GRIP LOCK SYSTEMS®

GRIPLOCK® SYSTEMS

Rigging & Tradeshow Applications

Griplock® Grippers

No matter what the weight, you can cable-suspend almost any object, permanently or temporarily, with the Griplock® Gripper. Grippers install swiftly and toollessly, can be re-used repeatedly, and are ideally suited for applications where instant adjustability, strength, and total reliability are paramount.

Heavy-Duty

Griplock's® award winning line of heavy duty 3- and 6-ball grippers, engineered for gross weights up to 5,500 pounds, are manufactured by Reutlinger of Frankfurt, Germany and TUV certified. In addition our 6-ball grippers are the only grippers to be BGV C1* certified for overhead use at European public events. As a result of meeting these stringent safety standards, our quick to install grippers are rapidly replacing traditional rigging hardware throughout the tradeshow and lighting industries.

**The BGV C1 standard was initiated by the Institution for Statutory Accident Insurance and Prevention (Berufsgenossenschaft VBG) in Germany, and has been adopted throughout Europe as the rigging industry safety standard.*

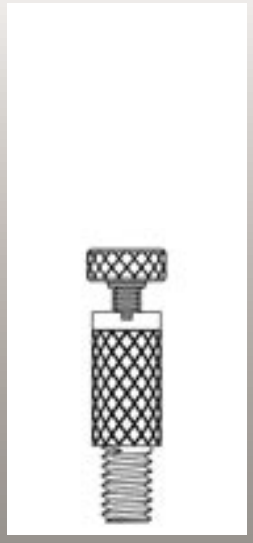
Light-Duty

There is an increasing demand in the entertainment and event industries for quick, light-weight tethers for set decoration, temporary lighting installations, and all-purpose suspension. Griplock® has a large selection of adjustable rings, snap hooks, clevises and loop-makers for smaller cables up to 3/32" (2.5mm). The same high performance product for lighter loads.

TYPE-15, -18 & -25 LIGHT DUTY GRIPPERS

For Use With 3/64" - 3/32" (1.2mm - 2.5mm) Cable

SAFE WORKING LOAD UP TO 134 LBS



15-1420-S
Bottom Exit Gripper, 3-Ball Mechanism, 1/4-20 External Thread, Safety Nut, For 3/64" - 1/16" Cable

15-RI-S
Bottom Exit Ring Gripper, 3-Ball Mechanism, Safety Nut, For 3/64" - 1/16" Cable

15-FORK-8X16
Bottom Exit Fork Gripper, 3-Ball Mechanism, For 3/64" - 1/16" Cable

15-GHA
Bottom Exit Adjustable Gated Hook Gripper, 3-Ball Mechanism, For 3/64" - 1/16" Cable

15Z-1420-GHA
Side Exit Gripper with Gated Hook, 3-Ball Mechanism, For 3/64" - 1/16" Cable

ZF-15ZZ
Double Ended Loopmaker Gripper, 3-Ball Mechanism, For 3/64" - 1/16" Cable
SWL: Up to 75 lbs

18-RI-S
Bottom Exit Ring Gripper, 3-Ball Mechanism, Safety Nut, For 1/16" - 5/64" Cable

25Z-1420i-S
Side Exit Gripper, 3-Ball Mechanism, 1/4-20 Internal Thread, Safety Nut, For 5/64" - 2.5mm Cable

25-FORK-6X12-S
Bottom Exit Fork Gripper, 3-Ball Mechanism, Safety Cap, For 5/64" - 2.5mm Cable

25Z-1420-GHA
Side Exit Gripper with Adjustable Gated Hook, 3-Ball Mechanism, For 5/64" - 2.5mm Cable

*Drawings not to scale

TYPE-30 3- & 6-BALL GRIPPERS

For Use With 3/32" - 1/8" (2.4mm - 3.2mm) Cable

SAFE WORKING LOAD UP TO 225 LBS

30-3816e-V6-S
Bottom Exit Gripper, 3/8-16 External Thread, 6-Ball Mechanism, Safety Nut
30-3816e-V6B-S
Black Zinc Finish

30Z-M6-V6-Q3.5
Side Exit Cross-Cable Gripper, 6-Ball Mechanism, M6 Internal Thread, Safety Nut

