

A.O.SMITH

**Pump Motors for Swimming Pools,
Spas and Jetted Tubs**

Bulletin 1082



A Deeper Pool of Resources

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Warranty Policy

All motors of A. O. Smith's carry warranties. The nature and length of the warranty will depend upon the motor and are set forth below.

Partial Motors. Partial motors are warranted against defects in materials and workmanship observed prior to any assembly of the motor parts by the Purchaser provided that such claim is made within 30 days of its observation and no later than one year of the date Smith manufactured the partial motor. **The Company makes no warranty and disclaims all warranties as to latent defects.**

Pool motors. Pool motors are warranted to be free of defects in workmanship and materials for a period of 24 months from the date of installation or 36 months from the date of manufacture, WHICHEVER COMES FIRST. These motors must have the A. O. Smith two-compartment design or must be the 1081 designated 'Centurion' brand.

Speed Engineered motors carry a two-year warranty from the date of manufacture and a one-year warranty from the date of installation.

E-Plus® motors carry a two-year warranty from the date of manufacture and a one-year warranty from the date of installation.

E-Plus® 3 motors carry a three-year warranty from the date of manufacture and a two-year warranty from the date of installation.

All other A. O. Smith Motors in this catalog are warranted to be free of defects in workmanship and materials for a period of 12 months from the date of installation or 24 months from the date of manufacture, WHICHEVER COMES FIRST.

THIS WARRANTY IS A LIMITED WARRANTY AND SHALL BE IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO OTHER WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. The liability of the Company arising out of its supply of said products, or their use, shall not in any case exceed the cost of correcting defects in the products as above set forth. The Company shall not be liable for any costs or damage incurred by its customers in the removal or replacement of defective products from units in which the products have been assembled.

IN NO EVENT SHALL THE COMPANY BE LIABLE FOR LOSS OF PROFITS, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES.

This warranty does not apply if the failure is caused or contributed to by any of the following: improper handling, improper storage, improper installation, abuse, unsuitable application of the product, lack of reasonable and necessary maintenance, improper packaging for return, or repairs made or attempted by other than the Company, which in the judgment of the Company adversely affects the product's performance or reliability.



No products shall be returned to the Company without its prior consent and shall be properly packaged and shipped prepaid Point of Shipment, to the Company's Authorized Service Center. The Company cannot assume responsibility or accept invoices for unauthorized repairs to its components, even though the motors may have been defective.

Cover photo courtesy of Natural Springs Pools, Tampa, Florida.

A.O. Smith Pump to Motor Replacement Guide

Name of Pump OEM or Brand Name	Group Class
Americana, American Eagle	.ST
American Ultra Flow or Power Pump	.SQ
Aqua-Flo C-Face	.SK
Aqua-Flo Dominator	.SQ
Arneson Pool Sweep	.PS
Hayward Super & Super II	.ST
Hayward Max-Flo	.ST
Hydrotech	.ST
ITT Marlow Argonaut	.ST
Jacuzzi Bronze, Plastic	.SK
Jacuzzi Magnum	.ST
Pac Fab Challenger	.SQ
Pac Fab Hydro Pump	.SK
Polaris Vac-Sweep	.PS
Premier/Springwater	.SK
Starite Duraglas or Maxiglas	.SQ
Speck	.ST
Wet Institute	.SK

Group "SK"

Hp	Service Factor	Voltage	Stock Number	Conservationist
1/2	1.6	115/230	SK1052	CK1052
3/4	1.5	115/230	SK1072	CK1072
1	1.5	115/230	SK1102	CK1102
1.5	1.3	115/230	SK1152	SK1152
2	1.3	230	SK1202	SK1202
3	1.115	230	SK1302	SK1302

Group "SP"

Hp	Voltage	Brand	Stock Number
3/4	115/230	Arneson	SPS1052
3/4	115/230	Arneson	RPS1052
3/4	115/230	Polaris	PL1072

Group "SQ"

Hp	Service Factor	Voltage	Stock Number	Conservationist
1/2	1.9	115/230	SQ1052	QC1052
1/2	1.3	115/230	USQ1052	
3/4	1.65	115/230	SQ1072	QC1072
3/4	1.27	115/230	USQ1072	UQC1072
1	1.65	115/230	SQ1102	QC1102
1	1.25	115/230	USQ1102	UQC1102
1-1/2	1.47	208-230	SQ1152	SQ1152
1-1/2	1.1	115/230	USQ1152	UQC1152
2	1.3	230	SQ1202	SQ1202
2	1.1	208-230	USQ1202	USQ1202
2-1/2	1.0	230	USQ1252	USQ1252
3	1.15	230	SQ1302	SQ1302

Group "ST"

