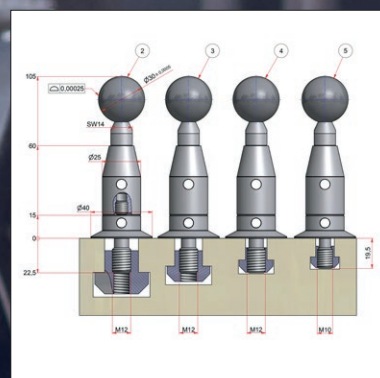
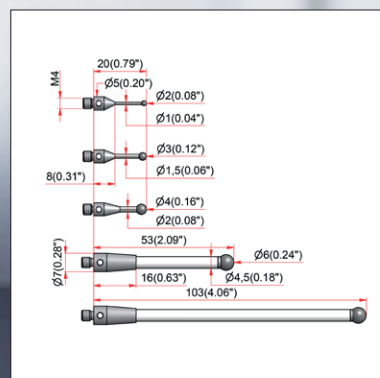
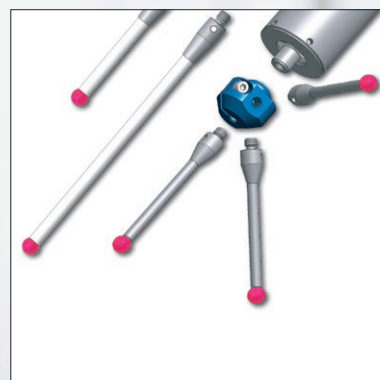


m&h STYLI AND ACCESSORIES

for workpiece and tool measurement



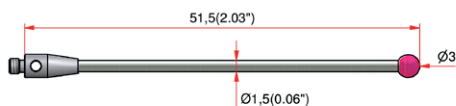
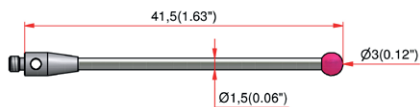
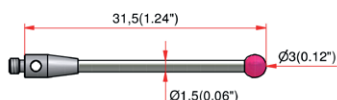
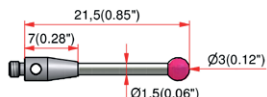
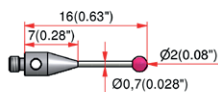
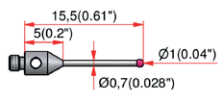
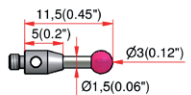
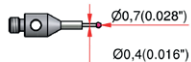
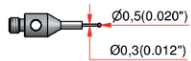
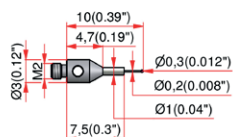


Styli and Accessories

m&h Inprocess Messtechnik GmbH is one of the leading companies in technologically advanced touch probe manufacture for machine tools. Touch probe systems made by m&h are renowned for their high quality standards and continuous innovation. m&h touch probes are being successfully used in many noted companies worldwide. For a variety of measuring tasks on the machine tool m&h offers a substantial range of high-grade styli and accessories. They are made of high-grade materials and distinguish themselves by easy handling.

M2 STYLI AND ACCESSORIES

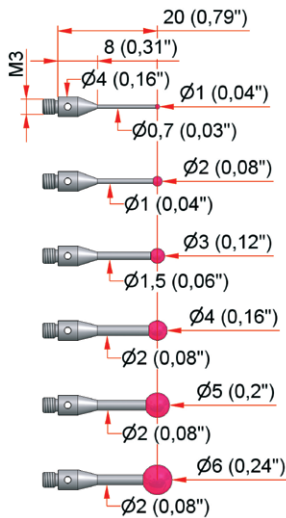
M2 - Styli with tungsten carbide shaft and ruby ball



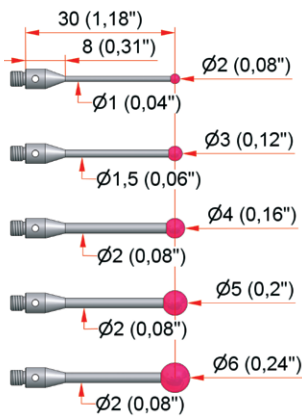
Length	Ball Ø	Weight	Part number
10 (0.39'')	0,3 (0.012'')	0,3 g	91.00-T10/0,3-HM-M2
10 (0.39'')	0,5 (0.020'')	0,3 g	91.00-T10/0,5-HM-M2
10 (0.39'')	0,7 (0.028'')	0,3 g	91.00-T10/0,7-HM-M2
11,5 (0.45'')	3 (0.12'')	0,7 g	91.00-T11,5/3-HM-M2
15,5 (0.61'')	1 (0.04'')	0,3 g	91.00-T15,5/1-HM-M2
16 (0.63'')	2 (0.08'')	0,4 g	91.00-T16/2-HM-M2
21,5 (0.85'')	3 (0.12'')	0,9 g	91.00-T21,5/3-HM-M2
31,5 (1.24'')	3 (0.12'')	1,1 g	91.00-T31,5/3-HM-M2
41,5 (1.63'')	3 (0.12'')	1,3 g	91.00-T41,5/3-HM-M2
51,5 (2.03'')	3 (0.12'')	1,6 g	91.00-T51,5/3-HM-M2

