

MICHIGAN PNEUMATIC TOO Air Winches



Built to last since 1936!



r Winch Catalog 2016



Serving All Industries

- Petro Chemical
- Construction
- Demolition
- Assembly
- Rental

1-800-521-8104 • www.michiganpneumatic.com



Table of Contents

History
Specifications
Model No. Identification
Selection Guide6
Cable Capacity
MP-W05AA3 Series 1100 lb. Capacity
MP-W10220 Series 2200 lb. Capacity 12
MP-W20220 Series 4400 lb. Capacity 20
MP-W3036 Series 6600 lb. Capacity
MP-W5036 Series 11000 lb. Capacity
MP-W5045 Series 11000 lb. Capacity
MP-AH45 Series 22000 lb. Capacity 52
Guards & Pendant Controls
Accessories

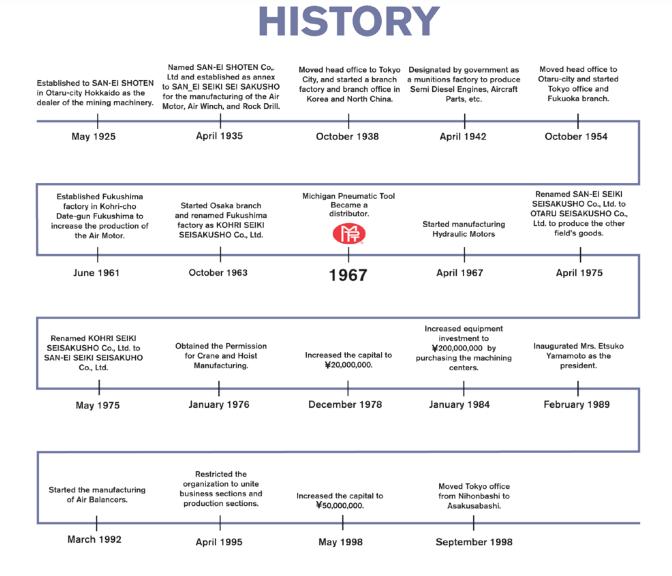




Since 1925, we have been a superior manufacturer of hydraulic and pneumatic machinery. Our products include Air Motors, Air Hoists, Air Winches, Air Balancers, Hydraulic Motors, and more.

Our machinery is designed and manufactured with great quality, and used in fields such as iron manufacturing, ship building, machine manufacturing, chemical plants, oil refineries, mining, construction, automobile manufacturing and more. It is important to us that all of our customers are satisfied. At SAN-EI SEIKI, we develop products for all new and upcoming fields of work. Our products and services are original, unique, and we never stop brainstorming new ideas for machinery equipment.

We are proud of our superior technology and top level facilities. We strive to solve your tough problems in all mechanical, pneumatic, and hydraulic areas.





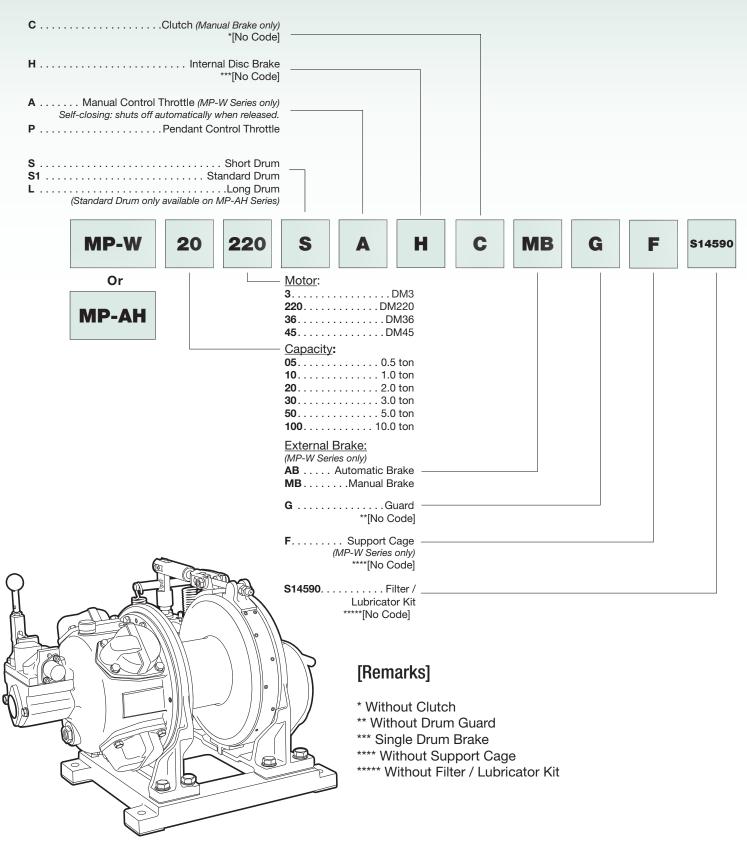
Motor Series	Drum	Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope Manual Brake	Weight w/o Rope Auto Brake	Avg. Air Consumption
MP-W05AA3	Short	2.3 hp	1100 lbs.	62 ft./min.	5/16" x 145 ft. 1/4" x 240 ft.	97 lbs.	104 lbs.	71 cfm
MP-W10220	Short	9.6 hp	2200 lbs.	121 ft./min.	1/2" x 375 ft.	566 lbs.	588 lbs.	- 191 cfm
1017-0010220	Long	9.0 hp	2200 105.	12111./11111.	1/2" x 750 ft.	608 lbs.	635 lbs.	191 Cilli
MP-W20220	Short	0.6 hr	4400 lbs.	62 ft./min.	1/2" x 375 ft. 7/16" x 475 ft.	586 lbs.	608 lbs.	191 cfm
IVIP-VV20220	Long	9.6 hp	4400 IDS.		1/2" x 750 ft. 7/16" x 950 ft.	632 lbs.	654 lbs.	
MP-W3036	Short	16.0 hp	6600 lbs.	62 ft./min.	5/8" x 525 ft.	1035 lbs.	1066 lbs.	- 318 cfm
1017-003030	Long	10.0 Hp	- Sdi 0000		5/8" x 1050 ft.	1130 lbs.	1161 lbs.	318 CIIII
MP-W5036	Short	16.0 hp	11000 lbs	1000 lbs. 36 ft./min.	7/8" x 375 ft. 3/4" x 500 ft.	1670 lbs.	1716 lbs.	- 318 cfm
IVIF-VV5050	Long	10.0 Hp	11000 lbs.		7/8" x 750 ft. 3/4" x 1000 ft.	1890 lbs.	1923 lbs.	310 CIM
	Short	02.0 hr	11000 lba	EQ ft /min	7/8" x 375 ft. 3/4" x 500 ft.	1757 lbs.	1808 lbs.	600 ofm
MP-W5045	Long	23.0 hp	11000 lbs.	59 ft./min.	7/8" x 750 ft. 3/4" x 1000 ft.	1958 lbs.	2013 lbs.	600 cfm
MP-AH45	Standard	23.0 hp	22000 lbs.	27 ft./min.	1-1/4" x 853 ft.	N/A	3375 lbs.	600 cfm

Specifications

Figures are shown with supplied air pressure at 90 psi. Capacities rated at half drum.

All San-Ei tuggers feature a marine grade paint specifically designed for use in seaport applications and other harsh enviornments. With threaded exhaust ports, you can also use the San-Ei air tuggers indoors and divert the exhaust to the exterior or away from hazardous materials or gases.

Model Number Identification





Selection Guide

Rope Capacity and Line Speed

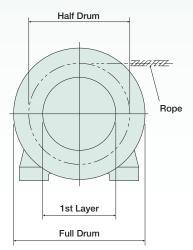
The line speed of an air winch is dependent on the quantity of rope on the drum. The first layer of rope on the drum receives the highest power at the slowest speed. A full drum is up to the maximum speed with the lowest power.

The standard capacity of a winch at half drum: Ds

$Ds = (D0 + Df) \times 1/2$

Do = Inner Drum Diamater Df = Full Drum Diameter

1st Layer - Minimum speed, maximum pull **Half Drum** - Medium speed, medium pull **Full Drum** - Maximum speed, minimum pull



Motor	Drum	Inner Drum	Full Drum	Drum	Rope
Series		Diameter	Diameter	Length	Anchor Hole
MP-W05AA3	Short	4.72"	8.50"	4.49"	0.39"
MP-W10220	Short	7.09"	16.14"	7.01"	0.63"
MP-W10220	Long	7.09"	16.14"	14.00"	0.63"
MP-W20220	Short	7.09"	16.14"	7.01"	0.63"
MP-W20220	Long	7.09"	16.14"	14.00"	0.63"
MP-W3036	Short	9.45"	20.87"	9.45"	0.79"
MP-W3036	Long	9.45"	20.87"	18.90"	0.79"
MP-W5036	Short	12.99"	23.62"	11.81"	1.10"
	Long	12.99"	23.62"	23.62"	1.10"
MP-W5045	Short	12.99"	23.62"	11.81"	1.10"
	Long	12.99"	23.62"	23.62"	1.10"
MP-AH45	Standard	20.00"	38.58"	27.5i5"	1.50"

Drum Size

Rope Selection

To determine the size of rope needed for a particular application, use the Safe Working Load specifications from the chart below. The Breaking Strength for each size of rope is listed for additional reference.

Rope Diameter	5/16"	11/32"	3/8"	7/16"	1/2"	9/16"	5/8"	45/64"	3/4"	7/8"	1"
Breaking Strength (tons)	4.42	5.59	6.9	8.6	10.8	13.5	17.7	22.4	27.6	34.6	43.2
Safe Working Load (tons)	0.8	1.1	1.3	1.7	2.1	2.7	3.5	4.4	5.5	6.9	8.6



Cable Capacity

Rope Length

The maximum rope length, when tightly wound, varies according to the rope diameter for each model. The approximate working rope length is 80% of the lengths listed in the chart below.

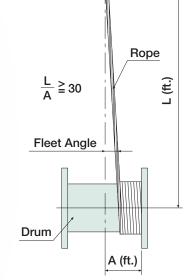
		Cable Capacity (tightly wound)									
Motor Series	Drum	1/4" 6.3mm	5/16" 8mm	3/8" 10mm	7/16" 11.2mm	1/2" 12.5mm	5/8" 16mm	3/4" 20mm	7/8" 22.4mm	1" 25.4mm	1-1/4" 31.7mm
MP-W05AA3	Short	195 ft.	145 ft.	-	-	-	-	-	-	-	-
MP-W10220 MP-W10220	Short Long	-	-	670 ft. 1340 ft.	475 ft. 950 ft.	375 ft. 750 ft.		-	-		-
MP-W20220 MP-W20220	Short Long	-	-		475 ft. 950 ft.	375 ft. 750 ft.	-	-	-	-	-
MP-W3036 MP-W3036	Short Long	-	-			-	525 ft. 1050 ft.	-	-	-	-
MP-W5036	Short Long	-	-			-	-	500 ft. 1000 ft.	375 ft. 750 ft.	-	-
MP-W5045	Short Long	-	-		-	-	-	500 ft. 1000 ft.	375 ft. 750 ft.	-	-
MP-AH45	Standard	-	-	-	-	-	-	-	-	1300 ft.	853 ft.