Hp	Service Factor	Voltage	Stock Number	Conservationist
1/2	1.6	115/230	ST1052	CT1052
3/4	1.5	115/230	ST1072	CT1072
3/4	1.0	115/230	UST1072	
1	1.5	115/230	ST1102	CT1012
1	1.0	115/230	UST1102	
1-1/2	1.3	115/230	ST1152	ST1152
1-1/2	1.0	115/230	UST1152	
2	1.3	230	ST1202	ST1202
2	1.0	115/230	UST1202	
2-1/2	1.0	230	UST1252	
3	1.15	230	ST1302	ST1302

Above Ground and Spa Applications

Hp	Service Factor	Voltage	Stock Number
1/2	1.0	115	BN23SS
3/4•1/8	1.0	115	BN36*
3/4	1.0	115	BN24SS
1•1/6	1.0	115	BN37*
1	1.0	115	BN25SS
1	1.0	115	ODB1102**
1	1.0	115	ODB1102VI**
1.5	1.0	115/230	TBT1152D
1.5•1/6	1.0	115	TBT1152VI*
1.5•1/6	1.0	230	TBS2152H*

Notes:

*2 Speed

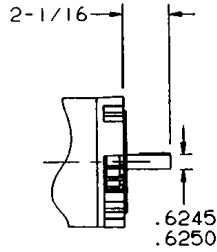
**Doughboy Replacement

Please contact your local distributor with motor model number, frame size, horsepower, service factor, voltage and pump OEM model number for proper spa or above ground motor identification.

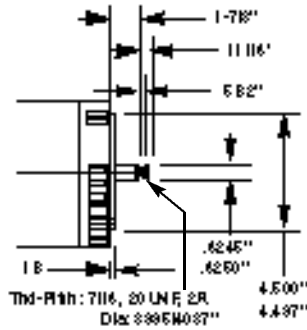
Please Note:

Every effort has been made to ensure the accuracy of this guide. A.O. Smith cannot, however, accept responsibility for ultimate selection. OEM design changes and variations from one OEM to another may result in different construction, dimensions or operating characteristics. It is your responsibility to confirm the acceptability of the suggested replacement.

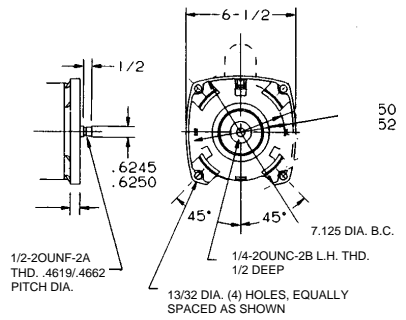
Mounting Dimensions



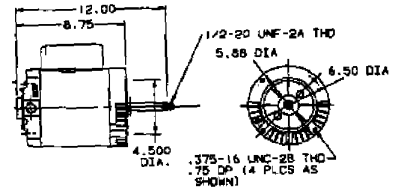
56C



56J



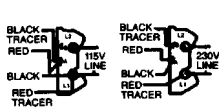
SQUARE FLANGE



ARNESON "POOL SWEEP" ABOVE GROUND BASE MOUNT

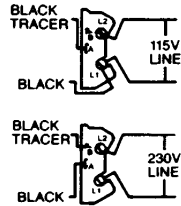
PL1072

Connection Diagrams



CONNECTIONS SHOWN ARE FOR C.C.W. ROTATION FROM END OPP. SHAFT EXT. FOR C.W. ROTATION, INTERCHANGE RED & RED TRACER LEADS.

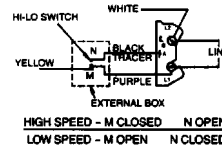
CD #22



CD #23

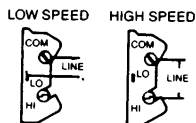


CD #24

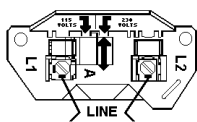


CD #25

CD #29-CD #34

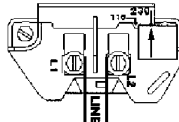


CD #41



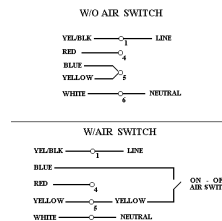
230V. CONNECTION IS SHOWN. TO CHANGE TO 115V, MOVE THE BLACK PLUG TO ALIGN THE ARROWS AT THE 115V. LOCATION.

OLD CD #125

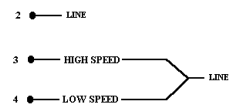


230V. CONNECTION IS SHOWN. TO CHANGE TO 115V, MOVE THE BLACK PLUG TO ALIGN THE ARROWS AT THE 115V. LOCATION.

NEW CD #125



CD #131



CD #132

Above Ground Swimming Pool Pump Motors

Jetted Tub/Spa/Above Ground Swimming Pool Pump Motors • Split Phase & Capacitor Start • Single Phase • Dripproof • Ball Bearing • Rigid Base & No Base • 3450, 2850 and 3450/1725 RPM • 1/2 thru 4 HP SPL

Features: 12 & 3 O'clock Conduit Entries • 40°C Ambient • Class B Insulated • CW Non-Reversible
 • Through Bolt Mount • 48/56 Base Mounting • 3-1/2" Shaft Height • Four Thru Bolts on a 5.146 Bolt Circle

Applications: Spa, above ground swimming pool and jetted tub pumps.

