Table 73/1 : Unit shaft (h9, h6) combined with holes

Fit	h9 hole	h6	Character of Fit	Examples
clearance	H11		mostly ample clearance	easily fitted together
	D10		very ample clearance	
	E9		ample clearance	bearing of lever
	F8		noticeable clearance	sliding contact bearing
		G7	without noticeable clearance	precision guide
	H9		can just be displaced by hand	clearance fit for key (shaft + hub)
		H7		clutch
transition	JS9		displaceable by using moderate force	slight fit for key in hub.
	JS7			parts which are often disassembled
		K7	can be fitted without considerable force	handwheel, coupling, pulley
		N7	fitted with force	model pin
	P9		—	tight fit for key (shaft and hub)
Inter-ference		P7	fitted by pressing on shrinking	transmission of small torques without trans-mitting element

Table 70/1 : Tolerances for holes

Basic size in mm >	to	H 11	D 10	E 9	H 9	JS9	N9	P9	F 8	H 6	G 7	H 7	JS7	K7	M7	N7	P7	R7	H6
	3	+ 60 0	+ 60 + 20	+ 39 + 14	+ 25 0	± 12	- 4 - 29	- 6 - 31	+ 20 6	+ 14 0	+ 12 + 2	+ 10 0	± 5	0 - 10	- 2 - 12	- 4 - 14	- 6 - 16	- 10 - 20	+ 6 0
3	6	+ 75 0	+ 78 + 30	+ 50 + 20	+ 30 0	± 15	0 - 30	- 12 - 42	+ 28 + 10	+ 18 0	+ 16 + 4	+ 12 0	± 6	+ 3 - 9	0 - 12	- 4 - 16	- 8 - 20	- 11 - 23	+ 8 0
6	10	+ 90 0	+ 98 + 40	+ 61 + 25	+ 36 0	± 18	0 - 36	- 15 - 51	+ 35 + 13	+ 22 0	+ 20 + 5	+ 15 0	± 7	+ 5 - 10	0 - 15	- 4 - 19	- 9 - 24	- 13 - 28	+ 9 0
10	18	+ 110 0	+ 120 + 50	+ 75 + 32	+ 43 0	± 21	0 - 43	- 18 - 51	+ 43 + 16	+ 27 0	+ 24 + 6	+ 18 0	± 9	+ 6 - 12	0 - 18	- 5 - 23	- 11 - 29	- 16 - 34	+ 11 0
18	30	+ 130 0	+ 149 + 65	+ 92 + 40	+ 52 0	± 26	0 - 52	- 22 - 74	+ 53 + 20	+ 33 0	+ 28 + 7	+ 21 0	± 10	+ 6 - 19	0 - 21	- 7 - 28	- 14 - 35	- 20 - 41	+ 13 0
30	50	+ 160 0	+ 180 + 80	+ 112 + 50	+ 62 0	± 31	0 - 62	- 26 - 88	+ 64 + 25	+ 39 0	+ 34 + 9	+ 25 0	± 12	+ 7 - 18	0 - 25	- 8 - 33	- 17 - 42	- 25 - 50	+ 16 0
50	80	+ 190 0	+ 220 + 100	+ 134 + 60	+ 74 0	± 37	0 - 74	- 32 - 106	+ 76 + 30	+ 45 0	+ 40 + 10	+ 30 0	± 15	+ 9 - 21	0 - 30	- 9 - 39	- 21 - 51		+ 19 0
80	120	+ 220 0	+ 260 + 120	+ 159 + 72	+ 87 0	± 43	0 - 87	- 37 - 124	+ 90 + 36	+ 54 0	+ 47 + 12	+ 35 0	± 17	+ 10 - 25	0 - 35	- 10 - 45	- 24 - 59	1)	+ 22 0
120	180	+ 250 0	+ 305 + 145	+ 185 + 85	+ 100 0	± 50	0 - 100	- 43 - 143	+ 106 + 43	+ 63 0	+ 54 + 14	+ 40 0	± 20	+ 12 - 28	0 - 40	- 12 - 52	- 28 - 68		+ 25 0
180	250	+ 290 0	+ 355 + 170	+ 215 + 100	+ 115 0	± 57	0 - 115	- 50 - 165	+ 122 + 50	+ 72 0	+ 61 + 15	+ 46 0	± 23	+ 13 - 33	0 - 46	- 14 - 60	- 33 - 79		+ 29 0
250	315	+ 320 0	+ 400 + 190	+ 240 + 110	+ 130 0	± 65	0 - 130	- 56 - 186	+ 137 + 56	+ 81 0	+ 69 + 17	+ 52 0	± 26	+ 16 - 36	0 - 52	- 14 - 66	- 36 - 88		+ 32 0

