


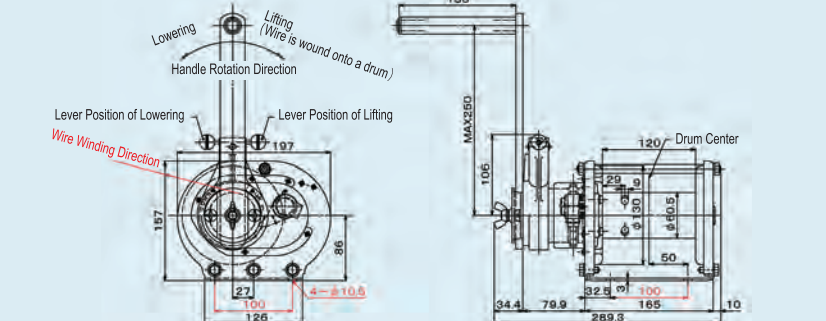
Stainless Steel (Ratchet) Winch

MAXPULL WINCH
Metallic Painting (RST)


● It permits reciprocating handle movement in both direction for lifting and lowering load, and accommodates installation in cramped locations such as wall and floor. It can be used by rotating the handle a full 360 degrees in addition to the above-mentioned.



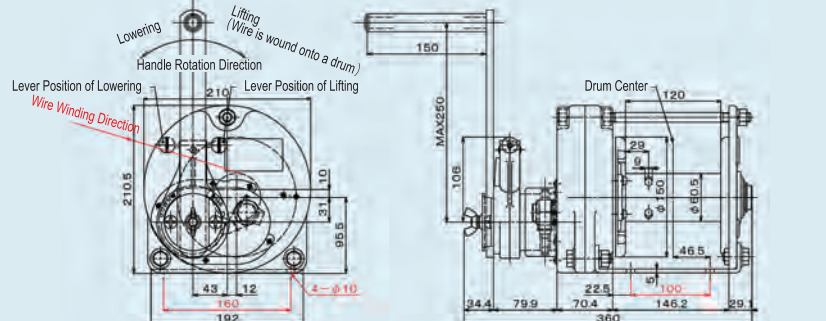
RST-1-SI
100kg(220lbs)




Model	RST-1-SI		Drum Capacity	6-Layers Winding φ 5 mm (6×19) × 35 m (3/16 inch (7×19) × 114 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 14.6 kg (32.2 lbs) 3rd Layer : 19.0 kg (41.9 lbs) 4th Layer : 21.2 kg (46.7 lbs)	Gear Ratio	1 : 1
Wire Rope Tension	100 kg (220 lbs)	4th Layer or Less						



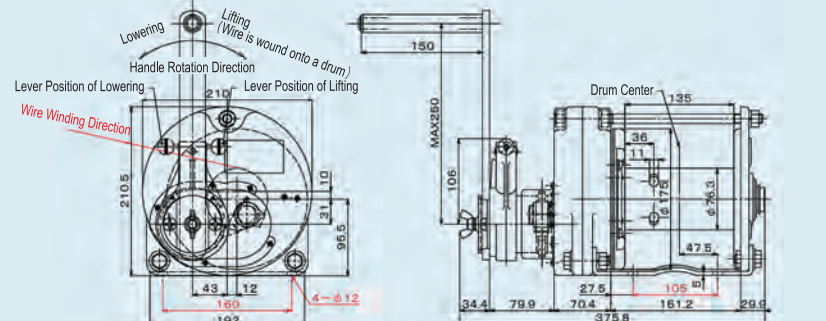
RST-3-SI
300kg(660lbs)




Model	RST-3-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 32 m (1/4 inch (6×36) × 104 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 7.7 kg (17.0 lbs) 3rd Layer : 10.5 kg (23.1 lbs) 5th Layer : 13.3 kg (29.3 lbs)	Gear Ratio	6.25 : 1
Wire Rope Tension	300 kg (660 lbs)	5th Layer or Less						



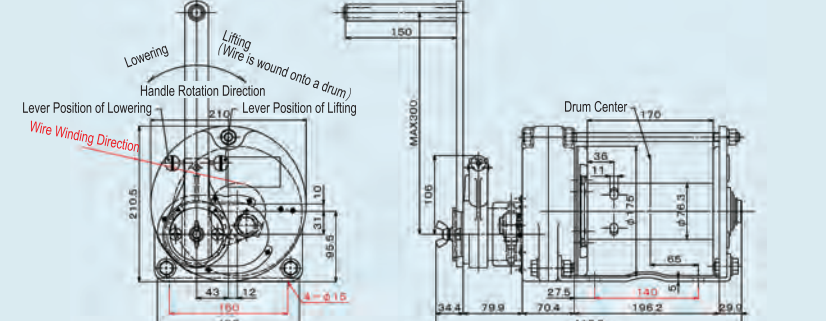
RST-5-SI
500kg(1,100lbs)



Model	RST-5-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 40 m (1/4 inch (6×36) × 131 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 11.1 kg (24.5 lbs) 3rd Layer : 14.4 kg (31.8 lbs) 5th Layer : 17.7 kg (39.0 lbs)	Gear Ratio	8.9 : 1
Wire Rope Tension	500 kg (1,100 lbs)	5th Layer or Less						



RST-10-SI
1,000kg(2,200lbs)

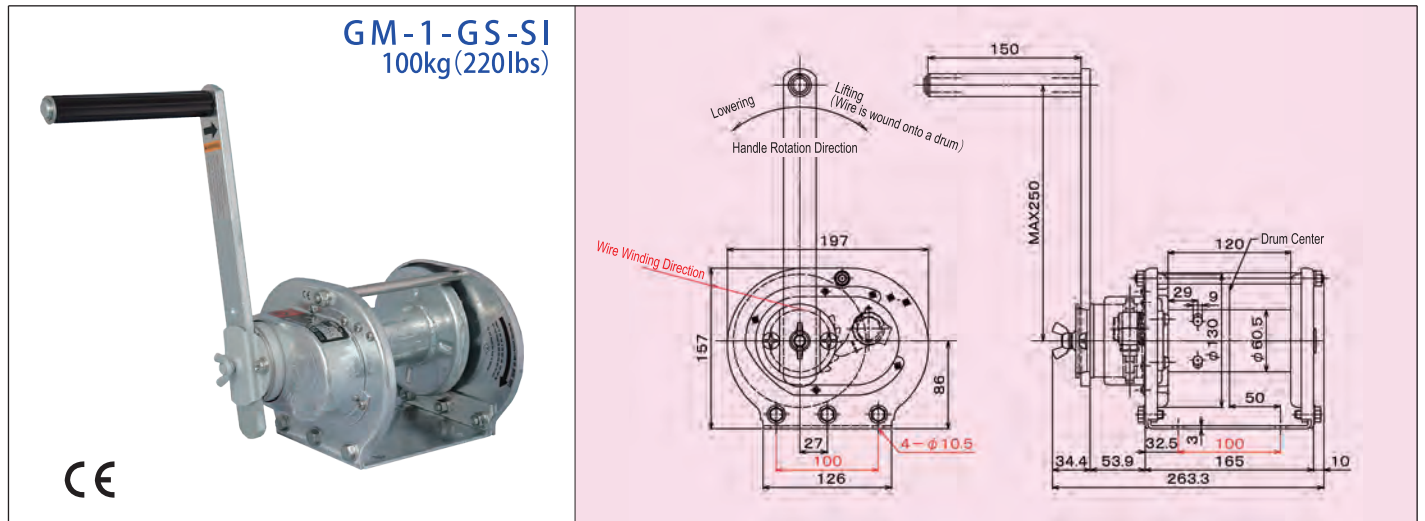


Model	RST-10-SI		Drum Capacity	5-Layers Winding φ 8 mm (6×37) × 35 m (5/16 inch (6×36) × 114 ft)	Handle Force Handle Length (Effective Max.) 300 mm (11.81 inch)	Winding Layer Number of Wire Rope 1st Layer : 13.5 kg (29.8 lbs) 2nd Layer : 16.0 kg (35.3 lbs) 3rd Layer : 18.5 kg (40.8 lbs)	Gear Ratio	12.6 : 1
Wire Rope Tension	1,000 kg (2,200 lbs)	3th Layer or Less						

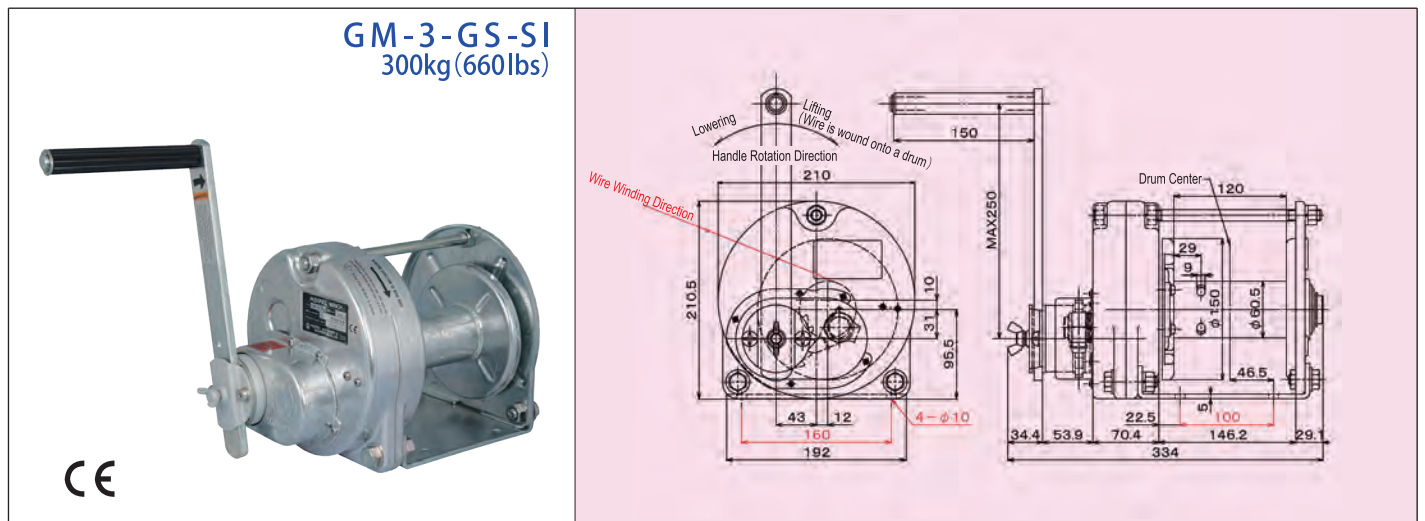
IMPORTANT! Dimensions are in metric and subject to change without notice.

Steel Hot Dip Galvanizing (Rotating) Winch

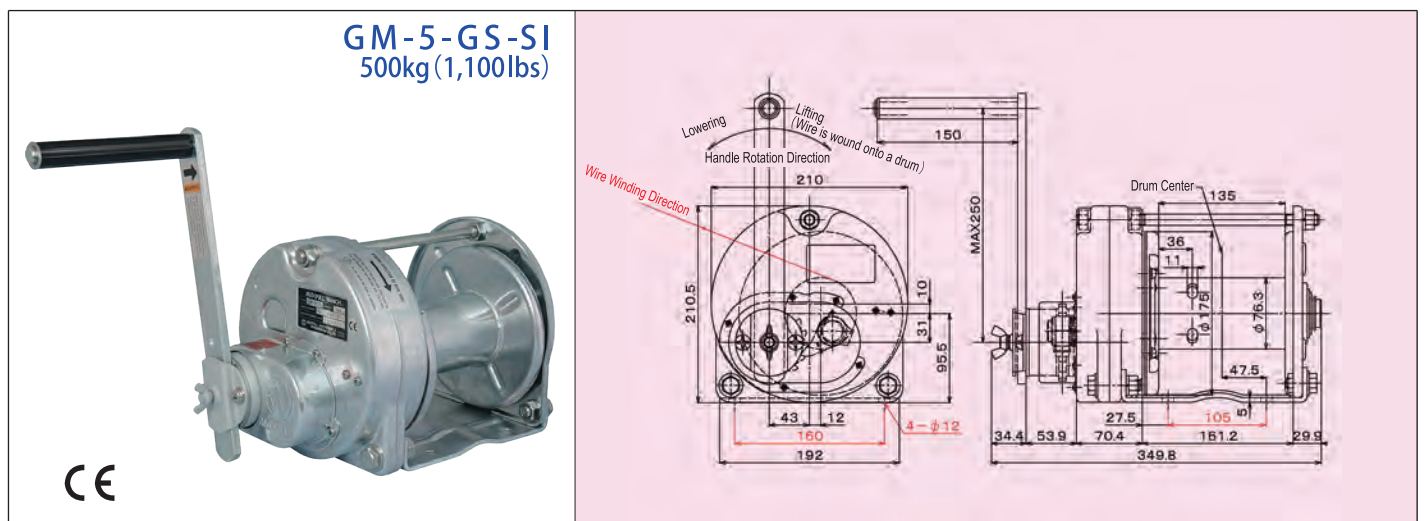
- Select this type when the handle can rotate 360 degrees on mounting position.
- It has excellent rust-proof, salt tolerance, and lower cost than stainless steel.



