

Resin Washers / Sheets

Extra Thin

Extra thin washer with excellent low friction and abrasion resistance.

Extra Thin Resin Washers – Abrasion Resistance

SWSPS

Material: Polyslider® (Nylon Resin)

Ⓢ Polyslider® is a registered trademark of ASAHI POLYSLIDER COMPANY, LIMITED.

Part Number	Type	D	V	T					
SWSPS	8	3	4	5	0.13 0.25 0.5 1.0 0.25 0.5				
	10	4	5	6					
	12	4	5	6		8			
	14	5	6	8		10			
	15	5	6	8		10	12		
	16	6	8	10		12			
	20	6	8	10		12	15	16	
	25	6	8	10		12	15	16	20

Property Data

Thickness (T) Tolerance			
0.13	0.25	0.5	1.0
±0.013	±0.025	±0.025	±0.050

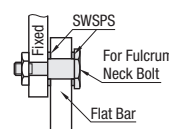
Comparison Table

Item	Polyslider®	Fluoro Resin
Abrasion Resistance	Excellent	Good
Compression Strength	Excellent	Poor
Sliding Properties	Good	Excellent
Features	Crush & Abrasion Resistant	Low Friction & Not Crush Resistant

Tolerance

Item	Unit	Values
Tensile Strength	Mpa	98
Elongation	%	60
Friction Coefficient	μ	0.16-0.4
Insulation Resistance	KV/mm	45

Application Example

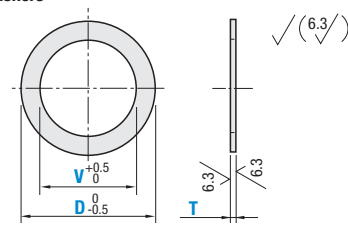


Extra Thin Resin Washers and Sheets – Polyacetal / Fluoro Resin / Polycarbonate

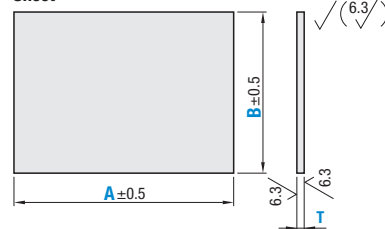


Type	Washers		Material	Color	Thickness(T) Tolerance				
	Washer Package	Sheet			0.1	0.2	0.3	0.5	1
Washers	SWSJJ	PACK-SWSJJ	CIRAJ	Polyacetal	White	±0.03	±0.04	±0.07	±0.10
	SWSPT	PACK-SWSPT	CIRAT	Fluoro Resin	White	±0.01	±0.02	±0.03	±0.05
	SWSPP	PACK-SWSPP	CIRAP	Polycarbonate	Transparent	±0.01	±0.02	±0.03	±0.05

Washers



Sheet



Washers

Part Number	Type	D	V	T						
PACK-SWSJJ	8	0	3	4	*0.1 0.2 0.3 0.5 1.0					
	10	0	3	4		5	6			
	12	0	4	5		6	8			
	14	0	4	5		6	8	10		
	15	0	4	5		6	8	10		
	16	0	4	5		6	8	10	12	
	20	0	5	6		8	10	12	15	16
	25	0	6	8		10	12	15	16	
	30	0	8	10		12	15	16	20	
	35	0	10	12		15	16	20	25	30
40	0	10	12	15	16	20	25	30		
50	0	12	15	16	20	25	30	35	40	

Part Number	Type	D	V	T						
PACK-SWSPP	8	0	3	4	0.1 0.2 0.3 0.5 1.0					
	10	0	3	4		5	6			
	12	0	4	5		6	8			
	15	0	5	6		8	10			
	16	0	5	6		8	10	12		
	20	0	6	8		10	12	15	16	
	25	0	6	8		10	12	15	16	
	30	0	8	10		12	15	16	20	
	35	0	10	12		15	16	20	25	30
	40	0	10	12		15	16	20	25	30
50	0	12	15	16	20	25	30	35	40	

Sheet

Part Number	Type	T	A	B			
CIRAJ	CIRAT	CIRAP	20	30	20		
			40	50			
			60	70		80	
			90	100		150	
			30	40		30	
			50	60			
			70	80			90
			100	150			
			40	50			40
			60	70			
90	100	150					
50	60	70	80	90	50		
100	150	200					
60	100	200					
100	200						
100	200	100					

Part Number Example

Part Number	-	V	-	T
SWSPS8	-	3	-	0.5
PACK-SWSJJ8	-	3	-	0.5
Part Number	-	A	-	B
CIRAJ0.2	-	100	-	20

*CIRAJ is not available for T0.1.