Optional Flex-48 Accessories: Airswitch (#17800901), Single-Speed Toggle Switch Assy. - On/Off (#18374501), Day/Night Controller (#18602401), Two-Speed Toggle Switch Assy. - Lo/Off/Hi (#18313301)



BN24SS

Century Flex 48 Single Speed • "1081" • "1795" • "1563" • Rigid Base

HP	RPM	Volts	Hz	Full Load Amps	Service Factor	Frame	Stock Number	Shaft	Overload Protector	"C" Dim.	Notes
1/2	3450	115	60	7.2	1.0	48Y	BN23	Threaded	Auto	11.08	
3/4	3450	115	60	9.8	1.0	48Y	BN24	Threaded	Auto	11.08	
1	3450	115	60	12.0	1.0	48Y	BN25	Threaded	Auto	11.58	
1-1/2	3450	115	60	17.0	1.0	48Y	BV35	Threaded	Auto	12.08	
		230/115	60	8.0/16.0	1.0	48Y	BN35	Threaded	Auto	12.08	1
2	3450	230/115	60	10.0/20.0	1.0	48Y	BN40	Threaded	Auto	13.33	1
3	3450	230	60	12.0	1.0	48Y	BN41	Threaded	Auto	13.33	2

Century Flex-48 W/Stainless Steel Shaft & Ball Bearings • "1081" • "1795" • "1563" • Rigid Base

1/2	3450	115	60	7.2	1.0	48Y	BN23SS	Threaded	Auto	11.08	
3/4	3450	115	60	9.8	1.0	48Y	BN24SS	Threaded	Auto	11.08	
1	3450	115	60	12.0	1.0	48Y	BN25SS	Threaded	Auto	11.58	
1-1/2	3450	230/115	60	8.0/16.0	1.0	48Y	BN35SS	Threaded	Auto	12.08	1
		115	60	17.0	1.0	48Y	BV35SS	Threaded	Auto	12.08	
2	3450	230/115	60	10.0/20.0	1.0	48Y	BN40SS	Threaded	Auto	13.33	1

Century Single Speed • "1081" • "1795" • No Base

3/4	3450	230/115	60	4.6/9.2	1.0	48Y	BN80	Threaded	Auto	11.58	1
1	3450	230/115	60	6.0/12.0	1.0	48Y	BN81	Threaded	Auto	12.08	1
1-1/2	3450	230/115	60	8.0/16.0	1.0	48Y	BN82	Threaded	Auto	12.08	1

Century Flex 48 Single Speed • 50 Hz Motors • Rigid Base

1/2	2850	220-240	50	3.7-3.8	1.0	48Y	BN31	Threaded	Auto	11.58	
3/4	2850	220-240	50	4.8-5.0	1.0	48Y	BN32	Threaded	Auto	11.58	
1	2850	220-240	50	6.0-6.2	1.0	48Y	BN33	Threaded	Auto	12.08	
1-1/2	2850	220-240	50	7.6/7.6	1.0	48Y	BN39	Threaded	Auto	12.83	1
2	2850	220-240	50	9.0-8.6	1.0	48Y	BN44	Threaded	Auto	13.33	1

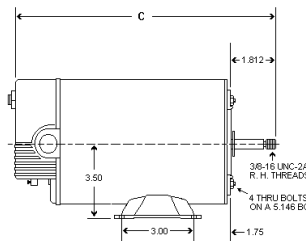
Century Flex 48 LASAR® Line (Low Amp Start and Run) • Two Speed • "1081" • "1563" • Rigid Base

1-1/2	3450/1725	115	60	11.0/2.9	1.0	48Y	BN37	Threaded	Auto	12.08	1
1-1/2 ~ 2.5	3450/1725	115	60	16.4/4.4	1.0	48Y	BN50	Threaded	Auto	12.83	1
1-1/2 ~ 1.8	3450/1725	230	60	8.0/2.6	1.0	48Y	BN34	Threaded	Auto	12.83	1
2 ~ 2.5	3450/1725	230	60	10.5/2.6	1.0	48Y	BN51	Threaded	Auto	13.33	1

Continued on next page

Notes:

1. Capacitor start
2. \$ Energy Efficient two value capacitor start capacitor run motor



Century® Flex-48® Swimming Pool Pump Motors

Continued from previous page

Jetted Tub/Spa/Above Ground Swimming Pool Pump Motors • Split Phase & Capacitor Start • Single Phase • Drip-proof • Ball Bearing • Rigid Base & No Base • 3450, 2850 and 3450/1725 RPM • 1/2 thru 4 HP SPL

Features: 12 & 3 O'clock Conduit Entries • 40°C Ambient • Class B Insulated • CW Non-Reversible
 • Through Bolt Mount • 48/56 Base Mounting • 3-1/2" Shaft Height • Four Thru Bolts on a 5.146 Bolt Circle

Applications: Spa, above ground swimming pool and jetted tub pumps.

