

Micrometer Screws

9S75M-AL



- Designed for micro-positioning applications
- Stainless steel screw with hardened steel ball tip
- Brass threaded collar
- Very smooth motion allows positioning with sensitivity of 1 μm
- Scale 10 μm division
- Nominal travel 5, 10, 15, 20, 25, 30, 50 mm

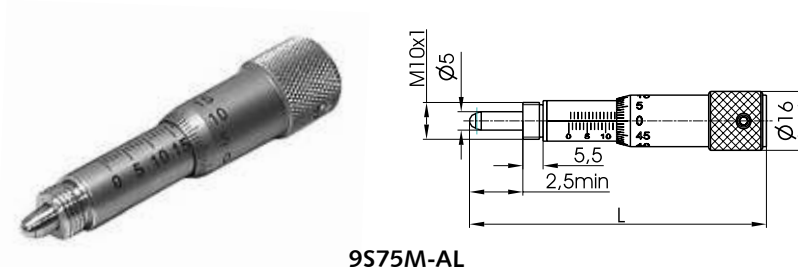
Micrometer screws 9S75M-AL, 9S75ML-AL have M6x0.5 internal driving screw thread. External mounting thread - M10x1. External M10x0.5 mounting thread is available on request.

Vernier scale is engraved on a revolving cylindrical collar of the micrometer screw. The collar can be rotated to make the scale visible if micrometer screw is mounted with the scale out of sight.

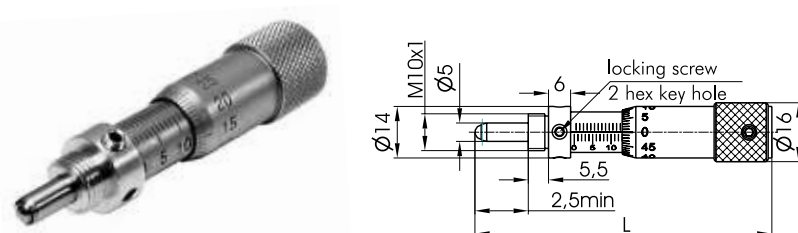
9S75M-AL, 9S75ML-AL are used in Standa translation stages and mirror mounts and can be used in mounts and stages of other manufacturers.

SPECIFICATIONS

Micrometer screw thread	M6x0.5
Sensitivity	1 μm
Scale division	10 μm
Axial load capacity	80 N
Mounting thread	M10x1



9S75M-AL



9S75ML-AL



7T173-20T
with 9S75M-20-AL installed



7T175-50
with 9S75M-50-AL installed



7T68-25XYZ
with 9S75M-25-AL installed

Model	Nominal travel, mm	Maximum travel, mm	L, mm	Weight, kg
9S75M-5-AL, 9S75ML-5-AL	5	7	40	0.03
9S75M-10-AL, 9S75ML-10-AL	10	13	54	0.04
9S75M-15-AL, 9S75ML-15-AL	15	17	60	0.04
9S75M-20-AL, 9S75ML-20-AL	20	22	70	0.05
9S75M-25-AL, 9S75ML-25-AL	25	27	81	0.06
9S75M-30-AL, 9S75ML-30-AL	30	32	92	0.08
9S75M-50-AL, 9S75ML-50-AL	50	52	136	0.10

Micrometer Screws

9S55-AL



9S55-5-AL

9S55M-5-AL

- Designed for micro-positioning applications
- Stainless steel screw with hardened steel ball tip
- Brass threaded collar
- Very smooth motion allows positioning with sensitivity of 1 μm
- Scale 10 μm division
- Nominal travel 5, 10 mm

There are two types of the **Thin Micrometers** – **9S55-AL** and **9S55M-AL**. They differ in their mounting method:

9S55-AL has a $\varnothing 8 \times 7$ mm mounting barrel.

9S55M-AL can be mounted by tightening a fixing nut included on a $M8 \times 1$ thread.

