

RATCHET TECHNOLOGY



UTILITIES

CONSTRUCTION

OEM DESIGN

PLANT MAINTENANCE

CATALOG PLC10



**LOWELL**  
CORPORATION

MAKING TOUGH JOBS EASIER SINCE 1869

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**IF YOUR SON OR  
DAUGHTER HAD TO WORK  
ON A TRANSMISSION LINE  
40 FEET IN THE AIR,  
IN THE MIDDLE OF A  
BLIZZARD, WITH THE  
TEMPERATURE TEN  
BELOW ZERO, WOULDN'T  
YOU WANT THE BEST  
TOOLS IN THEIR HANDS?**

Of course you would. And that's the way we feel about our customers.

Since 1869, we've made a variety of hand tools, most based on our reliable ratchet technology, that have made the job easier for workers in a number of industries: water, gas, and electric utilities, construction, plant maintenance. We've made tools to maintain machinery and we've made tools to make machinery perform better and more reliably.

And always—always—we've kept worker comfort and safety in mind. American workers are one of our greatest natural resources and we're proud to be able to help and protect them with the very best tools we can make.

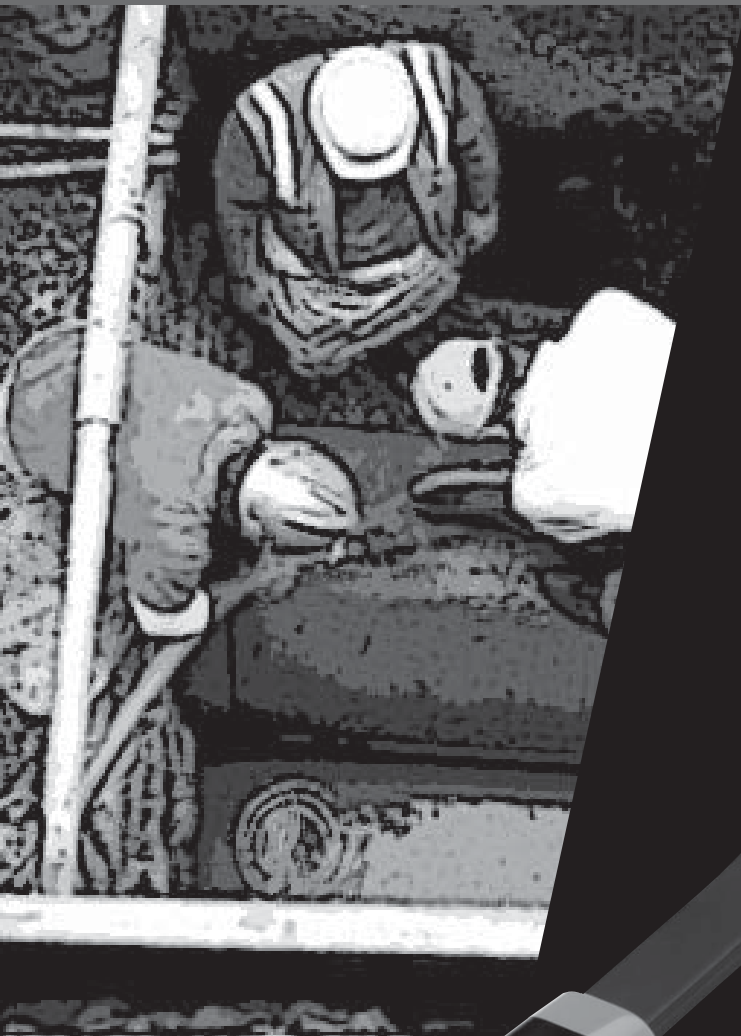
We've been making tough jobs easier since 1869.



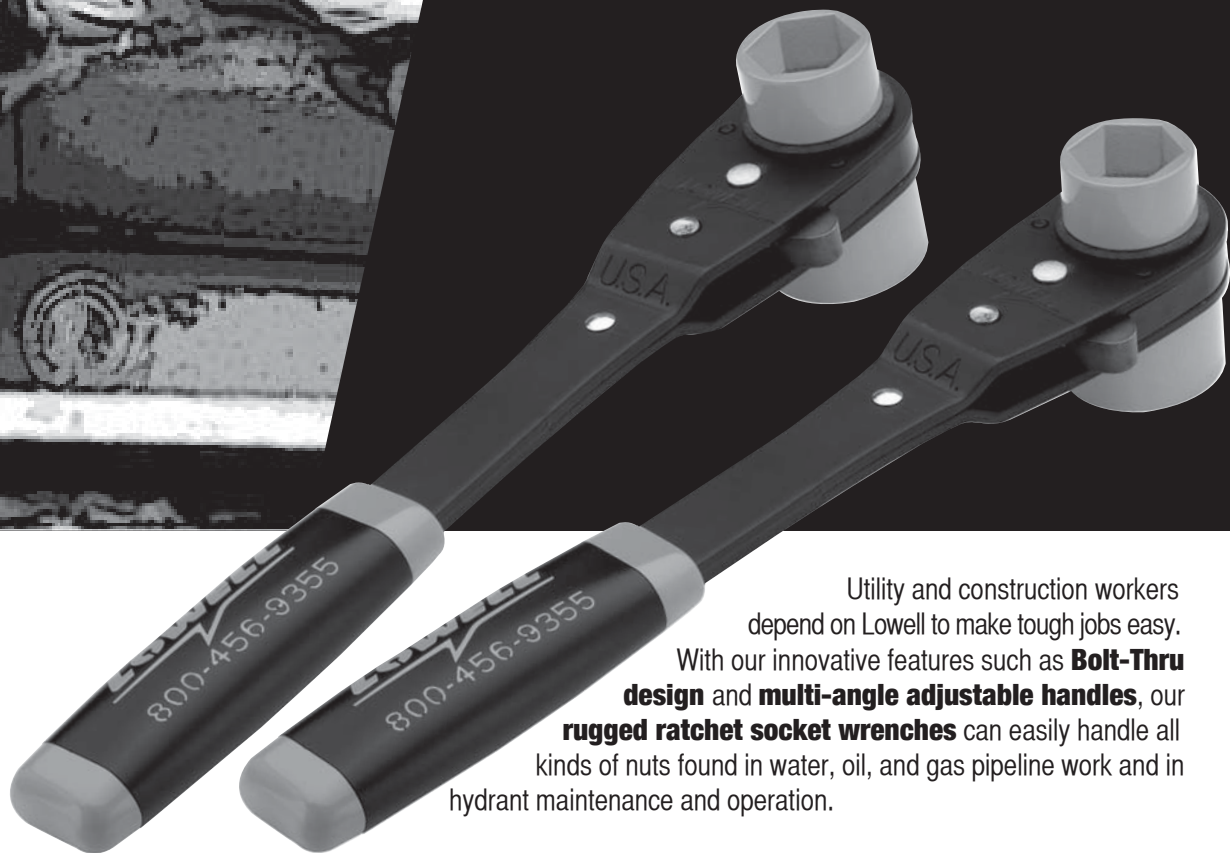


# Applications

## Water Utility and Construction



**A muddy ditch  
is a good place to  
take it easy.**



Utility and construction workers depend on Lowell to make tough jobs easy. With our innovative features such as **Bolt-Thru design** and **multi-angle adjustable handles**, our **rugged ratchet socket wrenches** can easily handle all kinds of nuts found in water, oil, and gas pipeline work and in hydrant maintenance and operation.



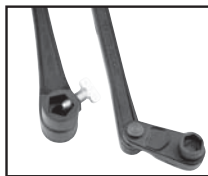
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Valve Wheel  
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# Applications

## High Line Utility

**40 feet  
up in the air is  
a good place to  
take it easy.**



High line utility workers depend on Lowell tools to make the tough jobs easy. With innovative features like **Bolt-Thru design**, our **rugged square and hex ratchet socket wrenches** can easily handle all kinds of nuts found in electrical transmission and distribution applications. All made in USA.



Lineman's Wrenches  
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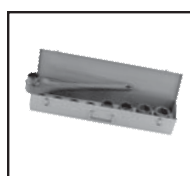
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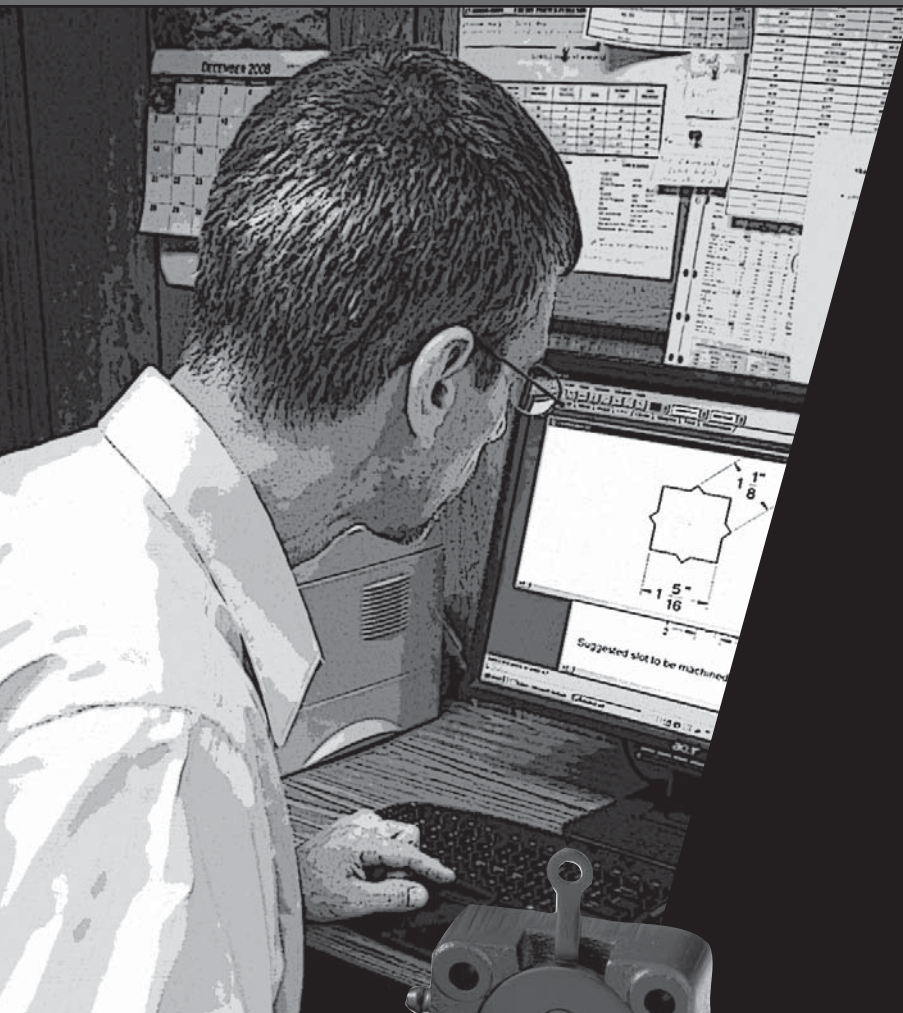
Socket Wrench Sets  
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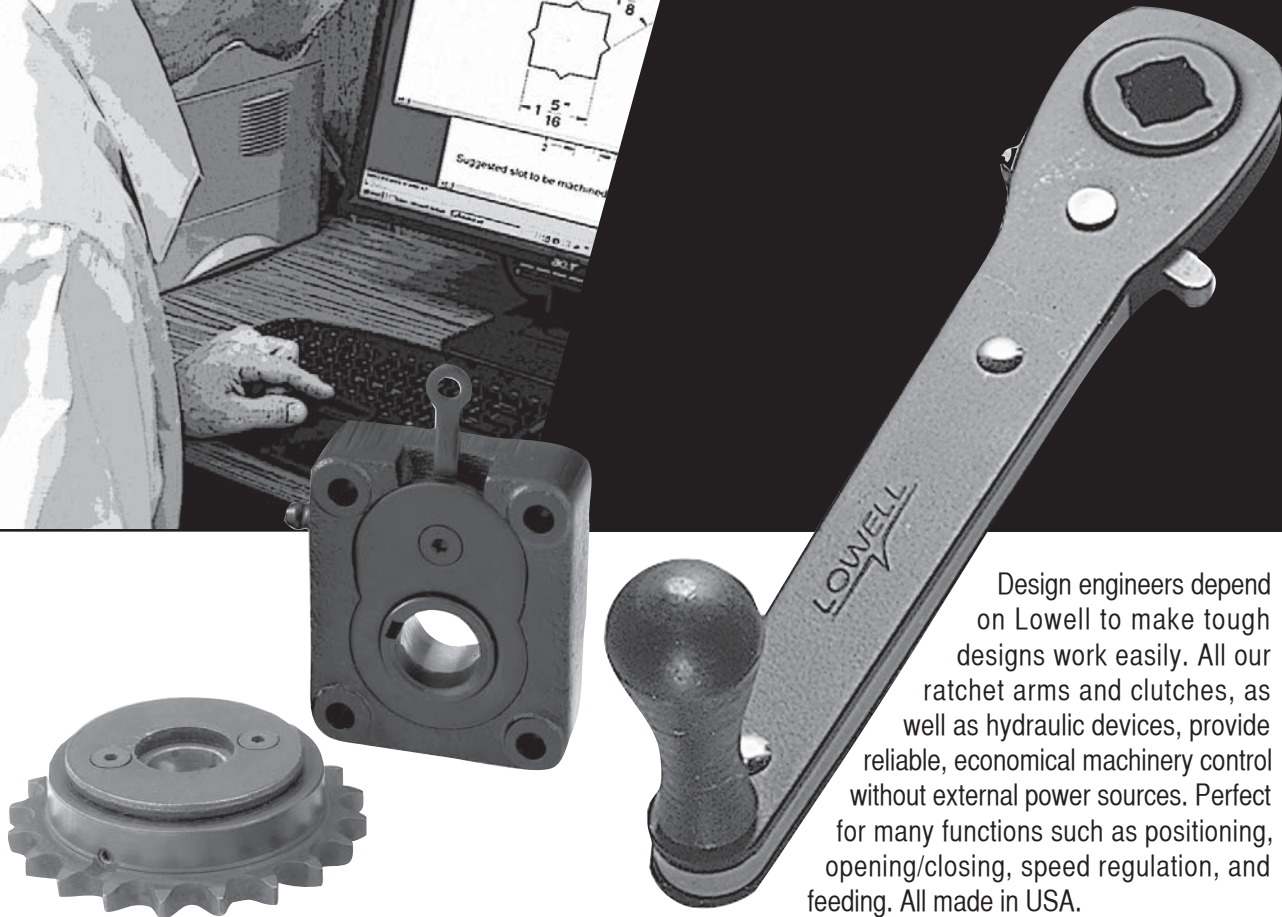
Hi-Vis Hi-Lite  
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# Applications

