

Manipulators

MAN-01-1x series

Multi role manipulator

Product codes

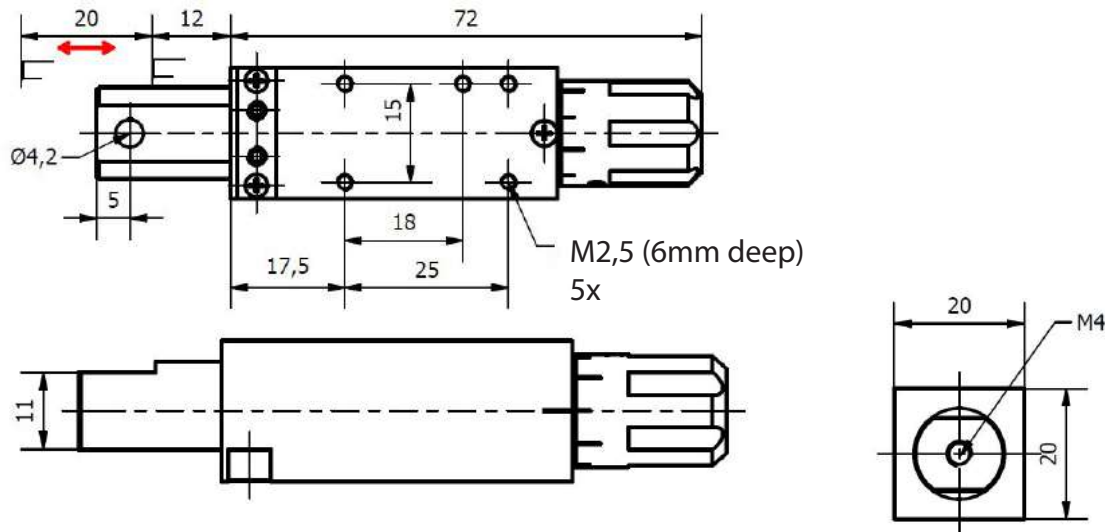
Multi role manipulator

- with 1mm/ turn **MAN-01-11**
- with 0,5mm/ turn **MAN-01-12**
- (with 0,25mm/ turn **MAN-01-13**)

Material of body: Anodized aluminium (black)

Material of shaft: Stainless steel

(Dimension: see drawings)

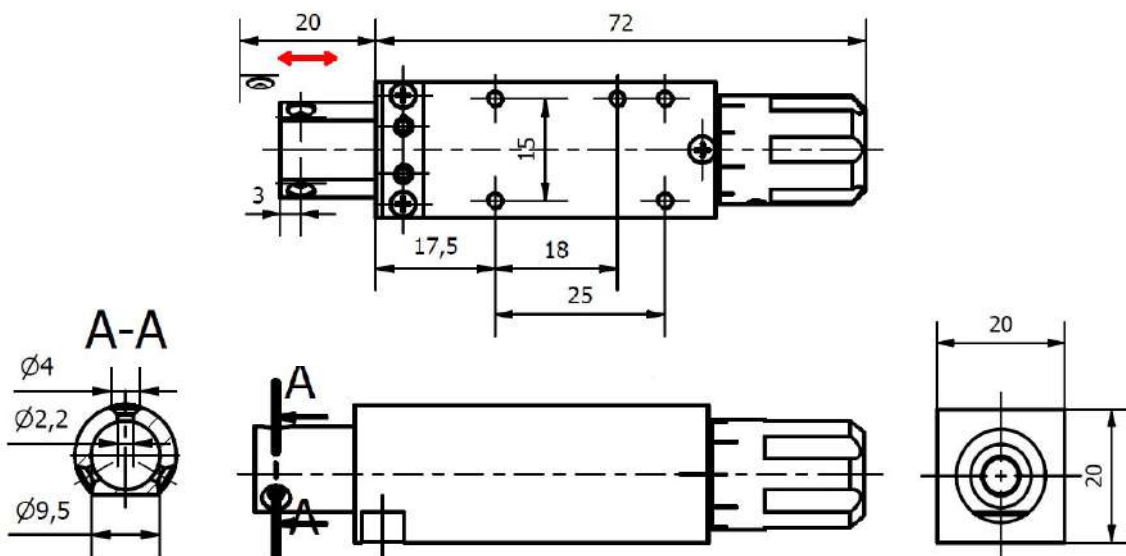


Basic manipulator

Product codes

Basic manipulator (?)

- with 1mm/ turn **MAN-01-14**
- with 0,5mm/ turn **MAN-01-15**
- (with 0,25mm/ turn **MAN-01-16**)



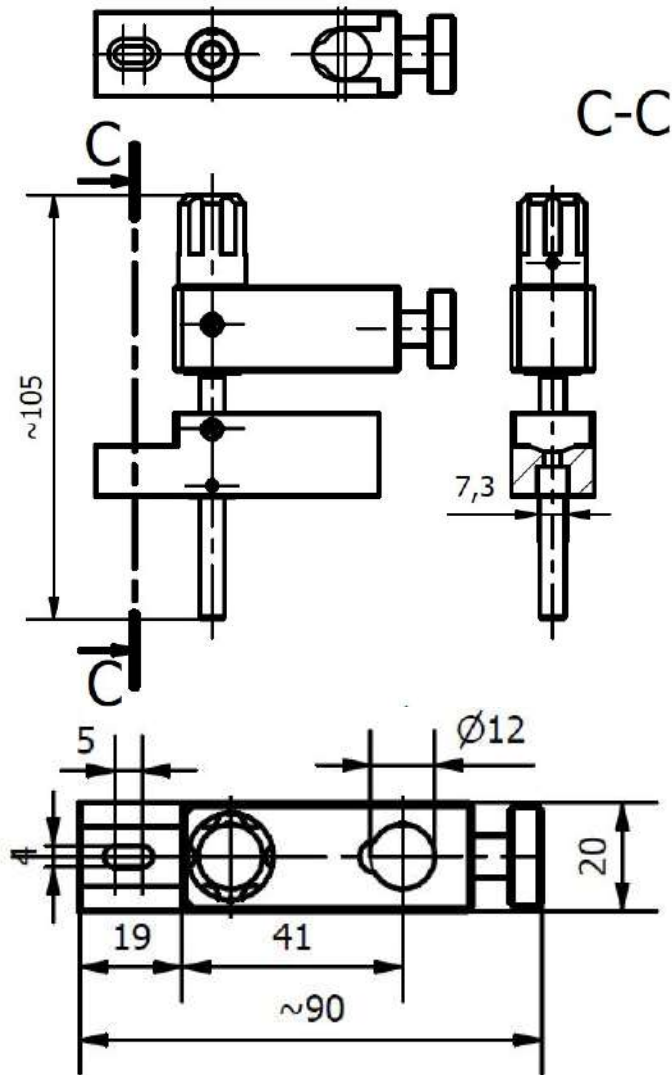
Manipulators

MAN-08

Simple manipulator

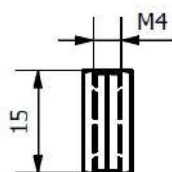
Product codes

MAN-08-01

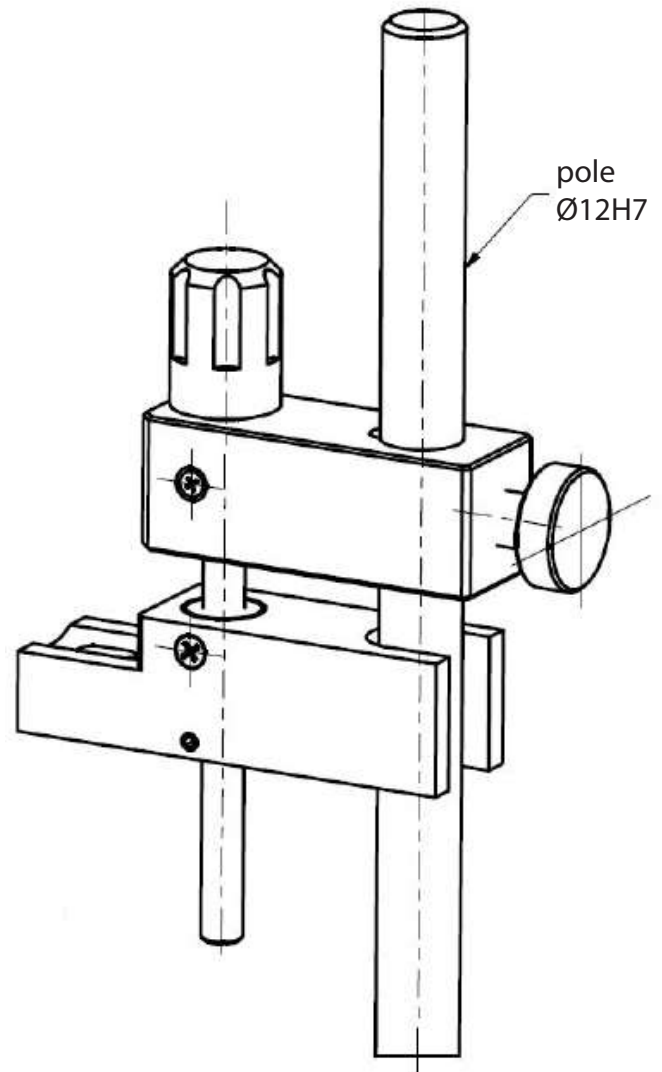


Special high nut

MAN-01-93

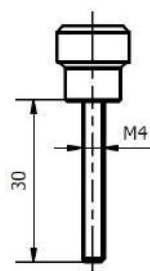


Material of body: Anodized aluminium (black)
Material of shaft: Stainless steel
The operation length: ~25mm
Mountable to $\text{Ø}12\text{H}7$ diameter pole
The thread: 1mm/turn
(The other dimension: see drawings)



