

Posts for Tension Springs

Groove / Roller

Posts for Tension Springs – Groove

ℓ Dimension Selectable
BSP0
SBSP0
 (Stainless Steel)

Full Thread Under Head
BSP0Z
SBSP0Z
 Stainless Steel

ⓐ The ℓ dimensions marked with * in the specification table are for dimensions in the right table.

Type	D - L	ℓ
BSP0	5-15	8
	6-15	7
	6-20	12
	8-20	11
SBSP0	8-25	16
	10-30	17
	10-35	22
	12-40	20

Type	Material	Surface Treatment	Accessories Material
BSP0 BSP0Z	1045 Carbon Steel or Equivalent	Black Oxide	Nut 1 pc. (JIS Class 1) SWCH Carbon Steel Equivalent
SBSP0 SBSP0Z	303 Stainless Steel	—	Nut 1 pc. (JIS Class 1) 304 Stainless Steel

Part Number	Type	D	L								M (Coarse)	ℓ*	A	F	H	T	d		
L Dimension Selectable	Stainless Steel	3	15	20	25	30	35	40	50	M3	10	1.0	3	1.0	1.2	1.8	1.8		
		4	15	20	25	30	35	40	50	M4	1.2	3	1.0	2.0					
		5	*15	20	25	30	35	40	50	M5	2.0	3	1.0	3.0					
		6	*15	*20	25	30	35	40	45	50	60	M6	16	4			2.0	3.6	
		8		*20	*25	30	35	40	45	50	60	70	M8	20			4	2.5	5.0
		10			*30	*35	40	45	50	60	70	M10	25	4			2.5	6.0	
		12				*40	50	60	70	M12	30	4.0	4	2.5			6.5		

Part Number	Type	D	L								M (Coarse)	A	F	H	T	d
Full Thread Under Head	Stainless Steel	3	10	15	20	25	30	35	45	55	65	M3	1.0	3	1.0	1.8
		4	10	15	20	25	30	35	45	55	65	M4	1.2	3	1.0	2.0
		5		15	20	25	30	35	45	55	65	M5	2.0	4	2.0	3.0
		6		20	25	30	35	45	55	65	M6	3.0	4	2.0	3.6	
		8			25	30	35	45	55	65	M8	3.0	4	2.5	5.0	
		10			30	35	45	55	65	M10	4.0	4	2.5	6.0		
		12			35	45	55	65	M12	4.0	4	2.5	6.5			

Part Number Example
 Part Number - L
 BSP08 - 40

Posts for Tension Springs – Rollers

YSP0
YJPO

Components	Material / Treatment	YSP0	YJPO
(1) Roller	Material	303 Stainless Steel	Polyacetal (White)
	Surface Treatment	Electroless Nickel Plating	—
	Hardness	Hv1000 Effective Depth 0.01	—
(2) Main Body, Washer	Material	1045 Carbon Steel or Equivalent	303 Stainless Steel
	Surface Treatment	Electroless Nickel Plating	—
(3) Screw	Material	302HQ Stainless Steel	302HQ Stainless Steel

Part Number	Type	D	Mounting length (L)	(1) Rollers				(2) Main Body				Accessories (3) Screws	Applicable Tension Springs
YSP0 YJPO	8	8	8	2.5	5.5	4.5	1	5.5	5.5	M4	10	7	D 8
	9	9	9	3	6.5	5.5	1.5	6.5	6	M5	12	8	D9 / D10
	12	11	11	3.5	8	7	2	7.5	7.5	M6	12	10	D12 / D14
	15	13	13	4	10	8	2.5	8.5	9.5	M8	16	13	D16 / D18
18	16	16	4	13	11	2.5	8.5	12	M8	16	13	D20 / D24	

Part Number Example
 Part Number - YC
 YSP012

Part Number Alterations
 Part Number - YC(EC)
 YSP09 - YC10

Alterations	Y Dimensions	E Dimensions
Code	YC	EC
Spec.	Changes the Y Dimension. Y<YC≤30 Specify in 1 mm Increment	Changes the E Dimension. M≤EC≤Mx5 Specify in 1 mm Increment

