

Plastic Hex Socket Head Cap Screws / Plastic Hex Socket Head Set Screws

Material: RENY / PPS / PEEK

Plastic Hex Socket Head Cap Screws / Plastic Screws

No Knurling

Low Head/Extra Low Head (Available in Pkg.)



RENY

PPS

PEEK

Type				Material
Screw	Nuts	Washers	Set Screws	
RENB	RENN	RENW	-	RENY (Glassfiber Reinforced Polyamide MXD6)
PPSB	PPSN	PPSW	-	PPS (Polyphenylenesulfide)
PEKB	PEKN	PEKW	PEKSF	PEEK (Polyetheretherketone)

Screw

Nuts

Washers

Set Screws

(Note) Gate mark remains.
* Usable as one end threaded posts in combination with Both Ends Tapped Plastic Hex Spacers on P222.

<Cautions>

- The surface colors of plastic screws, nuts and washers may change somewhat depending on production lot and other conditions.
- Sometimes black spots may be seen on the surface, which does not affect its performance.

RoHS10

Plastic Hex Socket Head Cap Screws

Part Number	M x P	A	E	B	Unit Price	Volume Discount Rate	Quantity
Type	M-L				* Less than	* or More	
					RENB/PPSB/PEKB	RENB/PPSB/PEKB	
RENB	3-6						
PPSB	8						
PEKB	10	3	5.5	3	2.5		100
	12	0.5					
	15						
	20						
RENB	4-6						
PPSB	8						
PEKB	10	4	7	4	3		100
	12	0.7					
	15						
	20						
RENB	5-8						
PPSB	10						
PEKB	12	5	8.5	5	4		100
	15	0.8					
	20						
	25						
	30						
RENB	6-10						
PPSB	12						
PEKB	15	6	10	6	5		100
	20	1.0					
	25						
	30						
	40						
RENB	8-15						
PPSB	20	8	13	8	6		50
PEKB	25	1.25					
	30						
	40						
RENB	10-15						
	20	10	16	10	8		50
	25	1.5					
	30						
	35						
	40						
RENB	12-20						
	25	12	18	12	10		50
	30	1.75					
	35						
	40						

•RENY-Glassfiber Reinforced Polyamide MXD6
RENY is based on polyamide MXD6 and is also a crystalline engineered plastic reinforced with 50% glass fiber. It has the highest strength and elasticity among engineered plastics, and excels in both oil and heat resistance. Thus, it is used as an alternative to metal.

•PPS-Polyphenylenesulfide
PPS is a crystalline super engineered plastic. It has excellent heat resistance, and does not deteriorate in physical properties even when it is used for long durations in high temperature atmosphere. In addition, it excels in chemical resistance, mechanical characteristics, electrical properties and dimensional stability.

Plastic Nuts

Part Number		B	(e)	T	Unit Price			Volume Discount Rate		
Type	M				1 ~ 99 pc(s).			100 ~ 200 pcs.		
					RENN	PPSN	PEKN	RENN	PPSN	PEKN
RENN PPSN PEKN	3	5.5	6.4	2.4						
	4	7	8.1	3.2						
	5	8	9.2	4						
	6	10	11.5	5						
	8	13	15	6.5						
	10	17	19.6	8		-	-		-	-
	12	19	21.9	10		-	-		-	-

Plastic Washers

Part Number		D	d	t	Unit Price			Volume Discount Rate		
Type	No.				1 ~ 99 pc(s).			100 ~ 200 pcs.		
					RENW	PPSW	PEKW	RENW	PPSW	PEKW
RENW PPSW PEKW	3	7	3.2	0.5						
	4	9	4.3	0.8						
	5	10	5.3	1						
	6	12.5	6.4	1.6						
	8	17	8.4	1.6						
	10	21	10.5	2.0		-	-		-	-
	12	24	13	2.5		-	-		-	-

Plastic Set Screws

Part Number	B	d1	C	d	Unit Price	Volume Discount Rate
Type	M-L		(Min.)	(Max.)	1 ~ 99 pc(s).	100 ~ 200 pcs.
PEKSF	3-15	1.5	2.2	2		
	4-20	2	2.8	2.5		
	5-20	2.5	3.6	3		
	6-25	3	4.4	3.5		
	8-30	4	6	5.5		

Ordering Example
Part Number
PPSB3-10
PPSN3
PPSW3
PEKSF4-20

•PEEK-Polyetheretherketone
PEEK is semicrystalline super engineered plastic with the highest performance. It has the highest chemical resistance among all engineered plastics. The only generally used chemical that can dissolve PEEK is concentrated sulfuric acid. PEEK also excels in heat resistance, abrasion resistance, flame resistance and hydrolysis resistance.

