

INNOVATIONS
MASTER CATALOG

TOOLING SYSTEMS
2013

www.kennametal.com

 **KENNAMETAL®**

GENERAL ENGINEERING

TRANSPORTATION

www.kennametal.com



AEROSPACE & DEFENSE

EARTHWORKS

ENERGY



Accessories

Shrink Fit Unit Offering	L2
Induction Shrink Fit Unit TTISG3400EU	L4-L7
Induction Shrink Fit Unit TTISG3400NA	L4-L7
Induction Shrink Fit Unit TTISG3400CCEU	L8-L11
Induction Shrink Fit Unit TTISG3400CCNA	L8-L11
Shrink Fit Axial Adjustment Gages	L12-L13
Balance Screw Sets	L14
HC Hydraulic Chuck Test Pins	L14
HC Hydraulic Chuck Cleaning Brushes	L15
Collet Extractors TG	L15
TG Round Flush-Face Locknuts	L16
TG Balanceable Round Locknuts	L16
Coolant Disk Assemblies	L17
TG Standard Round and Hex Locknuts	L18
ER Standard Short and Slim Locknuts	L19
ER Slim Coolant and Hex Locknuts	L20
ER Coolant Hex and Standard Round Locknuts	L21
ER Coolant Round Locknuts	L22
Coolant Locknut Sealing Disks and Disk Sets	L23-L29
ER16	L23
ER20	L24
ER25	L25
ER32	L26-L27
ER40	L28-L29
DA 01 Double Angle Locknuts	L30
DA 04 Double Angle Locknuts	L31
DA 08 Double Angle Locknuts	L31
Stop Screws	L32
Coolant and Blank Caps	L34
Extended Caps	L35
Shell Mill Adapter Lock Screws	L36-L37
Shell Mill Coolant Lock Screws	L38
Tightening Fixtures	L38-L41
KM Vise Mounts	L38
KM4X and HSK Vise Mounts	L39
HSK Universal Mounts and Sleeves	L40
7/24 Steep Taper Vise and Universal Mounts	L41
P-KM and HSK Spindle Plugs	L42
KM, HSK, and 7/24 Steep Taper Spindle Wipers	L43
HSK Coolant Supply Units and Wrenches	L44
Retention Knobs	L45-L50
Socket Wrenches	L51
KM Manual Torque Wrenches	L52
KM-LOC II and KM-LOC Wrenches	L53
T-Handle Hex Wrench Sets	L54
Universal Bit Drivers	L55
Driver Bits	L55
Open-Ended Wrenches	L56
Pin Spanner and Hook Spanner Wrenches	L57
Rapid and Rapid Plus Wrenches	L58

ERICKSON



		EMEA, Asia, South America	TTISG3400EU	TTISG3400CCEU
		North America	TTISG3400NA	TTISG3400CCNA
input	generator power		10 kW	10 kW
	compressed air supply required		4 bar (58 psi)	4 bar (58 psi)
	supply power needed (3 phase)		3 x 400V/16A (EU) 3 x 480V/16A (NA)	3 x 400V/16A (EU) 3 x 480V/16A (NA)
	cooling process		water	water
capability	number of cooling stations		1	1
	HSS shank diameters range/capacity		6-32 (50mm) (1/4-1-1/4"[2"])	6-32 (50mm) (1/4-1-1/4"[2"])
	carbide shank diameters range/capacity		3-32 (50mm) (1/8-1-1/4"[2"])	3-32 (50mm) (1/8-1-1/4"[2"])
	process controlled		semi automated	fully automated
output	process time		45 sec	45 sec
	cost		high	highest
			best	top machine

Accessories

** Unit needs transformer.



To learn more, *scan here*.
For instructions on how to scan, please see page xxxiii.



Difficult-to-Cut Materials Are No Match for Kennametal's High Torque Shrink Fit System!

**Two lines available to address all your High Torque (HT)
and General Purpose (GP) requirements.**

- HT line is ideal for heavy roughing operations that require higher clamping torque levels (30–50% higher than the GP line).
- Increase productivity and reduce costs with a shrinking and cooling process that takes 30 seconds or less!
- Precision engineered system ensures precise concentricity, greater balancing quality, optimized bore sizes, and superior metal removal rates.
- Increased accuracies when machining difficult to cut materials common to the aerospace industry.

Visit www.kennametal.com or contact your local Authorized Kennametal Distributor.



www.kennametal.com



Induction Shrink Fit Unit TTISG3400EU and TTISG3400NA

The TTISG3400EU and TTISG3400NA is a top of the line unit that Kennametal offers with manual processes and integral, enclosed water-cooling system. Built for Europe/ROW and the North American market, fully CE and FC approved for Europe/ROW and fully UL® and CSA approved for North America with direct 400V, 16A for Europe/ROW or with direct 480V, 16A for North America.
3-phase electrical supply capability - no transformer needed.



- 10 kW high-frequency generator — maximum 5 seconds heat cycle.
- 3 x 400V/16A Europe/ROW or 480/16A North America electrical supply needed.
- No air pressure supply needed.
- 560mm (22") D, 800mm (31.5") W, 950mm (37.5") H.
- Shrinking capacity carbide Ø 3–32mm (1/8–1-1/4") with supplied coil.
- Shrinking capacity HSS Ø 6–32mm (1/4–1-1/4") with supplied coil.
- Maximum toolholder gage length for cooling 160mm (6.3") for HSK63 toolholder.
- Maximum toolholder length for heating 400mm (15.75") for HSK63 toolholder.
- Shrink fit holder till outside geometry 65mm with extra Inver coil.
- Long life expectancy of toolholders while using pre-programmed parameters.
- Manual over-ride of pre-programmed parameters, time and power, to allow shrinking of special toolholder designs.
- Integrated coolant sprayer with coolant sleeve for consistent cooling down of the adapter within 25 seconds. (Complete toolchange process 30 seconds).
- Manual retreat of the toolholder after the cooling and cleaning process is finished.
- No drying action – no compressed air.

- One permanent induction coil Ø 6–32mm (1/8–1-1/4").
- Four heating coil stop plates covering range of Ø 3–32mm (1/8–1-1/4").
- One disk holding clip.
- One heating coil stop (optional).
- Operation manual.

Essential accessories:

- Electrical transformer, if 480V/16A 3-phase power not available for North America.
- Toolholder setting pot (V-flange, HSK, KM™).
- Liquid cooling; no cooling pots required.



Accessories

ERICKSON™

■ Shrink Fit Unit Complete

order number	catalog number	description
5275128	TTISG3400EU	induction shrink unit 400V/16A (CE and FC approved) for Europe/ROW
5275038	TTISG3400NA	induction shrink unit 480V/16A (UL and CSA approved) for North America

(continued)

(Induction Shrink Fit Unit TTISG3400EU and TTISG3400NA continued)

- These pots are essential to locate toolholder in Shrink Fit Units.



■ Toolholder Setting Pots (essential accessories)

order number	catalog number	description
3387728	TTISG3200LCPCCV30	30V flange adapter (BT, CV, DV, etc.)
3387729	TTISG3200LCPCCV40	40V flange adapter (BT, CV, DV, etc.)
3387730	TTISG3200LCPCCV50	50V flange adapter (BT, CV, DV, etc.)
3853186	TTISG3200LPCCKM50	KM50™ flange adapters
3853187	TTISG3200LPCCKM63	KM63™ flange adapters
3853188	TTISG3200LPCCKM80	KM80™ flange adapters
3387731	TTISG3200LPCCHSK32	32 HSK flange adapters
3387732	TTISG3200LPCCHSK40	40 HSK flange adapters
3387763	TTISG3200LPCCHSK50	50 HSK flange adapters
3387764	TTISG3200LPCCHSK63	63 HSK flange adapters
3387765	TTISG3200LPCCHSK80	80 HSK flange adapters
3387766	TTISG3200LPCCHSK100	100 HSK flange adapters

NOTE: Retention knobs do not need to be removed on the V-flange design pots.

- Used on column to find edge at the front of extra slim/special toolholders for the coil positioning stop.



Accessories

■ Shrink Fit • Coil Stop (not included, optional accessory)

order number	catalog number	description
1779396	TTCS	coil stop block

- Easy, quick connection from supplied coil to larger capacity coil.

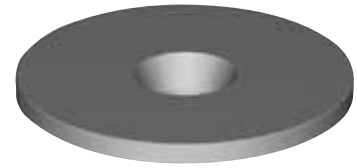


■ Shrink Fit • Heating Coil (TTHC0332M included in TTISG3400CCEU and TTISG3400CCNA unit purchase)

order number	catalog number	description
2641533	TTHC0332M	induction coil Ø 3–32mm (1/8–1-1/4")

- Shields to protect cutting tool from heat soak and used as an automated stop for the coil.

■ Shrink Fit • Heating Coil Stop Plates (included with TTISG3400EU and TTISG3400NA)



order number	catalog number	description
3003874	TTHCSP0306M	coil stop plates Ø 3,0 to 5,9mm (.125" – .232")
3003875	TTHCSP0612M	coil stop plates Ø 6,0 to 12,0mm (.233" – .472")
2614114	TTHCSP1220M	coil stop plates Ø12,1 to 22,0mm (.473" – .866")
2613902	TTHCSP2032M	coil stop plates Ø 22,1 to 32,0mm (.867" – 1.260")

- Clip holds stop plates in position within the heating coil.

■ Heating Coil Holding Clip (included in TTISG3400EU and TTISG3400NA purchase)



order number	catalog number	description
3003876	TTHCHC0332M	holding clip

- Split shields can be used for cutting tools with larger cutting diameters than the holding/shrinking diameter.
- Shields to protect cutting tool from heat soak.

- Shields are designed for 400/480V version — will work in 208V version with manual alignment.

■ Shrink Fit • Heating Coil Split Stop Plates (not included – optional accessory)



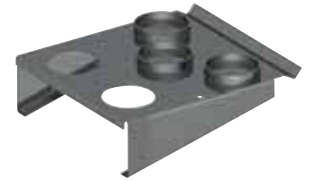
order number	catalog number	description
3648695	TT3200HCSSP0306M	coil stop plates Ø 3,0 to 5,9mm (.125" – .232")
3648696	TT3200HCSSP0612M	coil stop plates Ø 6,0 to 12,0mm (.233" – .472")
3648697	TT3200HCSSP1220M	coil stop plates Ø12,1 to 22,0mm (.473" – .866")
3648698	TT3200HCSSP2032M	coil stop plates Ø 22,1 to 32,0mm (.867" – 1.260")

(continued)

(Induction Shrink Fit Unit TTISG3400EU and TTISG3400NA continued)

- Safe holding of stop plates, cutting tools — will have to be placed on a bench top.

■ Shrink Fit • Accessory Tray (not included — optional accessory)



order number	catalog number	description
3648699	TT3200CCTRAY	3200 CC accessory tray

- Safe holding of cutting tools.

■ Shrink Fit • Accessory Cutting Tool Tray (not included — optional accessory)



order number	catalog number	description
1850281	TTCCTRAY	3200 CC accessory tray



Induction Shrink Fit Unit TTTISG3400CCEU and TTISG3400CCNA

The TTISG3400CCEU and TTTISG3400CCNA is a top of the line unit that Kennametal offers with fully automated processes and integral, enclosed water-cooling system. Built for Europe/ROW and the North American market, fully CE and FC approved for Europe/ROW and fully UL® and CSA approved for North America, with direct 400V, 16A for Europe/ROW or with direct 480V 16A for North America. 3-phase electrical supply capability — no transformer needed.



- 10kW high frequency generator – max. 5 second heat cycle.
- Europe/ROW: 3 x 400V/16A electrical supply needed.
- North America: 3 x 480V/16A electrical supply needed.
- 4 bar (90 psi) air pressure supply needed.
- 560mm (22") D, 800mm (31.5") W, 1950mm (77") H.
- Shrinking capacity carbide Ø 3–32mm (1/8–1-1/4") with supplied coil.
- Shrinking capacity HSS Ø 6–32mm (1/4–1-1/4") with supplied coil.
- Second coil available to extend range to Ø 50mm (2").
- Maximum toolholder length for cooling 400mm (15.75") for HSK63 toolholders.
- Maximum toolholder length for heating 680mm (26.78") for HSK63 toolholders.
- Virtually hands free automated system.
- Long life expectancy of toolholders while using pre-programmed parameters.
- Manual over-ride of pre-programmed parameters, time and power, to allow shrinking of special toolholder designs.
- Integrated coolant sprayer for consistent cooling down of the adapter within 25 seconds. (Complete toolchange process 30 seconds).
- Automatic retreat of the toolholder after the cooling and cleaning process is finished.

Accessories

- One induction coil Ø 3–32mm (1/8–1-1/4").
- Four heating coil stop plates covering range of Ø 3–32mm (1/8–1-1/4").
- One disk holding clip.
- One heating coil stop (optional).
- Operating manual.

Essential accessories:

- Electrical transformer, if 480V/16A for North America 3-phase power not available.
- Toolholder setting pot (V-flange, HSK, KM™).
- Liquid cooling: no coolant pots required.



ERICKSON

■ Shrink Fit Unit Complete

order number	catalog number
5275129	TTISG3400CCEU
5275039	TTISG3400CCNA

NOTE: TTISG3400CCEU (for Europe/ROW): 400V/16A. Fully CE and FC approved.
TTISG3400CCNA (for North America): 480V/16A. Fully UL and CSA approved.

(continued)

(Induction Shrink Fit Unit TTISG3400CCEU and TTISG3400CCNA continued)

- These pots are essential to locate toolholder in Shrink Fit Units.



