

# Gussets

## Tapped, Hole Position Fixed Type

**Gussets – Tapped, Hole Position Fixed Type**

RoHS10

For details of dimension, see Hole and Bolt Selection Table.

Type		Material	Surface Treatment
Standard Class (Perpendicularity Z0.05/100)	Precision Class (Perpendicularity Z0.02/100)		
RBBS	RGBS	General Structural Steel	—
RBBB	RGBB		Black Oxide
RBBM	RGBM		Electroless Nickel Plating
RBBA	RGBA		—
RBBW	RGBW		Clear Anodize
RBBV	RGBV	Black Anodize	—
RBBF	RGBF	304 Stainless Steel	—

⊗ Precision Grade is not specifiable for B200 or more.

Standard Grade: 0.05/100  
Precision Grade: 0.02/100

**When A=20 and 30**

A	a <sub>1</sub>
20	12.5
30	20

B	b <sub>1</sub>	b <sub>2</sub>	J
30	10	*10	10
40	10	20	
50	15	20	
60	15	30	
80	15	50	
100	20	60	

The Manufacturing tolerance of \* is  $\pm 0.2$ , other dimensions are general tolerance (JISB0405), P4003

T	M
6	3
9 or 10	5
12	6

**When A=40**

A	a <sub>1</sub>	a <sub>2</sub>
40	*10	*20

\*When B=40, in order to prevent interference, (a<sub>1</sub>, a<sub>2</sub>) dimensions are (15, 15).  
\*When B=50, 60 and T12, similarly (a<sub>1</sub>, a<sub>2</sub>) dimensions are (15, 15).

B	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	J
40	15	15	—	10
50	*12.5	*25	—	
60	15	30	—	
80	20	40	—	
100	20	60	—	
150	37.5	75	—	
200	30	75	75	B-(A-10)

\*When B=50, in order to prevent interference, (b<sub>1</sub>, b<sub>2</sub>) dimensions are (15, 20).  
⊗ See the right table (A=50~150) when B=200.

T	M
9 or 10	5
12	6
16	8

**When A=50~150**

A	a <sub>1</sub>	a <sub>2</sub>
50	12.5	25
60	15	30
80	20	40
100	25	50
150	37.5	75

B	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	J
50	12.5	25	—	10
60	15	30	—	
80	20	40	—	
100	25	50	—	
150	37.5	75	—	
200	30	75	75	
250	30	100	100	B-(A-10)
300	30	120	120	B-(A-10)

⊗ 2 mounting holes for B150 or less.

T	M
9 or 10	5
12	6*
16	8

\*M8 when B≥100.

Part Number	Type	A	B Selection						T	
			1018 Carbon Steel or Equivalent / 304 Stainless Steel	5052 Aluminum Alloy				1018 Carbon Steel or Equivalent / 304 Stainless Steel	5052 Aluminum Alloy	
Standard Class Perpendicularity Z0.05/100 1018 Carbon Steel or Equivalent RBBS RBBB RBBM	Precision Class Perpendicularity Z0.02/100 1018 Carbon Steel or Equivalent RGBS RGBB RGBM	20	30	40	50	60	80	6	6	12
		30	30	40	50	60	80	100	6	10
		40	40	50	60	80	100	150	200	10
		50	50	60	80	100	150	200	250	12
		60	60	80	100	150	200	250	300	12
		80	80	100	150	200	250	300	300	12
5052 Aluminum Alloy RBBA RBBW RBBV	5052 Aluminum Alloy RGBA RGBW RGBV	100	100	150	200	250	300	9	10	
		150	150	200	250	300	300	300	12	
		150	150	200	250	300	300	300	12	
304 Stainless Steel RBBF	304 Stainless Steel RGBF	100	100	150	200	250	300	9	10	
		150	150	200	250	300	300	300	12	

⊗ Precision Grade is not specifiable for B200 or more.

