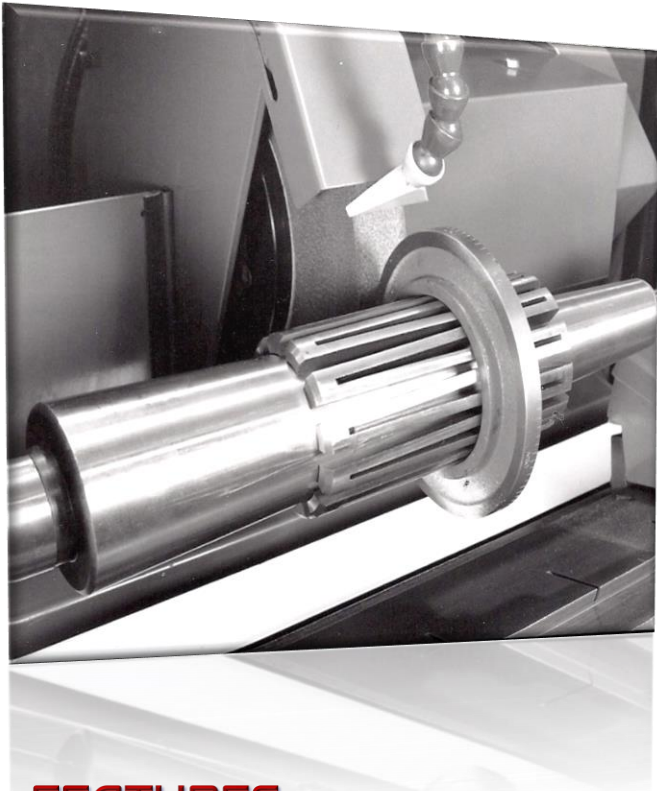


K.O.LEE

EXPANDING MANDRELS MILLING - GRINDING - TURNING



K.O.LEE's Expanding Mandrels are a time-tested tool for grinding, turning and milling operations. Used in production lines, tool rooms and home work shops, these mandrels will hold work from thin sleeves and bushings to heavy casting and forgings. **K.O.LEE's** mandrels are sized to fit 3/8 to 5-1/2 inch (9.5 to 139.7mm) holes.

There is a **K.O.LEE** expanding mandrel set for every shop. Any mandrel may be purchased separately for production operations. A full set of **K.O.LEE** expanding mandrels will eliminate making and stocking straight arbors for every job.

FEATURES

A Large Bearing Surface on all sleeves provides a positive grip on heavy jobs... prevents slip and chatter and holds thin sleeves and bushings without distortion. Work can be held in any position on sleeve and may overhang on either or both ends for facing operations.

Precision Ground arbors and sleeves provide accuracy of .001 inch (.025mm) or better. Large bearing surfaces minimize wear.

Auxiliary Centers are a K.O.LEE feature, providing a large bearing surface and oil reservoir. The auxiliary centers also prevent damage to arbor center, prolong arbor life and are inexpensive to replace. Available at extra cost.



