

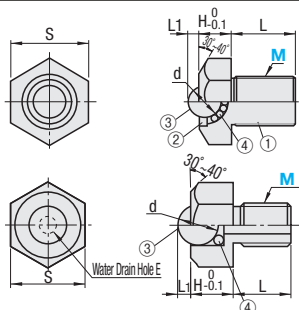
Ball Rollers (For upward facing)

Milled Stainless Steel

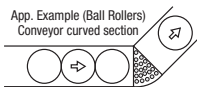
Hex Head Stud



BCHL
BCHLJ



Example



Type	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCHL	EN 1.4301 Equiv.	EN 1.4301 Equiv.	EN 1.4125 Equiv. (HRC55~)	
BCHLJ	EN 1.4301 Equiv.		Polyacetal Ball	EN 1.4125 Equiv. (HRC55~)
BCHLJJ	Polyacetal			
BCHLJP	PEEK		PEEK	

Part Number	Type	M	L	L1	H	d	S	Allowable Load N (kgf)	Unit Price
								BCHL	BCHLJ
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)	
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)	

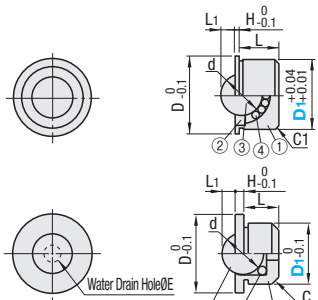
Part Number	Type	M	L	L1	H	d	S	E	Allowable Load N (kgf)	Unit Price
									BCHLJJ	BCHLJP
5		6	1.5	-	5	4.76	-	8	1.5	2(0.2)
6		8	1.7	2	6	5.56	6.35	10	2.5	4(0.4)
8		10	2.8	2.5	8	8.73	7.94	13	3	7(0.7)
10		12	3.5	3	10	10.32	9.53	17	3.5	11(1.1)

⚠BCHLJJ is not suitable for high-speed transfer.

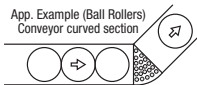
Press Fit



BCHA
BCHAJ



⚠H7 is recommended for mounting holes.



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

Type	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCHA	EN 1.4301 Equiv.	EN 1.4301 Equiv.	EN 1.4125 Equiv. (HRC55~)	
BCHAJ	EN 1.4301 Equiv.		Polyacetal Ball	EN 1.4125 Equiv. (HRC55~)
BCHJJ	Polyacetal			
BCHJP	PEEK		PEEK	

Part Number	Type	D1	D	L	H	L1	d	Allowable Load N (kgf)	Unit Price
								BCHA	BCHAJ
7.5		9	4		1.2	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)	
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)	

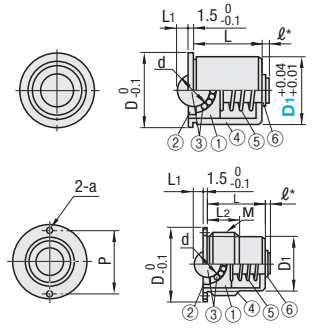
Part Number	Type	D1	D	L	H	L1	d	E	Allowable Load N (kgf)	Unit Price
									BCHJJ	BCHJP
7		9	4		1.5	-	4.76	-	1.5	0.8
9		11	5		1.7	2	5.56	6.35	2.5	4(0.4)
11		13	7	1	-	2.5	-	7.94	3	6(0.6)
13		15	8		2.8	3	8.73	9.53	3.5	7(0.7)
15		17	8		3.5	-	10.32	-	3.5	11(1.1)
20		22	11.5		5.2	-	15.87	-	5.3	14(1.4)
24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



⚠The ball lowers by L1.

⚠H7 is recommended for mounting holes.



Torque limiting and Indexing

⚠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	① Main Body	② Spacer	③ Ball	④ Casing	⑤ Spring	⑥ Retaining Ring
BCHP	EN 1.4301 Equiv.	EN 1.4301 Equiv.	EN 1.4125 Equiv. (HRC55~)	EN 1.4301 Equiv.	EN 1.4568 Equiv.	EN 1.4301 Equiv.
BCHPT						

Part Number	Type	D1	D	L	L1	d	ℓ	Load (N) min. max.	Unit Price
								BCHP	
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		24	55	