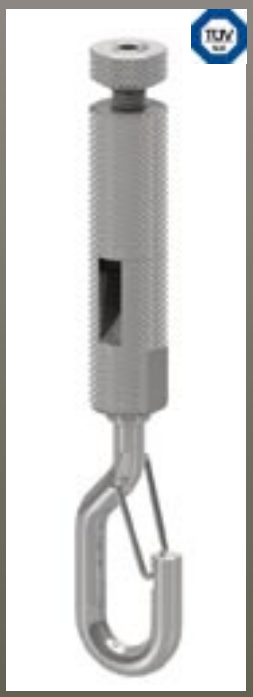
30Z-1420i-V6-S
Side Exit Gripper, 6-Ball Mechanism, 1/4-20 Internal Thread, Safety Nut

30ZG-3816i-V6-S
Side Exit Jointed Gripper, 6-Ball Mechanism, 3/8-16 Internal Thread, Safety Nut
30ZG-M8i-V6-S
M8 Internal Thread

ZF-30ZZ
Double Ended Loopmaker Gripper, 3-Ball Mechanism
SWL: 250 LBS

30Z-CLMP-200-V6
Side Exit Gripper with Clamp Attachment, 6-Ball Mechanism, For Pipe or Truss from 1.25" - 2.0" OD, Safety Nut

30-FORK-10x20-V6B-S
Bottom Exit Gripper, 6-Ball Mechanism, 10mm Wide Clevis, Safety Nut
30-FORK-10x20-V6-S
Nickel plated



30Z-1420-V6-GHA
Side Exit Gripper with Gated Hook, 6-Ball Mechanism, Safety Nut

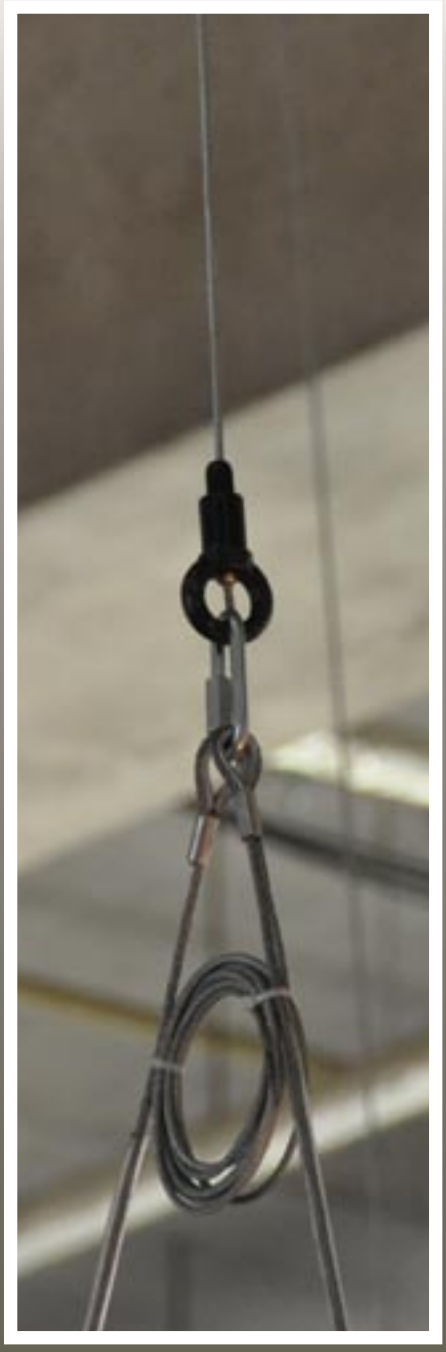
30-RI-V6B-S
Bottom Exit Ring Gripper, 6-Ball Mechanism, Safety Nut, Black Zinc Plated
30-RI-V6-S
Nickel Plated

*Drawings not to scale

TYPE-50 6-BALL SIDE CABLE EXIT GRIPPERS

For Use With 3/16” (5.0mm) Cable

SAFE WORKING LOAD UP TO 500 LBS



50Z-M12i-V6B
Side Exit Gripper, 6-Ball Mechanism, M12 x 1.75
Internal Thread, Safety Cap

50Z-M12e-V6B-75
Side Exit Gripper, 6-Ball Mechanism, M12 x 1.75”
External Thread, Safety Cap
Other thread lengths available

