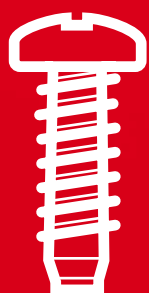


 **SCHRIEVER®**

verbindet.



SLS®

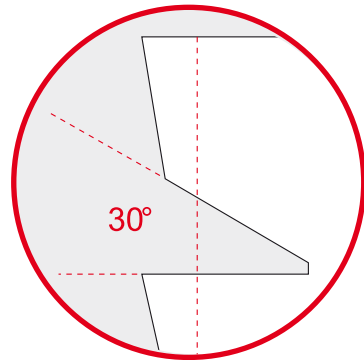
The ideal connection for light metals

SCHRIEVER SLS®



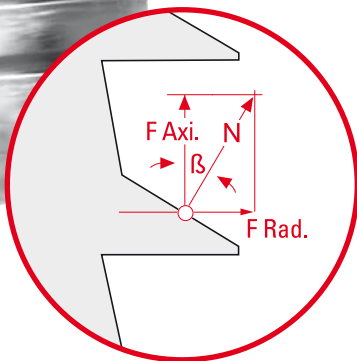
The screw is perfectly suited for light metal components and engineering plastics with a reinforcement content of more than 30 %.

Direct insertion in these materials result in increased stability combined with cost savings and form the basis for the usage of our SLS®-screws.



Advantages of the SLS®-Geometry

1. Cost savings in processing fees of up to 40 % due to discontinuation of i.e. bore holes, thread cutting and cleaning
2. High overwind protection
3. High vibration resistance
4. No chip formation
5. Improved installation properties
6. No risk of jamming due to optimized core geometry



Advantages of the thread asymmetry

1. The 30° load bearing angle (β) provides high tightening and loosening torques caused by the increased thread friction force.
2. Low deformation cross-sections guarantee low installation torques.
3. Optimized core geometry creates space for distorted materials.
4. A specific cone geometry guarantees an optimum location behaviour right from the start of the installation.



SLS®

Material

Schriever SLS®-screws are by default of high tensile hardened and tempered steel according to KN 3001 (cf. property class 10.9 metric). Stainless steel (A2 [1.4567], A4 [1.4578]).

Other materials and customized designs on request.

Ordering example

SLS® with nominal diameter = 3.0 mm
Length = 12 mm · head = KN 3039
Hexalobular drive size 10 – thread tip, dog point
KN 3039 SLS 30x12-T10-Ka

We supply customized designs deviating from our standard quality upon request.

Our service

Our technical experts will assist you to ensure an optimal usage of the Schriever SLS® in your specific application. Your joining applications will be technically optimised in our laboratory and design recommendations provided. You will receive a inspection report free of charge.

Production range

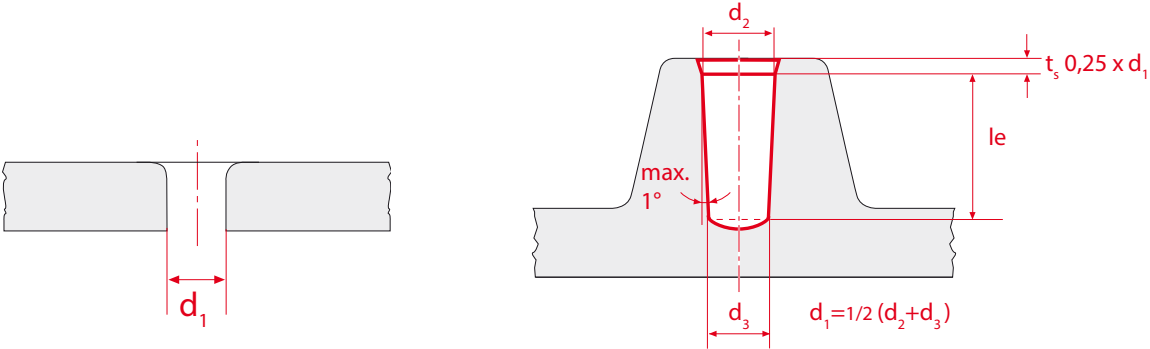
Screw	18	22	25	30	35	40	50	60	70
d1 (mm)	1,8	2,2	2,5	3,0	3,5	4,0	5,0	6,0	7,0
Length L (mm)									
4 ± 0,375									
6 ± 0,375									
7 ± 0,45									
8 ± 0,45									
10 ± 0,45									
12 ± 0,55									
14 ± 0,55									
16 ± 0,55									
18 ± 0,55									
20 ± 0,65									
22 ± 0,65									
25 ± 0,65									
30 ± 0,62									
35 ± 0,80									
40 ± 0,80									
50 ± 0,80									
60 ± 0,95									

