

Assembly tools

Shapes of driving features and assigned tool sizes



Hexagon and hexalobular socket keys

Thread	Standard					
	DIN 912 ISO 4762 DIN 6912	DIN 7984	DIN 7991	DIN 913 / 914 DIN 915 / 916 ISO 4026 / 4027 ISO 4028/4029	ISO 7379	ISO 7380
M1,4	1,3	–	–	0,7	–	–
M1,6	1,5	–	–	0,7	–	–
M2	1,5	–	–	0,9	–	–
M2,5	2	–	1,5	1,3	–	–
M3	2,5	2	2	1,5	–	2
M4	3	2,5	2,5	2	–	2,5
M5	4	3	3	2,5	–	3
M6	5	4	4	3	3	4
M8	6	5	5	4	4	5
M10	8	7	6	5	5	6
M12	10	8	8	6	6	8
M14	12	10	10	6	–	–
M16	14	12	10	8	8	10
M18	14	12	12	10	–	–
M20	17	14	12	10	10	–
M22	17	14	14	12	–	–
M24	19	17	14	12	12	–
M27	19	–	–	–	–	–
M30	22	–	–	–	–	–
M33	24	–	–	–	–	–
M36	27	–	–	–	–	–
M42	32	–	–	–	–	–
M48	36	–	–	–	–	–

Screwdriver bits/hexalobular socket keys¹⁾

Metric screws			Wood screws/shipboard screws			Sheet metal screws		
Thread	Drive		Nenn-Ø	Drive		Thread	Drive	
M2	T6	X6	3	T10	X10	ST 2,2	–	X6
M2,5	T8	X8	3,5	T15	X15	ST 2,9	–	X10
M3	T10	X10	4	T15	X15	ST 3,5	–	X15
M4	T20	X20	4,5	T25	X25	ST 3,9	–	X15
M5	T25	X25	5	T25	X25	ST 4,2	–	X20
M6	T30	X30	6	T25	X25	ST 4,8	–	X25
M8	T40	X40	7	T30	X30	ST 5,5	–	X25
M10	T50	X50	–	–	–	ST 6,3	–	X30

Type of hexalobular socket key:

– T = Torx®

– X = hexalobular socket according to ISO 10664

¹⁾ Reference values basing on product standards. Special requirements or brand products can technical differ from it.

Assembly tools

Wrench size of hexagon head screws / nuts



Thread	Standard							
	hexagon head screws / nuts					hexagon head flange screws / bolts		
	DIN	ISO	DIN	ISO	DIN	DIN	DIN / ISO / EN	
	558 601 931 933 934 960 961 7990 7968 (571) ¹⁾	4018 4016 4014 4017 4032 8765 8676	6914 6915 7999	7412 7414	561	heavy-duty 6921	light-duty ISO 4162 EN 1662	heavy-duty EN 1665 hexagon nuts ISO 4161 EN 1661 EN 1663 EN 1664 DIN 6923 DIN 6926 DIN 6927
M1,6	3,2	–	–	–	–	–	–	–
M2	4	–	–	–	–	–	–	–
M2,5	5	–	–	–	–	–	–	–
M3	5,5	–	–	–	–	–	–	–
M3,5	6	–	–	–	–	–	–	–
M4	7	–	–	–	–	–	–	–
M5	8	–	–	–	–	8	7	8
M6	10	–	–	–	8	10	8	10
M7	11 (12) ¹⁾	–	–	–	–	–	–	–
M8	13	–	–	–	10	13	10	13
M10	17	16	–	–	13	15	13	15 (EN: s = 16)
M12	19	18	22	21	16	16	15 (EN: s = 16)	18
M14	22	21	–	–	–	18	18	21
M16	24	–	27	–	18	21	21	24
M18	27	–	–	–	–	–	–	–
M20	30	–	32	34	24	27	27	30
M22	32	34	36	–	–	–	–	–
M24	36	–	41	–	30	–	–	–
M27	41	–	46	–	–	–	–	–
M30	46	–	50	–	36	–	–	–
M33	50	–	–	–	–	–	–	–
M36	55	–	60	–	46	–	–	–
M39	60	–	–	–	–	–	–	–
M42	65	–	–	–	55	–	–	–
M45	70	–	–	–	–	–	–	–
M48	75	–	–	–	65	–	–	–

¹⁾ for wood screws