■ Toolholder Setting Pots (essential accessories)

order number	catalog number	description
3387728	TTISG3200LPCCV30	30V flange adapter (BT, CV, DV, etc.)
3387729	TTISG3200LPCCV40	40V flange adapter (BT, CV, DV, etc.)
3387730	TTISG3200LPCCV50	50V flange adapter (BT, CV, DV, etc.)
3853186	TTISG3200LPCCKM50	KM50™ flange adapters
3853187	TTISG3200LPCCKM63	KM63™ flange adapters
3853188	TTISG3200LPCCKM80	KM80™ flange adapters
3387731	TTISG3200LPCCHSK32	32 HSK flange adapters
3387732	TTISG3200LPCCHSK40	40 HSK flange adapters
3387763	TTISG3200LPCCHSK50	50 HSK flange adapters
3387764	TTISG3200LPCCHSK63	63 HSK flange adapters
3387765	TTISG3200LPCCHSK80	80 HSK flange adapters
3387766	TTISG3200LPCCHSK100	100 HSK flange adapters

NOTE: Retention knobs do not need to be removed on the V-flange design pots.

- Used on column to find edge at the front of extra slim/special toolholders for the coil positioning stop.



■ Shrink Fit • Coil Stop (not included, optional accessory)

order number	catalog number	description
1779396	TTCS	coil stop block

- Easy, quick connection from supplied coil to larger capacity coil.



■ Shrink Fit • Heating Coil (TTHC0332M included in TTISG3400CCEU and TTISG3400CCNA unit purchase)

order number	catalog number	description
2641533	TTHC0332M	induction coil Ø 3–32mm (1/8–1-1/4")
2229225	TTHC3250M	induction coil Ø 40–50mm (1-1/2–2")

(continued)

(Induction Shrink Fit Unit TTISG3400CCEU and TTISG3400CCNA continued)

- Shields to protect cutting tool from heat soak and used as an automated stop for the coil.

■ Shrink Fit • Heating Coil Stop Plates (included with TTISG3400CCEU and TTISG3400CCNA)



order number	catalog number	description
3003874	TTHCSP0306M	coil stop plates Ø 3,0 to 5,9mm (.125" – .232")
3003875	TTHCSP0612M	coil stop plates Ø 6,0 to 12,0mm (.233" – .472")
2614114	TTHCSP1220M	coil stop plates Ø12,1 to 22,0mm (.473" – .866")
2613902	TTHCSP2032M	coil stop plates Ø 22,1 to 32,0mm (.867" – 1.260")

- Clip holds stop plates in position within the heating coil.

■ Heating Coil Holding Clip (included in TTISG3400CCEU and TTISG3400CCNA purchase)



order number	catalog number	description
3003876	TTHCHC0332M	holding clip

Accessories

- Split shields can be used for cutting tools with larger cutting diameters than the holding/shrinking diameter.
- Shields are designed for 400/480V version — will work in 208V version with manual alignment.
- Shields to protect cutting tool from heat soak.

■ Shrink Fit • Heating Coil Split Stop Plates (not included — optional accessory)



order number	catalog number	description
3648695	TT3200HCSSP0306M	coil stop plates Ø 3,0 to 5,9mm (.125" – .232")
3648696	TT3200HCSSP0612M	coil stop plates Ø 6,0 to 12,0mm (.233" – .472")
3648697	TT3200HCSSP1220M	coil stop plates Ø12,1 to 22,0mm (.473" – .866")
3648698	TT3200HCSSP2032M	coil stop plates Ø 22,1 to 32,0mm (.867" – 1.260")

(continued)

(Induction Shrink Fit Unit TTISG3400CCEU and TTISG3400CCNA continued)

- Safe holding of stop plates, cutting tools — will have to be placed on a bench top.
- Shrink Fit • Accessory Tray (not included — optional accessory)



order number	catalog number	description
3648699	TT3200CCTRAY	3200 CC accessory tray

- Safe holding of cutting tools.
- Shrink Fit • Accessory Cutting Tool Tray (not included — optional accessory)



order number	catalog number	description
1850281	TTCCTRAY	3200 CC accessory tray



Shrink Fit Axial Adjustment Gages

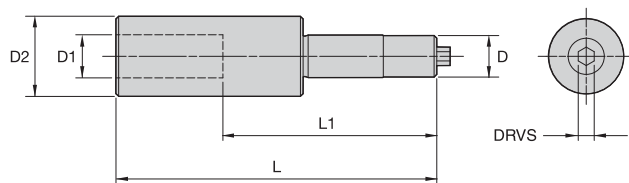
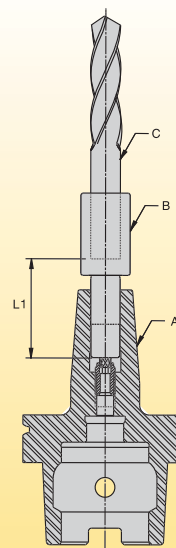
Cutting tool length adjustment is performed using a special axial adjusting gage (B) before shrinking the cutting tool into the toolholder.

An axial adjustment gage is placed in the toolholder (A) along with the cutting tool (C). Length difference of the setting gage (L1) is calculated into the required tool assembly length.

The whole assembly then can be placed into a length presetter for adjustment.

Rotating the gage moves the axial stop screw and presets the assembled tool to the required length. Remove the gage; the cutting tool can then be shrunk into the toolholder.

In some cases, there are two different gage options for the D bore size. The only difference is the DRVS hex drive size to accommodate a recent DIN standard change.



Accessories

ERICKSON™

■ TTAAG • Metric

order number	catalog number	D	D1	D2	L	L1	DRVS
2441761	TTAAG03M	3	3	20	50	40	3mm
2456185	TTAAG04M	4	4	20	52	40	4mm
2456186	TTAAG05M	5	5	20	55	40	3mm
1801298	TTAAG06M	6	6	25	110	80	2,5mm
1775603	TTAAG08M	8	8	25	112	80	3mm
1775604	TTAAG10M	10	10	30	117	80	4mm
1775605	TTAAG12M	12	12	30	117	80	4mm
3110267	TTAAG12MX1	12	12	30	117	80	5mm
1775606	TTAAG14M	14	14	30	117	80	4mm
3110268	TTAAG14MX1	14	14	30	117	80	5mm
5086814	TTAAG16MX1	16	16	30	120	80	5mm
1775608	TTAAG16M	16	16	30	120	80	6mm
5086815	TTAAG18MX1	18	18	30	120	80	5mm
1775609	TTAAG18M	18	16	30	120	80	6mm
5086816	TTAAG20MX1	20	20	40	120	80	5mm
1775610	TTAAG20M	20	20	40	120	80	8mm
5086817	TTAAG25MX1	25	25	40	124	80	5mm
1784105	TTAAG25M	25	25	40	124	80	8mm
5086818	TTAAG32MX1	32	32	40	124	80	5mm
1775611	TTAAG32M	32	32	40	124	80	8mm

(continued)

(TTAAG continued)

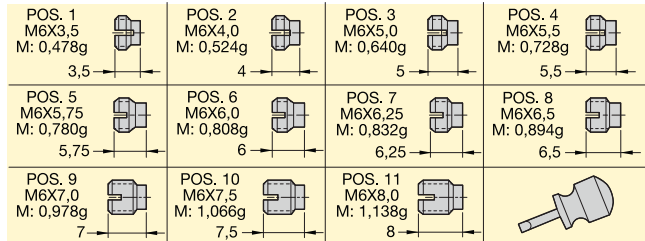


■ TTAAG • Inch

order number	catalog number	D	D1	D2	L	L1	DRVS
1765666	TTAAG025	1/4	.250	.984	4.33	3.15	2,5mm
1765669	TTAAG031	5/16	.313	.984	4.41	3.15	3mm
1765670	TTAAG038	3/8	.375	1.181	4.61	3.15	4mm
1765671	TTAAG044	7/16	.438	1.181	4.41	3.15	4mm
3110269	TTAAG044X1	7/16	.438	1.181	4.41	3.15	5mm
1765702	TTAAG050	1/2	.500	1.181	4.61	3.15	4mm
3110270	TTAAG050X1	1/2	.500	1.181	4.61	3.15	5mm
1765703	TTAAG056	9/16	.563	1.181	4.61	3.15	4mm
3110271	TTAAG056X1	9/16	.563	1.181	4.61	3.15	5mm
1765704	TTAAG062	5/8	.625	1.181	4.72	3.15	6mm
1765705	TTAAG068	11/16	.688	1.181	4.72	3.15	6mm
1765707	TTAAG075	3/4	.750	1.575	4.72	3.15	8mm
1765708	TTAAG088	7/8	.875	1.575	4.72	3.15	8mm
1765709	TTAAG100	1	1.000	1.575	4.88	3.15	8mm
1765710	TTAAG125	1 1/4	1.250	1.850	4.88	3.15	8mm



- Standard balance screw set is used on HPMC bearing milling chuck.
- Total number of screws in each set is 110.
- All are M6 screws.
- Eleven different lengths from 3,5–8mm.
- Eleven different weights, 10 of each, varying between 0,047–1,138 grams.
- Set comes complete in a divider box and screwdriver.
- For high-performance milling choices.



Balance Screw Set

order number	catalog number
3367391	HPMCBALSCREWSET

- It is important to periodically check the clamping function on a hydraulic chuck with a test pin for clamping clarity.
- The clamping grip can be checked quickly and easily by placing the correct test pin in the chuck bore and the turning the clamp screw to the limit stop. The chuck is functioning correctly if the testing pin cannot be moved by hand.



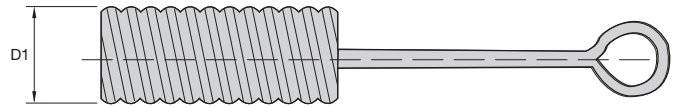
HC Test Pin • Metric

order number	catalog number	D
1191037	280.200	6
1191039	280.202	10
1191040	280.203	12
1245409	280.204	14
1191041	280.205	16
1245410	280.206	18
1191042	280.207	20
1245411	280.208	25
1191043	280.209	32

HC Test Pin • Inch

order number	catalog number	D
1247566	280.262	3/8
1247570	280.264	1/2
1247572	280.266	5/8
1247575	280.268	3/4
1247577	280.269	1

- Hydraulic chucks are maintenance-free and deliver a long service life. A non-abrasive cleaning brush is recommended to help maintain the performance and accuracy of the clamping bore of the hydraulic chuck and reducing sleeves.

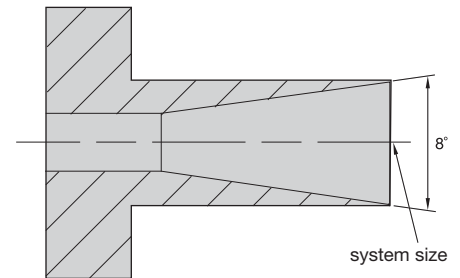


ERICKSON

■ Cleaning Brush

order number	catalog number	D1	
		mm	in
1138729	192.950	6	1/4
1138736	192.951	8	5/16
1138744	192.952	10	3/8
1138752	192.953	12	1/2
1138759	192.954	14	9/16
1138766	192.955	16	5/8
1138914	192.956	18	11/16
1138853	192.957	20	3/4
1138922	192.958	25	1
1138930	192.959	32	1 1/4

- Assists with collet extraction from locknut.



Accessories

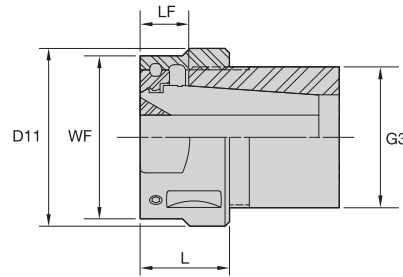
ERICKSON

■ TG • CE

order number	catalog number	system size
1106809	50TGCE	TG50
1106812	75TGCE	TG75
1106813	100TGCE	TG100
1106814	150TGCE	TG150

- TG flush mount, coolant-capable locknuts, and coolant disks/caps can be used on all standard TG collet chucks to seal standard TG collets.
- Face is completely flush.
- Includes the original ball bearing race design.
- External diameter is the same as existing global round TG locknut.

- Operated by a standard open-ended wrench or the original hook-style wrench.
- TG flush mount coolant capable locknuts and coolant disks/caps are interchangeable with existing designs.
- Utilizes standard TG collets.



ERICKSON™

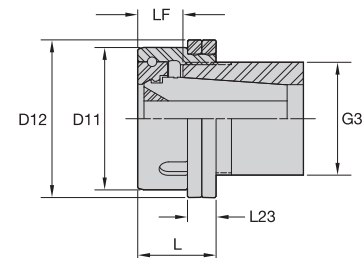
■ TG Locknut • Round Flush Face

order number	catalog number	D11		L		LF		WF		G3	wrench size		
		mm	in	mm	in	mm	in	mm	in		size	Nm	ft. lbs.
2980879	LNATGF050M	38	1.50	18,3	.72	10,6	.42	34	1.34	15/16-20 UNEF	HSW34M	81	60
2980880	LNATGF075M	50	1.97	23,4	.92	13,0	.51	46	1.81	1 1/2-12 ACME	HSW45M	150	110
2980881	LNATGF100M	60	2.36	30,2	1.19	16,4	.65	55	2.17	1 7/8-12 ACME	HSW58M	203	150

NOTE: Locknut wrench must be ordered separately.
WF = Open-ended wrench size.

Accessories

- Balanceable and interchangeable locknuts can be ordered separately as an option to the original standard locknut supplied on collet chucks.



