



**HOWMET
AEROSPACE**

Torque Control Assembly Tools



Torque Control Assembly Tools

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Sales & Service:

Howmet Fastening Systems
Assembly Tool Systems Division
801 S. Placentia Avenue
Fullerton, CA 92831 USA

714-278-8908 Customer Service
714-871-4821 FAX

Torque Control Assembly Tools

How to Select a Tool

- Part Numbering System
- Hex Key Information
- New Tool Application Form

SECTION 1

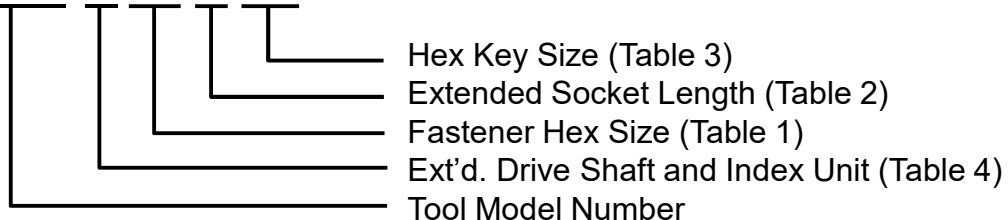
How to Select a Tool

How to Specify Your Tool Selection:

1. Identify the fastener type and diameter by part number.
2. Identify the installed torque range of the fastener.
3. What is the hex size of the nut? Example: 1/4" = 250
(D) Indicates a 12pt. Double hex socket, not recommended for Hex Nuts.
4. Does a pistol grip tool or a straight motor fit the application best?
5. Most tools can be equipped with a 360° index unit that will help with application accessibility.
6. Would the tool fit best with an extended socket or a flush socket?
7. Are the threaded pins interference fit or loose? If they are loose a hex key would be required. (Extended sockets only)
8. Need Additional Help? Please call us for assistance 714-278-8908

Example of Complete Tool Model Number:

KTL(D)1408 C 250 B 078



ERGO KEY™ Hex Key System

The purpose of the hex key is to hold the pin (screw) from turning while the nut is being installed, this is particularly important in non-interference fit holes. It works as a "hold & drive" from the nut side of the application and is affixed to the back of the attached gear housing.

"NEW" Improved Strength, Solid 1-Piece Hex Key

Solid 1-Pc Hex Key →

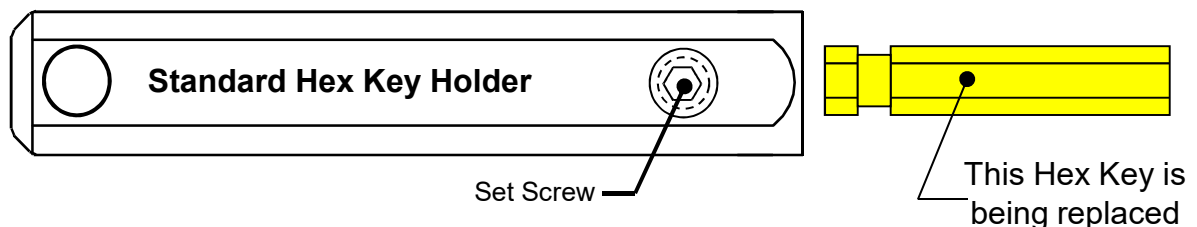


1-Piece Hex Key

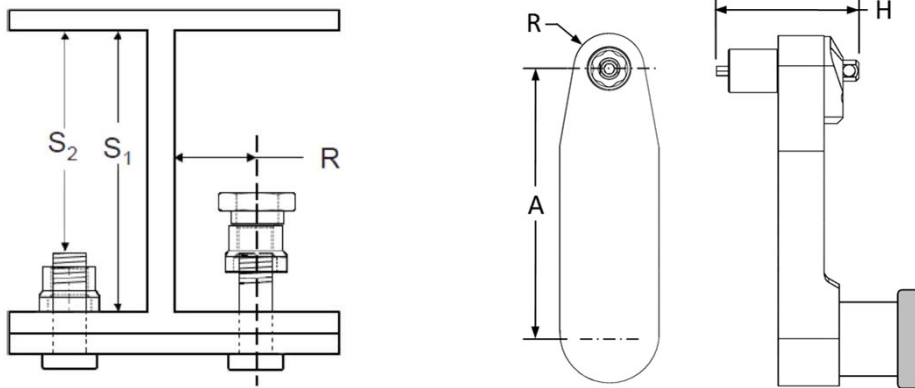
- Very strong-forged Hex Key
- Various lengths to fit extended sockets up to 3.0 inches (76.2mm)
- Hex Keys last longer
- Easy to change or replace
- Less downtime
- Improved production
- Lowers fastener install costs
- Currently available in .062 (1/16"), .078 (5/64), .094 (3/32") hex sizes



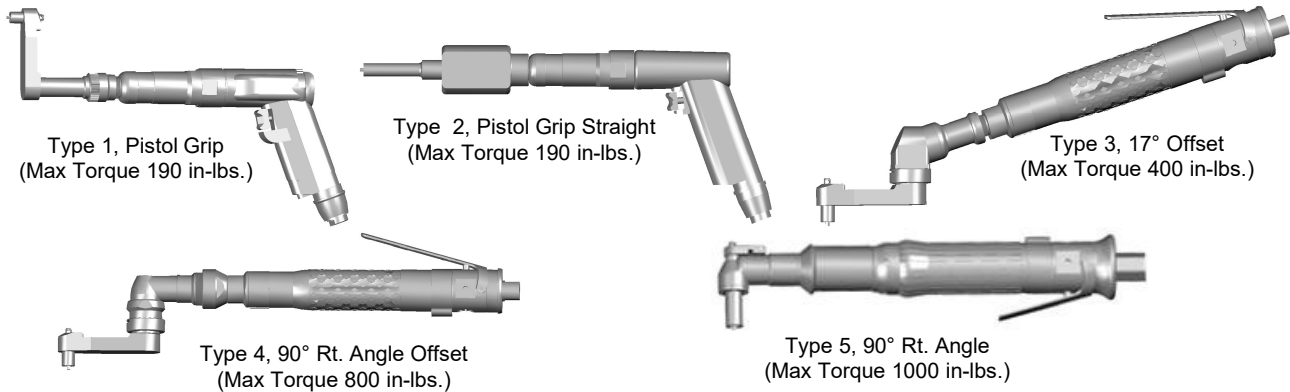
Replaces the standard "T" style key system below



Application Specifications Sheet



1. Nut or frangible collar part number _____
2. Hex size of the Nut or frangible collar _____ inches _____ mm
3. What is the final torque requirement of the fastener _____ in-lbs., _____ (Nm)
4. "R" Edge distance between centerline of fastener to nearest structure _____ (in) _____ (mm)
5. "S₁" Total working space _____ (in), _____ (mm)
6. "S₂" Minimum clearance over Pin _____ (in) _____ (mm)
7. Will a hex key be required? YES or NO (circle one), if yes, hex key size _____
8. "A" Offset required, Min _____ Max _____ (inch or mm)
9. Is an extended socket required? Yes or No, Length of socket _____ (inch or mm)
10. "H" Maximum height of the gear head, Including socket _____ (inch or mm)



11. Determine type of tool: Type 1 ____, Type 2 ____, Type 3 ____, Type 4 ____, Type 5 ____
12. Make and model number of preferred nutrunner _____

Company Name _____

Contact _____

Phone _____ FAX _____

Return by FAX: (714) 871-4821 or E-Mail glenn.anderson@Howmet.com

Form: F-11196, Rev 2

Torque Control Assembly Tools

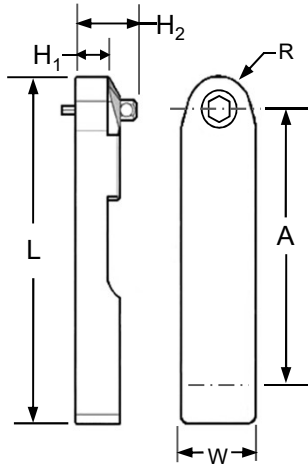
Pistol Grip Power Tools

SECTION 2



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 45 in lbs



LUM12HRX
Atlas Copco Motor Required
Free Speed RPM: 500

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL1408	5	2.38" [60.4mm]	.34" [8.6mm]	.68" [17.3mm]	3.24" [82.3mm]	.75" [19.0mm]	.31" [7.9mm]

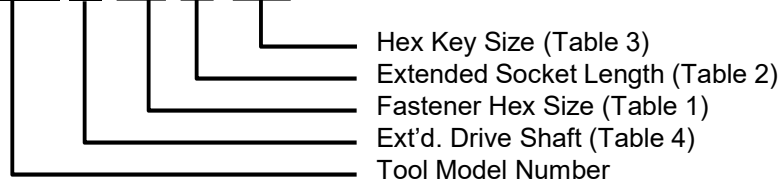
This tool is designed for low torque applications not exceeding 45 in. lbs but can be equipped with hex keys in the extended socket configuration.

Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	AK3	-3	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3A	-3A	C	2.0"	Yes
		D	1/2"	078	5/64"	AK4A	-4A	G	6.0"	Yes
		E	5/8"							
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs

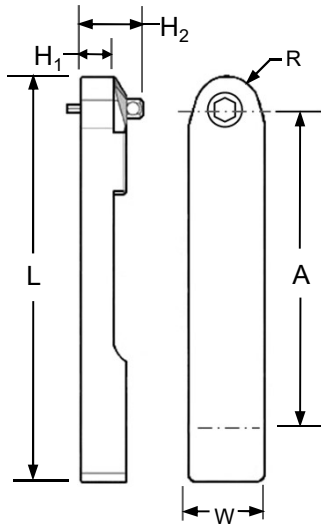
Example of Complete Tool Model Number:

KTL1408 C 250 B 078



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 45 in lbs



Model Number	No. of Gears	A	H ¹	H ²	L	W	R
KTL1418	7	3.63" [92.2mm]	.34" [8.6mm]	.68" [17.3mm]	4.49" [114.1mm]	.75" [19.0mm]	.31" [7.9mm]

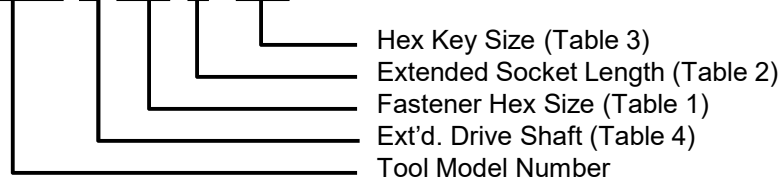
This tool is designed for difficult access applications and for durability purposes is not recommended for general use. This tool is for relatively low torque applications and is not intended for use with hex keys.

Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
282	9/32"	D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs

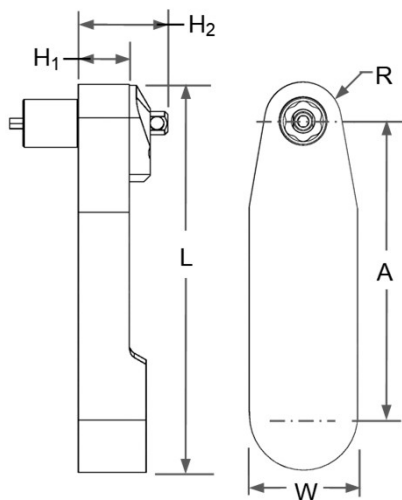
Example of Complete Tool Model Number:

KTL1418 A 250 B 078



Offset Pistol Grip Tools For K-Fast™ Nut Applications

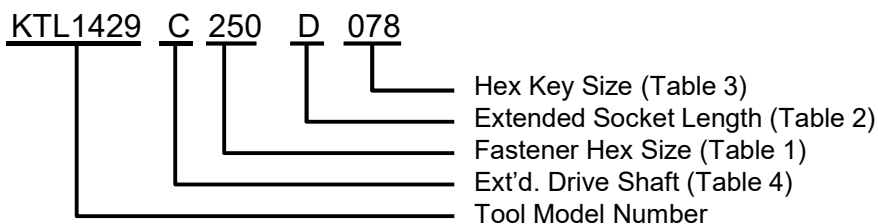
15 – 55 in lbs



Model Number	RPM	No. of Gears	A	H ₁	H ₂ (Ref)	W	L	R
KTL1429	450	5	2.68	.47	.81	1.0	3.53	.35
KTLS1429	220		[68.1mm]	[11.9mm]	[20.5mm]	[25.4mm]	[89.7mm]	[8.8mm]

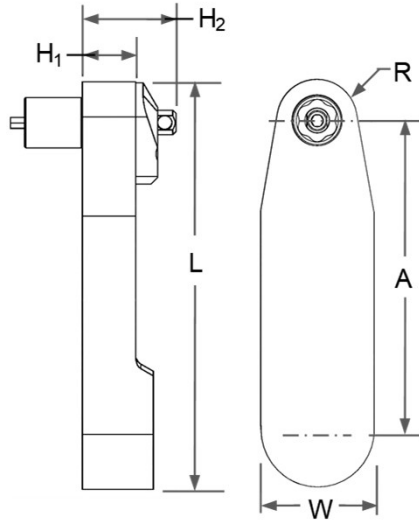
Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
282	9/32"	D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs



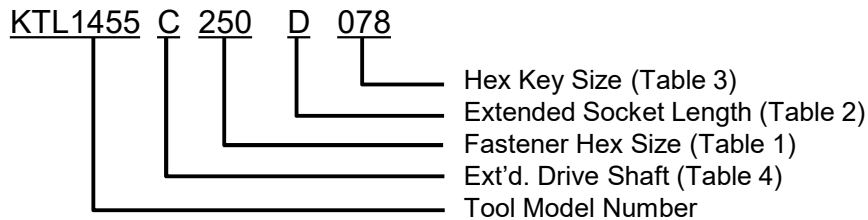
Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 55 in lbs



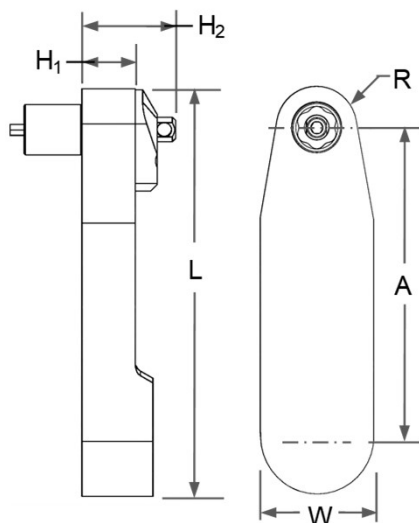
Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL1455	7	4.13" [104.9mm]	.38" [9.5mm]	.72" [18.5mm]	4.98" [126.5mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd. Socket Length	Table 3 Key Hex Size	Table 4 Extended Drive Shaft With 360° Index Unit																																										
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>219</td> <td>7/32"</td> </tr> <tr> <td>250</td> <td>1/4"</td> </tr> <tr> <td>282</td> <td>9/32"</td> </tr> </tbody> </table>	Code	Hex Size	219	7/32"	250	1/4"	282	9/32"	<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>C</td> <td>0.375"</td> </tr> <tr> <td>D</td> <td>0.500"</td> </tr> <tr> <td>E</td> <td>0.625"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> <tr> <td>J</td> <td>2.0"</td> </tr> </tbody> </table>	Code	Extension	A	Flush	C	0.375"	D	0.500"	E	0.625"	G	1.0"	J	2.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>NA</td> </tr> <tr> <td>062</td> <td>1/16"</td> </tr> <tr> <td>078</td> <td>5/64"</td> </tr> </tbody> </table>	Code	Size	000	NA	062	1/16"	078	5/64"	<table border="1"> <thead> <tr> <th>New Code</th> <th>Length</th> <th>Index Unit</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Short</td> <td>Yes</td> </tr> <tr> <td>C</td> <td>2.0"</td> <td>Yes</td> </tr> <tr> <td>G</td> <td>6.0"</td> <td>Yes</td> </tr> </tbody> </table>	New Code	Length	Index Unit	A	Short	Yes	C	2.0"	Yes	G	6.0"	Yes
Code	Hex Size																																												
219	7/32"																																												
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Offset Pistol Grip Tools For K-Fast™ Nut Applications

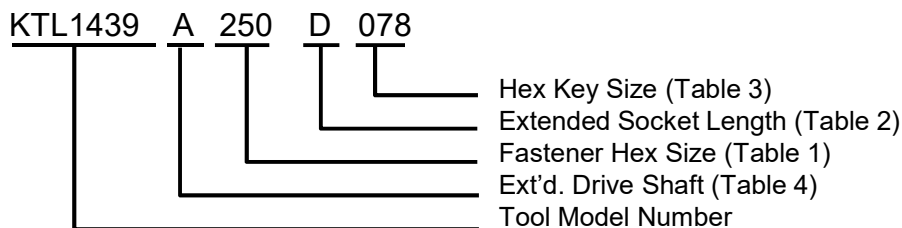
15 – 55 in lbs



Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL1439	5	2.68" [68.1mm]	.38" [9.5mm]	.72" [18.5mm]	3.5" [89.7mm]	1.0" [25.4mm]	.35" [8.8mm]

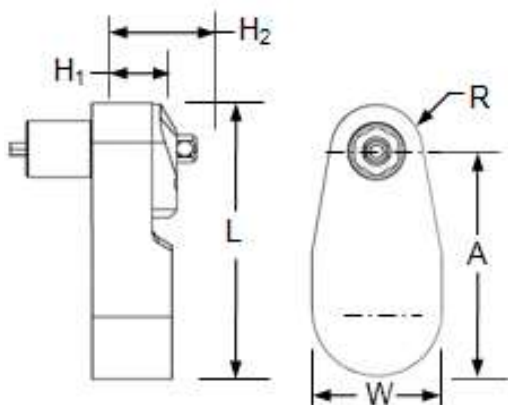
Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
		D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 55 in lbs



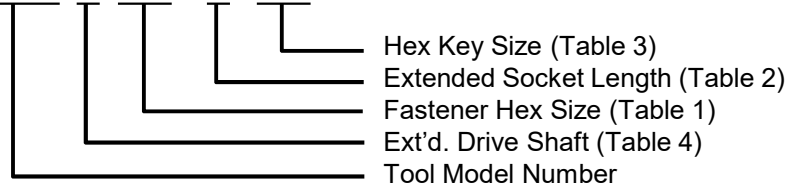
Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KTL1428	3	1.25" [31.8mm]	.47" [11.9mm]	.81" [20.5mm]	2.11" [53.5mm]	1.0" [25.4mm]	.35" [8.9mm]

Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
		D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs

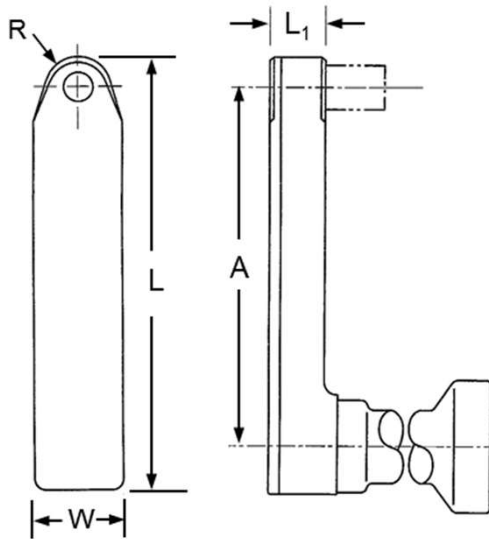
Example of Complete Tool Model Number:

KTL1428 C 250 D 078



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 50 in lbs



Back Drive Socket Position



LUM12HRX
Atlas Copco Motor Required
Free Speed RPM: 450

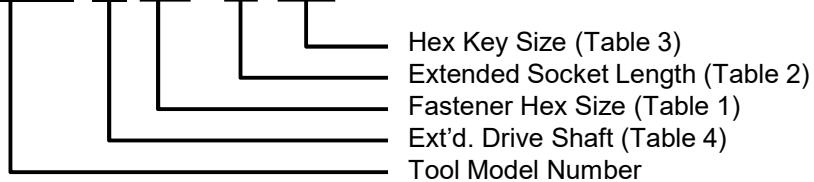
Model Number	No. of Gears	A	H ₁	W	L	R (Radius)
KTL1023	6	2.93" [74.4mm]	.47" [11.9mm]	.75" [19.0mm]	3.70" [94.0mm]	.26" [6.6mm]

Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
		D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs

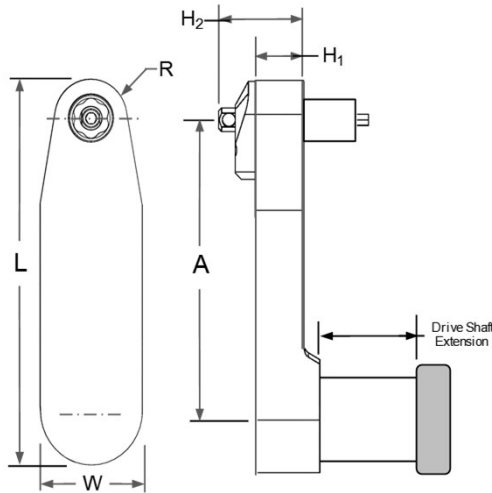
Example of Complete Tool Model Number:

KTL1023 C 250 D 078



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 50 in lbs



Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL1456	4	1.75" [44.5mm]	.34" [8.6mm]	.68" [17.4mm]	2.65" [67.3mm]	.75" [19.0mm]	.31" [7.8mm]

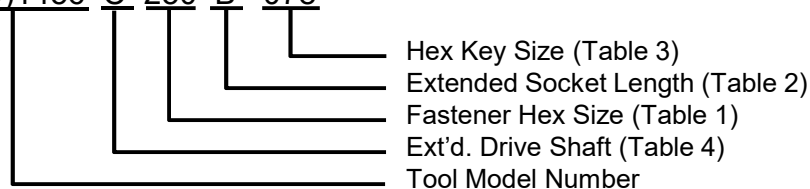
This tool is designed for low torque applications not exceeding 45 in. lbs but can be equipped with hex keys in the extended socket configuration.

Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
		D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs

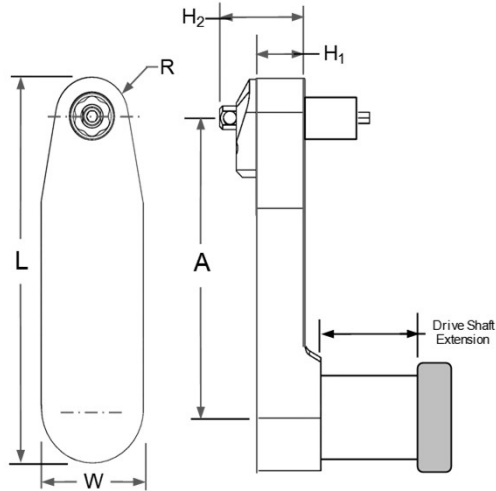
Example of Complete Tool Model Number:

KTL(D)1456 C 250 B 078



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 50 in lbs



Back Drive Socket Position

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL1430	6	3.06" [77.7mm]	.34" [8.6mm]	.68" [17.4mm]	3.88" [98.5mm]	.75" [19.0mm]	.31" [7.8mm]

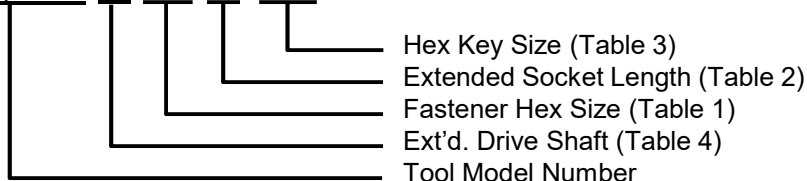
This tool is designed for low torque applications not exceeding 45 in. lbs but can be equipped with hex keys in the extended socket configuration.

Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
		D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

*Used on Airbus Programs

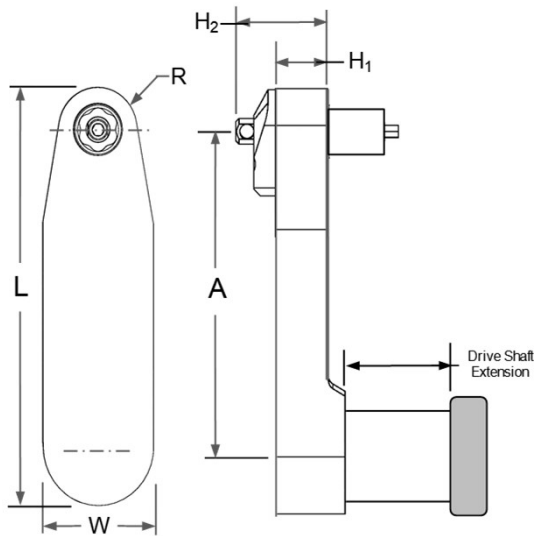
Example of Complete Tool Model Number:

KTL(D)1430 C 250 B 078



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 50 in lbs



Back Drive Socket Position

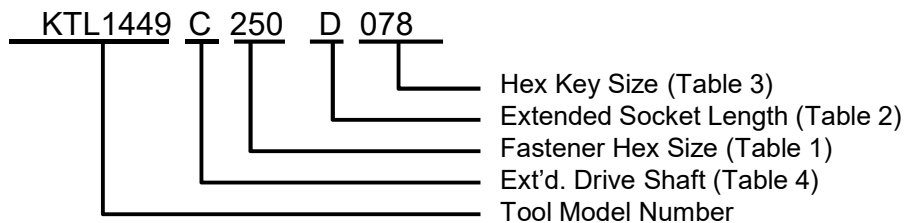


Model Number	No. of Gears	A	H ₁	H ₂ (Ref.)	L	W	R
KTL1449	4	1.96" [49.8mm]	.47" [11.9mm]	.81" [20.5mm]	2.81" [71.4mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Socket Table Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Drive Shaft Length		
Code	Hex Size	Code	Length	Code	Size	Code	Dia.	New Code	Length	Index Unit
219	7/32"	A	Flush	000	NA	000	N/A	A	---	Yes
250	1/4"	C	3/8"	062	1/16"	AK3	-3	C	2.0"	Yes
		D	1/2"	078	5/64"	AK3A	-3A	G	6.0"	Yes
		E	5/8"			AK4A	-4A			
		G	1.0"							
		J	2.0"							

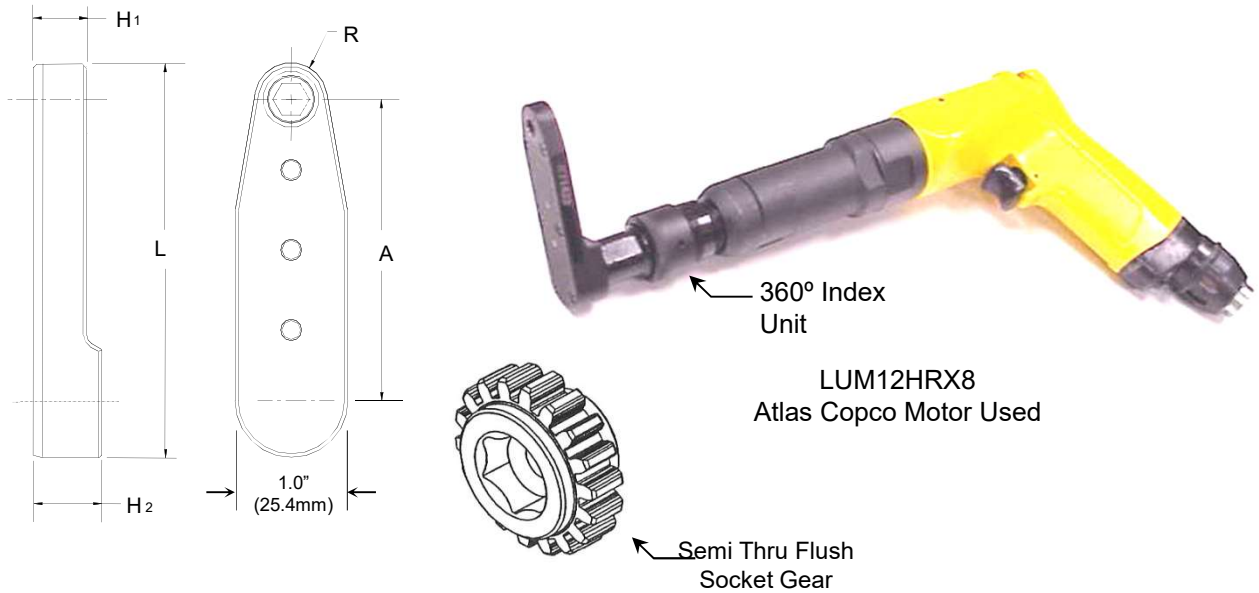
*Used on Airbus Programs

Example of Complete Tool Model Number:



