 1872	VBHGM	3000 l/h	5.5 kW	178	63	216	15	G 1"	80	120	132	370	12	790	420	153
SMG 1873	VBHGG	4000 l/h	7.5 kW	210	63	254	18	G 1"	80	120	160	370	15	864	494	166

The dimensional specifications of the electric motors vary according to manufacturer, therefore the dimensions of the motor pump units are not binding.

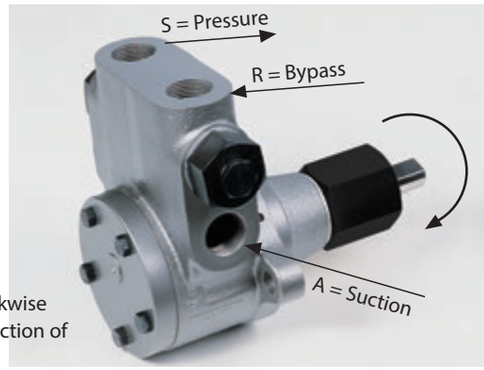
hp-Motor pump groups; Series SMG 3.8

Series VBR with integrated overflow valve and bypass

Single units with 950 RPM with hp-Industrial pumps

Standard design:
Units up to 9 bar Pressure stage 2 = 2 to 9 bar.
Units up to 30 bar Pressure stage 4 =15 to 40 bar.
Other pressure stages according to model key on page 32, please specify with order.

The pump connections are marked as follows:
A = Suction connection
S = Delivery connection



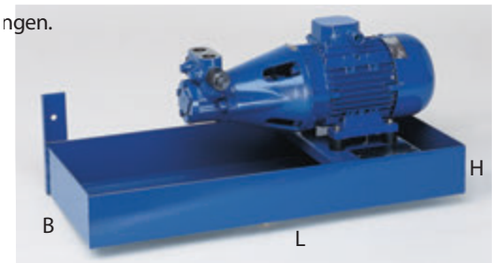
The pumps are designed in the standard version with direction of rotation I = counterclockwise (viewed from the pump shaft). The position of the pump connections depends on the direction of rotation. (See figure)

Direction of rotation I = counterclockwise Standard version
With direction of rotation D = clockwise, swap round the oil connections S = delivery and R = bypass. Suction port A = Suction is on the other side.

Series size	Pump model	Discharge at 950 RPM		Motor power	Connections[1]*	H1 heating Watt	Gear rotor / shaft Ø	Item No.	
		at 0 - 9 bar	at 30 bar						
SMG 1881	VBRP	30 l/h	–	0.25 kW	G 3/8"	100	25/12	0380061	
SMG 1882	VBRM	55 l/h	–	0.25 kW	G 3/8"	100	25/12	0380062	
SMG 1883	VBRG	80 l/h	–	0.25 kW	G 3/8"	100	25/12	0380063	
SMG 1884	VBRF	105 l/h	–	0.25 kW	G 3/8"	100	25/12	0380064	
SMG 1885	VBGRP	200 l/h	–	0.25 kW	G 1/2"	100	38/12	0380065	
SMG 1886	VBGRM	300 l/h	–	0.25 kW	G 1/2"	100	38/12	0380066	for max. pressure
SMG 1887	VBGRG	400 l/h	–	0.37 kW	G 1/2"	100	38/12	0380067	designed from 9 bar
SMG 1888	VBHRP	670 l/h	–	0.55 kW	G 3/4"	160	56/18	0380068	
SMG 1889	VBHRM	1000 l/h	–	0.75 kW	G 3/4"	160	56/18	0380069	
SMG 1890	VBHRG	1330 l/h	–	1.1 kW	G 3/4"	160	56/18	0380070	
SMG 1891	VBHGRP	2000 l/h	–	1.5 kW	G 1[2]	280	75/22	0380071	
SMG 1891-1	VBHGRPZ	2400 l/h	–	1.5 kW	G 1[2]	280	75/22	0380094	
SMG 1892	VBHGRM	3000 l/h	–	2.2 kW	G 1[2]	280	75/22	0380072	
SMG 1893	VBHGRG	4000 l/h	–	3.0 kW	G 1[2]	280	75/22	0380073	
SMG 1881-25	VBRP	30 l/h	20 l/h	0.25 kW	G 3/8"	100	25/12	0380074	
SMG 1882-25	VBRM	55 l/h	40 l/h	0.25 kW	G 3/8"	100	25/12	0380075	
SMG 1883-25	VBRG	80 l/h	60 l/h	0.25 kW	G 3/8"	100	25/12	0380076	
SMG 1884-25	VBRF	105 l/h	90 l/h	0.25 kW	G 3/8"	100	25/12	0380077	
SMG 1885-25	VBGRP	200 l/h	160 l/h	0.55 kW	G 1/2"	100	38/12	0380078	
SMG 1886-25	VBGRM	300 l/h	260 l/h	0.75 kW	G 1/2"	100	38/12	0380079	
SMG 1887-25	VBGRG	400 l/h	360 l/h	1.1 kW	G 1/2"	100	38/12	0380080	
SMG 1888-25	VBHRP	670 l/h	470 l/h	1.5 kW	G 3/4"	160	56/18	0380081	p_{max} 30 bar
SMG 1889-25	VBHRM	1000 l/h	800 l/h	2.2 kW	G 3/4"	160	56/18	0380082	
SMG 1890-25	VBHRG	1330 l/h	1100 l/h	3 kW	G 3/4"	160	56/18	0t380083	
SMG 1891-25	VBHGRP	2000 l/h	1400 l/h	4 kW	G 1[2]"	280	75/22	0380084	
SMG 1891-1-25	VBHGRPZ	2400 l/h	2000 l/h	4 kW	G 1[2]"	280	75/22	0380095	
SMG 1892-25	VBHGRM	3000 l/h	2400 l/h	5.5 kW	G 1[2]"	280	75/22	0380085	
SMG 1893-25	VBHGRG	4000 l/h	3200 l/h	7.5 kW	G 1[2]"	280	75/22	0380086	

