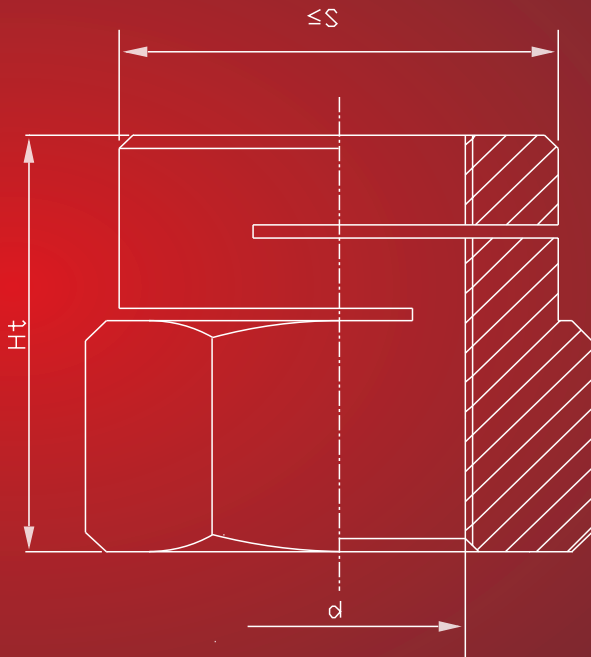


GEMTEK®



GEMLOCK



开槽锁紧螺母 *Slot Locking Nuts*



开槽锁紧螺母 *Slot locking nut*



开槽锁紧螺母通过精密加工的锁紧槽为螺母提供了卓越的抗振，抗冲击，抗腐蚀和耐极端温度的能力。

Slot locking nut was designed with precision manufactured locking slots which provide superior resistance to vibration, shock, impact, corrosion and extreme temperature.

开槽锁紧螺母的优点:

- ◆ 专门设计的开槽结构能实现极佳的防松效果
- ◆ 可采用优质碳钢，合金钢和不锈钢等多种材料供货
- ◆ 行业验证的先进防松效果，适用于对防松有苛刻要求的应用
- ◆ 适用温度范围广（-200℃ 到300℃）
- ◆ 防松性能安全可靠，不受油、气等影响

Advantages of slot locking nut:

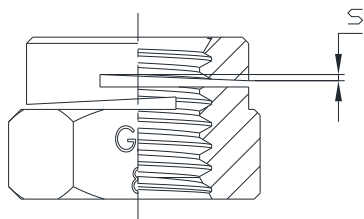
- ◆ Special designed slots provide excellent locking effect
- ◆ Made of high quality carbon steel, alloy steel, stainless steel and others
- ◆ Proven locking effect, best solution for high vibrating applications
- ◆ Can work in wide temperature range from -200℃ to 300℃
- ◆ Reliable locking performance is unaffected from oil, vapor and etc.

应用

- ◆ 轨道交通和机车
- ◆ 公共交通工具
- ◆ 矿山机械
- ◆ 风电设备等

Applications:

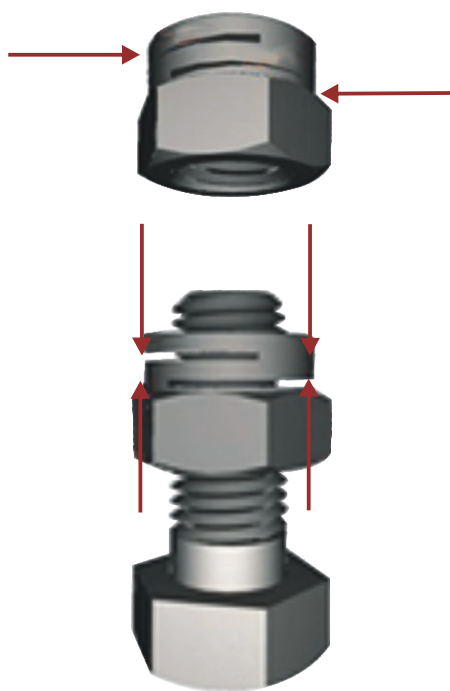
- ◆ Railway & locomotive
- ◆ Bus
- ◆ Mining machinery
- ◆ Wind turbine equipment and etc

