ROUND KNOBS

Push-On Knobs

x = outer diameter y= height



x=.93 y=.45



x=.93 y=.68



x=.94 y=.72



188

x=.95 y=.64



106 x=.95 y=.67

257 x=.96 y=.56



520 x= 1.00 y= .375



248 x = 1.01y= .68



289 x = 1.04y= .54



66 x=1.05 y= .33



107 x=1.05 y= .52



108 x = 1.06 y= .52



517 x= 1.06 y= .78



331 x=1.10 y= .52



13 x = 1.11y= .54



82 x = 1.14y= .36



14 x = 1.14y= .45



415 x=1.15 y= .35



510 x= 1.19 y= .61



x=1.20 y= .30



y= .54



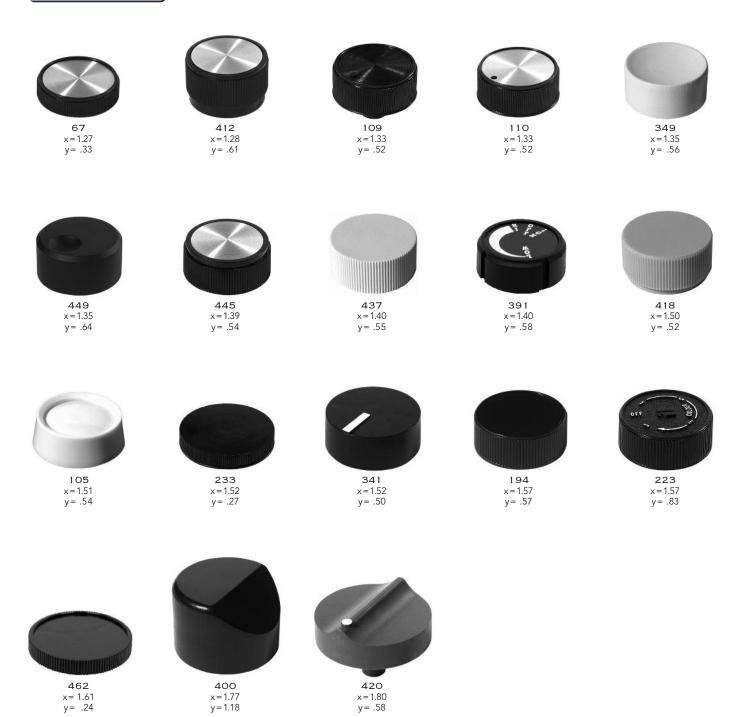
210 x=1.23 y= .64



ROUND KNOBS

Push-On Knobs

x= outer diameter y= height



EH®



x = outer diameter y= height



x= .60 y=.47



x= .62 y=1.13



268

x=.77 y=.64



246 x=.78 y=.65



285 x=.88 y=.59

321

x=.88 y=.77



231 x=.90 y=.67



6 x=.91 y=.57



y= .64



281 x= 1.12 y= .59



363 x = 1.13y= .65



444 x=1.14 y= .52



359 x=1.14 y= .58



x = 1.14y= .67



361 x = 1.14y= .73



427 x = 1.20y= .82



208 x = 1.46y= .89

y= .87



163 x = 1.55y = .47



360 x= 1.63 y= .50



360 x = 1.66y= .53



x = 1.66

y= .81





519 x= 2.33 y=1.00



483 x= 2.66 y=1.12



POINTER KNOBS

Push-On Knobs

x = outer diameter y= height



228 x=.35 y=.51



259 x=.67 y=.52



388 x=.81 y=.48



315 x=1.00 y= .54



18 x=1.13 y= .70



377 x=.81 y=.58



193 x=1.00 y= .62





138 y=.68

27

x=.91

y=.58

132

x=1.01 y= .62

173

x=1.27

y= .52

319

x=.41

y=.39



688 x=.44 y=.78



1 x=.79 y=.40



357 x=.64 y=.47



387 x=.81 y=.46

162 x=.92 y=.52



126 x= .98 y= .76

156 x=1.12 y= .54

2088

x= 1.06 y= .75

433 x=1.27 y= .62



375 x=1.30 y= .62



480 x = 1.50y= .85



BAR KNOBS

Push-On Knobs

x= outer diameter y= height



x= .50 y=.68



455 x= .70 y=.57



98 x= .87 y=.63



324 x= 1.12 y= .98



196 x=1.40 y= .64



425 x=1.63 y= .86



x=.52 y=.65



265 x= .75 y=.75



261 x=.83 y=.57



x=1.13 y= .52

286

x = 1.40

y= .87

423

x = 1.64

y= .89





432 x=.52 y=.72



394 x=.77 y=.67



153 x=.83 y=.57



378 x=.64 y=.39



265 x=.77 y=.77



419 x=1.08 y=.56