M3 STYLI AND ACCESSORIES

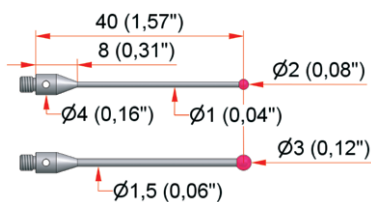
M3 - Styli with tungsten carbide shaft and ruby ball



Length	Ball Ø	Weight	Part number
20 (0.79")	1 (0.04")	0,7g	21.00-T20/1-HM-M3
20 (0.79")	2 (0.08")	0,7g	21.00-T20/2-HM-M3
20 (0.79")	3 (0.12")	1,1g	21.00-T20/3-HM-M3
20 (0.79")	4 (0.16")	1,6g	21.00-T20/4-HM-M3
20 (0.79")	5 (0.2")	1,7g	21.00-T20/5-HM-M3
20 (0.79")	6 (0.24")	1,9g	21.00-T20/6-HM-M3



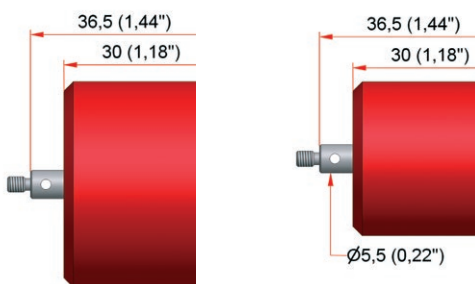
30 (1.18")	2 (0.08")	0,9g	21.00-T30/2-HM-M3
30 (1.18")	3 (0.12")	1,4g	21.00-T30/3-HM-M3
30 (1.18")	4 (0.16")	1,9g	21.00-T30/4-HM-M3
30 (1.18")	5 (0.2")	2,0g	21.00-T30/5-HM-M3
30 (1.18")	6 (0.24")	2,2g	21.00-T30/6-HM-M3



40 (1.57")	2 (0.08")	1,0g	21.00-T40/2-HM-M3
40 (1.57")	3 (0.12")	1,6g	21.00-T40/3-HM-M3

M3 - Cylindrical styli

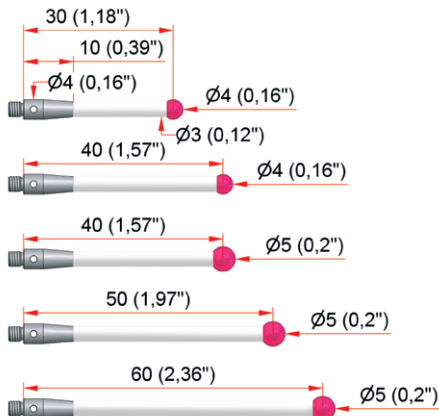
Material: Anodised aluminium



Length	Cylinder Ø	Weight	Part number
36,5 (1.44")	30 (1.18")	35 g	21.00-T36,5/30-M3
36,5 (1.44")	40 (1.57")	45 g	21.00-T36,5/40-M3

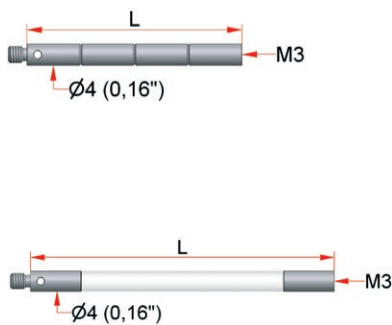
M3 STYLI AND ACCESSORIES

M3 - Stylus with ceramic shaft and ruby ball



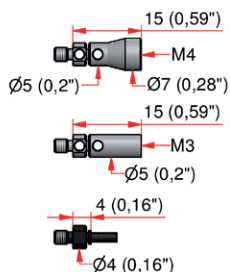
Length	Ball Ø	Weight	Part number
30 (1.18'')	4 (0.16'')	2,4g	21.00-T30/4-KE-M3
40 (1.57'')	4 (0.16'')	2,6 g	21.00-T40/4-KE-M3
40 (1.57'')	5 (0.2'')	3,1 g	21.00-T40/5-KE-M3
50 (1.97'')	5 (0.2'')	3,3 g	21.00-T50/5-KE-M3
60 (2.36'')	5 (0.2'')	3,5 g	21.00-T60/5-KE-M3