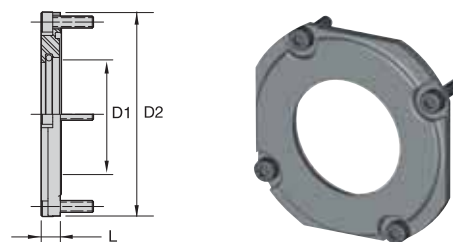
ERICKSON™

■ TG Locknut Round • Balanceable

order number	catalog number	D11		D12		L		L23		LF		G3	wrench size			balance ring set
		mm	in	mm	in	mm	in	mm	in	mm	in		size	Nm	ft. lbs.	
1020465	HPVLNA050G	38,0	1.50	42,5	1.67	20,0	.79	10,05	.40	9,7	.38	15/16-20 UNEF	HSW34M	81	60	SHVBR0325M
1091592	HPVLNA075G	50,0	1.97	56,5	2.22	25,0	.98	12,05	.47	14,4	.57	1 1/2-12 ACME	HSW45M	150	110	SHVBR0445M
1020466	HPVLNA100G	60,0	2.36	66,5	2.62	33,0	1.30	12,05	.47	19,1	.75	1 7/8-12 ACME	HSW58M	203	150	SHVBR0545M

Note: Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten according to torque recommendations. Collet chuck technical section, see pages M98–M99. Locknut wrench must be ordered separately. Balance rings are supplied with locknut and adjustment directions.

- TG coolant disk cap assemblies are used in conjunction with the TG flush-style locknuts and collet chucks to seal standard TG collets.
- Utilizes the ER coolant disks.
- High-pressure coolant up to 150 bar (1,500 psi).
- Withstands most of today's coolants.
- Seals against chip packing and machined contaminants.



ERICKSON

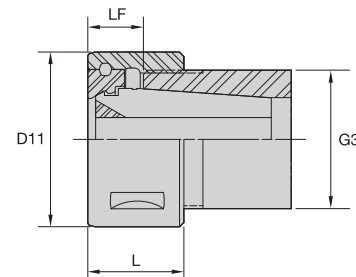
■ TG Nut • Coolant Disk Assembly

order number	catalog number	D1		D2		L		lock screw	locknut reference	ER coolant disk reference	Nm	ft. lbs.
		mm	in	mm	in	mm	in					
2980882	TG050CDA	21,0	.827	40	1.6	5,7	.22	MS311	LNATGF050M	ER25	25	18
2980893	TG075CDA	27,0	1.063	50	2.0	5,7	.22	MS1488	LNATGF075M	ER32	25	18
2980894	TG100CDA	33,5	1.319	60	2.4	5,7	.22	MS1488	LNATGF100M	ER40	25	18

NOTE: Tighten the four assembly screws to the recommended tightening torque.
 Assembly screws to locknuts are supplied with the appropriate wrench.
 ER coolant disks must be ordered separately; see page L23.
 Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to torque recommendations.
 Collet chuck technical section, see page M98.
 Locknut wrench must be ordered separately.



- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



ERICKSON™

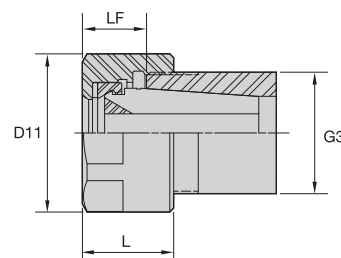
■ TG Locknut • Round

order number	catalog number	D11		L		LF		G3	locknut wrench	Nm	ft. lbs.
		mm	in	mm	in	mm	in				
1013486	LNA075M	50,0	1.97	25,0	.98	14,4	.57	1 1/2-12 ACME	HSW45M	136	100
1013485	LNA100M	60,0	2.36	33,0	1.30	19,1	.75	1 7/8-12 ACME	HSW58M	203	150
1013484	LNA150M	85,0	3.35	37,0	1.46	18,0	.71	2 5/8-12 ACME	HSW80M	271	200
1020326	NPA150	88,3	3.48	34,9	1.38	18,6	.73	2 5/8-12 ACME	PSW350	271	200

NOTE: Locknut wrench must be ordered separately.



Accessories



ERICKSON™

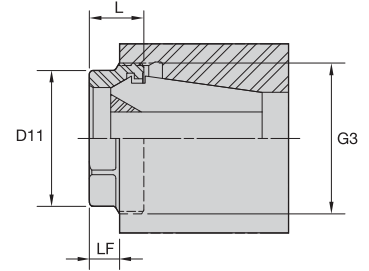
■ TG Locknut • Hex

order number	catalog number	D11		L		LF		G3	locknut wrench	WF	Nm	ft. lbs.
		mm	in	mm	in	mm	in					
1020290	NPA050	30,2	1.19	21,4	.84	14,6	.58	15/16-20 2B	OEW106	1 1/16	102	75
4134686	LN050M	34,0	1.34	19,0	.75	9,8	.38	15/16-20 UNEF	OEW30M	30mm	136	100
1020289	NPA075	53,2	2.09	28,4	1.12	19,7	.78	1 1/2-12 ACME	OEW188	1 7/8	136	100
1020331	NPA100	61,9	2.44	35,7	1.41	25,1	.99	1 7/8-12 ACME	OEW225	2 1/4	203	150

NOTE: Locknut wrench must be ordered separately.
WF = Open-ended wrench size.



- Standard and replaceable locknuts are supplied as the standard option with the original short-style collet chuck.



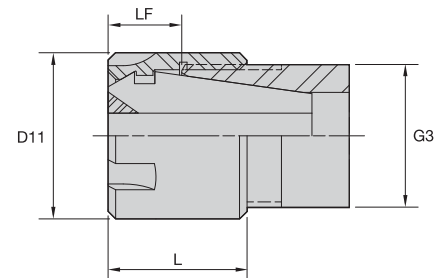
ERICKSON

■ ER Locknut • Short



order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	wrench size	Nm	ft. lbs.
			mm	in	mm	in	mm	in					
2978768	LNECSER32M	ER32	35,9	1.41	14,4	.57	8	.32	M40 x 1.5	OEW32M	32	136	100
2978769	LNECSER40M	ER40	46,0	1.81	16,0	.63	8	.32	M50 x 1.5	OEW168	1 11/16	176	130

NOTE: Locknut wrench must be ordered separately.



Accessories

ERICKSON

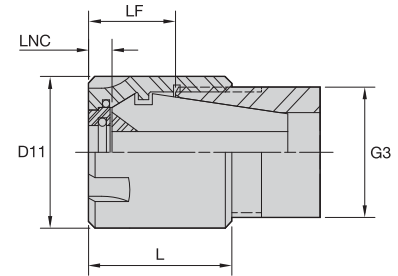
■ ER Locknut • Slim



order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (in. lbs.)	straight collet torque (in. lbs.)
			mm	in	mm	in	mm	in						
1024642	LER08M	ER08	12	.47	10,8	.43	6,1	.24	M10 X .75	ER08WEM	5	5	42	42
1024643	LER11M	ER11	16	.63	12,0	.47	7,5	.30	M13 X .75	ER11WEM	12	16	106	142
1016342	LER16M	ER16	22	.87	18,4	.72	11,5	.45	M19 X 1	ER16WEM	24	24	212	212
1799219	LER20M	ER20	28	1.10	19,0	.75	11,5	.45	M24 X 1	ER20WEM	28	28	248	248

NOTE: Locknut wrench must be ordered separately.

- Interchangeable with slim locknuts.
- Must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page L23.



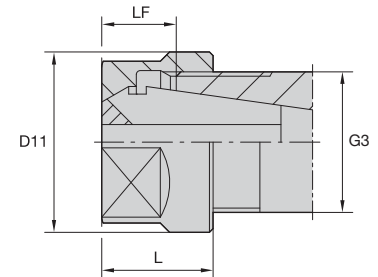
ERICKSON™

■ ER Locknut • Slim Coolant

order number	catalog number	collet series	D11		L		LNC		LF		G3	locknut wrench	Nm	in. lbs.
			mm	in	mm	in	mm	in	mm	in				
2255307	LABER16M	ER16	22	.87	22	.87	4,5	.18	11,5	.45	M19 X 1	ER16WEM	24	212
2398953	LABER20M	ER20	28	1.10	24	.94	5,0	.20	13,0	.51	M24 X 1	ER20WEM	28	248

NOTE: Locknut wrench must be ordered separately.

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



ERICKSON™

■ ER Locknut • Hex

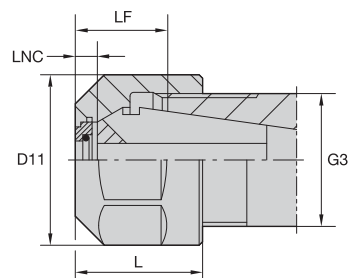
order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	wrench size	Nm ft. lbs.	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)
			mm	in	mm	in	mm	in								
3062811	LNHSER16M	ER16	28,0	1.10	17,5	.69	10,5	.41	M22 X 1.5	OEW25M	25mm	56 42	40	56	30	42
3062812	LNHSER20M	ER20	34,0	1.34	19,0	.75	11,5	.45	M25 X 1.5	OEW30M	30mm	80 59	32	80	24	59

NOTE: Locknut wrench must be ordered separately.

Accessories



- Interchangeable with standard locknuts.
- Must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page L23.



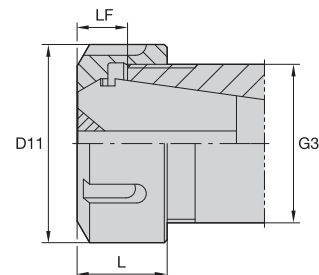
ERICKSON

■ ER Locknut Hex • Coolant

order number	catalog number	collet series	D11		L		LNC		LF		G3	locknut wrench	wrench size	counterbore collet torque (Nm)	straight collet torque (Nm)	counterbore collet torque (ft. lbs.)	straight collet torque (ft. lbs.)
			mm	in	mm	in	mm	in	mm	in							
1854738	LNHABER16M	ER16	28,0	1.10	22,5	.89	5,0	.20	15,5	.61	M22 X 1.5	OEW25M	25mm	40	56	30	42
1859410	LNHABER20M	ER20	34,0	1.34	24,0	.94	5,0	.20	16,5	.65	M25 X 1.5	OEW30M	30mm	32	80	24	59

NOTE: Locknut wrench must be ordered separately.

- Standard and replaceable locknuts are usually supplied as the standard option with the original collet chuck.



Accessories

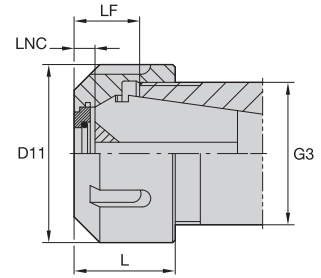
ERICKSON

■ ER Locknut • Round

order number	catalog number	collet series	D11		L		LF		G3	locknut wrench	Nm	ft. lbs.
			mm	in	mm	in	mm	in				
3063113	LNSER25M	ER25	42	1.65	20	.79	12	.47	M32 X 1.5	ER25WM	104	77
3063114	LNSER32M	ER32	50	1.97	23	.89	13	.51	M40 X 1.5	ER32WM	136	100
3063115	LNSER40M	ER40	63	2.48	26	1.00	15	.59	M50 X 1.5	ER40WM	176	130

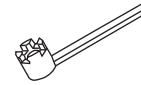
NOTE: Locknut wrench must be ordered separately.

- Interchangeable with standard locknuts; must be ordered separately.
- Used in conjunction with ER coolant-sealing disks for high-pressure coolant applications up to 150 bar (2,000 psi). Must be ordered separately; see page L23.



ERICKSON™

■ ER Locknut Round • Coolant

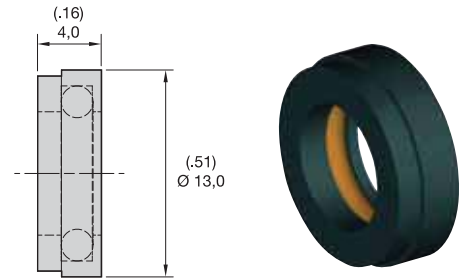


order number	catalog number	collet series	D11		L		LNC		LF		G3	locknut wrench	Nm	ft. lbs.
			mm	in	mm	in	mm	in	mm	in				
1127154	LNABER25M	ER25	42	1.65	25,0	.98	5	.20	17	.67	M32 X 1.5	ER25WM	104	77
1128857	LNABER32M	ER32	50	1.97	27,5	1.08	5	.20	18	.71	M40 X 1.5	ER32WM	136	100
1125692	LNABER40M	ER40	63	2.48	30,5	1.20	5	.20	20	.79	M50 X 1.5	ER40WM	176	130

NOTE: Locknut wrench must be ordered separately.



- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized replaceable O-rings.



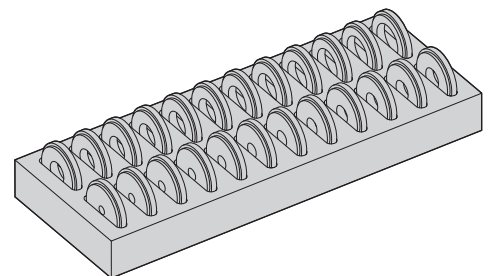
ERICKSON

■ ER16 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1128244	CDER16035M	ER16	3,0-3,5	.1181-.1387	1/8
1122128	CDER16040M	ER16	3,5-4,0	.1378-.1575	5/32
1125973	CDER16045M	ER16	4,0-4,5	.1575-.1772	—
1125741	CDER16050M	ER16	4,5-5,0	.1772-.1969	3/16
1260100	CDER16055M	ER16	5,0-5,5	.1969-.2165	7/32
1130781	CDER16060M	ER16	5,5-6,0	.2165-.2362	—
1260101	CDER16065M	ER16	6,0-6,5	.2362-.2559	1/4
1260102	CDER16070M	ER16	6,5-7,0	.2559-.2756	—
1260103	CDER16075M	ER16	7,0-7,5	.2756-.2953	9/32
1124948	CDER16080M	ER16	7,5-8,0	.3150-.3347	5/16
1254499	CDER16085M	ER16	8,0-8,5	.3150-.3347	—
1120977	CDER16090M	ER16	8,5-9,0	.3347-.3543	11/32
1260104	CDER16095M	ER16	9,0-9,5	.3543-.3740	3/8
1128201	CDER16100M	ER16	9,5-10,0	.3740-.3937	—

Accessories

- An economical way to purchase a group of coolant disks.



