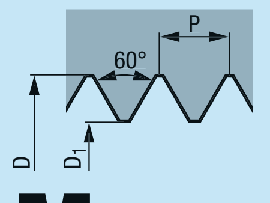
EMUGE

Gewindekernloch-Vorfertigungsdurchmesser
Thread Hole Preparatory Diameters

Metrische ISO-Gewinde
ISO Metric Threads



M

Metrisches ISO-Regelgewinde DIN 13
ISO Metric coarse thread DIN 13

Nenngröße Nom. size D mm	P mm	D_1 (6H) min. mm	D_1 (6H) max. mm	mm
M 1	0,25	0,729	0,785	**0,75**
1,1	0,25	0,829	0,885	**0,85**
1,2	0,25	0,929	0,985	**0,95**
1,4	0,3	1,075	1,142	**1,1**
1,6	0,35	1,221	1,321	**1,25**
1,7	0,35	1,321	1,421	**1,35**
1,8	0,35	1,421	1,521	**1,45**
2	0,4	1,567	1,679	**1,6**
2,2	0,45	1,713	1,838	**1,75**
2,3	0,4	1,867	1,979	**1,9**
2,5	0,45	2,013	2,138	**2,05**
2,6	0,45	2,113	2,238	**2,15**
3	0,5	2,459	2,599	**2,5** (2,55)
3,5	0,6	2,850	3,010	**2,9**
4	0,7	3,242	3,422	**3,3** (3,4)
4,5	0,75	3,688	3,878	**3,7**
5	0,8	4,134	4,334	**4,2** (4,3)
5,5	0,9	4,526	4,750	**4,6**
6	1	4,917	5,153	**5** (5,1)
7	1	5,917	6,153	**6**
8	1,25	6,647	6,912	**6,8** (6,9)
9	1,25	7,647	7,912	**7,8**
10	1,5	8,376	8,676	**8,5** (8,6)
11	1,5	9,376	9,676	**9,5**
12	1,75	10,106	10,441	**10,2** (10,4)
14	2	11,835	12,210	**12** (12,2)
16	2	13,835	14,210	**14** (14,2)
18	2,5	15,294	15,744	**15,5**
20	2,5	17,294	17,744	**17,5**
22	2,5	19,294	19,744	**19,5**
24	3	20,752	21,252	**21**
27	3	23,752	24,252	**24**
30	3,5	26,211	26,771	**26,5**
33	3,5	29,211	29,771	**29,5**
36	4	31,670	32,270	**32**
39	4	34,670	35,270	**35**
42	4,5	37,129	37,799	**37,5**
45	4,5	40,129	40,799	**40,5**
48	5	42,587	43,297	**43**
52	5	46,587	47,297	**47**
56	5,5	50,046	50,796	**50,5**
60	5,5	54,046	54,796	**54,5**
64	6	57,505	58,305	**58**
68	6	61,505	62,305	**62**

P ≤ 0,3 mm = Tol. 5H

( ) = Vorfertigungsdurchmesser für Gewindebohrer Typ HCUT
Preparatory diameters for taps of type HCUT

MF

Metrisches ISO-Feingewinde DIN 13
ISO Metric fine thread DIN 13

Nenngröße Nom. size D x P mm	D_1 (6H) min. mm	D_1 (6H) max. mm	mm
M 2,5 x 0,35	2,121	2,221	**2,15**
2,6 x 0,35	2,221	2,321	**2,25**
3 x 0,35	2,621	2,721	**2,65**
3,5 x 0,35	3,121	3,221	**3,15**
4 x 0,35	3,621	3,721	**3,65**
4 x 0,5	3,459	3,599	**3,5**
5 x 0,5	4,459	4,599	**4,5**
6 x 0,5	5,459	5,599	**5,5**
6 x 0,75	5,188	5,378	**5,2**
7 x 0,75	6,188	6,378	**6,2**
8 x 0,75	7,188	7,378	**7,2**
8 x 1	6,917	7,153	**7** (7,1)
9 x 0,75	8,188	8,378	**8,2**
9 x 1	7,917	8,153	**8**
10 x 0,75	9,188	9,378	**9,2**
10 x 1	8,917	9,153	**9** (9,1)
10 x 1,25	8,647	8,912	**8,8**
11 x 1	9,917	10,153	**10**
12 x 1	10,917	11,153	**11**
12 x 1,25	10,647	10,912	**10,8**
12 x 1,5	10,376	10,676	**10,5** (10,6)
14 x 1	12,917	13,153	**13**
14 x 1,25	12,647	12,912	**12,8**
14 x 1,5	12,376	12,676	**12,5** (12,6)
15 x 1	13,917	14,153	**14**
16 x 1	14,917	15,153	**15**
16 x 1,5	14,376	14,676	**14,5** (14,6)
18 x 1	16,917	17,153	**17**
18 x 1,5	16,376	16,676	**16,5**
18 x 2	15,835	16,210	**16**
20 x 1	18,917	19,153	**19**
20 x 1,5	18,376	18,676	**18,5**
20 x 2	17,835	18,210	**18**
22 x 1	20,917	21,153	**21**
22 x 1,5	20,376	20,676	**20,5**
22 x 2	19,835	20,210	**20**
24 x 1	22,917	23,153	**23**
24 x 1,5	22,376	22,676	**22,5**
24 x 2	21,835	22,210	**22**
25 x 1,5	23,376	23,676	**23,5**
26 x 1,5	24,376	24,676	**24,5**
27 x 1,5	25,376	25,676	**25,5**
27 x 2	24,835	25,210	**25**
28 x 1,5	26,376	26,676	**26,5**
28 x 2	25,835	26,210	**26**
30 x 1,5	28,376	28,676	**28,5**
30 x 2	27,835	28,210	**28**
32 x 1,5	30,376	30,676	**30,5**
32 x 2	29,835	30,210	**30**
33 x 1,5	31,376	31,676	**31,5**
33 x 2	30,835	31,210	**31**
34 x 1,5	32,376	32,676	**32,5**

