

Metrisches ISO-Gewinde

Grenzmaße für Feingewinde von 182 bis 250 mm Nenndurchmesser mit gebräuchlichen Toleranzfeldern

DIN
13
Teil 25

ISO metric fine threads from 182 to 250 mm diameter; limits

Ersatz für Ausgabe 02.73

Filetages métriques ISO à pas fin du diamètre de 182 à 250 mm; dimensions limits

Maße in mm

1 Anwendungsbereich

Diese Norm gilt für Metrisches ISO-Gewinde mit einem Grundprofil nach DIN 13 Teil 19. Die Grenzen für die Kernausrundung des Bolzensgewindes sind nach DIN 13 Teil 14 mit $R = 0,144 P = H/6$ für das Größtmaß und mit $R_{\min} = 0,125 P \approx H/7$ für das Kleinstmaß des Kerndurchmessers d_3 festgelegt.

Sie enthält Grenzmaße für Feingewinde von 182 bis 250 mm Gewinde-Nenndurchmesser mit gebräuchlichen Toleranzfeldern.

2 Grenzmaße

Die Grenzmaße der Feingewinde mit den gebräuchlichen Toleranzfeldern (siehe DIN 13 Teil 14) sind aus den Gewinde-Nennmaßen nach DIN 13 Teil 5 bis Teil 11 und den Abmaßen und Toleranzen nach DIN 13 Teil 15 errechnet worden. Grenzmaße für Gewinde nach Toleranzfeldern, die in dieser Norm nicht enthalten sind, können aus den Abmaßen nach DIN 13 Teil 27 errechnet werden.