Fleet Angle

The correct fleet angle is necessary to keep the rope straight on the drum during wind-up. The angle between the center line through the lead sheave and the centerline of the rope leading to the drum is called the fleet angle. Please refer to the figure at the right.

The maximum fleet angle is **2**°. To obtain the best angle, the lead sheave <u>Sheave</u> must be positioned using the following formula:

L (ft.) = A (ft.) x 30



Lead

MP-W20220LAAB Long Drum Tugger w/ Autobrake



Model MP-W05AA3SACMB

1100 lb. Short Drum Winch w/ Manual Brake

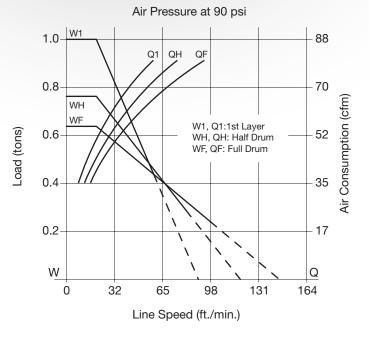


The MP-W05AA3 series tugger is also known as the "Baby Tugger" and is capable of lifting 1100 lbs. This cast aluminum, lightweight, compact tugger is designed for low air consumption and high efficiency. Ideal for gasoline tank farm construction, water tower erection, petrochemical, marine and oil platform work. The 4-piston motor allows for controlled maneuvering of the load. In addition, the motor can be rotated, allowing the MP-W05AA3 series air tuggers to be ceiling or wall mounted for unique applications.

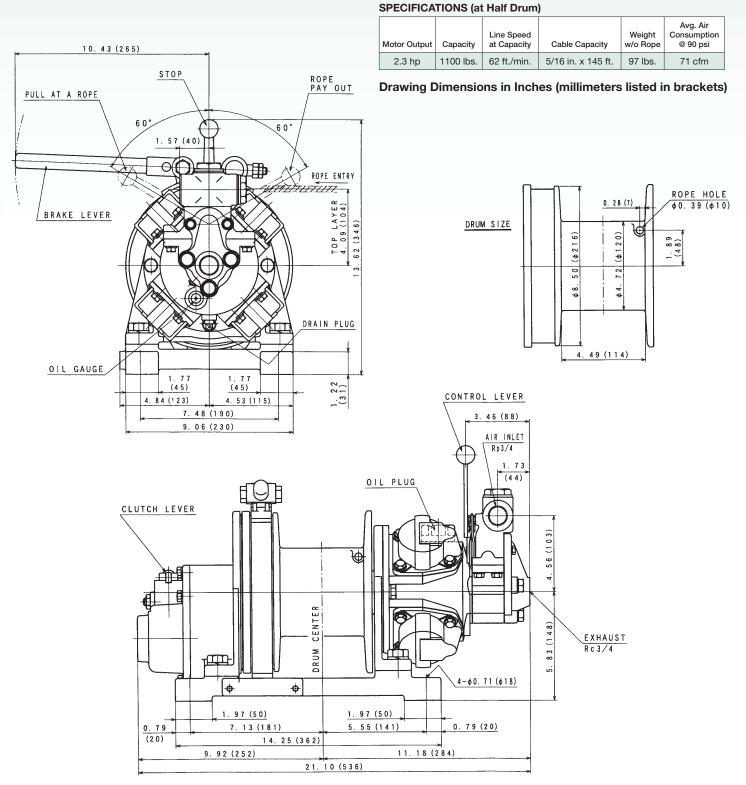
The MP-W05AA3 series features the only "baby tugger" with a 3-piece valve assembly, which allows the technicians to repair the throttle valve or rotary valve independently of each other, and more importantly, without removing the entire motor from the frame assembly, unlike competitive units on the market.

Specifications

Capacity	1100 lbs.
Line Speed at Capacity	62 ft.
Cable Capacity	
	145 ft. of 5/16"
Weight w/o Rope	
Air Inlet Thread	3/4"

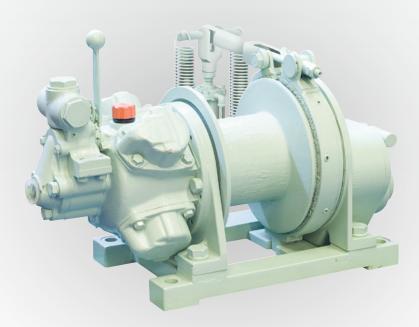


Model MP-W05AA3SACMB 1100 lb. Short Drum Winch w/ Manual Brake





Model MP-W05AA3SAAB 1100 lb. Short Drum Winch w/ Auto Brake

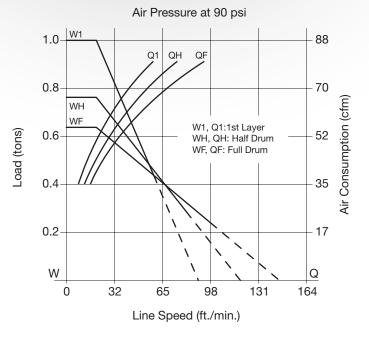


The "Baby Tugger", as its known, is capable of lifting 1100 lbs. This compact tugger is designed for low air consumption and high efficiency. The MP-W05AA3 series tuggers feature cast aluminum bodies. Ideal for gasoline tank farm construction, water tower erection, petrochemical, marine and oil platform work. Unique to the MP-W05AA3 series is that the 4-piston motor can be rotated, allowing for ceiling or wall mounting applications and for controlled maneuvering of the load.

The MP-W05AA3 series features a 3-piece valve assembly. This allows technicians to repair the throttle valve or rotary valve independently of each other. More importantly, they can do so without having to remove the entire motor from the frame assembly, unlike competitive units on the market.

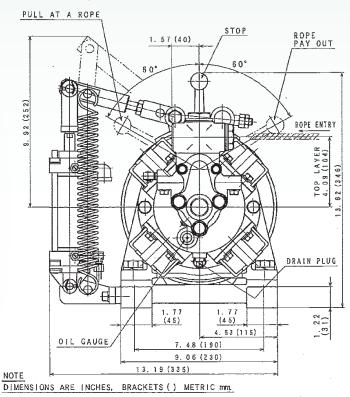
Specifications

Capacity	1100 lbs.
Line Speed at Capacity	62 ft.
Cable Capacity	195 ft. of 1/4"
	145 ft. of 5/16"
Weight w/o Rope	104 lbs.
Air Inlet Thread	





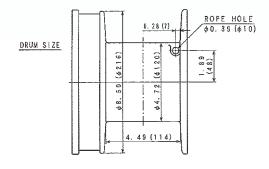
Model MP-W05AA3SAAB 1100 lb. Short Drum Winch w/ Auto Brake



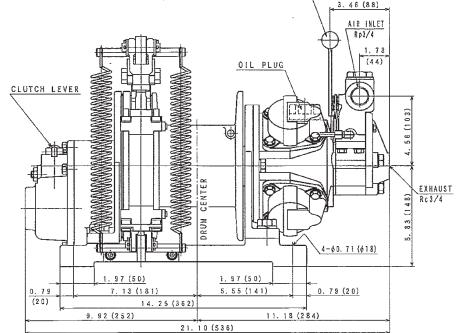
SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
2.3 hp	1100 lbs.	62 ft./min.	5/16 in. x 145 ft.	104 lbs.	71 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)



CONTROL LEVER

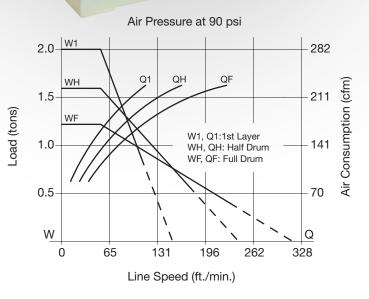




Model MP-W10220SACMB

2200 lb. Short Drum Winch w/ Manual Brake

This San-Ei tugger bridges the gap in the tugger line by offering a 2200 lb. capacity. This series of tuggers are known for being very reliable and have been in the San-Ei product line from the beginning. We updated the forward/reverse valve design from the original design. The rest of the MP-W10220 series tugger remains the same reliable 4-piston air motor, gears, drum and brake mechanism that you expect when purchasing a tugger. The MP-W10220 series is considered to be the foundation of the San-Ei product line, having existed since their inception in 1936.



Specifications

Capacity	2200 lbs.
Line Speed at Capacity	121 ft.
Cable Capacity	670 ft. of 3/8"
	475 ft. of 7/16"
	375 ft. of 1/2"
Weight w/o Rope	566 lbs.
Air Inlet Thread	

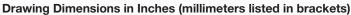
18.15 (461)

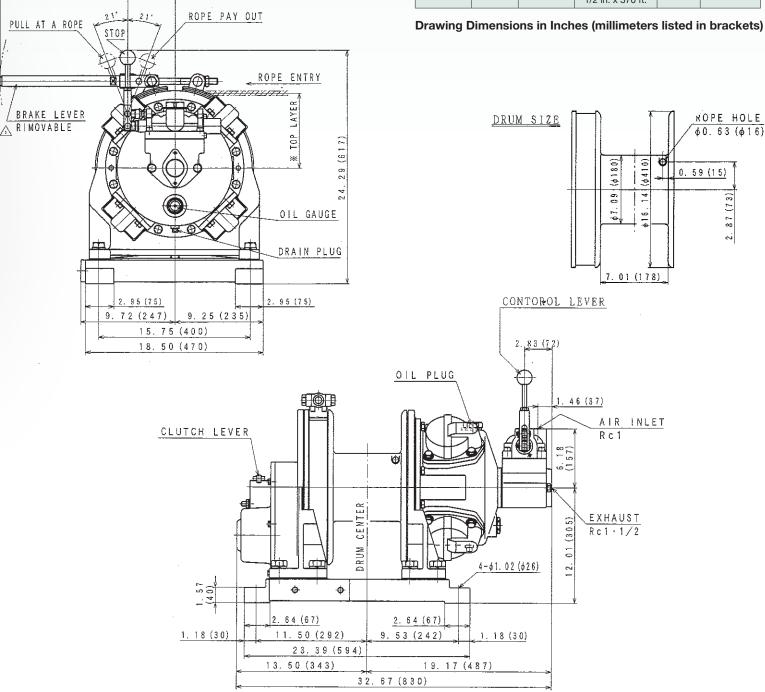
4.84(123)

Model MP-W10220SACMB 2200 lb. Short Drum Winch w/ Manual Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
9.6 hp	2200 lbs.	121 ft./min.	3/8 in. x 670 ft. 7/16 in. x 475 ft. 1/2 in. x 370 ft.	566 lbs.	191 cfm