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15 – 50 in lbs

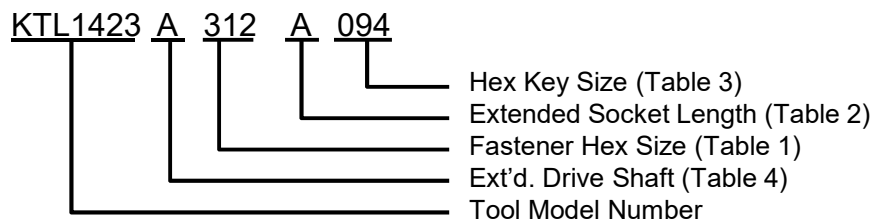


Model Number	No. of Gears	A	H ₁	H ₂	L	R
KTL1423	5	2.4 [61.1mm]	.30 [7.5mm]	.56 [14.1mm]	3.27 [82.9mm]	.36 [9.2mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size		Table 4 Drive Shaft Length with 360° index capability	
Code	Hex Size	Code	Extension	Code	Size	Code	Length
312	5/16"	A	Flush	000	No Hex Key	A	-
		D	1/2"	094	3/32" (.094)	C	2.0"
		F	3/4"			G	6.0"

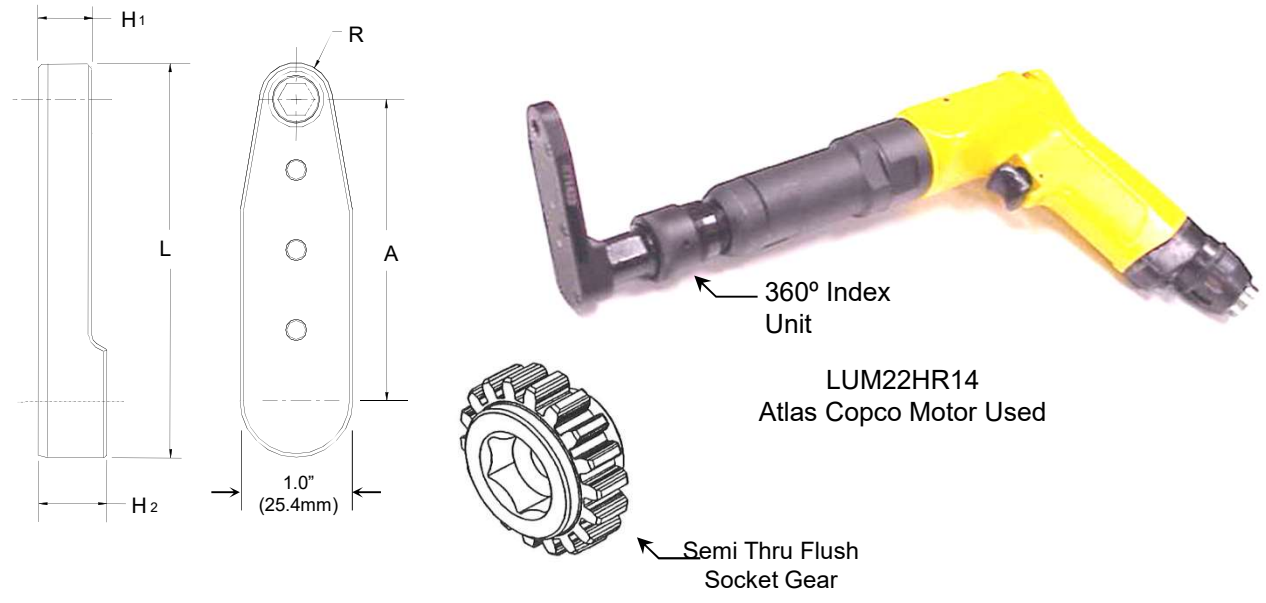
(D) Indicates 12pt Socket Configuration

Example of Complete Tool Model Number:



Offset Pistol Grip Tools For K-Fast™ Nut Applications

45-80 in lbs

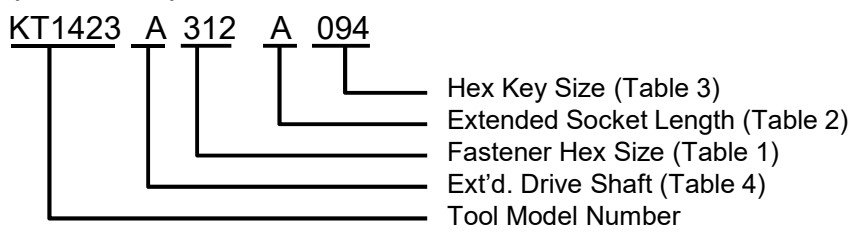


Model Number	No. of Gears	A	H ₁	H ₂	L	R
KT1423	5	2.4 [61.1mm]	.30 [7.5mm]	.56 [14.1mm]	3.27 [82.9mm]	.36 [9.2mm]

Table 1 Socket Table	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size	Table 4 Drive Shaft Length with 360° index capability
Hex Size (Across Flats)			
Code Hex Size	Code Extension	Code Size	Code Length
312 5/16"	A Flush	000 No Hex Key	A -
	D 1/2"	094 3/32" (.094)	C 2.0"
	F 3/4"		G 6.0"

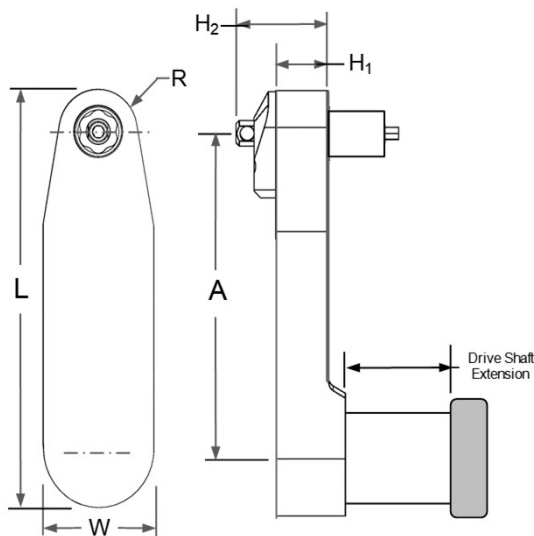
(D) Indicates 12pt Socket Configuration

Example of Complete Tool Model Number:



Offset Pistol Grip Tools For K-Fast™ Nut Applications

55 – 100 in lbs



Ref: LUM22HR
Free Speed RPM: 350

Back Drive Socket Position

Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT1449	4	1.96" [49.8mm]	.47" [11.9mm]	.81" [20.5mm]	2.81" [71.4mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Socket Length	Table 3 Key Hex Size	Table 4 Drive Shaft Ext'd Length																																								
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>250</td> <td>1/4"</td> </tr> <tr> <td>312</td> <td>5/16"</td> </tr> </tbody> </table>	Code	Hex Size	250	1/4"	312	5/16"	<table border="1"> <thead> <tr> <th>Code</th> <th>Length</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>C</td> <td>3/8"</td> </tr> <tr> <td>D</td> <td>1/2"</td> </tr> <tr> <td>E</td> <td>5/8"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> <tr> <td>J</td> <td>2.0"</td> </tr> </tbody> </table>	Code	Length	A	Flush	C	3/8"	D	1/2"	E	5/8"	G	1.0"	J	2.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>na</td> </tr> <tr> <td>078</td> <td>5/64"</td> </tr> <tr> <td>094</td> <td>3/32"</td> </tr> </tbody> </table>	Code	Hex Size	000	na	078	5/64"	094	3/32"	<table border="1"> <thead> <tr> <th>New Code</th> <th>Length</th> <th>Index Unit</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>---</td> <td>Yes</td> </tr> <tr> <td>C</td> <td>2.0"</td> <td>Yes</td> </tr> <tr> <td>G</td> <td>6.0"</td> <td>Yes</td> </tr> </tbody> </table>	New Code	Length	Index Unit	A	---	Yes	C	2.0"	Yes	G	6.0"	Yes
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(D) Indicates 12pt Socket Configuration

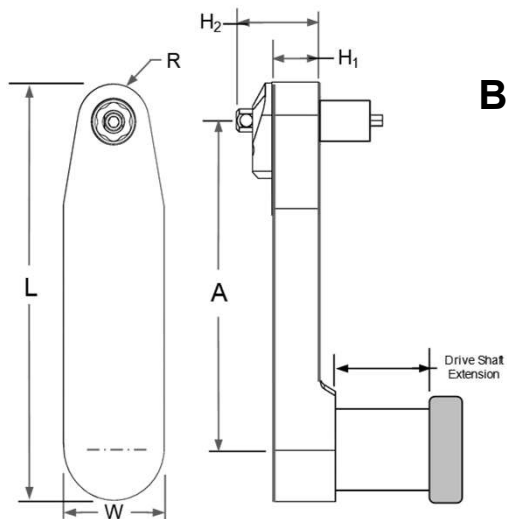
Example of Complete Tool Model Number:

KT(D)1449 C 312 D 094



Offset Pistol Grip Tools For K-Fast™ Nut Applications

50 – 100 in lbs



Back Drive Socket Position



Free Speed RPM: 350

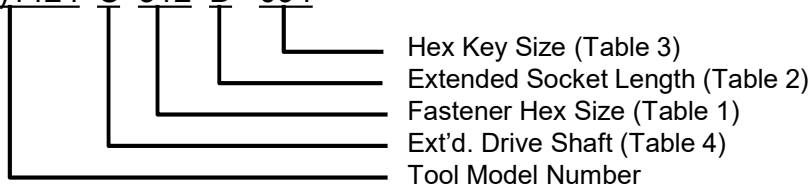
Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT1424	6	3.38" [85.8mm]	.47" [11.9mm]	.81" [20.5mm]	4.05" [102.9mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd. Socket Length	Table 3 Key Hex Size	Table 4 Drive Shaft Ext'd Length																																										
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(D) Indicates 12pt Socket Configuration
Hex Sockets recommended for Hex Nuts

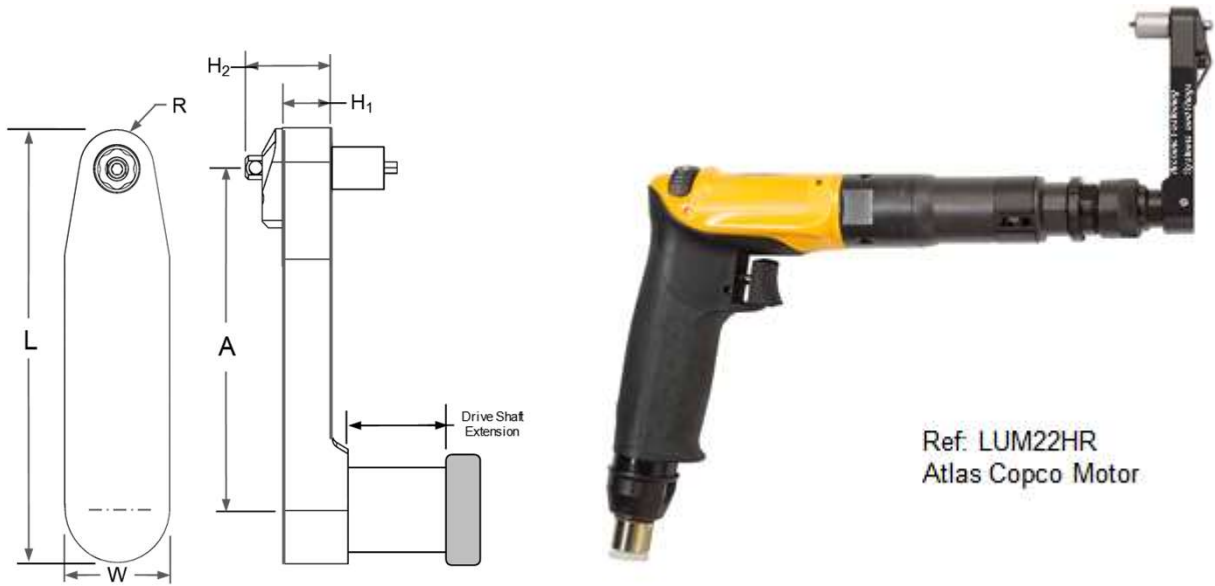
Example of Complete Tool Model Number:

KT(D)1424 C 312 D 094



Offset Pistol Grip Tools For K-Fast™ Nut Applications

50 – 100 in lbs



Ref: LUM22HR
Atlas Copco Motor

Back Drive Socket Position

Free Speed RPM: 350

Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT1434	6	3.47" [88.1mm]	.47" [11.9mm]	.81" [20.5mm]	4.39" [111.7mm]	1.0" [25.4mm]	.43" [10.8mm]

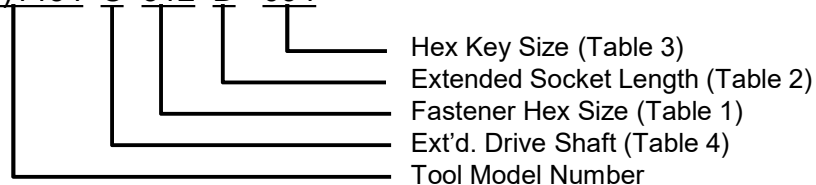
Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd. Socket Length		Table 3 Key Hex Size		Table 4 Drive Shaft Ext'd Length		
Code	Hex Size	Code	Extension	Code	Size	New Code	Length	Index Unit
312	5/16"	A	Flush	000	No Hex Key	A	---	Yes
375	3/8"	C	3/8"	094	3/32" Hex Key	C	2.0"	Yes
		D	1/2"	125	1/8" Hex Key	G	6.0"	Yes
		E	5/8"					
		G	1.0"					
		J	2.0"					

3/8" Hex is the Largest Flush Size

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

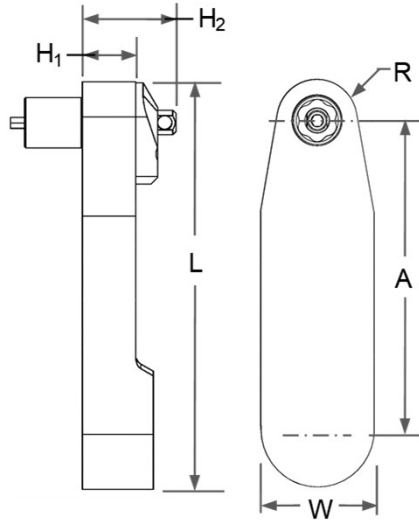
Example of Complete Tool Model Number:

KT(D)1434 C 312 D 094



Offset Pistol Grip Tools For K-Fast™ Nut Applications

50 – 100 in lbs



Free Speed RPM: 350
LUM22HR Atlas Copco Motor Required

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT1439	5	2.68" [68.1mm]	.38" [9.5mm]	.72" [18.5mm]	3.5" [89.7mm]	1.0" [25.4mm]	.35" [8.8mm]

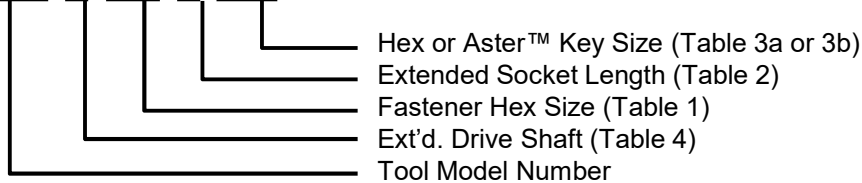
Table 1 Nut Hex Size (A/F)		Table 2 Ext'd.Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Extended Drive Shaft With 360° Index Unit	
Code	Hex Size	Code	Length	Code	Hex Size	Code	Dia.	Code	Length
250	1/4"	A	Flush	000	NA	000	No Key	A	Short
282	9/32"	C	3/8"	078	5/64"	AK3	-3	C	2.0"
312	5/16"	D	1/2"	094	3/32"	AK3A	-3A		
		E	5/8"			AK4A	-4A		
		G	1.0"						
		J	2.0"						

(D) Indicates 12point Socket Configuration

*Used on Airbus Programs

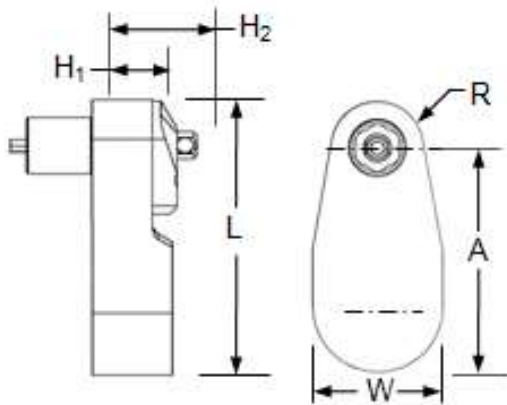
Example of Complete Tool Ordering Number:

KT1439 C 312 D AK4



Offset Pistol Grip Tools For K-Fast™ Nut Applications

50 – 100 in lbs



RPM Rated: 275



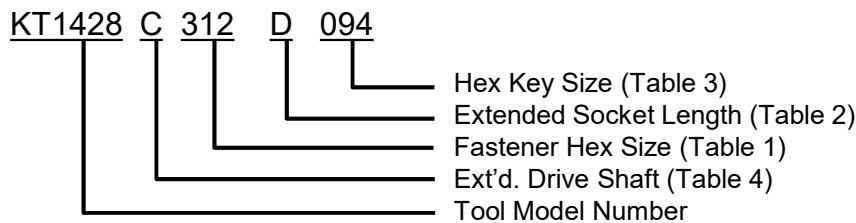
Free Speed RPM: 350

Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT1428	3	1.25" [31.8mm]	.47" [11.9mm]	.81" [20.5mm]	2.11" [53.5mm]	1.0" [25.4mm]	.35" [8.9mm]

Table 1 Nut Hex Size		Table 2 Extended Socket Length		Table 3 Hex Keys		Table 4 Extended Drive Shaft With 360° Index Unit		
Hex	Dia.	Code	Length	Code	Hex	New Code	Length	Index Unit
312	5/16"	A	Flush	000	No Key	A	Short	Yes
		D	1/2"	094	3/32"	C	2.0"	Yes
		E	5/8"			G	6.0"	Yes
		G	1.0"					
		J	2.0"					

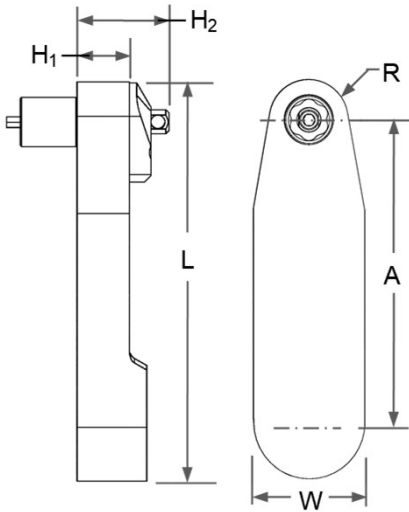
5/16" is the largest flush socket gear hex size

Example of Complete Tool Model Number:



Offset Pistol Grip Tools For K-Fast™ Nut Applications

50 – 120 in lbs



Model Number	RPM	No. of Gears	A	H ₁	H ₂	L	W	R
KT1429	350	5	2.68"	.47"	.81"	3.53"	1.0"	.35"
KTS1429	200		[68.1mm]	[11.9mm]	[20.5mm]	[89.7mm]	[25.4mm]	[8.8mm]

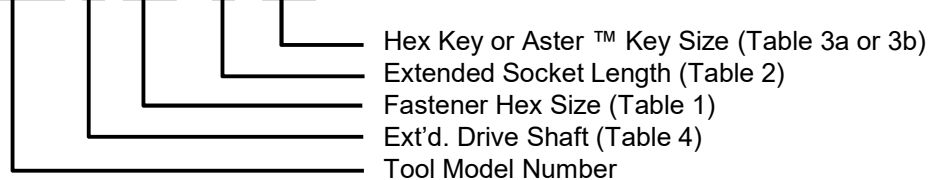
Table 1 Nut Hex Size (A/F)		Table 2 Ext'd.Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key		Table 4 Extended Drive Shaft With 360° Index Unit	
Code	Hex Size	Code	Length	Code	Hex Size	Code	Dia.	Code	Length
250	1/4"	A	Flush	000	NA	000	No Key	A	Short
282	9/32"	C	3/8"	078	5/64"	AK3	-3	C	2.0"
312	5/16"	D	1/2"	094	3/32"	AK3A	-3A	G	6.0"
		E	5/8"			AK4A	-4A		
		G	1.0"						
		J	2.0"						

(D) Indicates 12point Socket Configuration

*Used on Airbus Programs

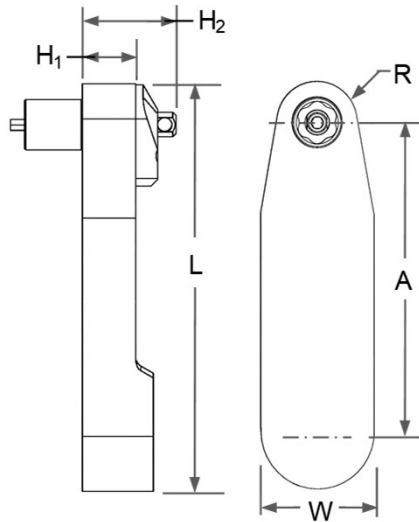
Example of Complete Tool Model Number:

KT1429 C 312 D 094



Offset Pistol Grip Tools For K-Fast™ Nut Applications

15-55 in lbs



LUM12HR
Atlas Copco Motor Required

Free Speed RPM: 450

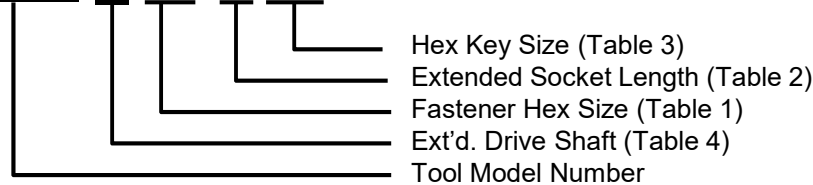
Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL1455	7	4.13" [104.9mm]	.38" [9.5mm]	.72" [18.5mm]	4.98" [126.5mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd. Socket Length	Table 3 Key Hex Size	Table 4 Extended Drive Shaft With 360° Index Unit																																										
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket

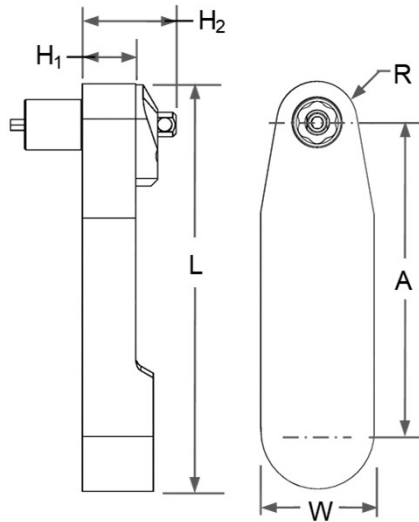
Example of Complete Tool Model Number:

KTL1455 C 282 G 078



Offset Pistol Grip Tools For K-Fast™ Nut Applications

50-85 in lbs



Free Speed RPM: 350

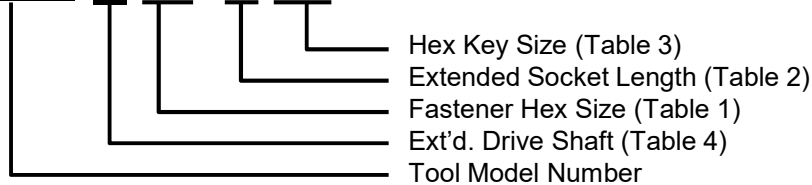
Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT1455	7	4.13" [104.9mm]	.38" [9.5mm]	.72" [18.5mm]	4.98" [126.5mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size		Table 4 Extended Drive Shaft With 360° Index Unit		
Code	Hex Size	Code	Extension	Code	Size	New Code	Length	Index Unit
250	1/4"	A	Flush	000	No Hex Key	A	Short	Yes
312	5/16"	C	0.375"	078	5/64" Hex Key	C	2.0"	Yes
		D	0.500"	094	3/32" Hex Key	G	6.0"	Yes
		E	0.625"					
		G	1.0"					
		J	2.0"					

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

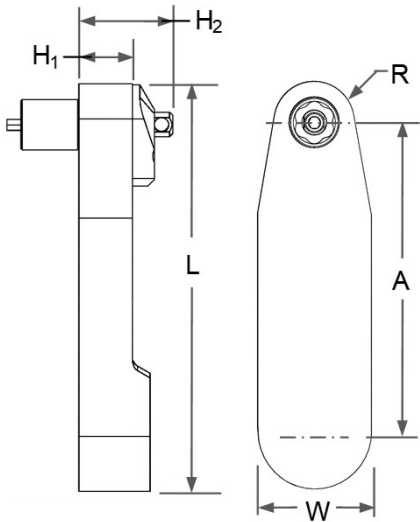
Example of Complete Tool Model Number:

KT1455 C 312 D 094



Offset Pistol Grip Tools For K-Fast™ Nut Applications

40-115 in lbs



Free Speed RPM: 300

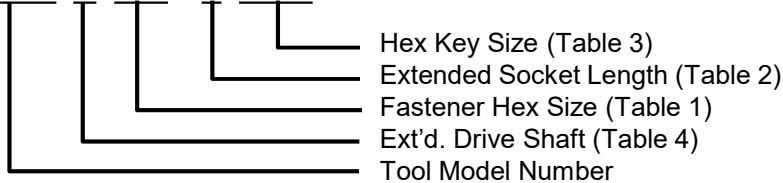
Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT1452	5	2.72" [69.0mm]	.47" [9.5mm]	.72" [18.5mm]	3.7" [94.7mm]	1.0" [25.4mm]	.39" [10.0mm]

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size	Table 4 Extended Drive Shaft With 360° Index Unit																																										
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

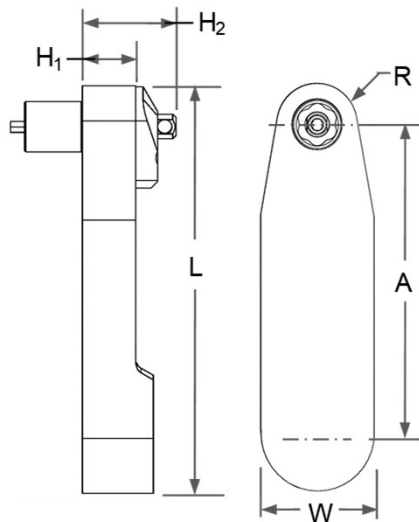
Example of Complete Tool Model Number:

KT1452 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

70-150 in lbs



Free Speed RPM: 290

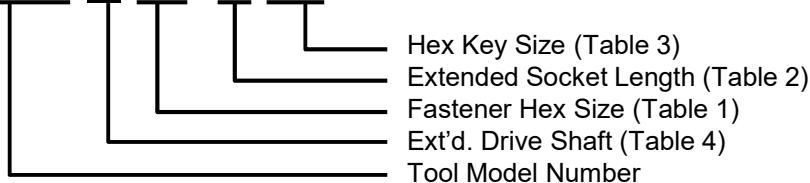
Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT1461	5	2.75" [69.9mm]	.47" [11.9mm]	.81" [20.5mm]	3.68" [93.3mm]	1.0" [25.4mm]	.43" [10.8mm]

