VALTOR Fastener Thread Pitch Reference

VALTOR Hardware Products Co., Ltd. | Metric, Tapping Screw, UNC/UNF and BSW Reference

Metric fastener pitches follow ISO 262:2023 selected commercial fastener sizes. Additional fine pitches exist in ISO 261 and should be specified explicitly when required.

1. ISO Metric Fastener Threads — Selected Sizes

Thread Size	Series	Coarse Pitch P (mm)	Selected Fine Pitch(es) P (mm)	Reference
M2	1st choice	0.4	—	ISO 262:2023
M2.5	1st choice	0.45	—	ISO 262:2023
M3	1st choice	0.5	—	ISO 262:2023
M3.5	2nd choice	0.6	—	ISO 262:2023
M4	1st choice	0.7	—	ISO 262:2023
M5	1st choice	0.8	—	ISO 262:2023
M6	1st choice	1.	—	ISO 262:2023
M7	2nd choice	1.	—	ISO 262:2023
M8	1st choice	1.25	1.0	ISO 262:2023
M10	1st choice	1.5	1.25 / 1.0	ISO 262:2023
M12	1st choice	1.75	1.5 / 1.25	ISO 262:2023
M14	2nd choice	2.	1.5	ISO 262:2023
M16	1st choice	2.	1.5	ISO 262:2023
M18	2nd choice	2.5	2.0 / 1.5	ISO 262:2023
M20	1st choice	2.5	2.0 / 1.5	ISO 262:2023
M22	2nd choice	2.5	2.0 / 1.5	ISO 262:2023
M24	1st choice	3.	2.0	ISO 262:2023
M27	2nd choice	3.	2.0	ISO 262:2023
M30	1st choice	3.5	2.0	ISO 262:2023
M33	2nd choice	3.5	2.0	ISO 262:2023

2. Tapping Screw Threads — ISO 1478

Thread Size	Pitch P ≈ (mm)	Status	Reference
ST1.5	0.5	Current	ISO 1478:1999
ST1.9	0.6	Current	ISO 1478:1999
ST2.2	0.8	Current	ISO 1478:1999
ST2.6	0.9	Current	ISO 1478:1999
ST2.9	1.1	Current	ISO 1478:1999
ST3.3	1.3	Current	ISO 1478:1999

ST3.5	1.3 Current	ISO 1478:1999
ST3.9	1.3 Current	ISO 1478:1999
ST4.2	1.4 Current	ISO 1478:1999
ST4.8	1.6 Current	ISO 1478:1999
ST5.5	1.8 Current	ISO 1478:1999
ST6.3	1.8 Current	ISO 1478:1999
ST8	2.1 Current	ISO 1478:1999
ST9.5	2.1 Current	ISO 1478:1999

3. Unified Inch Threads — Numbered Machine Screws

Size	Major Dia. (in)	Major Dia. (mm)	UNC (TPI)	UNF (TPI)	Reference
#2	0.086	2.184	56	64	ASME B1.1-2024
#3	0.099	2.515	48	56	ASME B1.1-2024
#4	0.112	2.845	40	48	ASME B1.1-2024
#5	0.125	3.175	40	44	ASME B1.1-2024
#6	0.138	3.505	32	40	ASME B1.1-2024
#8	0.164	4.166	32	36	ASME B1.1-2024
#10	0.190	4.826	24	32	ASME B1.1-2024
#12	0.216	5.486	24	28	ASME B1.1-2024

4. Fractional Inch Threads — UNC / UNF / BSW

Nominal Size	Major Dia. (mm)	UNC (TPI)	UNF (TPI)	BSW (TPI)	Unified Ref.	BSW Ref.
1/4	6.350	20	28	20	ASME B1.1-2024	BS 84:2007
5/16	7.938	18	24	18	ASME B1.1-2024	BS 84:2007
3/8	9.525	16	24	16	ASME B1.1-2024	BS 84:2007
7/16	11.113	14	20	14	ASME B1.1-2024	BS 84:2007
1/2	12.700	13	20	12	ASME B1.1-2024	BS 84:2007
9/16	14.288	12	18	12	ASME B1.1-2024	BS 84:2007
5/8	15.875	11	18	11	ASME B1.1-2024	BS 84:2007
3/4	19.050	10	16	10	ASME B1.1-2024	BS 84:2007
7/8	22.225	9	14	9	ASME B1.1-2024	BS 84:2007
1	25.400	8	12	8	ASME B1.1-2024	BS 84:2007
1-1/8	28.575	7	12	7	ASME B1.1-2024	BS 84:2007
1-1/4	31.750	7	12	7	ASME B1.1-2024	BS 84:2007
1-1/2	38.100	6	12	6	ASME B1.1-2024	BS 84:2007

Note: Metric pitch P is the axial distance between adjacent thread crests in millimetres. For Unified and Whitworth threads, TPI means threads per inch. Thread form and flank angle must also be considered.