

INNOVATIONS
MASTER CATALOG

TOOLING SYSTEMS
2013

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 **KENNAMETAL®**

GENERAL ENGINEERING

TRANSPORTATION

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AEROSPACE & DEFENSE

EARTHWORKS

ENERGY



KM4X™ • The New Choice for Heavy-Duty Milling

Primary Application

The KM4X 4-ball spindle interface provides up to 3x more bending capacity than HSK. The greater bending capacity enables customers to fully utilize the capabilities of their machine and cutting tools when working with tough materials like titanium or during heavy machining. Increased metal removal rates optimize machine production and decrease overall manufacturing cost.

- Heavy-duty, rigid configuration.
- 3x more bending capacity than HSK.
- Increased metal removal rates.
- Full utilization of machine tools.
- Decreased manufacturing costs.
- Balanced-by-design for higher spindle speeds.
- Highest maximum speed capability.

Features and Benefits

The Latest Innovation in Spindle Interface Technology

- KM4X offers the most rigid connection able to withstand extremely high bending due to a combination of high interference and high clamping forces.
- KM™ is the only connection that maintains stiffness at elevated rotational speeds and is suitable for a range of applications from low speeds with high torque to very high spindle speeds.
- KM4X is better balanced between bending and torsion capabilities.

To learn more, [scan here](#).
For instructions on how to scan, please see page xxxiii.



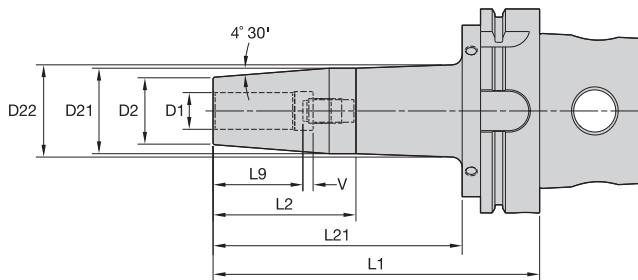


Four locking elements for power, drive, and uniform rigid locking. Provides even distribution of forces.

Systems secondary drive/location and orientation feature.

Standardized HSK V-flange and features for automatic tool-change arms.

The KM™ System's superior rigidity and accuracy is gained by optimized interference levels. Three surface areas of contact develop when clamped, resulting in superior performance.



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools.

Cutting Tool Shank Requirements
metric (ISO standard)

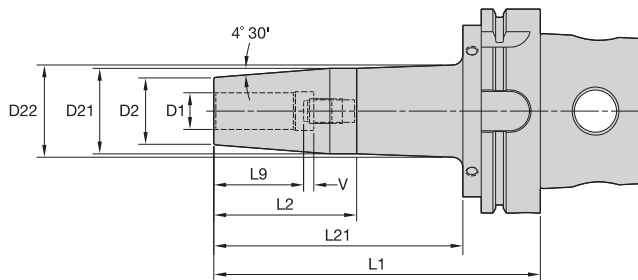
cutting tool shank diameter	tolerance	
6	h6	0,000/-0,008
8 & 10	h6	0,000/-0,009
12, 14, 16, & 18	h6	0,000/-0,011
20 & 25	h6	0,000/-0,013
32, 40, & 50	h6	0,000/-0,016

■ TT GP HPV MM-KM4X • Metric



order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4156046	KM4X100HPVTT06085M	6	21	27	—	85	56	26	—	10	TTSS05014M	2,5mm
4156047	KM4X100HPVTT06160M	6	21	27	32	160	50	26	122	10	TTSS05014M	2,5mm
4156048	KM4X100HPVTT08085M	8	21	27	—	85	56	26	—	10	TTSS06014M	3mm
4156049	KM4X100HPVTT08160M	8	21	27	32	160	50	26	122	10	TTSS06014M	3mm
4156050	KM4X100HPVTT10090M	10	24	32	—	90	61	31	—	10	TTSS08014M	4mm
4156051	KM4X100HPVTT10160M	10	24	32	36	160	63	31	122	10	TTSS08014M	4mm
4156052	KM4X100HPVTT12095M	12	24	32	—	95	66	36	—	10	TTSS10014M	5mm
4156113	KM4X100HPVTT12160M	12	24	32	36	160	63	36	122	10	TTSS10014M	5mm
4156114	KM4X100HPVTT14095M	14	27	34	—	95	66	36	—	10	TTSS10014M	5mm
4156115	KM4X100HPVTT14160M	14	27	34	38	160	57	36	122	10	TTSS10014M	5mm
4156116	KM4X100HPVTT16100M	16	27	34	—	100	71	39	—	10	TTSS12014M	6mm
4156117	KM4X100HPVTT16160M	16	27	34	38	160	57	39	122	10	TTSS12014M	6mm
4156118	KM4X100HPVTT18100M	18	33	42	—	100	71	39	—	10	TTSS12014M	6mm
4156119	KM4X100HPVTT18160M	18	33	42	46	160	69	39	122	10	TTSS12014M	6mm
4156120	KM4X100HPVTT20105M	20	33	42	—	105	76	41	—	10	TTSS16014M	8mm
4156121	KM4X100HPVTT20160M	20	33	42	46	160	69	41	122	10	TTSS16014M	8mm
4156122	KM4X100HPVTT25115M	25	44	53	—	115	86	47	—	10	TTSS16014M	8mm
4156123	KM4X100HPVTT25160M	25	44	53	57	160	69	47	122	10	TTSS16014M	8mm
4156124	KM4X100HPVTT32120M	32	44	53	—	120	91	51	—	10	TTSS16014M	8mm
4156125	KM4X100HPVTT32160M	32	44	53	57	160	69	51	122	10	TTSS16014M	8mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
Supplied with stop screw.
Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.