Disk Springs

Disk Springs

SRBN
SSRBN
 Stainless Steel

t	Load Tolerance (75% Deflection)
0.3-1.1	+25% -7.5%
1.2-3	+15% -7.5%

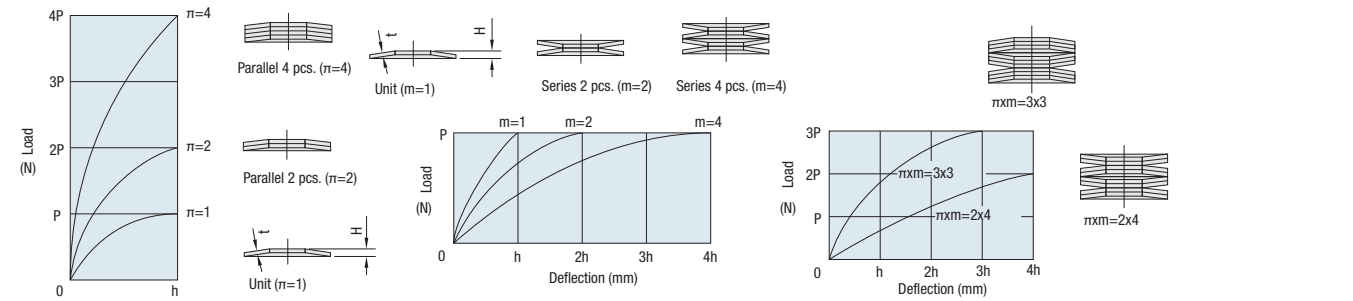
Type	Material	Surface Treatment	Hardness
SRBN	1065 or 1070 Carbon Steel	Black Oxide D45 and 50 are not treated.	42-50 HRC min.
SSRBN	304 Stainless Steel	—	37-46 HRC min.

JIS B 2706-1995
 JIS B 2706-1995 Equivalent

Part Number	Load Type	D	d	t	H	h	Load N 75% Deflection	
							SRBN	SSRBN
SRBN SSRBN Stainless Steel	A	0	4.2	0.3	0.55	±0.10	0.25	118
							0.20	206
	B	-0.15	5.2	0.4	0.70	±0.10	0.30	206
							0.25	324
	A	0	6.2	0.5	0.85	±0.10	0.35	294
							0.30	657
	B	-0.20	8.2	0.7	1.00	±0.10	0.40	275
							0.35	1,030
	A	0	7.2	0.8	1.10	±0.10	0.40	275
							0.35	1,030
	B	-0.20	9.2	0.9	1.25	±0.10	0.40	275
							0.35	1,030
	A	0	10.2	1.0	1.40	±0.15	0.40	1,275
							0.40	1,275
	B	-0.25	11.2	1.1	1.55	±0.15	0.45	1,520
							0.45	1,520
	A	0	12.2	1.25*	1.75*	±0.15	0.55	2,922
							0.55	2,922
	B	-0.25	14.2	1.0	1.80	±0.10	0.80	1,128
							0.80	1,128
	A	0	16.3	1.5*	2.05*	±0.15	0.65	2,844
							0.65	2,844
	B	-0.30	18.3	1.25*	2.15*	±0.15	0.90	1,912
							0.90	1,912
A	0	20.4	1.75*	2.45*	±0.15	0.70	3,874	
						0.70	3,874	
B	-0.30	22.4	1.25*	2.25*	±0.15	1.00	1,697	
						1.00	1,697	
A	0	25.4	2.0	2.80	±0.15	0.80	5,198	
						0.80	5,198	
B	-0.30	25.4	1.5*	2.65*	±0.2	1.15	2,618	
						1.15	2,618	
A	0	25.4	2.25*	3.15*	±0.15	0.90	6,502	
						0.90	6,502	
B	-0.30	25.4	1.75*	3.05*	±0.2	1.30	3,648	
						1.30	3,648	
A	0	25.4	2.5	3.50	±0.2	1.00	7,698	
						1.00	7,698	
B	-0.30	25.4	2.0	3.40	±0.15	1.40	4,765	
						1.40	4,765	
A	0	25.4	3.0	4.10	±0.2	1.10	11,964	
						1.10	11,964	

ⓐ Sizes marked with * differ from JIS standards.
 ⓑ Load is reference value. kgf=N×0.101972

Load Characteristics in Combination Excerpt from JIS B 2706 (2003)



Part Number Example
 Part Number - Load Type A / B
 SRBN22.5 - A