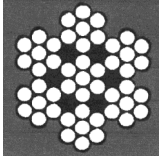


# Pendant Systems

The Lighting Suspension Specialists www.PendantSystems.com P-215-638-8552 F-215-638-8554

## Cable Gripper & Cable Strength Information

### Cable Strength Relationships between Gripper & Cable Diameter for Loading Requirements



7 X 7 Cable

#### Information

Cable (also known as wire rope) is available in many different types of construction. Wire rope consists of strands laid helically around a supporting core. Individual strands are composed of a number of wires laid helically around a center (core) of wire. The lay of a cable is defined by the direction in which the strands are laid into the rope, and by the direction the wire is laid into strands.

Cable that is 7 X 7 refers to the number of strands (7) which has (7) wires each. The center strand (core), with 6 strands laid around the core. See illustration on the left.

Grippers can be used to suspend objects safely at angles of up to 60° from the vertical. However, suspension at angles does reduce the safe working load per the table to the right.

	Vertical	15°	30°	45°	60°
<b>Load</b>	<b>100%</b>	<b>96%</b>	<b>86%</b>	<b>70%</b>	<b>50%</b>
<b>De-rating of Load</b>	<b>0%</b>	<b>4%</b>	<b>14%</b>	<b>30%</b>	<b>50%</b>

#### Safety Recommendations

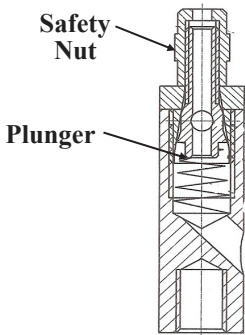
- Do not use for loads outside the stated range of the product
- Do not exceed the safe working load

- Do not apply paint or other coatings to cable
- Do not use in Chlorinated atmospheres
- To facilitate height adjustments, install the object below and adjust upwards to the desired level
- Inspect periodically and replace if worn, distorted, or damaged

#### Cable Gripper Designs

Within each cable gripper is a plunger that a cable slides through. There are three balls that surround the outside diameter of the cable as it passes through the gripper. When weight is applied to the gripper when mounted, the tension forces the balls to grab the cable in a pinching movement.

In normal operation the more the tension, the more the gripping. Some grippers come with a safety nut that locks the movement in both directions eliminating the potential for a release if the plunger is accidentally depressed by an end user.



Safety Nut

Plunger

Diameter <sup>1</sup>	Description <sup>2</sup>	Break Strength <sup>3</sup>	Gripper Slippage <sup>4</sup>	Maximum Safe Load <sup>5</sup>
1/32"	Micro Series	132	85	12
3/64"	Micro / MGR Series	270	227	30
1/16"	MGR-SE Side Exit Series	480	318	50
1/16"	MGR / GR Series	480	328	50
3/32"	GR Series	920	532	100

#### Notes:

1. Cable diameter is expressed in fractions of an inch and relates to the US standard of referring to cable diameters.
2. Describes series of Gripper Part#. The cable used in all tests conducted by Pendant Systems was 7 x 7 Galvanized steel cable.
3. The break strength is the minimum breaking force in pounds for that particular diameter of cable.
4. Gripper Slippage is the average force in pounds when the testing equipment sensed slippage within the gripper. Normally the cable slips, and the gripper holds again within a very small distance of cable.
5. Maximum safe load is based on 20% (percent) of the lowest observed force for that diameter cable. For multiple cables, add the weights together. Example for a linear fixture using 2 each 1/16" cables, 2 X 40 = 80 pounds of fixture with a 80% (percent) safety factor. Pendant Systems is conservative with loads but keep in mind that most junction boxes only support 50lbs & fan rated boxes support up to 75lbs.
6. Pendant Systems Grippers are not recommended for outdoor use or exposure to water, wind, chemical environments (such as swimming pools) or continuous movement (such as in front of a HVAC vent).
7. Use only uncoated 7 x 7 or 7 x 19 uncoated stainless or galvanized steel aircraft cable.
8. Weight guidelines are for static loads at 5% or less of an angle. For angled suspension, use our CC-Slot cable coupler or ADJ foot adjustable grippers.
9. Always allow at least 1" of cable to pass beyond the body of the gripper.