KM4X 100 Shank Tools



- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide and HSS cutting tools.

Cutting Tool Shank Requirements
inch (industry standard)

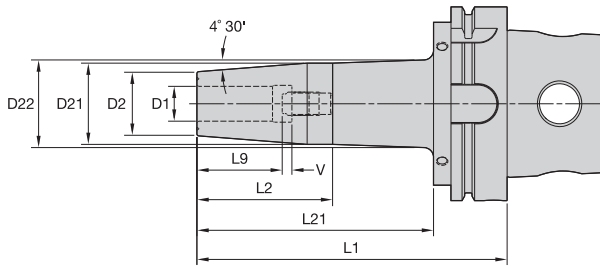
cutting tool shank diameter	tolerance
1/4, 5/16, & 3/8	-.0001/-0.0004
7/16, 1/2, 9/16, 5/8, & 11/16	.0000/-0.0004
3/4, 7/8, 1, 1-1/4, 1-1/2, & 2	.0000/-0.0005

■ TT GP HPV IN-KM4X • Inch



order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4155746	KM4X100HPVTT025335	1/4	0.83	1.06	—	3.35	2.21	1.02	—	0.39	TTSS05014M	2,5mm
4155747	KM4X100HPVTT025630	1/4	0.83	1.06	1.26	6.30	1.97	1.02	4.81	0.39	TTSS05014M	2,5mm
4155748	KM4X100HPVTT031335	5/16	0.83	1.06	—	3.35	2.21	1.02	—	0.39	TTSS06014M	3mm
4155749	KM4X100HPVTT031630	5/16	0.83	1.06	1.26	6.30	1.97	1.02	4.81	0.39	TTSS06014M	3mm
4155750	KM4X100HPVTT038354	3/8	0.95	1.24	—	3.54	2.40	1.22	—	0.39	TTSS08014M	4mm
4155751	KM4X100HPVTT038630	3/8	0.95	1.26	1.42	6.30	2.48	1.22	4.81	0.39	TTSS08014M	4mm
4155752	KM4X100HPVTT050374	1/2	0.95	1.26	—	3.74	2.60	1.42	—	0.39	TTSS10014M	5mm
4156153	KM4X100HPVTT050630	1/2	0.95	1.26	1.42	6.30	2.48	1.42	4.81	0.39	TTSS10014M	5mm
4156154	KM4X100HPVTT062394	5/8	1.06	1.34	—	3.94	2.80	1.54	—	0.39	TTSS12014M	6mm
4156155	KM4X100HPVTT062630	5/8	1.06	1.34	1.51	6.30	2.24	1.54	4.81	0.39	TTSS12014M	6mm
4156156	KM4X100HPVTT075413	3/4	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156157	KM4X100HPVTT075630	3/4	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156158	KM4X100HPVTT088413	7/8	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156159	KM4X100HPVTT088630	7/8	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156160	KM4X100HPVTT100453	1	1.73	2.08	—	4.53	3.39	1.85	—	0.39	TTSS16014M	8mm
4156161	KM4X100HPVTT100630	1	1.73	2.08	2.23	6.30	2.72	1.85	4.81	0.39	TTSS16014M	8mm
4156162	KM4X100HPVTT125472	1 1/4	1.73	2.08	—	4.72	3.59	2.01	—	0.39	TTSS16014M	8mm
4156163	KM4X100HPVTT125630	1 1/4	1.73	2.08	2.23	6.30	2.72	2.01	4.81	0.39	TTSS16014M	8mm
4156164	KM4X100HPVTT150531	1 1/2	2.36	2.75	—	5.31	4.18	2.01	—	0.39	TTSS20014M	10mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
 Supplied with stop screw.
 Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.



