32-1060 REV 1119 Page 1 of 20

## All dimensions shown as in [mm]

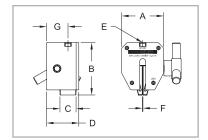
## **Tensile / Pull**

#### Wedge grips

Heavy-duty grips designed for a range of tensile testing requirements up to 2,000 lbF [10 kN]. Self-tightening stainless steel serrated or rubber jaw faces engage the sample through a spring loaded knob and rack and pinion type mechanism. The jaws ride on rollers, eliminating jamming common in conventional wedge grips.

Model No.	Α	В	С	D	Е	F	G
G1061-1			0.375 [9.5]	0.95 [24.1]	5/16-18 UNC		0.62 [15.7]
G1061	1.95	2.45	0.75 [19.1]	1.50 [38.1]	5/16-18 UNC	0 - 0.25 [0 - 6.4]	1.00 [25.4]
G1061-2	[49.5]	[62.2]	1.00	1.75	1/2-20		1.13
G1061-3			[25.4]	[44.5]	UNF	0 - 0.20 [0 - 5.1]	[28.7]









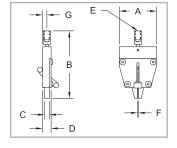
#### Miniature wedge grip

For general low force pull testing applications. The serrated, self tightening steel jaws are easily opened with a spring-loaded lever.

Α	В	C	D	E	F	G
1.37	2.49	0.19	0.32	#10-32	0 - 0.09	0.15
[34.8]	[63.1]	[4.8]	[8.1]	UNF	[0 - 2.3]	[3.9]

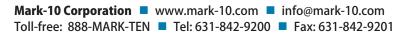
Model No.	Capacity IbF [N]	Weight lb [kg]
G1062	100 [500]	0.08 [0.04]

Includes a #10-32 M/M stud with jam nuts











<sup>\*</sup> Includes jam nuts

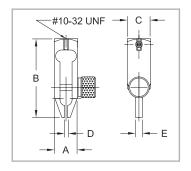
32-1060 REV 1119 Page 2 of 20

# Miniature component grip

For testing small and hard-to-reach electronic and mechanical components. Slender profile allows this grip to be used in a wide range of applications.

Model No.	Capacity lbF [N]	Weight lb [kg]	А	В	С	D	Е
G1003	30	0.05	0.5	1.7	0.5	0 - 0.07	0.15
	[150]	[0.02]	[12.7]	[43.2]	[12.7]	[0 - 1.8]	[3.8]

Includes a #10-32 M/M stud with jam nuts



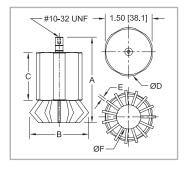


## Multi-jaw grip

For gripping round or odd shaped items. Jaws expand and retract by rotating the housing.

Model No.	Cap. lbF [N]	Weight lb [kg]	ØA	В	С	ØD	Е	ØF
G1056	100 [500]	0.30 [0.14]	3.50 [88.9]	2.30 [58.4] MAX	1.63 [41.4]	1.55 [39.4]	0.075 [1.91]	0.40 - 1.25 [10.2 - 31.7]

Includes a #10-32 M/M stud with jam nuts



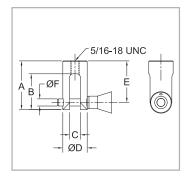


## Clevis grip

This grip is designed for ergonomic assessment, spring testing, and other pull testing applications.

Model No.	Capacity lbF [N]	Weight lb [kg]	Α	В	С	D	Е	ØF
G1077	500	0.29	1.70	1.25	0.38	0.85	1.45	0.25
	[2,500]	[0.13]	[43.2]	[31.8]	[9.7]	[21.6]	[36.8]	[6.3]

Includes a 5/16-18M to #10-32F thread adapter, 5/16-18 M/M stud with jam nuts, and #10-32 M/M stud with jam nuts







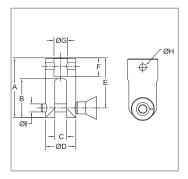
22-1060 REV 1119 Page 3 of 20

# High capacity clevis grip

This high capacity grip is designed for spring testing and pulling testing applications. Integrated eye end.

Model No.	Capacity lbF [kN]	Weight lb [kg]
G1090	2,000 [9]	0.78 [0.35]

Α	В	С	ØD	Е	F	ØG	ØН	ØI
2.77 [70.4]	1.80 [45.7]	0.55 [14.0]	1.40 [35.6]	2.32 [58.9]	0.87 [22.1]	0.63 [15.9]	0.32	0.38 [9.7]

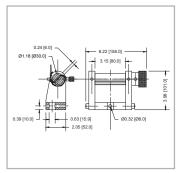




# Ribbon wrap grip

Secures textile webbing, tape, and braided materials typically used in construction, shipping, and other industrial uses. Integrated eye end.

Model No.	Capacity lbF [kN]	Weight lb [kg]
G1111	2,000 [10]	5.2 [2.4]





32-1060 REV 1119 Page 4 of 20

## **Packaging / Peel / Friction**

# Film and paper grips

For gripping film, paper, and other thin materials for tensile and peel testing. Adjustable serrated interlocking jaws grip the sample securely.