SPECIFICATIONS

Micrometer screw thread	M6x0.5
Sensitivity	1 μm
Scale division	10 μm
Axial load capacity	80 N

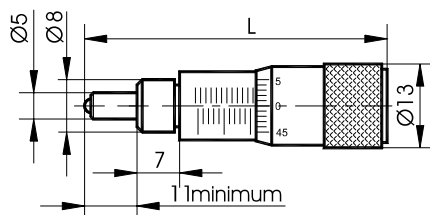
Way of mounting

9S55-AL

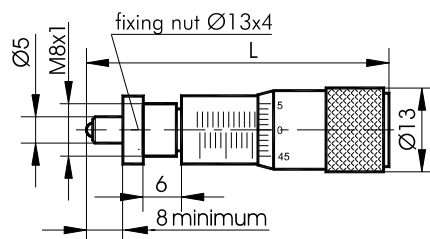
Mounting barrel

9S55M-AL

mounting sleeve with fixing nut



9S55-AL



9S55M-AL

Model	Nominal travel, mm	L, mm	Weight, kg
9S55-5-AL	5	46	0.02
9S55M-5-AL	5	46	0.02
9S55-10-AL	10	58,5	0.03
9S55M-10-AL	10	58,5	0.03



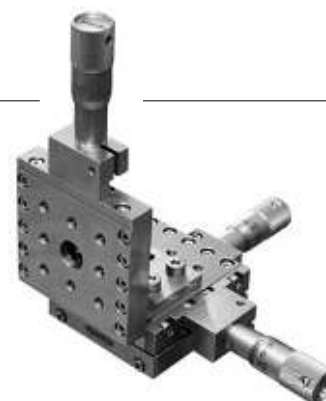
7T164-10T
with 9S55-10-AL installed



7T264-10
with 9S55-10-AL installed



7T184-13XYZ
with 9S55-10-AL installed



7T164V-10XYZ
with 9S55-10 installed

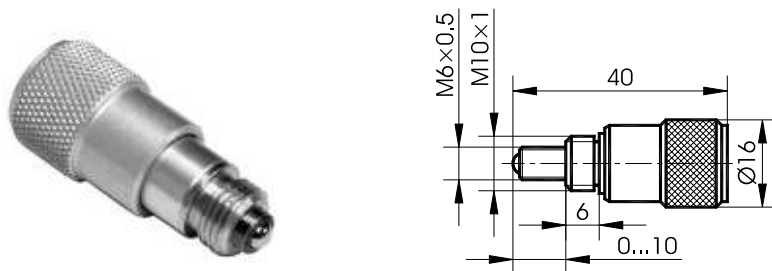
Vacuum 10^{-6} Torr Compatible



9S55-5

9S55M-5

Fine Closed Screw

9S65M


Fine Closed Screw 9S65M provides high **1 µm** sensitivity and smooth movement. Its travel range is **10 mm**. The screw is used in many STANDA mounts. The handle covers the thread over the complete travel range.

Special micrometer screw design for use in optical mounts for angular adjustment.

External mounting thread - **M10x1**.

External **M10x0.5** mounting thread is **available on request**.

SPECIFICATIONS

Adjustment screw thread	M6x0.5
Sensitivity	1 µm
Axial load capacity	80 N
Nominal travel	10 mm
Weight	0.02 kg



5OM60-3
with 9S65M installed



5OM37-40
with 9S65M installed

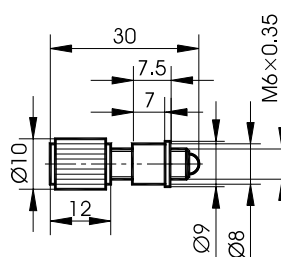
Compact Fine Screws

9S67

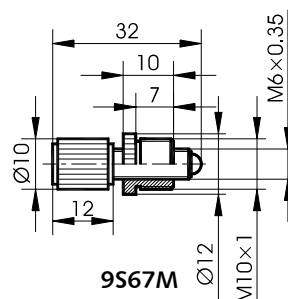

9S67



9S67M



9S67



9S67M

Compact Fine Screws 9S67 provide high resolution. A **unique design** allows **smooth adjustment** and **high repeatability** thanks to **matched stainless steel screw/brass nut pairs**. Using **screw/nut matching technology**, **backlash** is in high precision **M6x0.35** thread almost **eliminated**. The combination of metals provides a superior match for both movement and long lifetime.

9S67 has a mounting diameter of **Ø8 mm**. The **9S67M** has a mounting thread **M10x1**, or **M10x0.5** as option.

