



[made in germany]



product catalogue

[Edition in English]



DREMEC[®]
Befestigungselemente GmbH

welcome

[to Dremec Befestigungselemente]



About us

+ Giving mechanical components optimum strength and stability is DREMEC's main operational objective.

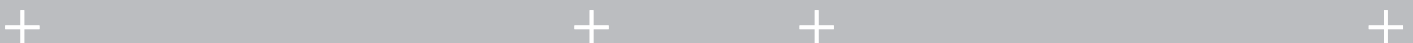
As an established manufacturer of spacer bolts and sleeves from metals, plastics and metal / plastic combinations, our business partners from a wide range of industrial branches rightfully expect more than just economical and punctual production of fastening elements from us. Our know-how is particularly sought after where the solution of tricky fastening problems requires individual solutions and where fasteners have to meet highest quality standards.

Our search for efficient fastening solutions is backed by our experience gained in many lines of industry, these encompassing mining, medical engineering, automo-

+ tive, mechanical engineering and aircraft construction, through to space applications in satellite technology. The majority of turned parts range from small fastening elements through to components having a length of several decimeters.

Innovative in product development, constructive in customer relations!

Dependability and meeting delivery schedules paired with excellent quality are values that have been highly appreciated by DREMEC customers for many years. To us our small customers and their problems are just as important as our large customers when it comes to attention and commitment, irrespective of their order sizes, which can range from several hundred parts to annual requirements of millions of fastening elements.



Customisations

Spacer bolts from our catalogue range cannot always be used for assembly purposes.

The application of the components and the structural design of units and systems often requires customised assembly solutions, which can be achieved by the use of custom-made spacer bolts.

On the basis of customer drawings or a detailed component description, we are pleased to assist in solving a fastening problem and to submit a respective quotation. Our extensive production machinery allows the manufacture of highly complex components in the most varied dimensions.

The spacer bolts from our standard range are available in intermediate lengths and also, depending on customer request, with modified dimensions at the internal and external thread. Our production methods include knurling, slotting, cross tapping and drilling and

many more. For production examples, please refer to catalogue pages 32 and 33.

In addition to the conventional surfaces finishes, such as zinc and nickel plating, we also offer special finishes. For a selection, please refer to page 34.

There is neither a minimum nor a maximum quantity limit per order.



Please note this sign in the catalogue. Products shown on the identified pages can also be modified to meet special requirements.



Information 24/7

1. Portal login

You can obtain your personal access data from our sales staff. Without this authorisation, you can only obtain simple inventory information.



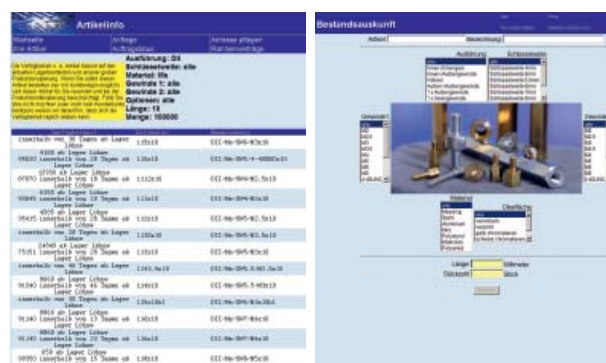
2. Home

Once successfully logged in, you are on your personal start page. From here, you can directly invoke the desired information. Upon request of our customers, a quicklink is integrated at this point to obtain inventory information. The current availability is instantly shown when entering our article number and the desired quantity. You have access to the current inventory as well as to production planning. You can order for a desired delivery date by a mouse click. Orders received by 11 a.m. can be shipped the same day.



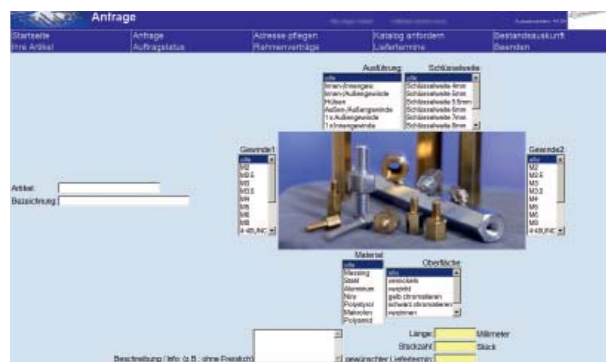
3. Inventory information

Here setting of a few desired properties is sufficient to find several possible articles including their related inventory information.



4. Inquiry

Analog to the inventory information, you can describe a special component here and request a quotation by mouse click.



5. Your articles

You have access to our article/customer master data. All articles with special prices, graduated prices as well as with customer article numbers and customer article designations already entered are listed here. You have to option to filter or search for your designations/numbers. If existing, you have access to drawings and can also directly go to the inventory information/order for the individual article.

If our article number/designation is also entered, you have the possibility to simply enter your data by a mouse click.

Artikel	Bezeichnung	Einheit	Preis	Status
113000	111-100-10000	100,000	1,00	Bestand
113001	111-100-10001	100,000	1,00	Bestand
113002	111-100-10002	100,000	1,00	Bestand
113003	111-100-10003	100,000	1,00	Bestand
113004	111-100-10004	100,000	1,00	Bestand
113005	111-100-10005	100,000	1,00	Bestand
113006	111-100-10006	100,000	1,00	Bestand
113007	111-100-10007	100,000	1,00	Bestand
113008	111-100-10008	100,000	1,00	Bestand
113009	111-100-10009	100,000	1,00	Bestand
113010	111-100-10010	100,000	1,00	Bestand
113011	111-100-10011	100,000	1,00	Bestand
113012	111-100-10012	100,000	1,00	Bestand
113013	111-100-10013	100,000	1,00	Bestand
113014	111-100-10014	100,000	1,00	Bestand
113015	111-100-10015	100,000	1,00	Bestand
113016	111-100-10016	100,000	1,00	Bestand
113017	111-100-10017	100,000	1,00	Bestand
113018	111-100-10018	100,000	1,00	Bestand
113019	111-100-10019	100,000	1,00	Bestand
113020	111-100-10020	100,000	1,00	Bestand
113021	111-100-10021	100,000	1,00	Bestand
113022	111-100-10022	100,000	1,00	Bestand
113023	111-100-10023	100,000	1,00	Bestand
113024	111-100-10024	100,000	1,00	Bestand
113025	111-100-10025	100,000	1,00	Bestand
113026	111-100-10026	100,000	1,00	Bestand
113027	111-100-10027	100,000	1,00	Bestand
113028	111-100-10028	100,000	1,00	Bestand
113029	111-100-10029	100,000	1,00	Bestand
113030	111-100-10030	100,000	1,00	Bestand
113031	111-100-10031	100,000	1,00	Bestand
113032	111-100-10032	100,000	1,00	Bestand
113033	111-100-10033	100,000	1,00	Bestand
113034	111-100-10034	100,000	1,00	Bestand
113035	111-100-10035	100,000	1,00	Bestand
113036	111-100-10036	100,000	1,00	Bestand
113037	111-100-10037	100,000	1,00	Bestand
113038	111-100-10038	100,000	1,00	Bestand
113039	111-100-10039	100,000	1,00	Bestand
113040	111-100-10040	100,000	1,00	Bestand

6. Framework contracts

A well arranged list of all framework contracts including those already fulfilled, can be invoked here.