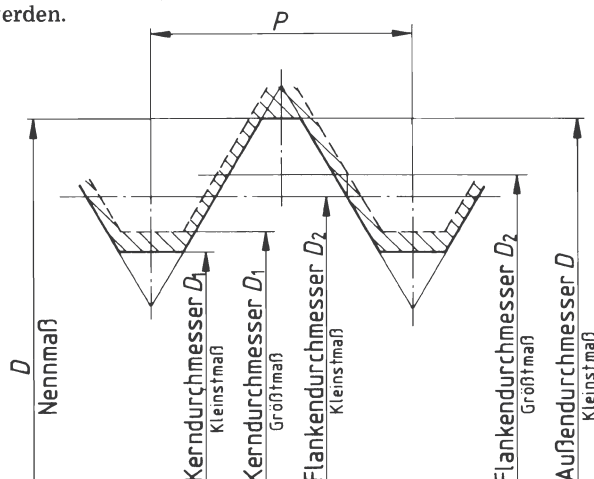


Bild 1. Muttergewinde in Toleranzlage H

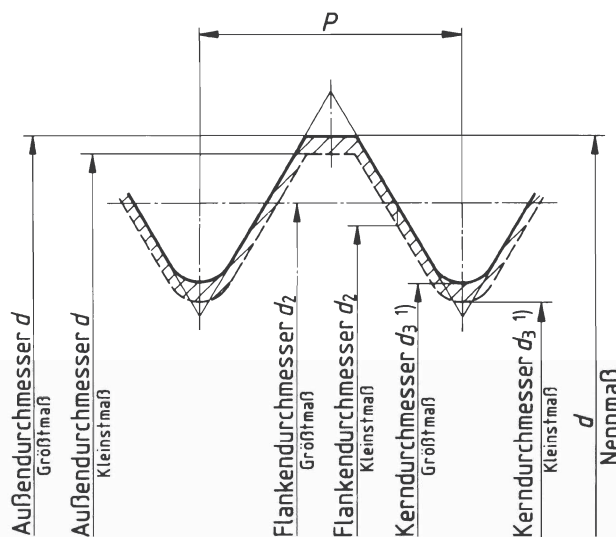


Bild 2. Bolzensgewinde in Toleranzlage h

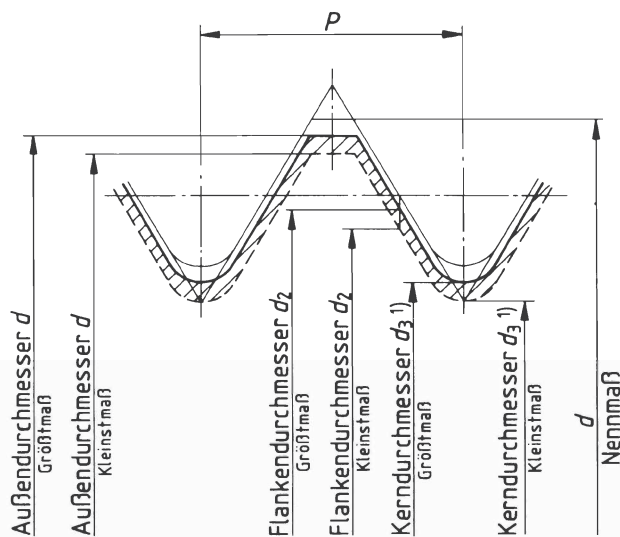


Bild 3. Bolzensgewinde in Toleranzlage g

1) Größtmaß mit $R = 0,144 P = H/6$, Kleinstmaß mit $R_{\min} = 0,125 P \approx H/7$ errechnet (siehe DIN 13 Teil 14)

Fortsetzung Seite 2 bis 9

Normenausschuß Gewinde (NGew) im DIN Deutsches Institut für Normung e.V.