## OEM Machine Components



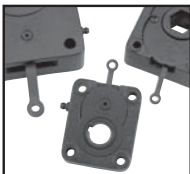
**A desktop is  
a good place to  
take it easy.**



Design engineers depend on Lowell to make tough designs work easily. All our ratchet arms and clutches, as well as hydraulic devices, provide reliable, economical machinery control without external power sources. Perfect for many functions such as positioning, opening/closing, speed regulation, and feeding. All made in USA.



Ratchet Arms  
pages 18, 19



Ratchet Clutches  
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Roller Clutches  
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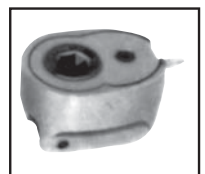
Ratcheting  
Crank Handles  
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Double Handle  
Ratchet Wrenches  
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Observation  
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Custom Ratchets  
page 25



# Applications

## Plant Maintenance and Operation



**A plant floor  
is a good place to  
take it easy.**



Many plant managers and supervisors depend on Lowell to make tough factory jobs easy. We make heavy duty ratchet and socket wrenches, ratchet clutches, and ratchet handles that enable machinery to work much more efficiently while holding down maintenance and repair costs. And rugged Lowell devices also enhance worker safety. All made in USA.



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Impakdriver  
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# Socket Wrenches

## Lineman's Wrenches

### Lineman's Socket Wrenches

- Designed to meet the specific needs of high line utility linemen
- Fluorescent orange, cast iron sockets make the wrench harder to lose
- Sockets fit most common utility pole fasteners: lag bolts, C clamps, and suspension bolts
- Bolt-Thru feature allows bolts and threaded rods to pass completely through the socket wrench head

### Triple Square Fabricated Handle

- Three lengths; 101T = 8", 150T = 10", 151T = 12"
- Weight: 101T = 1-1/2 lbs, 150T = 2 lbs, 151T = 2-1/8 lbs
- Three square sizes in one permanent socket; 3/4", 1", 1-1/8"
- Fabricated steel handles
- Large reversing lever on side of head
- Bolt-Thru design
- Ergonomic handle grip
- Semi-enclosed ratchet mechanism (150T & 151T only)
- Fit in most common holsters



Bolt-Thru Design

Series 150T, Model 151T

### Dual End Lineman's Socket Wrench

- Large reversing lever on side of head
- Three square sizes all in one permanent socket: 3/4", 1", 1-1/8"
- Two hex sizes in the other permanent socket: 9/16", 3/4"
  - 3/4" hex socket will also turn 5/8" sq nuts
- Fits in common holsters
- Fabricated steel handle
  - Bolt-Thru design
  - Weights:
    - 101TDE, 1 3/4 lbs.
    - 103TDE, 2 lbs.
  - Lengths:
    - 101TDE, 8"
    - 103TDE, 11"

SERIES Dual End,  
Model 101TDE

Series 150T, Model 101T

### 150T Series Socket Wrenches

MODEL	A		B		C		D		Socket Openings		LB	KG
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM		
101T	8 1/4	210	9 1/4	235	2 1/16	52	13 1/16	20	3/4, 1, 1 1/8 Sq	19, 25, 29 Sq	1 1/2	0,68
101T-Dual End	8 1/4	210	9 1/4	235	2 1/16	52	13 1/16	20	5/8, 3/4, 1, 1 1/8 Sq; 7/16, 3/4 H	16, 19, 25, 29 Sq; 14, 19 H	1 3/4	0,80
103T-Dual End	11 1/4	286	12 1/4	311	2 1/16	52	13 1/16	20	5/8, 3/4, 1, 1 1/8 Sq; 7/16, 3/4 H	16, 19, 25, 29 Sq; 14, 19 H	2	0,91
150Double Sq	10	254	11	280	2 1/16	52	13 1/16	20	1, 1 1/8 Sq	25, 29 Sq	2	0,91
150T	10	254	11	280	2 1/16	52	13 1/16	20	3/4, 1, 1 1/8 Sq	19, 25, 29 Sq	2	0,91
151Double Sq	12	305	13	330	2 1/16	52	13 1/16	20	1, 1 1/8 Sq	25, 29 Sq	2 1/4	1,02
151T	12	305	13	330	2 1/16	52	13 1/16	20	3/4, 1, 1 1/8 Sq	19, 25, 29 Sq	2 1/4	1,02
152	15 3/4	400	17	432	2 1/2	64	1 1/2	30	1 5/16, 1 7/16 Sq; 1 1/2 H	33, 36 Sq; 38 H	3 3/4	1,70



## Transmission Wrench

- Two cast iron models and one fabricated steel model
- Two square sizes in one permanent socket;  $1\frac{5}{16}$ ",  $1\frac{7}{16}$ "
- Combination socket also turns  $1\frac{1}{2}$ " hex nuts
- Variety of other square and hex sockets are available
- Reversing lever at head
- Bolt-Thru design
- Enclosed ratchet mechanism (52, 53 only)
- Three lengths; 52 (cast) = 15", 152 (steel) =  $15\frac{3}{4}$ ", 53 (cast) = 20"
- Weight: 52 =  $4\frac{1}{8}$  lbs, 152 =  $3\frac{3}{4}$  lbs, 53 = 5 lbs

Series **150T**, Model **152**

## Triple Square Impact Socket

- Use with any impact wrench to install or maintain utility pole hardware
- Three square sizes in one socket:  $1\frac{3}{16}$ " for  $\frac{1}{2}$ " hardware; 1" for  $\frac{5}{8}$ " hardware;  $1\frac{1}{8}$ " for  $\frac{3}{4}$ " hardware
- $\frac{7}{16}$ " hex quick change adapter is included
- Weight: 2 lbs.
- Length:  $7\frac{3}{4}$ "

Socket Adapter

Triple Square Impact Socket

## Triple Square Cast Handle

- Two lengths; 50T, 10"; 51T, 12"
- Weight: 50T, 2 lbs; 51T,  $2\frac{1}{8}$  lbs
- Enclosed ratchet mechanism
- Fits in common holsters
- Reversing lever at head
- Three square sizes all in one permanent socket;  $\frac{3}{4}$ ", 1" &  $1\frac{1}{8}$ "
- Cast iron handle
- Bolt-Thru design

Series **50T**, Model **51T**

## 50T Series Socket Wrenches

MODEL	A		B		C		D		Socket Openings		LB	KG
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM		
50 Double Sq	10	254	11	280	$2\frac{1}{16}$	52	$1\frac{5}{16}$	24	$1, \frac{1}{8}$ Sq	25, 29 Sq	2	0,91
50T	10	254	11	280	$2\frac{1}{16}$	52	$1\frac{5}{16}$	24	$\frac{3}{4}, 1, 1\frac{1}{8}$ Sq	19, 25, 29 Sq	2	0,91
51 Double Sq	12	305	13	330	$2\frac{1}{16}$	52	$1\frac{5}{16}$	24	$1, \frac{1}{8}$ Sq	25, 29 Sq	$2\frac{1}{8}$	0,96
51T	12	305	13	330	$2\frac{1}{16}$	52	$1\frac{5}{16}$	24	$\frac{3}{4}, 1, 1\frac{1}{8}$ Sq	19, 25, 29 Sq	$2\frac{1}{8}$	0,96
52	15	382	$1\frac{1}{8}$	410	$2\frac{1}{16}$	62	$1\frac{7}{16}$	36	$1\frac{5}{16}, \frac{7}{16}$ Sq; $1\frac{1}{2}$ H	33 & 36 Sq; 38 H	$4\frac{1}{8}$	1,87
53	20	508	$2\frac{1}{8}$	536	$2\frac{1}{16}$	62	$1\frac{7}{16}$	36	$1\frac{5}{16}, 1\frac{7}{16}$ Sq; $1\frac{1}{2}$ H	33 & 36 Sq; 38 H	5	2,27

# Socket Wrenches

## 50/150 SERIES

### Heavy Duty Socket Wrenches

- Durable for heavy-duty applications such as pipeline and construction
- Takes a wide range of square and hex sockets
- Retaining ring is easily removed for socket replacement or changeover
  - Reversing control in head
- Enclosed ratchet mechanism on Models 50, 51; semi-enclosed mechanism on Models 150, 151
- Series 150 offers a lower cost alternative without sacrificing any performance
- Ergonomic handle designs; Models 150, 151 offer choice of vinyl or padded vinyl fat grip
- Bolt-Thru design

### Hi-Vis Hi-Lite

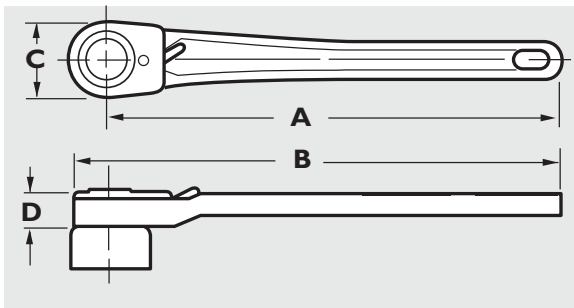
- A simple, inexpensive, and extremely useful tool that directs light right to the wrench head and leaves both hands free for work
- Clips to wrench handles to help workers find and adjust nuts in low light
- Available for Series 150 socket wrenches, Triple Square Lineman's wrenches, and Hi-Vis Double Shot wrenches
- Light kit includes both clip and lanyard
  - Weight: 1.9oz. (with detachable clip)
  - Battery: standard AA
  - Brightness: 20 lumen
- Battery life: 6 hours continuous (up to 100 hours intermittent)
  - Diameter: 3/4"
  - Length: 3 5/8"

SERIES 50

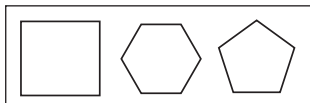
SERIES 150

Hi-Vis Hi-Lite

Hi-Vis Hi-Lite clipped to a Model 151T Triple Square Lineman's Wrench



### Socket Openings



### Quick-Release

Makes socket changing fast and easy.

Available on Models 50, 51, 52, 53, and 564.



