

PROTECTION . Like No Other

Product Catalog









Aluminum Hurricane & Security Shutters:

- Hoods (Extruded, Rolled Form)
- > Side (End) Caps
- Side Rails (Tracks)
- > Bottom Bars
- > Weight Bars
- Motor Tubes
- > Miscellaneous Extrusions

Exterior Screens: (MaestroScreens)

- > Motorized Retractable Screens
- > Wire & Free-Hanging Screens

Motors: Tubular Motor Control Systems

- > AC/DC
- > 120v / 220v / 230v / 12v
- > Interior Shades Motors

Parts & Accessories & Manual Operators

Options & Electronics:

- > Controllers (remote) / Switches / Receivers
- > LED Lighting
- > Smart Wi-Fi Controllers
- > Wind-Sun Sensor
- > Smart Home Automation Interface







MISSION STATEMENT

To design, engineer, manufacture and deliver the highest quality and most innovative solutions for the hurricane shutter, security shutter, exterior screening and interior shading markets around the World.

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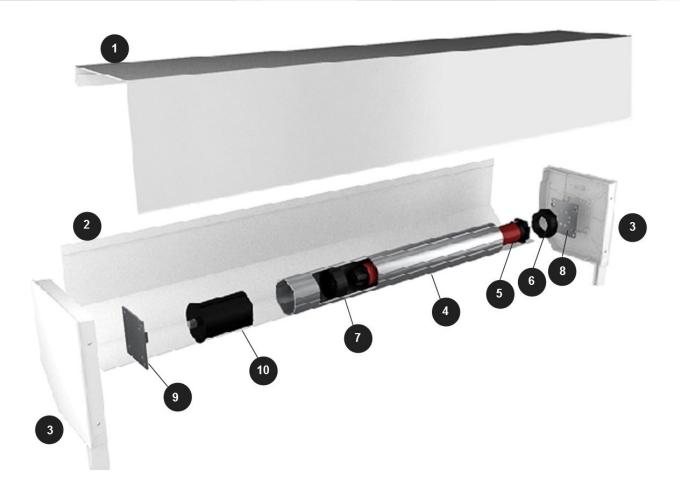
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Smart Series AC Crown & Drive Gears	

Smart Series AC Crown & Drive Gears

Hood Assembly



	Hood Assembly Components		
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Hood Assembly | Extruded 5-Sided 45° Hoods



Extruded 45° Hoods			
Size (A) Front Section Item # (B) Back Section Item #			
5 1/2" / 140mm	SM02F-5.5	SM02B-5.5	

Roll Formed 45° Hoods		
Size	Item # (Back & Front)	
5.5" / 139mm	SM04-05.5 (Screens)	
6 1/2" / 165mm	SM01-06.5 (Shutters)	
6 1/2" / 165mm	SM05-06.5 (Screens)	
7" / 178mm	SM01-07 (Shutters)	
7" / 178mm	SM04-07 (Screens)	
8" / 203mm	SM01-08 (Shutters)	
10" / 254mm	SM01-10 (Shutters)	
12" / 305mm	SM01-12 (Shutters)	

Hoods are sold in two sections (front and back), available in a length of 26' (7.93m), and feature either an extruded or rounded design style.

Note: Mill available on custom orders. Minimum quantities and lead times will apply.

	MaestroShield Extruded Hood	MaestroShield Rounded Hood
Wall Thickness	1.5mm (.050") (66% thicker than bent)	0.9mm (.035")
Powder Coat Warranty	10-year warranty on powder coating (1-year in coastal regions within 1 mile of saltwater coastline)	1-year

Hood Assembly | Extruded Rounded and Square Hoods

Rounded









Hood Front Brush Seal

Rounded hoods available in white, ivory, beige, and bronze









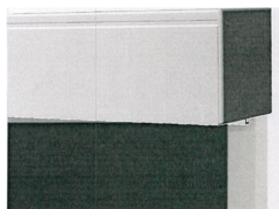
Extruded, Rounded Hood with Brush Seal			
Size (A) Front Section Item # (B) Back Section Item #			
5 1/2" / 140mm	SM10F-5.5-XX/24A	SM02B-5.5-XX/24A	
1" / 3/4"	AC05-06/Black (1") Brush Seal	AC05-07/Black (.75") Brush Seal	

Extruded, Rounded Hood (No Brush Seal) Custom Order Only			
Size (A) Front Section Item # (B) Back Section Item #			
5 1/2" / 140mm	SM02B-5.5		





Square(4")



Square hoods available in white, bronze.

Other customs available through custom order.





- Compact size.
- Modern design.
- Great for sizes up to 16' wide x 10' height

Extruded, Square Hood			
Size (A) Front Section Item # (B) Back Section Item			
4" / 102mm SM06F-4.0		SM06B-4.0	

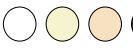
Hood Assembly | Side Caps 45° and Safety Plates

| Side Caps 45° and Safety Plates (See Next Page for Rounded / Square)

Impact-Rated Side Caps		
Size	Weight	Item #
5 1/2" (139mm)	0.75 lbs	CA02-139
6 1/2" (165mm) with No Leg)	0.95 lbs	CA05-165
7" (178mm)w/ Small Leg)	1.08 lbs	CA04-180
8" (203m)w/ Small Leg)	1.43 lbs	CA04-205
8" (203mm)w/ Lg. Leg)	2.05 lbs	CA03-205
8" (203mm) with No Leg)	1.3 lbs	CA05-205
10" (254mm)w/ Lg. Leg)	2.78 lbs	CA03-250
10" (254mm) with No Leg)	1.95 lbs	CA05-250
12" (304mm)w/ Lg. Leg)	3.86 lbs	CA03-300

	MaestroShield Heavy Duty Side Cap	Universal Side Cap
Thickness of Casting	6mm (.23")	3.2mm (.12")
Threaded Inserts for Motor Plates	Threaded Galvanized Steel Insert - 6.85mm (.26") deep	Threaded Aluminum - 3mm (.12") deep or drill through
Threaded Inserts for mini Receiver	Yes	No
Powder Coat Warranty	10-year	1-year
Openings for Manual Crank	Yes - In all four positions	Not in all positions (requires drilling)
Adjustable Hood for flush appearance	Yes	No

Side Caps available in white, ivory, beige, and bronze





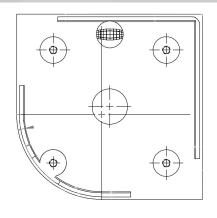


Safety Plate fits all side caps with 60mm (2.36"), 70mm (2.75") & 86mm (3.38") tube

Guides		
Item	Item #	
Entry Guide for 44mm Non End Retention system, with small leg side cap	AC01-12SLM	1
Entry Guide for 44mm End Retention system, with small leg side cap	AC01-12SM	7
Entry Guide with 56mm system, with large leg side caps	AC01-12A	

Safety Plate for Side Cap		
Size	Item #	
6.5" (165mm)	AC02-PL065	
7" (177mm)	AC02-PL07	
8" (203mm)	AC02-PL08	
10" (254mm)	AC02-PL10S	
12" (304mm)	AC02-PL12	

Hood Assembly | Side Caps - Rounded and Square



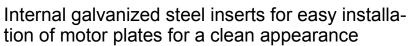
Impact-Rated Rounded Side Caps			
Size Weight Item#			
5 1/2" (139mm)	0.75 lbs	CA10-139	

Note: Mill available on custom order. Minimum quantities /lead times apply.

Side Caps available in white, ivory, beige, and bronze







and the same of th			
	MaestroShield Heavy Duty Side Cap	Competitors Universal Side Cap	
Thickness of Casting	6mm (.23")	3.2mm (.12")	
Threaded Inserts for Motor Plates	Threaded Galvanized Steel Insert - 6.85mm (.26") deep	Threaded Aluminum - 3mm (.12") deep (Some not threaded)	
Powder Coat Warranty	10-year	1-year	
Openings for Manual Crank	Yes - In all three positions	Not in all positions (requires drilling)	
Adjustable Hood for flush appearance	Yes	No	





Hood Assembly | Side Caps - Detachable Leg

	Item #	Compatible Side Caps
Datashahla Laguas d	CA05-SM (mill)	CA05-165
Detachable Leg used with "no" leg side caps	CA05-SM-WH(white)	CA05-105





Side Cap Legs available in mill or white



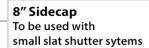


Modular 6.5" Sidecap

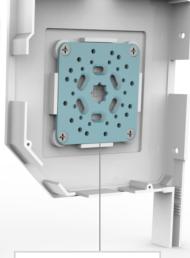
To be used with Screen &



To be used with small slat shutter sytems







802 Mounting PlateTo be used with Screen & shutter sytems

AC03-0802

Hood Assembly | Mounting Plates

Item Name and Item Number:	Universal Mounting Plate Item #AC03-03A	45° Mounting Plate Item #AC03-0801	Motor Mounting Plate for Screens Item #AC03-0802	Motor Mounting Plate with Large Side Caps Item #AC03-0802
Motor Compatibility:	 Positions: Front, Back, Down 20-120 Nm with manual override 	 Position: All 20-120Nm with manual override 	 Position: All 20-50Nm Hybrid without manual override 	 Position: All 20-120Nm with manual override.
Motor Shaft Length Compatibility (for non-manual override motor):	Not Applicable	Short	Not Applicable	Not Applicable
Manual Gear Compatibility:	1/8, 1/11, 1/18, 1/25, 1/50 and 1/59 Gear Box	1/25, 1/50 and 1/59 Gear Box	n/a	1/8, 1/11, 1/18, 1/25, 1/50, 1/59 manual gear
Idler Compatibility:	None	60mm Idler with Spring 70mm Idler with Spring	60mm, 70mm Idler Bearing w/ Spring	60mm, 70mm Idler Bearing w/ Spring
Bracket/Side Cap Compatibility:	MaestroShield Heavy Duty and Universal Side Cap	MaestroShield Heavy Duty and Universal Side Cap	5.5" Cap	MaestroShield Heavy Duty and Universal Side Cap 8", 10", 12" with Large Leg
Component Specs:	100mm X 100mm; (3.93"x3.93") Polyurethane powder- coated steel	100mm X 100mm; (3.93"x3.93") Polyurethane powder- coated steel	100mm X 100mm; (3.93"x3.93") Polyurethane powder- coated steel	100mm X 100mm; (3.93"x3.93") Polyurethane powder- coated steel

Hood Assembly | Mounting Plates

Item Name and	Motor Star Bracket	Motor Star Bracket	Motor Star Bracket	Idler Bearing Cradle	Idler Bearing Cradle
Item Number:	Item #AC03-06	Item #AC03-16	Item #AC03-26	Item #AC03-40	Item #AC02-11
Motor Compatibility:	6-50Nm smart motor	100Nm motor without manual override	 Square Shaft motors Smart motors 3-50Nm Standard motors 3-50Nm without- manual override Interior Shade motors 	None	None
Motor Shaft Length. Compatibility (without manual override motor):	Small/SQ	Big/SQ	Small/SQ	Not Applicable	Not Applicable
Manual Gear Compatibility:	None	None	None	None	None
Idler Compatibility:	None	60mm/70mm Idler with Spring	None	60mm, 70mm and 86mm Idler Bearing	100mm Idler Bearing
Bracket/Side Cap Compatibility:	No	AC03-0801, AC03-0802, AC03-50A, AC03-03A, AC04-50	AC03-0801, AC03-0802, AC03-50A, AC03-03A, AC04-50	MaestroShield and Universal Side Cap	MaestroShield and Universal Side Cap
Component Specs:	Zinc-plated, countersunk, threaded	Zinc-plated, countersunk, threaded	Zinc-plated, countersunk, threaded	100mm X 100mm; (3.93"x3.93") Polyurethane powder -coated steel (includes plastic cap/ setting pin)	100mm X 100mm; (3.93"x3.93") Polyurethane powder -coated steel (threaded holes for setting idler)

Hood Assembly | Mounting Plates

Item Name and Item Number:	Universal Bracket Plate Item #AC03-1201	Mounting Plate for Torque Spring Item #AC03-30	Heavy Duty Universal Bracket Item #AC03-20	Mounting Plate for 4" Side Cap Item #AC03-102
Motor Compatibility:	20-50Nm non-manual override	100Nm motor without override and spring assist.	All 140Nm - 300Nm Assemblies requiring 100mm Motor Tube	None
Motor Shaft Length Compatibility (for non-manual override motor):	Short	Spring assist, 100Nm motors without manual override	Not Applicable	None
Manual Gear Compatibility:	None	None	1/8, 1/11, 1/18, 1/25, 1/50 and 1/59 Gear Box	None
ldler Compatibility:	None	60mm, 70mm and 86mm Idler Bearing	Idler side for all 140Nm - 300Nm Assemblies requiring 100mm Motor Tube	None
Bracket/Side Cap Compatibility:	MaestroShield Heavy Duty and Universal Side Cap	MaestroShield Heavy Duty and Universal Side Cap	MaestroShield and Universal Side Cap	MaestroShield (Square) 4" Side Cap
Component Specs:	100mm X 100mm, (3.93"x3.93") pre-drilled, Polyurethane powder- coated steel includes pin(s)	100mm X 100mm, (3.93"x3.93") pre-drilled, Polyurethane powder-coated steel, includes bolt to secure spring and metal insert.	Powder-coated steel	100mm X 100mm, (3.93"x3.93") pre- drilled, Powder-coated steel

Hood Assembly I Mounting Plates

	The second secon		
Item Name and	Universal Angled Bracket Plate	Small Leg Side Cap Motor Mounting Bracket	Universal Bracket Plate Item #AC03-50A
	Item #AC04-50	Item # AC03-13	Small Angle Bracket Item #AC03-10
Motor Compatibility:	20-100Nm with manual override	20-50Nm motors w/manual override Hybrid 20—50Nm with and without manual override	20-120Nm with manual override
Universal Position	Not Applicable	All positions	Not Applicable
Motor Shaft Length Compatibility (for non-manual override motor):	None	Not Applicable	None
Manual Gear Compatibility:	1/8, 1/11, 1/18, 1/25, 1/50, 1/59 manual gear	1/8, 1/11, 1/18 manual gear	None
Idler Compatibility:	N/A	None	No
Bracket/Side Cap Compatibility:	Universal Angled Bracket Plate: 6" X 4", (152.4mmx101.6mm); Polyurethane powder-coated steel; used with Small Angle Bracket 4" (101.6mm)Angle Bracket: for Bracket System Mounting; Polyurethane powder-coated steel (Threaded to accept all 100x100mm mounting plates)	6.5" (165mm), 8" (203mm), 10" (254mm) Side Caps removable leg, 7" (178mm), and 8"(203mm) Side Caps with small leg	Universal Bracket Plate: 6" X 4", (152.4mmx101.6mm); Polyurethane powder-coated steel; used with Small Angle Bracket 4" (101.6mm)Angle Bracket: for Bracket System Mounting; Polyurethane powder-coated steel (Threaded to accept all 100x100mm mounting plates)
Component Specs:	Powder-coated steel	Powder-coated steel	Powder-coated steel

Hood Assembly I Idler Bearings

	Item # and Name	Compatibility	Specifications
	60mm Idler Bearing w/ Spring Item #AC02-12-SL	Compatible with 60mm octangular motor tube For use with Maestro Screen	Dual stainless steel, motor-cross ball bearings. Polycarbonate composite housing. Spring loaded for easier and quicker Installation
3/4" (19mm) - Shortest Adjustable position 2 1/4" (58mm) - Longest Adjustable position 4 1/3" (110mm) Total Shaft Length	60mm Idler Bearing Item #AC02-12	Compatible with 60mm octangular motor tube	Dual stainless steel, motor-cross ball bearings Polycarbonate composite housing. Adjustable shaft
3/4" (19mm) - Shortest Adjustable position 2 1/4" (58mm) - Longest Adjustable position 4 1/3" (110mm) Total Shaft Length	70mm Idler Bearing Item #AC02-05-110 (110mm shaft) Item # AC02-05-110SPR (110mm shaft) (with Spring) Item #AC02-05-135SPR (with 128mm shaft) (with Spring)	Compatible with 70mm octangular motor tube	Dual stainless steel, motor-cross ball bearings. Polycarbonate composite housing. Adjustable Shaft
3/4" (19mm) - Shortest Adjustable position 1 1/2" (38mm) - Longest Adjustable position 5 1/16" (129mm) Total Shaft Length	86mm Idler Bearing with End Cap Item #AC02-03 Or AC02-03RSL for XL 5.5 Motor Tube	Compatible with 86mm Maestro-Shield® profile motor tube Or 5.5" XL System Motor Tube	Dual stainless steel, motor-cross ball bearings. Polycarbonate composite housing. Adjustable Shaft
Idler Bearing can be repositioned within motor tube for adjustable positioning	100mm Motor Tube Idler Bearing Item #AC02-04	Compatible with 100mm round motor tube with 94mm inside Diameter. Can be modified for compatibility with 100mm round tube with 97mm inside diameter	Dual stainless steel, motor-cross ball bearings. Self-lubricating. Polycarbonate composite housing

Extrusions | Motor Tubes

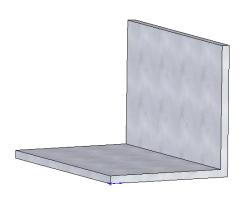
Profile	Item # and Name	Compatibility	Specifications
	Motor Tube 70mm Octagonal Inside, Round Outside Item #EX01-07/21 Item #EX01-07/24	Aluminum Shutter	Aluminum; Sold in 21' (6.4m) and 24' (7.3m) lengths
	Motor Tube MS 86mm Item #EX01-08/24	Aluminum Shutter Or Exterior Screen Inner Tube for XL System	Aluminum; Sold in 24' (7.3m) lengths
	Motor Tube 100mm Round Triple Coat Protection Galvanized Steel Item #EX01-09/24	Aluminum Shutter	Triple Coated Protection Galvanized Steel; Sold in 21' (6.4m), and 24' (7.3m) lengths
	Motor Tube 60mm Inner Octagonal Item #EX01-16/24A	Exterior Screening Or Aluminum Shutter	Aluminum; Sold in 24' (7.3m) lengths
	3 1/2" (89mm) Screen Outer Tube Item #EX01-14/24A	Exterior Screening	Aluminum; Sold in 24' (7.3m) lengths
	4.0" Motor Tube Outer Tube Item #EX01-18/24A	Exterior Screening	Aluminum; Sold in 24' (6.4m)
	5 1/2" (139.7mm) Screen Outer XL Tube Item #EX01-19/26 or #EX01-19/30	Exterior XL Screening	Aluminum; Sold in 26' (7.92m) and 30' (9.14m) lengths

Extrusions | Build Out



Tubes for Build Out			
Size	Colors	Length	Item #
1" X 2" .125" (2.54 x 5.08 x .32 cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B11
1" X 3" X .125" (2.54 x 7.62 x .32cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B13
1" X 4" X .125" (2.54 x 10.16 x .32 cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B14
2" X 2" X .125" (5.08 x 5.08 x .32cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B22
2" X 3" X .125" (5.08 x 7.62 x .32 cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B23
2" X 4" X .125" (5.08 x 10.16 x .32 cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B24
3" X 3" X .125" (7.62 x 7.62 x .32 cm)	White	24' / 7.3m	EX01-B33
4" X 4" X .125" (10.16 x 10.16x .32 cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B44
4" X 6" X .125" (10.16 x 15.24 x .32cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-B46

Angles for Build Out			
Size	Colors	Length	Item #
1" X 1" X 0.062" (2.54 x 2.54 x .16cm)	White, Beige, Ivory, Bronze	20' / 6.1m	EX01-A11
1" X 2" X 0.125" (2.54 x 5.08 x.32cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-A12
2" X 2" X 0.125" (5.08 x 5.08 x .32cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-A22
2" X 3" X 0.125" (5.08 x 7.62 x .32cm)	White, Beige, Ivory, Bronze	20' / 6.1m	EX01-A23
2" X 4" X 0.125" (5.08 x 10.16 x .32cm)	White, Beige, Ivory, Bronze	21' / 6.4m	EX01-A24



Spring Block

2" x 3" - Item# AC07-01 (5.08 x 7.62cm)

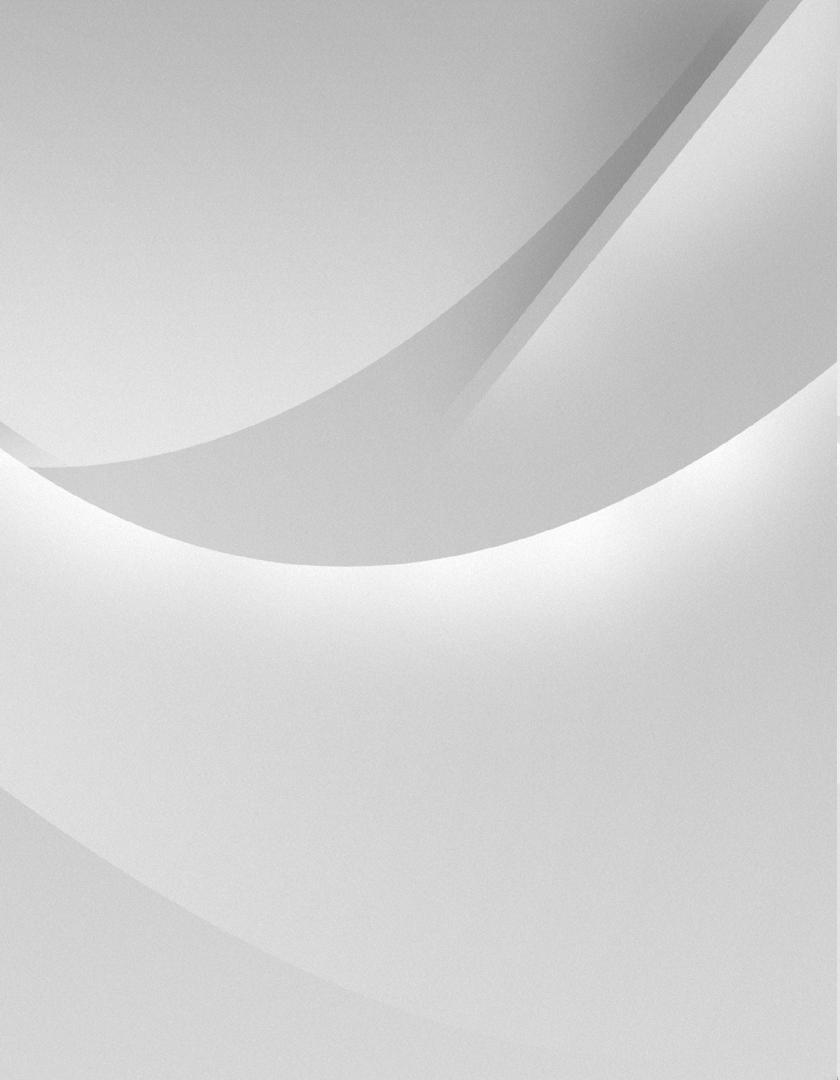
2" x 4" - Item# AC07-02 (5.08 x 10.16cm)

Securely locks storm bar or mullion into position while allowing for easy removal; available in white



Accessories | Gaskets & Brush Seals

Item # and Name	Compatibility	Specifications
Slat Gasket Item #AC01-17	Aluminum Roll Down Shutters (standard)	Black Rubber sold in 500' rolls (152.4m)
Water Seal Gasket Item #AC09-01	Aluminum Roll Down Shutters	Black Rubber Width - 8mm sold in 400' rolls (121.92m)
3/4" (1.9cm) Item #AC05-01/BLK 1-1/4" (3.2cm) Item#AC05-03/BLK 1.9" (4.83cm) Item#AC05-04/BLK	MaestroScreens Exterior Screening	Black Felt 3/4" (1.9cm) trim height 1-1/4" (3.2cm) trim height 1.9" (4.83cm) trim height Channel Width - 4.8mm (.19") Sold in 500' rolls (152.4m)
.75" Item#AC05-07/Black (Hood Back) 1.0" Item#AC05-06/Black (Hood Front)	MaestroScreens Exterior Screening	Black Felt .75" (1.9cm) trim height 1" (2.54cm) trim height Channel Width - 2.9mm (.115") Sold in 500' rolls (152.4m)
Rubber Seal 3.75" (9.5cm) Item #WS1010	MaestroScreens Exterior Screening	Black Vinyl 3.75" (9.5cm) trim height Channel Width - 4.8mm (.19") Sold in 164' rolls (50m)







Aluminum Roll Down Shutters

2022









- Security Shutters
- Hurricane Shutters
- Storm and Weather Protection
- Loss Prevention
- Property Protection

Roll Down Shutters | Security Barriers

Engineered to be the best, MaestroShield[®] End Retention Roll Down Shutters are designed for strength and beauty. Our strength has been rigorously tested and certified and span industry leading widths up to 262" (6.6m) and heights up to 252"(6.4m). Our beauty is in the versatility of our system which offers the choice of slat venting, multiple colors, and a wide array of motors and electronics that will seamlessly integrate your

Security Features of MaestroShield® Aluminum Roll Down Shutters:

- MaestroShield's End Retention system, with riveted end retention slat locks, provides superior security and protection against intrusion, high speed winds, wind-born debris and Ultra-Violet solar radiation.
- MaestroShield's Aluminum Roll-Down shutters have some of the industries highest design
 pressure capacities and have been issued a notice of acceptance with Miami Dade County, Florida
 Building Code and Texas Department of Insurance. With a test pressure load exceeding 120 psf, a
 10 ft. (3.05m) wide by 10 ft. (3.05m) high span of MaestroShield's end retention can withstand over
 15,000 lbs (6,803 kgs) of pressure.
- With connector slats all the way up to the motor tube,
 a MaestroShield aluminum curtain does not allow
 for any give if an intruder tries to lift it from the bottom.
- Optional locking bottom bar for added security and a greater design load.