Artikel	Anfrage	Autrag	Status	Beleg	Beleg	Beleg
MA1114	20.11.2009	6.11.11.2009	0000	0	erfüllt	erfüllt
MA1120	14.10.2009	10.07.2009	0000	0	erfüllt	erfüllt
MA1124	14.10.2009	10.07.2009	0000	0	erfüllt	erfüllt

7. Delivery dates

View of all planned shipments. You have access to each planned delivery note position. All positions readily available are displayed with a green background. Please request immediate shipment by mouse click. If available, your article numbers/designations appear here. You are given the possibility to filter your inputs should the list become too long and, as a result, too complex.

Artikel	Bezeichnung	Menge	Status
11-2008	WA806896 /1	212,22	6000
43-2008	WA806873 /1	212,22	17810
41-2008	WA806873 /2	124,15	700
41-2008	WA806873 /3	212,22	6000
41-2008	WA806873 /4	212,22	200
43-2008	WA806873 /5	212,22	1600
43-2008	WA806873 /1	212,22	2190
43-2008	WA806875 /2	226874,2420	4000
43-2008	WA806875 /3	762560	6000
43-2008	WA806874 /1	1138,10	6000

8. Order status

DREMEC order tracing. As is done with most parcel services, you can trace the current status of your order through to its handing over to the parcel service or transportation company.

Auftrag	IBF	Doc	Doc	Doc	Doc	Doc	Doc
AU006346	29682	1	30.9.2008	2.10.2008	318.7.2407	800	0
AU006346	29682	2	30.9.2008	24.10.2008	226874,2420	6000	6000
AU006346	29682	3	30.9.2008	24.10.2008	V62560	6000	6000

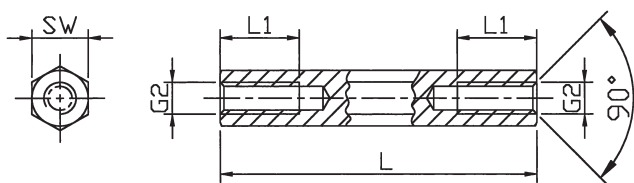
spacer bolt

[Brass, metric thread]



Standard range - spacer bolts [Brass, nickel plated]

EXECUTION DII [Internal / internal thread]



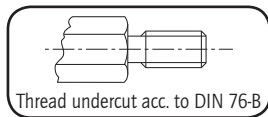
Thread lengths [mm]

L	L1 at M2.5 to M6	L1 at M2
5	5	5
6	6	6
8	8	8
10	10	10
12	12	6
15	15	6
18	9	6
from 20	10	6

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
111 x (length)	DII	Brass	SW4	M2	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50
1112 x	DII	Brass	SW4	M2.5	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50
112 x	DII	Brass	SW5	M2.5	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60
113 x	DII	Brass	SW5	M3	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60
114 x	DII	Brass	SW5.5	M3	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
116 x	DII	Brass	SW7	M4	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
118 x	DII	Brass	SW8	M5	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
119 x	DII	Brass	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100

*SW: width across flats

Ordering example: 111 x 10 = DII / Ms / SW4 / M2 x 10



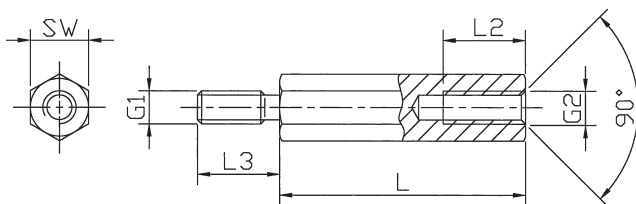
- Material acc. to DIN 17660: Cu Zn 39 Pb 3
- Min. tensile strength: 430 N/mm²
- Surface finish acc. to DIN 267: nickel plated (G 3 E)
- Material number: 2.0401
- Tolerance for length dimensions: +/- 0.1 mm
- All articles are also available without undercut.

- Available from stock. Delivery times for intermediate lengths and special versions upon request.



Standard range - spacer bolts [Brass, nickel plated]

EXECUTION DIA [Internal / external thread]



Internal thread lengths [mm]

L	L2 at M2.5 to M5	L2 at M2	L2 at M6
5	3	3	
6	4	4	
8	5	5	
10	6	6	6
12	7	6	7
15	10	6	10
18	10	6	10
from 20	10	6	12

External thread lengths [mm]

G1=G2	L3
M2	5
M2,5	6
M3	6+8
M4	8
M5	8
M6	10

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
211 x (length)	DIA	Brass	SW4	M2	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50
2112 x	DIA	Brass	SW4	M2.5	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50
212 x	DIA	Brass	SW5	M2.5	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60
213 x	DIA	Brass	SW5	M3	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60
214 x	DIA	Brass	SW5.5	M3	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
216 x	DIA	Brass	SW7	M4	5, 6, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
218 x	DIA	Brass	SW8	M5	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
219 x	DIA	Brass	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100

*SW: width across flats

Ordering example: 211 x 10 = DIA / Ms / SW4 / M2 x 10

Articles 213 and 214 also come in an ext. thread length of 6 mm. In this case the article number has the suffix „K“

Example: 213 x 10K = DIA / Ms / SW5 / M3 x 10 (6)

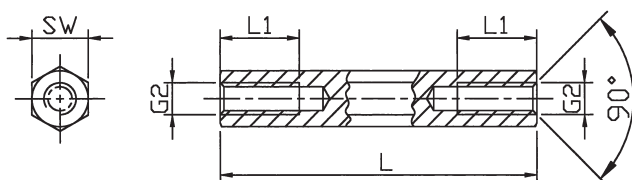
spacer bolt

[Steel, metric thread]



Standard range – spacer bolts [Zinc, plated]

EXECUTION DII [Internal / internal thread]



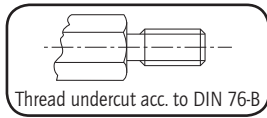
Internal thread lengths [mm]

L	L1 at M2.5 to M5	L1 at M2	L1 at M6	L1 at M8
5	5	5	5	
8	8	8	8	
10	10	10	10	
12	12	6	12	
15	15	6	15	15
18	9	6	9	
20	10	6	10	20
from 30	10	6	12	14

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
121 x (length)	DII	Steel	SW4	M2	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40
1212 x	DII	Steel	SW4	M2.5	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40
123 x	DII	Steel	SW5	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50
124 x	DII	Steel	SW5.5	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
125 x	DII	Steel	SW6	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
126 x	DII	Steel	SW7	M4	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
127 x	DII	Steel	SW8	M4	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
128 x	DII	Steel	SW8	M5	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
129 x	DII	Steel	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
1213 x	DII	Steel	SW13	M8	15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100

*SW: width across flats

Ordering example: 129 x 50 = DII / St / SW10 / M6 x 50



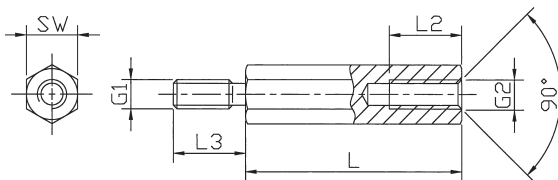
- Material acc. to DIN 176: 11 SMn Pb30
- Minimum tensile strength: 500 N/mm²
- Surface finish acc. to DIN 267: galvanised (A3 F)
- Material number: 1.0718
- Tolerance for length dimensions +/- 0.1 mm (DIN 2768-m applies to SW13)
- All articles are also available without undercut.

