



"It', Your Job... General Tool, Make It Easier"

GENER

8



## PRECISION, SPECIALITY & INNOVATION

The driving force behind the partnership of two of the world's leading brands in the world of tools



Founded in 1922 in the United States of America, steeped in heritage and forged in precision and ingenuity. General's philosophy is based on manufacturing speciality products for professional tradesmen & the do-it-yourselfer.

## **♦**GROZ

Founded in 1976, based on a tradition of manufacturing excellence, innovative & specialised R&D, technological expertise & a worldwide distribution

## **GROZ - GENERAL Partnership**

Drawing on the strengths of each other and creating a higher level of synergy, both the companies have partnered whereby Groz leveraging on it's worldwide distribution network will exclusively showcase the General range across Australia, Asia, Europe/Russia, Africa and South America

Both partners promise you, our customer, the most accurate, precise and specialised product that provides best value.

This is our promise.

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#### **DIGITAL FRACTIONAL CALIPERS**

>147C

>1478C

>14712C

ESP FR

Compas numérique Calibrador digital





## Ground breaking Digital Fractional Calipers with three universal measurement systems

- High-contrast tri-mode digital display switches easily between inches, millimeters and fractions
- Rugged stainless steel design delivers accurate readings of inside, outside, step and depth measurements
- · All metal construction with no plastic parts
- Bar scale is graduated in inches and millimeters
- Resolution: 0.01 mm, 0.0005", 1/64"
- · Free-wheeling friction roller advances and retracts slide
- · Extendable depth gauge for use in slots and small holes
- · Flashing display indicates low battery
- · Auto off feature preserves battery life
- Complete with a foam padded plastic case for safe storage when not in use
- · Calibration certificate included



\_\_\_^ reading in fractions



reading in inches



Digital Fractional Caliper - 147C showing reading in mm

GENERAL ULTRAFECH

Cat Nr.	Rai	Range		ıracy
	mm	inch	mm	inch
147C	0-150	0-6	±0.02	±0.001
1478C	0-200	0-8	±0.03	±0.0012
14712C	0-300	0-12	±0.04	±0.0016





## 02 CARBON FIBRE DIGITAL FRACTIONAL CALIPER

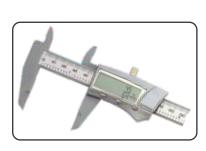
>146

ESP Compas numérique FR Calibrador digital

#### Carbon Fibre Digital Fractional Caliper with three universal measurement systems



- High-contrast, tri-mode digital display easily switches between inches, millimeters and fractions, with guaranteed accuracy to ±0.2 mm (±0.08")
- Lightweight, non-marring carbon fibre construction. Delivers accurate readings of inside, outside, step and depth measurements
- Bar scale is graduated in inches and millimeters
- Resolution: 0.01 mm, 0.0005", 1/64"
- Extendable depth gauge for use in slots and small holes
- · Auto off feature preserves battery life
- · Replacement Battery LR44







GENERAL STRATEGO

Carbon Fibre Digital Fractional Caliper - 146

showing reading in mm

reading in inch

#### **Ordering Information**

Cat Nr.	Range	
	mm	inch
146	0-150	0-6

## **03** VERNIER CALIPERS

>MG6001C

>MG8001C

>MG12001C

ESP Calibrador de Vernier FR Pied à coulisse

#### **Precision Vernier Caliper - Finest Caliper made to exacting tolerances**

- Made from hardened stainless steel in satin chrome finish
- Vernier scale etched with permanent black graduations allows precise & convenient reading
- Resolution: 0.02 mm, 0.001"
- Extendable depth gauge

Cat Nr.	Range		Accuracy	
	mm	inch	mm	inch
MG6001C	0-150	0-6	±0.02	±0.001
MG8001C	0-200	0-8	±0.03	±0.0012
MG12001C	0-300	0-12	±0.04	±0.0016



## 04DIAL CALIPERS>MGDC150C>MGDC200C

ESP Calibrador con dial FR Compas à cadran

- Manufactured from hardened stainless steel in satin chrome finish
- · Scale with deep etched graduations
- Large, clear dial gauge
- Resolution: 0.02 mm
- Covered rack prevents dirt & chips from entering the rack & gear mechanism thus ensuring smooth operation
- Convenient to use lock for quick repetitive measurement & free wheeling thumb roller
- Suitable for inside, outside, depth & step measurements
- · Dial Gauge has adjustable bezel for zero setting
- · Comes complete with calibration certificate



#### **Ordering Information**

Cat Nr.	Range	Accuracy
	mm	mm
MGDC150C	0-150	±0.02
MGDC200C	0-200	±0.03



>729

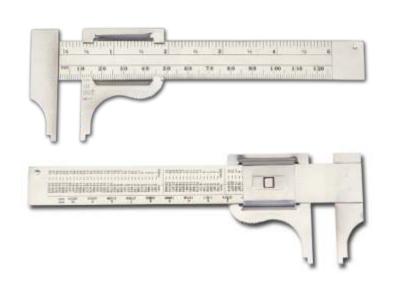
## 05 STAINLESS STEEL SLIDE CALIPERS >729me

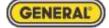
ESP Calibrador Deslizable FR Calibre à coulisse

#### A great addition to any workbench or tool box

- Rugged stainless steel construction & compact design
- Suitable for making inside & outside diameter measurements
- Permanent deep etched & filled graduations on the scale
- 4" (102 mm) capacity
- Decimal equivalent table on the back of the caliper aids in quick & accurate conversion

Cat Nr.	Graduations
729me	1 mm & 16ths
729	16ths & 32nds





06	EXTERNAL MICROMETERS	>MG1001MMC	>MG1002MMC
ESP FR	Micrómetro Micromètre	>MG1003MMC	>MG1004MMC

#### Professional's choice for assured & accurate measurements

- Steel frame prevents flexing & ensures greater accuracy in measurement
- Hardened & precision ground measuring surfaces
- Satin chrome thimble & barrel with convenient to read black graduations
- Friction stop for repetitive measurements
- Quick & easy zero adjustment with spanner wrench (included)
- Least count 0.01 mm
- Supplied with master on sizes other than 0-25 mm