Characteristic Value of Plastics P221



No Knurling

Type		Material
PPSBL	PPS (Polyphenylenesulfide) Non-Glass Fiber	
PEKBL	PEEK (Polyetheretherketone)	

The head is not knurled.
More economical than Knurled Type.

Part Number		MxP	A	E	B	PPSBL			PEKBL		
Type	M-L					Unit Price	Volume Discount Rate		Unit Price	Volume Discount Rate	
						1 ~ 19 pc(s).	20~49	50~100	1 ~ 19 pc(s).	20~49	50~100
PPSBL PEKBL	5-10	5x0.8	8.5	5	4				-		-
	15										
	20										
	25										
	30										
	6-15	6x1.0	10	6	5						
20											

Ordering Example
Part Number
PPSBL5-20

Low Head (Pkg.)



Low Head (Pkg.)



Extra Low Head (Pkg.)

20 pcs. per pkg.

RoHS10

Part Number		M x P	A	E	B	t	PACK-RENS		PACK-PPSS		PACK-PEKST	
Type	M-L						Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
							1 ~ 2 pkg(s).	3 ~ 100 pkgs.	1 ~ 2 pkg(s).	3 ~ 100 pkgs.	1 ~ 2 pkg(s).	3 ~ 100 pkgs.
PACK-RENS PACK-PPSS PACK-PEKST	3-6	3										
	8	x	5.5	2	2	1.5						
	10	0.5										
	4-6	4										
	8	x	7	2.8	2.5	2.3						
	10	0.7										
	12											
	5-8	5										
	10	x	8.5	3.5	3	2.7						
	12	0.8										
	6-10	6										
	12	x	10	4	4	3						
16	1.0											

Part Number		M x P	A	E	Hexalobular Socket Number	t	PACK-RENE		PACK-PPSE		PACK-PEKE	
Type	M-L						Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
							1 ~ 2 pkg(s).	3 ~ 100 pkgs.	1 ~ 2 pkg(s).	3 ~ 100 pkgs.	1 ~ 2 pkg(s).	3 ~ 100 pkgs.
PACK-RENE PACK-PPSE PACK-PEKE	3-6	3										
	8	x	6	1.3	8	1.3						
	10	0.5										
	4-6	4										
	8	x	8	1.5	10	1.5						
	10	0.7										
	12											
	5-8	5										
	10	x	9	1.5	15	1.5						
	12	0.8										
	6-10	6										
	12	x	10	1.5	20	1.5						
16	1.0											

Ordering Example
Part Number
PACK-RENS 3-6
20 pcs. per pkg.

Mechanical Properties (Reference)

	RENB	PPSB	PEKB	PPSBL	PEKBL	PACK-RENS	PACK-PPSS	PACK-PEKST	PACK-RENE	PACK-PPSE	PACK-PEKE
Tensile Breaking Load N	RENB	PPSB	PEKB	PPSBL	PEKBL	PACK-RENS	PACK-PPSS	PACK-PEKST	PACK-RENE	PACK-PPSE	PACK-PEKE
M3	635	570	430	-	-	740	447	370	365	265	317
M4	1470	980	765	-	-	1325	725	730	697	447	624
M5	2450	1570	1230	836	1208	2050	990	1170	1065	579	1146
M6	3140	2250	1670	1580	1835	2798	1747	1666	1604	889	1455
M8	5100	3720	3090	-	-	-	-	-	-	-	-
M10	6900	-	-	-	-	-	-	-	-	-	-
M12	8700	-	-	-	-	-	-	-	-	-	-

	RENB	PPSB	PEKB	PPSBL	PEKBL	PACK-RENS	PACK-PPSS	PACK-PEKST	PACK-RENE	PACK-PPSE	PACK-PEKE
Torsional Breaking Torque N · m	RENB	PPSB	PEKB	PPSBL	PEKBL	PACK-RENS	PACK-PPSS	PACK-PEKST	PACK-RENE	PACK-PPSE	PACK-PEKE
M3	0.39	0.36	0.3	-	-	0.31	0.243	0.15	0.2	0.143	0.15
M4	0.79	0.71	0.64	-	-	0.62	0.436	0.54	0.62	0.285	0.5
M5	1.77	1.42	1.28	0.78	0.8	1.2	0.986	1.11	0.66	0.636	1.09
M6	2.94	2.11	2.26	1.86	1.96	2.15	1.496	1.72	1.09	0.876	1.71
M8	7.85	5.29	5.98	-	-	-	-	-	-	-	-
M10	12.75	-	-	-	-	-	-	-	-	-	-
M12	24.5	-	-	-	-	-	-	-	-	-	-

Shown above are reference values and not guaranteed. Recommended tightening torque is torsional shear torque x50%. Use a torque driver and torque wrench for tightening.
Mechanical characteristics change depending on the operating environment. Testing is recommended under the applicable conditions prior to usage.