Model No.	Capacity lbF [N]	Weight lb [kg]	А	В	С	D
G1008		0.31 [0.14]	1.25 [31.8]	2.50 [63.5]	1.2 [30.5]	0 - 0.15 [0 - 3.8]
G1015-1	100	0.65 [0.29]	3.00 [76.2]			
G1015-2	[500]	0.80 [0.36]	5.00 [127.0]	3.00 [76.2]	1.90 [48.3]	0 - 0.50 [0 - 12.7]
G1015-3		0.90 [0.41]	7.00 [177.8]			

Includes a #10-32 M/M stud with jam nuts

# G1008 #10-32 UNF A G1015-X #10-32 UNF B A D C C



#### Pneumatic film and paper grip

Fully enclosed, air-powered grip for seal strength testing of packaging, elongation testing of various materials, and other tensile testing requirements. Serrated interlocking jaws effectively grip samples for up to 100 lbF of force. The grip features a unique integrated open/close valve for quick sample engagement and disengagement. An air connection kit, consisting of tubing and fittings needed to connect two grips, is available separately. A membrane repair kit is also available. See below.

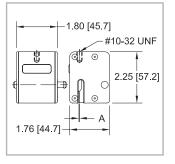
Model No.	Capacity	Weight lb [kg]	Max. pressure PSI (MPa)	Air input thread	Α
G1046	100 lbF [500 N] at 100 PSI [0.86 MPa]	0.58	125 [0.86]	#10-32 UNF	0 - 0.13 [0 - 3.3]

Includes a #10-32 M/M stud with jam nuts, one spare rubber membrane\*, one alcohol wipe, and two cotton swabs

Model No.	Description	
AC1019	Air connection kit for G1046	
AC1044*	Maintenance kit for G1046*	

#### The optional maintenance kit\* consists of:

- 1. Rubber membrane (qty. 5)
- 3. Cotton swab (qty. 12)
- 2. Alcohol wipe (qty. 5)
- 4. Wrench set





The optional air connection kit consists of:



- Coiled tubing, 1/8" OD, 1/16" ID, 8" retracted length (qty. 2)
- Y-splitter (qty. 1)
- Straight tubing, 1/8" OD, 1/16" ID, 5' length (qty. 1)
- Elbow fitting, tubing termination (qty. 2)
- Elbow fitting, tubing to #10-32M (qty. 1)
- Thread adapter, #10-32F to 1/4" NPT M (qty. 1)
- Adhesive-backed guide (qty. 4)
- \* The flexible internal membrane actuating the movable jaw has a variable life expectancy dependent upon the maximum air pressure used and the quality of the compressed air. It should be free from impurities, solvents and oils. Since field conditions are outside of Mark-10's control, the standard 3-year warranty does not apply to the flexible membrane. For convenience, a spare membrane and alcohol wipe is included with every new grip. A membrane repair kit may be purchased from Mark-10.



**Mark-10 Corporation** ■ www.mark-10.com ■ info@mark-10.com Toll-free: 888-MARK-TEN ■ Tel: 631-842-9200 ■ Fax: 631-842-9201



32-1060 REV 1119 Page 5 of 20

#### 90° peel fixture

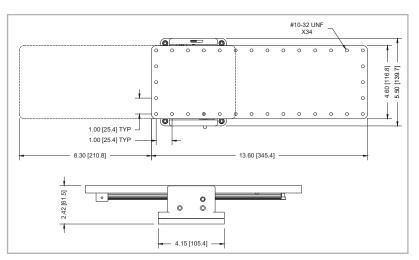
For testing adhesive strength of tapes, films, and packaging. Maintains a 90° angle between the table and direction of pull. An integrated limit switch automatically stops the motion of an ESM303 motorized test stand when the work table has reached its end of travel. Optional adjustable angle accessories are available.



A Day

Model No.	Description	Capacity lbF [N]	Weight lb [kg]
G1109	90° peel fixture	100 [500]	6.0 [2.7]
AC1078	Adjustable angle pulley adapter	30 [150]	1.4 [0.6]
AC1079	Adjustable angle mount	100 [500]	1.7 [0.8]
AC1080	Adapter, G1023 / G1058 grip to G1109	100 [500]	0.4 [0.2]

G1109 is compatible with the ESM303 motorized test stand only. Mounting hardware is included.







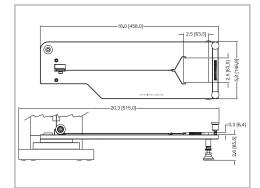


#### Coefficient of friction fixture

For determining friction properties of paper, film, and other thin flexible materials. Conforms to ASTM D1894 and other relevant standards. Includes work table, 200 g sled, cable, and low-friction pulley. Static and kinetic coefficients can be measured using the M5-2-COF gauge.

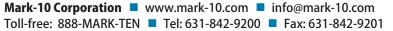
Model No.	Description
G1086	Coefficient of friction fixture

Includes mounting hardware and adapters to mount to the ESM303 test stand. Recommended for use with a motorized test stand.