### 50 Series Socket Wrenches

Model	A		B		C		D		Socket Openings			
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
50	10	254	11	280	2 1/16	52	1 5/16	24	5/8-1 1/4	16-32	2	0,91
51	12	305	13	330	2 1/16	52	1 7/16	24	1 3/8-1 1/4	16-32	2 1/8	0,96
52,52F	15	382	16 1/8	410	2 7/16	62	1 7/16	36	5/8-2	22-50	4 1/8	1,87
53,53F	20	508	21 1/8	536	2 7/16	62	1 7/16	36	5/8-2	22-50	5	2,27
54	24	610	25 5/8	650	3 3/16	80	1 11/16	42	1-2 5/8	24-60	9 1/4	4,2
55	36	914	37 5/8	956	3 3/16	81	1 11/16	43	1-2 5/8	24-60	13	5,9
56	36	914	38 1/8	968	4 3/16	106	1 7/8	48	1 1/2-3 1/8	38-80	24	10,9
58	43 1/2	1105	46 5/8	1184	6 1/4	159	1 5/8	49	3-7 1/4	80-175	47	21,2
60	60	1524	64 3/8	1642	9 1/4	235	2 1/2	64	5-9 1/8	125-230	100	45,0

### 150 Series Socket Wrenches

150	10	254	11	280	2 1/16	52	1 3/16	20	5/8-1 1/4	16-32	2	0,91
151	12	305	13	330	2 1/16	52	1 3/16	20	5/8-1 1/4	16-32	2 1/8	0,96
DS 1-9	12	305	13	330	2 1/16	52	1 3/16	20	3/4-1 1/4	19-32	2 1/4	1,02
152	15 1/4	400	17	432	2 1/2	64	1 3/16	30	5/8-2	22-50	3 3/4	1,70
158	8	204	9	228	2 3/8	52	1 3/16	20	5/8-1 1/4	16-32	1 3/4	0,79

### QR Series Socket Wrenches

50 QR	10	254	11	280	2 1/16	52	1 5/16	24	5/8-1 1/4	16-32	2	0,91
51 QR	12	305	13	330	2 1/16	52	1 5/16	24	5/8-1 1/4	16-32	2 1/8	0,96
52 QR	15	382	16 1/8	410	2 7/16	62	1 7/16	36	5/8-2	22-50	4 1/8	1,87
53 QR	20	508	21 1/8	536	2 7/16	62	1 7/16	36	5/8-2	22-50	5	2,27
564 QR	15 1/2	394	16 1/2	420	2 1/16	52	1 5/16	24	5/8-1 1/4	16-32	3 1/4	1,48

# Double Shot SERIES

## Heavy Duty Dedicated Socket Wrenches

- Designed specifically for pipeline, utility, maintenance and construction workers.
- Nine socket size combinations for heavy, standard, and metric hex nuts, as well as hydrant repair
- Sockets made of rugged cast metal
- Fluorescent orange sockets make the wrenches harder to lose
- Handle and sockets coated with durable electrostatic epoxy paint for easy cleaning
- Reversing control in head
- Stamped, riveted handle
- Vinyl grip makes working comfortable and secure
- All wrenches 12" long, weight 2 1/4 lbs.
- Bolt-Thru design



### Double Shot Series Socket Wrenches

Model	Hex Size	Application
DS-1	1 1/4" & 1 1/16"	Mechanical joints, restraints, repair clamps, service saddles
DS-2	1 1/8" & 1 5/16"	Flange bolts, friction clamps, hydrant break flange, bonnet bolts
DS-3	1 5/16" & 3/4"	Hydrant break flange, bonnet bolts, friction clamps, service saddles
DS-4	3/4" & 7/8"	Extended range couplings below 14"
DS-5	19mm & 22mm	Extended range couplings below 14"
DS-6	1 1/8" & 1 1/16"	Gas/water industry couplings, repair clamps, service saddles, flange bolts
DS-7	17mm & 22mm (international)	Mechanical joints, restraints, repair clamps, service saddles
DS-8	22mm & 24mm (international)	Mechanical joints, restraints, repair clamps, service saddles
DS-9	24mm & 30mm (international)	Mechanical joints, restraints, repair clamps, service saddles

# 50F/QR SERIES

## Series 50F Heavy Duty Hydrant Wrenches

- For US-style water hydrants
- Unique Bolt-Thru design
- Available in 2 sizes: 52F and 53F
- Opens and closes any hydrant in only a 22 1/2° swing
- Long handle and pentagon socket for better leverage
- Sockets adjust by thumb screw for versatile set up
- Socket has 9/16" square opening, accessible by turning wrench over
- Bolt-Thru design

## Series QR Reversible Wrenches with Quick Release

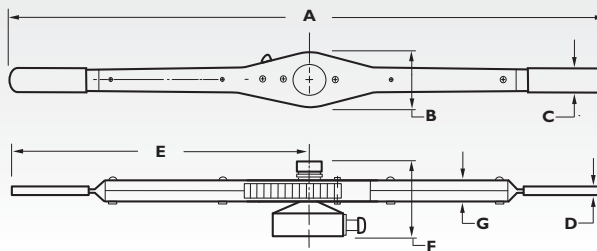
- Model 564 QR has multi-angle handle adjustable in 30° increments
- Quick-Release for fast socket changes: Models 50, 51, 52, 53 and 564
- Unique Bolt-Thru design

SERIES 50F

MODEL 564

## Model 252F Hydrant Wrench

- Two handles give greater leverage for loosening and tightening nuts
- Improves safety by allowing operator to always face the road
- Permits two-person operation



### 200 Series Double Handle Hydrant Wrench

Model	A		B		C		D		E		F		G		Sockets			
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb	kg
252	32 1/2	826	2 5/8	68	1	25	5/16	8	16 1/4	413	3 1/4	83	1 1/4	32	1 1/2-2	38-51	6 1/4	2,84





# Socket Sets

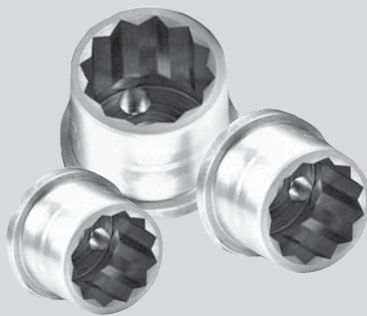
## Valve Key/511/512/513

### Valve Key Socket Set

#### Easily engage worn or corroded valve nuts

Lowell Valve Key Sockets are specifically designed to easily engage rounded-over or deformed valve nuts in the toughest situations, even when corrosion is significant.

- Field-proven
- Compact size
- Lower cost than alternative tools
- No moving parts for lower maintenance
- Rugged, durable, yellow zinc-plated, hardened steel components
- Set includes: valve key sockets in 3 sizes (small, medium, large), 3" screw, and attachment plate in a durable carrying case



### 511 and 512 Ratchet Wrench Sets

#### For gas and water pipeline applications

- Unique Bolt-Thru design
- Quick-Release for fast socket changeover
- Reversing levers in head
- Combines standard international sockets and special devices for US-style Buffalo and Erie type water main curb boxes, hydrants and corporation stops
- Standard 511 set includes: 51 QR ratchet handle;  $\frac{7}{8}$ ",  $\frac{15}{16}$ ",  $1\frac{1}{8}$ ",  $1\frac{1}{4}$ " hex sockets; heavy-duty steel box. US version includes corporation socket
- Standard 512 set includes: 51 QR ratchet handle;  $\frac{3}{4}$ ",  $\frac{7}{8}$ ",  $\frac{15}{16}$ ",  $1\frac{1}{8}$ ",  $1\frac{1}{4}$ ",  $1\frac{1}{2}$ " hexagonal sockets; extension bar; Buffalo ( $2\frac{1}{4}$ " spanner) and Erie ( $\frac{7}{8}$ " pentagonal) socket; corporation socket; and heavy-duty steel box



MODEL 511

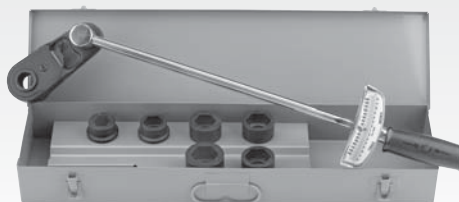


MODEL 512

### 513 Ratchet Torque Wrench Set

#### For gas and water pipeline applications

- Unique Bolt-Thru design
- 0-160 lb/ft torque indicating wrench
- Ratchet adapter with Quick-Release for fast socket changeover
- Chrome-plated torque wrench
- Easy-to-read. Can be used as a standard  $1\frac{1}{2}$ " male drive torque wrench as well
- Standard set includes: 560 torque wrench (0-160 lb/ft)  $18\frac{3}{4}$ " long with  $\frac{1}{2}$ " square male drive;  $\frac{3}{4}$ " ratchet adapter,  $\frac{3}{4}$ ",  $\frac{7}{8}$ ",  $\frac{15}{16}$ ",  $1\frac{1}{8}$ ",  $1\frac{1}{4}$ " hex sockets; heavy-duty steel box



MODEL 513

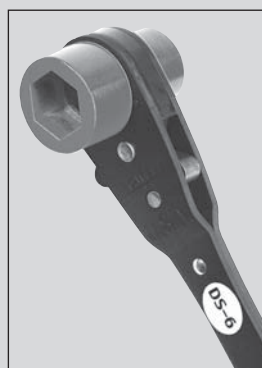
# Extended Reach/DoubleShot/521/531/514



## Extended Reach Ratchet Wrench Set

Greater leverage in tight spots

- Ideal for attaching mechanical joints in close quarters
- Each socket extends  $3\frac{1}{2}$ " from the handle to allow for clearance over obstacles
- Quick-Release for fast socket changeover
- Bolt-Thru design
- Standard set includes: Model 51 quick release handle; five sockets;  $\frac{7}{8}$ ",  $\frac{15}{16}$ ",  $1\frac{1}{4}$ ",  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ " hexagonal extended sockets; heavy-duty molded plastic case



## DoubleShot Ratchet Wrench Sets

Designed for specific applications

- Mechanical joints, restraints, couplings, sleeves, repair clamps, saddles, flange bolts
- Installation Set includes: DS-1  $1\frac{1}{4}$ " x  $1\frac{1}{16}$ "; DS-2  $1\frac{1}{8}$ " x  $\frac{15}{16}$ "; DS-4  $\frac{3}{4}$ " x  $\frac{7}{8}$ "
- Repair Set includes: DS-1  $1\frac{1}{4}$ " x  $1\frac{1}{16}$ "; DS-2  $1\frac{1}{8}$ " x  $\frac{15}{16}$ "; DS-3  $\frac{15}{16}$ " x  $\frac{3}{4}$ "
- Also available:  
Other sizes listed on page 11  
DS-LC Economy Set
- Each set includes three DoubleShot wrenches in a heavy-duty molded plastic case



## 521 and 531 Ratchet Wrench Sets

For larger applications: utility and pipeline transmission and distribution, maintenance, and construction

- Large size international sockets
- Longer handles for increased leverage
- Unique Bolt-Thru design
- Quick-Release for fast socket changeover
- Reversing levers in head
- Standard 521 set includes: 52 QR ratchet handle;  $1\frac{1}{4}$ ",  $1\frac{5}{16}$ ",  $1\frac{7}{16}$ ",  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ " hex sockets; heavy-duty steel box can hold three additional sockets which may be ordered with set
- Standard 531 set includes: 53 QR ratchet handle;  $1\frac{1}{4}$ ",  $1\frac{5}{16}$ ",  $1\frac{7}{16}$ ",  $1\frac{1}{2}$ ",  $1\frac{3}{4}$ " hex sockets; heavy-duty steel box can hold three additional sockets which may be ordered with set



MODEL 521



MODEL 531

## 514 Adjustable Angle Ratchet Wrench Set

For ratchet action in close quarters

- Multi-angle handle adjustable in  $30^\circ$  increments
- Locks quickly via wing nut
- Quick-Release for fast socket changeover
- Shear pin design to prevent overtorquing
- Standard set includes: Adjustable 564 QR handle;  $3\frac{1}{2}$ " ratchet adapter;  $\frac{3}{4}$ ",  $\frac{7}{8}$ ",  $\frac{15}{16}$ ",  $1\frac{1}{16}$ ",  $1\frac{1}{8}$ ",  $1\frac{1}{4}$ " hexagonal sockets; heavy-duty steel box



MODEL 514

\* Please see Design Guide for complete ordering information.

## Crank Handles

### Easier more efficient machinery adjustment

- Fixed or rotating metal handle for extra durability
- Bolt-Thru design
- Rotating plastic handle for lower cost.
- Performs many adjustments including cross feed, rise and fall, gib and quill, positioning screw, or clamping
- Ratchet arm lengths range from 7" to 12"
- Reversing control located in the head to reverse the action safely and easily
- Available in square, hex, bore and keyway, or custom openings

MODEL 101 CRANK

MODEL 103 CRANK

MODEL 114 CRANK

MODEL 112 CRANK

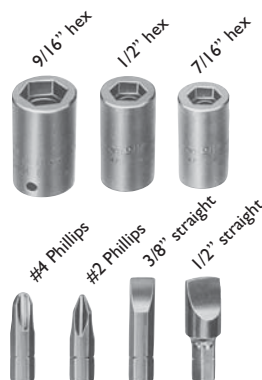
#### 100 Series Ratcheting Crank Handles

