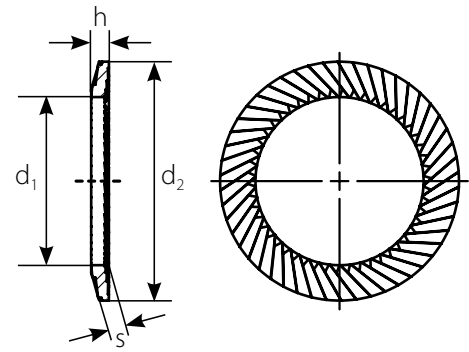


## Original SCHNORR® safety washers type „VS“

The Original SCHNORR® Safety Washer “VS” can be used with high-strength bolts of the grade 8.8 -10.9 without any restrictions. This extra strong safety washer has a greater thickness for higher pre-tensioning loads. The outside inside diameter as well and the serrations are the same as the “S” type. It can be delivered for screws M 5 t o M 30. Special sizes are also available upon request.

### Explanations on the table:

<b>Article no.:</b>	applies to the normal version made of spring steel, hardened, blackened; mechanically galvanized
<b>h max.:</b>	maximum dimension in delivery condition
<b>h min.:</b>	minimum dimension after load test
<b>Available material grades:</b>	spring steel acc. to DIN EN 10132-4; corrosion-resistant steel 1.4301; Phosphorus Bronze CuSn8; nickel cobalt alloy, creep-resistant steel 1.4122; Inconel
<b>Available surfaces:</b>	blackened (standard), bronzed, phosphated, galvanized, zinc lamellar coatings



### Designation of an original SCHNORR® safety washer type “VS”:

Size 16 made of spring steel, surface mechanically galvanized  
= safety washer VS 16 FSt. for 8 M + passivation

## Original SCHNORR® safety washers type “VS” material C60S (1.1211)

Article number/ Order reference	Finish	Size		Ordering dimensions					Packaging	
		Nominal size [mm]	[Inch]	d <sub>1</sub> [mm]	d <sub>2</sub> [mm]	s [mm]	h <sub>min.</sub> [mm]	h <sub>max.</sub> [mm]	Unit [pcs.]	Weight per 1000 pieces [kg]
414600 450650	blackened Zn8M + passivation	5	3/16"	5.3	9.0	0.9	0.95	1.3	1000	0.273
416400 450750	blackened Zn8M + passivation	6		6.4	10.0	0.9	0.95	1.4	1000	0.300
420 500 451 050	blackened Zn8M + passivation	8	5/16"	8.4	13.0	1.1	1.15	1.7	1000	0.615
423 100 451 150	blackened Zn8M + passivation	10	3/8"	10.5	16.0	1.4	1.50	2.0	1000	1.167
426 300 451 350	blackened Zn8M + passivation	12		13.0	18.0	1.4	1.55	2.1	500	1.223
429 200 451 550	blackened Zn8M + passivation	14		15.0	22.0	1.4	1.65	2.2	500	2.089
430 800 451 650	blackened Zn8M + passivation	16	5/8"	17.0	24.0	1.9	2.05	2.6	250	3.142
432 500 451 750	blackened Zn8M + passivation	18		19.0	27.0	1.9	2.15	2.7	250	4.041
435 300 451 950	blackened Zn8M + passivation	20		21.0	30.0	1.9	2.10	2.8	250	5.066
436 700 452 050	blackened Zn8M + passivation	22	7/8"	23.0	33.0	1.9	2.30	3.0	100	6.117
438 000 452 150	blackened Zn8M + passivation	24		25.6	36.0	2.4	2.70	3.4	100	8.865
400 974 401 260	blackened Zn8M + passivation	25,4	1"	38.0	27.0	2.5	2.95	3.4	100	10.580
440 400 452 350	blackened Zn8M + passivation	27		28.6	39.0	2.4	2.80	3.5	100	9.731
441 600 452 450	blackened Zn8M + passivation	30	1 1/8"	31.6	45.0	2.4	3.05	3.8	100	14.380
442 801 401 051	blackened Zn8M + passivation	36	1 3/8"	38.0	54.0	3.0	3.75	4.5	50	27.226

We would be glad to offer you safety washers type “VS” with different finish on request.

Our surfaces are Cr 6-free and comply with the EU “Old Car” (2000/53/EG) RoHS-(2002/95/CE) Directive as well as the WEEE Directive (2002/96/EC)

## Original SCHNORR® safety washers type "VS" material X5CrNi18-10 (1.4301)

Article number/ Order reference	Size		Ordering dimensions					Packaging	
	Nominal size		d <sub>1</sub>	d <sub>2</sub>	s	h <sub>min.</sub>	h <sub>max.</sub>	Unit	Weight
	[mm]	[Inch]	[mm]	[mm]	[mm]	[mm]	[mm]	[pcs.]	per 1000 pieces [kg]
416 201	5	3/16"	5.3	9.0	1.0	1.05	1.3	1000	0.298
418001	6		6.4	10.0	1.0	1.10	1.4	1000	0.330
422 901	8	5/16"	8.4	13.0	1.5	1.60	2.0	1000	0.836
425 020	10	3/8"	10.5	16.0	1.8	1.90	2.3	1000	1.501
427 700	12		13.0	18.0	1.8	1.90	2.4	500	1.731
430 660	14		15.0	22.0	1.8	1.95	2.5	500	2.693
430 750	16	5/8"	17.0	24.0	2.5	2.60	3.1	250	4.145
433 621	18		19.0	27.0	2.5	2.65	3.2	250	5.337
435 250	20		21.0	30.0	2.5	2.70	3.3	250	6.709
436 721	22		23.0	33.0	2.5	2.70	3.4	100	8.184
438 021	24		25.4	36.0	3.0	3.20	3.9	100	11.262
441 420	27		28.6	39.0	3.0	3.30	4.0	100	12.360
441 621	30	1 1/8"	31.6	45.0	3.0	3.55	4.3	100	18.222

We would be glad to offer you safety washers type "VS" in further special material grades on request.

## Original SCHNORR® safety washers „UV“ captive fitting on bolts

### For screws with captive safety washers

These safety washers are dimensioned so they can be fitted to bolts or screws from M2.5 to M10. This is done prior to thread rolling so the safety washers are captive.