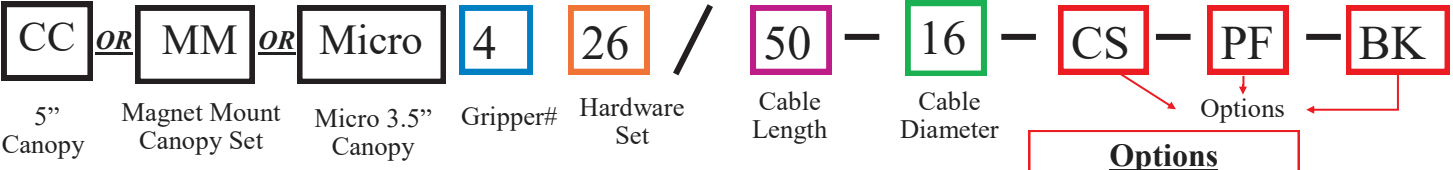
#### Disclaimer:

The information shown on the chart above is based on independent tests conducted for Pendant Systems. The information shown may vary with gripper model and cable diameter. Pendant Systems recommends each customer determine their individual specific requirements. Please contact Pendant Systems for additional information if required.

# Pendant Systems

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## LSC Cord OR Cable Canopy Kit Ordering Matrix



### Options

#	Gripper Model #	Cable Exit	Hole Size	#	Gripper Model #	Cable Exit	Hole Size	#	Description
1	MGR 1/4-20	Bottom	.250"	36	LG-32	2 Way	.250"	12W	12 Gauge Power cord
2	MGR-SE-1/4-20	Side	.250"	37	MGR-SE-360 1/4-20	Side	.250"	14W	14 Gauge Power Cord
3	GR1/4IP-TN	Bottom	.562"	38	MGR-SE-360 8/32	Side	.187"	8.5HB	8.5" Crosscable W/ #2 HB Ends
4	GR1/4IP	Bottom	.562"	39	MGR CC 1/4-202P NK	Bottom	.250"	10HB	10" Crosscable W/ #2 HB Ends
5	GR3/8IP	Bottom	.687"	40	MGR CC 1/4-02 M	Bottom	.250"	12.5HB	12.5" Crosscable W/ #2 HB Ends
6	GR1/2IP	Bottom	.875"	41	MGE-SE 1/4-20-M	Side	.250"	18HB	18" Crosscable W/ #2 HB Ends
7	GR1/4IP-TN-L	Bottom	.562"	42	GR 3/8 IP ALL	Bottom	.687"	24HB	24" Crosscable W/ #2 HB Ends
8	MGR-1/4-20-M NK	Bottom	.250"	43	GR1/4 IP ALL	Bottom	.562"	36HB	36" Crosscable W/ #2 HB Ends
9	MGR-SE-1/4-20-BS	Side	Cross	44	AL LG 1/16	2-Way	N/A	8CC	8" Crosscable with 1/4-20TH Studs
10	MGR-SE-ADJ-1/4-20	Side	.250"	45	AL LG 3/32	2-Way	N/A	12CC	12" Crosscable with 1/4-20TH Studs
11	MGR-SE-ADJ-8/32	Side	.187"	46	AL LG 1/8	2-Way	N/A	18CC	18" Crosscable with 1/4-20TH Studs
12	MGR1/8IP	Bottom	.400"	47	Micro SE-TH W/8" HB CABLE	Cross	.200"	24CC	24" Crosscable with 1/4-20TH Studs
13	MGR-SE-1/8IP	Side	.400"	48	Micro SE-TH W/8" PD CABLE	Cross	.250"	8PD	Paddles on the ends of 8" Crosscable
14	MGR-SE-1/4-20-EXT	Side	.250"	49	Micro SE-TH W/24" SW-EYE	Cross	.150"	24PD	Paddles on the ends of 24" Crosscable
15	MGR-SE-TH w/ Crosscable	Side	Cross	50	Micro SE 8/32	Side	.187"	12PD	Paddles on the ends of 12" Crosscable
16	GR-SE-BF	Side	Cross	51	Micro SE Panel	Side	.187"	36PD	Paddles on the ends of 36" Crosscable
17	Micro-GR	Bottom	.312"	52	Micro SE 360 8/32	Side	.187"	6Y	6" Legs on Y Paddle Assembly
18	MGR 1/8IP ALL	Bottom	.400"	53	Micro Ball	Bottom	.375"	18Y	18" Legs on Y Paddle Assembly
