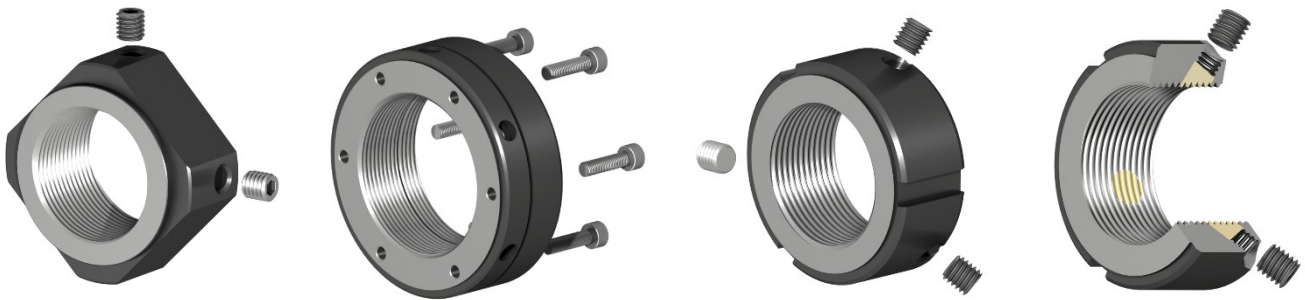


Ball Screw Lock Nut

Comprehensive range of products for general to heavy duty applications.



*For illustration only.

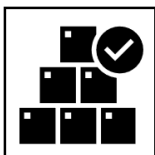
KEY FEATURES



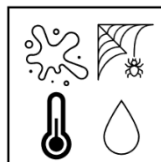
Standardized product
Designed based on popular dimensions, allowing compatibility with most ball screws available and enabling direct replacement of from other brands.



Consistent quality and service life
Audited factory and production line ensures stable product quality, while the mature design guarantees long-term supply of product and parts.



Short product lead time
Most standardized bearing products are available in stock. In stock items can be shipped within 2 working days with reception of purchase order.



Made for harsh environments
HZMotion locking nuts are precisely manufactured from high-quality raw materials. All lock nuts are black oxide coated for rust prevention.

PRODUCT LINEUP

Model	Illustration:	Coverage:	Features:
NRA		M4 – M40	Radial direction locking Light duty application
NR		M6 – M40	Radial direction locking Mid to heavy duty
NF		M14 – M100	Hybrid direction locking Mid to heavy duty
NK		M16 – M80	Axial direction locking Heavy duty application

RESOURCES & TECHNICAL INFORMATION:

Instant pricing and order online:



<https://www.hzmotion.com/#/pages/catalogs/index>

Download 3D & 2D drawing:



<https://www.hzmotion.com/#/pages/catalogs/index>

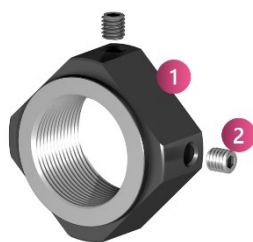
Bearing life calculation tool:



<https://www.hzmotion.com/#/pages/tools/index>

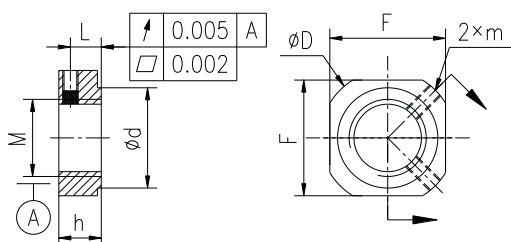
NRA Square Type Lock Nut

Product specification & list of contents:



Part No.	Description	Unit	QTY
1	Lock Nut	pcs	1
2	Set Screw	pcs	2

NRA square type lock nut models and dimensions:



Product Specifications:

Material	C45
Hardness	HRC 24-28
Thread tolerance level:	ISO 4H
Surface treatment:	Black oxide

Model	Thread Pitch	m	D	d	h	L	F
NRA M4×0.5	0.5	M2.6	11.5	8	5	2.7	10
NRA M5×0.5	0.5	M3×0.5	12.5	9	5	2.7	11
NRA M6×0.75	0.75	M3×0.5	13.5	10	5	2.7	12
NRA M8×1	1	M3×0.5	16	11	6.5	4	14
NRA M10×1	1	M4×0.7	19	13	8	5	17
NRA M12×1	1	M4×0.7	22	17	8	5	19
NRA M15×1	1	M4×0.7	25	21	8	5	22
NRA M17×1	1	M4×0.7	29	22	13	9	24
NRA M20×1	1	M5×0.8	35	26	11	7	30
NRA M25×1.5	1.5	M6×1	43	33	15	10	35
NRA M30×1.5	1.5	M6×1	48	39	20	14	40
NRA M35×1.5	1.5	M8×1.25	60	48	21	14	50
NRA M40×1.5	1.5	M8×1.25	60	48	25	18	50