- Available from stock. Delivery times for intermediate lengths and special versions upon request.



Standard range – spacer bolts [Zinc, plated]

EXECUTION DIA [Internal / external thread]



Internal thread lengths [mm]

L	L2 at M2.5-M5	L2 at M2	L2 at M6	L2 at M8
5	3	3		
8	5	5		
10	6	6	6	
12	7	6	7	
15	10	6	10	10
18	10	6	10	
from 20	10	6	12	14

External thread lengths [mm]

G1=G2	L3
M2	5
M2,5	6
M3	6
M4	8
M5	8
M6	10
M8	14

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
221 x (length)	DIA	Steel	SW4	M2	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40
2212 x	DIA	Steel	SW4	M2.5	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40
223 x	DIA	Steel	SW5	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50
224 x	DIA	Steel	SW5.5	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
225 x	DIA	Steel	SW6	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
226 x	DIA	Steel	SW7	M4	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
227 x	DIA	Steel	SW8	M4	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
228 x	DIA	Steel	SW8	M5	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
229 x	DIA	Steel	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
2213 x	DIA	Steel	SW13	M8	15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100

*SW: width across flats

Ordering example: 229 x 50 = DIA / St / SW10 / M6 x 50

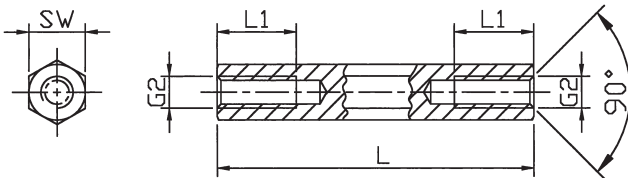
spacer bolt

[Stainless steel, metric thread]



Standard range – spacer bolts [Stainless steel]

EXECUTION DII [Internal / internal thread]



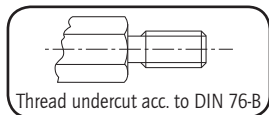
Internal thread lengths [L1 in mm]

L	M3	M4	M5	M6	M8
5	5	5			
8	8	8	8		
10	10	10	10	10	
12	12	12	12	12	
15	7	15	15	15	15
18	7	9	9	9	18
20	7	9	10	10	20
25	7	9	10	12	12
from 30	7	9	10	12	14

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
144 x (length)	DII	1.4305	SW5.5	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
146 x	DII	1.4305	SW7	M4	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
148 x	DII	1.4305	SW8	M5	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
149 x	DII	1.4305	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
1413 x	DII	1.4305	SW13	M8	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100

*SW: width across flats

Ordering example: 146 x 50 = DII / 1.4305 / SW 7 / M 4 x 50



- Material acc. to EN DIN 10088: X8CrNiS18-9
- Minimum tensile strength: 750 N/mm²
- Material number: 1.4305
- Tolerance for length dimensions +/- 0.1 mm (DIN 2768-m applies to SW13)
- All articles are also available without undercut.

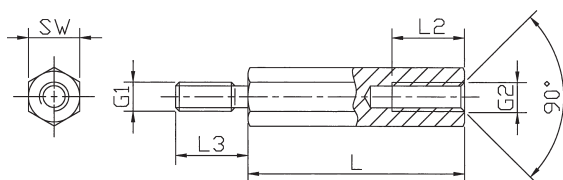
- Available from stock. Delivery times for intermediate lengths and special versions upon request.



Standard range – spacer bolts [Stainless steel]



EXECUTION DIA [Internal / external thread]



Internal thread lengths [L2 in mm]

L	M3	M4	M5	M6	M8
5	2,5				
8	5	5			
10	6	6	6	5	
12	7	8	8	7	
15	7	9	10	10	10
18	7	9	10	12	12
from 20	7	9	10	12	14



External thread lengths [L3 in mm]

G1=G2	L3
M3	6
M4	8
M5	8
M6	10
M8	14



Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
244 x (length)	DIA	1.4305	SW5.5	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
246 x	DIA	1.4305	SW7	M4	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
248 x	DIA	1.4305	SW8	M5	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
249 x	DIA	1.4305	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
2413 x	DIA	1.4305	SW13	M8	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100

*SW: width across flats

Ordering example: 246 x 50 = DIA / 1.4305 / SW 7 / M 4 x 50



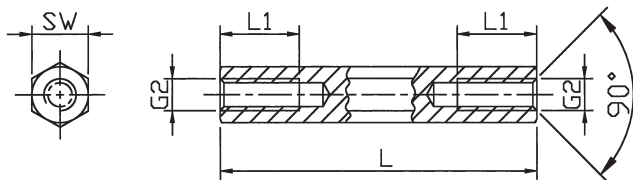
spacer bolt

[Aluminium, metric thread]



Standard range – spacer bolts [Aluminium]

EXECUTION DII [Internal / internal thread]



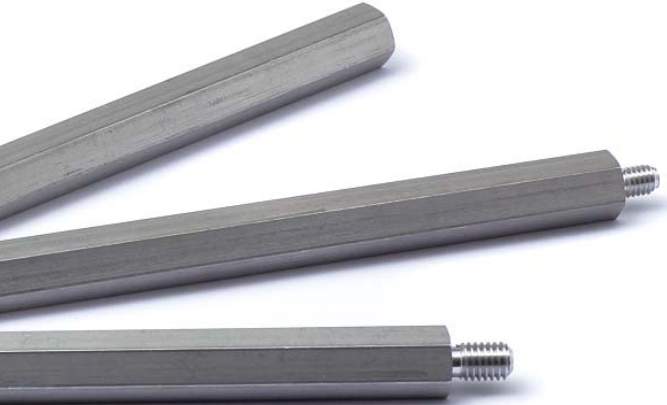
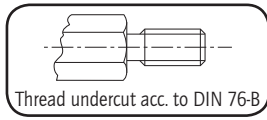
Internal thread lengths [L1 in mm]

L	M3	M4	M5	M6	M8
5	5	5			
8	8	8	8		
10	10	10	10	10	
12	12	12	12	12	
15	7	15	15	15	15
18	7	9	9	9	18
20	7	9	10	10	20
25	7	9	10	12	12
from 30	7	9	10	12	14

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
135 x (length)	DII	Alu	SW6	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
136 x	DII	Alu	SW7	M4	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
138 x	DII	Alu	SW8	M5	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
139 x	DII	Alu	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
1313 x	DII	Alu	SW13	M8	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100

*SW: width across flats

Ordering example: 136 x 50 = DII / Alu / SW 7 / M 4 x 50

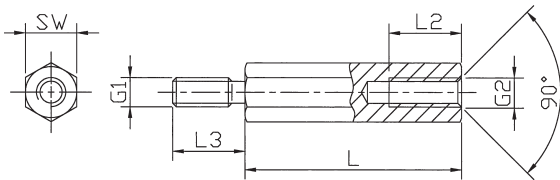


- Material acc. to EN AW 2011: AlCuBiPb
- Minimum tensile strength: 310 N/mm²
- Material number: 3.1655
- Tolerance for length dimensions +/- 0.1 mm (DIN 2768-m applies to SW13)

- Available from stock. Delivery times for intermediate lengths and special versions upon request.