234 x=.69 y=.66



161 x=.78 y=.33



129 x= 1.12 y= .75



118 x=1.35 y= .56

x=1.14 y= .88

129

506 x= 1.50 y= .94

428

x = 1.67

y= .80



303

x = 1.33

y= .43

379 x=1.61 y= .83

351

x=1.76

y= .98



316 x=1.63 y= .58



430 x=1.98 y= .75



ELECTRONIC HARDWARE CORPORATION 320 Broad Hollow Road, Farmingdale, NY 11735 PHONE: 631.752.1950 FAX: 631.752.1971 WWW.ehcknobs.com EMAIL: sales@ehcknobs.com 1-800-752-1680

FLUTED KNOBS x = outer diameter Push-On Knobs y= height 405 385 436 404 374 x=.56 x=.63 x=.86 x=1.20 x=1.26 y=.34 y=.58 y= .70 y= .64 y=.31

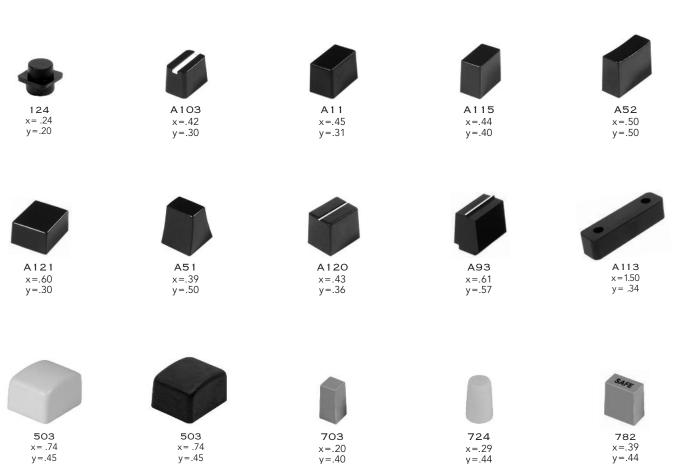
406 x = 1.44y= .77



x= 1.62 y= .44

BUTTONS & SLIDERS

Push-On Knobs



x=.20

y=.40

x= .74 y=.45

y=.45

y=.44





AK574 x=.610 y=.490



REC2081S x=.625 y=.313



x= .700 y=.375



REC2082S x=.625 y=.500



AK576-4 x= .986 y=.813



REC2084S x=.750 y=.375



AK577-8 x= .610 y=.490



7117 x=.880 y=.870



We make the parts you need

NOT ONLY DO WE MANUFACTURER THE WORLD'S LARGEST SELECTION OF KNOBS ...



WE MAKE AN ENDLESS ASSORTMENT OF QUALITY INDUSTRIAL COMPONENTS.

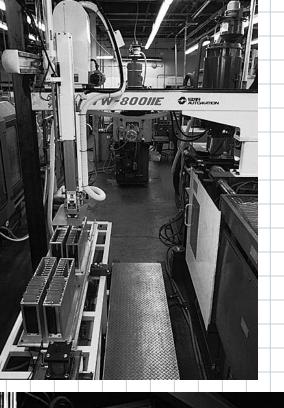
Adjustable Ratchet Handles • Adjustable Tension Levers • Handwheels • Crank Handles Aluminum Bridge & Ledge Handles • Hinges • Dimple & Metal 1 and 2 Prong Knobs Index Pulls • Cam Style Plungers • Leveling Feet • Custom Molding and Tooling

> We manufacture both English and metric sizes. We also make parts to order in custom sizes and offer a variety of materials and finishing options.

Send us an rfg www.ehcoem.com



Through the use of robotics and specialized automation systems, EHC is able to better implement continuous improvement programs that will reduce costs, and ensure maximum output and quality.



PUSH-ON KNOB SERIES

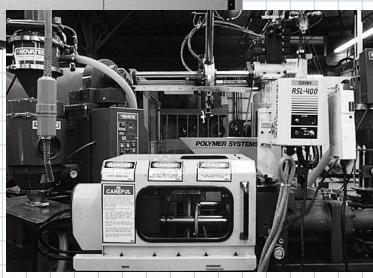
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Experienced personnel working with state-of-the-art equipment, enable EHC to maintain a high standard of quality in a fast-paced competitive marketplace.