#### **Ordering Information**

Cat Nr.	Range	Accuracy
	mm	mm
MG1001MMC	0-25	0.004
MG1002MMC	25-50	0.004
MG1003MMC	50-75	0.005
MG1004MMC	75-100	0.005

07	EXTERNAL DIGITAL MICROMETERS	>MG1111MMC	>MG1112MMC
ESP FR	Micrómetro Micromètre		

#### Top of the line direct readout Digital Micrometers

- Measure both in mm & inch
- Least count 0.001 mm, 0.00005"
- Carbide measuring faces
- Supplied with master on sizes other than 0-25 mm



Cat Nr.	Range		Accı	ıracy
	mm	inch	mm	inch
MG1111MMC	0-25	0-1	0.004	0.00016
MG1112MMC	25-50	1-2	0.004	0.00016



#### DIGITAL PROTRACTOR

>1702

**ESP** FR

Transportador digital Rapporteur numérique

#### No guesswork in measuring, marking, reading & transferring angles

- 150 mm (6") long stainless steel protractor arm with knurled locking nut
- Large, easy to read LCD display for absolute & relative angle measurements
- One button zero calibration ensures accurate readings
- For user convenience & comfort the display offers a "hold" function and is easily inverted, or flipped 180° for reading upside down
- Resolution: 0.05°
- Useful for professionals in the woodworking, automotive, industrial, aerospace and medical industries

#### **Ordering Information**

Cat Nr.	Accuracy	Range
1702	0.1°	0.00°-180.00°















#### 09

#### **MULTI USE RULE AND GAUGE**

>16me

**ESP** Jauge et reglè FR Regla y Medidor

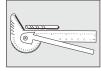
#### Unique 5 in 1 pocket sized tool

- Can be used as:
  - a. A Drill Point Gauge for checking 59° angle drill points
  - b. A Square
  - c. A Protractor for measuring and laying out angles
  - d. A Center Finder for locating centers of shafts & circles
  - e. A Circle Divider for dividing circles into sectors, polygons & polygrams (up to nine equal parts)
- Manufactured from stainless steel, this multi use tool comes complete with a 120 mm (4-3/4") rule with permanently etched graduations in 64ths and millimeters
- Tap and Drill Table shows popular tap sizes and corresponding drills sizes for American National threads

#### **Ordering Information**

Cat Nr. 16me



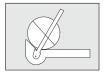


b. As a Square

c. As a Protractor



d. As a Center Finder



e. As a Circle Divider







## 10 PRECISION PENCIL COMPASS

>842

>837

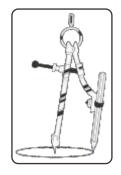
ESP Compass porte-crayon / traceur FR Compás / Trazadorcon Lápiz

- Carpenter's favorite the Precision Pencil Compass is a robust scribing and marking tool
- The fulcrum spring handle makes this tool great for making contours, circles and edge marks
- · Scribe guide for edge marking
- For use with pencil (included) or slim ball-point pen
- · Made from durable die cast metal



Cat Nr.	Capacity	
	mm	inch
842	228	9







11

**ESP** 

FR

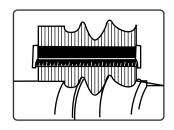
**CONTOUR GAUGE** 

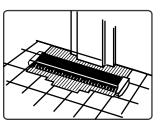
Calibrador de Contornos Gabarit de profil

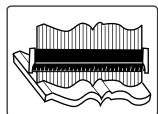
- Designed for precise surface duplication in woodworking, fine carpentry, linoleum installation or any job where contour duplication is essential
- Ultra thin 35 leaves per inch assure exact replication of copied shape
- Can be used for duplicating surfaces up to 3-1/2" deep
- · Stainless steel pins
- · Inch graduations on body
- Overall travel 5-1/4"



Cat Nr.	Length	Width
	inch	inch
837	6	3-1/2









12	FEELER GAUGE	>230
16	I LLLLN GAUGL	> 200

ESP Calibrador de Láminas FR Calibre d'épaisseur

#### On spot accuracy at value pricing

- Feeler Gauges are used for adjusting & gauging spark plugs, distributor points & valve clearances, or any other instance of measuring space between two parts
- 26 Leaf Feeler Gauge features straight leaves etched with both metric and english dimensions
- Leaves are 3" (75 mm) long and ½"(12.7 mm) wide
- Each leaf is etched with size numbers in inch & mm for quick identification
- Comes with a protective holder which helps to preserve trueness of the leaf edges



#### **Ordering Information**

Cat Nr.	No. of	Siz	es
	Leaves	mm	inch
230	26	0.37-0.635	.0015025

## 13 SCREW PITCH GAUGE >255mm

ESP Enrosque calibrador de tono FR Jauge de vis

- Finely crafted measuring device used for gauging both internal and external thread pitches on tapped hole, screws and nuts
- Set of 22 screw pitches includes popular metric sizes from 0.35 mm to 6.0 mm
- When not in use, the gauge can be rotated into the tool's housing to protect the edges
- Gauge is notched for measuring internal threads
- Knurled locknut holds gauge in open or closed position

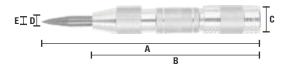


Cat Nr.	No. of Pitches	Sizes mm
255mm	22	0.35-6.0



14	AUTOMATIC CENTER PUNCHES	>77	>78
ESP FR	Pointeau automatique Centropunzón Automático	>79	>87

- Automatic Center Punches are a precise means of punching center holes for drilling in layout work
- Spring-impact operation is adjustable to accommodate both light and heavy markings. Punch depth can be set for repetitive work
- One-handed operation makes accurate marks without the need for a hammer
- Replacement points, shafts and moving parts are hardened alloy steel
- · Common choice of both machinists and woodworkers



#### Available in a choice of 4 styles

#### 77

Lightweight aluminum body automatic center punch with long wearing alloy steel parts



#### 78

Heavy-Duty Center Punch - All steel body and black oxide finish prevents rust. Includes threaded, replaceable hardened steel point



#### 79

All-Steel body Automatic Centre Punch with black oxide finish to prevent rust.