32-1060 REV 1119 Page 6 of 20

#### Score bending fixture

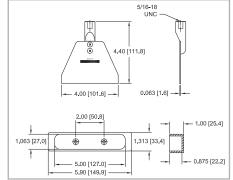
Used to produce a 90° bend in fiber board materials and plastics to conform to TAPPI standard T829. Set of upper and lower dies.

Model	Capacity	Weight
No.	lbF [N]	lb [kg]
G1071	50 [250]	Upper die: 0.15 [0.67] Lower die: 0.30 [0.14]

Upper die includes a 5/16-18M to #10-32F thread adapter and #10-32 M/M stud with jam nuts.

Lower die includes mounting hardware for the following test stands: ESM303, ESM1500/750 (w/AC1055 plate), ES30, TSC1000, TSF, ES10/ES20 (w/AC1060 plate).

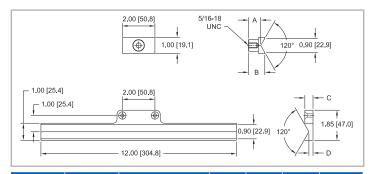
Recommended for use with a motorized test stand.





#### **Opening force fixture**

Used to determine the opening force of flat folded cartons along score lines. Set of upper and lower dies.



Model No.	Capacity lbF [N]	Weight lb [kg]	Α	В	С	D
G1072	50 [250]	Upper die: 0.06 [0.03] Lower die: 0.10 [0.05]	0.75 [19.1]	1.00 [25.4]	0.50 [12.7]	0.25 [6.4]



Upper die includes a 5/16-18M to #10-32F thread adapter and #10-32 M/M stud with jam nuts.

Lower die includes mounting hardware for the following test stands: ESM303, ESM1500/750 (w/AC1055 plate), ES30, TSC1000, TSF, ES10/ES20 (w/AC1060 plate). Recommended for use with a motorized test stand.

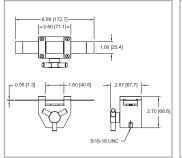
#### Loop tack fixture

Designed for tack force testing of pressure-sensitive adhesives, in conformance with ASTM D6195 and related standards. A looped sample is loaded onto the test strip, and the closed end of the loop is secured by an upper grip (not included - suggested model: G1008, pictured below). The test strip may be indexed in three positions, allowing for three tests to be performed between cleaning cycles.

Model No.	Capacity lbF [N]	Weight* lb [kg]	Test strip material
G1098	100 [500]	1.10 [0.5]	T304 SS, per ASTM A666

<sup>\*</sup> Including one test strip

Includes a 5/16-18 M/M stud with jam nuts.











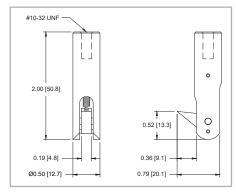
32-1060 REV 1119 Page 7 of 20

#### Flip Cap Pull Grip

Designed to engage the tab on a flip cap for pull-off force measurements. A spring-loaded hook retracts as it is lowered into the starting position, then snaps into place below the tab.

Model	Capacity	Weight
No.	lbF [N]	lb [kg]
G1104	20 lbF [100 N]	0.10 lb [0.04 kg]

Includes a #10-32 M/M stud with jam nuts



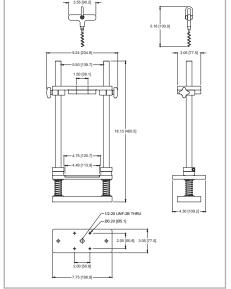


#### **Cork Pull Fixture**

Designed to extract a cork stopper out of a bottle for pull force measurements, in conformance with ISO 9727.

Model	Capacity	Weight
No.	lbF [N]	lb [kg]
G1105	200 lbF [1000 N]	9.5 lb [4.3 kg]

Includes a G1035 large hook, G1018-2 swivel adapter, and test stand mounting hardware. Recommended for use with a motorized test stand.







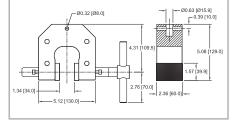
32-1060 REV 1119 Page 8 of 20

#### **Vise / Parallel Jaw**

#### Parallel jaw / vise-action grip, large

For general tensile and pull testing applications. Includes an adjustable stop to ensure consistent sample placement. Integrated eye end.

Model	Capacity	Weight	Housing	Jaw
No.	lbF [kN]	lb [kg]	Material	Material
G1100	2,000 [9 k]	5.9 lb [2.7]	Aluminum	Hardened steel, 58 RC





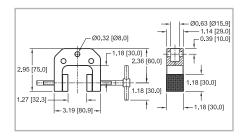
3.94 in [100.0 mm] extended length jaws are available. See website for details.

#### Parallel jaw / vise-action grip, medium

For general tensile and pull testing applications. Integrated eye end.

Model	Capacity	Weight	Housing	Jaw
No.	lbF [N]	lb [kg]	Material	Material
G1101	200 [1,000]	1.0 lb [0.5]	Aluminum	Hardened steel, 58 RC

Extended length jaws are available: 1.97 in [50.0 mm], 3.15 in [80.0 mm], 3.94 in [100.0 mm]. See website for details.



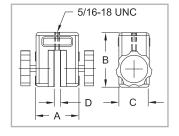


#### Parallel jaw / vise-action grip

For general tensile and pull testing applications.