Model	A		B		C		D		Gear Openings		lb	kg	Crank Options
	in	mm	in	mm	in	mm	in	mm	in	mm			
101	7	180	7 <sup>13</sup> / <sub>16</sub>	198	1 <sup>1</sup> / <sub>16</sub>	40	<sup>19</sup> / <sub>32</sub>	15	<sup>3</sup> / <sub>8</sub> – <sup>3</sup> / <sub>4</sub>	10–19	<sup>3</sup> / <sub>4</sub> –1	0,34–0,45	<b>Models 101, 101A, 112, 114, 115</b> Steel or Plastic; Fixed or Revolving; Long or Short
101A	7	180	8 <sup>1</sup> / <sub>16</sub>	205	2 <sup>1</sup> / <sub>16</sub>	52	<sup>19</sup> / <sub>32</sub>	15	<sup>1</sup> / <sub>2</sub> –1	13–25	<sup>3</sup> / <sub>4</sub> –1	0,34–0,45	
103	12	305	13 <sup>1</sup> / <sub>2</sub>	342	2 <sup>1</sup> / <sub>2</sub>	64	<sup>7</sup> / <sub>8</sub>	22	<sup>1</sup> / <sub>2</sub> –1 <sup>1</sup> / <sub>4</sub>	12–32	2 <sup>1</sup> / <sub>4</sub> –2 <sup>3</sup> / <sub>4</sub>	1,02–1,25	
112	8	204	9	228	2 <sup>1</sup> / <sub>16</sub>	52	<sup>7</sup> / <sub>8</sub>	22	<sup>1</sup> / <sub>2</sub> –1	13–25	1 <sup>1</sup> / <sub>2</sub> –2	0,68–0,91	
114	10	254	11	280	2 <sup>1</sup> / <sub>16</sub>	52	<sup>7</sup> / <sub>8</sub>	22	<sup>1</sup> / <sub>2</sub> –1	13–25	2–2 <sup>1</sup> / <sub>2</sub>	0,91–1,13	<b>Model 103</b> Steel or Plastic; Fixed or Revolving
115	12	305	13	330	2 <sup>1</sup> / <sub>16</sub>	52	<sup>7</sup> / <sub>8</sub>	22	<sup>1</sup> / <sub>2</sub> –1	13–25	2–2 <sup>1</sup> / <sub>2</sub>	0,91–1,13	



## Easily loosen and tighten frozen fasteners

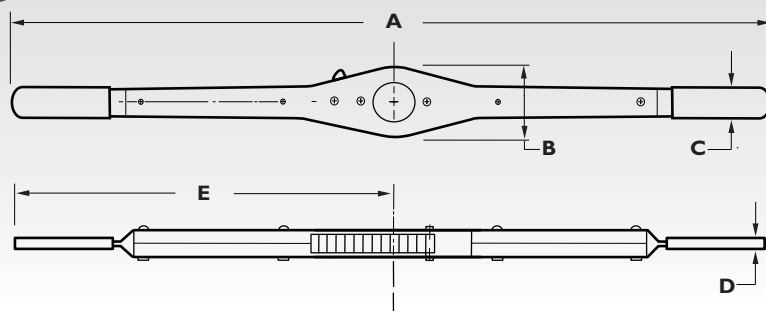
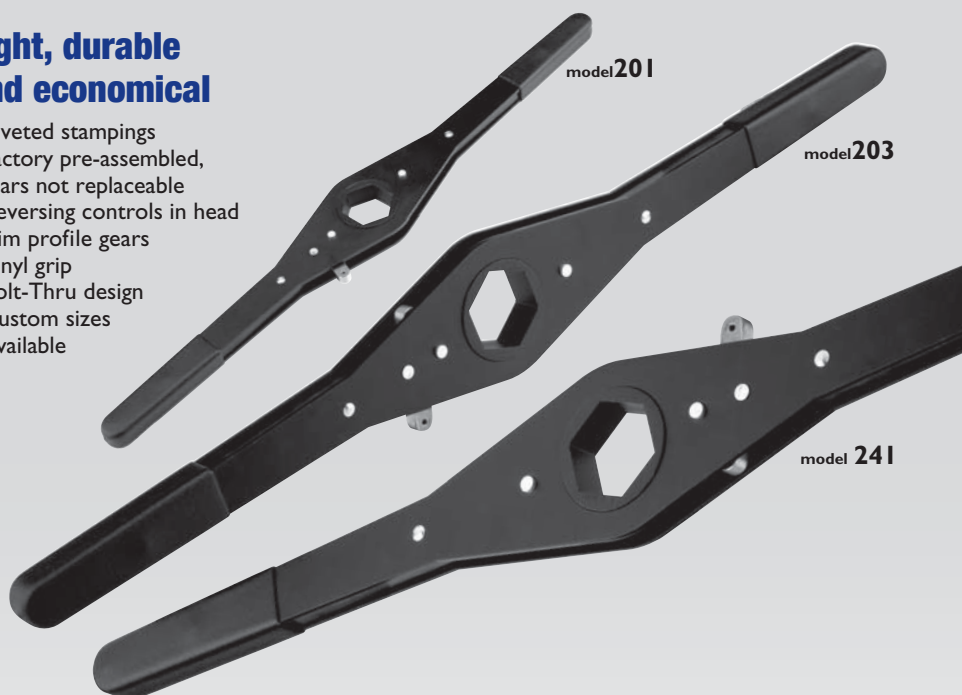
- Tighten or loosen screws, nuts and bolts with a hammer blow
- Quick, easy, and safe
- Rugged construction for long-term durability and reliability
- Prevents expensive, unnecessary damage to fasteners and machinery
- Available in five different sets, with and without bits and sockets.
- Available bits include both straight and Phillips
- Available hex sockets for use with 0690M (3/8") Impakdriver



## 200 SERIES

### Light, durable and economical

- Riveted stampings
- Factory pre-assembled, gears not replaceable
- Reversing controls in head
- Slim profile gears
- Vinyl grip
- Bolt-Thru design
- Custom sizes available



200 Series Double Handle Wrenches

Model	in	A		B		C		D		E		Gear Openings		lb	kg
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
201	13 3/4	349	1 9/16	40	3/4	19	3/8	16	6 7/8	175	3/8-3/4	10-19	1 1/4	0,57	
203	19	483	2 1/2	64	1	25	7/8	22	9 1/2	241	1/2-1 1/4	12-32	2 1/2	1,13	
241	27 3/8	702	3 5/8	92	1	25	7/8	22	13 13/16	351	3/4-1 13/16	19-46	4 3/4	2,15	

### Impakdriver

Model	Contents	Drive	in	Length		Dia.		Bits	Hex Sockets		lb	kg
				in	mm	in	mm		in	mm		
0690M	Driver	3/8	4 7/8	124	1 1/4	32	None	None	1/8	0,51		
0690MG	Driver	1/2	4 7/8	124	1 1/4	32	None	None	1/8	0,51		
0065M	Set	3/8	4 7/8	124	1 1/4	32	4*	None	1/2	0,68		
0067M	Set	3/8	4 7/8	124	1 1/4	32	4*	7/16, 1/2, 3/16	3/4	0,79		
0065MG	Set	1/2	4 7/8	124	1 1/4	32	4*	None	1/2	0,68		

\* 3/8 straight 1/2 straight #2 phillips #4 phillips

# Torque Wrenches

## T-Torker® SERIES

### T-Torker® Wrenches

For repetitive jobs requiring identical torque settings

- Highly durable
- Provides audible overrunning when any factory-preset torque is reached
- Torque values accurate to  $\pm 10\%$
- Fast, easy one-handed tightening in the right-hand direction
- Size and weight designed for hand comfort
- T-shape creates effective leverage
- Flanged reversing collar disengages the ratchet mechanism and locks the tool for conventional backing off and loosening
- All mechanisms are sealed in die-cast handle and lubricated for the normal life of the tool
- Available in three models: Utility, Industrial, and ratchet-only



### Series T-T

For Utility applications

- Specifically designed for US-style, No-HUB® cast iron soil pipe installations as prescribed by the Cast Iron Soil Pipe Institute
- Factory-preset and sealed to values of 60, 75, or 80 lb-in
- 5/16" or 3/8" hexagonal socket hardened to 42-48 Rc is forged on end of drive shaft

### Series T-TM

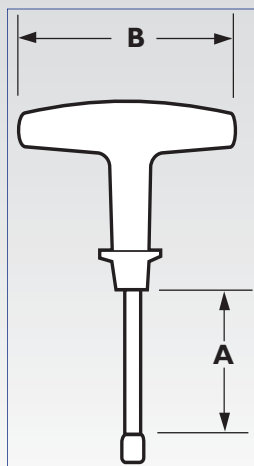
For industrial applications

- Designed to accommodate any factory-preset torque limit and variety of shaft-end accessories
- Applications include: production, assembly, inspection, quality control, field service, in-plant set up and maintenance
- Torque range is 5-80 lb-in
- Settings should be in 5 lb-in increments
- Customized shafts available on request

### Series TR

For maintenance applications

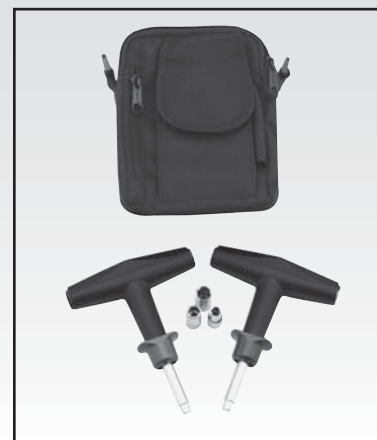
The TR series consists of no-torque ratchet T-handle wrenches whose superior design and construction makes them suitable for a variety of applications



### T-Torker Kit

For plumbing and utility applications

- All the tools needed to tighten all standard screws on No-HUB couplings to either 60 or 80 lb-in.
- Kit contains two T-Torker wrenches and three hex sockets: 1/4", 5/16", 3/8"
- Each wrench labeled with its torque setting and color-coded for easy identification in low light
- Kit is available in durable case with strap and belt loops



### Torque Wrenches

Model	No.	Drive Type	A		B		Torque		lb	kg	Basic Application
			in	mm	in	mm	lb-in	nm			
T-T	3T000	5/16 hex female	2 1/2	61	4	98	60 or 75	6,8 or 8,5	7/8	0,40	Utility
T-T	3T001	3/8 hex female	2 1/2	61	4	98	80	9,0	7/8	0,40	Utility
T-M	3M000	1/4 sq male	1 7/8	46	4	98	5-80	0,55-9,0	7/8	0,40	Industrial
T-R	3R000	1/4 sq male	1 7/8	46	4	98	N/A	N/A	7/8	0,40	Maintenance
T-60 Kit	K000	1/4, 5/16, 3/8 female	2 1/2	61	4	98	60 or 80	6,8 or 9,0	7/8	0,40	Utility, Plumbing

\* Please see Design Guide for complete ordering information.

# Valve Wheel Wrenches

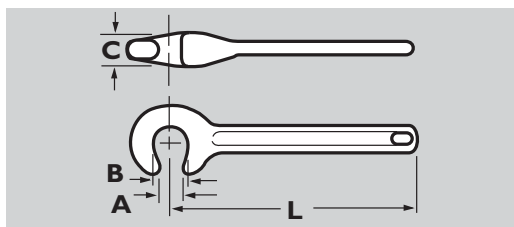
**For added force to turn frozen wheels**

- Rugged, cast iron or aluminum
- Large size, non-ratcheting extension arms
- Specially-shaped end opening engages without slipping or marring surfaces
- Available in 4 lengths: 8", 15", 22", and 30"



## Valve Wheel Wrenches

Model	L		A		B		C		lb	kg
	in	mm	in	mm	in	mm	in	mm		
<b>Cast Iron</b>										
V0	8	204	$\frac{21}{32}$	17	$\frac{3}{4}$	19	1	25	1	0,45
V1	15	381	1	25	$\frac{13}{16}$	30	$\frac{13}{8}$	35	$\frac{17}{16}$	0,85
V2	22	559	$\frac{15}{16}$	33	$\frac{11}{2}$	38	2	51	$7\frac{1}{2}$	3,40
V3	30	762	2	51	$2\frac{3}{16}$	56	$2\frac{1}{2}$	64	11	5,0
<b>Aluminum</b>										
V0	8	204	$\frac{21}{32}$	17	$\frac{3}{4}$	19	1	25	$\frac{1}{4}$	0,11
V1	14	356	1	25	$\frac{13}{16}$	30	$\frac{13}{8}$	35	1	0,45
V2	$20\frac{1}{2}$	521	$\frac{13}{8}$	35	$\frac{11}{2}$	38	2	51	$2\frac{1}{8}$	0,96



# Strap Wrenches

## The Warnock

**For handling highly-polished surfaces**

- Cast metal handle
- Strap made of polyester yarn coated with latex for durability and extra grip
- Drop-forged shackle swings away from handle for quick strap adjustment, securely holds strap in closed position and provides extra turning force
- Custom strap lengths are available on request

Warnock



Simplex

## The Simplex

**For heavy-duty applications**

- Cast metal handle
- Strap made of polyester yarn coated with latex for durability and extra grip
- Strap and unique nose configuration provides powerful gripping
- Conforms to US Federal Spec. GGG-W-651, Type V
- Custom strap lengths available on request

## Strap Wrenches

	Handle Length		Strap Width		Strap Length		Turning Capacity		Gear Openings			
Model	in	mm	in	mm	in	mm	in	mm	lb-ft	nm	lb	kg
<b>Warnock</b>												
W-12	12	305	$\frac{1}{4}$	32	17	430	2	51	188	255	$1\frac{1}{2}$	0,67
W-18	18	458	$\frac{3}{4}$	44	30	760	5	127	250	339	$3\frac{1}{2}$	1,57
W-24	24	610	$2\frac{1}{4}$	58	54	1370	12	305	330	447	$6\frac{1}{2}$	2,92
<b>Simplex</b>												
S-6	6	153	$\frac{1}{2}$	13	22	559	4	102	20	27	$\frac{1}{8}$	0,06
S-12	12	305	$\frac{1}{4}$	32	17	430	2	51	188	255	$1\frac{1}{2}$	0,67
S-18	18	458	$\frac{3}{4}$	44	30	760	5	127	250	339	3	1,35
S-24	24	610	$2\frac{1}{4}$	58	54	1370	12	305	330	447	5	2,25