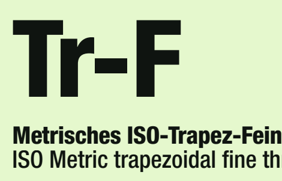
Nenngröße Nom. size D x P mm	D_1 (6H) min. mm	D_1 (6H) max. mm	mm
M 35 x 1,5	33,376	33,676	**33,5**
36 x 1,5	34,376	34,676	**34,5**
36 x 2	33,835	34,210	**34**
36 x 3	32,752	33,252	**33**
38 x 1,5	36,376	36,676	**36,5**
39 x 1,5	37,376	37,676	**37,5**
39 x 2	36,835	37,210	**37**
39 x 3	35,752	36,252	**36**
40 x 1,5	38,376	38,676	**38,5**
40 x 2	37,835	38,210	**38**
42 x 1,5	40,376	40,676	**40,5**
42 x 2	39,835	40,210	**40**
42 x 3	38,752	39,252	**39**
45 x 1,5	43,376	43,676	**43,5**
45 x 2	42,835	43,210	**43**
45 x 3	41,752	42,252	**42**
48 x 1,5	46,376	46,676	**46,5**
48 x 2	45,835	46,210	**46**
48 x 3	44,752	45,252	**45**
50 x 1,5	48,376	48,676	**48,5**
50 x 2	47,835	48,210	**48**
52 x 1,5	50,376	50,676	**50,5**
52 x 2	49,835	50,210	**50**
52 x 3	48,752	49,252	**49**
56 x 3	52,752	53,252	**53**
56 x 4	51,670	52,270	**52**
60 x 4	55,670	56,270	**56**
64 x 3	60,752	61,252	**61**
64 x 4	59,670	60,270	**60**
68 x 4	63,670	64,270	**64**
70 x 3	66,752	67,252	**67**
70 x 4	65,670	66,270	**66**
72 x 3	68,752	69,252	**69**
72 x 4	67,670	68,270	**68**
72 x 6	65,505	66,305	**66**
76 x 3	72,752	73,252	**73**
76 x 4	71,670	72,270	**72**
76 x 6	69,505	70,305	**70**
80 x 4	75,670	76,270	**76**
80 x 6	73,505	74,305	**74**
85 x 3	81,752	82,252	**82**
85 x 4	80,670	81,270	**81**
90 x 3	86,752	87,252	**87**
90 x 4	85,670	86,270	**86**
90 x 6	83,505	84,305	**84**
95 x 6	88,505	89,305	**89**
100 x 4	95,670	96,270	**96**
100 x 6	93,505	94,305	**94**
110 x 6	103,505	104,305	**104**
115 x 3	111,752	112,252	**112**
120 x 4	115,670	116,270	**116**
120 x 6	113,505	114,305	**114**

Trapez- und Rundgewinde
Trapezoidal and Round Threads

Tr

Metrisches ISO-Trapez-Regelgewinde DIN 103
ISO Metric trapezoidal coarse thread DIN 103

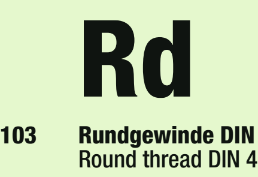
Nenngröße Nom. size D x P mm	D_1 (7H) min. mm	D_1 (7H) max. mm	mm
Tr 8 x 1,5	6,5	6,69	**6,6**
9 x 2	7	7,236	**7,2**
10 x 2	8	8,236	**8,2**
10 x 3	7	7,315	**7,25**
11 x 3	8	8,315	**8,25**
12 x 3	9	9,315	**9,25**
14 x 3	11	11,315	**11,25**
14 x 4	10	10,375	**10,25**
16 x 4	12	12,375	**12,25**
18 x 4	14	14,375	**14,25**
20 x 4	16	16,375	**16,25**
22 x 5	17	17,45	**17,25**
24 x 5	19	19,45	**19,25**
26 x 5	21	21,45	**21,25**
28 x 5	23	23,45	**23,25**
30 x 6	24	24,5	**24,25**
32 x 6	26	26,5	**26,25**
34 x 6	28	28,5	**28,25**
36 x 6	30	30,5	**30,25**
38 x 7	31	31,56	**31,5**
40 x 7	33	33,56	**33,5**
42 x 7	35	35,56	**35,5**
44 x 7	37	37,56	**37,5**
46 x 8	38	38,63	**38,5**
48 x 8	40	40,63	**40,5**
50 x 8	42	42,63	**42,5**
52 x 8	44	44,63	**44,5**



Tr-F

Metrisches ISO-Trapez-Feingewinde DIN 103
ISO Metric trapezoidal fine thread DIN 103

Nenngröße Nom. size D x P mm	D_1 (7H) min. mm	D_1 (7H) max. mm	mm
Tr 9 x 1,5	7,5	7,69	**7,6**
10 x 1,5	8,5	8,69	**8,6**
11 x 2	9	9,236	**9,2**
12 x 2	10	10,236	**10,2**
14 x 2	12	12,236	**12,2**
16 x 2	14	14,236	**14,2**
18 x 2	16	16,236	**16,2**
20 x 2	18	16,236	**18,2**
22 x 3	19	19,315	**19,25**
24 x 3	21	21,315	**21,25**
26 x 3	23	23,315	**23,25**
28 x 3	25	25,315	**25,25**
30 x 3	27	27,315	**27,25**

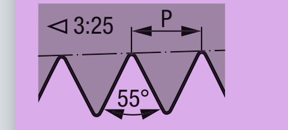


Rd

Rundgewinde DIN 405
Round thread DIN 405

Nenngröße Nom. size D mm x P/1" (tpi)	D_1 (7H) min. mm	D_1 (7H) max. mm	mm
Rd 8 x 10	5,714	6,164	**6**
9 x 10	6,714	7,164	**7**
10 x 10	7,714	8,164	**8**
11 x 10	8,714	9,164	**9**
12 x 10	9,714	10,164	**10**
14 x 8	11,142	11,672	**11,5**
16 x 8	13,142	13,672	**13,5**
18 x 8	15,142	15,672	**15,5**
20 x 8	17,142	17,672	**17,5**
22 x 8	19,142	19,672	**19,5**
24 x 8	21,142	21,672	**21,5**
26 x 8	23,142	23,672	**23,5**
28 x 8	25,142	25,672	**25,5**
30 x 8	27,142	27,672	**27,5**