Optional Flex-48 Accessories: Airswitch (#17800901), Single-Speed Toggle Switch Assy. - On/Off (#18374501), Day/Night Controller (#18602401), Two-Speed Toggle Switch Assy. - Lo/Off/Hi (#18313301)



BN24SS



TBS1152V1



ODB1102V1

Century Flex 48 Two Speed • 50 Hz Motors • Rigid Base

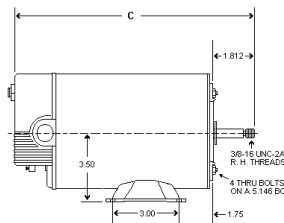
HP	RPM	Volts	Hz	Full Load Amps	Service Factor	Frame	Stock Number	Shaft	Overload Protector	"C" Dim.	Notes
3/4 ~.10	2850/1450	220-240	50	4.4-4.5/2.2-2.3	1.0	48Y	BN52	Threaded	Auto	12.08	2
1 ~.12	2850/1450	220-240	50	5.8-5.8/2.2-2.3	1.0	48Y	BN53	Threaded	Auto	12.83	2
1-1/2 ~.18	2850/1450	220-240	50	8.4-8.5/2.5-2.6	1.0	48Y	BN54	Threaded	Auto	13.33	2
2 ~.25	2850/1450	220-240	50	9.2-8.8/3.0-3.3	1.0	48Y	BN55	Threaded	Auto	14.33	2

Hoffinger Replacement (Doughboy/Lomart) • No Base

1	3450	115	60	10.0	1.0	48Y	BV90	Threaded	Auto	10.45	
		115	60	10.0	1.0	48Z	ODB1102	Threaded	Auto	10.25	
		115	60	9.0	1.0	48Y	BV91	Threaded	Auto	10.22	5
		115	60	9.0	1.0	48Z	ODB1102V1	Threaded	Auto	10.25	4,5

Century Flex 48 LASAR-XL • Extra Low Running Amps • Two Speed • Rigid Base

1 ~.16	3450/1725	115	60	10.3/3.1	1.0	48Y	BN38	Threaded	Auto	12.83	2
1-1/2 ~.18	3450/1725	115	60	13.8/3.8	1.0	48Y	BN60	Threaded	Auto	12.83	7
2 ~.25	3450/1725	230	60	8.5/2.8	1.0	48Y	BN61	Threaded	Auto	13.33	7
3 ~.38	3450/1725	230	60	12.0/3.5	1.0	48Y	BN62	Threaded	Auto	13.33	7
4SPL ~.38	3450/1725	230	60	12.0/3.5	1.0		BN63	Threaded	Auto	13.33	7

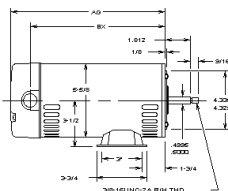


Replaces Sta-Rite, Hayward, American Products, Hydra Bath, Pac Fab, Jacuzzi, Etc.

1-1/2	3450	115/230	17.2/8.6	1.0	56Y	TBT1152D	Threaded	Auto	13.69	2
1-1/2 ~ 1/6	3450/1725	115	18.9/3.9	1.0	56Y	TBS1152V1	Threaded	Auto	13.69	1,2,3,6
		230	9.5/1.9	1.0	56Y	TBS2152H	Threaded	Auto	14.19	1,6

Notes:

- 2 speed shipped less hi-lo switch for remote control
- Capacitor start motor
- Special Hayward replacement for SP-1515-Z24-EBK, EBKC. C48M2A16A1
- Special Doughboy replacement, less base, 40°C Ambient, Al Windings
- 3/8-16, Left hand threads, CWPE rotation
- 50°C Ambient
- Run capacitor mounted on motor shell



NEMA C Flange Pool Filter Motors Single Speed

Important: Total output (HP x service factor) of replacement motor must equal or exceed motor being replaced

- Features:** All Copper Windings • Auto Protector • Capacitor Start
 • NEMA“56C” Face Mount • Not Reversible • Open Drip Proof
 • Rotation (CCWPE) • Sealed Ball Bearings • Sealed Switch Design
 • “1081” Design • 50° C Ambient • 60 HZ • Stainless Steel Threaded Shaft (56J & 56C) • 304 Brg. Shaft End



