



Precision Lock Nuts · Ground Nuts · Hydraulic Nuts



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DRIVE

Beijing Yuchen Ruixiang Precision Machinery Co., Ltd.

Beijing Yuchen Ruixiang Precision Machinery Co., Ltd. was founded in 2009 and is located in Fengtai District, Beijing. Since its establishment, the company has always focused on the production and research and development of high-quality precision lock nuts, grinding nuts, hydraulic nuts, grease-driven nuts, non-standard custom nuts, foundation bolts, guide rail pressure blocks and other products. It is a comprehensive enterprise integrating research and development, production and sales.

The company has two production bases in Baoding, Hebei and Wuhu, Anhui respectively. The self-built factory building covers an area of 15,000 square meters, with more than 130 employees and more than 100 sets of modern production equipment, including CNC lathes, machining centers, internal and external cylindrical grinders, vertical lathes, special equipment and thread testing equipment. In the past decade or so, the company has continuously promoted the innovation of technical processes, continuously improved the control of quality processes, and fully ensured the effective operation of the quality system.

Its products are widely used in many fields such as high-end CNC machine tools, precision spindles, torque motor turntables, photovoltaic equipment, compressors, wind power generation, high-speed rail EMUs, shipbuilding heavy industry, aerospace, robots, and automated equipment.

The company adheres to the tenet of high quality, quick response, excellent service and high cost performance, and is committed to meeting the diverse needs of different customer groups and providing customers with solid and reliable technical service support.



This sample was compiled extremely carefully and all data have been checked. However, our company does not assume any responsibility for incorrect or incomplete data.

The company reserves the right to change the product data without prior notice.

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Note: The commonly used specification material in nut products is 42CrMo, and a small number of models are S45C, users who have special needs for materials please indicate in the order contract.

# Precision lock nuts

## A variety of different designs

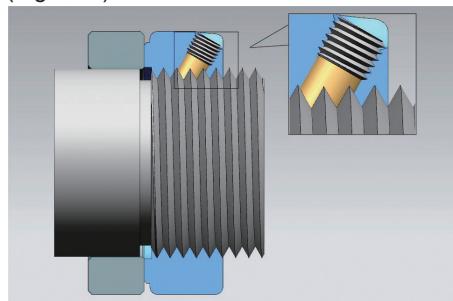
The locking device for axial positioning of precision bearings on the shaft requires extremely high manufacturing accuracy, and conventional lock nuts are not fully applicable to precision bearings. To meet the high standard requirements of different industry applications, Beijing Yuchen has developed and produced a variety of precision lock nuts.

List two commonly used precision lock nuts with locking pins: YCF type and YCKMT type. With these two types of lock nuts, bearings and other components can be easily and reliably axially positioned on the shaft and accuracy can be ensured. The uniqueness of these two types of nuts lies in the three uniformly distributed copper column locking pins on the circumference. These pins are pressed onto the shaft thread by hexagon socket head cap screws to prevent the nut from loosening.

Their design, installation and disassembly are relatively simple, and no additional locking washers or grooves are required in the shaft. The angle formed by the locking pins and the hexagon socket head cap screws and the axis is the same as the threaded surface. The ends of the locking pins and the threads are processed in the same process and have the same precision thread profile. The nut is locked in place by the friction between the locking pins and the shaft thread and the adhesion friction between the threaded surfaces, so it does not bear the axial load acting on the nut. When the nut is locked, the threaded surface does not relieve the axial load and the nut does not deform (Figure 1). Another advantage of the YCF type and YCKMT type is that they are adjustable. The three uniformly distributed locking pins can precisely position the nut to make the nut perpendicular to the shaft. The locking pins can also be used to adjust the inaccuracies or deviations of other components installed on the shaft (Figure 2).

The YCF type and YCKMT type nuts can still maintain precision after being correctly disassembled and assembled many times.

(Figure 3) shows the correct installation of the YCF type lock nut using a wrench.



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Fig. 1: The locking pin and hex screw are at the same angle to the axis as the thread face

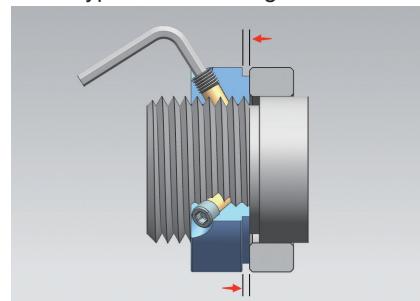


Fig. 2: Adjustable thread end face for inaccuracies or deviations from other components on the shaft

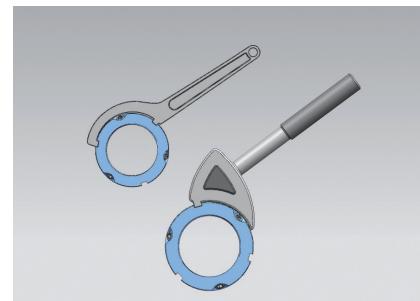


Fig. 3: Proper installation of the YCF type lock nut using a wrench

## Order examples and order codes

Locking method	YCK	M	90 × 2.0	L
<p>YCF Teeth Belly Locking YCR Radial Locking YCR-3 Radial Locking YCA Axial Locking YCK Tightening Locking YCAK Morphing Locking YCZ Taper Locking DN Radial Locking YCKMT Teeth Belly Locking YCKMTA Teeth Belly Locking YCG Steel Sheet Locking YCE Radial Locking YCKMK Wedge Locking YCMR Radial Locking AN Precision Nut</p> <p>Nut model</p> <p>Feature code</p> <p>Diameter</p> <p>Pitch</p> <p>Left-handed (right-handed without labeling)</p>				

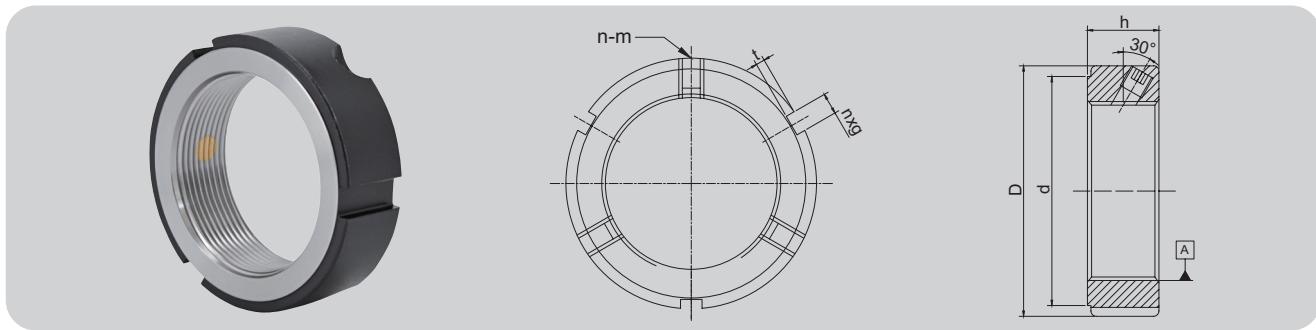


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Thread	Axial Load Static kN	Loosening Torque Nm			
		YCF	YCR	YCA	YCK
M8	30	—	17	—	—
M10	35	—	18	—	—
M12	40	—	19	—	57
M15	60	—	20	—	72
M17	80	27	21	25	90
M20	90	28	24	26	99
M25	130	30	26	28	101
M30	160	32	28	29	102
M35	190	39	34	37	109
M40	210	46	36	42	110
M45	240	61	56	59	127
M50	300	70	63	66	137
M55	340	88	68	74	166
M60	380	98	96	81	205
M65	460	127	112	88	254
M70	490	147	137	96	313
M75	520	152	145	103	382
M80	620	156	149	113	460
M85	650	176	168	128	549
M90	680	186	178	137	656
M95	710	201	193	152	745
M100	740	220	210	172	833
M105	770	236	215	186	957
M110	800	252	230	206	1127
M115	830	268	250	221	1242
M120	860	279	264	235	1323
M125	890	289	274	250	1389
M130	920	313	294	265	1421
M135	950	352	328	304	1576
M140	980	392	372	324	1610
M145	1010	436	402	353	1680
M150	1040	480	421	392	1710
M155	1070	519	460	422	1850
M160	1100	563	509	461	1931
M165	1130	598	529	495	1989
M170	1160	647	558	520	2052
M180	1220	686	558	559	2214
M190	1280	735	627	598	2596
M200	1340	794	666	637	2731



## Tooth Belly Lock Nut YCF Series



The YCF type lock nut is designed with the locking copper at a 30° angle to the thread and does not bear the axial load acting on the thread. When the nut is locked, the threaded surface does not relieve the axial load and the nut does not deform. The three equally spaced locking coppers can be used to adjust the deviations of other components installed on the shaft. Since the locking copper does not deform, the YCF type nut can still maintain precision after being correctly disassembled and assembled many times.

Material: 42CrMo Hardness: HRC 28°-32° Thread Precision: ISO 4H

End Face Runout: M12-M200 0.002-0.005mm M210-M450 0.005-0.008mm

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Thread	D	h	d	n×g	t	n-m	Max.Nm
YCF M12×1.5	30	14	25	3×4	2	3-M6	8
YCF M14×1.5	30	14	25	3×4	2	3-M6	8
YCF M15×1.0	30	14	25	3×4	2	3-M6	8
YCF M16×1.5	30	14	25	3×4	2	3-M6	8
YCF M17×1.0	32	16	27	3×5	2	3-M6	8
YCF M18×1.5	32	16	27	3×5	2	3-M6	8
YCF M20×1.0	38	16	33	3×5	2	3-M6	8
YCF M20×1.5	38	16	33	3×5	2	3-M6	8
YCF M22×1.5	38	16	33	3×5	2	3-M6	8
YCF M24×1.5	38	18	33	3×5	2	3-M6	8
YCF M24×1.5	40	18	35	3×5	2	3-M8	18
YCF M25×1.5	38	18	33	3×5	2	3-M6	8
YCF M25×1.5	40	18	35	3×5	2	3-M8	18
YCF M27×1.5	40	18	35	3×5	2	3-M6	8
YCF M28×1.5	42	18	37	3×5	2	3-M6	8
YCF M30×1.5	45	18	40	3×5	2	3-M6	8
YCF M32×1.5	47	18	42	3×5	2	3-M6	8
YCF M33×1.5	50	18	45	3×5	2	3-M6	8
YCF M35×1.5	52	18	46	3×6	2.5	3-M8	18
YCF M36×1.5	52	18	46	3×6	2.5	3-M8	18
YCF M39×1.5	58	20	52	3×6	2.5	3-M8	18
YCF M40×1.5	58	20	52	3×6	2.5	3-M8	18
YCF M42×1.5	62	20	56	3×6	2.5	3-M8	18
YCF M45×1.5	65	20	59	3×6	2.5	3-M8	18
YCF M48×1.5	70	20	64	3×6	2.5	3-M8	18

YCF M10 model optional YCKMT M10 model



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## Tooth Belly Lock Nut YCF Series

Thread	D	h	d	n×g	t	n-m	Max.Nm
YCF M50×1.5	70	20	64	3×6	2.5	3-M8	18
YCF M52×1.5	73	22	66	3×8	3	3-M8	18
YCF M55×1.5	75	22	68	3×8	3	3-M8	18
YCF M55×2.0	75	22	68	3×8	3	3-M8	18
YCF M56×1.5	75	22	68	3×8	3	3-M8	18
YCF M56×2.0	75	22	68	3×8	3	3-M8	18
YCF M58×1.5	80	22	73	3×8	3	3-M8	18
YCF M60×2.0	80	22	73	3×8	3	3-M8	18
YCF M64×1.5	85	22	78	3×8	3	3-M8	18
YCF M64×2.0	85	22	78	3×8	3	3-M8	18
YCF M65×2.0	85	22	78	3×8	3	3-M8	18
YCF M68×2.0	92	24	84	3×8	3.5	3-M8	18
YCF M70×2.0	92	24	84	3×8	3.5	3-M8	18
YCF M72×2.0	94	24	86	3×8	3.5	3-M8	18
YCF M75×2.0	98	24	90	3×8	3.5	3-M8	18
YCF M76×2.0	98	24	90	3×8	3.5	3-M8	18
YCF M80×2.0	105	24	96	3×8	3.5	3-M8	18
YCF M85×2.0	110	24	102	6×8	3.5	3-M8	18
YCF M90×2.0	120	26	108	6×10	4	3-M8	18
YCF M95×2.0	125	26	113	6×10	4	3-M8	18
YCF M100×2.0	130	26	118	6×10	4	3-M8	18
YCF M105×2.0	140	28	125	6×10	4	3-M10	35
YCF M110×2.0	145	28	132	6×10	4	3-M10	35
YCF M115×2.0	150	28	137	6×10	4	3-M10	35
YCF M120×2.0	155	30	142	6×12	5	3-M10	35
YCF M125×2.0	160	30	147	6×12	5	3-M10	35
YCF M130×2.0	165	30	152	6×12	5	3-M10	35
YCF M135×2.0	175	32	160	6×12	5	3-M10	35
YCF M140×2.0	178	32	165	6×12	5	3-M10	35
YCF M145×2.0	190	32	175	6×12	5	3-M10	35
YCF M150×2.0	195	32	180	6×12	5	3-M10	35
YCF M155×3.0	200	34	180	6×14	6	3-M10	35
YCF M160×3.0	210	34	190	6×14	6	3-M10	35
YCF M165×3.0	210	34	190	6×14	6	3-M10	35
YCF M170×3.0	220	34	200	6×14	6	3-M10	35
YCF M180×3.0	230	36	205	6×16	7	3-M12	60

