

Ball Rollers (For upward facing)

Milled Stainless Steel

Hex Head Stud

BCHL (Stainless Steel Ball)
BCHLJ (Polyacetal Ball)

BCHLJJ (Polyacetal Ball)
BCHLJP (PEEK)

RoHS10

Example
App. Example (Ball Rollers)
Conveyor curved section

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

Lock Nut

BCHN

Flange Mounting

BCHF

RoHS10

Nut Dimensions

M	B1	(e)	T
M6	10	11.5	5
M8	13	15	6.5
M10	17	19.6	8

Type	Material			
Type	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCHN	SUS304	-	-	-
BCHF	SUS304	-	SUS440C(HRC55-)	-

Part Number Type	M	L	L1	H	d	S	Allowable Load N (kgf)	Unit Price
Type	BCHL		BCHLJ		Unit Price			
BCHL	5	6	1.1	5	4	8	12(1.2)	6(0.6)
BCHL	6	8	1.2	6	4.76	10	14(1.4)	7(0.7)
BCHL	8	10	1.5	7	5.56	13	41(4.2)	27(2.8)
BCHLJ	10	12	2.5	10	8.73	17	55(5.6)	34(3.5)
BCHLJ	12	15	3.5	11	10.32	19	62(6.3)	55(5.6)
BCHLJ	16	20	5.3	15	15.87	24	343(35)	69(7)
BCHLJ	20	25	6.3	18	19.05	30	412(42)	82(8.4)

Part Number Type	M	L	L1	H	d	S	E	Allowable Load N (kgf)	Unit Price
Type	BCHLJJ		BCHLJP		Unit Price				
BCHLJJ	5	6	1.5	-	5	4.76	8	1.5	2(0.2)
BCHLJJ	6	8	1.7	2	6	5.56	6.35	10	2.5
BCHLJJ	8	10	2.8	2.5	8	8.73	7.94	13	3
BCHLJP	10	12	3.5	3	10	10.32	9.53	17	3.5

☞ BCHLJJ is not suitable for high-speed transfer.

Part Number Type	D1	L1	H	M	L	d	B	(a)	Allowable Load N (kgf)	Unit Price
BCHN	12	1.5	6.5	6	15	5.56	3	3.5	41(4.2)	
BCHN	16	2.5	9.5	8	20	8.73	4	5	55(5.6)	
BCHN	19	3.5	11.5	10	25	10.32	5	6	62(6.3)	
BCHN	25	5.3	14.7	15	35	15.87	7	9	343(35)	
BCHN	31	6.3	18.7	20	45	19.05	9	12	412(42)	

Part Number Type	D	D1	L1	H	t	P.C.D	a	d	Allowable Load N (kgf)	Unit Price
BCHF	27	15	2.5	9.5	2	21	3.5	8.73	55(5.6)	
BCHF	30	18	3.5	11.5	2	24	3.5	10.32	62(6.3)	
BCHF	39	24	5.3	14.7	3	31.5	4.5	15.87	343(35)	
BCHF	48	30	6.3	18.7	4	39	5.5	19.05	412(42)	

Press Fit

BCHA
BCHAJ

Insertion, Adhesive

BCHJJ
BCHJP

RoHS10

Example
App. Example (Ball Rollers)
Conveyor curved section

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

☞ H7 is recommended for mounting holes.

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

Set Screw

BCSB
BCSBJ

BCSBJJ

RoHS10

Example
App. Example (Ball Rollers)
Conveyor curved section

Type	Material			
Type	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCSB	SUSXM-7	SUS304	SUS440C(HRC55-)	-
BCSBJ	SUSXM-7	-	Polyacetal Ball	SUS440C(HRC55-)
BCSBJJ	Polyacetal	-	-	-

☞ Size M8 main balls are swaged in place without a spacer (2).

Part Number Type	D1	D	L	H	L1	d	Allowable Load N (kgf)	Unit Price
Type	BCHA		BCHAJ		Unit Price			
BCHA	7.5	9	4	1.1	4	12(1.2)	6(0.6)	
BCHA	9	11	5	1.2	4.76	14(1.4)	7(0.7)	
BCHA	11	13	6	1.5	5.56	41(4.2)	27(2.8)	
BCHAJ	15	17	9	2.5	8.73	55(5.6)	34(3.5)	
BCHAJ	18	20	10	3.5	10.32	62(6.3)	55(5.6)	
BCHAJ	24	26	14	1.5	5.3	15.87	343(35)	69(7)
BCHAJ	30	32	17	2	6.3	19.05	412(42)	82(8.4)

Part Number Type	D1	D	L	H	L1	d	E	Allowable Load N (kgf)	Unit Price
Type	BCHJJ		BCHJP		Unit Price				
BCHJJ	7	9	4	1.5	-	4.76	1.5	0.8	2(0.2)
BCHJJ	9	11	5	1.7	2	5.56	6.35	2.5	4(0.4)
BCHJJ	11	13	7	1	-	2.5	7.94	3	6(0.6)
BCHJP	13	15	8	2.8	3	8.73	9.53	3.5	7(0.7)
BCHJP	15	17	8	3.5	-	10.32	3.5	11(1.1)	-
BCHJP	20	22	11.5	5.2	-	15.87	5.3	14(1.4)	-
BCHJP	24	26	15	6.6	-	19.05	6.4	21(2.1)	-

☞ BCHJJ is not suitable for high-speed transfer.