19	MGR-SE-TH10/32 Block	Side	.250"	54	MGR-SE 360 1/4-20 LN	Side	.250"	7/8 KO	Strain Relief for 7/8 Knock Out
20	MGR 10/32	Bottom	.187"	55	GR1/4 ALL	Bottom	.562"	BK	Black Canopy Set
21	MGR-SE10/32 ASS	Side	.187"	56	GR3/8ALL	Bottom	.687"	BN	Brushed Nickel Canopy Set
22	KL-100	2 Way	N/A					CG	Ceiling Mounted Gripper
23	MGR-SE 8/32	Side	.187"					CH	Cord Holder
24	MGR-SE 10/32 SM	Side	.187"					CL	Clear Power Cord
25	MGR-SE 1/4-20-Ext-M	Side	.250"					CP8	Cable Puck with 8 Inch Legs
26	MGR-Hook	Bottom	Loop					CP12	Cable Puck with 12 Inch Legs
27	GR-SE 1/4 Combo	Side	.25"/.5"					CP16	Cable Puck with 16 Inch Legs
28	MGR-SE10/32 ASS ANG	Side	.187"					CP8-4	Cable Puck 4 with 8 Inch Legs
29	MGR-10/32 NK	Bottom	.187"					CP12-4	Cable Puck 4 with 12 Inch Legs
30	MGR-SE-ADJ-SHOE	Side	.125" w/ slot .225"					CP16-4	Cable Puck 4 with 16 Inch Legs
31	MGR-SE-THW/8"CabDB64	Side	keyhole .11" hole diameter					CS	Slot Cable Coupler allowing cable to hang straight on vaulted ceiling
32	MGR 1/4-20 M	Bottom	.250"					DF	Dual Feed w/ 2-Cord From 1-Canopy
33	MGR-SE 10/32 EXT	Side	.187"					HK	Snap Hook 1/4"-20
34	MGR-SE 8/32 SH	Side	.187"					M2D4	Multi-Mount 2-Cables 4" Spacing
35	LG-16	2 Way	N/A					M3D4	Multi-Mount 3-Cables 4" Spacing
								M4D4	Multi-Mount 4-Cables 4" Spacing
								MB	Metal Braided Power Cord
								NK	Nickel Canopy Set
								PC	Powder Coated Hardware
								PF	Creates side hole for power cord entrance w/ Power Feed Tube
								RM	Row Mount
								SH	Shade Holder Accessory for capturing Wire Frame
								SM	Canopy .250" Holes on 3.5" Center
								SQ	Square Canopy
								UNIV	Universal
								RD	Round Canopy
								TC1.1	Track Clip Mounting TC-1.1
								TC 1	Track Clip Mounting TC-1
								TC .5	Track Clip Mounting TC-.5
								TC .38	Track Clip Mounting TC-.380
								MAG	Magnets
								LSC	Lighting Suspension Cord (Prefix)

ALL Kits can be  
Made with Magnets  
or Micro 3.5"  
Canopies

# Pendant Systems

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## Cable Grippers



**MGR-1/4-20**  
Bottom Exit Gripper  
W/Safety Nut for 1/16" Cable  
1/4"-20 Male on Bottom  
.250" Mounting Hole  
1.64"H x .4"W x .45" Thread



**MGR-1/4-20-M**  
Bottom Exit Gripper  
for 1/16" Cable  
1/4"-20 Male Thread .4" Long  
.250 Mounting Hole  
1.4"H x .359"W x .693" Body