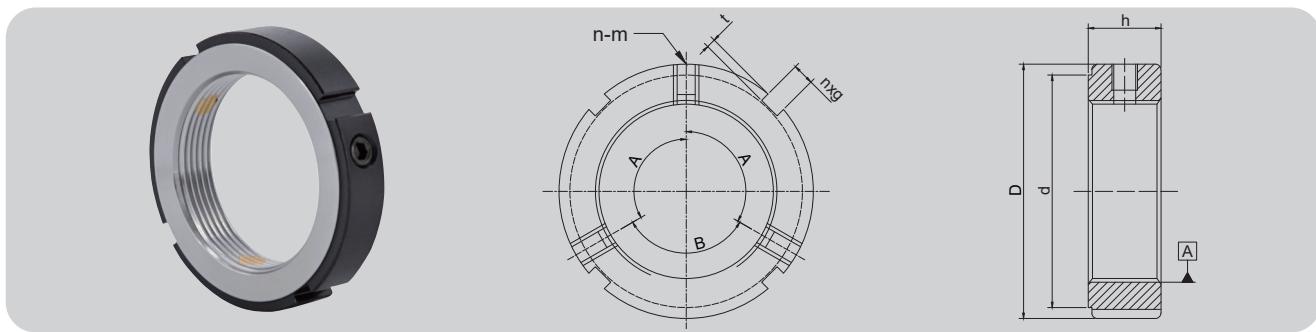
## Tooth Belly Lock Nut YCF Series

Thread	D	h	d	n×g	t	n-m	Max.Nm
YCF M190×3.0	240	36	215	6×16	7	3-M12	60
YCF M195×3.0	240	36	215	6×16	7	3-M12	60
YCF M200×3.0	250	38	225	6×16	7	3-M12	60
YCF M210×3.0	260	38	245	6×16	7	3-M12	60
YCF M220×3.0	270	38	255	6×16	7	3-M12	60
YCF M230×3.0	280	40	258	6×16	9	3-M12	60
YCF M240×3.0	290	40	268	6×16	9	3-M12	60
YCF M250×3.0	300	40	278	6×16	9	3-M12	60
YCF M260×4.0	310	40	288	6×20	10	3-M14	100
YCF M270×4.0	320	40	298	6×20	10	3-M14	100
YCF M280×4.0	330	40	308	6×20	10	3-M14	100
YCF M290×4.0	340	42	315	6×22	11	3-M14	100
YCF M300×4.0	350	42	325	6×22	11	3-M14	100
YCF M310×4.0	365	42	340	6×24	12	3-M14	100
YCF M320×4.0	375	42	350	6×24	12	3-M14	100
YCF M330×4.0	385	42	360	6×24	12	3-M14	100
YCF M340×4.0	395	42	370	6×24	12	3-M14	100
YCF M350×4.0	405	42	380	6×24	12	3-M14	100
YCF M360×4.0	415	44	388	6×26	13	3-M16	150
YCF M370×4.0	425	44	398	6×26	13	3-M16	150
YCF M380×4.0	435	44	408	6×26	13	3-M16	150
YCF M390×4.0	445	44	418	6×26	13	3-M16	150
YCF M400×4.0	465	44	438	6×30	13	3-M16	150
YCF M410×4.0	475	46	444	6×30	15	3-M16	150
YCF M420×4.0	485	46	454	6×30	15	3-M16	150
YCF M430×4.0	495	46	464	6×30	15	3-M16	150
YCF M440×4.0	505	46	474	6×30	15	3-M16	150
YCF M450×4.0	515	46	484	6×30	15	3-M16	150

Non-standard nuts can be customized

1Nm=10.2kgf.cm=0.73lb.ft

## Radial Lock Nut With Four Slots YCR Series



The locking method of the YCR type lock nut is radial locking. It is relatively thin and is suitable for the installation environment where there are certain limitations on the nut thickness space and other products cannot be used.

Material: 42CrMo Hardness: HRC 28° - 32° Thread Precision: ISO 4H

End Face Runout: M5 - M200 0.002 - 0.005mm M210 - M450 0.005 - 0.008mm

Thread	D	h	n×g	t	d	n-m	Max.Nm
YCR M5×0.5	16	8	4×3	2	11	2-M4	3.5
YCR M6×0.5	16	8	4×3	2	11	2-M4	3.5
YCR M8×0.75	16	8	4×3	2	11	2-M4	3.5
YCR M8×1.0	16	8	4×3	2	11	2-M4	3.5
YCR M9×0.75	18	8	4×3	2	13	2-M4	3.5
YCR M10×0.75	18	8	4×3	2	13	2-M4	3.5
YCR M10×1.0	18	8	4×3	2	13	2-M4	3.5
YCR M12×1.0	20	8	4×3	2	16	2-M4	3.5
YCR M12×1.0	22	8	4×3	2	18	2-M4	3.5
YCR M12×1.25	20	8	4×3	2	16	2-M4	3.5
YCR M12×1.25	22	8	4×3	2	18	2-M4	3.5
YCR M14×1.5	25	8	4×3	2	20	2-M4	3.5
YCR M15×1.0	25	8	4×3	2	20	2-M4	3.5
YCR M16×1.5	28	10	4×4	2	23	2-M5	4.5
YCR M17×1.0	28	10	4×4	2	23	2-M5	4.5
YCR M18×1.5	30	10	4×4	2	25	2-M5	4.5
YCR M20×1.0	32	10	4×4	2	27	3-M5	4.5
YCR M20×1.5	32	10	4×4	2	27	3-M5	4.5
YCR M22×1.5	35	10	4×4	2	30	3-M5	4.5
YCR M24×1.5	38	12	4×5	2	33	3-M6	8
YCR M25×1.5	38	12	4×5	2	33	3-M6	8
YCR M27×1.5	42	12	4×5	2	37	3-M6	8
YCR M30×1.0	45	12	4×5	2	40	3-M6	8
YCR M30×1.5	45	12	4×5	2	40	3-M6	8
YCR M33×1.5	52	12	4×6	2.5	46	3-M6	8
YCR M35×1.5	52	12	4×6	2.5	46	3-M6	8
YCR M36×1.5	52	12	4×6	2.5	46	3-M6	8

## Radial Lock Nut With Four Slots YCR Series

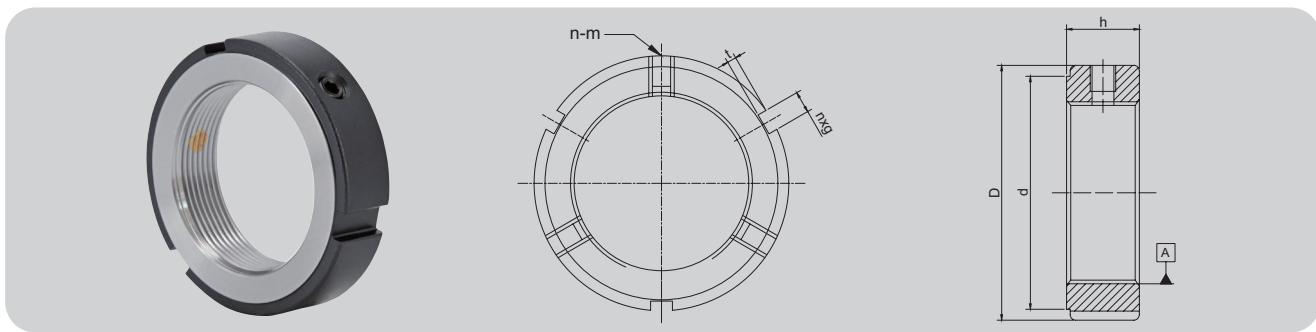
Thread	D	h	n×g	t	d	n-m	Max.Nm
YCR M38×1.5	58	14	4×6	2.5	52	3-M6	8
YCR M39×1.5	58	14	4×6	2.5	52	3-M6	8
YCR M40×1.5	58	14	4×6	2.5	52	3-M6	8
YCR M42×1.5	62	14	4×6	2.5	56	3-M6	8
YCR M45×1.5	65	14	4×6	2.5	59	3-M6	8
YCR M48×1.5	68	14	4×6	2.5	62	3-M6	8
YCR M50×1.5	70	14	4×6	2.5	64	3-M8	18
YCR M50×2.0	70	14	4×6	2.5	64	3-M8	18
YCR M52×1.5	73	16	4×8	3	66	3-M8	18
YCR M55×2.0	75	16	4×8	3	68	3-M8	18
YCR M56×2.0	75	16	4×8	3	68	3-M8	18
YCR M58×1.5	80	16	4×8	3	73	3-M8	18
YCR M60×1.5	80	16	4×8	3	73	3-M8	18
YCR M60×2.0	80	16	4×8	3	73	3-M8	18
YCR M62×2.0	83	16	4×8	3	76	3-M8	18
YCR M64×2.0	85	16	4×8	3	78	3-M8	18
YCR M65×2.0	85	16	4×8	3	78	3-M8	18
YCR M68×2.0	92	18	4×8	3.5	84	3-M8	18
YCR M70×2.0	92	18	4×8	3.5	84	3-M8	18
YCR M72×2.0	94	18	4×8	3.5	86	3-M8	18
YCR M75×2.0	98	18	4×8	3.5	90	3-M8	18
YCR M76×2.0	100	18	4×8	3.5	92	3-M8	18
YCR M80×2.0	105	18	4×8	3.5	96	3-M8	18
YCR M85×2.0	110	18	4×8	3.5	102	3-M8	18
YCR M90×2.0	120	20	4×10	4	108	3-M8	18
YCR M95×2.0	125	20	4×10	4	113	3-M8	18
YCR M100×2.0	130	20	4×10	4	118	3-M8	18
YCR M105×2.0	140	22	4×12	5	125	3-M10	35
YCR M110×2.0	145	22	4×12	5	132	3-M10	35
YCR M115×2.0	150	22	4×12	5	137	3-M10	35
YCR M120×2.0	155	24	4×12	5	142	3-M10	35
YCR M125×2.0	160	24	4×12	5	147	3-M10	35
YCR M130×2.0	165	24	4×12	5	152	3-M10	35
YCR M135×2.0	175	26	4×14	6	160	3-M10	35
YCR M140×2.0	178	26	4×14	6	165	3-M12	60
YCR M145×2.0	190	26	4×14	6	175	3-M12	60
YCR M150×2.0	195	26	4×14	6	180	3-M12	60
YCR M155×3.0	200	28	4×16	7	180	3-M12	60

## Radial Lock Nut With Four Slots YCR Series

Thread	D	h	n×g	t	d	n-m	Max.Nm
YCR M160×3.0	210	28	4×16	7	190	3-M12	60
YCR M165×3.0	210	28	4×16	7	190	3-M12	60
YCR M170×3.0	220	28	4×16	7	200	3-M12	60
YCR M180×3.0	230	30	4×18	8	205	3-M12	60
YCR M190×3.0	240	30	4×18	8	215	3-M12	60
YCR M195×3.0	240	30	4×18	8	215	3-M12	60
YCR M200×3.0	250	32	4×18	8	225	3-M12	60
YCR M210×3.0	260	32	4×18	8	240	3-M12	60
YCR M220×3.0	270	32	4×18	8	250	3-M12	60
YCR M230×3.0	280	34	4×20	9	258	3-M12	60
YCR M240×3.0	290	34	4×20	9	268	3-M12	60
YCR M250×3.0	300	34	4×20	9	278	3-M12	60
YCR M260×4.0	310	34	4×22	10	288	3-M14	100
YCR M270×4.0	320	34	4×22	10	298	3-M14	100
YCR M280×4.0	330	34	6×22	10	308	3-M14	100
YCR M290×4.0	340	36	6×24	11	315	3-M14	100
YCR M300×4.0	350	36	6×24	11	325	3-M14	100
YCR M310×4.0	365	36	6×24	12	340	3-M14	100
YCR M320×4.0	375	36	6×24	12	350	3-M14	100
YCR M330×4.0	385	36	6×24	12	360	3-M14	100
YCR M340×4.0	395	36	6×24	12	370	3-M14	100
YCR M350×4.0	405	36	6×24	12	380	3-M14	100
YCR M360×4.0	415	38	6×26	13	388	3-M16	150
YCR M370×4.0	425	38	6×26	13	398	3-M16	150
YCR M380×4.0	435	38	6×26	13	408	3-M16	150
YCR M390×4.0	445	38	6×26	13	418	3-M16	150
YCR M400×4.0	465	38	6×30	13	438	3-M16	150
YCR M410×4.0	475	40	6×30	15	444	3-M16	150
YCR M420×4.0	485	40	6×30	15	454	3-M16	150
YCR M430×4.0	495	40	6×30	15	464	3-M16	150
YCR M440×4.0	505	40	6×30	15	474	3-M16	150
YCR M450×4.0	515	40	6×30	15	484	3-M16	150

Non-standard nuts can be customized

## Radial Lock Nut With Three Slots YCR-3 Series



The YCR-3 type three-slot series is locked radially and has a relatively thin thickness. It is suitable for installation environments where there are certain limitations on the nut thickness space and other products cannot be used.