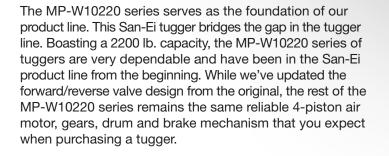


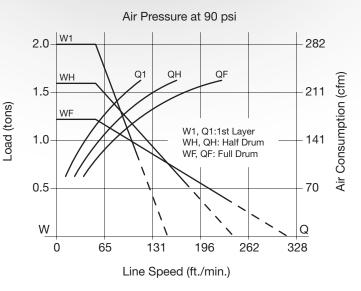




Model MP-W10220SAAB

2200 lb. Short Drum Winch w/ Auto Brake





Specifications

Capacity	2200 lbs.
Line Speed at Capacity	121 ft.
Cable Capacity	670 ft. of 3/8"
	475 ft. of 7/16"
	375 ft. of 1/2"
Weight w/o Rope	588 lbs.
Air Inlet Thread	

PULL AT A ROPE

84 (123)

211

ROPE PAY OUT

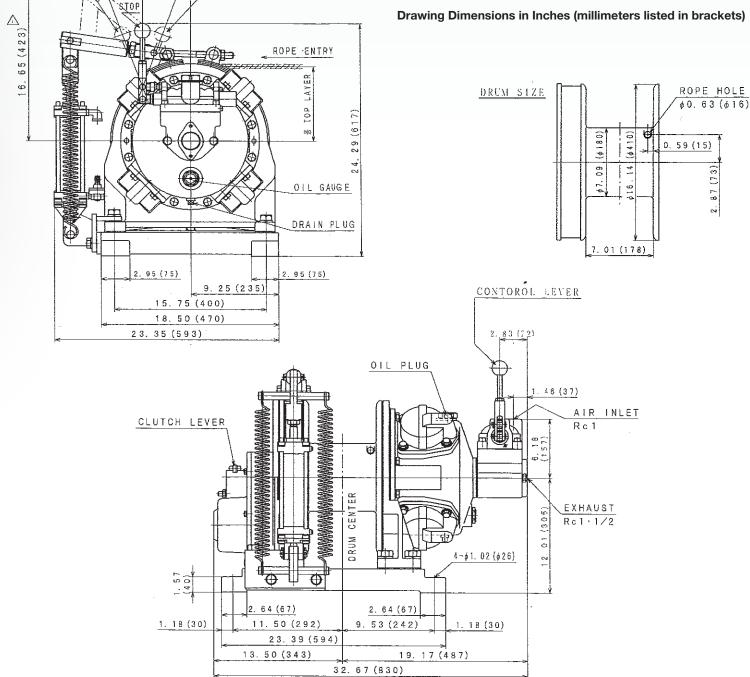


Model MP-W10220SAAB 2200 lb. Short Drum Winch w/ Auto Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
9.6 hp	2200 lbs.	121 ft./min.	3/8 in. x 670 ft. 7/16 in. x 475 ft. 1/2 in. x 375 ft.	588 lbs.	191 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)

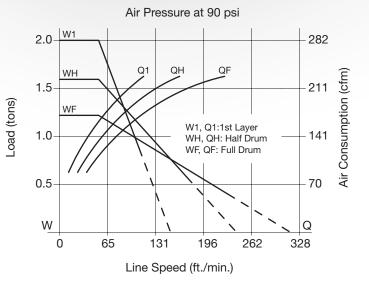




Model MP-W10220LACMB

2200 lb. Long Drum Winch w/ Manual Brake

An original flagship model, the MP-W10220 series sets itself apart from its competition with its reliable 4-piston air motor, gears, drum and brake mechanism. Boasting a capacity of 2200 lbs. found in our original design and with feedback from our valued customers we updated the forward/reverse valve design; making the MP-W10220 series the most versatile tugger in its class.



Specifications

Capacity	2200 lbs.
Line Speed at Capacity	121 ft.
Cable Capacity	1340 ft. of 3/8"
	950 ft. of 7/16"
	750 ft. of 1/2"
Weight w/o Rope	608 lbs.
Air Inlet Thread	



Model MP-W10220LACMB 2200 lb. Long Drum Winch w/ Manual Brake

18.15(461) 84 (123) ROPE PAY OUT 21 PULL AT A ROPE STOP ROPE -ENTRY))) LAYER BRAKE LEVER TOP 29 (617) * OIL GAUGE DRAIN PLUG 2.95(75) 2.95(75) 9.72(247) 9.25 (235) 15.75(400) 18.50(470) CLUTCH LEVER **H** н<u>н</u> 2

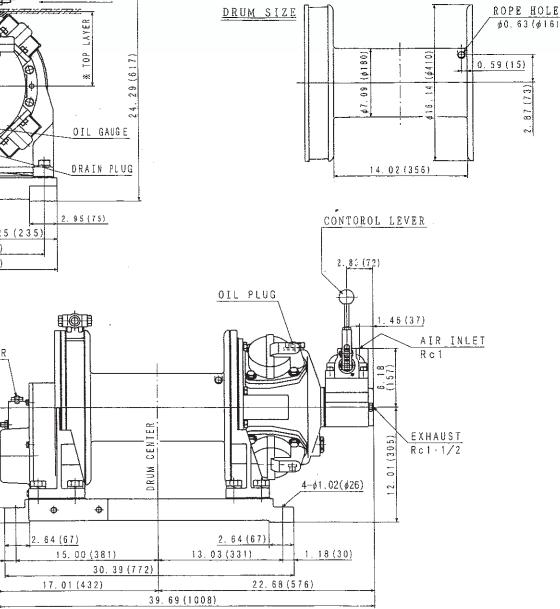
.57

1.18(30)

SPECIFICATIONS (at Half Drum)

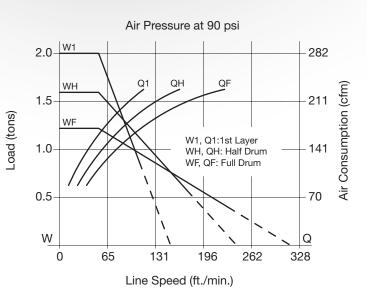
Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
9.6 hp	2200 lbs.	121 ft./min.	3/8 in. x 1340 ft. 7/16 in. x 950 ft. 1/2 in. x 750 ft.	608 lbs.	191 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)





This San-Ei tugger bridges the gap in the tugger line. The 2200 lb. capacity series of tuggers are very reliable and have been in the San-Ei product line from the beginning. We updated the forward/reverse valve design from the original design. The rest of the MP-W10220 series remains the same reliable 4-piston air motor, gears, drum and brake mechanism that you expect from a tugger of this class. The MP-W10220 series is considered the foundation of the San-Ei product line.

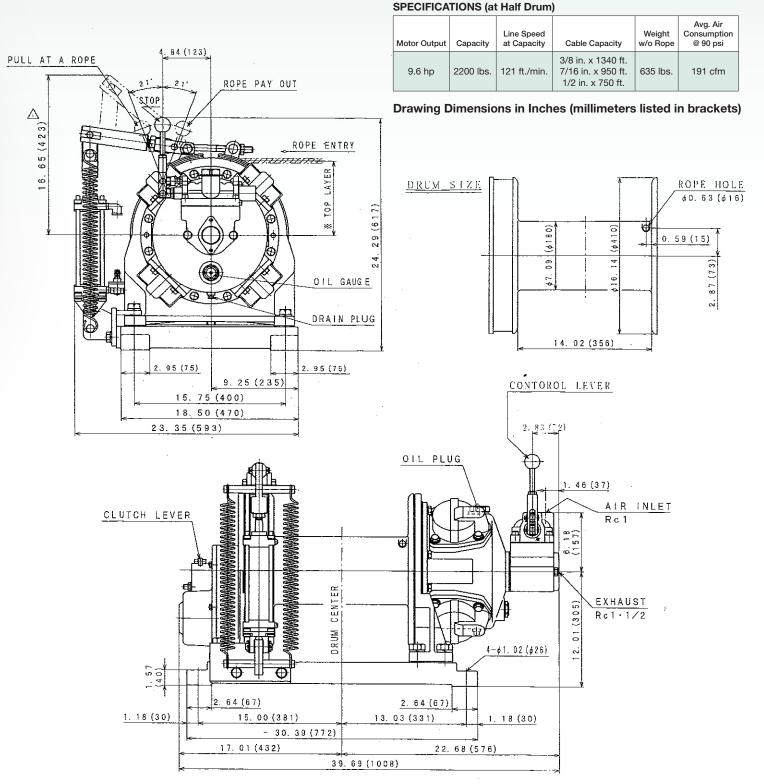


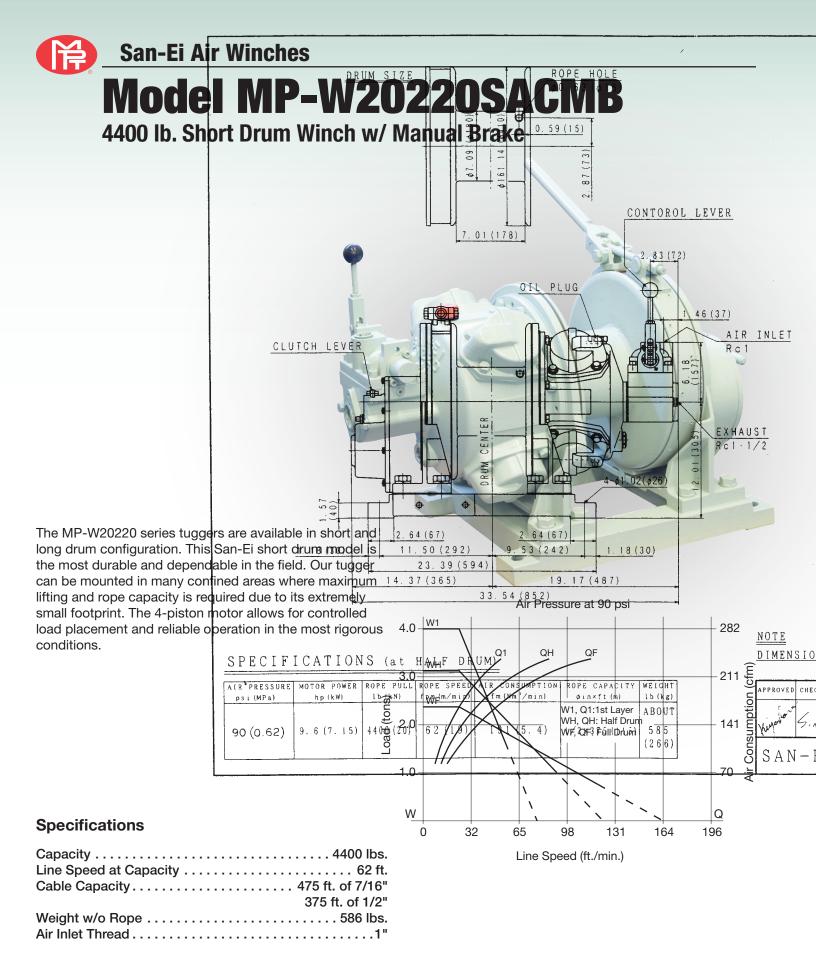
Specifications

Capacity	2200 lbs.
Line Speed at Capacity	121 ft.
Cable Capacity	1340 ft. of 3/8"
	950 ft. of 7/16"
	750 ft. of 1/2"
Weight w/o Rope	635 lbs.
Air Inlet Thread	1"