Gasflaschengewinde DIN 477
Gas Cylinder Threads DIN 477

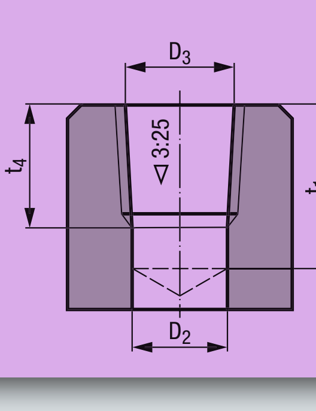


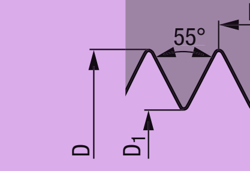
W keg

Kegeliges Gewinde DIN EN ISO 11363 und DIN 477
für Einschraubstutzen Kegel 3:25

Tapered thread DIN EN ISO 11363 and DIN 477
for screw sockets taper 3:25

Nenngröße Nom. size D mm	P/1" (tpi)	D_2 mm	D_3 (±0,06) mm	t_1 mm	t_4 mm
17E / W 19,8	28	14,6	16,82	24,5	22,5
25E / W 28,8	28	22,6	25,42	29,5	27,5
W 31,3	11	25,1	27,92	29,5	27,5





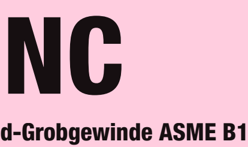
W zyl

Zylindrisches Gewinde DIN 477
für Seitenstutzen

Cylindrical thread DIN 477
for side connections

Nenngröße Nom. size D mm	P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
W 21,8	14	19,496	20,066	**19,8**
W 24,32	14	22,016	22,586	**22,3**

Unified-Gewinde
Unified Threads



UNC

Unified-Grobgewinde ASME B1.1
Unified coarse thread ASME B1.1

Nenngröße Nom. size D inch - Gg/1" (tpi)	D_1 (2B) min. mm	D_1 (2B) max. mm	mm
Nr. 1 - 64	1,425	1,582	**1,55**
Nr. 2 - 56	1,694	1,872	**1,85**
Nr. 3 - 48	1,941	2,146	**2,1**
Nr. 4 - 40	2,156	2,385	**2,35**
Nr. 5 - 40	2,487	2,697	**2,65**
Nr. 6 - 32	2,647	2,896	**2,85**
Nr. 8 - 32	3,307	3,528	**3,5**
Nr. 10 - 24	3,680	3,949	**3,9**
Nr. 12 - 24	4,341	4,590	**4,5**
1/4 - 20	4,976	5,268	**5,1**
5/16 - 18	6,411	6,734	**6,6**
3/8 - 16	7,805	8,164	**8**
7/16 - 14	9,149	9,550	**9,4**
1/2 - 13	10,584	11,016	**10,8**
9/16 - 12	11,996	12,456	**12,2**
5/8 - 11	13,376	13,868	**13,5**
3/4 - 10	16,299	16,833	**16,5**
7/8 - 9	19,169	19,748	**19,5**
1" - 8	21,963	22,598	**22,25**
1 1/8 - 7	24,648	25,349	**25**
1 1/4 - 7	27,823	28,524	**28**
1 3/8 - 6	30,343	31,120	**30,75**
1 1/2 - 6	33,518	34,295	**34**
1 3/4 - 5	38,951	39,814	**39,5**
2" - 4 1/2	44,689	45,598	**45**

UNF

Unified-Feingewinde ASME B1.1
Unified fine thread ASME B1.1

Nenngröße Nom. size D inch - Gg/1" (tpi)	D_1 (2B) min. mm	D_1 (2B) max. mm	mm
Nr. 2 - 64	1,755	1,913	**1,85**
Nr. 3 - 56	2,024	2,197	**2,15**
Nr. 4 - 48	2,271	2,459	**2,4**
Nr. 5 - 44	2,550	2,741	**2,7**
Nr. 6 - 40	2,817	3,012	**2,95**
Nr. 8 - 36	3,401	3,597	**3,5**
Nr. 10 - 32	3,967	4,168	**4,1**
Nr. 12 - 28	4,503	4,716	**4,6**
1/4 - 28	5,367	5,580	**5,5**
5/16 - 24	6,792	7,038	**6,9**
3/8 - 24	8,379	8,626	**8,5**
7/16 - 20	9,738	10,030	**9,9**
1/2 - 20	11,326	11,618	**11,5**
9/16 - 18	12,761	13,084	**12,9**
5/8 - 18	14,348	14,671	**14,5**
3/4 - 16	17,330	17,689	**17,5**
7/8 - 14	20,262	20,663	**20,4**
1" - 12	23,109	23,569	**23,25**
1 1/8 - 12	26,284	26,744	**26,5**
1 1/4 - 12	29,459	29,919	**29,5**
1 3/8 - 12	32,634	33,094	**32,75**
1 1/2 - 12	35,809	36,269	**36**

UN-8

Unified-Gewinde ASME B1.1
Unified thread ASME B1.1

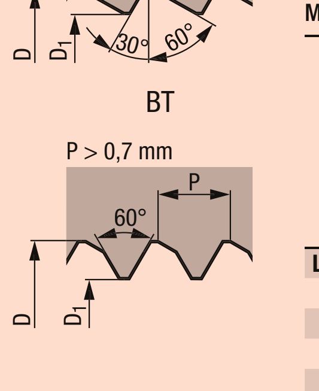
Nenngröße Nom. size D inch - Gg/1" (tpi)	D_1 (2B) min. mm	D_1 (2B) max. mm	mm
1 1/8 - 8	25,138	25,773	**25,4**
1 1/4 - 8	28,313	28,948	**28,6**
1 1/2 - 8	34,663	35,298	**35**
1 3/4 - 8	41,013	41,648	**41,3**
2" - 8	47,363	47,998	**47,7**