技术特点 *Technical character*

开槽锁紧螺母的锁紧槽经精密加工而成，使内螺纹产生一定的螺距差。

当螺栓旋入时，内螺纹回复原有螺距，发生弹性形变，产生的弹性力将内外螺纹紧密啮合，使螺母牢固的自锁在螺栓上。

更有一种对称开槽的设计，可使锁紧力均衡分布在螺纹上，使啮合更紧密，适合于震动更剧烈的应用。

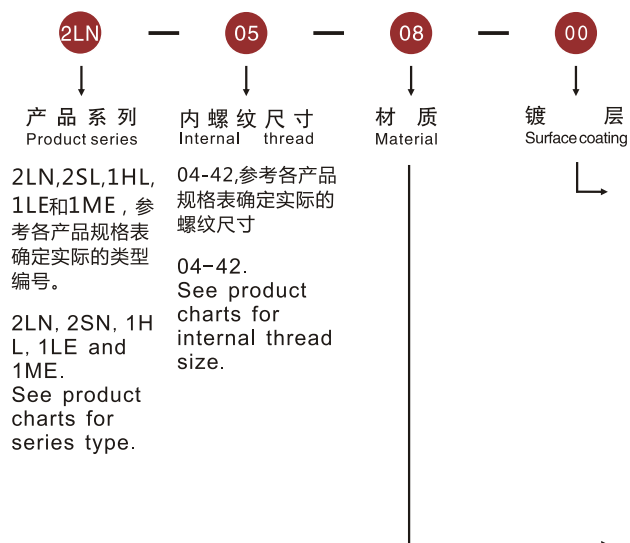


The locking function of a nut is obtained by the slots on the nut. Each slot is de-pitched by precision manufacturing technique. When installed, the nut regains its original form and each slot grips the flank of the bolt thread.

Furthermore, a symmetric two slots solution is introduced, which has two slots on two different planes and opposite side. This design distributes the self locking torque more balanced and makes better engagement. This is suitable for higher lever vibration applications.



料号规则 Part NO. designation



镀层编号 Coating Code	表面处理 Surface treatment	盐雾试验 Salt pray test
Blank	无镀层 No plating	—
03	镀白锌 Zinc plated	48h
04	镀彩锌 Zinc yellow	96h
4H	镀橄榄锌 Zinc olive	96h
DA	镀达克罗 DACROMET	500h-1000h

◆其它表面处理按客户要求

Other coating on request

材质编号 Material Code	原材料 Material	适用温度范围 Range of application
05	碳钢5级 Carbon steel grade 5	-50°C +300°C
08	碳钢8级 Carbon steel grade 8	-50°C +300°C
10	碳钢10级 Carbon steel grade 10	-50°C +300°C
27	不锈钢304, A2-70 Stainless steel 304, A2-70	-200°C +300°C
48	不锈钢316, A4-80 Stainless steel 316, A4-80	-200°C +300°C

◆其它材质按客户要求

Other material on request

示例：产品系列号为2LN，内螺纹尺寸为M5，材质为碳钢8级，表面处理为镀白锌的开槽锁紧螺母的订购编号为：2LN050803

Exp.: Slot locking nut of series 2LN with M5 internal thread, made of carbon steel grade 8 and with zinc plated:2LN050803



设计标准参考

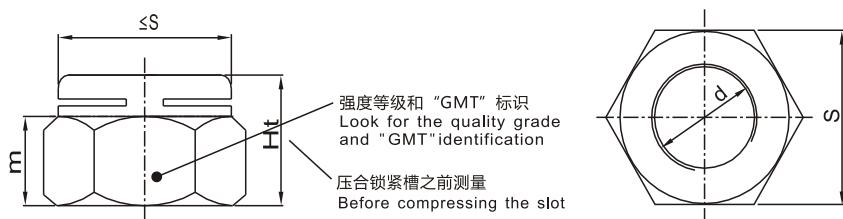
Design standard

◆ 螺纹 参照ISO262 (NFE03014) 和
ISO965-2 (NFE03053)

◆ Thread according to ISO262 (NFE03014)
and ISO965-2 (NFE03053)

