

# Ball Rollers (For upward facing)

## Milled Stainless Steel

**Hex Head Stud**

**BCHL**  
**BCHLJ**

**BCHLJJ**  
**BCHLJP**

**RoHS 10**

**EX** Example  
App. Example (Ball Rollers) Conveyor curved section

Type	Material			
	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCHL	SUS304	SUS304	SUS440C(HRC55-)	
BCHLJ			Polyacetal Ball	SUS440C(HRC55-)
BCHLJJ	Polyacetal	-		
BCHLJP	PEEK	-	PEEK	

Part Number Type	M	L	L <sub>1</sub>	H	d	S	Allowable Load N (kgf)		Unit Price
							BCHL	BCHLJ	
<b>BCHL</b> (Stainless Steel Ball)	5	6	1.1	5	4	8	12(1.2)	6(0.6)	
	6	8	1.2	6	4.76	10	14(1.4)	7(0.7)	
	8	10	1.5	7	5.56	13	41(4.2)	27(2.8)	
	10	12	2.5	10	8.73	17	55(5.6)	34(3.5)	
	12	15	3.5	11	10.32	19	62(6.3)	55(5.6)	
<b>BCHLJ</b> (Polyacetal Ball)	16	20	5.3	15	15.87	24	343(35)	69(7)	
	20	25	6.3	18	19.05	30	412(42)	82(8.4)	

  

Part Number Type	M	L	L <sub>1</sub>	H	d	S	E	Allowable Load N (kgf)		Unit Price	
								BCHLJJ	BCHLJP		
<b>BCHLJJ</b> Polyacetal	5	6	1.5	-	5	4.76	-	8	1.5	2(0.2)	-
	6	8	1.7	2	6	5.56	6.35	10	2.5	4(0.4)	5(0.5)
	8	10	2.8	2.5	8	8.73	7.94	13	3	7(0.7)	6(0.6)
	10	12	3.5	3	10	10.32	9.53	17	3.5	11(1.1)	8(0.8)

⚠️ BCHLJJ is not suitable for high-speed transfer.

**Press Fit**

**BCHA**  
**BCHAJ**

**Insertion, Adhesive**

**BCHJJ**  
**BCHJP**

**RoHS 10**

**EX** Example  
App. Example (Ball Rollers) Conveyor curved section

⚠️ H7 is recommended for mounting holes.

⚠️ Adhesive attaching is recommended for mounting. (Do not press-fit. It may cause ball malfunction.)

Type	Material			
	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCHA	SUS304	SUS304	SUS440C (HRC55-)	
BCHAJ			Polyacetal Ball	SUS440C (HRC55-)
BCHJJ	Polyacetal	-		
BCHJP	PEEK	-	PEEK	

Part Number Type	D <sub>1</sub>	D	L	H	L <sub>1</sub>	d	Allowable Load N (kgf)		Unit Price
							BCHA	BCHAJ	
<b>BCHA</b> (Stainless Steel Ball)	7.5	9	4		1.1	4	12(1.2)	6(0.6)	
	9	11	5		1.2	4.76	14(1.4)	7(0.7)	
	11	13	6	1	1.5	5.56	41(4.2)	27(2.8)	
	15	17	9		2.5	8.73	55(5.6)	34(3.5)	
	18	20	10		3.5	10.32	62(6.3)	55(5.6)	
<b>BCHAJ</b> (Polyacetal Ball)	24	26	14	1.5	5.3	15.87	343(35)	69(7)	
	30	32	17	2	6.3	19.05	412(42)	82(8.4)	

  

Part Number Type	D <sub>1</sub>	D	L	H	L <sub>1</sub>	d	E	Allowable Load N (kgf)		Unit Price		
								BCHJJ	BCHJP			
<b>BCHJJ</b> (Polyacetal)	7	9	4		1.5	-	4.76	-	1.5	0.8	2(0.2)	-
	9	11	5		1.7	2	5.56	6.35	2.5		4(0.4)	5(0.5)
	11	13	7	1	-	2.5	-	7.94	3		-	6(0.6)
	13	15	8		2.8	3	8.73	9.53	3.5		7(0.7)	8(0.8)
	15	17	8		3.5	-	10.32	-	3.5		11(1.1)	-
	20	22	11.5		5.2	-	15.87	-	5.3		14(1.4)	-
	24	26	15	1.5	6.6	-	19.05	-	6.4		21(2.1)	-

⚠️ BCHJJ is not suitable for high-speed transfer.

**Plunger Type (Press Fit)**

**BCHP**  
(Press Fit)

**(Threaded)**

**BCHPT**  
(Threaded)

**RoHS 10**

**EX** Example  
Torque limiting and Indexing

⚠️ The ball lowers by L<sub>1</sub>.

⚠️ H7 is recommended for mounting holes.

⚠️ Slides in the amount of the ball stroke.

⚠️ For tightening, wrenches for ball rollers are required. (Refer to Alteration BR on the next page.)

Type	Material					
	① Main Body	② Spacer	③ Ball	④ Casing	⑤ Spring	⑥ Retaining Ring
BCHP	SUS304	SUS304	SUS440C (HRC55-)	SUS304	SUS631J1	SUS304

Part Number Type	D <sub>1</sub>	D	L	L <sub>1</sub>	d	ℓ	Load (N)		Unit Price
							min.	max.	
<b>BCHP</b>	14	16	14	1.5	5.56	1.5	23	30	
	18	20	17	2.5	8.73	2	24	38	
	22	24	21.5	3.5	10.32	2	24	55	

Part Number Type	Nominal	M (Fine)	D	D <sub>1</sub>	L	L <sub>1</sub>	L <sub>2</sub>	a	d	P	ℓ	Load (N)		Unit Price
												min.	max.	
<b>BCHPT</b>	16	16x1.5	19	13.5	14	1.5	9	2	5.56	15.4	1.5	23	30	
	20	20x1.5	24	16.5	17	2.5	10	2	8.73	18.5	2	24	38	
	24	24x1.5	28	20.5	21.5	3.5	12	2.5	10.32	24	2	24	55	