Model MP-W10220LAAB 2200 lb. Long Drum Winch w/ Auto Brake







ROPE HOLE

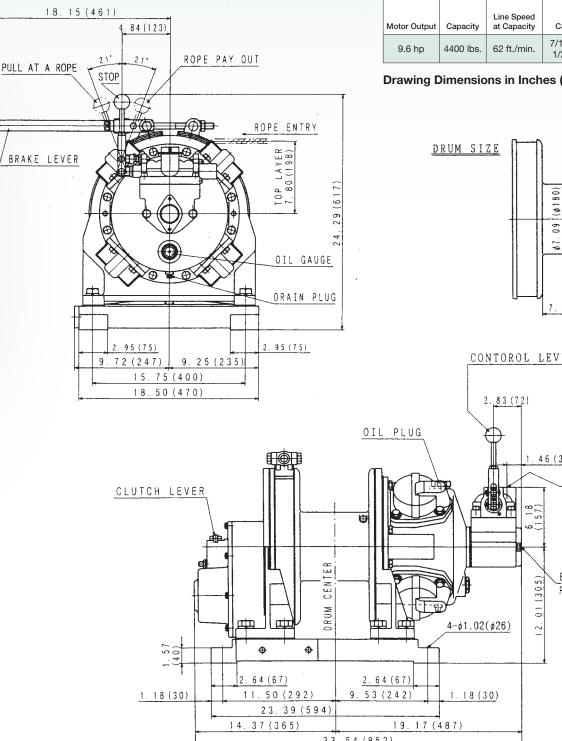
 $\phi 0.63(\phi 16)$

87 (73)

2

0.59(15)

Model MP-W20220SACMB 4400 lb. Short Drum Winch w/ Manual Brake



SPECIFICATIONS (at Half Drum)

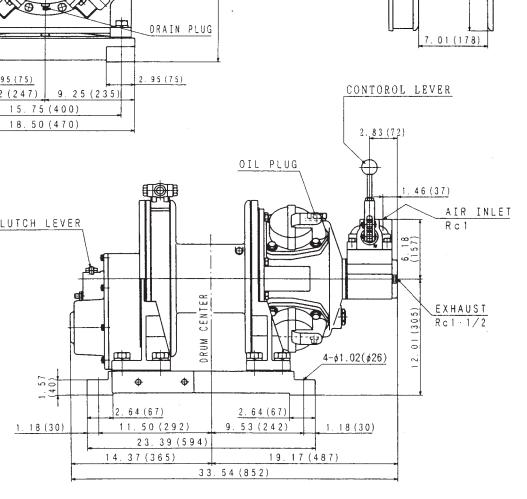
Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
9.6 hp	4400 lbs.	62 ft./min.	7/16 in. x 475 ft. 1/2 in. x 375 ft.	586 lbs.	191 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)

(\$410) ŧ

14

9 | 9

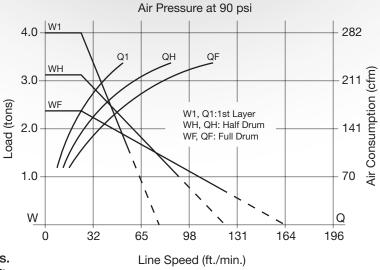




Model MP-W20220SAAB

4400 lb. Short Drum Winch w/ Auto Brake

San-Ei tuggers are the most durable and dependable tuggers in the field today. The MP-20220 Series tuggers are available in short and long drum configurations. Boasting a small foot print, this tugger can be mounted in many confined areas where maximum lifting and rope capacity is required. The 4-piston motor allows for controlled load placement and reliable operation in the most rigorous conditions.



Specifications

Capacity	4400 lbs.
Line Speed at Capacity	62 ft.
Cable Capacity	. 475 ft. of 7/16"
	375 ft. of 1/2"
Weight w/o Rope	608 lbs.
Air Inlet Thread	1"

PULL AT A ROPE

84 (123)

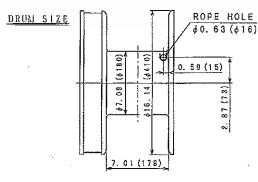


Model MP-W20220SAAB 4400 lb. Short Drum Winch w/ Auto Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
9.6 hp	4400 lbs.	62 ft./min.	7/16 in. x 475 ft. 1/2 in. x 375 ft.	608 lbs.	191 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)



CONTOROL LEVER

46 (37)

57.8

(305)

12.01

4-\$1, 02 (\$28)

1. 18 (30)

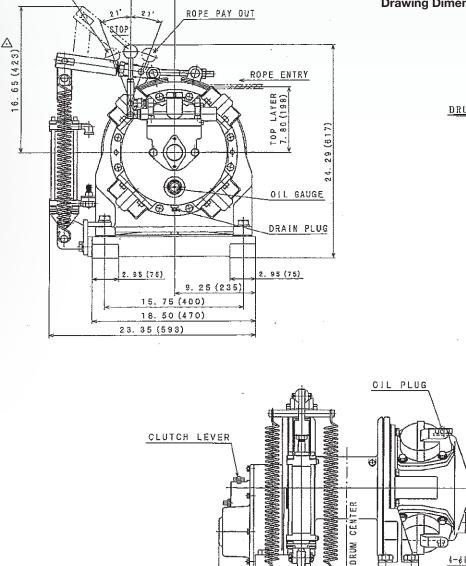
AIR INLET

Rc1

EXHAUST

Rc1 · 1/2

2.83 (72)



(40)

1.18(30)

This equipment is not to be used for lifting, supporting or transporting people, or for lifting or supporting loads over people.

33. 54 (852)

2.64 (67)

19.17 (487)

9.53 (242)

Θ

2.64 (67)

14.37 (365)

11.50 (292)

23.39(594)



4400 lb. Long Drum Winch w/ Manual Brake

Our MP-W20220 series tuggers are available in short and long drum configuration. The 4400 lb. long drum air tugger is our most popular model. This San-Ei model is the most durable and dependable in the field. With a small foot print, this tugger can be mounted in many confined areas where maximum lifting and rope capacity is required. The 4-piston motor allows for controlled load placement and reliable operation in the most rigorous conditions.

Air Pressure at 90 psi W1 282 4.0 Q1 QH QF WH Air Consumption (cfm) 211 3.0 Load (tons) WF W1, Q1:1st Layer WH, QH: Half Drum 2.0 141 WF, QF: Full Drum 1.0 70 Q W 32 0 65 98 131 164 196 Line Speed (ft./min.)

Specifications

Capacity	
Line Speed at Capacity	62 ft.
Cable Capacity	950 ft. of 7/16"
	750 ft. of 1/2"
Weight w/o Rope	
Air Inlet Thread	

14.19(360.5)

ROPE PAY OUT

13.23(336)

ROPE PULL

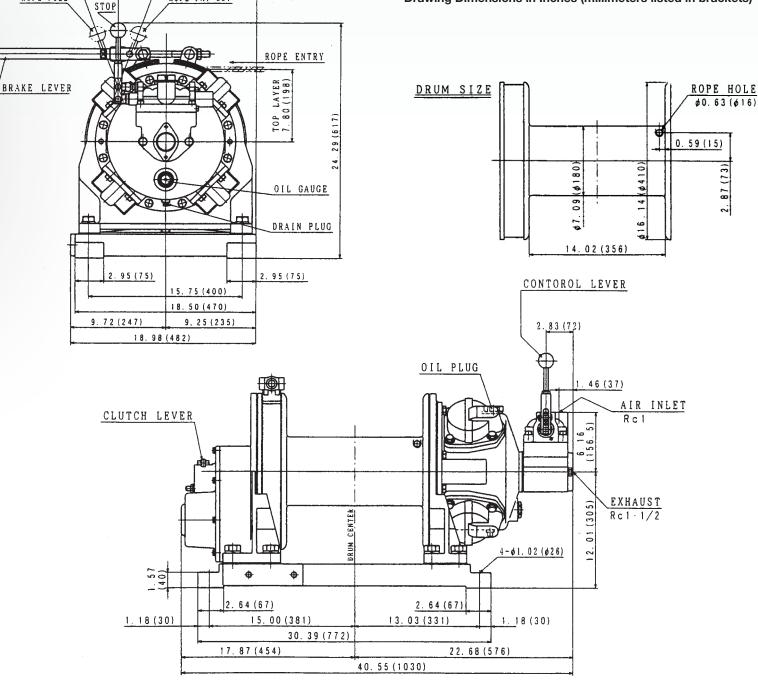


Model MP-W20220LACMB 4400 lb. Long Drum Winch w/ Manual Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
9.6 hp	4400 lbs.	62 ft./min.	7/16 in. x 950 ft. 1/2 in. x 750 ft.	632 lbs.	191 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)

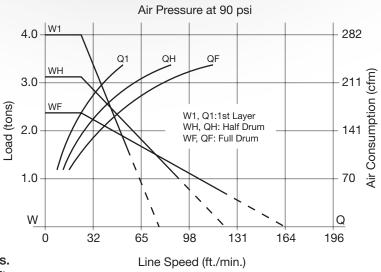




Model MP-W20220LAAB

4400 lb. Long Drum Winch w/ Auto Brake

The MP-W20220 series tuggers offer reliable operation and controlled load placement in the most rigorous conditions. Featuring a 4400 lb. capacity, 4-piston motor design, the MP-W20220 series is available in short and long drum configurations. They are our most popular series of tuggers, due in part to being the most durable in the field. With a small foot print, this tugger can be mounted in many confined areas where maximum lifting and rope capacity is required.