M3 - Stylus extensions



Length (L)	Material	Weight	Part number
10 (0.39'')	Stainl. steel	0,8 g	21.00-TV10-ST-M3
20 (0.79'')	Stainl. steel	1,5 g	21.00-TV20-ST-M3
30 (1.18'')	Stainl. steel	2,0 g	21.00-TV30-ST-M3
40 (1.57'')	Stainl. steel	2,4 g	21.00-TV40-ST-M3
40 (1.57'')	Ceramic	1,4 g	21.00-TV40-KE-M3
60 (2.36'')	Ceramic	1,8 g	21.00-TV60-KE-M3
100 (3.94'')	Ceramic	2,5 g	21.00-TV100-KE-M3

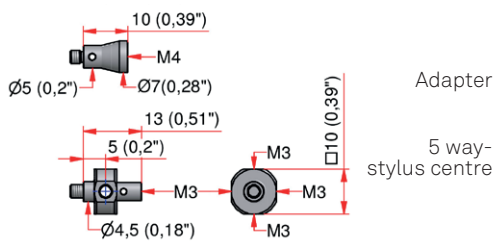
M3 - Stylus adapters with break shaft



Length	Thread	Weight	Part number
15 (0.59'')	M3/M4	1,5 g	91.00-S-M3/M4
15 (0.59'')	M3/M3	1,4 g	21.00-S-M3/M3
4 (0.16'')	M3	0,6 g	21.00-S-M3

M3 STYLI AND ACCESSORIES

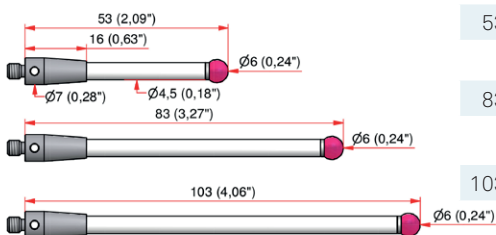
M3 - Accessories



Length	Thread	Weight	Part number
10 (0.39")	M3/M4	1,0 g	91.00-TA-M3/M4
13 (0.51")	M3	3,3 g	21.00-TK-M3

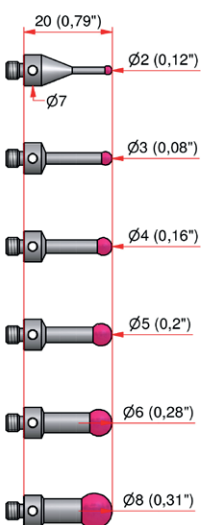
M4 STYLI AND ACCESSORIES

M4 - Styli with ceramic shaft and ruby ball



Length	Ball Ø	Weight	Part number
53 (2.09")	6 (0.24")	5,6 g	91.00-T53/6-KE-M4
83 (3.27")	6 (0.24")	7,0 g	91.00-T83/6-KE-M4
103 (4.06")	6 (0.24")	8,7 g	91.00-T103/6-KE-M4

M4 - Styli with stainless steel shaft and ruby ball

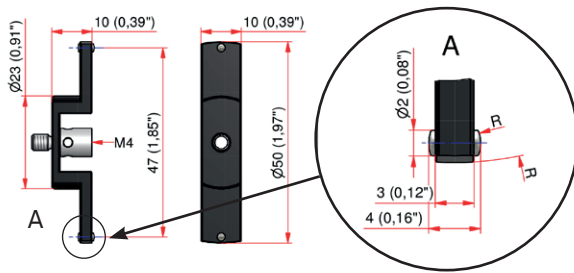


Length	Ball Ø	Weight	Part number
20 (0.79")	2 (0.12")	2,3 g	91.00-T20/2-ST-M4-D7
20 (0.79")	3 (0.08")	2,0 g	91.00-T20/3-ST-M4-D7
20 (0.79")	4 (0.16")	2,2 g	91.00-T20/4-ST-M4-D7
20 (0.79")	5 (0.2")	2,5 g	91.00-T20/5-ST-M4-D7
20 (0.79")	6 (0.28")	3,1 g	91.00-T20/6-ST-M4-D7
20 (0.79")	8 (0.31")	4,1 g	91.00-T20/8-ST-M4-D7

M4 STYLI AND ACCESSORIES

M4 - Disc styli (Ø50)