Special screw for fixing
SEN-03 family force transducer

MAN-01-94



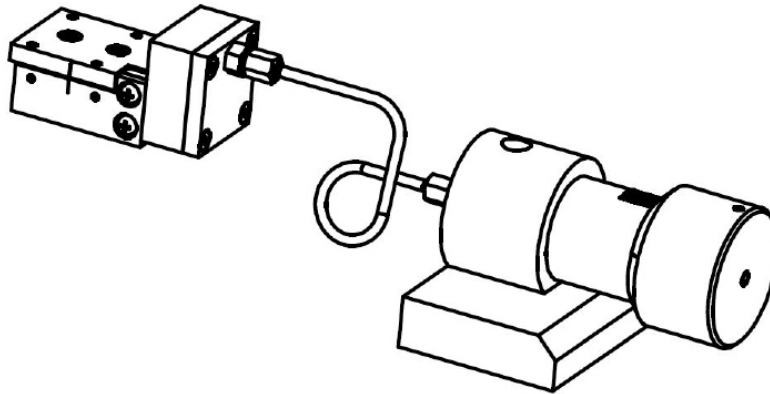
Water hydraulic micromanipulator

MAN-07

Material of body: Anodized aluminium (black)
Material of shaft: Stainless steel
(The dimension: see drawings)

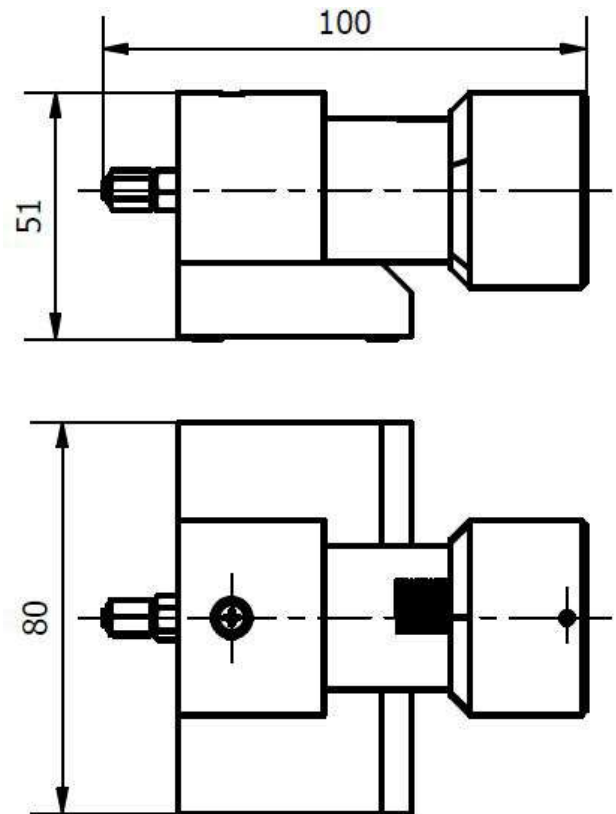
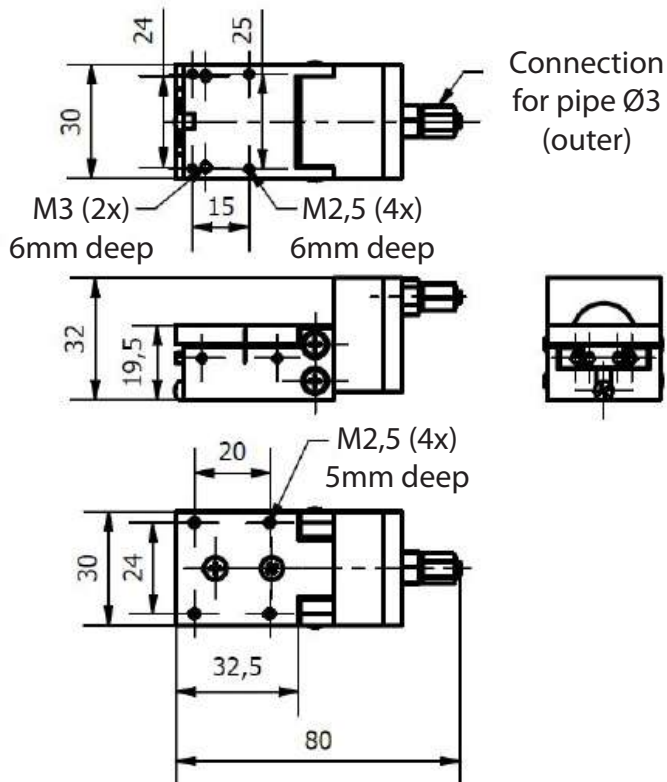
Product codes

MAN-07-02



(MAN-07-14)

(MAN-07-12)



Magnetic stand

MAN-06

MAN-06-04

Basic magnetic stand

Product codes

Magnetic stand with vertical pole, only

L1=50 **MAN-06-04**

L1=150 **MAN-06-05**

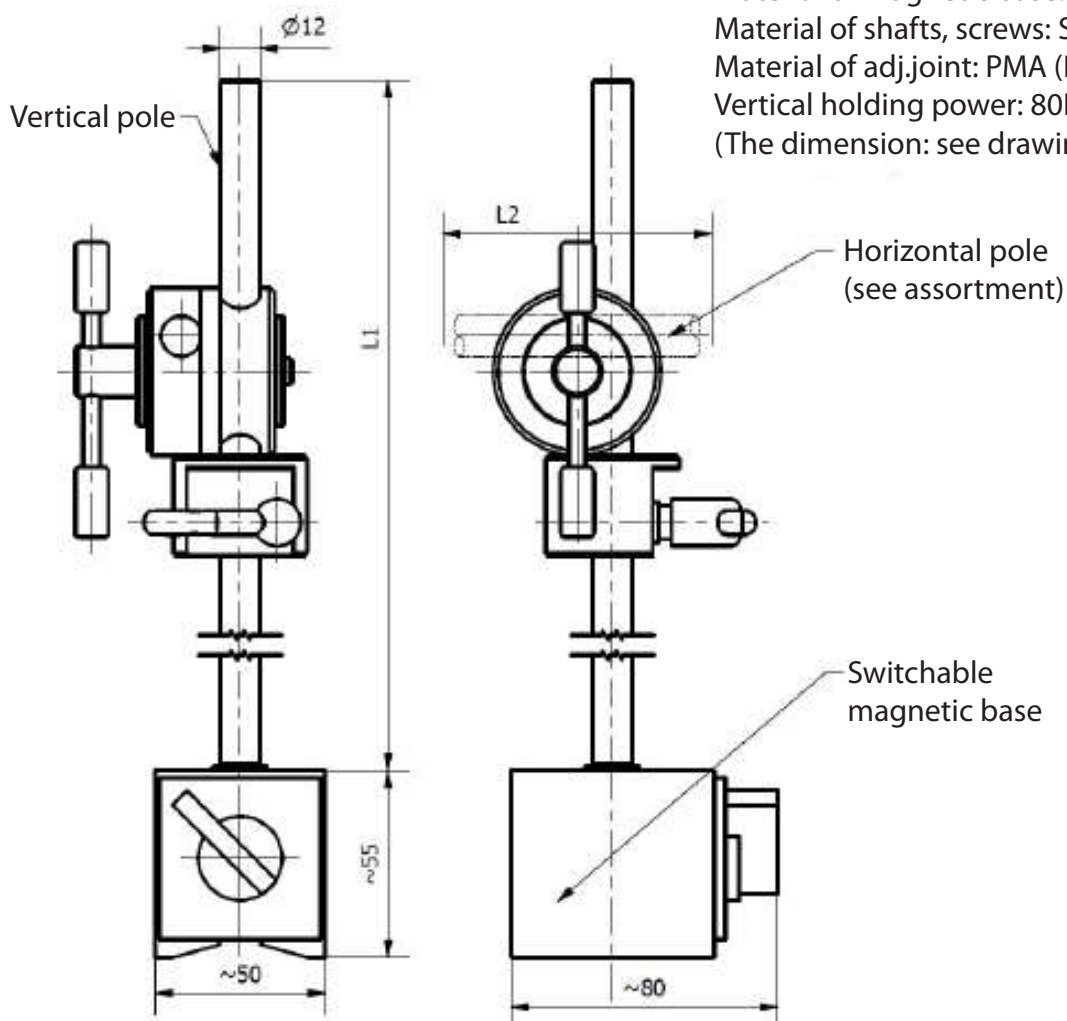
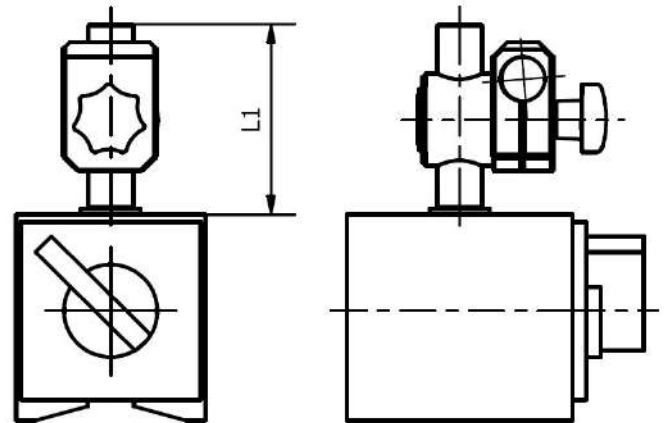
L1=250 **MAN-06-06**

