Reference insert page 1-1 for Koyo Ball & Roller Bearings Catalogue
(comparison between JIS B 1514-1:2006 and JIS B 1514-1:2017)

Table 1-1 Comparison table between GPS symbols with descriptions and previous terms for radial bearings.

Nominal dimension [1]	Symbol for characteristic [1]	GPS symbol and specification modifier [2]	Description [3]	Conventional term [4]
B			Nominal inner ring width	Nominal inner ring width
	VBs	LP SR	**Symmetrical rings:** range of two point sizes of inner ring width	Variation of inner ring width
			Asymmetrical rings: range of minimum circumscribed sizes of inner ring width, between two opposite lines, obtained from any longitudinal section which includes the inner ring bore axis	
	ΔBs	LP	**Symmetrical rings:** deviation of a two-point size of inner ring width from its nominal size	Deviation of single inner ring width
		GN ALS ⧅	**Asymmetrical rings, upper limit:** deviation of a minimum circumscribed size of inner ring width, between two opposite lines, in any longitudinal section which includes the inner ring bore axis, from its nominal size	
		LP	**Asymmetrical rings, lower limit:** deviation of a two-point size of inner ring width from its nominal size	
C			Nominal outer ring width	Nominal outer ring width
	VCs	LP SR	**Symmetrical rings:** range of two point sizes of outer ring width	Variation of outer ring width
			Asymmetrical rings: range of minimum circumscribed sizes of outer ring width, between two opposite lines, obtained from any longitudinal section which includes the outer ring outside axis	
	ΔCs	LP	**Symmetrical rings:** deviation of a two-point size of outer ring width from its nominal size	Deviation of single outer ring width
		GN ALS ⧅	**Asymmetrical rings, upper limit:** deviation of a minimum circumscribed size of outer ring width, between two opposite lines, in any longitudinal section which includes the outer ring outside axis, from its nominal size	
		LP	**Asymmetrical rings, lower limit:** deviation of a two-point size of outer ring width from its nominal size	
C_1			Nominal outer ring flange width	Nominal outer ring flange width
	VC1s	LP SR	Range of two point sizes of outer ring flange width	Variation of outer ring flange width
	ΔC1s	LP	Deviation of a two-point size of outer ring flange width from its nominal size	Deviation of single outer ring flange width
d			Nominal bore diameter of a cylindrical bore or at the theoretical small end of a tapered bore	Nominal bore diameter
	Vdmp	LP SR	Range of mid-range sizes (out of two-point sizes) of bore diameter obtained from any cross-section of a cylindrical bore	Variation of mean bore diameter
	Δdmp	LP	**Cylindrical bore:** deviation of a mid-range size (out of two-point sizes) of bore diameter in any cross-section from its nominal size	Deviation of mean bore diameter (at the theoretical small end) in a single plane
		LP SD SCS	**Tapered bore:** single plane deviation of a mid-range size (out of two-point sizes) of bore diameter at the theoretical small end from its nominal size	
	Vdsp		Range of two-point sizes of bore diameter in any cross-section of a cylindrical or tapered bore	Variation of single bore diameter in a single plane
	Δds	LP	Deviation of a two-point size of the bore diameter from its nominal size	Deviation of a single bore diameter
d_1			Nominal diameter at the theoretical large end of a tapered bore	Nominal diameter at the theoretical large end of a basically tapered bore
	Δd1mp	LP SD SCS	Deviation of a mid-range size (out of two-point sizes) of bore diameter at the theoretical large end of a tapered bore from its nominal size	Deviation of mean bore diameter in a single plane at the theoretical large end of a basically tapered bore

Note 1) Symbols as defined in **JIS B 0124** except for the format used.
Tolerance values associated to characteristics are symbolized by "t" followed by the symbols for the characteristics, for example "t_{VBs}".
2) Symbols as defined in **JIS B 0420-1** and **ISO 1101**. See **JIS B 1514-1**:2017 **Annex D**.
3) Description based on **JIS B 0022**

JIS B 1514-1 and JIS B 1514-2 were revised to introduce geometrical product specifications (GPS) in 2017.
So this reference insert page is provided in order to compare the GPS symbols, descriptions and conventional terms.

Nominal dimension [1]	Symbol for characte-ristic [1]	GPS symbol and specification modifier [2]	Description [3]	Conventional term [4]
D			Nominal outside diameter	Nominal outside diameter
	VDmp		Range of mid-range sizes (out of two-point sizes) of outside diameter obtained from any cross-section	Variation of mean outside diameter
	ΔDmp		Deviation of a mid-range size (out of two-point sizes) of outside diameter in any cross-section from its nominal size	Deviation of mean outside diameter in a single plane
	VDsp		Range of two-point sizes of outside diameter in any cross-section	Variation of outside diameter in a single plane
	ΔDs	(LP)	Deviation of a two-point size of outside diameter from its nominal size	Deviation of a single outside diameter
D_1			Nominal outside diameter of outer ring flange	Nominal outside diameter of outer ring flange
	ΔD1s	(LP)	Deviation of a two-point size of outside diameter of outer ring flange from its nominal size	Deviation of a single outside diameter of outer ring flange
	Kea	 [5]	Circular radial run-out of outer ring outside surface of assembled bearing with respect to datum, i.e. axis, established from the inner ring bore surface	Radial run-out of outer ring of assembled bearing
	Kia	 [5]	Circular radial run-out of inner ring bore of assembled bearing with respect to datum, i.e. axis, established from the outer ring outside surface	Radial run-out of inner ring of assembled bearing
	Sd	 [5]	Circular axial run-out of inner ring face with respect to datum, i.e. axis, established from the inner ring bore surface	Perpendicularity of inner ring face with respect to the bore
	SD [6]	⊥	Perpendicularity of outer ring outside surface axis with respect to datum established from the outer ring face	Perpendicularity of outer ring outside surface with respect to the face
	SD1 [6]	⊥	Perpendicularity of outer ring outside surface axis with respect to datum established from the outer ring flange back face	Perpendicularity of outer ring outside surface with respect to the flange back face
	Sea	 [5]	Circular axial run-out of outer ring face of assembled bearing with respect to datum, i.e. axis, established from the inner ring bore surface	Axial run-out of outer ring of assembled bearing
	Sea1	 [5]	Circular axial run-out of outer ring flange back face of assembled bearing with respect to datum, i.e. axis, established from the inner ring bore surface	Axial run-out of outer ring flange back face of assembled bearing
	Sia	 [5]	Circular axial run-out of inner ring face of assembled bearing with respect to datum, i.e. axis, established from the outer ring outside surface	Axial run-out of inner ring of assembled bearing
SL			Taper slope: Taper slope is the difference between nominal diameters at the theoretical large end and small end of a tapered bore ($d_1 - d$)	–
	ΔSL		Deviation of taper slope of a tapered inner ring bore from its nominal size	–

Nominal dimension [1]	Symbol for characte-ristic [1]	GPS symbol and specification modifier [2]	Description [3]	Conventional term [4]
d			Nominal bore diameter of shaft washer, single-direction bearing	Nominal bore diameter of shaft washer, single-direction bearing
	Δdmp		Deviation of a mid-range size (out of two-point sizes) of shaft washer bore diameter in any cross-section from its nominal size	Deviation of mean bore diameter in a single plane of shaft washer, single-direction bearing
	$Vdsp$		Range of two-point sizes of shaft washer bore diameter in any cross-section	Variation of bore diameter in a single plane of shaft washer, single-direction bearing
d_2			Nominal bore diameter of c039Tf8.5gle plane	