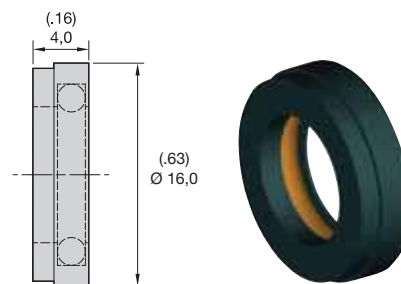
ERICKSON

■ ER16 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1148501	CDER16000M	ER16	14	3,5mm-10mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.



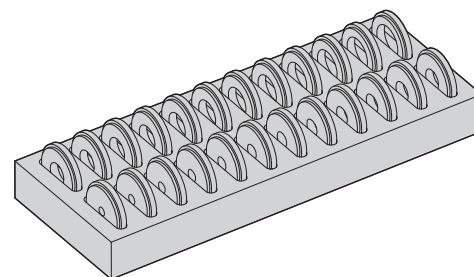
ERICKSON™

■ ER20 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1882862	CDER20030M	ER20	2,5–3,0	.0984–.1181	–
2046541	CDER20035M	ER20	3,0–3,5	.1181–.1387	1/8
2046542	CDER20040M	ER20	3,5–4,0	.1378–.1575	5/32
1785844	CDER20045M	ER20	4,0–4,5	.1575–.1772	–
2046613	CDER20050M	ER20	4,5–5,0	.1772–.1969	3/16
2046614	CDER20055M	ER20	5,0–5,5	.1969–.2165	7/32
1600448	CDER20060M	ER20	5,5–6,0	.2165–.2362	–
2046615	CDER20065M	ER20	6,0–6,5	.2362–.2559	1/4
1821042	CDER20070M	ER20	6,5–7,0	.2559–.2756	–
2046616	CDER20075M	ER20	7,0–7,5	.2756–.2953	9/32
1568338	CDER20080M	ER20	7,5–8,0	.3150–.3347	5/16
2046617	CDER20085M	ER20	8,0–8,5	.3150–.3347	–
1567466	CDER20090M	ER20	8,5–9,0	.3347–.3543	11/32
2046618	CDER20095M	ER20	9,0–9,5	.3543–.3740	3/8
1747032	CDER20100M	ER20	9,5–10,0	.3740–.3937	–
2046619	CDER20105M	ER20	10,0–10,5	.3937–.4134	13/32
1923780	CDER20110M	ER20	10,5–11,0	.4314–.4330	–
2046620	CDER20115M	ER20	11,0–11,5	.4330–.4528	7/16
1883015	CDER20120M	ER20	11,5–12,0	.4528–.4724	15/32
2046621	CDER20125M	ER20	12,0–12,5	.4724–.4921	–
2046622	CDER20130M	ER20	12,5–13,0	.4921–.5118	1/2

Accessories

- An economical way to purchase a group of coolant disks.



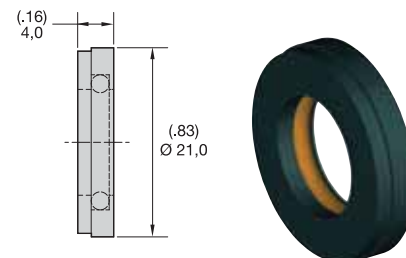
ERICKSON™

■ ER20 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1720848	CDER20000M	ER20	20	3,5mm–13mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.


ERICKSON

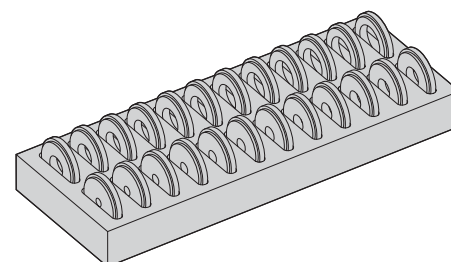
■ ER25 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1820323	CDER25035M	ER25	3,0 - 3,5	.1181 - .1387	1/8
1136043	CDER25040M	ER25	3,5 - 4,0	.1378 - .1575	5/32
1260105	CDER25045M	ER25	4,0 - 4,5	.1575 - .1772	—
1130194	CDER25050M	ER25	4,5 - 5,0	.1772 - .1969	3/16
1260106	CDER25055M	ER25	5,0 - 5,5	.1969 - .2165	7/32
1127146	CDER25060M	ER25	5,5 - 6,0	.2165 - .2362	—
1260107	CDER25065M	ER25	6,0 - 6,5	.2263 - .2559	1/4
1126670	CDER25070M	ER25	6,5 - 7,0	.2559 - .2756	—
1260108	CDER25075M	ER25	7,0 - 7,5	.2756 - .2953	9/32
1126607	CDER25085M	ER25	8,0 - 8,5	.3150 - .3347	—
1126599	CDER25080M	ER25	7,5 - 8,0	.3150 - .3347	—
1129478	CDER25090M	ER25	8,5 - 9,0	.3347 - .3543	11/32
1260109	CDER25095M	ER25	9,0 - 9,5	.3543 - .3740	3/8
1126613	CDER25100M	ER25	9,5 - 10,0	.3740 - .3937	—
1124966	CDER25105M	ER25	10,0 - 10,5	.3937 - .4134	13/32
1126677	CDER25110M	ER25	10,5 - 11,0	.4134 - .4330	—
1260110	CDER25115M	ER25	11,0 - 11,5	.4330 - .4528	7/16
1125474	CDER25120M	ER25	11,5 - 12,0	.4528 - .4724	15/32
1260111	CDER25125M	ER25	12,0 - 12,5	.4724 - .4921	—
1129141	CDER25130M	ER25	12,5 - 13,0	.4921 - .5118	1/2
1260112	CDER25135M	ER25	13,0 - 13,5	.5118 - .5315	17/32
1125481	CDER25140M	ER25	13,5 - 14,0	.5315 - .5512	—
1260113	CDER25145M	ER25	14,0 - 14,5	.5512 - .5709	9/16
1260114	CDER25150M	ER25	14,5 - 15,0	.5709 - .5906	37/64
1260115	CDER25155M	ER25	15,0 - 15,5	.5906 - .6102	19/32
1128486	CDER25160M	ER25	15,5 - 16,0	.6102 - .6300	5/8

Accessories



- An economical way to purchase a group of coolant disks.

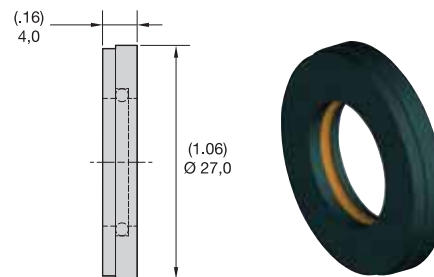

ERICKSON

■ ER25 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1254501	CDER25000M	ER25	26	3,5mm–16mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.

- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.

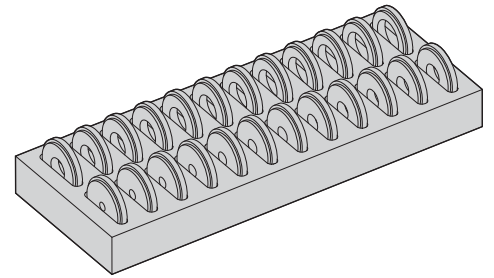


ERICKSON™

■ ER32 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1120969	CDER32035M	ER32	3,0–3,5	.1181–.1387	1/8
1125347	CDER32040M	ER32	3,5–4,0	.1378–.1575	5/32
1260116	CDER32045M	ER32	4,0–4,5	.1575–.1772	–
1148555	CDER32050M	ER32	4,5–5,0	.1772–.1969	3/16
1260117	CDER32055M	ER32	5,0–5,5	.1969–.2165	7/32
1121104	CDER32060M	ER32	5,5–6,0	.2165–.2362	–
1120661	CDER32065M	ER32	6,0–6,5	.2362–.2559	1/4
1131561	CDER32070M	ER32	6,5–7,0	.2559–.2756	–
1260118	CDER32075M	ER32	7,0–7,5	.2756–.2953	9/32
1132831	CDER32080M	ER32	7,5–8,0	.3150–.3347	5/16
1260119	CDER32085M	ER32	8,0–8,5	.3150–.3347	–
1122258	CDER32090M	ER32	8,5–9,0	.3347–.3543	11/32
1260120	CDER32095M	ER32	9,0–9,5	.3543–.3740	3/8
1136052	CDER32100M	ER32	9,5–10,0	.3740–.3937	–
1260121	CDER32105M	ER32	10,0–10,5	.3937–.4134	13/32
1135241	CDER32110M	ER32	10,5–11,0	.4134–.4330	–
1260122	CDER32115M	ER32	11,0–11,5	.4330–.4528	7/16
1128840	CDER32120M	ER32	11,5–12,0	.4528–.4724	15/32
1125490	CDER32125M	ER32	12,0–12,5	.4724–.4921	–
1126728	CDER32130M	ER32	12,5–13,0	.4921–.5118	1/2
1260123	CDER32135M	ER32	13,0–13,5	.5118–.5315	17/32
1132848	CDER32140M	ER32	13,5–14,0	.5315–.5512	–
1127692	CDER32145M	ER32	14,0–14,5	.5512–.5709	9/16
1232472	CDER32150M	ER32	14,5–15,0	.5709–.5905	–
1260124	CDER32155M	ER32	15,0–15,5	.5905–.6102	19/32
1125023	CDER32160M	ER32	15,5–16,0	.6102–.6300	5/8
1260125	CDER32165M	ER32	16,0–16,5	.6300–.6496	–
1260126	CDER32170M	ER32	16,5–17,0	.6496–.6693	21/32
1260127	CDER32175M	ER32	17,0–17,5	.6693–.6890	11/16
1126732	CDER32180M	ER32	17,5–18,0	.6890–.7087	–
1260128	CDER32185M	ER32	18,0–18,5	.7087–.7284	23/32
1155337	CDER32190M	ER32	18,5–19,0	.7284–.7480	3/4
1260129	CDER32195M	ER32	19,0–19,5	.7480–.7677	–
1124951	CDER32200M	ER32	19,5–20,0	.7677–.7874	25/32

- An economical way to purchase a group of coolant disks.



ERICKSON

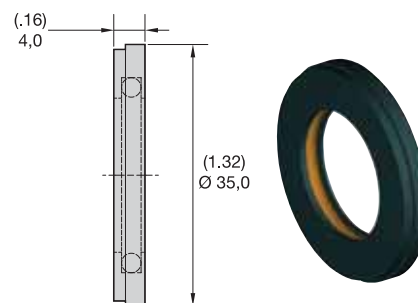
■ ER32 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1123496	CDER32000M	ER32	34	3,5mm-20mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.



- 0,5mm (.020") range of sealing per disk.
- High-pressure coolant up to 150 bar (2,000 psi).
- Accommodates both metric- and inch-sized cutting tool shanks.
- Standard-sized, replaceable O-rings.



ERICKSON™

ER40 Locknut Coolant Seal Disk

order number	catalog number	collet series	range metric	range inch	range fraction
1260131	CDER40035M	ER40	3,0–3,5	.1181–.1387	1/8
1260132	CDER40040M	ER40	3,5–4,0	.1378–.1575	5/32
1260133	CDER40045M	ER40	4,0–4,5	.1575–.1772	–
1260134	CDER40050M	ER40	4,5–5,0	.1772–.1969	3/16
1260135	CDER40055M	ER40	5,0–5,5	.1969–.2165	7/32
1128810	CDER40060M	ER40	5,5–6,0	.2165–.2362	–
1260136	CDER40065M	ER40	6,0–6,5	.2362–.2559	1/4
1128828	CDER40070M	ER40	6,5–7,0	.2559–.2756	–
1260137	CDER40075M	ER40	7,0–7,5	.2756–.2953	9/32
1126684	CDER40080M	ER40	7,5–8,0	.3150–.3347	5/16
1260138	CDER40085M	ER40	8,0–8,5	.3150–.3347	–
1129486	CDER40090M	ER40	8,5–9,0	.3347–.3543	11/32
1260139	CDER40095M	ER40	9,0–9,5	.3543–.3740	3/8
1128834	CDER40100M	ER40	9,5–10,0	.3740–.3937	–
1260140	CDER40105M	ER40	10,0–10,5	.3937–.4134	13/32
1125622	CDER40110M	ER40	10,5–11,0	.4134–.4330	–
1260141	CDER40115M	ER40	11,0–11,5	.4330–.4528	7/16
1125678	CDER40120M	ER40	11,5–12,0	.4528–.2724	15/32
1260142	CDER40125M	ER40	12,0–12,5	.4724–.4921	–
1260143	CDER40130M	ER40	12,5–13,0	.4921–.5118	1/2
1260144	CDER40135M	ER40	13,0–13,5	.5118–.5315	17/32
1128841	CDER40140M	ER40	13,5–14,0	.5315–.5512	–
1260145	CDER40145M	ER40	14,0–14,5	.5512–.5709	9/16
1128848	CDER40150M	ER40	14,5–15,0	.5709–.5905	–
1260146	CDER40155M	ER40	15,0–15,5	.5905–.6102	19/32
1125686	CDER40160M	ER40	15,5–16,0	.6102–.6300	5/8
1260147	CDER40165M	ER40	16,0–16,5	.6300–.6496	–
1125623	CDER40170M	ER40	16,5–17,0	.6496–.6693	21/32