Flat head version L_{min.} = L + 2 mm

Minimum length

Maximum length

Design recommendation

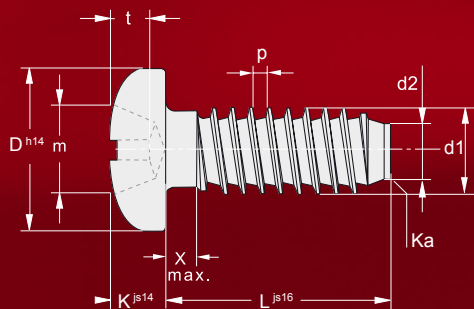


Recommended hole diameter d₁

Material		Nominal diameter screw d (mm)								
Brinell hardness HB 5/250	Screw-in depth (mm)	L 18	L 22	L 25	L 30	L 35	L 40	L 50	L 60	L 70
	Hole-Ø d	d ₁	d ₁	d ₁	d ₁	d ₁	d ₁	d ₁	d ₁	d ₁
GD-AISI f 60	3,0-6,0	1,71	2,09	2,35	2,80	3,25	3,70	4,70	-	-
	6,0-10	-	-	-	2,80	3,25	3,70	4,75	5,65	6,65
	>10	-	-	-	-	-	-	4,80	5,75	6,72
GD-AISI9Cu3 f 60	3,0-6,0	1,71	2,09	2,35	2,75	3,20	3,65	4,65	-	-
	6,0-10	-	-	-	2,80	3,25	3,70	4,70	5,65	6,60
	>10	-	-	-	-	-	-	4,75	5,70	6,69
GD-ZnAl4Cu1 f 60	3,0-6,0	1,71	2,09	2,35	2,80	3,30	3,75	4,75	-	-
	6,0-10	-	-	-	2,80	3,30	3,75	4,75	5,70	6,69
	>10	-	-	-	-	-	-	4,85	5,80	6,78