#### 8/

Pencil-sized Pocket Automatic Center Punch, with a light weight aluminum body is the ultimate choice for machinist, mechanics and inspectors on the go. The pocket clip makes this tool a convenient choice



Cat Nr.		A		В		C	ı	)		E
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
77	132	5	99	3-29/32	12	1/2	6	1/4	2.6	.104
78	143	5-5/8	109	4-9/32	16	5/8	7	17/64	2.1	.083
79	130	4-7/8	99	3-29/32	12	1/2	5	3/16	1.4	.055
87	146	5-3/4	144	5-11/16	8	5/16	3	1/8	1.5	.058



15	SCRIBERS	>80C	>83	>88CM
ESP FR	Pointe à tracer Marcador			

A basic tool for layout work - marking and engraving on metal, glass, plastics & ceramics useful for machinists, engravers, mechanics and craftspeople

#### 80C

- The Fixed Two-Point Scriber with one straight and one 90° point provides multi-faceted scribing solutions for both conventional and unconventional applications
- Use the straight point to mark bend lines for an air conditioning duct, or flip the tool around and use the 90 degree bend to remove an 0-ring from a piece of equipment.
- Point is made from hardened and ground steel and the knurled Aluminum body provides excellent grip

#### 83

- Travel-convenient design Pocket Scriber provides powerful scribing and etching solutions
- The locking screw chuck allows the point to be reversed into the body, condensing the tool length to about 3-1/2" (90 mm) and protecting the point when not in use
- The hexagonal head prevents the tool from rolling off uneven work surfaces
- Point is made from hardened and ground steel and the knurled Steel body provides excellent grip

#### **88CM**

- · Industry standard for scribing and etching
- The tungsten carbide tip makes precise marks to 0.25 mm on even the hardest metals, and therefore works easily on ceramics and glass as well
- A powerful magnet at the tool's cap quickly cleans up stray metal shavings that can damage work piece
- The knurled aluminum handle provides maximum control and comfort
- · Locking screw chuck allows the point to be reversed when not in use
- · Pocket clip is provided for safe storage in pocket or toolbox while working in the field
- Replaceable point is also available (88P)



Cat Nr.	0verall	Overall Length			
	mm	inch			
80C	215	8-13/32			
83	125	4-15/16			
88CM	138	5-7/16			
88P	88P Replacement Point for				







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video boroscope - wireless video inspection system 12 / video boroscope - video inspection system 13 / 8:1 mid range infrared thermometer 14 / thermo-hygrometer 14 / digital moisture meter 15 / digital airflow meter 15 / personal lightning detector 16 / combustible gas detector pen 16 / glass magnifiers 17 / lighted magnifier 17 / telescopic inspection mirrors 18 / lighted inspection mirror 18

#### **VIDEO BORESCOPE - WIRELESS VIDEO INSPECTION SYSTEM**

>DCS400

>DCS495

ESP FR Sistema de inspección por video Système de vérification par vidéo

Wireless Data Logging Vidio Inspection Systems

 Compact Video Borescope for Visual Inspection of inaccessible areas

Ideal for HVAC/R Maintenance & Audit, MR0
Inspection & Audit, Automotive & Fleet Maintenance



Detachable Wireless Camera

#### Includes:

- Heavy-Duty Blow Mould Case
- 3.2 ft (1m) Obedient Probe
- 2GB MicroSD Memory Card
- 3 Extension Tools: Mirror, Magnet, Pick-up Hook
- USB cable & AV out cable
- Rechargeable battery & AC adaptor/charger
- · One-to-Two charging cable



lw0	Syst	tems	are	avail	lable	9

## SEEKER 400

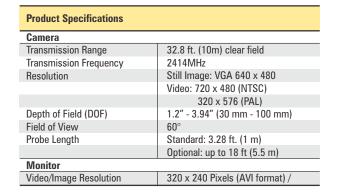
Comes with a 12 mm diameter probe suitable for HVAC/R, plumbing and general inspection

## SEEKER 495

Comes with a 9 mm diameter probe suitable for automotive, electrical, and other inspections that require a thinner probe

#### **Product Features**

- 3.5" (89 mm) TFT-LCD Wireless Color Monitor can be detached from the unit for remote viewing up to 32.8ft. (10m) away
- 1m Flexible Waterproof (Ip67) Obedient Probe retains configured shape. Option to extend length upto 5 m is available
- Adjustable LED lighting inside the tip of the probe illuminates dark spaces for clear inspection
- Datalogs and records in still photo (JPEG) and video (AVI), up to 3 hrs or view it live
- NTSC or PAL compatible
- Choices of 3 menu languages: English, French, & Spanish



Cat Nr.	Specification			
DCS400	With 12 mm dia. probe			
DCS495	With 9 mm dia. probe			
P400-1XN	1m long probe extension for DCS400, 12mm dia.			
P400-2XN	2m long probe extension for DCS400, 12mm dia.			



