DIN 931 / ISO 4014 — Standard Thread Length (b)

Partially threaded hexagon head bolts. Thread length b per ISO 888:2012. Length limits per ISO 4014:2022. Sizes above M64 per DIN 931-2:2009 (M68–M160 × 6). All dimensions in millimetres.

L ≤ 125 mm	125 < L ≤ 200 mm	L > 200 mm	Fully threaded rule
b = 2d + 6	**b = 2d + 12**	**b = 2d + 25**	If L – b ≤ 0.5d, supply as **ISO 4017 / DIN 933** (fully threaded)

Dia	Pitch (coarse)	b L <= 125	b 125 < L <= 200	b L > 200	Shortest std length	Greatest std length	Min length for part thread	Std
M8	1.25	22	28	-	40	80	26	
M10	1.5	26	32	-	45	100	31	
M12	1.75	30	36	-	50	120	36	
M14	2	34	40	-	60	140	41	2nd
M16	2	38	44	57	65	160	46	
M18	2.5	42	48	61	70	180	51	2nd
M20	2.5	46	52	65	80	200	56	
M22	2.5	50	56	69	90	220	61	2nd
M24	3	54	60	73	90	240	66	
M27	3	60	66	79	100	270	73	2nd
M30	3.5	66	72	85	110	300	81	
M33	3.5	72	78	91	120	330	88	2nd
M36	4	78	84	97	140	360	96	
M39	4	84	90	103	150	390	103	2nd
M42	4.5	90	96	109	160	420	111	
M45	4.5	96	102	115	170	450	118	2nd
M48	5	102	108	121	180	480	126	
M52	5	-	116	129	200	500	136	2nd
M56	5.5	-	124	137	200	500	146	
M60	5.5	-	132	145	220	500	156	2nd
M64	6	-	140	153	220	500	166	
M68	6	-	148	161	240	500	-	DIN 931-2
M72	6	-	156	169	260	500	-	DIN 931-2
M76	6	-	164	177	260	500	-	DIN 931-2
M80	6	-	172	185	280	500	-	DIN 931-2
M85	6	-	182	195	300	500	-	DIN 931-2
M90	6	-	192	205	320	500	-	DIN 931-2
M100	6	-	-	225	340	500	-	DIN 931-2
M110	6	-	-	245	380	500	-	DIN 931-2
M125	6	-	-	275	420	500	-	DIN 931-2

DIN 931 / ISO 4014 — how to read the chart

Reading the table. Pick the b column by the bolt's nominal length L, not by diameter. A dash means that length branch falls outside the standard length range for that diameter — e.g. M8 to M48 have no standard length above 200 mm, and M52 upward have no standard length at or below 125 mm.

Greatest standard length is 10d, capped at 500 mm (ISO 4014:2022). So M8 stops at 80, M12 at 120, M20 at 200. Only M56 and M64 upward reach 500 mm. Anything longer is made to order — get the supplier's drawing, because b may not follow the formula on a special.

ISO 4014 ends at M64. Everything below the copper line is **DIN 931-2**, which uses the same b formula but a fixed **6 mm pitch** for every diameter — there is no ISO coarse pitch above M64. Designate these as e.g. M80 × 6.

"2nd" marks a second-choice (non-preferred) diameter under ISO 262. They are standard sizes with standard pitches, but stock and lead time are usually worse than the preferred series.

Not every diameter × length combination is a real product. M8 × 500 and M64 × 20 do not exist as standard items — the first exceeds the 10d cap, the second is below the shortest standard length. Always check the length falls between the "shortest" and "greatest" columns before quoting off the shelf.

Sources: ISO 888:2012 clause 6 and Table 2 (thread length formula and values) · ISO 4014:2022 (scope M1.6–M64, shortest and greatest standard length) · DIN 931-2:2009 (M68–M160 × 6) · ISO 262 / ISO 965 (coarse pitch). DIN 931 and ISO 4014 thread lengths are identical; they differ only in head width across flats at M10, M12, M14 and M22.