Magnetic stand with vertical and horizontal pole

L1= 50 & L2=150 **MAN-06-11**

L1=150 & L2=150 **MAN-06-12**

L1=250 & L2=250 **MAN-06-13**



Material of magnetic base: painted steel
Material of shafts, screws: Stainless steel
Material of adj.joint: PMA (Polyamid, black)
Vertical holding power: 80N
(The dimension: see drawings)

Magnetic stand

MAN-06

Horizontal pole assortment Product

Product codes

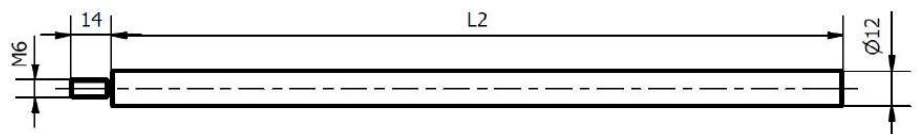
Simple pole for magnetic stand

L2=100 **MAN-06-31**

L2=150 **MAN-06-32**

L2=250 **MAN-06-33**

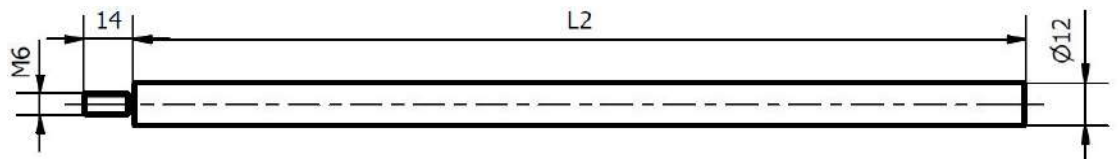
Material of shafts, screws: Stainless steel
(The dimension: see drawings)



Pole for ball mounted manipulator

L2=150 **MAN-06-34**

L2=250 **MAN-06-35**

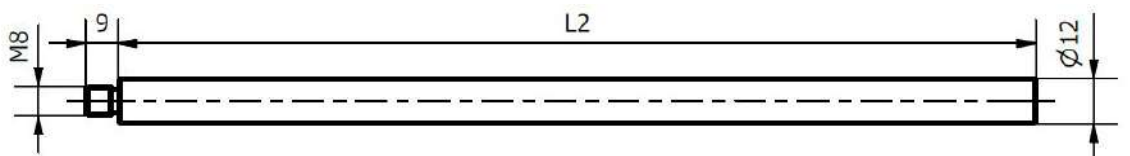


Pole with M8 threaded end

L2=50 **MAN-06-36**

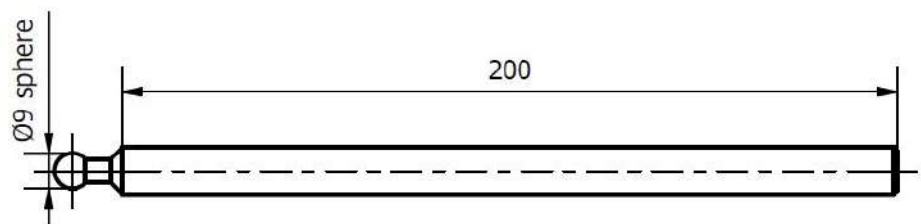
L2=150 **MAN-06-37**

L2=250 **MAN-06-38**



Pole with Ø9 ball end

MAN-06-39



Magnetic stand

MAN-06

Joints

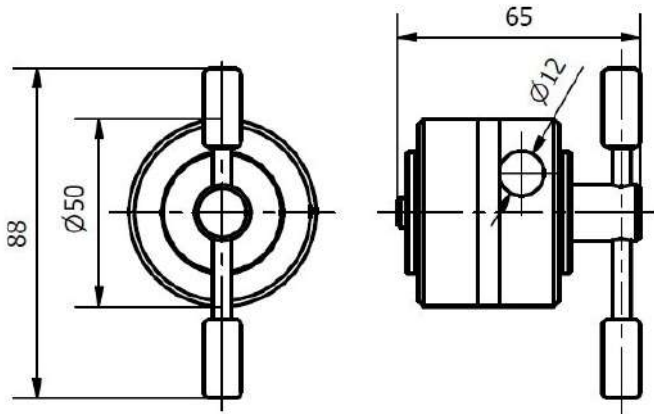
Product codes

Big joint

MAN-06-91

Material of bracket: PMA (polyamid, black)

Material of shafts, screws, washers: Stainless steel
(The dimension: see drawings)

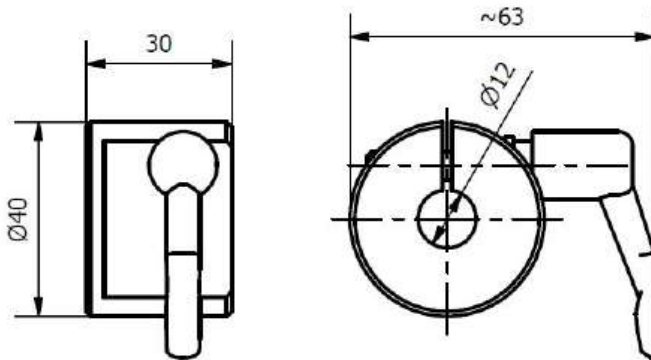


Joint supporter

MAN-06-92

Material of body: PMA (polyamid, black)

(The dimension: see drawings)



Small joint

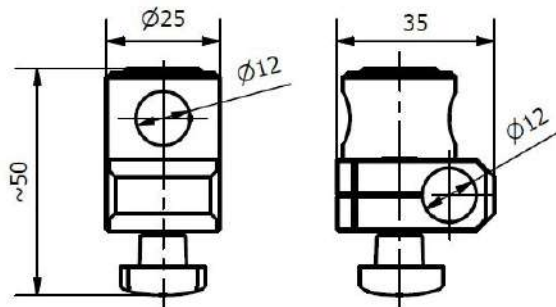
MAN-06-93

Used material: PMA (polyamid, black)

Anodised aluminium (black)

Stainless steel

(The dimension: see drawings)



Construction elements

For MAN-06 and MAN-01-1x series manipulators

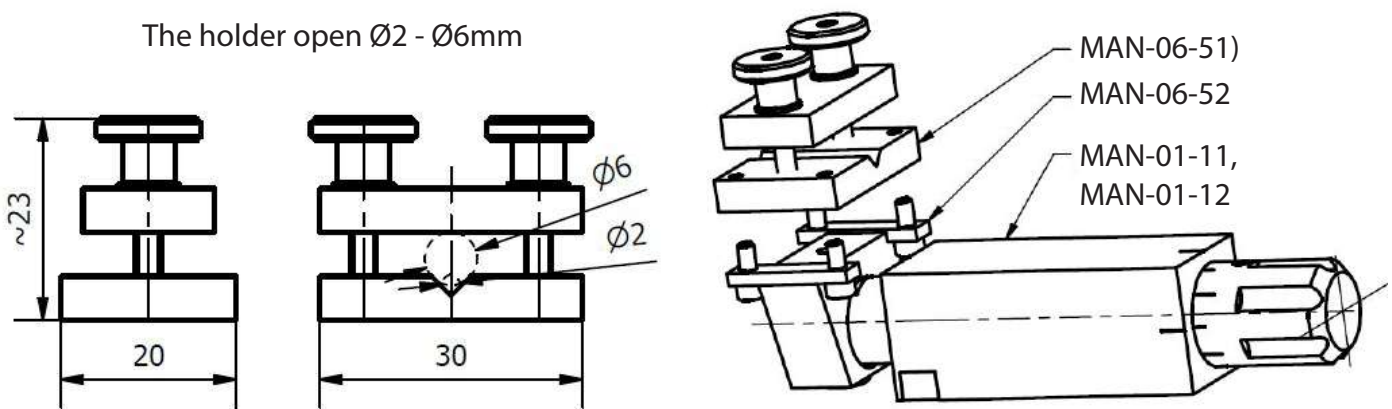
Tool holder Product codes

Material of body: anodized aluminium (black)
Material of shafts, screws: stainless steel
Material of turn knob: Stainless steel
or chromium-plated brass

MAN-06-51

(The dimension: see drawings)