*Drawings not to scale

TYPE-50 6-BALL SIDE CABLE EXIT GRIPPERS

For Use With 3/16" (5.0mm) Cable

SAFE WORKING LOAD UP TO 500 LBS

50Z-CLMP-200-V6B
Side Exit Gripper with Clamp Attachment, 6-Ball Mechanism, For Pipe or Truss from 1.25" - 2.0" OD, Safety Cap

50Z-RI-V6B
Side Exit Gripper with Ring Attachment, 6-Ball Mechanism, Ring ID 1.18", Safety Cap

50Z-FORK-14x28-V6B
Bottom Exit Gripper with Fork Attachment, 6-Ball Mechanism, 14mm Wide Clevis, Safety Cap

*Drawings not to scale

TYPE-50 6-BALL BOTTOM EXIT GRIPPERS

For Use With 3/16" (5.0mm) Cable

SAFE WORKING LOAD UP TO 500 LBS

50-M12e-V6B
Bottom Exit Gripper, 6-Ball Mechanism,
M12 x 1.75 External Thread, Safety Cap,

50-M12e-V3
3-Ball Mechanism, Nickel Plated Finish
SWL: 410 lbs

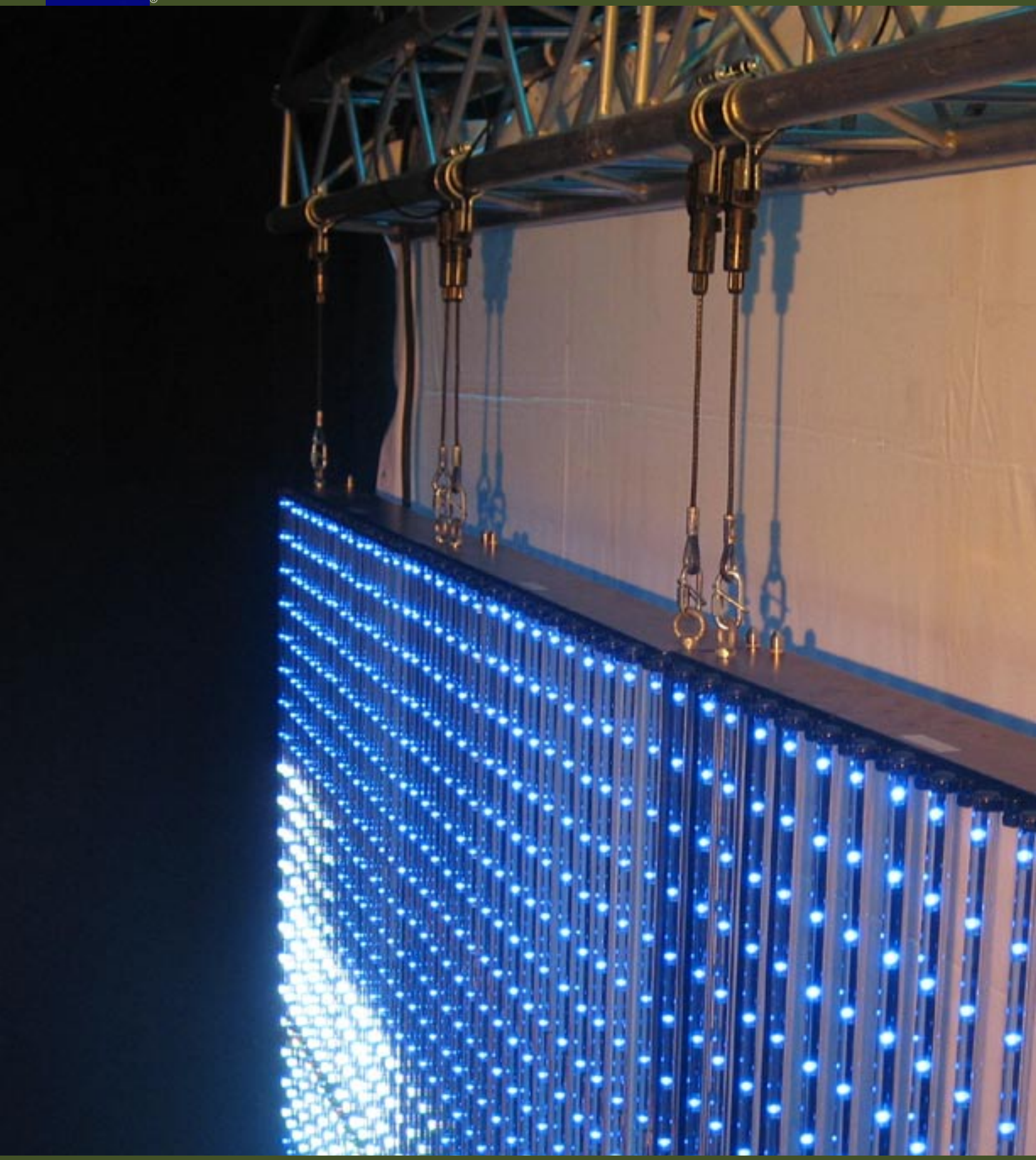
50-RI-V6B
Bottom Exit Gripper with Ring Attachment, 6-Ball Mechanism, Ring ID 1.18", Safety Cap