Standard range – spacer bolts [Aluminium]

EXECUTION DIA [Internal / external thread]



Internal thread lengths [L2 in mm]

External thread lengths [L3 in mm]

L	M3	M4	M5	M6	M8	G1=G2	L3
5	2.5						M3 6
8	5	5					M4 8
10	6	6	6	5			M5 8
12	7	8	8	7			M6 10
15	7	9	10	10	10		M8 14
18	7	9	10	12	12		
from 20	7	9	10	12	14		

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
235 x (length)	DIA	Alu	SW6	M3	5, 8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
236 x	DIA	Alu	SW7	M4	8, 10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
238 x	DIA	Alu	SW8	M5	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
239 x	DIA	Alu	SW10	M6	10, 12, 15, 18, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100
2313 x	DIA	Alu	SW13	M8	15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100

*SW: width across flats

Ordering example: 236 x 50 = DIA / Alu / SW 7 / M4 x 50

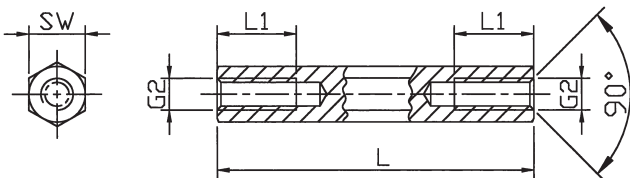
spacer bolt

[Polyamide, metric thread]



Standard range – spacer bolts [Plastic (Polyamide), hexagon, black]

EXECUTION DII [Internal / internal thread]



Thread lengths [mm]
Material: Polyamide 6.0 GV*, black

Thread G2	L (mm)	L1 (mm)
M2/M2.5	to 14	Dead-end thread
	15-20	half length
	from 21	10
M3	to 15	Dead-end thread
	16-20	half length
	from 21	10
M4/M5/M6	to 20	Dead-end thread
	from 21	10

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm increments
181 x (length)	DII	Polyamide GV*	SW5	M2	from 5 mm to 45 mm
182 x	DII	Polyamide GV*	SW5	M2.5	from 4 mm to 55 mm
185 x	DII	Polyamide GV*	SW6	M3	from 5 mm to 65 mm
187 x	DII	Polyamide GV*	SW8	M4	from 5 mm to 68 mm
188 x	DII	Polyamide GV*	SW10	M5	from 5 mm to 65 mm
189 x	DII	Polyamide GV*	SW10	M6	from 4 mm to 65 mm

*SW: width across flats

*GV: Glass fibre reinforced



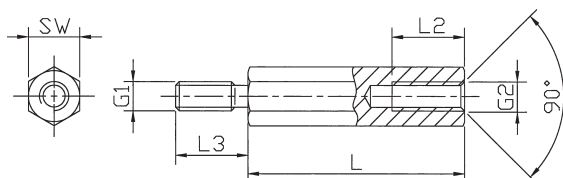
- Temperature resistance: up to approx. 110°
- Contact resistance DIN 53 482: >10¹² Ohm/cm
- Dielectric strength DIN 54 481: 40 kV/mm
- Tolerance for length dimensions: +/- 0.1 mm

- Available from stock. Delivery times for intermediate lengths and special versions upon request.



Standard range – spacer bolts [Plastic (Polyamide), hexagon, black]

EXECUTION DIA [Internal / external thread]



Internal thread lengths [mm]
Material: Polyamide 6.6, black

External thread lengths [mm]

L (mm)	l2 (mm)	G1=G2	L3
5	3.0	M 2.5	8
from 6	4.0	M 3	8
from 8	6.0	M 4	8
from 10	8.0	M 5	8
from 12	10.0	M 6	10

Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm increments
282 x (length)	DIA	Polyamide	SW5	M2.5	from 5 mm to 45 mm
285 x	DIA	Polyamide	SW6	M3	from 5 mm to 60 mm
287 x	DIA	Polyamide	SW8	M4	from 5 mm to 60 mm
288 x	DIA	Polyamide	SW10	M5	from 8 mm to 65 mm
289 x	DIA	Polyamide	SW10	M6	from 8 mm to 60 mm

*SW: width across flats

Ordering example: 282 x 15 = DIA / Polyamide / SW 5 / M 2.5 x 15

spacer bolt

[Polyamide, metric thread]



Standard range – spacer bolts [Plastic (Polyamide), round, black]

EXECUTION DII [Internal / internal thread]

Order No.	Execution	Material	Diameter (mm)	Thread	Standard lengths in mm increments
181 rd x length	DII	Polyamide GV*	4	M2	from 5 mm to 45 mm
182 rd x	DII	Polyamide GV*	5	M2.5	from 4 mm to 55 mm
185 rd x	DII	Polyamide GV*	6	M3	from 5 mm to 60 mm
187 rd x	DII	Polyamide GV*	8	M4	from 5 mm to 65 mm

EXECUTION DIA [Internal / external thread]

Order No.	Execution	Material	Diameter (mm)	Thread	Standard lengths in mm increments
285 rd x length	DIA	Polyamide	6	M3	from 5 mm to 60 mm
287 rd x	DIA	Polyamide	8	M4	from 5 mm to 60 mm