### 17 VIDEO BORESCOPE - VIDEO INSPECTION SYSTEM

>DCS200

>DCS300

ESP Sistema de inspección por video FR Système de vérification par vidéo

• Compact Video Borescopes for live Visual Inspection of inaccessible areas

 Ideal for Plumbing, Electrical, Construction, DIY / Home owners, HVAC/R & Automotive / Fleet shops





Product Specifications					
Display	Color LCD Screen				
Resolution	320 x 240				
Probe Length	Standard: 3.28 ft. (1m)				
	Optional: up to 32.8 ft (10m)				
Depth of Field (DOF)	.98" to 11.8"				
	(25 mm to 300 mm)				
Field of View	60°				
Light source	Two adjustable LED's				

#### **Ordering Information**

Cat Nr.	Specification
DCS300	With 3.5" (89 mm) screen
DCS200	With 2.4" (70 mm) screen
P230-2X	2m long probe extension with 12mm diameter
P230-3X	3m long probe extension with 12mm diameter

#### Two choices are available:

## SEEKER 200

2.4" (70 mm) color LCD screen for crystal clear image

## SEEKER 300

3.5" (89 mm) color LCD screen for crystal clear image

#### **Product Features**

- 12 mm diameter camera-tipped probe is flexible and strong with built-in adjustable LED lighting and is slim enough to perform automotive engine check-up
- Flexible Waterproof (Ip67) Probe retains configured shape to suit different inspection needs
- · Probe is water, oil and dust proof
- · View findings instantaneously



#### **18** THE SEEKER™ 8:1 MID RANGE INFRARED THERMOMETER

>IRT207

FR Termómetro infrarrojo tipo pistola Pistolet thermomèter infra rouge

- Ideal for most applications in HVAC/R, plumbing & heating, electrical, automotive & other industrial jobs
- Rugged & ergonomic design for general purposes
- · Ultra low power consumption in shutdown mode
- · Extended long time measuring reliability
- · Backlit LCD display
- · Switchable On/Off Laser sighting
- Choice between Fahrenheit & Celsius scales
- Auto off

Product Specifications					
Distance to Spot (DS) ratio	8:1				
Range	-4° to 604°F (-20° to 317°C)				
Emissivity	Fixed at 0.95				
Resolution	0.5°F / 0.5°C				
Accuracy	±2%				
Operating temperature	0° to 50°C, 10 to 90%RH				

#### **Ordering Information**

Cat Nr.
IRT207

Includes: 1 "CR2032" battery



## **19** THE SEEKER™ THERMO-HYGROMETER PEN

>PTH8707

 $\epsilon$ 

RoHS

ESP Hygromètre de digital FR Medidor de humedad de digital

- Ideal for contractors & homeowners to measure temperature & humidity conditions
- Choice between Fahrenheit & Celsius scales
- Min & Max feature ideal for monitoring temperature & humidity condition in data storage & computer rooms
- Check home comfort & ventilation
- Monitor green-house environment
- Rotate the cap to cover & protect sensitive sensor tip
- · Fits in your shirt pocket with back clip

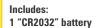
<b>Product Specifications</b>	
Humidity Range	20 to 100% RH
Temperature Range	32° to 122°F (0° to 50°C)
Temperature Accuracy	$\pm 1.8^{\circ}F (\pm 1^{\circ}C)$
Resolution	Temperature: 0.1°F/°C
	Humidity:0.1%
Humidity Accuracy	±3%

#### **Ordering Information**

Cat Nr. PTH8707









CE

## **20** THE SEEKER™ DIGITAL MOISTURE METER

>MMD4E

FR Medidor de humedad de digital Hygromètre de digital

 Ideal for contractors and homeowners to accurately measure moisture content in wood, concrete, drywall, subflooring & other construction materials

- Strong stainless steel pins
- · LCD moisture level indicator
- · Audible alarms with 8 different tone levels
- · Built-in low battery indication
- · Hold button to freeze/hold reading
- · Ergonomically designed

<b>Product Specifications</b>	
Measuring Range	Wood: 5% - 50%
	Building Material: 1.5% - 33%
Resolution	0.1%
Accuracy	±3%
Auto power off	3 minutes

#### **Ordering Information**

Cat Nr.
MMD4E





Includes:

- · Protective cover
- 1 "9V" battery

## 21 THE SEEKER™ DIGITAL AIRFLOW METER

>DAF3010B

CE

FR Medidor de flujo de aire digital Débitmètre d'air numérique

- Ideal for contractors, auto technicians & homeowners to measure & monitor the airflow efficiency in AC & ventilation systems & for outdoor use
- Measures current, average, or maximum wind speed
- Wind chill indication
- · LCD display with backlit for easy reading
- Selectable air speed units of Ft/min, m/s, km/hr, MPH, & Knots for maximum applications
- · Choice between Fahrenheit & Celsius scales
- Battery status indication

<b>Product Specifications</b>	
Operating Environment	Temperature: 32° to 113°F (0 to 45°C)
	Relative Humidity: <80%
Storage Environment	Temperature: 14° to 122°F (-10 to 50°C)
	Relative Humidity: <85%

#### **Ordering Information**

Cat Nr. DAF3010B



Includes: 1 CR2032 battery or "3V" button cell



## 22 THE SEEKER™ PERSONAL LIGHTNING DETECTOR

**>LD7** 

ESP Detector personal de rayos FR Détecteur d'éclair personnel

- Ideal for Early Storm Warnings & Storm Detections
- Can be clipped on the belt or hung from a belt loop
- Gives early warning of pending storms and lightning at various distances from 0-40 miles away
- Multiple alarm signals include an audible alarm, a vibration alarm & sequentially illuminating LED's at various distance intervals: 24-40 miles, 12-24 miles, 6-12 miles & 0-6 miles
- Also indicates if danger is approaching, stationary or departing





Includes: 2 "AAA" batteries

#### **Ordering Information**

Cat	Nr.
LD	7

## 23 THE SEEKER™ COMBUSTIBLE GAS DETECTOR PEN

>PNG2000A

ESP Détecteur-de gaz naturel FR Detector de gas natural

- Ideal for contractors and home owner to check gas leaks in plumbing & appliances
- Easy to operate
- High Sensitivity
- Low Power Consumption
- · Microprocessor controlled
- · Reliable performance
- Audible & visual alarms
- · Fast response and resume
- A variety of sound for different status
- · Small zero drift & large range of operating temperature