**MGR-1/4-20-M-NK**  
1/4"-20 Mini Gripper Nickel Plated  
Bottom Exit .250 in. Mounting Hole  
1.4"H x .359"W x .4" Thread x  
.693" Body



**MGR 10/32 EXT**  
Bottom Exit Gripper  
W/10/32" Nut for  
1/16" Cable .187" Mounting  
Hole .375" L Thread



**MGR 10/32 NK**  
Bottom Exit Gripper (No Knurling)  
w/10/32" Nut for 1/16"  
Cable .187" Mounting Hole  
.375" L Thread



**Micro-GR**  
Bottom Exit Gripper for 3/64"  
Cable W/Safety Nut  
5/16" Male on Bottom  
.312" Mounting Hole  
.790" Overall HT.



**MGR-1/8IP ALL**  
Bottom Exit Gripper  
W/Safety Nut for 1/16" Cable  
1" of 1/8" IP Thread  
.400" Mounting Hole  
1.454" Overall HT.



**MGR-1/8IP**  
Bottom Exit Gripper  
W/Safety Nut for 1/16" Cable  
1/8" IP Male on Bottom  
.400" Mounting Hole  
1.06"H x .589"W x .615" Thread



**GR1/4IP**  
Bottom Exit Gripper W/Safety  
Nut for 1/16" & 3/32" Cable  
1/4" IP Male on Bottom .562"  
Mounting Hole 1.316"H  
x .744"W x .673" Thread



**GR1/4IP-TN**  
Bottom Exit Gripper  
W/Safety Nut & Top Nut for 1/16"  
& 3/32" Cable  
.562" Mounting Hole  
1.25"H x .757"W x .2" Thread



**GR1/4IP-TN-L**  
Bottom Exit Gripper  
W/Safety Nut & Top Nut for  
1/16" & 3/32" Cable .562"  
Mounting Hole 1.357"H  
x .875" Bottom W 3/4" L Thread  
x .763" W Ring



**GR3/8IP**  
Bottom Exit Gripper  
W/Safety Nut for 1/16" &  
3/32" Cables 3/8" IP Male on  
Bottom .687" Mounting Hole  
1.3"H x .885"W x .670" Thread



**GR1/2IP**  
Bottom Exit Gripper W/Safety  
Nut for 1/16" & 3/32" Cable  
1/2" IP Male on Bottom .875"  
Mounting Hole 1.319"H x 1"W  
x .669" Thread



**GR-SE 1/4IP Combo**  
Side Exit Gripper for 3/32" Cable W/  
Safety Nut 1/4"-20 Female & 1/4" IP  
OD on Bottom 3/32" Cable .513" x  
2.05" Body 2.5" Overall HT.  
.25" & .5" Mounting Slots



**GR-SE-BF**  
Side Exit Gripper W/Safety  
Nut & Set Screw for 1/16" &  
3/32" Cable .25" Fork on  
Bottom 2.6"H x .509"W



**MGR-SE-1/4-20**  
Side Exit Gripper W/Safety Nut  
For 1/16" Cable 1/4"-20 Female  
on Bottom .250" Mounting Hole  
1.653"H x .39"W x .235" Thread

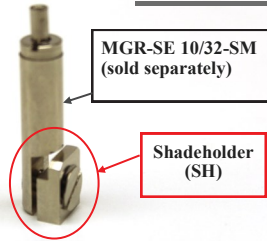
# Pendant Systems

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## Cable Grippers



**MGR-SE 1/4-20-BS**  
Side Exit Gripper W/Safety Nut & Allen Screw for 1/16" Cable Slotted for Cross Cable on Bottom .250" Mounting Hole 1.465"H x .192"D x .1" Slot



**SH**  
Accessory for MGR-SE 10/32-SM Gripper Shown above assembled.  
Gripper sold separately.  
SH captures shade wire frames



**MGR-SE-1/4-20-EXT**  
Side Exit Gripper for 1/16" Cable 1/4"-20 Male on Bottom .250" Mounting Hole 1.74"H x .39"W .188"-1/4"-20 Thread



**MGR-SE-1/8IP**  
Side Exit Gripper for 1/16" Cable .4" 1/8" IP Male Thread on Bottom .400" Mounting Hole 1.729"H x .391"W



