

For heat insulation  
SUS416

# WASHER (RISER PADS)

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SUS416

# FREE WASHERS

—PLAIN/ FOR COUNTERSUNK BOLT / COUNTERBORE—

Material	Coefficient of thermal conductivity [cal/cm·sec·°C] (100°C)	Coefficient of thermal expansion [×10 <sup>-6</sup> /°C] (100°C)
SUS416	0.058	9.9
S50C	0.120	11.5

1cal/cm·sec·°C=418.6W/(m·K)

Ⓜ Non JIS material definition is listed on P.1351 - 1352

**RPSK** (Dowel pin type)

VH7	d	t
8	+0.015	0
10	0	0
12	+0.018	0
13	0	0

Part Number Type D V T U/Price 1~19

RPSK	25	8 10	10	Quotation
			15	
	30	8 10 12	10	
			15	
	40	10 12 13	10	
			15	

**RPSB** (Bolt type)

Applicable bolt size	d	t
M 6	6.2	7
M 8	8.2	9
M10	10.2	11
M12	12	13
M16	17	17

Part Number Type D M (Applicable bolt size) Selection T U/Price 1~19

RPSB	25	6 8 10	10	Quotation
			15	
	30	8 10 12 16	10	
			15	
	40	8 10 12 16	10	
			15	

**RPST** (For flat head screw)

Applicable bolt size	d	t
M 6	6.2	3.5
M 8	8.2	4.6
M10	10.2	5.7

Part Number Type D M (Applicable bolt size) Selection T U/Price 1~19

RPST	30	6 8	10	Quotation
			15	
40	6 8 10	10		
		15		

**RPSZ** (Counterbore type)

Applicable bolt size	d	d1	h
M 6	6.2	11	6.5
M 8	8.2	14	8.6
M10	10.2	17.5	10.8
M12	12.2	20	13

Part Number Type D M (Applicable bolt size) Selection T U/Price 1~19

RPSZ	25	6	10	Quotation
			15	
	30	6	10	
			15	
	40	6	10	
			15	

Order Part Number - V, M - T

RPSK30 - V12 - T15

RPSB40 - M12 - T20

Days to Ship **Quotation**

Price **Quotation**

Alterations Part Number - V, M - T - (MK · TK1 · TK2 · TK3)

RPSZ30 - M8 - T15 - MK

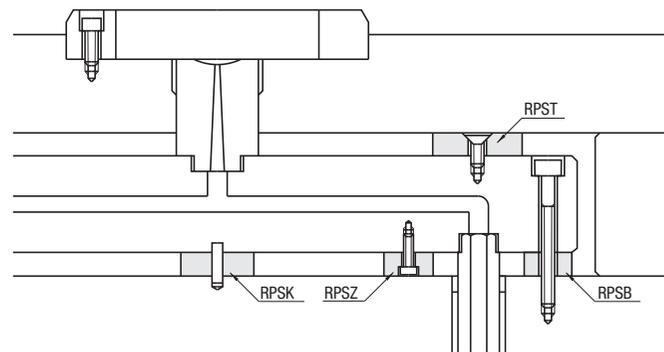
Alterations	Code	Spec.	1Code
	MK	Adds a groove on both sides in order to facilitate insulation. Express services not available. RPSK · RPSB Forming marks sometimes remain on the bottom face of the formed groove.	Quotation
	TK1	Changes T dimension tolerance.	
	TK2	Changes T dimension tolerance.	

**ex** Example

SUS416 has a small heat transmission rate and is effective in cutting off heat.

Material	Thermal conductivity coefficient [cal/cm·sec·°C] (100°C)	Thermal expansion coefficient [×10 <sup>-6</sup> /°C] (100°C)
SUS416	0.058	9.9
S50C	0.120	11.5

1cal/cm·sec·°C=418.6W/(m·K)



**MWSCS** (Plain)

**MWFBS** (For countersunk bolt)

**MWZCS** (Counterbore)

Part Number Type D T V P H U/Price 1~9

MWSCS	5.0~10.0	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation
	10.1~20.0	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	
	20.5~30.0	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	
30.5~40.0	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0		
					5.1~10.0	
40.5~60.0	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0		
					5.1~10.0	
60.5~80.0	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0		
					5.1~10.0	
80.5~100.0	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0		
					5.1~10.0	

Part Number	D	0.1mm increments			U/Price 1~9		
		T	V	P	MWSCS	MWFBS	MWZCS
Plain MWSCS	5.0~10.0 (0.1mm increments)	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation	
		5.1~10.0					
For countersunk bolt MWFBS	10.1~20.0 (0.1mm increments)	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation	
		5.1~10.0					
Counterbore (D≥10 T≥3.0) MWZCS	20.5~30.0 (0.5mm increments)	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation	
		5.1~10.0					
Counterbore (D≥10 T≥3.0) MWZCS	30.5~40.0 (0.5mm increments)	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation	
		5.1~10.0					
Counterbore (D≥10 T≥3.0) MWZCS	40.5~60.0 (0.5mm increments)	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation	
		5.1~10.0					
Counterbore (D≥10 T≥3.0) MWZCS	60.5~80.0 (0.5mm increments)	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation	
		5.1~10.0					
Counterbore (D≥10 T≥3.0) MWZCS	80.5~100.0 (0.5mm increments)	1.0~5.0	3.0~70.0	3.0~68.0	1.0~48.0	Quotation	
		5.1~10.0					

Ⓜ Plain: D > 50 → T ≥ 2; To make D size larger than 50mm, the thickness (T) must be T2 or more.  
 Ⓜ For countersunk bolt: D > 50 → T ≥ 2; To make D size larger than 50mm, the thickness (T) must be T2 or more.  
 Ⓜ Counterbore: D > 50 → T ≥ 2; To make D size larger than 50mm, the thickness (T) must be T2 or more.

Order Part Number - D - T - V - P - H

MWSCS - D20.0 - T6.0 - V6.0

MWFBS - D20.0 - T6.0 - V6.0 - H3.0

MWZCS - D20.0 - T6.0 - V6.0 - P4.0 - H3.0

Alterations Part Number - D - T - V - P - H - (SSC · WSC · TK)

MWFBS - D30.0 - T3.0 - V10.0 - H1.0 - TK1

Alterations	Code	Spec.	1Code
	SSC	Cuts a face. SSC=1mm increments SSC ≥ V/2 + 2 SSC ≤ D/2 - 1 Not available for D5~D8.	Quotation
	WSC	Cuts two faces. WSC=1mm increments WSC ≥ V + 4 WSC ≤ D - 2 Not available for D5~D8.	
	TK	Changes T dimension tolerance.	

Ⓜ Note that designated tolerance of TK alteration is different from that of free washer (P.1199) and free washer (Right page).