SK1072



CT1072

HIGH SERVICE FACTOR - STANDARD EFFICIENCY AND “CONSERVATIONIST” HIGH EFFICIENCY DESIGNS

HP	RPM	Volts	Max. Amps	Service Factor	Frame	Stock Number	Shaft	Approx. “AG”	Conn. Dia.	Notes
1/2	3450	115/230	10.6/5.3	1.6	56C	SK1052	Key	11	23	2
		115/230	8.0/4.0	1.6	56C	CK1052	Key	11	23	1,2
		115/230	10.6/5.3	1.6	56J	ST1052	Thd.	10-5/8	23	2
		115/230	8.0/4.0	1.6	56J	CT1052	Thd.	11	23	1,2
3/4	3450	115/230	14.6/7.3	1.5	56C	SK1072	Key	11-9/16	23	2
		115/230	11.0/5.5	1.5	56C	CK1072	Key	11-11/16	23	1,2
		115/230	14.6/7.3	1.5	56J	ST1072	Thd.	11	23	2
		115/230	11.0/5.5	1.5	56J	CT1072	Thd.	11-11/16	23	1,2
1	3450	115/230	17.0/8.5	1.5	56C	SK1102	Key	12-1/8	23	2
		115/230	13.6/6.8	1.4	56C	CK1102	Key	12-1/8	23	1,2
		115/230	17.0/8.5	1.5	56J	ST1102	Thd.	12-1/8	23	2
		115/230	13.6/6.8	1.4	56J	CT1102	Thd.	12-1/8	23	1,2
1-1/2	3450	115/230	19.4/9.7	1.3	56C	SK1152	Key	12-5/8	23	1,2
		115/230	19.4/9.7	1.3	56J	ST1152	Thd.	12-5/8	23	1,2
2	3450	230	11.2	1.3	56C	SK1202	Key	13-1/16	24	1
		230	11.2	1.3	56J	ST1202	Thd.	13-1/16	24	1
3	3450	230	14.4	1.15	56C	SK1302	Key	13-7/8	24	1
		230	14.4	1.15	56J	ST1302	Thd.	13-7/8	24	1

Notes:

1. \$ Energy Efficient capacitor start, capacitor run “Conservationist” motor
2. Connection Diagram may be #23, old #125, or new #125 depending on date motor was manufactured See page 2 for mounting dimensions.

Important: Total output (HP x service factor) of replacement motor must equal or exceed motor being replaced

- Features:** All Copper Windings • Auto Protector • Capacitor Start • NEMA“56C” Face Mount
 • Not Reversible • Open Drip Proof • Rotation (CCW Pump End) • Sealed Ball Bearings
 • Sealed Switch Design • “1081” Design • 50° C Ambient • 60 HZ • Stainless Steel Shaft
 • 304 Brg. Shaft End



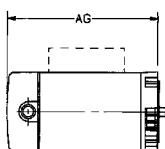
UST1072

LOW SERVICE FACTOR (UP-RATED) - STANDARD EFFICIENCY AND “CONSERVATIONIST” HIGH EFFICIENCY DESIGNS

HP	RPM	Volts	Max. Amps	Service Factor	Frame	Stock Number	Shaft	Approx. “AG”	Conn. Dia.	Notes
3/4	3450	115/230	10.6/5.3	1.0	56J	UST1072	Thd.	10-5/8	23	2
1	3450	115/230	14.6/7.3	1.0	56J	UST1102	Thd.	11	23	2
1-1/2	3450	115/230	17.0/8.5	1.0	56J	UST1152	Thd.	12-1/8	23	2
2	3450	115/230	19.4/9.7	1.0	56J	UST1202	Thd.	13-1/16	23	1,2
2-1/2	3450	230	11.2	1.0	56J	UST1252	Thd.	13-1/16	24	1,2

Note:

1. \$ Energy Efficient capacitor start, capacitor run “Conservationist” motor
2. Connection Diagram may be #23, old #125, or new #125 depending on date motor was manufactured



NEMA C Flange Pool Filter Motors Two Speed

Important: Total output (HPx service factor) of replacement motor must equal or exceed motor being replaced

- Features:** Auto Protector • Capacitor Start • Stainless Steel Threaded Shaft
 • Not Reversible • Open Drip Proof • Rotation (CCW Pump End) • Sealed Ball Bearings (304 Shaft End) • Sealed Switch Design • "1081" Design • 50° C Ambient • 60 HZ
 • 3450/1725 RPM



STL1072R

A.O. Smith NEMAC Flange swimming pool filter pump motors are carefully engineered to meet the rugged demands of pool duty. Two sealed ball bearings (with large 304 bearing on shaft end) offer ample capacity for extended life. Bearings are selected for quietness and are lubricated for life with greases specifically chosen for moisture and heat resistant qualities. Aluminum end frames are accurately machined for maximum concentricity and minimum runout.

Motors are shipped less hi-lo switch for remote operation.