50-RI-V3
3-Ball Mechanism, Nickel Plated Finish
SWL: 410 lbs

50-FORK-14x28-V6B
Bottom Exit Gripper with Fork Attachment, 6-Ball Mechanism, 14mm Wide Clevis, Safety Cap

50-FORK-14x28-V3
3-Ball Mechanism, Nickel Plated Finish
SWL: 410 lbs

*Drawings not to scale



TYPE-80 6-BALL SIDE CABLE EXIT GRIPPERS

For Use With 1/4” - 5/16” (6.0mm - 8.0mm) Cable

SAFE WORKING LOAD UP TO 1,100 LBS

80Z-M20i-V6B
Side Exit Gripper, 6-Ball Mechanism, M20 x 2.5 Internal Thread, Safety Cap

80Z-CLMP-200-V6B
Side Exit Gripper with Clamp Attachment, 6-Ball Mechanism, For Pipe or Truss from 1.25” - 2.0” OD, Safety Cap

TYPE-80 6-BALL SIDE CABLE EXIT GRIPPERS

For Use With 1/4" - 5/16" (6.0mm - 8.0mm) Cable

SAFE WORKING LOAD UP TO 1,100 LBS

80Z-RI-V6B
Side Exit Gripper with Ring Attachment, 6-Ball Mechanism, Ring ID 1.58", Safety Cap

80Z-FORK-20x40-V6B
Side Exit Gripper with Fork Attachment, 6-Ball Mechanism, 20mm Wide Clevis, Safety Cap

*Drawings not to scale

TYPE-80 6-BALL BOTTOM EXIT GRIPPERS

For Use With 1/4" - 5/16" (6.0mm - 8.0mm) Cable

SAFE WORKING LOAD UP TO 1,100 LBS

80-M20E-V6B
Bottom Exit Gripper, 6-Ball Mechanism, M20 x 2.5 External Thread, Safety Cap

80-FORK-20x40-V6B
Bottom Exit Gripper, 6-Ball Mechanism, 20mm Wide Clevis, Safety Cap

80-RI-V6B
Bottom Exit Gripper with Ring Attachment, 6-Ball Mechanism, Ring ID 1.58", Safety Cap

WEIGHT LOADS AND SPECS

Chart For Griplock® Grippers using 7x7 or 7x19 STEEL CORE Uncoated Aircraft Cable

The SWL represents the Safe Working Load for a specific Gripper / Cable combination

Safe Working Loads are 20% of the minimum break strength of the Gripper / Cable combination

Cable Diameter		Minimum Break Strength of Cable & Gripper Combination — Gripper Type							5:1 SWL of Cable & Gripper Combination
Inches	Mms.	Type-15	Type-18	Type-25	Type-30	Type-50		Type-80	
		3-Ball	3-Ball	3-Ball	3-Ball	3-Ball	6-Ball	6-Ball	
3/64”		165	165						33
	1.5 mm	280	280						56
1/16”	1.6 mm	300	300	300					60
5/64”	2.0 mm		450	450					90
3/32”	2.4 mm			630	630				126
	2.5 mm			675	675				135
	3.0 mm				1,000				200
1.8”					1,125				225
3/16”						2,250			450
3/16”							2,500		500
1/4”								4,500	900
5/16”	8.0 mm							5,500	1,100