Model No.	Capacity lbF [N]	Weight lb [kg]	A	В	С	D
G1013	200	0.65	1.75	2.25	1.25	0 - 0.25
	[1,000]	[0.29]	[44.5]	[57.2]	[31.8]	[0 - 6.3]

Includes a 5/16-18M to #10-32F adapter and #10-32 M/M stud with jam nuts





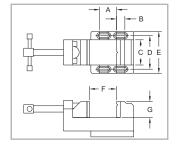
#### Vise grip, standard

General purpose vise, for a wide range of tension and compression testing applications.

Model	Capacity	Weight
No.	lbF [N]	lb [kg]
G1074	500 [2,500]	2.0 [0.9]

Α	В	С	D	E	F	G
1.00	0.50	1.50	2.00	2.50	0 - 1.50	1.00
[25.4]	[12.7]	[38.1]	[50.8]	[63.5]	[0 - 38.1]	[25.4]

Includes mounting hardware and adapters to mount to the following test stands: ESM303, ESM1500/750 (w/AC1055 plate), ES30, TSC1000, TSF, ES10/ES20 (w/AC1060 plate)







**Mark-10 Corporation** ■ www.mark-10.com ■ info@mark-10.com Toll-free: 888-MARK-TEN ■ Tel: 631-842-9200 ■ Fax: 631-842-9201



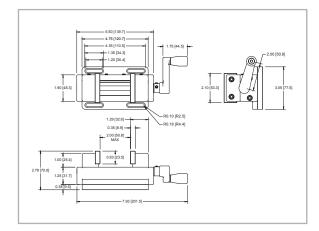
32-1060 REV 1119 Page 9 of 20

#### Vise grip, self-centering

General purpose vise, for a wide range of tension and compression testing applications. Self-centering, replaceable jaws can be field-modified to improve sample gripping characteristics.

Model No.	Capacity lbF [N]	Weight lb [kg]
G1106	500 [2,500]	3.00 [1.36]

Includes mounting hardware and adapters to mount to the following test stands: ESM303, ESM1500/750 (w/AC1055 plate), ES30, TSC1000, TSF, ES10/ES20 (w/AC1060 plate).





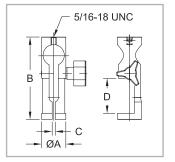
#### Wire / Rope / Yarn / Tubing

# Wire terminal grips

For securing wire terminals, cables, connectors, and other samples for pull testing.

Model No.	Capacity lbF [N]	Weight lb [kg]	ØA	В	С	D
G1001					0 - 0.125 [0 - 3.1]	
G1001-1	200 [1,000]	0.29 [0.13]	1.00 [25.4]	3.40 [86.4]	0.125 - 0.25 [3.1 - 6.3]	1.45 [36.8]
G1001-2					0.25 - 0.375 [6.3 - 9.5]	

Includes a 5/16-18M to #10-32F adapter and #10-32 M/M stud with jam nuts



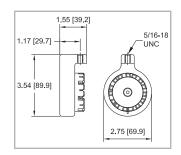


#### Wire terminal grip, turret style

For securing wire terminals, cables, connectors, and other samples for pull testing. Indexing wheel contains grooves of varying widths to accommodate a wide range of sample shapes and sizes.

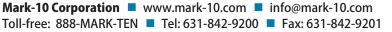
Model No.	Capacity lbF [N]	Groove Widths	Weight lb [kg]
G1076	200 [1,000]	0.03 [0.7], 0.04 [1.0], 0.06 [1.5], 0.08 [2.0], 0.09 [2.3], 0.11 [2.8], 0.12 [3.0], 0.14 [3.5], 0.15 [3.8], 0.17 [4.3], 0.18 [4.5], 0.20 [5.1], 0.21 [5.3], 0.23 [5.8], 0.25 [6.3]	1.00 [0.45]

Includes a 5/16-18M to #10-32F adapter and #10-32 M/M stud with jam nuts









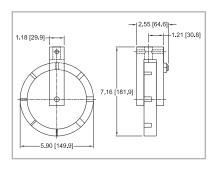


32-1060 REV 1119 Page 10 of 20

# High capacity wire terminal grip

For securing wire terminals, cables, connectors, and other samples for pull testing. Indexing wheel contains grooves of varying widths to accommodate a wide range of sample shapes and sizes. Integrated eye end.

Model	Capacity	Groove Widths	Weight
No.	lbF [kN]		lb [kg]
G1093	2,000 [9]	0.08 [2.0], 0.12 [3.0], 0.16 [4.0], 0.20 [5.0], 0.24 [6.0], 0.31 [8.0], 0.39 [10.0], 0.46 [11.8]	6.4 [2.9]





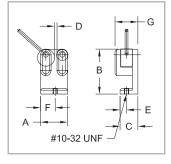
#### **Dual roller grips**

For securing the ends of wire, cable, and tubing samples for pull testing. Engaging and disengaging samples is quick and easy via an efficient cam design and convenient side slot for sample insertion. Serrated steel rollers produce effective gripping characteristics.