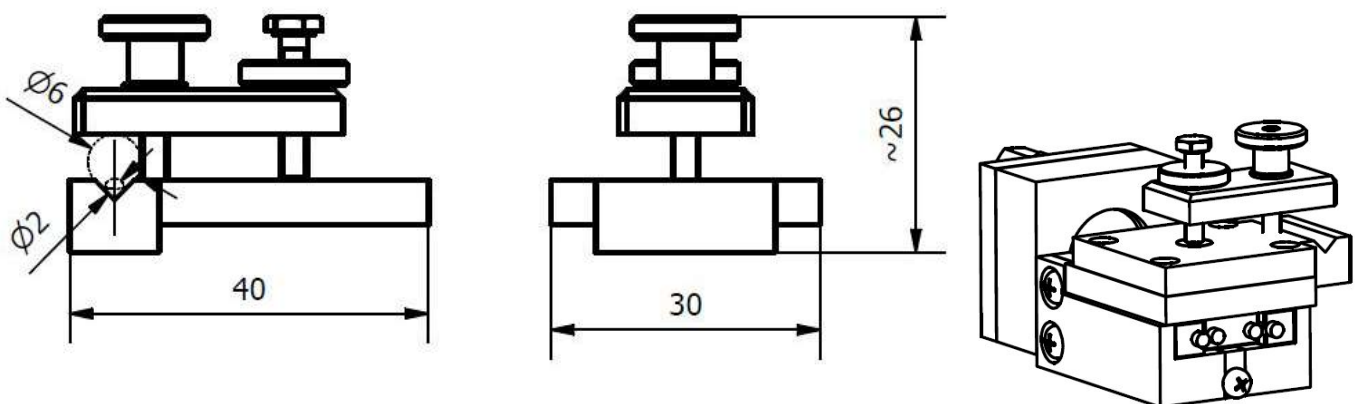
The holder open $\varnothing 2 - \varnothing 6\text{mm}$



MAN-06-56

Tool holders for micromanipulator (MAN-07)
(Accessories: 4pcs M2,5x6 ISO 4762)

The holder open $\varnothing 2 - \varnothing 6\text{mm}$



Construction elements

For MAN-06 and MAN-01-1x series manipulators

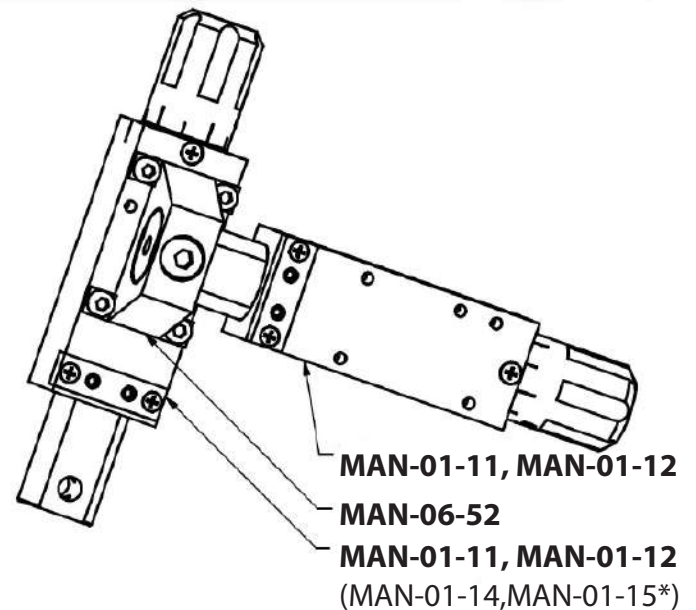
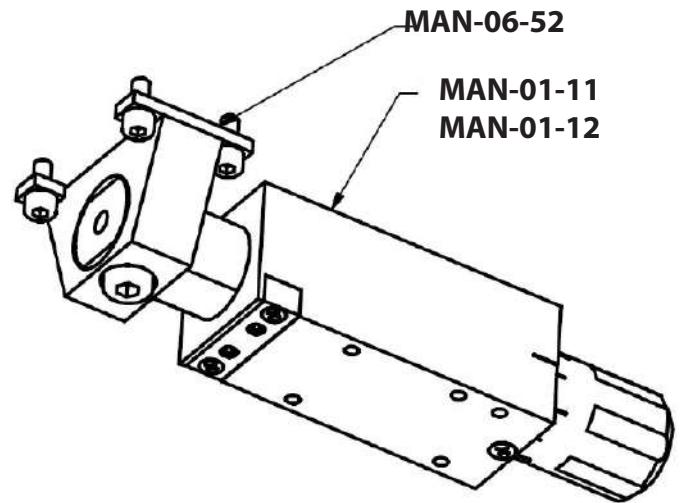
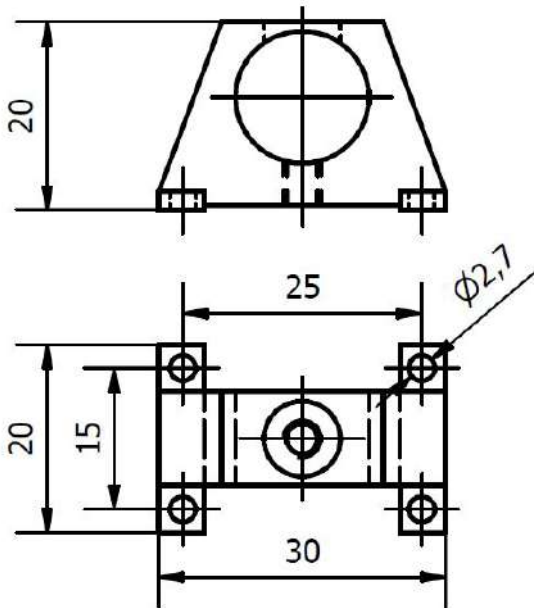
Adaptor for manipulator

Product code:

Material of body: anodized aluminium (black)
Material of shafts, screws: stainless steel
(The dimension: see drawings)

MAN-06-52

Adaptor for connecting tool holder, mounting plate or a second manipulator in 90° direction to manipulator
(Accessories: 4pcs M2,5x6 ISO 4762, 1pc M4x16 ISO 4762)



* As a last part, if you use the related adaptor for MAN-01-14, MAN-01-15.

Construction elements

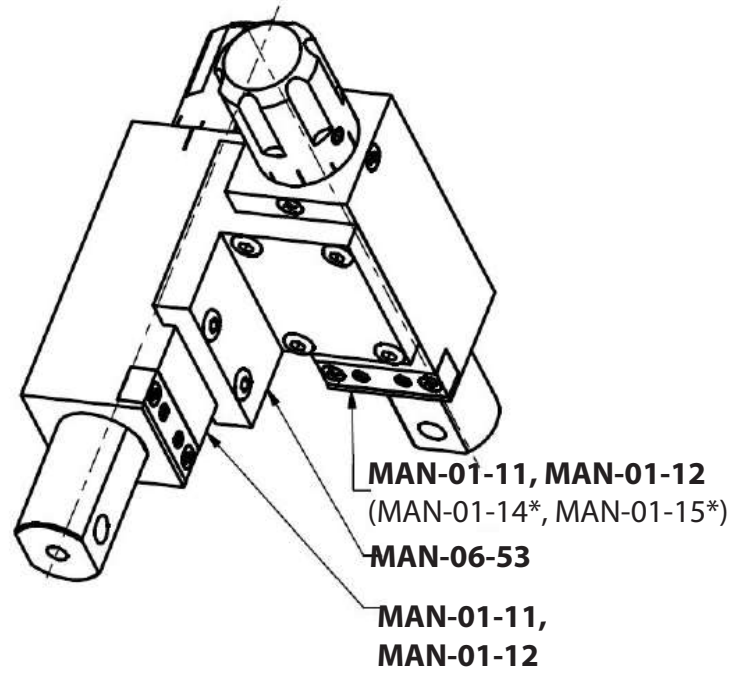
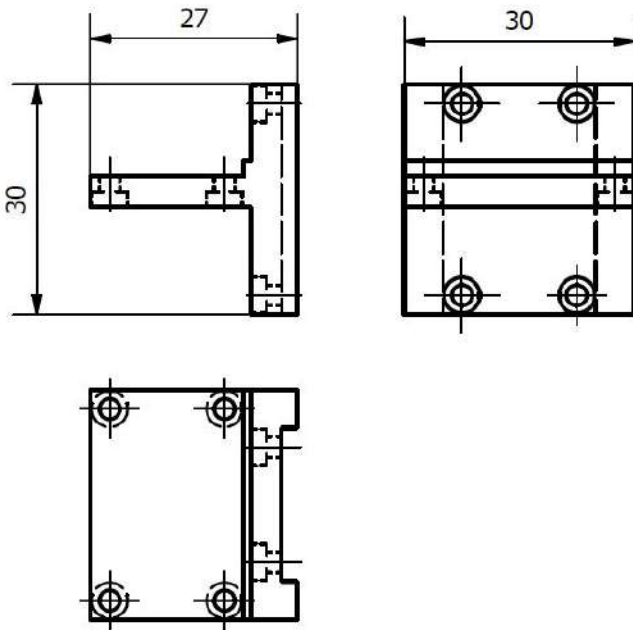
For MAN-06 and MAN-01-1x series manipulators

Product code:

Material of body: anodized aluminium (black)
Material of shafts, screws: stainless steel
(The dimension: see drawings)