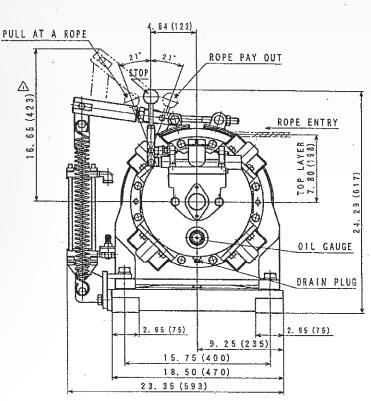


Specifications

Capacity	4400 lbs.
Line Speed at Capacity	62 ft.
Cable Capacity	. 950 ft. of 7/16"
	750 ft. of 1/2"
Weight w/o Rope	654 lbs.
Air Inlet Thread	



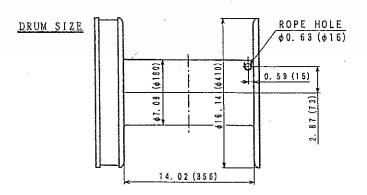
Model MP-W20220LAAB 4400 lb. Long Drum Winch w/ Auto Brake



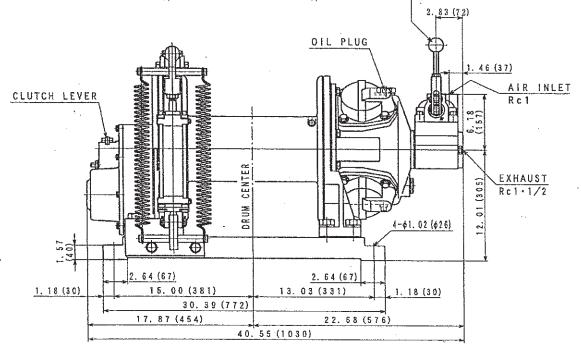
SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
9.6 hp	4400 lbs.	62 ft./min.	7/16 in. x 950 ft. 1/2 in. x 750 ft.	654 lbs.	191 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)



CONTOROL LEVER

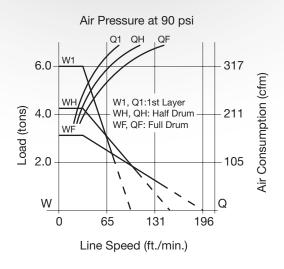




Model MP-W3036SACMB

6600 lb. Short Drum Winch w/ Manual Brake

The MP-W3036 series tugger is considered the work horse of the San-Ei tugger line. With its large 4-piston air motor and rugged construction, this unit is preferred in outdoor applications such as oil platform work and railroad car moving applications. Extra heavy-duty construction on this unit delivers return on investment. Ideal for long term rental applications in a variety of inclement weather. Large footprint for dependable mounting.



Specifications

Capacity	s.
Line Speed at Capacity 62	ft.
Cable Capacity	
Weight w/o Rope 1035 lb	s.
Air Inlet Thread 1-1/4	4"

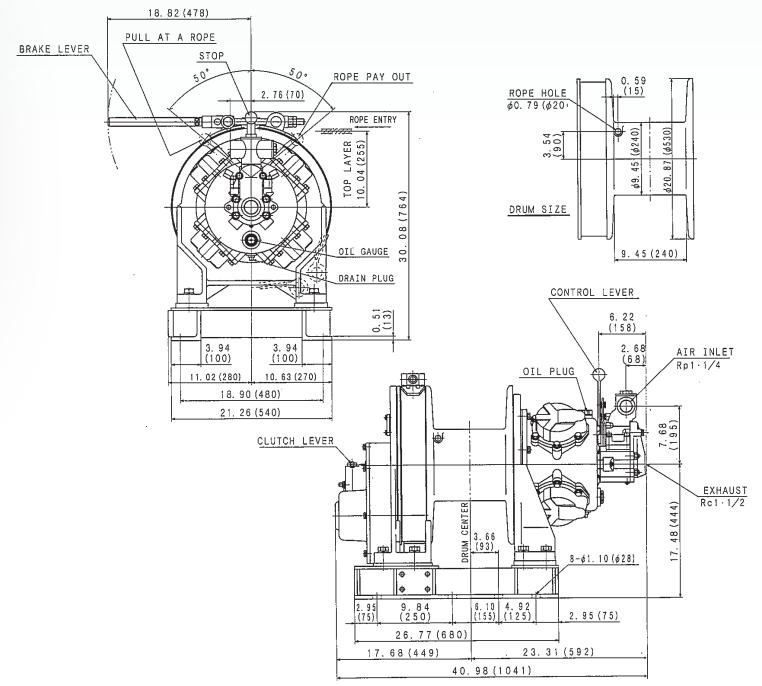


Model MP-W3036SACMB 6600 lb. Short Drum Winch w/ Manual Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
16.0 hp	6600 lbs.	121 ft./min.	5/8 in. x 525 ft.	1035 lbs.	318 cfm

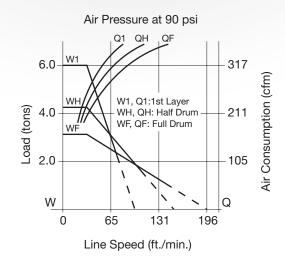
Drawing Dimensions in Inches (millimeters listed in brackets)





Model MP-W3036SAAB 6600 lb. Short Drum Winch w/ Auto Brake

With its large 4-piston air motor and rugged construction, the MP-W3036 series tugger is considered the work horse of the San-Ei tugger line. Preferred in outdoor applications such as oil platform work and railroad car moving applications, its extra heavy-duty construction delivers return on investment and is ideal for long term rental applications in a variety of inclement weather. Features a large footprint for dependable mounting.



Specifications

Capacity	600 lbs.
Line Speed at Capacity	62 ft.
Cable Capacity	of 5/8"
Weight w/o Rope10	066 lbs.
Air Inlet Thread	. 1-1/4"



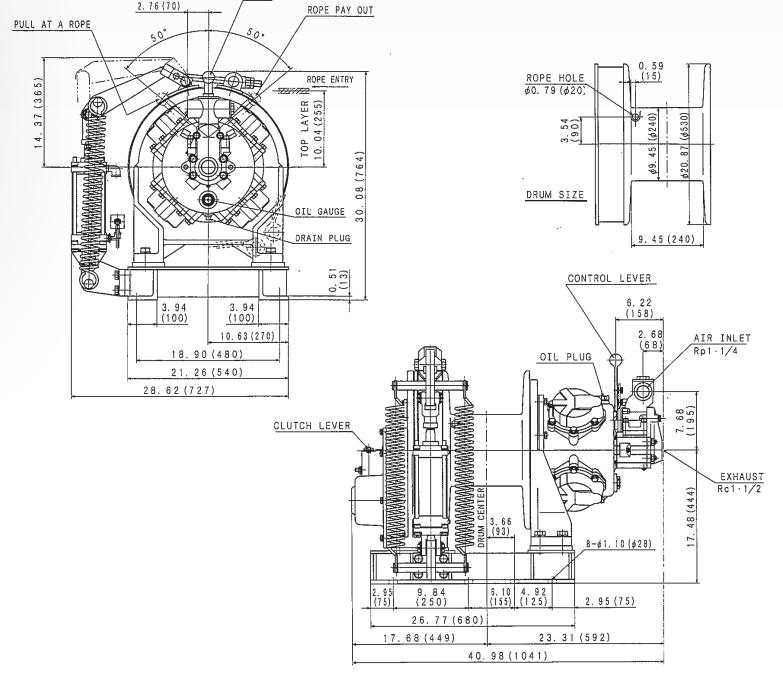
Model MP-W3036SAAB 6600 lb. Short Drum Winch w/ Auto Brake

STOP

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
16.0 hp	6600 lbs.	62 ft./min.	5/8 in. x 525 ft.	1066 lbs.	318 cfm

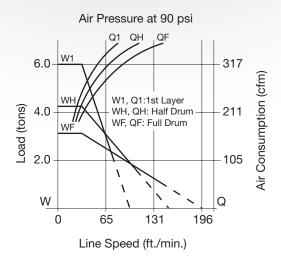
Drawing Dimensions in Inches (millimeters listed in brackets)





Model MP-W3036LACMB 6600 lb. Long Drum Winch w/ Manual Brake

The MP-W3036 series tugger is a real work horse among the San-Ei tugger line; and they are preferred in outdoor applications such as oil platform work and railroad car moving. With its large 4-piston air motor and rugged, extra heavy-duty construction, this unit delivers return on investment. Ideal for long term rental applications in a variety of inclement weather. With a large footprint this is the tugger of choice where dependable mounting and operation is required.



Specifications

Capacity	lbs.
Line Speed at Capacity 6	2 ft.
Cable Capacity 1050 ft. of	
Weight w/o Rope 1130	
Air Inlet Thread 1-	1/4"



Model MP-W3036LACMB 6600 lb. Long Drum Winch w/ Manual Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
16.0 hp	6600 lbs.	62 ft./min.	5/8 in. x 1050 ft.	1030 lbs.	318 cfm

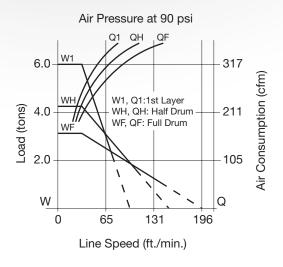
18.82 (478) 10.59(269) Drawing Dimensions in Inches (millimeters listed in brackets) PULL AT A ROPE BRAKE LEVER ROPE PAY OUT STOP 0 50. ROPE ENTRY 0.59 ROPE HOLE TOP LAYER 10.04(255) Ø0. 79 (Ø20) ÷ 3.54 ⊳ 08(764) 45 (\$240) \$530) 87 DRUM SIZE OIL GAUGE 0 ¢9. 520. DRAIN PLUG 18.90(480) 0.51 (13) 3.94 (100) 3.94 (100) 11.02(280) 10.63(270) CONTROL LEVER 18.90(480) 6. 22 🛆 21. 26 (540) (158)21.65(550) 2.68 AIR INLET (68) Δ Rp 1 · 1/4 OIL PLUG 89 92 Ф CLUTCH LEVER EXHAUST Rc1 · 1/2 (444) CENTER 48 6.42 (163) DRUM 17. 8-\$1.10(\$28) 11.61 (295) 2.95 6.8981 (300) 2.95(75) 11 36.22(920) 22. 40 (569) 28.03(712) 50.43(1281)



Model MP-W3036LAAB

6600 lb. Long Drum Winch w/ Auto Brake

Built with extra heavy-duty construction, the MP-W3036 series tugger is considered the work horse of the San-Ei tugger line. Featuring a large footprint for dependable mounting, it is preferred above its competition for outdoor applications such as oil platform work and railroad ar moving. With its large 4-piston air motor and rugged construction this unit delivers return on investment and is ideal for long term rental applications in a variety of inclement weather conditions.

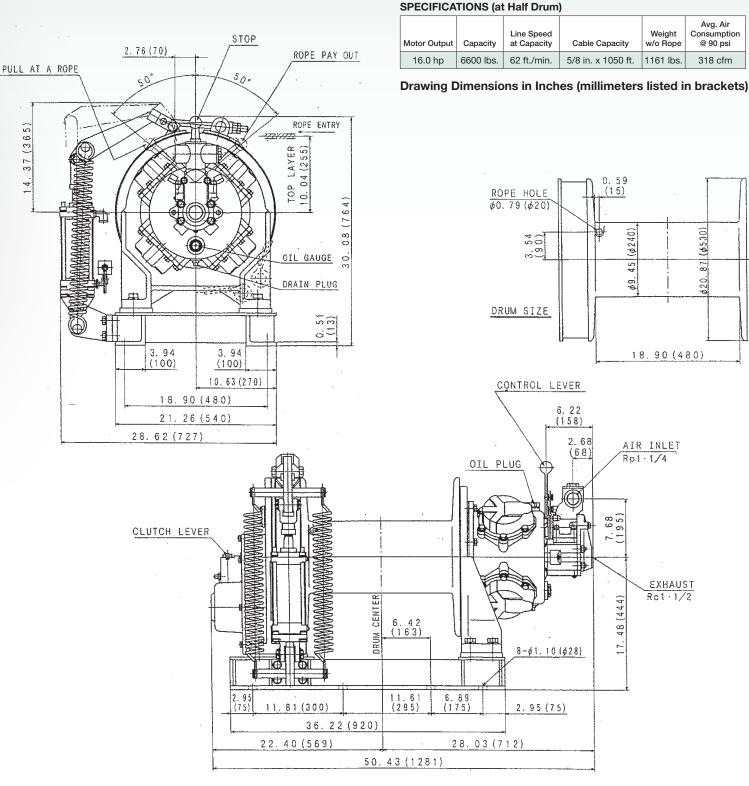


Specifications

Capacity	lbs.
Line Speed at Capacity 6	62 ft.
Cable Capacity 1050 ft. of	
Weight w/o Rope 1161	lbs.
Air Inlet Thread 1-	1/4"



Model MP-W3036LAAB 6600 lb. Long Drum Winch w/ Auto Brake

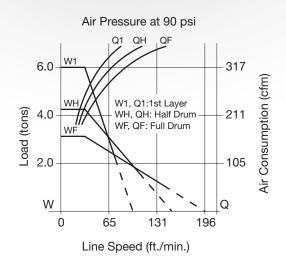




Model MP-W5036SACMB

11000 lb. Short Drum Winch w/ Manual Brake

The MP-W5036 series tugger is ideal for the most rigorous applications when dependability is a must. Designed for long term rentals with minimal maintenance. San-Ei has a great history of supplying these tuggers to ship building, petrochem and other marine industry applications. Extra wide brake band ensures confident user operation and safe load delivery. Featuring San-Ei's 4-piston air motor and super-duty frame and base construction.