A compact knob is made from black anodized aluminium.

SPECIFICATIONS

Adjustment screw thread	M6x0.35
Sensitivity	1.3 µm
Axial load capacity	70 N
Nominal travel	8 mm

Model	Weight, kg
9S67	0.015
9S67M	0.015



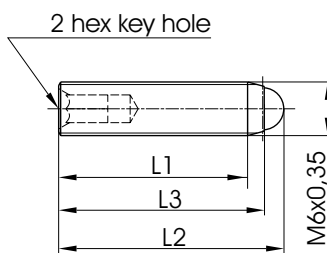
5OM111
with 9S67 installed



5OM60-3-9S67M
with 9S67M installed

Industrial Adjustment Screws

9SH67



When you need to make accurate adjustment in your equipment, order **9SH67** industrial adjustment screws along with **9MT6-0.35 taps** (see **page 9-12**) to make matched screw and nut pairs and enjoy

SPECIFICATIONS

Adjustment screw thread	M6x0.35
Sensitivity	1 μ m
Axial load capacity	70 N

the ultimate performance.

9SH67 industrial adjustment screws do not include nuts. Nuts with perfect thread and minimal backlash for the screws can be made with our **9MT6-0.35 taps** (see **page 9-12**) which use the widely appreciated **Standa** adjustment screw technology.

Model	L1, mm	L2, mm	L3, mm	Weight, kg
9SH67-10	8	12	9.8	0.002
9SH67-18	16	20	17.8	0.004
9SH67-23	21	25	22.8	0.006
9SH67.01-7.3	5.5	9.5	7.3	0.001
9SH67-XX	custom size			



9MT6-0.35
Industrial Custom Taps

Page 9-12

Low Cost Adjustment Screws

9S7C • 9S7



9S7-8



9S7C-18

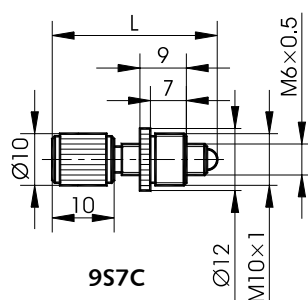
Low Cost Adjustment Screws 9S7 and 9S7C are popular for their low cost and miniature size, in applications where rough resolution about **5 μ m** is enough.

9S7C consists of **M6x0.5** screw and **nut** with **M10x1** mounting thread (**M10x0.5** as option).

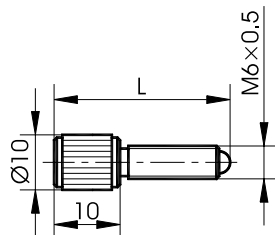
9S7C and **9S7** series screws suite well for optical mount and can be chosen as an option in mounts **5OM37**, **5OM60**, **6LH** and others.

SPECIFICATIONS

Adjustment screw thread	M6x0.5
Sensitivity	1.5 μ m
Axial load capacity	80 N



9S7C



9S7

Model	Nominal travel, mm	L, mm	Weight, kg
9S7-8	8	29	0.015
9S7C-8	8	29	0.02
9S7-18	18	39	0.025
9S7C-18	18	39	0.03



5OM37-40-9S7C
5OM37-40 with
9S7C-8 installed



6LH
with 9S7-18 installed

Ultra-Fine Adjustment Screws

9S127



- Stainless steel screw with pitch of 0.25 mm
- Precision brass collars of 3 types
- Tolerances better than tightest industry standards

Ultra-Fine Adjustment Screws 9S127 are compact and provide extremely high resolution. Special design provides smooth and repeatable action by mating a high precision **0.25 pitch stainless steel** screw with a high precision brass collar. The screws have either a hardened steel ball on the tip or a blunt ground tip.

The mounting surface of collars is either plain cylindrical or with a thread. The collars are ideally suitable for all mechanical stages and elements from STANDA or other companies.

The handy dimensions of the knobs are optimally chosen to feel rotation as little as **0.5°-1°**. This enables to achieve **0.5 µm** positioning sensitivity. The knobs are made of hard aluminium and come in various colours: black, white, red, green, yellow, blue, etc. By default the knobs are in black or white colour, **5 mm** high (dimension "K").