Model No.	Capacity lbF [N]	Weight lb [kg]
G1002	200 14 0003	0.19 [0.09]
G1002-1	200 [1,000]	0.24 [0.11]

Model No.	Α	В	C	D	Е	F	G	
G1002	1.18 [30.0]	2.00	0.75	0 - 0.25 [0 - 6.3]	0.25	0.64	1.0	
G1002-1	1.30 [33.0]	[50.8]	[19.1]	0.10 - 0.34 [2.5 - 8.6]	[6.4]	[16.5]	[25.4]	





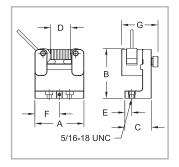


## Adjustable dual roller grip

For securing tubing, cables, and odd shaped samples for pull testing applications. Engaging and disengaging samples is quick and easy, with a side slot for sample insertion and serrated steel rollers. Rollers can be repositioned as required for the application.

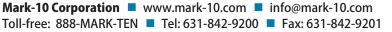
Model No.	Capacity lbF [N]		Weight lb [kg]				
G1085	200 [	1,000]	0.51 [0.23]				
Model No.	Α	В	C	D	Е	F	G
G1085	2.40	2.45	1.30 [33.0]	0 - 1.00 [0 - 25.4]	0.34	1.20 [30.5]	1.78

Includes a 5/16-18 M/M stud with jam nuts











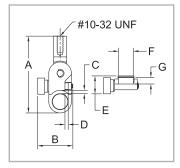
32-1060 REV 1119 Page 11 of 20

#### Miniature filament grip

For securing small diameter wires and filaments. The sample wraps around the bollard and the loose end is secured by the adjustable jaw. Integrated swivel ensures sample alignment under load.

Model No.	Cap. lbF [N]	Weight lb [kg]	А	В	С	D	Е	F	G
G1078	50	0.06	2.38	1.09	0.10	0.10	0.55	Ø0.45	0.20
	[250]	[0.03]	[60.4]	[27.7]	[2.5]	[2.5]	[14.1]	[11.4]	[5.1]

Includes #10-32 M/M stud with jam nuts

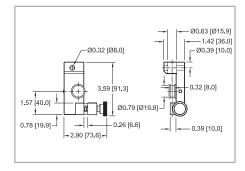




#### Wire / rope grip, medium

For securing wire and rope. The sample wraps around the bollard and the loose end is secured by the adjustable rubber-faced jaw. Integrated eye end.

Model No.	Capacity lbF [N]	Weight lb [kg]
G1103	200 [1,000]	0.6 [0.6]

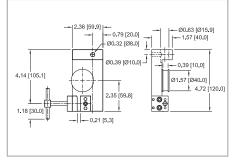




## Wire / rope grip, large

For securing wire and rope. The sample wraps around the bollard and the loose end is secured by an adjustable jaw. Integrated eye end.

Model No.	Capacity lbF [N]	Weight lb [kg]
G1102	1,000 [5,000]	1.8 [0.8]

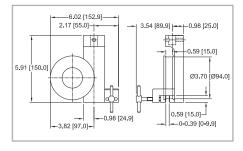




#### Wire / rope grip, high capacity

For high capacity wire and rope pull testing applications. Secures the free end of the sample via a bollard and vise. Integrated eye end.

Model No.	Capacity lbF [kN]	Weight lb [kg]
G1092	2,000 [9]	6.0 [2.7]









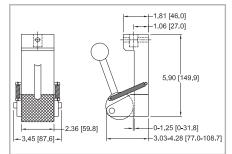


32-1060 REV 1119 Page 12 of 20

## High capacity eccentric roller grip

Features a serrated cam for effectively securing wires, plastics, textiles, and other materials in pull testing applications. Integrated eye end.

Model No.	Capacity lbF [kN]	Weight lb [kg]
G1094	2,000 [9]	7.4 [3.4]





## **Compression / Bend / Push**

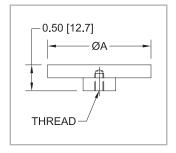
#### **Compression plates**

For compressing springs, foams, cartons, aerosol cans, and many other products.

Model No.	Cap. lbF [N]	Weight lb [kg]	ØA	Thread	Material
G1009	200 [1,000]	0.08 [0.04]	2.0 [51.0]	#10-32 UNF	Aluminum
G1009-1	500 [2,500]	0.27 [0.12]	3.0 [76.2]	5/16-18 UNC	Aluminum

G1009 includes a #10-32 M/M stud with jam nuts

G1009-1 includes a 5/16-18M/M stud with jam nuts

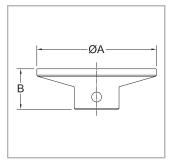




# High capacity compression plates

For compression spring testing, top load testing, and other applications. Inegrated eye end.

Model No.	Capacity lbF [kN]	Weight lb [kg]	ØA	В	Material
G1087	2,000 [9]	1.50 [55.9]	3.78 [96.0]	1.28 [32.5]	303 SS
G1087-1	2,000 [9]	0.63 [0.29]	2.20 [55.9]	1.18 [30.0]	303 33

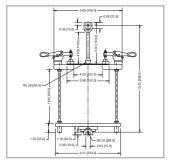




#### **Puncture fixture**

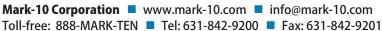
For determining puncture resistance of plastic films and other thin materials. Includes fixture and probe. Integrated eye end.