 Connector Slats



Locking Bottom Bar

- MaestroShield® offers the first impact rated hood assembly on the market.
- Recommended for doors, windows, porches, lanais, balconies, porticos and store fronts with available sizes up to 262" (6.6m) in width and 252" (6.4m) in height.
- Available colors: White, Beige, Ivory and Bronze which include a 10 year warranty on powder coating (with 1 year warranty at coastal areas within 1 mile of salt water).
- Vented and Non-Vented slats are available.
- Manual operated versions lifting capacity is up to 350 lbs (159 kgs) without spring assistance.
- Motorization available with MaestroShield® tubular motors from 3 Nm 300 Nm and wireless electronics which accommodate a wide range of applications.

Roll Down Shutters | Security Barriers

56mm End Retention Aluminum Roll Down Shutters

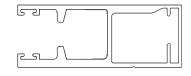
- 262.75" (6.67m) maximum width
- 252" (6.4m) maximum height

WITH END RETENTION NO STORM BARS

SLAT SPAN	ALLOWABLE DESIGN PRESSURE
116.7"	+/- 80.0 PSF
120.0"	+/- 78.2 PSF
130.0"	+/- 73.6 PSF
140.0"	+/- 70.0 PSF
150.0"	+/- 66.9 PSF
160.0"	+/- 64.3 PSF
170.0"	+/- 62.1 PSF
180.0"	+/- 60.1 PSF
190.0"	+/- 58.3 PSF
200.0"	+/- 56.8 PSF
210.0"	+/- 55.3 PSF
220.0"	+/- 54.0 PSF
230.0"	+/- 52.8 PSF
240.0"	+/- 51.7 PSF
250.0"	+/- 50.6 PSF
256.5"	+/- 50.0 PSF

Metric Design Load Table (based on 9.144m (360") height)

DESIGN LOAD "W" (P.S.F.)	MAXIMUM SLAT SPAN	kgs of pressure Shutters can withstand
50	6.4m - 25.4cm	14,855
55	6.4m - 15.24cm	16,091
60	6.4m - 5.08cm	17,281
65	6.4m - 10.16cm	17,985
70	15.8m - 17.78cm	18,654
75	5.5m - 27.94cm	19,305
80	5.5m - 10.16cm	19,958
85	5.2m - 22.86cm	20,530
90	5.2m - 7.62cm	21,126
95	4.9m - 22.86cm	21,653
100	4.9m - 0cm	21,727
105	4.6m - 7.62cm	21,789
110	4.6m - 15.24cm	21,704
115	4.0m - 27.94cm	21,777
120	4.0m- 10.16cm	21,772



Profile of :

56mm End Retention

Roll Down Shutters | Hurricane / Weather Barriers







Roll Down Shutters | Hurricane / Weather Barriers

Engineered to be the best, MaestroShield[®] End Retention and Non-End Retention Roll Down Shutters are designed for strength and beauty. Our strength has been rigorously tested and certified and span industry leading widths up to 262" (6.6m) and heights up to 252"(6.4m). Our beauty is in the versatility of our system, which offers the choice of slat venting, multiple colors, and a wide array of motors and electronics that seamlessly integrate your system while providing comfort, convenience and unparalleled security and protection against intrusion, high speed winds, wind-born debris and Ultra-Violet solar radiation for your home or business.

Aluminum Roll Down Shutters as Hurricane Protection:

- Both MaestroShield[®] end retention and non-end retention shutters have approval from Miami Dade County, Florida Building Code, and Texas Department of Insurance. With some of the highest design pressure ratings in the industry, a 21' (6.4m) width end retention shutter can withstand sustained wind speeds of over 145 mph (233 kph) without a storm bar, while a 10' (3m) width end retention shutter can withstand wind speeds of over 220 mph (354 kph) without a storm bar.
- Locking bottom slat available for extra security and design load
- Connector slats attach slats to motor tube for greater stability and added security

End Retention Benefits:

- 56mm (2.20") Shutters: approved up to 262" (6.3m) wide and 252" (6.4m) high
- 44mm (1.73") Shutters: approved up to 146.5" (3.7m) wide and 252" (6.4m) high
- Reinforced aluminum Side Rails
- End Retention Slat Locks engineered from high-strength Nylon 6/6
- Rivets attach End Retention Slat Locks to Slat
- Tested and Certified by:





TEXAS DEPARTMENT OF INSURANCE

Other Aluminum Roll Down Shutter Features:

- End Retention and Non-End Retention Versions
- Vented and Non-Vented 44mm (1.73") and 56mm (2.20") Slats
- Idlers with Stainless Steel Idler Bearings
- Mounting Plates are Polyurethane Powder-Coated to Resist Corrosion
- Available in White, Beige, Ivory and Bronze with a 10-Year Warranty on Powder Coating
- Manual Operated Versions have a lifting capacity of up to 350 lbs (159 kgs) without Spring Assistance
- Motorization available with MaestroShield® tubular motors up to 1011 lbs (499 kgs) and wireless electronics which accommodate a wide range of applications.
- Impact-rated Hood Components

Certifications:

Miami Dade County: NOA# 17-0206

Florida Building Code: FL7873-R10 / FL14235 / FL13757

Texas Department of Insurance: SHU150

Roll Down Shutters | Hurricane / Weather Barriers | Non-End Retention

56mm (2.20") Non-End Retention Aluminum **Roll Down Shutters**

- 88.375" (2.24m) maximum width w/o storm bars
- 252" (6.4m) maximum height

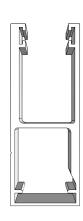
HVHZ

Non-HVHZ

TABLE 1

TABLE 1				
W/O END RE	W/O END RETENTION - NO STORMBARS			
DESIGN LOAD "W" (P.S.F.)	MAXIMUM SLAT SPAN	MINIMUM SEPARATION TO GLASS		
30	5' - 11"	3"		
35	5' - 8"	3"		
40	5' - 6"	3"		
45	5' - 4"	3"		
50	5' - 3"	3"		
55	5' - 1"	3"		
60	5' - 0"	3"		
65	4' - 11"	3"		
70	4' - 10"	3"		
75	4' - 9"	3"		
80	4' - 8"	3"		
85	4' - 7"	3"		
90	4' - 6"	3"		
95	4' - 5"	3"		
100	4' - 5"	3"		
105	4' - 4"	3"		
110	4' - 3"	3"		
115	4' - 3"	3"		
120	4' - 2"	3"		
125	4' - 2"	3"		
130	4' - 1"	3"		
135	4' - 1"	3"		
140	4' - 0"	3"		
145	4' - 0"	3"		
150	3' - 11"	3"		
155	3' - 11"	3"		
160	3' - 11"	3"		
165	3' - 10"	3"		
170	3' - 10"	3"		
175	3' - 10"	3"		
180	3' - 9"	3"		

TABLE 1		
	N - NO STORMBARS	
DESIGN LOAD "W"	MAXIMUM SLAT	
(P.S.F.)	SPAN	
30	7' - 4"	
35	7' - 4"	
40	7' - 4"	
45	7' - 3"	
50	6' - 10"	
55	6' - 6"	
60	6' - 3"	
65	6' - 0''	
70	5' - 9"	
75	5' - 7"	
80	5' - 5"	
85	5' - 3"	
90	5' - 1"	
95	4' - 11"	
100	4' - 10"	
105	4' - 9"	
110	4' - 7"	
115	4' - 6"	
120	4' - 5"	
125	4' - 4"	
130	4' - 3"	
135	4' - 2"	
140	4' - 1"	
145	4' - 0"	
150	3' - 11"	
155	3' - 10"	
160	3' - 10"	
165	3' - 9"	
170	3' - 8"	
175	3' - 8"	
180	3' - 7"	



Profile of 56mm (2.20") **Non-End Retention** Side Rail

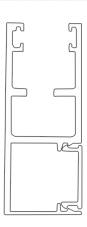
Roll Down Shutters | Assembly Specifications

EA® 44mm End Retention Aluminum Roll Down Shutters

146.5" (3.7m) maximum width

Non-HVHZ

Table 1 Span Schedule - No Storm Bars				
Slat Span	Allowable Design Pressure			
IN / MTR	IN / MTR	PSF		
61.2" / 1.55m	+ 93.0" / 2.36m	- 93.0 PSF		
70.0" / 1.78m	+ 78.6" / 2.00m	- 81.3 PSF		
80.0" / 2.03m	+ 69.2" / 1.76m	- 73.8 PSF		
90.0" / 2.29m	+ 63.4" / 1.61m	- 69.3 PSF		
98.3" / 2.50m	+ 60.0" / 1.52m	- 66.7 PSF		
100.0" / 2.54m	+ 58.8" / 1.49m	- 65.0 PSF		
110.0" / 2.79m	+ 52.8" / 1.04m	- 57.1 PSF		
120.0" / 3.05m	+ 48.3" / 1.23m	- 51.0 PSF		
130.0" / 3.30m	+ 44.6" / 1.13m	- 46.1 PSF		
140.0" / 3.56m	+ 41.7" / 1.06m	- 42.2 PSF		
146.5" / 3.72m	+ 40.0" / 1.02m	- 40.0 PSF		



Profile of EA[®] 44mm (1.73") End Retention Side Rail

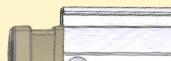
Roll Down Shutters | Assembly Specifications

Connector Slats

MaestroShield Roll Down Aluminum Shutters utilize connector slats or slat hangers to connect slat curtain to motor tube.

Advantages of Connector Slats:

- For greater stability: less movement of the slat curtain
- For added security: does not allow for any give if an intruder tries to lift it from the bottom

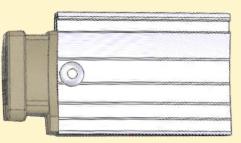


End Retention

- MaestroShield end retention shutters can span up to a maximum width of 262" (6.6m) without storm bars.
- Because of its malleable properties, MaestroShield's nylon end retention slat locks have greater resistant to breakage than the plastic slat locks used by most of our competitors.

Nylon also has a longer lifespan and does not crack as easily as plastic.

MaestroShield Roll Down Shutters use aluminum rivets to attach end retention slat locks. The rivets are attached at 90° through the slat, making a much stronger connection than screws fastened through the end of slat lock. Also, aluminum rivets through <u>aluminum</u> slats are subject to less corrosion than steel screws into aluminum slats.



Riveted for superior strength

AC01-12SLM: AC01-12SM: AC01-12A: With MaestroShield's nylon entry guide, there is no need to cut and "butterfly" the side rail to allow for

slat entry.

Nylon Entry Guide



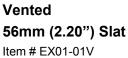
Extrusions | Aluminum Roll Down Shutters

Non-Vented 56mm (2.20")Slat

Item # EX01-01S



Vented 44mm (1.73") Slat







Slats available in white, ivory, beige, and bronze



Non-Vented 44mm (1.73")Slat

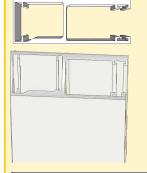


Slat Dimensions - Vented and Non-Vented 56mm			
Width	Height	Wall Thickness	Length
2 1/5" / 56mm 1/2" / 14mm 0.52" / 1.3mm 24' / 7.3m			

Slat Dimensions - Vented and Non-Vented 44mm				
Width Height Wall Thickness Length				
1 3/4" / 44mm	3/8" / 10mm	0.043" / 1mm	24' / 7.3m	

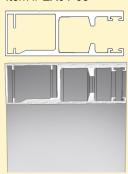
Non-End Retention Side Rail for 56mm (2.20") Slat

Item # EX01-02



End Retention Side Rail for 56mm (2.20") Slat

Item # EX01-05



End Retention Side Rail for 44mm (1.73") Slat

Item # EX01-05



44mm (1.73") Track features Snap-On removable front plate that conceals screws for a clean external appearance.



All side rails available in white, ivory, beige, and bronze







Side Rail Dimensions End Retention or Non-End Retention 56mm

Width	Height	Wall Thickness	Length
3 1/4" / 80mm	1 1/6" / 30mm	0.083"/ 3.8mm	21' / 6.4m

Side Rail Dimensions End Retention or Non-End Retention 44mm

Width	Height	Wall Thickness	Length
2 3/4" / 70mm	1.1" / 28mm	3/32" / 2.2mm	21' / 6.4m

Roll Down Shutters | Accessories

	Item # and Name	Specifications
	item # and Name	Specifications
	1 Wing End Retention Slat Lock Item #AC06-01/1B	1 wing Nylon Available in White Sold in pairs, one right, one left
	2 Wing End Retention Slat Lock Item #AC06-02/1B	2 wings. Nylon Available in White Sold in pairs, one right, one left
	Slat Cap Item #AC01-08	Nylon Available in Black Sold in pairs, one right, one left
+	44mm (1.73")Slat Cap	Nylon. Available in White Sold in pairs. One right, one left
	MS® 56mm (2.20") Rivets (White) Item #AC01-25/1000-WH (Bronze) Item #AC01-25/1000-BZ (Ivory/Beige) Item #AC01-25/1000-IV/BG EA® 44mm (1.73") Rivets Item # AC01-425/500	56mm (2.20") Rivets available in White, Bronze, Ivory/Beige. 44mm (1.73") Rivets (Mill).
	Motor Tube Rivet—3/6" Aluminum Dome Head X.375 x 500 grip Item # AC01-21/1000	(4.8mm) Aluminum Dome Head
	Slat Cap Rivet—1/8" 0.063 x x .125 GRIP Item # AC01-23 / 1000	(3.2mm) Slat Cap Rivet
	Entry Guide for 56mm System Item # AC01-12A Entry Guide for 44mm System Small Leg Side Cap: Item # AC01-12SM No Leg Side Cap: Item # AC01-12SLM	Nylon Entry Guide(s) 56mm (2.20"), 44mm (1.73") Sold in pairs One right, one left
	56mm Slat hanger Item #AC10-01 44mm Slat hanger Item #AC10-02	56mm (2.20"), 44mm (1.73")

Roll Down Shutters | Accessories

Item Name and Number	Specifications	
Felt Item #AC01-10	Available in Grey Adhesive backing Sold in 500' rolls (152.4m)	
Rubber Ring Item #AC01-05	3-25/32" / 96mm Wall: 3/8" / 10mm Reduces noise and impact of slats against motor tube. Fits 86mm tube	
5/8" (16mm) Hole Caps Item #AC01-11	Plastic 5/8" (16mm) diameter Available in White, Ivory, Beige, and Bronze	
Conic Stopper Item #AC07-03 Ivory/Beige Item #AC07-04 White Item #AC07-05 Bronze	PVC Restricts curtain from retracting too far into hood. Available in White, Ivory/Beige, and Bronze	
5-Sided Rolled Hood Available sizes: 5 1/2"(139mm), 6.5" (165mm), 7"(178mm), 8"(203mm), 10"(254mm) and 12"(305mm) Item #SM02B (Back) Item #SM02F (Front)	Available sizes: 5 1/2" (139mm), 7"(178mm), 8"(203mm), 10"(254mm) and 12"(305mm) Available in White, Ivory, Beige, and Bronze	
End Retention Side Rail For MS® 56mm (2.20")Slat Item # EX01-05	Width - 3 1/4" (80mm); Height - 1.18" (30mm); Wall Thickness - 5/32" (3.8mm); Sold in 21' (6.4m)	
Non-End Retention Side Rail for MS® 56mm (2.20") Slat Item # EX01-02	Width - 3 1/4" (80mm); Height - 30mm; Wall Thickness - 3.8mm; Sold in 21' (6.4m)	
End Retention Side Rail for EA® 44mm (1.73") lat Item # EX01-405B (Track) Item # EX01-405C (Cover)	Width - 2 3/4" (70mm); Height - 1,1" (28mm); Wall Thickness - 0.90mm; Sold in 24' (7.3m)	

Motor Lift Capacity | Motor Options (120v, 220v)

REBOUND / REBOUND BIDIRECTIONAL / SMART Motors 20—50 Nm with Built-In Receiver (see index for motor section)	Motor Torque	Max Lift Capacity per Tube Size			
 With / Without Manual Override 5 year 100% replacement Warranty coverage Easy-to-Set Electronic Limit Switch Electronic limit setting Universal Accessories, Crown and Drive Gears for 60mm 		60mm Motor Tube	70mm Motor Tube	86mm Motor Tube	100mm Motor Tube
	20 Nm	110 lbs (49 kg)	94 lbs (42.6 kg)	77 lbs (34.9 kg)	66 lbs (29.9 kg)
motor tubes and others available.	50 Nm	275 lbs (124 kg)	236 lbs (107 kg)	192 lbs (87 kg)	165 lbs (74.8 kg)

HYBRID / HYBRID BIDIRECTIONAL* Motors 20—120 Nm with Built-In Receiver	Motor	Max Lift Capacity per Tube Size			
(see index for motor section)	Torque	60mm Motor Tube	70mm Motor Tube	86mm Motor Tube	100mm Motor Tube
With and without Manual Override5 year 100% replacement Warranty coverage	20 Nm	110 lbs (49 kg)	94 lbs (42.6 kg)	77 lbs (34.9 kg)	66 lbs (29.9 kg)
Easy-to-Set Electronic Limit Switch Mechanically set limits with dual sided limit access	50 Nm	275 lbs (124 kg)	236 lbs (107 kg)	192 lbs (87 kg)	165 lbs (74.8 kg)
 Universal Accessories, Crown and Drive Gears for 60mm motor tubes and others available. *Bidirectional also available in 50Nm and 120Nm with 	100 Nm	n/a	471 lbs (213.6 kg)	384 lbs (174.1 kg)	330 lbs (149.6 kg)
override only	120 Nm	n/a	566 lbs (256.7 kg)	460 lbs (208.6 kg)	396 lbs (179.6 kg)

STANDARD Motore 20 420 Nm (no Built in Bessiver)	Motor	Max Lift Capacity per Tube Size			
Motors 20-120 Nm (no Built-in Receiver) (see index for motor section)	Torque	60mm Motor Tube	70mm Motor Tube	86mm Motor Tube	100mm Motor Tube
With and without Manual Override5 year 100% replacement Warranty coverage	20 Nm (19 rpm)	110 lbs (49 kg)	94 lbs (42.6 kg)	77 lbs (34.9 kg)	66 lbs (29.9 kg)
Mechanically set limits with dual sided limit access	30 Nm	165 lbs (74 kg)	141 lbs (63.9 kg)	115 lbs (52.1 kg)	99 lbs (44.9 kg)
 Mini-Receiver available separately Universal Accessories for 20Nm to 50NM: 	40 Nm	220 lbs (99 kg)	189 lbs (85.7 kg)	153 lbs (69.4 kg)	132 lbs (59.8 kg)
Crown, Drive for 60mm motor tubes and more	50 Nm	275 lbs (124 kg)	236 lbs (107 kg)	192 lbs (87 kg)	165 lbs (74.8 kg)
 Universal Accessories for 60Nm to120Nm: Crown, Drive for 70mm motor tubes and more 	60 Nm	n/a	283 lbs (128.3 kg)	230 lbs (104.3 kg)	198 lbs (89.8 kg)
	80 Nm	n/a	377 lbs (171 kg)	307 lbs (139.2 kg)	264 lbs (119.7 kg)
	100 Nm	n/a	471 lbs (213.6 kg)	384 lbs (174.1 kg)	330 lbs (149.6 kg)
	120 Nm	n/a	566 lbs	460 lbs	396 lbs

STANDARD Motors 140—300 Nm (no Built-in Receiver)	Motor	Max Lift Capacity per Tube Size
(see index for motor section)	Torque	100mm Motor Tube
Manual Override5-year 100% replacement Warranty coverage	140 Nm	462 lbs (209.5 kg)
No 3-phase power needed	180 Nm	594 lbs (269.4 kg)
 Single sided access to mechanical, set-lever limits Built-in Crown and Drive Gear for 100mm motor tube Without Manual Override available special order 	230 Nm	755 lbs (344.2 kg)
	300 Nm	990 lbs (449 kg)





2022









- Windows
- Doors
- Lanais
- Balconies

- Patios
- Porches
- Porticos
- Entries

- Garages
- Retail Stores
- Restaurants
- Hotels

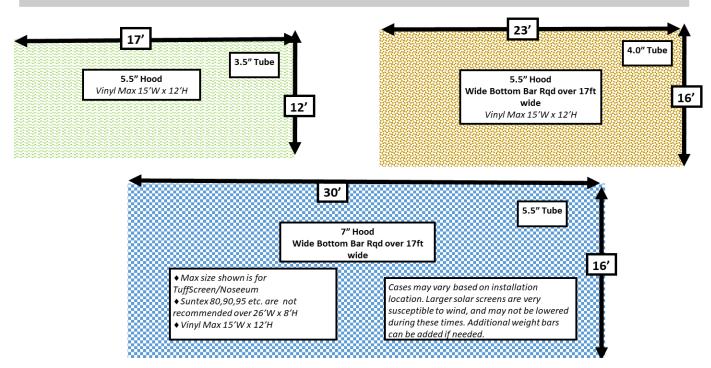
- Office Buildings
- Factories
- Warehouses
- Schools

Exterior Screening features



(your Sales Team needs to know by heart!)

- 1. The strength of MaestroScreen's motor tube, coupled with the extruded hood, allows for installations of up to 30' (9.1m) wide without sagging. The 5 1/2" (139mm) hood assembly and small profile side rails are light weight and allow for quick and easy installation.
- 2. There are two track options to choose from: slim and adjustable. Slim side tracks are only 2" (5.08cm) wide and 5/8" (.16cm) thick, allowing the frame freedom to blend unobtrusively with the building's façade. The adjustable track allows for adjustability up to 1/4" per side (1/2" overall). The 3-piece side track design enables you to hide the mounting screws for a cleaner, more attractive appearance.
- 3. MaestroShield has the only extruded hood on the market. Our extruded hood is 32% thicker than sheet metal hoods, making it resistant to denting in shipping and handling, and impact resistant when installed. Our side caps, featuring deep galvanized steel threaded inserts for attaching the mounting plates, are 87% thicker than standard universal side caps.
- 4. Our bottom bars accommodate a weighted steel bar insert, which assists in keeping the screen taut and operating smoothly. The slim bar option's sleek profile allows it to retract further into the hood assembly .
- 5. The zipper system allows the screen to be tensioned and still run smoothly without needing adjustment.
- 6. Nylon entry guides provide for clean entry of zipper into side rails, assuring smooth operation for the lifetime of the assembly. *PLUS*, the guide allows for the bottom bar to retract almost entirely into hood.
- 7. The heavy duty idler system allows for smooth and quiet operation. Spring-loaded idler allows for simple installation of motor tube assembly and, for a quick and easy removal of assembly, if needed.
- 8. The receiving channel add-on makes installations on uneven surfaces stress-free.
- 9. The continuous end retention system offers a clean and functional finish, with lengths spanning up to 30ft.
- 10. Industry-leading warranties featured with our wide variety of motors and electronics!:
 - 10-year warranty on powder coating (1-year in coastal regions within 1 mile of saltwater coastline)
 - 5-year full replacement warranty on tubular motors (DC motors carry a 2-year full replacement warranty)
 - · 2-year full replacement warranty on electronics and components

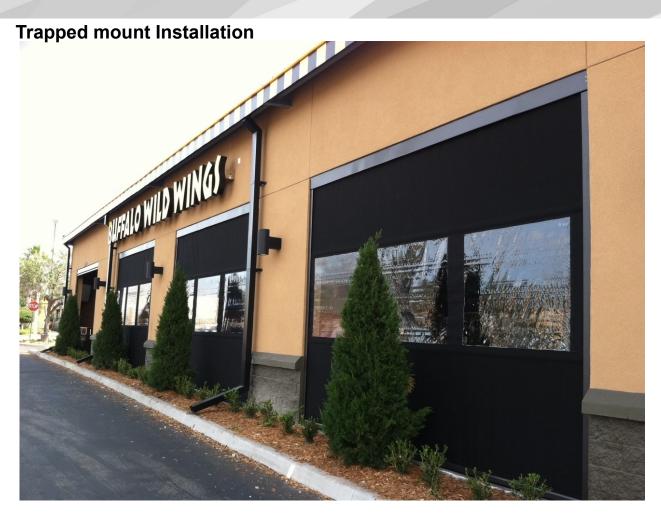


Adjustable Installation



Surface Mount Installation





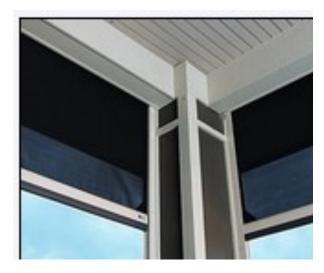
Clear Vinyl Retractable Screens





Stucco Column





Wood Clad Column



Stone-Face Column



Surface Mount



Adjustable

MaestroScreens | Adjustable Track

Adjustable Track Installations



MaestroScreens | Wire & Free-Hanging System(s)

