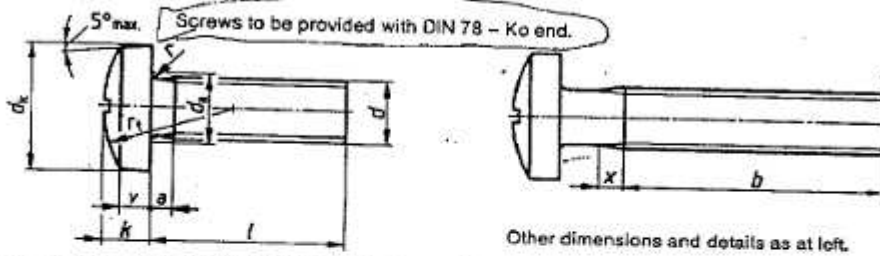


Cross recessed raised cheese head screws

2 Dimensions

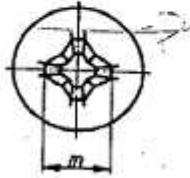
Raised cheese head screw threaded up to the head
(specified in table 1 above dashed line)

Raised cheese head screw with unthreaded portion of shank
(specified in table 1 below dashed line)¹⁾

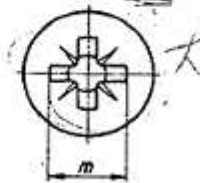


The shank diameter may be equal to the thread diameter (normal shank) or approximately equal to the pitch diameter (reduced shank), at the manufacturer's discretion.

Cross recess type H



Cross recess type Z



¹⁾ If raised cheese head screws with lengths given below the dashed line are to be supplied with their shank threaded up to the head, letter A shall be included in the designation, in accordance with DIN 962.

Thread size (d^1)			M1,6	M2	M2,5	M3	(M3,5)	M4	M5	M6	M8	M10	
P^2			0,35	0,4	0,45	0,5	0,8	0,7	0,8	1	1,25	1,5	
a	max.		0,7	0,8	0,9	1	1,2	1,4	1,6	2	2,5	3	
b	min.		15	16	18	19	20	22	25	28	34	40	
d_s	max.		2,1	2,6	3,1	3,6	4,1	4,7	5,7	6,8	9,2	11,2	
d_k	max. = nominal size		3,2	4	5	6	7	8	10	12	16	20	
	min.		2,9	3,7	4,7	5,7	6,64	7,64	9,64	11,57	15,57	19,48	
k	Nominal size		1,3	1,6	2	2,4	2,7	3,1	3,8	4,6	6	7,5	
	max.		1,42	1,72	2,12	2,52	2,82	3,25	3,95	4,75	6,15	7,68	
	min.		1,18	1,48	1,88	2,28	2,58	2,95	3,65	4,45	5,85	7,32	
r	max.		0,1	0,1	0,1	0,1	0,2	0,2	0,2	0,25	0,4	0,4	
r_f	no		3	4	5	6	7	8	10	12	16	20	
v	no		0,8	1,1	1,3	1,6	1,9	2	2,5	3	3,7	4,8	
x	max.		0,9	1	1,1	1,25	1,5	1,75	2	2,5	3,2	3,8	
Cross recess	Cross recess No.		0	1			2			3	4		
	Type H	m	no	1,8	2,5	2,7	3,1	4,2	4,6	5,3	6,8	9	10,2
		Penetration depth	min.	0,72	1,1	1,3	1,7	1,74	2,04	2,77	3,03	4,18	5,38
	Type Z	m	no	1,8	2,4	2,6	3	4	4,3	5	6,7	8,8	9,9
		Penetration depth	min.	0,92	1,1	1,27	1,68	1,85	1,9	2,64	3,02	4,06	5,23
			max.	1,17	1,35	1,52	1,93	2,11	2,36	3,1	3,48	4,52	5,69
Nominal size	$l^1, 3)$		Approximate mass (7,85 kg/dm ³), per 1000 units, in kg										
	min.	max.											
2	1,8	2,2	0,085	0,156									
3	2,8	3,2	0,097	0,175	0,341								
4	3,75	4,25	0,108	0,194	0,370	0,635							
5	4,75	5,25	0,120	0,212	0,399	0,675	0,99	1,41					
6	5,75	6,25	0,132	0,231	0,428	0,714	1,05	1,48	2,66				
8	7,7	8,3	0,155	0,268	0,486	0,793	1,17	1,63	2,91				
10	9,7	10,3	0,178	0,306	0,544	0,872	1,29	1,79	3,16	5,14	10,9		
12	11,65	12,35	0,201	0,343	0,602	0,951	1,42	1,94	3,41	5,49	11,5	21,2	
(14)	13,65	14,35	0,225	0,380	0,660	1,03	1,54	2,09	3,66	5,84	12,2	22,2	
16	15,65	16,35	0,248	0,418	0,718	1,11	1,67	2,25	3,91	6,19	12,8	23,2	
(18)	17,65	18,35		0,455	0,776	1,19	1,79	2,41	4,16	6,54	13,5	24,2	
20	19,6	20,4		0,492	0,834	1,27	1,92	2,56	4,41	6,89	14,2	25,2	
(22)	21,6	22,4			0,912	1,35	2,05	2,72	4,66	7,24	14,8	26,2	
25	24,6	25,4			0,999	1,47	2,25	2,94	5,03	7,77	15,8	27,7	
(28)	27,6	28,4			1,09	1,59	2,48	3,24	5,41	8,29	16,8	29,2	
30	29,6	30,4			1,15	1,71	2,63	3,44	5,68	8,64	17,5	30,2	
35	34,5	35,5					3,01	3,94	6,43	9,52	19,1	32,7	
40	39,5	40,5						4,44	7,18	10,5	20,7	35,7	
45	44,5	45,5							7,93	11,4	22,3	37,7	
50	49,5	50,5							8,68	12,3	23,9	41,2	
55	54	56									25,5	43,7	
60	59	61									27,1	46,2	