Accessories
"WA" = oil pan with anti-vibration pads for wall mounting
"LH" = leakage detector with WHG and TÜV permit
also for retrofitting already installed units according to the new stipulations.

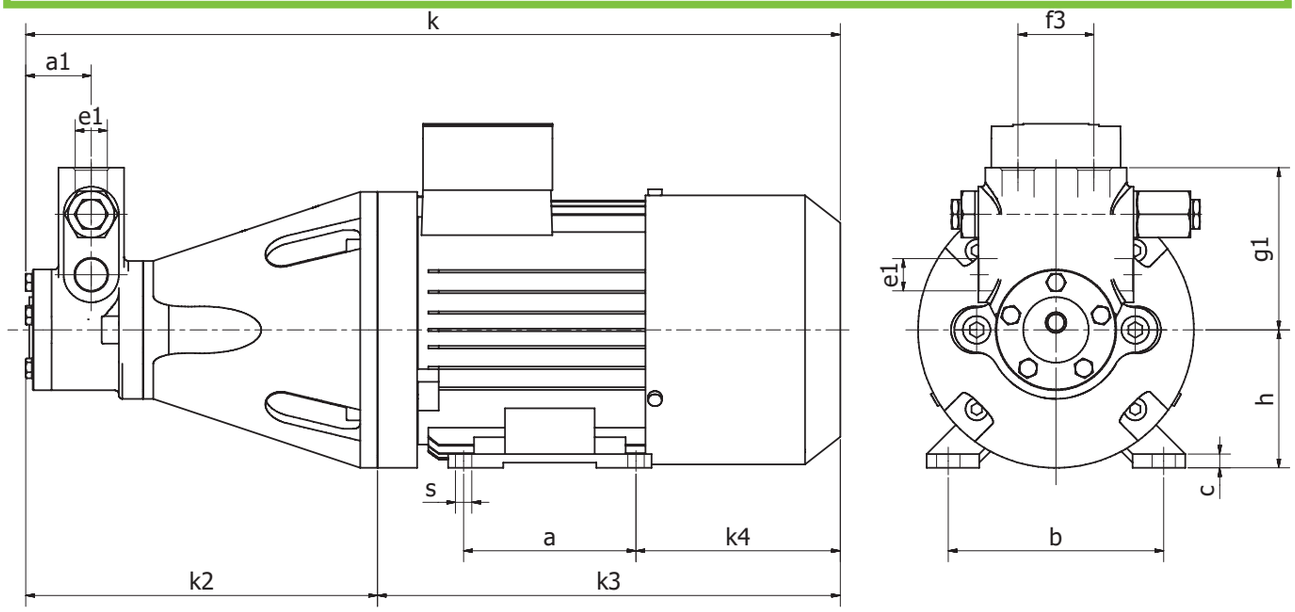
ngen.