UNEF

Unified-Extra-Feingewinde ASME B1.1
Unified extra fine thread ASME B1.1

Nenngröße Nom. size D inch - Gg/1" (tpi)	D_1 (2B) min. mm	D_1 (2B) max. mm	mm
1/4 - 32	5,491	5,679	**5,55**
5/16 - 32	7,079	7,267	**7,15**
3/8 - 32	8,666	8,854	**8,7**
7/16 - 28	10,130	10,343	**10,2**
1/2 - 28	11,717	11,930	**11,8**
9/16 - 24	13,142	13,388	**13,2**
5/8 - 24	14,729	14,975	**14,8**
3/4 - 20	17,676	17,968	**17,8**
7/8 - 20	20,851	21,143	**20,95**
1" - 20	24,026	24,318	**24,15**

SELF-LOCK-Gewinde
SELF-LOCK Threads



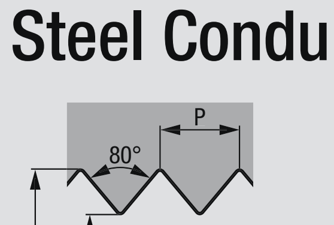
LK-M

Metrisches SELF-LOCK-Regelgewinde, EMUGE-Norm
Metric SELF-LOCK coarse thread, EMUGE standard

Nenngröße Nom. size D mm	P mm	D_1 min. mm	D_1 max. Reihe · Line 1 mm	D_1 max. Reihe · Line 2 mm	Reihe · Line 1 mm
LK-M 3	0,5	2,673	2,745	–	**2,7**
4	0,7	3,549	3,639	–	**3,55**
5	0,8	4,324	4,524	4,574	**4,4**
6	1	5,152	5,388	5,465	**5,2**
8	1,25	6,931	7,196	7,322	**7**
10	1,5	8,700	9,000	9,170	**8,8**
12	1,75	10,477	10,812	11,024	**10,7**
14	2	12,237	12,612	12,863	**12,5**
16	2	14,237	14,612	14,863	**14,5**
20	2,5	17,787	18,237	18,569	**18**
24	3	21,320	21,820	22,259	**21,5**

Reihe 2 für schwer zerspanbare Werkstoffe
Use Line 2 for difficult materials

Stahlpanzerrohr-Gewinde
Steel Conduit Threads



Pg

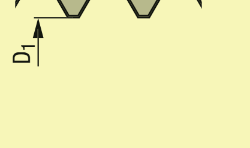
Stahlpanzerrohr-Gewinde DIN 40430
Steel conduit thread DIN 40430

Nenngröße Nom. size D mm	P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
Pg 7	20	11,28	11,43	**11,35**
9	18	13,86	14,01	**13,95**
11	18	17,26	17,41	**17,35**
13,5	18	19,06	19,21	**19,15**
16	18	21,16	21,31	**21,25**
21	16	26,78	27,03	**26,95**
29	16	35,48	35,73	**35,6**
36	16	45,48	45,73	**45,6**
42	16	52,48	52,73	**52,6**
48	16	57,78	58,03	**57,9**

Das Stahlpanzerrohr-Gewinde nach DIN 40430 wird durch ein Metrisches Feingewinde nach DIN EN 60423 ersetzt. Das Pg-Gewinde wird nur noch für Reparaturbedarf angewendet.

Steel conduit thread (Pg) DIN 40430 will be replaced by Metric fine thread acc. DIN EN 60423. The steel conduit thread will be used only for repair work.

Gewinde für die Luft- und Raumfahrtindustrie
Threads for the Aerospace Industry



MJ

MJ-Gewinde DIN ISO 5855
MJ thread DIN ISO 5855

Nenngröße Nom. size D x P mm	D_1 min. mm	D_1 max. mm	mm
MJ 3 x 0,5	2,513	2,653	**2,6**
4 x 0,7	3,318	3,498	**3,4**
5 x 0,8	4,221	4,421	**4,3**
6 x 1	5,026	5,216	**5,1**
8 x 1	7,026	7,216	**7,1**
8 x 1,25	6,782	6,994	**6,9**
10 x 1,25	8,782	8,994	**8,9**
10 x 1,5	8,539	8,775	**8,6**

UNJC

Unified-Grobgewinde ASME B1.15
Unified coarse thread ASME B1.15

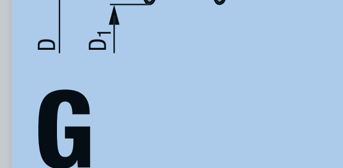
Nenngröße Nom. size D inch - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
Nr. 4 - 40	2,228	2,393	**2,3**
Nr. 6 - 32	2,733	2,939	**2,85**
Nr. 8 - 32	3,393	3,599	**3,5**
Nr. 10 - 24	3,795	4,064	**3,9**
1/4 - 20	5,113	5,387	**5,25**
5/16 - 18	6,563	6,833	**6,7**
3/8 - 16	7,978	8,255	**8,1**

UNJF

Unified-Feingewinde ASME B1.15
Unified fine thread ASME B1.15

Nenngröße Nom. size D inch - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
Nr. 4 - 48	2,329	2,466	**2,4**
Nr. 6 - 40	2,888	3,053	**3**
Nr. 8 - 36	3,480	3,663	**3,55**
Nr. 10 - 32	4,054	4,255	**4,15**
1/4 - 28	5,466	5,662	**5,55**
5/16 - 24	6,906	7,109	**7**
3/8 - 24	8,494	8,679	**8,6**

Zylindrische Rohrgewinde
Cylindrical Pipe Threads



G

Whitworth-Rohrgewinde DIN EN ISO 228
Whitworth pipe thread DIN EN ISO 228

Nenngröße Nom. size D - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
G 1/16 - 28	6,561	6,843	**6,8**
1/8 - 28	8,566	8,848	**8,8**
1/4 - 19	11,445	11,890	**11,8** (11,9)
3/8 - 19	14,950	15,395	**15,25** (15,35)
1/2 - 14	18,631	19,172	**19** (19,1)
5/8 - 14	20,587	21,128	**21**
3/4 - 14	24,117	24,658	**24,5**
7/8 - 14	27,877	28,418	**28,25**
1" - 11	30,291	30,931	**30,75**
1 1/8 - 11	34,939	35,579	**35,5**
1 1/4 - 11	38,952	39,592	**39,5**
1 3/8 - 11	41,365	42,005	**41,75**
1 1/2 - 11	44,845	45,485	**45,25**
1 5/8 - 11	49,030	49,670	**49,5**
1 3/4 - 11	50,788	51,428	**51**
2" - 11	56,656	57,296	**57**
2 1/4 - 11	62,752	63,392	**63,3**
2 1/2 - 11	72,226	72,866	**72,8**
2 3/4 - 11	78,576	79,216	**79,1**
3" - 11	84,926	85,566	**85,5**