<b>Product Specifications</b>	
Range	0-100% LEL
Sampling	Natural Diffusion
Operating humidity	<95% RH
Operating voltage	DC3V
Operating current	<150mA
Low arlarm	(20±5)% LEL
High alarm	$(50 \pm 10)\%$ LEL
Response time	<5s
Sound	<u>≥</u> 65 dB

#### **Ordering Information**

Cat Nr. PNG2000A







Includes:

- Wrist Strap
- 2 "AA" batteries



24 GLASS MAGNIFIERS

>700540

>750544

>750542

ESP Lupa FR Loupe





- · Polished optical glass lens with a metal frame
- Versa-Grip<sup>™</sup> Handle with non-slip cushion grip
- · Round lens is distortion free
- · A powerful magnifier for working in confined or obstructed spaces
- Designed for demanding jobs in laboratory, quality control, inspection & assembly functions
- Used by engineers, mechanics, inspectors, lab technicians, tool makers, instrument assemblers, jewelers, do-it-yourselfers, hobby & crafts people

#### **Ordering Information**

Cat Nr.	Diameter		Power	Focal L	ength
	mm	inch		mm	inch
700540	50	2	1.6X	150	6
750542	75	3	1.6X	150	6
750544	100	4	1.25X	200	8



## LIGHTED MAGNIFIER

Lupa liuminada Loupe Lumineuse



25

**ESP** 

FR





- Push On/ Push Off Powerful LED light
- · Contoured Handle for Handheld Use
- Intergrated Stand for Hands-Free Use
- · Shatter-Resistant lens
- Main lens has a 3X magnification. An additional inset lens offers 6X high quality magnification for hobbyists, collectors & craftsmen
- Works on 2 "AA" batteries

#### **Ordering Information**

Cat Nr.	Diameter		Power	Focal	Length
	mm	inch		mm	inch
800543	90	3-1/2	3X	168	6.6



Hands Free Use







>800543







## 26 TELESCOPIC INSPECTION MIRRORS

>759570

>759575

ESP FR Espejo de inspección telescópico Miroir d'inspection télescopique

- Inspection Mirrors facilitate inspection of inaccessible work pieces & machines by toolmakers, assemblers, inspectors & mechanics
- Fully polished mirrors are enclosed in high strength re-inforced nylon holders attached to ergonomically designed handles with ball & socket joints. Multi-flex neck allows adjustment of the mirror to any angle
- Precision engineered Versa Grip<sup>™</sup> handle provides a non-slip grip for maximum performance
- Great for auto mechanics, HVAC professionals & all inspection related fields

#### 759570

- Rectangular Lexan™ mirror that resists scratching & shattering
- High strength corrosion resistant stainless steel wand telescopes from 9-1/4" to 30" (235 mm-762 mm)

#### 759575

360° Swivel double ball joint

- Round Lexan<sup>™</sup> mirror that resists scratching and shattering
- High strength corrosion resistant stainless steel wand extends from 7-5/8" to 28" (194 mm-711 mm)







#### **Ordering Information**

Cat Nr.	Mirror Shape	Mirror Size		Wand I	ength.
		mm	inch	mm	inch
759570	Rectangular	50 x75	2 x3	235 -762	9-1/4 - 30
759575	Round	38	1-1/2	194 - 711	7-5/8 - 28



#### 27

#### LIGHTED INSPECTION MIRROR

>80560

ESP FR Espejo de inspeccion con luz Miroir d'inspection avec éclairage





- Ideal for toolmakers, machinists inspectors and mechanics
- Fully polished 2" x3" (50 mm x 75 mm) glass mirror is shatter-resistant
- 360° Swivel double ball joint
- 2 Extra bright LED lights facilitate the inspection of hardto-see and hard-to-reach areas
- Telescoping Shaft: 8 to 33 in. (205 to 840mm)

#### **Ordering Information**

**Cat Nr.** 80560







## **SCREWDRIVERS**



## contents

power precision screwdriver 20 / lighted screwdriver set 20 / jewellers screwdriver sets 21 / technician's screwdriver set 22 / ratchet offset screwdriver set 22 /

#### **POWER PRECISION SCREWDRIVER**

>500

**ESP** FR

Destornillador Sin Cuerda Tournevis Sans Fil

- Cordless Power, Precision Screwdriver - ideal for very delicate applications
- 100+RPM motor with forward and reverse action
- Quick change chuck allows for effortless swapping between the 1/8" (3 mm) Slotted, Phillips & Torx bits
- Ergonomic handle with multiple grip positions for convenient usage in various applications
- Ideal for use in electronics repair, computer & other hardware repair, office equipment repair, DIY & model building, watch & jewellery repair, & light engineering jobs





**Ergonomically Designed Rubber Cushion Grip Push & Hold for Forward Mode ON/OFF Switch** 

Pull & Hold for Reverse Mode

**Quick Change Chuck** 

Super-Torque Drive

100+ RPM

Includes: 2 "AAA" batteries

**To Replace Batteries** 

Unscrew End cap



Includes Six 1/8" (3 mm) **Precision Bits** Phillips: #00, #0

Slotted: 1/16" (1.5 mm), 1/8" (3 mm) Torx: T5, T6

#### **Ordering Information**

Cat Nr. 500

## 29

#### LIGHTED SCREWDRIVER SET

>1700

**ESP** FR

Juego de destornilla doe con luz Ensemble de tournevis éclairés

- Lighted Screwdriver Set with LED Vision imparts light directly on the screw head, anytime, anywhere
- Push ON/ Push OFF Powerful LED light
- Rotating cap facets fits palm, recess fits finger tips
- Non-Slip cushion Grip
- Oxide Blades are Rust and Corrosion Resistant
- Set includes:
  - 1 Multi-blade handle
  - 3 Reversible blades

