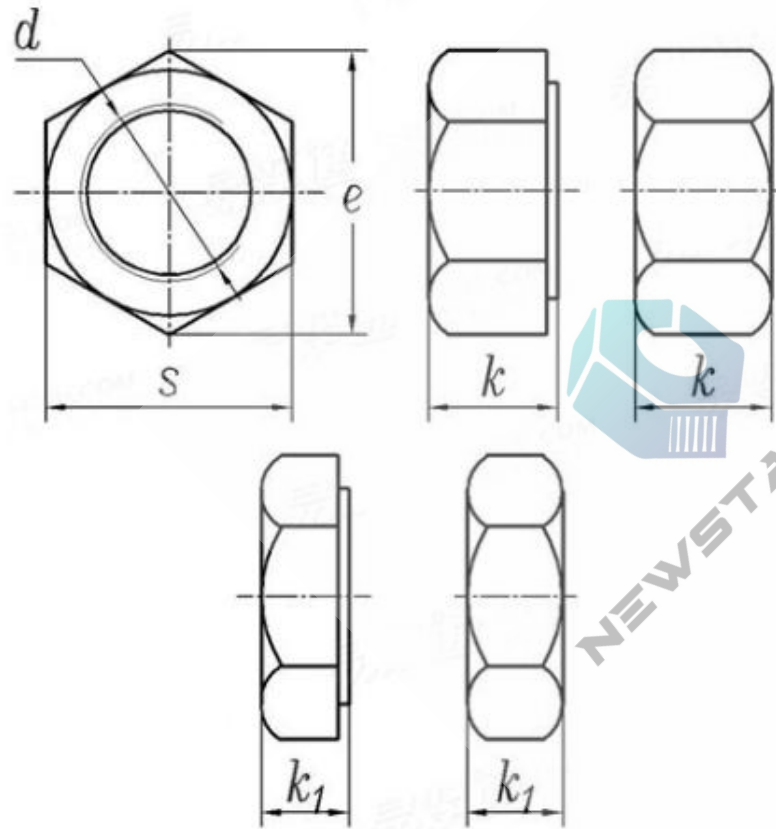
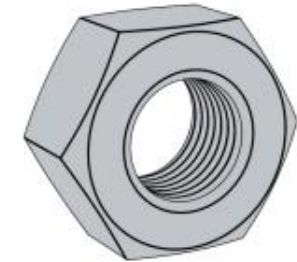


ANSI/ASME B 18.2.2



Unit: inch



NEWSTARWDH

ASME B 18.2.2

 Unit: **inch**

Screw Thread		1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1-1/8	1-1/4	1-3/8
d		0.2500	0.3125	0.3750	0.4375	0.5000	0.5625	0.6250	0.7500	0.8750	1.0000	1.1250	1.2500	1.3750
PP	UNC	20	18	16	14	13	12	11	10	9	8	7	7	6
s	min	0.488	0.546	0.669	0.728	0.850	0.909	1.031	1.212	1.394	1.575	1.756	1.938	2.119
	max	0.500	0.562	0.688	0.750	0.875	0.938	1.062	1.250	1.438	1.625	1.812	2.000	2.188
e	min	0.556	0.622	0.673	0.830	0.969	1.037	1.175	1.382	1.589	1.796	2.002	2.209	2.416
	max	0.577	0.650	0.794	0.866	1.010	1.083	1.227	1.443	1.660	1.876	2.093	2.309	2.526
k	min	0.218	0.280	0.341	0.403	0.464	0.526	0.587	0.710	0.833	0.956	1.079	1.187	1.310
	max	0.250	0.314	0.377	0.411	0.504	0.568	0.631	0.758	0.885	1.012	1.139	1.251	1.378
k₁	min	0.156	0.186	0.216	0.247	0.277	0.307	0.337	0.398	0.458	0.519	0.579	0.687	0.747
	max	0.188	0.220	0.252	0.285	0.317	0.349	0.381	0.446	0.510	0.575	0.639	0.751	0.815

