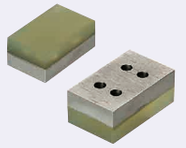
Metal-Plated Urethane Sheets

■Metal-Plated Urethane Sheets are available in short lead time.

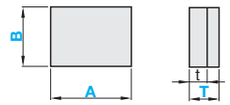


RoHS10

Type	Type	Material	Hardness	Color
A, B Selectable	UTPFS	Ether Polyurethane	Shore A95	Natural Color
	UTPFH		Shore A90	
	UTPFM	Ester Polyurethane	Shore A70	
	UTPFL		Shore A50	
A Configurable	UTPFSA	Ether Polyurethane	Shore A95	Natural Color
	UTPFHA		Shore A90	
	UTPFMA	Ester Polyurethane	Shore A70	
	UTPFLA		Shore A50	

Properties P.389
Material: EN 1.4301 Equiv.

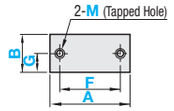
■Standard



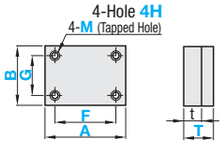
■Hole Type

1-Hole 1H

2-Hole 2H



4-Hole 4H



■Accuracy Standards

T Tolerance

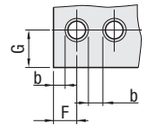
T	Tolerance
10,15	±0.2

A, B Tolerance

A, B	Tolerance
50 or Less	±0.3
51~100	±0.5

■Machining Limits
(Distance between Holes, Thickness between Holes and Edges)

Should be b≥2.



Part Number			A		B	Plate Hole Position 0.5mm Increment		Tapped Hole M	t (Metal Plate Thickness)
Type		Nominal	T	A, B Selectable	A Configurable 1mm Increment	B Selection	F	G		
A, B Selectable	A Configurable			10						
UTPFS	UTPFSA	1H	10	20	10~100	10 20 30 50	5~80	4~42	3 4 5 6 8 10	6
UTPFH	UTPFHA	2H		50						
UTPFM	UTPFMA	4H		100						
UTPFL	UTPFLA		15							10

Ordering Example

■Standard

Part Number - A - B

UTPFS10 - 50 - 50

■Hole Type

Part Number - A - B - F - G - M

UTPFSA2H10 - 20 - 30 - F10 - G15 - M4

The price of this product is the unit price shown in the table multiplied by material multiplier:

(Ex.) Part Number - A - B >> UTPFL10 - 10 - 10

(Unit Price) x (Material Multiplier) = Unit Price of Standard Type

■A, B Selectable

Part Number		B	Unit Price A			
Type	T		10	20	50	100
UTPFS (x1.0) UTPFH (x0.9) UTPFM (x1.0) UTPFL (x1.1)	10	10				
		20				
		30				
		50				
	15	10				
		20				
		30				
		50				

■A Configurable

Part Number		B	Unit Price A			
Type	T		10~25	26~50	51~75	76~100
UTPFSA (x1.0) UTPFHA (x0.9) UTPFMA (x1.0) UTPFLA (x1.1)	10	10				
		20				
		30				
		50				
	15	10				
		20				
		30				
		50				

■Tap Hole Machining Charge

Hole Type	Tapped Hole M
1H	
2H	
4H	

The price of the Hole Type is found by adding the standard type unit price and the hole machining charge.

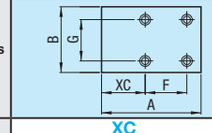
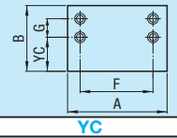
(Ex.) Part Number - A - B - F - G - M >> UTPFSA2H10 - 20 - 50 - F10 - G15 - M4

(Standard Type Unit Price) + (Hole Machining Charge) = Hole Type Unit Price

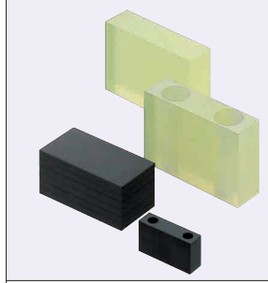
Alterations

Part Number - A - B - F - G - M - (XC, YC)

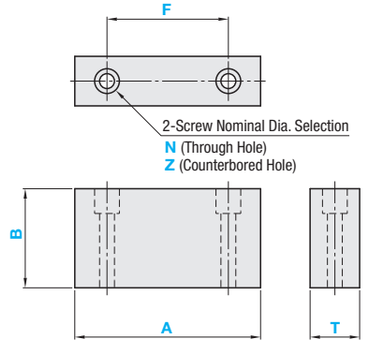
UTPFSA4H10 - 20 - 30 - F10 - G15 - M4 - YC10

Alterations	Hole Position from Left	Hole Position from Bottom
		
Code	XC	YC
Spec.	XC=1mm Increment For machining limits, see above.	YC=1mm Increment For machining limits, see above.