#### Ordering Information

Cat Nr. 1700



### 30 JEWELLERS SCREWDRIVER SETS

>63518

>S605

ESP Desarmadores para Joyero FR Tournevis de bijoutier

#### 63518

- 18 Piece Precision Screwdriver Set with an assortment of extended-shaft blades, suitable for use in the jewellery, computer and electronics repair industries
- Slender 600 series handle provides the essential precision feel needed for working on delicate components
- Includes 17 heat-treated blades that reflect most common choices in jewellery and electronics repair
- Locking screw chuck holds blades firmly in place and allows lightning-fast swapping
- Black Oxide coating on blades prevents rust and corrosion
- Set is housed in a pocket-sized case, assuring it's on hand when you need it



- Versatile precision screwdriver set with five removable blades,
   Slotted and Phillips, for use in a variety of applications such as model making and jewellery repair
- Knurled handle features a rolling head for fingertip precision when removing and installing delicate screws
- Bodies are knurled and nickel plated
- Set is stored in a convenient plastic case



Includes 17 heat treated blades:

**Slotted:** 3/64" (1.2 mm), 1/16" (1.6 mm), 5/64" (2 mm), 3/32" (2.4 mm)

Phillips: #000, #00
Torx: T5, T6, T7, T8
Hexagonal: 0.050" (1.3 mm), 1/16" (1.6 mm), 5/64" (2 mm)
Nut-Driver: 3/32" (2.4 mm), 1/8" (3 mm), 5/32" (4 mm)

Awl/Scribe









Includes 5 removable blades:

**Slotted**: 0.040" (1 mm), 0.055" (1.4 mm), 0.070" (1.8 mm) & 0.100 (2.5 mm)"

Phillips: #0

#### Ordering Information

**Cat Nr.**63518
S605



#### **TECHNICIAN'S SCREWDRIVER SET**

>751016

**ESP** FR

Jeu de tournevis de précision Juego de Atornilladores de Precisión





- The 16-in-1 Screwdriver Set offers the power of a full-bodied screwdriver and the precision of a jeweller's screwdriver
- The set features a removable jeweler's carrier which can either be used alone or in conjunction with the 750 series Versa-Grip handle
- Eight double-ended screwdriver blades provide viable solutions for most fasteners and are easily stored beneath the handle cap
- Embedded magnet in handle allows item to be used with any power shank bit (not included)



Cat Nr.

751016





Includes 8 double-ended alloy bits:

**Phillips:** #0 x #000

**Phillips/Slotted:** #0000 x 3/64" (1.2 mm) **Slotted:** 1/8" (3 mm) x 5/64" (2 mm) **Hexagonal:** .050" (1.3 mm) x 1/16" (1.6 mm),

5/64" (2 mm) x 3/32" (2.4 mm) **Torx:** T5 x T8, T6 x T10 Square Recess: #0 x #1

#### 32

#### RATCHET OFFSET SCREWDRIVER SET

>80075

**ESP** FR

Jeu de tournevis à cliquet de précision

Juego de Atornillador de Precisión con trinquete

- Ratchet screwdriver gives a larger amount of torque than a standard screwdriver & is perfect for reaching out to screws in obstructed / confined areas
- The 60 tooth ultra fine ratchet creates a swing radius of only 6°, therefore facilitating fastener removal & installation in the tightest of spaces
- Ratchet drive handle reverses instantly for clockwise & counter clockwise rotation
- Offset handle allows for easier access to screws positioned at odd angles
- 9 piece set includes most common bits for routine maintenance needs
- Accepts industry standard bits and socket adapters
- Cushion grip allows for hours of comfortable use
- Made from chrome vanadium steel



Includes 8 alloy steel bits:

**Slotted:** 1/4" (6.4 mm) and 3/16" (4.8 mm)

Phillips: #1 and #2 Torx: T15 and T20

Hexagonal: 1/8" (3 mm) and 5/32" (4 mm)