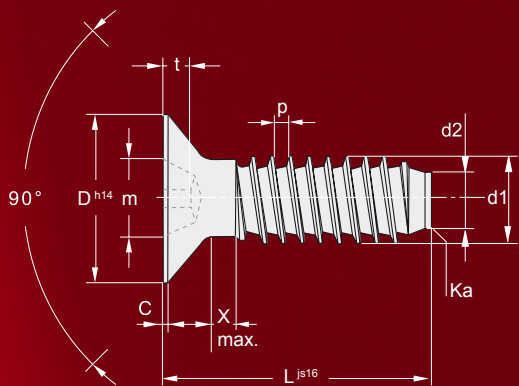


SLS®



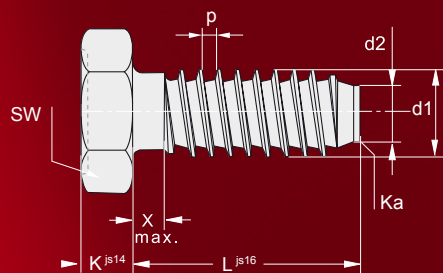
KN 3032

Dimensions					18	22	25	30	35	40	50	60	70
Thread outside-Ø	d1				1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Head-Ø	D				3,60	4,00	5,00	6,00	7,00	8,00	10,00	12,00	14,00
Head height	K				1,40	1,60	2,00	2,40	2,70	3,10	3,80	4,60	5,30
PH	width/size	≈ m			2,3/1	2,5/1	2,7/1	3,1/1	4,2/2	4,6/2	5,3/2	6,8/3	9,0/4
H-cross recess	t min.				0,64	1,10	1,30	1,70	1,74	2,04	2,77	3,03	4,18
Penetration depth	t max.				1,10	1,40	1,60	2,00	2,24	2,54	3,27	3,53	4,68
PZ	width/size	≈ m			2,4/1	2,4/1	2,6/1	3,0/1	4,0/2	4,3/2	5,0/2	6,7/3	8,8/4
Z-cross recess	t min.				0,82	1,10	1,27	1,68	1,65	1,90	2,64	3,02	4,06
Penetration depth	t max.				1,07	1,35	1,52	1,93	2,11	2,36	3,10	3,48	4,52



KN 3033

Dimensions					18	22	25	30	35	40	50	60	70
Thread outside-Ø	d1				1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Head-Ø	D				3,40	3,80	4,70	5,60	6,50	7,50	9,20	11,00	13,60
Cylindrical head height	C max.				0,35	0,35	0,55	0,55	0,55	0,65	0,75	0,85	0,95
PH	width/size	≈ m			1,6/0	2,35/1	2,7/1	2,9/1	3,9/2	4,4/2	4,6/2	6,6/3	6,9/3
H-cross recess	t min.				0,55	0,95	1,25	1,50	1,40	1,90	2,10	2,80	3,02
Penetration depth	t max.				0,85	1,25	1,55	1,80	1,90	2,40	2,60	3,30	3,68
PZ	width/size	≈ m			1,6/0	2,2/1	2,5/1	2,8/1	3,7/2	4,0/2	4,4/2	6,1/3	6,8/3
Z-cross recess	t min.				0,56	0,92	1,22	1,48	1,34	1,60	2,05	2,46	3,01
Penetration depth	t max.				0,81	1,17	1,47	1,73	1,80	2,06	2,51	2,92	3,47

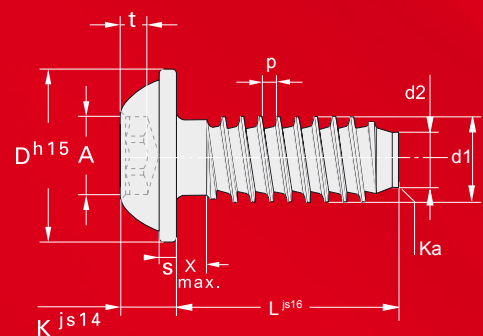


KN 3036

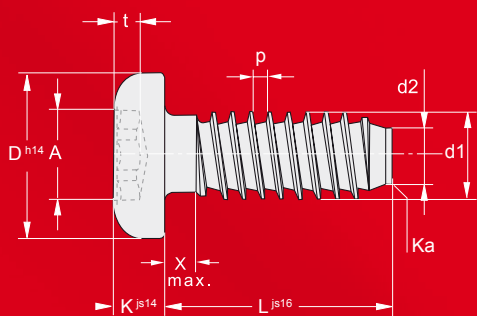
Dimensions						22	25	30	35	40	50	60	70
Thread outside-Ø	d1					2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Width across flats (AF size)	SW					4,00	5,00	5,50	6,00	7,00	8,00	10,00	10,00
Head height	K					1,40	1,70	2,00	2,40	2,80	3,5	4,00	4,80