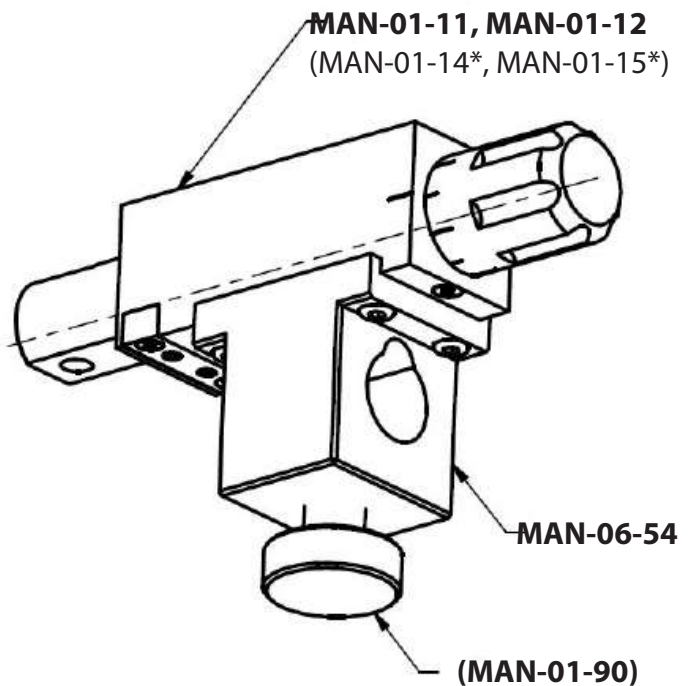
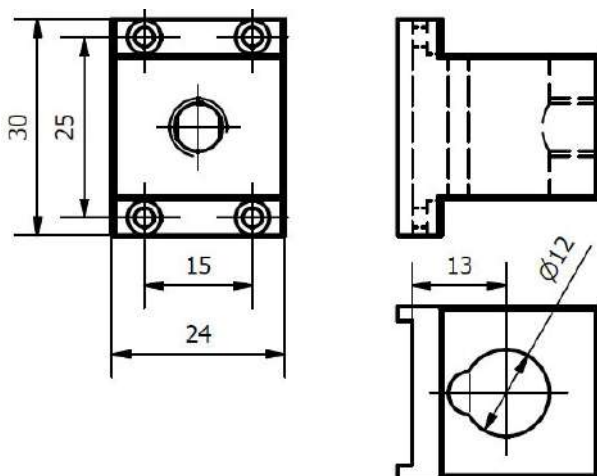
MAN-06-53

Adator for two manipulator connected in 90°
(Accessories: 8pcs M2,5x6 ISO 4762)



MAN-06-54

Adator connecting manipulator to pole
(Accessories: 4pcs M2,5x6 ISO 4762,
1pc fixing screw, product code: MAN-01-90)



* As a last part, if you use the related adaptor for MAN-01-14, MAN-01-15.

Construction elements

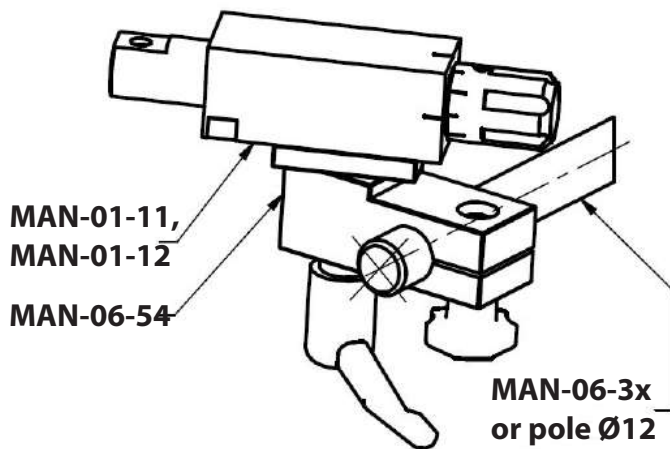
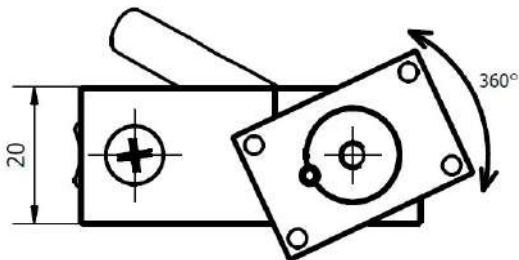
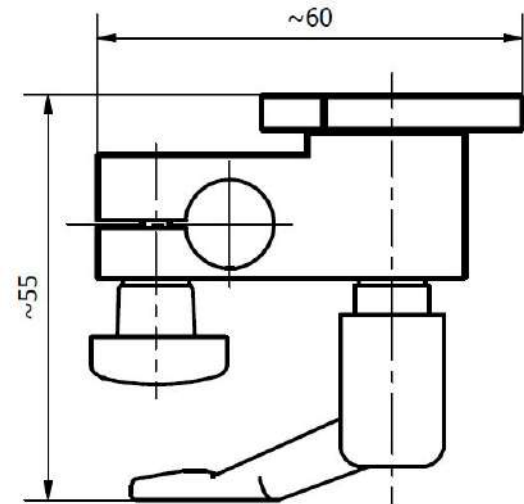
For MAN-06 and MAN-01-1x series manipulators

Product code:

Material of body: anodized aluminium (black)
 Material of shafts, screws: stainless steel
 (The dimension: see drawings)

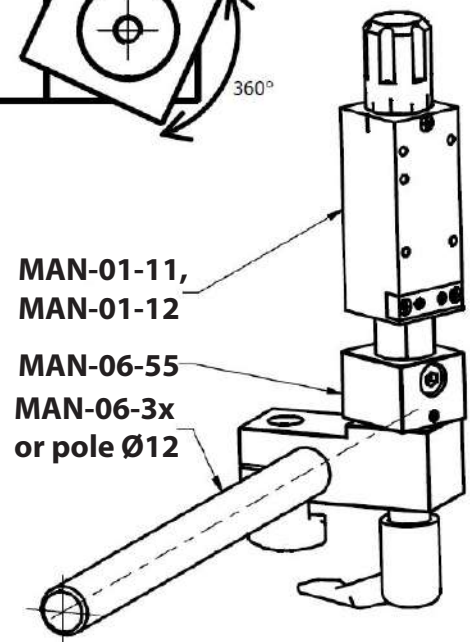
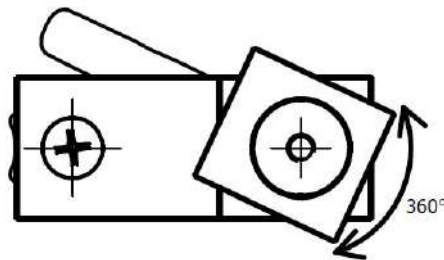
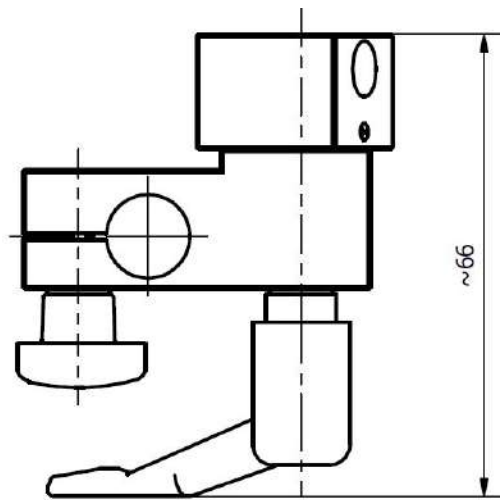
MAN-06-54

Turnable adator for mounting the manipulator to magnetic stand pole(Accessories for MAN-09-04: 4pcs M2,5x6 ISO 4762,



MAN-06-55

for MAN-09-05: 1pc M4x16 ISO 4762)



Construction elements

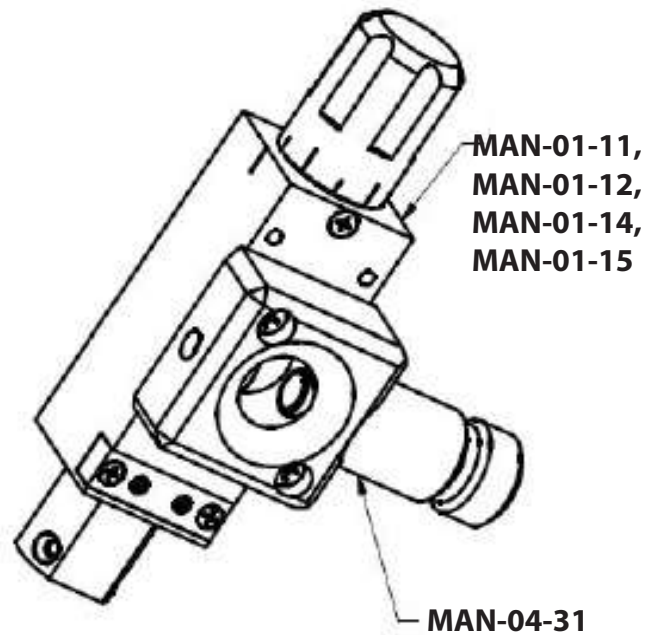
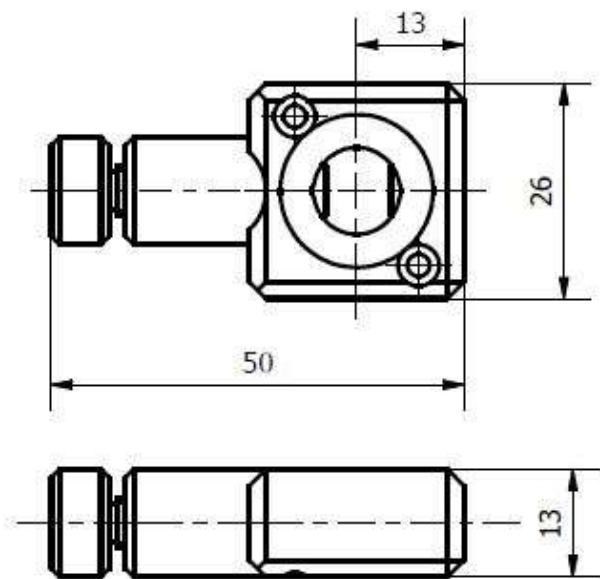
For ball mount constructions