Part Number Type	M	L	L1	D	d	S	t	Allowable Load N (kgf)	Unit Price
Type	BCSB		BCSBJ		Unit Price				
BCSB	8	14	1.3	5	4.76	4	5	5(0.5)	1(0.1)
BCSB	10	16	1.2	7	4.76	5	6	14(1.4)	7(0.7)
BCSBJ	12	20	1.5	8	5.56	6	8	41(4.2)	27(2.8)
BCSBJ	16	25	2.5	12	8.73	8	10	55(5.6)	34(3.5)
BCSBJ	20	30	3.5	15	10.32	10	12	62(6.3)	55(5.6)

Part Number Type	M	L	L1	D	d	E	W	l	Allowable Load N (kgf)	Unit Price
BCSBJJ	8	14	1.5	6	4.76	1.5	1.2	1.5	2(0.2)	
BCSBJJ	10	16	1.7	8	5.56	2.5	1.5	2	4(0.4)	
BCSBJJ	16	25	2.8	12	8.73	3	2	3	7(0.7)	
BCSBJJ	20	30	3.5	14	10.32	3.5	3	4	11(1.1)	

Plunger Type (Press Fit)

BCHP
BCHPT

(Threaded)

BCHPT
BCHPT

RoHS10

Example
Torque limiting and Indexing

The ball lowers by L1.
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.)

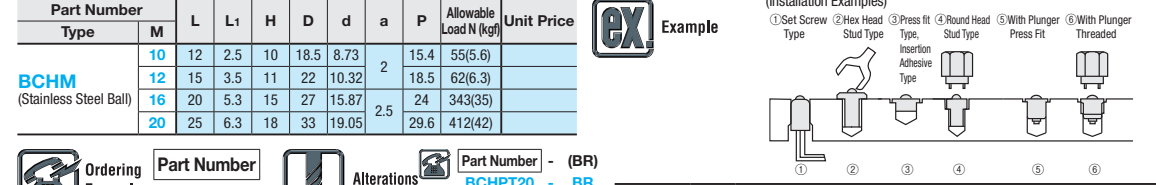
Type	Material					
Type	① Main Body	② Spacer	③ Ball	④ Casing	⑤ Spring	⑥ Retaining Ring
BCHP	SUS304	SUS304	SUS440C(HRC55-)	SUS304	SUS631J1	SUS304
BCHPT	SUS304	SUS304	SUS440C(HRC55-)	SUS304	SUS631J1	SUS304

Round Head Stud

BCHM

Example
For tightening, wrenches for ball rollers are required. (Refer to Alteration BR)

Part Number Type	M	L	L1	H	D	d	a	P	Allowable Load N (kgf)	Unit Price
BCHM	10	12	2.5	10	18.5	8.73	2	15.4	55(5.6)	
BCHM	12	15	3.5	11	22	10.32	2	18.5	62(6.3)	
BCHM	16	20	5.3	15	27	15.87	2.5	24	343(35)	
BCHM	20	25	6.3	18	33	19.05	2.5	29.6	412(42)	



Ordering Example: **Part Number BCHP18**

Alterations: **Part Number - (BR) BCHPT20 - BR**

Part Number Type	D1	D	L	L1	d	l	Load (N)	Unit Price
Type	BCHP		min.		max.		Unit Price	
BCHP	14	16	14	1.5	5.56	1.5	23 30	
BCHP	18	20	17	2.5	8.73	2	24 38	
BCHP	22	24	21.5	3.5	10.32	2	24 55	

Part Number Type	Nominal	M (Fine)	D	D1	L	L1	L2	a	d	P	l	Load (N)	Unit Price
Type	BCHPT		min.		max.		Unit Price						
BCHPT	16	16x1.5	19	13.5	14	1.5	9	2	5.56	15.4	1.5	23 30	
BCHPT	20	20x1.5	24	16.5	17	2.5	10	2	8.73	18.5	2	24 38	
BCHPT	24	24x1.5	28	20.5	21.5	3.5	12	2.5	10.32	24	2	24 55	

kgf=Nx0.101972

Special Wrench Included

BR

Includes a special wrench.
☞ For BCHPT and BCHM only.

Nominal	BCHPT Applicable (Nominal)	BCHM Applicable (M)	L	A	B	C	D	D1	P	a
10	16	For M10	25	8	19	3	18.5	10	15.4	
12	20	For M12	30	10	24	4	22	12	18.5	2
16	24	For M16	35	12	27	6	27	17	24	
20	-	For M20	40	14	30	7	33	20	29.6	2.5