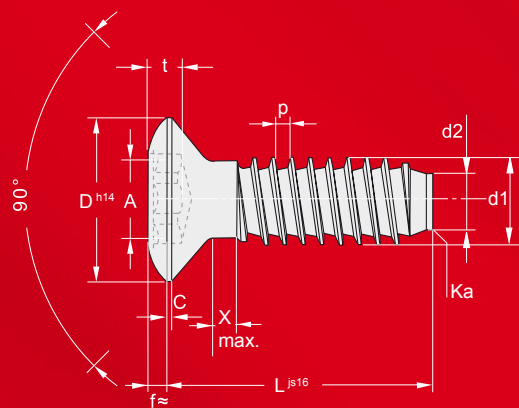
SLS®



KN 3038					18	22	25	30	35	40	50	60	70
Dimensions													
Thread outside-Ø	d1				1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Head-Ø	D				4,00	5,00	5,50	6,50	7,50	9,00	11,00	13,50	15,50
Head height	K				1,35	1,60	1,90	2,30	2,70	3,10	3,50	4,20	4,90
Flange thickness	s				0,60	0,60	0,70	0,80	0,90	1,00	1,20	1,40	1,60
Radius	R				0,25	0,35	0,40	0,50	0,50	0,60	0,70	0,80	0,90
Hexalobular					T 6	T 6	T 8	T 10	T 15	T 20	T 25	T 30	T 30
	A max.				1,75	1,75	2,40	2,80	3,35	3,95	4,50	5,60	5,60
Penetration depth	t min.				0,50	0,65	0,80	1,00	1,10	1,40	1,50	1,90	2,30
	t max.				0,65	0,85	1,00	1,30	1,50	1,80	1,90	2,40	2,90



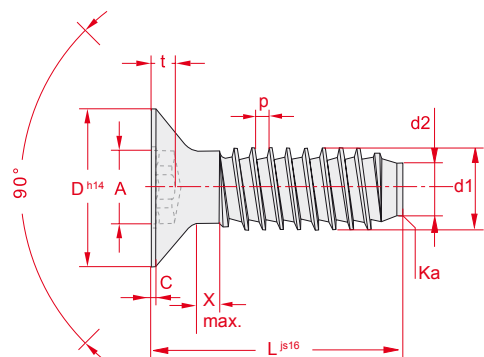
KN 3039					18	22	25	30	35	40	50	60	70
Dimensions													
Thread outside-Ø	d1				1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Head-Ø	D				3,60	4,00	5,00	6,00	7,00	8,00	10,00	12,00	14,00
Head height	K				1,40	1,60	2,00	2,40	2,70	3,10	3,80	4,60	5,30
Hexalobular					T 6	T 6	T 8	T 10	T 15	T 20	T 25	T 30	T 40
drive size	A max.				1,75	1,75	2,40	2,80	3,35	3,95	4,50	5,60	6,75
Penetration depth	t min.				0,65	0,70	0,90	1,00	1,20	1,40	1,60	2,00	2,40
	t max.				0,80	0,85	1,15	1,30	1,50	1,80	2,00	2,40	2,90



KN 3040					18	22	25	30	35	40	50	60	70
Dimensions													
Thread outside-Ø	d1				1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Head-Ø	D				3,40	3,80	4,70	5,60	6,50	7,50	9,20	11,00	13,60
Cylindrical head height	C max.				0,35	0,35	0,55	0,55	0,55	0,65	0,75	0,85	0,95
Hexalobular					T 6	T 6	T 8	T 10	T 15	T 20	T 25	T 30	T 40
drive size	A max.				1,75	1,75	2,40	2,80	3,35	3,95	4,50	5,60	6,75
Penetration depth	t min.				0,50	0,70	0,90	1,00	1,20	1,40	1,60	2,00	2,40
	t max.				0,65	0,85	1,15	1,30	1,50	1,80	2,00	2,40	2,90
	f ≈				0,40	0,50	0,60	0,75	0,90	1,00	1,25	1,50	1,80



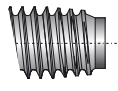
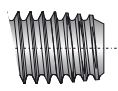
SLS®