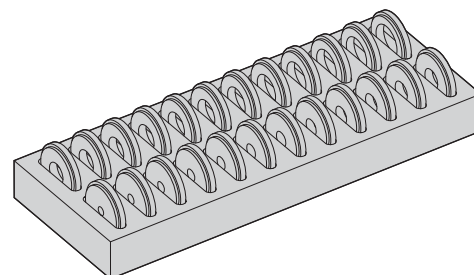
(continued)



(ER40 Locknut Coolant Seal Disk continued)

order number	catalog number	collet series	range metric	range inch	range fraction
1260148	CDER40175M	ER40	17,0–17,5	.6693–.6890	11/16
1128856	CDER40180M	ER40	17,5–18,0	.6890–.7087	—
1260149	CDER40185M	ER40	18,0–18,5	.7087–.7248	23/32
1260150	CDER40190M	ER40	18,5–19,0	.7284–.7480	3/4
1260151	CDER40195M	ER40	19,0–19,5	.7480–.7677	—
1128845	CDER40200M	ER40	19,5–20,0	.7677–.7874	25/32
1260152	CDER40205M	ER40	20,0–20,5	.7874–.8071	—
1260153	CDER40215M	ER40	21,0–21,5	.7874–.8465	27/32
1129413	CDER40210M	ER40	20,5–21,0	.8071–.8268	13/16
1121616	CDER40220M	ER40	21,5–22,0	.8465–.8661	—
1254500	CDER40230M	ER40	22,5–23,0	.8858–.9055	29/32
1260154	CDER40225M	ER40	23,0–23,5	.9055–.9252	—
1260155	CDER40235M	ER40	23,0–23,5	.9055–.9252	—
1260156	CDER40240M	ER40	23,5–24,0	.9252–.9449	15/16
1260157	CDER40245M	ER40	24,0–24,5	.9449–.9646	—
1128850	CDER40250M	ER40	24,5–25,0	.9646–.9843	31/32
1971143	CDER40255M	ER40	25,0–25,5	.9843–1.0039	1
1124539	CDER40260M	ER40	25,5–26,0	1.0039–1.0236	—

- An economical way to purchase a group of coolant disks.



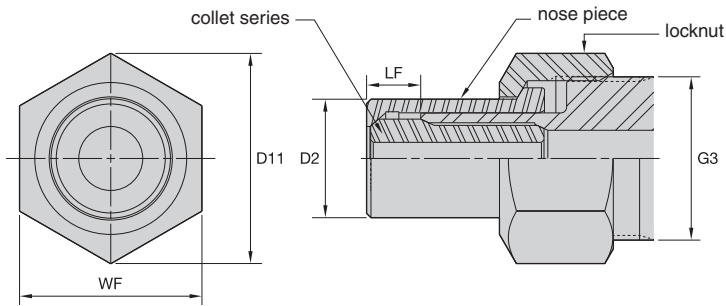
ERICKSON

■ ER40 Locknut Coolant Seal Disk Set

order number	catalog number	collet series	quantity	dimensional range	incremental division
1260130	CDER40000M	ER40	46	3,5mm–26mm	.5mm

NOTE: ER coolant disk sets come complete with wooden protective tray.





■ **DA01 Locknut Hex**

order number	catalog number	collet series	D11	WF	G3
1021948	LN101	DA100	1.73	1.50	1.375-12 UNF
1021950	LN181	DA180	2.02	1.75	1.625-12 UN
1022884	LN201	DA200	1.44	1.25	1.125-16 UN
1022886	LN301	DA300	.86	.75	.625-18 UNF

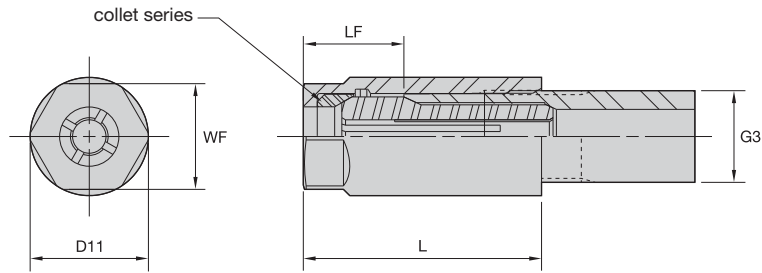
NOTE: Locknut and nose piece need to be ordered separately.
Locknut wrench to be ordered separately.

■ **DA01 Nose Piece**

order number	catalog number	collet series	D2	LF
1021918	NP101	DA100	1.06	.51
1022702	NP181	DA180	1.33	.35
1021920	NP201	DA200	.81	.37
1022726	NP301	DA300	.51	.35

NOTE: Locknut and nose piece need to be ordered separately.

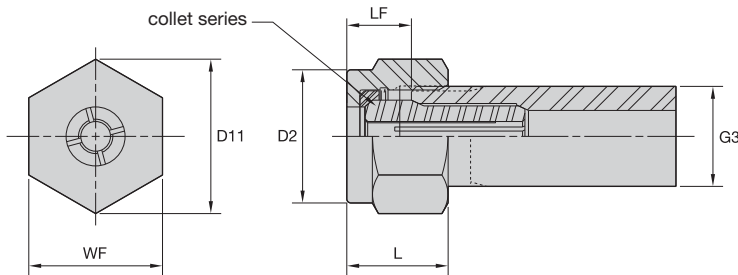




■ **DA04 Double Angle Locknuts**

order number	catalog number	collet series	D11	L	LF	WF	G3
1013469	LNA104M	DA100	1.06	1.51	.62	.94	.9375-20 UNEF
1013470	LNA184M	DA180	1.44	1.60	.49	1.18	1.250-16 UN
1013489	LNAL04M	L	1.50	1.28	.40	1.25	1.313-16 UN
1013488	LNAK04M	K	1.06	1.19	.37	.94	.9375-20 UNEF
1013472	LNA304M	DA300	.56	1.13	.48	.50	.4375-32 UN
1013471	LNA204M	DA200	.85	1.42	.47	.75	.6875-20 UN
1013440	LN000M	DA000	.40	.89	.18	.35	M9 X .9

NOTE: Locknut needs to be ordered separately.



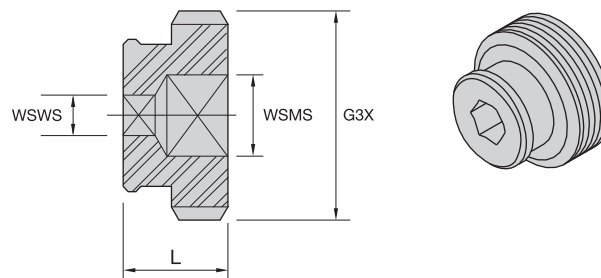
Accessories

■ **DA08 Double Angle Locknuts**

order number	catalog number	collet series	D11	D2	L	LF	WF	G3
1013467	LNA108M	DA100	1.44	1.24	.91	.58	1.25	1.000-14 UNS
1013439	LNA208M	DA200	1.08	.93	.75	.48	.94	.750-16 UNF
1013468	LNA308M	DA300	.77	.66	.73	.43	.67	.5625-18 UNF

NOTE: Locknut needs to be ordered separately.

- Replacement stop screws.
- Coolant, blank, and extended caps are available for added capabilities.



ERICKSON™

■ Stop Screw

order number	catalog number	L		WSWS wrench size	WSMS wrench size	G3X
		mm	in			
1019943	SS031031G	7,9	.31	4mm & 5/32	—	5/16-24UNF LH
1019975	SS038031G	7,9	.31	4mm & 5/32	—	3/8-24UNF LH
1019977	SS044038G	9,5	.38	4mm & 5/32	—	7/16-20UNF LH
1019979	SS050038G	9,5	.38	4mm & 5/32	—	1/2-20UNF LH
1019981	SS056041G	9,5	.38	4mm & 5/32	—	9/16-18UNF LH
1019983	SS062041G	9,5	.38	4mm & 5/32	—	5/8-18UNF LH
1019985	SS075041G	10,3	.41	4mm & 5/32	—	3/4-16UNF LH
1019987	SS081041G	10,3	.41	4mm & 5/32	8mm & 5/16	13/16-16UN LH
1019989	SS094041G	10,3	.41	4mm & 5/32	8mm & 5/16	15/16-16UN LH
1019991	SS112041G	10,3	.41	4mm & 5/32	8mm & 5/16	1 1/8-16UN LH
1020023	SS125050G	12,7	.50	4mm & 5/32	8mm & 5/16	1 1/4-12UNF LH
1020017	SS162062G	15,8	.62	4mm & 5/32	8mm & 5/16	1 5/8-12UN LH
1020049	SS175062G	15,8	.62	4mm & 5/32	8mm & 5/16	1 3/4-12UN LH





The Tunable Tooling

Internal dampening package eliminates chatter, vibration, and harmonics in all your deep-hole boring applications!

- Proprietary features provide superior surface finish and increased productivity.
- Wide product offering — from boring bars, extensions, and holders to rotating adapters and modular sections.
- Reduce setup time with KM™ Quick Change Tooling — now an ISO Standard!
- Customize Kennametal's pre-tuned boring bars — after they're on the machine — to optimize performance in your specific machining operations.

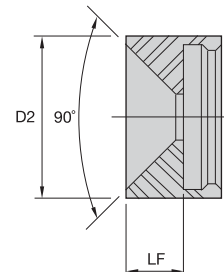
For tighter tolerances, reduced scrap rates, and improved tool life, you can rely on Kennametal Tunable Tooling!

Experience the advantages at your Authorized Kennametal Distributor or at www.kennametal.com.

www.kennametal.com



- Stop screw caps can easily be snapped onto their respective stop screws, referenced in the first column in respective tables below, for added capabilities.



ERICKSON™

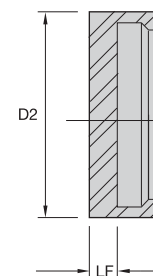
■ Coolant Cap

order number	catalog number	D2		LF		stop screw reference
		mm	in	mm	in	
1021134	SSCC031	6,5	.25	2,4	.09	SS031031G
1021138	SSCC044	9,5	.37	3,0	.12	SS044038G
1021140	SSCC050	11,0	.43	3,0	.12	SS050038G
1021142	SSCC056	12,0	.47	4,0	.16	SS056041G
1092046	SSCC062	14,0	.55	4,5	.18	SS062041G
1021154	SSCC075	17,0	.67	6,0	.24	SS075041G
1021156	SSCC081	17,0	.67	6,0	.24	SS081041G
1021158	SSCC094	21,8	.86	8,5	.33	SS094041G
1021160	SSCC112	24,5	.97	9,8	.38	SS112041G
1021162	SSCC125	29,0	1.14	12,0	.47	SS125050G
1021176	SSCC162	37,0	1.46	15,5	.61	SS162062G
1021178	SSCC175	42,0	1.65	18,5	.73	SS175062G

NOTE: For use with through-coolant applications for improved sealing.



Accessories



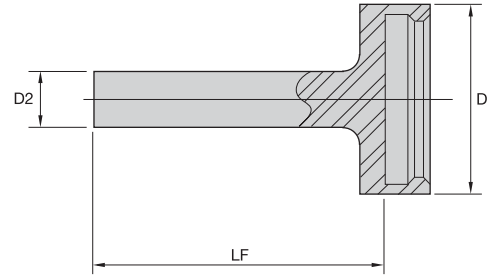
■ Blank Cap

order number	catalog number	D2		LF		stop screw reference
		mm	in	mm	in	
1021180	SSC031	6,5	.26	2,2	.09	SS031031G
1021204	SSC044	9,5	.37	2,2	.09	SS044038G,SS0500384
1021206	SSC056	12,0	.47	2,2	.09	SS075041G,SS056041G,SS062041G
1021208	SSC081	17,0	.67	2,2	.09	SS081041G,SS094041G

NOTE: A solid cap for small-diameter cutting tools with no through-coolant capability.



- Stop screw caps can easily be snapped onto their respective stop screws, referenced in the first column in respective tables below, for added capabilities.



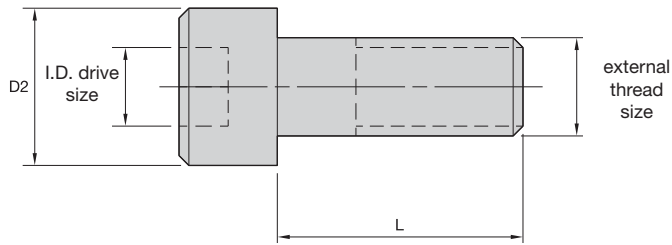
■ Extended Cap



order number	catalog number	D		D2		LF		stop screw reference
		mm	in	mm	in	mm	in	
1021216	SSC038081	8,1	.32	8,1	.32	20,5	.81	SS038031G
1021220	SSC056066	12,0	.47	5,0	.20	16,7	.66	SS094041G,SS075041G,SS056041G
1021222	SSC081103	17,0	.67	5,0	.20	26,2	1.03	SS094041G,SS081041G
1021254	SSC112150	24,5	.96	12,0	.47	38,1	1.50	SS150062G,SS125050G,SS112041G

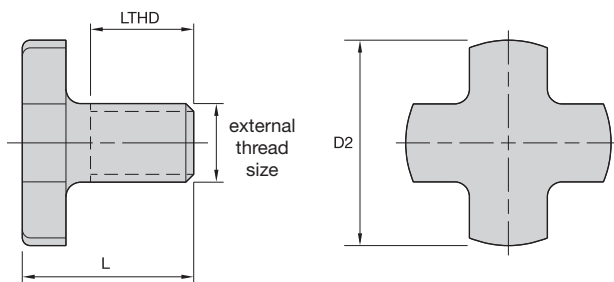
NOTE: For greater access and reaching inside collet cavities.