Material: 42CrMo Hardness: HRC 28° - 32° Thread Precision: ISO 4H

End Face Runout: M6 - M200 0.002 - 0.005mm M210 - M270 0.005 - 0.008mm

Thread	D	h	n×g	t	d	n-m	Max.Nm
YCR-3 M6×0.5	16	8	3×3	2	11	3-M4	3.5
YCR-3 M8×0.75	16	8	3×3	2	11	3-M4	3.5
YCR-3 M8×1.0	16	8	3×3	2	11	3-M4	3.5
YCR-3 M10×0.75	18	8	3×3	2	13	3-M4	3.5
YCR-3 M10×1.0	18	8	3×3	2	13	3-M4	3.5
YCR-3 M12×1.0	20	8	3×3	2	16	3-M4	3.5
YCR-3 M12×1.0	22	8	3×3	2	18	3-M4	3.5
YCR-3 M12×1.25	20	8	3×3	2	16	3-M4	3.5
YCR-3 M12×1.25	22	8	3×3	2	18	3-M4	3.5
YCR-3 M14×1.5	25	8	3×3	2	20	3-M4	3.5
YCR-3 M15×1.0	25	8	3×3	2	20	3-M4	3.5
YCR-3 M16×1.5	28	10	3×4	2	23	3-M5	4.5
YCR-3 M17×1.0	28	10	3×4	2	23	3-M5	4.5
YCR-3 M18×1.5	30	10	3×4	2	25	3-M5	4.5
YCR-3 M20×1.0	32	10	3×5	2	27	3-M5	4.5
YCR-3 M20×1.5	32	10	3×5	2	27	3-M5	4.5
YCR-3 M22×1.5	35	10	3×5	2	30	3-M5	4.5
YCR-3 M24×1.5	38	12	3×5	2	33	3-M6	8
YCR-3 M25×1.5	38	12	3×5	2	33	3-M6	8
YCR-3 M27×1.5	42	12	3×5	2	37	3-M6	8
YCR-3 M30×1.0	45	12	3×5	2	40	3-M6	8
YCR-3 M30×1.5	45	12	3×5	2	40	3-M6	8
YCR-3 M33×1.5	52	12	3×6	2.5	46	3-M6	8
YCR-3 M35×1.5	52	12	3×6	2.5	46	3-M6	8
YCR-3 M36×1.5	55	12	3×6	2.5	46	3-M6	8
YCR-3 M39×1.5	58	14	3×6	2.5	52	3-M6	8
YCR-3 M40×1.5	58	14	3×6	2.5	52	3-M6	8
YCR-3 M42×1.5	62	14	3×6	2.5	56	3-M6	8
YCR-3 M45×1.5	65	14	3×6	2.5	59	3-M6	8
YCR-3 M48×1.5	68	14	3×6	2.5	62	3-M6	8
YCR-3 M50×1.5	70	14	3×6	2.5	64	3-M8	18
YCR-3 M52×1.5	73	16	3×8	3	66	3-M8	18

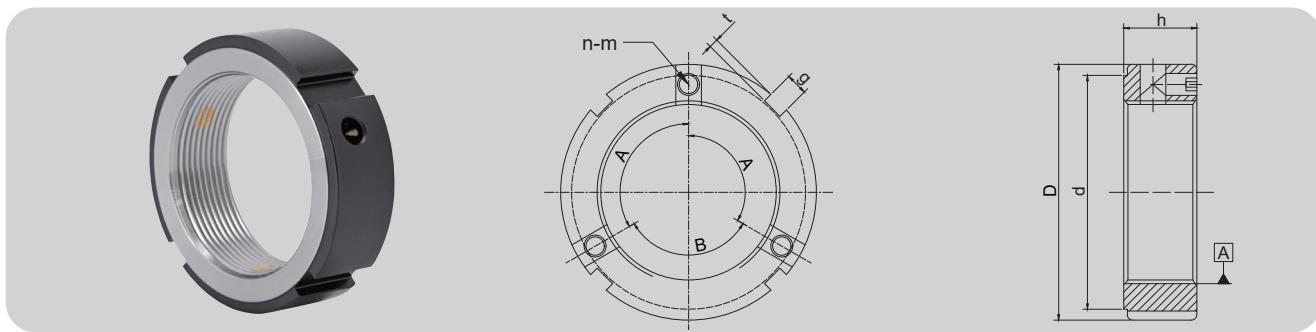
## Radial Lock Nut With Three Slots YCR-3 Series

Thread	D	h	n×g	t	d	n-m	Max.Nm
YCR-3 M55×2.0	75	16	3×8	3	68	3-M8	18
YCR-3 M56×2.0	75	16	3×8	3	68	3-M8	18
YCR-3 M60×1.5	80	16	3×8	3	73	3-M8	18
YCR-3 M60×2.0	80	16	3×8	3	73	3-M8	18
YCR-3 M64×2.0	85	16	3×8	3	78	3-M8	18
YCR-3 M65×2.0	85	16	3×8	3	78	3-M8	18
YCR-3 M68×2.0	92	18	3×8	3.5	84	3-M8	18
YCR-3 M70×2.0	92	18	3×8	3.5	84	3-M8	18
YCR-3 M72×2.0	94	18	3×8	3.5	86	3-M8	18
YCR-3 M75×2.0	98	18	3×8	3.5	90	3-M8	18
YCR-3 M76×2.0	100	18	3×8	3.5	92	3-M8	18
YCR-6 M80×2.0	105	18	6×8	3.5	96	3-M8	18
YCR-6 M85×2.0	110	18	6×8	3.5	102	3-M8	18
YCR-6 M90×2.0	120	20	6×10	4	108	3-M8	18
YCR-6 M95×2.0	125	20	6×10	4	113	3-M8	18
YCR-6 M100×2.0	130	20	6×10	4	118	3-M8	18
YCR-6 M105×2.0	140	22	6×12	5	125	3-M10	35
YCR-6 M110×2.0	145	22	6×12	5	132	3-M10	35
YCR-6 M115×2.0	150	22	6×12	5	137	3-M10	35
YCR-6 M120×2.0	155	24	6×12	5	142	3-M10	35
YCR-6 M125×2.0	160	24	6×12	5	147	3-M10	35
YCR-6 M130×2.0	165	24	6×12	5	152	3-M10	35
YCR-6 M135×2.0	175	26	6×14	6	160	3-M10	35
YCR-6 M140×2.0	178	26	6×14	6	165	3-M12	60
YCR-6 M145×2.0	190	26	6×14	6	175	3-M12	60
YCR-6 M150×2.0	195	26	6×14	6	180	3-M12	60
YCR-6 M155×3.0	200	28	6×16	7	180	3-M12	60
YCR-6 M160×3.0	210	28	6×16	7	190	3-M12	60
YCR-6 M165×3.0	210	28	6×16	7	190	3-M12	60
YCR-6 M170×3.0	220	28	6×16	7	200	3-M12	60
YCR-6 M180×3.0	230	30	6×18	8	205	3-M12	60
YCR-6 M190×3.0	240	30	6×18	8	215	3-M12	60
YCR-6 M195×3.0	240	30	6×18	8	215	3-M12	60
YCR-6 M200×3.0	250	32	6×18	8	225	3-M12	60
YCR-6 M210×3.0	260	32	6×18	8	240	3-M12	60
YCR-6 M220×3.0	270	32	6×18	8	250	3-M12	60
YCR-6 M230×3.0	280	34	6×20	9	258	3-M12	60
YCR-6 M240×3.0	290	34	6×20	9	268	3-M12	60
YCR-6 M250×3.0	300	34	6×20	9	278	3-M12	60
YCR-6 M260×4.0	310	34	6×22	10	288	3-M14	100
YCR-6 M270×4.0	320	34	6×22	10	298	3-M14	100

Non-standard nuts can be customized



## Axial Lock Nut YCA Series



The locking method of the YCA type lock nut is axial locking. Its thickness is the same as that of the YCF series and is suitable for situations where other products cannot be used due to restrictions in design or assembly.

Material: 42CrMo Hardness: HRC 28° - 32° Thread Precision: ISO 4H

End Face Runout: M12 - M200 0.002 - 0.005mm M210 - M300 0.005 - 0.008mm

Thread	D	h	n×g	t	d	n-m	Max.Nm
YCA M12×1.0	30	14	4×4	2	25	2-M4	3.5
YCA M14×1.5	30	14	4×4	2	25	2-M4	3.5
YCA M15×1.0	30	14	4×4	2	25	2-M4	3.5
YCA M16×1.0	30	14	4×4	2	25	2-M4	3.5
YCA M17×1.0	32	16	4×4	2	27	2-M4	3.5
YCA M18×1.5	32	16	4×4	2	27	2-M4	3.5
YCA M20×1.0	38	16	4×5	2	33	3-M4	3.5
YCA M20×1.5	38	16	4×5	2	33	3-M4	3.5
YCA M22×1.5	38	16	4×5	2	33	3-M4	3.5
YCA M24×1.5	38	18	4×5	2	33	3-M4	3.5
YCA M25×1.5	38	18	4×5	2	33	3-M4	3.5
YCA M27×1.5	40	18	4×5	2	35	3-M4	3.5
YCA M30×1.5	45	18	4×5	2	40	3-M4	3.5
YCA M33×1.5	50	18	4×5	2	45	3-M4	3.5
YCA M35×1.5	52	18	4×6	2.5	46	3-M6	8
YCA M36×1.5	52	18	4×6	2.5	46	3-M6	8
YCA M39×1.5	58	20	4×6	2.5	52	3-M6	8
YCA M40×1.5	58	20	4×6	2.5	52	3-M6	8
YCA M42×1.5	62	20	4×6	2.5	56	3-M6	8
YCA M45×1.5	65	20	4×6	2.5	59	3-M6	8
YCA M48×1.5	70	20	4×6	2.5	64	3-M6	8
YCA M50×1.5	70	20	4×6	2.5	64	3-M6	8
YCA M52×1.5	73	22	4×8	3	66	3-M6	8
YCA M55×2.0	75	22	4×8	3	68	3-M6	8
YCA M56×2.0	75	22	4×8	3	68	3-M6	8
YCA M58×1.5	80	22	4×8	3	73	3-M6	8
YCA M60×2.0	80	22	4×8	3	73	3-M6	8
YCA M64×2.0	85	22	4×8	3	78	3-M6	8
YCA M65×2.0	85	22	4×8	3	78	3-M6	8
YCA M68×2.0	92	24	4×8	3.5	84	3-M8	18
YCA M70×2.0	92	24	4×8	3.5	84	3-M8	18

## Axial Lock Nut YCA Series

Thread	D	h	n×g	t	d	n-m	Max.Nm
YCA M72×2.0	94	24	4×8	3.5	86	3-M8	18
YCA M75×2.0	98	24	4×8	3.5	90	3-M8	18
YCA M76×2.0	98	24	4×8	3.5	90	3-M8	18
YCA M80×2.0	105	24	4×8	3.5	96	3-M8	18
YCA M85×2.0	110	24	4×8	3.5	102	3-M8	18
YCA M90×2.0	120	26	4×10	4	108	3-M8	18
YCA M95×2.0	125	26	4×10	4	113	3-M8	18
YCA M100×2.0	130	26	4×10	4	118	3-M8	18
YCA M105×2.0	140	28	4×12	5	125	3-M10	35
YCA M110×2.0	145	28	4×12	5	132	3-M10	35
YCA M115×2.0	150	28	4×12	5	137	3-M10	35
YCA M120×2.0	155	30	4×12	5	142	3-M10	35
YCA M125×2.0	160	30	4×12	5	147	3-M10	35
YCA M130×2.0	165	30	4×12	5	152	3-M10	35
YCA M135×2.0	175	32	4×14	6	160	3-M12	60
YCA M140×2.0	178	32	4×14	6	165	3-M12	60
YCA M145×2.0	190	32	4×14	6	175	3-M12	60
YCA M150×2.0	195	32	4×14	6	180	3-M12	60
YCA M155×3.0	200	34	4×16	7	180	3-M12	60
YCA M160×3.0	210	34	4×16	7	190	3-M12	60
YCA M165×3.0	210	34	4×16	7	190	3-M12	60
YCA M170×3.0	220	34	4×16	7	200	3-M12	60
YCA M180×3.0	230	36	4×18	8	205	3-M12	60
YCA M190×3.0	240	36	4×18	8	215	3-M12	60
YCA M200×3.0	250	38	4×18	8	225	3-M12	60
YCA M210×3.0	260	38	4×18	8	240	3-M12	60
YCA M220×3.0	270	38	4×18	8	250	3-M12	60
YCA M230×3.0	280	40	4×20	9	258	3-M12	60
YCA M240×3.0	290	40	4×20	9	268	3-M12	60
YCA M250×3.0	300	40	4×20	9	278	3-M12	60
YCA M260×4.0	310	40	4×22	10	288	3-M14	100
YCA M270×4.0	320	40	4×22	10	298	3-M14	100
YCA M280×4.0	330	40	6×22	10	308	3-M14	100
YCA M290×4.0	340	42	6×24	11	315	3-M14	100
YCA M300×4.0	350	42	6×24	11	325	3-M14	100

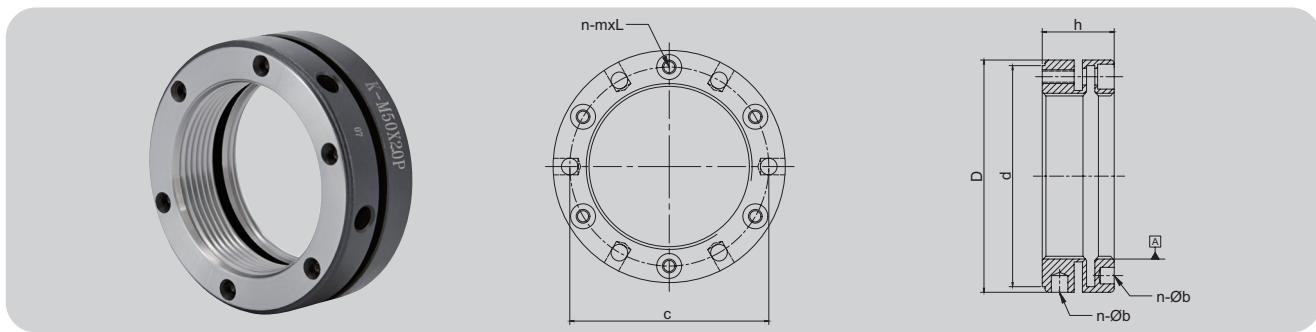
Non-standard nuts can be customized

1Nm=10.2kgf.cm=0.73lb.ft



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## Contracting Lock Nut YCK Series



The YCK type lock nut uses 3 to 8 high-strength bolts to achieve locking by axially deforming the thread of the nut body. It is suitable for harsh working environments, prone to loosening and requiring high torque, and the runout accuracy of the nut can be regulated by adjusting the tightening force of the axial screws.