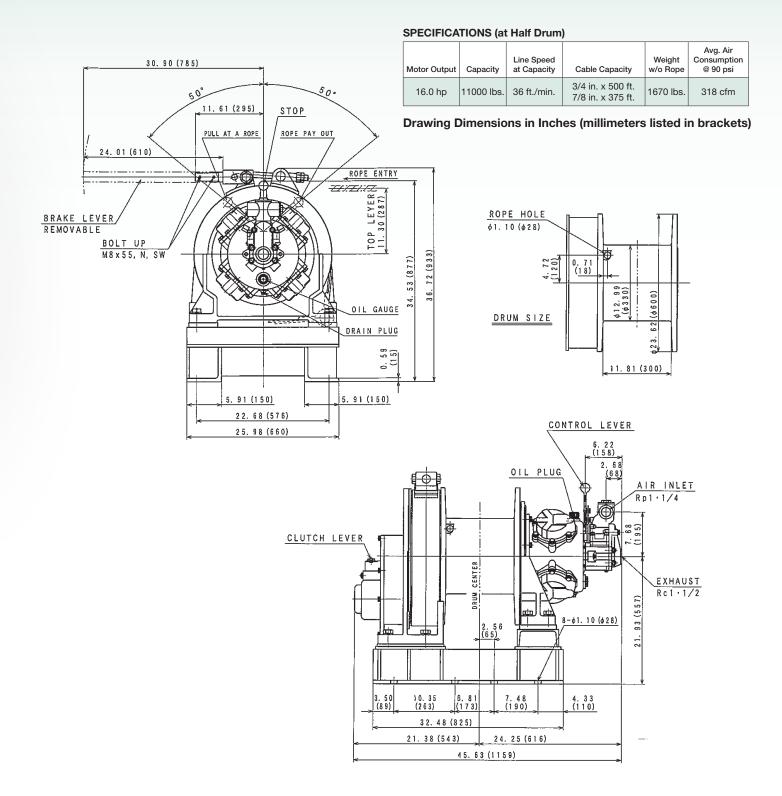


Specifications

Capacity	11000 lbs.
Line Speed at Capacity	
Cable Capacity	. 500 ft. of 3/4"
	375 ft. of 7/8"
Weight w/o Rope	1670 lbs.
Air Inlet Thread	1-1/4"



Model MP-W5036SACMB 11000 lb. Short Drum Winch w/ Manual Brake

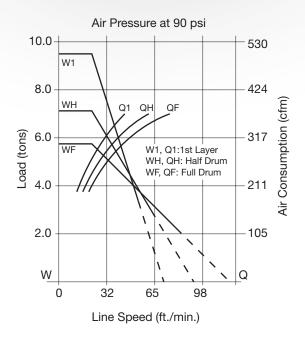




Model MP-W5036SAAB 11000 lb. Short Drum Winch w/ Auto Brake



These tuggers have been supplied to ship building, petrochem and other marine industry applications. The MP-W5036 series tugger is ideal for the most rigorous applications. Durable design used for long term rentals with minimal maintenance. Features San-Ei's 4-piston air motor, super-duty frame and base construction, and extra wide brake band, ensuring safe load delivery and operation.



Specifications

Capacity	11000 lbs.
Line Speed at Capacity	
Cable Capacity	. 500 ft. of 3/4"
	375 ft. of 7/8"
Weight w/o Rope	1716 lbs.
Air Inlet Thread	1-1/4"

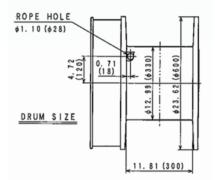


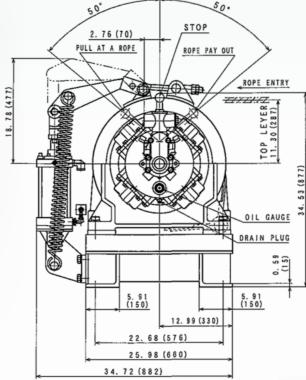
Model MP-W5036SAAB 11000 lb. Short Drum Winch w/ Auto Brake

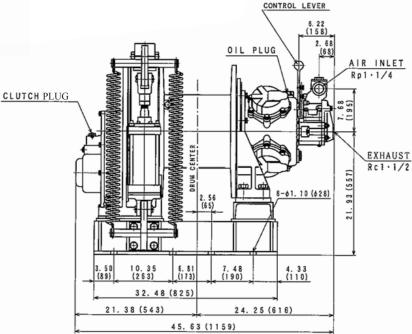
SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
16.0 hp	11000 lbs.	36 ft./min.	3/4 in. x 500 ft. 7/8 in. x 375 ft.	1716 lbs.	318 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)





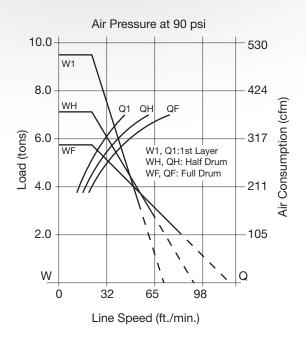




Model MP-W5036LACMB

11000 lb. Long Drum Winch w/ Manual Brake

The MP-W5036 series tugger is ideal for the most rigorous applications when dependability is a must. Designed for long term rentals with minimal maintenance. San-Ei has a great history of supplying these tuggers to ship building, petrochem and other marine industry applications. Extra wide brake band ensures confident user operation and safe load delivery. Featuring San-Ei's 4-piston air motor and super-duty frame and base construction.

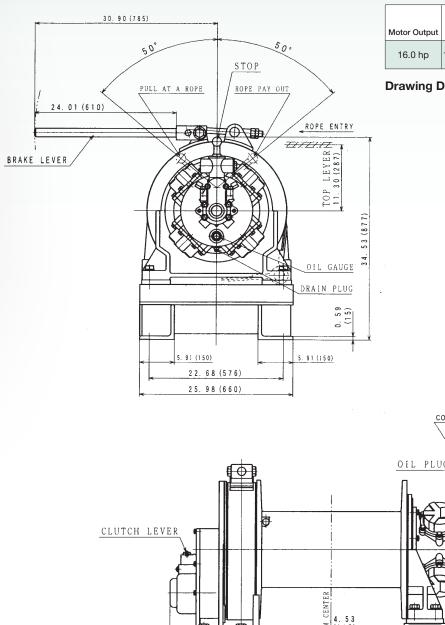


Specifications

Capacity	11000 lbs.
Line Speed at Capacity	
Cable Capacity	1000 ft. of 3/4"
	750 ft. of 7/8"
Weight w/o Rope	
Air Inlet Thread	1-1/4"



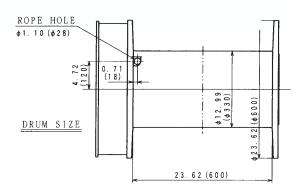
Model MP-W5036LACMB 11000 lb. Long Drum Winch w/ Manual Brake

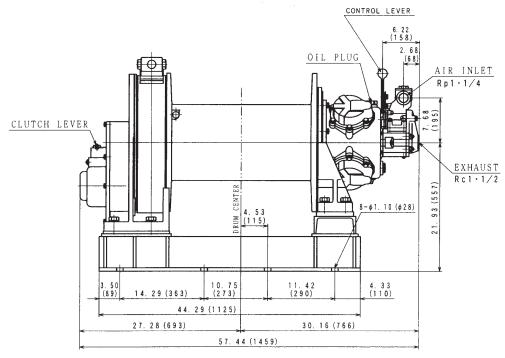


SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
16.0 hp	11000 lbs.	36 ft./min.	3/4 in. x 1000 ft. 7/8 in. x 750 ft.	1890 lbs.	318 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)



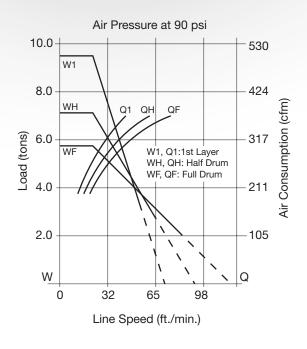




Model MP-W5036LAAB

11000 lb. Long Drum Winch w/ Auto Brake

These tuggers have been supplied to ship building, petrochem and other marine industry applications. The MP-W5036 series tugger is ideal for the most rigorous applications. Durable design used for long term rentals with minimal maintenance. Features San-Ei's 4-piston air motor, super-duty frame and base construction, and extra wide brake band, ensuring safe load delivery and operation.



Specifications

Capacity	
Line Speed at Capacity	
Cable Capacity	1000 ft. of 3/4"
	750 ft. of 7/8"
Weight w/o Rope	
Air Inlet Thread	

50°

18.78 (477



Model MP-W5036LAAB 11000 lb. Long Drum Winch w/ Auto Brake

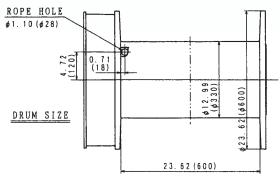
50.