Weight **0.01 to 0.02 kg**

SPECIFICATIONS

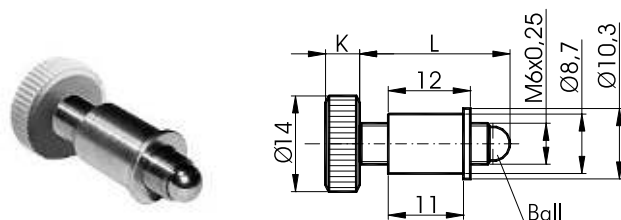
Adjustment screw thread	M6x0.25
Sensitivity	0.5 µm
Axial load capacity	50 N
Weight	0.01 to 0.02 kg



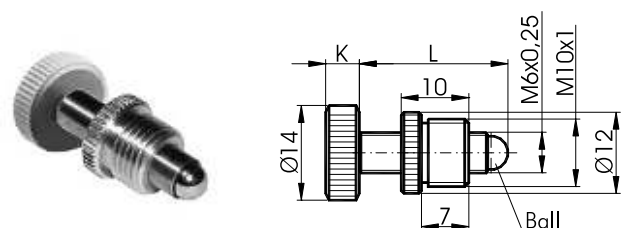
5MBM21-1
with 9S127-10 installed



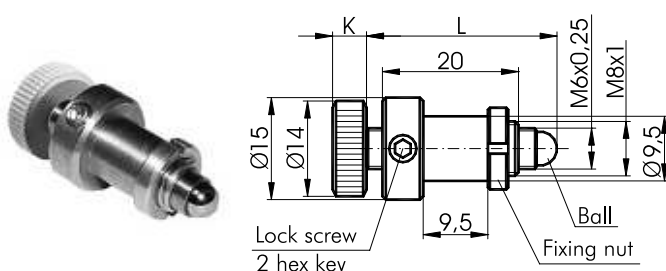
6TS62-9S127M
6TS62 with
9S127M-10 installed



9S127



9S127M



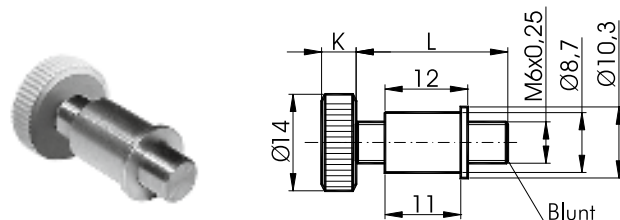
9S127N

Model	Travel, mm	L, mm	Tip
9S127-7	7	22	ball tip
9S127-10	10	25	ball tip
9S127-25	25	40	ball tip

Model	Travel, mm	L, mm	Tip
9S127M-7	7	20	ball tip
9S127M-10	10	23	ball tip
9S127M-25	25	38	ball tip

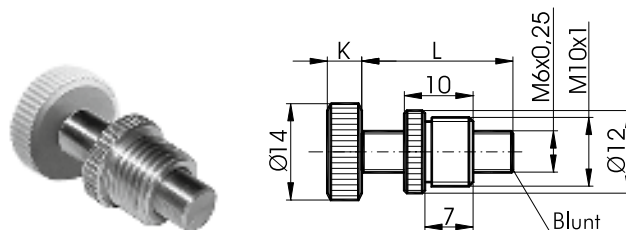
The **9S127M** has a mounting thread **M10x1**, but you may specify an alternative pitch of **M10x0.5**.

Model	Travel, mm	L, mm	Tip
9S127N-5	5	28	ball tip
9S127N-10	10	33	ball tip
9S127N-25	25	48	ball tip



9S127B

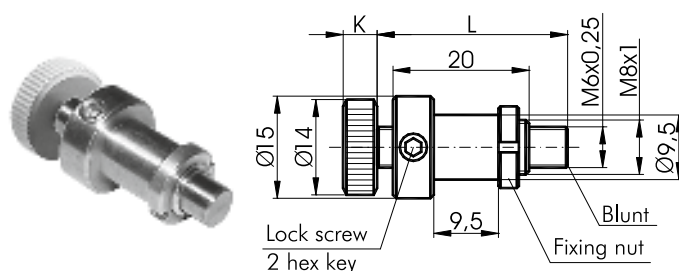
Model	Travel, mm	L, mm	Tip
9S127B-7	7	19	blunt tip
9S127B-10	10	22	blunt tip
9S127B-25	25	37	blunt tip



9S127BM

Model	Travel, mm	L, mm	Tip
9S127BM-7	7	19	blunt tip
9S127BM-10	10	22	blunt tip
9S127BM-25	25	37	blunt tip

The **9S127BM** has a mounting thread **M10x1**, but you may specify an alternative pitch of **M10x0.5**.