Material: 42CrMo/S45C Hardness: HRC 28° - 32° Thread Precision: ISO 4H

End Face Runout: M12 - M200 0.002 - 0.005mm M210 - M300 0.005 - 0.008mm

Thread	D	h	d	n-m×L	n	b	c	Max.Nm
YCK M12×1.0	26	14	25	3-M3×10	3	3	19	2.5
YCK M14×1.5	32	16	—	3-M4×10	4	4	22.5	3.5
YCK M15×1.5	33	18	30	4-M4×12	4	4	24	3.5
YCK M16×1.5	34	18	31	4-M4×12	4	4	24	3.5
YCK M17×1.0	37	18	34	4-M4×12	4	4	26	3.5
YCK M18×1.5	38	18	35	4-M4×12	4	4	28	3.5
YCK M20×1.0	40	18	37	4-M4×12	4	4	30	3.5
YCK M20×1.5	40	18	37	4-M4×12	4	4	30	3.5
YCK M22×1.5	42	18	39	4-M4×12	4	4	32	3.5
YCK M24×1.5	44	18	41	4-M4×12	4	4	34	3.5
YCK M25×1.5	45	20	42	4-M4×14	4	5	35	3.5
YCK M26×1.5	45	20	42	4-M4×14	4	5	35	3.5
YCK M27×1.5	46	20	43	4-M4×14	4	5	37	3.5
YCK M28×1.5	46	20	43	4-M4×14	4	5	37	3.5
YCK M30×1.5	48	20	45	4-M4×14	4	5	39	3.5
YCK M32×1.5	50	22	47	4-M4×16	4	5	41	3.5
YCK M33×1.5	50	22	47	4-M4×16	4	5	41	3.5
YCK M35×1.5	53	22	50	4-M4×16	4	5	44	3.5
YCK M36×1.5	54	22	51	4-M4×16	4	5	44	3.5
YCK M38×1.5	56	22	53	4-M4×16	4	5	47	3.5
YCK M39×1.5	56	22	53	4-M4×16	4	5	47	3.5
YCK M40×1.5	58	22	55	4-M4×16	4	5	49	3.5
YCK M42×1.5	60	22	57	4-M4×16	4	5	51	3.5
YCK M45×1.5	68	22	65	6-M4×18	6	6	57	3.5
YCK M48×1.5	69	25	66	6-M4×18	6	6	58	3.5
YCK M50×1.5	70	25	67	6-M4×18	6	6	60	3.5
YCK M52×1.5	72	25	68	6-M4×18	6	6	62	3.5
YCK M55×1.5	75	25	71	6-M4×18	6	6	65	3.5
YCK M55×2.0	75	25	71	6-M4×18	6	6	65	3.5
YCK M56×1.5	75	25	71	6-M4×18	6	6	65	3.5

## Contracting Lock Nut YCK Series

Thread	D	h	d	n-m×L	n	b	c	Max.Nm
YCK M58×1.5	82	26	78	6-M5×20	6	6	70	4.5
YCK M60×1.5	84	26	80	6-M5×20	6	6	72	4.5
YCK M60×2.0	84	26	80	6-M5×20	6	6	72	4.5
YCK M62×1.5	86	28	82	6-M5×20	6	6	75	4.5
YCK M64×1.5	88	28	84	6-M5×20	6	6	77	4.5
YCK M65×1.5	88	28	84	6-M5×20	6	6	77	4.5
YCK M65×2.0	88	28	84	6-M5×20	6	6	77	4.5
YCK M68×1.5	93	28	89	6-M5×20	6	7	80	4.5
YCK M68×2.0	93	28	89	6-M5×20	6	7	80	4.5
YCK M70×1.5	95	28	91	6-M5×20	6	7	82	4.5
YCK M70×2.0	95	28	91	6-M5×20	6	7	82	4.5
YCK M72×1.5	97	28	93	6-M5×20	6	7	84	4.5
YCK M75×1.5	100	28	96	6-M5×20	6	7	87	4.5
YCK M75×2.0	100	28	96	6-M5×20	6	7	87	4.5
YCK M80×2.0	110	32	105	6-M6×22	6	8	95	8
YCK M85×2.0	115	32	110	6-M6×22	6	8	100	8
YCK M90×2.0	120	32	115	6-M6×22	6	8	105	8
YCK M95×2.0	125	32	120	6-M6×22	6	8	110	8
YCK M100×2.0	130	32	125	6-M6×22	6	8	115	8
YCK M105×2.0	135	32	130	6-M6×22	6	8	120	8
YCK M110×2.0	140	32	135	6-M6×22	6	8	125	8
YCK M115×2.0	145	34	140	6-M6×22	6	8	130	8
YCK M120×2.0	155	36	150	6-M6×25	6	8	136	8
YCK M125×2.0	160	36	155	6-M6×25	6	8	140	8
YCK M130×2.0	165	36	160	6-M6×25	6	8	148	8
YCK M140×3.0	178	38	173	8-M6×25	8	10	160	8
YCK M150×3.0	190	38	184	8-M6×30	8	10	170	8
YCK M160×3.0	205	40	199	8-M8×30	8	10	178	18
YCK M170×3.0	215	40	209	8-M8×30	8	10	193	18
YCK M180×3.0	230	40	224	8-M8×30	8	10	205	18
YCK M190×3.0	240	40	234	8-M8×30	8	10	215	18
YCK M200×3.0	245	40	239	8-M8×30	8	10	223	18
YCK M210×3.0	255	42	249	8-M8×30	8	10	232	18
YCK M220×3.0	260	42	254	8-M8×30	8	10	240	18
YCK M230×3.0	270	42	264	8-M8×30	8	10	250	18
YCK M240×3.0	280	42	274	8-M8×30	8	10	260	18
YCK M250×3.0	290	42	284	8-M8×30	8	10	270	18
YCK M260×4.0	300	43	294	8-M10×30	8	12	280	35
YCK M270×4.0	310	43	300	8-M10×30	8	12	290	35
YCK M280×4.0	320	43	310	8-M10×30	8	12	300	35
YCK M290×4.0	330	43	320	8-M10×30	8	12	310	35
YCK M300×4.0	340	43	330	8-M10×30	8	12	320	35

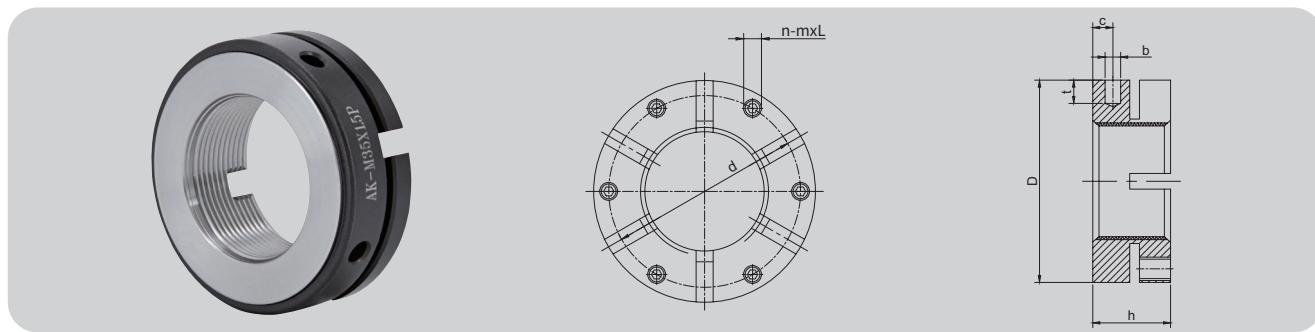
Non-standard nuts can be customized

1Nm=10.2kgf.cm=0.73lb.ft



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## Deformed Lock Nut YCAK Series



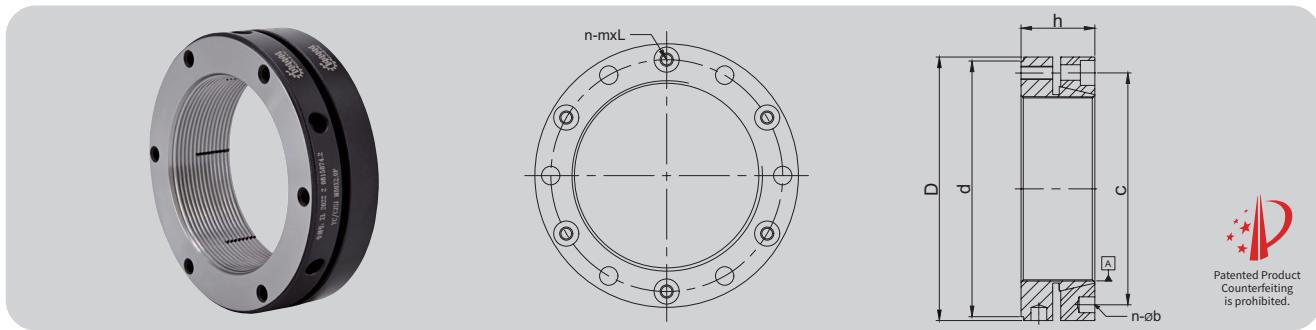
The YCAK type lock nut uses 4-8 high-strength flat head screws to support the end face. With the elasticity of the steel itself, its thread is deformed to achieve locking. Its external dimensions are similar to those of the YCF type and can be used interchangeably. The YCAK type lock nut is suitable for environments prone to loosening or with limited installation space, and its locking capacity is more than twice that of the YCF type.

Material: 42CrMo/S45C Hardness: HRC 28° - 32° Thread Precision: ISO 4H End Face Runout: 0.002 - 0.005mm

Thread	D	h	b	t	d	c	n-m×L	Max.Nm
YCAK M15×1.0	30	18	4	5	24	5	4-M5×6	3
YCAK M17×1.0	32	18	4	5	26	5	4-M5×6	3
YCAK M20×1.0	38	18	4	6	31	5	4-M6×8	5
YCAK M25×1.5	45	20	5	6	38	6	4-M6×8	5
YCAK M30×1.5	52	20	5	7	45	6	4-M6×8	5
	65	30	6	8	45	6	4-M6×8	5
YCAK M35×1.5	58	20	5	7	51	6	4-M6×8	5
	65	22	6	8	58	6	4-M6×8	5
YCAK M40×1.5	65	22	6	8	58	6	4-M6×8	5
	85	32	6	8	58	6	4-M6×8	5
YCAK M45×1.5	70	22	6	8	63	6	6-M6×8	5
YCAK M50×1.5	75	25	6	8	68	8	6-M6×8	5
YCAK M55×2.0	85	26	6	8	75	8	6-M8×10	15
YCAK M60×2.0	90	26	6	8	80	8	6-M8×10	15
YCAK M65×2.0	100	26	8	10	88	8	6-M8×10	15
YCAK M70×2.0	100	28	8	10	90	9	6-M8×10	15
YCAK M75×2.0	115	30	8	10	102	10	6-M10×12	20
YCAK M80×2.0	110	30	8	10	98	10	6-M10×12	20
YCAK M85×2.0	115	30	8	10	102	10	6-M10×12	20
YCAK M90×2.0	130	32	8	10	118	13	6-M10×12	20
YCAK M100×2.0	130	30	8	10	118	10	8-M10×12	20
YCAK M110×2.0	140	30	8	10	128	10	8-M10×12	20
YCAK M120×2.0	155	30	8	10	142	10	8-M10×12	20
YCAK M130×2.0	165	30	8	10	152	10	8-M10×12	20

Non-standard nuts can be customized

## Taper Lock Nut YCZ Series



The taper lock nut is matched with a taper ring with a corresponding angle inner cone through the outer cone on the outer circle of the rear end of the nut body. Bolts pass through the holes on the nut body and the end face of the taper ring to tighten and connect the inner and outer cones. Based on the taper wedge action principle of the nut body and the taper ring, corresponding wire cutting grooves are provided in the taper part of the nut body (2-10 grooves are provided according to the requirements of the use environment), so that under the compression of the axial locking bolt of the outer taper ring, the inner cone thread deforms inward, thereby allowing the female thread to completely embrace the male thread. In addition, by increasing the number of locking holes and bolts on the end faces of the nut body and the taper ring, the anti-loosening torque of the thread can be enhanced, and the wedge force can also be increased by changing the taper angle of the nut body and the taper ring to achieve a higher anti-loosening torque of the thread. In order to achieve a more balanced taper deformation effect of the nut, more wire cutting grooves can also be processed on the inner cone of the nut.

Material: 42CrMo/S45C Hardness: HRC 28° - 32° Thread Precision: ISO 4H

End Face Runout: M8 - M200 0.002 - 0.005mm M210 - M300 0.005 - 0.008mm

Patent Number: ZL2022 2 0815874.2

Thread	D	h	d	n-m×L	n	b	c	Max.Nm
YCZ M8×1.0	30	16	27	3-M4×10	3	4	21	3.5
YCZ M10×1.0	32	16	29	3-M4×10	3	4	23	3.5
YCZ M12×1.0	34	18	31	3-M4×10	3	4	25	3.5
YCZ M14×1.5	36	18	33	3-M4×10	3	4	27	3.5
YCZ M16×1.5	38	18	35	3-M4×10	3	4	29	3.5
YCZ M18×1.5	40	18	37	3-M4×10	3	4	31	3.5
YCZ M20×1.5	42	18	39	3-M4×10	3	4	33	3.5
YCZ M24×1.5	46	18	43	3-M4×10	3	4	37	3.5
YCZ M25×1.5	47	20	44	3-M4×10	3	5	38	3.5
YCZ M30×1.5	52	20	49	3-M4×10	3	5	43	3.5
YCZ M35×1.5	57	22	54	3-M4×10	3	5	48	3.5
YCZ M40×1.5	62	22	59	3-M4×10	3	5	53	3.5
YCZ M45×1.5	67	22	64	6-M4×10	6	6	58	3.5
YCZ M50×1.5	72	25	69	6-M4×10	6	6	63	3.5
YCZ M55×2.0	77	25	74	6-M4×10	6	6	68	3.5
YCZ M60×2.0	90	26	77	6-M5×10	6	6	78	4.5
YCZ M65×2.0	95	28	92	6-M5×10	6	6	83	4.5
YCZ M70×2.0	100	28	97	6-M5×10	6	7	88	4.5
YCZ M75×2.0	105	28	102	6-M5×10	6	7	93	4.5
YCZ M80×2.0	113	32	110	6-M6×10	6	8	100	8