> Automatic small parts molding is efficiently accomplished with the use of robotic pickers and material handling equipment.

12



12

MS PUSH-ON KNOBS

Push-On Knobs



1 N				
Part Nur	nber			
Plain Top	White Dot	Diam.	Height	
0N	0C	.500	.510	
1N	1C	.700	.610	
2N	2C	.900	.790	
3N	3C	1.250	.700	
4N	4C	1.750	.850	
5N	5C	2.250	.875	



Diam.

.500

.700

.900

1.250

1.750

2.250 1.095

.655

.782

1.010

1.070

.850

White Dot

0E

1E

2E

3E

4E

5E

Part Number Plain W Top D

0D

1D

2D

3D

4D

5D



		1 F			
Part Nur	nber				
With Arrow	Plain Dial		Diam.	Height	
0F	0G		.500	.655	
1F	1G		.700	.782	
2F	2G		.900	1.010	
3F	3G		1.250	.850	
4F	4G		1.750	1.070	
5F	5G		2.250	1.095	



Part Number		
	Diam.	Height
OP	.500	.510
1P	.700	.610
2P	.900	.790



1 K Part Number

	Diam.	Height
0K	.500	.655
1K	.700	.782
2K	.900	1.010

DESIGNER SERIES PUSH-ON KNOBS

Push-On Knobs



	DCIN	1			
Part Num	Part Number				
Plain Cap	w/Indicator Dot	Diam.	Height		
PCON	DC0N	.500	.505		
PC1N	DC1N	.700	.605		
PC2N	DC2N	.900	.760		
PC3N	DC3N	1.250	.630		



Part Number

Plain Cap	w/Indicator Dot	Diam.	Height
PC0D	DC0D	.500	.680
PC1D	DC1D	.700	.792
PC2D	DC2D	.900	.995
PC3D	DC3D	1.250	.805



Part Number w/Indicator Dot Plain Cap Height **PC0F** DC0F .500 .680 PC1F DC1F .700 .792 PC2F DC2F .900 .995 PC3F DC3F 1.250 .805



Fart Number		
	Diam.	Height
PCOP	.500	.505
PC1P	.700	.605
PC2P	.900	.760



PC1K Part Number

	Diam.	Height
РСОК	.500	.680
PC1K	.700	.792
PC2K	.900	.995



RS PUSH-ON KNOBS

Push-On Knobs



	1 N		
Part Number			
Plain Spun Inlay	w/Indicator Line	Diam.	Height
EH71-0N	-0C	.500	.510
EH71-1N	-1C	.700	.610
EH71-2N	-2C	.900	.790
EH71-3N	-3C	1.250	.700
EH71-4N	-4C	1.750	.850





	1 D		
Part Number			
Plain Spun Inlay	w/Indicator Line	Diam.	Height
EH71-0D	-0E	.500	.660
EH71-1D	-1E	.700	.780
EH71-2D	-2E	.900	1.010
EH71-3D	-3E	1.250	.850
EH71-4D	-4E	1.750	1.070



	11		
Part Number			
Dial w/Arrow	Plain Spun Inlay	Diam.	Height
EH71-0F	-0G	.500	.660
EH71-1F	-1G	.700	.780
EH71-2F	-2G	.900	1.010
EH71-3F	-3G	1.250	.850



Part Number

	Diam.	Height
EH71-0P	.500	.510
EH71-1P	.700	.610
EH71-2P	.900	.790



Part Number

	Diam.	Height
EH71-0K	.500	.660
EH71-1K	.700	.780
EH71-2K	.900	1.010

1 K



Part Number		
	Diam.	Height
EH71-0SB	.500	.510
EH71-1SB	.700	.610
EH71-2SB	.900	.640



1 D S B Part Number

	Diam.	Height
EH71-0DSB	.500	.660
EH71-1DSB	.700	.780
EH71-2DSB	.900	1.010



Part Number

	Diam.	Height
EH71-0LP	.500	.510
EH71-1LP	.700	.610
EH71-2LP	.900	.640



Part Number

	Diam.	Height
EH71-0NP	.500	.510
EH71-1NP	.700	.610
EH71-2NP	.900	.640
EH71-3NP	1.250	.700