■ **SM Cap Lock Screw • Metric**

order number	catalog number	external thread size	D2	L	I.D. drive size
1905810	MS1294	M8X1.25	13,0	25,0	6mm
1129648	MS1234	M10X1.5	16,0	25,0	8mm

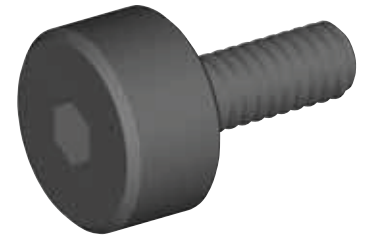
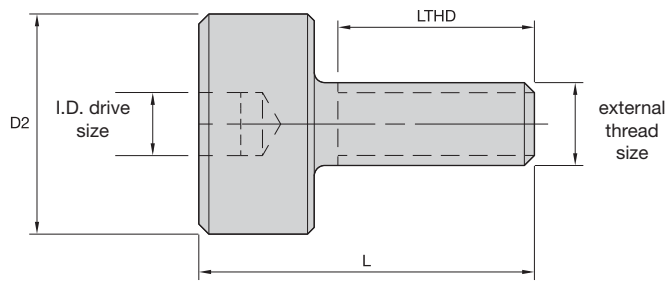


■ **SM Lock Screw • Metric**

order number	catalog number	external thread size	D2	L	LTHD
1147969	KLS27MPKG	M12X1.75	34,8	29,9	17,5
1736199	KLS32M	M16X2.0	41,8	34,9	20,5
1016374	KLS40M	M20X2.5	51,8	39,9	24,0
1178775	KLS50M	M24X3	62,8	47,9	28,5

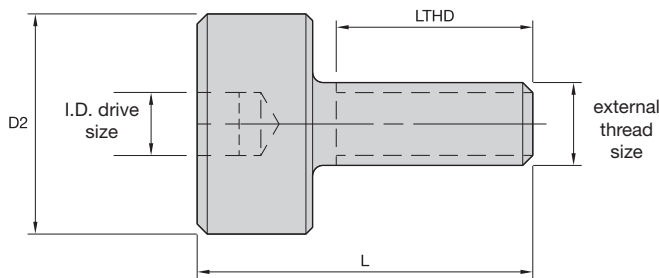
(continued)

(SM Lock Screws continued)



■ SM Round Lock Screw • Metric

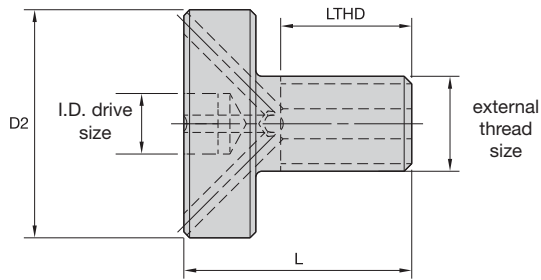
order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
4078806	KLSS27M	M12X1.75	35,0	30,9	22,0	10mm
4078807	KLSS32M	M16X2.0	42,0	37,9	26,0	14mm
4078808	KLSS40M	M20X2.5	52,0	44,9	30,0	17mm



■ SM Lock Screw • Inch

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
1020548	KLS05	.250-28 UNF	.656	1.000	.656	3/16
1020550	KLS07	.375 - 24 UNF	.875	1.062	.687	1/4
1020552	KLS10	.500 - 20 UNF	1.188	1.187	.812	5/16
1020574	KLS12	.625 - 18 UNF	1.500	1.535	1.040	5/16
1020576	KLS15	3/4 - 16 UNF	1.875	1.516	1.016	3/8
1020578	KLS20	1.000 - 14 UNS	—	—	—	9/16

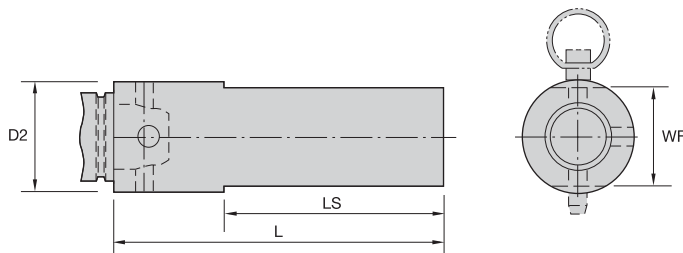
- Coolant lock screw to convert a standard shell mill adapter into a through-coolant version.



■ SM Lock Screw Coolant • Inch

order number	catalog number	external thread size	D2	L	LTHD	I.D. drive size
1151259	KLSSH10	.500-20 UNF	1.2	1.2	.8	5/16
1151260	KLSSH12	.625-18 UNF	1.5	1.5	1.0	5/16
1151261	KLSSH15	.750-16 UNF	1.9	1.5	1.0	3/8
1151262	KLSSH20	1.000-14 UNS	2.5	1.5	1.0	9/16
1151315	KLSSH25	1.000-14 UNS	3.1	2.0	1.5	9/16

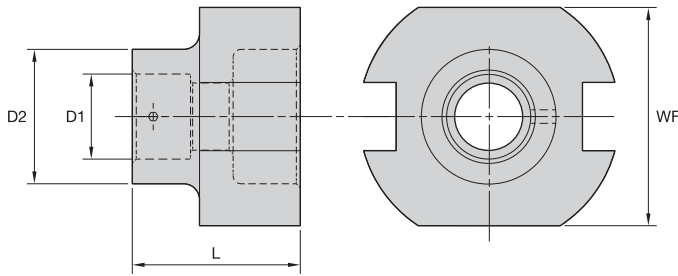
- Vise mount pot to hold KM toolholders for tightening/locking operations.



■ TF • KM Vise Mount

order number	catalog number	system size	D2		L		LS		WF	
			mm	in	mm	in	mm	in	mm	in
1021816	KM40TF	KM40	50,80	2.00	152,4	6.00	101,6	4.00	44,45	1.750
1021817	KM50TF	KM50	63,50	2.50	152,4	6.00	101,6	4.00	57,15	2.250
1021818	KM63TF	KM63	76,20	3.00	152,4	6.00	101,6	4.00	69,15	2.750
2606542	KM80TF	KM80	88,90	3.50	152,4	6.00	101,6	4.00	85,73	3.375

- Vise mount pot to hold HSK toolholders for tightening/locking operations.



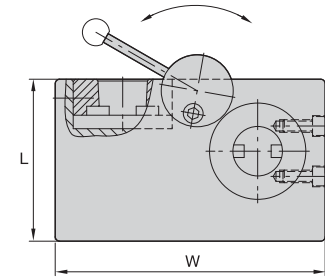
ERICKSON

■ TF • KM4X and HSK Vise Mount

order number	catalog number	D1		D2		L		WF		wrench size clamp screw
		mm	in	mm	in	mm	in	mm	in	
1013573	TFHSK32A	32,0	1.26	50,8	2.00	63,5	2.50	82,5	3.25	3mm & 1/8
1013584	TFHSK40A	40,0	1.57	60,0	2.36	63,5	2.50	82,5	3.25	4mm & 5/32
1013586	TFHSK63A	63,0	2.48	98,4	98.41	69,9	2.75	82,5	3.25	8mm & 5/16
1013587	TFHSK80A	80,0	3.15	108,0	4.25	120,7	4.75	82,5	3.25	8mm & 5/16
1013588	TFHSK100A	100,0	3.94	135,0	5.31	139,7	5.50	82,5	3.25	8mm & 5/16



- Universal vise to hold HSK forms A, C, and E toolholders for tightening/locking operations.
- Permits simultaneous access to the rear and front end of the toolholders.
- Replaces up to 15 separate tightening fixtures.
- Holds tools in the horizontal or vertical position.
- Can be used either right or left handed.
- Rigid aluminum construction with bolt holes to secure to bench.

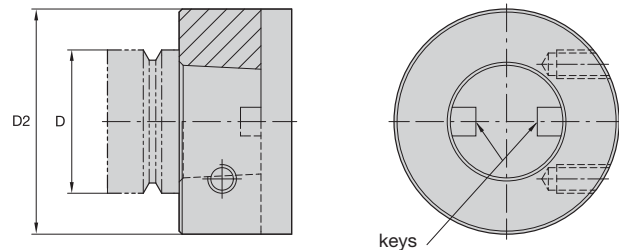


ERICKSON™

■ TF • HSK Universal Mount

order number	catalog number	CSWS	L		W	
			mm	in	mm	in
1254135	UTAV	ALL	160	6.30	260	10.24

- For HSK forms A and C, insert sleeve into fixture.
- For HSK form E, remove the drive keys before inserting the sleeve adapter.
- Sleeve adapters are made from hardened steel with removable keys.
- For sizes HSK32 and HSK40, a larger cam disk must be ordered when used in a horizontal position.



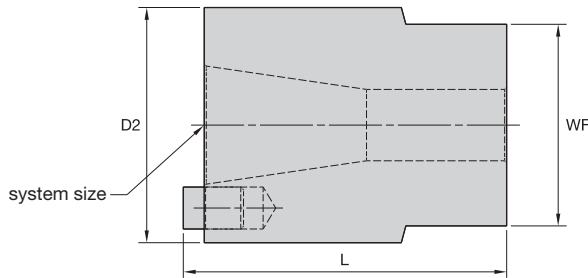
■ TF • HSK Universal Sleeve

order number	catalog number	system size	D		D2	
			mm	in	mm	in
1254136	HSK32AS	32	32,0	1.26	98,0	3.86
1254137	HSK40AS	40	40,0	1.57	98,0	3.86
1254158	HSK50AS	50	50,0	1.97	98,0	3.86
1254159	HSK63AS	63	63,0	2.48	98,0	3.86
1254160	HSK80AS	80	80,0	3.15	98,0	3.86
1254161	HSK100AS	100	100,0	3.94	98,0	3.86

cam disks needed to support HSK32 and HSK40

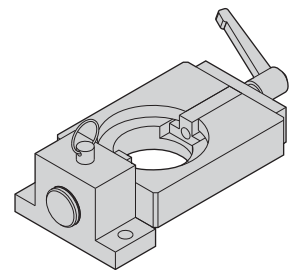
catalog number • sleeve	size reference • HSK	order number • cam disk	catalog number • cam disk
HSK32AS	HSK32	2241080	536.150
HSK40AS	HSK40	2241080	536.150

- Vise mount pot to hold steep taper toolholders for tightening/locking operations.


ERICKSON
TF • ST Vise Mount

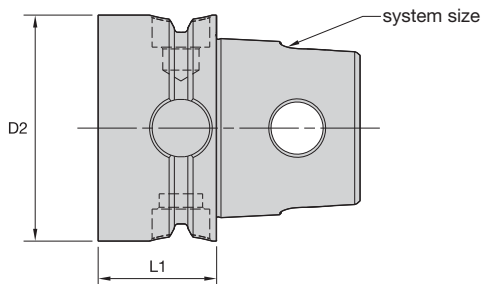
order number	catalog number	system size	D2		L		WF	
			mm	in	mm	in	mm	in
1013620	TF30	30	88,9	3.50	109,5	4.31	76,2	3.00
1013636	TF40	40	88,9	3.50	122,2	4.81	76,2	3.00
1013638	TF50	50	133,4	5.25	165,1	6.50	114,3	4.50

- Universal vise to hold 30, 35, 40, 45, and 50 7/24 steep taper toolholders for tightening/locking operations.
- Permits simultaneous access to the retention knob and locknut.
- Replaces up to five separate tightening fixtures.
- Holds tools in the horizontal or vertical position.
- Can be used either right or left handed.
- Holds most 7/24 tapers including ANSI, ISO, DIN, V-flange, BT, and NMTB.
- Handle position is easily changed with a simple button push.
- No setups, bushings, or spare parts required.
- 400 Nm (300 ft. lbs.) maximum torque capacity.


ERICKSON
TF • ST Universal Mount

order number	catalog number	system size
1013591	UTV5030	30, 35, 40, 45, & 50

- Prevents machine tool spindle from becoming contaminated when not in use.

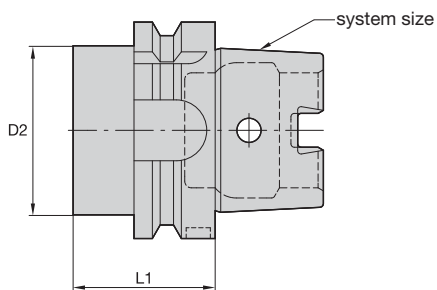


■ Spindle Plug • KM™

order number	catalog number	system size	D2		L1	
			mm	in	mm	in
1019237	KM32P	KM32	32	1.26	25	.98
1144452	KM40P	KM40	40	1.57	27	1.06
1144501	KM50P	KM50	50	1.97	31	1.22
1019945	KM63TSP	KM63TS	63	2.48	33	1.30
1144328	KM80P	KM80	80	3.15	37	1.46

- Prevents machine tool spindle from becoming contaminated when not in use.

Accessories

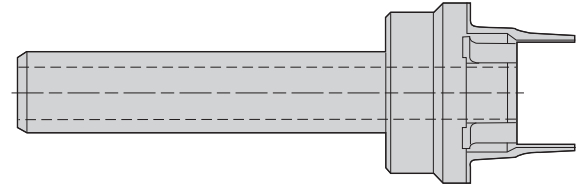


ERICKSON™

■ P-HSK • Form A

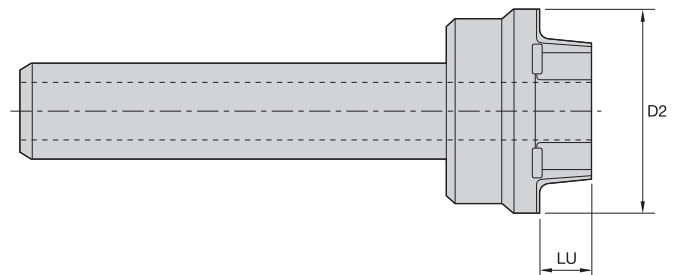
order number	catalog number	system size	D2		L1		kg
			mm	in	mm	in	
1256061	HSK63AP	63	50	1.97	42,3	1.66	0,7
1307767	HSK100AP	100	80	3.15	45,3	1.78	0,7

- Cleans taper and face of machine spindle and tool adapter.