Model No.	Capacity lbF [kN]	Weight lb [kg]
G1110	1,000 [5]	Fixture: 19.0 [8.6] Probe: 0.4 [0.2]











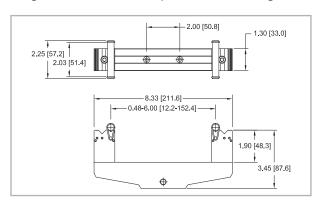
32-1060 REV 1119 Page 13 of 20

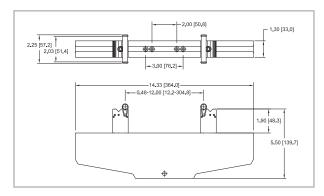
#### **Bend fixtures**

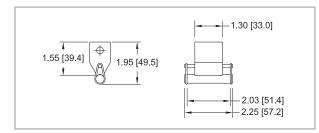
Family of fixtures for 3-point and 4-point bend testing of plastics, metals, ceramics, tubing, and many other materials. Two base sizes are available, along with an upper anvil, and optional roller diameters. Use a base-anvil combination for 3-point bend testing or two bases for 4-point bend testing.

















Model No.	Capacity lbF [kN]	Weight lb [kg]	Housing material	Block material	Roller material	Includes
G1095	500 [2.5]	3.0 [1.3]	2024 AI	303 SS	416 SS, hardened	Two 10 mm dia. rollers and o-rings
G1096	2,000 [10]	7.1 [3.2]	2024 AI	303 SS	416 SS, hardened	Two 10 mm dia. rollers and o-rings
G1097	2,000 [10]	0.5 [0.2]	303 SS	-	416 SS, hardened	10 mm. dia. roller and o-rings

Includes mounting hardware to mount to the following test stands: ESM303, ESM1500/750 (w/AC1055 plate), ES30, TSC1000, TSF, ES10/ES20 (w/AC1060 plate). May also be mounted via integrated eye end.

#### Optional Items

Model No.	Description
AC1067	Rollers for bend fixtures, 1 mm dia., set of 4
AC1067-1	Rollers for bend fixtures, 2 mm dia., set of 4
AC1067-2	Rollers for bend fixtures, 5 mm dia., set of 4









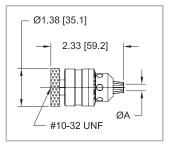
32-1060 REV 1119 Page 14 of 20

# Jacobs chuck pin vises

For securing pins, round samples, and fixtures.

Model No.	Capacity lbF [N]	Weight lb [kg]	ØA
G1010	30 lbF [150 N]	0.35 [0.16]	0.062 - 0.375 [1.6 - 9.5]
G1010-1		0.25 [0.11]	0.028 - 0.25 [0.7 - 6.3]
G1010-2		0.66 [0.30]	0.078 - 0.5 [2.0 - 12.7]

Includes a #10-32 M/M stud with jam nuts



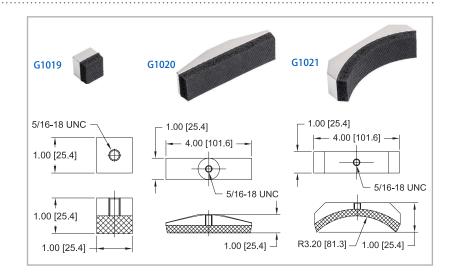


#### **Padded attachments**

For applications in physical therapy and ergonomics, including muscle strength testing, job task requirements, and more.

Model No.	Capacity lbF [N]	Weight lb [kg]
G1019	500 [2,500]	0.03 [0.01]
G1020	500 [2,500]	0.13 [0.06]
G1021	500 [2,500]	0.25 [0.11]

Includes a 5/16-18M to #10-32F adapter and #10-32 M/M stud with jam nuts

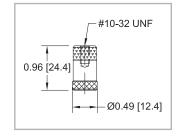


## Rubber tip

Simulates a finger for testing pushbuttons, membrane switches, touch-screen panels, keyboards, etc.

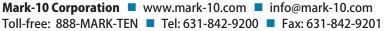
Model No.	Capacity lbF [N]	Weight lb [kg]
G1011	50 [250]	0.01 [0.004]

Includes a #10-32 M/M stud with jam nuts











32-1060 REV 1119 Page 15 of 20

## Syringe compression fixture

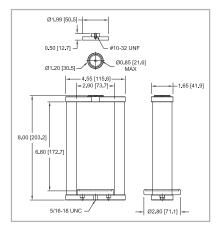
For testing compression force of a syringe plunger, as per ISO 7886-1 and other relevant standards.