CS PUSH-ON KNOBS

Push-On Knobs



5 N				
Part Number				
Without Indicator	With Indicator	Diam.	Height	
5N	5C	.500	.430	
7N	7C	.700	.532	
9N	9C	.900	.731	
12N	12C	1.250	.600	



With Indicator

5E

7E

9E

12E

Height

.585

.682

.935

.750

.500

.700

.900

1.250

Part Number

Without Indicator

5D

7D

9D

12D



		JF		
Part Num	ber			
Without Arrow	With Arrow		Diam.	Height
5G	5F		.500	.585
7G	7F		.700	.682
9G	9F		.900	.935
12G	12F		1.250	.750



Diam.	Height
.500	.430
.700	.532
.900	.731
	.500 .700



5 K Part Number

Tart Nulliber		
	Diam.	Height
5K	.500	.585
7K	.700	.682
9P	.900	.935

3000 SERIES PUSH-ON KNOBS





Part Number			
Without Line	With Line	Diam.	Height
3008	3440	.500	.625





Part Number					
Without Line	With Line	Diam.	Height		
3009	3441	850	600		





3442

Part Nun	nber		
Without Line	With Line	Diam.	Height
3010	3442	.975	.750





TRADITIONAL SERIES PUSH-ON KNOBS

Push-On Knobs

x= outer diameter y= height



231

231 x= .53 y= .64



252 x=.70 y=.56



2**57** x=.95 y=.57



325 x=1.14 y= .64



258 x=1.14 y= .59





x=1.52 y= .66

CORONADO SERIES CLAMP KNOBS







x=1.75 y= .88



GEMINI SERIES PUSH-ON KNOBS



SPECIAL KNOBS

Push-On Knobs

x = outer diameter y= height



551 x=.38 y=.88



537 x= .40 y=.68



691 x=.38 y=.88

691 x= .38 y=.88



691 x= .38 y=.88



691 x=.38 y=.88



x= .38 y=.88

6060 x= .46 y=.76



390 x= .45 y=.98



414 x= .45 y=1.27



x=.50 y=.60



7510 x= .38 y=1.03

596 x=.71 y=.80



98 x=.88 y=.64



382 x=.89 y=.30



701 x = 1.00y= .63



702 x = 1.01y= .64



571 x = 1.06y= .69



450 x = 1.08y= .72



438 x = 1.12y = .40



422 x = 1.77y= .36





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MATERIALS

MATERIAL

SPECIFICATIONS

Resins – much of the growth of the injection molding industry is due to the continuing ability of resin suppliers to offer new and improved engineering materials. Today resins can meet specifications for mechanical, thermal, electrical and impact demands increasingly competitive in performance to metal at reduced processing costs.

EHC's participates in an ongoing evaluation process of new resins. Moldability, ease of processing and decoration are some of the analysis conducted. This process provides for a continuing effort to improve current production needs and prepare for future program demands.

- Good Mechanical Strength is of primary concern when choosing our materials. Where high mechanical
 strength is needed numerous reinforcements are used including glass fibers, mineral fillers, glass microspheres,
 all products that improve impact resistance.
- Electrical Resistance or Insulation make the use of EHC plastic products especially suited in electromechanical environments.

The plastic materials used in EHC parts have been carefully selected to meet the functional and aesthetic requirements of each product.

Thermoplastic – Materials with technical characteristics such as: ABS, nylon, TPR, polyamide, acetyl, polypropylene, polycarbonate, PPO and polyester resins. These materials are not always interchangeable.

INSPECTION

Standard

Parts are considered commercially non-acceptable if an imperfection is visible when viewed at arm's length distance under normal lighting conditions. Parts will be viewed for a period not to exceed 3-5 seconds in daylight (or fluorescent light of approximately 70 foot candles) with the unaided eye at normal viewing distance of 24 inches, in the normal viewing plane. *Special*

Jewelry-type inspection will be reflected in a higher unit-cost. Customer to provide EHC with written notice in advance of placement of order.

CHEMICAL RESISTANCE

Contact manufacturer for resistance factors prior to usage with chemicals.

Surface Finish

- 1. Gloss: Parts produced from a highly polished mold, or
- 2. Satin: Parts produced from a textured mold to remove glossiness,
- or 3. Textured: Parts produced from a pattern etched mold, or 4. Matte-finish: Parts produced from a secondary operation
- that provides a non-reflective plastic surface.

Appearance

Parts to be free of shrinkage in excess of .009" IN/IN on top surface and sides of molded knob, mold flow marks or "cold" spots, molding flash, chips or cracks, excessive gate marks and colors (for knob and skirt assemblies) to be consistent in shade and density for each order lot or release.