- 30–50% higher clamping torque compared to GP line.
- Balanceable — fine tune with optional M6 set screws.
- Suitable for carbide only, designated by groove in front face.
- 10 kW power or greater Shrink Fit device must be used.

**Cutting Tool Shank Requirements
inch (industry standard)**

cutting tool	
shank diameter	tolerance
1/2 & 5/8	.0000/-0.0004
3/4, 7/8, 1, 1-1/4, & 1-1/2	.0000/-0.0005

**Cutting Tool Shank Requirements
metric (ISO standard)**

cutting tool	
shank diameter	tolerance
12, 14, 16, & 18	h6 0,000/-0,011
20 & 25	h6 0,000/-0,013
32, 40, & 50	h6 0,000/-0,016

■ TT HT HPV MM-KM4X • Metric

order number	catalog number	D1	D2	D21	L1	L2	L9	V	stop screw	wrench size stop screw
4156182	KM4X100HPVTHT12095M	12	24	31,9	95	66	36	10	TTSS10014M	5mm
4156193	KM4X100HPVTHT14095M	14	27	33,9	95	66	36	10	TTSS10014M	5mm
4156194	KM4X100HPVTHT16100M	16	27	33,9	100	71	39	10	TTSS12014M	6mm
4156195	KM4X100HPVTHT18100M	18	33	41,9	100	71	39	10	TTSS12014M	6mm
4156196	KM4X100HPVTHT20105M	20	33	41,9	105	76	41	10	TTSS16014M	8mm
4156197	KM4X100HPVTHT25115M	25	44	52,9	115	86	47	10	TTSS16014M	8mm
4156198	KM4X100HPVTHT32120M	32	44	52,9	120	91	51	10	TTSS16014M	8mm



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■ TT HT HPV IN-KM4X • Inch

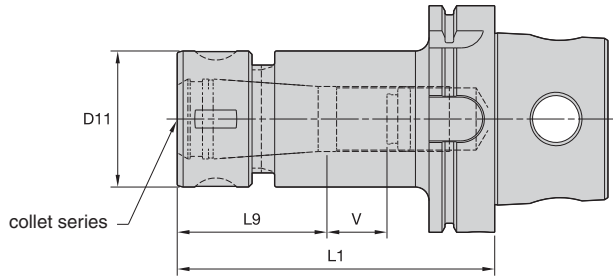


order number	catalog number	D1	D2	D21	D22	L1	L2	L9	L21	V	stop screw	wrench size stop screw
4156166	KM4X100HPVTHT050374	1/2	0.95	1.26	—	3.74	2.60	1.42	—	0.39	TTSS10014M	5mm
4156167	KM4X100HPVTHT050630	1/2	0.95	1.26	1.42	6.30	2.48	1.42	4.81	0.39	TTSS10014M	5mm
4156168	KM4X100HPVTHT062394	5/8	1.06	1.34	—	3.94	2.80	1.54	—	0.39	TTSS12014M	6mm
4156169	KM4X100HPVTHT062630	5/8	1.06	1.34	1.51	6.30	2.24	1.54	4.81	0.39	TTSS12014M	6mm
4156170	KM4X100HPVTHT075413	3/4	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156171	KM4X100HPVTHT075630	3/4	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156172	KM4X100HPVTHT088413	7/8	1.30	1.65	—	4.13	2.99	1.61	—	0.39	TTSS16014M	8mm
4156203	KM4X100HPVTHT088630	7/8	1.30	1.65	1.8	6.30	2.72	1.61	4.81	0.39	TTSS16014M	8mm
4156204	KM4X100HPVTHT100453	1	1.73	2.08	—	4.53	3.39	1.85	—	0.39	TTSS16014M	8mm
4156205	KM4X100HPVTHT100630	1	1.73	2.08	2.23	6.30	2.72	1.85	4.81	0.39	TTSS16014M	8mm
4156206	KM4X100HPVTHT125472	1 1/4	1.73	2.08	—	4.72	3.59	2.01	—	0.39	TTSS16014M	8mm
4156207	KM4X100HPVTHT125630	1 1/4	1.73	2.08	2.23	6.30	2.72	2.01	4.81	0.39	TTSS16014M	8mm
4156208	KM4X100HPVTHT150531	1 1/2	2.36	2.75	—	5.31	4.18	2.01	—	0.39	TTSS20014M	10mm

NOTE: Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.

Supplied with stop screw.

Optional M6~1.0P x 5 lg fine-balancing screw set (10 pieces) available. Order number: MS1276PKG. Must be ordered separately.