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd. Socket Length	Table 3 Key Hex Size	Table 4 Extended Drive Shaft With 360° Index Unit																																										
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>312</td> <td>5/16"</td> </tr> <tr> <td>375</td> <td>3/8"</td> </tr> <tr> <td>437</td> <td>7/16"</td> </tr> </tbody> </table> <p>3/8" Hex is the Largest Flush Size</p>	Code	Hex Size	312	5/16"	375	3/8"	437	7/16"	<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>C</td> <td>0.375"</td> </tr> <tr> <td>D</td> <td>0.500"</td> </tr> <tr> <td>E</td> <td>0.625"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> <tr> <td>J</td> <td>2.0"</td> </tr> </tbody> </table>	Code	Extension	A	Flush	C	0.375"	D	0.500"	E	0.625"	G	1.0"	J	2.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>No Hex Key</td> </tr> <tr> <td>094</td> <td>3/32" Hex Key</td> </tr> <tr> <td>125T</td> <td>1/8" Hex Key</td> </tr> </tbody> </table>	Code	Size	000	No Hex Key	094	3/32" Hex Key	125T	1/8" Hex Key	<table border="1"> <thead> <tr> <th>New Code</th> <th>Length</th> <th>Index Unit</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Short</td> <td>Yes</td> </tr> <tr> <td>C</td> <td>2.0"</td> <td>Yes</td> </tr> <tr> <td>G</td> <td>6.0"</td> <td>Yes</td> </tr> </tbody> </table>	New Code	Length	Index Unit	A	Short	Yes	C	2.0"	Yes	G	6.0"	Yes
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

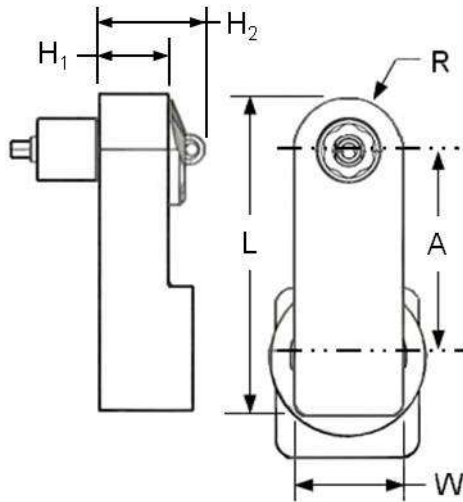
Example of Complete Tool Ordering Number:

KT1461 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

100-155 in lbs



LUM22HR14 Atlas Copco Motor Required
Free Speed RPM: 280

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT1415	3	1.62" [41.1mm]	.68" [17.3mm]	1.0" [25.2mm]	2.69" [68.3mm]	1.0" (25.4mm)	.50" (12.2mm)

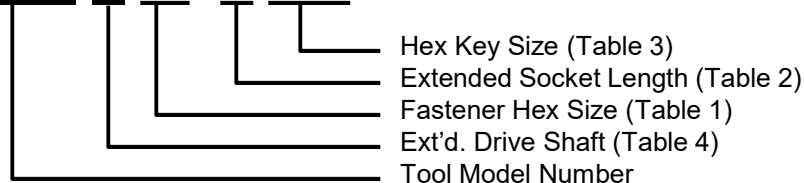
This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size		Table 4 Drive Shaft Ext'd Length		
Code	Hex Size	Code	Extension	Code	Size	New Code	Length	Index Unit
312	5/16"	A	Flush	000	No Hex Key	A	---	Yes
375	3/8"	D	1/2"	094	3/32" Hex Key	C	2.0"	Yes
437	7/16"	E	5/8"	125T	1/8" Hex Key	G	6.0"	Yes
500	1/2"	G	1.0"					
562	9/16"	J	2.0"					

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

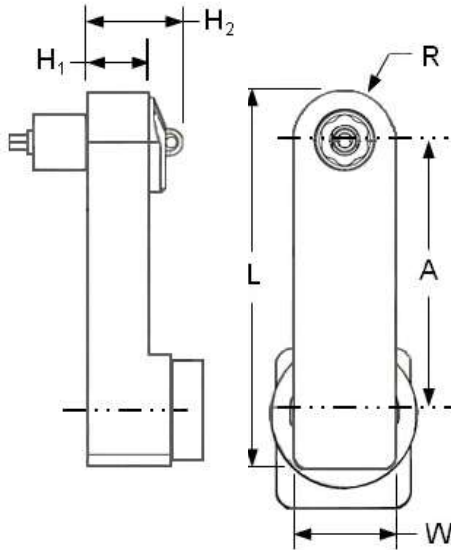
Example of Complete Tool Model Number:

KT(D)1415 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

100-155 in lbs



Free Speed RPM: 280

Model Number	No. of Gears	A	H ₁	H ₂ (With Hex Key)	L	W	R
KT1420	5	3.38" [85.9mm]	.68" [17.3mm]	1.0" [25.4mm]	4.44" [112.7mm]	1.0" (25.4mm)	.50" (12.2mm)

This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3b Aster™ Key	Table 4 Drive Shaft Ext'd Length																																																			
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

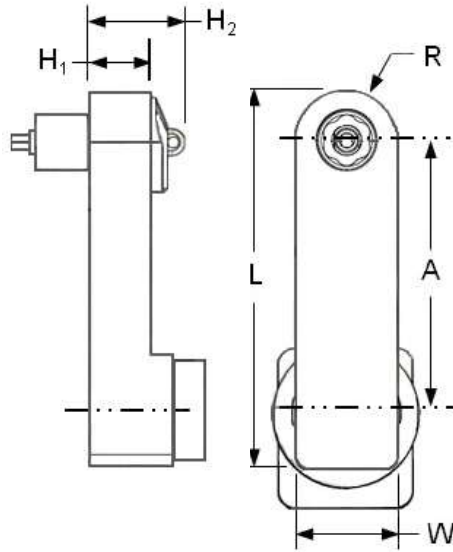
Example of Complete Tool Model Number:

KT1420 A 375 A AK5



Offset Pistol Grip Tools For K-Fast™ Nut Applications

100-155 in lbs



REF: LUM22HR14

Free Speed RPM: 110

Model Number	No. of Gears	A	H ₁	H ₂ (With Hex Key)	L	W	R
KT1436	7	5.13" [130.3mm]	.68" [17.3mm]	1.0" [25.4mm]	6.19" [157.3mm]	1.0" (25.4mm)	.50" (12.2mm)

This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd. Socket Length		Table 3 Key Hex Size		Table 4 Drive Shaft Ext'd Length		
Code	Hex Size	Code	Extension	Code	Size	New Code	Length	Index Unit
312	5/16"	A	Flush	000	No Hex Key	A	---	Yes
375	3/8"	D	1/2"	094	3/32" Hex Key	C	2.0"	Yes
437	7/16"	E	5/8"	125T	1/8" Hex Key	G	6.0"	Yes
500	1/2"	G	1.0"					
562	9/16"	J	2.0"					

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

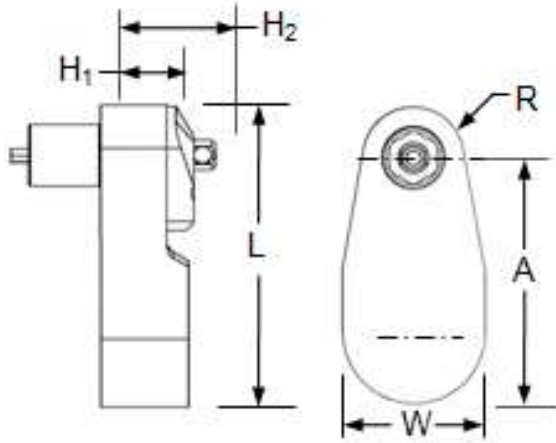
Example of Complete Tool Model Number:

KT(D)1436 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

130-190 in lbs



Picture is a simulation

Free Speed RPM: 110

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTH1454	3	1.31" [33.3mm]	.54" [13.7mm]	.85" [21.6mm]	2.22" [56.4mm]	.80" (20.3mm)	.40" (10.2mm)

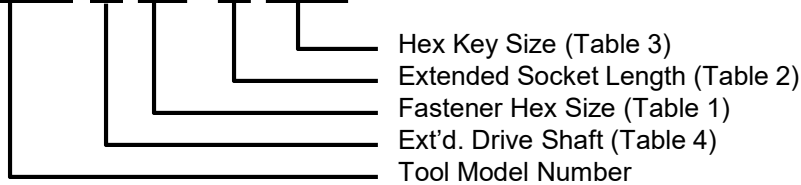
This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd. Socket Length		Table 3 Key Hex Size		Table 4 Drive Shaft Ext'd Length		
Code	Hex Size	Code	Extension	Code	Size	New Code	Length	Index Unit
375	3/8"	A	Flush	000	No Hex Key	A	---	Yes
437	7/16"	D	1/2"	125T	1/8" Hex Key	C	2.0"	Yes
		E	5/8"	156T	5/32" Hex Key	G	6.0"	Yes
		G	1.0"					
		J	2.0"					

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

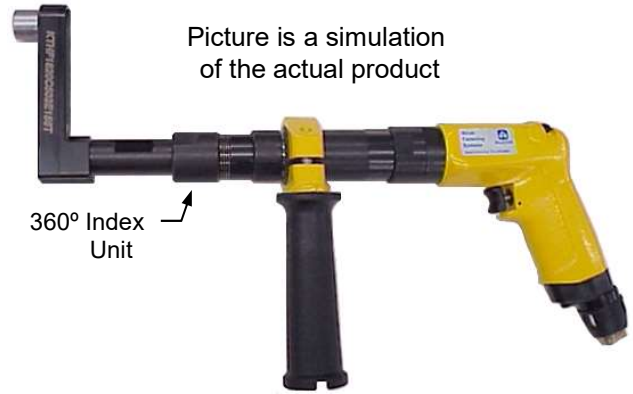
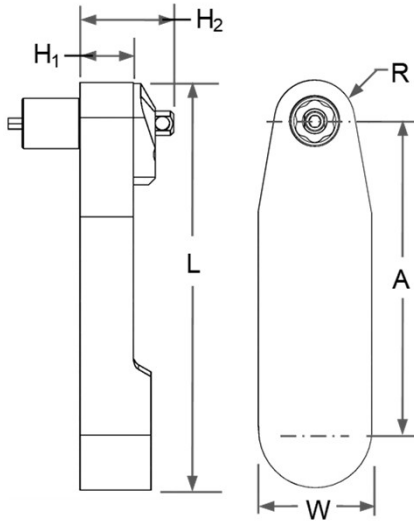
Example of Complete Tool Model Number:

KTH(D)1454 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

130-185 in lbs



LUM22HRX26
Atlas Copco Motor
Free Speed RPM: 110

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTH1457	5	2.68" [68.1mm]	.54" [13.7mm]	.85" [21.6mm]	3.59" [91.2mm]	.80" (20.3mm)	.40" (10.2mm)

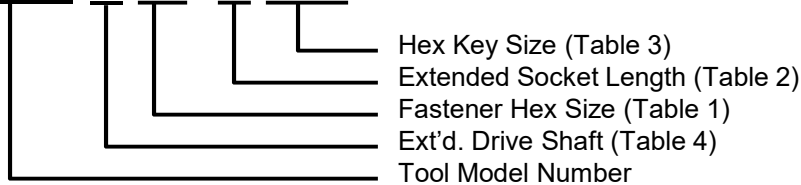
This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd. Socket Length	Table 3 Key Hex Size	Table 4 Drive Shaft Ext'd Length																																						
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

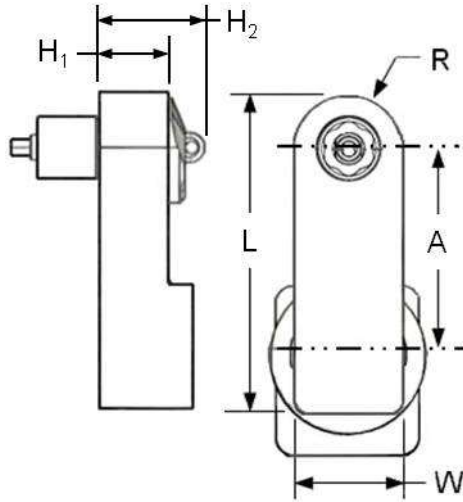
Example of Complete Tool Model Number:

KTH(D)1457 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

130-185 in lbs



LUM22HRX26
Atlas Copco Motor
Free Speed RPM: 110

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTH1415	3	1.62" [41.1mm]	.68" [17.3mm]	1.0" [25.4mm]	2.69" [68.3mm]	1.0" (25.4mm)	.50" (12.2mm)

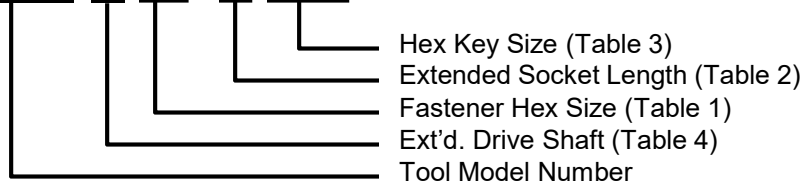
This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size	Table 4 Drive Shaft Ext'd Length																																										
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

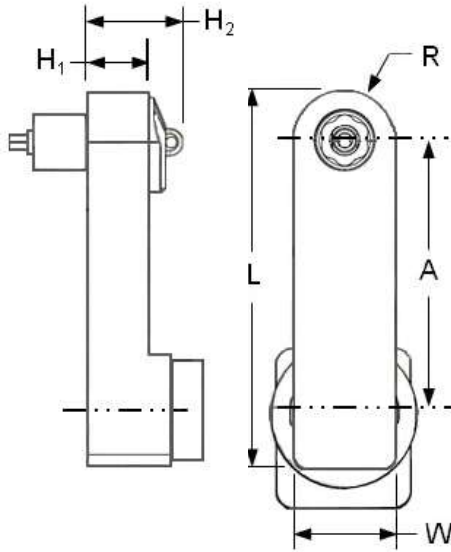
Example of Complete Tool Model Number:

KTH(D)1415 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

130-200 in lbs



LUM22HRX26
Atlas Copco Motor
Free Speed RPM: 110

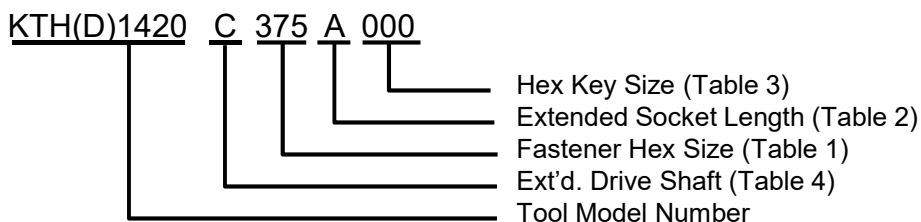
Model Number	No. of Gears	A	H ₁	H ₂ (With Hex Key)	L	W	R
KTH1420	5	3.38" [85.9mm]	.68" [17.3mm]	1.0" [25.4mm]	4.44" [112.7mm]	1.0" (25.4mm)	.50" (12.2mm)

This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size		Table 4 Drive Shaft Ext'd Length		
Code	Hex Size	Code	Extension	Code	Hex Size	New Code	Length	Index Unit
375	3/8"	A	Flush	000	NA	A	---	Yes
437	7/16"	D	1/2"	125T	1/8"	C	2.0"	Yes
500	1/2"	E	5/8"	156T	5/32"	G	6.0"	Yes
562	9/16"	G	1.0"					
		J	2.0"					

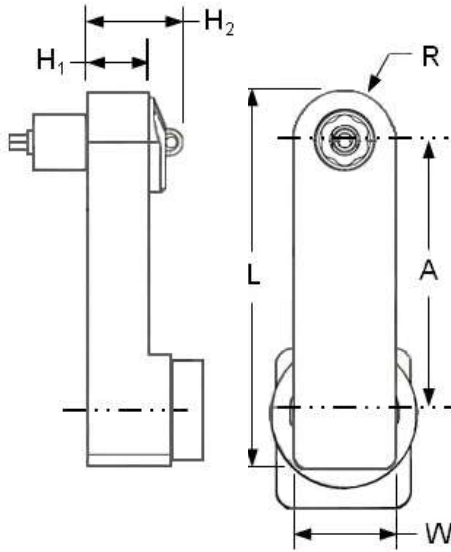
(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:



Offset Pistol Grip Tools For K-Fast™ Nut Applications

130-200 in lbs



LUM22HRX26
Atlas Copco Motor

Free Speed RPM: 110

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTH1436	7	5.13" [130.3mm]	.68" [17.3mm]	1.0" [25.4mm]	6.19" [157.3mm]	1.0" (25.4mm)	.50" (12.2mm)

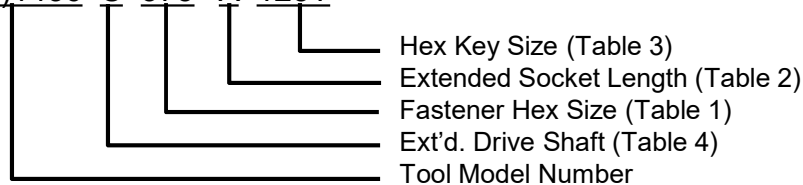
This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size		Table 4 Drive Shaft Ext'd Length		
Code	Hex Size	Code	Extension	Code	Size	New Code	Length	Index Unit
375	3/8"	A	Flush	000	No Hex Key	A	---	Yes
437	7/16"	D	1/2"	125T	1/8" Hex Key	C	2.0"	Yes
500	1/2"	E	5/8"	156T	5/32" Hex Key	G	6.0"	Yes
562	9/16"	G	1.0"					
		J	2.0"					

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

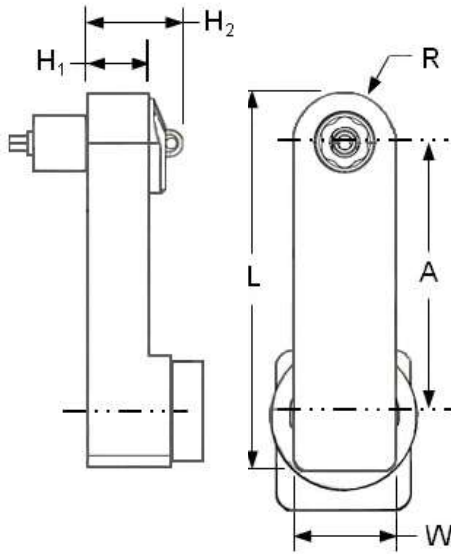
Example of Complete Tool Model Number:

KTH(D)1436 C 375 A 125T



Offset Pistol Grip Tools For K-Fast™ Nut Applications

130 – 195 in lbs



LUM22HRX26
Atlas Copco Motor

Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTH1459	7	4.95" [125.7mm]	.68" [17.3mm]	1.0" [25.4mm]	6.0" [152.7mm]	1.0" (25.4mm)	.39" (9.9mm)

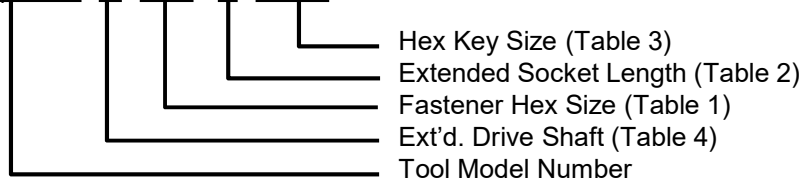
This is a very durable tool design for general purpose applications and is designed for use with extended sockets and hex keys when required.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size	Table 4 Drive Shaft Ext'd Length																																													
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>375</td> <td>3/8"</td> </tr> <tr> <td>437</td> <td>7/16"</td> </tr> <tr> <td>500</td> <td>1/2"</td> </tr> <tr> <td>562</td> <td>9/16"</td> </tr> </tbody> </table>	Code	Hex Size	375	3/8"	437	7/16"	500	1/2"	562	9/16"	<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>D</td> <td>1/2"</td> </tr> <tr> <td>E</td> <td>5/8"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> <tr> <td>J</td> <td>2.0"</td> </tr> </tbody> </table>	Code	Extension	A	Flush	D	1/2"	E	5/8"	G	1.0"	J	2.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>No Hex Key</td> </tr> <tr> <td>125T</td> <td>1/8" Hex Key</td> </tr> <tr> <td>156T</td> <td>5/32" Hex Key</td> </tr> </tbody> </table>	Code	Size	000	No Hex Key	125T	1/8" Hex Key	156T	5/32" Hex Key	<table border="1"> <thead> <tr> <th>New Code</th> <th>Length</th> <th>Index Unit</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>---</td> <td>Yes</td> </tr> <tr> <td>C</td> <td>2.0"</td> <td>Yes</td> </tr> <tr> <td>G</td> <td>6.0"</td> <td>Yes</td> </tr> <tr> <td>T</td> <td>12.0"</td> <td>Yes</td> </tr> </tbody> </table>	New Code	Length	Index Unit	A	---	Yes	C	2.0"	Yes	G	6.0"	Yes	T	12.0"	Yes
Code	Hex Size																																															
375	3/8"																																															
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A	---	Yes																																														
C	2.0"	Yes																																														
G	6.0"	Yes																																														
T	12.0"	Yes																																														

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:

KTH(D)1459 C 375 A 125T



Pistol Grip Tools For K-Fast™ Nut Applications

15 – 50 in lbs



Ref: LUM12HRX
Atlas Copco Motor

Tool Data:

Torque Range: 15 - 50in. lbs.

Total Tool Length: 10.4" [264mm] without Socket

Total Wt: 2.4 lbs. [1.1kg]

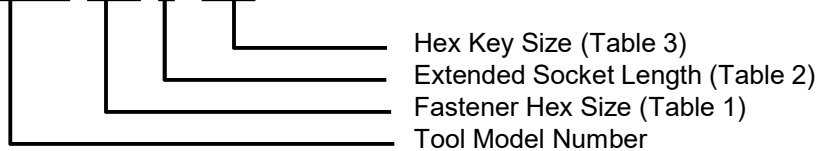
Free Speed RPM: 450

Table 1		Table 2		Table 3	
Hex Size (A/F)		Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
219	7/32"	J	2.0"	062	1/16" HexKey
250	1/4"	L	3.0"	078	5/64" HexKey

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

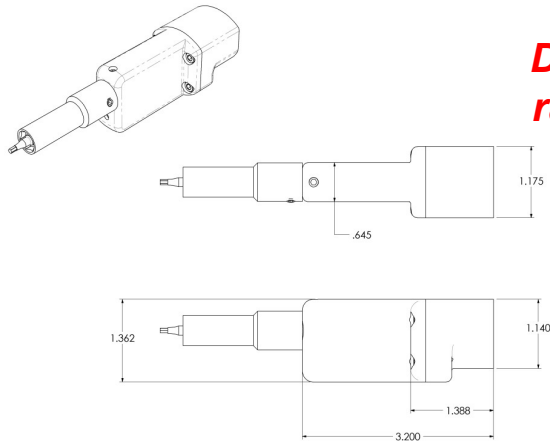
Example of Complete Tool Model Number:

KTL2005B 219 L 062



Pistol Grip Tools For K-Fast™ Nut Applications

5 – 25 in lbs



New! Smaller Head Design with same torque range as larger package.



Ref: LUM12HRX5
Atlas Copco Motor

Tool Data:

Torque Range: 5 - 25in. lbs.

Total Tool Length: 10.4" [264mm] without Socket

Total Wt: 2.4 lbs. [1.1kg]

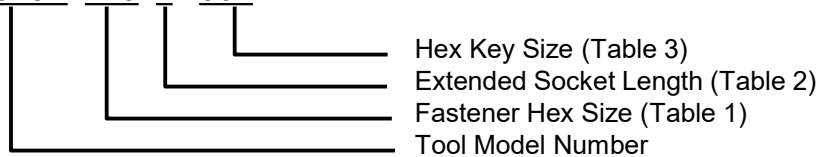
Free Speed RPM: 350

Table 1		Table 2		Table 3	
Hex Size (A/F)		Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
219	7/32"	J	2.0"	062	1/16" Hex Key
250	1/4"	L	3.0"	078	5/64" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

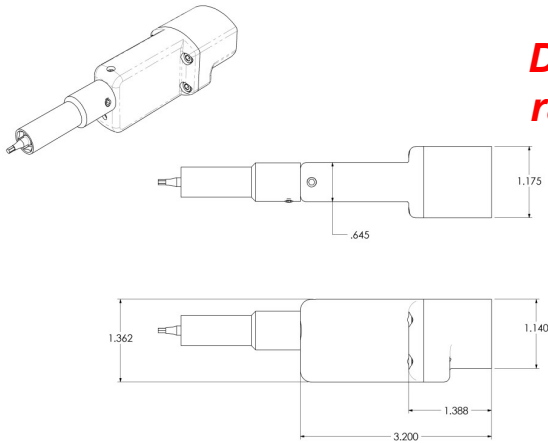
Example of Complete Tool Model Number:

KTXL2028B 219 L 062



Pistol Grip Tools For K-Fast™ Nut Applications

15 – 50 in lbs



New! Smaller Head Design with same torque range as larger package.



Ref: LUM12HRX
Atlas Copco Motor

Tool Data:

Torque Range: 15 - 50in. lbs.

Total Tool Length: 10.4" [264mm] without Socket

Total Wt: 2.4 lbs. [1.1kg]

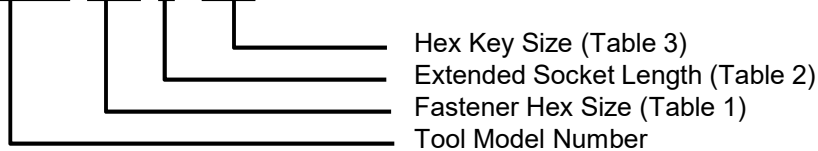
Free Speed RPM: 450

Table 1		Table 2		Table 3	
Hex Size (A/F)		Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
219	7/32"	J	2.0"	062	1/16" Hex Key
250	1/4"	L	3.0"	078	5/64" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

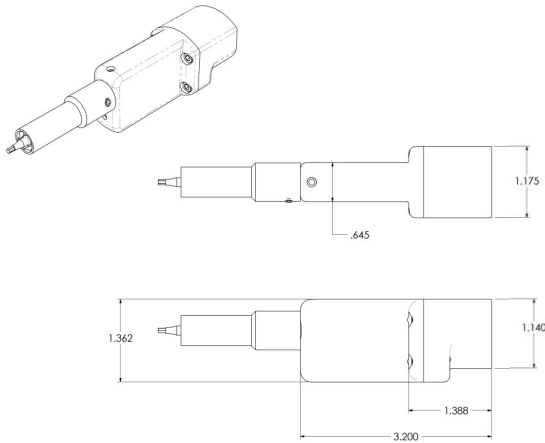
Example of Complete Tool Model Number:

KTL2028B 219 L 062



Straight Tools For K-Fast™ Nut Applications

15 – 50 in lbs



New! Smaller Head Design In a Straight Lever Operated Tool



Ref: LUM12SR8
Atlas Copco Motor

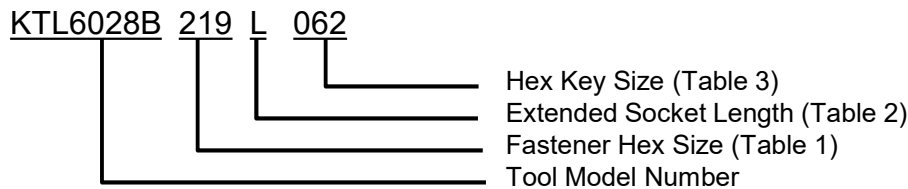
Tool Data:
Torque Range: 15 - 50in. lbs.

Free Speed RPM: 450

Table 1		Table 2		Table 3	
Hex Size (A/F)		Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
219	7/32"	J	2.0"	062	1/16" Hex Key
250	1/4"	L	3.0"	078	5/64" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:



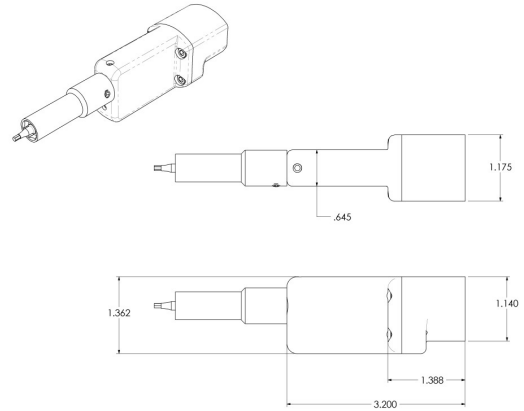
Pistol Grip Tools For K-Fast™ Nut Applications

50-100 in lbs



LUM22HR
Atlas Copco Motor Required

New! Smaller Head Design with same torque range as larger package.