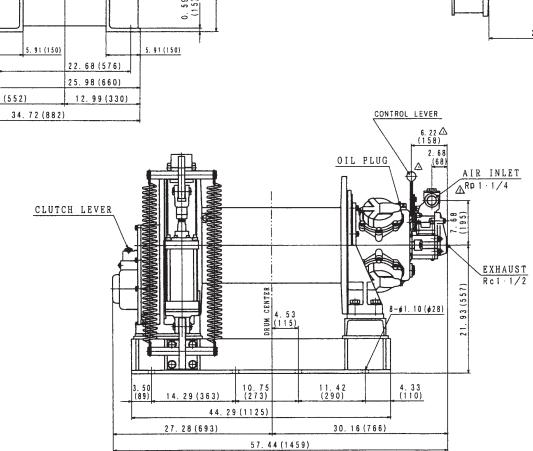
STOP

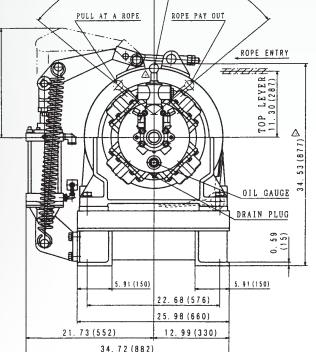
SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
16.0 hp	11000 lbs.	36 ft./min.	3/4 in. x 1000 ft. 7/8 in. x 750 ft.	1923 lbs.	318 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)

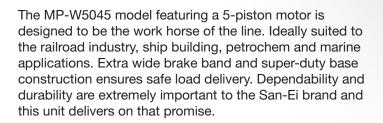


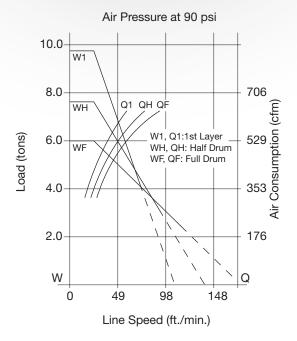






Model MP-W5045SACMB 11000 lb. Short Drum Winch w/ Manual Brake



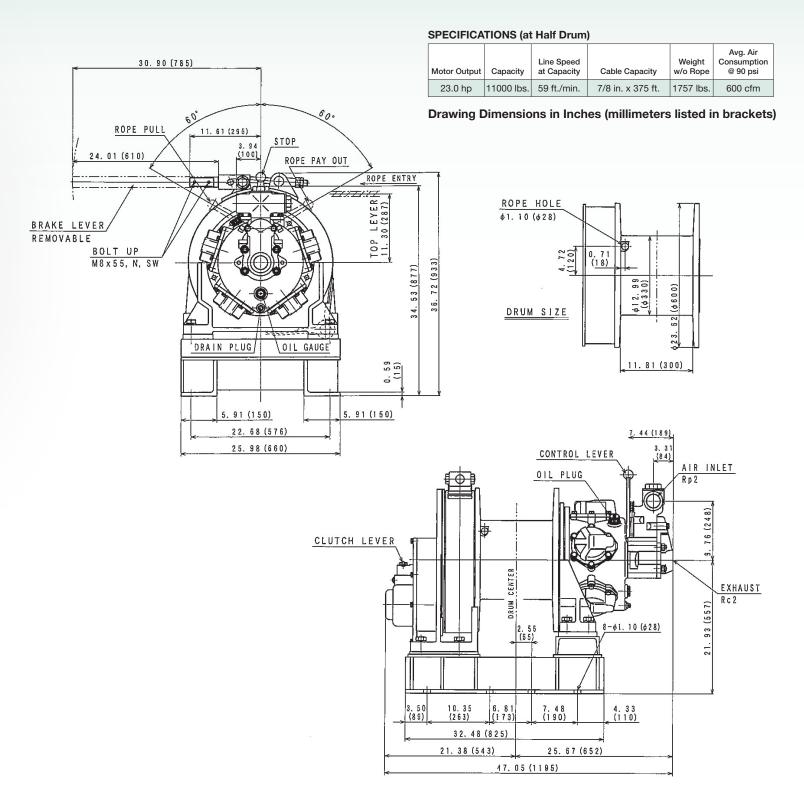


Specifications

Capacity	11000 lbs.
Line Speed at Capacity	59 ft.
Cable Capacity	375 ft. of 7/8"
Weight w/o Rope	1757 lbs.
Air Inlet Thread	



Model MP-W5045SACMB 11000 lb. Short Drum Winch w/ Manual Brake

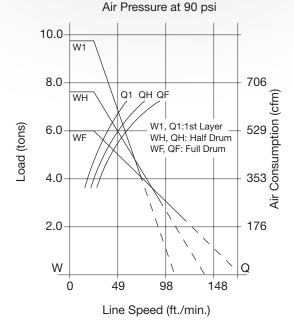




Model MP-W5045SAAB 11000 lb. Short Drum Winch w/ Auto Brake



Featuring a 5-piston air motor and super-duty frame and base construction, the MP-W5045 series tugger is ideal for the most rigorous applications when dependability is required. Designed for long term rentals with minimal maintenance. Ideal for ship building, petrochem and other marine industry applications. Extra wide brake band ensures confident user operation and safe load delivery.



Specifications

Capacity 11000 lbs.
Line Speed at Capacity 59 ft.
Cable Capacity
Weight w/o Rope 1808 lbs.
Air Inlet Thread

ROPE PULL



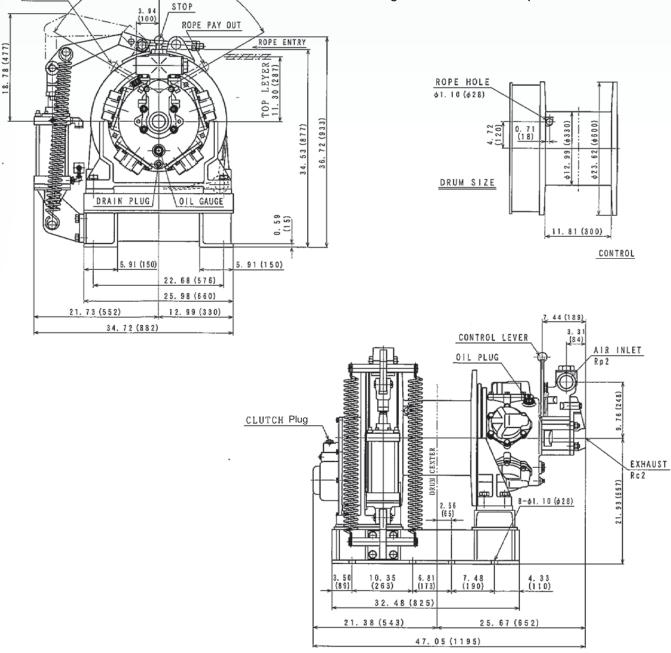
Model MP-W5045SAAB 11000 lb. Short Drum Winch w/ Auto Brake

60.

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
23.0 hp	11000 lbs.	59 ft./min.	7/8 in. x 375 ft.	1808 lbs.	600 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)

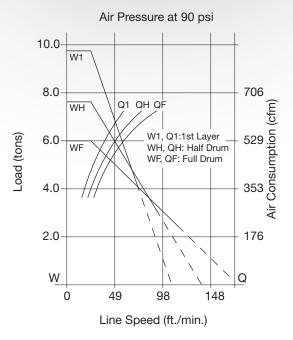


NOTE



Model MP-W5045LACMB 11000 lb. Long Drum Winch w/ Manual Brake

The MP-W5045 model featuring a 5-piston motor is designed to be the work horse of the line. Ideally suited to the railroad industry, ship building, petrochem and marine applications. Extra wide brake band and super-duty base construction ensures safe load delivery. Dependability and durability are extremely important to the San-Ei brand and this unit delivers on that promise.

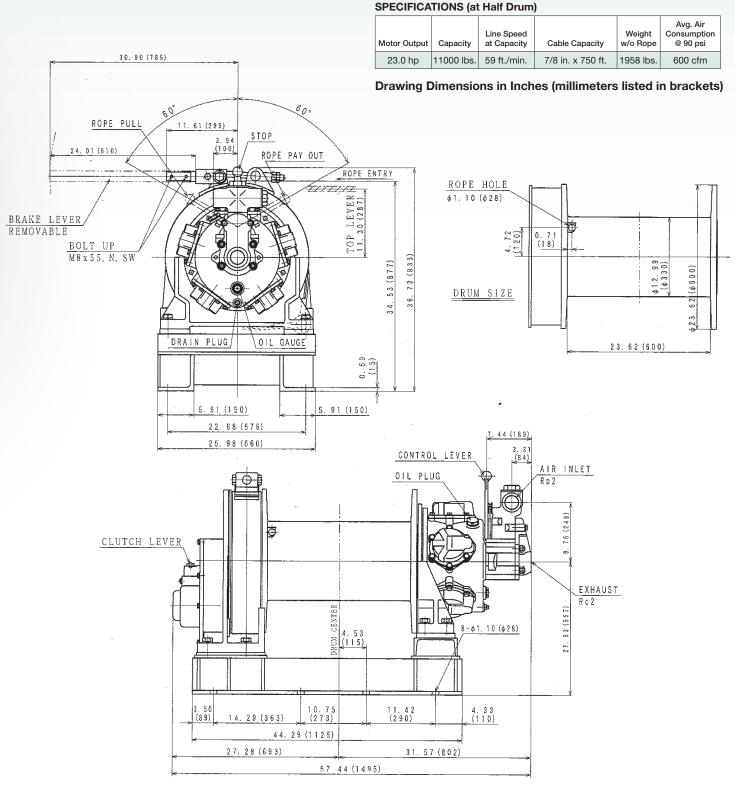


Specifications

Capacity
Line Speed at Capacity 59 ft.
Cable Capacity
Weight w/o Rope 1958 lbs.
Air Inlet Thread



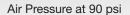
Model MP-W5045LACMB 11000 lb. Long Drum Winch w/ Manual Brake

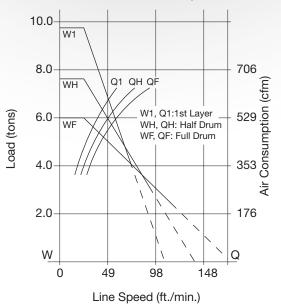




Featuring a 5-piston air motor and super-duty frame and base construction, the MP-W5045 series tugger is ideal for the most rigorous applications when dependability is required. Designed for long term rentals with minimal maintenance. Ideal for ship building, petrochem and other marine industry applications. Extra wide brake band ensures confident user operation and safe load delivery.