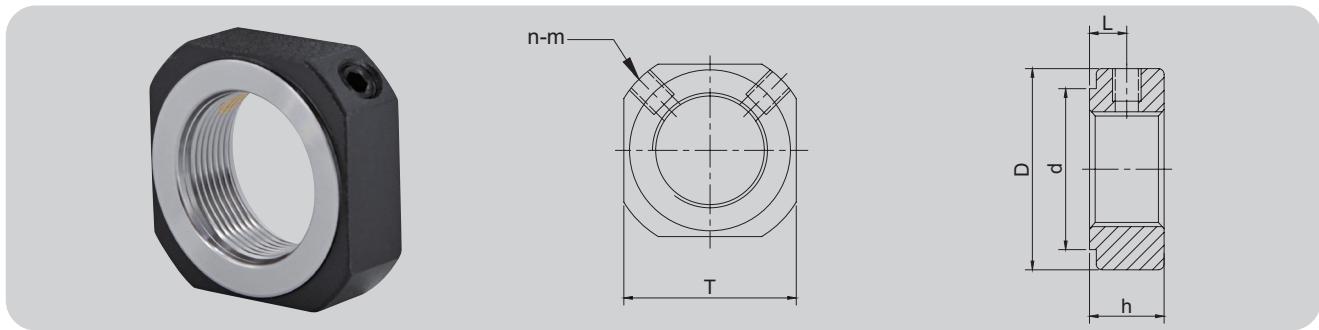
## Taper Lock Nut YCZ Series

Thread	D	h	d	n-m×L	n	b	c	Max.Nm
YCZ M85×2.0	118	32	115	6-M6×10	6	8	105	8
YCZ M90×2.0	123	32	120	6-M6×10	6	8	110	8
YCZ M95×2.0	128	32	125	6-M6×10	6	8	115	8
YCZ M100×2.0	133	32	130	6-M6×10	6	8	120	8
YCZ M105×2.0	138	32	135	6-M6×10	6	8	125	8
YCZ M110×2.0	143	32	140	6-M6×10	6	8	130	8
YCZ M115×2.0	148	32	145	6-M6×10	6	8	135	8
YCZ M120×2.0	155	36	150	6-M6×10	6	8	140	8
YCZ M125×2.0	160	36	155	6-M6×10	6	8	145	8
YCZ M130×2.0	165	36	160	6-M6×10	6	8	150	8
YCZ M140×3.0	175	38	170	8-M6×10	8	10	160	8
YCZ M150×3.0	193	38	188	8-M8×10	8	10	175	18
YCZ M160×3.0	205	40	199	8-M8×10	8	10	185	18
YCZ M170×3.0	215	40	209	8-M8×10	8	10	195	18
YCZ M180×3.0	225	40	219	8-M8×10	8	10	205	18
YCZ M190×3.0	235	40	229	8-M8×10	8	10	215	18
YCZ M200×3.0	245	40	239	8-M8×10	8	10	225	18
YCZ M210×3.0	255	42	249	8-M8×10	8	10	235	18
YCZ M220×3.0	265	42	259	8-M8×10	8	10	245	18
YCZ M230×3.0	275	42	269	8-M8×10	8	10	255	18
YCZ M240×3.0	285	42	279	8-M8×10	8	10	265	18
YCZ M250×3.0	295	42	279	8-M8×10	8	10	275	18
YCZ M260×3.0	310	43	304	8-M8×10	8	10	289	18
YCZ M270×3.0	320	43	314	8-M8×10	8	10	299	18
YCZ M280×3.0	330	43	324	8-M8×10	8	10	309	18
YCZ M290×3.0	340	43	334	8-M8×10	8	10	319	18
YCZ M300×3.0	350	43	344	8-M8×10	8	10	329	18

Non-standard nuts can be customized

1Nm=10.2kgf.cm=0.73lb.ft

## Square Nut DN Series



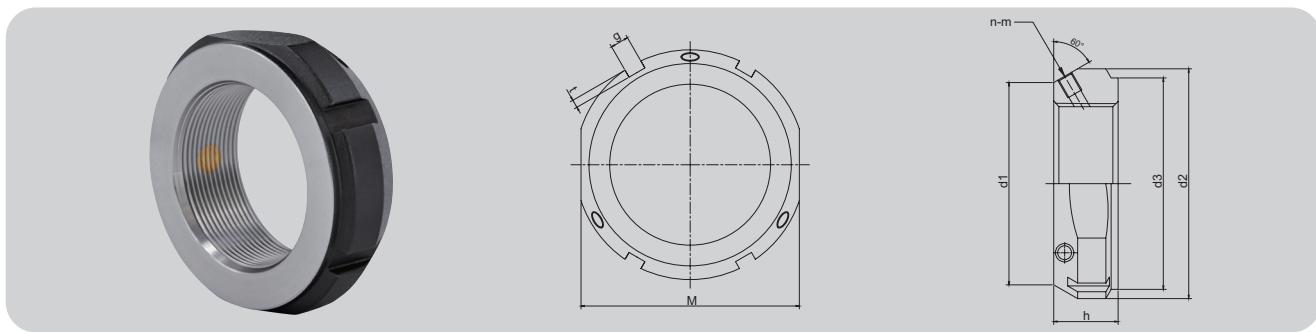
The square nut DN series locking screws are radially locked, suitable for simple installation parts and fixed by two locking screws at an included angle radially.

Material: 42CrMo/S45C Thread Precision: ISO 4H Hardness: HRC 24° - 30° End Face Runout: 0.002 - 0.005mm

PartNo	Thread	n-m	D	d	h	L	T
DN5	M5×0.5	2-M3	12.5	10	5	2.7	11
DN6	M6×0.75	2-M3	13.5	10	5	2.7	12
DN8	M8×1.0	2-M3	16	12	6.5	4	14
DN8	M8×0.75	2-M3	16	12	6.5	4	14
DN10	M10×1.0	2-M5	19	15	8	5	17
DN10	M10×0.75	2-M5	19	15	8	5	17
DN12	M12×1.0	2-M5	22	17	8	5	19
DN15	M15×1.0	2-M5	25	21	8	5	22
DN17	M17×1.0	2-M5	28	23	10	5.4	24
DN17	M17×1.0	2-M5	28	22	13	9	24
DN20	M20×1.0	2-M5	35	28	11	7	30
DN25	M25×1.5	2-M6	43	33	15	10	35
DN30	M30×1.5	2-M6	48	38	20	14	40
DN35	M35×1.5	2-M8	60	48	21	14	50
DN40	M40×1.5	2-M8	60	48	25	18	50

Non-standard nuts can be customized

## Lock Nut YCKMT Series



The YCKMT type lock nut, whose locking copper is designed at a 30° angle to the thread, is widely used for locking the main shaft and lead screw bearings of machine tools, and can be locked using a common open-end wrench.

Material: S45C/42CrMo Hardness: HRC 28° - 32° Thread Precision: ISO 4H

End Face Runout: M10 - M200 0.002 - 0.005mm Tr220 - Tr420 0.005 - 0.008mm

Thread	d1	d2	d3	h	g	t	M	n-m	Max.Nm
YCKMT M10×0.75	21	28	23	14	4	2	24	3-M5	4.5
YCKMT M12×1.0	23	30	25	14	4	2	27	3-M5	4.5
YCKMT M15×1.0	26	33	28	16	4	2	30	3-M5	4.5
YCKMT M17×1.0	29	37	33	18	5	2	34	3-M6	8
YCKMT M20×1.0	32	40	35	18	5	2	36	3-M6	8
YCKMT M25×1.5	36	44	39	20	5	2	41	3-M6	8
YCKMT M30×1.5	41	49	44	20	5	2	46	3-M6	8
YCKMT M33×1.5	41	50	44	20	5	2	44	3-M6	8
YCKMT M35×1.5	46	54	49	22	5	2	50	3-M6	8
YCKMT M40×1.5	54	65	59	22	6	2.5	60	3-M8	18
YCKMT M45×1.5	59	70	64	22	6	2.5	65	3-M8	18
YCKMT M50×1.5	64	75	68	25	7	3	70	3-M8	18
YCKMT M55×2.0	74	85	78	25	7	3	80	3-M8	18
YCKMT M60×2.0	78	90	82	26	8	3.5	85	3-M8	18
YCKMT M65×2.0	83	95	87	28	8	3.5	90	3-M8	18
YCKMT M70×2.0	88	100	92	28	8	3.5	95	3-M8	18
YCKMT M75×2.0	93	105	97	28	8	3.5	100	3-M8	18
YCKMT M80×2.0	98	110	100	32	8	3.5	—	3-M8	18
YCKMT M85×2.0	107	120	110	32	10	4	—	3-M10	35
YCKMT M90×2.0	112	125	115	32	10	4	—	3-M10	35
YCKMT M95×2.0	117	130	120	32	10	4	—	3-M10	35
YCKMT M100×2.0	122	135	125	32	10	4	—	3-M10	35
YCKMT M110×2.0	132	145	134	32	10	4	—	3-M10	35
YCKMT M120×2.0	142	155	144	32	10	4	—	3-M10	35
YCKMT M130×2.0	152	165	154	32	12	5	—	3-M10	35
YCKMT M140×2.0	162	175	164	32	14	6	—	3-M10	35

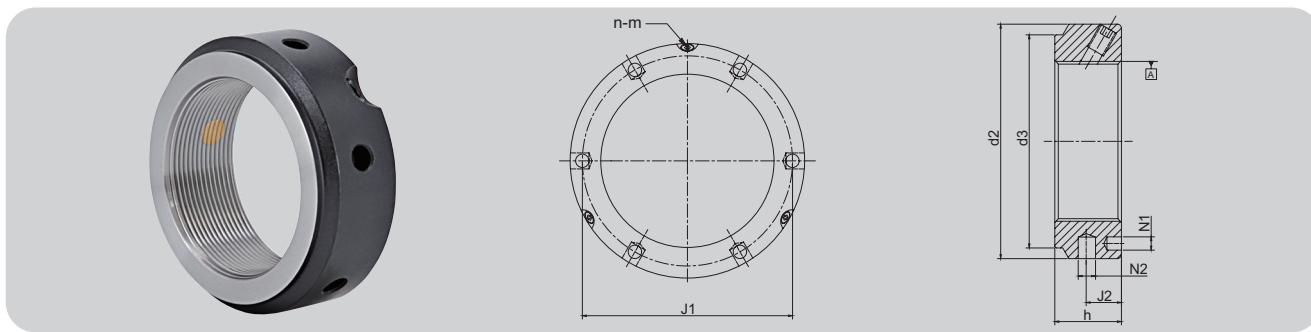
The boss height is 2mm for M35 and below, and 3mm for M40 and above.

## Lock Nut YCKMT Series

Thread	d1	d2	d3	h	g	t	M	n-m	Max.Nm
YCKMT M150×2.0	172	185	174	32	14	6	—	3-M10	35
YCKMT M160×3.0	182	195	184	32	14	6	—	3-M10	35
YCKMT M170×3.0	192	205	192	32	14	6	—	3-M10	35
YCKMT M180×3.0	202	215	204	32	16	7	—	3-M10	35
YCKMT M190×3.0	212	225	214	32	16	7	—	3-M10	35
YCKMT M200×3.0	222	235	224	32	18	8	—	3-M10	35
YCKMT Tr220×4.0	—	265	254	—	—	—	—	3-M10	35
YCKMT Tr240×4.0	—	290	279	—	—	—	—	3-M12	60
YCKMT Tr250×4.0	—	300	289	—	—	—	—	3-M12	60
YCKMT Tr260×4.0	—	310	299	—	—	—	—	3-M12	60
YCKMT Tr280×4.0	—	330	319	—	—	—	—	3-M12	60
YCKMT Tr300×4.0	—	360	349	—	—	—	—	3-M12	60
YCKMT Tr320×5.0	—	390	379	—	—	—	—	3-M12	60
YCKMT Tr340×5.0	—	410	399	—	—	—	—	3-M12	60
YCKMT Tr360×5.0	—	430	419	—	—	—	—	3-M12	60
YCKMT Tr380×5.0	—	460	449	—	—	—	—	3-M12	60
YCKMT Tr400×5.0	—	480	469	—	—	—	—	3-M12	60
YCKMT Tr420×5.0	—	500	489	—	—	—	—	3-M12	60

Non-standard nuts can be customized

## Lock Nut YCKMTA Series



The YCKMTA type lock nut, whose locking copper is designed at a 30° angle to the thread, is widely used for locking the main shaft and lead screw bearings of machine tools.

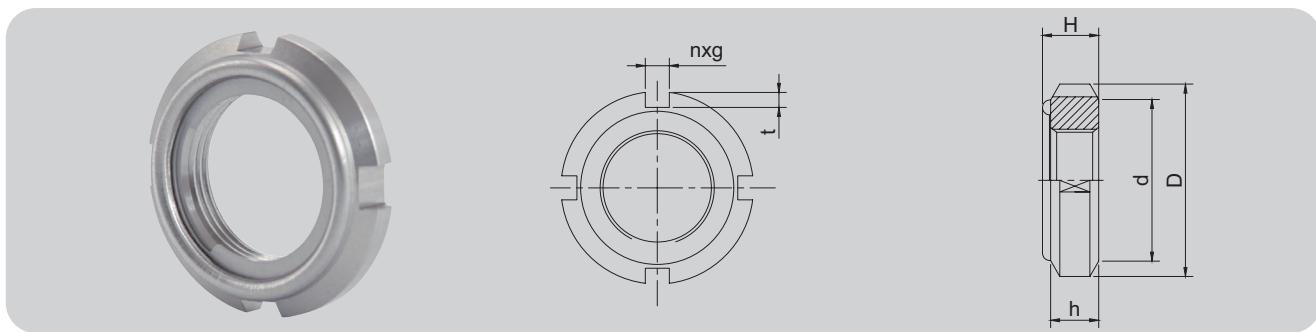
Material: S45C Hardness: HRC 28° - 32° Thread Precision: ISO 4H End Face Runout: 0.002 - 0.005mm

Thread	d2	d3	h	J1	J2	N1	N2	n-m	Max.Nm
YCKMTA M20×1.0	38	30	18	29	10	4.3	4	3-M6	8
YCKMTA M20×1.5	38	30	18	29	10	4.3	4	3-M6	8
YCKMTA M25×1.5	42	35	20	32.5	11	4.3	4	3-M6	8
YCKMTA M30×1.5	48	40	20	40.5	11	4.3	5	3-M6	8
YCKMTA M35×1.5	53	47	20	45.5	11	4.3	5	3-M6	8
YCKMTA M40×1.5	58	52	22	50.5	12	4.3	5	3-M8	18
YCKMTA M45×1.5	68	58	22	58	12	4.3	6	3-M8	18
YCKMTA M50×1.5	70	63	24	61.5	13	4.3	6	3-M8	18
YCKMTA M55×1.5	75	70	24	66.5	13	4.3	6	3-M8	18
YCKMTA M60×1.5	84	75	24	74.5	13	5.3	6	3-M8	18
YCKMTA M65×1.5	88	80	25	78.5	13	5.3	6	3-M8	18
YCKMTA M70×1.5	95	86	26	85	14	5.3	8	3-M8	18
YCKMTA M75×1.5	100	91	26	88	13	6.4	8	3-M8	18
YCKMTA M80×2.0	110	97	30	95	16	6.4	8	3-M8	18
YCKMTA M85×2.0	115	102	32	100	17	6.4	8	3-M10	35
YCKMTA M90×2.0	120	110	32	108	17	6.4	8	3-M10	35
YCKMTA M95×2.0	125	114	32	113	17	6.4	8	3-M10	35
YCKMTA M100×2.0	130	120	32	118	17	6.4	8	3-M10	35
YCKMTA M110×2.0	140	132	32	128	17	6.4	8	3-M10	35
YCKMTA M120×2.0	155	142	32	140	17	6.4	8	3-M10	35
YCKMTA M130×3.0	165	156	32	153	17	6.4	8	3-M10	35
YCKMTA M140×3.0	180	166	32	165	17	6.4	10	3-M10	35
YCKMTA M150×3.0	190	180	32	175	17	6.4	10	3-M10	35
YCKMTA M160×3.0	205	190	32	185	17	8.4	10	3-M10	35
YCKMTA M170×3.0	215	205	32	195	17	8.4	10	3-M10	35
YCKMTA M180×3.0	230	215	32	210	17	8.4	10	3-M10	35
YCKMTA M190×3.0	240	225	32	224	17	8.4	10	3-M10	35
YCKMTA M200×3.0	245	237	32	229	17	8.4	10	3-M10	35

The boss height is 2mm for M35 and below, and 3mm for M40 and above.

