

SKS Series Pump | Submittal Data

Submittal No: 301-2323-Q | Model: SKS1213B | RPM: 1760 | HP: 100HP | Effective: December 22, 2022 | Supersedes: October 21, 2019

JOB: _____

REPRESENTATIVE: _____

ENGINEER: _____

CONTRACTOR: _____

PRODUCT DATA

ITEM NO. _____

MODEL NO. _____ VOLTAGE _____

IMPELLER DIA. _____ WEIGHT _____

GPM _____ PUMP/MOTOR _____

HEAD/FT _____ FREQUENCY _____

RPM 1760 HP 100 PHASE _____

SUPPORT STAND OPTION YES NO
(Ductile Iron ASTM A536-84 Grade 65-45-12)

DIMENSIONS

Model No. | 1213B
Flange Size (Suction x Discharge) | 12 x 12 (305 x 305)

HORSEPOWER	100
MOTOR FRAME TEFC	405CZ
MOTOR FRAME ODP	404CZ
WEIGHT WITHOUT OPTIONAL STAND LBS (KG)	3369 (1528)
WEIGHT WITH OPTIONAL STAND LBS (KG)	3680 (1669)
FLANGE SIZE ASA	12 (305)
A*	ANSI CLASS 125: 30.25 (768)
	ANSI CLASS 250: 31.00 (787)
B*	ANSI CLASS 125: 24.25 (616)
	ANSI CLASS 250: 25.00 (635)
C	18.87 (479)
D	51.26 (1302)
E MAX	38.53 (979)
F	11.24 (285)
G	16.66 (423)
J DIA	21.42 (544)
K	18.65 (474)
L	35.31 (897)
M	16.61 (422)
N	8.00 (203)
P	28.00 (711)
Q	1.13 (29)
R	24.00 (610)
S	4
T	5/8-11 UNC-2B

*A & B Dimensions apply for all pump sizes.

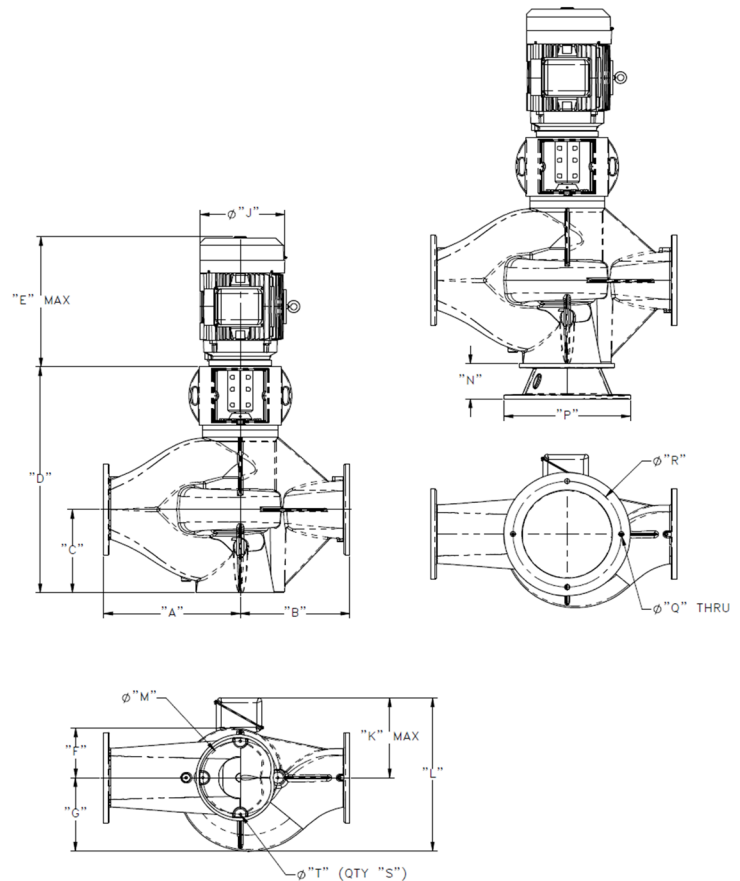
English dimensions are in inches. Metric dimensions are in millimeters.
Metric data is presented in (). Do not use for construction purposes unless certified.