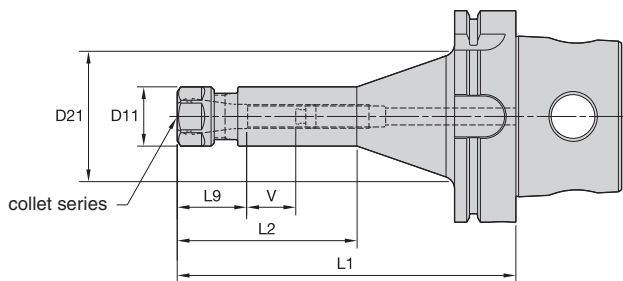
- Tremendous Grip (3:1 advantage).

TG collet series	Collet Capacity			
	mm		inch	
	min	max	min	max
TG50	1,1	13,5	1/32	17/32
TG75	2,6	20,0	3/64	3/4
TG100	2,6	25,5	5/64	1
TG150	11,6	40,0	23/64	1-1/2

■ TG Round-KM4X

order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4156445	KM4X100TG050105M	TG50	38	105	42	40	LNA050M	HSW34M	68	SS056041G	4mm & 5/32
4156446	KM4X100TG050160M	TG50	38	160	42	58	LNA050M	HSW34M	68	SS056041G	4mm & 5/32
4156447	KM4X100TG075120M	TG75	50	120	54	46	LNA075M	HSW45M	136	SS081041G	4mm & 5/32
4156448	KM4X100TG100140M	TG100	60	140	70	45	LNA100M	HSW58M	203	SS112041G	4mm & 5/32
4156449	KM4X100TG150165M	TG150	85	165	84	46	LNA150M	HSW80M	271	SS162062G	4mm & 5/32

NOTE: First, load collet into locknut. Before loading into the chuck body, insert cutting tool, then tighten to recommended tightening torque.
Supplied with locknut and stop screw.
Locknut wrench must be ordered separately.

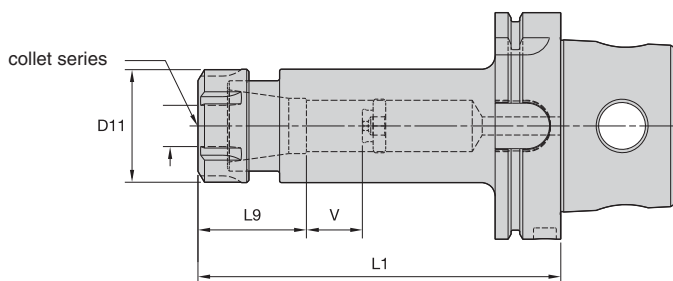


- Grip (2:1 advantage).

ER collet series	Collet Capacity		Collet Capacity	
	mm		inch	
	min	max	min	max
ER16	0,5	10,0	.02	.41
ER20	0,5	13,0	.02	.50
ER25	1,0	16,0	.04	.63
ER32	2,0	20,0	.08	.81
ER40	3,0	26,0	.12	1.00

■ ER Hex-KM4X

order number	catalog number	collet series	D11	D21	L1	L2	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4159999	KM4X100ER16100M	ER16	28	—	100	—	32	53	LNHSER16M	OEW25M	56	SS044038G	4mm & 5/32
4160000	KM4X100ER16160M	ER16	28	60	160	85	32	68	LNHSER16M	OEW25M	56	SS044038G	4mm & 5/32
4160001	KM4X100ER20100M	ER20	34	—	100	—	36	35	LNHSER20M	OEW30M	80	SS056041G	4mm & 5/32

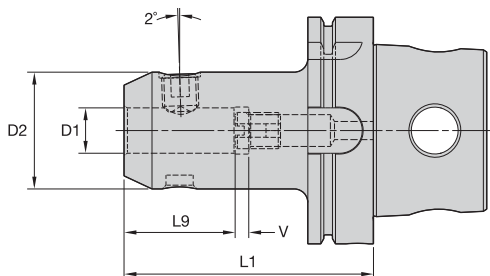


■ ER Round-KM4X



order number	catalog number	collet series	D11	L1	L9	V	locknut	locknut wrench	Nm	stop screw	wrench size stop screw
4160002	KM4X100ER25100M	ER25	42	100	40	33	LNSER25M	ER25WM	104	SS075041G	4mm & 5/32
4160043	KM4X100ER32100M	ER32	50	100	45	32	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
4160044	KM4X100ER32160M	ER32	50	160	45	92	LNSER32M	ER32WM	136	SS094041G	4mm & 5/32
4160045	KM4X100ER40120M	ER40	63	120	52	38	LNSER40M	ER40WM	175	SS112041G	4mm & 5/32



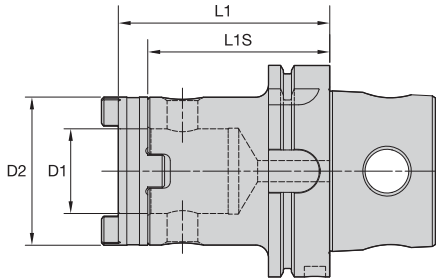
NOTE: First, load collet into locknut. Before loading into the chuck body, insert cutting tool, then tighten to recommended tightening torque. Supplied with locknut and stop screw. Locknut wrench must be ordered separately.