#### Consists of:

- 1. Frame
- 2. Replaceable blank inserts (4)
- 3. Cup tray
- 4. G1009 compression plate

Model No.	Capacity lbF [N]	Weight lb [kg]
G1089	100 [500]	1.89 [0.86]

Includes 5/16-18 M/M stud with jam nuts





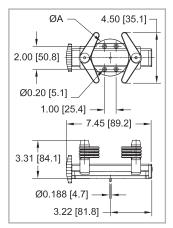
# **Torque / Force**

#### Universal bottle grip

For gripping bottles and containers in closure torque testing applications. Eight rubber edged gripping arms secure a wide range of sample shapes and sizes and may be individually positioned at angles up to 180°. Mounts directly to Series TST torque test stands, most force test stands, and G1045 90° peel fixture for applications such as top load testing and 90° peel testing.

Model No.	Capacity lbFin [Nm]	Weight lb [kg]	ØA
G1023	100 [11.3]	1.50 [0.7]	4.80 [122.0] MAX

Model No.	Description
G1068	Adapter, G1023 to force test stand / G1045 fixture





G1023 includes mounting hardware for Series TST test stands or G1068 adapter.

G1068 includes mounting hardware for the G1023 fixture and the following test stands: ESM303, ESM1500/750 (w/AC1055 plate), ES30, TSC1000, TSF, ES10/ES20 (w/AC1060 plate)



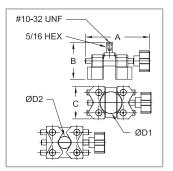
32-1060 REV 1119 Page 16 of 20

#### Universal V-jaw grip

For gripping round objects. Serrated, reversible aluminum jaws effectively grip a wide range of sample shapes and sizes. Mounts directly to Jacobs chucks, force gauges, and test stands.

Model No.	Torque Capacity	Force Capacity	Weight
	lbFin [Nm]	lbF [N]	lb [kg]
G1053	100	100	0.39
	[11.3]	[500]	[0.18]

Α	В	С	ØD1*	ØD2*
3.1	1.77	1.6	1.10 - 1.55	0.65 - 1.10
[78.7	[45.0]	[40.6]	[27.9 - 39.4]	[16.5 - 27.9]





\* Reverse the jaws to switch from ØD1 to ØD2 Includes a #10-32 M/M stud with jam nuts

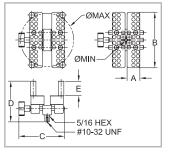
#### Universal cap grip

For securing caps, lids, and other similar items for torque and pull testing. Accommodates a wide range of sample sizes, and can be used manually with a torque gauge or mounted to a test stand.

Model No.	Capacity	Weight lb [kg]
G1058	100 lbFin [11.3 Nm] or 50 lbF [250 N]	0.65 [0.29]

Α	В	С	D	Е	ØMIN - ØMAX
0.9	3.8	3.2	2.8	1.0	0.20 - 3.50
[22.9]	[96.5]	[81.3]	[71.1]	[25.4]	[5.1 - 89.0]

Includes  $\#10\text{--}32\ \text{M/M}$  stud with jam nuts



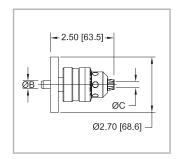


## Jacobs chuck grips

For securing round samples, fixtures, or bits in torque applications.

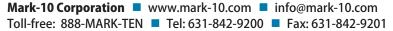
Model No.	Capacity lbF [N]	Weight lb [kg]	ØA	ØВ	ØС
G1022-1		0.50 [0.23]	N/A	0.188 [4.7]	0.028 - 0.250 [0.7 - 6.3]
G1022-2	100 lbFin [11.3 Nm]				0.062 - 0.375 [1.6 - 9.5]
G1022-3					0.078 - 0.500 [2 - 12.7]

Includes mounting hardware for Series TST torque test stands











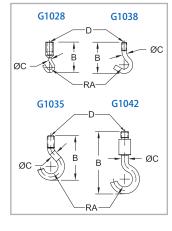
32-1060 REV 1119 Page 17 of 20

# **Basic Attachments & Adapters**

#### Hooks

For general pull testing applications.

Model No.	Capacity lbF [N]	Weight	RA	В	ØС	D
G1028	20 [100]	0.010 [0.005]	0.05 [1.3]	1.00 [25.4]	0.10 [2.5]	#10-32F
G1038	200 [1,000]	0.020 [0.009]	0.20 [5.1]	1.50 [38.1]	0.19 [4.8]	#10-32M
G1035	500 [2,500]	0.050 [0.023]	0.30 [7.6]	1.90 [48.3]	0.28 [7.1]	5/16-18M
G1042	1,000 [4500]	0.320 [0.145]	0.5 [12.7]	4.10 [104.1]	0.45 [11.4]	1/2-20M

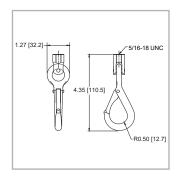




# **Snap hook**

For general pull testing applications. Features a snap clasp, for added safety in pull testing applications. Swiveling action ensures proper alignment.

Model	Capacity	Weight
No.	lbF [N]	lb [kg]
G1107	500 [2,500]	0.3 [0.14]

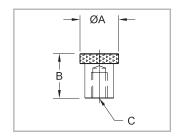




#### Flat heads

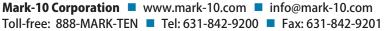
For compression testing of buttons, small springs, membrane switches, etc.