Wire & Free-Hanging Installations







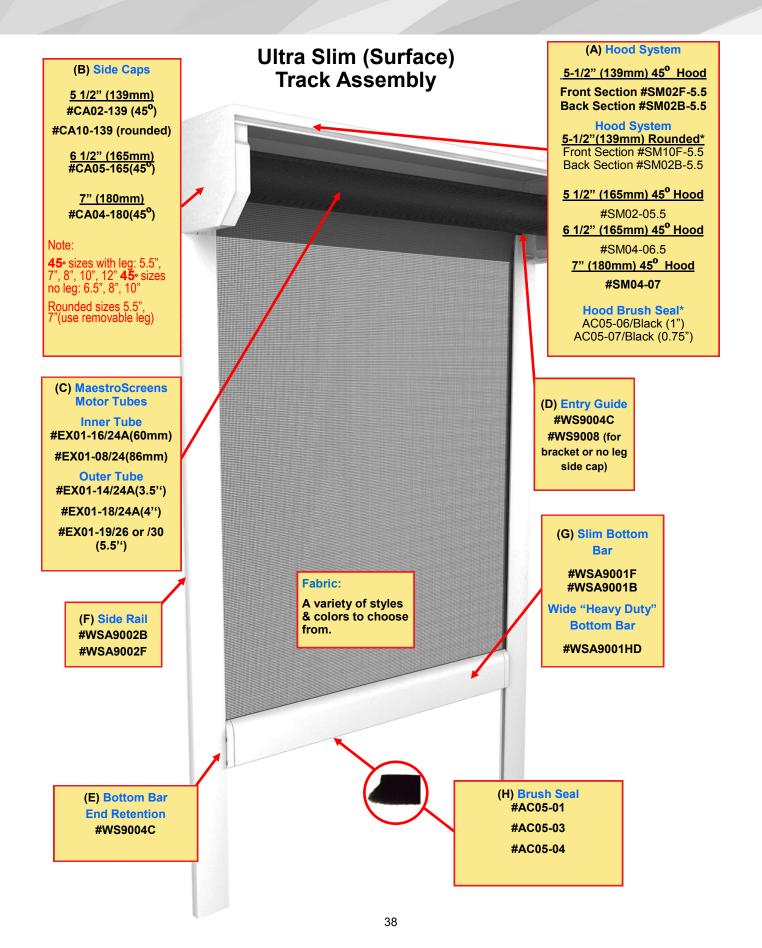




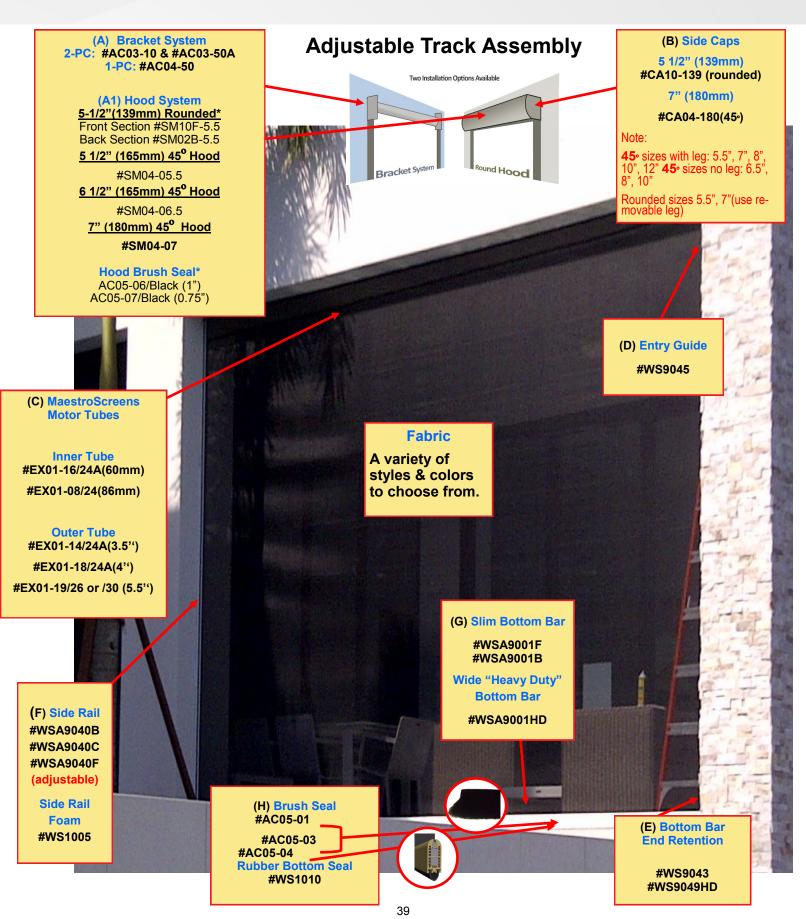




MaestroScreens | Slim (Surface) Track



MaestroScreens | Adjustable Track



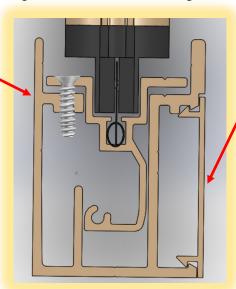
MaestroScreens | Reinforced Track System

Adjustable Track System

Outer Track

- Reinforced walls prevents screws from loosening
- ♦ Compatible with selfdrilling screws

#WSA9040B



Track Cover

- Protects integrity of hardware and inner track
- Provides a clean, finished and professional look

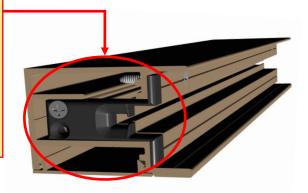
#WSA9040C



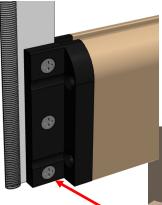
Inner Track

- Easily and firmly secured with a single screw
- Features easy installation entry guide

#WSA9040F



End Retention System



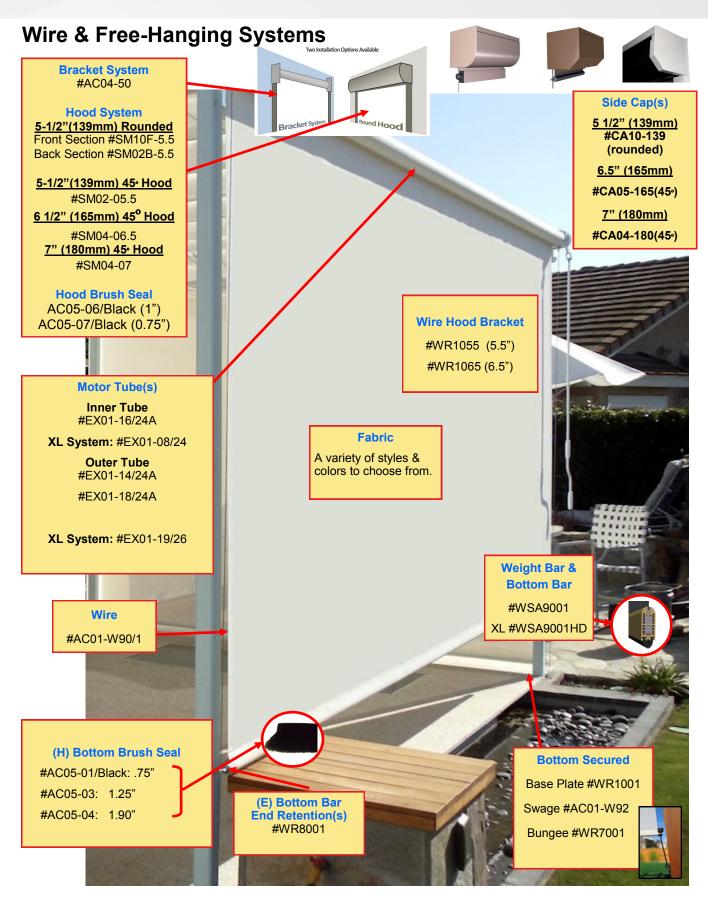
Tracks can be installed without needing to lift the bottom bar above the end retention



The full-length zipper creates a clean, flush look by concealing the bottom bar in the hood

The zipper is secured to the end retention, which helps to reduce stress on the screen

MaestroScreens | Wire System(s)



MaestroScreens | Wire System(s)

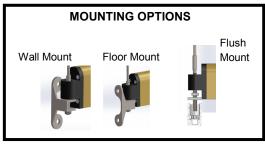
Styles, Choices, Options

Options	Free-Hanging	Wire System
5.5" 45 Degree Side Cap	×	*
5.5" Rounded Side Cap	/	<
7" 45 Degree Side Cap	✓	✓
Bracket System	✓	/
Wide Bottom Bar	\	\
Slim Bottom Bar	×	×
Bottom Bar Brush Seal (.75", 1.25", 1.9")	✓	>
Bottom Bar Rubber Seal	/	>
Control Options:		
Motor (Hybrid, Smart, Rebound)	/	~
Manual Gear	~	~
Mounting Options:		
Side Mounted	/	~
Floor Mounted	/	V
Back Mounted	/	\

ITEM	Free-Hanging
Base Plate	WR1001
Custom Wire Assemblies	WR7001

ITEM	Up to 8'	Up to 12'	Up to 16'
Wall Mount	WRSM-08	WRSM-12	WRSM-16
Floor Mount	WRFM-08	WRFM-12	WRFM-16









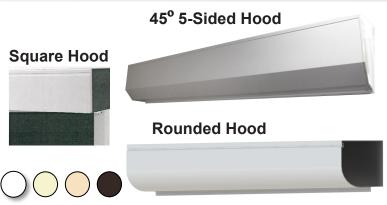
Add-Ons:

- Crank Handle (5', 6.4', 10')
- Multi-Channel Remote Controllers (1, 6, 15)
- LED (White & Blue)
- Smart Wifi Controller
- Home Automation Interface
- Wind Sun Sensor



MaestroScreens | Hoods

	MaestroShield Hoods			
Wall Thickness	1.5mm (.06') (66% thicker than bent)			
Packing	Stacks for ease and secure packing			
Shipping	Less expensive, or shipping damages			
Inventory	Less needed—common pieces			
Powder Coat Warranty	10-year warranty on powder coating (1-year in coastal regions within 1 mile of saltwater coastline)			



Extruded Hoods

- Hoods available in white, ivory, beige, and bronze
- Approx. 20% less expensive than bent hoods
- 10-year warranty on powder coat
- At 1.5mm (.06") thick, 66% thicker walls than bent hoods; more resistant to denting during shipping and handling.

Hood Sizes and	Hood Sizes and Installations Restrictions		Side Cap	Compatibility	Hood Type
	4" (102mm)	Front SM06F-4.0 Back SM06B-4.0	Square Side Cap (CA06-102)	Compatible with Square Hoods	
	5.5 " (139mm)	Hood back (SM02B-5.5)	5.5" (139mm) 45° Side Cap or 5.5" (139mm) Rounded side Cap	Compatible with both Rounded and 45° Hoods	Extruded 6063-
	For up to 17' (5.18m) Wide x 17' (5.18m) Tall w/ 3.5" (8.89cm)	45° Hood Front (SM02F-5.5)	Impact-Rated 5.5" (139mm) 45° Side cap w/ leg (CA02-139) Different Left and Right	Compatible with Slim Surface Mount Track	T6 Powder coated Aluminum; Front and Back Sold separately;
	tube & 23' (7.0m) x 12' (3.65m) w/ 4"(10.16cm) tube	Rounded Hood Front (SM10F-5.5)	Impact-Rated 5.5" (139mm) Rounded Side Cap (CA10-139) Works on Left or Right		copa.a.c.y,
	5½ (139mm) for up to 30'(7.9m) Wide	Front & Back (SM04-05.5)	5.5" (139mm) 45° Side Cap (CA03-139)		Roll Formed Aluminum; Sold by Foot
	6½ (165mm) for up to 30'(7.9m) Wide	Front & Back (SM05-06.5)	6.5" (165mm) 45° Side Cap (CA05-165) Works on Left or Right	Compatible with the Slim Surface Mount Track as well as the	Roll Formed Aluminum; Sold by Foot
	7" (180mm) for up to 30'(7.9m) Wide	Front & Back (SM04-07)	7" (180mm) 45° Side Cap (CA04-180)	Adjustable Track	Roll Formed Aluminum; Sold by Foot
	Bracket For up to	N/A	Small Angled Bracket (AC03-10 & AC03-50A)		No Hood
	30' (7.9m) Wide	N/A	Universal Bracket Plate (AC04-50)		No Hood

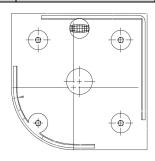
MaestroScreens | Side Cap Comparisons

Rounded Side Cap

	MaestroShield Side Cap	Universal Side Cap		
Thickness of Casting	6mm (.24")	3.2mm (.125")		
Threaded Inserts for Motor Plates	Threaded Galvanized Steel Insert - 6.85mm (.27") deep	Threaded Aluminum - 3mm (.125") deep (Some not threaded)		
Powder Coat Warranty	10-year	1-year		
Openings - for Manual Crank	Yes - In all three positions	Not in all positions (requires drilling)		
Adjustable Hood for flush appearance	Yes	No		

Impact-Rated Rounded Side Caps			
Size	Weight	Item #	
5-1/2"	0.75 lbs (.34 kgs)	CA10-139	

Internal galvanized steel inserts for easy installation of motor plates for a clean appearance







45° Side Cap

Component Name	Item #	Specifications
Impact-Rated 5 1/2"(139mm) Side Cap	CA02- 139	Weight - 0.75 lbs (.34kgs); 10- year powder coating warranty; thread inserts with galvanized steel so there is no need to drill holes; fits universal 45° hood

5 1/2" Impact Rated (139mm)

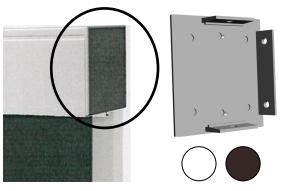
- At 6mm (.24") thick, twice as thick as universal standard side cap
- Threaded galvanized steel inserts for mounting fastener plates
- Greater depth of threaded inserts for stronger connection
- Threaded inserts for mounting mini receiver
- Openings in casting for mounting manual crank without drilling
- Hood is adjustable into side cap for flush appearance



Square Side Cap

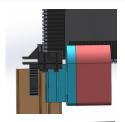
Square Side Caps pairs with 4" Extruded Hood				
	Size	Weight	Item #	
	4" (106mm)	0.25 lbs	CA06-102	

- Compact size.
- Modern design.
- Great for sizes up to 16' wide x 10' height



Square hoods available in white, bronze. Other customs available through custom order.

MaestroScreens | Guides & Bottom Bar





	Component Name	Item #	Specifications
Maestro5hield*	Slim Track Nylon Entry Guide	WS9004C	Black nylon; seamlessly guides screen into side rails; sold in pairs
	Slim Track Nylon Entry Guide	WS9008	Black nylon heavy duty; seamlessly guides screen into side rails; sold in pairs. (Use with Bracket System, 5.5" Rounded Hood, 6.5" 45 degree Hood)



Entry Guide — Adjustable Track

A	Component Name	Item #	Specifications
	Adjustable Track Nylon Entry Guide	WS9045	Black nylon; seamlessly guides screen into side rails; sold in pairs



Bottom Bar End Retention (s)

1	Component Name	Item #	Specifications
	SLIM Bottom Bar—End Retention for Slim Track	WS9003A	Nylon; sold in pairs
SLIM Bottom Bar—End Retention for Adjustable Track		WS9043	Nylon; sold in pairs
	XL System Bottom Bar—End Retention for Adjustable Track	WS9049HD	Nylon; sold in pairs



MaestroScreen Bottom Bar(s)

Choice of 2 piece bottom bar, or our 1-piece Heavy duty bottom bar. Retains a taut screen; weighted down with marine grade stainless steel to avoid corrosion

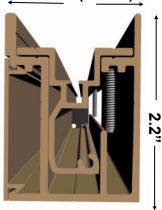


MaestroScreens | Side Tracks

MaestroScreens Adjustable Track System with Foam Inserts and Receiving Channel

Component Name	Item #	Specifications
MaestroScreen Adjustable Track	Inner Track WSA9040F Side Rail Cover WSA9040C Outer Track WSA9040B	Three piece track system. Sold in 24' (7.3m) lengths. 1.5" x 2.2" (5.6cm x 3.8cm) Available in White, Ivory, Bronze and Beige.
Receiving Channel	WSA9050U	1.5" wide x 2" tall. Sold in 24' Optional used for uneven mounting surfaces. Available in White, Ivory, Bronze and Beige.

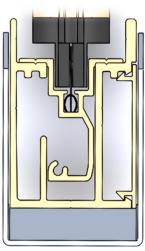
1.5" (5.6cm)





#WS1005 Foam

This MaestroShield track design allows for flexible installation of tracks on uneven mounting surfaces. The simplified installation procedure creates a clean and professional finish; Simply install and lower the screen, push the inner tracks until they are tight, and then screw the two parts together.



Receiving channel for uneven installations

MaestroScreens Slim (surface) Track

Two piece side rail snaps together with no visible screws for a clean elegant appearance

Component Name	Item #	Specifications
Maestro <i>S</i> creen (surface) Slim Track	WSA9002F (Front) WSA9002B (Back)	2.0" (5.08cm) W X 0.6" (.15cm) D; 2-piece front and back snap together for clean, finished look with no visible screws; sold in 21' (6.4m) and 24' (7.3m) lengths

MaestroScreens | Adjustable Track

Adjustable Track Bracket System

Features our adjustable mounting bracket system. "Perfect for trapped or surface mount installations."

- Two piece track allows for forgiveness with great adjust ability.
- Two installation options available: Bracket System or (Surface Mount with Rounded Hood).
- Features Maestroshield' zipper track retention for superior tension all the way across.
- Super easy to install seamless bracket system hides the screen almost entirely when in use.









- Features our new innovative dual track system.
- Features our adjustable mounting bracket system. Perfect for trapped or face mount installations
- Hood assembly option. Not required.
- Features
 MaestroShield's
 zipper track retention







Foam

Adjustable Track System Foam

Adjustable system with inner and outer track, makes difficult installations easier. Foam tubing placed between inner & outer tracks allow flexibility & adjustability. "D" Shaped Foam with sticky taped service.



MaestroScreens | Adjustable Track

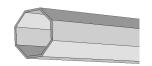
Adjustable Track Bracket System

- This universal bracket system is adjustable for your choice of installation between a trapped install and a face mounted install.
- No hood assembly required

Component Name	Item #	Specifications
Small Angle Bracket	AC03-10	Debutrathana Doudar Coated Steel: for use with Small Angle
Universal Bracket Plate	AC03-50	Polyurethane Powder-Coated Steel; for use with Small Angle Bracket (AC0310), 6"x4" (15.24cm x 10.16cm)
Idler Bearing Cradle	AC03-40	Polyurethane Powder-Coated Steel; includes Plastic Cap and Setting Pin; pre-drilled, 100mm X 100mm (3.937" x 3.937")
Universal Angled Bracket Plate	AC04-50	Polyurethane Powder-Coated Steel; 4" (10.16cm) Angle for bracket mounting system

MaestroScreens Inner Tubes

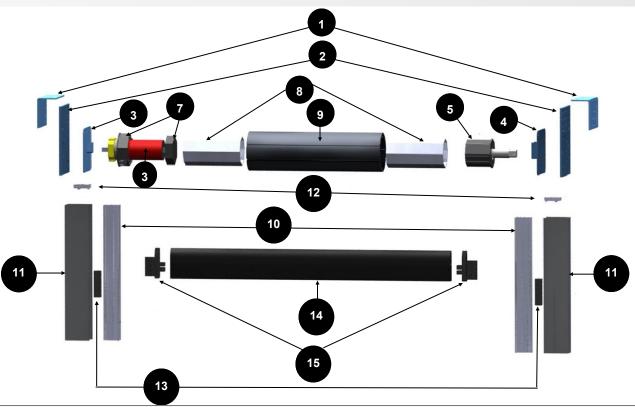
Component Name	Item #	Specifications		
60mm Tube	EX01-16/24A	60mm Octagonal; ID57mm, OD62mm; Sold in Lengths of 24' (7.31m). Used with 3.5" and 4" outer tube.		
86mm Tube	EX01-08/24	86mm Inner Tube Sold in Lengths of 24' (7.31m). Used with 5.5" outer tube.		



MaestroScreens Outer Motor Tube(s)

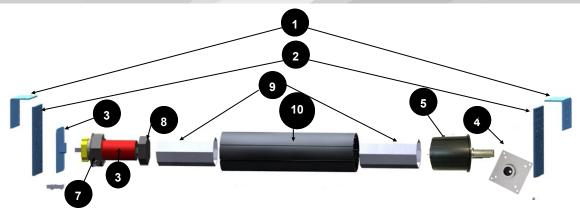
	Component Name	Item #	Specifications
	3 1/2" (8.9cm) Outer Tube	EX01-14/24A	88mm Round; ID—63mm, OD—88mm; sold in 24' (7.3m) lengths. For installations up to 12' (3.65m) tall x 17' (7.31m) wide.
(<u>Ö</u>)	4" (10cm) Outer Tube	EX01-18/24A	108mm Round; ID—63mm, OD—108mm; sold in 24' (6.4m) lengths & 24' (7.3m) lengths. For installations up to 23' (6.4m) tall x 17' (7.31m)wide.
()	5 1/2" (13.9cm) Outer Tube	EX01-19/26 or 19/30	XL System Outer Tube. Outer Dimension 5.5" (13.9cm) sold in 26' (7.92m) lengths & 30' (9.14m) lengths.

MaestroScreens | Adjustable Track Components



	Adjustable Track System Assembly Components						
#	Component	Item #	#	Component	Item #		
1	Angled Mounting Bracket	AC03-10	10	Inner Track	WSA9040F		
2	Mounting Bracket	AC03-50A	11	Track Cover	WSA9040C		
3	Motor Bracket	AC03-04	12	Outer Track	WSA9040B		
4	Idler Bracket	AC03-40	13	Entry Guide	WS9045		
5	Idler Bearing	AC02-12	14	Track Foam WS1005			
5	idler Bearing	AC02-12-SL (w/Spring)	15	Bottom Bar	WSA9001F WSA9001B		
6	Motor	Variable	16	End Retention	WS9043 or WS9049HD		
7	Crown & Drive Gear	TMUS-600C3 TMUS-600G3	17	3/4", 1-1/4", 1.9" Brush Seal Black ————— 3.75" Rubber Seal	AC05-01 (3/4) AC05-03 (1-1/4) AC05-04 (1.9")		
8	Inner Tube (60mm)	EX01-16/24A	18	Weight Bar	WSA9001		
9	Outer Tube " (10cm)	EX01-18/24A	19	Spline	WS1003		

MaestroScreens | XL Adjustable Track Components



	Adjustable Track XL System Assembly Components						
#	Component # Component		Item #				
1	Angled mounting bracket	AC03-10	6	Motor	20 & 50 Nm		
2	Mounting bracket	AC03-50	7	Crown	TMUS-45UC		
3	Motor bracket	AC03-04 AC03-13 AC03-1201	8	Drive gear	TMUS-45G		
4	Idler cradle	AC02-11	9	Inner tube (86mm)	EX01-08/24		
5	Idler Bearing	AC02-03RSL	10	Outer tube (5.5)	EX01-19/26 EX01-19/30		

XL SYSTEM: Designed optional components to work within our superior exterior screen systems for wider widths up to 30' (9.1m).

NOTE: Bracket type varies depending on motor

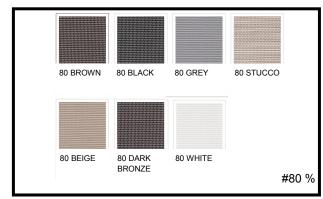


Finish Options:

	Brush or Rubber Seal						
#	Component Item # Color						
1	3/4" Brush Seal	AC05-01	Black				
2	1-1/4" Brush Seal	AC05-03	Black				
3	1.9" Brush Seal	AC05-04	Black				
4	3.75" Rubber Seal	WS1010	Black				
5	.75" Hood Brush Seal	AC05-07	Black				
6	1" Hood Brush Seal	AC05-06	Black				

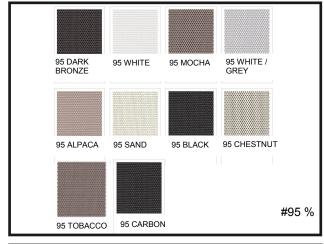
MaestroScreens | Product Detail — Fabric Options

Fabrics













Available Colors/Types:

- Brown (#80 & #90)
- Black (#80/#90/#95/#97#99)
- Grey (#80/#90)
- Stucco (#80/#90/#95)
- Beige (#80/#90)
- Dark Bronze (#80/#90/#95)
- White (#80/#95/#97/Blackout)
- Carbon (#95 only)
- Mocha (#95 only)
- White/Grey (#95 only)
- Alpaca (#95 only)
- Sand (#95 only)

- Chestnut (#95 only)
- Charcoal (#97/#99)
- Tobacco (#97/#99)
- Tuff Super *(black or white) NoSee'Um (black Insect Screen)
- > NoSee'Um (17x20 Insect Screen)
- NoSee'Um (23x21 Insect Screen)
- > Granite(#97/#99)
- EspressoTexturé (#97/#99)
- Vinyl (clear) / Weblon

Custom fabrics available. Many manufacturers to choose from.

10* YEAR SCREEN FABRIC WARRANTY: *Most fabric manufacturer's offer 10 year warranty on fabric(s). All fabric warranty claims are a passthrough warranty and are administered by the fabric manufacturer. Please contact fabric manufacturer for details on any warranty coverage information. MaestroShield assumes no responsibility for claims made on defective and/or malfunctioning fabrics either separately or as a component of screen assembly.

NOTE: MaestroScreens is not rated for wind abatement. Some "sailing" will occur in windy conditions and it is recommended that the screen is only raised or lowered when the wind subsides.