◆ 机械性能根据标准ISO2320 (NFE25408)
and ISO3506-2

◆ Mechanical performance test according to
ISO2320 (NFE25408) and ISO3506-2



料号 Part No.	螺纹尺寸 Thread size d	螺纹牙距 Thread pitch P	对边尺寸 SW S max.	厚度尺寸 Thickness Ht	六角厚度 Thickness m
2LN04... 2MN04...	M4	0.7	7	4.5 5.5	2.5 3.5
2LN05... 2MN05...	M5	0.8	8	4.8 6.5	2.6 4.3
2LN06... 2MN06...	M6	1.0	10	5.2 7.5	2.7 5.0
2LN08... 2MN08...	M8	1.25	13	6 8.5	3.5 6.0
2LN10... 2MN10...	M10	1.5	17	7.5 11	4.5 8.0
2LN12... 2MN12...	M12	1.75	19	9 13	5.5 9.5
2LN14... 2MN14...	M14	2.0	22	11 15	7.0 11.0
2LN16... 2MN16...	M16	2.0	24	12 17	8.0 13.0
2LN20... 2MN20...	M20	2.5	30	15 22	10.5 17.5
2LN24... 2MN24...	M24	3.0	36	19 25	13.0 19.0
2LN27... 2MN27...	M27	3.0	41	20 27	14.0 21.0
2LN30... 2MN30...	M30	3.5	46	21.5 30	15.0 23.5
2LN36... 2MN36...	M36	4.0	54	25 36	18.0 29.0
2LN42... 2MN42...	M42	4.5	63	30 42	22.0 34.0

◆ 所有尺寸单位均采用米制单位标准mm，英制尺寸产品按客户要求订制。

◆ 上述尺寸范围的产品为标准产品，非标准尺寸的产品，请联系格姆特公司的技术人员。

◆ All dimensions are in mm, inches are on request.

◆ All the sizes above are standard products of GEMTEK Company. For non-standard products please contact technical



设计标准参考

- ◆ 尺寸标准参考NFE25411
- ◆ 螺纹参照ISO262 (NFE03014) 和ISO965-2 (NFE03053)
- ◆ 机械性能根据标准ISO2320 (NFE25408) 和ISO3506-2

Design standard

- ◆ Dimension according to standard NFE25411
- ◆ Thread according to ISO262 (NFE03014) and ISO965-2 (NFE03053)
- ◆ Mechanical performance test according to ISO2320 (NFE25408) and ISO3506-2



料号 Part No.	螺纹尺寸 Thread Size d	螺纹牙距 Thread Pitch P	对边尺寸 SW s max.	厚度尺寸 Thickness Ht	六角厚度 Thickness m
2SL03...	M3	0.5	5.5	4.7	2.8
2SL04...	M4	0.7	7.0	5.6	3.6
2SL05...	M5	0.8	8.0	7.0	4.0
2SL06...	M6	1.0	10.0	8.0	4.3
2SL08...	M8	1.25	13.0	10.5	5.4
2SL10...	M10	1.5	16.0	13.0	7.0
2SL12...	M12	1.75	18.0	14.0	8.0
2SL14...	M14	2.0	21.0	16.5	9.1
2SL16...	M16	2.0	24.0	19.5	11.0
2SL18...	M18	2.5	27.0	21.0	12.0
2SL20...	M20	2.5	30.0	22.0	14.0
2SL22...	M22	2.5	32.0	25.0	15.0
2SL24...	M24	3.0	36.0	26.0	16.0
2SL27...	M27	3.0	41.0	29.0	18.0
2SL30...	M30	3.5	46.0	32.0	20.0
2SL36...	M36	4.0	55.0	38.0	25.0
2SL42...	M42	4.5	65.0	44.0	29.0

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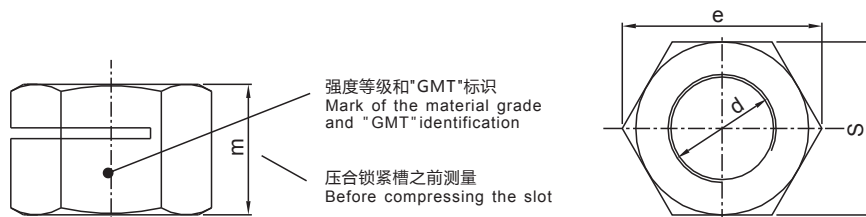


设计标准参考

- ◆ 尺寸标准参考ISO4033, $m=1.3d$
- ◆ 螺纹参照ISO262 (NFE03014) 和ISO 965-2 (NFE03053)
- ◆ 机械性能根据标准ISO2320 (NFE25408) and ISO3506-2

Design standard

- ◆ Dimension according to standard ISO4033, $m=1.3d$
- ◆ Thread according to ISO262 (NFE03014) and ISO965-2 (NFE03053)
- ◆ Mechanical performance test according to ISO2320 (NFE25408) and ISO3506-2