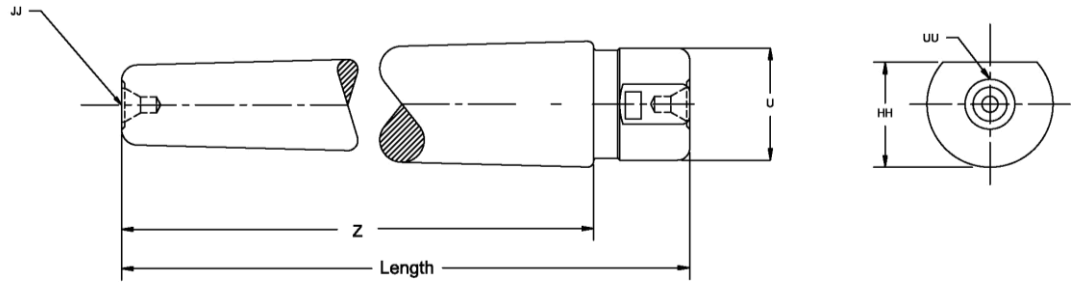
K.O.LEE



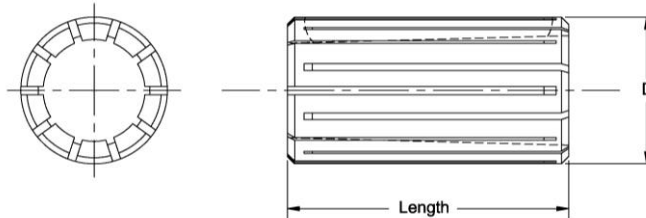
EXPANDING MANDRELS

MILLING - GRINDING - TURNING

SPECIFICATIONS



Arbor Part Number	Capacity	Length	Z	U	HH	JJ	UU	Material
KM0A	.375 to .500	4.50	3.875	0.375	0.363	# 2	13 Bell	6150
KM1A	.500 to .687	5.75	5.000	0.500	0.473	12 Bell	14 Bell	6150
KM2A	.686 to 1.000	9.25	8.250	0.750	0.709	13 Bell	15 Bell	6150
KM3A	1.000 to 1.562	12.25	11.000	1.125	1.059	13 Bell	16 Bell	6150
KM4A	1.562 to 2.500	16.81	15.312	1.500	1.409	15 Bell	17 Bell	6150
KM46A	2.0312 to 2.500	15.50	14.000	1.750	1.642	17 Bell	17 Bell	6150
KM5A	2.500 to 3.250	17.75	16.000	1.750	1.642	17 Bell	18 Bell	6150
KM5-6A	3.250 to 4.750	18.19	16.000	2.000	1.876	18 Bell	18 Bell	6150
KM6A	4.750 to 5.500	18.25	16.000	2.500	2.342	18 Bell	18 Bell	6150
KM25A	0.687 to 0.843	8.25	7.250	0.687	0.660	13 Bell	15 Bell	6150
KM26A	0.843 to 1.000	8.25	7.250	0.750	0.709	14 Bell	15 Bell	6150
KM35A	1.000 to 1.281	12.25	11.000	0.938	0.879	15 Bell	15 Bell	6150
KM36A	1.281 to 1.562	12.25	11.000	1.125	1.059	16 Bell	16 Bell	6150
KM45A	1.562 to 2.032	12.25	14.000	1.500	1.409	16 Bell	17 Bell	6150



Sleeve Part Number	Capacity	Length	D (Free Size)	Number of Slots	Slot Size	Material
KM0S	.375 to .500	1.250	0.422	12	0.047	6150
KM1S	.500 to .687	1.500	0.578	14	0.062	6150
KM2S	.686 to 1.000	2.500	0.797	16	0.062	6150
KM3S	1.000 to 1.562	3.000	1.125	22	0.062	6150
KM4S	1.562 to 2.500	4.312	1.844	22	0.094	6150
KM5S	2.500 to 4.000	7.000	2.890	24	0.125	6150
KM6S	4.000 to 5.500	7.000	4.875	32	0.187	6150
KM46S	2.032 to 2.500	4.250	2.203	20	0.125	6150
KM25S	0.687 to 0.843	2.250	0.796	16	0.063	6150
KM26S	0.843 to 1.000	2.500	0.937	16	0.063	6150
KM35S	1.000 to 1.281	3.250	1.125	16	0.094	6150
KM36S	1.281 to 1.562	3.250	1.375	16	0.125	6150
KM45S	1.562 to 2.032	4.250	1.687	20	0.094	6150





