

2.4 ProMinent® Sigma/ 2 Piston Metering Pumps

2.4.1 Technical Data - ProMinent Sigma Piston Metering Pumps

Pump type <u>SBKaHK</u>	at 50 Hz				at 60 Hz				Shipping Weight kg		
	bar	l/h	ml/ stroke	strokes/ min.	bar	l/h	strokes/ min.	mWG			
32002 SST	320	1.9	0.46	71	320	2.3	84	5	approx. 50% of max permissible pressure	1/4"	24
23004 SST	230	4.0	0.52	125	230	4.8	154	5		1/4"	24
10006 SST	100	6.4	0.55	195	100	6.5	200	5		1/4"	24
14006 SST	140	6.1	1.42	71	140	7.1	84	4		1/4"	24
10011 SST	100	11.0	1.43	125	100	13.1	154	4		1/4"	24
05016 SST	50	16.7	1.43	195	50	17.1	200	4		1/4"	24
07012 SST	70	12.4	2.90	71	70	14.8	85	5		1/4"	24
04522 SST	45	22.5	2.91	125	45	26.7	153	4		1/4"	24
02534 SST	25	34.1	2.92	195	25	35.0	200	4		1/4"	24
04022 SST	40	22.4	5.26	71	40	26.5	84	4		3/8"	25
02541 SST	25	41.5	5.37	125	25	49.2	154	4		3/8"	25
01264 SST	12	64.0	5.45	196	12	65.2	200	4		3/8"	25

Materials in Contact with Chemicals

Material	Liquid End	Suction / Discharge connection	Seals	Valve Balls	Ball Seat
SST	Stainless steel 1.4571 / 1.4404	Stainless steel 1.4571 / 1.4404	PTFE/PTFE with graphite	Ceramic	Stainless steel 1.4571 / 1.4404

Motor Data

3 ph IP55	400V	50 Hz	0.18 kW	0.7/1.1 A	S
1 ph AC	230V	50 Hz	0.18 kW	1.7/1.5 A	M
3 ph EXe or EXde	400V	50 Hz	0.18 kW	0.7/1.1 A	L
3 ph EXe or EXde	400V	60 HZ	0.18 kW	0.6/1.0 A	P
1 ph AC	115V	60 HZ	0.18 kW	3.3 A	

The ProMinent Sigma basic version is also available with a standard motor flange (DIN ISO/NEMA standards). The electrical connection data specified here apply to the standard motor supplied.

2.4.2 Sigma HK Spare Parts Kits

Spare parts kits Sigma HK

Consisting of: 1 ceramic dosing plunger, 4 valve balls, 4 ball seat discs, 2 ball PTFE/graphite ball seals, 2 plunger guides, 14 flat seals, 2 O-rings.

Applies to identity code: 32002, 23004, 10006	Part No.
FK 0.8 for Sigma HK	1001572
Applies to identity code: 14006, 10011, 05016	
FK 12.5 for Sigma HK	910470
Applies to identity code: 07012, 04522, 02534	
FK 25 for Sigma HK	910471
Applies to identity code: 04022, 02541, 01264	
FK 50 for Sigma HK	910472

2.4 ProMinent® Sigma/ 2 Piston Metering Pumps



2.4.3 Identity Code - ProMinent Sigma Piston Metering Pumps - Basic version (S2Ba)

SBKa

Sigma Basic Type (SBKaHK)