■ SW-KM

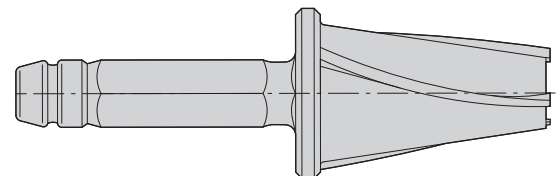
order number	catalog number	system size
1727267	KMSW32	32
1606113	KMSW40	40
1612900	KMSW50	50
1612922	KMSW63	63
1612923	KMSW80	80

- Cleans taper and face of machine spindle and tool adapter.


ERICKSON
■ SW-HSK

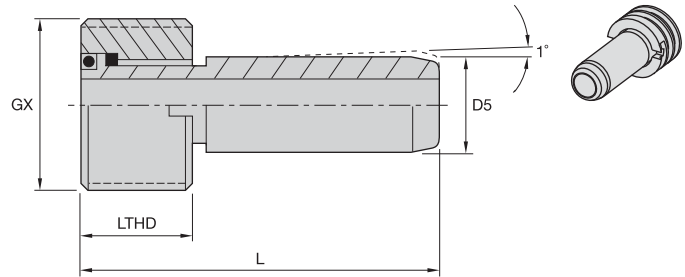
order number	catalog number	system size	D2		LU	
			mm	in	mm	in
1518662	HSK32SW	32	45	1.77	11	.43
1518630	HSK40SW	40	45	1.77	14	.55
1514497	HSK50SW	50	53	2.09	17	.67
1518677	HSK63SW	63	66	2.60	22	.87
1518681	HSK100SW	100	103	4.06	35	1.38

- Cleans taper of machine spindle and tool adapter.


ERICKSON
■ SW-ST

order number	catalog number	system size
1288838	SW30	30
1288842	SW40	40
1192562	SW50	50

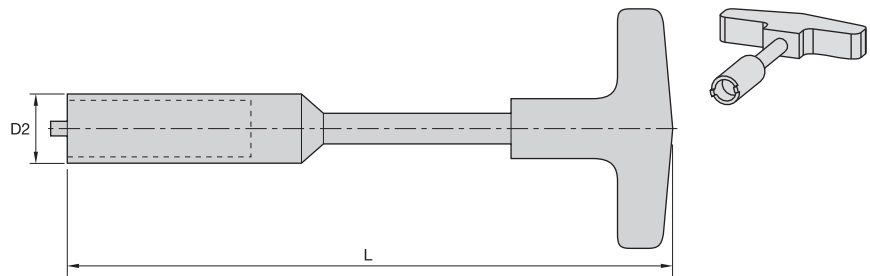
- Designed in accordance with DIN 69893.
- Withstand coolant pressure up to 80 bar (1,160 psi).
- Directs flow of coolant through the tool and avoids spindle mechanism contamination from flow-back.
- Standard-sized replaceable O-rings.



■ HSK Coolant Supply Unit • Assembly

order number	catalog number	system size	D5		L		LTHD		GX	Nm	ft. lbs.
			mm	in	mm	in	mm	in			
1132083	193.158	40A & 40E	8,0	.3	29,5	1.2	7,5	.30	M12 X 1	10	7
1132144	193.159	50A & 50E & 63F	10,0	.4	32,7	1.3	9,5	.37	M16 X 1	15	11
1132145	193.160	63A & 63T & 80F	12,0	.5	36,2	1.4	11,5	.45	M18 X 1	20	14
1132146	193.161	80A	14,0	.6	40,2	1.6	13,5	.53	M20 X 1.5	25	18
1132147	193.162	100A	16,0	.6	43,6	1.7	15,5	.61	M24 X 1.5	30	22

- Designed to lock and unlock the HSK coolant supply units.



■ HSK Wrench

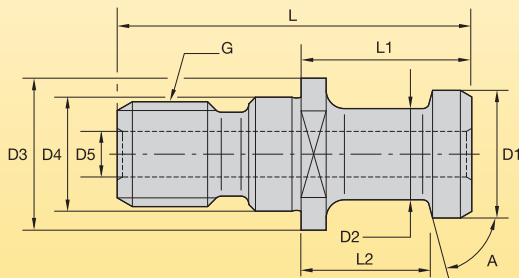
order number	catalog number	CSWS	D2		L		Nm	ft. lbs.
			mm	in	mm	in		
1176487	170.195	40A & 40E	13,0	.51	120	4.72	10	7
1132992	170.196	50A & 50E & 63F	14,5	.57	114	4.49	15	11
1134161	170.197	63A & 63T & 80F	16,5	.65	122	4.80	20	14
1127524	170.198	80A	19,0	.75	130	5.12	25	18
1132993	170.199	100A	22,0	.87	141	5.55	30	22



WARNING

Retention knobs are available in various styles and are not always interchangeable because all are machine and spindle specific. The proper retention knob must be used at all times with the appropriate adapter, according to machine specifications as provided by the machine's original manufacturer. Failure to use the correct retention knob, or to adequately install and tighten the correct retention knob, may result in an adapter loosening. Using a combination of metric and non-metric components can result in an inadequate coupling of the adapter to the spindle during machining, causing the component to fail.

While Kennametal has endeavored to obtain accurate and up-to-date information regarding retention knob selection based on individual machine tool builder specifications, we cannot guarantee that the information and specifications contained in this catalog are complete and that they have not been modified or superseded by the manufacturer. **You, the machine tool operator, are ultimately responsible for proper selection and use of retention knobs.** The purchase of retention knobs from Kennametal is subject to Kennametal's Standard Terms and Conditions of Sale.



Machining center manufacturers use numerous types and styles of retention knobs. Kennametal has listed some of the most popular retention knobs in the industry on the next few pages.

If a retention knob is not shown, please contact your Kennametal Representative or call Kennametal Customer Service and have the following information available:

machine builder	machine builder's drawing and/or numbers			machine model number	
taper size	G thread			A angle	
D1	D2	D3	D4	D5	
L	L1	L2	through coolant needed?	O-ring needed?	

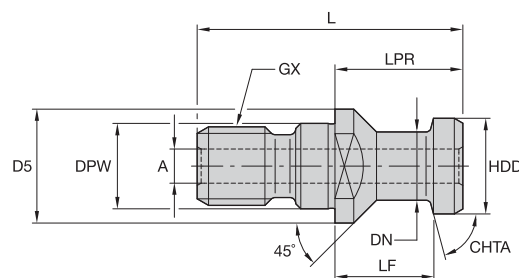
The machine builder should recommend the required tightening torque for the retention knobs. This information is not always available.

Kennametal has referenced a suggested maximum torque setting and offers a specialized socket just for retention knobs. Please see these socket wrench sizes listed against each knob.

	taper size	suggested torque max (ft. lbs.)	suggested torque max (Nm)	
	30	40	54	
	40	85	115	
	50	110	149	



- Metric thread.
- Piloted.
- Through coolant.



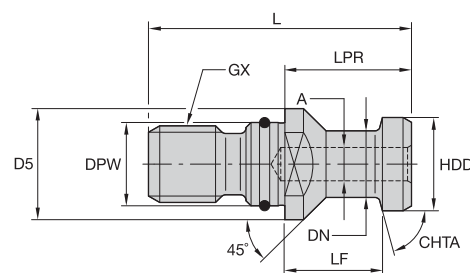
■ RK DIN 69872 Form A • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192424	RK40DVM	40	M16 X 2	7,05	75°	23	13,95	16,97	18,97	20,0	26,00	54	RKW40	115
1192430	RK50DVM	50	M24 X 3	11,55	75°	36	20,95	24,97	27,97	25,0	34,00	74	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.

- Metric thread.
- Piloted with O-ring.
- No through coolant.



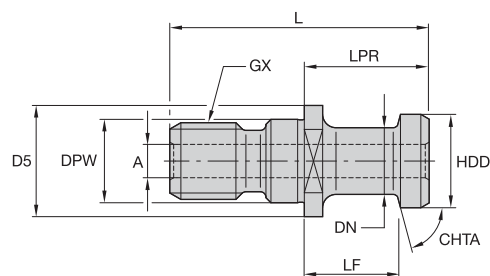
■ RK DIN 69872 Form B • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192423	RK40DVBM	40	M16 X 2	7,05	75°	22,9	13,95	16,97	18,97	20	26	54	RKW40	115
1192429	RK50DVBM	50	M24 X 3	11,55	75°	35,9	20,95	24,97	27,97	25	34	74	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.

- Metric thread.
- Piloted.
- Through coolant.



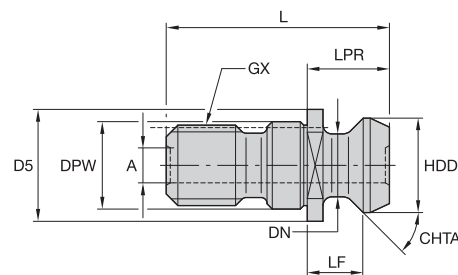
■ RK ISO 7388/2 Type A • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1285460	RK40ISAM	40	M16 X 2	7,05	75°	22,9	13,95	16,99	18,95	20	26	54	RKW40	115
1285502	RK50ISAM	50	M24 X 3	11,55	75°	35,9	20,95	24,99	27,95	25	34	74	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.

- Metric thread.
- Piloted.
- Through coolant.



■ RK • ISO 7388/2 Type B • Metric

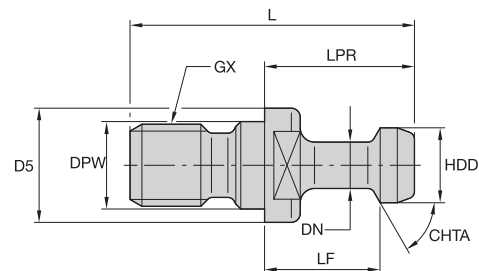


order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192425	RK40ISBM	40	M16 X 2	7,5	45°	22	12,80	16,99	18,80	11,0	16,25	44,50	RKW40	115
1192431	RK50ISBM	50	M24 X 3	11,7	45°	36	19,45	24,99	28,95	17,8	25,40	65,50	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.



- Metric thread.
- Piloted.
- No through coolant.



■ RK BT-MAS-Style with Pilot • Metric

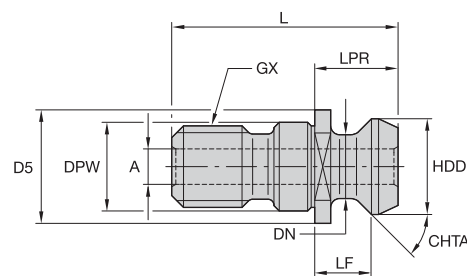


order number	catalog number	system size	GX	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192417	RK30BT1M	30	M12 X 1.75	45°	16,4	6,95	12,49	10,95	17,95	22,95	43,0	RKW30	54
1285416	RK30BT2M	30	M12 X 1.75	60°	16,4	6,95	12,49	10,95	17,95	22,95	43,0	RKW30	54
1192419	RK40BT1M	40	M16 X 2	45°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	RKW40	115
1192420	RK40BT2M	40	M16 X 2	60°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	RKW40	115
1285441	RK40BT3M	40	M16 X 2	90°	22,9	9,95	16,99	14,95	27,95	34,95	60,0	RKW40	115
1192426	RK50BT1M	50	M24 X 3	45°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	RKW50M	143
1192427	RK50BT2M	50	M24 X 3	60°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	RKW50M	143
1285482	RK50BT3M	50	M24 X 3	90°	37,9	16,95	24,99	22,95	34,95	44,95	85,0	RKW50M	143

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.



- Metric thread.
- Piloted.
- Through coolant.



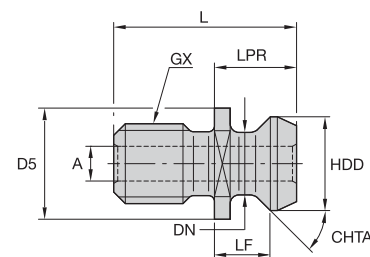
■ RK Short CV with Pilot • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	Nm
1192422	RK40CV3M	40	M16 X 2	7,14	45°	23,63	12,45	16,98	18,80	11,18	16,26	41,26	RKW40	115
1026734	RK50HPCV	50	M24 X 3	11,89	45°	36,32	20,83	24,99	28,96	17,78	25,40	65,41	RKW50	143

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.

- Metric thread.
- No pilot.
- Through coolant.



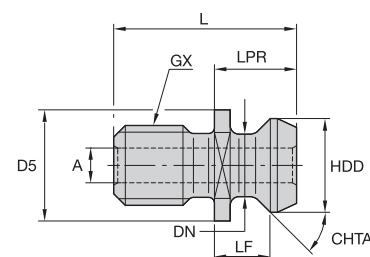
■ RK Short CV without Pilot • Metric



order number	catalog number	system size	GX	A	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	Nm
1192421	RK40CV1M	40	M16 X 2	6,95	45°	22,5	12,4	18,8	11,20	16,30	38,1	RKW40	115
1285478	RK50AV1M	50	M24 X 3	11,55	45°	37,0	19,6	29,1	17,95	25,55	60,0	RKW50M	143

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.