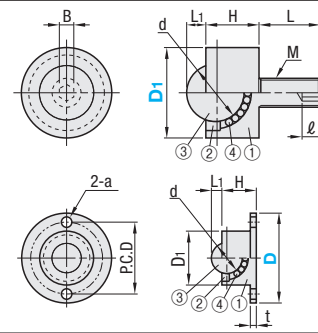
Part Number	Type	Nominal	M (Fine)	D	D1	L	L1	L2	a	d	P	ℓ	Load (N) min. max.	Unit Price
													BCHPT	
16		16x1.5	19	13.5	14	1.5	9	2	5.56	15.4	1.5	23	30	
20		20x1.5	24	16.5	17	2.5	10	2	8.73	18.5	2	24	38	
24		24x1.5	28	20.5	21.5	3.5	12	2.5	10.32	24		24	55	

kgf=Nx0.101972

Lock Nut



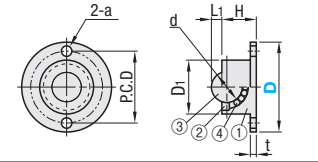
BCHN



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

Flange Mounting

BCHF

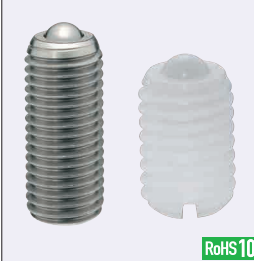


Type	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCHN	EN 1.4301 Equiv.		EN 1.4125 Equiv. (HRC55~)	
BCHF				

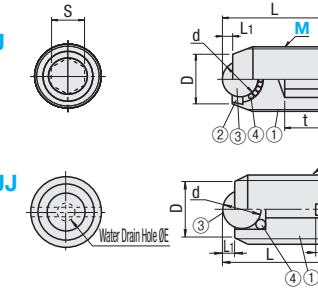
Part Number	Type	D1	L1	H	M	L	d	B	(ℓ)	Allowable Load N (kgf)	Unit Price
										BCHN	
12		15	6.5	6	15	5.56	3	3.5	41(4.2)		
16		25	9.5	8	20	8.73	4	5	55(5.6)		
19		35	11.5	10	25	10.32	5	6	62(6.3)		
25		53	14.7	12	30	15.87	6	8	343(35)		
31		63	18.7	15	35	19.05	8	10	412(42)		

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)		
30		18	3.5	11.5	2	24	3.5	10.32	62(6.3)		
39		24	5.3	14.7	3	31.5	4.5	15.87	343(35)		
48		30	6.3	18.7	4	39	5.5	19.05	412(42)		

Set Screw



BCSB
BCSBJ



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

Type	① Main Body	② Spacer	③ Main Ball	④ Sub Ball
BCSB	EN 1.4567 Equiv.	EN 1.4301 Equiv.	EN 1.4125 Equiv. (HRC55~)	EN 1.4125 Equiv. (HRC55~)
BCSBJ	EN 1.4567 Equiv.		Polyacetal Ball	

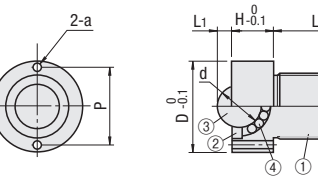
Part Number	Type	M	L	L1	D	d	S	t	Allowable Load N (kgf)	Unit Price
									BCSB	BCSBJ
8		14	1.3	5	4.76	4	5	5(0.5)	1(0.1)	
10		16	1.2	7	4.76	5	6	14(1.4)	7(0.7)	
12		20	1.5	8	5.56	6	8	41(4.2)	27(2.8)	
16		25	2.5	12	8.73	8	10	55(5.6)	34(3.5)	
20		30	3.5	15	10.32	10	12	62(6.3)	55(5.6)	

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

Round Head Stud



BCHM

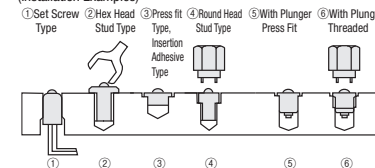


⚠For tightening, wrenches for ball rollers are required. (Refer to Alteration BR)

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)		
12		15	3.5	11	22	10.32	2	18.5	62(6.3)		
16		20	5.3	15	27	15.87	2.5	24	343(35)		
20		25	6.3	18	33	19.05		29.6	412(42)		



(Installation Examples)



Ordering Example

Part Number
BCHP18



Alterations

Part Number - (BR)
BCHPT20 - BR

Example

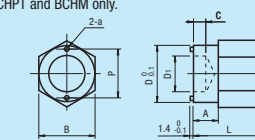
Special Wrench Included

BR

Spec.

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	
16	24	For M16	35	12	27	6	27	17	24	
20	-	For M20	40	14	30	7	33	20	29.6	2.5