9S127BN

Model	Travel, mm	L, mm	Tip
9S127BN-5	5	25	blunt tip
9S127BN-10	10	30	blunt tip
9S127BN-25	25	45	blunt tip

ORDERING INFORMATION

Knobs come in **5 mm (standard), 10 mm or 15 mm length**. When ordering, please append the standard screw code with the desired value for the length of the knob.

For example:

9S127-7	nominal travel 7 mm , ball tip, standard 5 mm length knob .
9S127BM-7-K10	nominal travel 7 mm , blunt tip, 10 mm length knob .
9S127BN-25-K15	nominal travel 25 mm , blunt tip, 15 mm length knob .

For screws with **hex hole** for **Allen key** (instead of the knob) see item **9SH127** (page 9-8).

Differential actuators !!!



Find out more at
www.STANDA.LT

Ultra-Fine Hex Adjustment Screws

9SH127


- Stainless steel screw with pitch of 0.25 mm
- Precision brass collars of 3 types
- Tolerances better than tightest industry standards

Ultra-Fine Hex Adjustment Screws 9SH127 are extremely compact and precise. A screw is of a **0.25 pitch stainless steel** screw and a brass collar. One end of the screw has a hexagonal hole for adjustments using a spanner or a **Removable Knob 9RK127** (optional). Another end of the screw is either fitted with the hardened steel ball, or made blunt. Brass collars, for plain cylindrical and threaded mounting, can be of 3 types.

SPECIFICATIONS

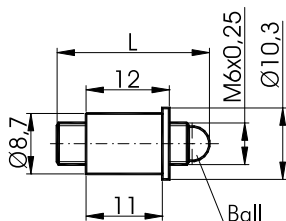
Adjustment screw thread	M6x0.25
Sensitivity	0.5 μ m
Axial load capacity	50 N
Hex key	3
Weight	0.01 to 0.02 kg



5F21-2-SH
5F21-2 with
9SH127-10 installed



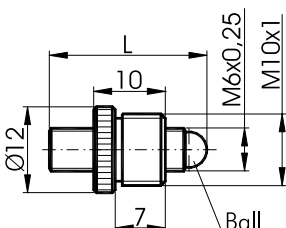
9SH127



Model	Travel, mm	L, mm	Tip
9SH127-7	7	22	ball tip
9SH127-10	10	25	ball tip
9SH127-25	25	40	ball tip



9SH127M

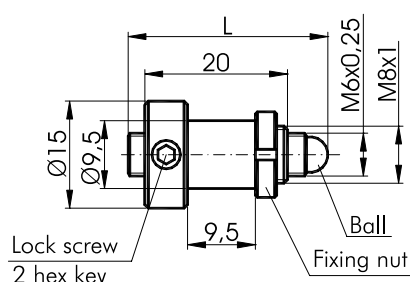


Model	Travel, mm	L, mm	Tip
9SH127M-7	7	20	ball tip
9SH127M-10	10	23	ball tip
9SH127M-25	25	38	ball tip

The **9S127M** has a mounting thread **M10x1**, but you may specify an alternative pitch of **M10x0.5**.