HP	Volts	Max. Amps Hi - Lo	Service Factor	Frame	Stock Number	Shaft	Approx. "AG"	Conn. Dia.	Notes
3/4•1/8	115	13.6/3.9	1.5	56J	STL1072R	Thrd	12-1/8	41	
	230	6.4/1.9	1.5	56J	STS1072R	Thrd	12-1/8	41	
1•1/6	230	8.5/2.5	1.5	56J	STS1102R	Thrd	13-1/16	41	
1-1/2•1/4	230	9.0/3.3	1.3	56J	STS1152R	Thrd	13-1/16	41	1
2•1/3	230	11.4/4.1	1.2	56J	STS1202R	Thrd	14-1/8	41	1

Notes:

1. \$ Energy Efficient capacitor start, capacitor run "Conservationist" motor
 See page 2 for mounting dimensions.

NEMA C Flange 3-Phase Pump Motors

- Features:** Ball Bearings • Continuous Duty • Internal Junction Box • Keyed and Threaded
 Stainless Steel Shafts • NEMA "56C" Mount • Open Drip Proof • 40° C Ambient • 60 HZ
 • 208-230/460V



T3052

TRI-VOLTAGE RATED

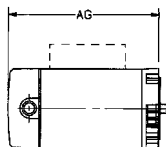
NEMAC Face mounting bracket, and end frames are die-cast corrosion resistant aluminum, accurately machined for maximum concentricity, and minimum runout. Stator assemblies are press fitted into rolled steel main frames. Double shielded ball bearings, selected for quiet operation, are lubricated for life with greases specifically chosen for moisture and heat resistant qualities.

1/2 x 14 thread tapped opening is provided for conduit fitting. No external junction box required connections made under motor canopy. Motors are supplied with horizontal canopy, but are easily converted for vertical operation with the use of optional vertical canopy.

HP	RPM	Volts	Max. Amps	Service Factor	Frame	Stock Number	Shaft	Pro- tector	Approx. "AG"	Conn. Dia.
1/2	3450	208-230/460	2.7/1.35	1.6	56C	K3052	Key	None	8-5/8	29
		208-230/460	2.7/1.35	1.6	56J	T3052	Thrd	None	8-5/8	29
3/4	3450	208-230/460	3.4/1.70	1.5	56C	K3072	Key	None	9-1/8	29
		208-230/460	3.4/1.70	1.5	56J	T3072	Thrd	None	9-1/8	29
1	3450	208-230/460	4.0/2.0	1.4	56C	K3102	Key	None	9-11/16	29
		208-230/460	4.0/2.0	1.4	56J	T3102	Thrd	None	9-11/16	29
1-1/2	3450	208-230/460	6.8/3.4	1.3	56C	K3152	Key	None	11-5/16	29
		208-230/460	6.8/3.4	1.3	56J	T3152	Thrd	None	11-5/16	29
2	3450	208-230/460	8.6/4.3	1.2	56C	K3202	Key	None	11-5/16	29
		208-230/460	8.6/4.3	1.2	56J	T3202	Thrd	None	11-5/16	29
3	3450	208-230/460	9.0/4.5	1.15	56C	K3302	Key	None	11-7/32	29
		208-230/460	9.0/4.5	1.15	56J	T3302	Thrd	None	11-7/32	29

Note:

See page 2 for mounting dimensions.

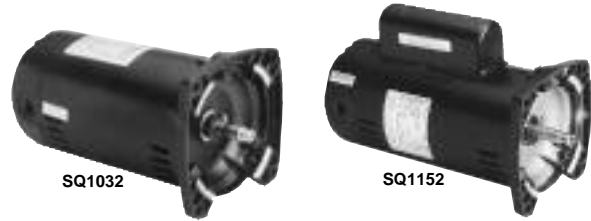


Square Flange Pool Filter Motors Single Speed & Energy Efficient

Important: Total output (HP x service factor) of replacement motor must equal or exceed motor being replaced.

Used on many Sta-Rite, Red Jacket, Pac Fab, American Products and Sears Jet and Pool Pumps.

Features: All Copper Winding • Auto Protector • Capacitor Start
• Open Drip Proof • Rotation (CCW Pump End) • Stainless Steel Threaded Shaft • Sealed Ball Bearings • 50° C Ambient • 60 HZ



HIGH SERVICE FACTOR

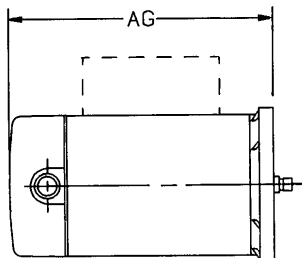
HP	RPM	Max. Volts	Amps	Service Factor	Frame	Stock Number	Approx. "AG"	Conn. Dia.	Notes
1/3	3450	115/230	8.2/4.1	1.95	48Y	SQ1032	9-5/8	23	2
1/2	3450	115/230	11.8/5.9	1.9	48Y	SQ1052	10-3/8	23	2
		115/230	9.6/4.8	1.9	48Y	QC1052	10-7/8	23	1,2
3/4	3450	115/230	14.8/7.4	1.65	48Y	SQ1072	10-7/8	23	2
		115/230	12.6/6.3	1.65	48Y	QC1072	11-1/4	23	1,2
1	3450	115/230	19.2/9.6	1.65	48Y	SQ1102	11-7/8	23	2
		115/208-230	16.0/8.0	1.65	48Y	QC1102	11-7/8	23	1,2
1-1/2	3450	208-230	10.4	1.47	48Y	SQ1152	11-7/8	24	1
2	3450	230	11.2	1.3	48Y	SQ1202	12-5/8	24	1
3	3450	230	15.4	1.15	56Y	SQ1302	14-11/32	24	1