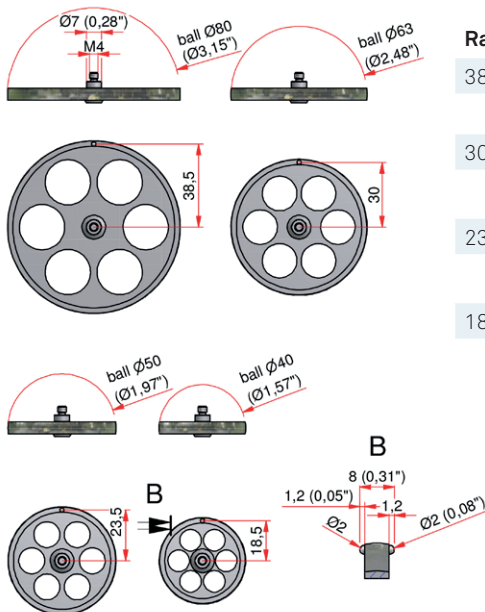
Material: Steel



Thread	Weight	Part number
M4/M4	16,1 g	91.00-TS-ST-M4
M4/M3	16,1 g	91.00-TS-ST-M4/M3

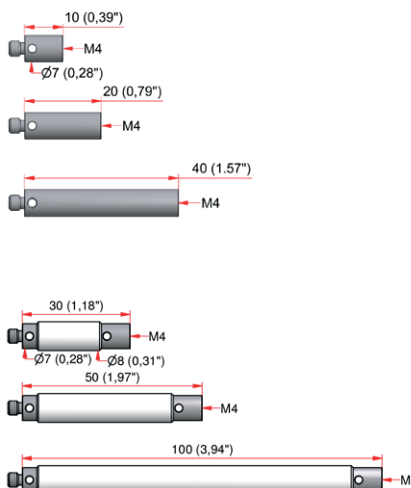
M4 - Ball Disc Styli

Material: Stainless steel



Radius	Ball Ø	Weight	Part number
38,5	80 (3.15")	67 g	91.00-TS80-ST-M4
30	63 (2.48")	11,9 g	91.00-TS63-ST-M4
23,5	50 (1.97")	34 g	91.00-TS50-ST-M4
18,5	40 (1.57")	24 g	91.00-TS40-ST-M4

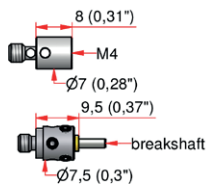
M4 - Stylus extensions



Length	Material	Weight	Part number
10 (0.39")	Stainl. steel	2,7 g	91.00-TV10-ST-M4-D7
20 (0.79")	Stainl. steel	5,2 g	91.00-TV20-ST-M4-D7
40 (1.57")	Stainl. steel	11,4 g	91.00-TV40-ST-M4-D7
30 (1.18")	Ceramic	6,7 g	91.00-TV30-KE-M4
50 (1.97")	Ceramic	8,9 g	91.00-TV50-KE-M4
100 (3.94")	Ceramic	13,8 g	91.00-TV100-KE-M4

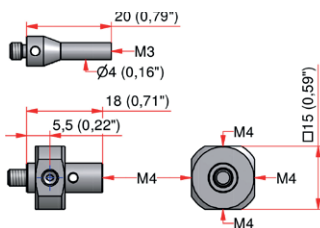
M4 STYLI AND ACCESSORIES

M4 - Stylus adapters with break shaft



Length	Thread	Weight	Part number
8 (0,31'')	M4/M4	1,9 g	91.00-S-M4/M4
9,5 (0,37'')	M4	3,3 g	91.00-S-M4

M4 - Accessories

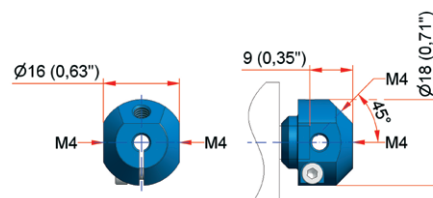


	Length	Thread	Weight	Part number
Adapter	20 (0,79'')	M4/M3	2,8 g	91.00-TA-M4/M3
5 Way-stylus centre	18 (0,71'')	M4	11,9 g	91.00-TK-ST-M4

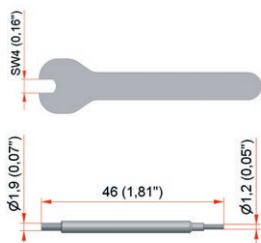
M4 - Clamp adapter (Ø7)



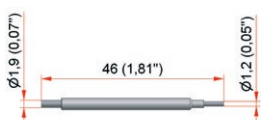
Thread	Weight	Part number
M4 (4x)	6,3 g	41.00-KM-M4