# Ratchet Arms

## 100 SERIES

### Low cost adjustable arms

- Riveted stampings
- Factory pre-assembled, gears not replaceable
- Reversing controls in head
- Slim profile gears
- Vinyl grip on 112, 114 & 115
- Bolt-Thru design



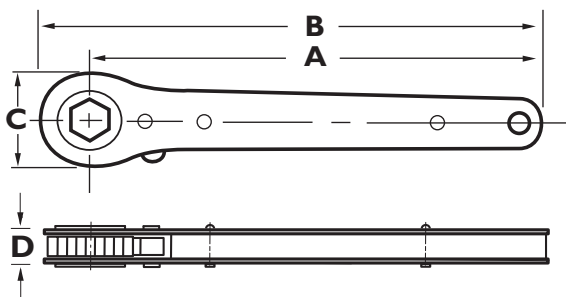
MODEL 101

MODEL 103

MODEL 112, 114, 115

### 100 Series Ratchet Arms

Model	A		B		C		D		Gear Openings		lb	kg
	in	mm	in	mm	in	mm	in	mm	in	mm		
101	7	180	7 <sup>15</sup> / <sub>16</sub>	198	1 <sup>1</sup> / <sub>16</sub>	40	1 <sup>15</sup> / <sub>32</sub>	15	3 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	10-19	3 <sup>1</sup> / <sub>4</sub>	0,34
101A	7	180	8 <sup>1</sup> / <sub>16</sub>	205	2 <sup>1</sup> / <sub>16</sub>	52	1 <sup>15</sup> / <sub>32</sub>	15	1 <sup>1</sup> / <sub>2</sub> - 1	13-25	3 <sup>1</sup> / <sub>4</sub>	0,34
103	12	305	13 <sup>1</sup> / <sub>2</sub>	342	2 <sup>1</sup> / <sub>2</sub>	64	7 <sup>7</sup> / <sub>8</sub>	22	1 <sup>1</sup> / <sub>2</sub> - 1 <sup>1</sup> / <sub>4</sub>	12-32	2 <sup>1</sup> / <sub>4</sub>	1,02
112	8	204	9	228	2 <sup>1</sup> / <sub>16</sub>	52	7 <sup>7</sup> / <sub>8</sub>	22	1 <sup>1</sup> / <sub>2</sub> - 1	13-25	1 <sup>1</sup> / <sub>2</sub>	0,68
114	10	254	11	280	2 <sup>1</sup> / <sub>16</sub>	52	7 <sup>7</sup> / <sub>8</sub>	22	1 <sup>1</sup> / <sub>2</sub> - 1	13-25	2	0,91
115	12	305	13	330	2 <sup>1</sup> / <sub>16</sub>	52	7 <sup>7</sup> / <sub>8</sub>	22	1 <sup>1</sup> / <sub>2</sub> - 1	13-25	2	0,91



## 10/10Z/40 SERIES

### Basic Ratchet Arms

- Cast malleable iron
- Durable in rugged, heavy-duty applications
- Reversing controls in head
- Enclosed, replaceable gears
- Wide range of standard and special openings available
- Slim profile
- Conform to US Federal Spec. GGG-W-653, Type I, Class I
- Bolt-Thru design



SERIES 10

SERIES 10Z

### 10 Series Ratchet Arms

Model	A		B		C		D		E		Gear Openings		lb	kg
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
11	6	152	6 <sup>15</sup> / <sub>16</sub>	176	1 <sup>13</sup> / <sub>16</sub>	46	2 <sup>23</sup> / <sub>32</sub>	18			3 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	10-19	1	0,45
12	8	204	9	228	1 <sup>15</sup> / <sub>16</sub>	50	7 <sup>7</sup> / <sub>8</sub>	22			3 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	10-19	1	0,45
13	10	254	11	280	1 <sup>15</sup> / <sub>16</sub>	50	7 <sup>7</sup> / <sub>8</sub>	22			3 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	10-19	1 <sup>1</sup> / <sub>2</sub>	0,68
14	10	254	11 <sup>1</sup> / <sub>4</sub>	286	2 <sup>1</sup> / <sub>16</sub>	52	1 <sup>13</sup> / <sub>16</sub>	20			1 <sup>1</sup> / <sub>2</sub> - 1	13-25	1 <sup>1</sup> / <sub>4</sub>	0,79
15	12	305	13 <sup>1</sup> / <sub>4</sub>	336	2 <sup>1</sup> / <sub>16</sub>	52	1 <sup>13</sup> / <sub>16</sub>	20			1 <sup>1</sup> / <sub>2</sub> - 1	13-25	2	0,91
16	15	382	16 <sup>1</sup> / <sub>2</sub>	420	3	76	1 <sup>1</sup> / <sub>32</sub>	30			1 <sup>1</sup> / <sub>2</sub> - 1 <sup>1</sup> / <sub>4</sub>	13-36	4 <sup>3</sup> / <sub>4</sub>	2,16
17	18	458	19 <sup>1</sup> / <sub>2</sub>	495	3	76	1 <sup>1</sup> / <sub>32</sub>	30			1 <sup>1</sup> / <sub>2</sub> - 1 <sup>1</sup> / <sub>4</sub>	13-36	5 <sup>1</sup> / <sub>2</sub>	2,50

### 10Z Series Ratchet Arms

11Z	6	152	6 <sup>15</sup> / <sub>16</sub>	176	1 <sup>13</sup> / <sub>16</sub>	46	2 <sup>23</sup> / <sub>32</sub>	18	2 <sup>1</sup> / <sub>2</sub>	64	3 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	10-19	1	0,45
12Z	8	204	9	228	1 <sup>15</sup> / <sub>16</sub>	50	7 <sup>7</sup> / <sub>8</sub>	22	2 <sup>1</sup> / <sub>2</sub>	64	3 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	10-19	1	0,45
13Z	10	254	11	280	1 <sup>15</sup> / <sub>16</sub>	50	7 <sup>7</sup> / <sub>8</sub>	22	2 <sup>1</sup> / <sub>2</sub>	64	3 <sup>1</sup> / <sub>8</sub> - 3 <sup>1</sup> / <sub>4</sub>	10-19	1 <sup>1</sup> / <sub>2</sub>	0,68
14Z	10	254	11 <sup>1</sup> / <sub>4</sub>	286	2 <sup>1</sup> / <sub>16</sub>	52	1 <sup>13</sup> / <sub>16</sub>	20	3	76	1 <sup>1</sup> / <sub>2</sub> - 1	13-25	1 <sup>1</sup> / <sub>4</sub>	0,79
15Z	12	305	13 <sup>1</sup> / <sub>4</sub>	336	2 <sup>1</sup> / <sub>16</sub>	52	1 <sup>13</sup> / <sub>16</sub>	20	3	76	1 <sup>1</sup> / <sub>2</sub> - 1	13-25	2	0,91
16Z	15	382	16 <sup>1</sup> / <sub>2</sub>	420	3	76	1 <sup>1</sup> / <sub>32</sub>	30	4	102	1 <sup>1</sup> / <sub>2</sub> - 1 <sup>1</sup> / <sub>4</sub>	13-36	4 <sup>3</sup> / <sub>4</sub>	2,16
17Z	18	458	19 <sup>1</sup> / <sub>2</sub>	495	3	76	1 <sup>1</sup> / <sub>32</sub>	30	4	102	1 <sup>1</sup> / <sub>2</sub> - 1 <sup>1</sup> / <sub>4</sub>	13-36	5 <sup>1</sup> / <sub>2</sub>	2,50

\* Please see Design Guide for complete ordering information.

# 10/10z/40 SERIES

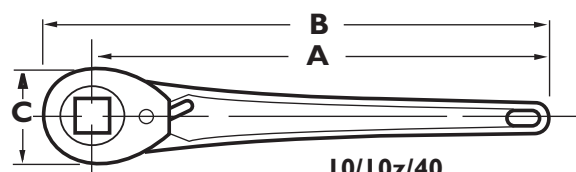
Gear Openings



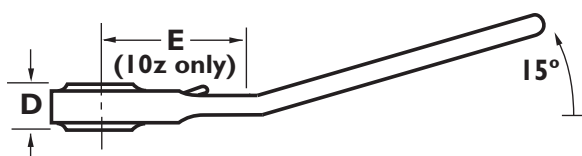
SERIES 40

## 40 Series Ratchet Arms

Model	A		B		C		D		Gear Openings		lb	kg
	in	mm	in	mm	in	mm	in	mm	in	mm		
41	24	610	25 <sup>7</sup> / <sub>8</sub>	645	3 <sup>3</sup> / <sub>4</sub>	95	1 <sup>3</sup> / <sub>8</sub>	35	3/4-1 13/16	19-46	12	5,44
42	36 <sup>1</sup> / <sub>4</sub>	920	38 <sup>1</sup> / <sub>4</sub>	972	3 <sup>3</sup> / <sub>4</sub>	95	1 <sup>3</sup> / <sub>8</sub>	35	3/4-1 13/16	19-46	14	6,35
44	36	914	38 <sup>7</sup> / <sub>8</sub>	976	4 <sup>7</sup> / <sub>8</sub>	124	1 <sup>1</sup> / <sub>2</sub>	38	1 1/16-2 3/8	27-60	16	7,26
45	24	610	27	686	6 <sup>1</sup> / <sub>8</sub>	156	1 11/16	43	1 11/16-3 1/4	42-80	16	7,26
46	38	965	41 1/16	1042	6 <sup>1</sup> / <sub>8</sub>	156	1 15/32	38	1 11/16-3 1/4	42-80	25	11,35
47	42	1066	45 11/16	1160	7 <sup>3</sup> / <sub>8</sub>	188	1 <sup>3</sup> / <sub>4</sub>	44	2 1/8-3 7/8	70-95	37	16,8
48	43 <sup>7</sup> / <sub>8</sub>	1107	48	1219	8 <sup>3</sup> / <sub>8</sub>	224	1 <sup>7</sup> / <sub>8</sub>	48	2 3/4-4 7/8	70-120	56	25,2



10/10z/40



# 20 SERIES

## Heavy Duty, remote reversing Ratchet Arms

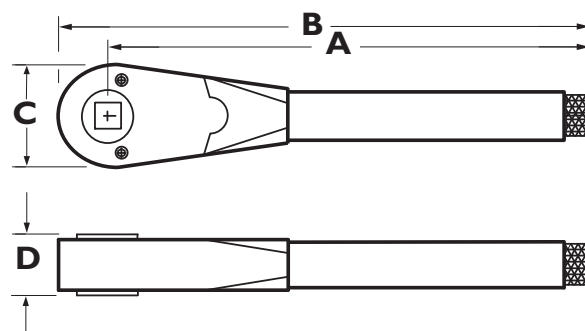
- Knurled knob operates on half-turn for maximum safety and convenience
- Durable for heavy-duty applications
- Enclosed, replaceable gears
- Wide range of standard and special openings and lengths
- Conform to Federal Spec. GGG-W-653, Type I, Class 2
- Bolt-Thru design



SERIES 20

## 20 Series Ratchet Arms

Model	A		B		C		D		Gear Openings		lb	kg
	in	mm	in	mm	in	mm	in	mm	in	mm		
21	7 <sup>3</sup> / <sub>8</sub>	188	8 <sup>7</sup> / <sub>8</sub>	208	1 <sup>7</sup> / <sub>8</sub>	40	1 <sup>3</sup> / <sub>8</sub>	20	5/16-9/32	10-14	1	0,45
22	10 <sup>1</sup> / <sub>2</sub>	266	11 1/2	292	2	50	1	25	3/8-3/4	10-19	2	0,91
23	12 <sup>3</sup> / <sub>8</sub>	314	13 <sup>3</sup> / <sub>8</sub>	345	2 <sup>3</sup> / <sub>8</sub>	60	1 1/8	28	1/2-1	13-25	3 1/2	1,59
24	15 <sup>7</sup> / <sub>8</sub>	395	17 <sup>1</sup> / <sub>8</sub>	434	3 <sup>1</sup> / <sub>8</sub>	80	1 <sup>7</sup> / <sub>8</sub>	30	1/2-1 1/4	13-36	6 1/4	2,84
25	18 <sup>1</sup> / <sub>2</sub>	470	20 <sup>1</sup> / <sub>8</sub>	510	3 <sup>1</sup> / <sub>8</sub>	80	1 <sup>7</sup> / <sub>8</sub>	30	1/2-1 1/4	13-36	6 3/4	3,06
26	18 <sup>3</sup> / <sub>8</sub>	473	20 <sup>1</sup> / <sub>8</sub>	522	3 <sup>3</sup> / <sub>8</sub>	95	1 <sup>7</sup> / <sub>8</sub>	35	3/4-1 13/16	19-46	11 7/8	5,39
27	24 <sup>3</sup> / <sub>8</sub>	625	26 <sup>7</sup> / <sub>8</sub>	675	3 <sup>3</sup> / <sub>4</sub>	95	1 <sup>3</sup> / <sub>8</sub>	35	3/4-1 13/16	19-46	12	5,4
28	36 <sup>3</sup> / <sub>8</sub>	935	39 <sup>3</sup> / <sub>8</sub>	995	4 <sup>7</sup> / <sub>8</sub>	124	1 1/2	38	1 1/16-2 3/8	27-60	18	8,17