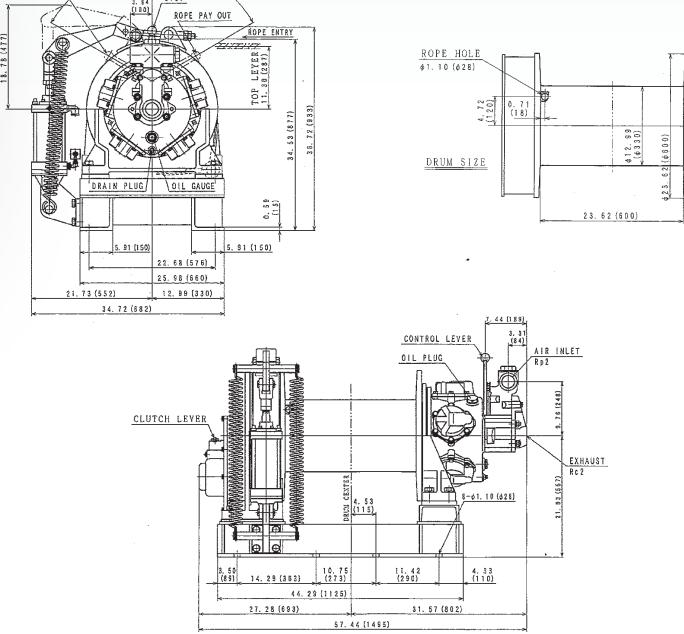


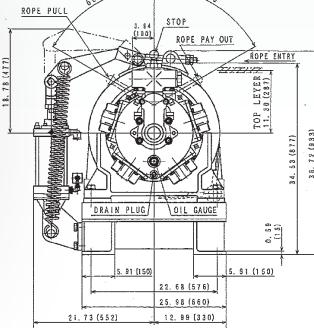
Model MP-W5045LAAB 11000 lb. Long Drum Winch w/ Auto Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
23.0 hp	11000 lbs.	59 ft./min.	7/8 in. x 750 ft.	2013 lbs.	600 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)







22000 lb. Standard Drum Winch w/ Auto Brake

The MP-AH45 series tugger is the most recent addition of the super-duty line of tuggers offered by San-Ei. The unit features a 5 piston air motor and a sealed dry disc brake system for the most extremely rigorous applications. It is designed for long term rentals with minimum maintenance. This unit would be ideal for ship building, petrochem and other large capacity marine applications. This tugger will handle any application put in front of it.

Air Pressure at 90 psi Rope at 1-1/4" DIA 20.0 W1 Consumption (cfm) 706 16.0 WН Load (tons) 01 QH QF W1, Q1:1st Layer WF WH, QH: Half Drum 12.0 530 WF, QF: Full Drum Air 353 8.0 177 4.0 Q W 0 17 33 49 Line Speed (ft./min.)

Specifications

Capacity	.22,000 lbs.
Line Speed at Capacity	
Cable Capacity	ft. of 1-1/4"
Weight w/o Rope	3375 lbs.
Air Inlet Thread	2"

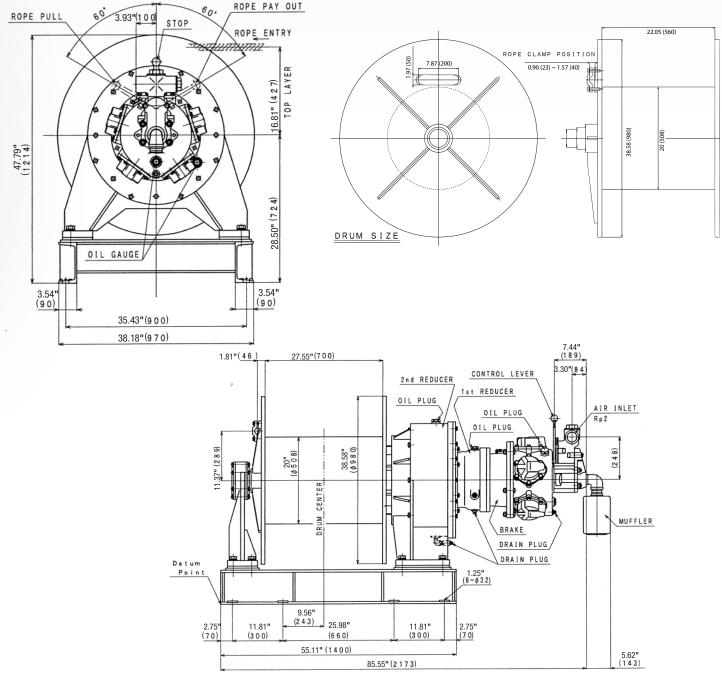


Model MP-AH45-100-S1H 22000 lb. Standard Drum Winch w/ Auto Brake

SPECIFICATIONS (at Half Drum)

Motor Output	Capacity	Line Speed at Capacity	Cable Capacity	Weight w/o Rope	Avg. Air Consumption @ 90 psi
23.0 hp	22000 lbs.	27 ft./min.	1-1/4 in. x 853 ft.	3375 lbs.	600 cfm

Drawing Dimensions in Inches (millimeters listed in brackets)





Guards & Pendant Controls



Drum Guards

Part No.	Drum	Fits Tool Model No.
E302-104G	Short	MP-W05 Series
E398-001G	Short	MP-W10220S Series MP-W20220S Series
E398-003G	Long	MP-W10220L Series MP-W20220L Series
E398-005G	Short	MP-W3036S Series
E398-007G	Long	MP-W3036L Series
E305-011G	Short	MP-W5036S Series MP-W5045S Series
E305-013G Long		MP-W5036L Series MP-W5045L Series
E305-015G	Standard	MP-AH45-100-S1H Series

Image: Window Service S

MP-W05AA3SACMBG Tugger w/ Guard

Notice: Do not lift tugger by guards. Guards were designed to prevent entanglement.

Complete Model Reference

Model	Standard	Model No.	Model No. w/ Guard	Model No.
Description	Model No.	w/ Pendant		w/ Pendant & Guard
1100 lb., Short Drum, Manual Brake	MP-W05AA3SACMB	–	MP-W05AA3SACMBG	–
1100 lb., Short Drum, Auto Brake	MP-W05AA3SAAB	MP-W05AA3SPAB	MP-W05AA3SAABG	MP-W05AA3SPABG
2200 lb., Short Drum, Manual Brake	MP-W10220SACMB	_	MP-W10220SACMBG	–
2200 lb., Short Drum, Auto Brake	MP-W10220SAAB	MP-W10220SPAB	MP-W10220SAABG	MP-W10220SPABG
2200 lb., Long Drum, Manual Brake	MP-W10220LACMB	_	MP-W10220LACMBG	–
2200 lb., Long Drum, Auto Brake	MP-W10220LAAB	MP-W10220LPAB	MP-W10220LAABG	MP-W10220LPABG
4400 lb., Short Drum, Manual Brake	MP-W20220SACMB	_	MP-W20220SACMBG	–
4400 lb., Short Drum, Auto Brake	MP-W20220SAAB	MP-W20220SPAB	MP-W20220SAABG	MP-W20220SPABG
4400 lb., Long Drum, Manual Brake	MP-W20220LACMB	_	MP-W20220LACMBG	–
4400 lb., Long Drum, Auto Brake	MP-W20220LAAB	MP-W20220LPAB	MP-W20220LAABG	MP-W20220LPABG
6600 lb., Short Drum, Manual Brake	MP-W3036SACMB	_	MP-W3036SACMBG	–
6600 lb., Short Drum, Auto Brake	MP-W3036SAAB	MP-W3036SPAB	MP-W3036SAABG	MP-W3036SPABG
6600 lb., Long Drum, Manual Brake	MP-W3036LACMB	_	MP-W3036LACMBG	–
6600 lb., Long Drum, Auto Brake	MP-W3036LAAB	MP-W3036LPAB	MP-W3036LAABG	MP-W3036LPABG
11000 lb., Short Drum, Manual Brake	MP-W5036SACMB	_	MP-W5036SACMBG	–
11000 lb., Short Drum, Auto Brake	MP-W5036SAAB	MP-W5036SPAB	MP-W5036SAABG	MP-W5036SPABG
11000 lb., Long Drum, Manual Brake	MP-W5036LACMB	_	MP-W5036LACMBG	–
11000 lb., Long Drum, Auto Brake	MP-W5036LAAB	MP-W5036LPAB	MP-W5036LAABG	MP-W5036LPABG
11000 lb., Short Drum, Manual Brake	MP-W5045SACMB	_	MP-W5045SACMBG	–
11000 lb., Short Drum, Auto Brake	MP-W5045SAAB	MP-W5045SPAB	MP-W5045SAABG	MP-W5045SPABG
11000 lb., Long Drum, Manual Brake	MP-W5045LACMB	_	MP-W5045LACMBG	–
11000 lb., Long Drum, Auto Brake	MP-W5045LAAB	MP-W5045LPAB	MP-W5045LAABG	MP-W5045LPABG
22000 lb., Standard Drum, Auto Brake	MP-AH45-100-S1H	MP-AH45-100-S1PH	MP-AH45-100-S1HG	MP-AH45-100-S1PHG

Pendant / Remote Control Retro-fit Kits Available.



Exhaust Mufflers

Part No.	Size	Fits Tool Model No.	
DM3-MFLRKIT	3/4" NPT	MP-W05 Series	
DM220-MFLRKIT	1-1/2" NPT	MP-W10220 Series MP-W20220 Series	
DM36-MFLRKIT	1-1/2" NPT	MP-W3036 Series MP-W5036 Series	
DM45-MFLRKIT	2" NPT	MP-W5045 Series MP-AH45 Series	

Filter / Lubricator Kits

	Part No.	Size	Fits Tool Model No.
	S14590-3/4	3/4" NPT	MP-W05 Series
	S14590-1	1" NPT	MP-W10220S Series MP-W10220L Series MP-W20220S Series MP-W20220L Series
	S14590-1 1/4	1-1/4" NPT	MP-W3036S Series MP-W3036L Series MP-W5036S Series MP-W5036L Series
	S14590-2	2" NPT	MP-W5045S Series MP-W5045L Series MP-AH45 Series

	•		
	•		
6			
6			
620			
62			
10.1	2. 4		
		2.3	



S14590-1

S14590-1 1/4







Support Cages

Part No.	Drum/Brake	Fits Tool Model No.	
W05SSCMB	Short/Manual	MP-W05 Manual Brake Series	
W05SSCAB	Short/Auto	MP-W05 Auto Brake Series	
W20SSCMB	Short/Manual	MP-W10220S Manual Brake Series, MP-W20220S Manual Brake Series	
W20SSCAB	Short/Auto	MP-W10220S Auto Brake Series, MP-W20220S Auto Brake Series	
W20LSCMB	Long/Manual	MP-W10220L Manual Brake Series, MP-W20220L Manual Brake Series	
W20LSCAB	Long/Auto	MP-W10220L Auto Brake Series, MP-W20220L Auto Brake Series	
W30SSCMB	Short/Manual	MP-W3036S Manual Brake Series	
W30SSCAB	Short/Auto	MP-W3036S Auto Brake Series	
W30LSCMB	Long/Manual	MP-W3036L Manual Brake Series	
W30LSCAB	Long/Auto	MP-W3036L Auto Brake Series	
W50SSCMB	Short/Manual	MP-W5036S Manual Brake Series, MP-W5045S Manual Brake Series	
W50SSCAB	Short/Auto	MP-W5036S Auto Brake Series, MP-W5045S Auto Brake Series	
W50LSCMB	Long/Manual	MP-W5036L Manual Brake Series, MP-W5045L Manual Brake Series	
W50LSCAB	Long/Auto	MP-W5036L Auto Brake Series, MP-W5045L Auto Brake Series	
AH45SSCAB	Std/Auto	MP-AH45-100-S1H Series	







MICHIGAN PNEUMATIC TOOL

תה

Air Winches

P

6850 Middlebelt Rd. • PO Box 906 Romulus, MI 48174-7406

© 2016 Michigan Pneumatic[®] Tool, Inc.





04072016**Rev15** PFT | DD | BA