

Shaft tolerances and permissible speeds

Basic bearing insert	Shaft dia.		Max speed rev/ min	High loads - high speeds				Max speed rev/ min	Normal applications				Max speed rev/ min	Light loads - low speeds			
	mm	inches		Shaft tolerance ISO h6					Shaft tolerance ISO h7					Shaft tolerance ISO h9			
				0.001mm units		0.0001 inch units			0.001mm units		0.0001 inch units			0.001mm units		0.0001 inch units	
				high	low	high	low		high	low	high	low		high	low	high	low
1017	12-17	½-1¼ ₁₆	7000	0	-11	0	-4	5000	0	-18	0	-7	2000	0	-43	0	-17
1020	20	¾	6700	0	-13	0	-5	4200	0	-21	0	-8	1700	0	-52	0	-20
1025	25	1⅜-1	6250	0	-13	0	-5	3600	0	-21	0	-8	1350	0	-52	0	-20
1030	25-30	⅞-1¼	5300	0	-13	0	-5	3100	0	-21	0	-8	1100	0	-52	0	-20
1035	30-35	1⅞-1⅞ ₁₆	4500	0	-16	0	-6	2700	0	-25	0	-10	900	0	-62	0	-24
1040	35-40	1⅞-1⅞ ₁₆	4000	0	-16	0	-6	2400	0	-25	0	-10	750	0	-62	0	-24
1045	40-45	1½-1¾	3700	0	-16	0	-6	2200	0	-25	0	-10	600	0	-62	0	-24
1050	45-50	1⅞-2	3400	0	-16	0	-6	1950	0	-25	0	-10	500	0	-62	0	-24
1055	50-55	1⅞-2⅜ ₁₆	3100	0	-19	0	-7	1800	0	-30	0	-12	450	0	-74	0	-29
1060	55-60	2⅞-2⅞ ₁₆	2800	0	-19	0	-7	1600	0	-30	0	-12	400	0	-74	0	-29
1065	65	2½	2600	0	-19	0	-7	1500	0	-30	0	-12	350	0	-74	0	-29
1070	60-70	1⅞-2⅞ ₁₆	2450	0	-19	0	-7	1400	0	-30	0	-12	300	0	-74	0	-29
1075	65-75	2⅞ ₁₆ -2⅞ ₁₆	2300	0	-19	0	-7	1300	0	-30	0	-12	280	0	-74	0	-29
1080	75-80	2⅞ ₁₆ -3¼	2150	0	-19	0	-7	1200	0	-30	0	-12	250	0	-74	0	-29
1085	80-85	3⅜ ₁₆ -3⅞ ₁₆	2000	0	-22	0	-9	1100	0	-35	0	-14	220	0	-87	0	-34
1090	85-90	3⅞ ₁₆ -3½	1900	0	-22	0	-9	1050	0	-35	0	-14	200	0	-87	0	-34
3095	95-100	3 ⅞ ₁₆ -4	1600	0	-22	0	-9	1000	0	-35	0	-14	180	0	-87	0	-34

For most applications the standard set screw lock is more than satisfactory. Whenever eccentric collar units are used it is recommended that shaft tolerances in the high loads column be adopted. Whenever taper adapter sleeve locking arrangements are used, shaft tolerances in the light loads column can be adopted. When operating conditions are very severe (for example, in case of heavy vibration or shock) a light interference fit may be required between the shaft and bearing bore diameter.

Housing tolerances for bearing units - series FC, MFC, SLC and MSC

Bearing unit reference	Housing tolerance	
	Stationary housing	Rotating housing
SLC MSC	ISO H7	ISO N7
FC MFC	ISO H7	ISO H7

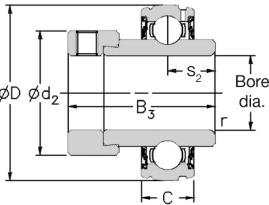
Radial Internal Clearance (RIC)

Radial Internal Clearance	Bearing Type
C3	Standard Self-Lube® bearing series
C4	Taper Sleeve Locking bearing series
C5	HLT bearing series