LOW SERVICE FACTOR (UP-RATED)

HP	RPM	Max. Volts	Amps	Service Factor	Frame	Stock Number	Approx. "AG"	Conn. Dia.	Notes
1/2	3450	115/230	8.2/4.1	1.3	48Y	USQ1052	9-5/8	23	2
3/4	3450	115/230	11.8/5.9	1.27	48Y	USQ1072	10-3/8	23	2
		115/230	9.6/4.8	1.27	48Y	UQC1072	10-7/8	23	1,2
1	3450	115/230	14.8/7.4	1.25	48Y	USQ1102	10-7/8	23	2
		115/230	12.6/6.3	1.25	48Y	UQC1102	11-1/4	23	1,2
1-1/2	3450	115/230	19.2/9.6	1.1	48Y	USQ1152	11-7/8	23	2
		115/208-230	16.0/8.0	1.1	48Y	UQC1152	11-7/8	23	1,2
2	3450	208-230	10.4	1.1	48Y	USQ1202	11-7/8	24	1
2-1/2	3450	230	11.2	1.0	48Y	USQ1252	12-5/8	24	1

Notes:

1. \$ Energy Efficient capacitor start, capacitor run "Conservationist" motor
 2. Connection Diagram may be #23, old #125, or new #125 depending on date motor was manufactured
- See page 2 for mounting dimensions.



Square Flange Pool Motors – Two Speed

Important: Total output (HPx Service Factor) of replacement motor must equal or exceed motor being replaced.

Used on many Sta-Rite, Red Jacket, and Sears Jet and Pool Pumps.

- Features:** All Copper Windings • Auto Protector - Single Phase
 • Capacitor Start • Open Drip Proof • Rotation (CCW Pump End)
 • Stainless Steel Threaded Shaft • 50° C Ambient • 60 HZ



HIGH SERVICE FACTOR

HP	RPM	Volts	Amps		Service Factor	Frame	Stock Number	Approx. "AG"	Conn. Dia.	Notes	
			Hi - Lo	Lo							
3/4•1/8	3450/1725	115	12/4	1.85	48Y	SQL1072R	12-5/8	41	1,2	\$	
		230	7.3/2.6	1.65		SQS1072R	13-1/8	41	2		
1•1/6	3450/1725	230	9.5/2.5	1.65	48Y	SQS1102R	13-13/16	41	2		
1-1/2•1/4	3450/1725	230	10.1/3.7	1.47	48Y	SQS1152R	13-13/16	41	1,2	\$	
2•1/3	3450/1725	230	11.4/4.1	1.3	56Y	SQS1202R	14-27/32	41	1,2	\$	

LOW SERVICE FACTOR (UP-RATED)

HP	RPM	Volts	Max. Amps		Service Factor	Frame	Stock Number	Approx. "AG"	Conn. Dia.	Notes	
			Hi - Lo	Lo							
1•1/6	3450/1725	230	7.3/2.6	1.25	48Y	UQS1102R	13-1/8	41	2		
1-1/2•1/4	3450/1725	230	9.5/2.5	1.1	48Y	UQS1152R	13-13/16	41	2		
2•1/3	3450/1725	230	10.4/3.3	1.1	48Y	UQS1202R	13-13/16	41	1,2	\$	

Notes:

1. \$ Energy Efficient capacitor start, capacitor run "Conservationist" motor
2. 2 speed shipped less hi/lo switch for remote operation



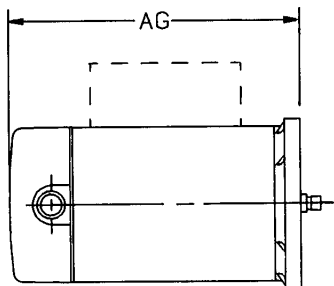
Three Phase Square Flange Pump Motors

- Features:** All Copper Windings • Open Drip Proof • Stainless Steel Shaft Threaded Shaft
 • Sealed Ball Bearings • 50° C Ambient • 60 HZ • Tri Voltage Rated

HP	RPM	Volts	Max. Amps		Service Factor	Frame	Stock Number	Protector	Approx. "AG"	Conn. Dia.
			Amps	Lo						
1/2	3450	208-230/460	3.0/1.5	1.9	48Y	Q3052	None	9-7/8	29	
3/4	3450	208-230/460	3.6/1.8	1.65	48Y	Q3072	None	12-5/8	29	
1	3450	208-230/460	4.7/2.35	1.65	48Y	Q3102	None	10-7/8	29	
1-1/2	3450	208-230/460	6.8/3.4	1.47	48Y	Q3152	None	11-7/8	29	
2	3450	208-230/460	8.5/4.25	1.3	48Y	Q3202	None	12-5/8	29	
3	3450	200-230/460	9.7/4.9	1.15	56Y	Q3302	None	12-7/32	29	

Note:

See page 2 for mounting dimensions.