Model	GM-1-GS-SI		Drum Capacity	6-Layers Winding φ 5 mm (6×19) × 35 m (3/16 inch (7×19) × 114ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84inch)	Winding Layer Number of Wire Rope 1st Layer : 14.6kg (32.2lbs) 3rd Layer : 19.0kg (41.9lbs) 4th Layer : 21.2kg (46.7lbs)	Gear Ratio	1 : 1
Wire Rope Tension	100 kg (220 lbs)	4th Layer or Less					Weight (Body + Handle)	7.2kg (15.9lbs)



Model	GM-3-GS-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 32 m (1/4 inch (6×36) × 104ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84inch)	Winding Layer Number of Wire Rope 1st Layer : 7.7kg (17.0lbs) 3rd Layer : 10.5kg (23.1lbs) 5th Layer : 13.3kg (29.3lbs)	Gear Ratio	6.25 : 1
Wire Rope Tension	300 kg (660 lbs)	5th Layer or Less					Weight (Body + Handle)	14.1 kg (31.1lbs)




Model	GM-5-GS-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 40 m (1/4 inch (6×36) × 131ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84inch)	Winding Layer Number of Wire Rope 1st Layer : 11.1kg (24.5lbs) 3rd Layer : 14.4kg (31.8lbs) 5th Layer : 17.7kg (39.0lbs)	Gear Ratio	8.9 : 1
Wire Rope Tension	500 kg (1,100 lbs)	5th Layer or Less					Weight (Body + Handle)	15.4 kg (34.0lbs)

※ Drum capacity include the length of extra maintenance winding.
 ※ Wire rope tension is the value of standard layer or less. If the winding layer number exceeds the standard layer, decrease the wire rope tension according to the ratio.

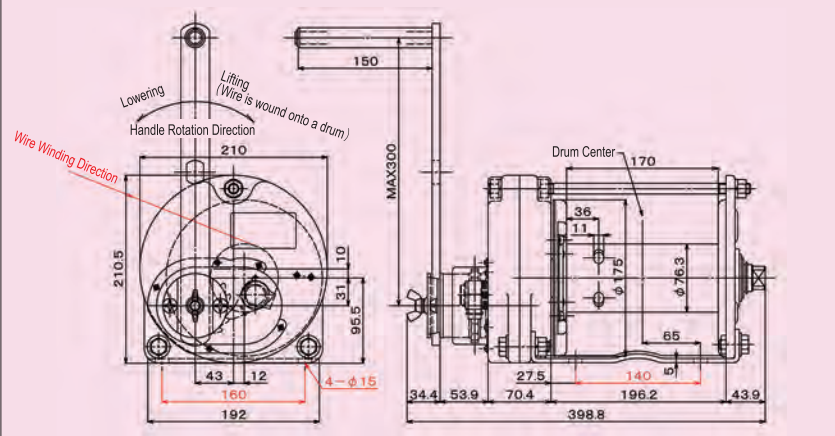
- ※ It is possible to manufacture ratchet-handle type and capstan-drum type. To order, please specify as for example MR-5-GS-SI, MC-5-GS-SI.
- ※ The parts performed hot dip galvanizing are gear case, gear case cover, drum, side frame, bed, clutch cover and handle arm.
- ※ Stay bolt, bolts, screws, nuts, retaining ring and spring are made of SUS-304.

GM-10-GS-SI

1,000kg (2,200lbs)




CE



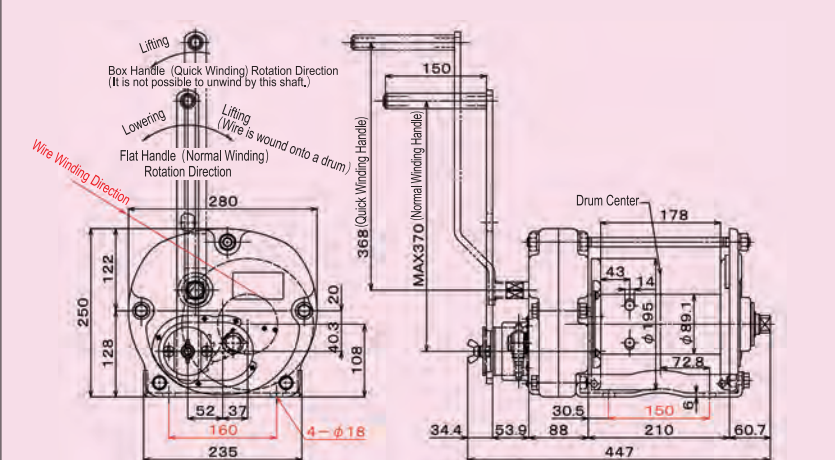
Model	GM-10-GS-SI		Drum Capacity	5-Layers Winding φ 8 mm (6×37) × 35 m (5/16 inch (6×36) × 114 ft)	Handle Force Handle Length (Effective Max.) 300 mm (11.81 inch)	Winding Layer Number of Wire Rope 1st Layer : 13.5 kg (29.8 lbs) 2nd Layer : 16.0 kg (35.3 lbs) 3rd Layer : 18.5 kg (40.8 lbs)	Gear Ratio	12.6 : 1
Wire Rope Tension	1,000 kg (2,200 lbs)	3th Layer or Less					Weight (Body + Handle)	16.4 kg (36.2 lbs)

GM-20-GS-SI

2,000kg (4,400lbs)



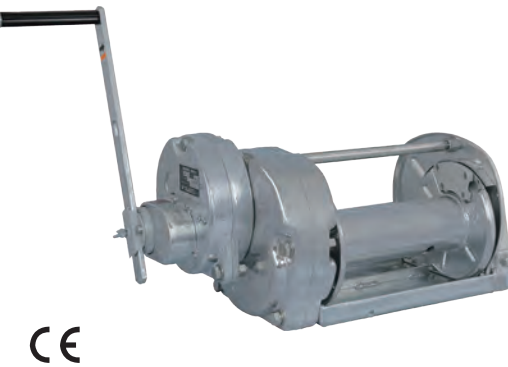
CE



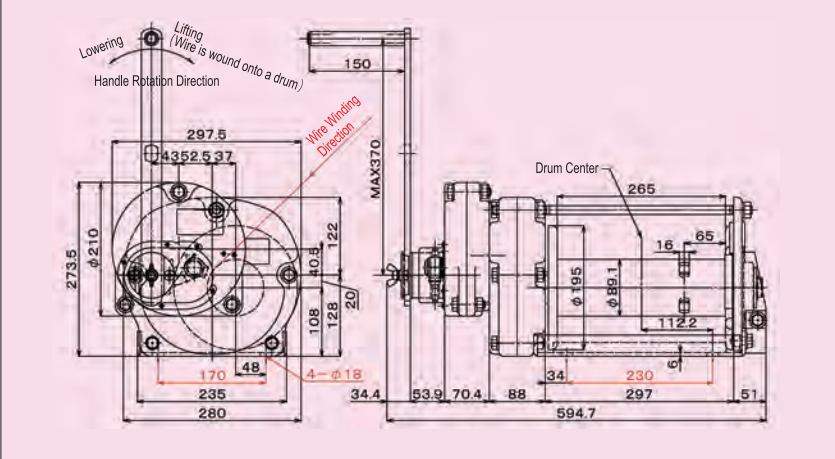
Model	GM-20-GS-SI		Drum Capacity	5-Layers Winding φ 9 mm (6×37) × 38 m (3/8 inch (6×36) × 124 ft)	Handle Force Handle Length (Effective Max.) 370 mm (14.57 inch)	Winding Layer Number of Wire Rope 1st Layer : 16.0 kg (35.3 lbs) 2nd Layer : 18.9 kg (41.7 lbs) 3rd Layer : 21.8 kg (48.1 lbs)	Gear Ratio	Quick Winding : 4 : 1 Normal Winding : 20 : 1
Wire Rope Tension	Normal Winding : 400 kg (880 lbs)	Quick Winding : 2,000 kg (4,400 lbs)					3th Layer or Less	Weight (Body + Handle)

GM-30-GS-SI

3,000kg (6,600lbs)




CE



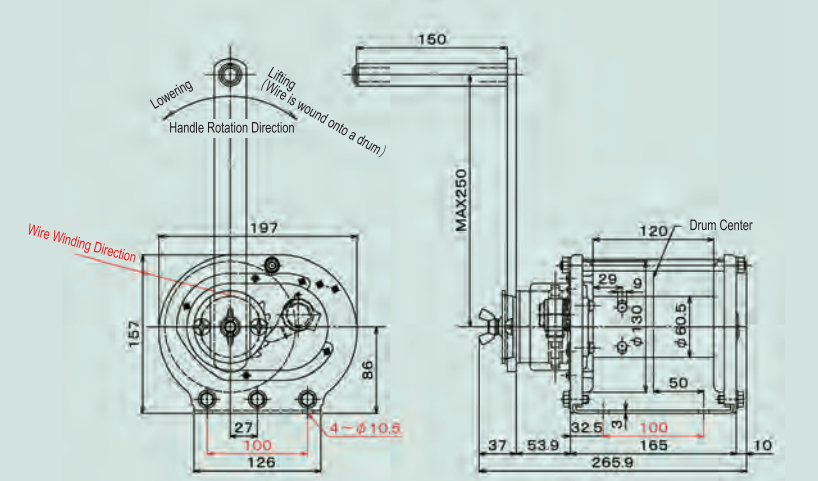
Model	GM-30-GS-SI		Drum Capacity	4-Layers Winding φ 12 mm (6×37) × 35 m (7/16 inch (6×36) × 114 ft)	Handle Force Handle Length (Effective Max.) 370 mm (14.57 inch)	Winding Layer Number of Wire Rope 1st Layer : 13.9 kg (30.6 lbs) 2nd Layer : 17.2 kg (37.9 lbs) 3rd Layer : 20.5 kg (45.2 lbs)	Gear Ratio	35.5 : 1
Wire Rope Tension	3,000 kg (6,600 lbs)	3th Layer or Less					Weight (Body + Handle)	37.7 kg (83.1 lbs)

Steel (Rotating) Winch

● Select this type when the handle can rotate 360 degrees on mounting position.




GM-1-SI
100kg(220lbs)

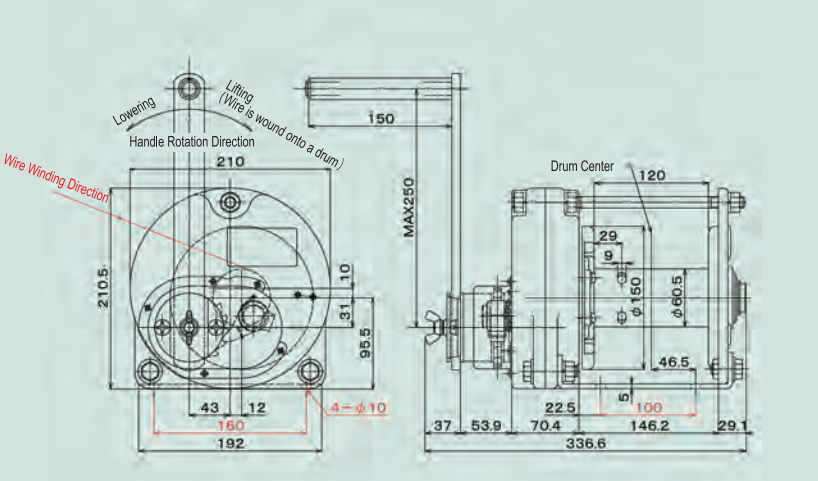


RoHS CE

Model	GM-1-SI		Drum Capacity	6-Layers Winding φ 5 mm (6×19) × 35 m (3/16 inch (7×19) × 114 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 14.6 kg (32.2 lbs) 3rd Layer : 19.0 kg (41.9 lbs) 4th Layer : 21.2 kg (46.7 lbs)	Gear Ratio	1 : 1
Wire Rope Tension	100 kg (220 lbs)	4th Layer or Less					Weight (Body + Handle)	7.2 kg (15.9 lbs)




GM-3-SI
300kg(660lbs)