Mounting tools



Mounting tools	Thread	Part number
Spanner AF4mm	M3	#1665



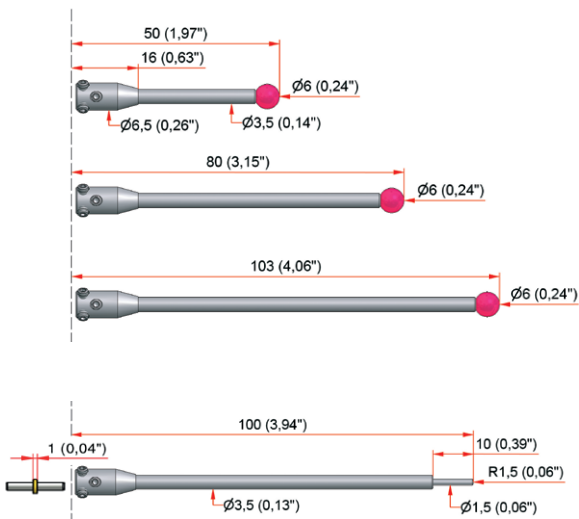
Mounting pin	M2/M3/M4	#0885
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Mounting tool for break shaft connections		
Hexagon key AF 1.3mm	Break shaft	#0227

STYLI AND ACCESSORIES WITH BREAK SHAFT CONNECTION

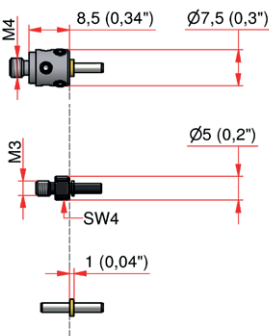
Styli with stainless steel shaft, ruby ball for workpiece measurement



Length	Ball Ø	Weight	Part number
50 (1.97'')	6 (0.24'')	5,7 g	91.00-T50/6
80 (3.15'')	6 (0.24'')	8,1 g	91.00-T80/6
103 (4.06'')	6 (0.24'')	9,8 g	91.00-T103/6

Length	Stylus tip Ø	
100 (3.94'')	1,5 (0.06'')	91.00-T100/R1,5
with Break shaft 91.00-S		

Break shaft adapters / Break shaft



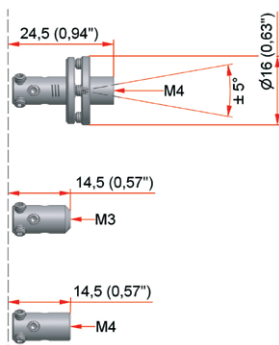
Adapter with break shaft

Adapter with break shaft

Break shaft

Length	Thread	Weight	Part number
8,5 (0.34'')	M4	3,3 g	91.00-S-M4
4 (0.16'')	M3	0,6 g	21.00-S-M3
		0,6 g	91.00-S

Accessories with break shaft connection



Indination adapter

Adapter

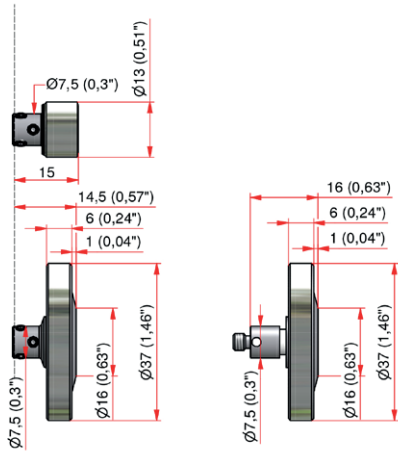
Adapter

Length	Thread	Weight	Part number
24,5 (0.94'')	M4	9,5 g	91.00-NA
14,5 (0.57'')	M3	2,6 g	91.00-TA-M3
14,5 (0.57'')	M4	2,7 g	91.00-TA-M4

STYLI AND ACCESSORIES FOR TOOL SETTING

Cylindrical styli of tungsten carbide with break shaft connection

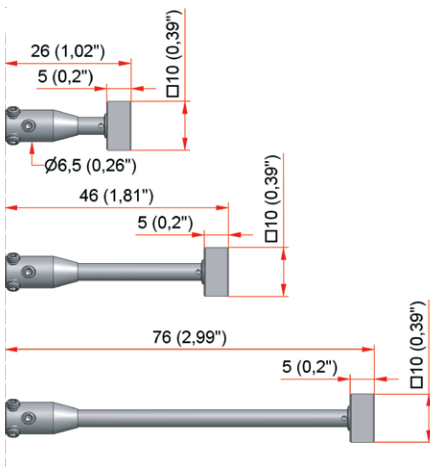
for measuring rotating tools



Length	Cylinder Ø	Weight	Part number
15 (0.59")	13 (0.51")	9,8 g	91.00-D13/24,5
14,5 (0.57")	37 (1.46")	40,0 g	35.10-D37/24
16 (0.63")	37 (1.46")	40,0 g	35.10-D37/16-M4