OPERATING SPECIFICATIONS

FLANGE	PRESSURE	TEMPERATURE
ANSI Class 125	175 PSIG* (1210 KPA)	250°F (120°C)
ANSI Class 250	300 PSIG** (2070 KPA)	250°F (120°C)

* In accordance with ANSI Standard B16.1 Class 125

** In accordance with ANSI Standard B16.1 Class 250



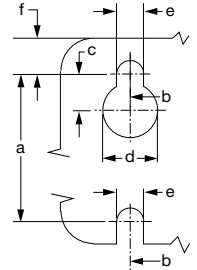
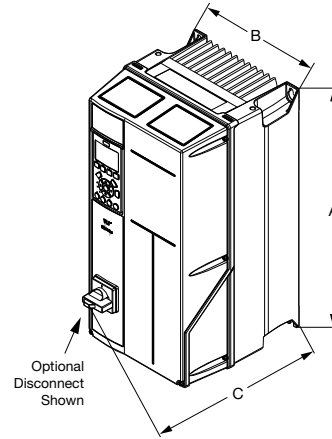
MATERIALS OF CONSTRUCTION		CASING	IMPELLER	WEAR RING	SHAFT	COUPLING	MECHANICAL SEAL	SEAL FLUSH LINE	SUPPORT STAND
STANDARD CONSTRUCTION	BRONZE FITTED	Ductile Iron ASTM A536-84 Grade:65-45-12	Bronze ASTM B583-836	None	St. Steel AISI 416 ASTM A582	Aluminum Alloy 6061-T6	Ceramic / EPT	Copper	N/A
OPTIONAL		N/A	CF	Bronze ASTM B584-932 SAE660	N/A	N/A	Tungsten Carbide / EPT	CF	Ductile Iron ASTM A536-84 Grade 65-45-12
STANDARD CONSTRUCTION	ALL IRON	Ductile Iron ASTM A536-84 Grade:65-45-12	Cast Iron ASTM A48 Class 30A	None	St. Steel AISI 416 ASTM A582	Aluminum Alloy 6061-T6	Ceramic / EPT	Stainless Steel	N/A
OPTIONAL		N/A	CF	N/A	N/A	N/A	Tungsten Carbide / EPT	CF	Ductile Iron ASTM A536-84 Grade 65-45-12

N/A - Not Available

CF - Consult Factory

DRIVE DATA

PROTOCOLS (Standard)	BACnet, Modbus RTU, N2 Metasys, FLN Apogee, FC Protocol
PROTOCOLS (Optional)	LonWorks® DeviceNet Profibus
ENCLOSURE	NEMA Type 1 / IP21 NEMA Type 12 / IP55
I/O (Standard)	6 Digital Inputs / 2 Digital Outputs 1 Analog Current Output / 2 Analog Inputs 2 Pulse Inputs 2 Form C Relays
ADDITIONAL CONTROL OPTIONS	None General Purpose I/O Relay Card 24VDC Supply Analog I/O
DISCONNECT SWITCH	Mechanical Fused
EMC/RFI CONTROL	Integrated filter designed to meet EN61800-3
HARMONIC SUPPRESSION	Dual DC-link chokes (Equivalent: 5% AC line reactor) Supporting IEEE 519-1992 requirements
COOLING	Fan-cooled through back channel
AMBIENT TEMPERATURE	-10°C to 45°C up to 1000 meters above sea level -14°F to 113°F up to 3300 feet above sea level



Frames A2 through D2 (4x mounts)