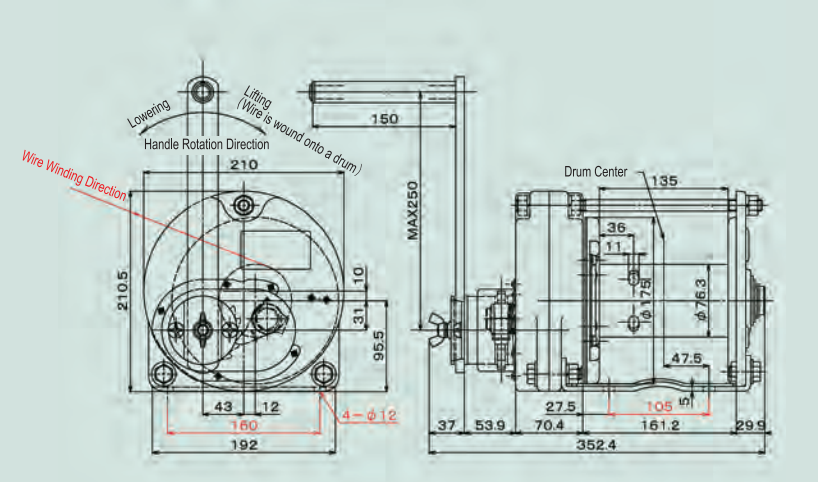


RoHS CE

Model	GM-3-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 32 m (1/4 inch (6×36) × 104 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 7.7 kg (17.0 lbs) 3rd Layer : 10.5 kg (23.1 lbs) 5th Layer : 13.3 kg (29.3 lbs)	Gear Ratio	6.25 : 1
Wire Rope Tension	300 kg (660 lbs)	5th Layer or Less					Weight (Body + Handle)	14.1 kg (31.1 lbs)



GM-5-SI
500kg(1,100lbs)



RoHS CE

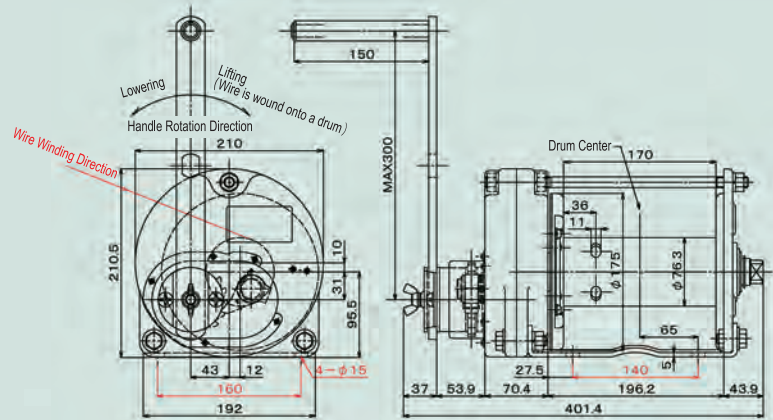
Model	GM-5-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 40 m (1/4 inch (6×36) × 131 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 11.1 kg (24.5 lbs) 3rd Layer : 14.4 kg (31.8 lbs) 5th Layer : 17.7 kg (39.0 lbs)	Gear Ratio	8.9 : 1
Wire Rope Tension	500 kg (1,100 lbs)	5th Layer or Less					Weight (Body + Handle)	15.4 kg (34.0 lbs)

※ Drum capacity include the length of extra maintenance winding.
 ※ Wire rope tension is the value of standard layer or less. If the winding layer number exceeds the standard layer, decrease the wire rope tension according to the ratio.

GM-10-SI 1,000kg (2,200lbs)



RoHS CE

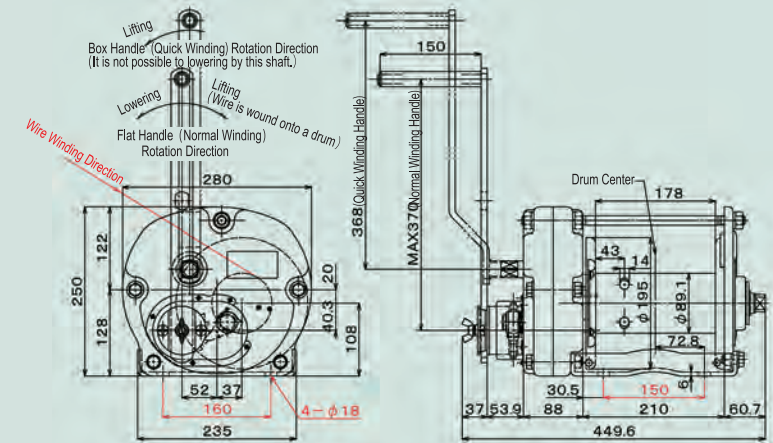


Model	GM-10-SI		Drum Capacity	5-Layers Winding φ 8 mm (6×37) × 35 m (5/16 inch (6×36) × 114 ft)	Handle Force Handle Length (Effective Max.) 300 mm (11.81 inch)	Winding Layer Number of Wire Rope 1st Layer : 13.5 kg (29.8 lbs) 2nd Layer : 16.0 kg (35.3 lbs) 3rd Layer : 18.5 kg (40.8 lbs)	Gear Ratio	12.6 : 1
Wire Rope Tension	1,000 kg (2,200 lbs)	3th Layer or Less					Weight (Body + Handle)	16.4 kg (36.2 lbs)

GM-20-SI 2,000kg (4,400lbs)



RoHS CE

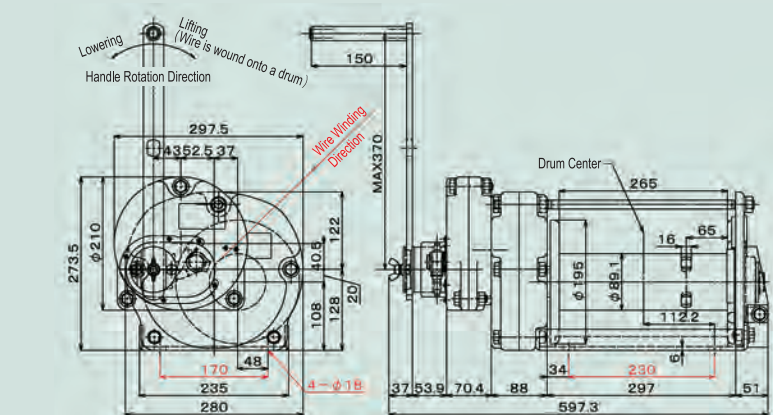


Model	GM-20-SI		Drum Capacity	5-Layers Winding φ 9 mm (6×37) × 38 m (3/8 inch (6×36) × 124 ft)	Handle Force Handle Length (Effective Max.) 370 mm (14.57 inch)	Winding Layer Number of Wire Rope 1st Layer : 16.0 kg (35.3 lbs) 2nd Layer : 18.9 kg (41.7 lbs) 3rd Layer : 21.8 kg (48.1 lbs)	Gear Ratio	Quick Winding 4 : 1 Normal Winding 20 : 1
Wire Rope Tension	Normal Winding : 400 kg (880 lbs)	3th Layer or Less					Weight (Body + Handle)	28.2 kg (62.2 lbs)

GM-30-SI 3,000kg (6,600lbs)



RoHS CE



Model	GM-30-SI		Drum Capacity	4-Layers Winding φ12 mm (6×37) × 35 m (7/16 inch (6×36) × 114 ft)	Handle Force Handle Length (Effective Max.) 370 mm (14.57 inch)	Winding Layer Number of Wire Rope 1st Layer : 13.9 kg (30.6 lbs) 2nd Layer : 17.2 kg (37.9 lbs) 3rd Layer : 20.5 kg (45.2 lbs)	Gear Ratio	35.5 : 1
Wire Rope Tension	3,000 kg (6,600 lbs)	3th Layer or Less					Weight (Body + Handle)	37.7 kg (83.1 lbs)

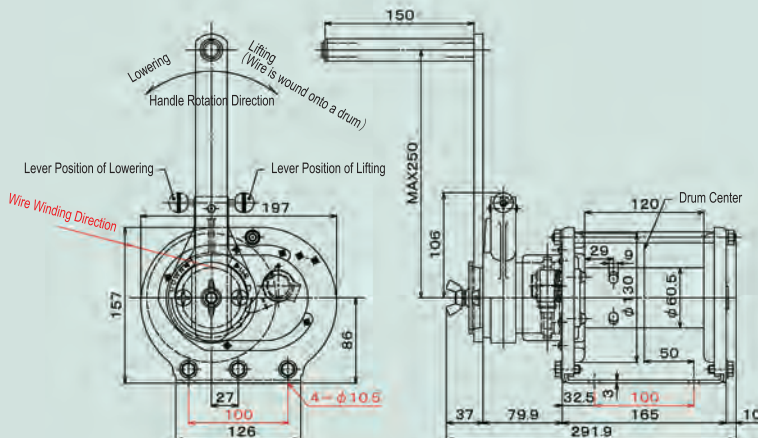
Steel (Ratchet) Winch

- It is a ratchet handle winch and using left-right motion of the handle to perform lifting and lowering, and can be installed directly in cramped locations where handle cannot be rotated such as wall and floor.

MR-1-SI
100kg(220lbs)



RoHS CE

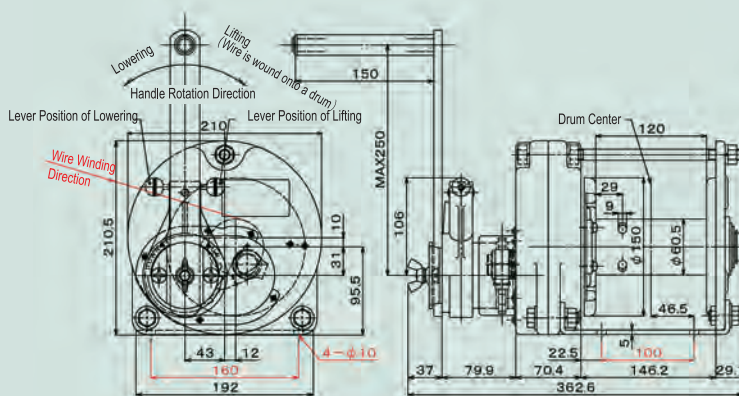


Model	MR-1-SI		Drum Capacity	6-Layers Winding φ 5 mm (6×19) × 35 m (3/16 inch (7×19) × 114 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 1.4.6kg (32.2lbs) 3rd Layer : 1.9.0kg (41.9lbs) 4th Layer : 2.1.2kg (46.7lbs)	Gear Ratio	1 : 1
Wire Rope Tension	100 kg (220 lbs)	4th Layer or Less					Weight (Body + Handle)	8.1 kg (17.9lbs)

MR-3-SI
300kg(660lbs)



RoHS CE

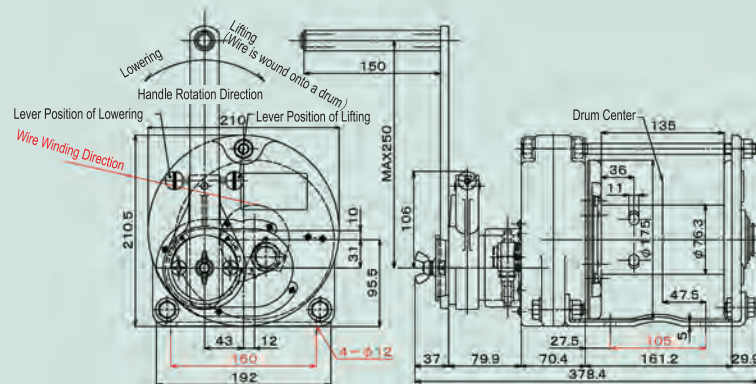


Model	MR-3-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 32 m (1/4 inch (6×36) × 104 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 7.7kg (17.0lbs) 3rd Layer : 10.5kg (23.1lbs) 5th Layer : 13.3kg (29.3lbs)	Gear Ratio	6.25 : 1
Wire Rope Tension	300 kg (660 lbs)	5th Layer or Less					Weight (Body + Handle)	15.0kg (33.1 lbs)

MR-5-SI
500kg(1,100lbs)



RoHS CE



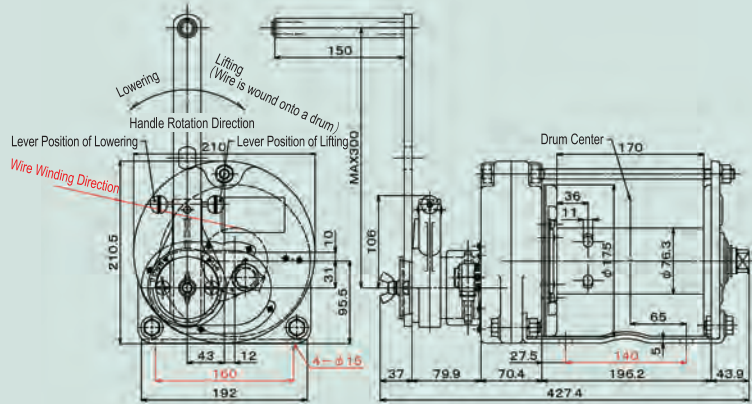
Model	MR-5-SI		Drum Capacity	6-Layers Winding φ 6 mm (6×37) × 40 m (1/4 inch (6×36) × 131 ft)	Handle Force Handle Length (Effective Max.) 250 mm (9.84 inch)	Winding Layer Number of Wire Rope 1st Layer : 11.1kg (24.5lbs) 3rd Layer : 14.4kg (31.8lbs) 5th Layer : 17.7kg (39.0lbs)	Gear Ratio	8.9 : 1
Wire Rope Tension	500 kg (1,100 lbs)	5th Layer or Less					Weight (Body + Handle)	16.3kg (35.9lbs)

※ Drum capacity include the length of extra maintenance winding.
※ Wire rope tension is the value of standard layer or less. If the winding layer number exceeds the standard layer, decrease the wire rope tension according to the ratio.