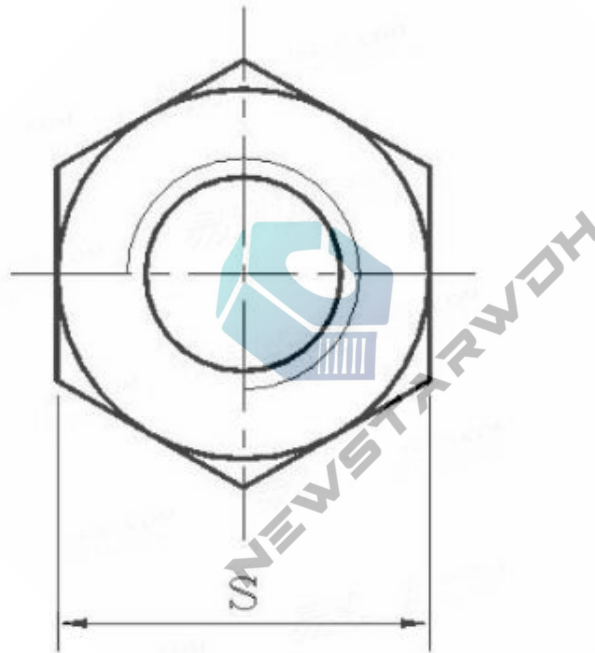
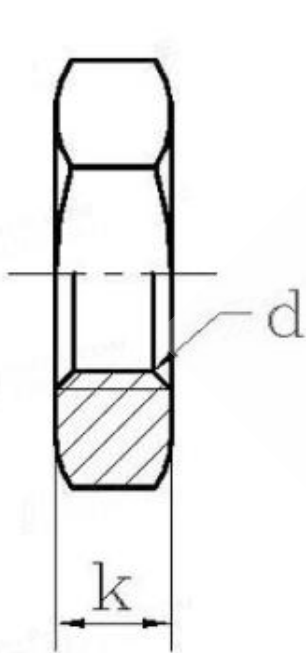
Screw Thread		1-1/2	1-5/8	1-3/4	1-7/8	2	2-1/4	2-1/2	2-3/4	3	3-1/4	3-1/2	3-3/4	4
d		1.5000	1.6250	1.7500	1.8750	2.0000	2.2500	2.5000	2.7500	3.0000	3.2500	3.5000	3.7500	4.0000
PP	UNC	6	0	5	0	5	5	4	4	4	4	4	4	4
s	min	2.300	2.481	2.662	2.844	3.025	3.388	3.750	4.112	4.475	4.838	5.200	5.562	5.925
	max	2.375	2.562	2.750	2.938	3.125	3.500	3.875	4.250	4.625	5.000	5.375	5.750	6.125
e	min	2.622	2.828	3.035	3.242	3.449	3.862	4.275	4.688	5.102	5.515	5.928	6.341	6.755
	max	2.742	2.959	3.175	3.392	3.608	4.041	4.474	4.907	5.340	5.774	6.207	6.640	7.073
k	min	1.433	1.556	1.679	1.802	1.925	2.155	2.401	2.647	2.893	3.124	3.370	3.616	3.862
	max	1.505	1.632	1.759	1.886	2.013	2.251	2.505	2.759	3.013	3.252	3.506	3.760	4.014
k₁	min	0.808	0.868	0.929	0.989	1.050	1.155	1.401	1.522	1.643	1.748	1.870	1.990	2.112
	max	0.880	0.944	1.009	1.073	1.138	1.251	1.505	1.634	1.763	1.876	2.006	2.134	2.264

ANSI/ASME B 18.2.2 - 1987(R1999)