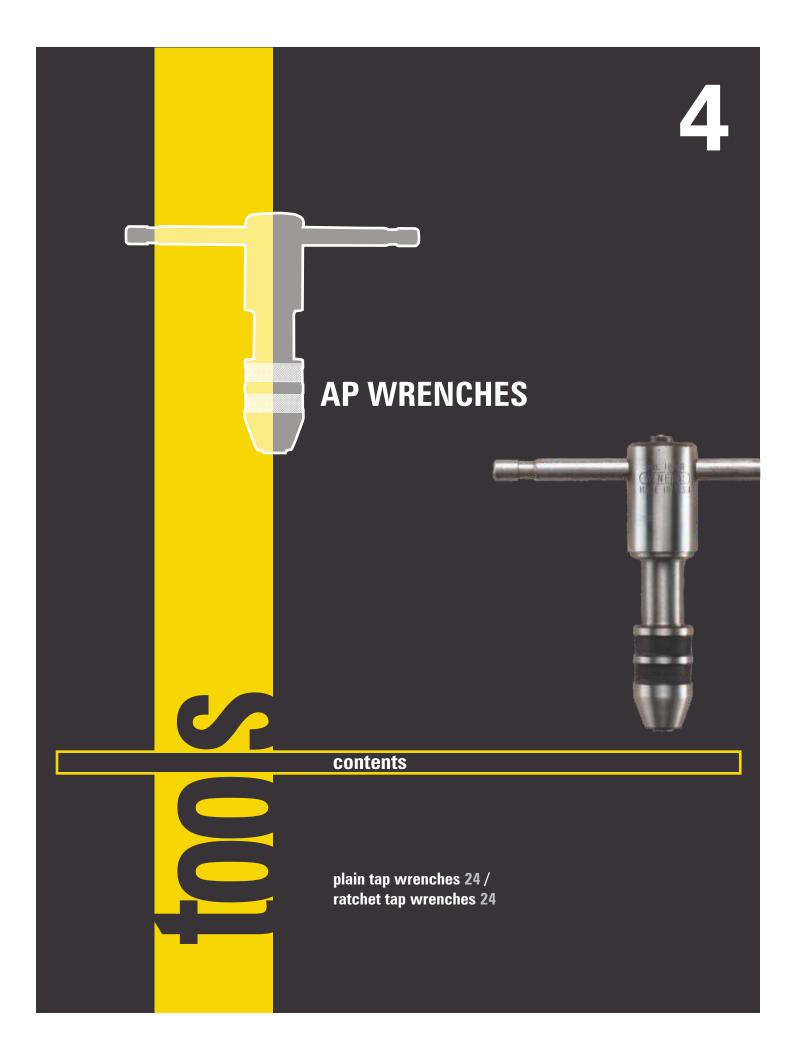
#### Ordering Information

Cat Nr.

80075







## **33** PLAIN TAP WRENCHES >163 >164 >166

ESP Llave para grifo
FR Tourne-à-gauche regulier

- Industrial quality Tap wrenches for the professional user
- Designed to give the user the reach & leverage needed for accurate tapping, these are used for holding taps, drills, reamers & other small tools to be turned by hand
- CNC machined to very close tolerances with self centering powder metallurgy hardened jaws & knurled chuck sleeve for positive gip
- The smallest size 163 has a rigid T handle, whereas 164 & 166 have sliding T handles for greater leverage when working in tight spaces

#### **Ordering Information**

Cat Nr.	Body Length		Tap C	apacity
	mm inch		mm	inch
163	57	2-1/4	M1.6-M4	Nr.0 - Nr.8
164	70	2-3/4	M1.6-M6	Nr.0-1/4"
166	95 3-3/4		M6-M12	Nr.12-1/2"



## 34 RATCHET TAP WRENCHES >160R >161R >162R

FR Giramachos de Acción Rachet
Tourne-à-gauche à cliquet

- Ratchet Tap Wrenches can be set for right or left hand operation or locked for non ratchet use
- Self centering powder metallurgy hardened jaws & knurled chuck sleeve provide positive grip on taps, reamers & small tools
- Sliding T-Handle for fitting into tight spaces with greater leverage

Cat Nr.	Body Length		Tap C	apcity	
	mm	inch	mm	inch	
160R	70	2-3/4	M1.6-M4	Nr.0 - Nr.8	
161R	88	3-1/2	M1.6-M6	Nr.0-1/4"	
162R	106	4-1/4	M6-M12	Nr.12-1/2"	





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35 LIGHTED TWEEZERS

>70401

>70403

>70408

ESP Pinzas con linterna FR Brucelles éclairées



Working inside those dark, confined spaces on the job just got a lot easier!

- Illuminated Tweezers with a built-in, bright white LED to directly illuminate working area
- Made from heat-treated steel with corrosion-resistant non-glare black finish, these are built to withstand tough jobs and working environments
- · Non-slip cushion grip for comfort
- Complete with 3 "LR41" batteries



36

FR



Cat Nr.	Tip Type	Length	
		mm	inch
70401	Smooth Pointed	159	6-1/4
70403	Serrated Blunt	159	6-1/4
70408	Serrated Bent	165	6-1/2

 mm
 inch

 Smooth Pointed
 159
 6-1/4

 Serrated Blunt
 159
 6-1/4

 Serrated Bent
 165
 6-1/2

>70396

70408

ESP Recogedor mecánico con luz

Ramasseur mécanique éclairé

 Illuminated Mechanical Pickup with a built-in, bright white LED to directly illuminate working area

LIGHTED MECHANICAL PICKUP

- The 20" (508 mm) flex-shaft allows easy maneuverability through cramped engine compartments, behind furniture or beneath floorboards to retrieve fallen items
- The strong retrieval claw can be opened with continued push and can grasp objects up to 1" (25mm)
- · Comfortable ergonomically designed hand controls
- The innovative LED component of this tool eliminates the need for using a flashlight while searching for lost bolts or tools
- Equipped with a corrosion-resistant black finish, the Mechanical Pickup is built to withstand tough jobs and working environments





#### Ordering Information

Cat Nr.	Overall Length	
	mm	inch
70396	610	24



Includes 3 "LR41" Batteries



#### 37 **TELESCOPIC MAGNETIC PICK-UPS**

>759394

>759582

**ESP** FR

Ramasseur magnétique à manche télescopique Imán recogedor con mango telescópico

#### 759394

- Must-have rescue tool for retrieving ferrous metal parts such as screws, nuts, wrenches and metal shavings
- High-powered 2.29 kg Neodymium magnet offers smooth surface pull capacities that are up to six times stronger than cobalt magnets of equal size
- Equipped with a double ball joint neck, this Magnetic Pickup allows navigation around awkward angles to reach obstructed areas
- Stainless Steel telescope extends up to 27" (686 mm) and condenses to 6-1/2" (165 mm) for compact storage

Exclusive Versa-Grip handle provided comfort and control

Great for auto mechanics, machinists and do-it-yourselfers

## 759582

- Telescoping Mini Light and Magnetic Pick-Up is a great combination tool for retrieving lost items from confined areas
- Equipped with a powerful LED light and a 0.9 kg Neodymium magnet, this works well for collecting fallen hardware and other ferrous metals from engine compartments, heating ducts and drains
- The stainless stell telescoping wand extends from 7-3/4" (197 mm) to 28-3/4" (730 mm)
- Double ball joint neck allows limitless angle adjustments
- Exclusive Versa-Grip handle provides comfort and control