Gewinde- Nenndurchmesser $d = D$	Steigung P	Muttergewinde						Bolzensgewinde						
		Toleranzfeld	Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Toleranzfeld	Außen- durchmesser		Flanken- durchmesser		Kern- durchmesser ¹⁾	
				D_2		D_1			d		d_2		d_3	
				Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß		Größt- maß	Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß	Kleinst- maß
182	1	5H	182,000	181,350	181,520	180,917	181,107	4h	182,000	181,888	181,350	181,250	180,773	180,634
	1	6H	182,000	181,350	181,562	180,917	181,153	6g	181,974	181,794	181,324	181,164	180,747	180,548
	1,5	5H	182,000	181,026	181,216	180,376	180,612	4h	182,000	181,850	181,026	180,914	180,160	179,990
	1,5	6H	182,000	181,026	181,262	180,376	180,676	6g	181,968	181,732	180,994	180,814	180,128	179,890
	1,5	7H	182,000	181,026	181,326	180,376	180,751							
	2	5H	182,000	180,701	180,925	179,835	180,135	4h	182,000	181,820	180,701	180,569	179,546	179,337
	2	6H	182,000	180,701	180,981	179,835	180,210	6g	181,962	181,682	180,663	180,451	179,508	179,219
	2	7H	182,000	180,701	181,056	179,835	180,310							
	3	5H	182,000	180,051	180,316	178,752	179,152	4h	182,000	181,764	180,051	179,891	178,319	178,043
	3	6H	182,000	180,051	180,386	178,752	179,252	6g	181,952	181,577	180,003	179,753	178,271	177,905
	3	7H	182,000	180,051	180,476	178,752	179,382	8g	181,952	181,352	180,003	179,603	178,271	177,755
	4	5H	182,000	179,402	179,702	177,670	178,145	4h	182,000	181,700	179,402	179,222	177,093	176,759
4	6H	182,000	179,402	179,777	177,670	178,270	6g	181,940	181,465	179,342	179,062	177,033	176,599	
4	7H	182,000	179,402	179,877	177,670	178,420	8g	181,940	181,190	169,342	178,892	177,033	176,429	
185	1	5H	185,000	184,350	184,520	183,917	184,107	4h	185,000	184,888	184,350	184,250	183,773	183,634
	1	6H	185,000	184,350	184,562	183,917	184,153	6g	184,974	184,794	184,324	184,164	183,747	183,548
	1,5	5H	185,000	184,026	184,216	183,376	183,612	4h	185,000	184,850	184,026	183,914	183,160	182,990
	1,5	6H	185,000	184,026	184,262	183,376	183,676	6g	184,968	184,732	183,994	183,814	183,128	182,890
	1,5	7H	185,000	184,026	184,326	183,376	183,751							
	2	5H	185,000	183,701	183,925	182,835	183,135	4h	185,000	184,820	183,701	183,569	182,546	182,337
	2	6H	185,000	183,701	183,981	182,835	183,210	6g	184,962	184,682	183,663	183,451	182,508	182,219
	2	7H	185,000	183,701	184,056	182,835	183,310							
	3	5H	185,000	183,051	183,316	181,752	182,152	4h	185,000	184,764	183,051	182,891	181,319	181,043
	3	6H	185,000	183,051	183,386	181,752	182,252	6g	184,952	184,577	183,003	182,753	181,271	180,905
	3	7H	185,000	183,051	183,476	181,752	182,382	8g	184,952	184,352	183,003	182,603	181,271	180,755
	4	5H	185,000	182,402	182,702	180,670	181,145	4h	185,000	184,700	182,402	182,222	180,093	179,759
4	6H	185,000	182,402	182,777	180,670	181,270	6g	184,940	184,465	182,342	182,062	180,033	179,599	
4	7H	185,000	182,402	182,877	180,670	181,420	8g	184,940	184,190	182,342	181,892	180,033	179,429	
6	5H	185,000	181,103	181,438	178,505	179,135	4h	185,000	184,625	181,103	180,903	177,639	177,208	
6	6H	185,000	181,103	181,528	178,505	179,305	6g	184,920	184,320	181,023	180,708	177,559	177,013	
6	7H	185,000	181,103	181,633	178,505	179,505	8g	184,920	183,970	181,023	180,523	177,559	176,828	
188	1	5H	188,000	187,350	187,520	186,917	187,107	4h	188,000	187,888	187,350	187,250	186,773	186,634
	1	6H	188,000	187,350	187,562	186,917	187,153	6g	187,974	187,794	187,324	187,164	186,747	186,548
	1,5	5H	188,000	187,026	187,216	186,376	186,612	4h	188,000	187,850	187,026	186,914	186,160	185,990
	1,5	6H	188,000	187,026	187,262	186,376	186,676	6g	187,968	187,732	186,994	186,814	186,128	185,890
	1,5	7H	188,000	187,026	187,326	186,376	186,751							
	2	5H	188,000	186,701	186,925	185,835	186,135	4h	188,000	187,820	186,701	186,569	185,546	185,337
	2	6H	188,000	186,701	186,981	185,835	186,210	6g	187,962	187,682	186,663	186,451	185,508	185,219
	2	7H	188,000	186,701	187,056	185,835	186,310							
	3	5H	188,000	186,051	186,316	184,752	185,152	4h	188,000	187,764	186,051	185,891	184,319	184,043
	3	6H	188,000	186,051	186,386	184,752	185,252	6g	187,952	187,577	186,003	185,753	184,271	183,905
	3	7H	188,000	186,051	186,476	184,752	185,382	8g	187,952	187,352	186,003	185,603	184,271	183,755
	4	5H	188,000	185,402	185,702	183,670	184,145	4h	188,000	187,700	185,402	185,222	183,093	182,759
4	6H	188,000	185,402	185,777	183,670	184,270	6g	187,940	187,465	185,342	185,062	183,033	182,599	
4	7H	188,000	185,402	185,877	183,670	184,420	8g	187,940	187,190	185,342	184,892	183,033	182,429	
190	1	5H	190,000	189,350	189,520	188,917	189,107	4h	190,000	189,888	189,350	189,250	188,773	188,634
	1	6H	190,000	189,350	189,562	188,917	189,153	6g	189,974	189,794	189,324	189,164	188,747	188,548
	1,5	5H	190,000	189,026	189,216	188,376	188,612	4h	190,000	189,850	189,026	188,914	188,160	187,990
	1,5	6H	190,000	189,026	189,262	188,376	188,676	6g	189,968	189,732	188,994	188,814	188,128	187,890
	1,5	7H	190,000	189,026	189,326	188,376	188,751							
	2	5H	190,000	188,701	188,925	187,835	188,135	4h	190,000	189,820	188,701	188,569	187,546	187,337
	2	6H	190,000	188,701	188,981	187,835	188,210	6g	189,962	189,682	188,663	188,451	187,508	187,219
	2	7H	190,000	188,701	189,056	187,835	188,310							
	3	5H	190,000	188,051	188,316	186,752	187,152	4h	190,000	189,764	188,051	187,891	186,319	186,043
3	6H	190,000	188,051	188,386	186,752	187,252	6g	189,952	189,577	188,003	187,753	186,271	185,905	
3	7H	190,000	188,051	188,476	186,752	187,382	8g	189,952	189,352	188,003	187,603	186,271	185,755	
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1) Siehe Seite 1