MR-10-SI 1,000kg (2,200lbs)



RoHS CE

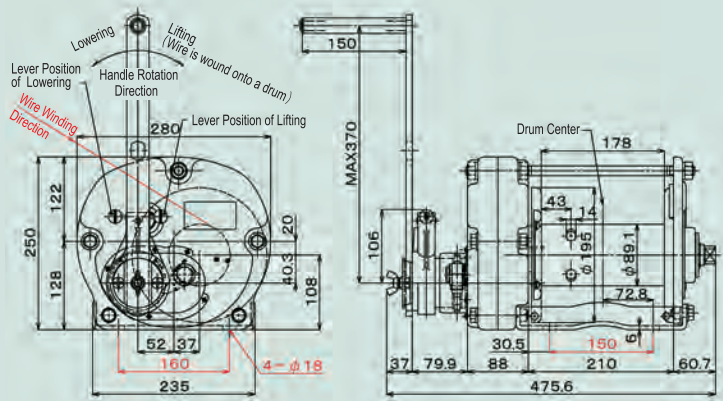


Model	MR-10-SI		Drum Capacity	5-Layers Winding φ 8 mm (6×37) × 35 m (5/16 inch (6×36) × 114 ft)	Handle Force Handle Length (Effective Max.) 300 mm (11.81 inch)	Winding Layer Number of Wire Rope 1st Layer : 13.5 kg (29.8 lbs) 2nd Layer : 16.0 kg (35.3 lbs) 3rd Layer : 18.5 kg (40.8 lbs)	Gear Ratio	12.6 : 1
Wire Rope Tension	1,000 kg (2,200 lbs)	3th Layer or Less					Weight (Body + Handle)	17.3 kg (38.1 lbs)

MR-20-SI 2,000kg (4,400lbs)



RoHS CE

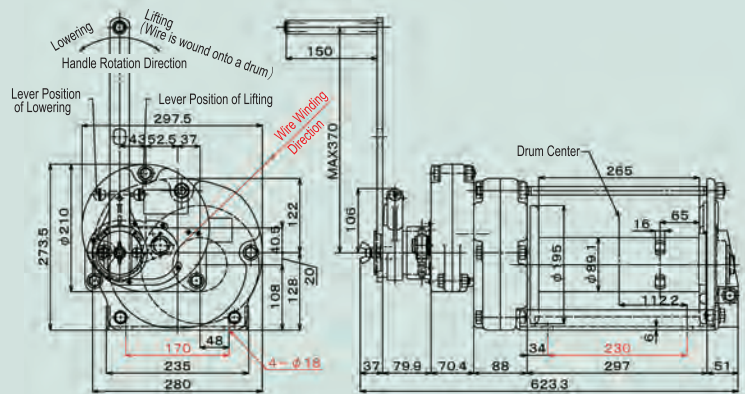


Model	MR-20-SI		Drum Capacity	5-Layers Winding φ 9 mm (6×37) × 38 m (3/8 inch (6×36) × 124 ft)	Handle Force Handle Length (Effective Max.) 370 mm (14.57 inch)	Winding Layer Number of Wire Rope 1st Layer : 16.0 kg (35.3 lbs) 2nd Layer : 18.9 kg (41.7 lbs) 3rd Layer : 21.8 kg (48.1 lbs)	Gear Ratio	20 : 1
Wire Rope Tension	2,000 kg (4,400 lbs)	3th Layer or Less					Weight (Body + Handle)	29.1 kg (64.2 lbs)

MR-30-SI 3,000kg (6,600lbs)




RoHS CE



Model	MR-30-SI		Drum Capacity	4-Layers Winding φ12 mm (6×37) × 35 m (7/16 inch (6×36) × 114 ft)	Handle Force Handle Length (Effective Max.) 370 mm (14.57 inch)	Winding Layer Number of Wire Rope 1st Layer : 13.9 kg (30.6 lbs) 2nd Layer : 17.2 kg (37.9 lbs) 3rd Layer : 20.5 kg (45.2 lbs)	Gear Ratio	35.5 : 1
Wire Rope Tension	3,000 kg (6,600 lbs)	3th Layer or Less					Weight (Body + Handle)	38.6 kg (85.1 lbs)

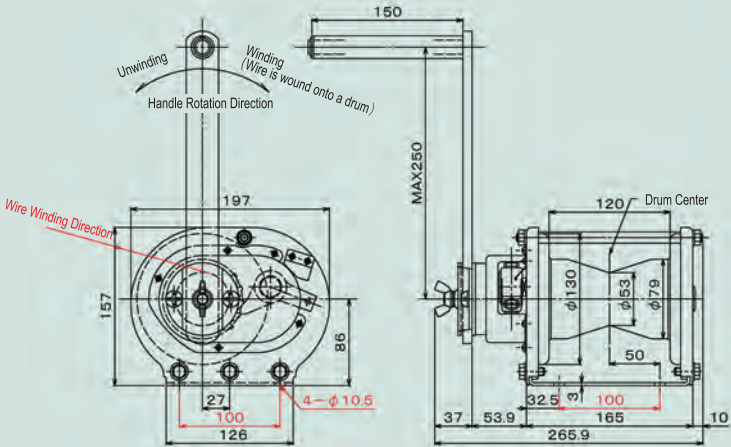
Steel (Capstan) Winch

- Wind 5 or 7 wraps of wire rope onto the drum, and haul in the same length as the wire rope wound on the drum while rotating the handle. To do this, apply tension to the wire rope being hauled in to avoid slipping of the drum and wire rope wound on the drum. (The length of the wire




MC-1
100kg (220lbs)

RoHS CE



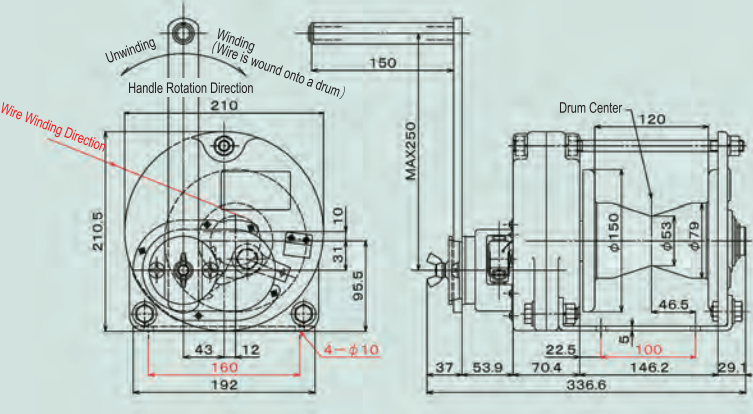
Technical drawing showing front and side views of the MC-1 winch with dimensions in mm. Key dimensions include: 150 (handle length), 197 (total width), 157 (inner width), 86 (height), 27 (offset), 100 (width), 126 (width), 4-φ10.5 (mounting holes), 100 (drum diameter), 165 (drum width), 265.9 (total width), 10 (thickness), 37 (offset), 53.9 (offset), 120 (drum center), 130 (drum diameter), 53 (drum diameter), 79 (drum diameter), 50 (offset), 100 (drum diameter), 165 (drum width), 265.9 (total width), 10 (thickness), 37 (offset), 53.9 (offset).

Model	MC-1	Wire Rope	φ 5 mm (6×19) (3/16inch (7×19))	Handle Force Handle Length (Effective Max.) 250 mm (9.84inch)	12.4 kg (27.3lbs)	Gear Ratio	1 : 1
Wire Rope Tension	100kg (220lbs)	Winding Wire Rope	5 or 7 Wraps			Weight (Body + Handle)	8.9kg (19.6lbs)




MC-3
300kg (660lbs)

RoHS CE



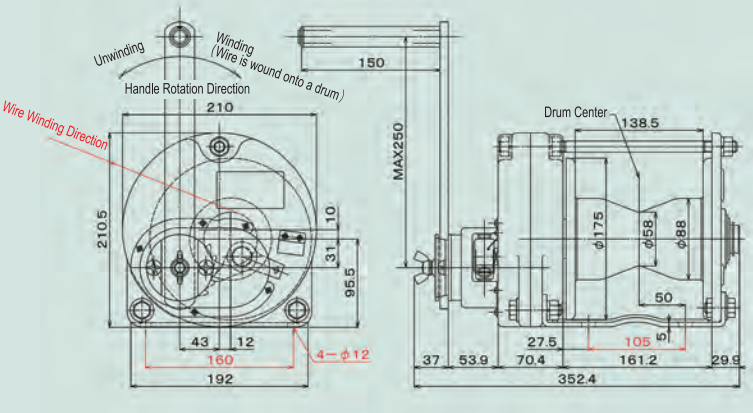
Technical drawing showing front and side views of the MC-3 winch with dimensions in mm. Key dimensions include: 150 (handle length), 210 (total width), 210.5 (inner width), 10 (height), 31 (height), 95.5 (height), 43 (offset), 12 (offset), 160 (width), 192 (width), 4-φ10 (mounting holes), 100 (drum diameter), 146.2 (drum width), 336.6 (total width), 29.1 (thickness), 37 (offset), 53.9 (offset), 120 (drum center), 115 (drum diameter), 53 (drum diameter), 79 (drum diameter), 46.5 (offset), 100 (drum diameter), 146.2 (drum width), 336.6 (total width), 29.1 (thickness), 37 (offset), 53.9 (offset).

Model	MC-3	Wire Rope	φ 6 mm (6×37) (1/4 inch (6×36))	Handle Force Handle Length (Effective Max.) 250 mm (9.84inch)	6.5 kg (14.3lbs)	Gear Ratio	6.25 : 1
Wire Rope Tension	300kg (660lbs)	Winding Wire Rope	5 or 7 Wraps			Weight (Body + Handle)	15.8kg (34.8lbs)



MC-5
500kg (1,100lbs)

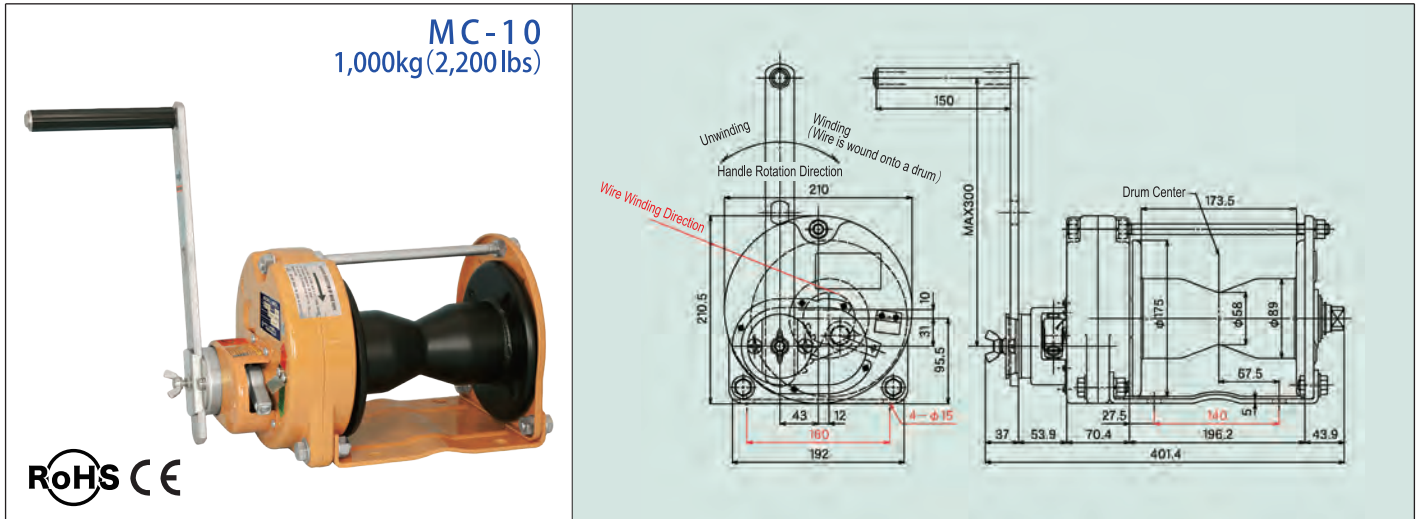
RoHS CE



Technical drawing showing front and side views of the MC-5 winch with dimensions in mm. Key dimensions include: 150 (handle length), 210 (total width), 210.5 (inner width), 10 (height), 31 (height), 95.5 (height), 43 (offset), 12 (offset), 160 (width), 192 (width), 4-φ12 (mounting holes), 105 (drum diameter), 161.2 (drum width), 352.4 (total width), 29.9 (thickness), 37 (offset), 53.9 (offset), 138.5 (drum center), 175 (drum diameter), 58 (drum diameter), 88 (drum diameter), 50 (offset), 105 (drum diameter), 161.2 (drum width), 352.4 (total width), 29.9 (thickness), 37 (offset), 53.9 (offset).