Product code:

Material of body: POM (polyamid, black)
 Material of shafts, screws: stainless steel
 (The dimension: see drawings)

MAN-04-31

Adaptor for receiving ball-ended pole (MAN-06-39) Its adaptor can be mounted on right hand or left hand positions.
 (Accessories for: 2pcs M2,5x16 ISO 4762)



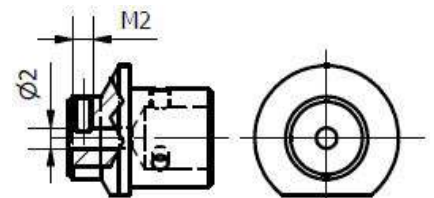
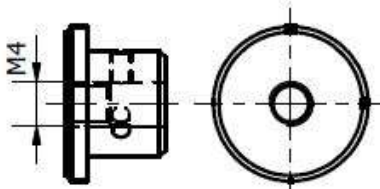
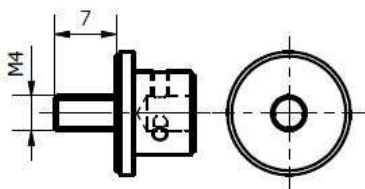
Adaptor for MAN-01-14, MAN-01-15 manipulators

(Accessories: 3pcs M2x5 ISO 7046 for all, and for MAN-04-35 1pc M2x3 DIN 916 ?)

pin with M4 thread
MAN-04-32

hole with M4 thread
MAN-04-33

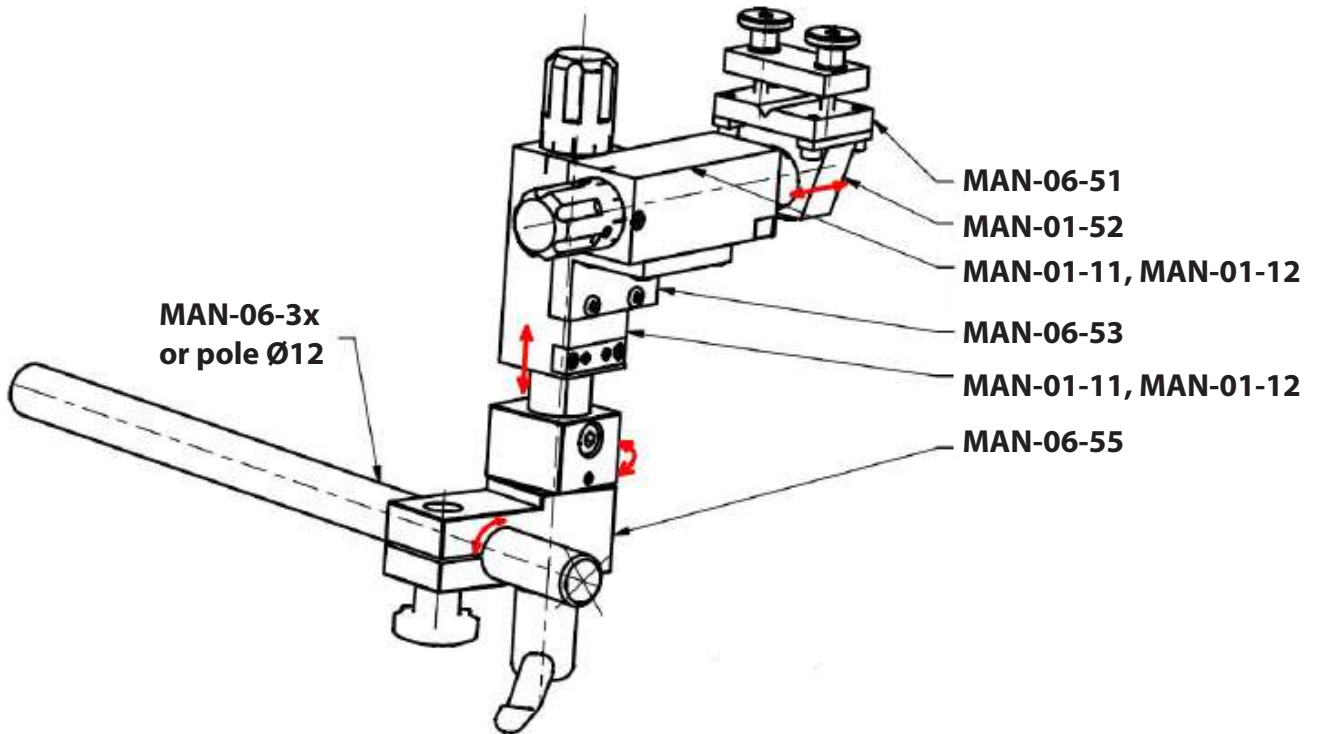
hole with $\varnothing 2$ end fixing screw
MAN-04-35