Square styli of tungsten carbide with break shaft connection

for measuring of non rotating tools

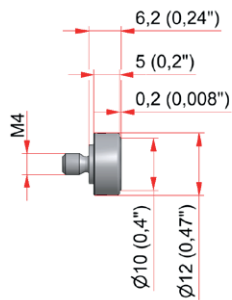


Length	Square	Weight	Part number
26 (1.02")	10x10x5	11,9 g	21.00-WM26
46 (1.81")	10x10x5	14,2 g	21.00-WM46
76 (2.99")	10x10x5	14,6 g	21.00-WM76

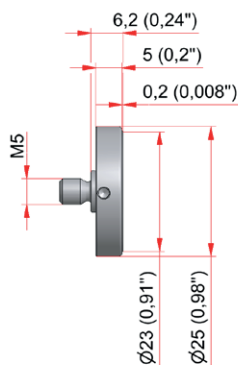
STYLI AND ACCESSORIES FOR TOOL SETTING

Cylindrical styli of tungsten carbide without break shaft connection

for measuring of non rotating tools

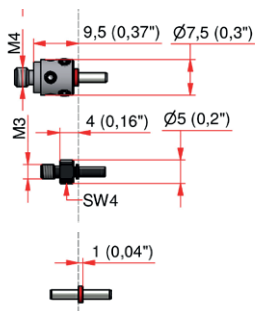


Anschluss	Length	Cylinder Ø	Weight	Part number
M4	15 (0.59'')	12 (0.47'')	5,4 g	35.35-D10



M5	14,5 (0.57'')	25 (0,98'')	24,8 g	35.30-D23
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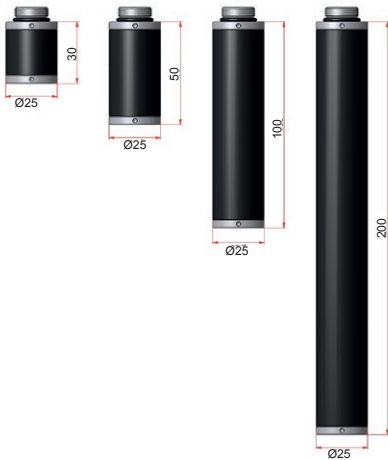
Break shaft adapters / Break shaft



	Length	Thread	Weight	Part number
Adapter with break shaft - High force	9,5 (0.37'')	M4	3,3 g	91.00-S-M4-HF
Adapter with break shaft	4 (0.16'')	M3	0,6 g	21.00-S-M3
Break shaft - High force			0,6 g	91.00-S-HF

MEASURING UNIT EXTENSIONS

Measuring unit extensions in carbon



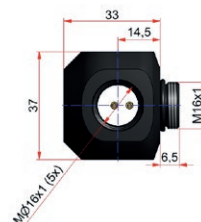
Length	Thread	Diameter Ø	Part number
30 (1.18")	M16x1	25 (0.98")	41.00-VE30
50 (1.97")	M16x1	25 (0.98")	41.00-VE50
100 (3.94")	M16x1	25 (0.98")	41.00-VE100
200 (7.87")	M16x1	25 (0.98")	41.00-VE200

Cross adapter

screwed up to 5 production probes

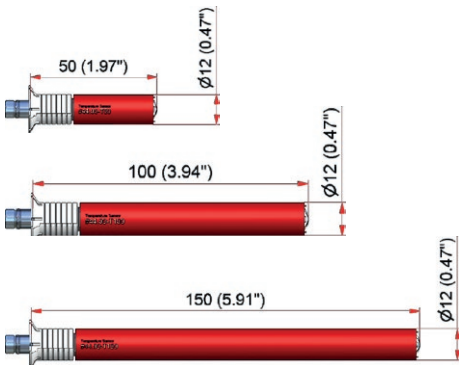


Description	Thread	Part number
Cross adapter with Screw plugs (4x)	M 16x1	41.00-KA
Screw plug	M 16x1	41.00-KA-V



TEMPERATURE SENSORS

Temperature Sensors



Length	Diameter Ø	Part number
50 (1.97")	12 (0.47")	44.00-T50
100 (3.94")	12 (0.47")	44.00-T100
150 (5.91")	12 (0.47")	44.00-T150