Model No.	Capacity lbF [N]	Weight lb [kg]	ØA	В	С
G1029	200 [1,000]	0.01 [0.005]	0.5 [12.7]	0.5 [12.7]	#10-32F
G1036	500 [2,500]	0.06 [0.027]	0.75 [19.1]	0.87 [22.1]	5/16-18F









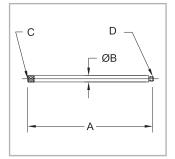


32-1060 REV 1119 Page 18 of 20

#### **Extension rods**

For use between force gauge, grips, andattachments. Suitable for tension and compression applications.

Model No.	Capacity lbF [N]	Weight lb [kg]	A	ØB	С	D
G1024		0.05 [0.023]	5.0 [127.0]		#10-32F	#10-32M
G1024-1	200 [1,000]	0.02 [0.009]	2.0 [50.8]	0.25 [6.4]		
G1024-2	[.,]	0.01 [0.005]	1.0 [25.4]	[0.1]		
G1031		0.25 [0.113]	5.0 [127.0]			5/16-18M
G1031-1	500 [2,500]	0.10 [0.045]	2.0 [50.8]	0.50 [12.7]	5/16-18F	
G1031-2	[ ,,,,,,,	0.25 [0.113]	1.0 [25.4]	]		

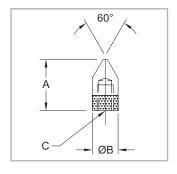




## **Chisel points**

For compression testing applications.

Model No.	Capacity lbF [N]	Weight lb [kg]	А	ØB	С
G1025	200 [1,000]	0.003 [0.001]	0.50 [12.7]	0.25 [6.4]	#10-32F
G1032	500 [2,500]	0.040 [0.018]	1.00 [25.4]	0.50 [12.7]	5/16-18F

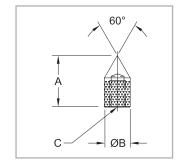




# **Cone points**

For various compression and puncture testing applications.

Model No.	Capacity lbF [N]	Weight lb [kg]	A	ØB	С
G1026	200 [1,000]	0.003 [0.001]	0.50 [12.7]	0.25 [6.4]	#10-32F
G1033	500 [2,500]	0.030 [0.014]	1.00 [25.4]	0.50 [12.7]	5/16-18F





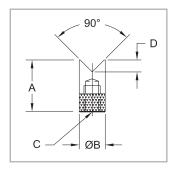


32-1060 REV 1119 Page 19 of 20

#### **V**-grooves

For compression testing of round or odd-shaped samples.

Model No.	Capacity lbF [N]	Weight lb [kg]	А	ØB	С	D
G1027	200 [1,000]	0.004 [0.002]	0.50 [12.7]	0.25 [6.4]	#10-32F	0.08 [2.0]
G1034	500 [2,500]	0.040 [0.018]	1.00 [25.4]	0.50 [12.7]	5/16-18F	0.25 [6.4]

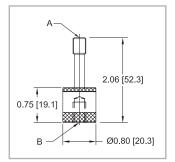




# **Swivel adapters**

For use between grips and force gauges to provide a swiveling action for proper sample alignment.

Model No.	Capacity lbF [N]	Weight lb [kg]	А	В
G1018-1	200 [1,000]	0.12 [0.05]	#10-32M	#10-32F
G1018-2	500 [2,500]	0.27 [0.12]	5/16-18M	5/16-18F





32-1060 REV 1119 Page 20 of 20

# Thread adapters & couplings

For use between gauges, load cells, test stands grips, and attachments. Suitable for tension and compression applications.

Model No.	Capacity lbF [N]	Length	Thread A	Thread B
G1050	100 [500]	0.75 [19.1]	#4-40M	#10-32F
G1051		0.55 [14.0]	#4-40M	#10-32M
G1039	200 [1,000]	0.75 [19.1]	#10-32F	#10-32F
G1030		0.50 [12.7]	5/16-18M	#10-32F
G1057		1.00 [25.4]	#10-32F	M6F
G1060		0.50 [12.7]	#10-32M	#10-32M
G1047		0.75 [19.1]	#10-32M	M4F
G1048		0.75 [19.1]	M4M	#10-32F
G1054		0.75 [19.1]	M6M	#10-32F
G1063		1.30 [33.0]	#10-32M	5/16-18F
G1040	500 [2,500]	0.92 [23.4]	5/16-18M	5/16-18M
G1037		1.00 [25.4]	5/16-18F	5/16-18F
G1049		1.25 [31.8]	M6M	5/16-18F
G1059		1.13 [28.7]	5/16-18F	1/2-20F
G1041		1.06 [26.9]	1/2-20M	5/16-18M
G1066		0.75 [19.1]	5/16-18F	1/2-20M
G1067		0.75 [19.1]	1/2-20M	10-32F
G1069		1.25 [31.8]	5/16-18F	1/4-28M
G1091		1.30 [33.0]	1/2-20F	1/2-20F
G1044	1,000 [5,000]	Adapter plate, 1/2-20F. Compatible with the following test stands: ESM303, ESM1500 (w/AC1055 plate), TSF, TSB100, TSC1000, and ES10/ES20 (w/AC1060 plate). Mounting hardware included. Pictured at right.		