Urethane / Rubber Blocks



Type	Material	Hardness	Color
BUTSN	Ether Polyurethane	Shore A95	Natural Color
BUTHN		Shore A90	Natural Color
BUTM	Ester Polyurethane	Shore A70	Natural Color
BUTL		Shore A50	Natural Color
BRBNM	Nitrile Rubber	Shore A70	Black
BRBCM	Chloroprene Rubber	Shore A65	Black
BRBFM	Fluororubber	Shore A80	Black
BRBSM	Silicon Rubber	Shore A70	Light Gray
BRBAM	Silicon Rubber	Shore A50	Milky White
BUNSE	Low Elasticity Rubber	Shore A32	Black



Type	Material	Tolerance			
BUTSN	Ether Polyurethane	T Dimension Tolerance	6 ~ 9	10 or More	
BUTHN			±0.3	±0.5	
BUTM	Ester Polyurethane	A, B Dimension Tolerance	30mm or Less	31 ~ 50	51 or More
BUTL			±0.5	±0.7	±0.8
BRBNM	Nitrile Rubber	T Dimension Tolerance	6 ~ 9	10 or More	
BRBCM	Chloroprene Rubber		±0.5	±0.8	
BRBFM	Fluororubber				
BRBSM	Silicon Rubber				
BRBAM	Silicon Rubber	A, B Dimension Tolerance	30mm or Less	31 ~ 50	51 or More
BUNSE	Low Elasticity Rubber		±0.8	±1.0	±1.5

5≤T-d(d1)

d(d1)+5≤F≤A-d(d1)-5

Hole Machining Details

Screw Nominal Dia.	3	4	5	6	8	10	12
d	3.5	4.5	5.5	6.5	9	12	14
d1	6.5	8	9.5	11	14	17.5	20.5
h	3.5	4.5	5.5	6.5	9	11	14

Part Number	1mm Increment				Screw Nominal Dia. Selection
Type	A	B	T	F	N (Through Hole), Z (Counterbored Hole)
BUTSN (Urethane A95) BUTHN (Urethane A90) BUTM (Urethane A70) BUTL (Urethane A50) BRBNM (Nitrile Rubber) BRBCM (Chloroprene Rubber) BRBFM (Fluororubber) BRBSM (Silicon Rubber A70) BRBAM (Silicon Rubber A50) BUNSE (Low Elasticity Rubber)	25~150	25~100	6~30	9~141 (N=0 >> F=0)	0 3 4 5 6 8 10 12 (When B<30) 0 5 6 8 10 12 (When 30≤B<50) 0 10 12 (When 50≤B) (For No Hole) N=0

Ordering Example

Part Number - A - B - T - F - Screw Nominal Dia. Selection

BUTSN - A100 - B100 - T21 - F53 - N12

BUNSE - A150 - B50 - T7 - F0 - N0

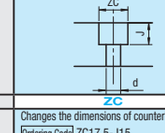
Part Number				Unit Price					
Type	A	B	T	BUTSN BUTM BUTL	BUTHN	BRBNM BRBCM	BRBFM	BRBSM BRBAM	BUNSE
BUTSN BUTHN BUTM BUTL BRBNM BRBCM BRBFM BRBSM BRBAM BUNSE	25~50	25~40	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		41~60	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		61~80	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		81~100	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
	51~100	25~40	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		41~60	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		61~80	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		81~100	6~10						
			11~15						
			16~20						
			21~25						
			26~30						

Part Number				Unit Price					
Type	A	B	T	BUTSN BUTM BUTL	BUTHN	BRBNM BRBCM	BRBFM	BRBSM BRBAM	BUNSE
BUTSN BUTHN BUTM BUTL BRBNM BRBCM BRBFM BRBSM BRBAM BUNSE	101~150	25~40	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		41~60	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		61~80	6~10						
			11~15						
			16~20						
			21~25						
			26~30						
		81~100	6~10						
			11~15						
			16~20						
			21~25						
			26~30						

Alterations

Part Number - A - B - T - F - Screw Nominal Dia. Selection - (ZC)

BUTSN - A100 - B100 - T30 - F53 - Z10 - ZC17.5-J16

Alteration	Counterbored Hole Detailed Dimensions
	
Code	ZC
Spec.	Changes the dimensions of counterbore hole. Ordering Code ZC17.5-J15 ZC, J=0.5mm Increment ZC-d≥4 B-J≥2