# Ratchet Clutches

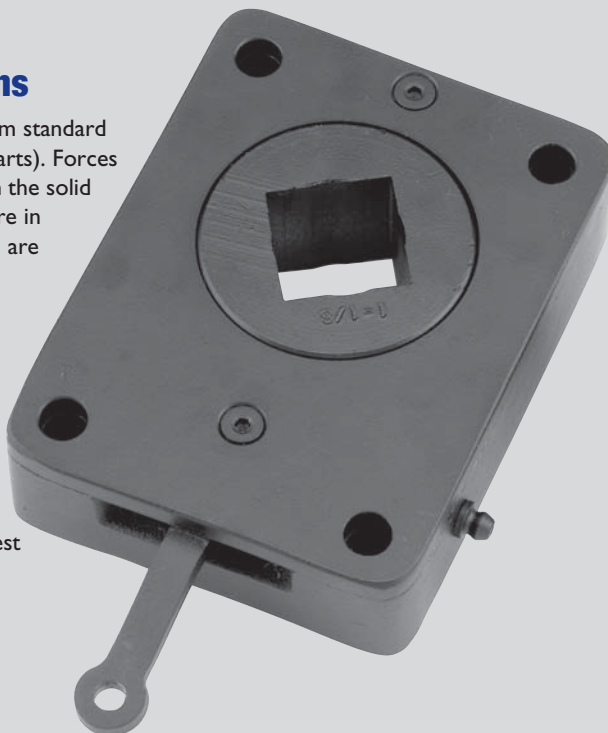
## 70/700 SERIES

### 70 Series Clutches

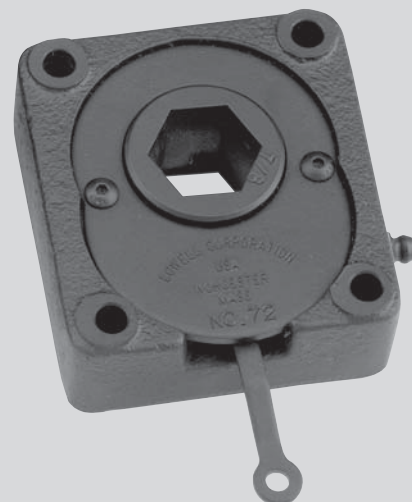
#### Rugged and reliable for heavy duty applications

Lowell ratchet clutches are designed from standard bodies, gears, pawls, and springs (see charts). Forces are applied in an optimum manner between the solid steel gear and hefty pawl so that loads are in compression rather than in shear. Gears are a low carbon steel. Rugged tooth design has large contact area with pawl.

- Mounting holes provided in body
- Keyways are per ANSI/ASME B17.1
- Lubrication is recommended after every 1200 hours of operation
- Specials may be ordered with size, shape, and tooth arrangements of your choice
- Free running neutral available on request
- Durable, cast iron construction
- Custom models available
- 100% made in USA



70 Series Clutches



700 Series Clutches



### 700 Series Clutches

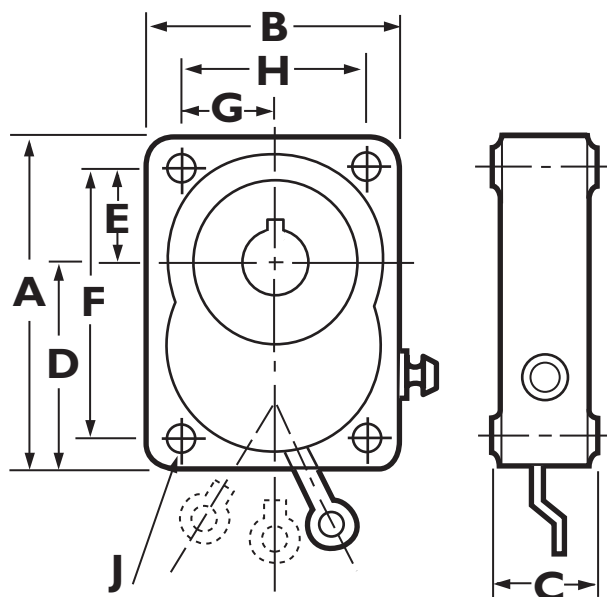
#### Low cost and weight with high performance

- Fingertip control of a range of motion: one-way left, one-way right, freewheeling, and fully locked
- Control lever can be connected to hydraulic, pneumatic, or electric actuators for remote shifting
- Simple design ensures durability and reduces purchase and operating costs
- High drive torque to weight ratio
- Maximum driving efficiency
- Minimal overrunning torque
- Versatile mounting options
- Standard gear openings available in hex, square, and bore and keyway (per ANSI/ASME B17.1)
- Can be used singly or in combination
- Open sided for easy, minimal maintenance
- Alignment is not critical
- Custom models available
- 100% made in USA



# 70/700 SERIES

## 70 Series Clutches



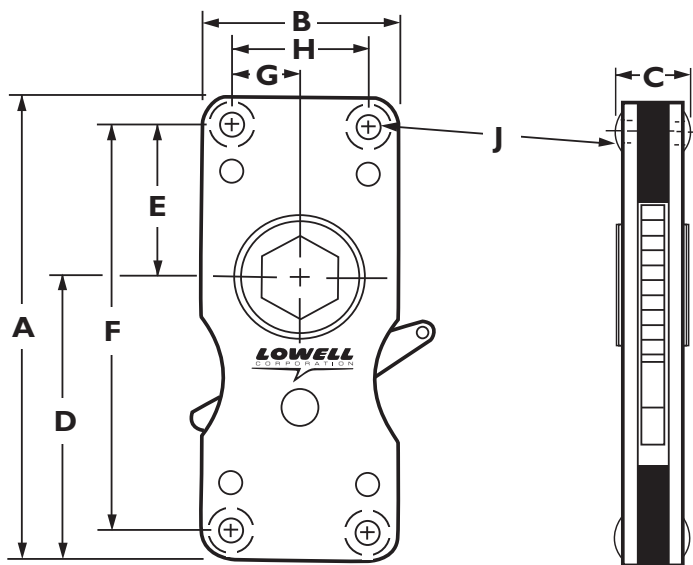
## 70 Series Ratchet Clutches

	Gear																Max		Overrun		Gear					
	A		B		C		D		E		F		G		H		J		Openings	Torque	lb-ft	NM	Speed	Teeth		
MODEL	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	LB	KG						
71	2 <sup>7</sup> / <sub>8</sub>	73	2 <sup>3</sup> / <sub>8</sub>	60	<sup>15</sup> / <sub>16</sub>	24	1 <sup>3</sup> / <sub>4</sub>	44	<sup>15</sup> / <sub>16</sub>	20	2 <sup>1</sup> / <sub>4</sub>	58	<sup>7</sup> / <sub>8</sub>	22	1 <sup>3</sup> / <sub>4</sub>	44	<sup>17</sup> / <sub>64</sub>	6	<sup>9</sup> / <sub>8</sub> -3 <sup>1</sup> / <sub>4</sub>	10-19	1 <sup>1</sup> / <sub>2</sub>	0,68	200	272	250	16
72	3 <sup>1</sup> / <sub>4</sub>	82	2 <sup>7</sup> / <sub>8</sub>	74	1 <sup>3</sup> / <sub>16</sub>	30	1 <sup>7</sup> / <sub>8</sub>	48	1 <sup>9</sup> / <sub>16</sub>	26	2 <sup>3</sup> / <sub>8</sub>	66	1 <sup>9</sup> / <sub>8</sub>	28	2 <sup>1</sup> / <sub>4</sub>	58	<sup>17</sup> / <sub>64</sub>	6	<sup>9</sup> / <sub>2</sub> -1	13-25	2 <sup>1</sup> / <sub>4</sub>	1,02	300	406	100	16
73	4	102	3 <sup>1</sup> / <sub>8</sub>	80	1 <sup>3</sup> / <sub>16</sub>	34	2 <sup>1</sup> / <sub>16</sub>	62	1 <sup>9</sup> / <sub>16</sub>	30	3 <sup>1</sup> / <sub>4</sub>	82	1 <sup>15</sup> / <sub>16</sub>	30	2 <sup>3</sup> / <sub>8</sub>	60	<sup>21</sup> / <sub>64</sub>	8	<sup>1</sup> / <sub>2</sub> -1 <sup>1</sup> / <sub>4</sub>	13-36	3 <sup>1</sup> / <sub>2</sub>	1,59	500	678	100	20
74	5 <sup>1</sup> / <sub>8</sub>	130	3 <sup>7</sup> / <sub>8</sub>	98	1 <sup>7</sup> / <sub>16</sub>	36	3 <sup>1</sup> / <sub>8</sub>	80	1 <sup>1</sup> / <sub>2</sub>	38	4 <sup>1</sup> / <sub>8</sub>	105	1 <sup>7</sup> / <sub>16</sub>	36	2 <sup>7</sup> / <sub>8</sub>	74	<sup>25</sup> / <sub>64</sub>	10	<sup>3</sup> / <sub>4</sub> -1 <sup>15</sup> / <sub>16</sub>	19-46	6 <sup>1</sup> / <sub>4</sub>	2,84	800	1085	75	20
75	6 <sup>1</sup> / <sub>2</sub>	165	5	128	1 <sup>9</sup> / <sub>16</sub>	40	4	102	1 <sup>7</sup> / <sub>8</sub>	48	5 <sup>1</sup> / <sub>4</sub>	134	1 <sup>7</sup> / <sub>8</sub>	48	3 <sup>3</sup> / <sub>4</sub>	95	<sup>17</sup> / <sub>32</sub>	14	1 <sup>1</sup> / <sub>2</sub> -2 <sup>3</sup> / <sub>8</sub>	27-60	11	5,0	1500	2034	60	24
76	8 <sup>1</sup> / <sub>8</sub>	213	6 <sup>1</sup> / <sub>4</sub>	159	1 <sup>7</sup> / <sub>16</sub>	37	5 <sup>1</sup> / <sub>4</sub>	133	2 <sup>1</sup> / <sub>2</sub>	64	7 <sup>1</sup> / <sub>8</sub>	181	2 <sup>1</sup> / <sub>2</sub>	64	5	127	<sup>17</sup> / <sub>32</sub>	14	1 <sup>15</sup> / <sub>16</sub> -3 <sup>1</sup> / <sub>4</sub>	42-80	15	6,8	2500	3390	50	24
77	9 <sup>3</sup> / <sub>4</sub>	248	7 <sup>1</sup> / <sub>2</sub>	191	1 <sup>3</sup> / <sub>16</sub>	38	6	152	3 <sup>1</sup> / <sub>8</sub>	79	8 <sup>1</sup> / <sub>16</sub>	214	3 <sup>1</sup> / <sub>8</sub>	79	6 <sup>1</sup> / <sub>4</sub>	159	<sup>17</sup> / <sub>32</sub>	14	2 <sup>3</sup> / <sub>8</sub> -3 <sup>7</sup> / <sub>8</sub>	70-95	24	10,89	4100	5560	50	24
78	10 <sup>7</sup> / <sub>8</sub>	276	8 <sup>1</sup> / <sub>2</sub>	213	1 <sup>15</sup> / <sub>16</sub>	49	6 <sup>1</sup> / <sub>4</sub>	165	3 <sup>1</sup> / <sub>8</sub>	92	9 <sup>1</sup> / <sub>8</sub>	238	3 <sup>7</sup> / <sub>8</sub>	87	6 <sup>1</sup> / <sub>4</sub>	175	<sup>17</sup> / <sub>32</sub>	14	2 <sup>3</sup> / <sub>4</sub> -4 <sup>3</sup> / <sub>8</sub>	70-120	29	13,15	6260	8490	30	24

## 700 Series Ratchet Clutches

<b>701</b>	4	102	$1\frac{5}{8}$	41	$\frac{21}{32}$	17	$2\frac{7}{16}$	62	$1\frac{21}{64}$	34	$3\frac{1}{2}$	89	$\frac{9}{16}$	14	$1\frac{1}{8}$	29	$\frac{13}{16}$	5	$\frac{3}{8}-\frac{3}{4}$	10-19	$\frac{3}{4}$	0,34	85	115	250	16
<b>702</b>	$5\frac{1}{4}$	133	$2\frac{3}{8}$	60	$\frac{61}{64}$	24	$3\frac{3}{4}$	92	$1\frac{1}{4}$	32	$4\frac{1}{2}$	114	$\frac{13}{16}$	21	$1\frac{3}{4}$	41	$\frac{17}{64}$	7	$\frac{1}{2}-1$	13-25	$1\frac{1}{2}$	0,68	175	237	100	20