¹⁾ Use of sizes given in brackets should be avoided where possible.
²⁾ P = pitch of coarse thread.
³⁾ Screws with lengths above the dashed line are threaded up to the head ($h = l - a$).
 Lengths over 60 mm shall be g graded in 10 mm steps.
 For commercial lengths (given between stepped lines), values of mass have been specified.

Material	Steel	Stainless steel	Non-ferrous metal	
General requirements	As specified in DIN 267 Part 1.			
Screw thread	Tolerance	6g ¹⁾		
	As specified in	DIN 13 Parts 13 and 15.		
Mechanical properties ²⁾	Property class (material)	4.8, 5.8 or 8.8	A2-70 or A4-70	CuZn = Copper-zinc alloy ³⁾
	As specified in	ISO 898 Part 1.	DIN 267 Part 11.	DIN 267 Part 18.
Limit deviations and geometrical tolerances	Product grade	A		
	As specified in	ISO 4759 Part 1.		
Surface finish	As processed. Property class 8.8: (thermally or chemically) blackened.	Bright.	Bright.	
<p>DIN 267 Part 2 shall apply with regard to surface roughness. DIN 267 Part 19 shall apply with regard to permissible surface discontinuities. DIN 267 Part 9 shall apply with regard to electroplating, other types of surface protection being subject to agreement.</p>				
Cross recesses	As specified in DIN 7962.			
Acceptance inspection	DIN 267 Part 5 shall apply with regard to acceptance inspection.			
<p>¹⁾ Only for screws without surface protection, the 6g tolerance makes it possible for normal coating thicknesses to be applied in accordance with DIN 267 Part 9, the reference line not being exceeded. Depending on the coating thickness required, a larger fundamental deviation shall be selected than that for the g position. This might, however, impair the resistance to stripping of the bolt/nut assembly.</p> <p>²⁾ CuZn = CU2 or CU3, at the manufacturer's discretion.</p> <p>³⁾ Other property classes or materials, or a particular grade of material (e.g. CU3) shall be subject to agreement.</p>				