Dimensions in [mm]

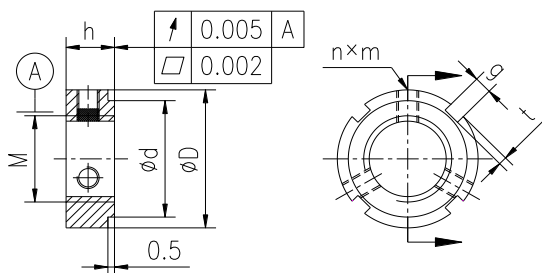
NR Round Type Lock Nut

Product specification & list of contents:



Part No.	Description	Unit	QTY
1	Lock nut	pcs	1
2	Set screw	pcs	2 (M6-M18) 3 (M20-M40)

NR round type lock nut models and dimensions:



Product Specifications:

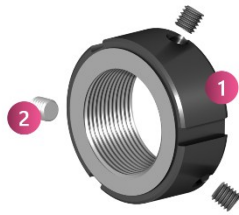
Material	42CrMo
Hardness	HRC 28-32
Thread tolerance level:	ISO 4H
Surface treatment:	Black oxide

Model	Thread Pitch	D	h	g	t	d	n×m	Max Locking Torque [N·m]	Axial Load Capability [kN]
NR M6×0.5	0.5	16	8	3	2	11	2×M4	3.5	30
NR M8×0.75	0.75	16	8	3	2	11	2×M4	3.5	30
NR M10×0.75	0.75	18	8	3	2	13	2×M4	3.5	35
NR M10×1.0	1	18	8	3	2	13	2×M4	3.5	35
NR M12×1.0	1	20	8	3	2	16	2×M4	3.5	40
NR M12×1.25	1.25	20	8	3	2	16	2×M4	3.5	40
NR M14×1.5	1.5	25	8	3	2	20	2×M4	3.5	60
NR M15×1.0	1	25	8	3	2	20	2×M4	3.5	60
NR M16×1.5	1.5	28	10	4	2	23	2×M5	4.5	60
NR M17×1.0	1	28	10	4	2	23	2×M5	4.5	80
NR M18×1.5	1.5	30	10	4	2	25	2×M5	4.5	80
NR M20×1.0	1	32	10	4	2	27	3×M5	4.5	90
NR M20×1.5	1.5	32	10	4	2	27	3×M5	4.5	90
NR M22×1.5	1.5	35	10	4	2	30	3×M5	4.5	130
NR M24×1.5	1.5	38	12	5	2	33	3×M6	8	130
NR M25×1.5	1.5	38	12	5	2	33	3×M6	8	130
NR M27×1.5	1.5	42	12	5	2	37	3×M6	8	140
NR M30×1.0	1	45	12	5	2	40	3×M6	8	160
NR M30×1.5	1.5	45	12	5	2.5	40	3×M6	8	160
NR M33×1.5	1.5	52	12	6	2.5	45	3×M6	8	170
NR M35×1.5	1.5	52	12	6	2.5	47	3×M6	8	190
NR M36×1.5	1.5	52	12	6	2.5	49	3×M6	8	190
NR M39×1.5	1.5	58	14	6	2.5	52	3×M6	8	210
NR M40×1.5	1.5	58	14	6	2.5	52	3×M6	8	210

Unnoted dimensions in [mm]

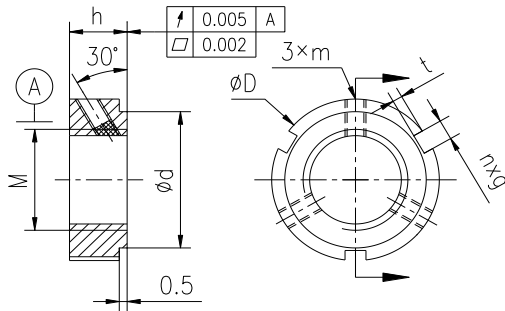
NF Round Type Lock Nut

List of contents:



Part No.	Description	Unit	QTY
1	Lock nut	pcs	1
2	Set screw	pcs	3

NF round type lock nut specifications and dimensions:



Product Specifications:

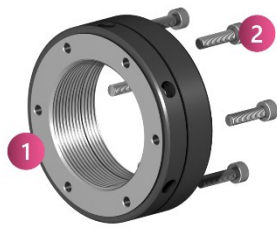
Material	42CrMo
Hardness	HRC 28-32
Thread tolerance level:	ISO 4H
Surface treatment:	Black oxide

Model	Thread Pitch	D	h	d	n×g	t	m	Max Locking Torque [N·m]	Axial Load Capability [kN]
NF M14×1.5	1.5	30	14	25	3×4	2	M5	4.5	50
NF M15×1.0	1	30	14	25	3×4	2	M5	4.5	60
NF M16×1.5	1.5	30	14	25	3×4	2	M5	4.5	80
NF M17×1.0	1	32	16	27	3×5	2	M6	4.5	85
NF M18×1.5	1.5	32	16	27	3×5	2	M6	4.5	90
NF M20×1.0	1	38	16	33	3×5	2	M6	4.5	90
NF M20×1.5	1.5	38	16	33	3×5	2	M6	8	90
NF M22×1.5	1.5	38	16	33	3×5	2	M6	8	110
NF M24×1.5	1.5	38	18	33	3×5	2	M6	8	120
NF M25×1.5	1.5	38	18	33	3×5	2	M6	8	130
NF M27×1.5	1.5	40	18	35	3×5	2	M6	8	140
NF M30×1.5	1.5	45	18	40	3×5	2	M6	8	160
NF M33×1.5	1.5	50	18	45	3×5	2	M6	8	180
NF M35×1.5	1.5	52	18	47	3×6	2.5	M8	18	190
NF M36×1.5	1.5	52	18	47	3×6	2.5	M8	18	195
NF M39×1.5	1.5	58	20	52	3×6	2.5	M8	18	200
NF M40×1.5	1.5	58	20	52	3×6	2.5	M8	18	210
NF M42×1.5	1.5	62	20	56	3×6	2.5	M8	18	220
NF M45×1.5	1.5	65	20	59	3×6	2.5	M8	18	240
NF M48×1.5	1.5	70	20	64	3×6	2.5	M8	18	270
NF M50×1.5	1.5	70	20	64	3×6	2.5	M8	18	300
NF M52×1.5	1.5	73	22	68	3×7	3	M8	18	310
NF M55×1.5	1.5	75	22	68	3×7	3	M8	18	340
NF M55×2.0	2	75	22	68	3×7	3	M8	18	340
NF M56×1.5	1.5	75	22	68	3×7	3	M8	18	350
NF M56×2.0	2	75	22	68	3×7	3	M8	18	350
NF M60×2.0	2	80	22	73	3×7	3	M8	18	380
NF M64×1.5	1.5	85	22	78	3×7	3	M8	18	450
NF M64×2.0	2	85	22	78	3×7	3	M8	18	450
NF M65×2.0	2	85	22	78	3×7	3	M8	18	460
NF M68×2.0	2	92	24	84	3×8	3.5	M8	18	480
NF M70×2.0	2	92	24	84	3×8	3.5	M8	18	490
NF M72×2.0	2	94	24	86	3×8	3.5	M8	18	500
NF M75×2.0	2	98	24	90	3×8	3.5	M8	18	520
NF M76×2.0	2	98	24	90	3×8	3.5	M8	18	540
NF M80×2.0	2	105	24	96	3×8	3.5	M8	18	620
NF M85×2.0	2	110	24	102	6×8	3.5	M8	18	650
NF M90×2.0	2	120	26	108	6×10	4	M8	18	680
NF M95×2.0	2	125	26	113	6×10	4	M8	18	710
NF M100×2.0	2	130	26	118	6×10	4	M8	18	740

Unnoted dimensions in [mm]

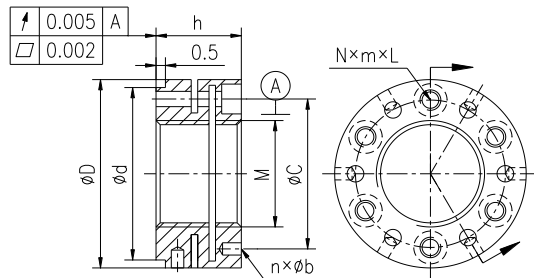
NK Round Type Lock Nut

Product specification & list of contents:



Part No.	Description	Unit	QTY
1	Lock nut	pcs	1
2	Locking bolt	pcs	4 (M16-M42) 6 (M45-M80)

NK round type lock nut specifications and dimensions:



Product Specifications:

Material	42CrMo
Hardness	HRC 28-32
Thread tolerance level:	ISO 4H
Surface treatment:	Black oxide

Model	Thread Pitch	D	h	d	N-m x L	n	b	c	Max Locking Torque [N·m]	Axial Load Capability [kN]
NK M16×1.5	1.5	34	18	29	4×M4×12	4	4	24	3.5	96
NK M17×1.0	1	37	18	32	4×M4×12	4	4	26	3.5	102
NK M18×1.5	1.5	38	18	33	4×M4×12	4	4	28	3.5	108
NK M20×1.0	1	40	18	35	4×M4×12	4	4	30	3.5	108
NK M20×1.5	1.5	40	18	35	4×M4×12	4	4	30	3.5	108
NK M22×1.5	1.5	42	18	37	4×M4×12	4	4	32	3.5	132
NK M24×1.5	1.5	44	18	39	4×M4×12	4	4	34	3.5	144
NK M25×1.5	1.5	45	20	40	4×M4×14	4	5	35	3.5	156
NK M26×1.5	1.5	45	20	40	4×M4×14	4	5	35	3.5	162
NK M27×1.5	1.5	46	20	43	4×M4×14	4	5	37	3.5	168
NK M28×1.5	1.5	46	20	43	4×M4×14	4	5	37	3.5	180
NK M30×1.5	1.5	48	20	45	4×M4×14	4	5	39	3.5	192
NK M32×1.5	1.5	50	22	47	4×M4×16	4	5	41	3.5	208
NK M33×1.5	1.5	50	22	47	4×M4×16	4	5	41	3.5	216
NK M35×1.5	1.5	53	22	50	4×M4×16	4	5	44	3.5	228
NK M38×1.5	1.5	56	22	53	4×M4×16	4	5	47	3.5	236
NK M39×1.5	1.5	56	22	53	4×M4×16	4	5	47	3.5	240
NK M40×1.5	1.5	58	22	53	4×M4×16	4	5	49	3.5	252
NK M42×1.5	1.5	60	22	55	4×M4×16	4	5	51	3.5	264
NK M45×1.5	1.5	68	22	63	6×M4×18	6	6	57	3.5	288
NK M48×1.5	1.5	69	25	65	6×M4×18	6	6	58	3.5	324
NK M50×1.5	1.5	70	25	66	6×M4×18	6	6	60	3.5	360
NK M52×1.5	1.5	72	25	68	6×M4×18	6	6	62	3.5	372
NK M55×1.5	1.5	75	25	71	6×M4×18	6	6	65	3.5	408
NK M55×2.0	2	75	25	71	6×M4×18	6	6	65	4.5	408
NK M56×1.5	1.5	75	25	71	6×M4×18	6	6	70	4.5	420
NK M58×1.5	1.5	84	26	79	6×M5×20	6	6	70	4.5	435
NK M60×1.5	1.5	84	26	79	6×M5×20	6	6	72	4.5	456
NK M60×2.0	2	84	26	79	6×M5×20	6	6	72	4.5	456
NK M62×1.5	1.5	86	28	82	6×M5×20	6	6	75	4.5	485
NK M64×1.5	1.5	86	28	82	6×M5×20	6	6	75	4.5	540
NK M65×1.5	1.5	88	28	84	6×M5×20	6	6	77	4.5	555
NK M68×1.5	1.5	93	28	87	6×M5×20	6	7	80	4.5	567
NK M68×2.0	2	93	28	87	6×M5×20	6	7	80	4.5	567
NK M70×1.5	1.5	95	28	89	6×M5×20	6	7	80	4.5	588
NK M70×2.0	2	95	28	89	6×M5×20	6	7	82	4.5	588
NK M72×1.5	1.5	97	28	91	6×M5×20	6	7	84	4.5	606
NK M75×1.5	1.5	100	28	94	6×M5×20	6	7	87	4.5	624
NK M75×2.0	2	100	28	94	6×M5×20	6	7	87	4.5	624
NK M80×2.0	2	110	32	103	6×M6×22	6	8	95	8	744

Unnoted dimensions in [mm]