Gewinde- Nenndurchmesser $d = D$	Steigung P	Muttergewinde						Bolzensgewinde						
		Toleranzfeld	Außen- durch- messer D	Flanken- durchmesser		Kern- durchmesser		Toleranzfeld	Außen- durchmesser		Flanken- durchmesser		Kern- durchmesser ¹⁾	
				D_2	D_1	d	d_2		d_3					
Kleinst- maß	Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß	Größt- maß	Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß	Kleinst- maß	Größt- maß			
190	4	5H	190,000	187,402	187,702	185,670	186,145	4h	190,000	189,700	187,402	187,222	185,093	184,759
	4	6H	190,000	187,402	187,777	185,670	186,270	6g	189,940	189,465	187,342	187,062	185,033	184,599
	4	7H	190,000	187,402	187,877	185,670	186,420	8g	189,940	189,190	187,342	186,892	185,033	184,429
	6	5H	190,000	186,103	186,438	183,505	184,135	4h	190,000	189,625	186,103	185,903	182,639	182,208
	6	6H	190,000	186,103	186,528	183,505	184,305	6g	189,920	189,320	186,023	185,708	182,559	182,013
	6	7H	190,000	186,103	186,633	183,505	184,505	8g	189,920	188,970	186,023	185,523	182,559	181,828
	8	5H	190,000	184,804	185,179	181,340	182,140	4h	190,000	189,550	184,804	184,580	180,185	179,653
	8	6H	190,000	184,804	185,279	181,340	182,340	6g	189,900	189,190	184,704	184,349	180,085	179,422
	8	7H	190,000	184,804	185,404	181,340	182,590	8g	189,900	188,720	184,704	184,144	180,085	179,217
192	1	5H	192,000	191,350	191,520	190,917	191,107	4h	192,000	191,888	191,350	191,250	190,773	190,634
	1	6H	192,000	191,350	191,562	190,917	191,153	6g	191,974	191,794	191,324	191,164	190,747	190,548
	1,5	5H	192,000	191,026	191,216	190,376	190,612	4h	192,000	191,850	191,026	190,914	190,160	189,990
	1,5	6H	192,000	191,026	191,262	190,376	190,676	6g	191,968	191,732	190,994	190,814	190,128	189,890
	1,5	7H	192,000	191,026	191,326	190,376	190,751							
	2	5H	192,000	190,701	190,925	189,835	190,135	4h	192,000	191,820	190,701	190,569	189,546	189,337
	2	6H	192,000	190,701	190,981	189,835	190,210	6g	191,962	191,682	190,663	190,451	189,508	189,219
	2	7H	192,000	190,701	191,056	189,835	190,310							
	3	5H	192,000	190,051	190,316	188,752	189,152	4h	192,000	191,764	190,051	189,891	188,319	188,043
	3	6H	192,000	190,051	190,386	188,752	189,252	6g	191,952	191,577	190,003	189,753	188,271	187,905
	3	7H	192,000	190,051	190,476	188,752	189,382	8g	191,952	191,352	190,003	189,603	188,271	187,755
	4	5H	192,000	189,402	189,702	187,670	188,145	4h	192,000	191,700	189,402	189,222	187,093	186,759
	4	6H	192,000	189,402	189,777	187,670	188,270	6g	191,940	191,465	189,342	189,062	187,033	186,599
	4	7H	192,000	189,402	189,877	187,670	188,420	8g	191,940	191,190	189,342	188,892	187,033	186,429
195	1	5H	195,000	194,350	194,520	193,917	194,107	4h	195,000	194,888	194,350	194,250	193,773	193,634
	1	6H	195,000	194,350	194,562	193,917	194,153	6g	194,974	194,794	194,324	194,164	193,747	193,548
	1,5	5H	195,000	194,026	194,216	193,376	193,612	4h	195,000	194,850	194,026	193,914	193,160	192,990