■ WN MM-KM4X • Metric

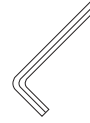
order number	catalog number	D1	D2	L1	L9	V	 clamp screw	wrench size clamp screw	Nm	 stop screw	wrench size stop screw
4160047	KM4X100WN06090M	6	24,5	90	30	10	SS03M012	3mm	7	571.060	2,5mm
4160048	KM4X100WN08090M	8	27,5	90	30	10	SS03M014	4mm	15	571.067	3mm
4160049	KM4X100WN10090M	10	34,5	90	35	10	SS03M018	5mm	25	571.068	4mm
4160050	KM4X100WN12100M	12	41,5	100	40	10	SS03M023	6mm	35	571.074	5mm
4160051	KM4X100WN14100M	14	43,5	100	40	10	SS03M023	6mm	35	571.074	5mm
4160052	KM4X100WN16100M	16	47,5	100	43	10	SS03M025	6mm	50	571.069	6mm
4160073	KM4X100WN18100M	18	49,5	100	43	10	SS03M025	6mm	50	571.069	6mm
4160074	KM4X100WN20110M	20	51,5	110	45	10	SS03M026	8mm	95	571.076	6mm
4160075	KM4X100WN25120M	25	64,5	120	50	10	SS03M027	10mm	135	571.077	6mm
4160076	KM4X100WN32120M	32	71,5	120	54	10	SS03M029	10mm	160	571.077	6mm

NOTE: Do not overtighten clamp screw; use torque recommendations above.
 Supplied with clamp screw and stop screw.
 Clamp screw and stop screw wrenches not included.



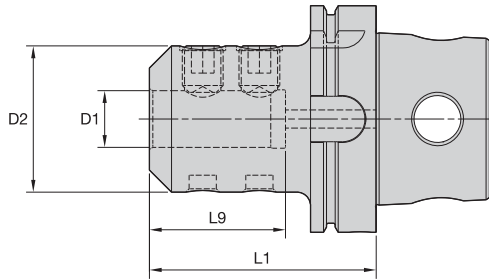
KM4X 100 Shank Tools

■ HTS-KM4X



order number	catalog number	D1	D2	L1	L1S	clamp screw	hex wrench	drive ring	ft. lbs.	kg
4159439	KM4X100HTS40085M	40	70	99	85	191.728	170.008	192.424	26	3.80
4159440	KM4X100HTS50090M	50	80	106	90	191.728	170.008	192.425	26	4.27

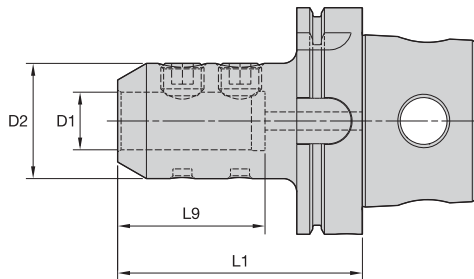
NOTE: Shipped with drive ring and clamping screw.
Assemble components using recommended torque values.



■ EM MM-KM4X • Metric



order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	Nm
4160510	KM4X100EM06080M	6	24,5	80	52	SS03M012	3mm	7
4160511	KM4X100EM08080M	8	27,5	80	52	SS03M014	4mm	15
4160512	KM4X100EM10080M	10	34,5	80	52	SS03M018	5mm	25
4160533	KM4X100EM12080M	12	41,5	80	49	SS03M023	6mm	35
4160534	KM4X100EM14080M	14	43,5	80	49	SS03M023	6mm	35
4160535	KM4X100EM16100M	16	47,5	100	53	SS03M025	6mm	50
4160536	KM4X100EM18100M	18	49,5	100	53	SS03M025	6mm	50
4160537	KM4X100EM20100M	20	51,5	100	55	SS03M026	8mm	95
4160538	KM4X100EM25100M	25	64,5	100	60	SS03M027	10mm	135
4160539	KM4X100EM32100M	32	71,5	100	65	SS03M029	10mm	160
4160540	KM4X100EM40120M	40	89,5	120	75	SS03M032	10mm	160
4160541	KM4X100EM50130M	50	99,5	130	85	SS03M030	12mm	200

