



POSI 1 GG-40



POSI 1 GG-150



POSI 1 GG-300



POSI 2



PosiControl



PosiControl4

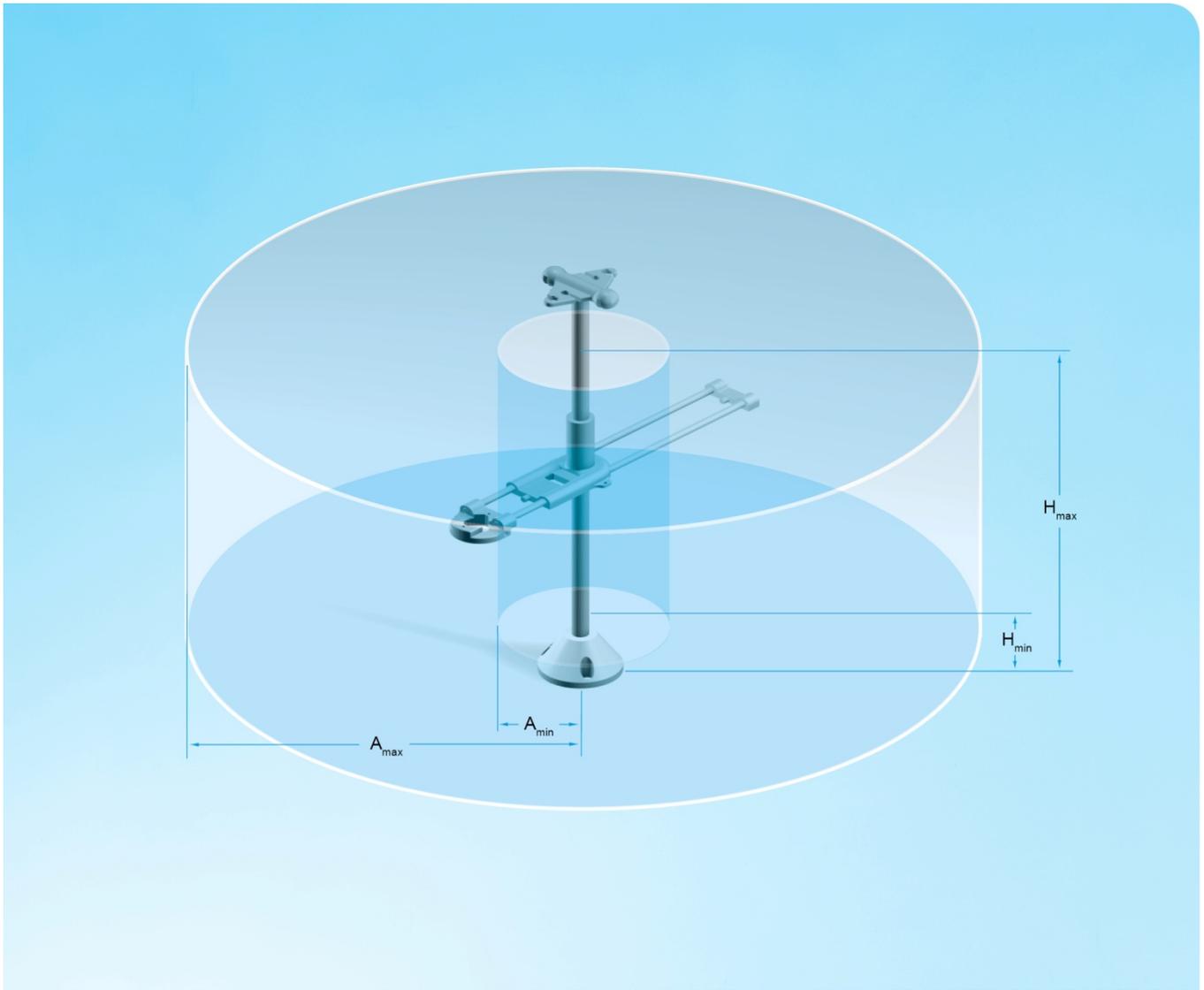
HANDLING SYSTEMS

POSI 1 Handling stand – GG series

Base out of aluminium die casting, rods out of stainless steel. Ears for the cable guide are integrated. Weight counterbalance via adjustable balancer. Universal tool bracket with three threaded holes for assembly of handles. The fixing is made by the stand with three fixing holes or by the space to be clamped.