CONTROL CONNECTIONS

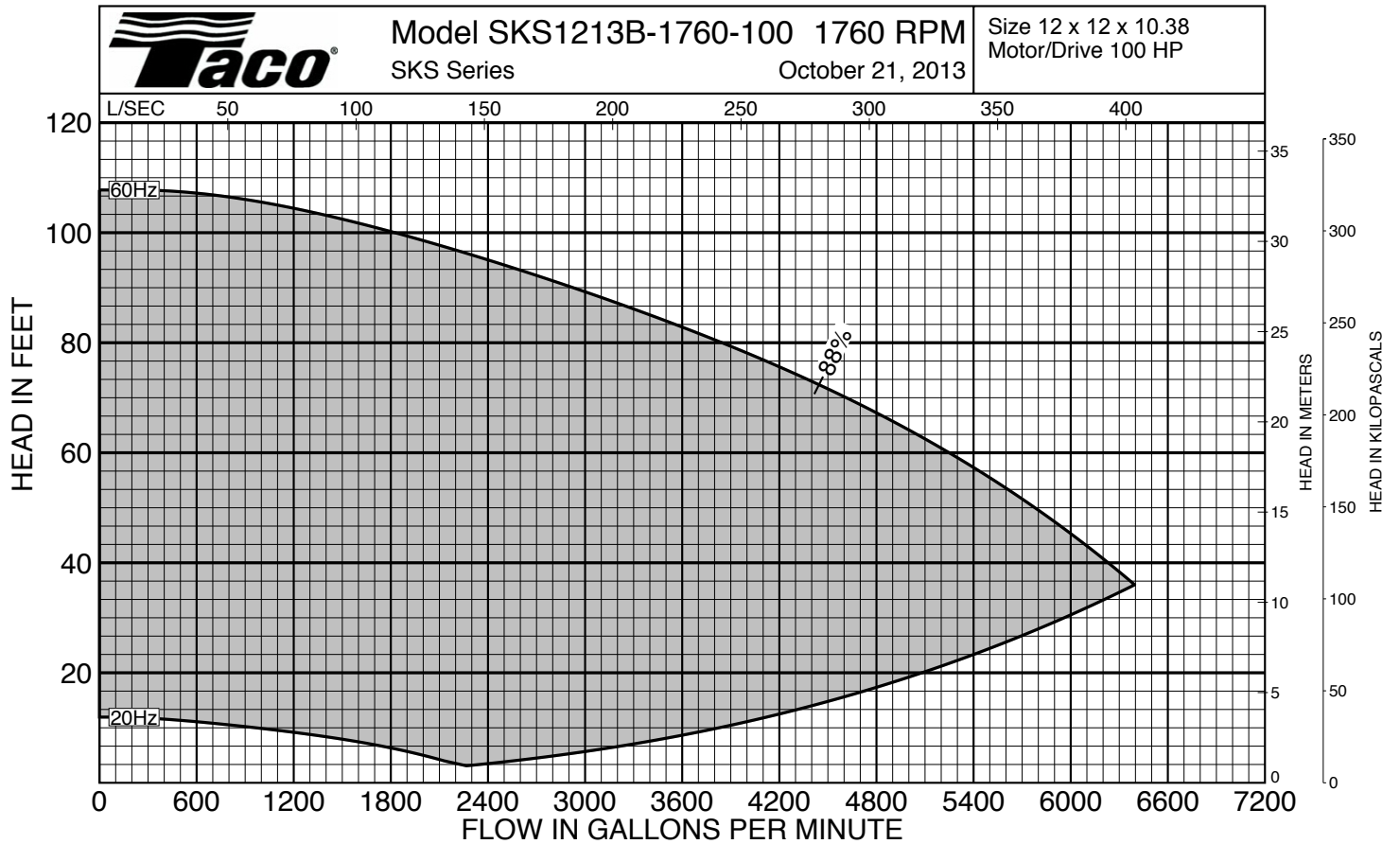
Analog input (follower signal)	2; selectable voltage or current, direct and inverse acting
Digital inputs (programmable)	6 (2 can be used as digital outputs)
Analog outputs (programmable)	1; 0/4 to 20 mA
Relay outputs (programmable)	2 standard Form C 240 V AC, 2 A; 1 or 3 additional optional
Auxiliary voltage	+24 V DC, maximum 200 mA
Communication port	1 RS485, 1 USB