* Figures are in pounds.
* The 5:1 SWL column reflects the US cable industry and the European TUV standard safety factor.
*Where no minimum break strength is shown, grippers and cables are not considered compatible.
*Use only bare galvanized or stainless steel cables. Do not use plastic coated cables.
*This chart applies to Grip

Chart For Griplock® Grippers using 6x7 or 6x19 FIBER CORE Wire Rope ONLY

The SWL represents the Safe Working Load for a specific Gripper / Cable combination

Cable Size		Minimum Break Strength of Cable & Gripper Combination — Gripper Type			5:1 SWL of Cable & Gripper Combination	12:1 SWL BGV C1 Standard See Below
Inches	Mms.	Typer -50		Type-80		
		3-Ball	6-Ball	6-Ball		
	4.0mm		1,650		330	187
3/16”		2,000			400	n/a
3/16”			2,125		425	n/a
	5.0 mm		2,750		550	287
	6.0 mm			3,300	660	419
1/4”				3,500	700	n/a
5/16”	8.0 mm			5,500	1,100	728

* Figures are in pounds
* The 5:1 SWL column reflects the US cable industry and the European TUV standard 5:1 safety factor.
* The 12:1 SWL column reflects the BGV C1 safe working load standard according to European public event cable rigging protocols. The BGV C1 SWL is printed on each gripper. See discussion of BGV C1 on the next page.
* Where no minimum break strength is shown, grippers and cables are not considered compatible.
* This chart applies to Griplock® Grippers only. It is not applicable to any other cable gripping product, including Griplock’s® Cablefast/ZF gripper line.

BGV C1

BGV is the Institute for Statutory Accident Insurance and Prevention in Germany (Berufsgenossenschaft VBG).

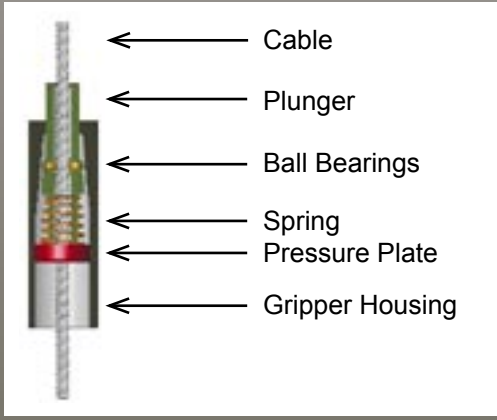
Historically, both the US and European Event and Entertainment Industries have relied upon general industry standards for overhead cable rigging. While both the Americans and Europeans have dramatically improved their professional standards in these and allied industries in recent years, the US has maintained the 5:1 SWL ratio rule while the Europeans, led by Germany, have adopted the far more stringent standards of BGV C1 BGV C1 requires that a gripper/cable combination hold a minimum of 80% of the calculated minimum break-strength of the cable alone. Components meeting the 80% minimum are assigned a 12:1 SWL ratio based on the actual minimum break-strength of the cable. The BGV C1 SWL can be seen in the table to the left.

The BGV C1 standard is required by most European Insurance companies for public events. Griplock's® Type-50 and -80 6-Ball grippers are the only BGV C1 certified grippers.

The BGV C1 Safe Working Load

Testing for the BGV C1 certification was performed on grippers in conjunction with fiber core wire rope, which is typically used for rigging in Europe. The SWL shown on the BGV C1 Certified grippers reflects the 12:1 ratio with fiber core cable discussed above. In the US, riggers typically use steel core aircraft cable. As can be seen from the tables to the left, steel core cable is consistently stronger than fiber core cable, so the BGV C1 SWL is considered conservative when the grippers are used with steel core aircraft cable.