Tool Data:

Torque Capability: Up to 80 in. lbs. maximum

Total Tool Length: 13.1" [327.5mm] without nose extension

Total Wt: 3.44 lbs [1.56 kg]

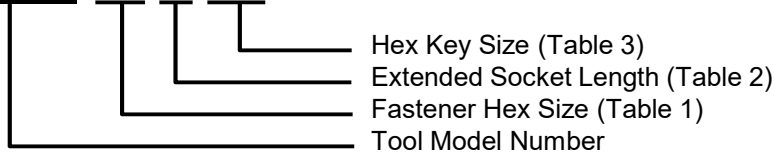
Free Speed RPM: 350

Table 1		Table 2		Table 3	
Hex Size (A/F)		Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
250	1/4"	J	2.0"	078	5/64" Hex Key
312	5/16"	L	3.0"	094	3/32" Hex Key
375	3/8"			125T	1/8" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:

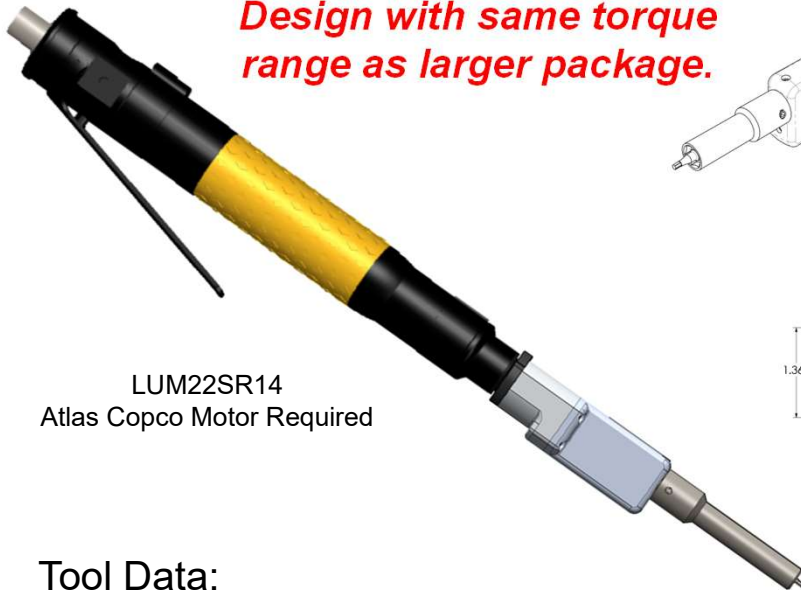
KT2028B 312 L 094



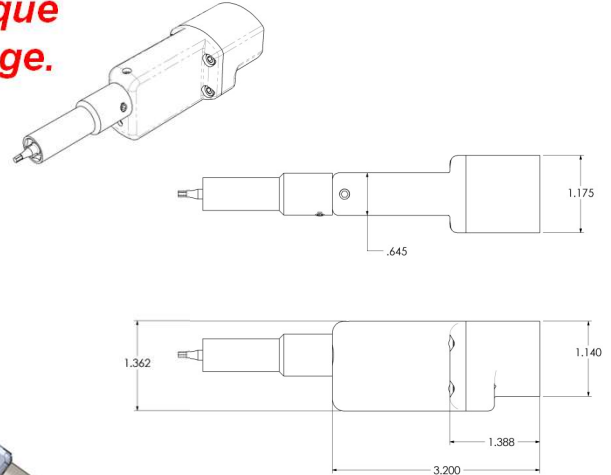
Straight Tools For K-Fast™ Nut Applications

50-100in lbs

New! Smaller Head Design with same torque range as larger package.



LUM22SR14
Atlas Copco Motor Required



Tool Data:

Torque Capability: Up to 100 in. lbs. maximum

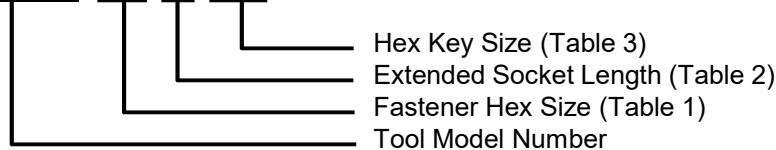
Free Speed RPM: 300

Table 1		Table 2		Table 3	
Hex Size (A/F)		Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
250	1/4"	J	2.0"	078	5/64" Hex Key
312	5/16"	L	3.0"	094	3/32" Hex Key
375	3/8"			125T	1/8" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:

KT6028B 312 L 094



Pistol Grip Tools For K-Fast™ Nut Applications

50-100 in lbs



LUM22HR
Atlas Copco Motor Required

Tool Data:

Torque Capability: Up to 100 in. lbs. maximum

Free Speed RPM: 350

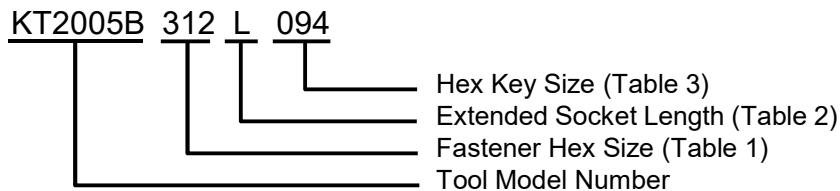
Total Tool Length: 13.1" [327.5mm] without nose extension

Total Wt: 3.44 lbs [1.56 kg]

Table 1		Table 2		Table 3	
Hex Size (A/F)		Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
250	1/4"	J	2.0"	078	5/64" Hex Key
312	5/16"	L	3.0"	094	3/32" Hex Key
375	3/8"			125T	1/8" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:



Heavy Duty Pistol Grip Tool For K-Fast™ Nut Applications

120 – 215 in lbs



Caution: This tool is capable of torque levels exceeding 200 in-lbs and must be used with side handle to prevent wrist injury.

Tool Data:

Torque Capability: Up to 215 in. lbs. maximum

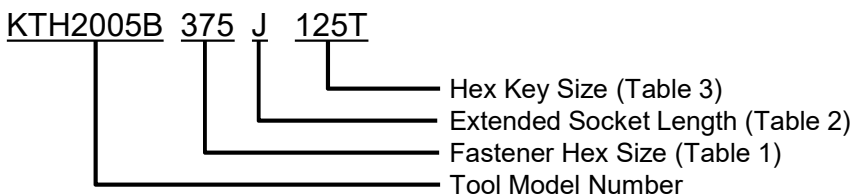
Total Tool Length: 14.2" [360mm] without nose extension

Total Wt: 3.62 lbs [1.64 kg]

Table 1 Socket Table		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Hex Size (Across Flats)					
Code	Hex Size	Code	Extension	Code	Size
312	5/16"	J	2.0"	000	No Hex Key
375	3/8"	L	3.0"	094	3/32" Hex Key
437	7/16"			125T	1/8" Hex Key
				156T	5/32" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:



Torque Control Assembly Tools

17° Offset Power Tools

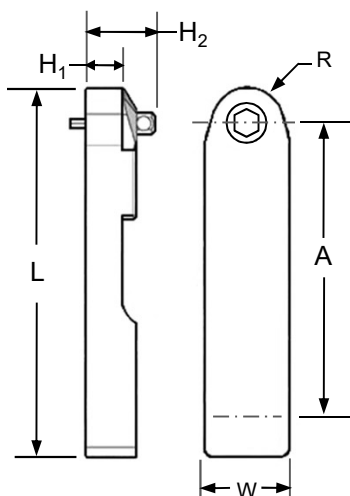
SECTION 3



17° Offset Tools For K-Fast™ Nut Applications



15 - 50 in lbs



“Flush Applications or short sockets”



Motor: LUM12SR8

Wt: 1.2Kg Free Speed RPM: 330

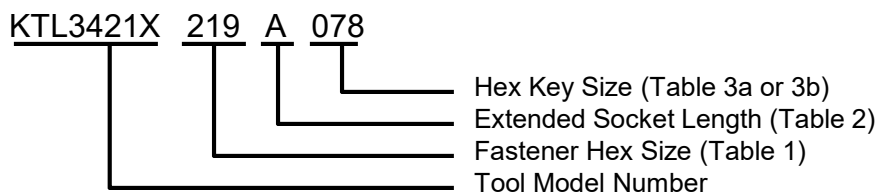
Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL3421X	5	2.38" [60.4mm]	.34" [8.6mm]	.68" [17.3mm]	3.24" [82.3mm]	.75" [19.0mm]	.31" [7.9mm]

This tool is designed for low torque applications not exceeding 40 in. lbs but can be equipped with hex keys in the extended socket configuration.

This gear head has 360° indexing capability.

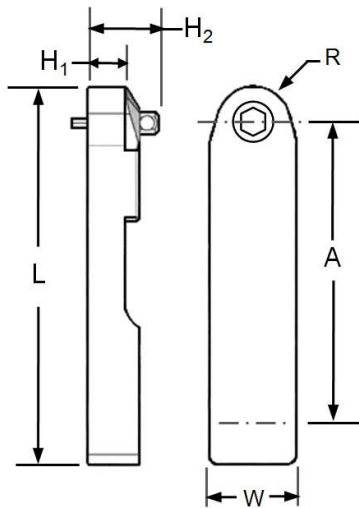
Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Extension	Code	Size	Code	Dia.
219	7/32"	A	Flush	000	No Key	000	No Key
250	1/4"	B	1/4"	062	1/16"	AK2	-2
		C	3/8"	078	5/64"	AK3	-3
		D	1/2"			AK3A	-3A

Example of Complete Tool Model Number:



17° Offset Tools For K-Fast™ Nut Applications

15 - 45 in lbs



Ref: LUM12SR-8K

Free Speed RPM: 330

Model Number	No. of Gears	A	H ₁	H ₂	W	L	R
KTL3417	7	3.63 [92.2mm]	.33 [8.3mm]	.67 [17.0mm]	.75 [19.1mm]	4.49 [114.1mm]	.31 [8.3mm]

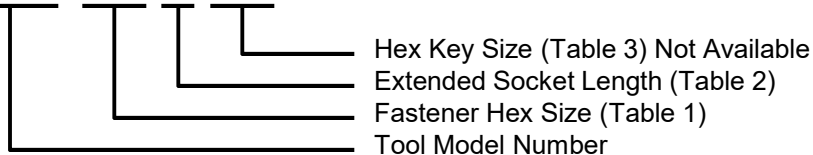
This tool is designed with a flush socket gear for use in very limited access applications. Extended sockets and hex keys can be equipped if necessary but a thicker tool should be used if possible.

This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
219	7/32"	A	Flush	000	No Hex Key
250	1/4"	C	0.375"	062	1/16" Hex Key
		D	0.500"	078	5/64" Hex Key

Example of Complete Tool Model Number:

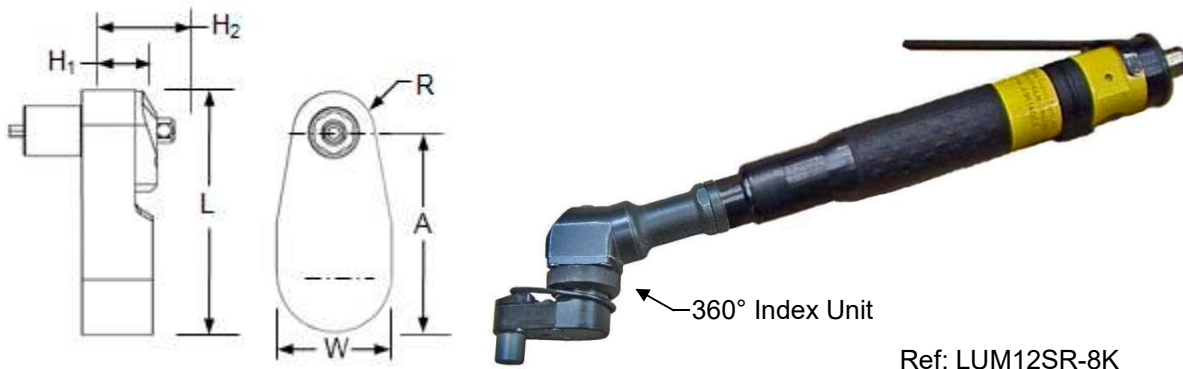
KTL3417X 250 A 078



17° Offset Tools For K-Fast™ Nut Applications



15 - 60 in lbs



Ref: LUM12SR-8K

Free Speed RPM: 330

Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KTL3428X	3	1.25 [31.8mm]	.47 [11.9mm]	.81 [20.5mm]	2.11 [53.5mm]	1.0" [25.4mm]	.35 [8.9mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

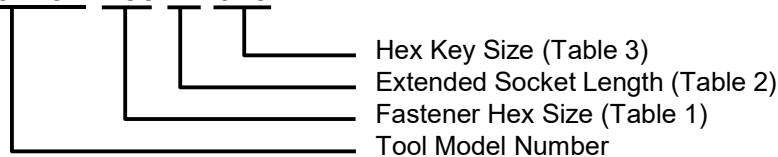
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
219	7/32"	A	Flush	000	No Hex Key
250	1/4"	D	0.500"	062	1/16" Hex Key
		E	0.625"	078	5/64" Hex Key
		G	1.0"		
		J	2.0"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

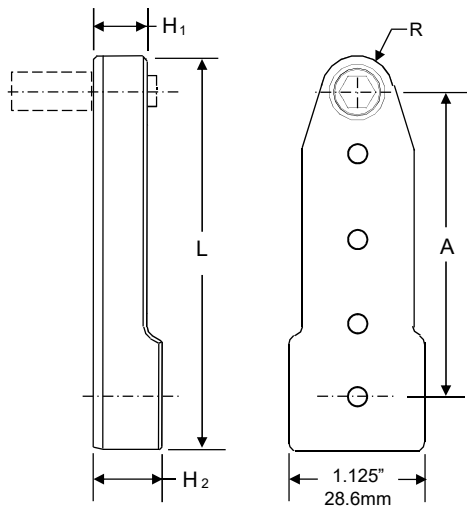
Example of Complete Tool Model Number:

KTL3428X 250 D 078



17° Offset Tools For K-Fast™ Nut Applications

20-60 in lbs



Ref: LUM12SR-8K

Free Speed RPM: 330

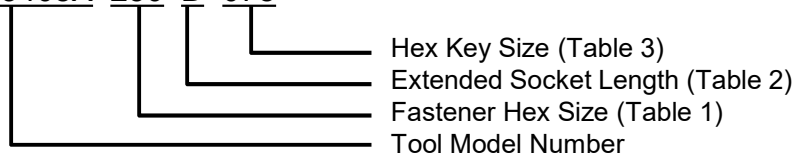
Model Number	No. of Gears	A	H ₁	H ₂	L	R
KTL3408	5	2.81" [71.4mm]	.47" [11.9mm]	.81" [20.5mm]	3.8" [95.5mm]	.35" [8.9mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd. Socket Length				Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Hex Sizes (A/F)		Code	Size
219	7/32"	A	Flush	220	250	000	No Hex Key
250	1/4"	C	3/8"	Yes	Yes	062	1/16" Hex Key
		D	1/2"	Yes	Yes	078	5/64" Hex Key
		E	5/8"	Yes	Yes		
		G	1.0"	Yes	Yes		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

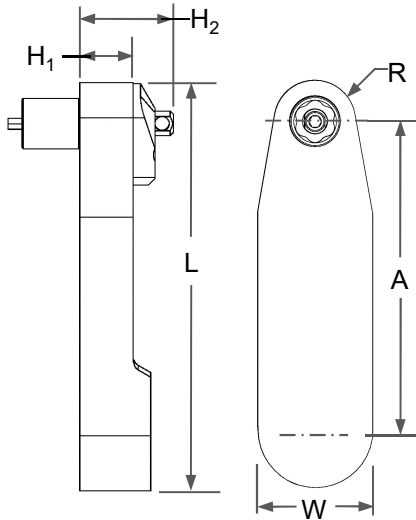
Example of Complete Tool Model Number:

KTL(D)3408X 250 D 078



17° Offset Tools For K-Fast™ Nut

Applications 20-60 in lbs



Ref: LUM12SR-8K

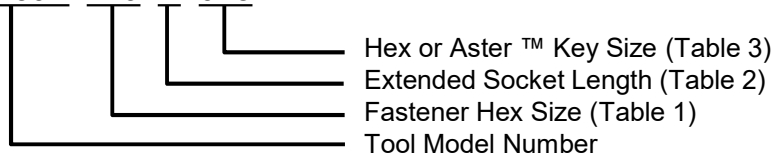
Free Speed RPM: 330

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL3439	5	2.68" [68.1mm]	.38" [9.6mm]	.72" [18.5mm]	3.53" [89.7mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Nut Hex Size		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size		Table 3 Aster™ Key	
Code	Dia.	Code	Extension	Code	Hex Size	Code	Dia.
219	7/32"	A	Flush	000	NA	000	No Key
250	1/4"	C	3/8"	062	1/16"	AK2	-2
282	9/32"	D	1/2"	078	5/64"	AK3	-3
		E	5/8"			AK3A	-3A
		G	1.0"				
		J	2.0"				

Example of Complete Ordering Number:

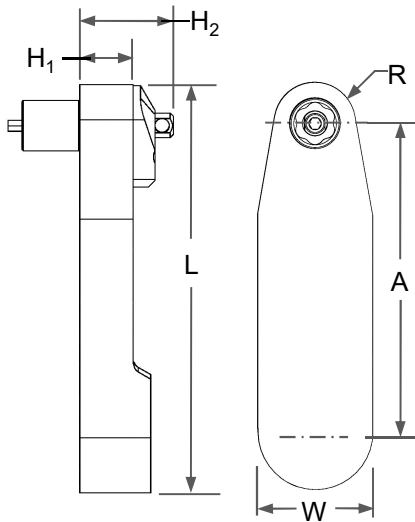
KTL3439X 219 D 078



17° Offset Tools For K-Fast™ Nut Applications



20-65 in lbs



Ref: LUM12SR-8K

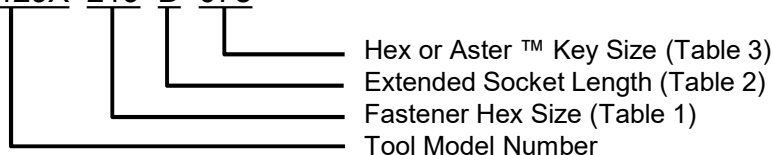
Free Speed RPM: 330

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL3429	5	2.68" [68.1mm]	.47" [11.9mm]	.81" [20.5mm]	3.53" [89.7mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Nut Hex Size		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size		Table 3 Aster™ Key	
Code	Dia.	Code	Extension	Code	Hex Size	Code	Dia.
219	7/32"	A	Flush	000	NA	000	No Key
250	1/4"	C	3/8"	062	1/16"	AK2	-2
282	9/32"	D	1/2"	078	5/64"	AK3	-3
		E	5/8"			AK3A	-3A
		G	1.0"				
		J	2.0"				

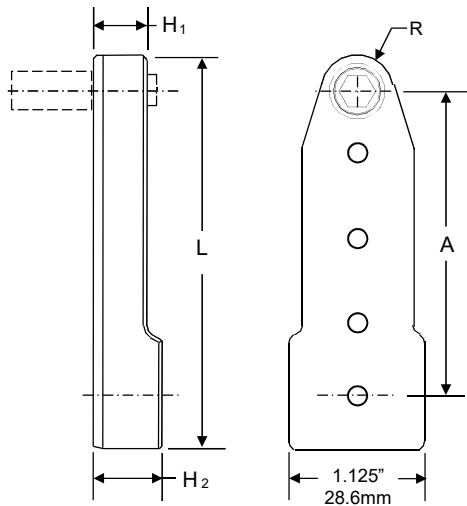
Example of Complete Ordering Number:

KTL3429X 219 D 078



17° Offset Tools For K-Fast™ Nut Applications

50-85 in lbs



Ref: LUM22SR14-K

Free Speed RPM: 250

Model Number	No. of Gears	A	H ₁	H ₂	L	R
KT3420	5	2.41 [61.1mm]	.31 [7.8mm]	.56 [14.2mm]	3.39 [86.1mm]	.36 [9.1mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

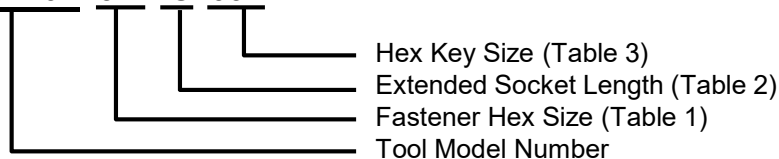
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
250	1/4"	A	Flush	000	No Hex Key
312	5/16"	C	0.375"	078	5/64" Hex Key
		D	0.500"	094	3/32" Hex Key
		E	0.625"		
		G	1.0"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

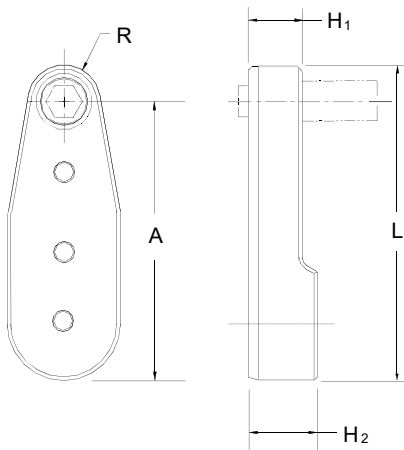
Example of Complete Tool Model Number:

KT3420X 312 C 094



17° Offset Tools For K-Fast™ Nut Applications

50-100 in lbs



Reverse Drive Socket



Ref: LUM22SR14-K

Free Speed RPM: 200

Model Number	No. of Gears	A	H ₁	H ₂	L	R
KT3449	4	1.96 [49.8mm]	.47 [11.9mm]	.61 [15.4mm]	2.81 [71.4mm]	.35 [8.8mm]

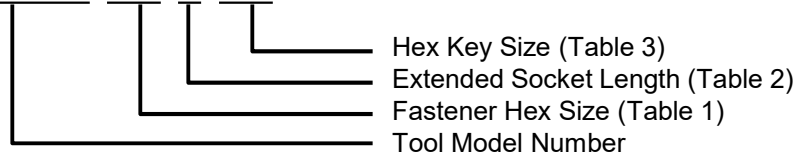
Note: This tool has a reverse drive socket.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
250	1/4"	A	Flush	000	No Hex Key
312	5/16"	C	0.400"	078	5/64" Hex Key
		D	0.500"	094	3/32" Hex Key
		E	0.625"		
		G	1.0"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

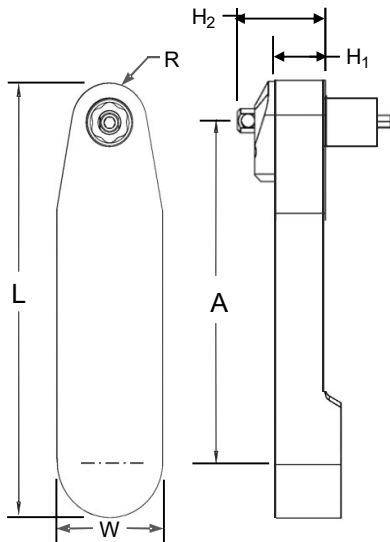
Example of Complete Tool Model Number:

KT(D)3449X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

25-75 in lbs



Reverse Drive Socket



Ref: LUM12SR8-K

Free Speed RPM: 220

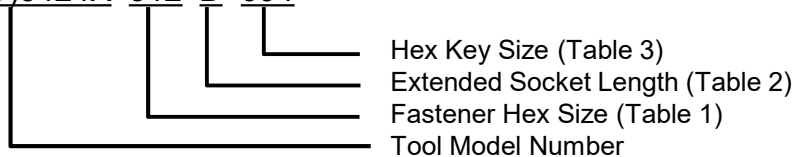
Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KTL3424	6	3.38" [85.8mm]	.47" [11.9mm]	.81" [20.5mm]	4.05" [102.9mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Hex Size (AF)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Socket Length	Code	Size	Code	Dia.
219	7/32"	A	Flush	000	None	000	No Key
250	1/4"	D	1/2"	078	5/64"	AK3	-3
312	5/16"	E	5/8"	094	3/32"	AK3A	
		G	1.0"			AK4	-4
		J	2.0"				

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

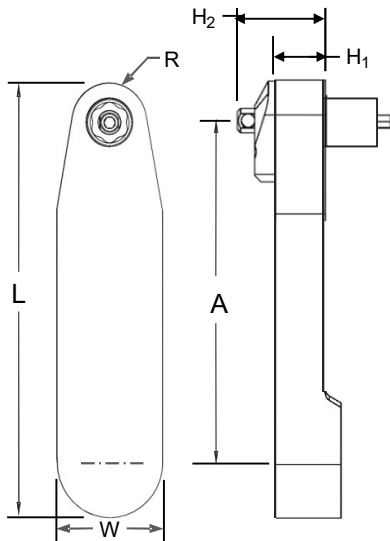
Example of Complete Tool Model Number:

KTL(D)3424X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

50-125 in lbs



Reverse Drive Socket



Ref: LUM22SR14-K
Free Speed RPM: 170

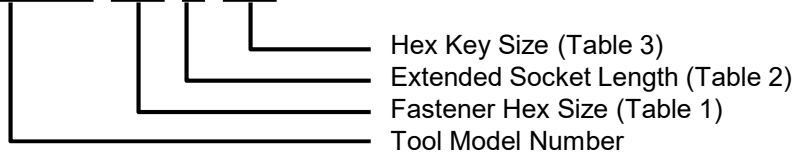
Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT3424	6	3.38" [85.8mm]	.47" [11.9mm]	.81" [20.5mm]	4.05" [102.9mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Socket Length	Code	Size	Code	Dia.
312	5/16"	A	Flush	000	None	000	No Key
		D	1/2"	094	3/32"	AK4	-4
		E	5/8"				
		G	1.0"				
		J	2.0"				

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

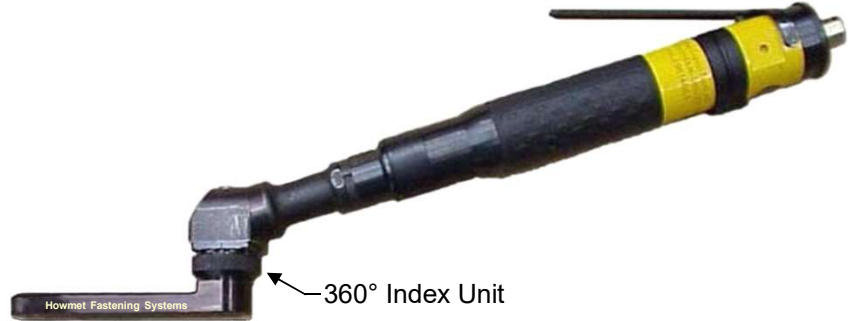
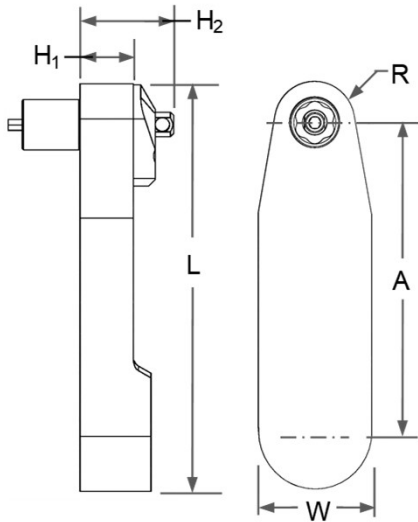
Example of Complete Tool Model Number:

KT(D)3424X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

50-100 in lbs



Ref: LUM22SR14-K
Atlas Copco Motor

Free Speed RPM: 180

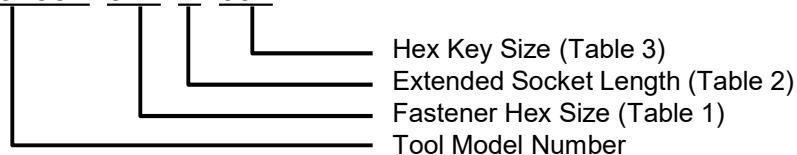
Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3438X	7	4.13" [104.9mm]	.47" [11.9mm]	.81" [20.5mm]	4.98" [126.5mm]	1.0" [25.4mm]	.35" [8.8mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
250	1/4"	A	Flush	000	No Hex Key
312	5/16"	C	3/8"	078	5/64" Hex Key
		D	1/2"	094	3/32" Hex Key
		E	5/8"		
		G	1.0"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