MAXIMUM DIMENSIONS & WEIGHTS

Frame Size	Power Range – HP (kW)			NEMA Type 1 / IP21 Inches (mm)			NEMA Type 12 / IP55 (IP54 D & E) – Inches (mm)			Max Weight Lbs (Kg)
	200V - 240V	380V - 480V	525V - 600V	A	B	C	A	B	C	
A2	1.5 (1.1) - 3 (2.2)	1.5 (1.1) - 5 (4.0)	—	19.1 (485)	5.1 (130)	9.6 (245)	N/A	N/A	N/A	30 (14)
A3	4 (3.0) - 5 (4.0)	7.5 (5.5) - 10 (7.5)	1.5 (1.1) - 10 (7.5)	19.1 (485)	5.1 (130)	9.6 (245)	N/A	N/A	N/A	30 (14)
A5	1.5 (1.1) - 5 (4.0)	1.5 (1.1) - 10 (7.5)	1.5 (1.1) - 10 (7.5)	N/A	N/A	N/A	16.5 (420)	9.5 (242)	9.6 (243)	35 (16)
B1	7.5 (5.5) - 15 (11.0)	15 (11.0) - 25 (18.0)	15 (11.0) - 25 (18.0)	18.9 (480)	9.5 (242)	12.1 (308)	18.9 (480)	9.5 (242)	12.1 (308)	65 (30)
B2	20 (15.0) - 20 (15.0)	30 (22.0) - 40 (30.0)	30 (22.0) - 40 (30.0)	25.6 (650)	9.5 (242)	12.1 (308)	25.6 (650)	9.5 (242)	12.1 (308)	70 (32)
C1	25 (18.0) - 40 (30.0)	50 (37.0) - 75 (55.0)	50 (37.0) - 75 (55.0)	26.9 (680)	12.1 (308)	14.1 (359)	26.9 (680)	12.1 (308)	14.1 (359)	100 (45)
C2	50 (37.0) - 60 (45.0)	100 (75.0) - 125 (90.0)	100 (75.0) - 125 (90.0)	30.3 (770)	14.6 (370)	14.9 (379)	30.3 (770)	14.6 (370)	14.9 (379)	143 (65)
D1	N/A	150 (110.0) - 200 (132.0)	150 (132.0) - 200 (160.0)	47.5 (1208)	16.5 (420)	16.3 (414)	47.5 (1208)	16.5 (420)	16.3 (414)	229 (104)
D2	N/A	250 (160.0) - 350 (250.0)	250 (200.0) - 400 (400.0)	62.5 (1588)	16.5 (420)	16.4 (417)	62.5 (1588)	16.5 (420)	16.4 (417)	364 (165)

BACKPLATE MOUNTING HOLE DIMENSIONS – Inches (mm)

Frame Size	a	b	c	d	e	f	Frame Size	a	b	c	d	e	f
A2	17.62 (447.5)	4.33 (110)	0.32 (8)	0.43 (11)	0.22 (5.5)	0.35 (9)	C1	25.51 (648.0)	10.71 (272)	0.49 (12.5)	0.75 (19)	0.35 (9)	0.39 (10)
A3	17.62 (447.5)	4.33 (110)	0.32 (8)	0.43 (11)	0.22 (5.5)	0.35 (9)	C2	29.09 (739.0)	13.15 (334)	0.49 (12.5)	0.75 (19)	0.35 (9)	0.39 (10)
A5	15.82 (401.7)	8.46 (215)	0.32 (8)	0.47 (12)	0.26 (6.5)	0.25 (6.5)	D1	45.4 (1154)	12.00 (304)	N/A	N/A	0.40 (11)	1.00 (25)
B1	17.87 (453.9)	8.27 (210)	0.47 (12)	0.75 (19)	0.35 (9)	0.35 (9)	D2	60.4 (1535)	12.00 (304)	N/A	N/A	0.40 (11)	1.00 (25)
B2	24.57 (624.0)	8.27 (210)	0.47 (12)	0.75 (19)	0.35 (9)	0.35 (9)							



COMMENTS