DECORATIVE INLAYS AND CAPS, FLAT ALUMINUM DIALS AND TAPERED ALUMINUM SKIRTS

Material: Aluminum

- Surface Finish
 - Matte (frosted: Non-reflective surface appearance produced by mechanical brushing or chemical etching with clear anodized coating)
 - Bright: Reflective surface appearance produced by mechanical or chemical means with clear anodized coating.
- Inspection: See opening paragraph.

Appearance

Parts are to be free of scratches and blemishes. Colors to be consistent in shade and density for each order lot or release.

MARKINGS

Adhesion:

Markings cannot be removed from plastic surface by an adhesive material comparable to scotch tape.

Inspection: See opening paragraph.

Appearance:

All characters, lettering, border, and backgrounds must be complete and all lettering must be clear, visible, and legible. Colors to be consistent in shade and density for each order lot or release.

SET SCREWS

Hexagon Socket/Spline Socket/Slotted

- 1. Material: high grade alloy steel or stainless steel
- 2. Finish: Corrosion resistant/coating with clear,
- yellow or black finish
- 3. Hardness: Case hardened
- 4. Finish: Clear corrosion resistant coating
- 5. Point Style: Cup point

Location (nominal) of Screw(s) (if applicable)

- 1. One Screw
 - a) 180° from indicator
 - b) Adjacent to flat of shaft hole
- 2. Two screws: 90° and 180° from indicator

Thread

Class 3A

Screw Size, Length, Socket, Point, and Self Locking Determined by manufacturer, or per customer request.

INSERTS

- 1. Material: Aluminum or half-hard brass alloy.
- 2. Finish: Commercial nickel plate on brass, and alodine on
- aluminum. Finish to be consistent and free of flaking. *Thread*
 - Thread Fit: 2B gauge

SPRING CLIPS

Material: #1050C type spring steel

Hardness: Medium temper

Finish: Blue oil finish, or zinc phosphate

CHROME-PLATED PLASTIC

(Thermoplastic only)

Processes

Electroplating, or
 Vacuum metalizing

Surface Finish

1. Bright: High gloss reflective finish, or

- 2. Satin: Semi-gloss non-reflective finish
- Adhesion

Plating cannot be removed from plastic surface by an adhesive material comparable to scotch tape.

Appearance:

Parts to be plated over entire first surface area, consistent in shade and density for each order lot or release, free of first surface peeling, free of first surface flow marks and free of foreign matter under plated surface (e.g. dust)

PACKAGING

All products are packaged to insure that quality is not jeopardized during transit. Relative to the complexity of the part, product is:

- A. Individual bags, or
- B. Layer packaged on cardboard pads, or
- C. Bulk-packaged in cartons

PRODUCT DIMENSIONS: ±.015" unless otherwise specified.

PRODUCT CONCENTRICITY: .020" TIR

SHAFTHOLE DIAMETERS

Round Shaft Hole: ±.002" Round Shaft Hole with Flat: ±.0035" Knurled Shaft Hole: Solid Shaft: ± 002" Split Shaft: ±.0035"

TORQUE SPECIFICATIONS

Torque is defined as the number of pounds required to strip molded-in inserts and stud heads from molded plastic part, flatten metal spring clip, strip serration of knurled plastic shaft hole or strip head of set screw.

Spring C	lip Shaft Hole Spring Diameter	Stripping Torque Inch Lbs.
	.125	10
	.187	17
	6 mm	25
	.250	25

Knurled Type Shaft Hole: All types 15 inch lbs.

Set Screws

rew	vs Screw Size	Threads Per In.	Head Stripping Torque Inch Lbs.
	#3	48	3-1/2
	#4	40	4-3/4
	#6	32	8-3/4
	#8	32	18
	#10	32	32

TENSION (push/pull specifications)

Tension is defined as the maximum number of pounds required to securely fit a press-fit knob onto the shaft and the minimum number of pounds required to remove the knob from the shaft. Plastic Shaft Hole

Push: 15 lbs. Maximum	Pull: 4 lbs. Minimum	
Spring Clip Shaft Hole		
Push: 20 lbs. Maximum	Pull: 4 lbs. Minimum	
Knurled Type Shaft Hole		
Push 20 lbs. Maximum	Pull: 4 lbs. Minimum	

Shaft hole fit per customer specifications can be provided for an additional charge. Sample shaft and tension requirements must be forwarded to manufacturer.