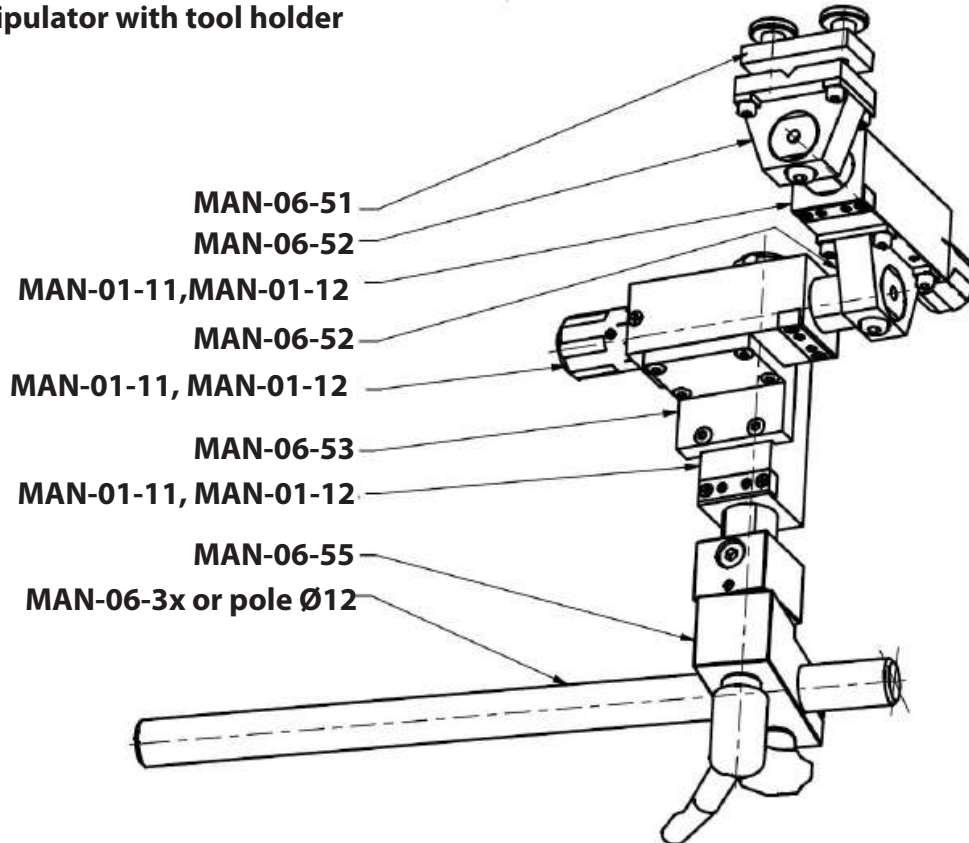
Examples

For MAN-06 and MAN-01-1x series manipulators

2D manipulator with tool holder

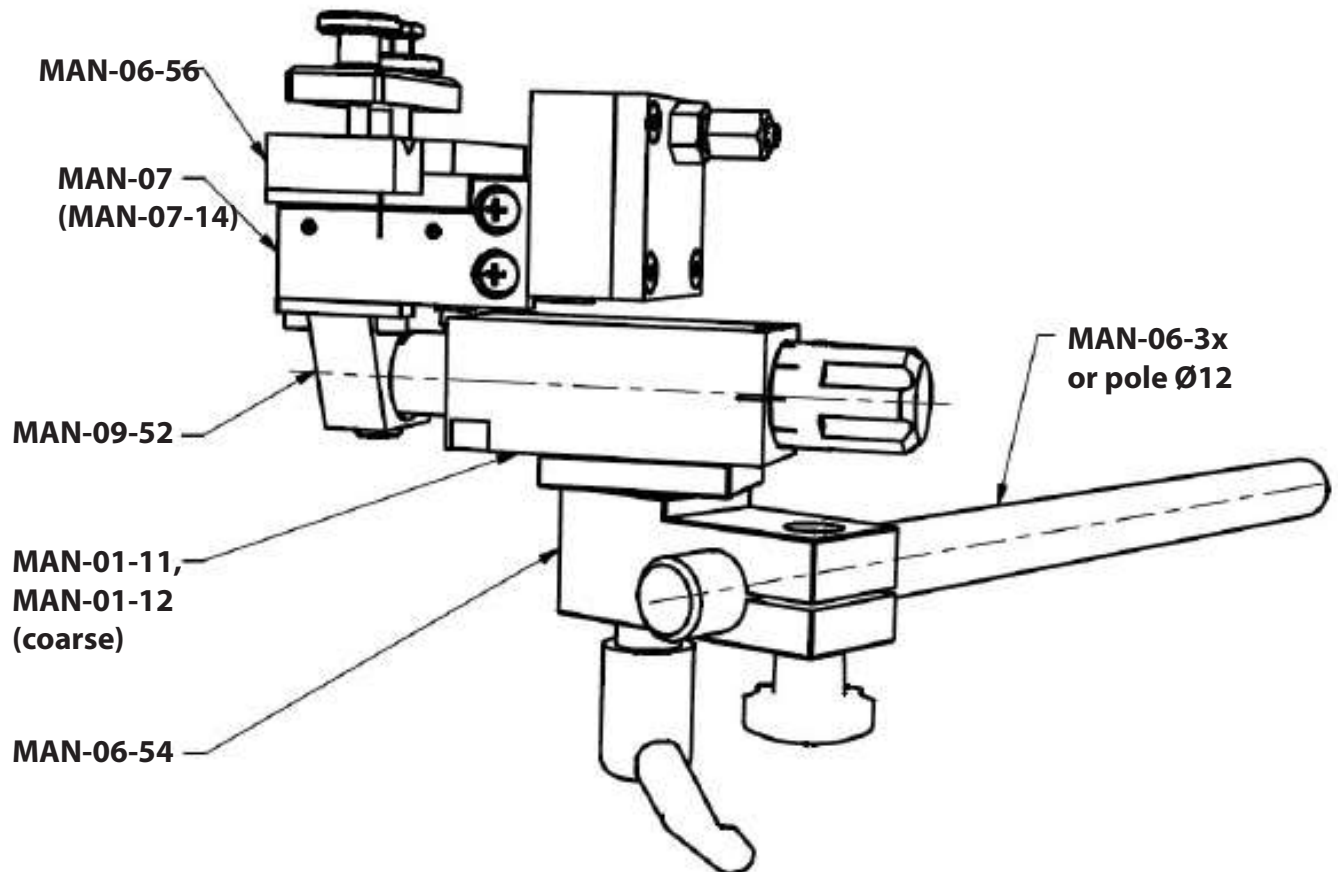


3D manipulator with tool holder



Examples

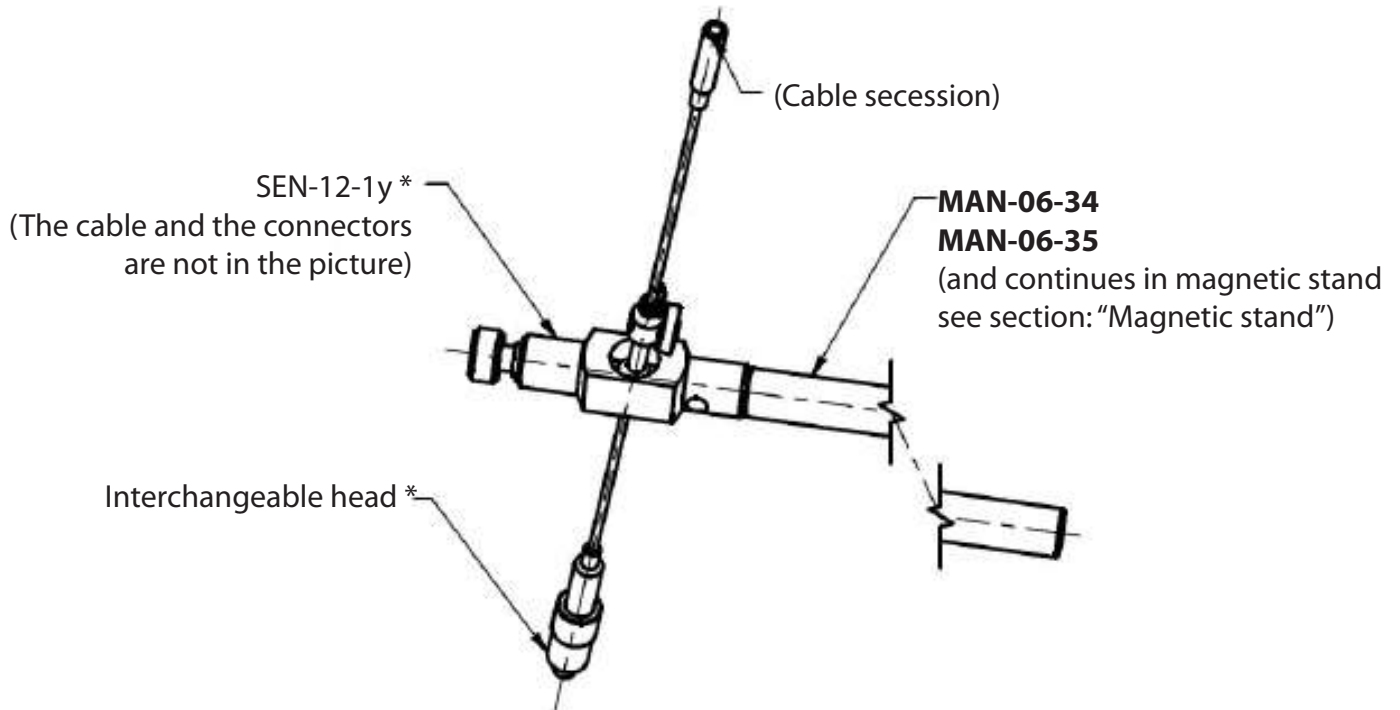
Micromanipulator with tool holder built on to the coarse manipulator with turnable adaptor



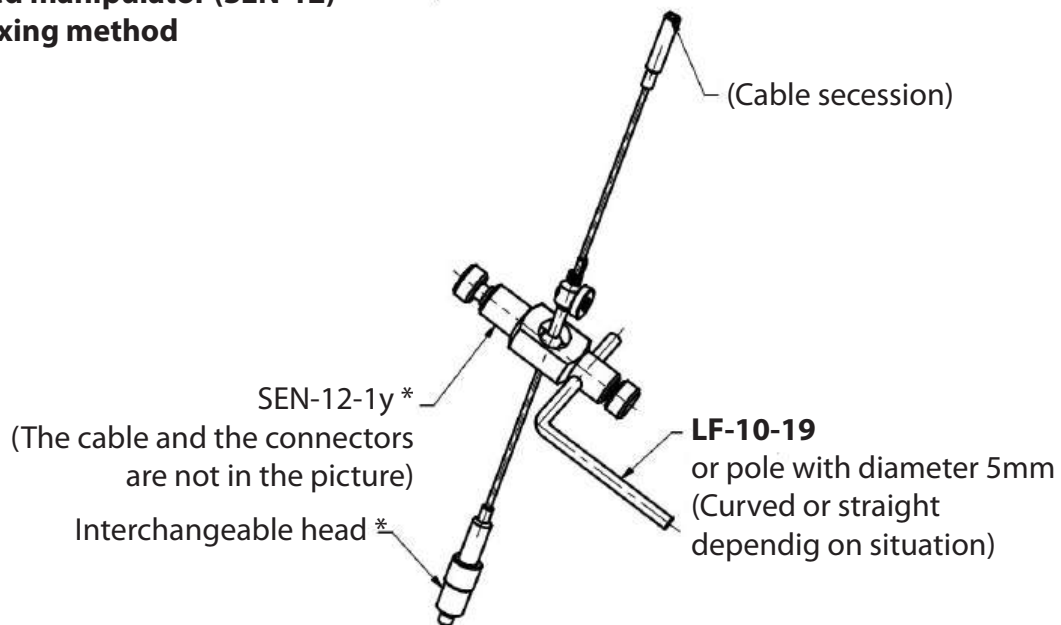
Examples

Ball mounted manipulator (SEN-12*)

Ball mounted manipulator (SEN-12) and magnetic stand (MAN-06)



Ball mounted manipulator (SEN-12) and other fixing method



* As a last part, if you use the related adaptor for MAN-01-14, MAN-01-15.

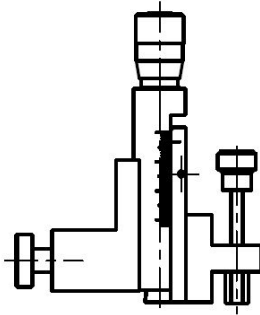
In Products

Manipulator in isolated organ bath systems
(ISO-04, -05, -07, -08)

Product codes

Manipulator (1,0mm/turn)

MAN-01-05

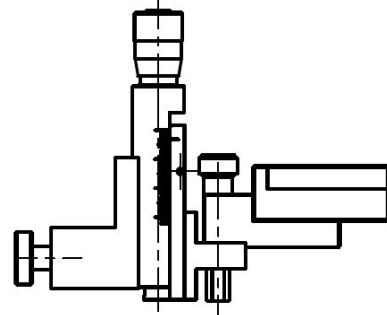


No longer available

Replacement: **MAN-08-01** 1mm/turn
MAN-01-21 1mm/turn
(**MAN-01-22** 0,5mm/turn*)

Manipulator (1,0mm/turn)
for SI-H application, with holder for SI-H force
transducer

MAN-01-06

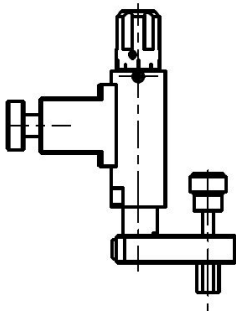


No longer available

Replacement: **MAN-01-23** 1mm/turn
(**MAN-01-24** 0,5mm/turn*)

