DIN940

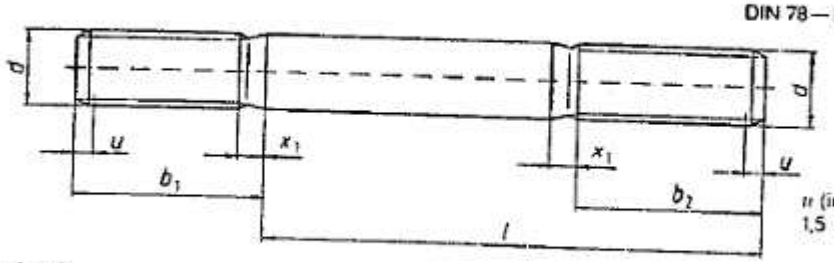
Studs

with a length of engagement equal to about 2,5 d

—

2 Dimensions

DIN 78 — K type nut end



r (incomplete thread): 1,5 P maximum.

b_1 = stud end
b_2 = nut end

Table 1: Dimensions

d	M4 — —	M5 — —	M6 — —	(M7) — —	M8 M8×1 —	M10 M10×1,25 —	M12 M12×1,25 M12×1,5	(M14) (M14×1,5) —	M16 M16×1,5 —	(M18) (M18×1,5) —	M20 M20×1,5 —	(M22) (M22×1,5) —	M24 M24×2 —
b_1	10	13	15	18	20	25	30	35	40	45	50	55	60
b_2 [1] [2] [3]	14 20 —	16 22 —	18 24 —	20 26 —	22 28 —	26 32 45	30 36 49	34 40 53	38 44 57	42 48 61	46 52 65	50 56 69	54 60 73
x_1	1,75	2,0	2,5	2,5	3,2	3,8	4,3	5,0	5,0	6,3	6,3	6,3	7,5
l js15	Approximate mass (7,85 kg/dm³) per 1000 units, in kg												
12													
(14)													
16													
(18)													
20	2,14												
(22)	2,61	4,46											
25	2,90	4,92	7,26										
(28)	3,20	5,38	7,93	11,8									
30	3,40	5,69	8,37	12,4	16,3								
35	3,89	6,46	9,48	13,9	18,3	30,7							
40	4,38	7,23	10,6	15,4	20,2	33,8	51,9						
45		8,00	11,7	16,9	22,2	36,9	56,3	80,9					
50		8,77	12,8	18,4	24,2	39,9	60,8	86,9	122				
55			13,9	20,0	26,2	43,0	65,2	93,0	130	167			
60			15,0	21,5	28,1	46,1	69,7	99,0	138	177	232		
65				23,0	30,1	49,2	74,1	105	146	187	244	311	
70				24,5	32,1	52,3	78,5	111	154	197	257	326	394
75					34,1	55,4	83,0	117	161	207	269	341	412
80					36,0	58,4	87,4	123	169	217	281	356	430
(85)						61,5	91,9	129	177	227	294	371	447
90						64,6	96,3	135	185	237	306	386	465
(95)						67,7	101	141	193	247	318	401	483
100						70,8	105	147	201	257	331	415	501
110							114	159	217	277	355	445	536
120							123	172	232	297	380	475	572
130								184	248	317	405	505	607
140								196	264	337	429	535	643
150									280	357	454	565	678
160									296	377	479	594	714
170										397	503	624	749
180										417	528	654	785
190											553	684	820
200											577	714	856

[1]) For lengths, l, of 125 mm or less

[2]) For lengths, l, above 125 mm up to 200 mm

[3]) For lengths, l, exceeding 200 mm

Lengths above 200 mm shall be graded in 20 mm steps

Bracketed sizes and intermediate lengths shall be avoided if possible

The zone between the continuous thick lines indicates the range of commercial sizes of studs with coarse pitch thread

Studs of sizes above this range cannot be manufactured with a nut end thread length, b_2, as specified in the table. In such cases, b_2 will be approximately equal to $l - (x_1 + 3)$. For sizes above the dashed line, $b_2 + x_1$ will be less than 1,2 b_1. The nut end of these studs shall be rounded (i.e. given a DIN 78 – L type end), unless the end is already marked with the property class

Table 2: Technical delivery conditions

Material		Steel	
General requirements		As specified in ISO 898/2	
Thread	Tolerance	Stud end 8k6	Nut end 6g
	As specified in	DIN 13-51	DIN 13-12 and DIN 13-15
Mechanical properties	Property class (material) [1]	5.6 or 8.8	
	As specified in	DIN EN 20 898-1	
Limit deviations, geometrical tolerances	Product grade	A	
	As specified in	ISO 4759-1	
Surface finish		Property class 5.6: as processed Property class 8.8: (thermally or chemically) blackened. DIN 267-2 shall apply with regard to surface roughness. DIN EN 26 157-3 shall apply with regard to limits for surface discontinuities. ISO 4042 shall apply with regard to electroplating. The limits of thread size shall also apply after coating.	
Acceptance inspection		As specified in ISO 3269	

[1] Use of other property classes or materials shall be subject to agreement.