9SH127N



Model	Travel, mm	L, mm	Tip
9SH127N-5	5	28	ball tip
9SH127N-10	10	33	ball tip
9SH127N-25	25	48	ball tip


www.standa.it

e-mail: sales@standa.it

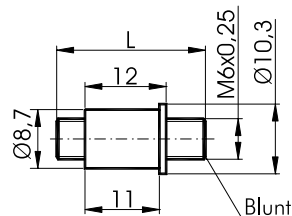

Phone: +370-5-2651483

Fax: +370-5-2651474



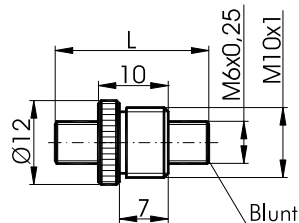
standa





9SH127B

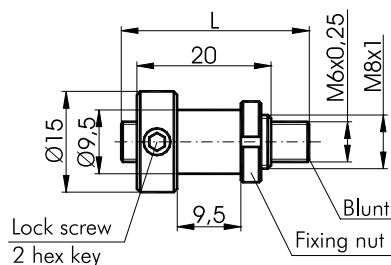
Model	Travel, mm	L, mm	Tip
9SH127B-7	7	19	blunt tip
9SH127B-10	10	22	blunt tip
9SH127B-25	25	37	blunt tip



9SH127BM

Model	Travel, mm	L, mm	Tip
9SH127BM-7	7	19	blunt tip
9SH127BM-10	10	22	blunt tip
9SH127BM-25	25	37	blunt tip

The **9SH127BM** has a mounting thread **M10x1**, but you may specify an alternative pitch of **M10x0.5**.



9SH127BN

Model	Travel, mm	L, mm	Tip
9SH127BN-5	5	25	blunt tip
9SH127BN-10	10	30	blunt tip
9SH127BN-25	25	45	blunt tip

ORDERING INFORMATION

For example:

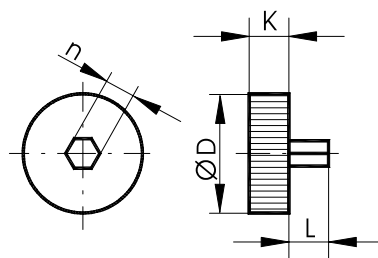
9SH127-7	nominal travel 7 mm , ball tip.
9SH127BM-7	nominal travel 7 mm , blunt tip.
9SH127BN-25	nominal travel 25 mm , blunt tip.

Removable Knob

9RK

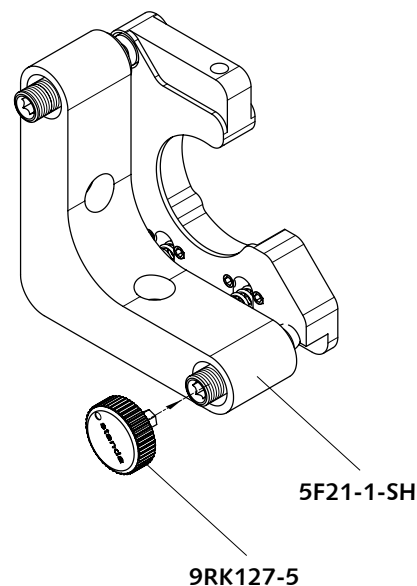


9RK127-5



A hard anodized aluminium knob with optimal dimensions can be easily removed after the screw is adjusted. This will help you prevent inadvertent touching and will save space. Standard knobs come in 5mm thickness and are of white colour (dimension K).

Model	D, mm	K, mm	L, mm	n
9RK127-5	Ø14	5	5	hex 3
9RK127-10	Ø14	10	5	hex 3
9RK137-5	Ø8	5	3.5	hex 1.5
9RK137-10	Ø8	10	3.5	hex 1.5
9RK147-5	Ø8	5	3.5	hex 2
9RK147-10	Ø8	10	3.5	hex 2



Fine Hex Adjustment Screws

9SH137 • 9SH147


- Small (M3 or M4) adjustment screws
- Screw of stainless steel
- Brass nut with outer M6 mounting thread
- Hex key drive
- Screw thread pitch 0.25 mm
- Travel 5 mm
- Lockable models available
- Other travel by request

Fixing nuts **3N6X05** (for 9SH137 series) and **3N8X1** (for 9SH147 series) are available for screws with threaded. It will allow to fix the screw at any depth in walls too thin for the 6mm collar thread. It will fix the screw so that it is in desired position.

When you order our units with these screws, we will make sure to include the fixing nut, in case the unit's wall is thin. In other cases you may order the nut separately.