**MGR-SE-8/32**  
Side Exit Gripper for 1/16" Cable 8/32" Screw on Bottom .187" Mounting Hole 1.25"H x .15"W .09"D 8/32" Tapped Hole



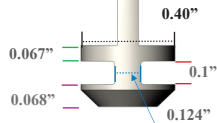
**MGR-SE 10/32 SM**  
Side Exit Gripper For 1/16" Cable 10/32" Side Mounted Screw .187" Mounting Hole 1.8"H x .362"W x .157"D



**MGR-SE-ADJ-1/4-20**  
Side Exit Gripper W/Safety Nut for 1/16" Cable W/Adjustable Foot .250" Mounting Hole .157"D-1/4"-20 Tapped Female Hole 1.95"H x .192"W



**MGR-SE-ADJ-8/32**  
Side Exit Gripper W/Safety Nut for 1/16" Cable W/Adjustable Foot .187" Mounting Hole .037"D-8/32" Tapped Female Hole 1.65"H x .192"W



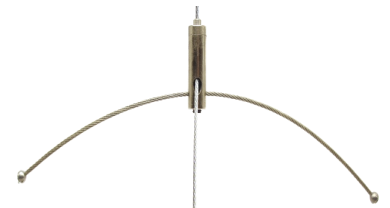
**MGR-SE-ADJ-SHOE**  
Side Exit Gripper (1.95"H x .39"W) for 1/16" cable with Adjustable Foot for Slot in Fixture (.15"- .25"W x .09" thickness)



**MGR-SE-TH w/ CAB PD**  
Side Exit Gripper W/Through Hole for Crosscable for 1/16" Cable Allen Set Screw on Bottom 1.125"H x .15"W Available in 8", 12", 24.5" & 36" Crosscable lengths



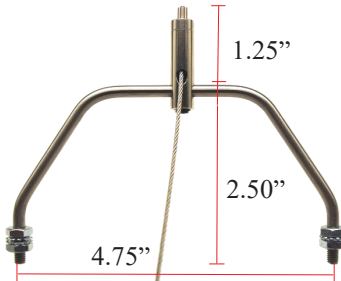
**MGR-SE-TH DB 64**  
Captive MGR-SE-TH Gripper W/8" L x 3/64" Crosscable W/ #5 Dumbbell Ends 1.125"H x .15"W & .219" Diameter Dumb Bell Ends



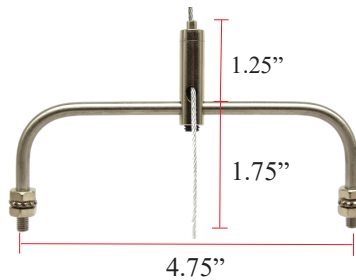
**MGR-SE-TH w/ 8" Cable**  
Captive MGR-SE-TH Gripper W/8" Crosscable 1.125" H x .15"W Half Ball Ends x .186" Diameter



**MGR-SE TH 10/32 Block**  
Captive MGR-SE-TH Gripper W/9.25" CC W/10/32 Male Studs and Keps Nuts (2-.187")



**MGR-SE 10/32 ASS ANG**  
Captive MGR-SE Gripper W/4.75" Center to Center Stainless Angled Bar W/ 10/32" Nuts



**MGR-SE 10/32 ASS**  
Captive MGR-SE Gripper W/4.75" Center to Center Stainless Bar W/ 10/32" Nuts

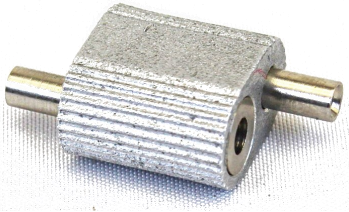


**MGR-Hook**  
Bottom Exit Gripper for 1/16" Cable Snap Hook w/ Cable Retention Clip W/ .260" Opening 1.5"H x .826"W

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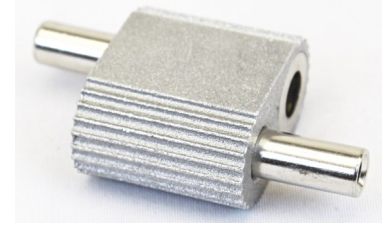
## Cable Grippers