The tooling holes have a positive tolerance.

## Steel Sheet Lock Nut YCG Series

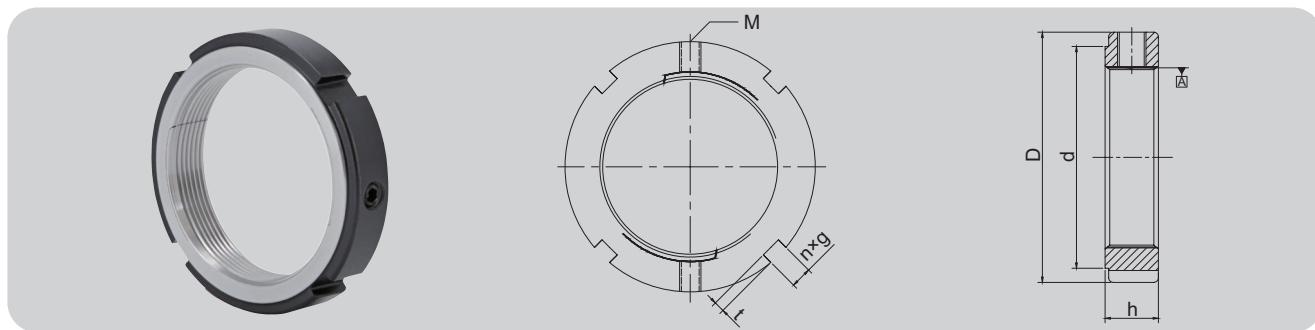


The YCG steel sheet self-locking anti-loosening nut is equipped with a special locking spring steel ring based on engineering principles. When in use, the spring steel ring naturally holds and compresses in the screw groove, having excellent shock-proof and anti-loosening effects. Even with repeated friction, it will not affect the thread and the locking spring steel ring. Its locking ability is not affected when the temperature changes from -30°C to +300°C and under the erosion of various oils (such as gasoline, petroleum, alcohol, etc.).

Material: S45C tempered, S45C not tempered, SUS304

PartNo	Thread (d*p)	D	d	t	n×g	h	H		
YCG 0	M10×0.75	18	13	0 -0.5	2(1.8)	3	4	5.2	$\pm 0.3$
YCG 1	M12×1.0	22	17		2(1.8)	3	4	5.4	
YCG 2	M15×1.0	25	21		2(1.8)	4	5	6.5	$\pm 0.5$
YCG 3	M17×1.0	28	24		2(1.9)	4	5	6.4	
YCG 4	M20×1.0	32	26		2(1.8)	4	6	7.7	
YCG 5	M25×1.5	38	32		2	5	7	9.1	
YCG 6	M30×1.5	45	38		2	5	7	9.1	
YCG 7	M35×1.5	52	44		2	5	8	10.2	
YCG 8	M40×1.5	58	50		2.5	6	9	11.2	
YCG 9	M45×1.5	65	56		2.5	6	10	12.5	$\pm 1.0$
YCG 10	M50×1.5	70	61		2.5	6	11	13.5	
YCG 11	M55×2.0	75	67		3	7	11	13.5	
YCG 12	M60×2.0	80	73		3	7	11	13.5	
YCG 13	M65×2.0	85	79		3	7	12	15	
YCG 14	M70×2.0	92	85	0 -0.75	3.5	8	12	15	$\pm 1.5$
YCG 15	M75×2.0	98	90		3.5	8	13	15.8	
YCG 16	M80×2.0	105	95		3.5	8	15	18.6	
YCG 17	M85×2.0	110	102		3.5	8	16	19.2	
YCG 18	M90×2.0	120	108	0 -0.75	4	10	16	20.3	$\pm 1.5$
YCG 19	M95×2.0	125	113		4	10	17	21.3	
YCG 20	M100×2.0	130	120		4	10	18	22.3	

## Lock Nut YCE Series

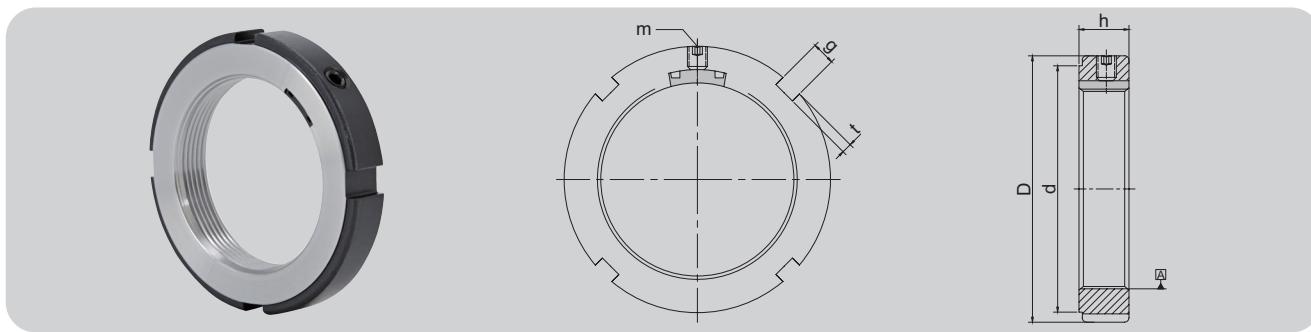


The YCE type nut has a through-thread cutting locking method, adopts two-point symmetrical locking, and the overall thread type is stressed, which has good anti-loosening performance.

Material: 42CrMo/S45C Hardness: HRC 28° - 32° Thread Precision: ISO 4H End Face Runout: 0.002 - 0.005mm

Thread	D	d	h	n×g	t	M	Unlocking Torque in Nm	Max Axial load in Newton
YCE M22×1.5	35	30	12	4×4	2	2-M6	94	37 800
YCE M25×1.5	40	35		4×5	2		106	48 000
YCE M30×1.5	45	40		4×6	2.5		118	58 000
YCE M32×1.5	46	41		4×7	3		130	74 400
YCE M35×1.5	50	45		4×8	3.5		150	77 700
YCE M38×1.5	52	47		4×10	4		166	82 000
YCE M40×1.5	55	49		4×12	5		188	85 200
YCE M42×1.5	56	50		15	2-M8	2-M8	210	89 600
YCE M45×1.5	60	54					236	100 000
YCE M50×1.5	65	59					264	115 600
YCE M52×1.5	67	61					294	120 400
YCE M55×2.0	75	68					1024	144 800
YCE M60×2.0	80	73					1064	158 300
YCE M65×2.0	85	78					1120	178100
YCE M70×2.0	90	82					1174	192 100
YCE M75×2.0	95	87					1230	209 000
YCE M80×2.0	105	97					1300	228 000
YCE M85×2.0	110	102					1350	245 800
YCE M90×2.0	115	106					1426	265 800
YCE M95×2.0	120	111					1500	280 800
YCE M100×2.0	125	116					1580	295 800
YCE M105×2.0	130	119					1660	310 800
YCE M110×2.0	135	124					1740	325 700
YCE M115×2.0	140	129					1860	345 200
YCE M120×2.0	145	134					1920	362 800
YCE M125×2.0	150	139					2080	383 000
YCE M130×2.0	155	144					> 4000	406 200
YCE M135×2.0	165	152	20	4×14	6	2-M10	> 4000	633 000
YCE M140×2.0	170	157					> 4000	660 800
YCE M145×2.0	175	162					> 4000	684 600
YCE M150×2.0	180	167					> 4000	712 900

## Lock Nut YCKMK Series



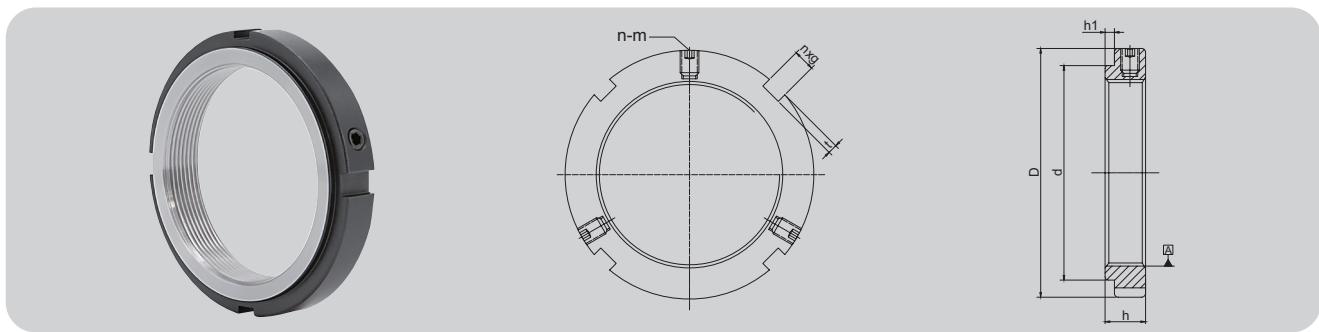
The YCKMK series of precision lock nuts have a threaded wedge embedded in their inner holes, which can lock the nut at a specific position on the shaft or adapter sleeve. It is suitable for positioning bearings in application conditions with not very strict requirements. However, it cannot be applied to shafts or adapter sleeves with keyways. If it is opposite to the keyway, it may cause the wedge to be damaged.

Material: 42CrMo/S45C Hardness: HRC 28° - 32° Thread Precision: ISO 4H End Face Runout: 0.002 - 0.005mm

Thread	D	d	h	g	t	m	Max.Nm
YCKMK M10×0.75	20	16	9	3	2	M5	4.5
YCKMK M12×1.0	22	18	9	3	2	M5	4.5
YCKMK M15×1.0	25	21	9	4	2	M5	4.5
YCKMK M17×1.0	28	24	9	4	2	M5	4.5
YCKMK M20×1.0	32	28	9	4	2	M5	4.5
YCKMK M25×1.5	38	34	9	5	2	M5	4.5
YCKMK M30×1.5	45	41	9	5	2	M5	4.5
YCKMK M35×1.5	52	48	9	5	2	M5	4.5
YCKMK M40×1.5	58	53	11	6	2.5	M6	8
YCKMK M45×1.5	65	60	11	6	2.5	M6	8
YCKMK M50×1.5	70	65	15	6	2.5	M8	18
YCKMK M55×2.0	75	69	15	7	3	M8	18
YCKMK M60×2.0	80	74	15	7	3	M8	18
YCKMK M65×2.0	85	79	14	7	3	M8	18
YCKMK M70×2.0	92	85	14	8	3.5	M8	18
YCKMK M75×2.0	98	91	14	8	3.5	M8	18
YCKMK M80×2.0	105	98	18	8	3.5	M10	35
YCKMK M85×2.0	110	103	18	8	3.5	M10	35
YCKMK M90×2.0	120	112	18	10	4	M10	35
YCKMK M95×2.0	125	117	20	10	4	M10	35
YCKMK M100×2.0	130	122	20	10	4	M10	35

Non-standard nuts can be customized

## Radial Lock Nut YCMR Series



The YCMR series lock nuts use three high-strength bolts in the three blind holes of their radial outer circle. By tightening these three bolts, the nut thread is deformed and tightly pressed on the shaft or external thread. The resulting friction force is sufficient to lock the nut in place. When loosening the bolts, use a copper rod to tap above the fixing bolts, and the nut thread will return to its initial shape. As long as there is no damage, it can be reused. The YCMR series lock nuts cannot be applied to shafts with keyways. If the locking screws are aligned with the keyways, the nut may be damaged.

Easy to disassemble: 1. When disassembling the lock nut, first loosen the three high-strength bolts; 2. Tap above the fixing bolts with a copper rod; 3. Use a hook wrench to loosen the lock nut.