Motor Lift Capacity | Motor Options (5v, 12v, 120v, 220v)

REBOUND / REBOUND BIDIRECTIONAL / SMART Motors 20—50 Nm with Built-In Receiver	Motor	Max Lift Capacity per Tube Size			
 (see index for motor section) Without Manual Override 5 year 100% replacement Warranty coverage 	Torque	3.5" Motor Tube	4" Motor Tube	5.5" Motor Tube	
 Easy-to-Set Electronic Limit Switch Electronic limit setting Universal Accessories, Crown and Drive Gears for 60mm 	20 Nm	77 lbs (34 kg)	66 lbs (29 kg)	48 lbs (22 kg)	
motor tubes and others available.	50 Nm	192 lbs (87 kg)	164 lbs (74 kg)	120 lbs (59 kg)	

HYBRID / HYBRID BIDIRECTIONAL* Motors 20—50 Nm with Built-In Receiver	Motor	Max Lift Capacity per Tube Size			
 (see index for motor section) With and without Manual Override 5 year 100% replacement Warranty coverage 	Torque	3.5" Motor Tube	4" Motor Tube	5.5" Motor Tube	
 5 year 100% replacement Warranty coverage Mechanically set limits with dual sided limit access Universal Accessories, Crown and Drive Gears for 60mm motor tubes and others available. 	20 Nm	77 lbs (34 kg)	66 lbs (29 kg)	48 lbs (22 kg)	
*Bidirectional also available in 50Nm	50 Nm	192 lbs (87 kg)	164 lbs (74 kg)	120 lbs (59 kg)	

Battery/DC (Lithium) Motors Motors 1.1Nm—13 Nm with Built-In Receiver	Motor	Max Lift Capacity per Tube Size			
(see index for motor section)	Torque	3.125" (78mm)	3.5" Motor Tube	4" Motor Tube	
Without Manual Override		Motor Tube	3.5 Motor rube	4 Motor rube	
2 year 100% replacement Warranty coverage	6 Nm	25 lbs (11 kg)	23 lbs (10 kg)	20 lbs (9 kg)	
Electronic set limits	0 14111	20 lb3 (11 kg)	20 103 (10 kg)	20 lb3 (5 kg)	
Universal Accessories, Crown and Drive Gears for 60mm motor tubes and others available.	13 Nm	42 lbs (19 kg)	38 lbs (17 kg)	33 lbs (15 kg)	

STANDARD Motors 20-50 Nm (no Built-in Receiver)	Motor	Max Lift Capacity per Tube Size			
 (see index for motor section) With and without Manual Override 5 year 100% replacement Warranty coverage Easy-to-Set Electronic Limit Switch 	Torque	3.5" Motor Tube	4" Motor Tube	5.5" Motor Tube	
 Mechanically set limits Mini-Receiver available separately 	20 Nm(19 rpm)	77 lbs (34 kg)	66 lbs (29 kg)	48 lbs (22 kg)	
 Universal Accessories for 20Nm to 50NM: Crown, Drive for 60mm motor tubes and more Universal Accessories for 60Nm to120Nm: Crown, Drive for 70mm motor tubes and more 	30 Nm	115 lbs (52 kg)	99 lbs (44 kg)	78 lbs (33 kg)	
	35 Nm	134 lbs (60 kg)	116 lbs (52 kg)	89 lbs (30kg)	
DC (12v): (no Built-in Receiver) Motors 20Nm, 35Nm, 50Nm With and without Manual Override	40 Nm	153 lbs (69 kg)	132 lbs (59 kg)	95 lbs (43 kg)	
vitir and without Maridal Override 2 year 100% replacement Warranty coverage	50 Nm	192 lbs (87 kg)	164 lbs (74 kg)	120 lbs (59 kg)	

Quick Zip | Assembled Units with 3" Housing

Product Information Quick Zip Screen System

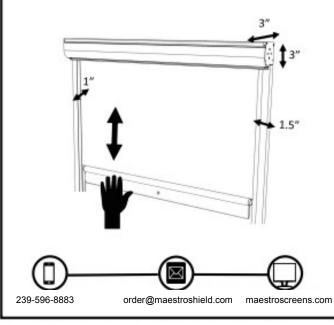
MaestroShield's Compact Hood System offers the benefits of our custom screen systems, but with a simple manual operation and a compact size. Like all MaestroShield products, this unit is designed for easy installation and maintenance-free operation for years to come.

Unlike competitors the screens are secure to both tracks, blocking all insects while also preventing the wind from hampering operation.

Choose from any of our popular insect and solar screen option, which will be sure to add comfort and enjoyment to your home or business!

FEATURES

- Quick and easy installation
- Easy Spring Loaded operation
- Screens up to 10ftw x 8fth
- Compact 3" Hood
- 2 year 100% replacement warranty coverage
- Includes a pole for easy reach and adjustment of the screen, while maintaining a clean product finish
- Available in white, custom colors are possible for an upcharge.









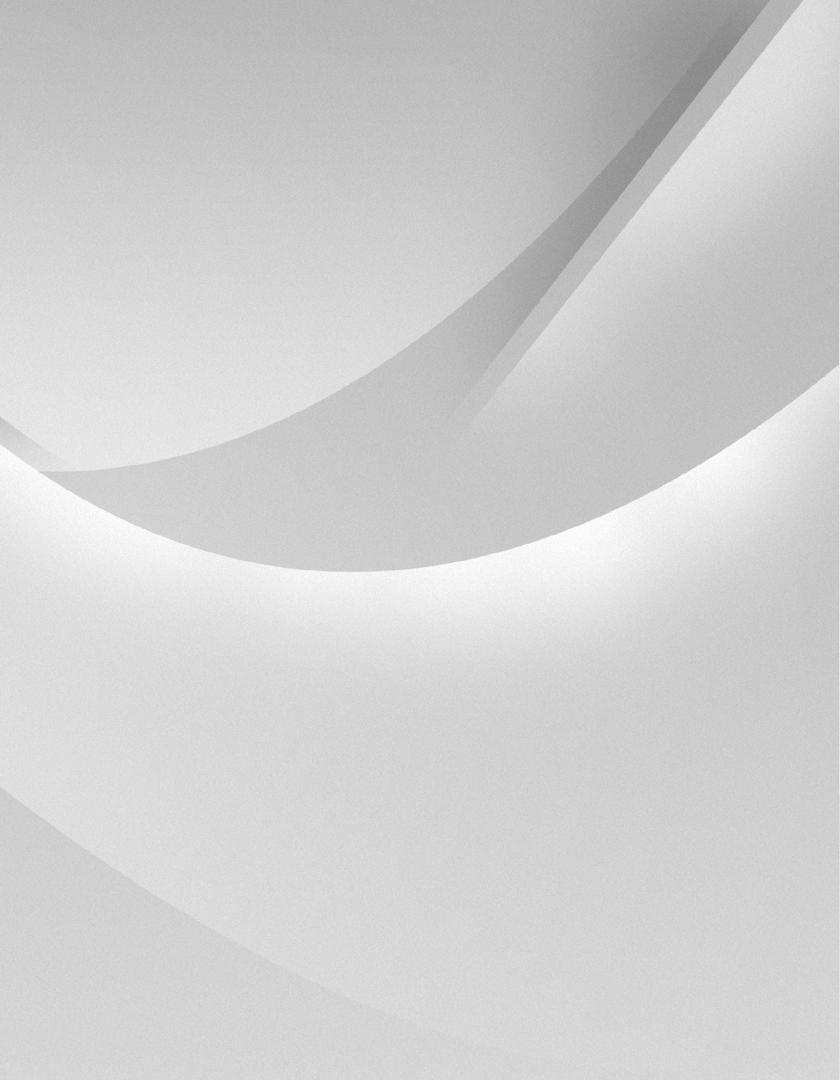








Maestroshield products are innovation at its best. We strive to develop the best products in the industry, and at the most competitive prices. Treat yourself to the service you deserve, with the quality and value you expect.







Tubular Motors

2022









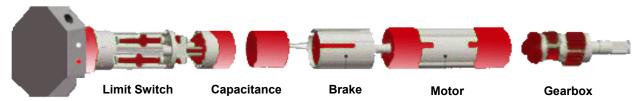
Motors for:

- · Roll Down Shutters ·
- Roll Down Exterior Screen
- **Motorized Interior**
 - Shading
- Rolling Awnings
- Projection Screens
- Rolling Doors and Grilles

Tubular Motors | Product Specifications

MaestroShield[®] motors are innovation at its best. Designed in-house by Swedish and American engineers, these industry leading components are the perfect marriage of power, precision and price. With multiple configurations available, the agility of our motors puts them in a class of their own. Designed and tested with quality in mind, MaestroShield[®] motors will greatly enhance your shutter, door, screen, awning and shading applications. These are only some of the reasons why MaestroShield[®] is superior to the competition.

Tubular Motor Anatomy



Features & Benefits:

- More than 50 sizes available to suit most applications and configurations
- More than 250 crown and drive gear combinations to fit virtually any motor tube size and shape.
- Durable universal mounting plates to fit tubular motors into a wide range of products.
- Easily programmed with a full suite of electronics
- Produced under ISO 9001 quality guidelines
- IP44 Rated
- Limits: Mechanically set and adjusted by hand with 8" (2.03cm) hex-shaped adjuster tool
 enclosed with each motor. Motor limits can be accessed on two facing sides of the motor
 head. The signature MaestroShield limits have a self-feeding spring on the limit adjuster to
 allow automatic re-feeding of the limit screw onto the adjustment shaft in case of oversetting the limits.
- Internal Gearing: done with Nylon and Metal components; no plastic is integrated into this
 portion of the MaestroShield motor.



Most Tubular Motors carry a Full 5-Year 100% Replacement Warranty (except DC motors (2 yr) and Lithium Battery motors







Tubular Motors | Index

Our AC motors come in standard, hybrid, hybrid with bidirectional technology, smart, rebound, rebound with bidirectional technology. Additionally we have a line of DC motors that include standard, and rebound bidirectional motors which work well with our solar panel. We have added motor packages that come bundled with associated crowns, drives, brackets that make buying simple. Item #'s ending in "pkg*" include crown, gear and/or bracket when applicable. The bidirectional technology enables visibility of position while viewing through the application, and are Dooya compatible. See Electronics section (pg 89) for our line of compatible products for each of our motors. We offer functionality, continuous quality and cutting edge technology.

TYPE LEGEND	Туре	Receiver (built-in)	NM Up to	Manual Override	Limit Setting	Bidirectional	Electronics Type
Rebound	RB	x	50Nm	Both	Electronic		MSD
Rebound Bidirectional	RBD	х	50Nm	No	Electronic	х	MSBD
Hybrid	HY	x	120Nm	Both	Mechanical		MS / MSD
Hybrid Bidirectional	HY BD	x	100Nm	Yes	Mechanical	x	MSBD
Standard	STD	No Receiver**	300Nm	Both	Mechanical		MS / MSD
DC	DC	No Receiver**	50Nm	No	Mechanical		MS / MSD
DC Bidirectional	DC BD	X	13Nm	No	Electronic	X	MSBD
Smart	SMT	X	50Nm	No	Electronic		MS

Item #	TYPE	Torque	Speed	Manual Override	Limit Setting	Misc.	Receiver	Electronics	Page
REBOUND		(Nm)	(Rpm)	(Yes/No)	Mechanical Electronic		BUILT-IN (Yes/No)	Type	
TMRB45BDS-20/19PKG*	RBD	20	19	No	Electronic	Rebound / Bidirectional	Yes	MSBD	78
TMRB45BDS-50/13PKG*	RBD	50	13	No	Electronic	Rebound / Bidirectional	Yes	MSBD	78
TMRB45M-50/14	RB	50	14	Yes	Electronic	Shutter—Rebound	Yes	MSD	78
HYBRID		(Nm)	(Rpm)	(Yes/No)	Mechanical Electronic		BUILT-IN (Yes/No)	Туре	
TMRS45M-20/30	HY	20	30	Yes	Mechanical		Yes	MS	75
TMRS45S-20/30	HY	20	30	No	Mechanical		Yes	MS	75
TMRS45S-20/30-13	HY	20	30	No	Mechanical	13ft Cord	Yes	MS	75
TMRS45M-50/12	HY	50	12	Yes	Mechanical		Yes	MS	75
TMRS45S-50/12	HY	50	12	No	Mechanical		Yes	MS	75
TMHY45M-50/13PKG*	HY	50	13	Yes	Mechanical		Yes	MSD	76
TMHY45BDM-50/13PKG*	HY BD	50	13	Yes	Mechanical	Bidirectional	Yes	MSBD	77
TMHY59BDM-100/11PKG*	HY BD	100	11	Yes	Mechanical	Bidirectional	Yes	MSBD	76
TMHY59M-120/9PKG*	HY	120	9	Yes	Mechanical		Yes	MSD	77

^{**}requires separate purchase of external receiver to pair with remote control type

Tubular Motors INDEX

Item #	TYPE	Torque	Speed	Manual Override	Limit Setting	Misc.	Receiver	Electronics	Page
STANDARD		(Nm)	(Rpm)	(Yes/No)	Mechanical Electronic		Built-In (Yes or No)		
TMUS35S-06/33	STD	6	33	No	Mechanical		No**	MS / MSD	66
TMUS45S-10/32	STD	10	32	No	Mechanical		No**	MS / MSD	66
TMUS45SQ-10/21	STD	10	21	No	Mechanical	Quiet	No**	MS / MSD	66
TMUS45M-20/19	STD	20	19	Yes	Mechanical		No**	MS / MSD	69
TMUS45M-20/32	STD	20	32	Yes	Mechanical		No**	MS / MSD	69
TMUS45S-20/19	STD	20	19	No	Mechanical		No**	MS / MSD	66
TMUS45S-20/32	STD	20	32	No	Mechanical		No**	MS / MSD	66
TMUS45M-30/13	STD	30	13	Yes	Mechanical		No**	MS / MSD	69
TMUS45S-30/13	STD	30	13	No	Mechanical		No**	MS / MSD	66
TMUS45M-40/13	STD	40	13	Yes	Mechanical		No**	MS / MSD	69
TMUS45M-50/13	STD	50	13	Yes	Mechanical		No**	MS / MSD	69
TMUS45M-50/13/Clutch	STD	50	13	Yes	Mechanical	Clutch	No**	MS / MSD	62
TMUS45S-50/13	STD	50	13	No	Mechanical		No**	MS / MSD	66
TMEU45M-50/13	STD	50	13	Yes	Mechanical	220v	No**	MS / MSD	69
TMEU-50M/02	STD	50	12	Yes	Mechanical	230v	No**	MS / MSD	69
TMUS59M-60/14	STD	60	14	Yes	Mechanical		No**	MS / MSD	71
TMUS59M-80/14	STD	80	14	Yes	Mechanical		No**	MS / MSD	71
TMUS59M-100/11	STD	100	11	Yes	Mechanical		No**	MS / MSD	71
TMUS59S-100/11	STD	100	11	No	Mechanical		No**	MS / MSD	66
TMUS59S-100/11/SS	STD	100	11	No	Mechanical	Short Shaft	No**	MS / MSD	
TMEU-100M/02	STD	100	12	Yes	Mechanical	230v	No**	MS / MSD	71
TMEU59M-100/11	STD	100	11	Yes	Mechanical	220v	No**	MS / MSD	71
TMUS59M-120/9	STD	120	9	Yes	Mechanical		No**	MS / MSD	71
TMEU59M-120/8	STD	120	8	Yes	Mechanical	220v	No**	MS / MSD	71
TMUS-140M/03	STD	140	3	No	Mechanical		No**	MS / MSD	74
TMUS92S-140/12	STD	140	12	No	Mechanical		No**	MS / MSD	73
TMUS92M-180/12	STD	180	12	Yes	Mechanical		No**	MS / MSD	74
TMUS92S-180/12	STD	180	12	No	Mechanical		No**	MS / MSD	73
TMUS92M-230/12	STD	230	12	Yes	Mechanical		No**	MS / MSD	74
TMUS92S-230/12	STD	230	12	No	Mechanical		No**	MS / MSD	73
TMUS92M-300/8	STD	300	8	Yes	Mechanical		No**	MS / MSD	74
TMUS92S-300/8	STD	300	8	No	Mechanical		No**	MS / MSD	73
TMEU02-300M	STD	300	8	Yes	Mechanical	230v	No**	MS / MSD	74
TMUS92M-330/9.5NL	STD	330	9.5	Yes	Mechanical	No	No**	MS / MSD	

^{**}requires separate purchase of external receiver to pair with remote control type

Tubular Motors | Index

Item #	TYPE	Torque	Speed	Manual Override	Limit Setting	Misc.	Receiver	Electronics	Page
DC / DC Battery Motors (Use: Interior / Solar Panel)		(Nm)	(Rpm)	(Yes/No)	Mechanical Electronic		Built-In (Yes or No)		
TMDC-3W/12V	DC	3	24	No	Mechanical	12v	No**	MS / MSD	63
TMDC-6W/12V-12	DC	6	12	No	Mechanical	12v	No**	MS / MSD	63
TMDC-6W/12V-24	DC	6	24	No	Mechanical	24v	No**	MS	63
TMDCQ-6W/12V-20	DC	6	20	No	Mechanical	12v	No**	MS / MSD	63
TMDC-20W/12V	DC	20	14	No	Mechanical	12v	No**	MS / MSD	63
TMDC-35W/7V	DC	35	7	No	Mechanical	12v	No**	MS / MSD	63
TMDC-50W/12V	DC	50	12	No	Mechanical	12v	No**	MS / MSD	63
TMDC7W/12V	DC Battery	.7	34	No	Electronic	12v	No	MS / MSD	63
TMDC25BD-1.1/28PKG	DC Battery	1.1	28	No	Electronic	12v / Bidirectional	Yes	MSBD	79
TMDC28BD-2/28PKG	DC Battery	2	28	No	Electronic	5v / Bidirectional	Yes	MSBD	79
TMDC45BD-3/28	DC Battery	3	28	No	Electronic	Bidirectional	Yes	MSBD	79
TMDC45BD-6/24	DC Battery	6	24	No	Electronic	5v / Bidirectional	Yes	MSBD	79
TMDC45BDQ-10/9	DC Battery	10	9	No	Electronic	5v / Bidirectional	Yes	MSBD	79
TMDC45BDQ-13/13PKG*	DC Battery	13	13	No	Electronic	5v / Bidirectional	Yes	MSBD	79
SMART / SMART DC Battery	TYPE	(Nm)	(Rpm)	(Yes/No)	Mechanical Electronic	Misc	Built-In (Yes or No)	Electronics	Page
ELSTM25BD-1.5/32	SMT AC	1.5	32	No	Electronic	Bidirectional	Yes	MSBD	79
ELSTM45BDQ-10/21	SMT AC	10	21	No	Electronic	120v	Yes	MSBD	79
SSWR06/28	SMT	6	28	No	Electronic	Silent Motor	Yes	MS	58
ELSTM06/28	SMT	6	28	No	Electronic		Yes	MS	60
ELSTM20/30	SMT	20	30	No	Electronic		Yes	MS	60
ELSTM50/12	SMT	50	12	No	Electronic		Yes	MS	60

Item #	TYPE	Torque	Speed	Manual Override	Limit Setting	Misc.	Receiver	Electronics	Page
HYBRID MOTOR PACKAGES		(Nm)	(Rpm)	(Yes/No)	Mechanical Electronic		Built-In (Yes or No)		
TMHY45M-50/13PKG*	HY	50	13	Yes	Mechanical		Yes	MSD	76
TMHY45BDM-50/13PKG*	HY BD	50	13	Yes	Mechanical	Bidirectional	Yes	MSBD	77
TMHY59BDM-100/11PKG*	HY BD	100	11	Yes	Mechanical	Bidirectional	Yes	MSBD	76
TMHY59M-120/9PKG*	HY	120	9	Yes	Mechanical		Yes	MSD	77

For your convenience our Hybrid line of Motors Packages comes bundled with crown(s), drive(s), and bracket(s) when appliable for 60mm and 70mm motor tubes. Great for Shutter applications!

^{*}Note: When ordering, item #'s with a "pkg" ending include crown, gear and/or bracket if applicable)

^{**}Requires separate purchase of external receiver to pair with remote control type

Tubular Motors | SMART (SMT) (MS)

AC 6-50 Nm No Manual Override

Standard Features Include:

- Built-in Receiver
- Easy-to-Set Electronic Limit Switch
- Replacement Warranty 5 yr. (1 yr. for lithium battery motors, and 2 yrs for DC motors)
- Lifting capacities in excess of 365 lbs. (165.56 kgs)
- Universal Accessories, Crown and Drive Gears for a variety of motor tubes.





	AC Motors • 110 -120V / 60Hz											
Item #	Torque	Speed	Diameter	Voltage	Input Power	Current	Lifting	Lifting Weight				
	(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)			
ELSTM06/28	6	28	35/1.377"	110-120	130	1.1	≤ 40	≤ 18.14	19" / 48.26			
ELSTM20/30	20	30	44.5/1.75"	110-120	250	1.98	≤ 112	≤ 50.80	22.5" / 57.15"			
ELSTM50/12	50	12	44.5/1.75"	110-120	200	1.98	≤ 275	≤ 124.73	22.5" / 57.15"			

Tubular Motors | SMART AC 6-50 Nm

| Crown / Drive Gears

Crown	Drive	Item #	Motor Tube / Reel	Outer Diameter
	3—	50 Nm Motors Crown and Drive	44.5mm Diameter ONLY	
Or No Crown Needed		Crown: TMUS35-46.5RC (for ELSTM03/33) Crown: Or None Needed Drive: TMUS-SG213	2" (50mm) Round Tube	Ø46.5mm / 1 7/8"
		Crown: TMUS-600C3 Drive: TMUS-60OG3	2.36" (60mm) Octangular Tube	Ø57.6mm / 2.27" Ø56.2mm / 2.21"
		Crown: TMUS-SC161 Drive: TMUS-SG162	2.5" (63mm) Round Tube	Ø60.5mm / 2 3/8"
	(8)	Crown: TMUS-SC259 Drive: TMUS-SG260	2.5" (65mm) Round Tube	Ø63.3mm / 2 1/2"
		Crown: TMUS-SC276 Drive: TMUS-SG277	2.75" (70mm) Octangular Tube	Ø66mm / 2 5/8"
		Crown: TMUS-SC166 Drive: TMUS-SG65	2.75" (70mm) Round Tube	Ø65mm / 2 9/16"
		Crown: TMUS-SC309 Drive: TMUS-SG310	3" (78mm) Round Tube	Ø74.5mm / 2 15/16"

Tubular Motors | Standard / Clutch Release (STD) (MS/MSD)

| Crown / Drive Gears

Standard Features Include:

This innovative and versatile motor allows unique configurations and operations of traditional rolling systems:

- Panic release and recoil of deployed units when clutch is disengaged — Ideal for emergency egress for fire safety compliance
- Manual uncoiling and motorized recoiling of horizontally mounted rolling units
- Easily programmed with full suite of electronics.