Manipulators

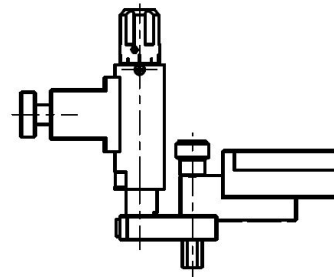
MAN-01-21 1mm/turn
(**MAN-01-22** 0,5mm/turn*)



Manipulators

for SI-H application, with holder for SI-H force
transducer

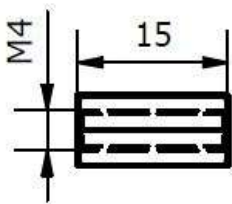
MAN-01-23 1mm/turn
(**MAN-01-24** 0,5mm/turn*)



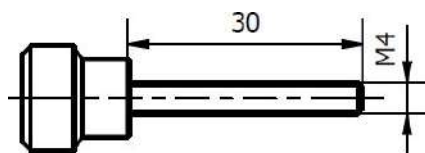
* Option

Spare parts

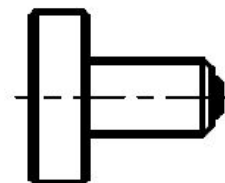
High nut
MAN-01-93



Fixing screw M4x30
MAN-01-94



Fixing screw M8x10
MAN-01-90



In Products

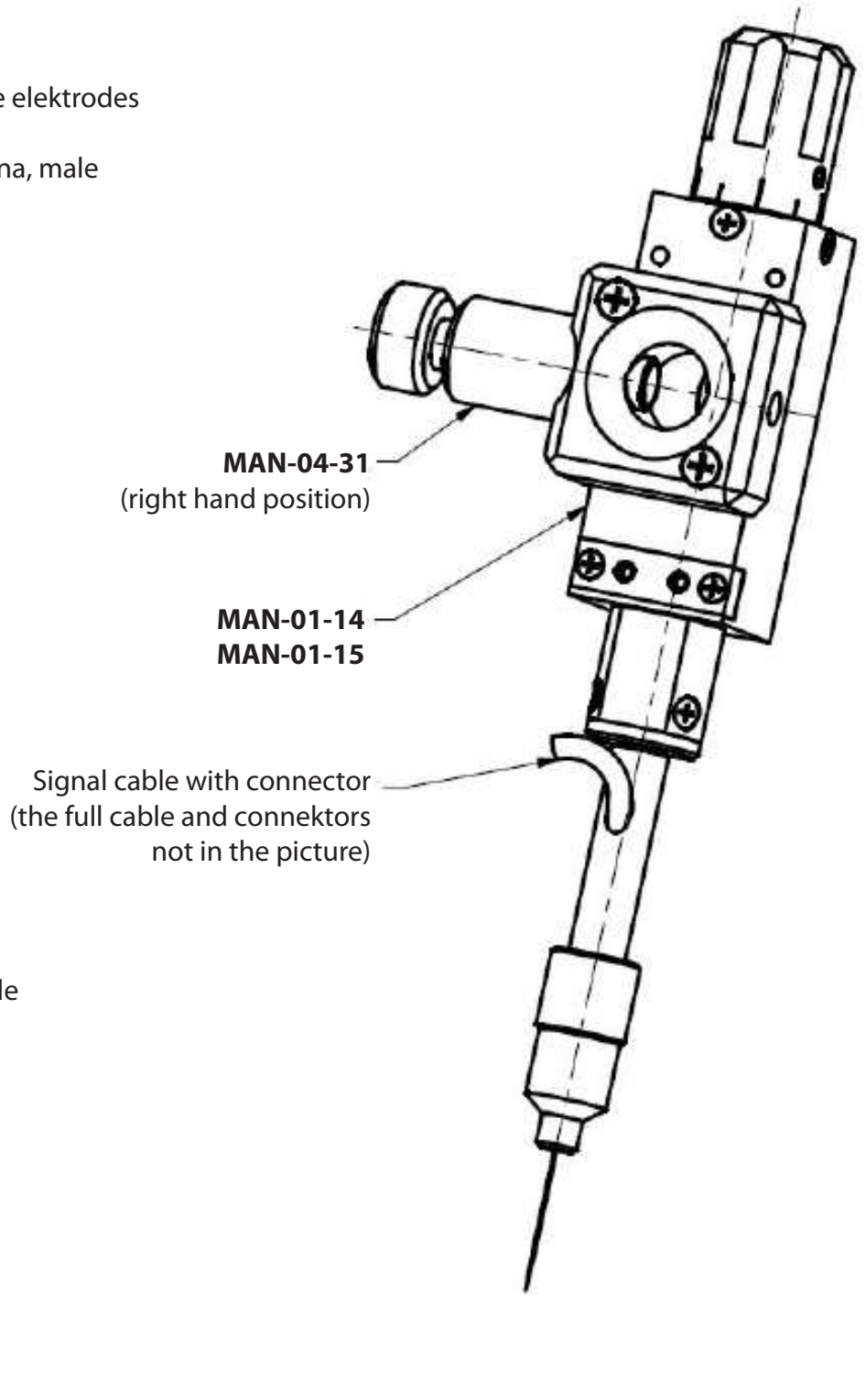
Manipulator in zebrafish ECG systems
(ZF-01)

Product codes

Complete manipulator for needle electrodes
Signal cable length: 150mm,
The connector 2pcs Ø2mm banana, male

MAN-04-21 (left hand)

MAN-04-22 (right hand)



Ball mounted manipulator

with interchangeable heads

SEN-12

Product codes

Ball mounted manipulator

SEN-12-1y

Only interchangeable head

SEN-12-2y

the "y" is depend on the type of head)

Material of body: POM (polyamid, black)

Material of shafts, screws: stainless steel

Length of built cable: 2m

Connector: Ø4mm banana male

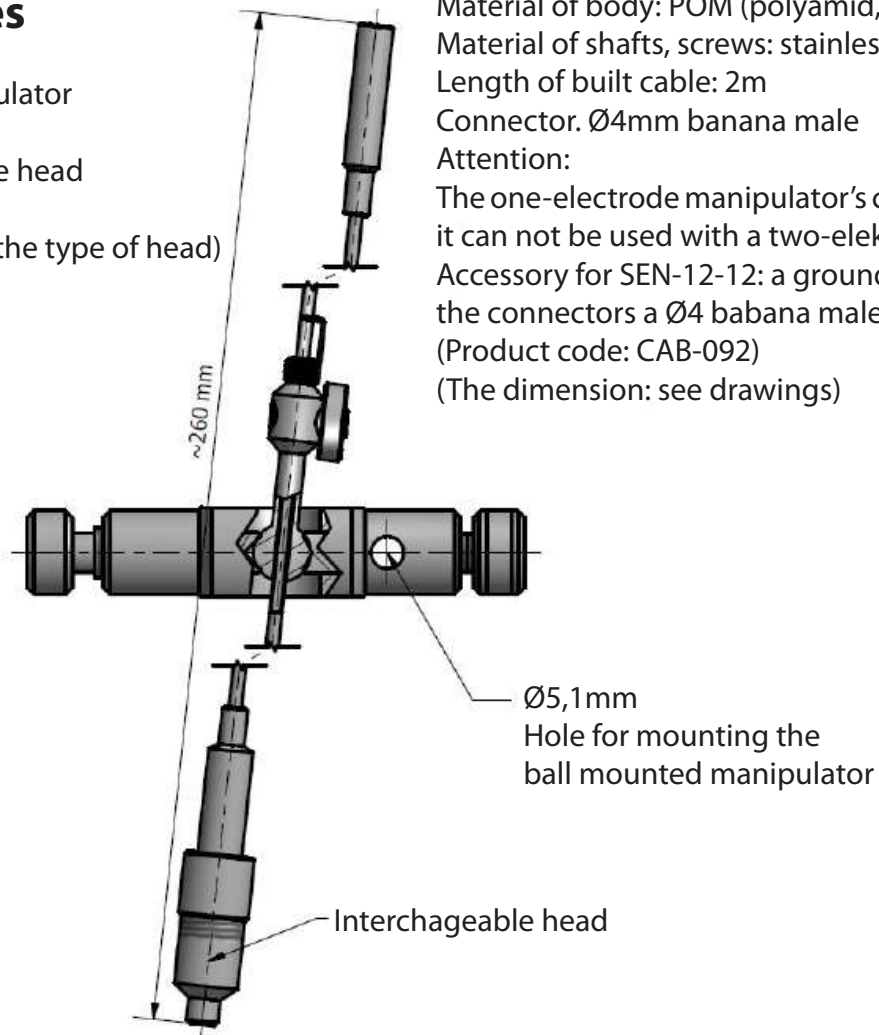
Attention:

The one-electrode manipulator's cable is one-cored, it can not be used with a two-electrode head!

Accessory for SEN-12-12: a ground cable, with the connectors a Ø4 babana male and small clip.

(Product code: CAB-092)

(The dimension: see drawings)

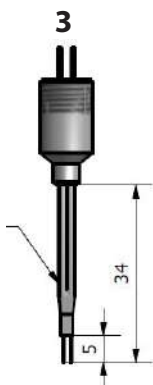


Type of head:

The electrode:

"y" =>

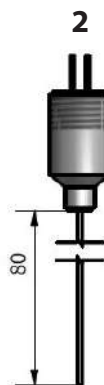
Bipolar
Platina Ø0,2



Bipolar hook
Platina Ø0,8



Unipolar
Platina Ø0,8



Needle
Stanless steel Ø0,3



Banana female
Size: Ø2