**AL-LG 1/16**  
Aluminum Shot Blast Looping Gripper  
for 1/16" & 3/64" Cable  
.638" L x .660" W x .392" W  
66 Lbs SWL for 1/16" Cable  
30 Lbs SWL for 3/64" Cable



**AL-LG 3/32**  
Aluminum Shot Blast Looping Gripper  
for 3/32" & 5/64" Cable  
.728" L x .893" W x .469" W  
154 Lbs SWL for 3/32" Cable  
123 Lbs SWL for 5/64" Cable



**AL-LG 1/8**  
Aluminum Shot Blast Looping Gripper  
for 1/8" Cable  
.988" L x .1.172" W x .631" W  
248 Lbs SWL for 1/8" Cable



**GR3/8-16 SW**  
Bottom Exit Gripper W/Safety  
Wheel for 1/8" Cable  
Male 3/8-16 Bolt Thread  
2.212"H x .605"W x .543"Thread



**MGR 1/8 IP RG**  
Reversing Mechanism  
Bottom Exit Gripper  
for 1/16" & 3/64" Cable  
.400" Mounting Hole  
.972"H x .512"W x .512"Thread



**GR1/4IPALL**  
Bottom Exit Gripper  
W/Safety Nut & Top Nut for  
1/16" & 3/32" Cable Mounting  
Hole .500"H x .875"Bottom W  
3/4"L Thread x .763" W Ring



**GR3/8IP ALL**  
Bottom Exit Gripper  
for 1/8", 3/32", 1/16" Cables  
3/8"IP Male on Bottom .687"  
Mounting Hole  
.982"H x .669"W x .982"Thread



**MGR-SE-360 1/4-20 LN**  
Side Exit Gripper for 1/16" &  
3/64" Cable W/Adjustable Foot  
(Moves in all Directions)  
.250" Mounting Hole  
2.531" L x .467" W x .40625"  
Thread Length



**MGR-SE-360 1/4-20**  
Side Exit Gripper W/Safety Nut  
for 1/16" & 3/64" Cable W/  
Adjustable Foot  
(Moves in all Directions)  
.250" Mounting Hole  
2.531" L x .467" W x .40625"



**MGR-SE-360 8/32**  
Side Exit Gripper W/Safety Nut  
for 1/16" & 3/64" Cable W/  
Adjustable Foot  
(Moves in all Directions)  
.187" Mounting Hole  
2.531" L x .467" W x .40625"  
Thread Length

# Pendant Systems

The Lighting Suspension Specialists [www.PendantSystems.com](http://www.PendantSystems.com) P-215-638-8552 F-215-638-8554

## Micro Series Cable Grippers



### Micro SE 8/32

Side Exit Gripper  
For 3/64" & 1/32" Cable  
1.24"H x .344"W x .256" 8/32 Tapped  
8/32" Screw Included



### Micro Ball

Bottom Exit Gripper  
for 3/64" & 1/32" Cable  
.642" Height x .447" W  
Fits .375" Diameter Hole Nicely



### Micro SE Panel

Side Exit Gripper  
For 3/64" & 1/32" Cable  
1.4"H x .47"W x .260" Slot  
8/32" Allen Set Screw  
Uses 5/64" Allen Wrench



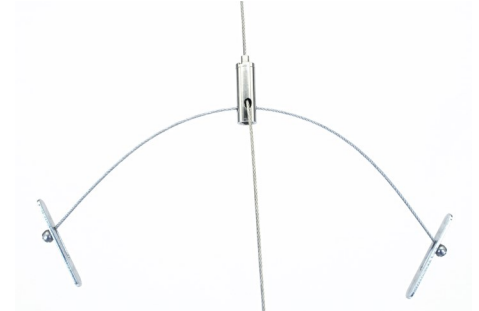
### Micro SE TH W-8 CAB

Captive Crosscable Micro SE TH Gripper  
On 3/64" Cable w/ Half Ball Ends  
For 3/64" & 1/32" Cable  
Uses Allen Wrench 3/32"