- Universal Accessories, Crown and Drive Gears to fit any tube over 70mm wide (2.75")and recoil spring are available.
- Supported by a 2-year full replacement warranty (1 yr. for lithium battery motor, w yr. for DC motors, 5 yr. all other AC motors)





Standard Clutch Release Motor - with Override • 110 -120V / 60Hz										
Item #	То	rque	Speed	Diameter	Voltage	Input Power	Current	Motor Length	Running Time	
	(Nm)	(Lbs/ kgs)	(rpm)	(mm / in)	(V)	(Hz)	(A)	(cm / in)	(min.)	
TMUS45M-50/13/ Clutch	50	442 / 200.48	13	45 / 1.77"	110-120	60	2.2	65.4 / 25 ³ / ₄ "	4	

Crown	Drive	Item #	Motor Tube / Reel	Outer Diameter						
	50Nm Clutch Release Motors Crown and Drive									
		Crown: TMUS-59OC Drive: TMUS-45OG	70mm Octagonal Tube	Ø67.5mm / 2.66" Ø66.7mm / 2.63"						
		Crown: TMUS-59C Drive: TMUS-45G	86mm Profiled Tube	Ø79mm / 3.11" Ø79mm / 3.11"						

Tubular Motors | DC Motors (DC) (MS / MSD)

Standard Features Include:

- Quiet 12V motors
- 47.5 decibel sound output
- Replacement Warranty 2 yr. (1 Yr. for Lithium Battery Motors, 5 yr. for AC Motors)
- No Manual Override
- Lifting capacities in excess of 295 lbs. (133.81 kgs)
- Mechanically set limits with dual sided limit access; 8" (2.03cm) long hexagonal limit adjuster tool together with wiring manuals included with each motor
- Universal Accessories, Crown and Drive Gears for motor tubes 38mm or (1-inch) and over are available



	DC Motors • 12V											
Item #	Torque	Speed	Diameter	Motor Length	Voltage	Input Power	Current	Lifting \	Veight	Running Time		
	(Nm)	(rpm)	(mm/in)	(cm/in)	(V)	(W)	(A)	(Lbs)	(Kg)	(min)		
TMDC7W/12V	0.7	34	25 / ,98"	27.94 / 11"	12	6.5	0.55	≤ 5	≤ 2.3	4		
TMDC-3W/12V	3	24	35 / 1.377"	50.8 / 20"	12	33.7	3.00	≤ 25	≤ 11	4		
TMDCQ-6W/12V-20	6	20	35 / 1.377"	50.8 / 20"	12	42.7	4.00	≤ 50	≤ 22	4		
TMDC-6W/12V-24	6	24	35 / 1.377"	50.8 / 20"	12	42.7	4.00	≤ 50	≤ 22	4		
TMDC-20W/12V	20	14	45 /1.77"	55.88 / 22"	12	52.8	4.40	≤ 110	≤ 50	4		
TMDC-35W/12V	35	7	45 / 1.77"	55.88 / 22"	12	84.0	7.00	≤ 190	≤ 86	4		
TMDC-50W/12V	50	12	45 / 1.77"	55.88 / 22"	12				≤	4		

Tubular Motors | Standard: 0.7-35 Nm

| Crown / Drive Gears

Crown	Drive	Item #	Motor Tube / Reel	Outer Diameter
	0.7 1	Nm Motors (25mm (.98") diam	eter ONLY)	
		Crown: TMUS-C241 Drive Gear: TMUS-G265	Rollease 1.5" Tube (3.8cm)	Ø35.8mm / 1.41" Ø35.7mm / 1.41"
	3—6 1	Nm Motors (35mm (1.37") diar	neter ONLY)	
		Crown: TMUS35-46.5RC Drive Gear: TMUS45-46.5RG	2" (50mm) Round Tube (5.08cm)	Ø46.3mm / 1.82" Ø46.5mm / 1.83"
NO CROWN NEEDED		Drive Gear: TMUS35-35RG	1½" (40mm) Round Tube (3.8cm)	Ø36.2mm / 1.43"
NO CROWN NEEDED		Drive Gear: TMUS-G14	Acmeda 44mm Tube (1.73")	Ø41mm / 1.61"
	3—35 Nm Moto	rs (35mm (1.37") and 45mm (1.77") diameter ONLY)	
		Crown: TMUS-C118 Drive Gear: TMUS-G22	2" / 55mm Round Tube (5.08cm)	Ø46mm / 1.81" Ø45.5mm / 1.79"
	Various Drive Gears	Crown: TMUS35-60OC	Compatible with crowns fitting 10-50 Nm motors	Ø46mm / 1.81"

Tubular Motors | Standard: 0.7-35 Nm

| Crown / Drive Gears

Crown	Drive	Item #	Motor Tube / Reel	Outer Diameter
	20—35 Nm	Motors (45mm (1.77") diame	eter ONLY)	
		Crown: TMUS-45OC Drive Gear: TMUS-45OG	70mm Octagonal Tube (2.75")	Ø67.4mm / 2.65" Ø66.7mm / 2.63"
		Crown: TMUS-60OC3 Drive Gear: TMUS-60OG3	60mm Octagonal Tube (2.36")	Ø57.6mm / 2.27" Ø56.2mm / 2.21"
		Crown: TMUS-54C Drive Gear: TMUS-54G	60mm Round Tube (2.36")	Ø54.5mm / 2.15" Ø53.5mm / 2.11"
NO CROWN NEEDED		Drive Gear: TMUS45-46.5RG	2" / 50mm Round Tube	Ø46.5mm / 1.83"
NO CROWN NEEDED		Drive Gear: TMUS-G02	Acmeda 56mm Tube (2.20")	Ø51.6mm / 2.03"

Tubular Motors | Standard: 6 Nm-100 Nm (STD) (MS / MSD)

No Manual Override

Standard Features Include:

- Quiet 120V motor series
- 5 year 100% replacement Warranty coverage. (2 yr. for DC motors, 1 yr. for Lithium battery motors)
- No Manual Override
- Lifting capacities in excess of 396 lbs. (179.62kgs)
- Mechanically set limits with dual sided limit access; 8" (2.03cm) long hexagonal limit adjuster tool together with wiring manuals included in each motor.
- Universal Accessories, Crown and Drive Gears for motor tubes 38mm or (1-in) and over are available.



Star	Standard AC Motors — No Override • 120V / 60Hz									
Item #	Torque	Speed	Diameter	Voltage	Input Power	Current	Lifting V	Veight	Motor Length	Running Time
	(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)	(min)
TMUS35S-06/33	6	33	35 / 1.37"	110-120	113	0.97	≤ 33	≤ 15	48.26cm/ 19"	4
TMUS45S-10/32	10	32	45 / 1.77"	110-120	240	2.42	≤ 55	≤ 25	57.15cm/ 22.5"	4
TMUS45SQ-10/32	10	32	45 / 1.77"	110-120	240	2.42	≤ 55	≤ 25	57.15cm/ 22.5"	4
TMUS45S-20/32	20	32	45 / 1.77"	110-120	235	2.20	≤ 110	≤ 50	57.15cm/ 22.5"	4
TMUS45S-20/19	20	19	45 / 1.77"	110-120	235	2.30	≤ 110	≤ 50	57.15cm/ 22.5"	4
TMUS45S-30/13	30	13	45 / 1.77"	110-120	235	2.30	≤ 118	≤ 53	57.15cm/ 22.5"	4
TMUS45S-50/13	50	13	45 / 1.77"	110-120	235	2.30	≤ 275	≤ 125	57.15cm/ 22.5"	4
TMUS59S-100/11	100	11	59 / 2.32"	110-120	340	2.90	≤ 471	≤ 214	66.04cm/ 26"	4
TMUS59S-120/9	120	9	59 / 2.32"	110-120	340	2.90	≤ 473	≤ 215	66.04cm/ 26"	4

Note: Lifting capacity varies depending on tube size.

Tubular Motors | Standard: 6 Nm-100 Nm

| Crown / Drive Gears

Crown	Drive	Item #	Motor Tube / Reel	Outer Diameter						
6 Nm Motors (35mm (1.37") diameter ONLY)										
		Crown: TMUS35-46.5RC Drive Gear: TMUS45-46.5RG		Ø46.3mm / 1.82" Ø46.5mm / 1.83"						
NO CROWN NEEDED		Drive Gear: TMUS35-35RG	1½" (40mm) Round Tube (3.8cm)	Ø36.2mm / 1.43"						
NO CROWN NEEDED		Drive Gear: TMUS-G14	Acmeda 44mm Tube (1.73")	Ø41mm / 1.61"						
	6-50 Nm Motors	(35mm (1.37") and 45mm (1.	77") diameter ONLY)							
		Crown: TMUS-C118 Drive Gear: TMUS-G133	2" / 55mm Round Tube (5.08cm)	Ø46mm / 1.81" Ø45.5mm / 1.79"						
	Various Drive Gears.	Crown: TMUS35-60OC	Compatible with crowns adapters fitting 10-50 Nm motors	Ø46mm / 1.81"						

Tubular Motors | Standard: 10-100 Nm

| Crown / Drive Gears

Crown	Drive Item #		Motor Tube / Reel	Outer Diameter
	10—5	0 Nm Motors (45mm (1.77") dia	ameter ONLY)	
		Crown: TMUS-45C Drive Gear: TMUS-45G	86mm Profiled Tube (3.38")	Ø79.5mm / 3.13" Ø79mm / 3.11"
		Crown: TMUS-45OC Drive Gear: TMUS-45OG	70mm Octagonal Tube (2.75")	Ø67.4mm / 2.65" Ø66.7mm / 2.63"
		Crown: TMUS-60OC3 Drive Gear: TMUS-60OG3	60mm Octagonal Tube (2.36"")	Ø57.6mm / 2.27" Ø56.2mm / 2.21"
		Crown: TMUS-54C Drive Gear: TMUS-54G	60mm Round Tube (2.36")	Ø54.5mm / 2.15" Ø53.5mm / 2.11"
NO CROWN NEEDED		Drive Gear: TMUS45-46.5RG	2" / 50mm Round Tube (5.08cm)	Ø46.5mm / 1.83"
NO CROWN NEEDED		Drive Gear: TMUS-G02	Acmeda 56mm Tube (2.20")	Ø51.6mm / 2.03"
		Crown: TMUS-45UC Drive Gear: TMUS45G	XL System	140mm / 5.5"
	100	Nm Motors (59mm (2.32") dian	meter ONLY)	
		Crown: TMUS-59OC Drive Gear: TMUS-59OG	70mm Octagonal Tube (2.75")	Ø67.5mm / 2.66" Ø67.1mm / 2.64"
		Crown: TMUS-59C Drive Gear: TMUS-59G	86mm Profiled Tube (3.38")	Ø79mm / 3.11" Ø79mm / 3.11"
		Crown: TMUS-59RC Drive Gear: TMUS-59RG	100mm (OD) (3.93") / 94mm (ID) (3.70") Round Steel Tube	Ø94mm / 3.70" Ø94mm / 3.70"

Tubular Motors | Standard: 20 Nm-50 Nm (STD) (MS)

| With Manual Override

Standard Features Include:

- Manual Override
- 5 year 100% replacement Warranty coverage. (2 yr. for DC motors, 1 yr. for Lithium battery motors)
- Mechanically set limits with dual sided limit access; 8" (2.03cm) long hexagonal limit adjuster

tool together with wiring manuals included.

- Lifting capacities in excess of 198 lbs. (89.8 kgs)
- Universal Accessories, Crown and Drive Gears for motor tubes 49mm (1.92') and over are available.



Standard AC Motor - with Override - 120V / 60Hz										
Item #	Torque	Speed	Diameter	Voltage	Input Power	Current	Lifting \	Weight	Motor Length	Running Time
	(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)	(min)
TMUS45M-20/19	20	19	45 / 1.77"	110-120	276	2.3	≤ 79	≤ 36	62.86 / 24.75"	4
TMUS45M-20/32	20	32	45 / 1.77"	110-120	276	2.3	≤ 79	≤ 36	62.86 / 24.75"	4
TMUS45M-30/13	30	13	45 / 1.77"	110-120	240	2.4	≤ 118	≤ 53	62.86 / 24.75"	4
TMUS45M-40/13	40	13	45 / 1.77"	110-120	205	1.9	≤ 158	≤ 71	62.86 / 24.75"	4
TMUS45M-50/13	50	13	45 / 1.77"	110-120	235	2.2	≤ 198	≤ 90	62.86 / 24.75"	4

Note: Also Available in 220V - 230V (call for details)

Note: Lifting capacity varies depending on tube size.

Motors with manual override require Universal Assembly

(See index for reference)

Tubular Motors | Standard: AC 20—50 Nm

Crown / Drive Gears

Crown	Drive	Item #	Motor Tube / Reel	Outer Diameter
	20—50 I	Nm Motors (45mm (1.77") dia	meter ONLY)	
		Crown: TMUS-96C Drive Gear: TMUS-96G	100mm (OD) (3.93")/ 94mm (ID) (3.70")Round Steel Tube	Ø94mm / 3 11/16" Ø94mm / 3 11/16"
		Crown: TMUS-45C Drive Gear: TMUS-45G	86mm Profiled Tube (3.38")	Ø79.5mm / 3.13" Ø79mm / 3.11"
		Crown: TMUS-75C Drive Gear: TMUS-75G	80mm Tube with Groove (Awnings) (3.14"))	Ø75.2mm / 2.96" Ø75.2mm / 2.96"
		Crown: TMUS-45OC Drive Gear: TMUS-45OG	70mm Octagonal Tube	Ø67.4mm / 2.65" Ø66.7mm / 2.63"
		Crown: TMUS-60OC2 Drive Gear: TMUS-60OG2	60mm Octagonal Tube (2.36")	Ø56.9mm / 2.24" Ø57.6mm / 2.27"
		Crown: TMUS-54C Drive Gear: TMUS-54G	60mm Round Tube (2.36")	Ø54.5mm / 2.15" Ø53.5mm / 2.11"
NO CROWN NEEDED		Drive Gear: TMUS45-46.5RG	2" (50mm) Round Tube (5.08cm)	Ø46.5mm / 1.83"
		Crown: TMUS-61C Drive Gear: TMUS-61G	62mm Round Tube (2.44")	Ø60.8m / 2.39" Ø60.8m / 2.39"

Tubular Motors | Standard: AC 60—120 Nm (STD) (MS)

| With Manual Override

Standard Features Include:

- Manual Override
- 5 year 100% replacement Warranty coverage (2 yr. for DC motors, 1 yr. for Lithium battery motor)
- Mechanically set limits with dual sided limit cess; 8" (2.03cm) long hexagonal limit adjuster tool together with wiring manuals included with each motor.
- Lifting capacities in excess of 396 lbs.(179.62 kgs)
- Universal Accessories, Crown and Drive Gears for motor tubes 70mm (2.75") and over are available.



Standard Motor - with Override - 120V / 60Hz										
Item #	Torque	Speed	Diameter	Voltage	Input Power	Current	Lifting V Based or Tub	n 70mm	Motor Length	Running Time
	(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)	(min)
TMUS59M-60/14	60	14	59 / 2.32"	110-120	278	2.4	≤ 283	≤ 129	66.04 / 26"	4
TMUS59M-80/14	80	14	59 / 2.32"	110-120	506	2.9	≤ 377	≤ 171	66.04 / 26"	4
TMUS59M-100/11	100	11	59 / 2.32"	110-120	340	2.9	≤ 471	≤ 214	66.04 / 26"	4
TMUS59M-120/9	120	9	59 / 2.32"	110-120	340	2.9	≤ 566	≤ 257	66.04 / 26"	4

Note: Also Available in 220V - 230V (call for details)

require Universal Assembly

(See index for reference)

Motors with manual override

Note: Lifting capacity varies depending on tube size.

Tubular Motors | Standard: 60 Nm-120 Nm

| Crown / Drive Gears

Crown	Drive	Outer								
0.0	20	Item #	Motor Tube / Reel	Diameter						
60—120 Nm Motors (59mm (2.32") diameter ONLY)										
		Crown: TMUS-59RC Drive Gear: TMUS-59RG	100mm (OD) (3.93") / 94mm (ID) (3.70") Round Steel Tube	Ø94mm / 3.70" Ø94mm / 3.70"						
		Crown: TMUS-59C Drive Gear: TMUS-59G	86mm Profiled Tube (3.38")	Ø79mm / 3.11" Ø79mm / 3.11"						
		Crown: TMUS-59OC Drive Gear: TMUS-59OG	70mm Octagonal Tube (2.75")	Ø67.5mm / 2.66" Ø67.1mm / 2.64"						

Tubular Motors | Standard: 140 Nm-300 Nm (STD) (MS)

| No Manual Override

Standard Features Include:

- No 3-phase power needed
- MaestroShield Warranty coverage
- Single sided access to mechanical, set-lever limits
- Mounting hardware and built-in Crown and Drive

Gears for 100mm OD (3.93") / 94mm ID (3.70")

 Lifting capacities in excess of 1011 lbs (458.58 kgs).



140-300 Nm AC Motor without override

Standard AC Motor - no Override - 120V / 60Hz												
Item #	Torque	Speed	Diameter Voltage		Motor Length	Running Time						
	(Nm)	(rpm)	(mm/in)	(in/cm)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)	(min)	
TMUS92S-140/12	140	12	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	680	5.80	≤ 462	≤ 210	62.99cm/ 24.80"	4	
TMUS92S-180/12	180	12	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	760	6.50	≤ 594	≤ 270	62.99cm/ 24.80"	4	
TMUS92S-230/12	230	12	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	990	8.50	≤ 759	≤ 345	62.99cm/ 24.80"	4	
TMUS92S-300/8	300	8	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	1000	8.60	≤ 990	≤ 450	62.99cm/ 24.80"	4	

Note: Also Available in 220V - 230V (call for details)

Tubular Motors | Standard: 140-300 Nm (STD) (MS)

| With Manual Override

Standard Features Include:

- No 3-phase power needed
- MaestroShield Warranty coverage
- Single sided access to mechanical, set-lever limits,
- Lifting capacities in excess of 1011 lbs. (458.58
- Mounting hardware and built-in Crown and Drive Gears for 100mm OD (3.93") / 94mm ID (3.70") tube.
- Maintenance use only manual override available
- No built-in receiver. (requires separate receiver purchase)



	Standard AC Motor—with Override - 120V / 60Hz												
Item #	Torque	Speed	Diameter	Motor Head Dimensions	Voltage Input Power		Current	Lifting Weight Based on 100mm Tube		Motor Length	Run- ning Time		
	(Nm)	(rpm)	(mm/in)	(in/cm)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)	(min)		
TMUS92M-140/12	140	12	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	680	5.80	≤ 462	≤ 210	62.99cm/ 24.80"	4		
TMUS92M-180/12	180	12	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	760	6.50	≤ 594	≤ 270	62.99cm/ 24.80"	4		
TMUS92M-230/12	230	12	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	990	8.50	≤ 759	≤ 349	62.99cm/ 24.80"	4		
TMUS92M-300/8	300	8	92 / 3.62"	4.72" X 3.94" 11.98cm x 10cm	110-120	1000	8.60	≤ 990	≤ 459	62.99cm/ 24.80"	4		

Tubular Motors | Hybrid: AC 20-50Nm (HYB) (MS)

With and Without Manual Override

Standard Features Include:

- Built-in Receiver
- Mechanical Limit Setting
- Easy-to-Set Electronic Limit Switch
- 5 year 100% replacement Warranty coverage (2 yr. for DC motors, 1 yr. for Lithium battery motor)
- With and without Manual Override
- With and without Manual Override
- Lifting capacities in excess of 275 lbs. (124.73 kgs)
- Universal Accessories, Crown and Drive Gears for a variety of motor tubes.

White

Black

Green

Mechanical limit switch with built-in receiver



Head with Manual Override

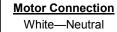


Fast Installing Type Limit Head



Features

- Quiet design, noise performance below 45dB
- Mechanical limit switch with built-in receiver
- Built-in control board using sealed box, more safe and stable
- Precise limit setting and easy adjustment
- Shock resistance relays for higher stability
- Working temperature from -40 to +85F for electronics
- Works with all MaestroShield control systems
- Both motors can be used with standard mounting plates AC03-03A (standard or AC03-0801 (45" plate)



Black-Live

Green-Earth

Custom Order: 100Nm Hybrid available

AC Motors (with and without Override) • 110 -120V / 60Hz

	Item #	Torque	Speed	Diameter	Voltage	Input Power	Current	Lifting Weight		Motor Length
		(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	60mm Tube 70mm Tub		Motor Length (Shaft or Tube)
With	TMRS45M-20/30	20	30	45/1.77"	120	300	2.50	≤ 112 lbs/ 50.80kgs	≤ 94 lbs/ 42.63 kgs	27" / 68.58cm - 24.75" / 62.87cm
manual override	TMRS45M-50/12	50	12	45/1.77"	120	300	2.5	≤ 275 lbs/ 124.73 kgs	≤ 236 lbs/ 107.04 kgs	27" / 68.58cm - 24.75" / 62.87cm
Without	TMRS45S-20/30	20	30	45/1.77"	120	300	2.50	≤ 112 lbs/ 50.80 kgs	≤ 94 lbs/ 42.63 kgs	27" / 68.58cm - 24.75" / 62.87cm
manual override	TMRS45S-50/12	50	12	45/1.77"	120	300	2.5	≤ 275 lbs/ 124.73 kgs	≤ 236 lbs/ 107.04 kgs	27" / 68.58cm - 24.75" / 62.87cm

Crown		Drive	Item #	Motor Tube / Reel	Outer Diameter
	Crown: TMUS-SC276		Drive Gear: TMUS-45OG	2.75" (70mm) Octangular Tube	Ø66mm / 2 5/8"
	Crown: TMUS-60OC3		Drive Gear: TMUS-60OG3	2.36" (60mm) Octangular Tube	Ø56mm / 2 7/32"

Tubular Motors | Hybrid Motors Packages (HY) (MSD)

| 50Nm and 120Nm

Standard Features Include:

- Built-in Receiver
- 5 year 100% replacement Warranty coverage
- With Manual Override
- Lifting capacities i> 275 lbs. (124.73 kgs)
- Package* Includes: Bracket, Crown(s) and Drive Gear(s) for either 70mm or 60mm and 70mm tube
- Lifting Capacities dependent on motor tube size.
- Range: 275, 236 for the 50Nm depending on tube
- Range: 566, 460, 396 for 120Nmdepending on tube size
- *Parts can be purchased separately

50Nm Motor Package



Dooya Compatible Receiver

Includes: Mounting Plate, 60/70mm crowns & drives

Lifting Capacity (lbs)									
	60 mm	70 mm							
50 Nm	50 Nm 275 lbs 236 lbs								

TMUS-45OC TMUS-45OG





AC03-0802

120Nm Motor Package



Dooya Compatible Receiver

Includes: Mounting Plate, 70mm crown & drive

	Lifting C	apacity (lbs)	
	70 mm	86 mm	100 mm
120 Nm	566 lbs	460 lbs	396 lbs







TMUS-59OC TMUS-59OG

AC03-0801 or AC03-0802

AC Motor—with Built-In Receiver and Override - 120V / 60Hz

	Item #	Torque	Speed	Diameter	Voltage	Input Power	Current	Base	Weight ed on n Tube	Motor Length	Running Time
		(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)	(min)
With manual override	TMHY45M- 50/13PKG	50	13	45/1.77"	120	288	1.5	Above	chart	76.2/ 30	4
With manual override	TMHY59M- 120/9PKG	120	9	59/2.32"	120	436	3.6	Above	chart	78.74/ 31	4

Tubular Motors

| Hybrid Bidirectional Motor Packages (HY BD) (MSBD)

| 50Nm and 100Nm

Standard Features Include:

- Bidirectional position feedback via your app.
- Built-in Receiver
- 5 year 100% replacement Warranty coverage
- With Manual Override
- Lifting capacities >275 lbs. (124.73 kgs)
- Package* Includes: Bracket, Crown(s) and Drive Gear(s) for either 70mm or 60mm and 70mm tube
- Lifting Capacities dependent on motor tube size.
- Range: 275, 236 for the 50Nm depending on tube
- Range: 471, 214 for the 100Nm depending on tube
- Signal repeater
- *Parts can be purchased separately

50Nm Motor Package



Includes: Mounting Plate, 60/70mm crowns & drives

Lif	ting Capacity (lbs	s)
	60 mm	70 mm
50 Nm	275 lbs	236 lbs

TMUS-45OC TMUS-45OG



TMUS-60OG3

TMUS-60OC



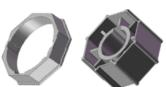
AC03-0802

100Nm Motor Package



Includes: Mounting Plate, 70mm crown & drive

	Lifting Capacity (lbs)									
	70 mm 86 mm 100 mm									
100 Nm	471 lbs	384 lbs	330 lbs							







TMUS-59OC TMUS-59OG

AC03-0801 or AC03-0802

AC Motor-Built-In Receiver/Bidirectional/Override - 120V / 60Hz

	Item#	Torque	Speed	Diameter	Voltage	Input Power	Current	Base	Weight ed on n Tube	Motor Length	Running Time
		(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	(Lbs)	(Kg)	(cm/in)	(min)
With manual override	TMHY45BDM- 50/13PKG	50	13	45/1.77"	120	288	1.5	Above	chart	76.2/ 30	4
With manual override	TMHY59BDM- 100/11PKG	100	11	59/2.32"	120	436	3.6	Above	chart	78.74/ 31	4

| Rebound - 2nd Generation (RBD/RB)

Tubular Motors

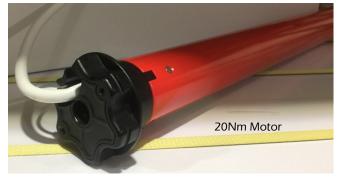
| 20-50Nm Without Override-PKGS(MSBD)

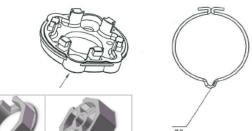
| 50Nm With Override (MSD)

REBOUND FEATURES

- Easy to install
- Available from 20-50Nm
- Senses obstructions
- Built-in Receiver Technology
- Integrated Signal Repeater to extend range
- Easy-to-Set Electronic Limit Switches
- 5 year 100% replacement Warranty coverage
- Compatible with MSBD Electronics

- Dooya Compatible (override only)
- Without Manual Overirde has bidirectional visibility through the app.
- Without Manual Override has electronic limit setting
- Without Manual Override includes crown and drive gear as well as fast mounting plate
- With Manual Override has manual limit setting



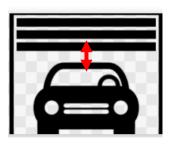


TMUS-60OC TMUS-60OG3

Note: Use with TMUS-60OG3 drive gear TMUS-60OC crown. (TMUS-60OC3 is not recommended)

REBOUND TECHNOLOGY

MaestroShield offers cutting edge technology with obstruction motors allow the rebound effect for additional safety closing solutions.