Self-Lube® bearing inserts
1000DECG and 1100DEC Series

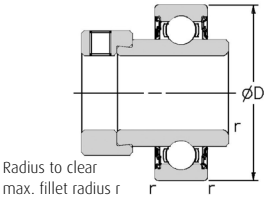
1000DECG

With spherical outside diameter
and eccentric collar lock



1100DEC

With parallel outside diameter
and eccentric collar lock



Shaft diameter		RHP designation		Dimensions (mm)						ISO Load ratings		Rec. max. speed	Mass (approx.)
mm	inches	1000DECG Series	1100DEC Series	D	C	B ₃	s ₂	d ₂	r	dynamic C _r newtons	static C _o newtons	rev/min	kg
20		1020-20DECG	1120-20DEC	47.000	14.00	43.73	17.13	33.30	1.00	12800	6650	6700	0.20
	¾	1020-¾DECG	1120-¾DEC										
25		1025-25DECG	1125-25DEC	52.000	15.00	44.43	17.53	38.10	1.00	14000	7880	6250	0.26
	⅞	1025-⅞DECG	1125-⅞DEC										
	1⅜	1025-1⅜DECG	1125-1⅜DEC										
	1	1025-1DECG	1125-1DEC										
30		1030-30DECG	1130-30DEC	62.000	16.00	48.43	18.33	44.50	1.00	19500	11300	5300	0.53
	1⅞	1030-1⅞DECG	1130-1⅞DEC										
	1⅜	1030-1⅜DECG	1130-1⅜DEC										
	1¼	1030-1¼DECG	1130-1¼DEC										
35		1035-35DECG	1135-35DEC	72.000	17.00	51.13	18.83	55.60	1.00	25700	15300	4500	0.70
	1¼	1035-1¼DECG	1135-1¼DEC										
	1⅝	1035-1⅝DECG	1135-1⅝DEC										
	1⅞	1035-1⅞DECG	1135-1⅞DEC										
40		1040-40DECG	1140-40DEC	80.000	18.00	56.33	21.43	60.30	1.00	32500	19900	4000	0.82
	1½	1040-1½DECG	1140-1½DEC										
45		1045-45DECG	1145-45DEC	85.000	19.00	56.33	21.44	63.50	1.00	32500	20500	3700	1.08
	1⅝	1045-1⅝DECG	1145-1⅝DEC										
	1⅞	1045-1⅞DECG	1145-1⅞DEC										
	1¾	1045-1¾DECG	1145-1¾DEC										
50		1050-50DECG	1150-50DEC	90.000	20.00	62.73	24.64	69.90	1.00	35000	23200	3400	1.19
	1⅞	1050-1⅞DECG	1150-1⅞DEC										
	1⅝	1050-1⅝DECG	1150-1⅝DEC										
55		1055-55DECG	1155-55DEC	100.000	21.00	71.42	27.84	76.20	1.50	43500	29200	3100	1.40
	2	1055-2DECG	1155-2DEC										
	2⅞	1055-2⅞DECG	1155-2⅞DEC										
	2⅜	1055-2⅜DECG	1155-2⅜DEC										
60		1060-60DECG	1160-60DEC	110.000	22.00	77.84	31.04	84.20	1.50	48000	33000	2800	1.72
	2¼	1060-2¼DECG	1160-2¼DEC										
	2⅝	1060-2⅝DECG	1160-2⅝DEC										
	2⅞	1060-2⅞DECG	1160-2⅞DEC										
	2½	1065-2½DECG	1165-2½DEC	120.000	23.00	85.74	34.14	92.00	1.50	57500	40000	2600	2.21
65		1070-65DECG	1170-65DEC	125.000	24.00	85.74	34.14	97.00	1.50	61000	45000	2450	2.56
70		1070-70DECG	1170-70DEC										
	2½	1070-2½DECG	1170-2½DEC										
	2⅝	1070-2⅝DECG	1170-2⅝DEC										
	2⅞	1070-2⅞DECG	1170-2⅞DEC										
65		1075-65DECG	1175-65DEC	130.000	25.00	92.14	37.34	102.00	1.50	66000	49500	2300	2.94
70		1075-70DECG	1175-70DEC										
75		1075-75DECG	1175-75DEC										
	2⅞	1075-2⅞DECG	1175-2⅞DEC										
	2⅝	1075-2⅝DECG	1175-2⅝DEC										
	2⅜	1075-2⅜DECG	1175-2⅜DEC										

Please check availability