ANSI/ASME B 18.2.2 - 2010

ANSI/ASME B 18.2.2 - 2015

DIN 439



Unit: mm



DIN 439

Unit: mm

Screw Thread d		M1.6	(M1.8)	M2	M2.5	M3	(M3.5)	M4	M5	M6	M8	M10	M12	(M14)	M16
P	Coarse pitch	0.35	0.35	0.4	0.45	0.5	0.6	0.7	0.8	1	1.25	1.5	1.75	2	2
	Fine pitch 1	-	-	-	-	-	-	-	-	-	1	1	1.5	1.5	1.5
	Fine pitch 2	-	-	-	-	-	-	-	-	-	-	1.25	1.25	-	-
	Fine pitch 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
k	max	1	1.1	1.2	1.6	1.8	2	2.2	2.7	3.2	4	5	6	7	8
	min	0.75	0.85	0.95	1.35	1.55	1.75	1.95	2.45	2.9	3.7	4.7	5.7	6.42	7.42
s	max	3.2	3.5	4	5	5.5	6	7	8	10	13	17	19	22	24
	min	3.08	3.38	3.82	4.82	5.32	5.82	6.78	7.78	9.78	12.73	16.73	18.67	21.67	23.67
per 1000 units ≈ kg		0.06	0.08	0.11	0.22	0.29	0.37	0.57	0.83	1.6	3.2	7.2	10.4	15.9	20.5

Screw Thread d		(M18)	M20	(M22)	M24	(M27)	M30	(M33)	M36	(M39)	M42	(M45)	M48	(M52)
P	Coarse pitch	2.5	2.5	2.5	3	3	3.5	3.5	4	4	4.2	4.5	5	5
	Fine pitch 1	1.5	2	1.5	2	2	2	2	3	3	3	3	3	3
	Fine pitch 2	2	1.5	2	1.5	-	-	-	2	2	2	2	2	2
	Fine pitch 3	-	-	-	-	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
k	max	9	10	11	12	13.5	15	16.5	18	19.5	21	22.5	24	26
	min	8.42	9.1	9.9	10.9	12.4	13.9	15.4	16.9	18.2	19.7	21.2	22.7	24.7
s	max	27	30	32	36	41	46	50	55	60	65	70	75	80
	min	26.16	29.16	31	35	40	45	49	53.8	58.8	63.1	68.1	73.1	78.1
per 1000 units ≈ kg		29.6	40.2	48.3	69.5	101	139	183	244	316	403	500	617	755