Model	MC-5	Wire Rope	φ 6 mm (6×37) (1/4 inch (6×36))	Handle Force Handle Length (Effective Max.) 250 mm (9.84inch)	8.5 kg (18.7lbs)	Gear Ratio	8.9 : 1
Wire Rope Tension	500kg (1,100lbs)	Winding Wire Rope	5 or 7 Wraps			Weight (Body + Handle)	17.8kg (39.2lbs)

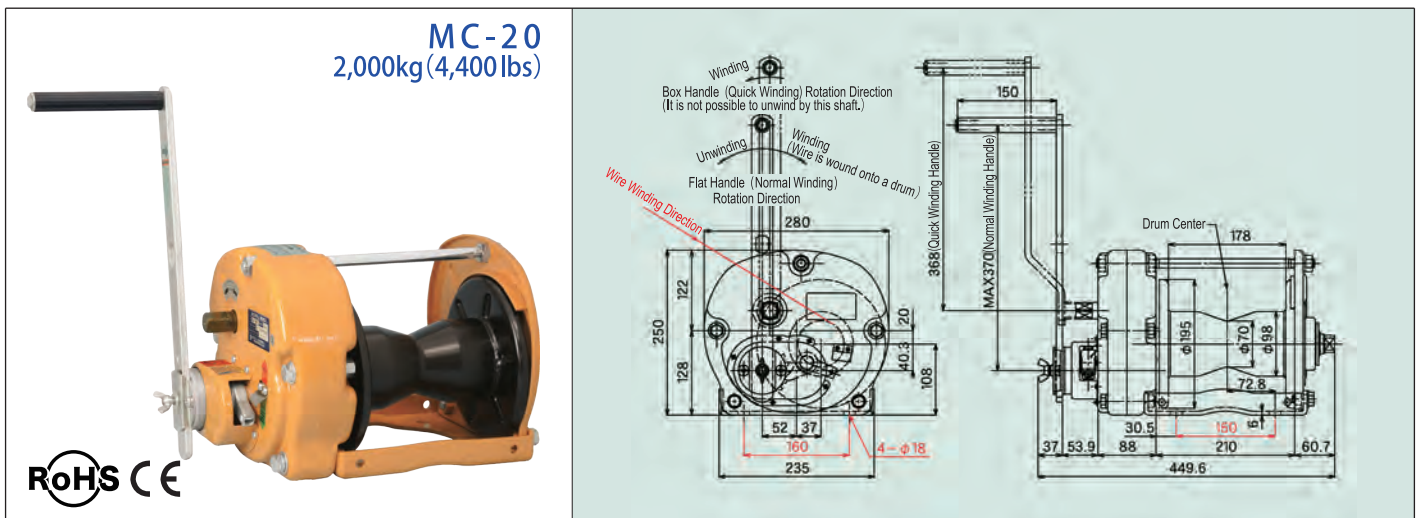
Rope to be used is endless.)



MC-10
1,000kg (2,200lbs)



Model	MC-10	Wire Rope	φ 8 mm (6×37) (5/16inch (6×36))	Handle Force Handle Length (Effective Max.)	10.8kg (23.8lbs)	Gear Ratio	12.6 : 1
Wire Rope Tension	1,000 kg (2,200 lbs)	Winding Wire Rope	5 or 7 Wraps	300 mm (11.81inch)		Weight (Body + Handle)	20.1 kg (44.3lbs)



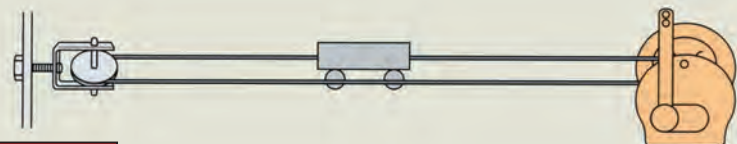
MC-20
2,000kg (4,400lbs)



Model	MC-20	Wire Rope	φ 9 mm (6×37) (3/8 inch (6×36))	Handle Force Handle Length (Effective Max.)	13.0kg (28.7lbs)	Gear Ratio	Quick Winding 4 : 1 Normal Winding 20 : 1
Wire Rope Tension	Normal Winding : 400 kg (880 lbs) Quick Winding : 2,000 kg (4,400 lbs)	Winding Wire Rope	5 or 7 Wraps	370 mm (14.57inch)		Weight (Body + Handle)	31.3 kg (69.0 lbs)

Capstan winch is mainly used in the following cases :

1. Movement of Truck
2. Opening and Closing of Stage Setting
3. Device for Opening / Closing Arcade
4. Stretching a Safety Net for Training of Fire Department



Model MC is designed only for pulling horizontally. Never use this winch for lifting vertically.

■ Please refer to the following table to find the amount of tension required.

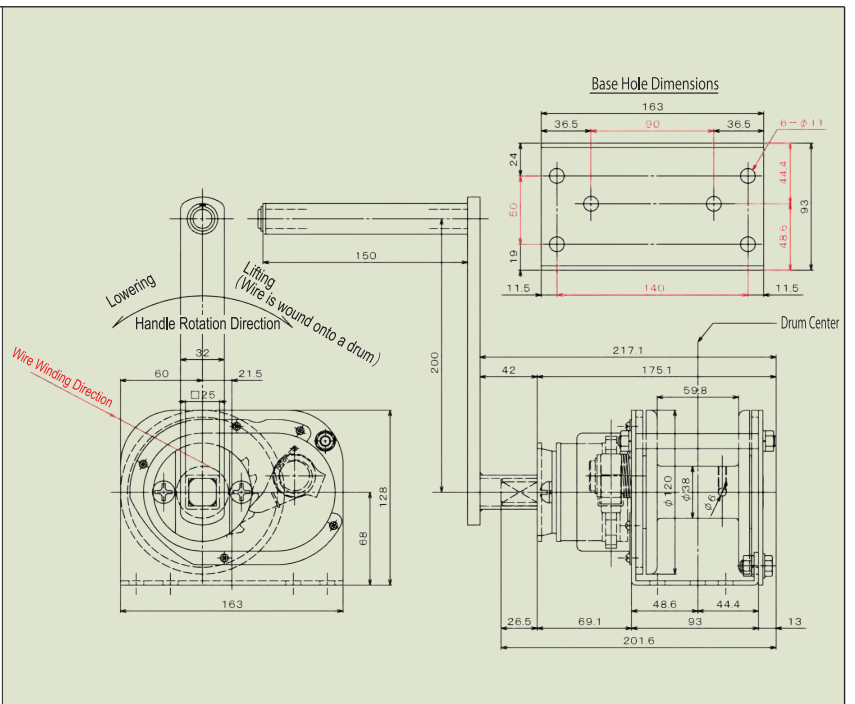
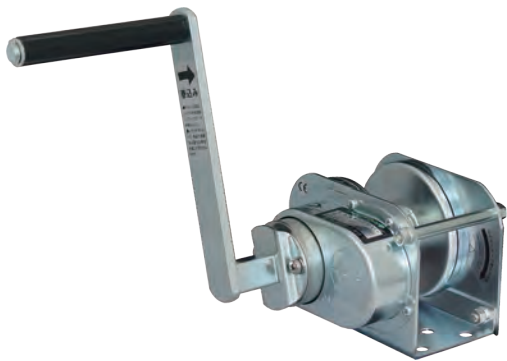
Model	MC-1	MC-3	MC-5	MC-10	MC-20
Tension for Hauling in the Wire Rope	2kg or more (4.4 lbs or more)	4kg or more (8.8 lbs or more)	7kg or more (15.4 lbs or more)	13kg or more (28.7 lbs or more)	25kg or more (55.1 lbs or more)

※ The value shown on the diagram is the value of wound the wire rope around the center of the capstan drum 7 times.

Mini (Rotating) Winch

● Important parts such as mechanical brake are made with model GM common parts to making it robust, but mounting pitch is 140mm × 50mm (5 33/64 inch × 1 31/32 inch), super compact design with weight of 5 kg (11.0lbs). It is the best winch for customers who place importance on safety and reliability even in small size.

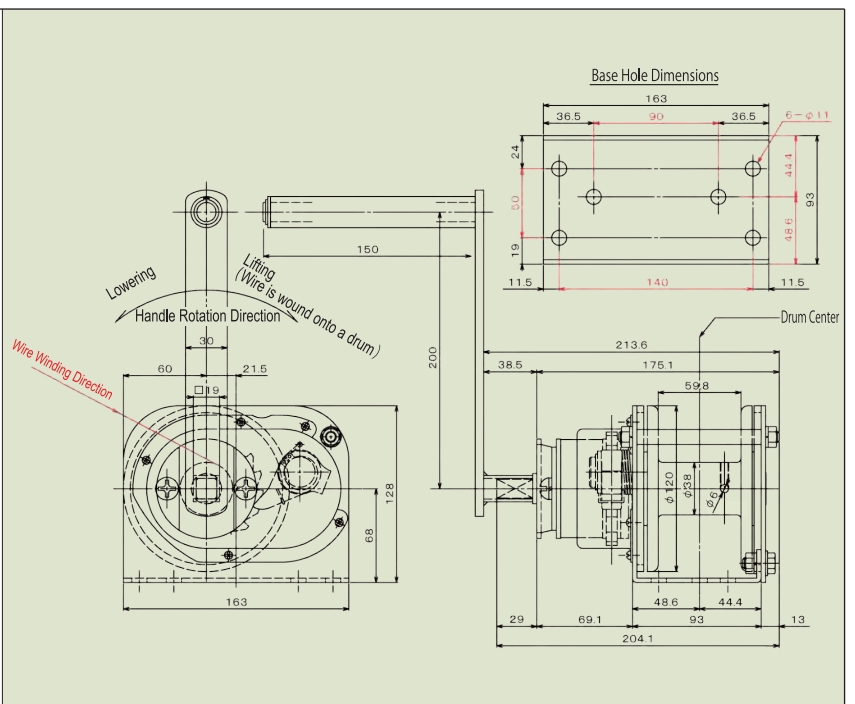
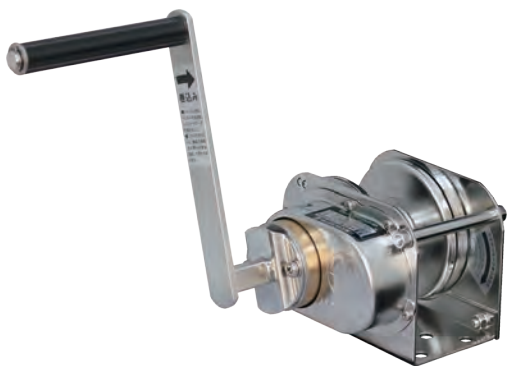
GM-1LH-SI-KEN
100kg (220lbs)



Model	GM-1LH-SI-KEN	Drum Capacity	8-Layers Winding φ 4 mm (6×19) × 22 m (5/32 inch (7×19) × 72 ft.)	Handle Force Handle Length 200 mm	Winding Layer Number of Wire Rope	Gear Ratio	1 : 1
Wire Rope Tension	100 kg (220 lbs) 5th Layer or Less				1st Layer : 1.4kg (25.1 lbs) 3rd Layer : 1.5.8kg (34.8 lbs) 5th Layer : 2.0.1kg (44.3 lbs)		

※ An automatic brake is used. (Rotating the handle clockwise when lifting, and counterclockwise when lowering.)