Pool Sweep Motors

Smith-Seal

- Features:** Auto Protector
 • Ball Bearings • Open Drip Proof
 • Single Speed • 40° C Ambient
 • 60 HZ



RPS1052

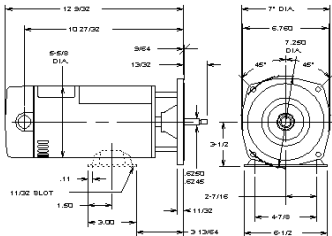
SPS1052

PL1072

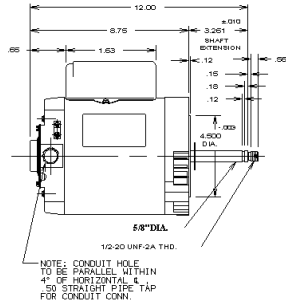
Special face mounted motors for use on Arneson "Pool Sweep".

HP	RPM	Max.			Stock		Conn.		Notes	Remarks
		Volts	Amps	Frame	Number	Shaft	Dia.			
3/4	3450	115/230	12.4/6.2	48Y	SPS1052	Thrd	23	1,4	Vert. Mount	
		115/230	12.4/6.2	48Y	RPS1052	Thrd	23	1,4	Horz. Rigid Base	
		115/230	14.8/7.4	56CZ	PL1072	Thrd	38	2,3		

- Notes:**
 1. Arneson "Pool Sweep"
 2. Polaris Vac-sweep (Shaft Adapter not required)
 3. 50° C Ambient
 4. Connection Diagram may be #23, old #125, or new #125 depending on date motor was manufactured



RPS1052/SPS1052



PL1072

Jetted Tub Motors

- Features:** Auto Protector • Ball Bearing • Base Mount • Carbon Steel Shaft
 • Open Drip Proof • Thurbolt Pump Mount • Split Phase • 50° C Ambient
 • "1081" Design • 60 HZ • 1 Year Warranty

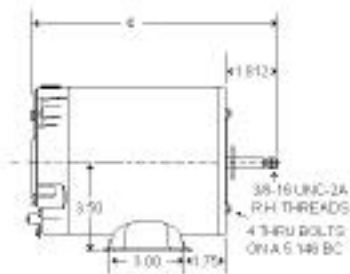


JBT2072

REPLACES: HYDRA BATH AND OTHERS

HP	RPM	Volts	Max. Amps	Service Factor	Frame	Stock Number	Shaft	Approx. "AG"	Dim. "BX"	Notes
3/4	3450	115	9.0	1.0	56Y	JBT2072	Thrd	8-9/16	7	1
1	3450	115	11.2	1.0	56Y	JBT2102	Thrd	8-9/16	7	1

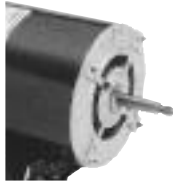
- Note:**
 1. Items to be discontinued when stock is depleted.



Replacement Motor Selection

CHOOSING THE RIGHT REPLACEMENT MOTOR IS EASY USING THESE **5 STEPS**:

1. Know which end frame you need. Is it:



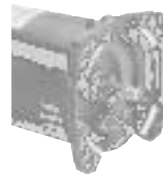
Thru Bolt



56C (C Face Keyed)



56J (C Face Threaded)



Square Flange

2. Know the total horsepower output.

Find it on the motor's nameplate. Use this equation:

The total horsepower times (x) the service factor of the replacement motor must be equal to or greater than that of the original motor being replaced.

1081 DESIGN	ST 1072	
THERMALLY PROTECTED	SKCET53ABN	
MOD. C48K2N117A3	SER 8K00	
VOLTS 115/230	ENCL = DP	HP 3/4
ROT = CCWPE	PH 1	CODE L
RPM 3450	FR 56J	HZ 60
MAX LOAD	AMPS 14.6/7.3	SF 1.5
INSUL CLASS B	AMB 50 °C	TIME RATING CONT.
TYPE UAC	A.O.SMITH CORP.	

3. Is the original motor single or three phase?

The original and replacement motors must be the same unless the power supply is being changed.

4. What is the correct voltage?

The operating voltage of the replacement motor must match the voltage of the original motor. A single voltage motor is an acceptable replacement for a dual voltage motor and vice versa.

5. What is the motor's cycle or hertz?

As a general rule, 50-cycle motors should not be substituted for 60-cycle motors and vice versa.

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