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Westfield Fasteners Product Specification:

Philidas Industrial Self Locking Nut, Metric Sizes

This datasheet provides technical specifications, dimensions and tolerances for Philidas Industrial all-metal self-locking nuts with metric threads, available from Westfield Fasteners.

Product Description

Philidas Industrial all-metal self-locking nuts feature a one-piece construction with an integral locking feature that creates friction between the mating nut and bolt threads. This produces a prevailing torque that helps resist loosening caused by vibration.

Their relatively high prevailing torque makes them suitable for demanding applications, including industrial machinery, automotive, rail and mining equipment.

Unlike nylon-insert locking nuts, their all-metal construction allows them to be used over a wider range of operating temperatures, subject to the applicable material and product specifications. They are designed to be reused.

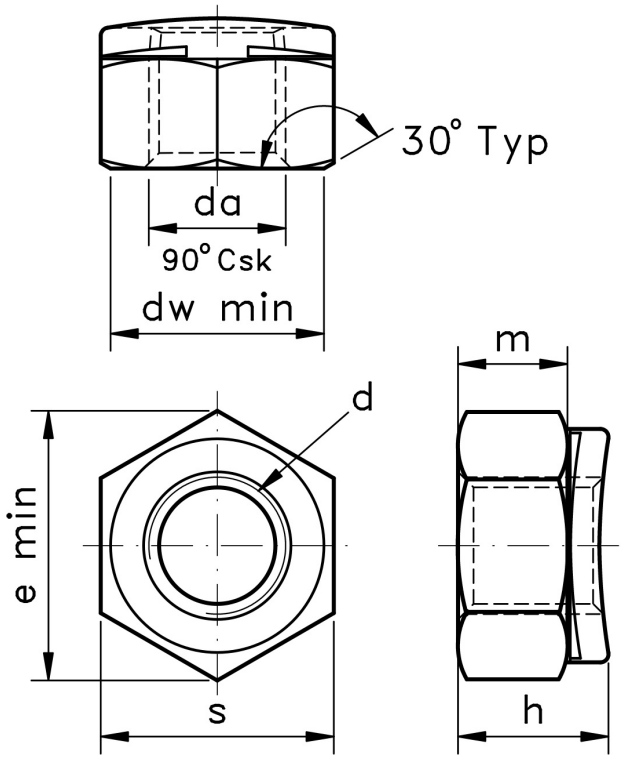


Figure 1: Philidas Industrial All-Metal Self-Locking Nut

Table 1: Dimensions and Tolerances (mm)

Thread Diameter, d	Pitch, p	Width Across the Flats, s		Width Corner to Corner, e	Overall Height, b	Wrenching Height, m	Bearing Face, dw	Diameter of Bearing Face, da	
		min.	max.		nom.	nom.		min.	max.
M3	0.5	5.32	5.50	6.01	4.5	2.5	4.50	3.0	3.45
M4	0.7	6.78	7.00	7.66	5.4	3.3	5.90	4.0	4.60
M5	0.8	7.78	8.00	8.79	6.5	4.3	6.90	5.0	5.75
M6	1.0	9.78	10.00	11.05	7.5	5.0	8.90	6.0	6.75
M8	1.25	12.73	13.00	14.38	8.5	5.7	11.60	8.0	8.75
M10	1.5	16.73	17.00	18.90	11.0	8.0	15.60	10.0	10.80
M12	1.75	18.67	19.00	21.10	13.0	9.5	17.40	12.0	13.0
M14	2.0	21.67	22.00	24.49	15.0	11.0	20.50	14.0	15.10
M16	2.0	23.67	24.00	26.75	17.0	12.8	22.50	16.0	17.30
M18	2.5	26.16	27.00	29.56	20.0	15.5	24.90	18.0	19.50
M20	2.5	29.16	30.00	32.95	22.0	17.5	27.70	20.0	21.60
M22	2.5	31.0	32.00	35.03	23.0	18.0	29.50	22.0	23.70
M24	3.0	35.0	36.00	39.55	25.0	19.5	33.20	24.0	25.90
M27	3.0	40.0	41.00	45.20	28.0	22.0	38.0	27.0	29.10
M30	3.5	45.0	46.00	50.85	31.0	24.5	42.70	30.0	32.40
M33	3.5	49.0	50.00	55.37	33.0	26.2	46.60	33.0	35.60
M36	4.0	53.8	55.00	60.79	36.0	28.6	51.10	36.0	38.90
M39	4.0	58.8	60.00	66.44	39.0	31.1	55.90	39.0	42.10

Material Specifications

The following table summarises the available materials, mechanical properties and applicable specifications for this range of nuts. Material grades and property classes may vary according to the nominal thread size.

Material Code	Description	Grade / Spec.	Stress Under Proof Load (MPa)
YZP-8	Zinc Plated Steel with Yellow Passivate	Class 8	800
Available on Request:			
A2	A2-70 Stainless Steel	A2-70	700
A4	A4-80 Stainless Steel	A4-80	800