PROBE-EXTENSIONS

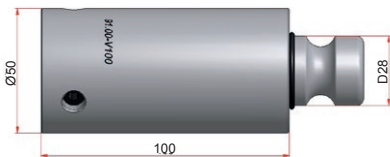
Probe-Extensions in stainless steel



Length	Thread	Diameter Ø	Part number
50 (1.97")	D28	50 (1.97")	91.00-V50



75 (2.96")	D28	50 (1.97")	91.00-V75
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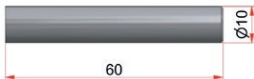


100 (3.94")	D28	50 (1.97")	91.00-V100
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CALIBRATION EQUIPMENT

Calibration pin for Tool Setters

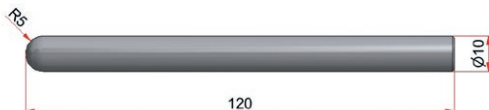
high-alloy stainless steel; hardened



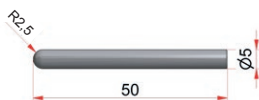
Length	Diameter Ø	Part number
60 (2.36")	10 (0.39")	35.20-CP

Calibration Pins for Laser Tool Setters

high-alloy stainless steel; hardened



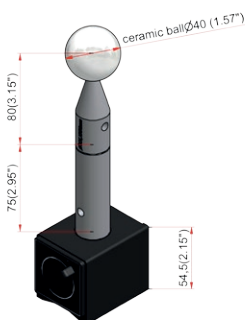
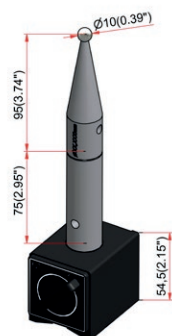
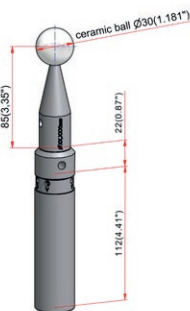
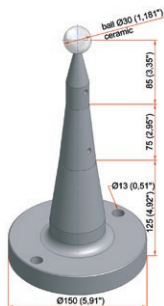
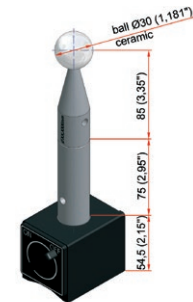
Length	Diameter Ø	Part number
120 (4.72")	10 (0.39")	#4286



50 (1.97")	5 (0.19")	#5209
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CALIBRATION EQUIPMENT

Calibration Ball Sets



Description

Part number

Calibration Ball SET 1

3D-FI EICHKUGEL SET 1

Magnetic base for calibration ball

Extension (75mm/2.95") for magnetic base

Calibration ball D=30mm (1.18"), L=100mm (3.9")

Measurement certificate for ball diameter

Mounting pin D6x80

Storage box

Calibration Ball SET 2

3D-FI EICHKUGEL SET 2

Calibration Ball SET 1

Calibration stand L=125mm (4.92")

Extension (75mm/2.95") for calibration stand

Plastic case

Calibration Ball SET 3

3D-FI EICHKUGEL SET 3

Calibration Ball SET 1

Cylindrical shaft with adapter L=134mm (5.28")

Calibration Ball SET 4

3D-FI EICHKUGEL SET 4

Magnetic base for calibration ball

Extension (75mm/2.95") for magnetic base

Calibration ball D=10mm (0.39"), L=100mm (3.9")

Measurement certificate for ball diameter

Mounting pin D6x80

Storage box

Calibration Ball SET 5

3D-FI EICHKUGEL SET 5

Magnetic base for calibration ball

Extension (75mm/2.95") for magnetic base

Calibration ball D=40mm (1.57"), L=100mm (3.9")

Measurement certificate for ball diameter

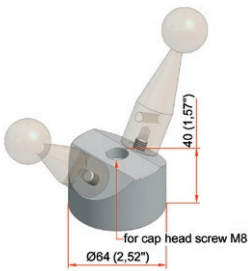
Mounting pin D6x80

Storage box

CALIBRATION EQUIPMENT

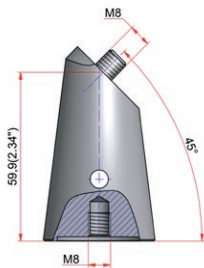
Support base for calibration balls

Delivered without balls.