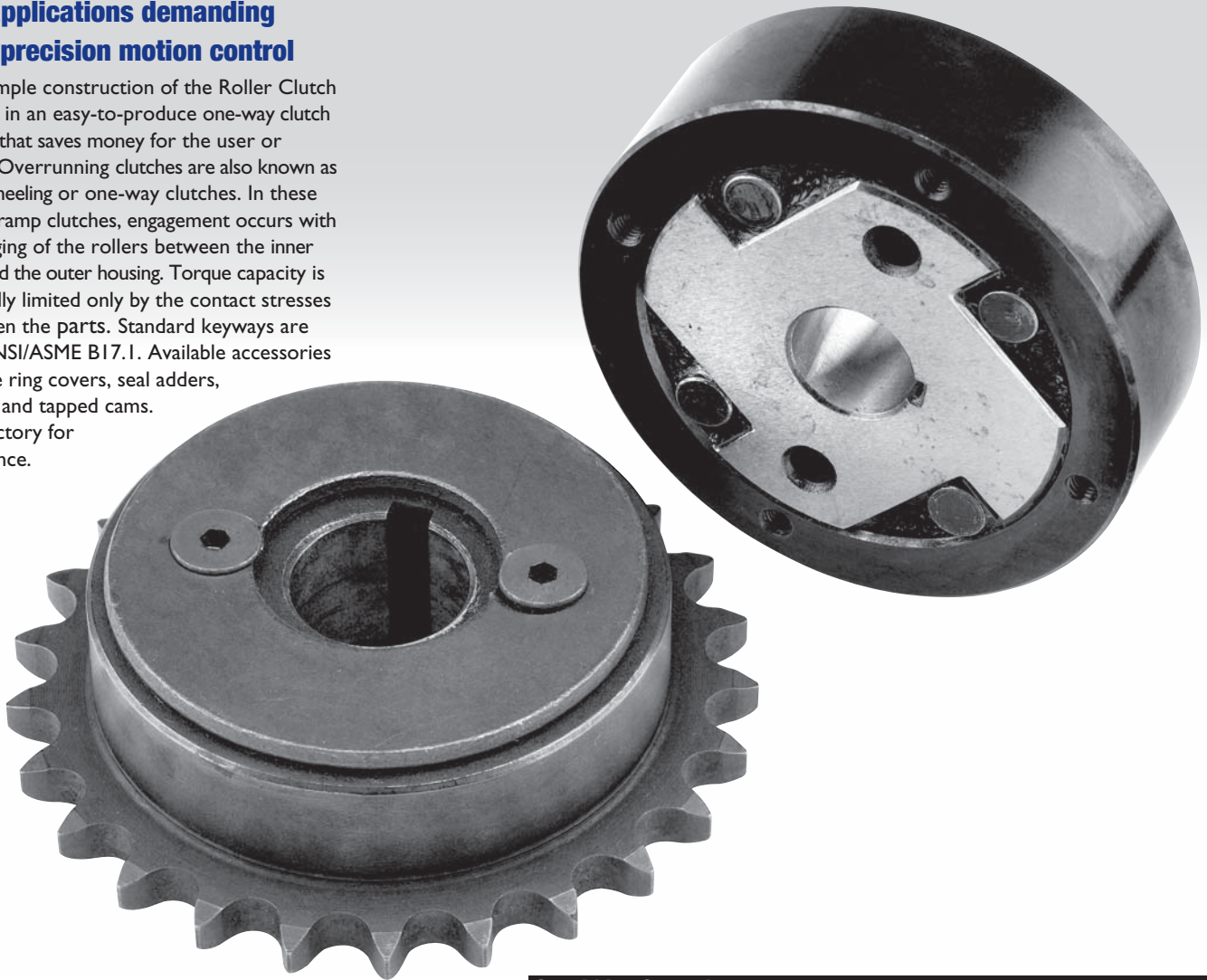
## 700 Series Clutches



# Roller Clutches

## For applications demanding high precision motion control

The simple construction of the Roller Clutch results in an easy-to-produce one-way clutch device that saves money for the user or OEM. Overrunning clutches are also known as free-wheeling or one-way clutches. In these roller-ramp clutches, engagement occurs with a wedging of the rollers between the inner cam and the outer housing. Torque capacity is normally limited only by the contact stresses between the parts. Standard keyways are per ANSI/ASME B17.1. Available accessories include ring covers, seal adders, drilled and tapped cams. Call factory for assistance.



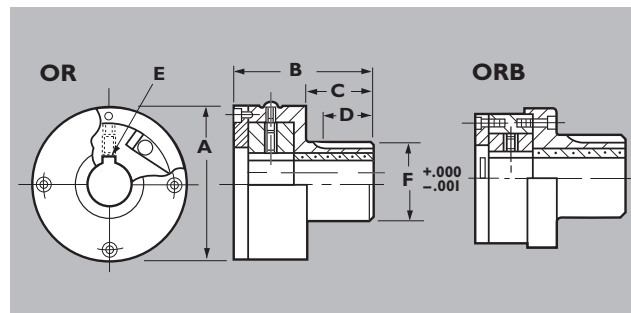
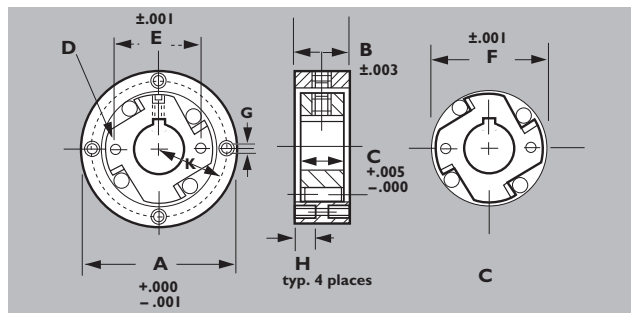
### One Way Sprocket

Max. Bore		Cam Size	Pitch	Number of Teeth		MB		L P	
in	mm	in	in	mb	p	in	mm	in	mm
$\frac{7}{16}$	14,3	5	35	15; 16 +	17 +	$\frac{13}{16}$	20,6	61/64	24,2
$\frac{5}{8}$	16	14	35	20 +	21 +	$\frac{13}{16}$	20,6	1 11/32	34,1
$\frac{7}{8}$	22,2	28	35	25 +	26 +	$1\frac{1}{16}$	27	1 5/32	29,4
$\frac{7}{16}$	14,3	5	40	12 +	13 +	$\frac{13}{16}$	20,6	1 1/16	27
$\frac{5}{8}$	16	14	40	15 +	16 +	$\frac{13}{16}$	20,6	1 5/32	29,4
$\frac{7}{8}$	22,2	28	40	20 +	21 +	$1\frac{1}{16}$	27	1 9/32	32,6
$\frac{5}{8}$	16	14	50	12 +	13 +	$\frac{13}{16}$	20,6	1 13/64	30,6
$\frac{7}{8}$	22,2	28	50	15; 16 +	17 +	$1\frac{1}{16}$	27	1 11/32	34,1
$1\frac{1}{4}$	32	100	50	20; 21 +	22 +	$\frac{3}{8}$	35	1 9/16	39,7
$\frac{5}{8}$	16	14	60	12 +	13 +	$\frac{13}{16}$	20,6	1 21/64	33,7
$\frac{7}{8}$	22,2	28	60	14 +	15 +	$1\frac{1}{16}$	27	1 29/64	37
$1\frac{1}{4}$	32	100	60	18 +	19 +	$1\frac{3}{8}$	35	1 11/16	42,9

\* Please call 800-456-9355 for complete ordering information

**Type MB:** Stocked in smallest sprocket listed. See Cam & Ring Assemblies for bore size availability. **Type P:** Made to order. Seals optional.

\* Please see Design Guide for complete ordering information.

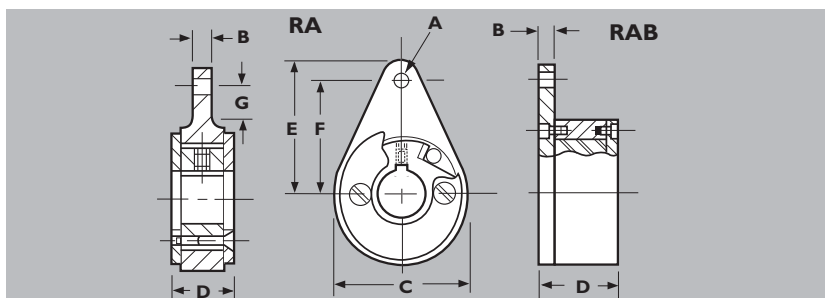


## Cam and Ring Assembly

Overrun																								
Cam only	Complete	A		B		C		D		E		F		G		H		K		Bore Openings		Torque	Speed	
Model	Model	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb-ft	nm	rpm
C5	CR5	1 1/2	38,1	21/32	16,7	41/64	16,3	9/64	3,6	53/64	2,1	1 1/4	25,8	6-32	7/32	5,6	1 9/32	32,5	1/4-1/2	6,4-12,7	5	6,77	1800	
C14	CR14	1 7/8	47,6	21/32	16,7	41/64	16,3	9/64	3,6	1 1/8	28,6	1 3/8	34,9	6-32	9/32	7,1	1 11/16	42,9	3/8-5/8	9,5-17,1	14	18,96	1800	
C28	CR28	2 5/8	66,7	25/32	19,8	49/64	19,4	13/64	5,2	1 27/64	36,1	1 29/32	48,4	8-32	3/8	9,5	2 7/32	58	5/8-7/8	17,1-22,2	28	37,92	1500	
C100	CR100	3 1/2	88,9	11/32	26,2	1 1/64	25,8	17/64	6,7	1 7/8	47,6	2 1/4	67,1	10-32	3/8	9,5	3	76,2	3/4-1 1/4	19-31,8	100	135,43	1000	
C200	CR200	4 1/8	111,1	1 3/8	41,3	1 39/64	40,9	17/64	6,7	2 21/32	67,5	3 3/32	83,3	1 1/4-20	7/16	11,1	3 9/16	96,8	1 1/2-2	38,1-50,8	200	270,86	800	
C500	CR500	5 7/8	149,2	1 5/16	45,6	1 25/32	45,2			4 9/16	115,9			5/16-18	1/2	12,7	5 1/4	133,4	2 1/4-2 3/4	57,2-69,9	500	677,14	600	

## Overrunning Clutch

																	Bore Openings		Torque		Overrun
	A		B		C		D		E		F		G		H		in	mm	lb-ft	nm	rpm
Model	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm			
OR5	1 <sup>5</sup> / <sub>16</sub>	41,3	1 <sup>15</sup> / <sub>16</sub>	49,2	1 <sup>13</sup> / <sub>16</sub>	20,6	7 <sub>16</sub>	11,1	3 <sup>1</sup> / <sub>16</sub> × 3 <sup>1</sup> / <sub>32</sub>	4,8 × 2,4	7 <sub>8</sub>	11,1	4 <sup>1</sup> / <sub>64</sub>	16,3	1 <sup>1</sup> / <sub>16</sub>	27	1 <sup>1</sup> / <sub>4</sub> -1 <sup>1</sup> / <sub>2</sub>	6,4-12,7	5	6,77	1800
OR14	2	50,8	2 <sup>1</sup> / <sub>8</sub>	54	1	25,4	14,3	3 <sup>1</sup> / <sub>16</sub> × 3 <sup>1</sup> / <sub>32</sub>	4,8 × 2,4	1 <sup>1</sup> / <sub>4</sub>	31,8	4 <sup>1</sup> / <sub>64</sub>	16,3	1 <sup>3</sup> / <sub>16</sub>	30,2	3 <sup>3</sup> / <sub>8</sub> -5 <sup>3</sup> / <sub>8</sub>	9,5-17,1	14	18,96	1800	
OR28	2 <sup>5</sup> / <sub>8</sub>	66,7	2 <sup>23</sup> / <sub>32</sub>	69,1	1 <sup>15</sup> / <sub>16</sub>	23,8	33,3	3 <sup>1</sup> / <sub>16</sub> × 3 <sup>1</sup> / <sub>32</sub>	4,8 × 2,4	1 <sup>3</sup> / <sub>8</sub>	34,9	4 <sup>1</sup> / <sub>64</sub>	19,4	1 <sup>3</sup> / <sub>4</sub>	44,4	5 <sup>3</sup> / <sub>8</sub> -7 <sup>3</sup> / <sub>8</sub>	17,1-22,2	28	37,92	1500	
OR100	3 <sup>3</sup> / <sub>8</sub>	85,7	3 <sup>1</sup> / <sub>16</sub>	77,8	1 <sup>7</sup> / <sub>16</sub>	36,5	1	25,4	1 <sup>1</sup> / <sub>8</sub> × 1 <sup>1</sup> / <sub>8</sub>	6,4 × 3,2	1 <sup>3</sup> / <sub>4</sub>	44,5	1 <sup>1</sup> / <sub>64</sub>	25,8	1 <sup>3</sup> / <sub>4</sub>	44,4	3 <sup>3</sup> / <sub>4</sub> -1	19-25,4	100	135,43	1000
ORB100	3 <sup>5</sup> / <sub>8</sub>	92	3 <sup>11</sup> / <sub>32</sub>	84,9	1 <sup>1</sup> / <sub>2</sub>	38,1	1 <sup>13</sup> / <sub>16</sub>	20,6	3 <sup>3</sup> / <sub>8</sub> × 3 <sup>1</sup> / <sub>16</sub>	9,5 × 4,8	2 <sup>1</sup> / <sub>4</sub>	57,2	1 <sup>1</sup> / <sub>64</sub>	25,8	2	50,8	3 <sup>3</sup> / <sub>4</sub> -1 <sup>1</sup> / <sub>4</sub>	19-31,8	100	135,43	1000
ORB200	4 <sup>1</sup> / <sub>2</sub>	114,3	4 <sup>1</sup> / <sub>2</sub>	114,3	2 <sup>1</sup> / <sub>16</sub>	52,4	1 <sup>5</sup> / <sub>16</sub>	33,3	3 <sup>3</sup> / <sub>8</sub> × 3 <sup>1</sup> / <sub>16</sub>	9,5 × 4,8	3	76,2	1 <sup>39</sup> / <sub>64</sub>	40,9	2 <sup>1</sup> / <sub>2</sub>	63,5	1 <sup>1</sup> / <sub>2</sub> -2	38,1-50,8	200	270,86	800
ORB500	6	152,4	5 <sup>3</sup> / <sub>4</sub>	131	2 <sup>1</sup> / <sub>2</sub>	63,5	2	50,8	1 <sup>1</sup> / <sub>2</sub> × 1 <sup>1</sup> / <sub>4</sub>	12,7 × 6,4	4 <sup>1</sup> / <sub>2</sub>	114,3	1 <sup>25</sup> / <sub>32</sub>	45,2	3	76,2	2 <sup>1</sup> / <sub>4</sub> -2 <sup>3</sup> / <sub>4</sub>	57,2-69,9	500	677,14	600