Material: S45C Thread Precision: ISO 4H End Face Runout: 0.002 - 0.005mm

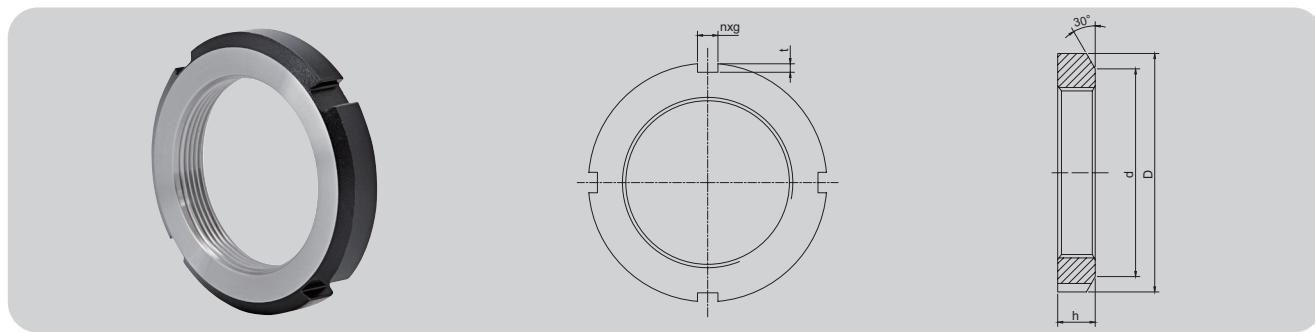
Thread	D	d	h	h1	n×g	t	n-m	Max.Nm
YCMR M20×1.0	32	26	9.5	1	4×4	2	3-M5	4.5
YCMR M25×1.5	38	30	10.5	2	4×5	2	3-M5	4.5
	38	31	10.5	2	4×5	2	3-M5	4.5
YCMR M30×1.5	45	36	10.5	2	4×5	2	3-M5	4.5
YCMR M35×1.5	52	41.5	11.5	3	4×5	2	3-M5	4.5
	52	42.5	11.5	3	4×5	2.5	3-M5	4.5
YCMR M40×1.5	58	47	13	3	4×6	2.5	3-M6	8
	58	47.5	13	3	4×6	2.5	3-M6	8
YCMR M45×1.5	65	53	13	3	4×6	2.5	3-M6	8
	65	54.5	13	3	4×6	2.5	3-M6	8
YCMR M50×1.5	70	57.5	14	3	4×6	2.5	3-M6	8
	70	61.5	14	3	4×6	3	3-M6	8
YCMR M55×2.0	75	64	14	3	4×7	3	3-M6	8
	75	67	14	3	4×7	3	3-M6	8
YCMR M60×2.0	80	69	14	3	4×7	3	3-M6	8
YCMR M65×2.0	85	71.5	15	3	4×7	3	3-M6	8
	85	76	15	3	4×7	3	3-M6	8
	85	77.5	15	3	4×7	3.5	3-M6	8
YCMR M70×2.0	92	79	15	3	4×8	3.5	3-M6	8
YCMR M75×2.0	98	81.5	16	3	4×8	3.5	3-M6	8
	98	85	16	3	4×8	3.5	3-M6	8
	98	87.5	16	3	4×8	3.5	3-M6	8

## Radial Lock Nut YCMR Series

Thread	D	d	h	h1	n×g	t	n-m	Max.Nm
YCMR M80×2.0	105	91.5	18	3	4×8	3.5	3-M8	18
	105	93	18	3	4×8	3.5	3-M8	18
YCMR M85×2.0	110	98	19	4	4×8	3.5	3-M8	18
YCMR M90×2.0	120	102	19	4	4×10	4	3-M8	18
YCMR M95×2.0	125	108	20	4	4×10	4	3-M8	18
	125	110	20	4	4×10	4	3-M8	18
YCMR M100×2.0	130	110	21	4	4×10	4	3-M8	18
	130	112	21	4	4×10	4	3-M8	18
YCMR M110×2.0	145	119	21.5	4	4×12	5	3-M8	18
	145	122	21.5	4	4×12	5	3-M8	18
	145	124	21.5	4	4×12	5	3-M8	18
YCMR M120×2.0	155	130	26	6	4×12	5	3-M10	35
	155	132	26	6	4×12	5	3-M10	35
YCMR M130×2.0	165	140	28	7	4×12	5	3-M10	35
	165	141	28	7	4×12	5	3-M10	35
YCMR M140×2.0	180	151	28	7	4×14	6	3-M10	35
	180	152	28	7	4×14	6	3-M10	35
YCMR M150×2.0	195	162	30	9	4×14	6	3-M10	35
YCMR M160×3.0	210	173	32	11	4×16	7	3-M10	35
YCMR M170×3.0	220	184	33	12	4×16	7	3-M10	35
YCMR M180×3.0	230	194	34	12	4×18	8	3-M10	35
YCMR M190×3.0	240	207	34	12	4×18	8	3-M10	35
YCMR M200×3.0	250	217	34	12	4×18	8	3-M10	35

Non-standard nuts can be customized

## Nut AN Series



The AN type nut is suitable for working conditions without anti-loosening requirements. It is widely used because of its easy installation.

Material: 42CrMo/S45C Hardness: HRC 24° - 30° Thread Precision: ISO 4H End Face Runout: 0.002 - 0.005mm

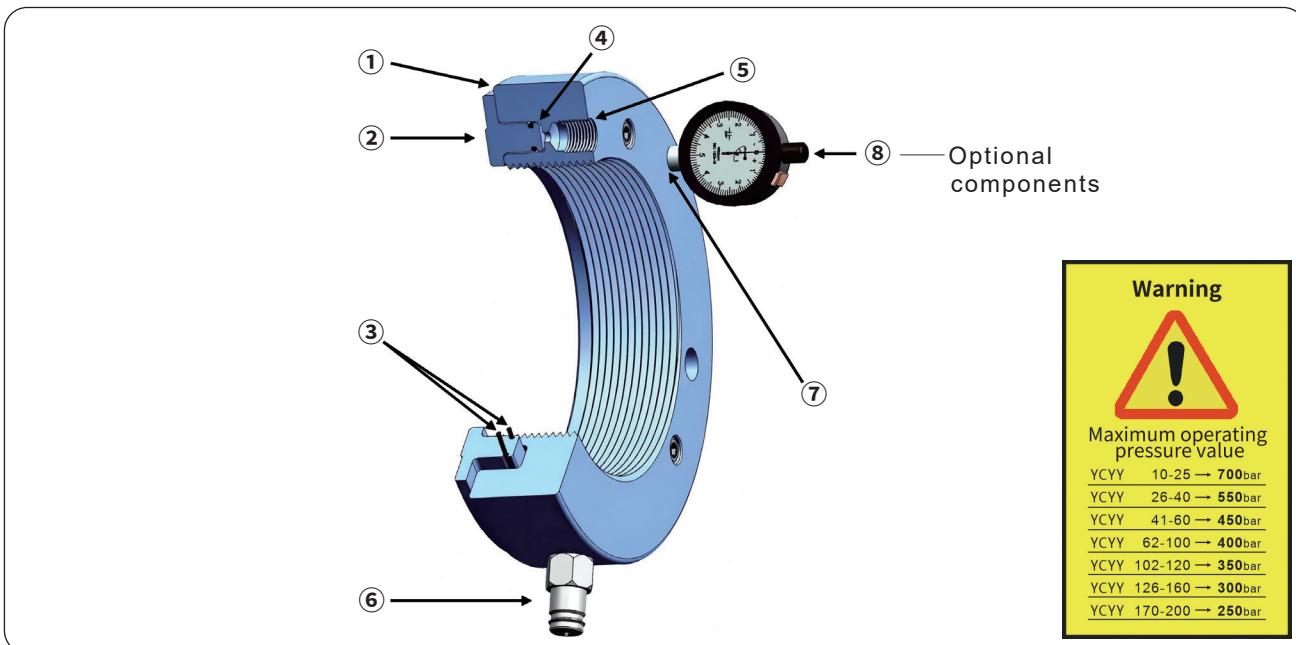
Thread	D	d	n×g	t	h
AN M10×0.75	18	13.5	4×3	2	4
AN M12×1.0	22	17	4×3	2	4
AN M15×1.0	25	21	4×4	2	5
AN M17×1.0	28	24	4×4	2	5
AN M20×1.0	32	26	4×4	2	6
AN M25×1.5	38	32	4×5	2	7
AN M30×1.5	45	38	4×5	2	7
AN M35×1.5	52	44	4×5	2	8
AN M40×1.5	58	50	4×6	2.5	9
AN M45×1.5	65	56	4×6	2.5	10
AN M50×1.5	70	61	4×6	2.5	11
AN M55×2.0	75	67	4×7	3	11
AN M60×2.0	80	73	4×7	3	11
AN M65×2.0	85	79	4×7	3	12
AN M70×2.0	92	85	4×8	3.5	12
AN M75×2.0	98	90	4×8	3.5	13
AN M80×2.0	105	95	4×8	3.5	15
AN M85×2.0	110	102	4×8	3.5	16
AN M90×2.0	120	108	4×10	4	16
AN M95×2.0	125	113	4×10	4	17
AN M100×2.0	130	120	4×10	4	18
AN M105×2.0	140	126	4×12	5	18
AN M110×2.0	145	133	4×12	5	19
AN M115×2.0	150	137	4×12	5	19
AN M120×2.0	155	138	4×12	5	20
AN M125×2.0	160	148	4×12	5	21
AN M130×2.0	165	149	4×12	5	21
AN M135×2.0	175	160	4×14	6	22
AN M140×2.0	180	160	4×14	6	22
AN M145×2.0	190	172	4×14	6	24
AN M150×2.0	195	171	4×14	6	24
AN M155×3.0	200	182	4×16	7	25
AN M160×3.0	210	182	4×16	7	25
AN M165×3.0	210	193	4×16	7	26
AN M170×3.0	220	193	4×16	7	26
AN M180×3.0	230	203	4×18	8	27
AN M190×3.0	240	214	4×18	8	28
AN M200×3.0	250	226	4×18	8	29

Non-standard nuts can be customized

# Hydraulic Nuts



## Operating Principle



Hydraulic nut component diagram

The hydraulic nut can significantly reduce the working intensity and improve the working efficiency when installing or disassembling rolling bearings with tapered holes. It consists of two main components: the main body ① with internal threads and a groove on one side, and the annular piston ② installed in the groove. The seals between these two parts are two O-rings ③.

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When high-pressure oil is pumped into the oil chamber ④, the piston will release a huge force pushed by the high oil pressure, which is sufficient for installing and disassembling rolling bearings. There is a threaded-free hole ⑦ on the outer steel ring for installing the dial indicator ⑧. The measuring needle of the dial indicator is closely attached to the piston shoulder to measure its axial displacement. There are two threaded holes on the steel ring of the hydraulic nut for installing quick connectors to connect the high-pressure oil pipe of the hydraulic pump: one ⑥ is located on the outside of the steel ring, and the other ⑤ is located on the outer circular surface. Unused holes must be plugged with the bolts provided with the hydraulic nut. For the holes that need to be connected to the high-pressure oil pipe, the quick connectors provided with the hydraulic nut must be installed. In addition, the standard configuration of the hydraulic nut also includes a set of spare O-rings and two small iron rods for tightening the hydraulic nut.

## Maintenance - Upkeep

- ① When the hydraulic nut is not in use, it is necessary to prevent contamination by debris. The interface of the high-pressure oil pipe should be screwed with bolts to prevent dirt from entering.
- ② When the piston is working, if the hydraulic nut leaks oil, it indicates that the seal is damaged and needs to be replaced. When replacing the seal, the piston needs to be pressed out of the steel ring. For ease of operation, the three auxiliary holes on the outer surface of the steel ring that are usually plugged with bolts can be utilized. Unscrew these three bolts and use the long bolt provided with the hydraulic nut, and the piston can be pushed out of the steel ring (see Figure A). Remove the O-ring, replace it with a new one, clean the groove. If necessary, a little grease can be used for lubrication during the replacement process, and place the new O-ring in the correct position of the piston.



A set of spare O-rings is provided in the standard configuration of the hydraulic nut. If you need to purchase them separately, please contact Beijing Yuchen Company.

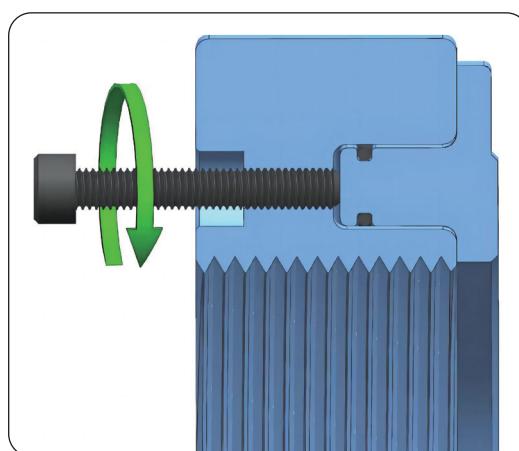


Fig. A. Eject the piston out of the steel ring

## Maintenance parts



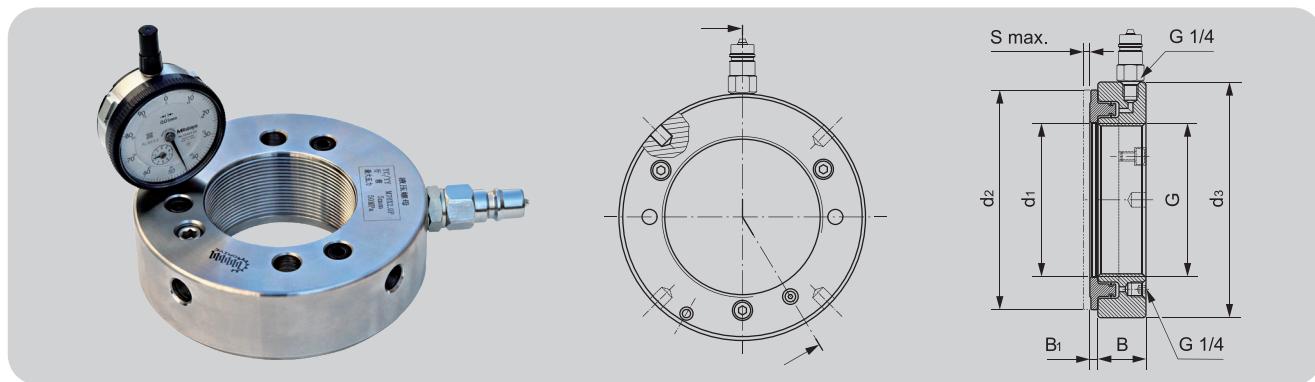
O-rings (black rubber, green fluororubber), ball plugs, quick connector screws, copper rings.