料号 Part No.	螺纹尺寸 Thread Size d	螺纹牙距 Pitch P	厚度尺寸 Thickness m	对角尺寸 SR e min.	对边尺寸 SW s max.
1HL03...	M3	0.5	3.9	6.01	5.5
1HL04...	M4	0.7	5.2	7.66	7.0
1HL05...	M5	0.8	6.5	8.79	8.0
1HL06...	M6	1.0	7.8	11.05	10.0
1HL08...	M8	1.25	10.4	14.38	13.0
1HL10...	M10	1.5	13.0	17.77	16.0
1HL12...	M12	1.75	15.6	20.03	18.0
1HL14...	M14	2.0	18.2	23.35	21.0
1HL16...	M16	2.0	20.8	26.75	24.0
1HL20...	M20	2.5	26	32.95	30.0
1HL24...	M24	3.0	31.2	39.55	36.0
1HL27...	M27	3.0	35.1	45.2	41.0
1HL30...	M30	3.5	39	50.85	46.0
1HL36...	M36	4.0	46.8	60.79	55.0

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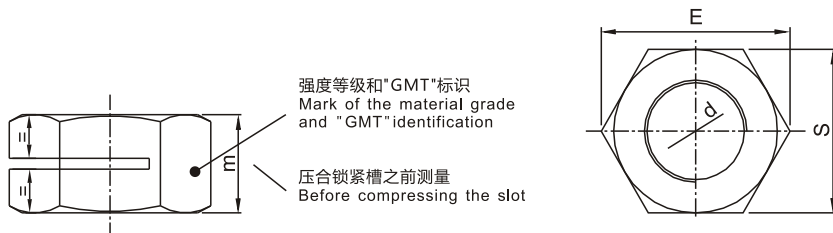


设计标准参考

- ◆ 螺纹参照ISO262 (NFE03014) 和ISO965-2 (NFE03053)
- ◆ 机械性能根据标准ISO2320 (NFE25408) and ISO3506-2

Design standard

- ◆ Thread according to ISO262 (NFE03014) and ISO965-2 (NFE03053)
- ◆ Mechanical performance test according to ISO2320 (NFE25408) and ISO3506-2



料号 Part No.	螺纹尺寸 Thread Size d	螺纹牙距 Pitch P	厚度尺寸 Thickness m max.	对角尺寸 SR e min.	对边尺寸 SW S max.
1ME03...	M3	0.5	3.1	6.10	5.5
1ME04...	M4	0.7	4.0	7.66	7.0
1LE05... 1ME05...	M5	0.8	4.08 7.0	8.79	8.0
1LE06... 1ME06...	M6	1.0	4.56 8.5	11.05	10.0
1LE08... 1ME08...	M8	1.25	6.0 10.5	14.38	13.0
1LE10... 1ME10...	M10	1.5	7.44 13.0	17.77	16.0
1LE12... 1ME12...	M12	1.75	9.6 15.6	20.03	18.0
1LE14... 1ME14...	M14	2.0	11.28 18.2	23.35	21.0
1LE16... 1ME16...	M16	2.0	13.12 20.8	26.75	24.0
1LE20... 1ME20...	M20	2.5	16.24 26	32.95	30.0
1LE24... 1ME24...	M24	3.0	19.12 31.2	39.55	36.0
1LE30... 1ME30...	M30	3.5	22.88 37	50.85	46.0
1LE36... 1ME36...	M36	4.0	27.76 43	60.79	55.0

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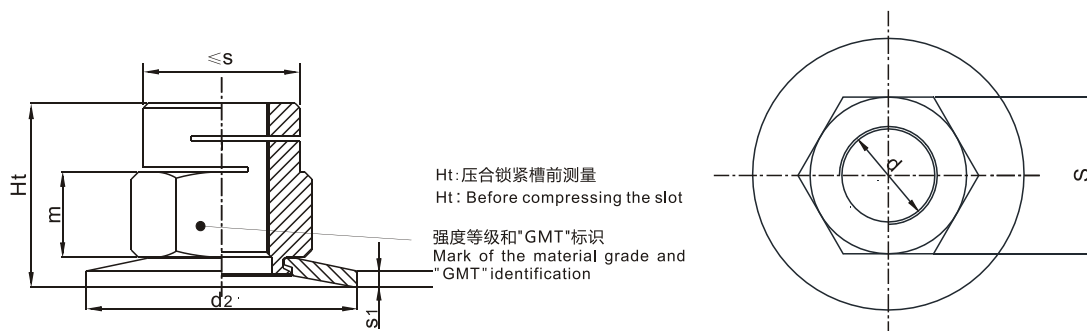


设计标准参考

- ◆ 螺母尺寸标准参考NFE25411
- ◆ 螺纹参照ISO262 (NFE03014) 和ISO965-2 (NFE03053)
- ◆ 机械性能根据标准ISO2320 (NFE25408) 和ISO3506-2

Design standard

- ◆ Dimension of nut according to standard NFE25411
- ◆ Thread according to ISO262 (NFE03014) and ISO965-2 (NFE03053)
- ◆ Mechanical performance test according to ISO2320 (NFE25408) and ISO3506-2