Price

HK	Main displacement component, piston
	Pump type: (figures 1 - 3 = back pressure [bar], figures 4 + 5 = feed rate [l/h])
32002	320 bar, 1.9 l/h
23004	230 bar, 4.0 l/h
10006	100 bar, 6.4 l/h
14006	140 bar, 6.1 l/h
10011	100 bar, 11.0 l/h
05016	50 bar, 16.7 l/h
07012	70 bar, 12.4 l/h
04522	45 bar, 22.5 l/h
02534	25 bar, 34.1 l/h
04022	40 bar, 22.4 l/h
02541	25 bar, 41.5 l/h
01264	12 bar, 64,2 l/h
SS	Liquid end materials: Stainless steel
T	Seal Material: PTFE seal
4	Displacement component: Piston (oxide ceramic)
0	Liquid end version: No spring
1	With 2 valve springs, Hastelloy C4, 0.1 bar
0	Hydraulic connection: Standard according to technical data
0	Version: With ProMinent® (standard)
1	Without ProMinent® logo
S	Electrical power supply: 3 ph. 230 V/400 V 50/60 Hz, 0.18 kW
M	1 ph. AC, 230 V/50/60 Hz, 0.18 kW
N	1 ph. AC 115 V 60 Hz, 0.18 kW
L	3 ph. 230 V/400 V, 50Hz, (EExe, EExde) } See Enclosure Rating
P	3 ph. 230 V/400 V, 60Hz, (EExe, EExde) } See Enclosure Rating
R	3ph, variable speed motor 4 pol. 230/400 V
V (0)	var. speed motor with integral speed control 230/1/50
0	Enclosure rating: IP 55 (standard)
1	Exe motor version (ATEX-T3)
2	Exde motor version (ATEX-T4)
0	Stroke sensor: No stroke sensor (standard)
2	Pacing relay (reed relay)
3	Stroke sensor (Namur) for hazardous locations
0	Stroke length adjustment: Manual (standard)
1	With stroke positioning motor, 230V/50/60 Hz
2	With stroke positioning motor, 115V/50/60 Hz
4	With stroke control motor, 4...20 mA 230 V/50/60Hz
6	With stroke control motor, 4...20 mA 115 V/50/60Hz

SBKa

HK

23004

SS

T

4

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0

S

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0

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2.4 ProMinent® Sigma/ 2 Piston Metering Pumps

2.4.4 Identity Code - ProMinent Sigma Pumps - Piston Metering Pumps (S2Ca)

SCKa

Sigma Control Type (SCKaHK)

HK	Main drive, piston
	Pump type: (figures 1 - 3 = back pressure [bar], figures 4 + 5 = feed rate [l/h])
32002	320 bar, 2.3 l/h
23004	230 bar, 4.8 l/h
10006	100 bar, 6.4 l/h
14006	140 bar, 7.1 l/h
10011	100 bar, 13.1 l/h
05016	50 bar, 16.7 l/h
07012	70 bar, 14.8 l/h
04522	45 bar, 26.7 l/h
02534	25 bar, 34.1 l/h
04022	40 bar, 26.5 l/h
02541	25 bar, 49.2 l/h
01264	12 bar, 64,2 l/h
SS	Liquid end materials: Stainless steel
T	Seal material: PTFE seal
4	Displacement component: Pistons (oxide ceramic)
0	Liquid end version: No spring (standard)
1	With 2 valve springs, Hastelloy C 4, 0.1 bar
0	Hydraulic connection: Standard threaded connector (according to technical data)
0	Version: With ProMinent® logo
1	Without ProMinent® logo
U	Electrical power supply: 1 ph 200-230V ±10 %, 50/60 Hz
C	Cable and plug: 2 m Australian
0	Relays: No relay
1	With fault indicating relay (N/C)
3	With fault indicating relay (N/O)
4	As 1 with pacing relay
5	As 3 with pacing relay
0	Control variant: Manual + external with pulse control
1	Manual + external + pulse control + analogue
4	As 1 + Process Timer
5	As 3 + Process Timer
0	Access code: No access code
1	With access code
0	Metering monitor: Input with pulse evaluation
1	input with permanent contact evaluation
0	Stroke length adjustment: Manual
P*	Prepack Option See options

Note: Prepack option P*
P2 - includes a 2.0m control cable
P5 - includes a 5.0m control cable
PX - includes a 10.0m control cable

SCKa HK 23004 SS T 4 0 0 0 U C 1 0 0 0 0 P2