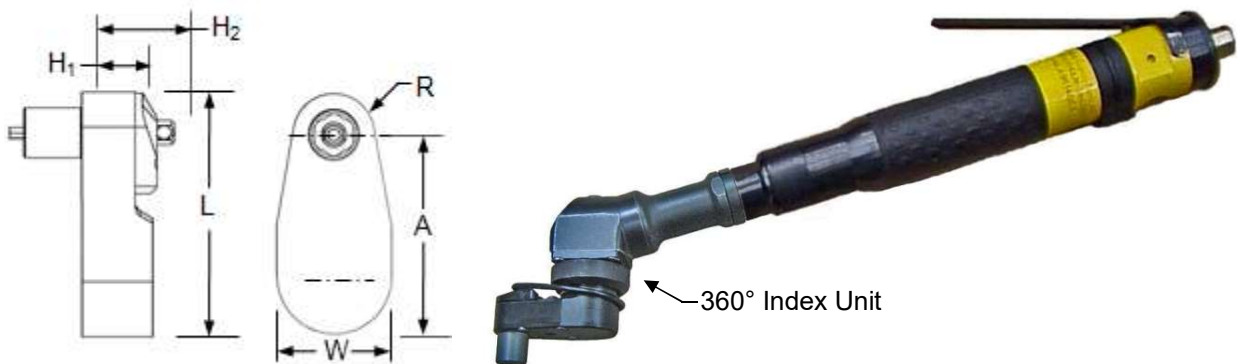
Example of Complete Tool Model Number:

KT(D)3438X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

50-120 in lbs



RPM rating: 160

Ref: LUM22SR14-K
Atlas Copco Motor

Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT3428X	3	1.25" [31.8mm]	.47" [11.9mm]	.81" [20.5mm]	2.11" [53.5mm]	1.0" [25.4mm]	.35" [8.9mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

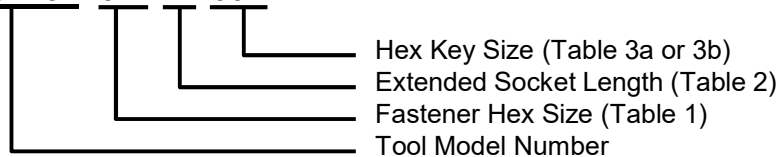
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Extension	Code	Size	Code	Dia.
250	1/4"	A	Flush	000	No Hex Key	000	No Key
312	5/16"	D	1/2"	078	5/64" Hex Key	AK3	-3
		E	5/8"	094	3/32" Hex Key	AK3A	-3A
		F	3/4"			AK4	-4
		G	1.0"				
		J	2.0"				

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

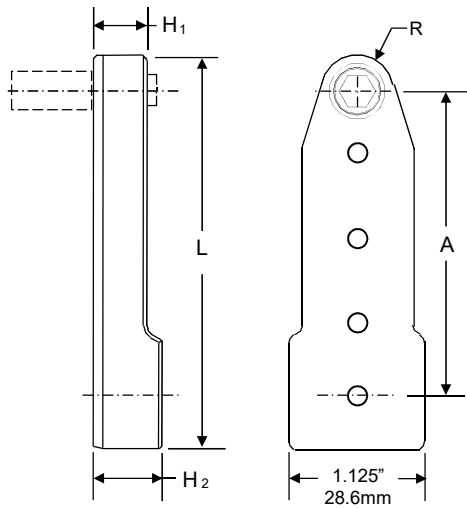
Example of Complete Tool Model Number:

KT(D)3428X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

50-120 in lbs



“Extended Socket Applications”



360° Index Unit

Ref: LUM22SR14-K
Atlas Copco Motor

Free Speed RPM: 180

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT3408X	5	2.81 [71.4mm]	.47 [11.9mm]	.81 [20.5mm]	3.80 [95.5mm]	1.0 [25.4mm]	.35 [8.8mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

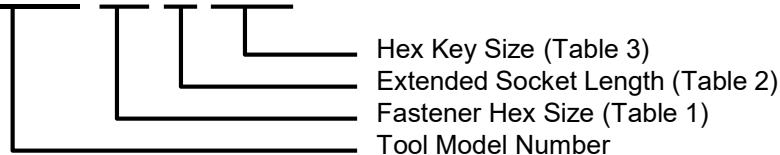
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length				Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Hex Sizes (AF)		Code	Size
312	5/16"			250	312	000	No Hex Key
		A	Flush	Yes	Yes	094	3/32" Hex Key
		C	3/8"	Yes	No		
		D	1/2"	Yes	Yes		
		E	5/8"	Yes	Yes		
		G	1.0"	Yes	Yes		
		J	2.0"	Yes	Yes		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

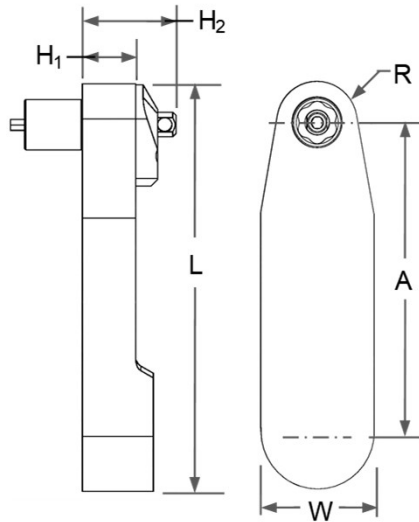
Example of Complete Tool Model Number:

KT(D)3408X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

50-120 in lbs



Ref: LUM22SR14-K
Atlas Copco Motor
Free Speed RPM: 180

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3439X	5	2.68" [68.1mm]	.38" [9.5mm]	.72" [18.5mm]	3.5" [89.7mm]	1.0" [25.4mm]	.35" [8.8mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

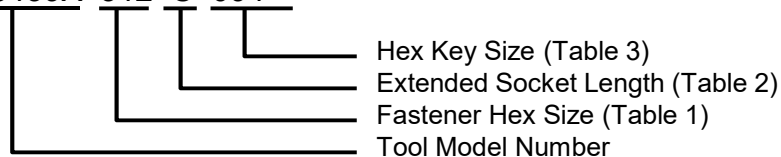
This gear head has 360° indexing capability.

Table 1 Hex Size (A/F)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
312	5/16"	A	Flush	000	No Hex Key
		C	3/8"	094	3/32" Hex Key
		D	1/2"		
		E	5/8"		
		G	1.0"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

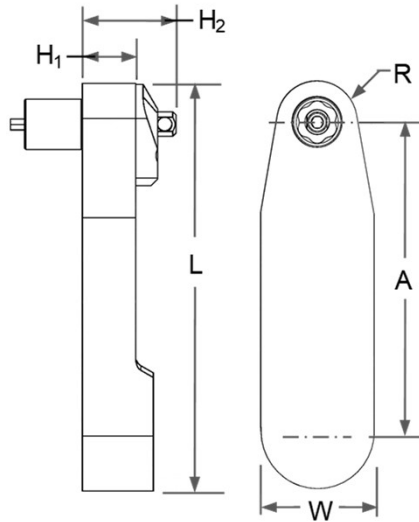
Example of Complete Tool Model Number:

KT(D)3439X 312 C 094



17° Offset Tools For K-Fast™ Nut Applications

50-120 in lbs



Ref: LUM22SR14-K
Atlas Copco Motor

Free Speed RPM: 180

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3439X	5	2.68" [68.1mm]	.38" [9.5mm]	.72" [18.5mm]	3.5" [89.7mm]	1.0" [25.4mm]	.35" [8.8mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

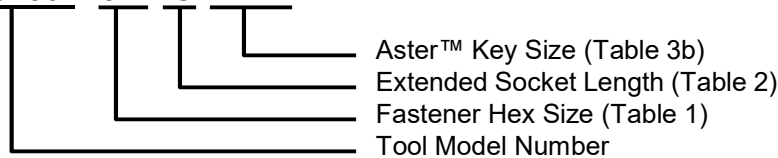
This gear head has 360° indexing capability.

Table 1 Hex Size (A/F)		Table 2 Ext'd. Socket Length		Table 3b Aster™ Key	
Code	Hex Size	Code	Extension	Code	Dia.
250	1/4"	A	Flush	000	No Key
280	9/32"	C	3/8"	AK3	-3
312	5/16"	D	1/2"	AK3A	-3A
343	11/32"	E	5/8"	AK4	-4
		G	1.0"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

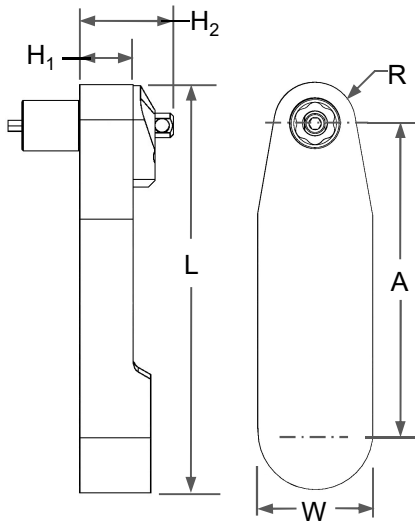
Example of Complete Tool Model Number:

KT3439X 312 C AK4



17° Offset Tools For K-Fast™ Nut Applications

50-130 in lbs



Ref: LUM22SR14-K
Atlas Copco Motor
Free Speed RPM: 180

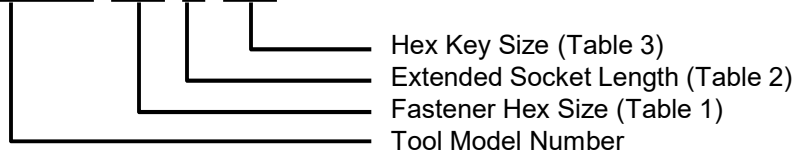
Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT3429	5	2.68 [68.1mm]	.47 [11.9mm]	.81" [20.5mm]	3.53 [89.7mm]	1.0 [25.4mm]	.35 [8.8mm]

Table 1 Hex Size (A/F)		Table 2 Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Socket Length	Code	Size	Code	Dia.
312	5/16"	A	Flush	000	None	000	No Key
		D	1/2"	094	3/32"	AK4	-4
		E	5/8"				
		G	1.0"				
		J	2.0"				

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

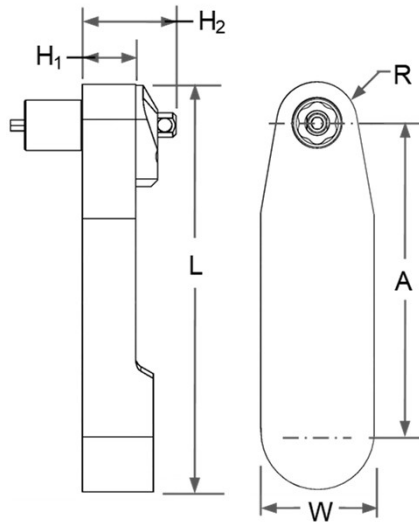
Example of Complete Tool Model Number:

KT(D)3429X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

70-115 in lbs



LUM22SR14-K
Atlas Copco Motor Required
Free Speed RPM: 150
Wt: 1.7Kg

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL3498X	5	3.19 [81.0mm]	.50 [11.4mm]	.84" [21.5mm]	4.5 [114.3mm]	1.12 [28.4mm]	.43 [11.1mm]

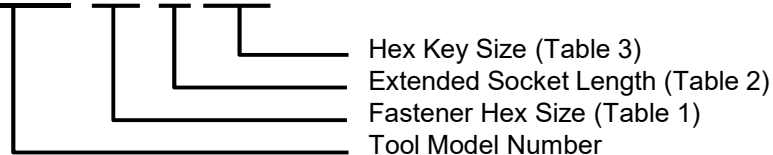
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required. This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length					Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Hex Sizes (A/F)			Code	Size
375	3/8"	A	Flush	375	437	500	000	No Key
437	7/16"	B	1/4"	Yes	Yes	Yes	125T	1/8"
500	1/2"	D	1/2"	Yes	Yes	Yes	156T	5/32"
		E	5/8"	Yes	Yes	Yes		
		G	1.0"	Yes	Yes	Yes		
		J	2.0"	Yes	Yes	Yes		

Socket Lengths:
Short Sockets will utilize extended socket gears.

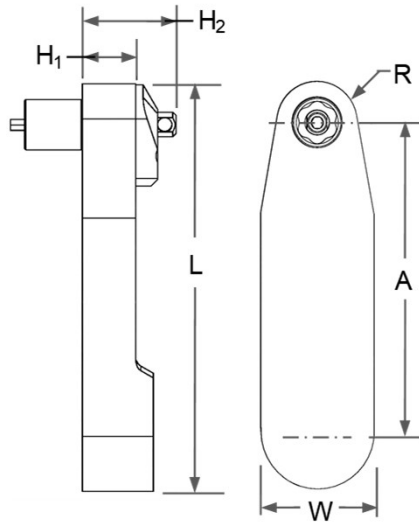
Example of Complete Tool Model Number:

KTL3498X 437 E 156T



17° Offset Tools For K-Fast™ Nut Applications

60-140 in lbs



Ref: LUM22SR14-K
Atlas Copco Motor

Free Speed RPM: 180

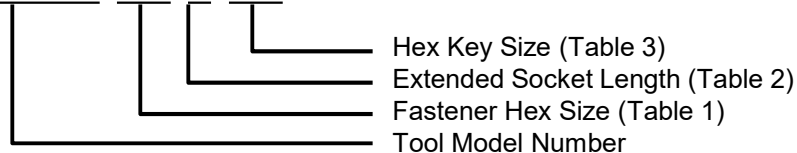
Model Number	No. of Gears	A	H ₁	H ₂ Ref.	L	W	R
KT3461X	5	2.75" [69.9mm]	.47" [11.9mm]	.81" [20.5mm]	3.68" [93.3mm]	1.0" [25.4mm]	.43" [10.8mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length				Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Hex Sizes (A/F)		Code	Size
312	5/16"	A	Flush	312	375	000	No Hex Key
375	3/8"	C	3/8"	No	No	094	3/32" Hex Key
		D	1/2"	Yes	No	125	1/8" Hex Key
		E	5/8"	Yes	Yes		
		G	1.0"	Yes	Yes		
		J	2.0"	Yes	Yes		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

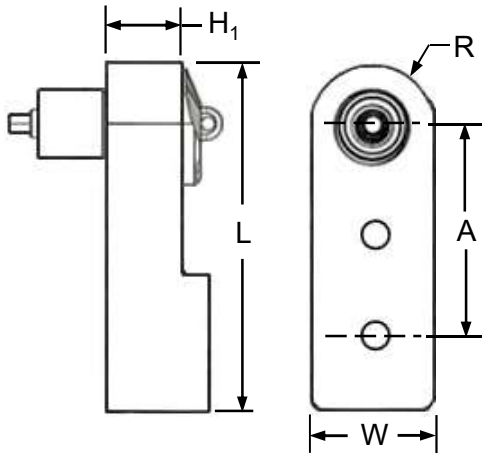
Example of Complete Tool Model Number:

KT3461X 312 D 094



17° Offset Tools For K-Fast™ Nut Applications

60-140 in lbs



3-Gear



Ref: LUM22SR14-K
Atlas Copco Motor

Wt: 1.5Kg Free Speed RPM: 160

Model Number	No. of Gears	A	H ₁	L	W	R
KTL3473	3	1.56 [39.6mm]	.50 [12.4mm]	2.62 [66.5mm]	1.0 [25.4mm]	.51 [12.9mm]

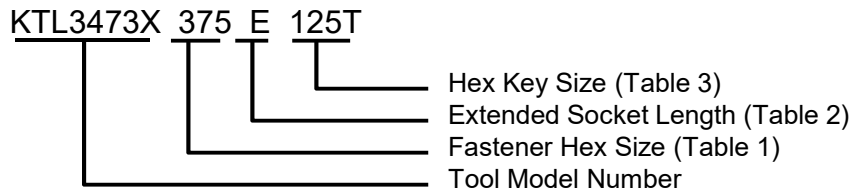
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length					Table 3 Key Hex Size	
Code	Hex Size	Code	Socket Length	Hex Sizes (A/F)			Code	Size
375	3/8"	A	Flush	375	437	500	000	No Key
437	7/16"	B	1/4"	Yes	Yes	Yes	125T	1/8"
500	1/2"	D	1/2"	Yes	Yes	Yes	156T	5/32"
		E	5/8"	Yes	Yes	Yes	187T	3/16"
		F	3/4"	Yes	Yes	Yes		
		G	1.0"	Yes	Yes	Yes		
		J	2.0"	Yes	Yes	Yes		

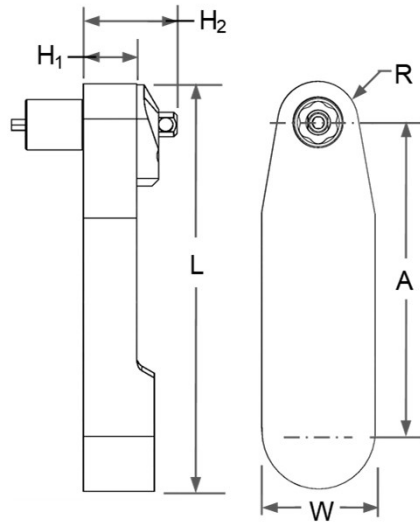
Socket Lengths:
Short Sockets will utilize extended socket gears.

Example of Complete Tool Model Number:



17° Offset Tools For K-Fast™ Nut Applications

70-140 in lbs



Ref: LUM22SR14-K

Wt: 1.5Kg Free Speed RPM: 140

Model Number	No. of Gears	A	H ₁	H ₂ (REF)	L	W	R
KT3452	5	2.64 [67.0mm]	.45 [11.4mm]	.79" [20.2mm]	3.54 [89.9mm]	1.0 [25.4mm]	.40 [10.1mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

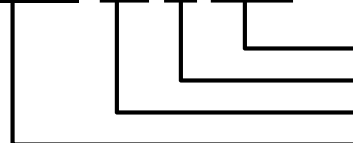
This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length				Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Hex Sizes (AF)		Code	Size
312	5/16"	A	Flush	312	375	000	No Key
375	3/8"	C	3/8"	No	No	094	3/32"
		D	1/2"	Yes	No	125T	1/8"
		E	5/8"	Yes	Yes		
		F	3/4"	Yes	Yes		
		G	1.0"	Yes	Yes		
		J	2.0"	Yes	Yes		

Socket Lengths:
Short Sockets will utilize extended socket gears.

Example of Complete Tool Model Number:

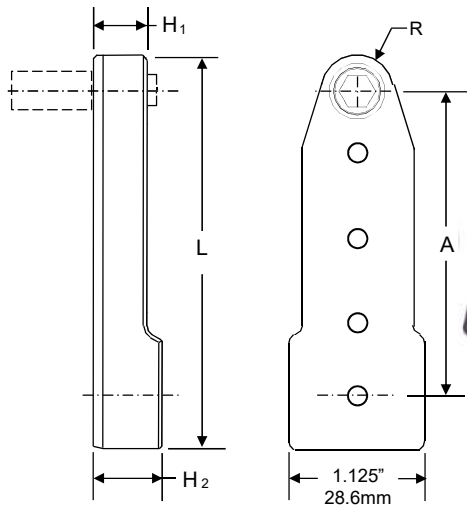
KT3452X 375 E 125T



Hex Key Size (Table 3)
Extended Socket Length (Table 2)
Fastener Hex Size (Table 1)
Tool Model Number

17° Offset Tools For K-Fast™ Nut Applications

120-160 in lbs



LTV28R28-10
Atlas Copco Motor Required

Wt: 1.9Kg Free Speed RPM: 290

Model Number	No. of Gears	A	H ₁	H ₂	L	R
KT3407	5	2.56 [65.0mm]	.50 [12.7mm]	.50 [12.7mm]	3.64 [92.5mm]	.45 [11.4mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

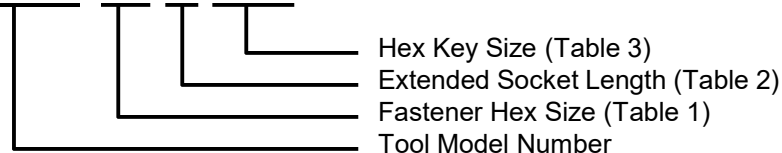
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Key Hex Size	
Code	Hex Size	Code	Extension	Hex Sizes (A/F)	
312	5/16"			312	375
375	3/8"	A	Flush	Yes	Yes
		C	3/8"	No	No
		D	1/2"	Yes	No
		E	5/8"	Yes	Yes
		G	1.0"	Yes	Yes
		J	2.0"	Yes	Yes
				Code	
				Size	
				000	No Hex Key
				094	3/32" Hex Key
				125T	1/8" Hex Key

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

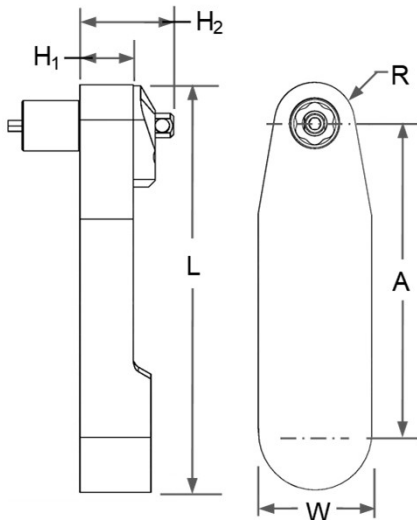
Example of Complete Tool Model Number:

KT(D)3407X 375 E 125T



17° Offset Tools For K-Fast™ Nut Applications

150-210 in lbs



Ref: LTV28R20-10-215

Wt: 1.9Kg Free Speed RPM: 160

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3475X	5	3.23" [82.0mm]	.50" [12.4mm]	.84" [21.5mm]	4.3" [109.2mm]	1.0" [25.4mm]	.50" [12.7mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length					Table 3 Key Hex Size	
Code	Hex Size	Code	Socket Length	Hex Sizes (A/F)			Code	Size
375	3/8"	A	Flush	375	437	500	000	No Key
437	7/16"	B	1/4"	Yes	Yes	Yes	125T	1/8"
500	1/2"	D	1/2"	Yes	Yes	Yes	156T	5/32"
		E	5/8"	Yes	Yes	Yes	187T	3/16"
		F	3/4"	Yes	Yes	Yes		
		G	1.0"	Yes	Yes	Yes		
		J	2.0"	Yes	Yes	Yes		

Socket Lengths:
Short Sockets will utilize extended socket gears.

Example of Complete Tool Model Number:

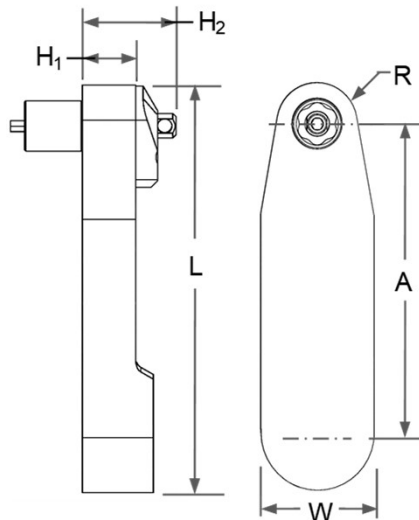
KT3475X 500 E 125T



Hex Key Size (Table 3)
Extended Socket Length (Table 2)
Fastener Hex Size (Table 1)
Tool Model Number

17° Offset Tools For K-Fast™ Nut Applications

150-240 in lbs



LTV28R28-10
Atlas Copco Motor Required

Wt: 1.7Kg Free Speed RPM: 265

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3498X	5	3.19" [81.0mm]	.50" [11.4mm]	.84" [21.5mm]	4.5" [114.3mm]	1.12" [28.4mm]	.43" [11.1mm]

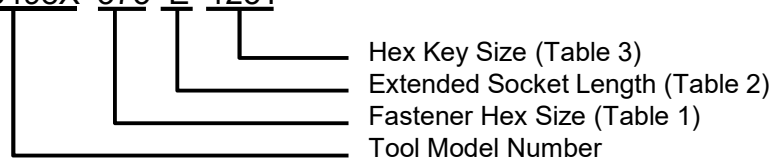
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required. This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length					Table 3 Key Hex Size	
Code	Hex Size	Code	Socket Length	Hex Sizes (A/F)			Code	Size
				312	375	437		
375	3/8"	A	Flush	Yes	Yes	Yes	000	No Key
437	7/16"	B	1/4"	Yes	Yes	Yes	125T	1/8"
500	1/2"	D	1/2"	Yes	Yes	Yes	156T	5/32"
		E	5/8"	Yes	Yes	Yes		
		F	3/4"	Yes	Yes	Yes		
		G	1.0"	Yes	Yes	Yes		
		J	2.0"	Yes	Yes	Yes		

Socket Lengths:
Short Sockets will utilize extended socket gears.

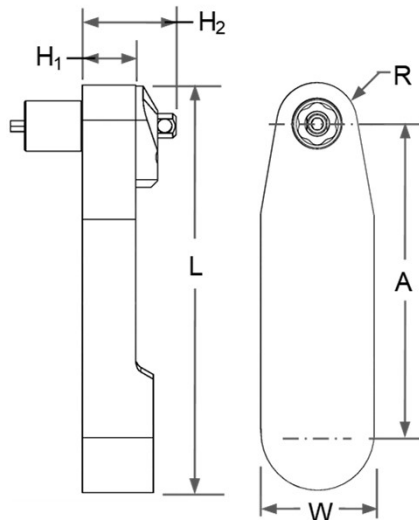
Example of Complete Tool Model Number:

KT3498X 375 E 125T



17° Offset Tools For K-Fast™ Nut Applications

150-240 in lbs



LTV28R28-10
Atlas Copco Motor Required
Free Speed RPM: 265
Wt: 1.7Kg

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3498X	5	3.19" [81.0mm]	.50" [11.4mm]	.84" [21.5mm]	4.5" [114.3mm]	1.12" [28.4mm]	.43" [11.1mm]

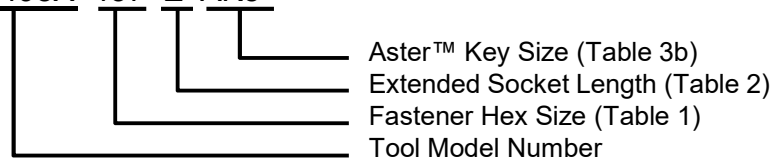
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required. This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length				Table 3b Aster™ Key		
Code	Hex Size	Code	Socket Length	Hex Sizes (A/F)			Code	Dia.
				314	376	439		
375	3/8"	A	Flush	Yes	Yes	Yes	000	No Key
437	7/16"	B	1/4"	Yes	Yes	Yes	AK5	-5
500	1/2"	D	1/2"	Yes	Yes	Yes	AK6	-6
		E	5/8"	Yes	Yes	Yes		
		F	3/4"	Yes	Yes	Yes		
		G	1.0"	Yes	Yes	Yes		
		J	2.0"	Yes	Yes	Yes		

Socket Lengths:
Short Sockets will utilize extended socket gears.

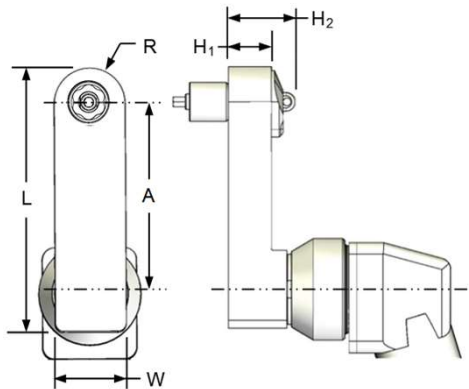
Example of Complete Tool Model Number:

KT3498X 437 E AK5



17° Offset Tools For K-Fast™ Nut Applications

170-290 in lbs



LTV28R28-10
Atlas Copco Motor
Required

Wt: 1.8Kg Free Speed RPM: 250

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3488X	5	3.38" [85.9mm]	.68" [17.3mm]	1.0" [26.1mm]	4.4" [113.0mm]	1.0" [25.4mm]	.50" [12.7mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required. This gear head has 360° indexing capability.