料号 Part No.	螺纹尺寸 Thread Size d	螺纹牙距 Thread Pitch P	对边尺寸 SW s max.	厚度尺寸 Thickne ss Ht	六角厚度 Thickne ss m	垫片外径 Thickne ss d2	垫片厚度 Thickne ss s1
2WL04...	M4	0.7	7.0	7.3	3.6	12	1.1
2WL05...	M5	0.8	8.0	9.2	4.0	14	1.3
2WL06...	M6	1.0	10.0	10.0	4.3	18	1.4
2WL08...	M8	1.25	13.0	12.7	5.4	22	1.6
2WL10...	M10	1.5	16.0	15.4	7.0	22/27	1.8
2WL12...	M12	1.75	18.0	16.8	8.0	27	1.8
2WL14...	M14	2.0	21.0	19.3	9.1	30	2.4
2WL16...	M16	2.0	24.0	20.6	11.0	40	3.2

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- ◆ All the sizes above are standard products of GEMTEK Company. For non-standard products please contact technical

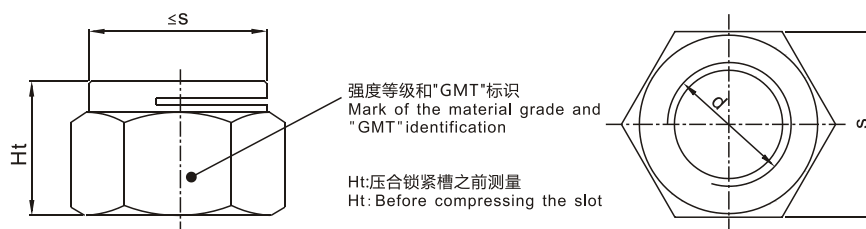


设计标准参考

- ◆ 尺寸标准参考DIN14440 和 DIN14441
- ◆ 螺纹参照ISO262和ISO 965-2
- ◆ 机械性能根据标准ISO2320 and ISO3506-2

Design standard

- ◆ Dimension according to standard DIN14440 and DIN14441
- ◆ Thread according to ISO262 and ISO965-2
- ◆ Mechanical performance test according to ISO2320 and ISO3506-2



DIN14440

料号 Part No.	螺纹尺寸 Thread Size d	螺纹牙距 Pitch P	厚度尺寸 Thickness Ht	对边尺寸 SW s max.
1DL08...	M8	1.25	8.5	13
1FL08...	M8	1.0	8.5	13
1DL10...	M10	1.5	10.5	17
1FL10...	M10	1.25	10.5	17
1DL12...	M12	1.75	12.5	19
1FL12...	M12	1.25	12.5	19

DIN14441

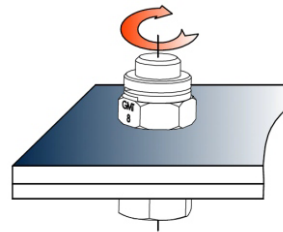
料号 Part No.	螺纹尺寸 Thread Size d	螺纹牙距 Pitch P	厚度尺寸 Thickness Ht	对边尺寸 SW s max.
1FS06...	M6	1.0	7.0	9
1DS08...	M8	1.25	8.5	12
1FS08...	M8	1.0	8.5	12
1DS10...	M10	1.50	10.5	14
1FS10...	M10	1.25	10.5	14
1DS12...	M12	1.75	12.5	17
1FS12...	M12	1.25	12.5	17

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- ◆ All dimensions are in mm, inches are on request.
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安装指南 *Install guidance*

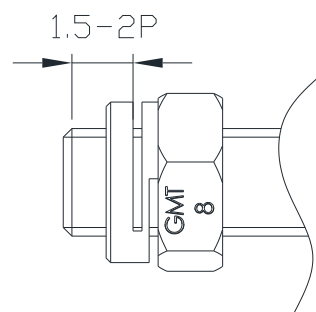
安装扭矩请参考ISO2320(NFE25408),有特殊要求请联系格姆特公司的工程师。

Please reference to ISO2320(NFE25408) applied tightening torque. With specific requirement, please contact GEMTEK engineer for help.



安装时请务必使螺栓全螺纹穿过锁紧槽1.5到2个螺距,否则螺母的锁紧效果可能无法全部实现。

Please always turn the screws into the nuts to the extent that the end of the thread protrudes beyond the locking element by a minimum of 1.5-2 thread pitches. Otherwise, the full locking effect of the nut cannot be achieved.





GEMTEK®

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