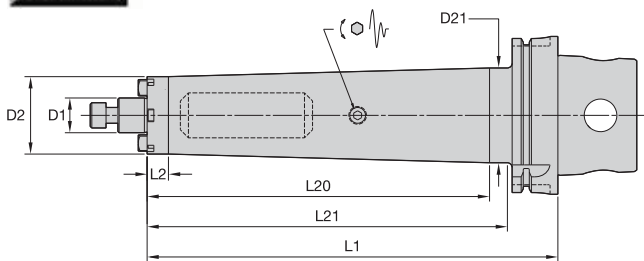


■ EM IN-KM4X • Inch



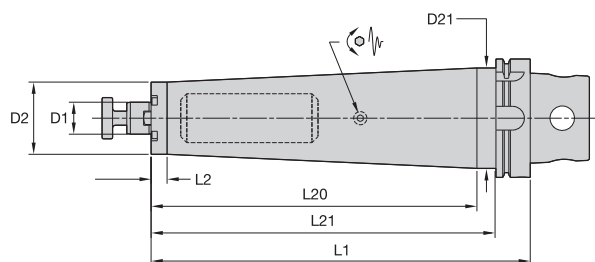
order number	catalog number	D1	D2	L1	L9	clamp screw	wrench size clamp screw	ft. lbs.
4160518	KM4X100EM025300	1/4	1.000	3.000	1.89	ELS025025	1/8	8
4160519	KM4X100EM038300	3/8	1.000	3.000	1.89	ELS038031	3/16	15
4160520	KM4X100EM050325	1/2	1.375	3.250	1.97	ELS044038	7/32	20
4160521	KM4X100EM062375	5/8	1.625	3.750	2.09	ELS056050	1/4	40
4160522	KM4X100EM075375	3/4	1.750	3.750	2.22	ELS062050	5/16	70
4160573	KM4X100EM100425	1	2.000	4.250	2.46	ELS075056	3/8	110
4160574	KM4X100EM125425	1 1/4	2.500	4.250	2.51	ELS075062	3/8	110
4160575	KM4X100EM150450	1 1/2	2.750	4.500	2.93	ELS075069	3/8	110
4160576	KM4X100EM200550	2	3.750	5.500	3.53	ELS100088	1/2	150
4160577	KM4X100EM250575	2 1/2	4.188	5.750	3.63	ELS100088	1/2	150

NOTE: Do not overtighten clamp screw; use torque recommendations above.
Supplied with clamp screw.
Clamp screw wrench not included.



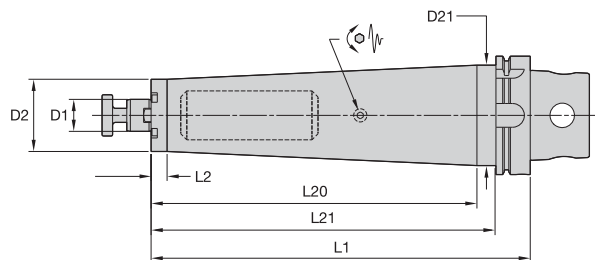
■ SMC TD CAP MM-KM4X • Metric

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	wrench size lock screw
4169583	KM4X100TDSMC22260M	22	49	65	260	13,5	215	231	MS-1234	8mm



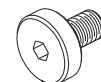
■ SMC TD Lock MM-KM4X • Metric

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	lock screw	wrench size lock screw
4169584	KM4X100TDSMC27320M	27	61	85	320	13,5	275	291	KLSS27M	10mm
4169585	KM4X100TDSMC32330M	32	78	—	330	299	—	—	KLSS32M	14mm

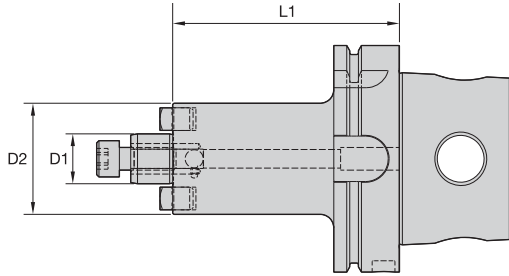


■ SMC TD Lock IN-KM4X • Inch

order number	catalog number	D1	D2	D21	L1	L2	L20	L21	clamp screw	wrench size clamp screw
4169586	KM4X100TDSMC0751050	3/4	1.75	2.56	10.5	.53	8.73	9.24	KLS07	1/4
4169587	KM4X100TDSMC1001250	1	2.75	3.33	12.5	.53	10.73	11.36	KLS10	5/16
4169588	KM4X100TDSMC1251300	1 1/4	2.88	3.33	13	.63	11.23	11.86	KLS12	5/16