Table 1 Socket Table		Table 2 Ext'd.Socket Length					Table 3 Key Hex Size	
Hex Size (Across Flats)		Code	Extension	Hex Sizes (AF)			Code	Size
Code	Hex Size			375	437	500		
375	3/8"	A	Flush	Yes	Yes	Yes	000	No Hex Key
437	7/16"	D	0.500"	No	No	No	125T	1/8" Hex Key
500	1/2"	E	0.625"	Yes	Yes	Yes	156T	5/32" Hex Key
		G	1.0"	Yes	Yes	Yes		
		J	2.0"	Yes	Yes	Yes		

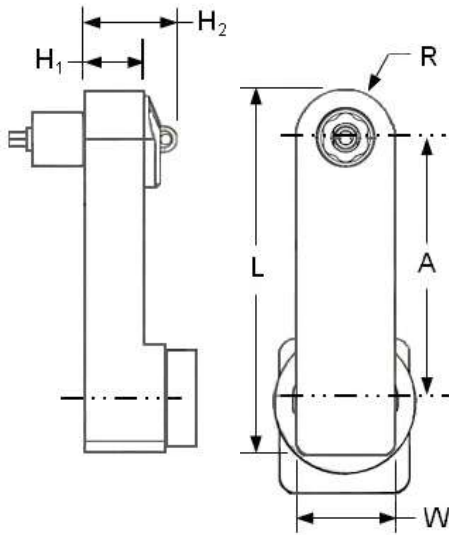
Example of Complete Tool Model Number:

KT3488X 375 E 125T

Hex Key Size (Table 3)
Extended Socket Length (Table 2)
Fastener Hex Size (Table 1)
Tool Model Number

17° Offset Tools For K-Fast™ Nut Applications

200-320 in lbs



LTV28R28
Atlas Copco Motor Required

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL3472A	5	3.00" [76.2mm]	.69" [17.5mm]	1.0" [26.3mm]	4.2" [106.4mm]	1.12" [28.4mm]	.56" [14.2mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

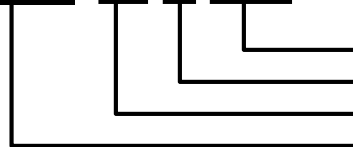
This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd. Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Extension	Code	Size	Code	Dia.
375	3/8"	A	Flush	000	NA	000	No Key
437	7/16"	E	5/8"	125T	1/8"	AK6	-6
500	1/2"	F	3/4"	156T	5/32"	AK7	-7
562	9/16"	G	1.0"	187T	3/16"		
625	5/8"						

.687 Max A/F Flush Socket Gear

Example of Complete Tool Model Number:

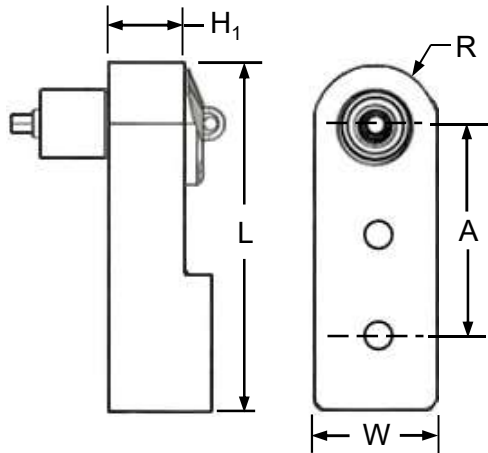
KTL3472A 437 G 156T



Hex or Aster™ Key Size (Table 3a or 3b)
Extended Socket Length (Table 2)
Fastener Hex Size (Table 1)
Tool Model Number

17° Offset Tools For K-Fast™ Nut Applications

250-370 in lbs



3-Gear



Wt: 3.3Kg
AtlasCopco Motor LTV28R28-10

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3415X	3	1.62" [41.1mm]	.68" [17.3mm]	1.0" [26.3mm]	2.69" [68.3mm]	1.0" [25.4mm]	.50" [12.2mm]

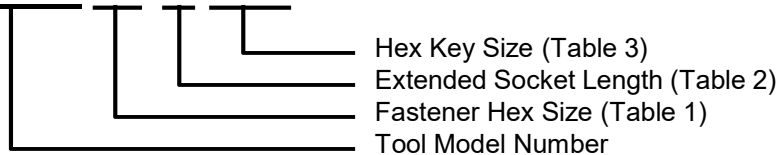
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
375	3/8"	A	Flush	000	No Key
437	7/16"	E	5/8"	125T	1/8"
500	1/2"	G	1.0"	156T	5/32"
562	9/16"	J	2.0"	187T	3/16"

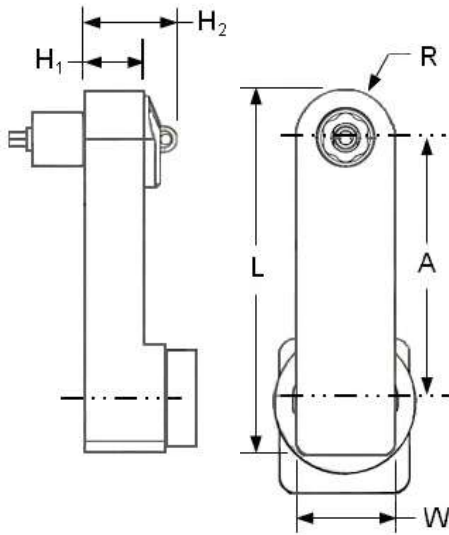
Example of Complete Tool Model Number:

KT3415X 500 G 156T



17° Offset Tools For K-Fast™ Nut Applications

270-420 in lbs



LTV38R70
Atlas Copco Motor

Wt: 3.6Kg Free Speed RPM: 145

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT3720A	7	3.69" [93.6mm]	.69" [17.5mm]	1.0" [25.4mm]	4.88" [124.0mm]	1.12" [28.4mm]	.56" [14.2mm]

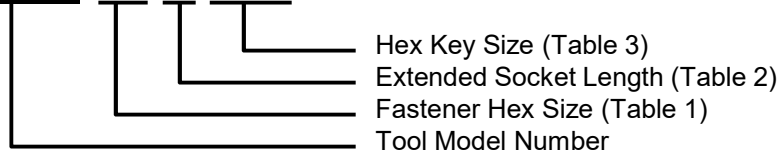
This is a very durable tool design for general purpose applications and is designed for Use in a flush condition or with extended sockets and hex keys when required. This gear head has 360° indexing capability.

Table 1 Nut Hex Size (A/F)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
437	7/16"	A	Flush	000	NA
500	1/2"	E	5/8"	125T	1/8"
562	9/16"	F	3/4"	156T	5/32"
625	5/8"	G	1.0"	187T	3/16"
687	11/16"	J	2.0"	219T	7/32"
750	3/4"			250T	1/4"

.687 Max A/F Flush Socket Gear

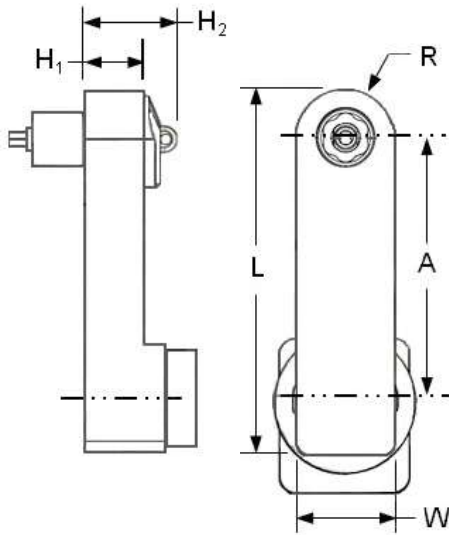
Example of Complete Tool Model Number:

KT3720A 500 G 187T



17° Offset Tools For K-Fast™ Nut Applications

260-520 in lbs



LTV38R57
Atlas Copco Motor

Wt: 3.4Kg Free Speed RPM: 170

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	R	W
KT3472A	5	3.00" [76.2mm]	.69" [17.5mm]	1.0" [26.3mm]	4.2" [106.4mm]	.56" [14.2mm]	1.12" [28.4mm]

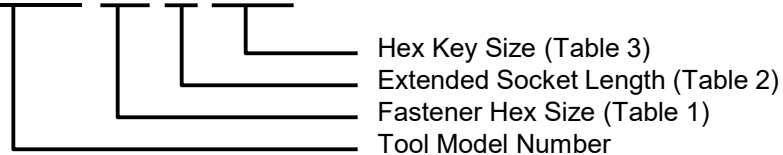
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required. This gear head has 360° indexing capability.

Table 1 Nut Hex Size (A/F)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
437	7/16"	A	Flush	000	NA
500	1/2"	E	5/8"	156T	5/32"
562	9/16"	F	3/4"	187T	3/16"
625	5/8"	G	1.0"	219T	7/32"
687	11/16"	J	2.0"	250T	1/4"

.687 Max A/F Flush Socket Gear

Example of Complete Tool Model Number:

KT3472A 562 G 187T



Torque Control Assembly Tools

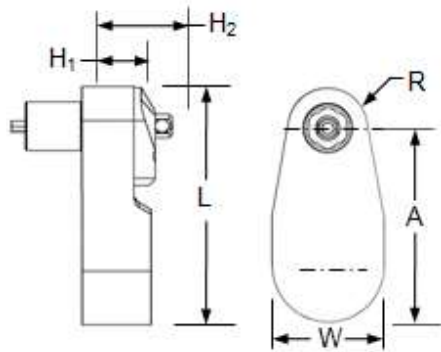
90° Offset Power Tools

SECTION 4



90° Offset Tools For K-Fast™ Nut Applications

20 – 55 in lbs



(Ref: LUM12SR8-K MOD.)

Wt: 1.5Kg Free Speed RPM: 300

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL5428A	3	1.25" [31.8mm]	.47" [11.9mm]	.81" [20.5mm]	2.1" [53.3mm]	1.0" [25.4mm]	.35" [8.8mm]

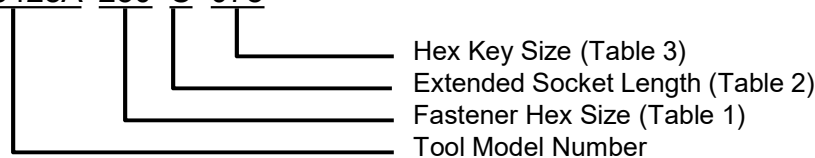
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size																																		
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tr> <td>219</td> <td>7/32"</td> </tr> <tr> <td>250</td> <td>1/4"</td> </tr> <tr> <td>312</td> <td>5/16"</td> </tr> <tr> <td></td> <td></td> </tr> </table>	Code	Hex Size	219	7/32"	250	1/4"	312	5/16"			<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>C</td> <td>0.375"</td> </tr> <tr> <td>D</td> <td>0.500"</td> </tr> <tr> <td>E</td> <td>0.625"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> <tr> <td>J</td> <td>2.0"</td> </tr> </table>	Code	Extension	A	Flush	C	0.375"	D	0.500"	E	0.625"	G	1.0"	J	2.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tr> <td>000</td> <td>No Hex Key</td> </tr> <tr> <td>062</td> <td>1/16" Hex Key</td> </tr> <tr> <td>078</td> <td>5/64" Hex Key</td> </tr> <tr> <td>094</td> <td>3/32" Hex Key</td> </tr> </table>	Code	Size	000	No Hex Key	062	1/16" Hex Key	078	5/64" Hex Key	094	3/32" Hex Key
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<p>(D) Indicates 12pt Socket Configuration No (D) indicates Hex Socket Hex Sockets recommended for Hex Nuts</p>	<p>Flush Socket Gear Available up to 5/16" Hex A/F</p>																																			

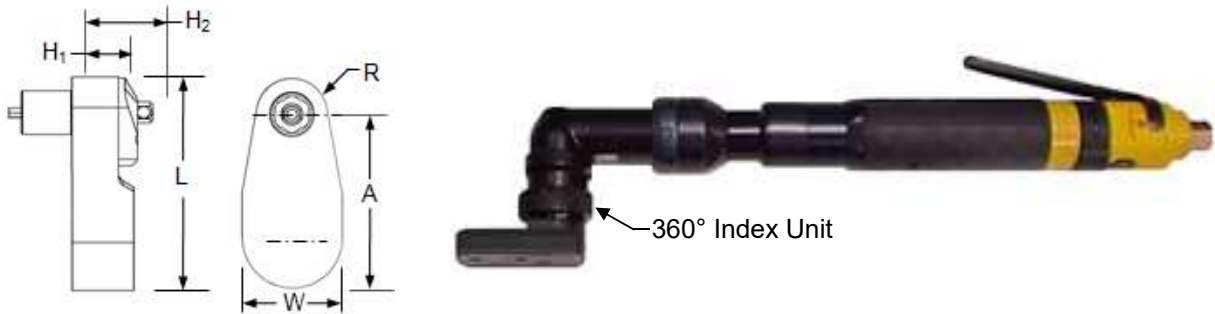
Example of Complete Tool Model Number:

KTL5428A 250 C 078



90° Offset Tools For K-Fast™ Nut Applications

20 – 55 in lbs



(Ref: LUM12SR8-K MOD.)

Wt. 1.5kg Free Speed RPM: 280

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL5457X	3	1.31" [33.3mm]	.47" [11.9mm]	.81" [20.5mm]	2.24" [56.8mm]	1.0" [25.4mm]	.43" [10.8mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

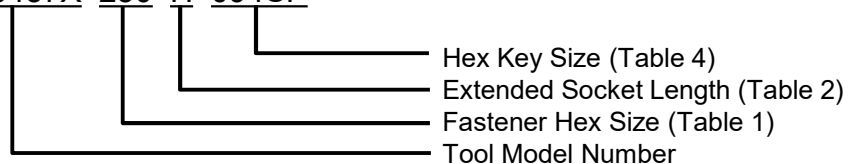
This gear head has 360° indexing capability if required.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Drive Shaft Extension	Table 4 Key Hex Size																																				
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>250</td> <td>1/4"</td> </tr> <tr> <td>312</td> <td>5/16"</td> </tr> </tbody> </table>	Code	Hex Size	250	1/4"	312	5/16"	<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>C</td> <td>0.375"</td> </tr> <tr> <td>D</td> <td>0.500"</td> </tr> <tr> <td>E</td> <td>0.625"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> <tr> <td>H</td> <td>1.5"</td> </tr> <tr> <td>J</td> <td>2.0"</td> </tr> </tbody> </table>	Code	Extension	A	Flush	C	0.375"	D	0.500"	E	0.625"	G	1.0"	H	1.5"	J	2.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>B</td> <td>No Index Unit</td> </tr> <tr> <td>X</td> <td>With Index Unit</td> </tr> </tbody> </table>	Code	Size	B	No Index Unit	X	With Index Unit	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>No Hex Key</td> </tr> <tr> <td>078</td> <td>5/64" Hex Key</td> </tr> <tr> <td>094</td> <td>3/32" Hex Key</td> </tr> </tbody> </table>	Code	Size	000	No Hex Key	078	5/64" Hex Key	094	3/32" Hex Key
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- (D) Indicates 12pt Socket Configuration
- No (D) indicates Hex Socket
- Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:

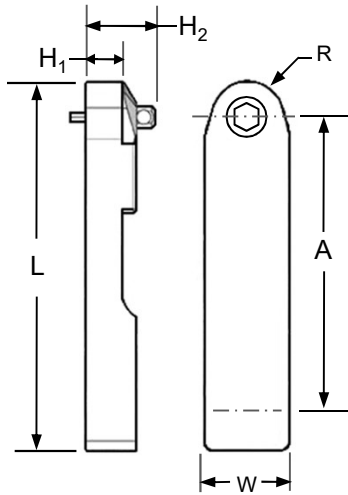
KTL5457X 250 H 094SP



90° Offset Tools For K-Fast™ Nut Applications

15-50 in lbs

“Flush Applications or short sockets”



Motor: LUM12SR8

Wt: 1.2Kg Free Speed RPM: 330

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL5421A	5	2.38" [60.4mm]	.34" [8.6mm]	.68" [17.3mm]	3.24" [82.3mm]	.75" [19.0mm]	.31" [7.9mm]

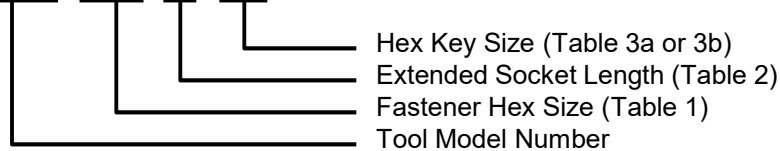
This tool is designed for low torque applications not exceeding 40 in. lbs but can be equipped with hex keys in the extended socket configuration.

This gear head has 360° indexing capability.

Table 1 Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Extension	Code	Size	Code	Dia.
219	7/32"	A	Flush	000	No Key	000	No Key
250	1/4"	B	1/4"	062	1/16"	AK2	-2
		C	3/8"	078	5/64"	AK3	-3
		D	1/2"			AK3A	-3A

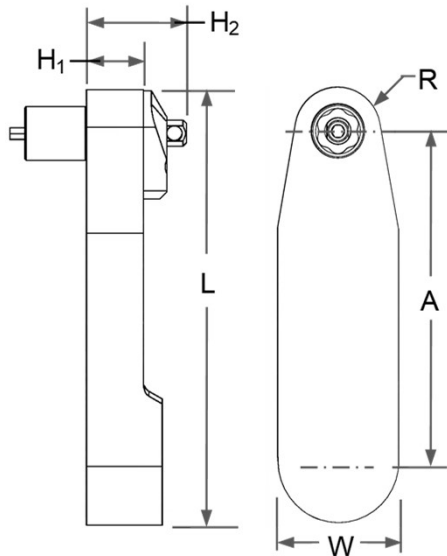
Example of Complete Tool Model Number:

KTL5421A 250 G 078



90° Offset Tools For K-Fast™ Nut Applications

20 – 55 in lbs



(Ref: LUM12SR8-K MOD.)

Wt: 1.5Kg Free Speed RPM: 300

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL5439A	5	2.69" [68.3mm]	.38" [9.5mm]	.73" [18.5mm]	3.54 [89.9mm]	1.0" [25.4mm]	.35" [8.9mm]

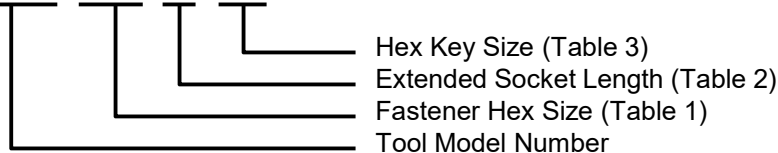
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size																														
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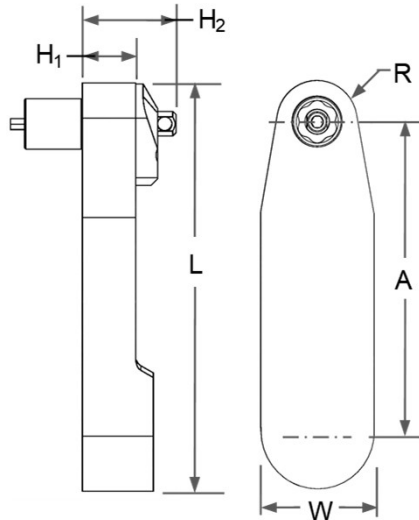
Example of Complete Tool Model Number:

KTL5439A 250 C 078



90° Offset Tools For K-Fast™ Nut Applications

20 – 55 in lbs



(Ref: LUM12SR8-K MOD.)

Wt. 1.5kg Free Speed RPM: 300

Model Number	No. of Gears	A	H ₁	H ₂ with hex key	L	W	R
KTL5430A	6	3.06" [77.7mm]	.34" [8.6mm]	.68" [17.3mm]	3.88 [98.5mm]	.75" [19.0mm]	.31" [7.9mm]

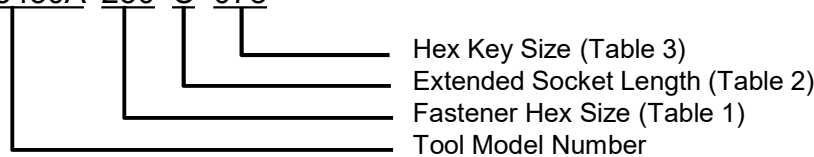
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size																														
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>219</td> <td>7/32"</td> </tr> <tr> <td>250</td> <td>1/4"</td> </tr> <tr> <td>312</td> <td>5/16"</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Code	Hex Size	219	7/32"	250	1/4"	312	5/16"			<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>C</td> <td>3/8"</td> </tr> <tr> <td>D</td> <td>1/2"</td> </tr> <tr> <td>E</td> <td>5/8"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> </tbody> </table>	Code	Extension	A	Flush	C	3/8"	D	1/2"	E	5/8"	G	1.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>No Hex Key</td> </tr> <tr> <td>078</td> <td>5/64" Hex Key</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Code	Size	000	No Hex Key	078	5/64" Hex Key		
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<p>(D) Indicates 12pt Socket Configuration No (D) indicates Hex Socket Hex Sockets recommended for Hex Nuts</p>	<p>Flush Socket Gear Available up to 5/16" Hex A/F</p>																															

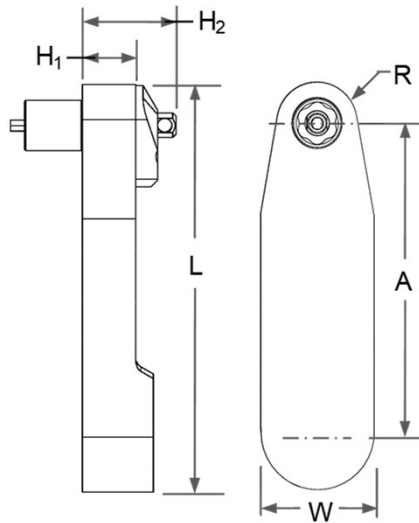
Example of Complete Tool Model Number:

KTL5430A 250 C 078



90° Offset Tools For K-Fast™ Nut Applications

20 – 55 in lbs



(Ref: LUM12SR8-K MOD.)

Wt. 1.5kg Free Speed RPM: 300

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTL5429A	5	2.68 [68.1mm]	.47 [11.9mm]	.81 [20.5mm]	3.53 [89.7mm]	1.0 [25.4mm]	.35 [8.8mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

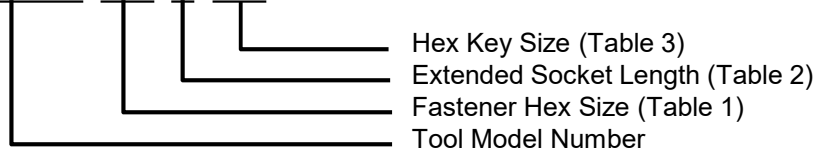
Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
219	7/32"	A	Flush	000	No Hex Key
250	1/4"	C	3/8"	078	5/64" Hex Key
312	5/16"	D	1/2"		
		E	5/8"		
		G	1.0"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

Flush Socket Gear
Available up to 5/16" Hex A/F

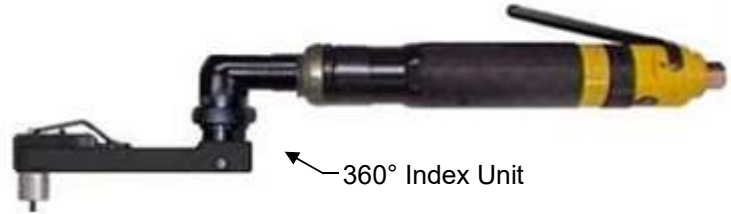
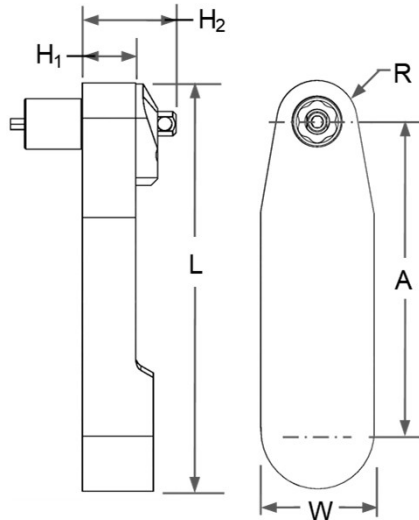
Example of Complete Tool Model Number:

KTL5429A 250 C 078



90° Offset Tools For K-Fast™ Nut Applications

20 – 55 in lbs



(Ref: LUM12SR8-K MOD.)

Wt. 1.5kg Free Speed RPM: 275

Model Number	No. of Gears	A	H ₁	H ₂ with hex key	L	W	R
KTL5408	7	4.3" [109.22mm]	.47" [11.9mm]	.81" [20.5mm]	5.37" [136.30mm]	1.0" [25.4mm]	.33" [8.4mm]

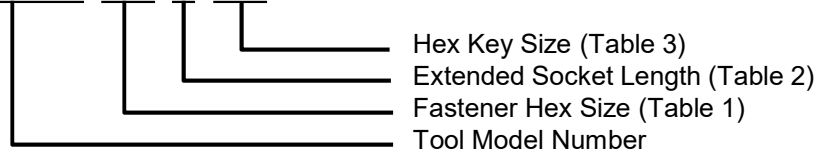
This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Hex Size
219	7/32"	A	Flush	000	NA
250	1/4"	C	3/8"	062	1/16"
312	5/16"	D	1/2"	078	5/64"
		E	5/8"	094	3/32"
		G	1.0"		
		J	2.0"		

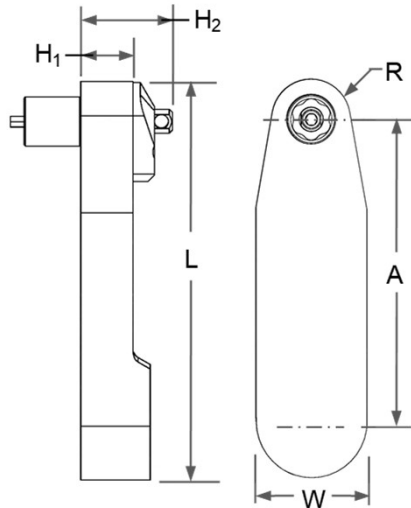
Example of Complete Tool Model Number:

KTL5408A 250 C 078



90° Offset Tools For K-Fast™ Nut Applications

50-100 in lbs



(Ref: LUM22SR-14K)

Wt. 1.7kg Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂ with hex key	L	W	R
KT5439A	5	2.69" [68.3mm]	.38" [9.5mm]	.73" [18.5mm]	3.54 [89.9mm]	1.0" [25.4mm]	.35" [8.9mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

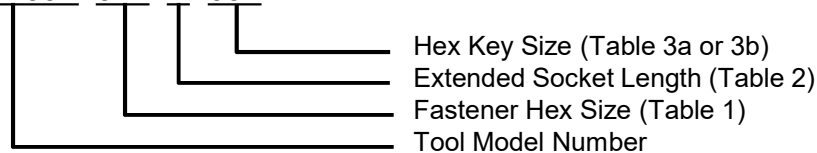
Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3a Key Hex Size		Table 3b Aster™ Key	
Code	Hex Size	Code	Extension	Code	Size	Code	Dia.
312	5/16"	A	Flush	000	No Hex Key	000	No Key
		C	3/8"	094	3/32" Hex Key	AK3	-3
		D	1/2"			AK3A	-3A
		E	5/8"			AK4	-4
		G	1.0"				

Flush Socket Gear
Available up to 5/16" Hex A/F

(D) Indicates 12pt Socket Configuration (KTD)
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

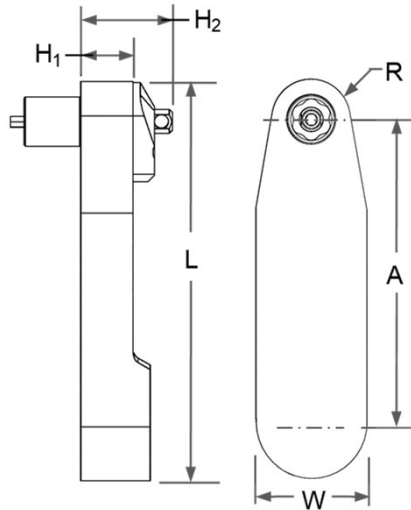
Example of Complete Tool Model Number:

KT5439A 312 D 094



90° Offset Tools For K-Fast™ Nut Applications

50-100 in lbs



(Ref: LUM22SR-14K)

Wt. 1.5kg Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5429A	5	2.68 [68.1mm]	.47 [11.9mm]	.81 [20.5mm]	3.53 [89.7mm]	1.0 [25.4mm]	.35 [8.8mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

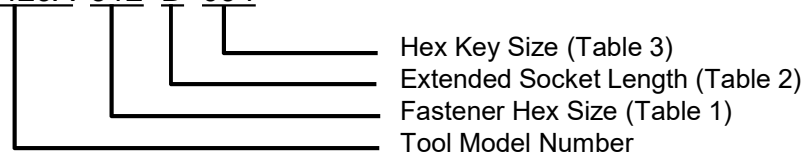
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3 Key Hex Size																						
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>312</td> <td>5/16"</td> </tr> </tbody> </table> <p>Flush Socket Gear Available up to 5/16" Hex A/F</p>	Code	Hex Size	312	5/16"	<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>C</td> <td>3/8"</td> </tr> <tr> <td>D</td> <td>1/2"</td> </tr> <tr> <td>E</td> <td>5/8"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> </tbody> </table>	Code	Extension	A	Flush	C	3/8"	D	1/2"	E	5/8"	G	1.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>No Hex Key</td> </tr> <tr> <td>094</td> <td>3/32" Hex Key</td> </tr> </tbody> </table>	Code	Size	000	No Hex Key	094	3/32" Hex Key
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

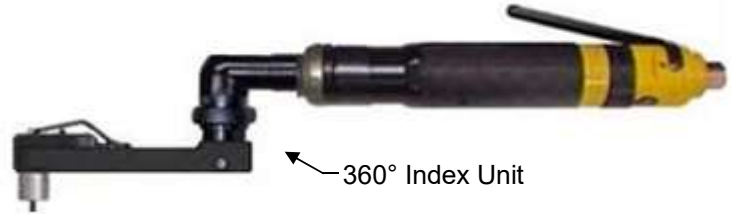
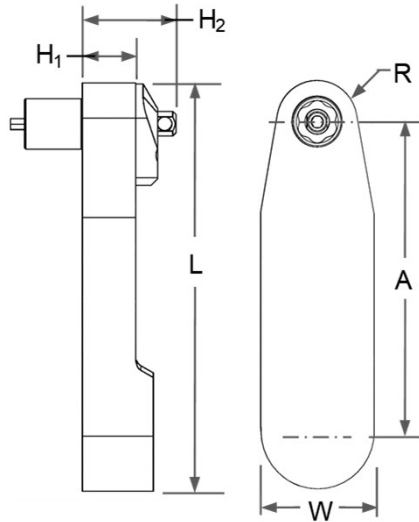
Example of Complete Tool Model Number:

KT5429A 312 D 094



90° Offset Tools For K-Fast™ Nut Applications

50-100 in lbs



(Ref: LUM22SR14-K MOD.)

