

Cylindrical Roller Bearings

Designs and Configurations

NACHI Cylindrical Roller Bearings are produced in a wide variety of designs and configurations.

Conventional Design

Cylindrical Roller Bearings of conventional design are available in 10 configurations as shown in Fig. 1.

Configurations N, NU, NN and NNU will not sustain axial loading. These configurations must be used as the float end bearing.

Configurations NF, NJ, NUH are designed with the capability of sustaining axial loading in one direction.

Configuration NUH is basically an NU bearing with the addition of a guide ring (an "L" ring).

The NUH dimensional data is the same as the NH bearing configuration.

Configuration NF, NJ, and NUH can sustain axial loading in one direction.

Configuration NH, NP, and NUP have bi-directional thrust load-carrying-capability.

The suffix of the bearing number indicates:

E : high capacity

G : polyamide cage

The bearing with polyamide cage should be used at less than 120°C operating temperature.

Fig 1. Cylindrical Roller Bearing Configurations

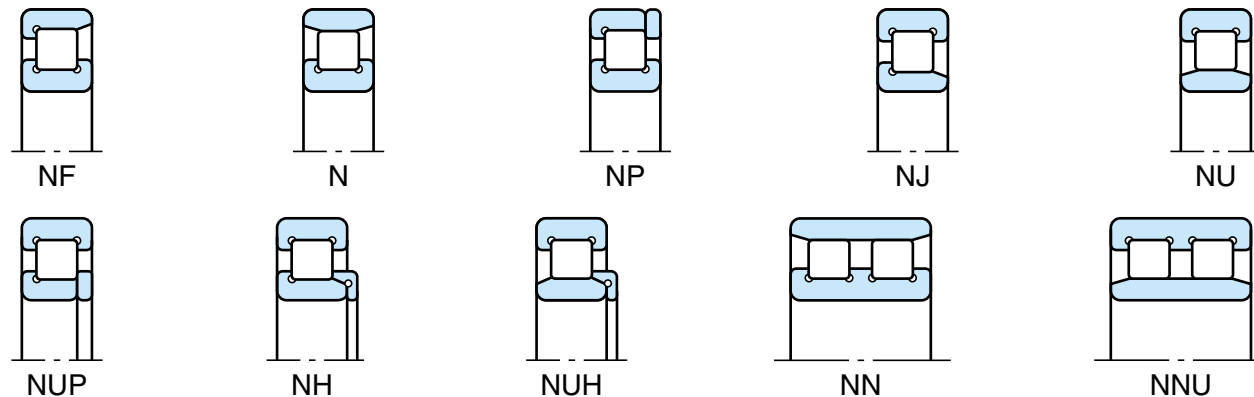
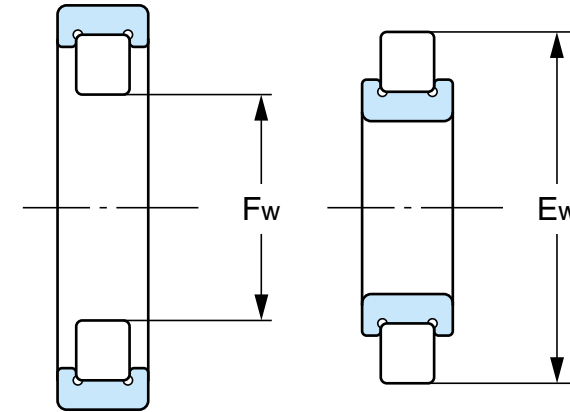


Table 1. Interchangeable Cylindrical Roller Bearings : Tolerance of Inscribed and Circumscribed Diameters

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Tolerance of Inscribed and Circumscribed Diameters**

Unit: μm

Nominal bore dia. d (mm)		Tolerance of F_w (1)		Tolerance of E_w (2)	
Over	Incl.	High	Low	High	Low
–	20	+10	0	0	–10
20	50	+15	0	0	–15
50	120	+20	0	0	–20
120	200	+25	0	0	–25
200	250	+30	0	0	–30
250	315	+35	0	0	–35
315	400	+40	0	0	–40
400	500	+45	0	–	–



- Notes: (1) Tolerance of inscribed circle diameter
(2) Tolerance of circumscribed circle diameter

Remarks: Interchangeable cylindrical roller bearing means that a separable ring can be replaced by another ring of the bearing with the same bearing number without impairing the function of the bearing.