SPECIFICATIONS

Adjustment Screw Thread

9SH137

M3x0.25

9SH147

M4x0.25

Sensitivity

0.5 μ m

Load Capacity

40 N

Weight

0.01 kg

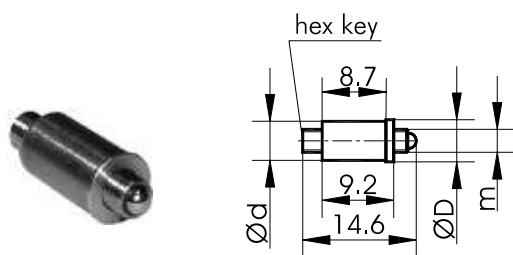


7T67-6-9SH137ML
7T67-6- with
9SH137ML installed

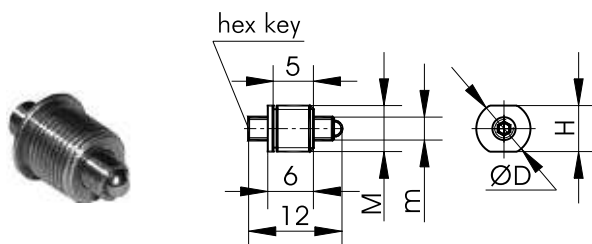


7T67-6-9SH137MN
7T67-6- with
9SH137MN installed

fixing nut



9SH137, 9SH147

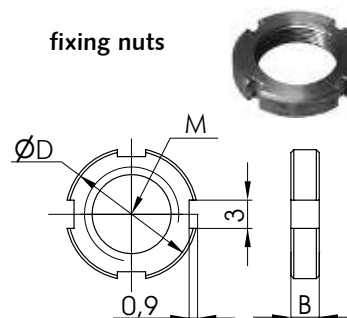


9SH137M, 9SH147M

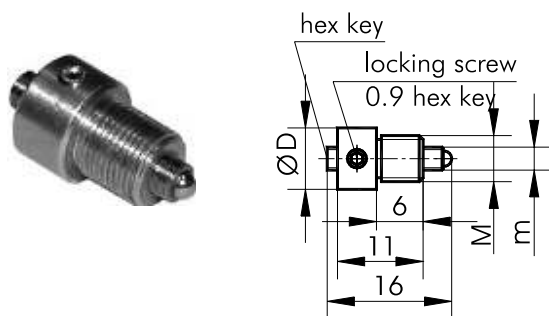
Model	d mm	D, mm	m, mm	hex key
9SH137	5.1	5.5	M3x0.25	1.5
9SH147	6	7	M4x0.25	2

Model	D, mm	m, mm	M, mm	H	hex key
9SH137M	7	M3x0.25	M6x0,5	6	1.5
9SH147M	9	M4x0.25	M8x1	8	2

fixing nuts

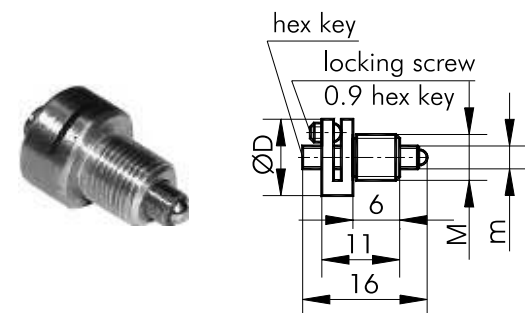


Model	D, mm	M	B, mm
3N6X05	10	M6x0,5	2.5
3N8X1	12	M8x1	3.5
3N10X05	14	M10x0,5	3
3N12X1	16	M12x1	3.5



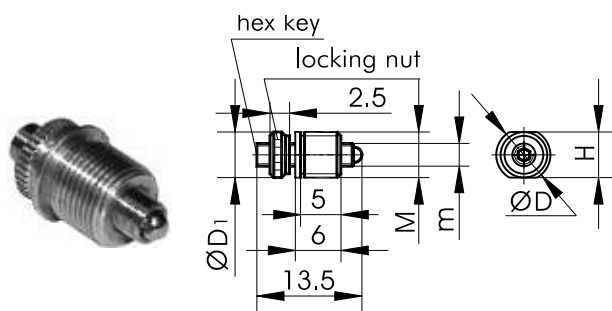
9SH137MN, 9SH147MN

Model	D, mm	m, mm	M, mm	hex key
9SH137MN	8	M3x0.25	M6x0,5	1.5
9SH147MN	10	M4x0.25	M8x1	2