Ordering example: 185rd x 30 = DII / rd6 / Polyamide GV* / M3 / x 30

Thread lengths: see hexagonal spacer bolts

***GV:** Glass fibre reinforced



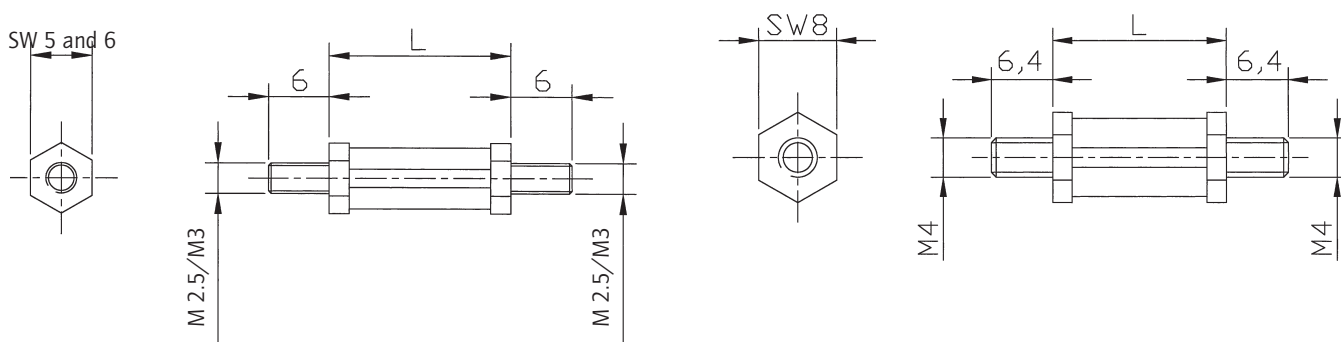
- Temperature resistance: up to approx. 110°
- Contact resistance DIN 53 482: >10¹² Ohm/cm
- Dielectric strength DIN 54 481: 40 kV/mm
- Tolerance for length dimensions: +/- 0.1 mm

- Available from stock. Delivery times for intermediate lengths and special versions upon request.



Standard range – spacer bolts [Plastic (Polyamide), hexagon, black]

EXECUTION DAA [External / external thread]



Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm increments
482 x length	DAA	Polyamide	SW5	M2.5	from 3 mm to 65 mm
485 x	DAA	Polyamide	SW6	M3	from 5 mm to 65 mm
487 x	DAA	Polyamide	SW8	M4	from 5 mm to 65 mm

*SW: width across flats

spacer bolt

[Polyamide with brass thread]

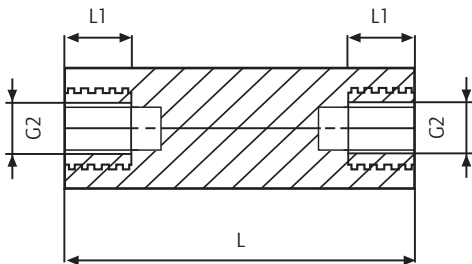
up to
width across
flats
10 mm



Standard range - spacer bolts

[Plastic (Polyamide), hexagon with brass thread]

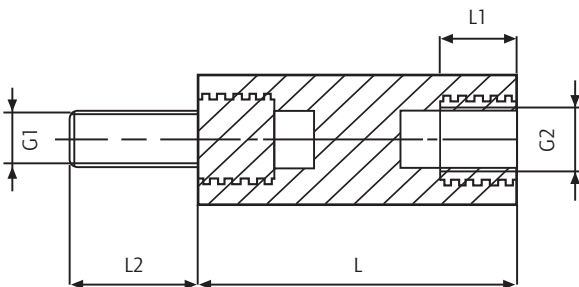
EXECUTION DII [Internal / internal thread]



Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
1182 x (length)	SW6	M2.5	15-65
1183 x	SW6	M3	15-65
1186 x	SW8	M4	15-65
1188 x	SW10	M5	15-70

Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
1182 x (length)	SW6	M2.5	15-65
1183 x	SW6	M3	15-65
1186 x	SW8	M4	15-65
1188 x	SW10	M5	15-70

EXECUTION DIA [Internal / external thread]



Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
2182 x (length)	SW6	M2.5	15-65
2183 x	SW6	M3	15-65
2186 x	SW8	M4	15-65
2188 x	SW10	M5	15-70

Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
2182 x (length)	SW6	M2.5	15-65
2183 x	SW6	M3	15-65
2186 x	SW8	M4	15-65
2188 x	SW10	M5	15-70

*SW: width across flats

Ordering example: 2188 x 45 = DIA / MS Polyamide / SW10 / M5 x 45



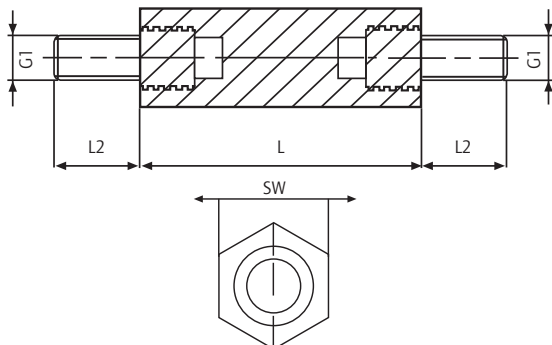
- Body material: Polyamide 6.6 white
- Thread inserts: Nickel-plated brass
- Temperature resistance: up to 110°C
- Fire class: UL 94-V2
- Contact resistance: 10^{12} Ohm/cm
- Dielectric strength: 50kV/mm
- Tolerance for length dimensions: ± 0.1 mm

- **Available from stock. Delivery times for intermediate lengths and special versions upon request.**

- **Note:** The pull-out strength and torques may vary depending on application and ambient influences (e.g. temperature, air humidity, etc.). For critical applications please carry out trials. DREMEC GmbH does not assume any liability for the specified strength values.



EXECUTION DAA [External / external thread]



Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
4182 x (length)	SW6	M2.5	15-65
4183 x	SW6	M3	15-65
4186 x	SW8	M4	15-65
4188 x	SW10	M5	15-70

Strength/resistance values

Thread lengths [mm]

G1=G2	L1	L2
M2.5	6	6
M3	6	6
M4	6	8
M5	6	10

Torques [Nm]

SW6	M2.5	1.3
SW6	M3	1.3
SW8	M4	3.0
SW10	M5	4.5

Pull-out torques [N]

SW6	M2.5	300
SW6	M3	300
SW8	M4	600
SW10	M5	800

spacer bolt

[Polyamide with brass thread]



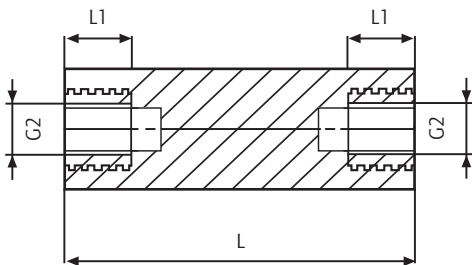
from
width across
flats
13 mm



Standard range - spacer bolts

[Plastic (Polyamide), hexagon with brass thread]

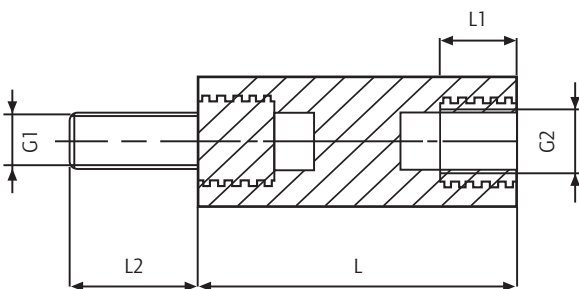
EXECUTION DII [Internal / internal thread]



Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
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118139 x (length)	SW13	M6	25-100
1181510 x	SW15	M8	25-100

EXECUTION DIA [Internal / external thread]



Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
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218139 x (length)	SW13	M6	25-100
2181510 x	SW15	M8	25-100

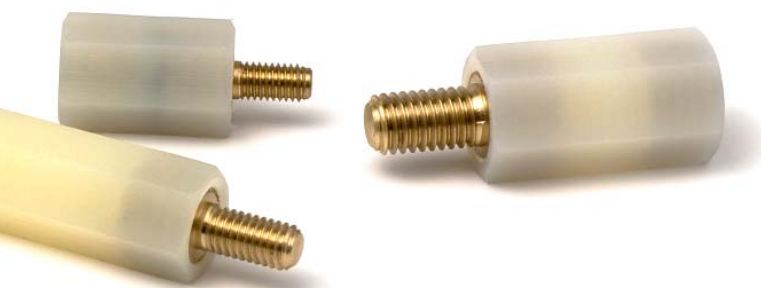
*SW: width across flats



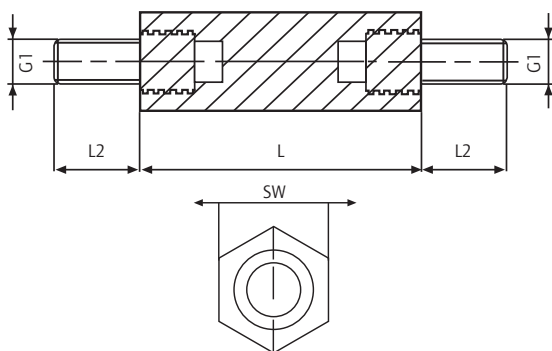
- Body material: Polyamide 6.6 natural
- Thread inserts: Bare brass
- Temperature resistance: up to 110°C
- Fire class: UL 94-V2
- Contact resistance: 10¹² Ohm/cm
- Dielectric strength: 50kV/mm
- Tolerance for length dimensions: +/- 0.2 mm

- Available from stock. Delivery times for intermediate lengths and special versions upon request.

- Note: The pull-out strength and torques may vary depending on application and ambient influences (e.g. temperature, air humidity, etc.). For critical applications please carry out trials. DREMEC GmbH does not assume any liability for the specified strength values.



EXECUTION DAA [External / external thread]



Order No.	SW* (hexagon)	Thread	Lengths (L) in mm increments
418139 x (length)	SW13	M6	25-100
4181510 x	SW15	M8	25-100



Strength/resistance values



Thread lengths [mm]

G1=G2	L1	L2
M6	11	12
M8	11	14



Torques [Nm]

SW13	M6	12.0
SW15	M8	18.0



Pull-out torques [N]

SW13	M6	1000
SW15	M8	1600



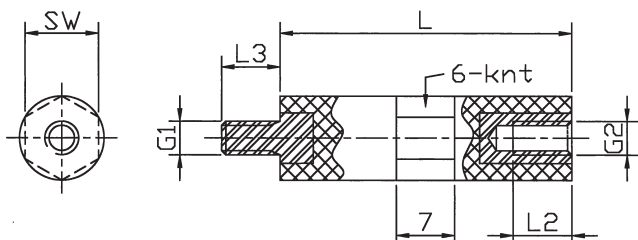
spacer bolt

[Polystyrene, with steel thread]

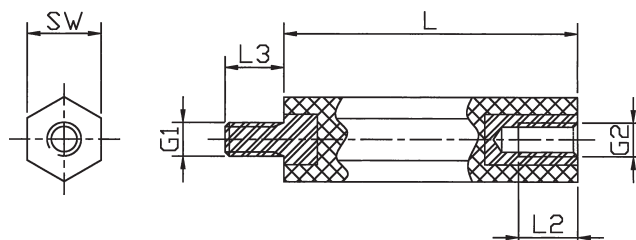


Standard range – spacer bolts [Polystyrene round and hexagon, with steel thread]

ROUND SHAPE: EXECUTION DIA [Internal / external thread]



HEXAGON SHAPE: EXECUTION DIA [Internal / external thread]



EXECUTION DIA [Internal / external thread]

Order No.	Execution	Shape	Body/thread material	Ø	SW* (hexagon)	Thread	Standard lengths in mm
25M3 x (length)	DIA	round	Polystyrene / steel	7	SW6	M3	15, 20, 25, 30, 40, 45, 55
25M4 x	DIA	round	Polystyrene / steel	10	SW9	M4	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 90*
25M5 x	DIA	hexagon	Polystyrene / steel		SW13	M5	15, 20, 30, 45, 55, 70, 85, 120*
25M6 x	DIA	hexagon	Polystyrene / steel		SW13	M6	15, 20, 30, 45, 70, 120*

*SW: width across flats

*Intermediate lengths available

Ordering example: 25M3 x 25 = DIA / Polyst. St. / SW6 / M3 x 25

- Body material: Polystyrene, grey (other colours on request)
- Thread insert material: Galvanised steel
- Temperature resistance: up to approx. 90°C
- Fire class: UL 94-V2
- Contact resistance DIN 53482: $>10^{16}$ Ohm/cm
- Dielectric strength: min. 5000 V between thread inserts
- Tolerance for length dimensions: +/- 0.5 mm

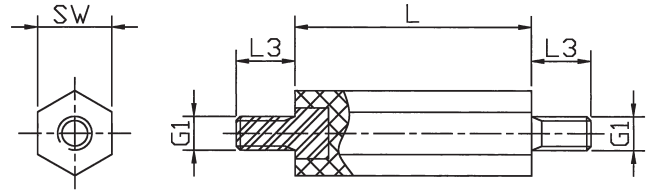
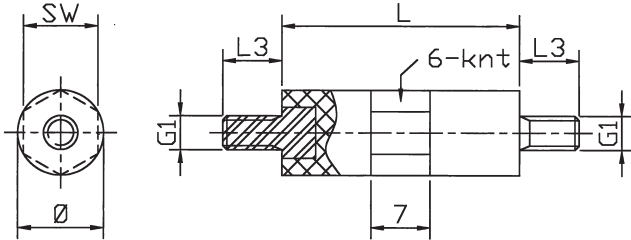
- Available from stock. Delivery times for intermediate lengths and special versions upon request.