EXPANDING MANDRELS

MILLING - GRINDING - TURNING

	Complete Mandrel and Sleeve Sets			Arbors Only			Sleeves Only			
	Part Number	Range		Part Number	Length		Part Number	Length		
		Inch	Millimeter		Inch	Millimeter		Inch	Millimeter	
GENERAL PURPOSE	KM0	3/8" to 1/2"	9.53 to 12.7mm	KM0A	4-1/2"	114.3mm	KM0S	1-1/4"	31.75mm	
	KM1	1/2" to 11/16"	12.7 to 17.46mm	KM1A	5-3/4"	146.05mm	KM1S	1-1/2"	38.1mm	
	KM2	11/16" to 1"	17.46 to 25.4mm	KM2A	9-1/4"	234.95mm	KM2S	2-1/2"	63.5mm	
	KM3	1" to 1-9/16"	25.4 to 39.68mm	KM3A	12-1/4"	311.15mm	KM3S	3"	76.2mm	
	KM4	1-9/16" to 2-1/2"	39.68 to 63.5mm	KM4A	16-3/4"	425.45mm	KM4S	4-1/4"	107.95mm	
HEAVY DUTY	KM25	11/16" to 27/32"	17.46 to 21.43mm	KM25A	8-1/4"	209.55mm	KM25S	2-1/4"	57.15mm	
	KM26	27/32" to 1"	21.43 to 25.4mm	KM26A	8-1/4"	209.55mm	KM26S	2-1/2"	63.5mm	
	KM35	1" to 1-9/32"	25.4 to 32.53mm	KM35A	12-1/4"	311.15mm	KM35S	3-1/4"	82.55mm	
	KM36	1-9/32" to 1-9/16"	32.53 to 39.69mm	KM36A	12-1/4"	311.15mm	KM36S	3-1/4"	82.55mm	
	KM45	1-9/16" to 2-1/32"	39.69 to 51.58mm	KM45A	15-1/2"	393.7mm	KM45S	4-1/4"	107.95mm	
	KM46	2-1/32" to 2-1/2"	51.58 to 63.5mm	KM46A	15-1/2"	393.7mm	KM46S	4-1/4"	107.95mm	
	KM5B	2-1/2" to 3-1/4"	63.5 to 82.55mm	KM5A	17-3/4"	450.85mm	KM5S	7"	177.8mm	
	KM5C	3-1/4" to 4"	82.55 to 101.6mm	KM5-6A	18"	457.2mm	KM5S	7"	177.8mm	
	KM55	3-1/4" to 4-3/4"	82.55 to 120.65mm	KM5-6A	18"	457.2mm	KM5S	7"	177.8mm	
	KM6B	4" to 4-3/4"	101.6 to 120.65mm	KM5-6A	18"	457.2mm	KM6S	7"	177.8mm	
	KM6C	4-3/4" to 5-1/2"	120.65 to 139.7mm	KM6A	18-1/4"	463.55mm	KM6S	7"	177.8mm	
	KM5	2-1/2" to 4"	63.5 to 101.6mm	KM5A	17-3/4"	450.85mm	KM5S	7"	177.8mm	
	KM6	4" to 5-1/2"	101.6 to 139.7mm	KM5-6A	18"	457.2mm	KM6S	7"	177.8mm	
	KM7	2-1/2" to 5-1/2"	63.5 to 139.7mm	KM6A	18-1/4"	463.55mm	KM6S	7"	177.8mm	
	GENERAL PURPOSE	KM90	3/8" to 1"	9.53 to 25.4mm	KM0A	4-1/2"	114.3mm	KM0S	1-1/4"	31.75mm
KM100		3/8" to 1-9/16"	9.53 to 39.68mm	KM1A	5-3/4"	146.05mm	KM1S	1-1/2"	38.1mm	
				KM2A	9-1/4"	234.95mm	KM2S	2-1/2"	63.5mm	
				KM3A	12-1/4"	311.15mm	KM3S	3"	76.2mm	
KM100X		1/2" to 1-9/16"	12.7 to 39.68mm	KM0A	4-1/2"	114.3mm	KM0S	1-1/4"	31.75mm	
				KM1A	5-3/4"	146.05mm	KM1S	1-1/2"	38.1mm	
				KM2A	9-1/4"	234.95mm	KM2S	2-1/2"	63.5mm	
KM101		3/8" to 2-1/2"	9.53 to 63.5mm	KM3A	12-1/4"	311.15mm	KM3S	3"	76.2mm	
				KM0A	4-1/2"	114.3mm	KM0S	1-1/4"	31.75mm	
				KM1A	5-3/4"	146.05mm	KM1S	1-1/2"	38.1mm	
HEAVY DUTY		KM200	3/8" to 1"	9.53 to 25.4mm	KM2A	9-1/4"	234.95mm	KM2S	2-1/2"	63.5mm
					KM3A	12-1/4"	311.15mm	KM3S	3"	76.2mm
	KM4A				16-3/4"	425.45mm	KM4S	4-1/4"	107.95mm	
	KM200X	1/2" to 1-9/16"	12.7 to 39.68mm	KM0A	4-1/2"	114.3mm	KM0S	1-1/4"	31.75mm	
				KM1A	5-3/4"	146.05mm	KM1S	1-1/2"	38.1mm	
				KM2A	9-1/4"	234.95mm	KM2S	2-1/2"	63.5mm	
	KM201	1" to 1-9/16"	25.4 to 39.68mm	KM25A	8-1/4"	209.55mm	KM25S	2-1/4"	57.1mm	
				KM26A	8-1/4"	209.55mm	KM26S	2-1/2"	63.5mm	
				KM1A	5-3/4"	146.05mm	KM1S	1-1/2"	38.1mm	
	KM202	1-9/16" to 2-1/2"	39.68 to 63.5mm	KM2A	9-1/4"	234.95mm	KM2S	2-1/2"	63.5mm	
				KM35A	12-1/4"	311.15mm	KM35S	3-1/4"	82.55mm	
				KM36A	12-1/4"	311.15mm	KM36S	3-1/4"	82.55mm	
	KM202	1-9/16" to 2-1/2"	39.68 to 63.5mm	KM3A	12-1/4"	311.15mm	KM3S	3"	76.2mm	
				KM45A	15-1/2"	393.7mm	KM45S	4-1/4"	107.95mm	
				KM46A	15-1/2"	393.7mm	KM46S	4-1/4"	107.95mm	