A+B	Available Types											
	1018 Carbon Steel				5052 Aluminum Alloy				304 Stainless Steel			
	RBBS	RBBB	RBBM	RBBF	RBBW, RBBV	RBBB	RBBM	RBBF	RBBW, RBBV	RBBB	RBBM	RBBF
	T=6, 9	T=12	T=16	T=6, 9	T=12	T=16	T=6, 9	T=12	T=16	T=6, 9	T=12	T=16
50	•	•	•	•	•	•	•	•	•	•	•	•
60	•	•	•	•	•	•	•	•	•	•	•	•
70	•	•	•	•	•	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•	•	•	•	•	•
90	•	•	•	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•	•	•	•
110	•	•	•	•	•	•	•	•	•	•	•	•
120	•	•	•	•	•	•	•	•	•	•	•	•
130	•	•	•	•	•	•	•	•	•	•	•	•
140	•	•	•	•	•	•	•	•	•	•	•	•
150	•	•	•	•	•	•	•	•	•	•	•	•
160	•	•	•	•	•	•	•	•	•	•	•	•
180	•	•	•	•	•	•	•	•	•	•	•	•
190	•	•	•	•	•	•	•	•	•	•	•	•
200	•	•	•	•	•	•	•	•	•	•	•	•
210	•	•	•	•	•	•	•	•	•	•	•	•
230	•	•	•	•	•	•	•	•	•	•	•	•
240	•	•	•	•	•	•	•	•	•	•	•	•
250	•	•	•	•	•	•	•	•	•	•	•	•
260	•	•	•	•	•	•	•	•	•	•	•	•
280	•	•	•	•	•	•	•	•	•	•	•	•
300	•	•	•	•	•	•	•	•	•	•	•	•
310	•	•	•	•	•	•	•	•	•	•	•	•
330	•	•	•	•	•	•	•	•	•	•	•	•
350	•	•	•	•	•	•	•	•	•	•	•	•
360	•	•	•	•	•	•	•	•	•	•	•	•
380	•	•	•	•	•	•	•	•	•	•	•	•
400	•	•	•	•	•	•	•	•	•	•	•	•
450	•	•	•	•	•	•	•	•	•	•	•	•

**Part Number Example** Part Number - B - T

RBBS50 - 100 - 9

**Part Number Alterations** Part Number - B - T - (NL)

RBBB80 - 100 - 12 - NL

Alteration	Code	Spec.
	NL	One tapped hole at the center of side A. Ordering Code: NL. ⊗ Not applicable when A=20, 30.

# Gussets

## Tapped, Hole Position Specified Type

Feature: When mounting hole pitch does not match with the fixed dimension on the left-hand page, the following standard is available.

**Gussets – Tapped, Hole Position Specified Type**

RoHS10

Type		Material	Surface Treatment
Standard Class (Perpendicularity Z0.05/100)	Precision Class (Perpendicularity Z0.02/100)		
RBPBS	—	General Structural Steel	—
RBPBB	—		Black Oxide
RBPBM	—		Electroless Nickel Plating
RBPBA	—	Aluminum Alloy	—
RBPBW	—		Clear Anodize

⊗ Precision Grade is not specifiable for B200 or more.

Standard Grade: 0.05/100  
Precision Grade: 0.02/100

**When A=30**

**When A=40~100**

⊗ When A=30, side A has one mounting hole. ⊗ Depending on the specified dimension, pilot hole for tapping may go through to the reverse side.

Part Number	Type	A	B Selection				1 mm Increment				M (Coarse)	T				
			1018 Carbon Steel or Equivalent / 304 Stainless Steel	5052 Aluminum Alloy			Side A Hole Pitch	Side B Hole Pitch		1018 Carbon Steel or Equivalent		5052 Aluminum Alloy				
								X	F	Y	G					
Standard Class 1018 Carbon Steel or Equivalent RBPBS RBPBB RBPBM		30	30	40	50	60	80	X≥Mx2*1	F≥Mx2 and X+F≤A-6*3	Y≥Mx2*1	G≥Mx2 and Y+G≤B-6*3	4	5	6	9	10
		40	40	50	60	80	100					5	6	12	12	
		50	50	60	80	100	150					4	5	6	9	10
		60	60	80	100	150	200					4	5	6	9	10
5052 Aluminum Alloy RBPBA RBPBW		80	80	100	150	200	300	0*4		0*4		4	5	6	8	9
		100	100	150	200	300	4					5	6	8	9	
		100	100	150	200	300	4					5	6	8	9	
		100	100	150	200	300	4					5	6	8	9	

\*1 The first tapped hole is distanced twice or more that of thread diameter from edge surface in order to prevent interference.  
\*2 When A=30, side A has one mounting hole and specification of F dimension is not required.  
\*3 Set apart the second tapped hole twice or more M (thread diameter) from the first and 6 mm or more from the edge surface.  
\*4 When 0 is specified for F and G dimensions, one mounting hole is available.

**Part Number Example** Part Number - B - X - F - Y - G - M - T

RBPBS30 - 60 - X20 - Y20 - G20 - M6 - T9

RBPBW60 - 100 - X20 - F20 - Y25 - G50 - M6 - T12