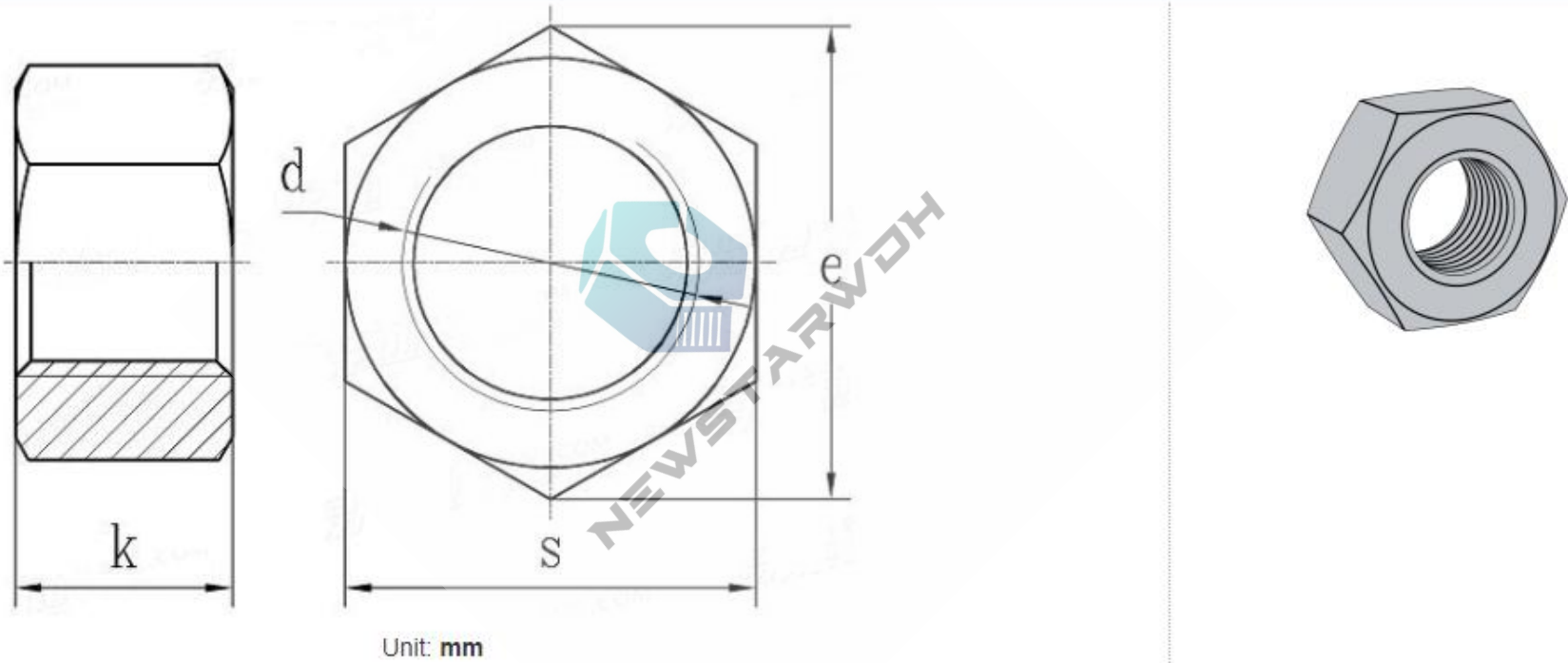
DIN 555

Unit: mm

Screw Thread d		M5	M6	M8	M10	M12	M16	M20	(M22)	M24	(M27)	M30	(M33)	M36
P	Pitch	0.8	1	1.25	1.5	1.75	2	2.5	2.5	3	3	3.5	3.5	4
	max	4.6	5.6	7.25	8.75	10.75	13.9	16.9	18.9	20.05	23.05	25.05	27.05	30.05
k	min	3.4	4.4	5.75	7.25	9.25	12.1	15.1	17.1	17.95	20.95	22.95	24.95	27.95
	max=nominal size	8	10	13	17	19	24	30	32	36	41	46	50	55
s	min	7.64	9.64	12.57	16.57	18.48	23.16	29.16	31	35	40	45	49	53.8
	per 1000 units ≈ kg	1.11	2.32	4.62	10.9	15.9	30.8	60.3	80.2	103	154	216	271	369

Screw Thread d		(M39)	M42	(M45)	M48	(M52)	M56	(M60)	M64	M72	M80	M90	M100
P	Pitch	4	4.5	4.5	5	5	5.5	6	6	6	6	6	6
	max	32.25	35.25	37.25	39.25	43.25	46.25	49.25	52.5	59.5	65.5	73.5	81.5
k	min	29.75	32.75	34.75	36.75	40.75	43.75	46.75	49.5	56.5	62.5	70.5	78.5
	max=nominal size	60	65	70	75	80	85	90	95	105	115	130	145
s	min	58.8	63.1	68.1	73.1	78.1	82.8	87.8	92.8	102.8	112.8	127.5	142.5
	per 1000 units ≈ kg	472	610	750	924	1130	1350	1600	1880	2520	3260	4680	6430