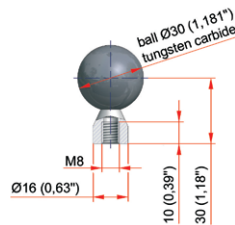
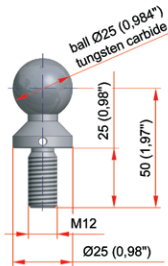
Base Ø	Base height	Angle	Part number
64 (2.52")	40 (1.57")	45° und 60°	3D-FI SUPPORT BASE

Extension for Calibration Ball Set 2



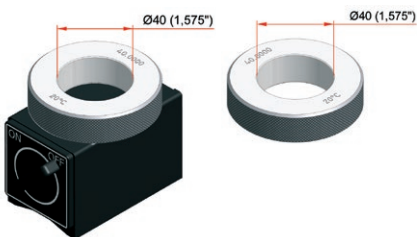
Base height	Angle	Thread	Part number
59,9 (2.34")	45°	M8	3D-FI EXTENSION 45

Calibration balls of tungsten carbide



Ball Ø	Thread	Part number
25 (0.98")	M12 (External thread)	#2675
30 (1.18")	M8 (Internal thread)	#3468

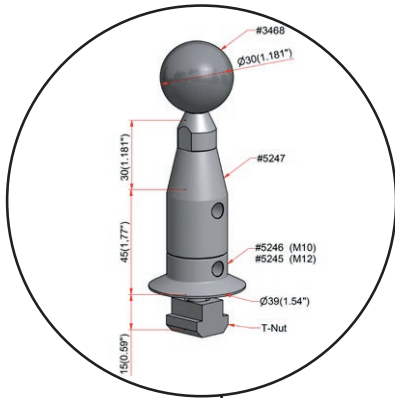
Calibration Rings



Ring Ø	Base height	Part number
40 (1.575")	55 (2.17")	91.00-CR-M
40 (1.575")		91.00-CR

CALIBRATION EQUIPMENT

Calibration Sets for T-Nuts



Description

Calibrierset for T-Nut 12mm
 Calibration ball Ø30mm (1.18") #3468
 Mounting pin #5250
 Storage box #5251

T-Nut

12mm (0.47")

Part number

CALIBRATION SET 12

Description

Calibrierset for T-Nut 14mm
 Calibration ball Ø30mm (1.18") #3468
 Mounting pin #5250
 Storage box #5251

T-Nut

14mm (0.55")

Part number

CALIBRATION SET 14

Description

Calibrierset for T-Nut 18mm
 Calibration ball Ø30mm (1.18") #3468
 Mounting pin #5250
 Storage box #5251

T-Nut

18mm (0.70")

Part number

CALIBRATION SET 18

Description

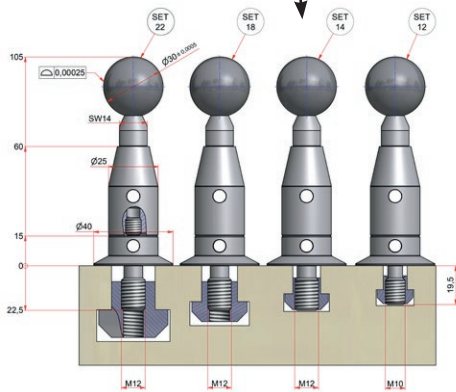
Calibrierset for T-Nut 22mm
 Calibration ball Ø30mm (1.18") #3468
 Mounting pin #5250
 Storage box #5251

T-Nut

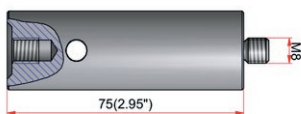
22mm (0.86")

Part number

CALIBRATION SET 22



Extension for T-Nut Calibration Sets 12/14/18/22



Length

75 (2.75")

Diameter Ø

25 (0.98")

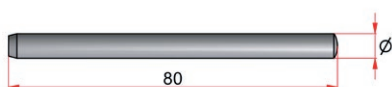
Thread

M8

Part number

#5248

Accessories for T-Nut Calibration Sets



Description

Mounting Pin D6x80

Part number

#5250

The sizes of the illustrations do not correspond to the original sizes. Subject to technical alternation without prior notice.

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Used worldwide

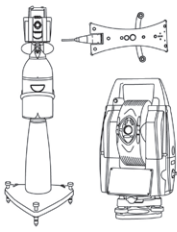
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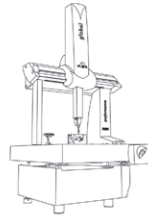
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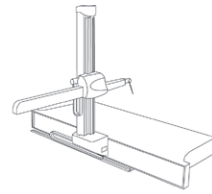
LASER TRACKERS
& STATIONS



PORTABLE MEASURING ARMS



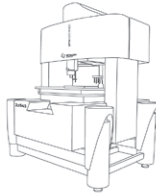
BRIDGE CMMs



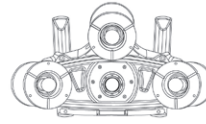
HORIZONTAL ARM CMMs



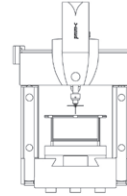
GANTRY CMMs



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