	1,5	6H	195,000	194,026	194,262	193,376	193,676	6g	194,968	194,732	193,994	193,814	193,128	192,890
	1,5	7H	195,000	194,026	194,326	193,376	193,751							
	2	5H	195,000	193,701	193,925	192,835	193,135	4h	195,000	194,820	193,701	193,569	192,546	192,337
	2	6H	195,000	193,701	193,981	192,835	193,210	6g	194,962	194,682	193,663	193,451	192,508	192,219
	2	7H	195,000	193,701	194,056	192,835	193,310							
	3	5H	195,000	193,051	193,316	191,752	192,152	4h	195,000	194,764	193,051	192,891	191,319	191,043
	3	6H	195,000	193,051	193,386	191,752	192,252	6g	194,952	194,577	193,003	192,753	191,271	190,905
	3	7H	195,000	193,051	193,476	191,752	192,382	8g	194,952	194,352	193,003	192,603	191,271	190,755
	4	5H	195,000	192,402	192,702	190,670	191,145	4h	195,000	194,700	192,402	192,222	190,093	189,759
	4	6H	195,000	192,402	192,777	190,670	191,270	6g	194,940	194,465	192,342	192,062	190,033	189,599
	4	7H	195,000	192,402	192,877	190,670	191,420	8g	194,940	194,190	192,342	191,892	190,033	189,429
6	5H	195,000	191,103	191,438	188,505	189,135	4h	195,000	194,625	191,103	190,903	187,639	187,208	
6	6H	195,000	191,103	191,528	188,505	189,305	6g	194,920	194,320	191,023	190,708	187,559	187,013	
6	7H	195,000	191,103	191,633	188,505	189,505	8g	194,920	193,970	191,023	190,523	187,559	186,828	
198	1	5H	198,000	197,350	197,520	196,917	197,107	4h	198,000	197,888	197,350	197,250	196,773	196,634
	1	6H	198,000	197,350	197,562	196,917	197,153	6g	197,974	197,794	197,324	197,164	196,747	196,548
	1,5	5H	198,000	197,026	197,216	196,376	196,612	4h	198,000	197,850	197,026	196,914	196,160	195,990
	1,5	6H	198,000	197,026	197,262	196,376	196,676	6g	197,968	197,732	196,994	196,814	196,128	195,890
	1,5	7H	198,000	197,026	197,326	196,376	196,751							
	2	5H	198,000	196,701	196,925	195,835	196,135	4h	198,000	197,820	196,701	196,569	195,546	195,337
	2	6H	198,000	196,701	196,981	195,835	196,210	6g	197,962	197,682	196,663	196,451	195,508	195,219
	2	7H	198,000	196,701	197,056	195,835	196,310							
	3	5H	198,000	196,051	196,316	194,752	195,152	4h	198,000	197,764	196,051	195,891	194,319	194,043
	3	6H	198,000	196,051	196,386	194,752	195,252	6g	197,952	197,577	196,003	195,753	194,271	193,905
	3	7H	198,000	196,051	196,476	194,752	195,382	8g	197,952	197,352	196,003	195,603	194,271	193,755
	4	5H	198,000	195,402	195,702	193,670	194,145	4h	198,000	197,700	195,402	195,222	193,093	192,759
	4	6H	198,000	195,402	195,777	193,670	194,270	6g	197,940	197,465	195,342	195,062	193,033	192,599
	4	7H	198,000	195,402	195,877	193,670	194,420	8g	197,940	197,190	195,342	194,892	193,033	192,429
200	1	5H	200,000	199,350	199,520	198,917	199,107	4h	200,000	199,888	199,350	199,250	198,773	198,634
	1	6H	200,000	199,350	199,562	198,917	199,153	6g	199,974	199,794	199,324	199,164	198,747	198,548
1) Siehe Seite 1														

1) Siehe Seite 1