### Micro SE TH

Close Up of Crosscable Gripper  
Side Exit Gripper  
for 1/16" & 3/64" Cable  
1.16"H x .31"W x .M-5 Thread  
Uses Allen Wrench 3/32"



### Micro SE TH W-8 CAB PD

Captive Crosscable Micro SE TH Gripper  
On 3/64" Cable w/ Half Ball Ends & Paddles  
For 3/64" & 1/32" Cable  
Uses Allen Wrench 3/32"



### Micro SE TH W-24 CAB SW-EYE

Captive Crosscable Micro SE TH Gripper  
On 3/64" Cable w/ Swivel Snap Eyelets for  
Capture of Flat Panel Tabs  
For 3/64" & 1/32" Cable  
Uses Allen Wrench 3/32"  
24.5" Total Length  
10 Lb SWL



### Acoustical Suspension Spring

Twist in suspension point for  
Acoustical Baffles



### T-Bar Twist Clip

Twist on T-Bar Clip for Display  
Not Building Code Compliant for Ltg  
Fits 15/16" T-Bar



### Micro-SE-360 8/32

Side Exit Gripper for 3/64" &  
1/32" Cable W/Adjustable Foot  
(Moves in all Directions)  
.187" Mounting Hole  
2.531" L x .467" W x .40625"  
Thread Length

# Pendant Systems

The Lighting Suspension Specialists [www.PendantSystems.com](http://www.PendantSystems.com) P-215-638-8552 F-215-638-8554  
Cable Grippers & Accessories



**MGR-SE 10/32 EXT**  
 Side Exit Gripper for  
 1/16" Cable 1/4"-20 Male on  
 Bottom .187" Mounting Hole  
 1.747"H x .351" W x  
 .276" of 10/32" Thread



**MGR-SE 8/32 SH**  
 Side Exit Gripper for 1/16" Cable  
 8/32" Female on Bottom  
 0.187" Mounting Hole  
 .155" Thread Diameter  
 1.48"H (Top of Plunger)x  
 0.353" W x 0.25"D  
 8/32" Tapped Hole x 1.14" Body  
 Length  
 0.200" Length of Screw Thread  
 Screw head .265" x .310" High



**LG-16**  
 Used w/ 1/16" cable (0-80 lbs  
 working load). 2 slots for en-  
 trance and exit of cable on  
 each side to form loops.  
 Releasable without tools. .780"  
 L x .782" W x .421" Thick



**LG-32**  
 Used w/ 3/32" cable (25-120  
 lbs working load). 2 slots for  
 entrance and exit of cable on  
 each side to form loops.  
 Releasable without tools. .795"  
 L x .899" w x .491" Thick



**MGR-SE 1/4-20-M**  
 Side Exit Gripper for 1/16" Ca-  
 ble. 1/4"-20 Female on Bottom.  
 0.250" Mounting Hole .237"  
 Thread Diameter  
 1.667"H x 0.36" W x 0.425"  
 Thread Depth



**MGR CC 1/4-20 M**  
 Bottom Exit Gripper for  
 1/16" Cable .250" Mounting  
 Hole  
 1.587"L x .345"W x .590"  
 1/4"-20 Thread



**MGR CC 1/4-202P NK**  
 Bottom Exit Gripper for  
 1/16" Cable .250" Mounting  
 Hole  
 1.587"L x .491"W x .580"  
 1/4"-20 Thread



**Adjuster Clip**  
 Mounts on MGR-SE 10/32 SM  
 Gripper for Balance Adjustment  
 Slips 10/32" Screw on  
 Gripper



**SLOT SCREW 8/32**  
 8/32" Threaded Screw w/T-  
 Slot Head used to capture  
 slotted extrusion .420" H  
 x .350" L x .180" W .285"  
 Thread Length



**SLOT SCREW 1/4-20**  
 1/4"-20 Threaded Screw w/T-  
 Slot Head used to capture  
 slotted extrusion .420" H  
 x .450" L x .300" W .265"  
 Thread Length