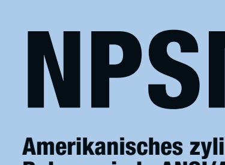
( ) = Vorfertigungsdurchmesser für Gewindebohrer Typ HCUT
Preparatory diameters for taps of type HCUT

Rp (BSPP)

Zylindrisches Whitworth-Rohrgewinde DIN EN 10226-1 und ISO 7-1
für im Gewinde dichtende Verbindungen

Cylindrical Whitworth pipe thread DIN EN 10226-1 and ISO 7-1
where pressure-tight joints are made on the threads

Nenngröße Nom. size D - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
Rp 1/16 - 28	6,490	6,632	**6,55**
1/8 - 28	8,495	8,637	**8,6**
1/4 - 19	11,341	11,549	**11,5**
3/8 - 19	14,846	15,054	**15**
1/2 - 14	18,489	18,773	**18,5**
3/4 - 14	23,975	24,259	**24**
1" - 11	30,111	30,471	**30,25**



NPSM

Amerikanisches zylindrisches Rohrgewinde ANSI/ASME B1.20.1
mechanisches Rohrgewinde (früher NPS)

American Standard straight pipe thread ANSI/ASME B1.20.1
for mechanical joints (previously NPS)

Nenngröße Nom. size D inch - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
1/8 - 27	9,093	9,246	**9,1**
1/4 - 18	11,887	12,217	**12**
3/8 - 18	15,316	15,545	**15,5**
1/2 - 14	18,974	19,279	**19**
3/4 - 14	24,333	24,638	**24,5**
1" - 11 1/2	30,505	30,759	**30,5**

NPSC

Amerikanisches zylindrisches Innengewinde ANSI/ASME B1.20.1
in Rohrverbindungen

American Standard internal straight thread ANSI/ASME B1.20.1
in pipe coupling

Nenngröße Nom. size D inch - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
1/8 - 27	8,636	8,814	**8,8**
1/4 - 18	11,227	11,491	**11,4**
3/8 - 18	14,656	14,920	**14,9**
1/2 - 14	18,161	18,501	**18,4**
3/4 - 14	23,495	23,835	**23,7**
1" - 11 1/2	29,489	29,903	**29,8**

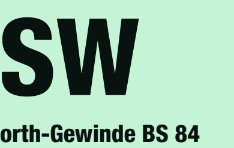
NPSF

Amerikanisches zylindrisches Rohrgewinde ANSI B1.20.3
zylindrisches Rohrdichtgewinde, gepaart mit kegeligem Außengewinde NPTF oder PTF-SAE-SHORT; Lehrung: konisch

American Standard straight pipe thread ANSI B1.20.3
dryseal internal straight pipe thread for fuel, combined with external tapered pipe thread NPTF or PTF-SAE-SHORT; Gauge with tapered gauges

Nenngröße Nom. size D inch - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
1/16 - 27	6,304	6,393	**6,35**
1/8 - 27	8,651	8,740	**8,7**
1/4 - 18	11,232	11,364	**11,3**
3/8 - 18	14,671	14,803	**14,75**
1/2 - 14	18,118	18,288	**18,2**
3/4 - 14	23,465	23,635	**23,5**
1" - 11 1/2	29,464	29,670	**29,5**

Britische Gewinde
British Threads



BSW

Whitworth-Gewinde BS 84
Whitworth thread BS 84

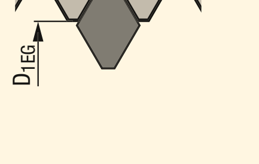
Nenngröße Nom. size D - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
BSW 1/16 - 60	1,045	1,230	**1,15**
3/32 - 48	1,704	1,912	**1,85**
1/8 - 40	2,362	2,591	**2,55**
5/32 - 32	2,952	3,214	**3,2**
3/16 - 24	3,406	3,744	**3,7**
7/32 - 24	4,201	4,539	**4,5**
1/4 - 20	4,724	5,156	**5,1**
5/16 - 18	6,129	6,589	**6,5**
3/8 - 16	7,493	7,988	**7,9**
7/16 - 14	8,791	9,332	**9,25**
1/2 - 12	9,987	10,589	**10,5**
9/16 - 12	11,575	12,177	**12**
5/8 - 11	12,918	13,559	**13,5**
3/4 - 10	15,799	16,485	**16,4**
7/8 - 9	18,613	19,355	**19,25**
1" - 8	21,336	22,149	**22**
1 1/8 - 7	23,927	24,831	**24,75**
1 1/4 - 7	27,102	28,006	**27,75**
1 3/8 - 6	29,504	30,528	**30,5**
1 1/2 - 6	32,680	33,703	**33,5**
1 5/8 - 5	34,769	35,963	**35,5**
1 3/4 - 5	37,943	39,136	**39**
1 7/8 - 4 1/2	40,396	41,702	**41,5**
2" - 4 1/2	43,571	44,877	**44,5**

BSF

Whitworth-Feingewinde BS 84
Whitworth fine thread BS 84

Nenngröße Nom. size D - P/1" (tpi)	D_1 min. mm	D_1 max. mm	mm
BSF 3/16 - 32	3,747	4,006	**4**
1/4 - 26	5,100	5,398	**5,3**
5/16 - 22	6,459	6,817	**6,8**
3/8 - 20	7,899	8,331	**8,3**
7/16 - 18	9,304	9,764	**9,7**
1/2 - 16	10,668	11,163	**11,1**
5/8 - 14	13,553	14,094	**14**
3/4 - 12	16,337	16,939	**16,75**
7/8 - 11	19,268	19,909	**19,75**
1" - 10	22,149	22,835	**22,75**