AC Motor—Built-In Receiver / Rebound function 120V / 60Hz											
	Item#	Torque	Speed	Diameter	Voltage	Input Power	Current	Motor Length	Running Time		
		(Nm)	(rpm)	(mm/in)	(V)	(W)	(A)	(cm/in)	(min)		
Without manual override	TMRB45BDS-20/19PKG	20	19	45/1.77"	120	180	1.5	60.5/ 23.7	4		
Without manual override	TMRB45BDS-50/13PKG	50	13	45/1.77"	120	269	2.4	65.2/ 25.6	4		
With manual override	TMRB45M-50/14	50	14	45/1.77"	120	235	2.2	62.86/ 24.75	4		

Tubular Motors | DC/DC Battery/AC-2nd Generation (DC/AC)

| 1.1 - 13Nm Without Override (MSBD)

DC / DC (with Lithium Battery) FEATURES. (use with SOLAR PANEL or USB Charger

- Easy to install
- Available from 2-13Nm
- Built-in Receiver Technology
- **Built-In Battery**
- Easy-to-Set Electronic Limit Switches
- 5 year 100% replacement Warranty coverage
- Compatible with MSBD Electronics
- Without manual override
- Charge with with EL03-38 Compact Solar Panel or motor charger.
- Position shows in app
- Uses micro-USB charger with cable approx. 9'











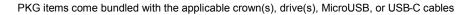
TMUS-60OC TMUS-60OG3



Solar Panel Dimensions: 15.75" x 1.97" EL03-39



(use v	DC / DC Battery Motor / AC (use with Compact Solar Panel or Micro-USB charger)												
	Item #	Туре	Lithium Battery	Torque	Speed	Diameter	Voltage						
				(Nm)	(rpm)	(mm/in)	(V)						
No override	TMDC45BDQ-13/11PKG	USB-C	Х	13	11	45mm	5v DC						
No override	ELSTM45BDQ-10/21			10	21	45mm	AC						
No override	TMDC45BD-6/24PKG	USB-C	Х	6	24	45mm	5v DC						
No override	TMDC45BD-3/28	Micro-USB	Х	3	28	25mm	5v DC						
No override	TMDC28BD-2/28PKG	Micro-USB	Х	2	28	28mm	5v DC						
No override	ELSTM25BD-1.5/32			1.5	32	25mm	AC						
No override	TMDC25BD-1.1/28PKG	Micro-USB	Х	1.1	28	25mm	5v DC						
Solar Panel	EL03-38												
Solar Panel	EL03-39												
Charger MicroUSB	EL03-USB13C												





Compact Solar Panel



Tubular Motors | Theoretical Lifting Capacity

Theoretical Lifting Capacity is an indicator of the torque aptitude of a motor without consideration of factors that impact the actual load value, such as tube diameter, length and deflection, friction and system loss, material dimensions and accessories used.

For all published motor theoretical lifting capacities, an additional 25% safety factor is excluded from the max published lifting capacity to achieve optimal performance of the motor. Maestro-Shield strongly suggests utilization of the full line of Maestro-Shield-brand accessory components.

Torque		Theoretic	cal Lifting	Capacity	— in Po	unds (lbs) / Kilogr	ams (kgs)
Torque (NM)	25mm Tube (.98")	35mm Tube (1.37")	40mm Tube (1.57")	50mm Tube (1.96")	60mm Tube (2.36")	70mm Tube (2.75")	86mm Tube (3.50")	100mm Tube (4")	5.5" Tube (86mm inner)
0.7 Nm	9 lbs	7 lbs (3 kgs)	6 lbs						
1 Nm	(4 kgs) 13 lbs	10 lbs	(2 kgs) 8 lbs						
3 Nm	(5 kgs)	(4 kgs)	(3 kgs) 25 lbs	20 lbs	17 lbs	14 lbs			
			(11 kgs) 50 lbs	(9kgs) 40 lbs	(7 kgs) 33 lbs	(6 kgs) 28 lbs			
6 Nm			(22 kgs)	(18 kgs)	(14kgs)	(12 kgs)			
8 Nm				53 lbs (24 kgs)	44 lbs (19 kgs)	38 lbs (17 kgs)			
10 Nm				66 lbs (29 kgs)	55 lbs (24 kgs)	47 lbs (21 kgs)			
20 Nm				132 lbs (59 kgs)	110 lbs (49 kgs)	94 lbs (42 kgs)	77 lbs (34 kgs)	66 lbs (29 kgs)	48 lbs (22 kgs)
30 Nm				198 lbs (89 kgs)	165 lbs (74 kgs)	141 lbs (63 kgs)	115 lbs (52 kgs)	99 lbs (44 kgs)	78 lbs (33 kgs)
35 Nm				231 lbs (104 kgs)	193 lbs (87 kgs)	165 lbs (74 kgs)	134 lbs (60 kgs)	116 lbs (52 kgs)	89 lbs (30 kgs)
40 Nm				264 lbs (119 kgs)	220 lbs (99 kgs)	189 lbs (85 kgs)	153 lbs (69 kgs)	132 lbs (59 kgs)	95 lbs (43 kgs)
50 Nm				330 lbs (149 kgs)	275 lbs (124 kgs)	236 lbs (107 kgs)	192 lbs (87 kgs)	165 lbs (74 kgs)	120 lbs (59 kgs)
60 Nm				iligo)	(1211190)	283 lbs (128 kgs)	230 lbs (104 kgs)	198 lbs (89 kgs)	143 lbs (65 kgs)
80 Nm						377 lbs (171 kgs)	307 lbs (139 kgs)	264 lbs (119 kgs)	192 lbs (82 kgs)
100 Nm						471 lbs (231 kgs)	384 lbs (174kgs)	330 lbs (149 kgs)	240 lbs (109 kgs)
120 Nm						566 lbs (256 kgs)	460 lbs (208 kgs)	396 lbs (179 kgs)	288 lbs (130 kgs)
140 Nm								462 lbs (209 kgs)	
180 Nm								594 lbs (269 kgs)	
230 Nm								759 lbs (344 kgs)	
300 Nm								990 lbs (449 kgs)	
330 Nm									

Tubular Motors | Crown and Drive Gear

Compatibility Chart

	Aria AC 60 - 120 Nm 5		Prodigy AC 20 - 50 Nm 4		Harmony AC 100 Nm 5		Harmony AC 10 - 50 Nm 4		Harmony AC 6 - 50 Nm 35mm		Harmony AC 6 Nm 3	00 1411	Harmony DC 20 = 35 Nm 4		Harmony DC 3 - 35 Nm 35mm	4	Harmony DC 3 - 6 Nm 3		Harmony DC 0.7 Nm 2		Clutch Release 50 Nm 4		Smart Series 10 - 50 Nm 44		Smart Series 6 Nm 3		Silent Series 1 Nm 25		Silent Series 3 - 8 Nm 44	MOTOR of
	59mm C		45mm		.59mm		45mm C	H	35mm & 45mm		35mm		45mm		35mm & 45mm		35mm	L	25mm C		45mm C		44.5mm		35mm C		25.5mm		44.5mm	Diameter of motor
Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	▼ MOTOR TUBE
																										TMUS-SG472	TMUS-SC458			1" Round 2.54cm
																		TMUS-G265	TMUS-C241							TMUS-SG472 TMUS-SG1171	TMUS-SC458 TMUS-SC1170			1.5" Rollease 3.8cm
										TMUS35-35RG	Not Needed					TMUS35-35RG	Not Needed							TMUS-SG143	TMUS-SC127					1.5" (40mm) Round 3.8cm
										47						97								TMUS-SG139	TMUS-SC141					1.5" (40mm) Octagonal 3.8cm
										TMUS-G14	Not Needed					TMUS-G14	Not Needed													44mm Acmeda Tubo
		TMUS45-46.5RG	Not Needed			TMUS45-46.5RG	Not Needed			TMUS45-46.5RG	TMUS35-46.5RC	TMUS45-46.5RG	Not Needed			TMUS45-46.5RG	TMUS35-46.5RC					TMUS-SG213	Not Needed	TMUS-SG155	TMUS-SC153			TMUS-SG197	Not needed	2" (50mm) Round 5.08cm
								TMUS-G22	TMUS-C18					TMUS-G22	TMUS-C18															2" (55mm) Round 5.08cm
						TMUS-G02	Not Needed					TMUS-G02	Not Needed																	56mm Acmeda Tubo 2.20"
		TMUS-54G	TMUS-54C			TMUS-54G	TMUS-54C					TMUS-54G	TMUS-54C																	2.36" (60mm) Round 6.00cm

Tubular Motors | Crown and Drive Gear

Compatibility Chart

		_		//																							_			- /		
Rebound AC 20Nm	Hybrid AC 20-50 Nm	212 20 00 - 120 NIII	Aria AC 60 - 120 Nm	LICEIGN WC 50 - 30 MILL	Brodiew AC 20 50 Nm	000000000000000000000000000000000000000	Harmony AC 100 Nm		Harmony AC 10 - 50 Nm	700			Harmony AC 6 Nm	Halliony DC zo - 33 Mill	Harmony DC 20 - 35 Nm				Harmony DC 3 - 6 Nm		Harmony DC 0.7 Nm		Clutch Release 50 Nm	SITICIT Selles TO - SO NITI	Smort Sorios 10 50 Nm	smart series 6 Nm	53	SHELL SELES I NITI		Sliet III Series 0 - 0 Niii	Silont Sprice 3 - 8 Nm	MOTOR
45mm	45mm	0	40mm	5	Asmm	0	59mm	±	45mm	X +3:1111	35mm & 45mm	-	35mm	100	15mm	3311111 & #3111111	35mm & 15mm	- -	35mm	2311111	25mm	0.1111	45mm	44.JIIIII	11 5mm	35mm		23.311111	OF Emm	11:0	11 5mm	Diameter of motor
Crown Drive	Crown Drive	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	Drive	Crown	▼ MOTOR TUBE
TMUS-60OC3 TMUS-60OG3	TMUS-60OC3 TMUS-60OG3			TMUS-60OG	TMUS-60OC			TMUS-60OG	TMUS-60OC					TMUS-60OG	TMUS-60OC									TMUS-SG160	TMUS-SC159							2.36" (60mm) Octangular
				TMUS-61G	TMUS-61C																											62mm Round 2.44 in
																								TMUS-SG162	TMUS-SC161					TMUS-SG163	TMUS-SC161	2.5" (63mm) Round
																								TMUS-SG260	TMUS-SC259							2.5" (65mm) Round
																								TMUS-SG65	TMUS-SC166					TMUS-SG510	TMUS-SC505	2.75" (70mm) Round
	TMUS-SC 276 TUS-450G	TMUS-59OG	TMUS-59OC	TMUS-45OG	TMUS-45OC	TMUS-59OG	TMUS-59OC	TMUS-45OG	TMUS-45OC					TMUS-45OG	TMUS-45OC							TMUS-45OG	TMUS-59OC	TMUS-SG277	TMUS-SC276							2.75" (70mm) Octangular
																								TMUS-SG310	TMUS-SC309							3" (78mm) Round
				TMUS-75G	TMUS-75C																											80mm Grooved Awning Tube 3.15 in.
		TMUS-59G 1	TMUS-59C 1	TMUS-45G	TMUS-45C	TMUS-59G 1	TMUS-59C 1	TMUS-45G	TMUS-45C													TMUS45G	TMUS-59C									86mm Profiled Tube 3.38 in.
		TMUS-59RG	TMUS-59RC	TMUS-96G	TMUS-96C	TMUS-59RG	TMUS-59RC																									100mm Round Steel Tube 3.93 in.





Tubular Motors for Interior Shading



Interior Shade Motors

MOTOR FEATURES:

- · Quick and easy limit setting and adjustment
- · Set a preferred stop location
- 2-way radio signal gives instant feedback to the app for motor positioning
- Rechargeable built-in Li-ion battery (up to 500 up and down cycles per charge)
- Charges with any micro-USB cable
- Optional: Solar-Panel controlled



3Nm , 13Nm

Motor, Motor Accessories, Solar Panel: Zones

DC1.1Nm/28 rpm **Item #TMDC25BD-1.1/28PKG** B

DC 6Nm/24 rpm **Item #TMDC45BD-6/24PKG**

DC13Nm/11 rpm Item #TMDC45BDQ-13/11PKG F

USB Charger 9' cord Item #EL03-USB13C

AC1.5Nm/32rpm **Item #ELSTM25BD-1.5/32** B

AC10Nm/21rpm **Item #ELSTM45BDQ-10/21** C,D,E,F

Solar Panel Item #EL03-39

	Tube	Motor
Α	1-1/8 in	1.1Nm
В	1.5 in	1.1Nm
С	2 in	2.0Nm
D	2.5in	3Nm
Е	3.125in	3Nm
F	3.125in	10Nm

Width

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	В	В	В	В	В	В	С	С	С	D	D	D	D	Е	Е
3	В	В	В	В	В	В	С	С	С	D	D	D	D	Е	E
4	В	В	В	В	В	В	С	С	С	D	D	D	D	Е	Е
5	В	В	В	В	В	В	С	С	С	D	D	D	E	E	E
6	В	В	В	В	В	С	С	С	D	D	D	D	Е	Е	Е
7	В	В	В	В	В	С	С	С	D	D	D	D	Е	Е	Е
8	В	В	В	В	В	С	С	D	D	D	D	D	E	E	Е
9	В	В	В	В	В	С	С	D	D	D	D	F	F	F	F
10	В	В	В	В	В	С	С	D	D	D	D	F	F	F	F
11	В	В	В	В	В	С	С	D	D	D	D	F	F	F	
12	В	В	В	В	С	С	С	D	D	D	D	F	F	F	
13	В	В	В	В	D	D	D	D	D	D	F	F	F	F	
14	В	В	В	В	D	D	D	D	D	D	F	F	F	F	
15	D	D	D	D	D	D	D	D	D						
16	D	D	D	D	D	D	D	D							
17	D	D	D	D	D	D	D	D							
18	D	D	D	D	D	D	D								
19	D	D	D	D	D	D	D								
20	D	D	D	D	D	D	D								
21															
21															



Manual Operators

2022

Manual Operator Components Side Cap 1 2 **Motor Mounting Plate** 3 Manual Gear Box 4 Universal 5 Pivot and Bell Coupling Not Eyelet and Hook Shown

Manual Operators | Manual Gear Boxes

Standard Features Include:

- No Spring Assist Needed
- All metal internal components; rust and wear resistant
- No Limit Setting
- Can use hand held drill on low setting to operate

	Item Name and Number	Specifications	Accessories Needed
	1/8 or 1/11 or 1/18	 8 to 1 gearing ratio Lift Capacity: 55 lbs (25 kgs) 11 to 1 gearing ratio Lift Capacity: 77 lbs (35 kgs) 18 to 1 gearing ratio Lift Capacity: 88 lbs (40 kgs) 	 Hardware package included Universal with Hex 7 shaft needed
Mag trahetr	1/25 Manual Gear Box Item #AC02-07/25	 25 to 1 gearing ratio Lift Capacity: 75 lbs (34 kgs) 	 Drive Gear needed Universal with Hex 7 shaft needed
Na astrophical Control of Control	1/50 Manual Gear Box Item #AC02-07/50	50 to 1 gearing ratio Lift Capacity: 220 lbs (99 kgs)	 Drive Gear needed Universal with Hex 7 shaft needed
	1/59 Manual Gear Box Item #AC02-07/100	 59 to 1 gearing ratio Lift Capacity: 350 lbs (158 kgs) 	 Crown & Drive Gear needed Universal with Hex 7 shaft needed

Manual Operators | Manual Gear Boxes

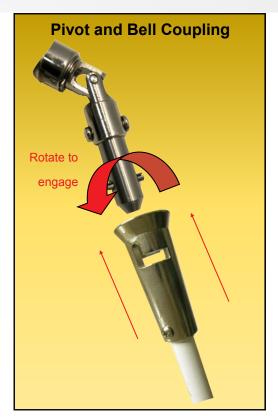
Manual Gear Boxes Crown and Drive Gears

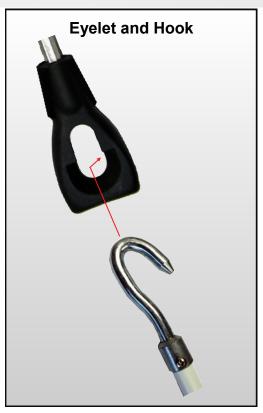
Crown	Drive	Item #	Motor Tube / Reel	Outer Diameter
	Compat	tible with 1/25 and 1/50 Ma	nual Gear ONLY	
Not Needed		Drive: TMUS-45G	86mm Profiled Tube (3.38")	Ø79mm / 3.11"
Not Needed		Drive: TMUS-75G	80mm Tube with Groove (Awnings) (3.14")	Ø75.2mm / 2.96"
Not Needed		Drive: TMUS-45OG	70mm Octagonal Tube (2.75")	Ø66.7mm / 2.63"
Not Needed		Drive: TMUS-60OG	60mm Octagonal Tube (2.36")	Ø56.2mm / 2.21"
Not Needed		Drive: TMUS45-46.5RG	2" / 55mm Round Tube	Ø56.5mm / 1.83"
	Con	npatible with 1/59 Manual	Gear ONLY	
		Crown: TMUS-59C Drive: TMUS-45G	86mm Profiled Tube (3.38")	Ø79mm / 3.11" Ø79mm / 3.11"
		Crown: TMUS-59OC Drive: TMUS-45OG	70mm Octagonal Tube (2.75")	Ø67.5mm / 2.66" Ø66.7mm / 2.63"

Manual Operators | Universals

	Item Name and Number	Specifications
	Universal 90° / 4 Hole Item #AC908-02 with pivot for use with bell coupling Item #AC908-12 with eyelet for use with hook	Nickel-plated steel 50mm (1.96") double layer electrolytic layer for greater corrosion resistance Includes Hex 7 shaft Recommended for operator position #3 Operator Position
	Universal 90° / 2 Hole Item #AC908-01 with pivot for use with bell coupling Item #AC908-11 with eyelet for use with hook Universal 90° / 2 Hole	Nickel-plated steel 50mm (1.96") double layer electrolytic layer for greater corrosion resistance Includes Hex 7 shaft Recommended for operator position #2 or #4 Corrosion resistant for superior performance in coastal
U	Stainless Steel (SS304) Item #AC908-SS01 with pivot for use with bell coupling	 areas and high humidity Includes Hex 7 shaft Recommended for operator position #2 or #4
	Universal 45° / 2 Hole Item #AC908-04 with pivot for use with bell coupling Item #AC908-14 with eyelet for use with hook	 Nickel-plated steel 50mm (1.96") double layer electrolytic layer for greater corrosion resistance Includes Hex 7 shaft Recommended for operator position #1
	Universal 45° / 2 Hole Stainless Steel (SS304) Item #AC908-SS04 with pivot for use with bell coupling	Corrosion resistant for superior performance in coastal areas and high humidity Includes Hex 7 shaft Recommended for operator position #1
	Universal Eyelet Extension Item #AC0816	 Nickel-plated steel 50mm double layer electrolytic layer for greater corrosion resistance Recommended for operator position #2 Compatible with 140Nm—300Nm motors

Manual Operators | Universals Accessories







Crank Handle Assembly Off White

ITEM NUMBER: NICKEL-PLATED	ITEM NUMBER: STAINLESS STEEL	USE
AC908-52	AC908-SS52	5' (1.5m) Handle with hook
AC908-51	AC908-SS51	5' (1.5m) Handle with bell coupling
AC908-SS62	ONLY OPTION	6' 4" (1.95m) Handle with hook
AC908-SS61	ONLY OPTION	6' 4" (1.95m) Handle with bell coupling
AC908-SS12	ONLY OPTION	10' (3.04m) Handle with hook
AC908-SS11	ONLY OPTION	10' (3.04m) Handle with bell coupling



Eyelet Exterior Operation

ITEM NUMBER USE Black • Reinforced Polyco	arbonate Plastic
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ITEM NUMBER	USE
AC02-10	7mm hex, 6" (15.25cm) steel shaft; use with 8" (20.32cm) hood only
AC08-16	Universal Eyelet Extension, aluminum with iron shaft, 15"total length. 140-300NM motors

Eyelet Extension Aluminum with Iron Shaft



Manual Operators | Spring Assist

Features and Benefits:

- Solid, stainless steel axle measuring 16mm X 16mm (.64" X .64");
- Special corrosion-resistant treated springs for superior performance in coastal areas and high humidity;
- Can be utilized for pull down applications;
- Can be combined with manual gear box for easy and precise manual lifting capabilities;
- In some installations, springs can be combined with tubular motor to eliminate the need for 100mm motor tube and heavy duty bracketry.



Item #	Motor Tube Diameter	Toro Capa		Wire Diameter	Number of Turns/spring	Length of Shaft	# of Turns to fully torque
	mm/in	lbs	Kg	mm/in		mm/in	
AC11-601L	60mm/2.36"	≤33	≤15	3.5mm/.13"	125	650mm / 25.6"	10
AC11-602L	60mm/2.36"	≤74	≤34	4.5mm/.17"	160	940mm / 37"	12
AC11-602R	60mm/2.36"	≤74	≤34	4.5mm/.17"	160	940mm / 37"	12
AC11-701L	70mm/2.75"	≤123	≤56	5.0mm/.19"	140	940mm / 37"	13
AC11-702L	70mm/2.75"	≤165	≤75	5.5mm/.21"	188	1270mm / 50"	13
AC11-703L	70mm/2.75"	≤220	≤100	6.0mm/.23"	133	1030mm / 40.5"	10
AC11-705L	70mm/2.75"	≤33	≤15	3.5mm/.13"	125	650mm / 25.6"	10
AC11-706L	70mm/2.75"	≤74	≤34	4.5mm/.17"	160	940mm / 37"	12

Spring Assist Torque Springs are Left Sided. Right sided available in AC11-602, or by custom order.





Electronics & Options

2022



Electronics for:

- Wind Sun Sensor
- Solar Panels
- Wi-Fi Controllers
- Remote Controllers

Electronics are covered by a full 2-year replacement warranty.

- Receivers
- **Switches**
- **LED Lighting**
- Home and Business Automation

Electronics | Remote Controllers (MS / MSBD / MSD)

Controllers:

All MaestroShield brand remote controls can be easily programmed to any MaestroShield receiver and will retain the programming for the lifetime of the unit. Remote controls have built-in features such as programming multi unit controls and the ability to change the direction of the motor's rotation. Remotes operate on a frequency of 433Mhz.



EL03-10HH01

EL03-11HH06L*

EL03-11HH16

MS Remote Controls

HANDHELD

- 1 Ch: #EL03-10HH01
- 6 Ch: #EL03-11HH06L*
- 16 Ch: #EL03-11HH16

*LED control WALLMOUNT

• 6 Ch: #EL03-11WM06

KEYCHAIN

- 4 Ch: #EL03-53
- 1 Ch: #EL03-52



EL03-11WM06

EL03-53

EL03-52



EL03-BDHH01

EL03-BDHH15



EL03-BDKEYCH

MSBD Remote Controls (Bidirectional)

HANDHELD

- 1 Ch: #EL03-BDHH01
- 15 Ch: #EL03-BDHH15

KEYCHAIN

1 Ch: #EL03-BDKEYCH

Maestroshield offers a wide variety of motors:

- Rebound
- Rebound Bidirectional (2nd Generation)
- Hybrid
- **Hybrid Bidirectional**
- DC
- **DC Bidirectional**
- DC Battery
- Standard (receiver sold separately)
- Smart

Our remote controllers are paired with, and are compatible to, the applicable external receiver, or with the motor with a built-in receiver.

See Tubular Motor Section for more details.



EL03-HH04

EL03-HH15



KEYCHAIN

• 1 Ch: #EL03-KEYCH

4 Ch: #EL03-HH04

15 Ch: #EL03-HH15

MSD Remote

Controls

HANDHELD

Dooya Compatible

Electronics | Controller Options (MS / MSBD / MSD)

| HUB - Home Automation - WIFI Controller

Options: Smart HUB Control - MSD / MSBD



ITEM #	TYPE	USE
EL03-HUB	MSD / MSBD	MSD / MSBD Smart App Control with HUB

- Hub/Wi-Fi controlled through Smart App.
- Compatible with Google Home
- Compatible with Amazon Alexa
- Works directly with Control 4 systems eliminating need for interface
- Controls up to 30 motors, or 5 locations (with up to 20 rooms/scenes/times per location)
- 433 MHz
- Individual or group control
- 60' of uninterrupted range





Options: Smart Home Automation Control System Interface II - MS

ITEM #	TYPE	USE						
EL03-76	MS	MS Control System, Smart Home Automation, Interface II						

- Extends the functionality of an existing Home Automation system to control MaestroShield motors and electronics
- Wirelessly control up to 16 motors per interface box (up to 99 boxes can be linked over RS485 for expanded functionality)





GARAGE DOORS



#EL03-76





Options: Smart Wifi Controller - MS

- Learns and Controls Devices using 433.92Mhz and Infrared
- Programs/Schedules—Custom Scenes/Rooms
- Auto Home/Away
- Sleek Black, 3 side 4.5"x1.5" h
- Works Over Wi-Fi 2.4GHz b/g/n
- Input Voltage—5V DC
- Input Current 1 A
- Temperature Range 0-50 Celsius
- Apple—App at iPhone App Store
- Android-App at Google Play

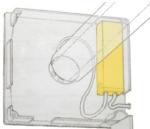


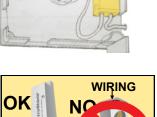




Electronics | Receivers (MS / MSD)

Receivers: Mini-Receivers - MS / MSD





- Reaches greater distances
- Compatible to MaestroShield Tubular Motors
- New built-in transformer provides voltage stabilization, eliminating voltage irregularities.
- Better insulated for premium moisture protection.
- New built-in transmitter allows for transmission ranges of up to 262' (80 meters)
- Conveniently tucks into any space and provides protection against power surges or spikes.
- Can be easily mounted inside the hood assembly.