## Roller Arm Assembly

Model	A		B		C		D		E		F		G		Bore Openings		Torque		Overrun
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	lb-ft	nm	rpm
RA14	1/4	6,4	1/4	6,4	1 7/8	47,6	13/16	20,6	1 3/4	44,5	1 1/2	38,1	7/16	11,1	3/8-5/8	9,5-17,1	14	18,96	1800
RA100	5/16	7,9	5/16	7,9	3 3/4	95,3	1 3/8	34,9	3 7/16	87,3	3	76,2	1	25,4	3/4-1 1/4	19-31,8	100	135,43	1000
RAB200	13/32	10,3	3/8	9,5	4 1/2	114,3	2 3/8	60,3	4 1/4	108	3 3/8	92,1			1 1/2-2	38,1-50,8	200	270,86	800
RAB500	17/32	13,5	3/8	9,5	6	152,4	2 7/16	64,3	5 1/2	139,7	4 3/4	120,7			2 1/4-2 3/4	57,2-69,9	500	677,14	600

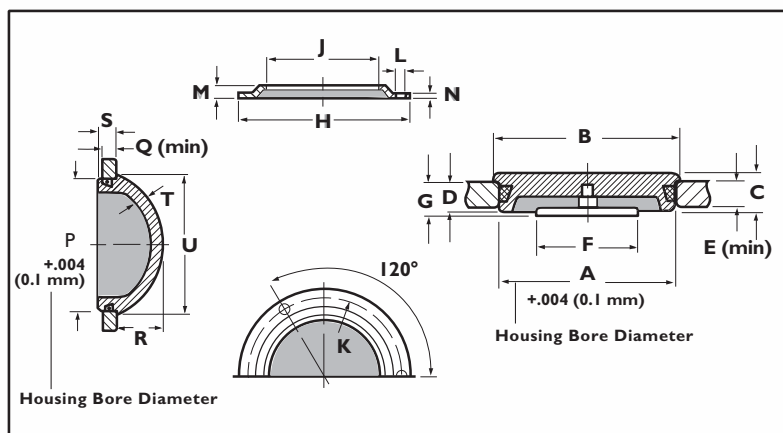
\* Please call 800-456-9355 for complete ordering information



# Observation Windows

## For trouble-free visual inspection

- Solid, shock-resistant transparent acrylic
- Withstands temperatures up to 220°F and internal pressures up to 8.8 psi (.61 Bar) or higher with optional guard ring
- Removable film protects polished face from damage during delivery and assembly
- White reflectors are furnished with all windows up to 8-inch diameter (removable if not desired)



## Oil Window

Model	ØA		ØB		C		D		E(min)		ØF		Reflector G	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
14200	$\frac{7}{8}$	22,2	1	25	$\frac{11}{32}$	8,5	$\frac{9}{32}$	7	$\frac{7}{32}$	5	$\frac{3}{4}$	28	$\frac{13}{32}$	10
20200	$1\frac{1}{4}$	32	$1\frac{3}{8}$	35	$\frac{11}{32}$	8,5	$\frac{9}{32}$	7	$\frac{7}{32}$	5	$1\frac{1}{8}$	28	$\frac{13}{32}$	10
21200		32		35		8,5		7		5		28		10
24200	$1\frac{1}{2}$	38,1	$1\frac{5}{8}$	41	$\frac{11}{32}$	8,5	$\frac{9}{32}$	7	$\frac{7}{32}$	5	$1\frac{1}{8}$	28	$\frac{13}{32}$	10
32200	$1\frac{31}{32}$	50	$2\frac{1}{8}$	53	$\frac{13}{32}$	10	$\frac{11}{32}$	8,5	$\frac{1}{4}$	6	$1\frac{1}{8}$	28	$\frac{13}{32}$	10
48200	$2\frac{59}{64}$	75	$3\frac{1}{16}$	76	$\frac{13}{32}$	10	$\frac{11}{32}$	8,5	$\frac{1}{4}$	6	$1\frac{1}{8}$	28	$\frac{13}{32}$	10
64200	$3\frac{15}{16}$	100	$4\frac{1}{16}$	103	$\frac{13}{32}$	10	$\frac{11}{32}$	8,5	$\frac{1}{4}$	6	$1\frac{1}{8}$	28	$\frac{13}{32}$	10
95200	$5\frac{29}{32}$	150	6	153	$\frac{13}{32}$	10	$\frac{11}{32}$	8,5	$\frac{1}{4}$	6	$1\frac{1}{8}$	28	$\frac{13}{32}$	10
96100	$7\frac{7}{8}$	200	$7\frac{63}{64}$	203	$\frac{13}{32}$	10	$\frac{11}{32}$	8,5	$\frac{1}{4}$	6	—	—	—	—
97100	$9\frac{27}{32}$	250	$9\frac{61}{64}$	253	$\frac{1}{2}$	12	$\frac{13}{32}$	10	$\frac{10}{32}$	8	—	—	—	—
98100	$11\frac{37}{64}$	300	$11\frac{39}{64}$	303	$\frac{20}{32}$	15	$\frac{1}{2}$	12	$\frac{13}{32}$	10	—	—	—	—

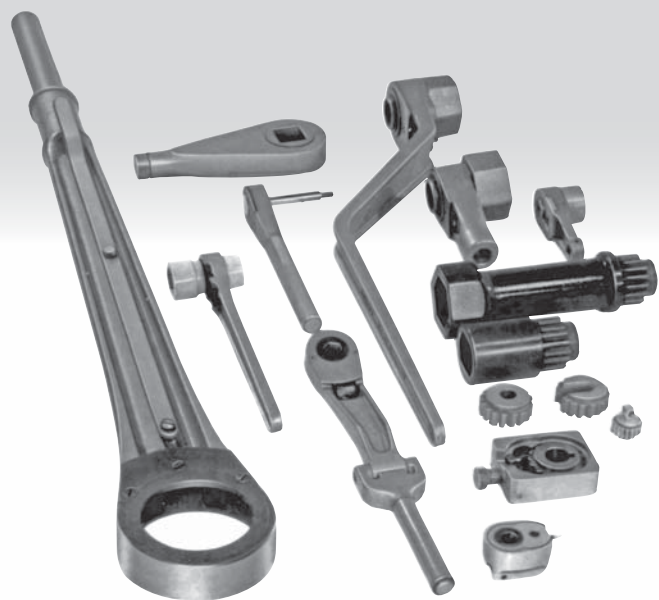
## Guard Ring for Push-Fit Oil Windows

Model	Ø H		Ø J		Ø K		Ø L		M		N		Use with
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
44600	$2\frac{3}{4}$	69	$1\frac{13}{16}$	46	$2\frac{31}{64}$	63	$\frac{9}{64}$	3,6	$\frac{1}{8}$	3,2	$\frac{1}{32}$	0,8	32200
62600	$3\frac{7}{8}$	98	$2\frac{3}{4}$	70	$3\frac{35}{64}$	90	$\frac{3}{16}$	4,8	$\frac{1}{8}$	3,2	$\frac{3}{64}$	1	48200
78600	$4\frac{7}{8}$	123	$3\frac{3}{4}$	95	$4\frac{17}{32}$	115	$\frac{3}{16}$	4,8	$\frac{1}{8}$	3,2	$\frac{3}{64}$	1	64200

## Oil Circulation Indicator

Model	Ø P		Q (min)		R		S		T		Ø U	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
24700	$1\frac{1}{2}$	38,1	$\frac{7}{32}$	5	$2\frac{7}{32}$	21	$\frac{9}{32}$	7	$\frac{7}{32}$	5	$1\frac{5}{8}$	41
47700		75		6		30		8,5		5		80
48700	3		$\frac{1}{4}$		$1\frac{3}{16}$		$\frac{11}{32}$		$\frac{7}{32}$		$3\frac{3}{16}$	

# Specials



## How may we help you?

Frequently, application or design engineers require a non-standard motion control device. Sometimes we can meet this need by modifying an existing product. For example, we can alter the shape or size of the drive, change the number of teeth on a gear, add a free-running neutral, shorten, lengthen, bend, off-set or hinge the handle and reposition mounting configurations.

Other applications may require a completely new design. Starting with a sketch or detailed drawing of the application, samples are fabricated in some cases and then the product is manufactured.

To discuss your application, call your local Lowell distributor or factory representative.

# Repair Parts

## Complete Kits

Complete repair kits are available for many of our ratchet arms, clutches, and socket wrenches.

**10 and 40 Series Ratchet Arms**  
**70 Series Ratchet Clutches**  
**50 Series Socket Wrenches**  
**Quick Release Series Socket Wrenches**

**Contents:**  
 2 pawls, 2 pawl springs, 1 shifter



**20 Series Ratchet Arms**

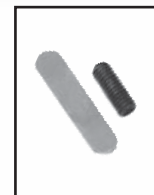
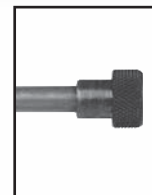
**Contents:**  
 2 pawls, 2 pawl springs, 1 shifter screw,  
 1 rod spring



## Rod and Knurl Kits

**20 Series Ratchet Arms**

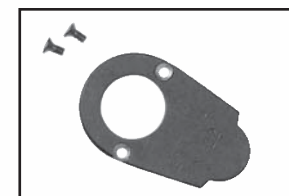
**Contents:**  
 1 rod and knurl assembly, 1 shifter screw,  
 1 rod spring



## Cover Plate Kits

**10 Series Ratchet Arms**  
**20 Series Ratchet Arms**  
**40 Series Ratchet Arms**  
**70 Series Ratchet Clutches**

**Contents:**  
 1 cover plate, 1 or more cover screws



**50 Series Socket Wrenches**

**Contents:**  
 1 cover plate, 1 cover spacer,  
 1 snap ring, 1 or more cover screws



**50 Series Socket Wrenches**  
**Quick Release Series Socket Wrenches**

**Contents:**  
 1 cover plate, 1 cover spacer,  
 1 cover screw, 1 latch, 2 latch springs



## Warranty

Lowell's products are guaranteed against defects in material and workmanship for a period of one year after installation so long as date of installation is less than 24 months after date of manufacture. The Lowell Corporation certifies that Lowell T-Torkers have been calibrated to an accuracy of plus or minus ten percent of the torque value stamped on the tool. These are delicate instruments. Do not use them as hammers. This Warranty will be void if there is any evidence of using these tools as a hammer. These tools are guaranteed to be free from defects in material and workmanship for a period of one year from the date of sale, provided they are used as torque instruments.

THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, WHETHER OF MERCHANTABILITY, FITNESS FOR USE, OR OTHERWISE.

Lowell shall have no liability for defects until the goods are returned to it with its permission. Buyer's exclusive remedy shall be the replacement, correction or refund of the purchase price of the defective part, at Lowell's option. In no event shall Lowell be liable for incidental or consequential damages for any cause whatsoever, whether breach or warranty or otherwise.





**This catalog supersedes all previously published literature. Products not shown herein have been discontinued. Contact factory for possible availability of any product not shown.**

**All details of manufacture are given without obligation. Tolerances are in accordance with ANSI/ASME.**

**We reserve the right to amend or approve the products for technical reasons.**

**Weights given are average, and we are not bound by the weights quoted.**

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