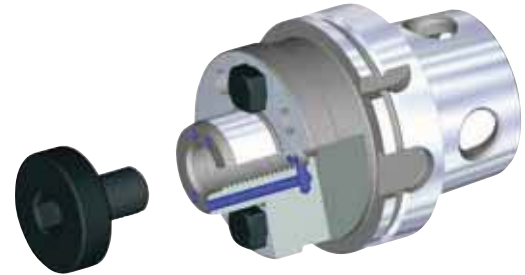
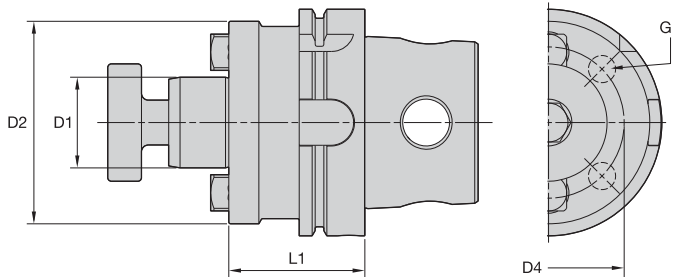


NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Lock screw wrench not included.



■ SMC CAP MM-KM4X • Metric

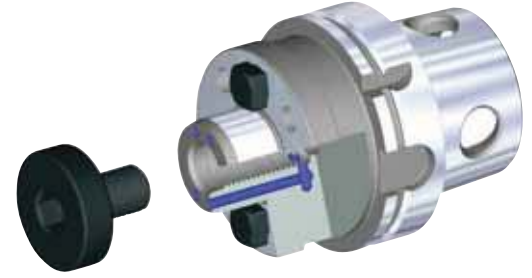
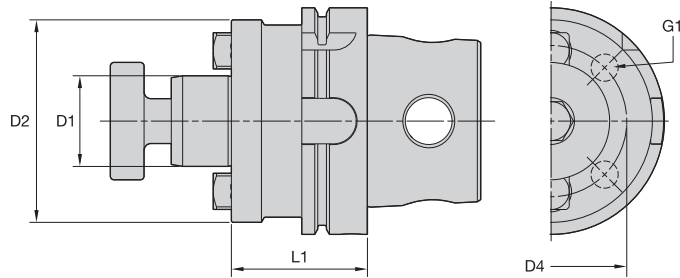
order number	catalog number	D1	D2	L1	lock screw	wrench size lock screw
4160335	KM4X100SMC22050M	22	49	50	MS1234	8mm
4160337	KM4X100SMC22100M	22	49	100	MS1234	8mm
4160338	KM4X100SMC22160M	22	49	160	MS1234	8mm



■ SMC Lock MM-KM4X • Metric

order number	catalog number	D1	D2	D4	G1	L1	lock screw	wrench size lock screw
4160340	KM4X100SMC27050M	27	60	—	—	50	KLSS27M	10mm
4160341	KM4X100SMC27100M	27	60	—	—	100	KLSS27M	10mm
4160342	KM4X100SMC27160M	27	60	—	—	160	KLSS27M	10mm
4160343	KM4X100SMC32050M	32	78	—	—	50	KLSS32M	14mm
4160344	KM4X100SMC32100M	32	78	—	—	100	KLSS32M	14mm
4160345	KM4X100SMC32160M	32	78	—	—	160	KLSS32M	14mm
4160346	KM4X100SMC40060M	40	89	67	M12x1,75	60	KLSS40M	17mm
4160347	KM4X100SMC40100M	40	89	67	M12x1,75	100	KLSS40M	17mm
4160348	KM4X100SMC40160M	40	89	67	M12x1,75	160	KLSS40M	17mm
4160350	KM4X100SMC50070M	50	98	—	—	70	KLS50M	SMW50M
4160351	KM4X100SMC50100M	50	98	—	—	100	KLS50M	SMW50M
4160352	KM4X100SMC50160M	50	98	—	—	160	KLS50M	SMW50M
4160353	KM4X100SMC60070M	60	129	102	M16x2,0	70	—	—
4160354	KM4X100SMC60100M	60	129	102	M16x2,0	100	—	—
4160355	KM4X100SMC60160M	60	129	102	M16x2,0	160	—	—