ITEM NUMBER	TYPE	USE
EL03-10MR10A	MS	110 - 120 V / 60 Hz / 10 Amps • Size: 3.82" W x 1.02" H x 0.79" D (9.70cm W x 2.59cm H x 2.00cm D) - Compatible with Maestroshield AC Motors
EL03-12	MS	220 - 240 V / 60 Hz / 10 Amps • Size: 3.82" W x 1.02" H x 0.79" D (9.70cm W x 2.59cm H x 2.00cm D) - Compatible with Maestroshield AC Motors
EL03-19	MS	3 Amps / 12 V • Size: 3.85" W x 1.02" H x 0.87" D (9.78cm W x 2.59cm H x 2.20cm D) - Compatible with Maestroshield 0.7 Nm DC Motor
EL03-MR300	MSD	Mini Receiver, - (Dooya Compatible) - Compatible with Maestroshield AC Motors

Controllers: Wall Mount Hard Wired - MS

Receiver - Single Channel Wall Mount, Hard-Wired

Convenient single button control directly on the receiver, or integrate with remote transmitter and/or key-switch to lock and secure your system





ITEM NUMBER	TYPE	LOADING POWER	FREQUENCY	SENSITIVITY	OPERATION
EL03-10WM-KS	MS	≤ 300W	433.92Mhz	-110dBm	MS Remote / Manual

^{*}Note: Range can vary depending on wall construction and room obstructions.

Electronics | Hard-Wired Options

Switches: All switches can used with any MaestroShield products.

Hard Wired Key Switches

- Flush Mount #EL03-18
- Surface Mount #EL08-16

These momentary switches can be used to lock and secure the operation of any tubular motorized unit. Available in surface mount or flush mount, comes with two sets of keys, and can be







Surface Mount Key Switch integrated with Wall Mount Receiver



Extra Blank Key

Momentary Switch

For precision opening or closing of your shutter, screen or shade, hold up or down switch and release at desired height.

Available in: White - #EL04-06 Ivory - #EL04-10



Maintain Switch

For continued opening or closing of your shutter, screen or shade to the next preset stop with a single touch.

Available in:

White - #EL04-07 Ivory - #EL04-08



Face Plate Sold separately White - #EL04-01 Ivory - #EL04-02

Electronics | Electronic LED Accessories

Options: Electronic LED Accessories



Options: LED Lights and Accessories

		Component Name	Item #	Specifications
Circlestrans		(Available in Blue or Warm White, 30 or 60	ELEDL-6012BL ELEDL-6012WH	5mtr (16.4ft) reels of LED Single Color Adhesive Light Strips, Style 3528, 60 LED's per meter, 12v, IP65
		Receiver	ELEDR-11MRL	LED Receiver for strip lights, 433mhz, DC 5v-24v, IP63
	Manage Company of the State of	LED UL Driver (Power Supply)	ELEDP-60W12	LED 60W Output Rated Driver, UL rated, Meanwell Switching Power Supply, IP65
		Connectors (Single Color-Wire)	ELEDC-00SC	Bag of 100 count. LED Single Color Con- nector with wire
	100	Connector Caps	ELED-00CN	Bag of 100 count. LED Connectors
- 2 -	FOR S.	Remote Controller	EL03-11HH06L	6-Channel Remote-Hand Held 433MHz, with Safety Feature Down Key, Controls screens and LED strip lights

Electronics | Electronics Accessories

Options: Electronic Transformer / Extension Cords



Transformer

For 12V and 24V DC motors

Item #EL03-22 - Compatible with 0.7 Nm - 20 Nm 12V motor; 5A/60W with AC and DC cord

Item #EL03-23 - Compatible with 0.7 Nm - 35 Nm 12V motor; 8A/98W with 2 meter (6.56') AC cord

Item #EL03-25 - Compatible with 0.7Nm - 1Nm 24V motor; 0.9A output

Power Cord(s):

Power cord extension with molded plug now available in 8' (2.43m) and 16' (4.87m) lengths.



Item #EL04-12 - 8' (2.43m) Power cord extension

Item #EL04-13 - 16' (4.87m) Power cord extension

Item #EL04-14/5 - Heat Sink Package

Options: Lock Box

Lock Box: Push Button, Programmable Safe Box



Open Cover



Insert Remote - Key



Program with ease



Replace Cover Attach to wall (optional)

Security Features

- Strong Powder Coated Steel
- Comes with rubberized cover for complete aesthetics
- Mounting hardware included
- Simple code programming instructions included
- No key required

- Fits our 1-channel & 4-channel keychain controllers
- Holds traditional keys as well
- Length is approximate 4.5"

Electronics | Electronics Accessories

Options: Wind, Sun Sensor Solar Powered (MS / MSBD / MSD)

Weather Reactive Automation







Power voltage	Panel +Battery
Working temp	-40°C~+85°C
Frequency	433.92MHz
Transmit power	≤10mW
Protection level	IP55
Operation	Remote/ Manua

Set it & Forget it

- Works with MaestroShield motors & controllers
 - Screens roll automatically up/down depending on settings & weather
 - Shutters when wind speeds reach set speeds, shutters rolldown.
- Digital Settings-
- ABS Plastic materials that resist ultraviolet rays
- Solar Powered, no wiring required
- Easy Installation—wireless signal
- **Quiet Operation**
- Waterproof
- Multiple sensitivity settings
- 3 second response time to Wind *(up to 50Km/h (31mph)*
- 1.5 min response time to Light *(.2 to 10klux)*2 year 100% replacement warranty coverage Approx. Range: 100 meters (320ft)

ITEM #	TYPE	USE
EL03-06WS	MS	MS Solar Powered Wind Sun Sensor

MaestroShield® Wind and Sun sensor system acts as a transmitter to operate with all MaestroShield® mini-receiver and matched transmitters during certain atmospheric conditions. When fitted to motors and control units, users are able to open and close shutters, screens and, awnings automatically based on the related weather conditions. The sensors measure the wind speed, sunlight intensity, and rain fall.



ITEM #	TYPE	USE
EL03-BDSNSNSR	MSBD	MSBD Solar Powered Wind Sun Sensor. (Pairs with Bidirectional Motors)
EL03-SNSNSR	MSD	MSD Solar Powered Wind Sun Sensor

- Requires no AC power. Detects wind, sunny and rainy conditions. Perfect for shutters or awnings.
- 3 different wind-force settings, and 4 different light intensity settings.
- Solar powered, wireless control
- 433.9 Mhz
- Approx unobstructed range of 650ft (200 meters)



Options: Electronic Solar Panel





Compact Solar Panel #EL03-38

ITEM #	USE
EL03-39	Micro-USB Small Solar Panel
EL03-38	Micro-USB Small Solar Panel used with Lithium Battery motors



Solar Panel Dimensions: 15.75" x 1.97"

EL03-39





Part Compatibility

2022

Tubular Motors											
Sm	art S	ilent	Series AC Motors Bu	uilt-in Receivers	No Overrio	de					
Roll Down	npati Maestro Screens	bility Interior Shading	Component	Component Name	Item #	Pcs per Box / Bundle					
				Silent Smart Series 6Nm AC	SSWR06/28	8					
		х	A CONTRACTOR OF THE PARTY OF TH	Silent Smart Series 8Nm AC	SSWR008/19	8					
			DC Motors Built-in F		lectronic Lin	nit					
Swi	tch	X	Override	Smart Silent Series 12V 1 Nm with Built In Battery	SSWR1201/30	30					
		x	<u> </u>	Silent Series 1Nm DC	SSWR01/30	20					
	art S		AC Motors Built-in F Override	Receivers and E	lectronic Lin	nit					
2441	CIT	X	O T STITULE	Smart Series 3Nm AC	ELSTM03/33	10					
		х		Smart Series 6Nm AC	ELSTM06/28	10					
		х		Smart Series 8Nm AC	ELSTM08/24	10					
х	х		Date of the second	Smart Series 20Nm AC	ELSTM20/30	8					
х	х		0	Smart Series 30Nm AC	ELSTM30/17	8					
х	х			Smart Series 40Nm AC	ELSTM40/12	8					
х	х			Smart Series 50Nm	ELSTM50/12	8					
		d Clu	tch Release Motor A	AC C	· -						
x				Clutch Release Motor	TMUS45M- 50/13/Clutch	6					
х				Clutch Motor Locking System	AC04-01	6					
DC	Mot	ors	No Override								
	х	х		DC Series 13Nm. DC Pairs with Solar Panel	TMDC45BD- 13/11PKG	10					
		х		DC Series 0.7Nm DC	TMDC- .7W/12V	50					
		х		DC Series 3Nm DC	TMDC-3W/12V	10					
		х		DC Series 6Nm DC	TMDC-6W/12V -24	10					
		х		DC Series	TMDC-	10					
		х	C	20Nm DC DC Series	20W/12V TMDC-	10					
Sta	ndar		Motors No Override	35Nm DC	35W/12V	10					
			illiotors No overnide	Standard Series	TMUS35S-	10					
		х		6Nm AC Standard Series	06/33 TMUS45S-	10					
х	х			10Nm AC Standard Series 20Nm AC 19rpm	10/32 TMUS45S- 20/19	10					
		х		Standard Series TMUS4		10					
х	х			Standard Series	20/32 TMUS45S-	10					
x				50Nm AC Standard Series 100Nm AC	50/13 TMUS59S- 100/11	6					
<u> </u>	hwist s	20-1-	AC Motore LN - C		100/11						
Hyl	orid S	series	AC Motors No Over								
Х	Х			Hybrid Series 20Nm AC 30rpm	TMRS45S- 20/30	8					
X	Х			Hybrid Series 50Nm AC 13rpm	TMRS45S- 50/13	8					

Tubular Motors										
Hybr	id Se	eries	AC Motors With Override							
Х	Х			Rebound Series 20Nm AC 30rpm	TMRS45M- 20/30	8				
Х	Х			Rebound Series 20Nm AC 30rpm	TMRS45M- 50/13	8				
Stan	dard	Seri	es AC Motors Built-in Red	ceivers With Over	ride*					
х	х			Prodigy Series (120V) U.S. 20Nm 19rpm	TMUS45M- 20/19	6				
х	х			Prodigy Series (120V) U.S. 20Nm 32rpm	TMUS45M- 20/32	6				
х				Prodigy Series (120V) U.S. 30Nm	TMUS45M- 30/13	6				
х				Prodigy Series (120V) U.S. 40Nm	TMUS45M- 40/13	6				
Х	х			Prodigy Series (120V) U.S. 50Nm	TMUS45M- 50/13	6				
Х	х			Prodigy Series (220V) Outside U.S. 20Nm	TMEU- 20M/02	6				
Х				Prodigy Series (220V) Outside U.S. 30Nm	30M/02	6				
Х				Prodigy Series (220V) Outside U.S. 40Nm	TMEU- 40M/02	6				
x	х			Prodigy Series (220V) Outside U.S. 50Nm	TMEU- 50M/02	6				
Stan	dard	Serie	es AC Motors U.S. 110-12	<u>.</u>						
Х				Standard Series U.S. 60Nm	TMUS59M- 60/14	6				
Х			Standard Series U.S 80Nm Standard Series U.S		TMUS59M- 80/14 TMUS59M-	6				
Х			11	100 Nm Standard Series U.S.	100/11 TMUS59M-	6				
X	dard	Sari	es AC Motors Outside U.S	120 Nm	120/09	6				
Speci			cs Ao motors outside o.o	. 220-2404 Maria	ui Override					
х				Standard Series Outside U.S. 60Nm	TMEU- 60M/02	6				
х				Standard Series Outside U.S. 80Nm	TMEU- 80M/02	6				
х				Standard Series Outside U.S. 100Nm	TMEU- 100M/02	6				
Stan	dard	Seri	es AC Motors U.S. 120V	No Override						
Х				Standard Series U.S. 140Nm No Override	TMUS92S- 140/12	2				
х			4-	Standard Series U.S. 180Nm No Override	TMUS92S- 180/12	2				
Х				Standard Series 02 U.S. 230Nm No Override	TMUS92S- 230/12	2				
х				Standard Series 02 U.S. 300Nm No Override	TMUS92S- 300/8	2				
Stan	dard	Seri	es AC Motors Outside U.	S. 220V No Over	ride Specia	Order				
х				Standard Series Outside U.S. 140Nm No Override	TMEU- 140W/03	2				
х				Standard Series Outside U.S. 180Nm No Override		2				
х			1 June	Standard Series Outside U.S. 230Nm No Override	TMEU- 230W/03	2				
х			_	Standard Series Outside U.S. 300Nm No Override	TMEU- 300W/03	2				

Second Component Second Comp	Tubular Motors										Drive Gears for Mot	ors		
Second Component Second Comp				C Motors No Override C	outside US 220V						orive Gears for Motors			
No. Common 1.0 Common 1.0		<u> </u>	1	Component	-	Item #	Box /	Roll Down shutters	Maestro Screens	Interior Shading	Component	•	Item #	Pcs per Box / Bundle
Standard Series AC Motors U.S. 120V Manual Coveride No. 120V No. 120V Manual Coveride No. 120V No. 120V	х			A	Outside U.S. 220V		2			Х		Drive Gear		20
Standard Series AC Motors U.S. 120/ Manual Override X X X X X X X X X	X				Outside U.S. 220V		2			Х	0	Crown		20
X	Star	ndard	d Ser	ies AC Motors U.S. 120\		de				Х				20
Sandard Series U	Х				140Nm Manual		2			Х			SG197	20
Standard Series AC Motors U.S. 120V Manual Override V.S. 200m V.S. 2	X				Standard Series U.S.		2	X	х	Х		Crown	SC161	20
Standard Series 20 Standar	04-		1.0	ACM-+ 11 C 400)						Х		Drive Gear		20
Standard Series AC Motors Outside U.S. 220-AVY Manual Override Special Order Only		laard	Ser	les AC Motors U.S. 1200	Standard Series 02	TMUS92M	2	х	х			Drive Gear		20
Standard Series AC Motors Outside U.S. 220-40V Manual Override					Override Standard Series 02	TMUS92M	2			Х		Crown		20
Standard Series Standard S	Star			· · · · · · · · · · · · · · · · · · ·		<u> </u>	erride			Х				20
Manual Overnide Manual Ove	-	ial O	<mark>order</mark>	Only			2	х	х					20
National Override					Manual Override Standard Series			X	х			Crown	SC159	20
Manual Override Sinandard Series Outside U.S. 200Nm Outs				1111	Manual Override Standard Series			х	х			Drive Gear		20
X	X				Manual Override		2	х	Х			Crown		20
Name Continue Co	X				Manual Override		2	X	х			Drive Gear	SG260	20
Name	X				Outside U.S. 230Nm		2	X	х			Crown	SC276	20
Hybrid Series AC Motors 110-120V Manual Override	x				Outside U.S. 300Nm		2						SC166	20
X	Hyb	ridSe	eries	AC Motors 110-120V	Manual Override			X	Х			Drive Gear		20
X X X X X X X X X X	х	Х					6	x	х		E	Drive	TMUS-SG65	20
Hybrid Series 100 Nm w/o Manual Override	X	Х			*		6	х	х			Crown		20
X	Х				Hybrid Series 100 Nm w/o Manual	TMRS59M	4	Х	х			Drive		20
X	0		<u></u>		Override	-100/12		х			0	Crown	TMUS-59OC	20
X	Cro	wns a	l	Orives for Motors	Crown		20		х			Crown	TMUS-45OC	20
X			Х		Drive	TMUS-	20	х				Drive	TMUS-59OG	20
X			х	0	Crown		20	х	х	х		Drive	TMUS-45OG	20
X Drive TMUS- 20 X X Drive TMUS-45C 20 X X Drive TMUS-45G 20 X X X X Drive TMUS-45G 20 X X X X X X X X X X X X X X X X X X			х	*	Drive		20	х				Crown	TMUS-59C	20
TMUS-45G 20 TMUS-45G 20			Х		Crown		20	х	х			Crown	TMUS-45C	20
Crown IMOS- 20			Х		Drive		20							
SC458			х		Crown	TMUS- SC458	20	х				Drive	TMUS-45G	20

Components (Parts and Pieces) Crowns and Drive Gears for Motors									
	maestro Screens	bility Interior Shading	Component	Component Name	Item #	Pcs per Box / Bundle			
х				Drive Gear	TMUS-59G	20			
		Х		Crown	TMUS35-46.5RC	20			
х	х	х		Drive Gear	TMUS45-46.5RG	20			
		х	9	Drive Gear	TMUS35-35RG	20			
		Х		Drive Gear	TMUS-G14	20			
		Х		Drive Gear	TMUS-G02	20			
х	х	х		Crown	TMUS-60OC2	20			
х	х	х		Drive Gear	TMUS-60OG2	20			
х	х	х	0	Crown	TMUS-54C	20			
х	х	х		Drive Gear	TMUS-54G	20			
x	х	х	6	Crown	TMUS-C18	20			
х	х	х		Drive Gear	TMUS-G22	20			
х	х	х	0	Crown	TMUS35-60OC	20			
х	х			Crown	TMUS-96C	20			
х	x		*	Drive Gear TMUS-96		20			
х	Х			Crown	TMUS-75C	20			
х	x			Drive Gear	TMUS-75G	20			
х	x		0	Crown	TMUS-61C	20			
х	х			Drive Gear	TMUS-61G	20			
х			0	Crown	TMUS-59RC	20			
х				Crown XL System	TMUS-45UC	20			
	ntro eive	l Sys	tems						
х	х	Х	© removed to the control of the cont	Mini Receiverfor 115V AC Motors	EL03-10MR10A	20			
х	х	Х	MaestroShield	Mini Receiverfor 220V AC Motors	EL03-12	20			
х	х	Х		Mini Receiver for 12V / 2A DC Motors	EL03-19	20			
х	х	Х		Mini Receiver for 12V / 10A DC Motors	EL03-20	20			
х	х	х	• [[]]] •	Wall Mount Receiver	EL03-10WM-KS	20			
х	х	х		External receiver	EL03-MR300	20			

Ele	ectro	onics				
Rer	note	Tran	smitters			
Con Roll Down shutters	Maestro Screens	bility Interior Shading	Component	Component Name	Item #	Pcs per Box / Bundle
x	х	Х	•	1-channel Wall Mount Remote	EL03- 10WM01	20
Х	Х	х		6-channel Wall Mount Remote	EL03- 10WM06	20
Х	х	Х	*	16-channel Wall Mount Remote	EL03- 10WM16	20
Х	Х	Х		1-channel Hand Held Remote	EL03- 10HH01	20
Х	х	Х		6-channel Hand Held Remote	EL03- 10HH06	20
Х	Х	Х		15-channel Hand Held Remote	EL03-HH15	20
				16-channel Hand Held Remote	EL03- 10HH16	20
х	Х	Х	(Key Chain Remote	EL03-52	20
х	х	х		4-Channel Key Chain Remote	EL03-53	20
Har	d-W	ired C	ptions			
х	х	х		Key Switch Flush Mount	EL03-18	30
х	х	х		Key Switch Surface Mount	EL03-16	30
Х	Х	Х)	Extra Blank Key	EL03-1000	10
Х	х	Х	980	Momentary Switch White	EL04-06	20
Х	Х	Х		Momentary Switch Ivory	EL04-10	20
Х	Х	Х		Maintain Switch White	EL04-07	20
Х	Х	Х	₫ % 0	Maintain Switch Ivory	EL04-08	20
Χ	Х	Χ		Face Plate Ivory	EL04-02	100
Х	Х	Х		Face Plate White	EL04-01	100
Hor	ne A	utom	ation			
х	х	Х	Memoran and another than the second of the s	Home Automation System Interface	EL03-75A	10
	х			Wind, Sun and Rain Sensor	EL03-06	10
Oth	er E	lectro	nic Options			
х	х	Х		4 Channel Motor Synchronizer	EL03-50	1
Х	х		* ASS C Management STON	Vibration Sensor	EL03-10115	1
х	х	Х	000	Power Distributor Board	EL03-51	1
X	Х	X		Transformer	EL03-22	1
Х	Х	Х	The second secon	Transformer	EL03-22B	1
Х	Х	Х		Transformer	EL03-23	1
х	х	Х	Total a recommend	Transformer	EL03-25	1
Х	х	Х		Battery Tube	EL03-30	1
Х	Х	Χ		Power Cord	EL04-12	1
Х	Х	Х		Power Cord	EL04-13	1
х	Х	х		Power Cord	EL04-14	1
х	х	x		Lithium Battery Charger	EL03-34	1

Ele	ctro	nics	& Components			
Elec	ctron	ics C	Options			
Roll Down	patili Maestro Screens	Interior Shading	Component	Component Name	Item #	Pcs per Box / Bundle
Х	х	Х	O E O	Wind Sun Sensor Solar Panel Driver	EL03-06WS	1
X	х	Х		SMART WI-Fi Controller Automation	EL03-11HA	1
Х	х	Х		ED Connector(s) LED Connector(s) w/single wire	ELEDC-00CN ELEDC-01SC	100
Х	х	Х		LED Lights 16ft Reel	ELEDL-3012 ELED-6012 (Blue or White) (30 or 60 LPF)	1
Х	х	Х	My many assessment of the second	LED UL Power Supply (Driver) 100W 12V	ELEDP-60W12	1
Х	Х	Х	¥ ⊙ I ⊗	LED Receiver	ELEDR-11MRL	1
x	х	Х		LED 6-Channel & Light Controller	EL03-11HH06L	1
Man	nual (Gear	S			
X			6	1/8 or 1/11 or 1/18 Manual Gear Box	AC02-07/08 AC02-07/11 AC02-0718	24
х				1/25 Manual Gear Box 1/50 Manual Gear Box	AC02-07/25 AC02-07/50	18
X				1/59 Manual Gear Box	AC02-07/100	6
ldle	r Bea	ring	Cradles			
Х				Idler Bearing Cradle	AC03-40	15
х				Idler Bearing Cradle	AC02-11	10
	х			60mm Idler Bearing w/ Spring	AC02-12-SL	20
Х				60mm Idler Bearing	AC02-12	20
Х				70mm Idler Bearing	AC02-05-110	20
Х			10	86mm Idler Bearing w/ end cap	AC02-03	10
	х			86mm dler w/Spring fXL System (5.5 Tube)	AC02-03RSL	10
х				100mm Motor Tube Idler Bearing	AC02-04	10
Μοι	ıntin	g Pla	tes Brackets			
X	х			Universal Mounting Plate	AC03-03A	50
Х	х			45° Mounting Plate	AC03-0801 AC03-0802	50
X	х			45° Mounting Plate For small leg side caps	AC03-13	50

Comp Roll D						
	patik					
own	Maestro Screens	Interior Shading	Component	Component Name	Item #	Pcs per Box / Bundle
х				Heavy Duty Universal Bracket	AC03-20	10
Х	Х			Universal Bracket Plate	AC03-1201	25
х			700	Motor Star Bracket	AC03-06	20
х				Motor Star Bracket	AC03-16	20
х	х			Universal Bracket Plate	AC03-50	50
х			OH	Harmony Mini Motor Mounting Bracket	AC03-04	20
x				Motor Mounting Cradle Bracket	AC03-07	20
Mou	nting	g Pla	ites Brackets			
х				Small Angle Bracket	AC03-10	50
		Х	.0.	3"x3" Snap-on Motor Bracket for Fascia	IS1039	20
		X	Control of the contro	Snap-on Fascia Motor Bracket for Fascia	IS1038	20
		X		Snap-on Motor Bracket for Bracket	IS1018	20
х	x			Mounting Plate for Torque Spring	AC03-30	15
Hood	ds &	Side	Caps: available	in White, Bronze,	Beige, Ivory	
х	Х			5 1/2" Impact-Rated	CA02-139-WH,	10
· ·	.,			Side Cap 8" Impact-Rated	BZ, BG, IV CA03-205-WH,	40
Х	X			Side Cap	BZ, BG, IV	10
х				10" Impact-Rated Side Cap	CA03-250-WH, BZ, BG, IV	5
х	Х			12" Impact-Rated	CA03-300-WH,	5
х	х			Side Cap 5.5" Round Extruded Hood, Front,	BZ, BG, IV SM10F-5.5-XX (color BG, BZ, IV, WH)	1
х	x			5.5" Rounded Side Cap	CA10-139-XX (color BG, BZ, IV, WH)	20
х	Х			6.5" Side Cap (no leg)	CA05-165-XX color (BG, BZ, IV, WH)	20
х	х			10" Side Cap (no leg)	CA05-250-XX color (BG, BZ, IV, WH)	20
				Removable Leg	CA05SM (color mill or WH)	20
х	х			7" Side Cap	CA04-180-WH, BZ, BG, IV	20
х	x			With small Leg 8" Side Cap With small Leg	CA04-205-WH, BZ, BG, IV	20