1) Above 50mm smaller steps in basic size

Table 72/1 : Unit hole (H8, H7) combined with shafts

Fit	H8/H7 Shaft	character of fit	Examples
clearance	d9	ample clearance	shaft with several bearings, sliding contact bearing, for big range of temperature, bearing of levers
	e8	noticeable clearance	
	h9	easily displaceable	clutch, bush
	f7	little clearance	
	g6	without noticeable clearance	precise sliding contact bearing
	h7 / h6	displaceable by using a lubricant	
transition	js6	displaceable by using moderate force	accurate centering
	k6	can be fitted without considerable force	handwheel, coupling pulley
	n6	fitted with force	transmission of torque with additional transmitting element
interference	s6 / r6 / p6	fitted by pressing or shrinking	transmission of small torques without additional transmitting element

Table 71/3 : Tolerances for Shafts

Upper and lower deviation (in μm)

Basic size >	to	d9	h9	e8	f7	h7	g6	h6	js6	k6	m6	n6	p6	r6	s6	h5	js5	k5	m5
	3	-20/-45	0/-25	-14/-28	-6/-16	0/-10	-2/-8	0/-6	±3	+6/0	+8/+2	+10/+4	+12/+6	+16/+10	+20/+14	0/-4	±2	+4/0	+6/+2
3	6	-30/-60	0/-30	-20/-38	-10/-22	0/-12	-4/-12	0/-8	±4	+9/+1	+12/+4	+16/+8	+20/+12	+23/+15	+27/+19	0/-5	±2.5	+6/+1	+9/+4
6	10	-40/-76	0/-36	-25/-47	-13/-28	0/-15	-5/-14	0/-9	±4.5	+10/+1	+15/+6	+19/+10	+24/+15	+28/+19	+32/+23	0/-6	±3	+7/+1	+12/+6
10	18	-50/-93	0/-43	-32/-59	-16/-34	0/-18	-6/-17	0/-11	±5.5	+12/+1	+18/+7	+23/+12	+29/+18	+34/+23	+39/+28	0/-8	±4	+9/+1	+15/+7
18	30	-65/-117	0/-52	-40/-73	-20/-41	0/-21	-7/-20	0/-13	±6.5	+15/+2	+21/+8	+28/+15	+35/+22	+41/+28	+48/+35	0/-9	±4.5	+11/+2	+17/+8
30	50	-80/-142	0/-62	-50/-89	-25/-50	0/-25	-9/-25	0/-16	±8	+18/+2	+25/+9	+33/+17	+42/+26	+50/+34	+59/+43	0/-11	±5.5	+13/+2	+20/+9
50	80	-100/-174	0/-74	-60/-106	-30/-60	0/-30	-10/-29	0/-19	±9.5	+21/+2	+30/+11	+39/+20	+51/+32	1)	1)	0/-13	±6.5	+15/+2	+24/+11
80	120	-120/-207	0/-87	-72/-126	-36/-71	0/-35	-12/-34	0/-22	±11	+25/+3	+35/+13	+45/+23	+59/+37	1)	1)	0/-15	±7.5	+18/+3	+28/+13
120	180	-145/-245	0/-100	-85/-148	-43/-83	0/-40	-14/-39	0/-25	±12.5	+28/+3	+40/+15	+52/+27	+68/+43	1)	1)	0/-18	±9	+21/+3	+33/+15
180	250	-170/-285	0/-115	-100/-172	-50/-96	0/-46	-15/-44	0/-29	±14.5	+33/+4	+46/+17	+60/+31	+79/+50	1)	1)	0/-20	±10	+24/+4	+37/+17
250	315	-190/-320	0/-130	-110/-191	-56/-108	0/-52	-17/-49	0/-32	±16	+36/+4	+52/+20	+66/+34	+88/+56	1)	1)	0/-23	±11.5	+27/+4	+43/+20

1) Above 50 mm smaller steps in basic size