ESB-1LH-SI-KEN
100kg (220lbs)



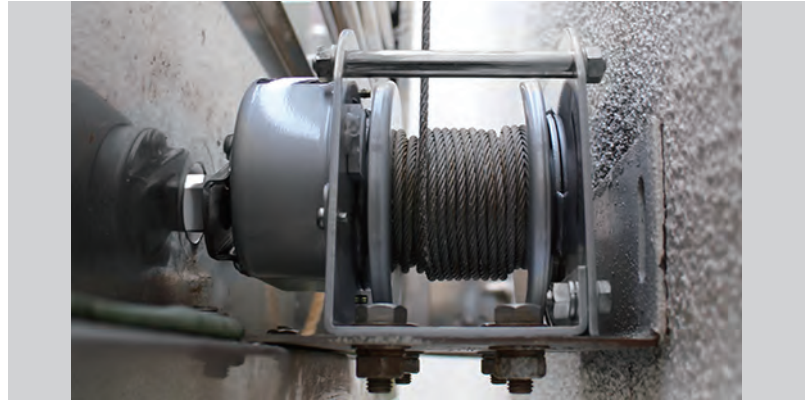
Model	ESB-1LH-SI-KEN	Drum Capacity	8-Layers Winding φ 4 mm (6×19) × 22 m (5/32 inch (7×19) × 72 ft.)	Handle Force Handle Length 200 mm	Winding Layer Number of Wire Rope	Gear Ratio	1 : 1
Wire Rope Tension	100 kg (220 lbs) 5th Layer or Less				1st Layer : 1.4kg (25.1 lbs) 3rd Layer : 1.5.8kg (34.8 lbs) 5th Layer : 2.0.1kg (44.3 lbs)		

※ An automatic brake is used. (Rotating the handle clockwise when lifting, and counterclockwise when lowering.)

■ Usage Example of 1LH Series



▲ Screen hanging apparatus



▲ Compact size allows space-saving installation



▲ Square handle for 1LH type



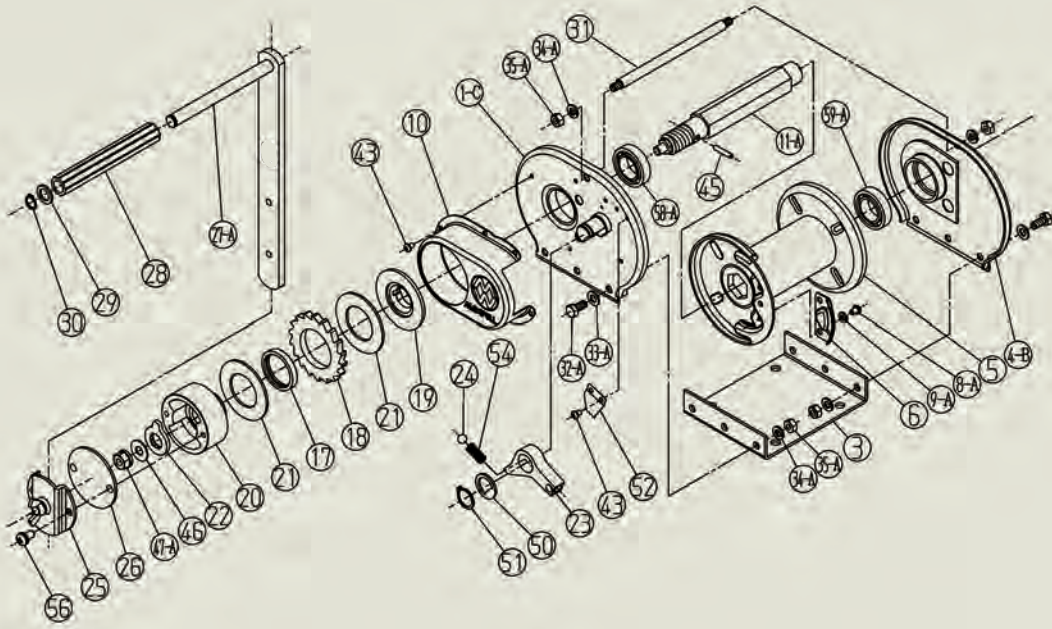
▲ Easy connection into square handle holder



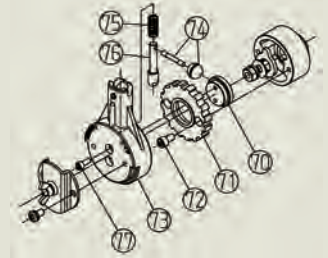
▲ Operate the winch inside of the device

Exploded view (Steel)

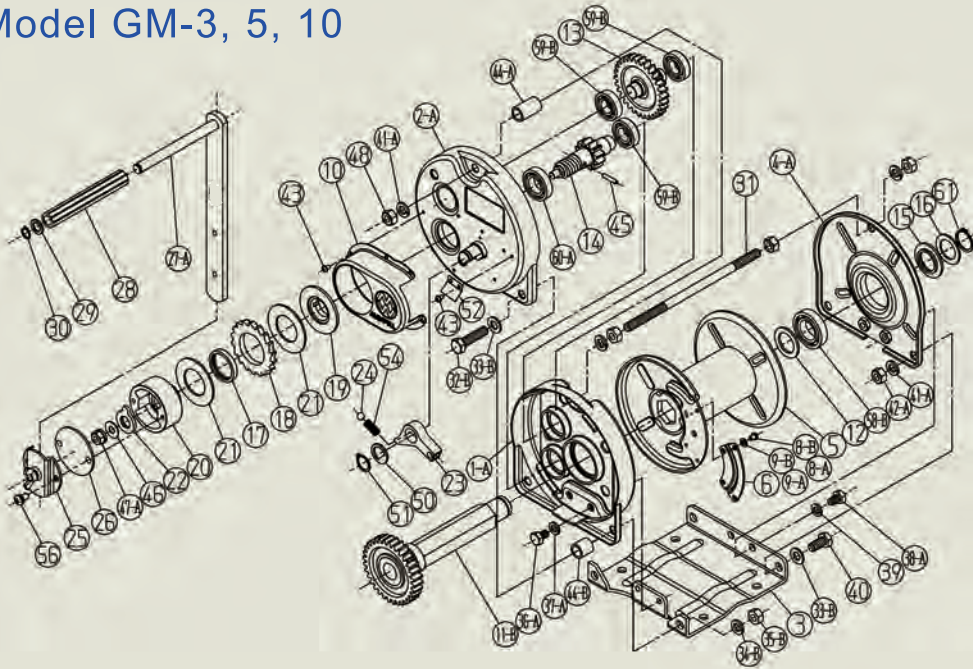
Model GM-1



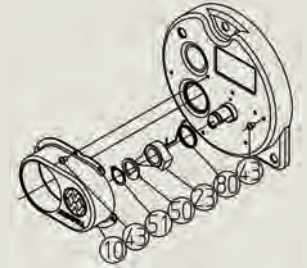
Model MR (Ratchet Type)
Parts of Ratchet Handle



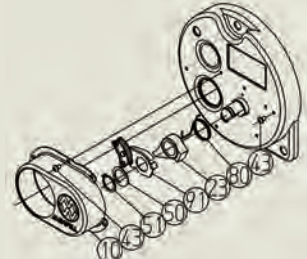
Model GM-3, 5, 10



Model SI (Stopper Armless Type)
Parts of Stopper



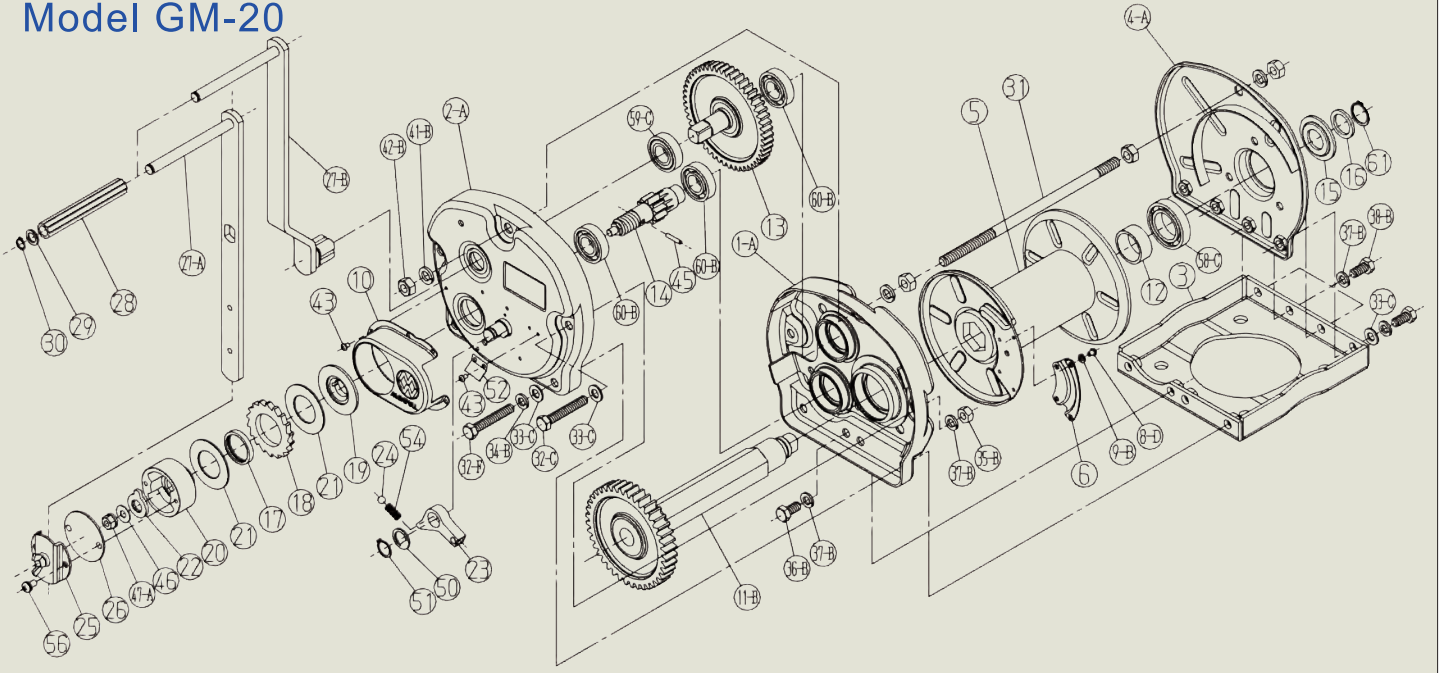
Model NSIL (Noiseless Type)
Parts of Stopper



