The original SCHNORR® HS-Washer

This bolt locking device is, in principle, a load washer with a smaller outer diameter than those acc. to DIN 6796. A notable feature of these washers is the slightly curved form which provides a progressively increasing characteristic curve. Despite the smaller outside diameter dimensions this makes it possible to achieve the same load as the load washers acc. to DIN 6796. These washers are primarily used when the space available is insufficient for standardised load washers.

Explanations on the table:

Technical requirements: according to DIN 267, Part 26 Available material grades: spring steel acc. to DIN EN 10132-4,

other materials on request

Available surfaces: phosphated and oiled; mechanically plated,

other materials on request

Article no.: applies to the normal version made of spring steel h max.: maximum dimension in delivery condition h min.: minimum dimension after setting test according

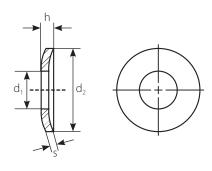
to DIN 267, Part 26

contact forces for the setting test according **Contact force:**

to DIN 267, Part 26

Minimum residual spring load, which rests after load with the contact spring load: pressure acc. to DIN 267, Part 26 and subsequent

relieving of 20 µm



Description of an original SCHNORR® HS-Washer:

Size 12 made of spring steel: = Safety Washer HS 12 FSt. phosphated and oiled

Article- number/ Ordering reference	Finish	Size Nominal size [mm]	Ordering dimensions					Contact force	Minimum residual spring load	packaging	
			d ₁ [mm]	d ₂ [mm]	s [mm]	h _{min.} [mm]	h _{max.} [mm]	F [N]	F [N]	Unit piece	Weight per 1000 pieces (kg)
431510	Zn20M + passivation										
416 520	Phosphated and oiled	8	8,4	17	2,0	2,10	2,55	18600	7700	500	2,438
431 520	Zn20M + passivation	8									
423 220	Phosphated and oiled	10	10,5	21	2,5	2,75	3,15	29600	12400	250	4,915
431 530	Zn20M + passivation										
426 400	Phosphated and oiled	12	13,0	24	3,0	3,27	3,75	43000	18000	250	7,194
431 540	Zn20M + passivation										
429 320	Phosphated and oiled	14	15,0	28	3,5	3,80	4,35	59100	25000	100	11,61
431 550	Zn20M + passivation										
430 900	Phosphated and oiled	16	17,0	30	4,0	4,31	4,95	80900	34000	200	14,5
431 560	Zn20M + passivation										
433 750	Phosphated and oiled	18	19,0	33	4,5	4,80	5,50	102000	57000	100	19,36
431 570	Zn20M + passivation										
435 320	Phosphated and oiled	20	21,0	36	5,0	5,30	5,95	130000	73000	50	25,33
431 580	Zn20M + passivation										
436 620	Phosphated and oiled	22	23,0	40	5,5	5,90	6,70	162000	91000	50	35,07
431 590	Zn20M + passivation										
439 150	Phosphated and oiled	24	25,0	45	6,0	6,45	7,30	188000	122000	25	50,28
431 600	Zn20M + passivation										
440 100	Phosphated and oiled	27	28,0	50	6,5	7,00	8,00	246000	161000	20	66,94
431 610	Zn20M + passivation										
442 650	Phosphated and oiled	30	31,0	58	7,0	7,65	8,90	300000	196000	-	101
431 620	Zn20M + passivation										

We would be glad to offer you safety washers type "HS" with different finish on request.