Thread lengths [mm]

Thread	L2	L3
M3	7	7
M4	7	7
M5	7	7
M6	7	7

ROUND SHAPE: EXECUTION DAA [External / external thread]

HEXAGON SHAPE: EXECUTION DAA [External / external thread]



EXECUTION DAA [External / external thread]

Order No.	Execution	Shape	Body/thread material	Ø	SW* (hexagon)	Thread	Standard lengths in mm
45M3 x (length)	DAA	round	Polystyrene / steel	7	SW6	M3	15, 20, 25, 30, 40, 45, 55
45M4 x	DAA	round	Polystyrene / steel	10	SW9	M4	10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 90*
45M5 x	DAA	hexagon	Polystyrene / steel		SW13	M5	15, 20, 30, 45, 55, 70, 85, 120*
45M6 x	DAA	hexagon	Polystyrene / steel		SW13	M6	15, 20, 30, 45, 70, 120*

*SW: width across flats

*Intermediate lengths available

Ordering example: 25M3 x 25 = DIA / d7 / M3 x 25

Accessories [cap nut, cap screw]

FIG. 1

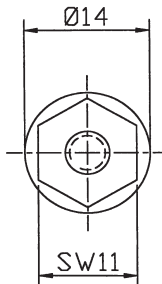
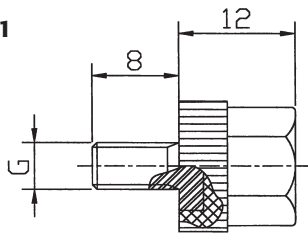
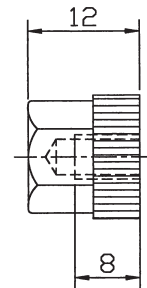


FIG. 2



Order No.	Designation	Fig.	Body/thread material	Thread size (G)
66M (G)	Cap nut	Fig. 2	Polystyrene	M4, M5, M6
65M (G)	Cap nut	Fig. 2	Polystyrene / brass	M4, M5, M6
55M (G)	Cap screw	Fig. 1	Polystyrene / steel	M4, M5, M6

Ordering example: 66 M5 = Cap nut / Polystyrene / M5

spacer bolt

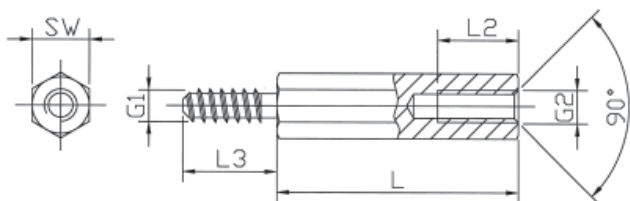
[brass / steel, with self-tapping thread]

- Tolerance for length dimensions: +/- 0.1 mm

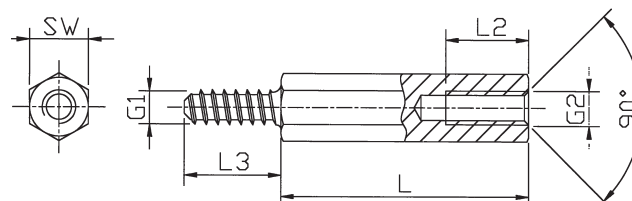
- **Available from stock. Delivery times for intermediate lengths and special versions upon request.**



EXECUTION DIA [Internal / external thread]



EXECUTION DIA [Internal / external thread without undercut (oF)]



Standard range – spacer bolts [Brass, nickel plated]



Order No.	Execution	SW* (mm)	Thread size G1	Thread size G2	Standard lengths in mm
212ST2.2 x (length)	DIA	5	ST2.2	M2.5	8, 10, 12, 15, 20
214ST2.9 x	DIA	5.5	ST2.9	M3	8, 10, 12, 15, 20
214ST3.3 x	DIA	5.5	ST3.3	M3	8, 10, 12, 15, 20
215ST3.5 x	DIA	6	ST3.5	M3	8, 10, 12, 15, 20
216ST4.2 x	DIA	7	ST4.2	M4	8, 10, 12, 15, 20
218ST4.8 x	DIA	8	ST4.8	M5	8, 10, 12, 15, 20
219ST6.3 x	DIA	10	ST6.3	M6	10, 12, 15, 20

*SW: width across flats

Please add the suffix „oF“ to the article No. to specify the variant without undercut

Ordering example: 212ST2.2 x 15oF = DIA / St / SW5 / M2.5 - St 2.2 x 15oF





- Tolerance for length dimensions: +/- 0.1 mm

- Available from stock. Delivery times for intermediate lengths and special versions upon request.

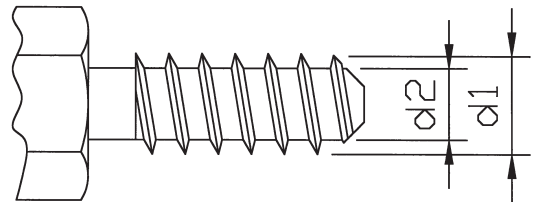


External thread G1 [mm]

Thread size	l3	d1	d2
ST2.2	5	2.1	1.6
ST2.9	6	2.8	2.1
ST3.3	6	3.2	2.3
ST3.5	7	3.4	2.6
ST4.2	8	4.1	3.0
ST4.8	8	4.7	3.5
ST6.3	10	6.1	4.8

Internal thread G2 [mm]

L (mm)	l2 (mm)
8	5
10	6
12	7
15	10
20	10



Standard range – spacer bolts [Steel, galvanised]

Order No.	Execution	SW* (mm)	Thread size G1	Thread size G2	Standard lengths in mm
222ST2.2 x (length)	DIA	5	ST2.2	M2.5	8, 10, 12, 15, 20
224ST2.9 x	DIA	5.5	ST2.9	M3	8, 10, 12, 15, 20
224ST3.3 x	DIA	5.5	ST3.3	M3	8, 10, 12, 15, 20
225ST3.5 x	DIA	6	ST3.5	M3	8, 10, 12, 15, 20
226ST4.2 x	DIA	7	ST4.2	M4	8, 10, 12, 15, 20
228ST4.8 x	DIA	8	ST4.8	M5	8, 10, 12, 15, 20
229ST6.3 x	DIA	10	ST6.3	M6	10, 12, 15, 20

*SW: width across flats

Please add the suffix „oF“ to the article No. to specify the variant without undercut

Ordering example: 222ST2.2 x 15oF = DIA / St / SW5 / M2.5 - St 2.2 x 15oF

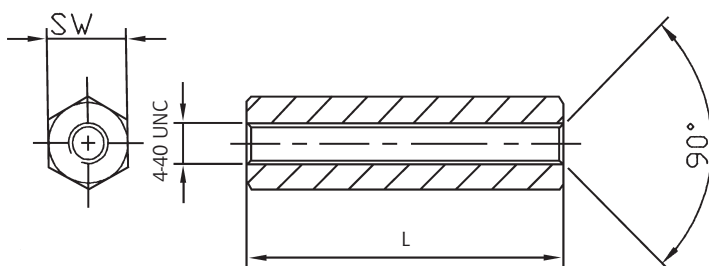
spacer bolt

[Brass, with UNC thread]



Standard range - spacer bolts [Brass, nickel plated]

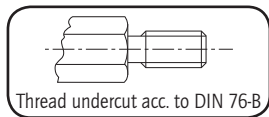
EXECUTION DII [Internal / internal thread]



Order No.	Execution	Material	SW* (hexagon)	Thread	Standard lengths in mm
110 x (length)	DII	Brass	SW5	4-40 UNC	5, 6, 8, 10, 12, 15

*SW: width across flats

Ordering example: 110 x 10 = DII / Ms / SW 5 / 4-40 UNC x 10 mm



All UNC types are also available in steel, different lengths and with UNC 6-32, UNC 8-32 and UNC 2-56 thread.