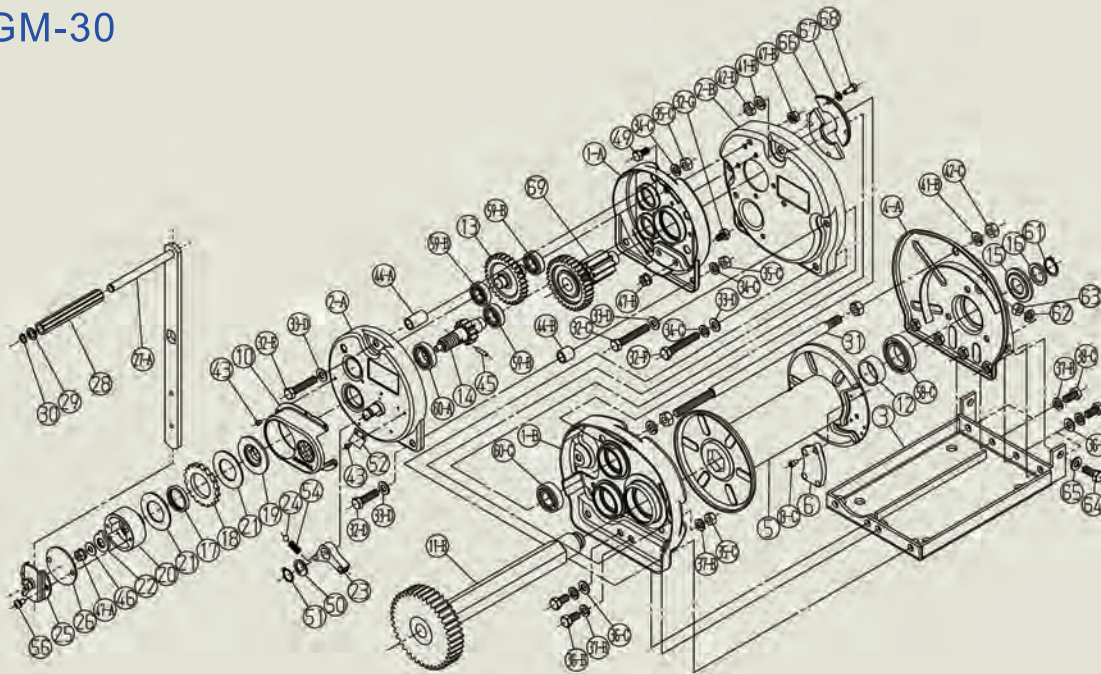
Part No.	Part Name	Qty.	Part No.	Part Name	Qty.	Part No.	Part Name	Qty.	Part No.	Part Name	Qty.
1-A	Gear Case	1	9-B	Spring Washer GM-5, 10, 20	4	23	Stopper	1	32-F	Hexagon Head Bolt GM-20, 30	2
1-B	Gear Case	1	10	Clutch Cover	1	24	Steel Ball	1	32-G	Hexagon Head Bolt GM-30	2
1-C	Side Frame A	1	11-A	Drum Shaft	1	25	Handle Holder with Butterfly Bolt	1	33-A	Plain Washer GM-1	6
2-A	Gear Case Cover	1	11-B	Drum Shaft Main Gear	1	26	Clutch Shield Plate	1	33-B	Plain Washer GM-3, 5, 10	4
2-B	Gear Case Cover	1	12	Shaft Distance Piece	1	27-A	Handle Arm	1	33-C	Plain Washer GM-20	5
3	Bed Plate	1	13	Spur Gear Pinion	1	27-B	Handle Arm GM-20	1	33-D	Plain Washer GM-30	7
4-A	Side Frame	1	14	Clutch Pinion	1	28	Handle Grip	1-2	34-A	Spring Washer GM-1	8
4-B	Side Frame B	1	15	Shaft Washer A	1	29	Handle Washer	1-2	34-B	Spring Washer GM-3, 5, 10, 20	2
5	Drum	1	16	Shaft Washer B	1	30	Retaining Ring C Type	1-2	34-C	Spring Washer GM-30	5
6	Wire Anchoring Plate	1	17	Ratchet Metal	1	31	Stay Bolt	1	35-A	Hexagon Nut GM-1	8
8-A	Hexagon Socket Button Head Cap Screw GM-1, 3	2	18	Ratchet Gear	1	32-A	Hexagon Head Bolt GM-1	6	35-B	Hexagon Nut GM-3, 5, 10, 20	2
8-B	Hexagon Socket Button Head Cap Screw GM-5, 10, 20	4	19	Back Plate	1	32-B	Hexagon Head Bolt GM-3, 5, 10	2	35-C	Hexagon Nut GM-30	5
8-C	Hexagon Socket Head Cap Screw GM-30	4	20	Clutch	1	32-C	Hexagon Head Bolt GM-20, 30	2	36-A	Hexagon Head Bolt GM-3, 5, 10	2
8-D	Hexagon Socket Button Head Cap Screw GM-20	4	21	Brake Lining	2	32-D	Hexagon Head Bolt GM-30	2	36-B	Hexagon Head Bolt GM-20, 30	2
9-A	Spring Washer GM-1, 3 M6	2	22	Dodecagon Hole Tongued Washer	1	32-E	Hexagon Head Bolt GM-30	1	36-C	Plain Washer GM-30	3

IMPORTANT! Parts lists in this view are subject to change without notice.

Model GM-20



Model GM-30

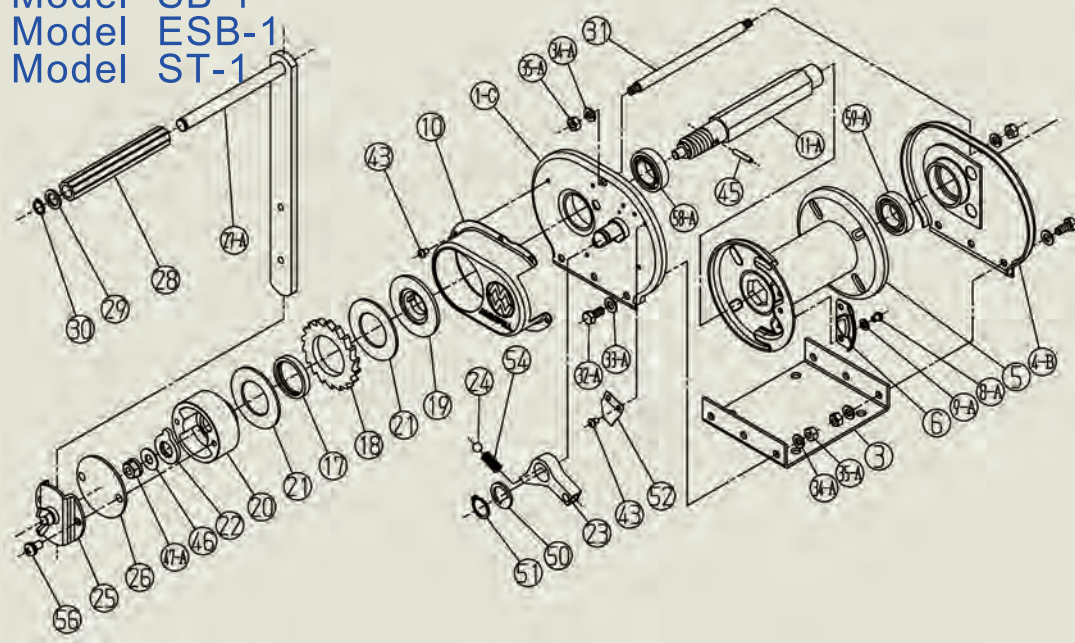


Part No.	Part Name	Qty.	Part No.	Part Name	Qty.	Part No.	Part Name	Qty.	Part No.	Part Name	Qty.				
37-A	Spring Washer	GM-3, 5, 10	2	44-B	Spacer	1	59-A	Bearing	GM-1	1	70	Axis	Model MR	1	
37-B	Spring Washer	GM-20, 30	8	45	Parallel Pin	1	59-B	Bearing	GM-3, 5, 10, 30	3	71	Ratchet Wheel	Model MR	1	
38-A	Hexagon Head Bolt	GM-3, 5, 10	2	46	Washer	1	59-C	Bearing	GM-20	1	72	Hexagon Socket Head Cap Screw	Model MR	2	
38-B	Hexagon Head Bolt	GM-20	4	47-A	Hexagon Nut with Lock Washer Helpr	1	60-A	Bearing	GM-3, 5, 10, 30	1	73	Ratchet Handle	Model MR	1	
38-C	Hexagon Head Bolt	GM-30	4	47-B	Hexagon Nut GM-30	5	60-B	Bearing	GM-20	3	74	Switch Lever	Model MR	1	
39	Spring Washer	GM-3, 5, 10	2	48	Hexagon Nut	4	60-C	Bearing	GM-30	1	75	Coil Spring	Model MR	1	
40	Hexagon Head Bolt	GM-3, 5, 10	2	49	Hexagon Head Bolt GM-30	3	61	Retaining Ring C Type	1	76	Switch Pin	Model MR	1		
41-A	Spring Washer	GM-3, 5, 10	5	50	Hinge Pin Washer	1	62	Spring Washer	GM-30	2	77	Hexagon Socket Head Cap Screw	Model MR	2	
41-B	Spring Washer	GM-20, 30	3	51	Retaining Ring C Type	1	63	Hexagon Nut	GM-30	2					
42-A	Hexagon Head Bolt	GM-3, 5, 10	2	52	Safety Leaf Spring	1	64	Hexagon Head Bolt	GM-30	2	80	Torsion Spring	Model SI, NSIL	1	
42-B	Hexagon Head Bolt	GM-20	4	54	Coil Spring	1	65	Plain Washer	GM-30	2	91	Magnetic Plate	Model NSIL	1 set	
42-C	Hexagon Head Bolt	GM-30	3	56	Phillips Pan Head Screw	2	66	Division Disc	GM-30	1 set					
42-D	Hexagon Head Bolt	GM-30	1	58-A	Bearing	GM-1	1	67	Spring Washer	GM-30	4				
43	Tapping Screw		7	58-B	Bearing	GM-3, 5, 10	1	68	Hexagon Head Bolt	GM-30	4				
44-A	Spacer		1	58-C	Bearing	GM-20, 30	1	69	Main Gear Pinion	GM-30	1				

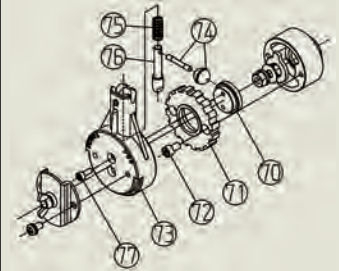
IMPORTANT! Parts lists in this view are subject to change without notice.

Exploded View (Stainless Steel)

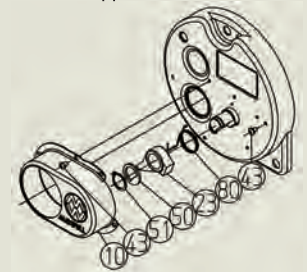
Model SB-1
Model ESB-1
Model ST-1



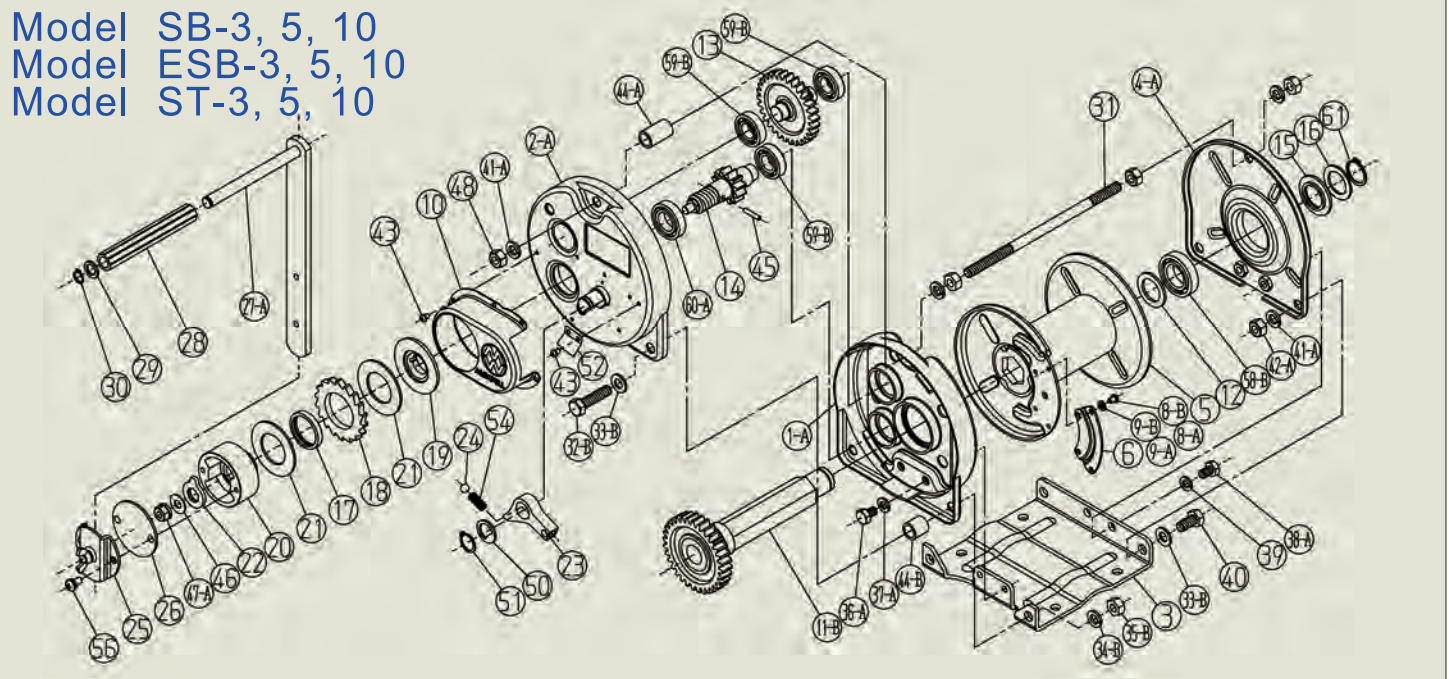
Model MR (Ratchet Type)
Parts of Ratchet Handle



Model SI (Stopper Armless Type)
Parts of Stopper



Model SB-3, 5, 10
Model ESB-3, 5, 10
Model ST-3, 5, 10



Part No.	Part Name	Qty.	Part No.	Part Name	Qty.	Part No.	Part Name	Qty.	Part No.	Part Name	Qty.
1-A	Gear Case	1	16	Shaft Washer B	1	44-A	Spacer	1	70	Axis Ratchet Type	1
1-C	Side Frame	1	17	Ratchet Metal	1	44-B	Spacer	2	71	Ratchet Wheel Ratchet Type	1
2-A	Gear Case Cover	1	18	Ratchet Gear	1	45	Parallel Pin	1	73	Ratchet Handle Ratchet Type	1
3	Bed Plate	1	19	Back Plate	1	46	Washer	1	74	Switch Lever Ratchet Type	1
4-A	Side Frame	1	20	Clutch	1	50	Hinge Pin Washer	1	75	Coil Spring Ratchet Type	1
4-B	Side Frame B	1	21	Brake Lining	2	52	Safety Leaf Spring	1	76	Switch Pin Ratchet Type	1
5	Drum	1	22	Dodecagon Hole Tongued Washer	1	54	Coil Spring	1			
6	Wire Anchoring Plate	1	23	Stopper	1	56	Pan Head Screw with Lock Washer Helser	2	80	Torsion Spring Model SI	1
10	Clutch Cover	1	24	Steel Ball	1	58-A	Bearing Model -1	1			
11-A	Drum Shaft	1	25	Handle Holder with Butterfly Bolt	1	58-B	Bearing Model -3, -5, -10	1			
11-B	Drum Shaft Main Gear	1	26	Clutch Shield Plate	1	59-A	Bearing Model -1	1			
12	Shaft Distance Piece	1	27-A	Handle Arm	1	59-B	Bearing Model -3, -5, -10	3			
13	Spur Gear Pinion	1	28	Handle Grip	1	60-A	Bearing Model -3, -5, -10	1			
14	Clutch Pinion	1	29	Handle Washer	1						
15	Shaft Washer A	1	31	Stay Bolt	1						

※ The bolts, nuts and retaining ring are made of SUS304, and the dimensions are same as standard type. Please refer to the dimension table of a standard type.