Aufnahmegewinde für Gewindedrahteinsätze
Helical Coil Threads for Wire Thread Inserts



EG M (STI)

Metrisches ISO-Regelgewinde DIN 8140-2
ISO Metric coarse thread DIN 8140-2

Nenngröße Nom. size D mm	P mm	D_{EG} min. mm	D_{1EG} min. mm	D_{1EG} max. mm	mm
EG M 2,5	0,45	3,084	2,597	2,697	**2,65**
3	0,5	3,650	3,108	3,220	**3,15**
4	0,7	4,910	4,152	4,292	**4,2**
5	0,8	6,040	5,174	5,334	**5,25**
6	1	7,300	6,217	6,407	**6,3**
8	1,25	9,624	8,271	8,483	**8,4**
10	1,5	11,948	10,324	10,560	**10,5**
12	1,75	14,274	12,379	12,644	**12,5**
14	2	16,598	14,433	14,733	**14,5**
16	2	18,598	16,433	16,733	**16,5**
18	2,5	21,248	18,541	18,896	**18,75**
20	2,5	23,248	20,541	20,896	**20,75**

EG UNC (STI)

Unified-Grobgewinde ASME B18.29.1
Unified coarse thread ASME B18.29.1

Nenngröße Nom. size D mm - P/1" (tpi)	D_{EG} min. mm	D_{1EG} min. mm	D_{1EG} max. mm	mm
EG Nr. 4 - 40	3,671	2,982	3,178	**3,1**
Nr. 6 - 32	4,536	3,678	3,879	**3,8**
Nr. 8 - 32	5,197	4,338	4,523	**4,4**
Nr. 10 - 24	6,200	5,054	5,283	**5,2**
1/4 - 20	8,002	6,628	6,872	**6,7**
5/16 - 18	9,771	8,244	8,490	**8,4**
3/8 - 16	11,587	9,867	10,126	**10**
7/16 - 14	13,469	11,506	11,783	**11,6**
1/2 - 13	15,237	13,121	13,393	**13,3**
9/16 - 12	17,039	14,747	15,031	**14,9**
5/8 - 11	18,875	16,376	16,673	**16,5**
3/4 - 10	22,349	19,598	19,908	**19,75**

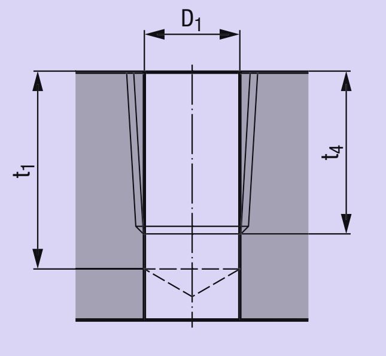
EG UNF (STI)

Unified-Grobgewinde ASME B18.29.1
Unified coarse thread ASME B18.29.1

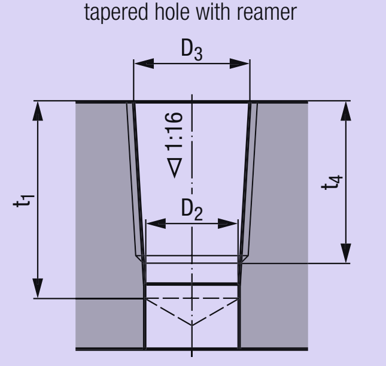
Nenngröße Nom. size D mm - P/1" (tpi)	D_{EG} min. mm	D_{1EG} min. mm	D_{1EG} max. mm	mm
EG Nr. 4 - 48	3,533	2,959	3,119	**3**
Nr. 6 - 40	4,330	3,642	3,815	**3,7**
Nr. 8 - 36	5,083	4,318	4,496	**4,4**
Nr. 10 - 32	5,858	4,999	5,184	**5,1**
1/4 - 28	7,528	6,545	6,720	**6,6**
5/16 - 24	9,312	8,166	8,351	**8,25**
3/8 - 24	10,899	9,753	9,931	**9,8**
7/16 - 20	12,763	11,389	11,587	**11,5**
1/2 - 20	14,352	12,978	13,176	**13,1**
9/16 - 18	16,121	14,594	14,800	**14,7**
5/8 - 18	17,709	16,182	16,388	**16,25**
3/4 - 16	21,112	19,392	19,608	**19,5**

Kegelige Rohrgewinde
Tapered Pipe Threads

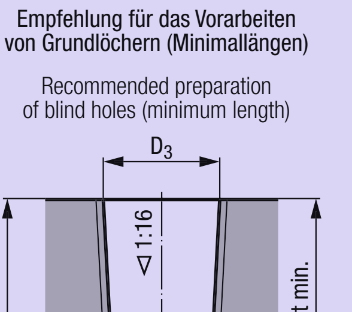
Zylindrisch vorbohren ohne Verwendung einer Reibahle
Drill cylindrically without using a reamer



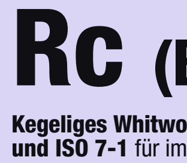
Zylindrisch vorbohren und kegelig aufreiben
Drill cylindrically and prepare tapered hole with reamer



Empfehlung für das Vorarbeiten von Grundlöchern (Minimallängen)
Recommended preparation of blind holes (minimum length)



Ausführung mit Einstich bevorzugt anwenden
We recommend using a recessed design wherever possible



Rc (BSPT)

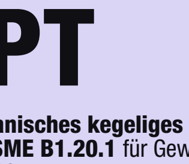
Kegeliges Whitworth-Rohrgewinde DIN EN 10226-2 und ISO 7-1 für im Gewinde dichtende Verbindungen, Kegel 1:16

Tapered Whitworth pipe thread DIN EN 10226-2 and ISO 7-1 where pressure-tight joints are made on the threads, taper 1:16

Nenngröße Nom. size D inch - P/1" (tpi)	D_1 mm	t_1 mm	t_4 mm
Rc 1/16 - 28	6,15	11,1	9,5
1/8 - 28	8,15	11,1	9,5
1/4 - 19	10,85	16,3	14
3/8 - 19	14,3	16,7	14,4
1/2 - 14	17,8	22,3	19,1
3/4 - 14	23,2	23,6	20,4
1" - 11	29,2	28,3	24,3