Gear rotor / shaft Ø	Oil pan dimensions mm			Item No.
	L	B	H	
25/12 + 38/12	600	270	80	0820502
56/18	840	270	80	0820504
75/22	1050	360	80	0820506
Leakage detector Model LMS at 230 V				0720701 -1
Leakage detector Model LMW				0720705 -1

[1] Pipe connections pipe thread DIN ISO 228-1
[2] For SMG 1891 - 1893, SMG 1891 - 25 - 1893 - 25 the side suction port is A = G 1 1/2"
* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Series VBR with integrated overflow valve and bypass 3.8



Series size	Pump model	Discharge	Motor power	Dimensions regardless of motor a	a1	b	c	e1	f3	g1	h	k2	s	for IE-3 k	k3	k4
SMG 1881	VBRP	30 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1882	VBRM	55 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1883	VBRG	80 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1884	VBRF	105 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1885	VBGRP	200 l/h	0.25 kW	90	40	112	7	G 1/2"	44	75	71	186	7	396	210	82
SMG 1886	VBGRM	300 l/h	0.25 kW	90	40	112	7	G 1/2"	44	75	71	186	7	396	210	82
SMG 1887	VBGRG	400 l/h	0.37 kW	100	40	125	8	G 1/2"	44	75	80	206	9.5	493	287	137
SMG 1888	VBHRP	670 l/h	0.55 kW	100	49	125	8	G 3/4"	67	90	80	268	9.5	555	287	137
SMG 1889	VBHRM	1000 l/h	0.75 kW	100	49	140	10	G 3/4"	67	90	90	278	10	615	337	181
SMG 1890	VBHRG	1330 l/h	1.1 kW	125	49	140	10	G 3/4"	67	90	90	278	10	615	337	156
SMG 1891	VBHGRP	2000 l/h	1.5 kW	140	63	160	12	G 1"[2)]	80	120	100	350	12	714	364	160
SMG 1891 -1	VBHGRPZ	2400 l/h	1.5 kW	140	63	160	12	G 1"[2)]	80	120	100	350	12	714	364	160
SMG 1892	VBHGRM	3000 l/h	2.2 kW	140	63	190	12	G 1" [2)]	80	120	112	350	12	697	347	137
SMG 1893	VBHGRG	4000 l/h	3.0 kW	140	63	216	15	G 1" [2)]	80	120	132	370	12	790	420	199
SMG 1881-25	VBRP	30 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1882-25	VBRM	55 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1883-25	VBRG	80 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1884-25	VBRF	105 l/h	0.25 kW	90	36	112	7	G 3/8"	38	67	71	172	7	382	210	82
SMG 1885-25	VBGRP	200 l/h	0.55 kW	100	40	125	8	G 1/2"	44	75	80	206	9.5	493	287	137
SMG 1886-25	VBGRM	300 l/h	0.75 kW	100	40	140	10	G 1/2"	44	75	90	206	10	543	337	181
SMG 1887-25	VBGRG	400 l/h	1,1 KW	125	40	140	10	G 1/2"	44	75	90	206	10	543	337	156
SMG 1888-25	VBHRP	670 l/h	1,5 KW	140	49	160	12	G 3/4"	67	90	100	288	12	652	364	160
SMG 1889-25	VBHRM	1000 l/h	2,2 KW	140	49	190	12	G 3/4"	67	90	112	288	12	635	347	137
SMG 1890-25	VBHRG	1330 l/h	3,0 KW	140	49	216	15	G 3/4"	67	90	132	308	12	728	420	199
SMG 1891-25	VBHGRP	2000 l/h	4,0 KW	178	63	216	15	G 1" [2)]	80	120	132	370	12	790	420	153
SMG 1891-1-25	VBHGRPZ	2400 l/h	4,0 KW	178	63	216	15	G 1" [2)]	80	120	132	370	12	790	420	153
SMG 1892-25	VBHGRM	3000 l/h	5.5 KW	178	63	216	15	G 1" [2)]	80	120	132	370	12	790	420	153
SMG 1893-25	VBHGRG	4000 l/h	7.5 KW	210	63	254	18	G 1"[2)]	80	120	160	370	15	864	494	166

The dimensional specifications of the electric motors vary according to manufacturer, therefore the dimensions of the motor pump units are not binding.