Compatib Maestro Screens X X X X X X	Interior Shading	Component bly Side Caps E	Component Name 5 1/2" Safety Plate for Side Cap 8" Safety Plate for Side Cap 10" Safety Plate for Side Cap	Item # SM02B-5.5 (back) SM02F-5.5 (front) SM02B-8 (back) SM02F-8 (front)	Pcs per Box / Bundle	Com	patil	oility	ails Bottoms Bars Component	Accessories Component Name	Item #	Pcs per Box / Bundle
Roll Down x x x x x x x x x x x x x x x x x x x	Interior Shading	Component	Name 5 1/2" Safety Plate for Side Cap 8" Safety Plate for Side Cap 10" Safety Plate for	SM02B-5.5 (back) SM02F-5.5 (front) SM02B-8 (back) SM02F-8 (front)	Box / Bundle				Component	•		Box /
X X X X X X X X X X X X	sem	bly Side Caps E	for Side Cap 8" Safety Plate for Side Cap 10" Safety Plate for	SM02F-5.5 (front) SM02B-8 (back) SM02F-8 (front)								
x X X x Hood Ass X x X x	sem	bly Side Caps E	Side Cap 10" Safety Plate for	SM02F-8 (front)			Х			Bottom Bar End Retention (Box)	WS9003A, WS9043	20
X X Hood Ass X X X X	sem	bly Side Caps E			20				118		WSA9002F-WH, WSA9002F-BG,	
Hood Ass X X X X	sem	bly Side Caps E		SM02B-10 (back) SM02F-10 (front)	20		Х	х		Side Rail (Front)	WSA9002F-BG, WSA9002F-BZ, WSA9002F-IV	1
x x x	sem	bly Side Caps E	12" Safety Plate for Side Cap	SM02B-12 (back) SM02F-12 (front)	20		х	х		Side Rail (Back)	WSA9002B-WH, WSA9002B-BG, WSA9002B-BZ,	1
x x				r e							WSA9002B-IV	
			5 1/2" 5-Sided 45° Extruded Hood 8" 5-Sided 45°	SM02B-5.5 (back) SM02F-5.5 (front) SM02B-8 (back)	1 front 1 back and		х		1000	Adjustable Outer track	WSA9030B-XX colors: (WH, Bg, BZ, IV)	1
XX			Extruded Hood	SM02F-8 (front) SM02B-10 (back)	1 front 1 back and		x			Adjustable Inner track	WSA9030F-XX colors:	1
v v			Extruded Hood 12" 5-Sided 45°	SM02F-10 (front) SM02B-12 (back)	1 front 1 back and					Nylon Entry Guide	(WH, Bg, BZ, IV)	
x X			Extruded Hood	SM02F-12 (front) SM01-08-WH,	1 front		Х			(Bag)	WS9004C	20
			8" Hood 45 Deg w / Lip	SM01-08- BG,SM01-08-IV, SM01-08-BZ			Х			Nylon Entry Guide (Box)	WS9045	20
			10" Hood 45 Deg w / Lip	w / Lip			х			Nylon XL System Entry Guide (Box)	WS9009HD	20
			12" Hood 45 Deg w / Lip	12" Hood 45 Deg w / Lip			х			Nylon Entry Guide with 44mm system	AC01-12SLM	10
x			Slat Hanger	AC10-01	100		х			Nylon Entry Guide with 44mm system small leg side caps	AC01-12SM	10
x			Slat Hanger	AC10-02	100		x			Nylon Entry Guide with 55mm system large leg side caps	AC01-12A	10
				EX01-01S-WH,		Ext	rude	d Mo	tor Tubes Fascia			
X			Non-Vented 56mm Slat	EX01-01S-BG, EX01-01S-BZ, EX01-01S-IV	10	x				Motor Tube MS 86mm	EX01-08/24	1
x			Vented 56mm Slat	EX01-01V-WH, EX01-01V-BG, EX01-01V-BZ, EX01-01V-IV	10	×				Motor Tube MS 70mm Octagonal	EX01-07/24	1
x			Non-End Retention Side Rail	EX01-02	1					Inside, Round Outside		
х			Plastic Entry Guide (Bag)	AC01-12A	20	×				Motor Tube 100mm Round Triple Coat Protection Galvanized Steel	EX01-09/24	1
x			Plastic Entry Guide (Box)	AC01-12SM	20		х			Motor Tube 5.5" (140mm) XL System Outer Tube	EX01-19/26 or EX01-19/30	1
x			Maestro Screen Bottom Bar (Front) Botom Bar (Back)	WSA9001F-XX, WSA9001B-XX (Colors: WH, BG, BZ, IV, BLK)	1	х	х			Motor Tube 60mm Inner Aluminum Octagonal	EX01-16/24	1
x			Maestro Screen XL (1 Pc) Bottom Bar	WSA9009HD-XX 26' or 30' (Colors: WH, BG, BZ, IV)	1				15 m			
x			End Retention Side Rail	EX01-05-XX (Colors: WH, BG, BZ, IV)	1		х		12	Motor Tube 4 inch Outer Tube	EX01-18/24	1

Evt	ruei	ons	- Motor Tubes			
			Motor Tubes			
Com Roll Down shutters	Maestro Screens	Interior Shading	Component	Component Name	Item #	Pcs per Box / Bundle
	х			3 1/2" Motor Tube 86mm Outer	EX01-14/24A	1
	x			4" Motor Tube 108mm	EX01-18/24	1
Oth	er Ac	ces	sories			
х				2 Wing End Retenton Slat Lock	AC06-02/1B	300
x				2 Wing End Retention Slat Lock	AC06-01/1B	300
х			3	Slat Cap	AC01-08	1000
х				Bottom Bar Lock	MS-1003	
х				Aluminum Bottom Bar for Lock System	MS-1004	2
x				Aluminum Bar	MS-1006	12
x			N. B. B.	Assembled Locking Slat for Aluminum Roll Down	MS-1007	19
x				Felt	AC01-10	1
Oth	er Ac	ces	sories			
х	x			5/8" Hole Caps	AC01-11-XX (WH, IV, BG, BZ)	1
Х	Х			Conic Stopper	AC07-04 (WH)	100
X	X			Conic Stopper	AC07-03 (IV/BG)	100
×	X		0	Conic Stopper Rubber Ring	AC07-05 (BZ) AC01-05	20
x			6	Slat Gasket	AC01-17	2
x			j	Water Seal Gasket	AC09-01	1
x	×			Brush Seal 19mm (0.75") 31.75mm (1.25") 48.26mm (1.9")	AC05-01 (.75") AC05-07(.75") AC05-06(1.0') AC05-03 (1.25") AC05-04 (1.9")	1
	x			Rubber Seal 65.25mm (3.75")	WS1010	1

		nent	onents			
	patil		ments			
Roll Down shutters	Maestro Screens	Interior Shading	Component	Component Name	Item #	Pcs pe Box / Bundle
х				Brush Seal 12mm (0.25")	AC05-02	1
	х			Zipper #8 gauge	WS-1006	1
				Zipper #8 gauge	WS-1001	1
х	х	х		Weightbar, Stainless Steel, 3/8" round	WSA9100	1
	х		_	Spline for Screen	WS-1003	1
				Spline for Screen	WS1004	1
	x			Adjustable Track Foam	WS1005	1
х			- iiiiiiiiiiii	Spring Block 2"x 3"	AC07-01	1
х				Spring Block 2"x 4"	AC07-02	1
Univ	versa	als &	Crank Handles			
x	Х			90° / 4 Hole Universal w/ pivot	AC908-02	30
Х			25.6	90° / 4 Hole Universal w/ eyelet	AC908-12	30
Х			30	90° / 2 Hole Universal w/ pivot	AC908-01	30
Х				90° / 2 Hole Universal w/ eyelet	AC908-11	30
x				Stainless Steel 90° / 2 Hole Universal w/ pivot	AC908-SS01	30
х	х		×	45° / 2 Hole Universal w/ pivot	AC908-04	30
х				45° / 2 Hole Universal w/ eyelet	AC908-14	30
х				Stainless Steel 45° / 2 Hole Pivot	AC908-SS04	30
Х	х			5' Handle with Bell Coupling	AC908-51	20
X	х		181	6' 4" Handle with Bell Coupling	AC908-61	20
х	Х			10' Handle with Bell Coupling	AC910-11	20
Х			8	5' Handle with Hook	AC908-52	20
Х				6' 4" Handle with Hook	AC908-62	20
Х			•	10' Handle with Hook	AC908-12	20
			1	Crank Handle-5' w/ Hook	AC908-SS52	
			8	Crank Handle-6'4" w/ Hook	AC908-SS62	
				Crank Handle-10' w/ Hook	AC908-SS12	

Accessories							Dealer Tools						
Cra	Cranks with durable stainless steel and Accessories							Dealer Kits and Samples					
Com	patik	oility					Con	npat	ibilit	<u>/</u>			
Roll Down shutters	Maestro Screens	Interior Shading	Component	Component Name	Item #	Pcs per Box / Bundle	Roll Down shutters	Screens	Shading	Component .	Component Name	Item #	Pcs per Box / Bundle
				Crank Handle-5' w/ Bell	AC908-SS51						Dealer Bag	PR04-01	
				Crank Handle- 6'4" w/ Bell	AC908-SS61		Fab	oric	& Po	wder Coated Samples			
			, ,	Crank Handle- 10' w/ Bell	AC908-SS11		X			1 Sq. Ft each of each color, type and weight, along			1
X			>	Eyelet Exterior Operator	AC02-10	20		X		White, Ivory, Beige	· ·	WD-FABRIC-KIT	'
Spri	ng A	ssist	ts	l		1	MC	ОТО	RS				
Х			-	Spring Assist Torque Spring	AC11-601	4	Hyl	brid	Serie	es AC Motors No Override	9	1	
×				Spring Assist	AC11-602L (left)	4	X	Х		1	Hybrid Series 20Nm AC 30rpm	TMRS45S- 20/30	8
				Torque Spring	AC11-602R (right)		х	Х			Hybrid Series 25Nm AC 13rpm	TMRS45S- 50/13	8
X			-	Spring Assist Torque Spring	AC11-701	4	Rel	bour	nd Bi	directional PKGS - AC Mot	tor with/without O	verride	
×			-	Spring Assist Torque Spring	AC11-702	4	X	х			Rebound Series PKG 20Nm AC 30rpm	TMRBD45BDS 20/19PKG	10
x			•	Spring Assist Torque Spring	AC11-703	4	X	Х		ATMOST COMMAND	Rebound Series PKG 50Nm AC 13rpm	TMRBD45BDS 50/13PKG	10
Х				Spring Assist Torque Spring	AC11-705	4	Hyl	brid	Bidi	rectional PKGS - AC Motor	With Override		
x				Spring Assist Torque Spring	AC11-706	4	X	Х			Hybrid Series PKG 50Nm AC 13rpm	TMHY45M- 50/13PKG	6
Cor	Complete Aluminum Roll Down Shutters Ready To Install						x	х			Hybrid Bidirectional PK	TMHY45BDM- 50/13PKG	6
X				Aluminum Roll Down Shutters;	CS01-Non End- WH, CS01-Non- End-IV, CS01-Non	Up to 88"	x	х			50Nm AC 13rpm Hybrid Bidirectional PK Series 100Nm AC 11rpm	TMHY59BDM- 100/11PKG	6
				Non-End Retention	End-BG, CS01- Non End-BZ	Sp 1.5 55	X	Х			Hybrid Series PKG 120Nm AC 9rpm	TMHY59M- 120/9PKG	6
				Aluminum Roll	CS01-End Ret- WH, CS01-End		Rebound Series AC Motors With Override				_		
X				Down Shutters; End Retention	Ret-IV, CS01-End Ret-BG, CS01- End Ret-BZ	Up to 262"	X			To come	Rebound Series 50Nm AC 14rpm	TMRB45M- 50/14	6
Dea	ler T	ools							onic Tra	s nsmitters			
				2-panel Aluminum Roll Down Demo Board	Call for Details	1	×	X			MSBD 1-channel Bidirectional Handheld Remote Control	EL03- BDHH01	20
				Single Sided Mini Demo	PR05-04-WH, PR05-04-IV,	1	X	X	X		MSBD 15-channel Bidirectional Handheld Remote Control	EL03- BDHH15	20
				Aluminum Roll Down Motorized	PR05-04-BG, PR05-04-BZ	'	х	X	X	0	MSBD 1-channel Bidirectional Keychair Remote Control	EL03- BDKEYCH	20
				Single Sided Mini Demo Aluminum Roll Down Manual	PR05-05-WH, PR05-05-IV, PR05-05-BG, PR05-05-BZ	1	X	X		A	MSD 4-channel Handheld Remote Control	EL03-HH04	20
			0	Single Sided Mini Demo	PR05-07-WH,		х	X			MSD 15-channel Handheld Remote Control	EL03-HH04	20
				Maestran Roll Down Motorized	PR05-07-WH, PR05-07-IV	1				a only partial list of			
				Single Sided Mini Demo Screen Roll Down Motorized	PR05-10	1		pie	ces	contact Maestroshiele , 220V/230V Motors & or custom products.	•	-	

| PROFILE & WARRANTY



Maestro Skield is successfully founded on the three stars of:

- ★ Quality
- Price
- ★ Delivery

We are proud to be one of the most rapidly growing suppliers of exterior screen and shade, interior shade, hurricane protection, security shutters, electronics and tubular motors. MaestroShield is a well-established innovative design, engineering, manufacturing and supply company. All of our products are designed and developed in-house by both Swedish and American engineers using only the highest quality materials. Quality assurance is the hallmark of our manufacturing philosophy. All of our aluminum extrusion, castings, motor and electronic manufacturing facilities follow ISO 9001 standards.

Our aluminum factory produces more than 200,000 metric tons of extrusion per year and our tubular motor factory produces over one million UL and CE motors annually.

MaestroShield® participates with the following associations: the Aluminum Association of Florida, the International Hurricane Protection Association with our structural certifica-tion held through the National Accreditation and Management Institute (NAMI). Our products have been rigorously tested by the Miami Dade Building Code, The

Florida Building Code and the Texas Department of Insurance.

Our commitment to engineering excellence and production is surpassed only by our commitment to complete customer satisfaction. Our International network of dealers is supported with quick and accurate in-house engineering, sales and marketing support and a full range of training.

MaestroShield®, is a Swedish-based international company that was formed to develop, produce and distribute high-quality, innovative window protection and shading systems for global markets. The MaestroShield™ family of window safety, security, and shading products has been engineered to exceed the highest certification standards required. Our commitment to engineering excellence is surpassed only by a commitment to complete customer satisfaction. Quality, Price and Delivery drive our operations and have made us a reliable entity in our industry that is "known for quality."

MaestroShield's dealer-based business-to -business platform is supported by quick and accurate in-house engineering, technical support, full-range training services, and exceptional customer service. MaestroShield products reflect quality from inception to full production and are stamped with approvals from the most rigorous regulatory agencies. We operate under ISO 9001 Quality System guidelines and offer our customers

outstanding warranties, service and the most reliable supply of an ever-growing and innovative line of unique products. MaestroShield® brings to the market, easy-to-install, top quality products, at competitive and reasonable price points. Continuous improvement of our products, enhances the versatility & diversity of our product lines and ensures our customers have the "best-in-class."

Roll-Down Aluminum Shutters

MaestroShield® Aluminum Shutters, and Hurricane Products have passed the FBC (Florida Building Code) certifications (FL7873-R10, FL14235, FL13757), Miami-Dade County (NOA # 17-0206), together with our NAMI Certification, and Quality Management System, MaestroShield® remains dedicated to the very highest of quality standards.

PCT Patent pending in 110 countries, MaestroShield® guarantees long-term Protection Like No Other™. Available as separate pieces, and/or parts and as custom-made complete shutter systems, MaestroShield® Roll down Aluminum Shutter systems have been designed to fit every opening. We can also provide custom aluminum extrusions that are engineered to fit your specific, unique, requirements.



Company

EXTERIOR SCREENING

MaestroShield's Screens provides complete solutions to meet the challenges of controlling light, heat, insects and inclement weather. As an ODM (original design manufacturer), we are unique to the industry for: major shading and screen components; from motors to side-tracks, bottom bars, hoods and electronics. By doing this, we supply our Dealers and customers with the complete package: innovative design and engineered quality products, competitively-priced, with controlled delivery, outstanding customer service, industry leading warranties, and a network of dealers ready to service your every need. In order to match the elegance of your exterior, there are a wide range of choices from leading fabric manufacturers that are compatible with our Maestro Screens, including an exclusive clear vinyl.

Interior Shading

MaestroShield® offers motors to work cohesively with interior shading automated installations.

Motors and Electronics

The ability to provide the market with a better, quality-driven tubular motor with increased reliability at a lower total cost goes back to the dedication of the engineers behind the product. The enhanced performance of the MaestroShield Brand Tubular Motor goes beyond anything else available in the market that achieves a balance between power and life cycle that is truly "Like No Other." Based upon lifecycle and capacity tests, MaestroShield motors carry a (5*) *five-year replacement warranty and DC motors carry a (2) two-year replacement warranty, Lithium battery motors carry a (1) one-year replacement warranty, after the product registration card is submitted and beginning on the sale date to the Dealer.

MaestroShield Electronic accessories have been developed according to the same high-quality standards and protocols, and are the most reliable products on the market, tested by a industry driven cross-section of companies.

Continuous Improvement

MaestroShield strongly believes in continuous improvement and growth. Dedication to Quality, Price and Delivery, bundled with Dealer-training, Technical Support, & readily available inventory will continue to move MaestroShield's place forward to a new level in the Hurricane and Security Protection, Exterior Screening, Interior Shading and Tubular Motors and Electronics industries.

Order Cancellation Policy

Orders maybe cancelled within 24 hours of placement and receipt of signed purchase order provided that the items have not already been shipped. For order cancellations after this period, MaestroShield reserves the right to charge a 20% order cancellation fee. Orders which are refused at delivery will be assessed a restocking fee in addition to any shipment costs that have resulted in either direction. No credit will be issued, except in exchange for other merchandise. Orders for custom products or those that require special handling are non-cancellable.

WARRANTY RETURNS GENERAL RETURN & EXCHANGE POLICY

All items for warranty consideration must have active product registration with serial number on file, and must obtain a RMA# (return-material-authorization-number) from MaestroShield®. RMA should be marked on outer package, before returning. Items received without an RMA number will not be considered for warranty return, or replacement. Returns are subject to MaestroShield's acceptance, and a restocking charge of 20% of invoiced value will apply on all returned items. Items approved for return must be returned in appropriate packaging, freight prepaid and accompanied by a copy of the original invoice. Items that arrived damaged or cannot be returned to stock will not receive credit. Exchanges of merchandise will be allowed providing all conditions outlined in Warranty Statement and Return Policy have been met. Any remaining dollar balance left unused after the exchange, or return, will be issued as an open credit on the account for future use. All exchanged product will carry the remainder warranty of originally purchased and replaced product. Extended warranties can be customized and procured through customer service at 1-239-596-8883.

SCREEN RETURN POLICY

Sale of ALL custom-made orders are final and are limited to repair or replacement (at our sole option) of included parts of the screen found to be defective under this Warranty Statement. In no event shall MaestroShield be liable for damages of any type, including, but not limited to: economic loss; or any indirect, punitive, special, incidental, or consequential damages of any type, including, but not limited to, time, wages or lost profits, of any nature or kind, or for damages to or loss of property, whether caused by negligence or otherwise.

GENERAL WARRANTY IMPLICATIONS and LIMITATIONS

Warranties do not cover any damage to MaestroShield® products that result from improper installation, accident, abuse, misuse, natural disaster, severe weather conditions, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions, lightning or any unauthorized disassembly, repair or modification. Warranties do not apply to any product on which the original identification information has been altered, obliterated or removed, has not been handled or packaged correctly, has been sold second hand or has been sold contrary to the United States export regulations without consent from MaestroShield®.

PLACING A CLAIM

To place a warranty claim, contact MaestroShield Customer Service at +1 (239) 596-8883 or toll free (866) 549-0269. All defective materials must be returned for evaluation within 30 days of replacement or dealer will be billed for replacement.

| LIFETIME LIMITED WARRANTY

Company

WARRANTY STATEMENT

Should there be evidence of a potential warranty issue within the specified warranty period, MaestroShield® will follow its standard policy to ensure that a new product is sent to the MaestroShield® Dealer who originally purchased the product, and has registered the warranty through the return product card system. The defective part must be returned to MaestroShield® for evaluation within 30 days of the warranty replacement. Should more than 30 days elapse or should the product evaluation prove the malfunctioning of the product was the result of any aforementioned items, the Dealer will be notified of the point of failure and subsequently charged the cost of the replacement part.

Smart Controllers, Solar Panels, Lithium Battery Motors, LED Drivers, LED Lights, LED Receivers are covered by a maximum 1-year replacement warranty.

Electronics, DC Motors are covered by a full 2-year replacement warranty.

Components (listed) are covered by a full 2-year replacement warranty: all DC motors without lithium batteries, manual gears; universals; mounting plates; idlers; spring blocks; crown and drive gears; brush seals and gaskets; plastic parts (entry guides, conic stopper, hole caps).

Tubular motors (does not apply to DC motors or lithium battery motors), are covered by a full 5-year replacement warranty.

*Powder coating warranty on extrusions and castings: AAMA 2603 10-year /1-year marine and/or environments (example FL and/or within 1-mile of coastal shoreline(s)). The "Warranty Period" shall commence from the date of application of the specified powder product. CON-DITIONS OF NON-WARRANTY: i Where any damage to or deterioration of the coating system arising from causes including, but not limited to, impact, abrasion, mechanical damage, neglect, malicious damage, fire damage, pollution, abnormal weather conditions and excessively salty environments; ii. Where the surfaces have been recoated in plant or touched up for any reason without the prior written agreement; iii. Where exposed surfaces have not been adequately sealed or protected, or protection has been breached; iv. Where failure is associated with exposure of the coatings to temperatures in excess of 70 degrees Celsius, or to acid or other hazardous sources, which are damaging to powder coatings; v. Where failure is associated with the use of adhesive tapes or with the use of sealants or mastics; vi. Where the coated surfaces have not been maintained by the property owner in accordance with the supplier's recommended care and maintenance procedures.; vii. Where damage or deterioration is caused by any accident or normal wear and tear or by any default or misuse of the powder coated products by the property owner or any third party; viii. Where the aluminum extrusions used in the joinery have not been powder coated by an approved Applicator; ix. Where it cannot be substantiated that a product from the originating powder coat source was used; x. if defective area is less than <5% of total coated surface; xi. Unless all claims are received in writing within 30 days of defect becoming apparent.

MAINTENANCE RECOMMENDATIONS: The long term color integrity of powder depends on the degree of exposure to the natural elements and the color chosen. Where the coating is subject to pollution or a salty or coastal environment, the long-term color retention properties may be affected. Cleaning should be done yearly with warm water, soft cloth and a non-abrasive pH neutral detergent followed by fresh water rinse. Harsh environment cleaning recommendation is quarterly. Most household cleaners and solvents in addition to all alcohol-based, acidic, or alkaline OTC cleaners, should not be used.

10* YEAR SCREEN FABRIC WARRANTY: *Most fabric manufacturer's offer 10 year warranty on fabric(s). All fabric warranty claims are a pass-through warranty and are administered by the fabric manufacturer. Please contact fabric manufacturer for details on any warranty coverage information. MaestroShield assumes no responsibility for claims made on defective and/or malfunctioning fabrics either separately or as a component of screen assembly.

Company

LIFETIME LIMITED WARRANTY

LIMITED WARRANTY STATEMENT

FABRIC CORNERS & WELD WORKMANSHIP - LIMITED WARRANTY STATEMENT

Should there be evidence of a potential warranty issue, beyond the initial inspection period of 30 days from receipt, and within the specified warranty period (in this case within 1-year of purchase), MaestroShield® will follow its Limited Warranty policy to ensure that a new product is sent to the MaestroShield® Dealer who originally purchased the product, and has previously registered the warranty through the return product card system. The defective product must be documented through pictures, and may be asked to be returned to MaestroShield® for evaluation within 30 days of the warranty notification request. Should more than 30 days elapse or should the product evaluation prove the defective product was the result of any aforementioned items, the Dealer will be notified of such, and subsequently charged the cost of the replacement product.

GENERAL WARRANTY IMPLICATIONS and LIMITATIONS

Warranties do not cover any damage to MaestroShield® products that result from improper installation, accidents, abuse, misuse, natural disaster, severe weather conditions, general wear, negligence, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions, lightning or any unauthorized disassembly, repair or modification. Warranties do not apply to any product on which the original identification information has not been filed, or has not been handled or packaged correctly, has been sold or resold second hand, or has been sold contrary to the United States export regulations without consent from MaestroShield®. *MaestroShield assumes no responsibility for claims made on defective and/or malfunctioning fabrics either separately or as a component of screen assembly. *Most fabric manufacturer's offer 10 year warranty on fabric(s). All fabric warranty claims are a pass-through warranty and are administered by the fabric manufacturer.

FABRIC/SCREEN RETURN POLICY

Sale of ALL custom-made orders are final and are limited to repair or replacement (at our sole option) of included parts of the screen found to be defective under this Warranty Statement. In no event shall MaestroShield be liable for damages of any type, including, but not limited to: economic loss; or any indirect, punitive, special, incidental, or consequential damages of any type, including, but not limited to, time, wages or lost profits, of any nature or kind, or for damages to or loss of property, whether caused by negligence or otherwise.

NO OTHER EXPRESS WARRANTIES

The Limited Warranty set forth herein constitutes the entire express warranty and representation of MaestroShield® with regard to its screen fabric products. This Limited Warranty shall be controlling over any conflicting terms and conditions of any purchase order, orders, contracts, or invoices both written and oral, that may be executed in connection with the purchase of MaestroShield® products. No representation or warranty made by any MaestroShield® distributor, dealer, agent, installer, or any type representative or employee shall be binding to MaestroShield® other than the terms set forth herein.

GENERAL FABRIC INFORMATION:

10* YEAR SCREEN FABRIC WARRANTY:

*Most fabric manufacturer's offer 10 year warranty on fabric(s). All fabric warranty claims are a pass-through warranty and are administered by the fabric manufacturer. Please contact fabric manufacturer for details on any warranty coverage information. MaestroShield assumes no responsibility for claims made on defective and/or malfunctioning fabrics either separately or as a component of screen assembly.

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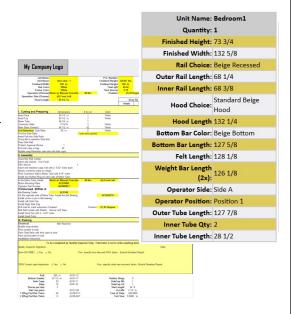
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