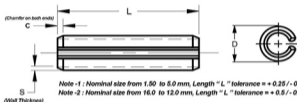


## Automotive Spring Pins / Automotive Tension Pins (SB.ASP)

**AUTOMOTIVE USE**



**AUTOMOTIVE APPLICATION**



Note-1 : Nominal size from 1.50 to 5.0 mm, Length "L" tolerance = + 0.25 / - 0.5

Note-2 : Nominal size from 16.0 to 12.0 mm, Length "L" tolerance = + 0.5 / - 0.5

### Order Example

- SB.ASP1.510ZP/PC/TP
- SB.ASP4.055ZP/PC/TP
- SB.ASP12100ZP/PC/TP

Nominal size	D (Free Status)		S	C		Minimum shear force, double shear	L (mm)												
	max.	min.		max.	min.		kN	10	20	30	40	50	55	60	70	75	80	90	100
1.5	1.66	1.58	0.3	0.45	0.25	1.58	●	●	●										
2.0	2.19	2.1	0.4	0.55	0.35	2.82	●	●	●										
2.5	2.72	2.62	0.5	0.6	0.4	4.38	●	●	●										
3.0	3.25	3.14	0.6	0.7	0.5	6.32	●	●	●	●	●								
3.5	3.75	3.64	0.75	0.8	0.6	9.05	●	●	●	●	●	●							
4.0	4.3	4.16	0.8	0.85	0.65	11.24	●	●	●	●	●	●	●						
4.5	4.8	4.66	1	1	0.8	15.36	●	●	●	●	●	●	●						
5.0	5.33	5.17	1	1.1	0.9	17.54	●	●	●	●	●	●	●						
6.0	6.36	6.18	1.2	1.4	1.2	26.04	●	●	●	●	●	●	●	●					
8.0	8.45	8.22	1.5	2	1.6	42.76	●	●	●	●	●	●	●	●	●	●	●	●	●
10.0	10.51	10.25	2	2.4	2	70.16	●	●	●	●	●	●	●	●	●	●	●	●	●
12.0	12.55	12.28	2.5	2.4	2	104.1													●

Notes: ● Standard material: C67S in accordance with DIN EN 10132-4:2003. \* Available with other spring steel materials, such as AISI6150, AISI304 ...etc.

\* All sizes are in Metric " mm ". \* Speical dimenions and toleranes are made to customer' request.

\* Surface treatment is optional: "ZP" =Zinc plating; "PC" =Phosphate coating; "TP" =Tin plating.