- Inch thread.
- No pilot.
- Through coolant.



■ RK Short CV without Pilot • Inch

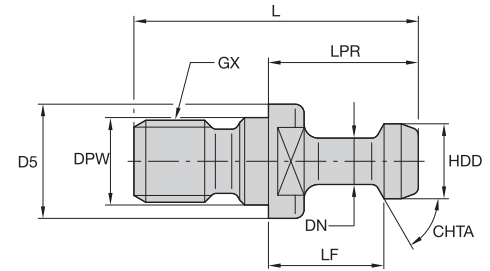


order number	catalog number	system size	GX	A	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026590	RK40CV	40	5/8 - 11	.281	45°	.900	.490	.740	.440	.640	1.500	RKW40	85
1026690	RK50CV	50	1 - 8	.500	45°	1.400	.820	1.140	.700	1.000	2.300	RKW50	110

NOTE: WF = width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.



- Inch thread.
- Piloted.
- No through coolant.



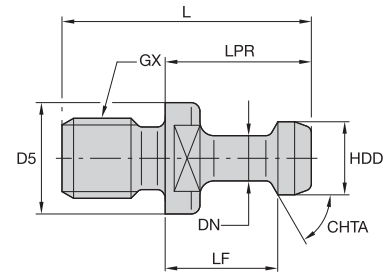
■ RK BT-MAS Style with Pilot • Inch



order number	catalog number	system size	GX	CHTA	D5	DN	DPW	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026729	RK31114	40	5/8 - 11	45°	.938	.392	.636	.589	.988	1.264	2.250	RKW40	85
1025459	RK31114B	40	5/8 - 11	90°	.938	.392	.636	.589	.988	1.264	2.250	RKW40	85
1021844	RK31118	50	1 - 8	45°	1.438	.668	1.026	.903	1.384	1.778	3.355	RKW50	110
1021800	RK31118B	50	1 - 8	90°	1.438	.668	1.026	.903	1.384	1.778	3.355	RKW50	110

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.

- Inch thread.
- Piloted.
- No through coolant.



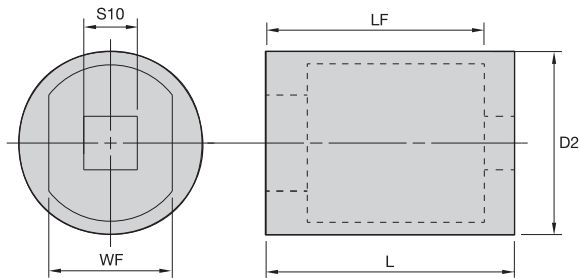
■ RK BT-MAS-Style without Pilot • Inch



order number	catalog number	system size	GX	CHTA	D5	DN	HDD	LF	LPR	L	wrench socket	ft. lbs.
1026730	RK32114	40	5/8 - 11	45°	.903	.392	.588	.990	1.266	2.125	RKW40	85

NOTE: WF = Width over flats for open-ended wrench or socket wrench.
For socket wrench, see page L51.

- Socket wrench with standard 1/2" drive to tighten retention knobs.



■ RK Socket • Metric

order number	catalog number	system size	S10						Nm
			D2	L	LF	mm	in	WF	
2407089	RKW40M	40	31,8	31,8	19,0	12,7	.50	18,1	115
2407091	RKW50M	50	44,5	60,3	47,6	12,7	.50	30,2	150

■ RK Socket • Inch

order number	catalog number	system size	D2	L	LF	S10		WF	ft. lbs.
						mm	in		
2407087	RKW30	30	1.00	1.50	1.00	.50	.54	40	
2407088	RKW40	40	1.25	1.94	1.44	.50	.76	85	
2407090	RKW50	50	1.75	1.63	1.12	.50	1.26	110	

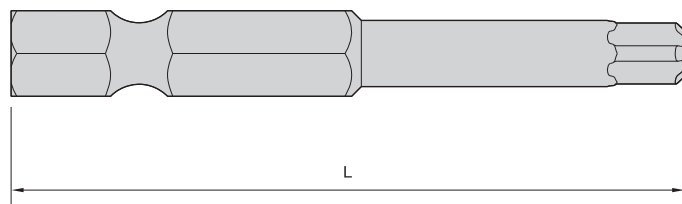




■ **KM Manual Torque Wrenches**

order number	catalog number	KM size	wrench type	adapter	adapter drive size	drive bit	driver hex size	driver bit size	torque (ft. lbs.)	torque (Nm)
1930183	TWT256R	12 & 1612	ratchet	—	—	BTE25IP	1/4"	25IP	5 - 6	7 - 8
1851809	TWT278R	16 & 2016	ratchet	—	—	BTE27IP	1/4"	27IP	7 - 8	10 - 11
3663411	TW515R	20 & 2520	ratchet	30137	3/8"	301.361	5/16"	5mm	14 - 16	19 - 22
2432682	TW628R	25 & 3225	ratchet	30137	3/8"	301.362	5/16"	6mm	25 - 30	34 - 40
1291313	TW58	32	solid	—	—	301.361	5/16"	5mm	6 - 8	8 - 11
1099387	TW610	40	solid	—	—	301.362	5/16"	6mm	9 - 12	12 - 16
1291314	TW58R	32	ratchet	30137	3/8"	301.361	5/16"	5mm	6 - 8	8 - 11
1291316	TW610R	40	ratchet	30137	3/8"	301.362	5/16"	6mm	9 - 12	12 - 16
1291318	TW623R	50	ratchet	AHB375M10	3/8"	—	—	10mm	20 - 25	27 - 34
1291312	TW1237R	63	ratchet	AHB500M12	1/2"	—	—	12mm	35 - 40	47 - 54
1121108	TW1460R	80	ratchet	EBM14	1/2"	—	—	14mm	58 - 63	79 - 85

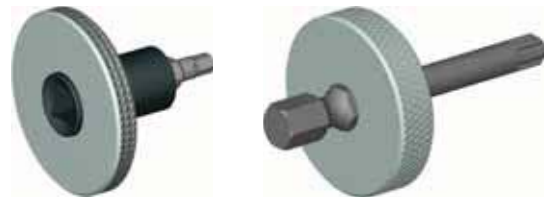
NOTE: All KM manual torque wrenches come complete with adapter and driver bit.



■ **Drive Bits**

order number	catalog number	KM size	L	driver hex size	driver bit size
2244316	BT25IP	12 & 1612	25	1/4"	25IP
2244318	BTE25IP	12 & 1612	50	1/4"	25IP
2244317	BT27IP	16 & 2016	25	1/4"	27IP
2244319	BTE27IP	16 & 2016	50	1/4"	27IP
3389747	301.361	20 & 2520	28,6	5/16"	5mm

(KM Manual Torque Wrenches continued)



■ Thumbwheels

order number	catalog number	KM size	driver	driver bit size
2906898	TBWL25IP	12 & 1612	1/4" Hex	25IP
2906899	TBWL27IP	16 & 2016	1/4" Hex	27IP
3746472	TBWL5H	20 & 2520	3/8" Square	5mm
3336459	TBWL6H	25 & 3225	3/8" Square	6mm



■ KM LOC and KM LOC II Wrench

wrench catalog number	drive hex bit			
	KM32	KM40	KM50	KM63
914-15	986-6 = hex size 6mm	986-8 = hex size 8mm	986-10 = hex size 10mm	986-10 = hex size 10mm



Accessories

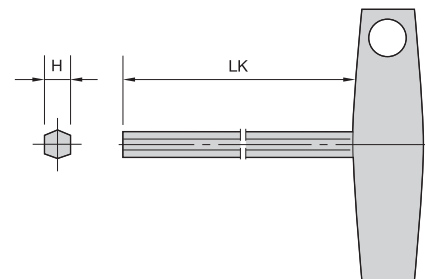
order number	drive hex bit catalog number
1863666	986-6
1131354	986-8
1131361	986-10

NOTE: Wrench and drive hex bit must be ordered separately.



■ Hex Wrench Set • Metric

order number	catalog number	wrench set description
1192354	MW-9	set contains (mm) 1,27; 1,5; 2,0; 2,5; 3,0; 4,0; 5,0; 6,0; and 8,0



■ T-Handle Hex Wrench • Metric

order number	catalog number	hex size
1138748	170.135	5mm
1138755	170.136	6mm

Accessories



■ T-Handle Wrench Set • Inch

order number	catalog number	wrench description
1192321	KW-7A	set contains sizes: 5/64, 3/32, 7/64, 1/8, 5/32, 3/16, and 7/32



■ Universal Bit Driver

order number	catalog number
1963869	driver

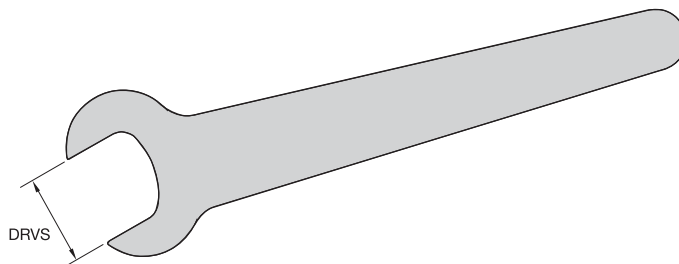


■ Driver Bit

order number	catalog number	hex size	Torx size	Torx Plus size
1138851	170.179	2,5mm	—	—
1150198	170.180	3mm	—	—
1138857	170.181	4mm	—	—
1962981	BT6	—	6	—
1963853	BT7	—	7	—
1963855	BT8	—	8	—
1963854	BT9	—	9	—
1963856	BT10	—	10	—
1138814	170.175	—	15	—
1138822	170.176	—	20	—
1994654	170.258	—	25	—
1984243	170.256	—	27	—
2244316	BT25IP	—	—	25IP
2244317	BT27IP	—	—	27IP



- Standard open-ended wrenches.



ERICKSON™

■ Wrench OEW • Metric

order number	catalog number	DRVS
1284020	OEW9M	9mm
1284011	OEW13M	13mm
1174217	OEW16M	16mm
1197387	OEW19M	19mm
1192371	OEW24M	24mm
1186649	OEW25M	25mm
1284014	OEW30M	30mm
1284015	OEW32M	32mm

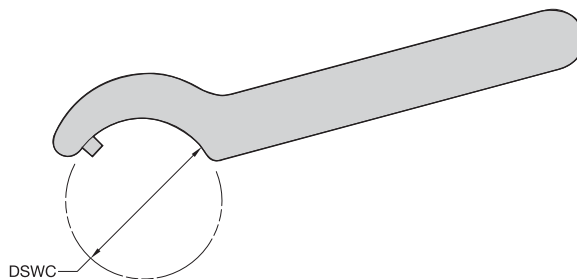
■ Wrench OEW • Inch

order number	catalog number	DRVS
1025533	OEW044	7/16
1025544	OEW050	1/8
1025546	OEW062	5/8
1025547	OEW068	11/16
1025548	OEW075	3/4
1025550	OEW088	7/8
1025551	OEW094	15/16
1025552	OEW100	1
1025553	OEW106	1 1/16
1025574	OEW112	1 1/8
1025575	OEW119	1 3/16
1025576	OEW125	1 1/4
1025674	OEW138	1 3/8
1025581	OEW150	1 1/2
1025582	OEW162	1 5/8
1025583	OEW168	1 11/16
1025604	OEW175	1 3/4
1025605	OEW188	1 7/8
1025607	OEW225	2 1/4
1025608	OEW250	2 1/2

Accessories



- Standard pin spanner wrenches.



ERICKSON

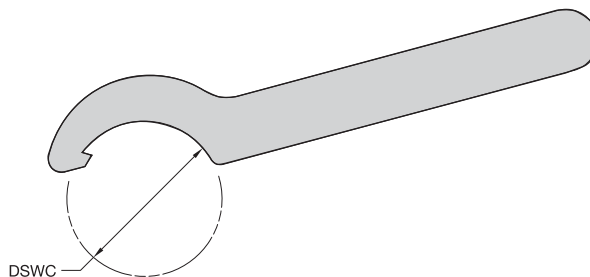
■ Wrench PSW • Metric

order number	catalog number	DSWC
3367387	PSW52M	58,0mm - 62,0mm
1284310	PSW58M	52,0mm - 55,0mm
1192392	PSW68M	68,0mm - 75,0mm
1284311	PSW80M	80,0mm - 90,0mm

■ Wrench PSW • Inch

order number	catalog number	DSWC
1013497	PSW350	3 1/2

- Standard hook spanner wrenches.



Accessories



ERICKSON

■ Wrench HSW • Metric

order number	catalog number	DSWC
1273813	HSW25M	25,0mm - 28,0mm
1273814	HSW34M	34,0mm - 36,0mm
1192229	HSW45M	45,0mm - 50,0mm
1192230	HSW58M	58,0mm - 62,0mm
1273815	HSW68M	68,0mm - 75,0mm
1192231	HSW80M	80,0mm - 90,0mm



■ Rapid and Rapid Plus Wrenches

order number	catalog number	driver	length	Rapid KM size	Rapid Plus KM size
2030659	12146032300	3/8" Square	250	KM40™	—
2030660	12146032400	1/2" Square	250	KM50™	KM40 and KM50
2030661	12146032500	1/2" Square	400	KM63™	KM63

■ Drive Sockets

order number	catalog number	driver	hex size	Rapid KM size	Rapid Plus KM size
2031858	12146032600	3/8" Square	10	KM40	—
2031859	12146032700	1/2" Square	12	KM50	—
2031860	12146032800	1/2" Square	17	KM63	KM40
2067373	12146033500	1/2" Square	22	—	KM50 and KM63

NOTE: Wrench and drive socket must be ordered separately.