How it Works

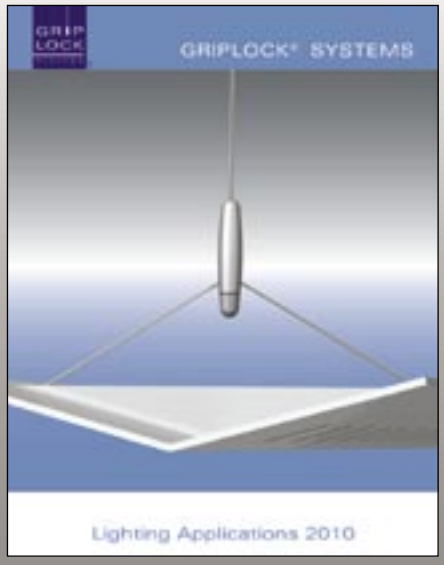


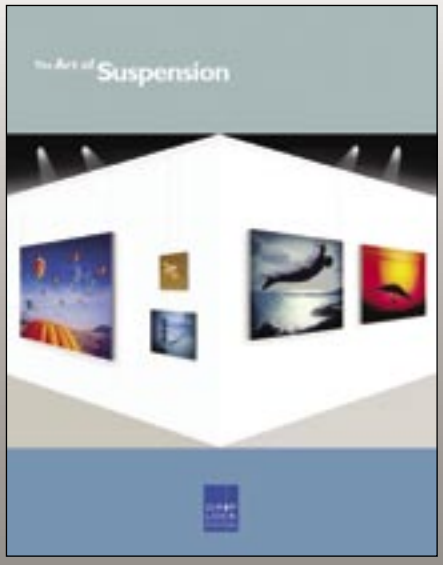
Griplock® Grippers are sophisticated in design but simple to use:

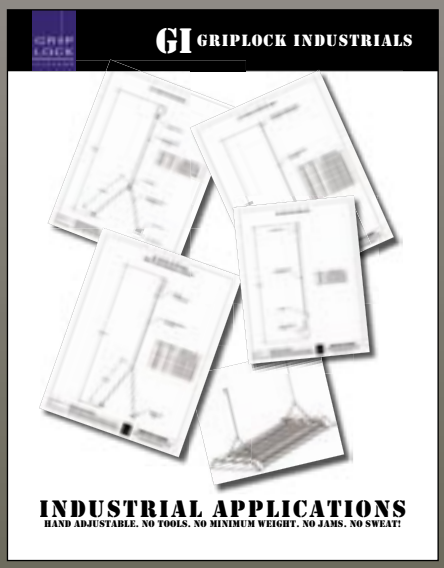
- Loosen the safety cap, insert the cable into the plunger and slide the gripper to the desired position. Where it stops it locks!® Tighten the safety cap to lock the gripper off in both directions.
- To re-adjust, simply loosen the safety cap, depress the plunger and move the gripper to a new position. Release the plunger and tighten the safety cap to lock.

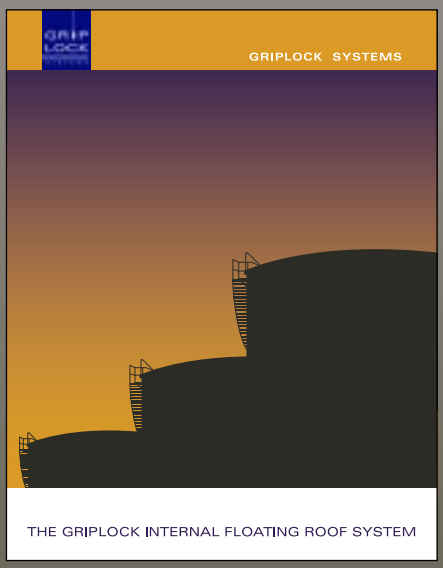
The 3- or 6-ball gripping mechanism is spring-loaded and allows the gripper to move freely up the cable. The gripper cannot move down unless the plunger is depressed and the gripping mechanism released. The plunger cannot be depressed while there is any weight on the gripper. Most grippers are supplied with a safety nut or cap.

- Use only 7x7 or 7x19 uncoated galvanized or stainless steel aircraft cable. 6x7 or 6x19 fiber core wire rope can be used with Type-50 and -80 grippers
- When feeding cable through a gripper always allow cable to pass 2" beyond the gripper housing. When cutting excess cable always leave 1" of cable showing.
- Cable should be cut using purpose-built cutters.
- Cable will generally not fray when cut. In case of fraying, solder or otherwise seal the cut end.
- The Griplock® Rigging System is ideal for temporary suspensions in all environments but is not recommended for permanent installations out of doors or in chemical-laden environments such as indoor swimming pools.
- Cables should not enter or exit grippers at more than a 5° angle. For angled applications please contact us or visit www.griplocksystems.com.









GRIPLOCK®:
WHAT WILL
WE THINK
OF NEXT?

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