

UDC 621.882.219.4 : 62-229.312.2

January 1981

Grub screws with thrust point

DIN
6332

Gewindestifte mit Druckzapfen

As it is current practice in standards published by the International Organization for Standardization (ISO), the comma has been used throughout as a decimal marker.

Dimensions in mm

1 Field of application and purpose

Grub screws with thrust point combined with operating elements, wing nuts or knurled nuts are clamping screws which are suitable both for clamping by means of the thrust point and also for clamping by means of a thrust pad according to DIN 6311 attached to the thrust point.

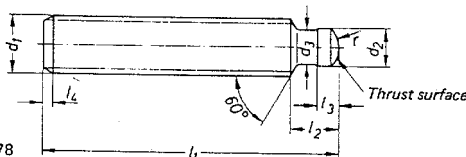
2 Other relevant standards

- DIN 78 Thread ends, lengths of projection of thread ends, for ISO metric threads according to DIN 13
 DIN 267 Part 2 Bolts, screws, nuts and similar threaded and formed parts; technical delivery conditions, types and dimensional accuracy
 DIN 427 Slotted headless screws with chamfered end
 DIN ISO 898 Part 1 Mechanical properties of fasteners; bolts; screws and studs

3 Dimensions, designation

Details left unspecified are to be selected as appropriate.

Type S suitable for accommodating thrust pads with snap ring



$l_4 \approx z_1$ according to DIN 78

Designation of grub screw Type S of $d_1 = M 12$ and $l_1 = 60$ mm:

Grub screw DIN 6332 — S M 12 x 60

Table 1.

d_1	M 6	M 8	M 10	M 12	M 16	M 20
d_2 ^{h11}	4,5	6	8	8	12	15,5
d_3 ⁰ _{-0,1}	4	5,4	7,2	7,2	11	14,4
r	3	5	6	6	9	13
l_2	6	7,5	9	10	12	14
l_3	2,5	3	4,5	4,5	5	5,5
Length l_1	Weight (7,85 kg/dm ³) kg/100 pieces					
30	0,49	—	—	—	—	—
40	—	1,18	—	—	—	—
50	0,84	—	—	—	—	—
60	—	1,81	2,75	4,02	—	—
80	—	—	3,75	5,48	9,96	—
100	—	—	—	6,93	12,6	19,8
125	—	—	—	—	16,0	24,9
150	—	—	—	—	—	30,1

Continued on pages 2 and 3

Page 2 DIN 6332

4 Material

Strength category 5.8 according to DIN ISO 898 Part 1

5 Type

m according to DIN 267 Part 2

Thrust surface (dimension r) hardened, 550 to 650 HV 10

The grub screws can also be provided with a slot in accordance with DIN 427.

The designation is then e.g. for a grub screw Type S with $d_1 = M12$, $l_1 = 60$ mm and slot (Sz):

Grub screw DIN 6332 – S M 12 x 60 Sz

Examples of application

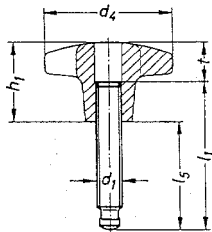
The choice of grip elements and their attachment to the grub screw is left to the user's discretion.

Clamping screw

with star handle according to DIN 6335

or with machine knob according to DIN 6336

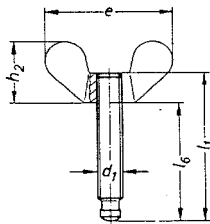
from M 6 to M 12



with wing nut

according to DIN 315

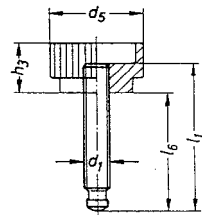
from M 6 to M 10



with knurled nut

according to DIN 6303

from M 6 to M 10



Further standards

DIN 99 Clamping levers

DIN 315 Wing nuts

DIN 6303 Knurled nuts

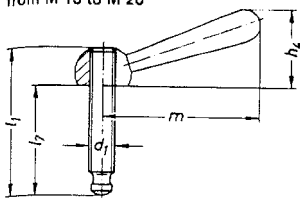
DIN 6311 Thrust pads

DIN 6335 Star handles

DIN 6336 Machine knobs

with clamping lever according to DIN 99 Table 2.

from M 10 to M 20



d_1	M 6	M 8	M 10	M 12	M 16	M 20	
Star handle according to DIN 6335	D 32	D 40	D 50	D 63	—	—	
Machine knob according to DIN 6336	D 32	D 40	D 50	D 63	—	—	
Wing nut according to DIN 315	M 6	M 8	M 10	—	—	—	
Knurled nut according to DIN 6303	AM 6	AM 8	AM 10	—	—	—	
Clamping lever according to DIN 99	—	—	E 13 x M 10	E 16 x M 12	E 20 x M 16	E 25 x M 20	
Thrust pad according to DIN 6311	S 12	S 16	S 20	S 25	S 32	S 40	
d_4	32	40	50	63	—	—	
d_5	24	30	36	—	—	—	
e	32	40	50	—	—	—	
h_1	20	25	32	40	—	—	
h_2	16	20	25	—	—	—	
h_3	14	17	20	—	—	—	
h_4	≈	—	38	47	59	76	
l_5	≈	2,2	3	3,6	4,5	5,3	5,8
m	≈	—	76	95	118	152	
t	10	12	16	20	—	—	

Clamping screws with thrust pad

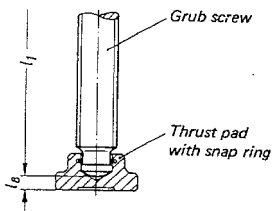


Table 3.

l_1	l_5 at d_1				l_6 at d_1			l_7 at d_1			
	M 6	M 8	M 10	M 12	M 6	M 8	M 10	M 10	M 12	M 16	M 20
30	20	—	—	—	22	—	—	—	—	—	—
40	—	27	—	—	—	30	—	—	—	—	—
50	40	—	—	—	42	—	—	—	—	—	—
60	—	47	44	40	—	50	48	45	41	—	—
80	—	—	64	60	—	—	68	65	61	55	—
100	—	—	—	80	—	—	—	—	81	75	69
125	—	—	—	—	—	—	—	—	—	100	94
150	—	—	—	—	—	—	—	—	—	—	119