


Rod End Bearings

Standard L Short Type



RoHS 10

Type	Standard				L Short Type				Material		
	Tapped Type		Threaded Type		Tapped Type		Threaded Type		Holder	Spherical Inner Ring	Bushing (Liner)
① Steel	PHSC	PHSCL	PHSO	PHSOL	PHSCN	PHSCLN	PHSON	PHSOLN	S35C (Trivalent Chromate)	*SUJ2(S8HRC-)	Special Copper Alloy
② Lubrication Free	PHSCM	PHSCLM	PHSOM	PHSOLM	PHSCMN	PHSCLMN	PHSONN	-	d3, 4 S35C (Trivalent Chromate)	*SUJ2(S8HRC-)	Self-Lubricating Synthetic Resin
③ Stainless Steel Oil Free	PHSS	PHSSL	PHSOS	PHSOSL	PHSSN	PHSSLN	PHSONN	-	(Other Than Above) S35C (Trivalent Chromate)	SUSJ2(S8HRC-)	Polytetrafluoroethylene
									SUS303	SUS440C(S8HRC-)	Polytetrafluoroethylene

Applicable Shaft Fits

Usage Condition	Steel	Lubrication Free	Stainless Steel Oil Free
Normal Load	h7	p6	Recommended gap between Sleeve and Shaft -0.013 to 0.013
Non-directional Load	p6	p6	

Gap between Holder and Inner Ring

Material	Unit: mm	Torque	Unit: N · m
Steel	0.035 or Less	Steel, Oil Free	
Lubrication Free	0.045 or Less	Stainless Steel Oil Free	0.02-0.34
Stainless Steel Oil Free	0.1 or Less	No regulation	

Allowable Incline

Shaft Step Shape	Shaft Condition	Allowable Incline Angle α
Large	Stepped part of the shaft contacts the outer circumference of the holder.	Small (α1)
Medium	Stepped part of the shaft contacts the side or the inner circumference of the holder.	Medium (α2)
No	Shaft contacts the inner circumference of the holder.	Large (α3)

Mechanical Properties

- Tensile Strength: 275-314N/mm²
- Tensile Proof Strength (0.2%): 216-245N/mm²

The thread end of L Short Type has no surface treatment.

The above drawing is for Standard Type. L Short Type does not have T/W dimension.

Tolerance of B Dimension and B-1 Dimensions

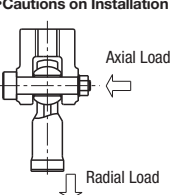
Type	B	B-1
①	0~-0.1	±0.1
②	+0.1~-0.4	0~-0.1
③	±0.3	0~-0.13

Part Number	Type	d	D	D1	D2	L		L1		MxP	B		B1	T	W	d1	r	Static Load Capacity Radial Cs (kN)			Mass		
						Standard	Short	Standard	Short		①	②						③	①	②	③	①	②
Standard L Short Type																							
Right-hand Thread																							
PHSC PHSCM PHSS																							
Left-hand Thread																							
PHSCL PHSCLM PHSSL																							

Part Number	Type	d	D	Standard	L	Short	Standard	Short	MxP	B		B1	T	W	d1	r	Static Load Capacity Radial Cs (kN)			Mass		
										①	②						③	①	②	③		
Standard L Short Type																						
Right-hand Thread																						
PHSO PHSCM PHSONN PHSON																						
Left-hand Thread																						
PHSOL PHSOLM PHSOLN																						

Ordering Example PHSC5

Cautions on Installation



⚠ Rod End cannot bear the thrust load.

Part Number

d	Ball Dia. Ø (mm)	α1	α2	α3
3	9.525	-	8	10
4	10.319	-	9	11
5	11.112	11.91	8	13
6	12.7	14.29	8	13
8	18.875	17.46	8	14
10	19.05	20.64	8	14
12	22.225	23.81	8	13
14	26.4	26.99	10	16
16	28.575	28.58	9	15
18	31.75	31.75	9	15
20	34.925	-	9	15
22	38.1	-	10	15


Standard

d	PHSC, PHSCL		PHSO, PHSOL		PHSCM, PHSCLM		PHSOM, PHSOLM		PHSS, PHSSL		PHSONN, PHSOLN	
	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
3	1-9 pc(s)	10-30 pc.	1-9 pc(s)	10-30 pc.	1-9 pc(s)	10-50 pc.	1-9 pc(s)	10-50 pc.	1-9 pc(s)	10-30 pc.	1-9 pc(s)	10-30 pc.
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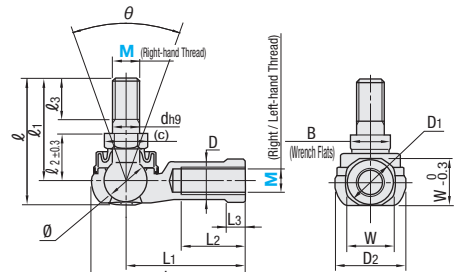
Rod End Bearings

Link Ball Type

Link Ball L Type



RBLD (Right-hand Thread)
RBLDL (Left-hand Thread)




Material: Holder: High Strength Zinc Alloy
Shank with Ball: S35C (20 ~ 28HRC)
Boot: NBR Type Special Synthetic Rubber

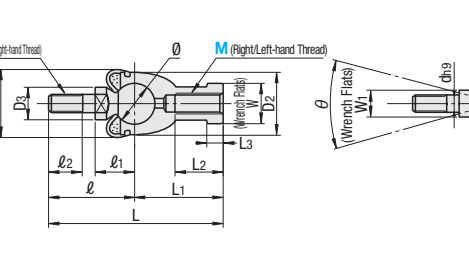
Hardness: Sphere 650HV~

Part Number	Type	Holder Part				Shank with Ball							Allowable Incline Angle θ	Strength of Yielding Point Pk (N)	Static Load Capacity Radial Cs (N)	Mass (g)	Unit Price	Volume Discount Rate
		M	D	D1	D2	L	L1	L2	MxP	L3	W	dh9						
RBLD (Right-hand Thread)																		
RBLDL (Left-hand Thread)																		

Link Ball Straight Type



RBID (Right-hand Thread)
RBIDL (Left-hand Thread)



Material: Holder: High Strength Zinc Alloy
Shank with Ball: S35C (20 ~ 28HRC)
Boot: NBR Type Special Synthetic Rubber

Hardness: Sphere 650HV~

Part Number	Type	Holder Part				Shank with Ball							Allowable Incline Angle θ	Strength of Yielding Point Pk (N)	Static Load Capacity Thrust Cs (N)	Mass (g)	Unit Price	Volume Discount Rate
		M	D	D1	D2	L	L1	L2	MxP	L3	W	dh9						
RBID (Right-hand Thread)																		
RBIDL (Left-hand Thread)																		

Ordering Example RBID6 RBIDL12A

1. Clearance of Sphere

	RBLD, RBLDL	RBID, RBIDL
Radial Direction Clearance	0.02-0.06	0.03 or Less
Axial Clearance	0.3 or Less	0.1 or Less

2. H10 tolerance is recommended for Shank with Ball and the mating hole.

3. Yield Strength (Pk) shows the strength of the direction shown in the figure below.