DIN 934

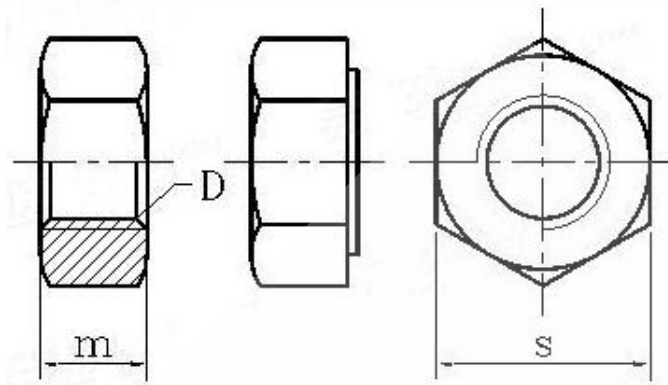


Screw Thread d		M1	M1.2	M1.4	M1.6	(M1.7)	M2	(M2.3)	M2.5	(M2.6)	M3	(M3.5)	M4	M5	M6	(M7)	M8
P	Pitch	0.25	0.25	0.3	0.35	0.35	0.4	0.45	0.45	0.45	0.5	0.6	0.7	0.8	1	1	1.25
	Fine thread	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	1
	Very fine thread	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
k	max=nominal size	0.8	1	1.2	1.3	1.4	1.6	1.8	2	2	2.4	2.8	3.2	4	5	5.5	6.5
	min	0.55	0.75	0.95	1.05	1.15	1.35	1.55	1.75	1.75	2.15	2.55	2.9	3.7	4.7	5.2	6.14
s	max=nominal size	2.5	3	3	3.2	3.5	4	4.5	5	5	5.5	6	7	8	10	11	13
	min	2.4	2.9	2.9	3.02	3.38	3.82	4.32	4.82	4.82	5.32	5.82	6.78	7.78	9.78	10.73	12.73
e	min	2.71	3.28	3.28	3.41	3.82	4.32	4.88	5.45	5.45	6.01	6.58	7.66	8.79	11.05	12.12	14.38
	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
per 1000 units ≈ kg		0.03	0.054	0.063	0.076	0.1	0.142	0.2	0.28	0.72	0.384	0.514	0.81	1.23	2.5	3.12	5.2

Screw Thread d		M10	M12	(M14)	M16	(M18)	M20	(M22)	M24	(M27)	M30	(M33)	M36	(M39)	M42	(M45)	M48
P	Pitch	1.5	1.75	2	2	2.5	2.5	2.5	3	3	3.5	3.5	4	4	4.5	4.5	5
	Fine thread	1.25	1.5	1.5	1.5	2	2	2	2	2	2	2	3	3	3	3	3
	Very fine thread	1	1.25	/	/	1.5	1.5	1.5	/	/	/	/	/	/	/	/	/
k	max=nominal size	8	10	11	13	15	16	18	19	22	24	26	29	31	34	36	38
	min	7.64	9.64	10.3	12.3	14.3	14.9	16.9	17.7	20.7	22.7	24.7	27.4	29.4	32.4	34.4	36.4
s	max=nominal size	17	19	22	24	27	30	32	36	41	46	50	55	60	65	70	75
	min	16.73	18.67	21.67	23.67	26.16	29.16	31	35	40	45	49	53.8	58.8	63.1	68.1	73.1
e	min	18.9	21.1	24.49	26.75	29.56	32.95	35.03	39.55	45.2	50.85	55.37	60.79	66.44	71.3	76.95	82.6
	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
per 1000 units ≈ kg		11.6	17.3	25	33.3	49.4	64.4	79	110	165	223	288	393	502	652	800	977

Screw Thread d		(M52)	M56	(M60)	M64	(M68)	M72	(M76)	M80	(M85)	M90	M100	M110	M125	M140	M160
P	Pitch	5	5.5	5.5	6	6	/	/	/	/	/	/	/	/	/	/
	Fine thread	3	4	4	4	4	6	6	6	6	6	6	6	6	6	6
	Very fine thread	/	/	/	/	/	4	4	4	4	4	4	4	4	/	/
k	max=nominal size	42	45	48	51	54	58	61	64	68	72	80	88	100	112	128
	min	40.4	43.4	46.4	49.1	52.1	56.1	59.1	62.1	66.1	70.1	78.1	85.8	97.8	109.8	125.5
s	max=nominal size	80	85	90	95	100	105	110	115	120	130	145	155	180	200	230
	min	78.1	82.8	87.8	92.8	97.8	102.8	107.8	112.8	117.8	127.5	142.5	152.5	177.5	195.4	225.4
e	min	88.25	93.56	99.21	104.86	110.51	116.16	121.81	127.46	133.11	144.08	161.02	172.32	200.57	220.8	254.7
	*	-	-	-	-	-	-	-	-	-	-	-	170	196	216	248
per 1000 units ≈ kg		1220	1420	1690	1980	2300	2670	3040	3440	3930	4930	6820	8200	13000	17500	26500