Includes 4 Alkaline LR41 batteries with a battery life of 64 continuous

38 >589 **PRECISION OILER** 

**ESP** Huileur de précision FR Aceitador de precisión

- Aluminum constructed Precision Oiler is a highly accurate lubrication tool for anyone working with small mechanical parts
- The needlepoint tip allows for precise insertion of oil in confined areas
- The smooth thumb actuator lets you control the release of lubricant from the reservoir in small droplets
- Includes a screw-on cover and pocket clip for use on the go
- Ideal for use by technicians, contractors, hobyyists, & DIY'ers

Cat Nr.	Overall Length	
	mm	inch
589	143	5-5/8











39 3 IN 1 MULTI FILE >473

ESP Lime polyvalente 3-en-1 FR Limas múltiples 3 en 1

 Innovative Multi File - power of three industrial grade files in a compact, all-in-one convenient handle

- With three distinct file shapes Square, Flat and Round, the Multi File offers a range of options from utility grinding to tool sharpening and finish sanding
- Square Blade is used for the fast removal of material with a rougher finish; for right angles, slots and key ways
- Flat Blade is used for light material removal with a smooth surface finish; for cutting faces and edges, general utility work and tool sharpening
- Round Blade is used for light material removal with a smooth surface finish; for enlarging and elongating round holes or for use on curved surfaces
- Great tool for tool makers, craftsmen, do-ityourselfers and maintenance professionals
- All blades are made of high-grade tool steel for added longevity



#### **Ordering Information**

Cat Nr.	
473	

### 40 6 PIECE SWISS PATTERN NEEDLE FILE SET

>707476

FR Jeu de Limes a aiguille de 6 piéces Juego de Limas de aguja de 6 piezas

- Swiss Pattern Needle File Sets designed to meet the needs of hobbyists, craftsmen, tool makers and jewellers
- Every file is made from alloy steel and machined into distinctive shapes for various small scale and finishing applications
- Also included is a 700 series Versa-Grip handle with a locking screw chuck
- Set of 6 Files Warding (Flat), Round, Triangular, Equalling (Mill), Square and Half Round.
- File end is 2-1/2" (63 mm) long with 1/8" (3 mm) diameter shanks & a #2 single cut Swiss pattern
- Knurled file shanks can be used without the included handle
- The set is packaged in a vinyl pouch for storage

Cat Nr.	File Length	
	mm	inch
707476	138	5-1/2





#### 41 4 PII

#### **4 PIECE PRECISION BLADE PROBE SET**

>60004

ESP FR Jeu de sonde de précision Juego de Garfios de precisión

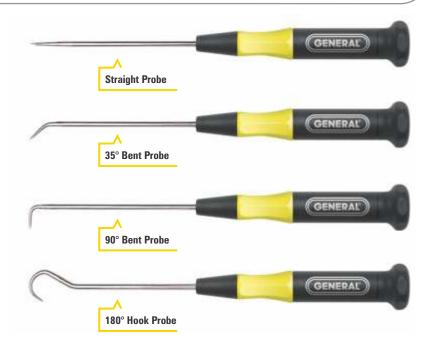




- The 4 Piece Probe Set with very popular hook and probe styles in a smaller, fixed-length design
- Probes are useful for cleaning and marking small work surfaces, as well as for separating and positioning electrical wires; works well in hard-toreach areas
- Blades are 2-5/8" (67 mm) in length; Overall Length of tool is 6" (150 mm) and have a heat treated alloy steel construction
- Exclusive Versa-Grip handle is provided for comfort and control

#### **Ordering Information**

Cat Nr.	
60004	_



42	GROMMET / EYELET KITS	>1260-0	>1260-2	>1260-4
ESP FR	Juego de Ojales Trousse d' oeillets	>1261-1	>1261-2	>1261-4

- Grommets or eyelets as they are commonly called are used to repair canvas, tarpaulins, tents, awnings, sailcloth, lawn furniture, pool covers etc.
- · These are offered as a kit containing:
  - a. Grommets
  - b. Hole Punch
  - c. Backer block
  - d. Setting Tool
  - e. Anvil
- Hole Punch & Setting Tool are precision machined from single bar of solid steel for additional durability

Cat Nr.	Specification	
1260-0	1/4" (6 mm) Grommet Kit with 24 Grommets	
1260-2	3/8" (10 mm) Grommet Kit with 12 Grommets	
1260-4	1/2" (12 mm) Grommet Kit with 12 Grommets	
1261-0	1/4" (6 mm) Grommet Kit with 24 Grommets	
1261-2	3/8" (10 mm) Grommet Kit with 12 Grommets	
1261-4	1/2" (12 mm) Grommet Kit with 12 Grommets	









# speciality tools

#### 43 **REVOLVING PUNCH PLIER**

>72

**ESP** Perforador Giratorio FR Poinçon rotatif

- Revolving Punch Pliers are ideal for making small holes that would not be practical with a single-style punch
- Revolving head offers 6 distinct punch sizes for use on leather, rubber, plastic and similar materials
- Six hardened steel punch sizes include: 2 mm, 2.5 mm, 3 mm, 3.5 mm, 4 mm & 4.5 mm
- Punches are tapered and hollow
- Made of powder coated steel with cushioned vinyl grip
- Spring-tensioned, self-opening tool
- This tool is commonly used around the home for hobbies and crafts, or for adding additional holes to a leather belt





Cat Nr.
72

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When the Job is Special, the Tool is General



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ERGONOMIC DESIGN
4 DISTINCT HANDLE GRIPS
8 SIDED CUSHION GRIP
CONTOURED HEAD

#### **4 DISTINCT HANDLE GRIPS**



#### PRECISION GRIP for low-torque fastening & delicate jobs

#### POSTIONING GRIP for accurate placement of fasteners & making precise cuts and marking

#### PALM CONTROL GRIP for comfortable, day-to-day fastener removal and installation

#### POWER GRIP for high-torque fastening and heavy-duty work

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