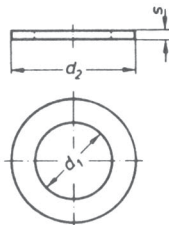


Washers  
Type Coarse  
for Bolts

DIN  
1441

Scheiben; Ausführung grob für Bolzen

Dimensions in mm



Designation of a washer with hole diameter  $d_1 = 19$  mm in steel (St):  
Washer 19 DIN 1441 - St

$d_1$	$d_2$	$s$	Weight (7,85 kg/dm <sup>3</sup> ) kg/1000 pieces ≈	For bolt diameter
5,5	10	0,8	0,34	5
7	12	1,6	0,94	6
8	14	1,6	1,3	7
9	16	2	2,16	8
11	20	2,5	4,3	10
13	25	3	8,43	12
14	25	3	7,94	13
15	28	3	10,3	14
17	28	3	9,16	16
19	30	4	13,3	18
21	32	4	14,4	20
23	34	4	15,5	22
24	36	4	17,8	23
25	38	4	20	24
26	40	4	22,8	25
27	40	5	26,9	26
28	40	5	25	27

$d_1$	$d_2$	$s$	Weight (7,85 kg/dm <sup>3</sup> ) kg/1000 pieces ≈	For bolt diameter
29	42	5	28,5	28
31	45	5	32,8	30
34	50	5	43,5	32 and 33
37	52	6	49,4	35 and 36
41	58	6	59,2	40
46	62	7	70,6	45
51	68	8	94,7	50
56	75	9	138	55
62	80	9	142	60
68	90	9	193	65
72	95	10	237	70
78	100	10	241	75
82	110	12	398	80
86	110	12	348	85
92	115	12	352	90
98	120	12	355	95
102	125	14	451	100

Technical conditions of delivery according to DIN 522

Material: St = steel; grade at manufacturer's choice

Type: g according to DIN 522