Nenngröße Nom. size D inch - P/1" (tpi)	D_2 mm	D_3 (JS11) mm	t_1 mm	t_4 mm
Rc 1/16 - 28	6,1	6,56	11,1	9,5
1/8 - 28	8,1	8,57	11,1	9,5
1/4 - 19	10,75	11,45	16,3	14
3/8 - 19	14,25	14,95	16,7	14,4
1/2 - 14	17,7	18,63	22,3	19,1
3/4 - 14	23,1	24,12	23,6	20,4
1" - 11	29,1	30,29	28,3	24,3

Nenngröße Nom. size D inch - P/1" (tpi)	D_3 (JS11) mm	b	t min. mm	D_4 min. mm
Rc 1/16 - 28	6,56	5,6	9,9	7,6 +0,3
1/8 - 28	8,57	5,6	9,9	9,6 +0,3
1/4 - 19	11,45	8,4	14,6	13 +0,5
3/8 - 19	14,95	8,8	15	16,5 +0,5
1/2 - 14	18,63	11,4	20	20,6 +0,5
3/4 - 14	24,12	12,7	21,3	26 +0,5
1" - 11	30,29	14,5	25,4	32,8 +0,5



NPT

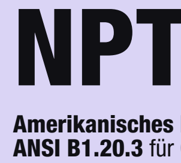
Amerikanisches kegeliges Rohrgewinde ANSI/ASME B1.20.1 für Gewinde **mit Dichtmittel**, Kegel 1:16

American tapered pipe thread ANSI/ASME B1.20.1 for threads **with dryseal material**, taper 1:16

Nenngröße Nom. size D inch - P/1" (tpi)	D_1 mm	t_1 mm	t_4 mm
1/16 - 27	6,15	11,8	9,7
1/8 - 27	8,5	11,9	9,75
1/4 - 18	11	17,4	14,25
3/8 - 18	14,4	17,7	14,55
1/2 - 14	17,8	23,1	19
3/4 - 14	23,15	23,6	19,5
1" - 11 1/2	29,05	28,4	23,4
1 1/4 - 11 1/2	37,8	28,9	23,9
1 1/2 - 11 1/2	43,85	28,9	23,9
2" - 11 1/2	55,85	29,3	24,35

Nenngröße Nom. size D inch - P/1" (tpi)	D_2 mm	D_3 +0,05 mm	t_1 mm	t_4 mm
1/16 - 27	5,95	6,39	11,8	9,7
1/8 - 27	8,3	8,74	11,9	9,75
1/4 - 18	10,75	11,36	17,4	14,25
3/8 - 18	14,15	14,8	17,7	14,55
1/2 - 14	17,45	18,32	23,1	19
3/4 - 14	22,8	23,67	23,6	19,5
1" - 11 1/2	28,65	29,69	28,4	23,4
1 1/4 - 11 1/2	37,35	38,45	28,9	23,9
1 1/2 - 11 1/2	43,45	44,52	28,9	23,9
2" - 11 1/2	55,45	56,56	29,3	24,35

Nenngröße Nom. size D inch - P/1" (tpi)	D_3 +0,05 mm	b	t min. mm	D_4 min. mm
1/16 - 27	6,39	7	10	7,6
1/8 - 27	8,74	7	10	10
1/4 - 18	11,36	10,2	14,5	13,1
3/8 - 18	14,8	10,6	15	16,5
1/2 - 14	18,32	13,8	19	20,5
3/4 - 14	23,67	14,2	20	25,8
1" - 11 1/2	29,69	17	24	32,2
1 1/4 - 11 1/2	38,45	17,5	24,5	41
1 1/2 - 11 1/2	44,52	17,5	24,5	47,2
2" - 11 1/2	56,56	18	25	59,2



NPTF

Amerikanisches kegeliges Rohrgewinde ANSI B1.20.3 für Gewinde **ohne Dichtmittel**, Kegel 1:16

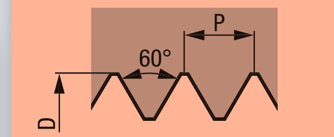
American tapered pipe thread ANSI B1.20.3 for threads **without dryseal material**, taper 1:16

Nenngröße Nom. size D inch - P/1" (tpi)	D_1 mm	t_1 mm	t_4 mm
1/16 - 27	6,1	13	10,65
1/8 - 27	8,45	13	10,7
1/4 - 18	10,9	19,2	15,65
3/8 - 18	14,3	19,5	16
1/2 - 14	17,6	25,4	20,85
3/4 - 14	23	25,9	21,3
1" - 11 1/2	28,75	31,1	25,6
1 1/4 - 11 1/2	37,5	31,7	26,15
1 1/2 - 11 1/2	43,75	31,7	26,15
2" - 11 1/2	55,75	32,1	26,55

Nenngröße Nom. size D inch - P/1" (tpi)	D_2 mm	D_3 +0,05 mm	t_1 mm	t_4 mm
1/16 - 27	5,95	6,41	13	10,65
1/8 - 27	8,3	8,76	13	10,7
1/4 - 18	10,75	11,4	19,2	15,65
3/8 - 18	14,15	14,84	19,5	16
1/2 - 14	17,45	18,33	25,4	20,85
3/4 - 14	22,8	23,68	25,9	21,3
1" - 11 1/2	28,65	29,72	31,1	25,6
1 1/4 - 11 1/2	37,35	38,48	31,7	26,15
1 1/2 - 11 1/2	43,45	44,55	31,7	26,15
2" - 11 1/2	55,45	56,59	32,1	26,55

Nenngröße Nom. size D inch - P/1" (tpi)	D_3 +0,05 mm	b	t min. mm	D_4 min. mm
1/16 - 27	6,41	8	11	7,4
1/8 - 27	8,76	8	11	9,8
1/4 - 18	11,4	11,6	15,5	12,9
3/8 - 18	14,84	12	16	16,3
1/2 - 14	18,33	15,6	20,5	20,3
3/4 - 14	23,68	16	21,5	25,6
1" - 11 1/2	29,72	19,2	26	32
1 1/4 - 11 1/2	38,48	19,7	26,5	40,8
1 1/2 - 11 1/2	44,55	19,7	26,5	47
2" - 11 1/2	56,59	20,2	27	59