ISO 4032



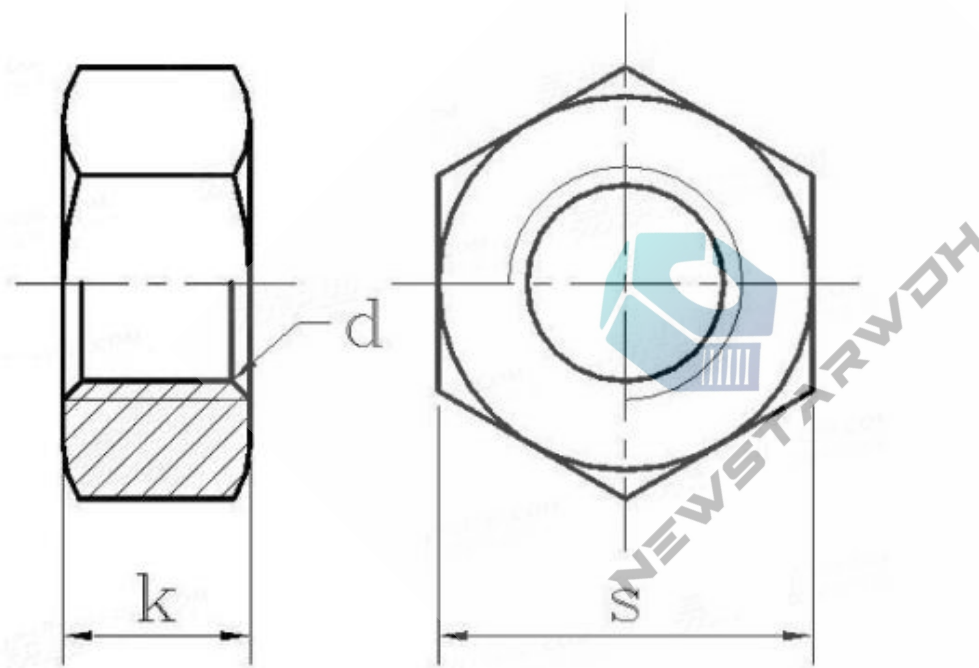
Unit: mm

D	Pitch P	m		S		D	Pitch P	m		S	
		max	min	max	min			max	min		
M1.6	0.35	1.3	1.05	3.2	3.02	M22	2.5	19.4	18.1	34	33
M2	0.4	1.6	1.35	4	3.82	M24	3	21.5	20.2	36	35
M2.5	0.45	2	1.75	5	4.82	M27	3	23.8	22.5	41	40
M3	0.5	2.4	2.15	5.5	5.32	M30	3.5	25.6	24.3	46	45
M3.5	0.6	2.8	2.55	6	5.82	M33	3.5	28.7	27.4	50	49
M4	0.7	3.2	2.9	7	6.78	M36	4	31	29.4	55	53.8
M5	0.8	4.7	4.4	8	7.78	M39	4	33.4	31.8	60	58.8
M6	1	5.2	4.9	10	9.78	M42	4.5	34	32.4	65	63.1
M8	1.25	6.8	6.44	13	12.73	M45	4.5	36	34.4	70	68.1
M10	1.5	8.4	8.04	16	15.73	M48	5	38	36.4	75	73.1
M12	1.75	10.8	10.37	18	17.73	M52	5	42	40.4	80	78.1
M14	2	12.8	12.1	21	20.67	M56	5.5	45	43.4	85	82.8
M16	2	14.8	14.1	24	23.67	M60	5.5	48	46.4	90	87.8
M18	2.5	15.8	15.1	27	26.16	M64	6	51	49.1	95	92.8
M20	2.5	18	16.9	30	29.16						