※ Main material of the ball bearing is SUS440C.

Cloth sheet cover

● When installing a manual winch for long-term outdoor use, winches are more likely to rust due to wind and rain compared to indoor installations.

This is an accessory for covering and protecting the winch so it is not exposed directly to wind and rain.

This will reduce rust and damage of the hand winch from dust.

Available for all models of hand winches.

The same size is used for the models 300kg(660lbs), 500kg(1,100lbs), and 1,000kg(2,200lbs).

※ Please select the cloth sheet cover depending on the winch position and direction in which the wire rope is pulled out.

Two types for the right and left are available.

▼ Installation direction of the Winch



▲ Cloth sheet cover (For wire rope pulling out to Right side)



For wire rope pulling out to Right side



For wire rope pulling out to Left side

Mounting bracket for structural poles

● This accessory set combines two winch mounting brackets and two universal bands to install a hand winch on a structural pole. It is excellent for rust prevention using hot-dip galvanized steel, and the unique shape of the winch mounting bracket allows the winch handle to not contact the structural pole.

By adjusting the height of the two winch mounting brackets, it can be installed for models 300kg(660lbs), 500kg(1,100lbs), 1,000kg(2,200lbs) and 2,000kg(4,400lbs).

※ Two types of universal bands are available for a pole diameter of $\phi 300$ mm to $\phi 410$ mm

($\phi 11 \frac{13}{16}$ inch to $\phi 16 \frac{9}{64}$ inch) and $\phi 410$ to $\phi 580$ mm ($\phi 16 \frac{3}{16}$ inch to $\phi 22 \frac{53}{64}$ inch).



◀ Winch mounting brackets

▶ Universal bands



▲ Installation example (without winch)



▲ Installation example (with winch)

Customized winches of various colors

● Customized winches of various colors are also available upon request of customer's desire.

※ Please specify color and production quantity, if you are requesting specialized colors.



Whatever the request, please contact us.
 We will manufacture the most suitable winch with
 the capacity, type, size and uses of your desired.

Special Hand Winches

In addition to the standard products, our unique custom-made products are used in various fields. The uses, capacity, method and size are many and varied. Our unique design responds adequately to customer expectations. We are manufacturing various winches according to the number of demands. For example, there is a winch such as for clean room and lifting the stage setting. Please contact us if your business idea requires that something be "moved".

Winch for lifting the floodgate
 (with universal joint)
 Capacity : 75 kg(165 lbs) + 75 kg(165 lbs)
 = 150kg(330 lbs)
 Model : GM-3-SI-WGD



Gear Ratio 1/1.2 endless winch for light load
 Capacity : 50 kg(110 lbs)
 Model : ME-05SI-R1.2-F8



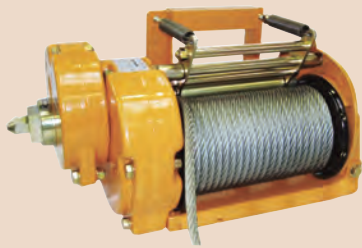
Short drum winch
 (For jib crane)
 Capacity : 300 kg(660 lbs)
 Model : GM-3-LD60



Winch for fixing the rotary shaft of industrial equipment
 (Latching brake)
 Capacity : 4.5 kg(9.9 lbs)
 Model : ESBH-1-SE



Winch with wire holding unit
 Capacity : 3,000kgf (6,600 lbs)
 Model : GM-30-FSPW



Stainless winch for nuclear power plant
 Capacity Maximum : 150 kg(330 lbs)
 Minimum : 50 kg(110 lbs)
 Model : ESB-3-SDG138-II



Winch for jib crane in chemical manufacturer
 Dust proof and drip-proof type
 Capacity : 300 kg(660 lbs)
 Model : ESB-3-SIC-LD60



4 ropes stainless winch for lifting precision lens
 Capacity : 250 kg (550 lbs) × 4
 = 1,000 kg(2,200 lbs)
 Model : ERSB-10SI-4GD265



Winch for boat davit
 Anti-rust painting specification
 Capacity Normal : 2,400 kg(5,200 lbs)
 Proof Stress : 6,000 kg(13,200 lbs)
 Wire Rope : ϕ 12.5mm × 16m × 2
 (ϕ 1/2 inch × 52.5 ft × 2)
 Model : GM-60-OSN-C



4 ropes noiseless type stainless winch for lifting the drop curtain
 Capacity : 125 kg(270 lbs) × 4 = 500 kg(1,100 lbs)
 Model : GM-5SE-FGD-1



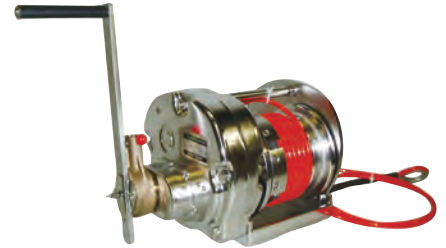
Winch with chain sprocket for winding the screen axis
Capacity : 70 kg(150 lbs)
Model : ESB-07-SI-SH4030



Winch for lifting the basketball backboard (Chain Link)
Capacity : 1,000 kg(2,200 lbs)
Model : GM-10-SI-KS



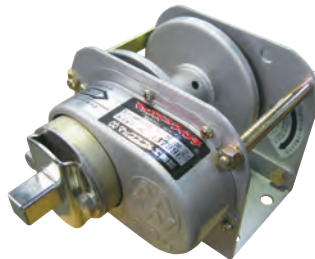
Stainless steel winch for clean room (A special fiber is used for rope)
Capacity Normal : 450 kg(990 lbs)
Proof Stress : 1,000 kg(2,200 lbs)
Model : ERSB-10-SI-GD165-II



2 ropes stainless winch for optical manufacturer (Fine adjustment is possible)
Capacity : 500 kg(1,100 lbs)
Model : MNW-5-SUDWG165-R200



Winch for vertical banner
Capacity : 100 kg(550 lbs)
Model : GM-1LH-SI-JY



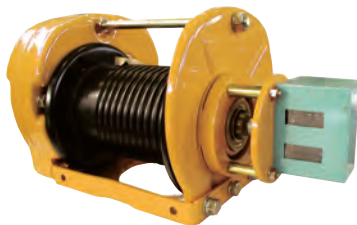
Stainless winch for aircraft production line
Capacity : 60 kg(130 lbs)
Model : ESB-06-D76PW



Winch for vessel fan damper (With emergency lock release device)
Capacity : 1,000 kg(2,200 lbs)
Model : ESB-10-LSTP



Winch with rotary counter and grooved drum
Capacity : 1,000 kg(2,200 lbs)



Stainless winch with torque keeper
Capacity 1st Layer : 24.6 kg(54 lbs)
4th Layer : 18.6 kg(41 lbs)
Wire Rope : ϕ 5 mm (6 \times 19) \times 20 m
(3/16 inch (7 \times 19) \times 65.6 ft)
Model : SB-T1



Noiseless type winch for lifting the drop curtain in National Bunraku Theater
Capacity : 300 kg(660 lbs)
Wire Rope : ϕ 6 mm (6 \times 37)
(1/4 inch (6 \times 36))



Hot dip galvanizing winch with dog clutch type
Capacity : 250 kg(550 lbs)
Model : GM-2.5-GSSI-SCB-DSU-140



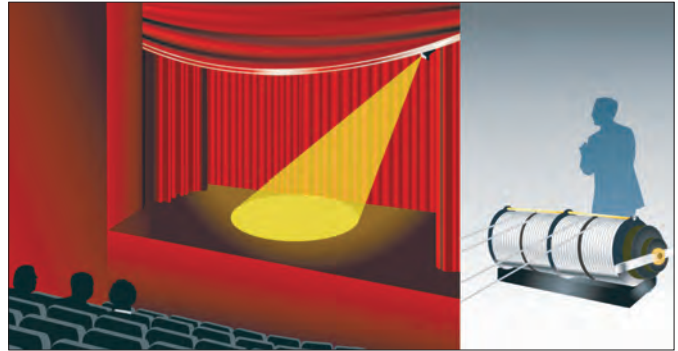
Winch for Koinobori (carp streamer) event
Capacity : 1,000 kg(2,200 lbs)
Model : GM-30YS6T-D165



Some examples of thousand ways to use MAXPULL winches



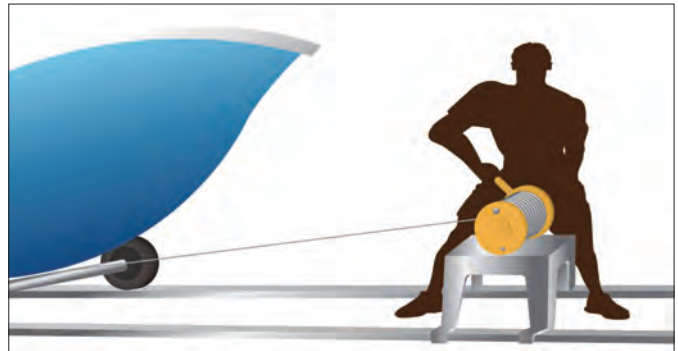
Adaptability meets height adjustment of the working table like as conveyor.



Stage equipment (Drop curtain, lighting equipment, projection screen etc.) is lifted using several wire rope while maintaining synchronization.



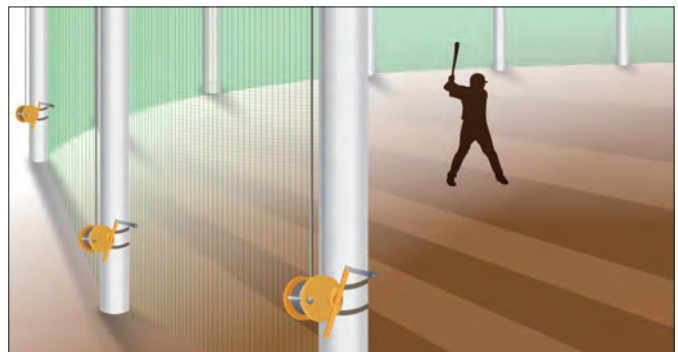
Small winch is used in the lifting equipment of vertical banner. It never spoils the landscape because it is not visible from the outside.



Horizontal pulling of small boat, car or dolly in factory is easily.



Stainless steel winch is ideal for the place where sanitation is needed. (food factory, chemical plant, clean room, etc.)



Maxpull winches help to lift and lower various safety nets for baseball field, golf driving range, etc.

WARNING Read the manual before using these products in order to use correctly and safety.

Manufacturer
MAXPULL MACHINERY & ENGINEERING CO., LTD.
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 E-mail: info@maxpull.co.jp

Quality Certificate **CE**



Web Site: www.maxpull.co.jp

●Because of continued product improvement, we change the specifications, dimension and appearance without notice.
MAXPULL winches are not for lift or move people. Also do not lift loads over people.
 rev.3. 2018/08, WEB