Gewinde-formen
Cold-forming of threads



M

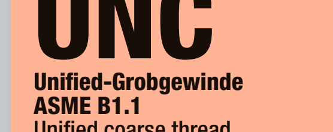
Metrisches ISO-Regelgewinde DIN 13
ISO Metric coarse thread DIN 13

Nenngröße Nom. size D mm	P mm	mm
M 1	0,25	**0,9**
1,1	0,25	**1**
1,2	0,25	**1,1**
1,4	0,3	**1,28**
1,6	0,35	**1,47**
1,7	0,35	**1,57**
1,8	0,35	**1,67**
2	0,4	**1,85**
2,2	0,45	**2,03**
2,3	0,4	**2,15**
2,5	0,45	**2,33**
2,6	0,45	**2,43**
3	0,5	**2,8**
3,5	0,6	**3,25**
4	0,7	**3,7**
4,5	0,75	**4,2**
5	0,8	**4,65**
5,5	0,9	**5,1**
6	1	**5,6**
7	1	**6,6**
8	1,25	**7,45**
9	1,25	**8,45**
10	1,5	**9,35**
12	1,75	**11,25**
14	2	**13,1**
16	2	**15,1**
18	2,5	**16,85**
20	2,5	**18,85**
22	2,5	**20,85**
24	3	**22,65**
27	3	**25,65**
30	3,5	**28,4**
33	3,5	**31,4**
36	4	**34,15**
39	4	**37,15**
42	4,5	**39,9**
45	4,5	**42,9**
48	5	**45,65**

MF

Metrisches ISO-Feingewinde DIN 13
ISO Metric fine thread DIN 13

Nenngröße Nom. size D x P mm	mm
M 2,5 x 0,35	**2,37**
2,6 x 0,35	**2,47**
3 x 0,35	**2,88**
3,5 x 0,35	**3,38**
4 x 0,5	**3,8**
5 x 0,5	**4,8**
6 x 0,5	**5,8**
6 x 0,75	**5,7**
7 x 0,75	**6,7**
8 x 0,75	**7,7**
8 x 1	**7,6**
9 x 0,75	**8,7**
9 x 1	**8,6**
10 x 0,75	**9,7**
10 x 1	**9,6**
10 x 1,25	**9,45**
11 x 1	**10,6**
12 x 1	**11,6**
12 x 1,25	**11,45**
12 x 1,5	**11,35**
14 x 1	**13,6**
14 x 1,25	**13,45**
14 x 1,5	**13,35**
15 x 1	**14,6**
15 x 1,5	**14,35**
16 x 1	**15,6**
16 x 1,5	**15,35**
18 x 1	**17,6**
18 x 1,5	**17,35**
18 x 2	**17,1**
20 x 1	**19,6**
20 x 1,5	**19,35**
20 x 2	**19,1**
24 x 2	**23,1**
30 x 2	**29,1**
36 x 3	**34,65**
42 x 4	**40,15**
48 x 3	**46,65**



UNC

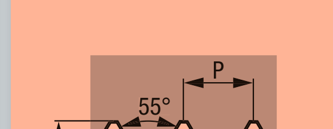
Unified-Grobgewinde ASME B1.1
Unified coarse thread ASME B1.1

Nenngröße Nom. size D inch - P/1" (tpi)	mm
Nr. 4 - 40	**2,55**
Nr. 5 - 40	**2,9**
Nr. 6 - 32	**3,15**
Nr. 8 - 32	**3,8**
Nr. 10 - 24	**4,35**
Nr. 12 - 24	**5**
1/4 - 20	**5,75**
5/16 - 18	**7,3**
3/8 - 16	**8,8**
7/16 - 14	**10,25**
1/2 - 13	**11,8**
9/16 - 12	**13,3**
5/8 - 11	**14,8**
3/4 - 10	**17,85**
7/8 - 9	**20,9**
1" - 8	**23,9**

UNF

Unified-Feingewinde ASME B1.1
Unified fine thread ASME B1.1

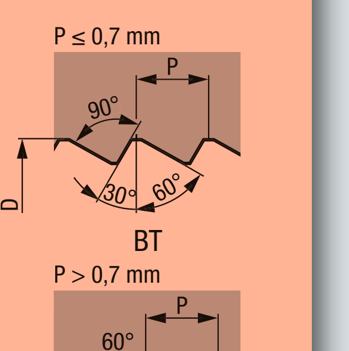
Nenngröße Nom. size D inch - P/1" (tpi)	mm
Nr. 2 - 64	**2,02**
Nr. 3 - 56	**2,32**
Nr. 4 - 48	**2,62**
Nr. 5 - 44	**2,92**
Nr. 6 - 40	**3,22**
Nr. 8 - 36	**3,85**
Nr. 10 - 32	**4,45**
Nr. 12 - 28	**5,1**
1/4 - 28	**5,95**
5/16 - 24	**7,45**
3/8 - 24	**9,05**
7/16 - 20	**10,55**
1/2 - 20	**12,15**
9/16 - 18	**13,65**
5/8 - 18	**15,25**
3/4 - 16	**18,35**
7/8 - 14	**21,4**
1" - 12	**24,45**



G

Whitworth-Rohrgewinde DIN EN ISO 228
Whitworth pipe thread DIN EN ISO 228

Nenngröße Nom. size D - P/1" (tpi)	mm
G 1/16 - 28	**7,25**
1/8 - 28	**9,25**
1/4 - 19	**12,55**
3/8 - 19	**16,05**
1/2 - 14	**20,1**
5/8 - 14	**22,05**
3/4 - 14	**25,6**
7/8 - 14	**29,35**
1" - 11	**32,15**



LK-M

Metrisches SELF-LOCK-Regelgewinde, EMUGE-Norm
Metric SELF-LOCK coarse thread, EMUGE standard

Nenngröße Nom. size D mm	P mm	mm
LK-M 3	0,5	**2,85**
4	0,7	**3,8**
5	0,8	**4,8**
6	1	**5,7**
8	1,25	**7,6**
10	1,5	**9,5**

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