宇晨瑞翔精密机械

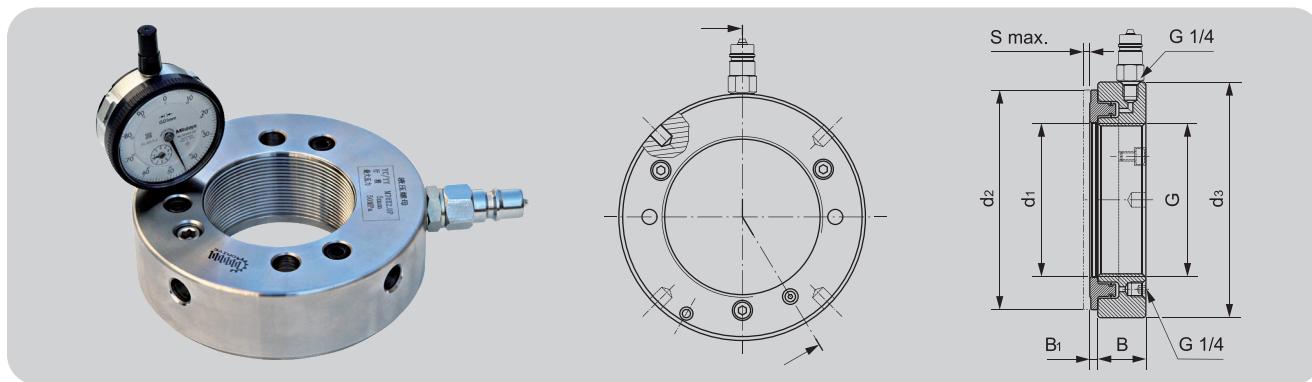
DRIVE

## Hydraulic Nut YCYY Series



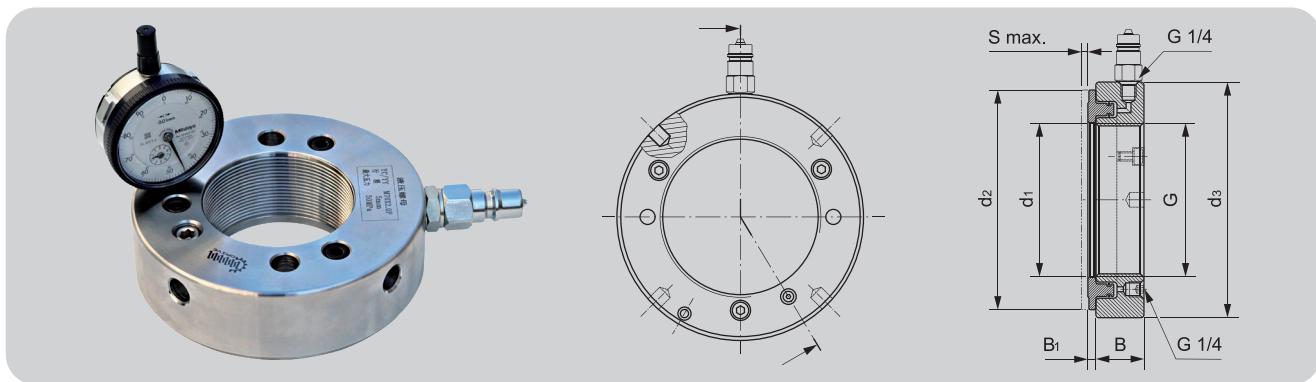
PartNo	Dimension						S max. mm	Piston area mm <sup>2</sup>
	G	d1	d2	d3	B	B1		
	Thread	mm	mm	mm	mm	mm		
YCYY-6	M30×1.5	30.5	84	94	38	5	5	2,300
YCYY-7	M35×1.5	35.5	89	99	38	5	5	2,500
YCYY-8	M40×1.5	40.5	94	104	38	5	5	2,700
YCYY-9	M45×1.5	45.5	99	109	38	5	5	2,700
YCYY-10	M50×1.5	50.5	104	114	38	5	5	2,900
YCYY-11	M55×2.0	55.5	109	120	38	5	5	3,150
YCYY-12	M60×2.0	60.5	115	125	38	5	5	3,300
YCYY-13	M65×2.0	65.5	121	130	38	5	5	3,600
YCYY-14	M70×2.0	70.5	127	135	38	5	5	3,800
YCYY-15	M75×2.0	75.5	132	140	38	5	5	4,000
YCYY-16	M80×2.0	80.5	137	146	38	5	5	4,200
YCYY-17	M85×2.0	85.5	142	150	38	5	5	4,400
YCYY-18	M90×2.0	90.5	147	156	38	5	5	4,700
YCYY-19	M95×2.0	95.5	153	162	38	5	5	4,900
YCYY-20	M100×2.0	100.5	158	166	38	6	5	5,100
YCYY-21	M105×2.0	105.5	163	172	38	6	5	5,300
YCYY-22	M110×2.0	110.5	169	178	38	6	5	5,600
YCYY-23	M115×2.0	115.5	174	182	38	6	5	5,800
YCYY-24	M120×2.0	120.5	179	188	38	6	5	6,000
YCYY-25	M125×2.0	125.5	184	192	38	6	5	6,200
YCYY-26	M130×2.0	130.5	190	198	38	6	5	6,400
YCYY-27	M135×2.0	135.5	195	204	38	6	5	6,600
YCYY-28	M140×2.0	140.5	200	208	38	7	5	6,800
YCYY-29	M145×2.0	145.5	206	214	39	7	5	7,300
YCYY-30	M150×2.0	150.5	211	220	39	7	5	7,500
YCYY-31	M155×3.0	155.5	218	226	39	7	5	8,100
YCYY-32	M160×3.0	160.5	224	232	40	7	6	8,600
YCYY-33	M165×3.0	165.5	229	238	40	7	6	8,900
YCYY-34	M170×3.0	170.5	235	244	41	7	6	9,400
YCYY-36	M180×3.0	180.5	247	256	41	7	6	10,300

## Hydraulic Nut YCYY Series



PartNo	Dimension						S max. mm	Piston area mm <sup>2</sup>
	G	d1	d2	d3	B	B1		
	Thread	mm	mm	mm	mm	mm		
YCYY-38	M190×3.0	191	259	270	42	8	7	11,500
YCYY-40	M200×3.0	201	271	282	43	8	8	12,500
YCYY-41	Tr205×4.0	207	276	288	43	8	8	12,800
YCYY-42	Tr210×4.0	212	282	294	44	8	9	13,400
YCYY-43	Tr215×4.0	217	287	300	44	8	9	13,700
YCYY-44	Tr220×4.0	222	293	306	44	8	9	14,400
YCYY-45	Tr225×4.0	227	300	312	45	8	9	15,200
YCYY-46	Tr230×4.0	232	305	318	45	8	9	15,500
YCYY-47	Tr235×4.0	237	311	326	46	8	10	16,200
YCYY-48	Tr240×4.0	242	316	330	46	9	10	16,500
YCYY-50	Tr250×4.0	252	329	342	46	9	10	17,600
YCYY-52	Tr260×4.0	262	341	356	47	9	11	18,800
YCYY-54	Tr270×4.0	272	352	368	48	9	12	19,800
YCYY-56	Tr280×4.0	282	363	380	49	9	12	21,100
YCYY-58	Tr290×4.0	292	375	390	49	9	13	22,400
YCYY-60	Tr300×4.0	302	386	404	51	10	14	23,600
YCYY-62	Tr310×5.0	312	397	416	52	10	14	24,900
YCYY-64	Tr320×5.0	322	409	428	53	10	14	26,300
YCYY-66	Tr330×5.0	332	419	438	53	10	14	27,000
YCYY-68	Tr340×5.0	342	430	450	54	10	14	28,400
YCYY-69	Tr345×5.0	347	436	456	54	10	14	29,400
YCYY-70	Tr350×5.0	352	442	464	56	10	14	29,900
YCYY-72	Tr360×5.0	362	455	472	56	10	15	31,300
YCYY-73	Tr365×5.0	367	460	482	57	11	15	31,700
YCYY-74	Tr370×5.0	372	466	486	57	11	16	32,800
YCYY-76	Tr380×5.0	382	476	498	58	11	16	33,500
YCYY-77	Tr385×5.0	387	483	504	58	11	16	34,700
YCYY-80	Tr400×5.0	402	499	522	60	11	17	36,700
YCYY-82	Tr410×5.0	412	510	534	61	11	17	38,300
YCYY-84	Tr420×5.0	422	522	546	61	11	17	40,000

## Hydraulic Nut YCYY Series



PartNo	Dimension						S max. mm	Piston area mm <sup>2</sup>
	G	d1	d2	d3	B	B1		
YCYY-86	Tr430×5.0	432	532	556	62	11	17	40,800
YCYY-88	Tr440×5.0	442	543	566	62	12	17	42,500
YCYY-90	Tr450×5.0	452	554	580	64	12	17	44,100
YCYY-92	Tr460×5.0	462	565	590	64	12	17	45,100
YCYY-94	Tr470×5.0	472	576	602	65	12	18	46,900
YCYY-96	Tr480×5.0	482	587	612	65	12	19	48,600
YCYY-98	Tr490×5.0	492	597	624	66	12	19	49,500
YCYY-100	Tr500×5.0	502	609	636	67	12	19	51,500
YCYY-102	Tr510×6.0	512	624	648	68	12	20	53,300
YCYY-104	Tr520×6.0	522	634	658	68	13	20	54,300
YCYY-106	Tr530×6.0	532	645	670	69	13	21	56,200
YCYY-108	Tr540×6.0	542	657	682	69	13	21	58,200
YCYY-110	Tr550×6.0	552	667	693	70	13	21	59,200
YCYY-114	Tr570×6.0	572	689	716	72	13	23	63,200
YCYY-116	Tr580×6.0	582	699	726	72	13	23	64,200
YCYY-120	Tr600×6.0	602	721	748	73	13	23	67,300
YCYY-126	Tr630×6.0	632	754	782	74	14	23	72,900
YCYY-130	Tr650×6.0	652	775	804	75	14	23	76,200
YCYY-134	Tr670×6.0	672	796	826	76	14	24	79,500
YCYY-138	Tr690×6.0	692	819	848	77	14	25	84,200
YCYY-142	Tr710×7.0	712	840	870	78	15	25	87,700
YCYY-150	Tr750×7.0	752	883	912	79	15	25	95,200
YCYY-160	Tr800×7.0	802	936	965	80	16	25	103,900
YCYY-170	Tr850×7.0	852	990	1020	83	16	26	114,600
YCYY-180	Tr900×7.0	902	1043	1075	86	17	30	124,100
YCYY-190	Tr950×8.0	952	1097	1126	86	17	30	135,700
YCYY-200	Tr1000×8.0	1002	1150	1180	88	17	34	145,800

Non-standard nuts can be customized

# Detection Equipment

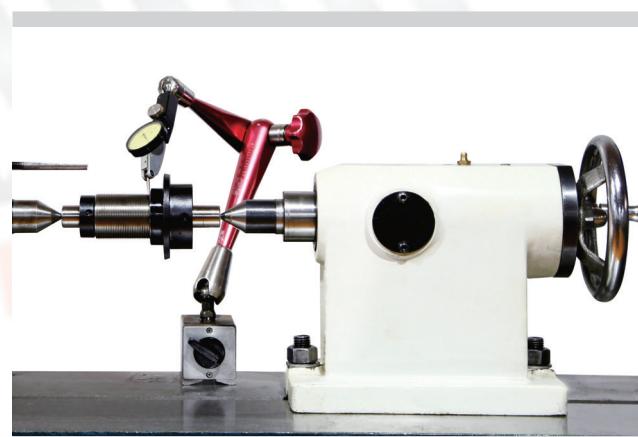
Japan Mitutoyo  
Thread Profiler



Japan Mitutoyo  
Roughness Tester



Taiwan Zhengye  
Verticality Detector



# Installation and Removal

## Nut installation precautions

Yuchen Precision Lock Nut is a nut used to fix precision bearings, which can effectively prevent the bearing from loosening or falling off during operation. When installing Yuchen Precision Lock Nuts, the following details need to be paid attention to to ensure optimal performance:

1. Clean the lock nut with an appropriate industrial cleaning agent before installing the lock nut;
2. Screw the cleaned lock nut into the cleaned male thread or shaft until the lock nut end face fits the workpiece that needs to be pretightened;
3. Use a hook wrench or torque wrench to tighten with rated torque, and the torque value is determined according to the actual needs of customers or the actual torque bearing of the bearing;
4. When pre-tightening the lock nut body, first use an Allen wrench to tighten the locking screw until the locking pin fits the thread, and then tighten the screw in order, the maximum torque value of the locking screw is shown in the product.

**!** **Important:** When the cleaned nut is screwed into the male thread or shaft, if the screwing feels jerky and stuck, please unscrew the nut immediately, carefully check the male thread and the nut thread for burrs, fine metal chips and other impurities, if any, please clean it immediately. If the inspection is not unscrewed and the nut is not screwed in, it is very likely that the loose nut cannot be unscrewed, and the nut can only be broken violently, which may cause unpredictable damage to the male thread or shaft.

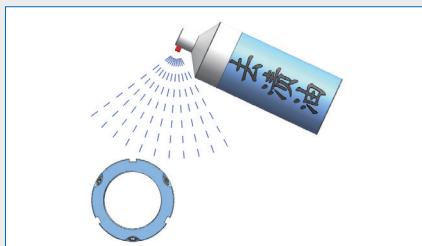
## Nut removal precautions

1. Before disassembling the lock nut, first loosen the locking screw, at this time the locking pin is still in the locked state;
2. Then use a leather hammer or copper rod to gently tap the nut near the locking screw, and loosen the locking pin before unscrewing the nut.

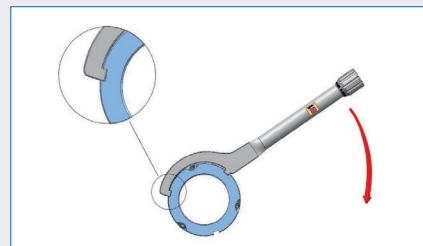
**!** **Important:** Clean the exposed male thread or shaft and apply a small amount of grease before unscrewing the nut to facilitate unscrewing the nut and also provide some protection for the male thread or shaft.

**!** The nut cannot be used as a go-no-go gauge for processing the male thread (except for one-to-one matching turning and grinding).

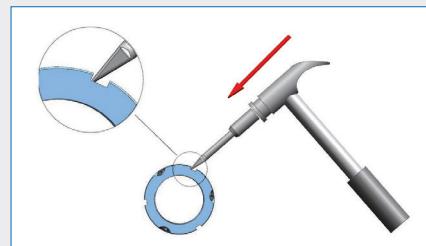
## Precautions for installation of Yuchen precision lock nut



Clean the nuts with an appropriate industrial cleaner



Use the appropriate tools and wrenches to complete the predetermined load



Do not use improper tools to exert force or brute force





**CFL CERTIFICATION CENTER**  
**CERTIFICATION OF QUALITY MANAGEMENT SYSTEM**

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**Beijing Drive Precision Machinery Co., Ltd.**

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