KN 3041												
Dimensions				18	22	25	30	35	40	50	60	70
Thread outside-Ø	d1			1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Head-Ø	D			3,40	3,80	4,70	5,50	7,30	8,40	9,30	11,30	13,60
Cylindrical head height	C max.			0,35	0,35	0,55	0,55	0,55	0,65	0,75	0,85	0,95
Hexalobular				T 6	T 6	T 8	T 10	T 15	T 20	T 25	T 30	T 40
drive size	A max.			1,75	1,75	2,40	2,80	3,35	3,95	4,50	5,60	6,75
Penetration depth	t min.			0,50	0,60	0,70	0,70	1,20	1,20	1,30	1,70	2,25
	t max.			0,65	0,85	0,95	1,05	1,55	1,70	1,80	2,15	2,70

Tolerances and thread dimensions

Nominal size (mm)		h 14	h 15	js 14	js 16
over	to				
0	3	0 /- 0,25	0 /- 0,40	±0,125	±0,30
3	6	0 /- 0,30	0 /- 0,48	±0,15	±0,375
6	10	0 /- 0,36	0 /- 0,58	±0,18	±0,45
10	18	0 /- 0,43	0 /- 0,70	±0,215	±0,55
18	30	0 /- 0,52	0 /- 0,84	±0,26	±0,65
30	50	0 /- 0,62	0 /- 1,00	±0,31	±0,80
50	80	0 /- 0,74	0 /- 1,20	±0,37	±0,95

Thread tip	Desig- nation
	Ka
	Fa
	Ko

Dimensions		18	22	25	30	35	40	50	60	70
Thread outside-Ø	d1	1,80	2,20	2,50	3,00	3,50	4,00	5,00	6,00	7,00
Tolerance outside-Ø		+0,14	+0,14	+0,14	+0,14	+0,18	+0,18	+0,18	+0,18	+0,22
Thread core-Ø	d2	1,33	1,59	1,81	2,18	2,56	2,93	3,68	4,42	5,21
Thread pitch	p	0,64	0,71	0,77	0,86	0,95	1,05	1,23	1,42	1,60
Thread run-out	X max.	0,90	1,10	1,30	1,50	1,80	2,00	2,50	3,00	3,50

Shaft length (L)		18	22	25	30	35	40	50	60	70
Standard	min.	4	4,5	5	6	7	8	10	12	16
	max.	18	22	25	30	35	40	50	60	70

Head drives	
-------------	--



3-wing



Hexalobular drive (T)
Hexalobular drive plus (TP)



Hexalobular combi drive (T ±)



Hexalobular drive with locking pin (TT)



H-cross recess (H)



H-cross recess combi (H ±)



Z-cross recess (Z)



Z-cross recess combi (Z ±)

› **Small quantity production**

› Screwing-in analyzes

› 3D - files (drawings)

- › Individually produced for you
- › Starting from 10,000 parts
- › Available in 4 weeks
- › Samples can be tested free of charge

Fast - Fastener - Schriever

Order product samples now

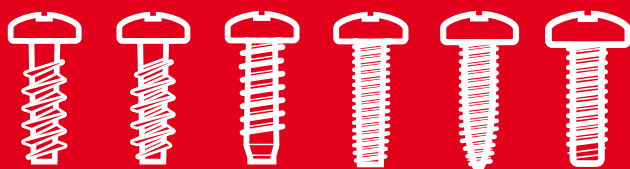
www.schriever-schrauben.de

STS® | STS® plus for thermoplastics

SLS® | S-trax® for light metals

SBS® for thin sheets

SGF® metric self-trapping screws



STS

STS+

SLS

S-trax

SBS

SGF

Hans Schriever GmbH & Co. KG · Verbindungstechnik

Hoher Hagen 5 | D-58513 Lüdenscheid

Phone: 0049 - 23 51 - 97 83 - 0

E-Mail: info@schriever-schrauben.de

Internet: www.schriever-schrauben.de | www.s-istda.de

TEST THE BEST

Comparison SCHRIEVER -KN- with EJOT -WN-
for the same application areas or purposes



SCHRIEVER KN
SLS

EJOT WN
PT DG

3032

1542

3033

1543

3036

1546

3038

3039

1552

3040

1553

3041

1523

The Schriever SLS® screws can also be used with all commercially available corrosion protection surfaces. Please feel free to contact us.