THREADED INSERTS

(Standard Series and Selected Combinations - Unified Screw Threads)

Thread Fit: 2B Gauge

Minor Diameter	Thread Type
	#6-32 UNC 2B
	#8-32 UNC 2B
	#10-32 UNF 2B
	1/4-20 UNC 2B
5	/16-18 UNC 2B
	3/8-16 UNC 2B
	1/2-13 UNC 2B
	5/8-11 UNC 2B

THREADED STUDS

(Standard Series and Selected Combinations - Unified Screw Threads)

Thread Fit: Class 2A Length: ±.020"

SALES TERMS & AGREEMENTS

TERMS:	Our terms of sale are 1/10 net 30 FOB Farmingdale, NY. Terms on tooling are 50% with order balance upon sample approval.		
RETURNS:	All returns must be approved by EHC and be assigned an EHC RMA number.		
OTY VARIANCE:	We reserve the right to over or under ship 10% on orders for non-standard parts.		
SHIPMENTS:	Usually UPS or FedEx prepaid and added, unless otherwise specified.		
DELIVERY:	Immediate and just-in-time delivery is available on most standard items.		
	SPECIFICATIONS FOR NON-STANDARD PRODUCTS MUST BE APPROVED BY EHC. SPECIFICATIONS WHICH	STORAGE OF CUSTOMER OWNED ARTWORK PREPARATION, RAW MATERIALS AND SUPPLIES,	

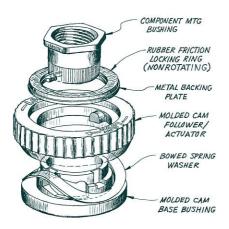
FOR CLOSER TOLERANCES, ENHANCED PHYS PROPERTIES, OR MORE STRINGENT VISUAL REQUIRE-MENTS THAN THOSE PREVIOUSLY LISTED MUST HAVE SPECIFIC APPROVAL OF EHC'S SALES AND MANUFAC-TURING ORGANIZATIONS.

NOTE: SHRINKAGE, TOOLMAKERS VARIATIONS FROM CAVITY TO CAVITY, LIFE-CYCLE OF TOOLING, MATERIALS FROM MULTIPLE VENDORS, HUMIDITY, ETC. ALL HAVE AN EFFECT ON THE NORMAL DIMENSIONS OF PLASTIC PARTS. A PREMIUM CHARGE WILL BE ADDED TO THE UNIT-COST FOR THOSE CUSTOMERS REQUIRING EXACT TOLERANCES AND APPEARANCE. CONTACT MANUFACTURER FOR ADDITIONAL CHARGES.

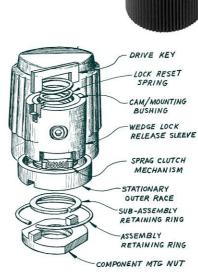
CUSTOMER SHALL NOTIFY EHC OF DISCONTIN-UANCE OF PRODUCT FOR WHICH CUSTOMER HAS PURCHASED ITEMS SO THAT ARRANGEMENTS CAN BE MADE TO RETURN OR DISCARD THEM. OUR STANDARD PRACTICE ASSUMES THAT ITEMS NOT USED BY THE CUSTOMER FOR A PERIOD OF TWO YEARS WILL BE CONSIDERED OF NO VALUE AND CUSTOMER WILL BE NOTIFIED OF OUR DECISION. FAILURE OF CUSTOMER TO RESPOND TO INQUIRY LEAVES DISBURSEMENT OF ITEMS AT THE DISCRETION OF EHC (AT NO CHARGE OR OBLIGATION)



ISO9001:2008 KEMA CERTIFIED ur mechanical devices engineered to meet the highest standards.







TO

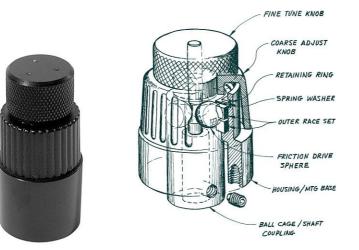
SE







We can make mechanisms for your specific needs.





REDUCTION DRIVES . SLIP CLUTCH KNOBS . KNOB LOCKING DEVICES MICROVERNIER REDUCTION DRIVES • MICROVERNIER WITH LOCKING MECHANISMS PUSH-TO-TURN KNOBS . SELF LOCKING PUSH-TO-TURN DEVICES