Wt. 1.5kg Free Speed RPM: 275

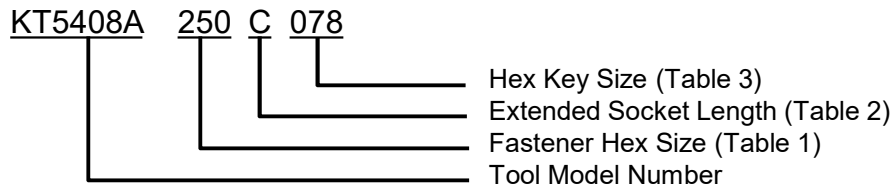
Model Number	No. of Gears	A	H ₁	H ₂ with hex key	L	W	R
KT5408	7	4.3" [109.22mm]	.47" [11.9mm]	.81" [20.5mm]	5.37" [136.30mm]	1.0" [25.4mm]	.33" [8.4mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

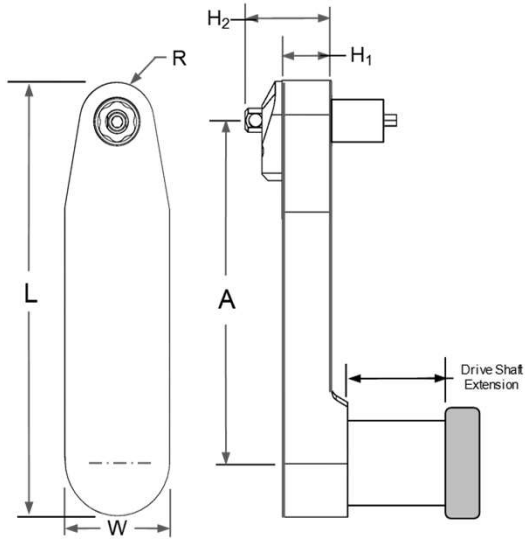
Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Hex Size
219	7/32"	A	Flush	000	NA
250	1/4"	C	3/8"	062	1/16"
312	5/16"	D	1/2"	078	5/64"
		E	5/8"	094	3/32"
		G	1.0"		
		J	2.0"		

Example of Complete Tool Model Number:



90° Offset Tools For K-Fast™ Nut Applications

50-100 in lbs



Reverse Drive Socket



(Ref: LUM22SR-14K)

Wt. 1.5kg Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5424A	6	3.4" [86.4mm]	.47 [11.9mm]	.81 [20.5mm]	4.3" [109.2mm]	1.0 [25.4mm]	.35 [8.8mm]

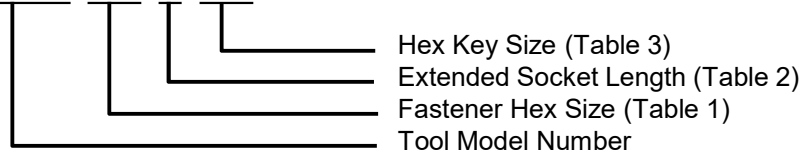
Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
312	5/16"	A	Flush	000	No Hex Key
		C	3/8"	094	3/32" Hex Key
		D	1/2"		
		E	5/8"		
		G	1.0"		

Flush Socket Gear
Available up to 5/16" Hex A/F

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

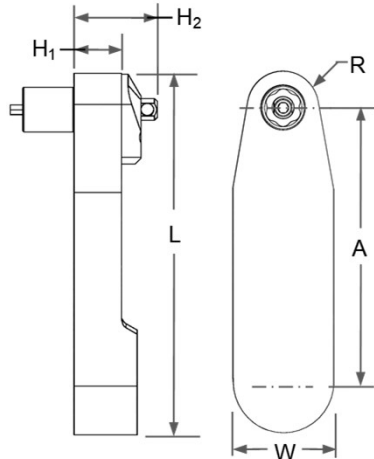
Example of Complete Tool Model Number:

KT5424A 312 D 094



90° Offset Tools For K-Fast™ Nut Applications

50-100 in lbs



(Ref: LUM22SR-12K)

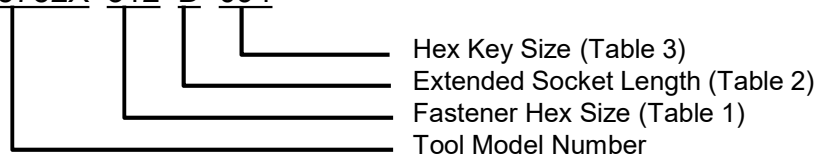
Wt. 1.5kg Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂ with hex key	L	W	R
KT5752X	5	2.72" [69.0mm]	.38" [9.5mm]	.72" [18.4mm]	3.7" [93.9mm]	1.0" [25.4mm]	.39" [10.0mm]

Table 1 Socket Hex Sizes A/F			Table 2 Ext'd.Socket Length		Table 3 Hold & Drive Key		
Dia.	Code	Hex Size	Code	Extension	Dia.	Hex Key	Aster™ Key
-4	312	5/16"	A	Semi-Flush	000	None	None
-5	375	3/8"	D	1/2"	-4	3/32"	AK4
-6	437	7/16"	E	5/8"	-5	1/8"	AK5
10mm is the largest flush socket gear hex size			F	3/4"	-6	5/32"	AK6
(D) Indicates 12-pt Socket Configuration			G	1.0"			
No (D) indicates 6-pt Hex Socket			J	2.0"			
Hex Sockets recommended for Hex Nuts							

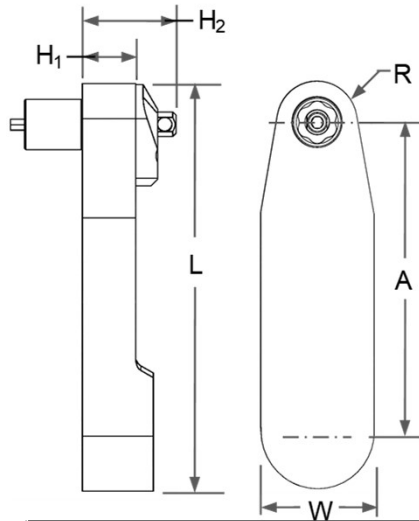
Example of Complete Tool Model Number:

KT(D)5752X 312 D 094



90° Offset Tools For K-Fast™ Nut Applications

90-160 in lbs



(Ref: LUM22SR-12K)

Wt. 1.5kg Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5461X	5	2.75" [69.9mm]	.47" [11.9mm]	.81" [20.5mm]	3.68" [93.9mm]	1.0" [25.4mm]	.43" [10.8mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

This gear head has 360° indexing capability.

Table 1 Socket Table		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Hex Size (Across Flats)					
Code	Hex Size	Code	Extension	Code	Size
312	5/16"	A	Flush	000	No Hex Key
375	3/8"	D	1/2"	094	3/32" Hex Key
		E	5/8"	125	1/8" Hex Key
		F	3/4"		
		G	1.0"		
Flush Socket Gear Available up to 5/16" Hex A/F					

Example of Complete Tool Model Number:

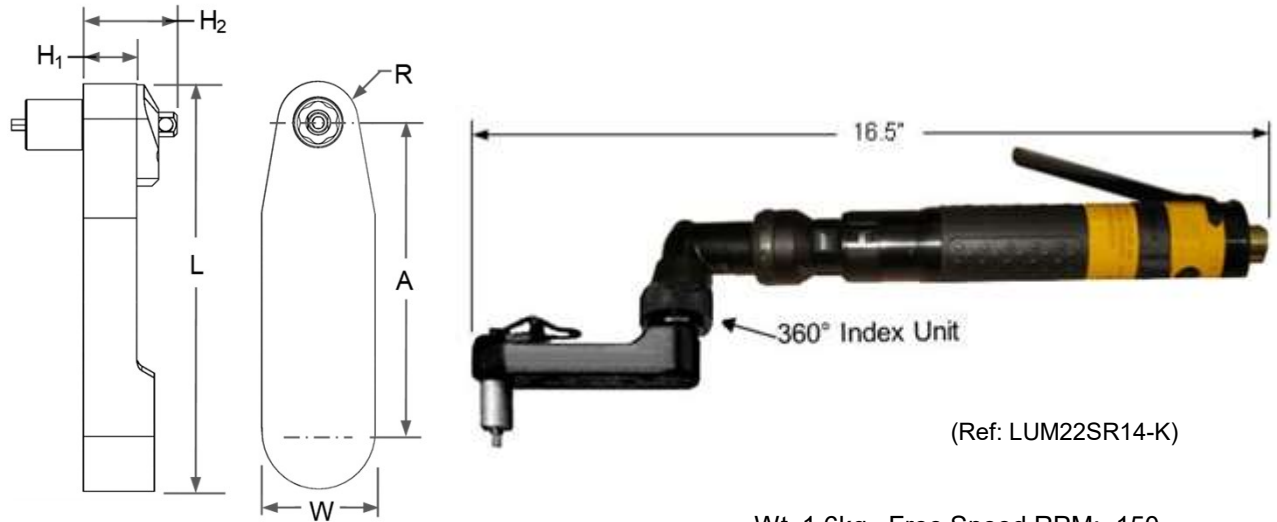
KT5461X 375 F 125



Hex Key Size (Table 3)
Extended Socket Length (Table 2)
Fastener Hex Size (Table 1)
Tool Model Number

90° Offset Tools For K-Fast™ Nut Applications

90-170 in lbs



Wt. 1.6kg Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂	L	R
KTL5498	5	3.19 [81.0mm]	.50 [12.7mm]	.85" [21.5mm]	4.5 [114.3mm]	.437 [11.1mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

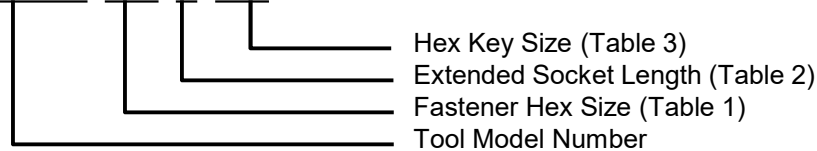
This gear head has 360° indexing capability.

Table 1 Socket Table		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Hex Size (Across Flats)		Code	Extension	Code	Size
Code	Hex Size	A	Flush	000	No Hex Key
312	5/16"	E	0.625"	094	3/32" Hex Key
375	3/8"	F	0.750"	125	1/8" Hex Key
		G	1.0"		
		J	2.0"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

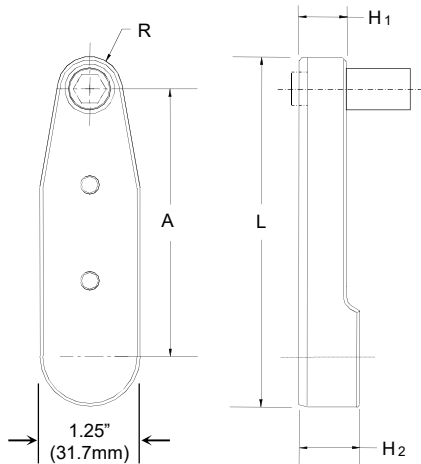
Example of Complete Tool Model Number:

KTL5498X 375 E 125



90° Offset Tools For K-Fast™ Nut Applications

140-250 in lbs



360° Index Unit

(Ref: LUM22SR14-K)

Wt. 1.6kg Free Speed RPM: 150

Model Number	No. of Gears	A	H ₁	H ₂	L	R
KTL5478	4	2.35 [59.6mm]	.50 [12.7mm]	.85 [21.5mm]	3.7 [92.8mm]	.437 [11.1mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

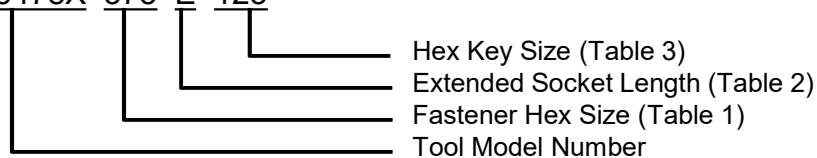
This gear head has 360° indexing capability.

Table 1 Socket Table		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Hex Size (Across Flats)		Code	Extension	Code	Size
Code	Hex Size	A	Flush	000	No Hex Key
312	5/16"	E	0.625"	094	3/32" Hex Key
375	3/8"	F	0.750"	125	1/8" Hex Key
		G	1.0"		
		J	2.0"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

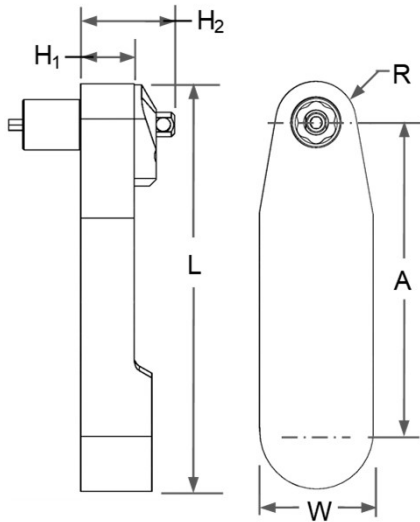
Example of Complete Tool Model Number:

KTL5478X 375 E 125



90° Offset Tools For K-Fast™ Nut Applications

110-170 in lbs



(Ref: LTV28R28-10)

Wt. 1.8kg Free Speed RPM: 150

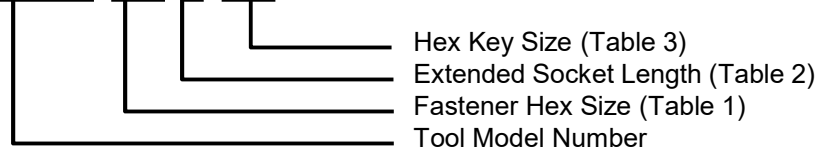
Model Number	No. of Gears	A	H ₁	H ₂	L	R
KT5407	5	2.56 [65.0mm]	.50 [12.7mm]	.50 [12.7mm]	3.64 [92.5mm]	.45 [11.4mm]

Table 1 Socket Table		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Hex Size (Across Flats)		Code	Extension	Code	Size
Code	Hex Size	A	Flush	000	No Hex Key
312	5/16"	D	1/2"	094	3/32" Hex Key
375	3/8"	E	5/8"	125	1/8" Hex Key
		F	3/4"		
		G	1.0"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

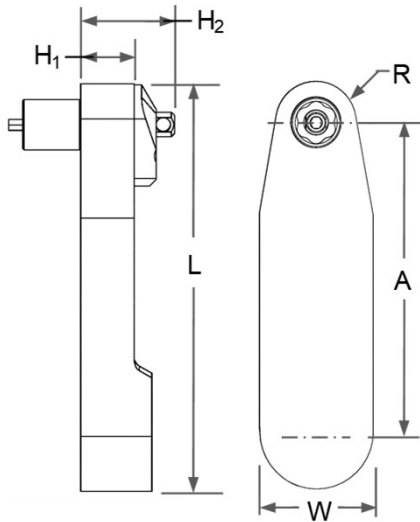
Example of Complete Tool Model Number:

KT5407X 375 E 125



90° Offset Tools For K-Fast™ Nut Applications

140-250 in lbs



(Ref: LTV28R28-10)

Wt. 1.8kg Free Speed RPM: 220

Model Number	No. of Gears	A	H ₁	H ₂	L	R
KT5498	5	3.19 [81.0mm]	.50 [12.7mm]	.85 [21.5mm]	4.5 [114.3mm]	.437 [11.1mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

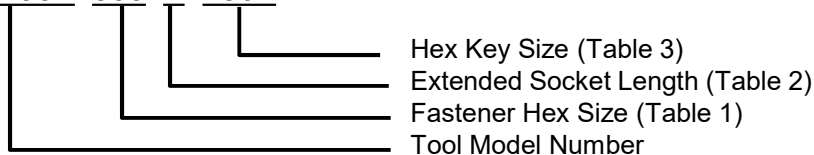
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
375	3/8"	A	Flush	000	No Hex Key
437	7/16"	D	0.500"	094	3/32" Hex Key
500	1/2"	E	0.625"	125	1/8" Hex Key
		G	1.0"	156T	5/32" Hex Key

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

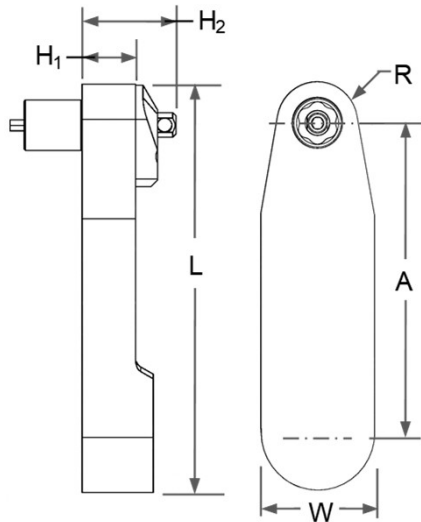
Example of Complete Tool Model Number:

KT5498X 500 E 156T



90° Offset Tools For K-Fast™ Nut Applications

140-250 in lbs



(Ref: LTV28R28-10)

Wt. 1.8kg Free Speed RPM: 220

Model Number	No. of Gears	A	H ₁	H ₂	L	R
KT5498	5	3.19 [81.0mm]	.50 [12.7mm]	.85 [21.5mm]	4.5 [114.3mm]	.437 [11.1mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

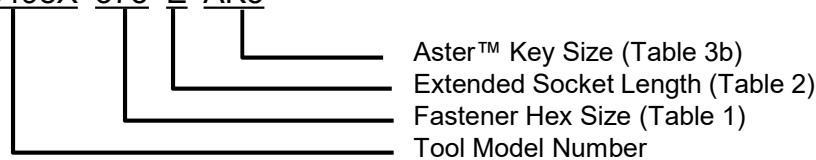
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3b Aster™ Key	
Code	Hex Size	Code	Extension	Code	Dia.
375	3/8"	A	Flush	000	No Key
437	7/16"	D	0.500"	AK5	-5
500	1/2"	E	0.625"	AK6	-6
		G	1.0"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

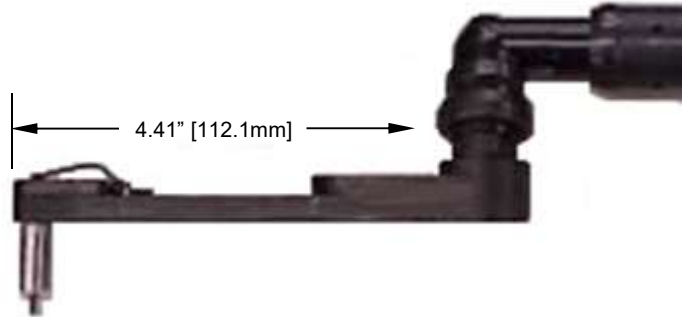
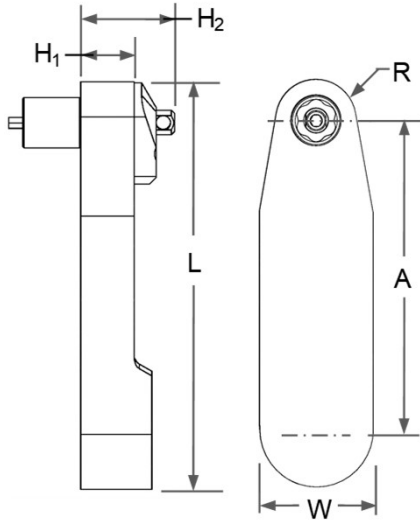
Example of Complete Tool Model Number:

KT5498X 375 E AK5



90° Offset Tools For K-Fast™ Nut Applications

140-250 in lbs



Ref: LTV38R57

Wt. 3.2kg Free Speed RPM: 150

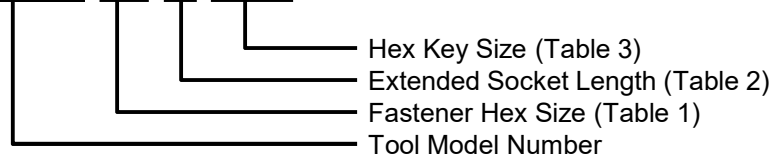
Model Number	No. of Gears	A	H ₁	H ₂	L	R	W
KT5713	7	5.2" [132mm]	.67" [17mm]	1.02" [25.8mm]	6.2" [157.5mm]	.43" [10.9mm]	1.15" [29.2mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3 Key Hex Size	
Code	Hex Size	Code	Extension	Code	Size
375	3/8"	A	Flush	000	No HexKey
437	7/16"	D	0.500"	094	3/32" HexKey
500	1/2"	E	0.625"	125T	1/8" HexKey
		G	1.0"	156T	5/32" HexKey

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

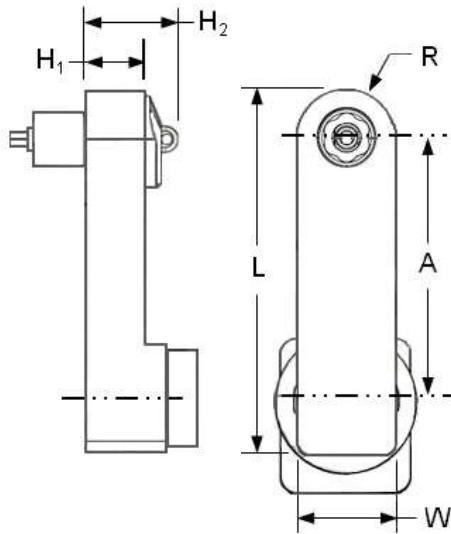
Example of Complete Tool Model Number:

KT5713 A 437 E 156T



90° Offset Tools For K-Fast™ Nut Applications

240-495 in lbs



Also available with a cordless electric motor



LTV38R42-13
Atlas Copco Motor Required

Wt. 2.6kg Free Speed RPM: 240

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KTL5472A	5	3.00" [76.2mm]	.69" [17.5mm]	1.0" [26.3mm]	4.2" [106.4mm]	1.12" [28.4mm]	.56" [14.2mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

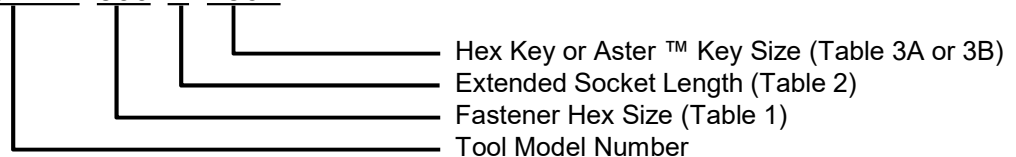
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)	Table 2 Ext'd.Socket Length	Table 3A Key Hex Size	Table 3B Aster™ Key																																										
<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>375</td> <td>3/8"</td> </tr> <tr> <td>437</td> <td>7/16"</td> </tr> <tr> <td>500</td> <td>1/2"</td> </tr> <tr> <td>562</td> <td>9/16"</td> </tr> </tbody> </table>	Code	Hex Size	375	3/8"	437	7/16"	500	1/2"	562	9/16"	<table border="1"> <thead> <tr> <th>Code</th> <th>Extension</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Flush</td> </tr> <tr> <td>E</td> <td>0.625"</td> </tr> <tr> <td>G</td> <td>1.0"</td> </tr> <tr> <td>J</td> <td>2.0"</td> </tr> </tbody> </table>	Code	Extension	A	Flush	E	0.625"	G	1.0"	J	2.0"	<table border="1"> <thead> <tr> <th>Code</th> <th>Hex Size</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>None</td> </tr> <tr> <td>125T</td> <td>1/8"</td> </tr> <tr> <td>156T</td> <td>5/32"</td> </tr> <tr> <td>187T</td> <td>3/16"</td> </tr> <tr> <td>219T</td> <td>7/32"</td> </tr> </tbody> </table>	Code	Hex Size	000	None	125T	1/8"	156T	5/32"	187T	3/16"	219T	7/32"	<table border="1"> <thead> <tr> <th>Code</th> <th>Dia.</th> </tr> </thead> <tbody> <tr> <td>000</td> <td>No Key</td> </tr> <tr> <td>AK6</td> <td>-6</td> </tr> <tr> <td>AK7</td> <td>-7</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	Code	Dia.	000	No Key	AK6	-6	AK7	-7		
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(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

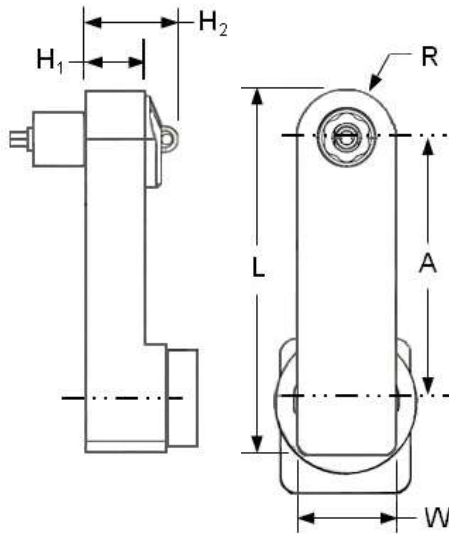
Example of Complete Tool Model Number:

KTL5472A 500 E 156T



90° Offset Tools For K-Fast™ Nut Applications

465-520 in lbs



LTV38R85-13
Atlas Copco Motor Required

Wt. 3.4kg Free Speed RPM: 120

Model Number	No. of Gears	A	H ₁	H ₂ (Ref)	L	W	R
KT5472A	5	3.00" [76.2mm]	.69" [17.5mm]	1.0" [26.3mm]	4.2" [106.4mm]	1.12" [28.4mm]	.56" [14.2mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

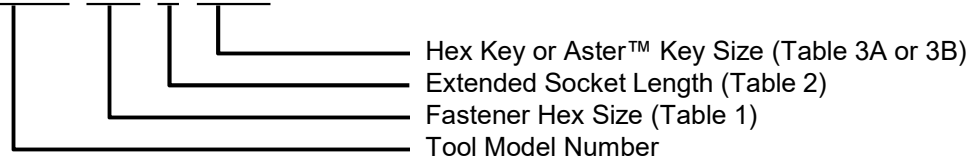
This gear head has 360° indexing capability.