9SH137ML, 9SH147ML

Model	D, mm	m, mm	M, mm	hex key
9SH137ML	9	M3x0.25	M6x0,5	1.5
9SH147ML	11	M4x0.25	M8x1	2



9SH137MF, 9SH147MF

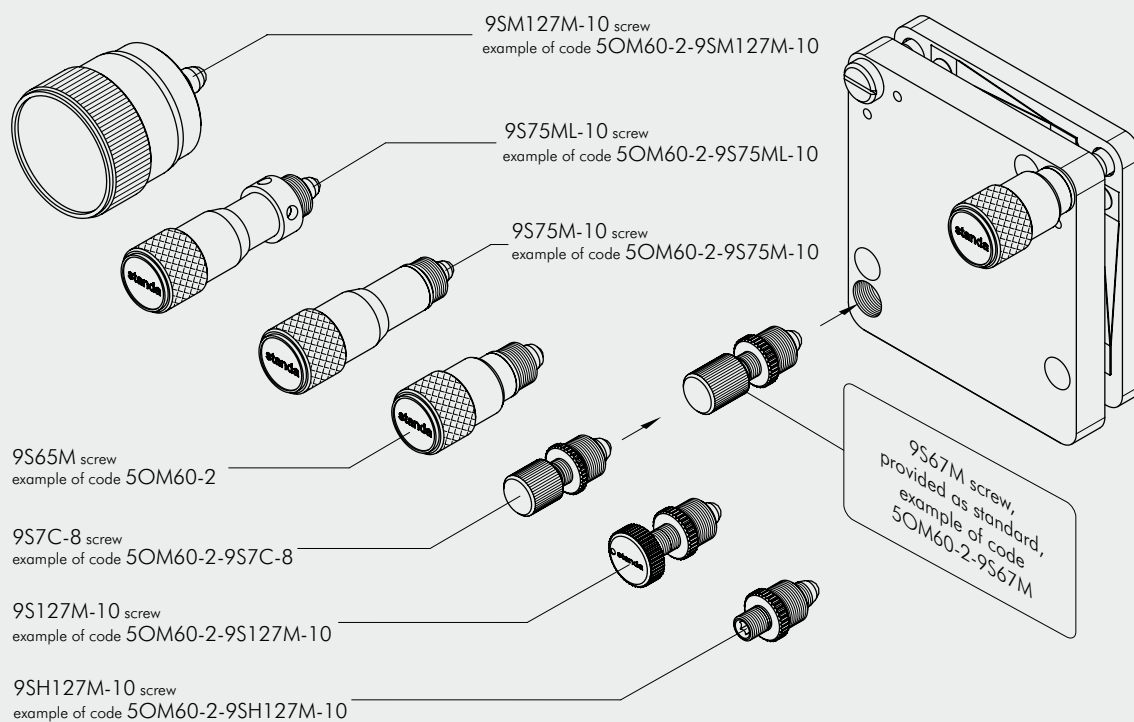
Model	D, mm	D ₁ , mm	m, mm	M, mm	H	hex key
9SH137MF	7	6	M3x0.25	M6x0,5	6	1.5
9SH147MF	9	8	M4x0.25	M8x1	8	2

note!

**All micrometer and fine screws
are produced
using a matched screw/nut pair technology
developed by Standa.**

This technology uses thread polishing (without using cutter)
to create very high quality threads
which have minimal clearances that provide
the highest degree of smoothness during adjustment.

APPLICATION SUGGESTION



Industrial Custom Taps

9MT


9MT6-0.35 taps are used for making custom holes in hardened aluminum. The taps should be ordered together with **9SH67** series industrial adjustment screws.


9SH67

Industrial Adjustment Screws

SPECIFICATIONS

Thread	M6×0.35
Tap drill size	5.62 mm

Tap Wrench

9TW


Use **9TW tap wrench** with taps **9MT** to conveniently make custom threaded holes.



9TW Tap Wrench
with 9MT6-0.35
Industrial Custom Tap installed