



The volume discount rate is also applicable to alteration cost.  
All price & lead time are to be quoted.

**MSBL**

De9	A	B	C	E	F	M×P	T
6.5	10	4	2.5	5	9	M 5×0.8	7
8	13	5	3	6	9	M 6×1.0	8.7
10	16	6	4	8	12	M 8×1.25	10.8
13	18	8	5	10	16	M10×1.5	14
16	24	10	7	14	18	M12×1.75	17
20	27	14	9	18	24	M16×2.0	21
25	33	17	11	19	30	M20×2.5	26

SCM435 30~35HRC (Strength class 10.9)  
S Black Oxide, (head only)

Catalog No. Type	1mm increments D	1mm increments L	U/Price 1~19
MSBL	6.5	10 ~ 70	Quotation
	8	10 ~ 90	
	10	10 ~ 120	
	13	10 ~ 130	
	16	15 ~ 150	
	20	15 ~ 150	
25	30 ~ 160		

No knurling on the head.

Order **Catalog No.** — **L**  
**MSBL 10** — **53**

Delivery **7** Days Express **B** P.i.  
For area out of Singapore please refer to P.i.

Quantity discount rate

Quantity	1~19	20~49	50~199	200~500
Rate	—	5%	10%	15%

**UW**

Although urethane itself has a heat resistant temperature of 100°C, when used continuously its durability falls, so use it at a temperature of no more than 80°C.

ShoreD58

D	d	Catalog No. Type	d	T	U/Price for 1~19
16	10	UW	10	1.5 3	T1.5 T3 Quotation
18	13				
24	16				
27	20				

Urethane hardness characteristics comparison (comparison with Shore A95)

Characteristic	Unit	ShoreD58	ShoreA95
Tensile strength	MPa	47.8	39.2
Elongation	%	440	400
Tensile Breakage Strength	kgf/cm	153	107
Impact Resilience	%	53	40
Compression set	%	39	45
Heat resistant temperature	°C	100	80

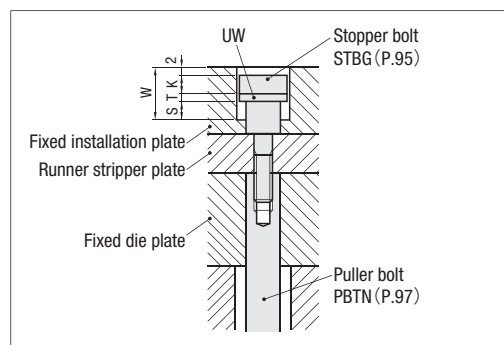
The above value is the reference value. It is not a guarantee value.

Order **Catalog No.** — **T**  
**UW10** — **T1.5**  
UW Printed in Red • Printed in Blue

Delivery SGP Stock **3** Days  
For area out of Singapore please refer to P.i.

Quantity discount rate

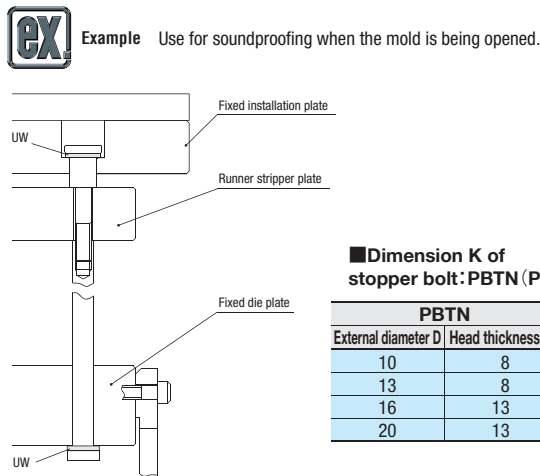
Quantity	1~19	20~49	50~200
Rate	—	5%	10%



- When using a urethane washer on the stopper bolt, be careful of the forming dimension of the counterbore depth (W) for securing the stroke (S).
  - The dimension of the stopper bolt is set so that the head is recessed 2 mm below the mounting plate. (See "Stopper Bolt STBG" on P.95.)
- When using a urethane washer, the relationship between the counterbore depth (W) and the stroke (S) is  $W = S + \text{urethane washer thickness } T + \text{stopper bolt head thickness } K + 2$ .

Dimension K of stopper bolt: PBTN (P.97)

PBTN	
External diameter D	Head thickness K
10	8
13	8
16	13
20	13



Stocks Availability Subjected to Prior Sales.



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**PLBS**

S45C Black Oxide

D1	BL	t	R	d	C	M	Catalog No. Type	D	U/Price 1~19
16	26	6	2	2.3	0.8	6	PLBS (Bushing For PL)	10	Quotation
20	30	8	2.5	2.8	1.0	8		13	
25	37	10	3	3	1.0	10		16	
30	42	10	3	3	1.0	10		20	

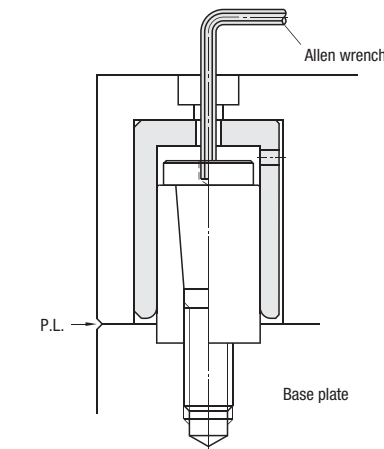
Order **Catalog No.** **PLBS13**

Delivery SGP Stock  
For area out of Singapore please refer to P.i.

Quantity discount rate

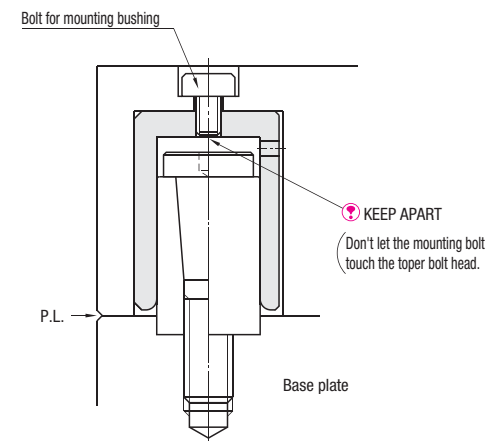
Quantity	1~19	20~29	30~49	50~100
Rate	—	5%	10%	15%

- Features**
- By using PLBS, polishing and R-chamfering of the hole at PL installation can be omitted.
  - Enables tightening/loosening of the PLBS parting lock's tapered bolt by using an Allen wrench (hexagonal wrench) through its bottom tap hole, making installation adjustment and maintenance easier than ever.



- How to Mount**
- When creating and finishing a hole for this bushing, aim at  $D1 +0.1 / +0.05$  tolerance for its diameter. (The depth of hole is a level of  $BL \pm 0.5 / \pm 0.1$ .)
  - Recommended finishing on the bushing's diameter ( $D1$ ) is end milling.

- Note**
- Please use a bushing mounting bolt with a length which does not reach PLB during mold closing. Contact of each bolt could cause breakage. Tapered bolt might be damaged by the contact of the bushing mounting bolt. Be especially careful because even slight contact damages the hole of tapered bolt for hexagonal wrench, and the removal becomes impossible.



Stocks Availability Subjected to Prior Sales. 100