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3A Key Hex Size		Table 3B Aster™ Key	
Code	Hex Size	Code	Extension	Code	Hex Size	Code	Dia.
375	3/8"	A	Flush	000	None	000	No Key
437	7/16"	E	0.625"	125T	1/8"	AK6	-6
500	1/2"	G	1.0"	156T	5/32"	AK7	-7
562	9/16"	J	2.0"	187T	3/16"		
				219T	7/32"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

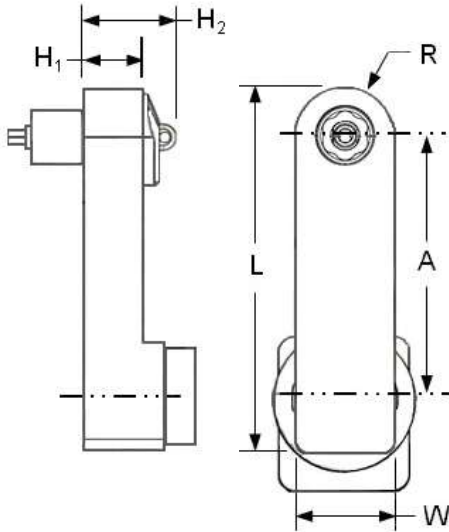
Example of Complete Tool Model Number:

KT5472A 500 E 156T



90° Offset Tools For K-Fast™ Nut Applications

380-550 in lbs



LTV38R70-13
Atlas Copco Motor Required
Tool Length: 676mm (26.6")
Wt: 4.5kg (9.5 lbs) Free Speed RPM: 91

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5463	5	3.19" [81.0mm]	.69" [17.6mm]	1.0" [26.3mm]	4.44" [112.8mm]	1.37" [34.9mm]	.68" [17.3mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

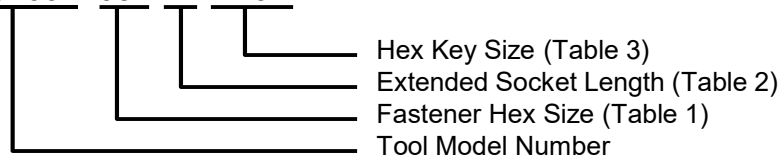
This gear head has 360° indexing capability.

Table 1 Socket Table		Table 2 Ext'd.Socket Length		Table 3A Key Hex Size		Table 3B Aster™ Key	
Hex Size (Across Flats)							
Code	Hex Size	Code	Extension	Code	Hex Size	Code	Dia.
500	1/2"	A	Flush	000	No Hex Key	000	No Key
562	9/16"	E	5/8"	156T	5/32"	AK6	-6
687	11/16"	G	1.0"	187T	3/16"	AK7	-7
750	3/4"	J	2.0"	219T	7/32"		
				250T	1/4"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

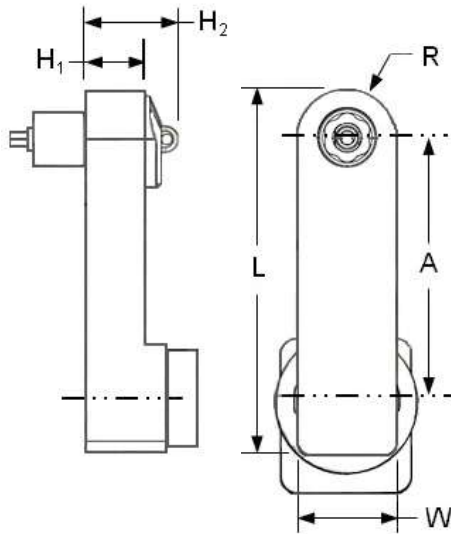
Example of Complete Tool Model Number:

KT(D)5463A 687 E 219T



90° Offset Tools For K-Fast™ Nut Applications

450-700 in lbs



Tool Length: 676mm (26.6")
Wt: 4.5kg (9.5 lbs) Free Speed RPM: 91

Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KTH5463	5	3.19" [81.0mm]	.69" [17.6mm]	1.0" [26.3mm]	4.44" [112.8mm]	1.37" [34.9mm]	.68" [17.3mm]

This is a very durable tool design for general purpose applications and is designed for use in a flush condition or with extended sockets and hex keys when required.

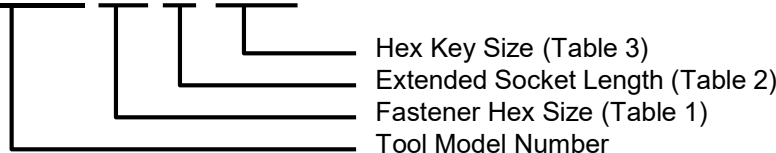
This gear head has 360° indexing capability.

Table 1 Socket Table		Table 2 Ext'd.Socket Length		Table 3A Key Hex Size		Table 3B Aster™ Key	
Hex Size (Across Flats)		Code	Extension	Code	Hex Size	Code	Dia.
Code	Hex Size	A	Flush	000	No Hex Key	000	No Key
500	1/2"	E	5/8"	156T	5/32"	AK6	-6
562	9/16"	G	1.0"	187T	3/16"	AK7	-7
687	11/16"	J	2.0"	219T	7/32"		
750	3/4"			250T	1/4"		

(D) Indicates 12pt Socket Configuration
No (D) indicates Hex Socket
Hex Sockets recommended for Hex Nuts

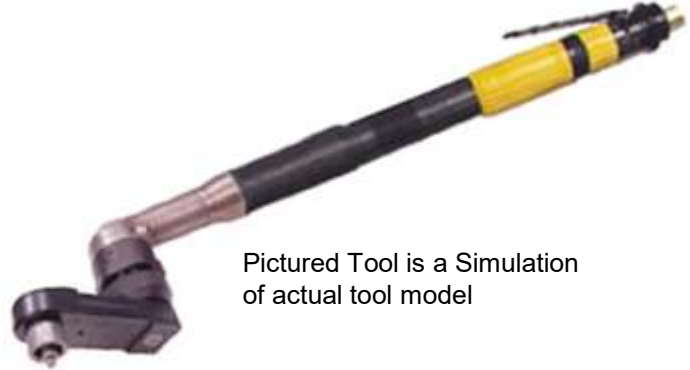
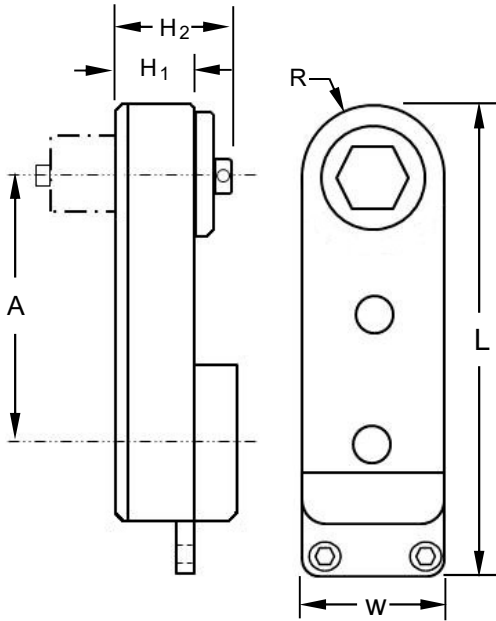
Example of Complete Tool Model Number:

KTH5463A 562 E 187T



90° Offset Tools For K-Fast™ Nut Applications

620-840 in lbs



Pictured Tool is a Simulation of actual tool model

Motor: LTV46R100-L13

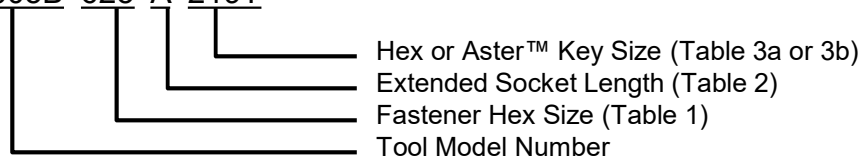
Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5605B	3	2.18" [55.25mm]	.77" [19.5mm]	1.12" [28.4mm]	4.55" [115.57mm]	1.38" [35.1mm]	.69" [17.5mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd. Socket Length		Table 3A Key Hex Size		Table 3B Aster™ Key	
Code	Hex Size	Code	Extension	Code	Hex Size	Code	Dia.
500	1/2"	A	Flush	000	No Hex Key	000	No Key
562	9/16"	E	5/8"	156T	5/32"	AK6	-6
625	5/8"	G	1.0"	187T	3/16"	AK7	-7
750	3/4"	J	2.0"	219T	7/32"		
				250T	1/4"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

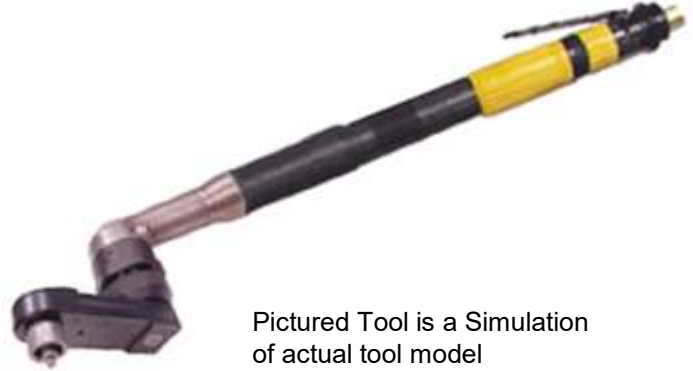
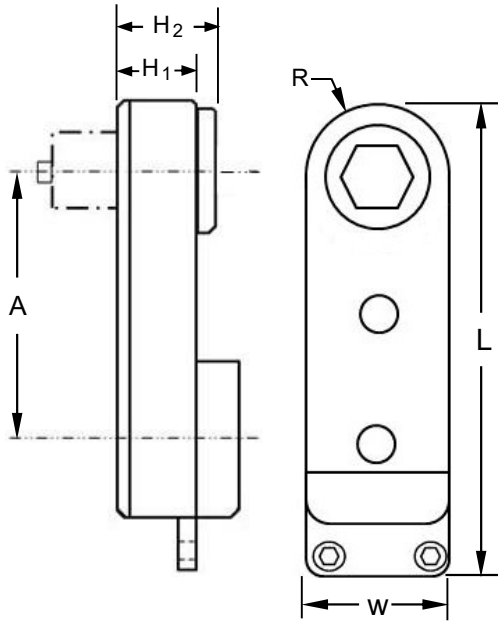
Example of Complete Tool Model Number:

KT(D)5605B 625 A 219T



90° Offset Tools For K-Fast™ Nut Applications

720-1020 in lbs



Pictured Tool is a Simulation of actual tool model

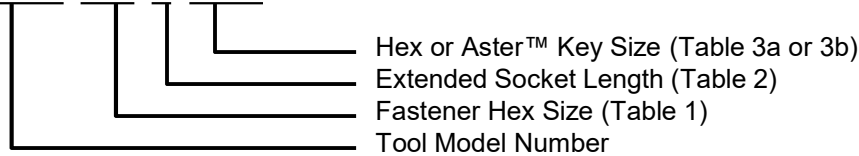
Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5530B	3	2.13" [54.1mm]	.75" [19.05mm]	.90" [22.9mm]	4.55" [115.57mm]	1.48" [37.6mm]	.74" [18.8mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3A Key Hex Size		Table 3B Aster™ Key	
Code	Hex Size	Code	Extension	Code	Hex Size	Code	Dia.
500	1/2"	A	Flush	000	No Hex Key	000	No Key
562	9/16"	F	3/4"	156T	5/32"	AK6	-6
625	5/8"	G	1.0"	187T	3/16"	AK7	-7
750	3/4"	J	2.0"	219T	7/32"		
				250T	1/4"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

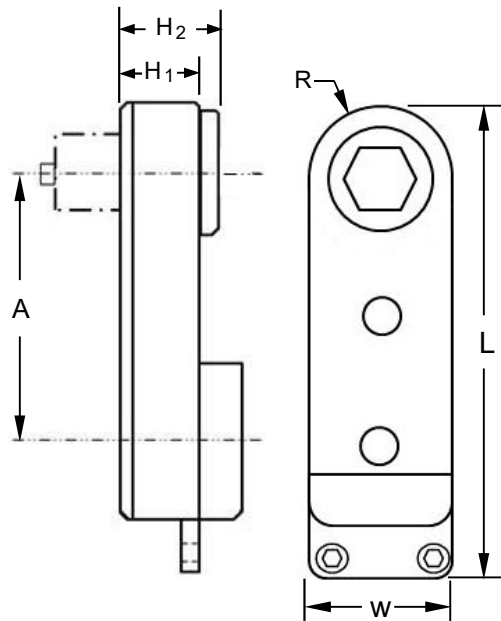
Example of Complete Tool Model Number:

KT5530A 625 F 187T



90° Offset Tools For K-Fast™ Nut Applications

800-1290 in lbs



Pictured Tool is a Simulation of actual tool model

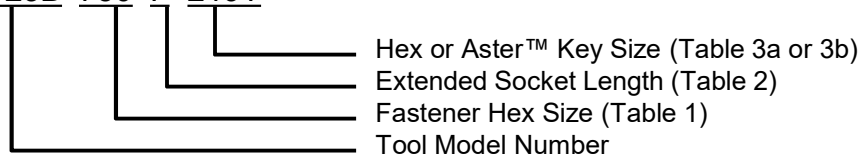
Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5723B	3	2.88" [73.2mm]	1.0" [25.4mm]	1.18" [29.9mm]	4.85" [123.2mm]	1.80" [45.7mm]	.90" [22.8mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3A Key Hex Size		Table 3B Aster™ Key	
Code	Hex Size	Code	Extension	Code	Hex Size	Code	Dia.
500	1/2"	A	Flush	000	No Hex Key	000	No Key
562	9/16"	F	3/4"	156T	5/32"	AK6	-6
625	5/8"	G	1.0"	187T	3/16"	AK7	-7
750	3/4"	J	2.0"	219T	7/32"		
				250T	1/4"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

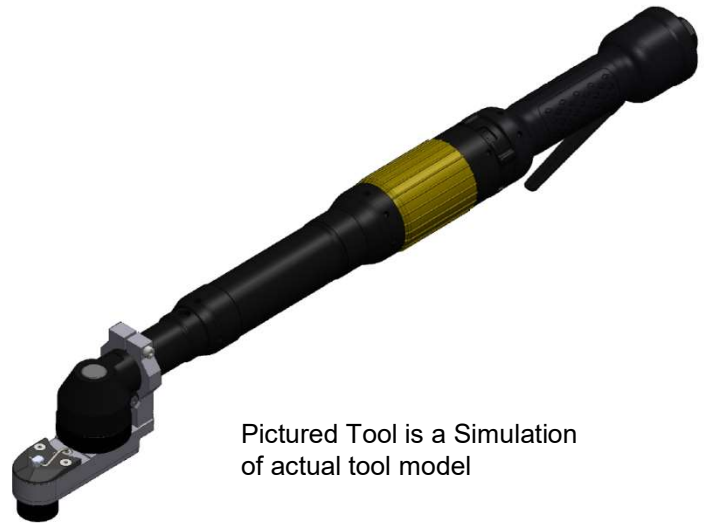
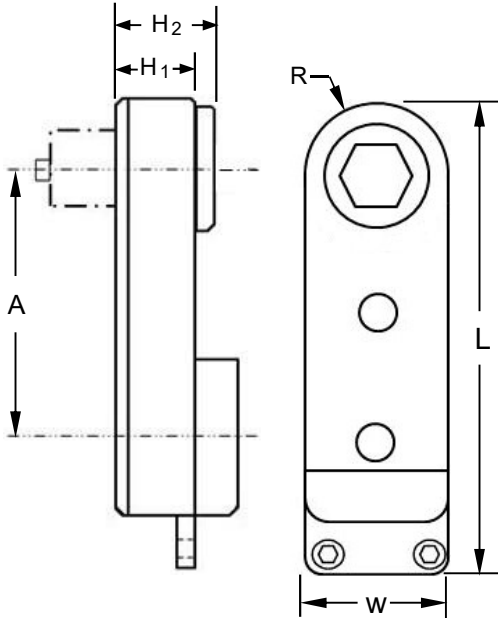
Example of Complete Tool Model Number:

KT5723B 750 F 219T



90° Offset Tools For K-Fast™ Nut Applications

600-1250 in lbs



Pictured Tool is a Simulation of actual tool model

Atlas Copco Motor LTV48R150L-13

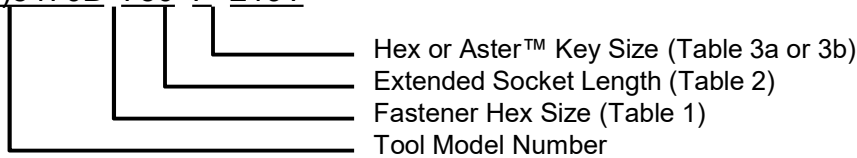
Model Number	No. of Gears	A	H ₁	H ₂	L	W	R
KT5470B	3	2.93" [74.3mm]	1.09" [25.4mm]	1.27" [32.3mm]	5.87" [149.1mm]	1.87" [47.47mm]	.93" [23.6mm]

Table 1 Socket Table Hex Size (Across Flats)		Table 2 Ext'd.Socket Length		Table 3A Key Hex Size		Table 3B Aster™ Key	
Code	Hex Size	Code	Extension	Code	Hex Size	Code	Dia.
500	1/2"	A	Flush	000	No Hex Key	000	No Key
562	9/16"	F	3/4"	156T	5/32"	AK6	-6
625	5/8"	G	1.0"	187T	3/16"	AK7	-7
750	3/4"	J	2.0"	219T	7/32"		
				250T	1/4"		

(D) Indicates 12pt Socket Configuration
 No (D) indicates Hex Socket
 Hex Sockets recommended for Hex Nuts

Example of Complete Tool Model Number:

KT(D)5470B 750 F 219T



Torque Control Assembly Tools

90° Right Angle Power Tools

SECTION 5



90° Angle Tools For K-Fast™ Nut Applications



20-1775 in lbs



Table 1

Tool Model Number	Max Torque		RPM	Tool Length	Tool Wt. (lbs.)	Hex Socket Sizes (A/F)										Hex Key Sizes	
	In-lbs	Nm				Convert fractional hex sizes to actual maximum decimal equivalents. Examples: 1/4" = .249, .250, .252 5/16" = .312, .313, .314											
KT310BA	79	9	430	10.5"	1.5	7/32	1/4	9/32	5/16						.078	.094	
KT310BB	130	15	360	12.1"	2.6	7/32	1/4	9/32	5/16						.094	.125	.156
KT310BC	250	28	340	13.8"	3.1	1/4	5/16	3/8	7/16	1/2					.125	.156	.187
KT310BD	370	42	400	17.2	4.4	5/16	3/8	7/16	1/2	9/16	5/8	3/4			.125	.156	.187
KT310BE	432	50	330	17.2	4.4	5/16	3/8	7/16	1/2	9/16	5/8	3/4			.125	.156	.187
KT310BF	490	57	280	17.8"	4.8	3/8	7/16	1/2	9/16	5/8	3/4				.156	.187	.219
KT310BG	600	70	225	19.2"	5.3	7/16	1/2	9/16	5/8	3/4	7/8	1.0			.156	.187	.219
KT310BH	730	85	190	20.9"	6.1	5/8	11/16	3/4	7/8	15/16	1.0	1-1/8	1-1/4		.219	.250	
KT310BK	1330	150	170	23.2"	7.6	5/8	11/16	3/4	7/8	15/16	1.0	1-1/8	1-1/4		.219	.250	

Notes:

- Actual hex socket size is the maximum A/F hex dimension of the specific fastener to be installed.
- (D) Specifies 12 Point Socket Configuration, Example: KTD310BC312G094T

Example of Complete Tool Model Number:

KT(D)310BH 562 L 219T

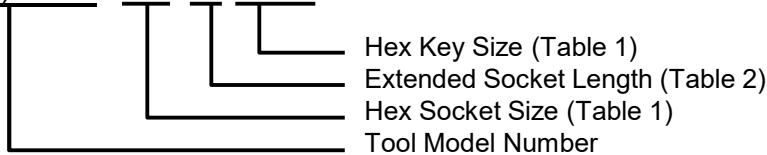


Table 2

Ext'd.Socket Length

Code	Extension
B	.250 "
D	.500 "
E	.625 "
G	1.0 "
J	2.0 "
L	3.0 "

Certain socket lengths are not available in all tools models

Torque Control Assembly Tools

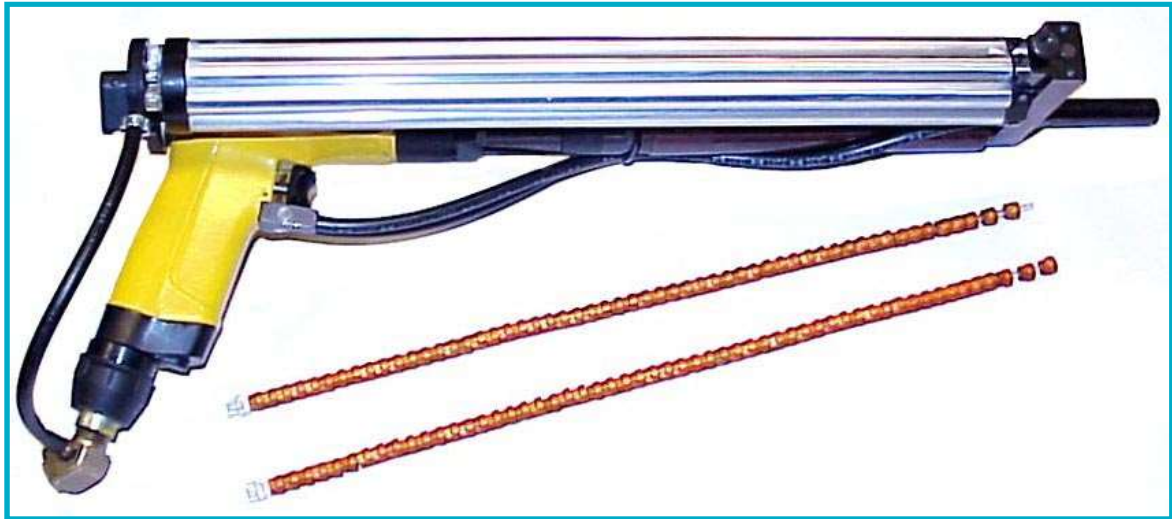
Hand Held Automatic Nut Feed Power Tools

SECTION 6



Semi-Automatic Pistol Grip Tool

K-Fast™ Nut Applications **25 - 100 in lbs**



Tool Data:

Torque Capability: Up to 80 in. lbs. maximum

Total Tool Length: 18.5" [470mm]

Total Wt: 6.27 lbs [2.84 kg]

This tool is ideal for open fastener applications with interference fit threaded pins. The tool is capable of installing up to 45 fasteners per minute and holds several hundred fasteners depending on thread size of the fastener.

Fasteners are supplied pre-spindled for easy handling and loading.

Example of Complete Tool Model Number:

AKT2000 – (XXX) - 3

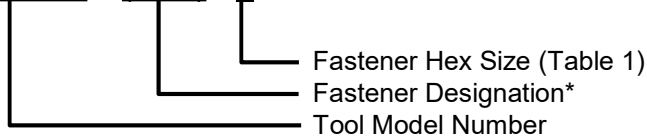


Table 1

Socket Table

Hex Size (Across Flats)

Code	Hex Size	Thread Size
08	219	8-32 UNJC
3	250	10-32 UNJF
4	312	1/4-28 UNJF

* Example: AKT2000-587-3, Boeing Fastener number (BACN10ZV3), Howmet P/N: KFN587-3

Torque Control for Bi Hex Nuts

Example of Fastener Part Numbers:

ASNA2528-(*)

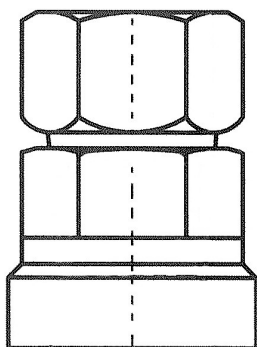
ASNA2536-(*)

ASNA2537-(*)

ASNA2538-(*)

This fastener can be installed as a “frangible collar” using non-torque controlled or as a nut installed with torque controlled tools in a pre-torque or final torque condition.

“Bi-Hex Nut”



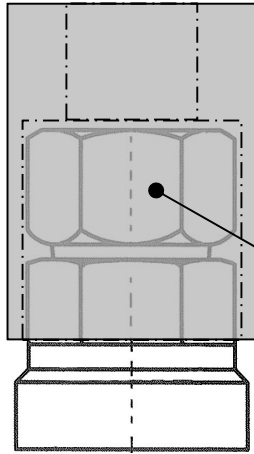
“Bi-Hex” Nuts have (2) wrenchable hex features. The top hex can be used if you are using a non-torque controlled installation tool. The top hex will “break-off” when the proper seating torque has been reached.

If “Pre-Torquing” the nut is important, a deep hex recess socket can be used with a torque controlled tool. The socket reaches over both hex features and the top hex is not removed. This requires a secondary operation to break off the top hex after a period of time.

**Note: “KTP” indicates a pre-torque tool
“KTF” indicates a final torque tool**

Pre-Torque or Final Torque Applications

Bi-Hex Nuts Only

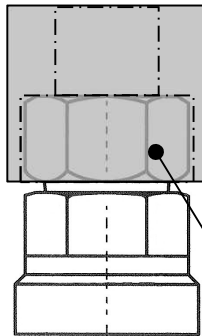


Example of a **Pre-Torque Tool** Installation of a Bi-Hex Nut

Note: Deep Socket covers both top and bottom hex of the fastener. Fastener can be tightened to as much as full torque, but keep the upper hex in tact. Later they can come back with a final torque tool to shear the top hex.

Deep Hex Socket for **Pre-Torque** Nut Installation
Example of Tool Model No: **KTP**1429C312D094T

Note: “KTP” indicates a pre-torque tool

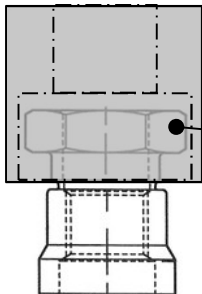


Example of a **Final Torque Tool** or Final Installation of a Bi-Hex Nut or Standard Collar.

Note: Socket only covers top hex, Torque tool is Used. Torque can be set higher than shear torque and collar will shear off at correct torque. Torque can be set just below shear torque and collar will not shear off until operator comes back with a higher torque tool or standard collar tool (next page) top hex of nut is broken off at the correct torque.

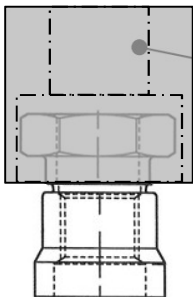
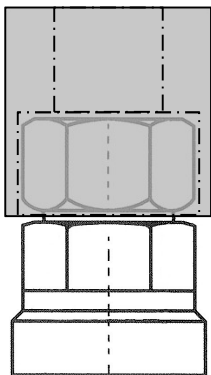
Shallow Hex Socket for **Final** Nut Installation

Example of Tool Model No:
KTE1429C314D094 (torque tool) **or**



Note: “KTE” indicates a final torque tool

Final Frangible Collar Installation



Example of a **Final Installation** of a Bi-Hex Nut - Non Torque Control Tool

Note: Socket only covers top hex, top hex of nut is broken off at the correct torque.

Shallow Hex Socket for **Final** Nut Installation
Example of Tool Model No: CTL1329C314D094

Note: "CTL" indicates a final installation tool. See Frangible Collar Tool catalog for entire selection of standard collar installation tools.



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