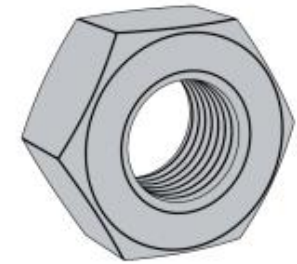
ISO 4032 - 1999

ISO 4032 - 2012

JIS B 1181



Unit: mm



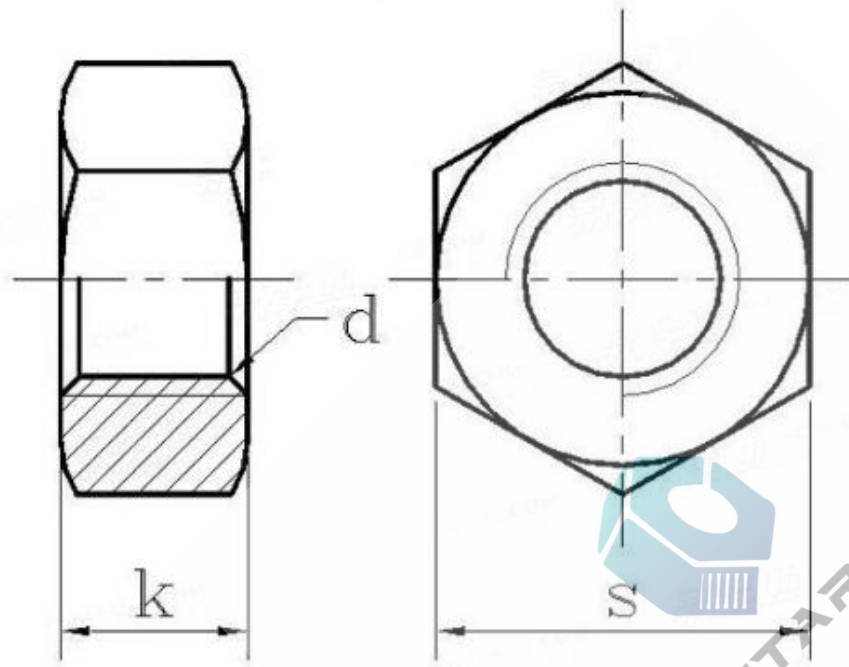
JIS B 1181 , Fine

Unit: mm

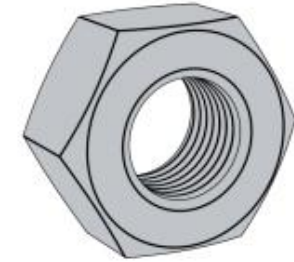
Nominal Diameter d		M8	M10	(M10)	M12	(M12)	(M14)	M16	(M18)	M20	(M20)	(M22)	M24
P	Pitch	1	1	1.25	1.5	1.25	1.5	1.5	1.5	1.5	2	1.5	2
	max	6.8	8.4	8.4	10.8	10.8	12.8	14.8	15.8	18	18	19.4	21.5
k	min	6.44	8.04	8.04	10.37	10.37	12.1	14.1	15.1	16.9	16.9	18.1	20.2
	max=nominal size	13	16	16	18	18	21	24	27	30	30	34	36
S	min	12.73	15.73	15.73	17.73	17.73	20.67	23.67	26.16	29.16	29.16	33	35

Nominal Diameter d		(M27)	M30	(M33)	M36	(M39)	M42	(M45)	M48	(M52)	M56	(M60)	M64
P	Pitch	2	2	2	3	3	3	3	3	4	4	4	4
	max	23.8	25.6	28.7	31	33.4	34	36	38	42	45	48	51
k	min	22.5	24.3	27.4	29.4	31.8	32.4	34.4	36.4	40.4	43.4	46.4	49.1
	max=nominal size	41	46	50	55	60	65	70	75	80	85	90	95
S	min	40	45	49	53.8	58.8	63.1	68.1	73.1	78.1	82.8	87.8	92.8

JIS B 1181



Unit: mm



NEWSTARWDH

Nominal Diameter d		M5	M6	M8	M10	M12	(M14)	M16	M20	M24	M30	M36
P	Pitch	0.8	1	1.25	1.5	1.75	2	2	2.5	3	3.5	4
k	max	5.1	5.7	7.5	9.3	12.00	14.1	16.4	20.3	23.9	28.6	34.7
	min	4.8	5.4	7.14	8.94	11.57	13.4	15.7	19.0	22.6	27.3	33.1
s	max	8.00	10.00	13.00	16.00	18.00	21.00	24.00	30.00	36	46	55.0
	min	7.78	9.78	12.73	15.73	17.73	20.67	23.67	29.16	35	45	53.8