

# Suspension Bolt

with bushing FSBE



### Description

Robust suspension bolt with lower dampening spring. The bolt consists of a precision tube with internal vacuum feed, the bushing is made of high-quality brass. The suspension bolt can be directly fastened to drillings or with appropriate holders to aluminum and hollow profiles. The bolt is sealed with an o-ring against the suction pad retainers.

### Application

- applications with high cycle rates
- soft touch-down on workpieces
- height adjustment via outer thread of the bushing



FSBE-M12x1- ... FSBE-M30x1,5-

### Article number

Type	Bolt stroke 25 mm	Bolt stroke 50 mm	Bolt stroke 75 mm	Bolt stroke 100 mm
FSBE-M12x1-M5	1.34.2.0035	1.34.2.0036	1.34.2.0037	---
FSBE-M16x1,5-1/8	1.34.2.0029	1.34.2.0038	1.34.2.0039	---
FSBE-M20x1,5-1/4	1.34.2.0040	1.34.2.0041	1.34.2.0042	---
FSBE-M20x1,5*	---	1.34.2.0069	1.34.2.0070	1.34.2.0071
FSBE-M30x1,5*	---	1.34.2.0073	1.34.2.0074	1.34.2.0075

\* w/o integrated vacuum feed

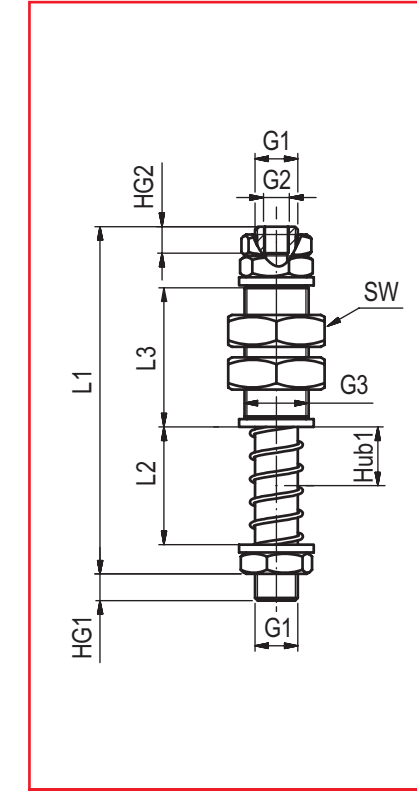
### Technical data

Type	Bolt stroke (mm)	Spring rate (N/mm)	Spring force max. (N)**	Tensile load max. (N)	Bending mom. max. (Nm)	Volume (l)	Temperature (°C)	Weight (kg)
FSBE-M12x1-M5-25	25	2,545	31,8	350	20	0,004	0 ... +80	0,30
FSBE-M12x1-M5-50	50	1,647	41,2	350	20	0,005	0 ... +80	0,32
FSBE-M12x1-M5-75	75	1,120	42,0	350	20	0,006	0 ... +80	0,35
FSBE-M16x1,5-1/8-25	25	3,711	46,4	1.250	50	0,009	0 ... +80	0,51
FSBE-M16x1,5-1/8-50	50	1,944	48,6	1.250	50	0,011	0 ... +80	0,55
FSBE-M16x1,5-1/8-75	75	1,512	56,7	1.250	50	0,013	0 ... +80	0,58
FSBE-M20x1,5-1/4-25	25	6,250	78,1	3.500	100	0,009	0 ... +80	0,93
FSBE-M20x1,5-1/4-50	50	3,977	99,4	3.500	100	0,011	0 ... +80	0,99
FSBE-M20x1,5-1/4-75	75	2,574	96,4	3.500	100	0,013	0 ... +80	1,08
FSBE-M20x1,5-50*	25	6,250	78,1	5.500	120	---	0 ... +80	1,08
FSBE-M20x1,5-75*	50	3,977	99,4	5.500	120	---	0 ... +80	1,12
FSBE-M20x1,5-100*	75	2,574	96,4	5.500	120	---	0 ... +80	1,23
FSBE-M30x1,5-50*	50	15,536	388	9.500	350	---	0 ... +80	3,41
FSBE-M30x1,5-75*	75	10,0	375	9.500	350	---	0 ... +80	3,74
FSBE-M30x1,5-100*	100	6,836	342	9.500	350	---	0 ... +80	4,29

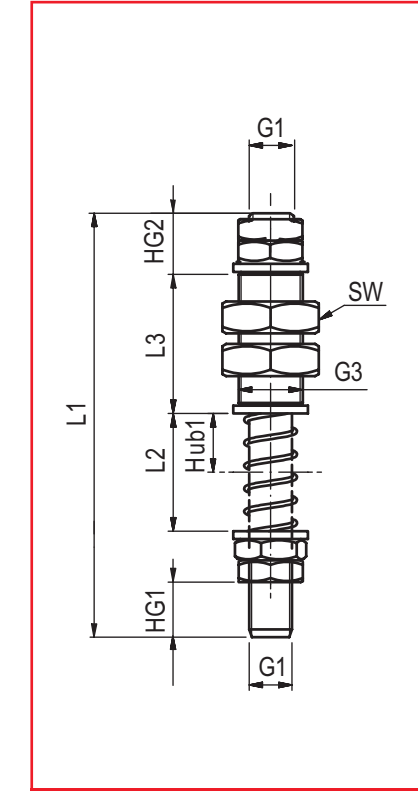
\*\* lower spring force at 50% of bolt stroke

# Suspension Bolt

with bushing FSBE



FSBE-M12x1- ... FSBE-M20x1,5-



FSBE-M20x1,5\*- ... FSBE-M30x1,5\*-

### Dimensions

Type	L1	L2	L3	Hub1	G1	G2	G3	HG1	HG2	SW
FSBE-M12x1-M5-25	130	51	50	25	M12x1	M5	M20x1,5	10,5	10	30
FSBE-M12x1-M5-50	155	75	50	50	M12x1	M5	M20x1,5	10,5	10	30
FSBE-M12x1-M5-75	190	110	50	75	M12x1	M5	M20x1,5	10,5	10	30
FSBE-M16x1,5-1/8-25	140	44	60	25	M16x1,5	G1/8	M24x1,5	10,5	15	36
FSBE-M16x1,5-1/8-50	180	83	60	50	M16x1,5	G1/8	M24x1,5	10,5	15	36
FSBE-M16x1,5-1/8-75	210	115	60	75	M16x1,5	G1/8	M24x1,5	10,5	15	36
FSBE-M20x1,5-1/4-25	150	48	60	25	M20x1,5	G1/4	M30x1,5	10,5	15	46
FSBE-M20x1,5-1/4-50	175	73	60	50	M20x1,5	G1/4	M30x1,5	10,5	15	46
FSBE-M20x1,5-1/4-75	215	113	60	75	M20x1,5	G1/4	M30x1,5	10,5	15	46
FSBE-M20x1,5-50*	175	73	60	25	M20x1,5	---	M30x1,5	10,5	---	46
FSBE-M20x1,5-75*	215	113	60	50	M20x1,5	---	M30x1,5	10,5	---	46
FSBE-M20x1,5-100*	260	158	60	75	M20x1,5	---	M30x1,5	10,5	---	46
FSBE-M30x1,5-50*	270	90	80	50	M30x1,5	---	M42x1,5	35	---	65
FSBE-M30x1,5-75*	320	140	80	75	M30x1,5	---	M42x1,5	35	---	65
FSBE-M30x1,5-100*	410	205	80	100	M30x1,5	---	M42x1,5	35	---	65