Resin Washers

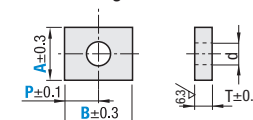
Square

Resin Washers – Square

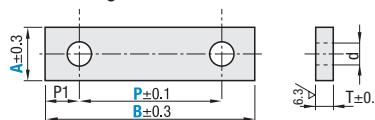
One Through Hole	Two Through Holes	Two Countersink Holes	Two Counterbored Holes	Material	Color
WSRJ	WSRR	WSRP	WSRZ	Polyacetal	White
WSRJ	WSRR	WSRP	WSRZ	MC Nylon Standard Grade	Blue

Ⓢ Material Properties P.2332

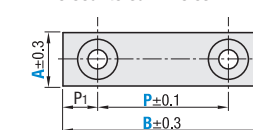
One Through Hole



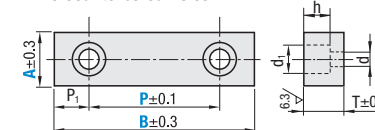
Two Through Holes



Two Countersunk Holes



Two Counterbored Holes



One Through Hole

Part Number	Type	A	B	P	T	Screw Nominal Diameter	d
WSRJ	WSRR	6	6-20	3.0-10.0	2	3	3.5
		8	8-25	4.0-12.5	3	3	3.5
		10	10-30	5.0-15.0	4	4	4.5
		12	12-35	6.0-17.5	5	4	4.5
		15	15-45	7.5-22.5	6	5	5.5
		20	20-60	10.0-30.0	8	6	6.5
		25	25-75	12.5-37.5	10	8	9

Two Through Holes

Part Number	Type	A	B	P	T	Screw Nominal Diameter	d	P ₁
WSRR	WSRR	6	12-24	6.0-18.0	2	3	3.5	3
		8	16-32	8.0-24.0	3	3	3.5	4
		10	20-40	10.0-30.0	4	4	4.5	5
		12	24-48	12.0-36.0	5	4	4.5	6
		15	30-60	15.0-45.0	6	5	5.5	7.5
		20	40-80	20.0-60.0	8	6	6.5	10
		25	50-100	25.0-75.0	10	8	9	12.5

Two Countersunk Holes

Part Number	Type	A	B	P	T	Screw Nominal Diameter	d	d ₁	h	P ₁
WSRP	WSRP	10	20-40	10.0-30.0	3	3	3.5	7.5	2	5
		12	24-48	12.0-36.0	4	4	4.5	9.5	2.5	6
		15	30-60	15.0-45.0	4	5	5.5	11.5	3	7.5
		20	40-80	20.0-60.0	5	6	6.5	13.5	3.5	10
		25	50-100	25.0-75.0	6	8	9	19	5	12.5

Two Counterbored Holes

Part Number	Type	A	B	P	T	Screw Nominal Diameter	d	d ₁	h	P ₁
WSRZ	WSRZ	10	20-40	10.0-30.0	6	3	3.5	6.5	4	5
		12	24-48	12.0-36.0	8	4	4.5	8	5	6
		15	30-60	15.0-45.0	8	5	5.5	9.5	6	7.5
		20	40-80	20.0-60.0	10	6	6.5	11	7	10
		25	50-100	25.0-75.0	12	8	9	14	9	12.5



Part Number Example: WSRJJ10 - 25 - 12.5



Part Number Alterations: WSRJM20 - 60 - 15.0 - NA30

Alterations

Slotted Hole

Code NA

Changes the through hole to the slotted hole. (Applicable to One Through Hole and Two Through Holes only.)
Ordering Code: (Specify in 0.5 mm Increments.) NA15

Spec.

Machining Conditions:
One Hole: 1 ≤ NA ≤ B - P - d/2 - 1.25
Two Holes: 1 ≤ NA ≤ P - d - 1.25

Application Example