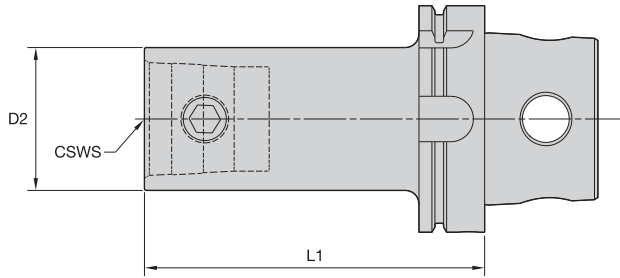
KM4X 100 Shank Tools

■ SMC Lock IN-KM4X • Inch



order number	catalog number	D1	D2	D4	G1	L1	lock screw	wrench size lock screw
4160286	KM4X100SMC075400	3/4	1.75	—	—	4.00	KLS07	1/4
4160287	KM4X100SM2C075400	3/4	1.46	—	—	4.00	KLS07	1/4
4160289	KM4X100SMC075600	3/4	1.75	—	—	6.00	KLS07	1/4
4160290	KM4X100SM2C075600	3/4	1.46	—	—	6.00	KLS07	1/4
4160291	KM4X100SMC100400	1	2.75	—	—	4.00	KLS10	5/16
4160292	KM4X100SM2C100400	1	2.19	—	—	4.00	KLS10	5/16
4160313	KM4X100SMC100600	1	2.75	—	—	6.00	KLS10	5/16
4160314	KM4X100SM2C100600	1	2.19	—	—	6.00	KLS10	5/16
4160315	KM4X100SMC125400	1 1/4	2.88	—	—	4.00	KLS12	5/16
4160316	KM4X100SMC125600	1 1/4	2.88	—	—	6.00	KLS12	5/16
4160317	KM4X100SMC150400	1 1/2	3.81	—	—	4.00	KLS15	3/8
4160318	KM4X100SMC150600	1 1/2	3.81	—	—	6.00	KLS15	3/8
4160319	KM4X100SMC200400	2	4.88	4.00	5/8 - 11	4.00	KLS20	9/16
4160320	KM4X100SMC200600	2	4.88	4.00	5/8 - 11	6.00	KLS20	9/16
4160321	KM4X100SMC250400	2 1/2	4.88	4.00	5/8 - 11	4.00	—	1/2
4160322	KM4X100SMC250600	2 1/2	4.88	4.00	5/8 - 11	6.00	—	1/2

NOTE: Do not overtighten lock screw; use torque recommendations above.
 Supplied with lock screw and drive keys.
 Lock screw wrench not included.



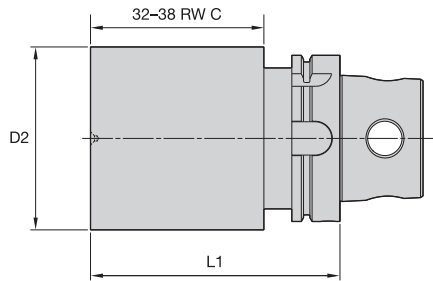
■ **KM-KM4X**

order number	catalog number	CSWS	D2	L1	spare parts package	wrench size actuation screw	Nm
4161856	KM4X100KM32075M	32	32	75	KM32PKGS	5mm	8 - 11
4161858	KM4X100KM40080M	40	40	80	KM40PKGS	6mm	12 - 16
4161859	KM4X100KM40100M	40	40	100	KM40PKGS	6mm	12 - 16
4161860	KM4X100KM40150M	40	40	150	KM40PKGS	6mm	12 - 16
4161861	KM4X100KM50100M	50	50	100	KM50PKGS	10mm	27 - 34
4161862	KM4X100KM50150M	50	50	150	KM50PKGS	10mm	27 - 34
4161863	KM4X100KM50200M	50	50	200	KM50PKGS	10mm	27 - 34
4161864	KM4X100KM63100M	63	63	100	KM63PKGS	12mm	47 - 54
4161865	KM4X100KM63150M	63	63	150	KM63PKGS	12mm	47 - 54
4161866	KM4X100KM63200M	63	63	200	KM63PKGS	12mm	47 - 54
4161867	KM4X100KM80100M	80	80	100	KM80PKGS	14mm	79 - 85
4161868	KM4X100KM80150M	80	80	150	KM80PKGS	14mm	79 - 85
4161869	KM4X100KM80200M	80	80	200	KM80PKGS	14mm	79 - 85

NOTE: Do not overtorque actuation screw; use torque recommendations above.
Supplied with KM actuation mechanism.



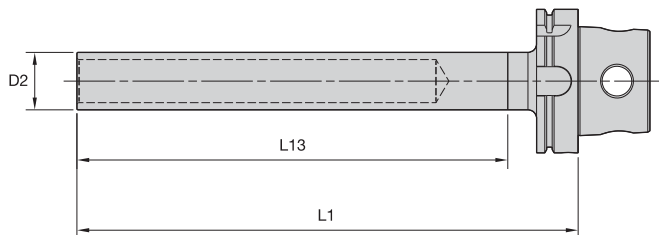
KM4X 100 Shank Tools



- Machinable front 32–38 RW C.

■ **BB-KM4X**

order number	catalog number	D2	L1
4160571	KM4X100BN080150M	80	150
4160572	KM4X100BN110150M	110	150
4160613	KM4X100BN130200M	130	200



- For acceptance testing on machine tool spindles.
- 0,003mm (.0001") maximum TIR.
- Precision ground.

■ **GB-KM4X**

order number	catalog number	D2	L1	L13
4160529	KM4X100GB40349M	40	349	330