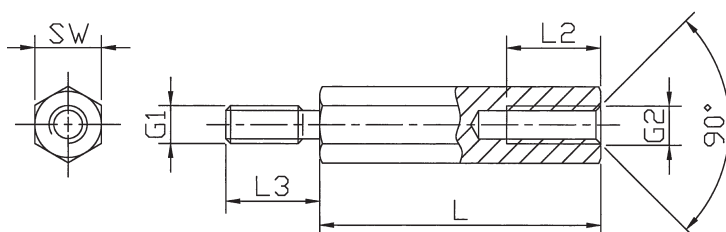
- Tolerance for length dimensions: +/- 0.1 mm
- All articles are also available without undercut.

- Available from stock. Delivery times for intermediate lengths and special versions upon request.



Standard range - spacer bolts [Brass, nickel plated]

EXECUTION DIA [Internal / external thread]



Thread lengths [mm]

L	L2	L3
5	3	4, 5, 6, 8, 10, 12
6	4	6, 8

Order No.	Execution	Material	SW* (hexagon)	Internal thread	External thread	Standard lengths in mm
2100 x (length)	DIA	Brass	SW5	4-40 UNC	4-40 UNC	5, 6
2103 x	DIA	Brass	SW5	4-40 UNC	M3	5, 6
2130 x	DIA	Brass	SW5	M3	4-40 UNC	5, 6

*SW: width across flats

Ordering example: 2100 x 05 / 12 = DIA / Ms / SW 5 / UNC 4-40 x 05 / 12 (body length / external thread length)

spacer sleeves

[Brass, nickel-plated, Polyamide black]

(*Makrolon grey upon request)



Standard range – spacer sleeves [Plastic]

Technical data [Reference values]

Material	Specific contact resistance	Dielectric strength	Heat resistance
Polyamide	$> 10^{12}$ Ohm/cm	80 kV/mm	110°C
*Makrolon	$> 10^{16}$ Ohm/cm	36 kV/mm	140°C

***All Polyamide spacer sleeves are also available in Makrolon! Please quote dimensions and quantity in your inquiry!**

EXECUTION DII [Internal / internal thread]

Order No.	Execution	Material	Diameter D (mm)	Diameter d (mm)	Standard lengths in mm increments
384 / 1.5 x (length)	DH	Polyamide	4	1.5	from 2 mm to 10 mm
384 / 2.2 x	DH	Polyamide	4	2.2	from 2 mm to 50 mm
385 / 2.7 x	DH	Polyamide	5	2.7	from 2 mm to 55 mm
386 / 3.4 x	DH	Polyamide	6	3.4	from 2 mm to 60 mm
388 / 4.2 x	DH	Polyamide	8	4.2	from 2 mm to 60 mm
3810 / 5.2 x	DH	Polyamide	10	5.2	from 2 mm to 57 mm
3810 / 6.2 x	DH	Polyamide	10	6.2	from 2 mm to 55 mm
3812 / 8.2 x	DH	Polyamide	12	8.2	from 2 mm to 63 mm
3816 / 10.5 x	DH	Polyamide	16	10.5	from 2 mm to 50 mm

Ordering example: 386 / 3.4 x 25 mm = DH / Polyamide / 6 (3.4) x 25 mm

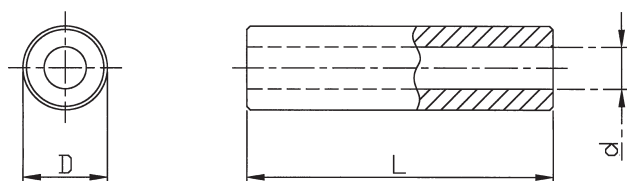


- Tolerance for length dimensions: +/- 0.1 mm

- Available from stock. Delivery times for intermediate lengths and special versions upon request.



Standard range – spacer sleeves [Brass, nickel plated]



Order No.	Execution	Material	Diameter D (mm)	Diameter d (mm)	Standard lengths in mm
314 / 2.1 x (length)	DH	Brass	4.0	2.1	2, 3, 4, 5, 6, 7, 8, 9, 10, 12,
315 / 2.6 x	DH	Brass	5.0	2.6	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15,
316 / 3.2 x	DH	Brass	6.0	3.2	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 18, 20, 25, 30
318 / 4.3 x	DH	Brass	8.0	4.3	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 18, 20, 25, 30
3110 / 5.3 x	DH	Brass	10.0	5.3	2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 18, 20, 25, 30





Standard parts [Steel, galvanised]

Hexagon nuts: acc. to DIN 934

U washers: acc. to DIN 125

Spring washers: acc. to DIN 128

matching the thread	Nut Order No.	U washer Order No.	Spring washer Order No.
4-40 UNC	8211	8223	8233
M2	8212	8222	8232
M2.5	82125	82225	82325
M3	8213	8223	8233
M3.5	82135	82235	82335
M4	8214	8224	8234
M5	8215	8225	8235
M6	8216	8226	8236

Packaging unit: 500 pcs.



Standard parts [Polyamide 6.6 natural]

Hexagon nuts: acc. to DIN 555, **U washers:** acc. to DIN 125

matching the thread	Nut Order No.	U washer Order No.
M2	8812	8822
M2.5	88125	88225
M3	8813	8823
M4	8814	8824
M5	8815	8825
M6	8816	8826

Packaging unit: 500 pcs.





special designs

[mechanical]

+ **slotted**



+ **with shaft**



+ **with cross hole**

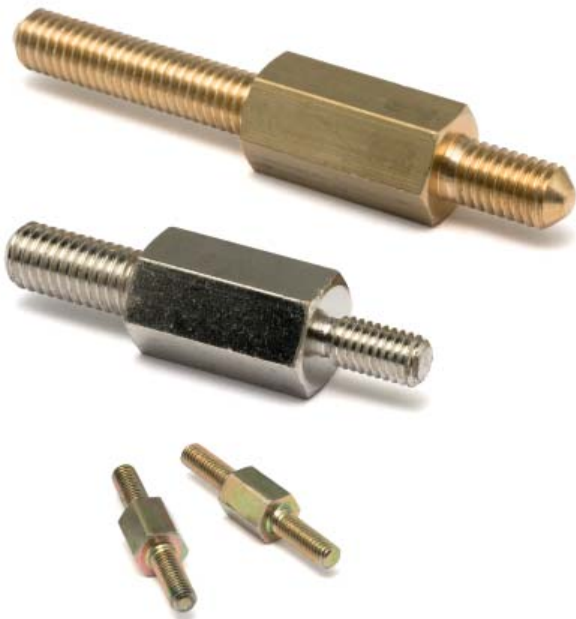


+ **with long external thread**
(various thread lengths + types are possible)



+ **with cross tapping**

+ **with 2 external threads**
(various thread combinations are possible)



+ **with cut-in**



+ **knurled**



special surface finishes/coatings

[...for surfaces]

+ **gold-plated**



+ **tin-plated**



+ **black chromated**



+ **yellow chromated**



notes



contact

[We look forward to receiving your call!]

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