POSI 2 Handling swivel arm

As basis the POSI 2 has a mounting flange, parallel motions out of drawn aluminium, pneumatic cylinder for the weight counterbalance, guidances and mounting surfaces out of aluminium as well as articulated joints (ball bearing guided) out of stainless steel. The tool bracket is exchangeable. The result out of the combination of stainless steel and aluminium is a robust and still very light construction.



Handling stand POSI 1

POSI 1 Torque reaction arm

Type	GG-40	GG-150	GG-300
Max. torque	40 Nm	150 Nm	300 Nm
Max. tool weight	3 kg	8 kg	18 kg
Height of vertical pillar (H_v)	830 mm	1020 mm	1250 mm
Length of horizontal arm (L)	570 mm	860 mm	943 mm
Tool diameter	36–42 mm	56–62 mm	80–95 mm
Working stroke (horizontal)	300 mm	500 mm	500 mm
Min. working height H_{min}	110 mm	165 mm	180 mm
Max. working height H_{max}	520 mm	450 mm	515 mm
Min. stroke A_{min}	155 mm	205 mm	250 mm
Max. stroke A_{max}	455 mm	705 mm	750 mm
Article number	DSM-600140	DSM-600139	DSM-600138

POSI 1 Balancer set



Type	Ideal for torque reaction arm	Weight counterbalance	Quantity	Article number
BA2	GG-40	2 – 3,5 kg	2	DSM-600302
BA3	GG-150	5 – 8,5 kg	2	DSM-600303
BA4	GG-300	9 – 15 kg	2	DSM-600305

Complete control via XYZ

Fix sequences have to be observed by a lot of assembly works. The integration of the transmitter-sensoric XY and of the Z-axis-sensoric into the POSI 1 enables the control of the operational procedures. Every position in the operating distance of the torque reaction arm can be controlled (positioning accuracy < 0,2 mm). By mistake not handled assembly positions as well as from this resulting quality defects are therewith part of the past. A retrofitting of the position monitoring is possible at any time. The sensorics are only for the determination of the positions. Therefore e.g. a switch-off on depth with the Z-axis is not possible.

POSI1 Transmitter-sensoric XY incremental



Type	Components	Article number
For torque reaction arm GG-40 and GG-150	Radial sensor 360 degrees, horizontal sensor	DSM-600120
For torque reaction arm GG-300	Radial sensor 360 degrees, horizontal sensor	DSM-600145

POSI1 Transmitter-sensoric XY absolute



Type	Components	Article number
For torque reaction arm GG-40 and GG-150	Radial sensor 360 degrees, horizontal sensor	DSM-600190
For torque reaction arm GG-300	Radial sensor 360 degrees, horizontal sensor	DSM-600195

POSI 1 Balancer with Z-axis sensoric



Typ	Ideal for torque reaction arm	Weight counterbalance	Quantity	Article number
BA2 with Z-axis sensoric	GG-40	2 – 3,5 kg	1	DSM-600321
BA3 with Z- axis sensoric	GG-150	5 – 8,5 kg	1	DSM-600322
BA4 with Z- axis sensoric	GG-300	9 – 15 kg	1	DSM-600324

Repeat accuracy $\pm 0,5\text{mm}$

Z-Achsen-Sensorik nur in Verbindung mit XY-Inkremental-Sensorik und PosiControl verwendbar.

**POSI 1 Ergo handle
for GG-40 / GG-150 / GG-300**



Type	Article number
Ergo handle	DSM-600251

**POSI 1 Ergo handle with start button
for GG-40 / GG-150 / GG-300**



Type	Article number
Ergo handle with start button	DSM-480013

**POSI 1 Self-starter handle
for GG-40 and nutrunner DS 44**



Type	Article number
Self-starter handle	DSM-400214

**POSI 1 Half-shell pair for reduction
of the tool fitting**

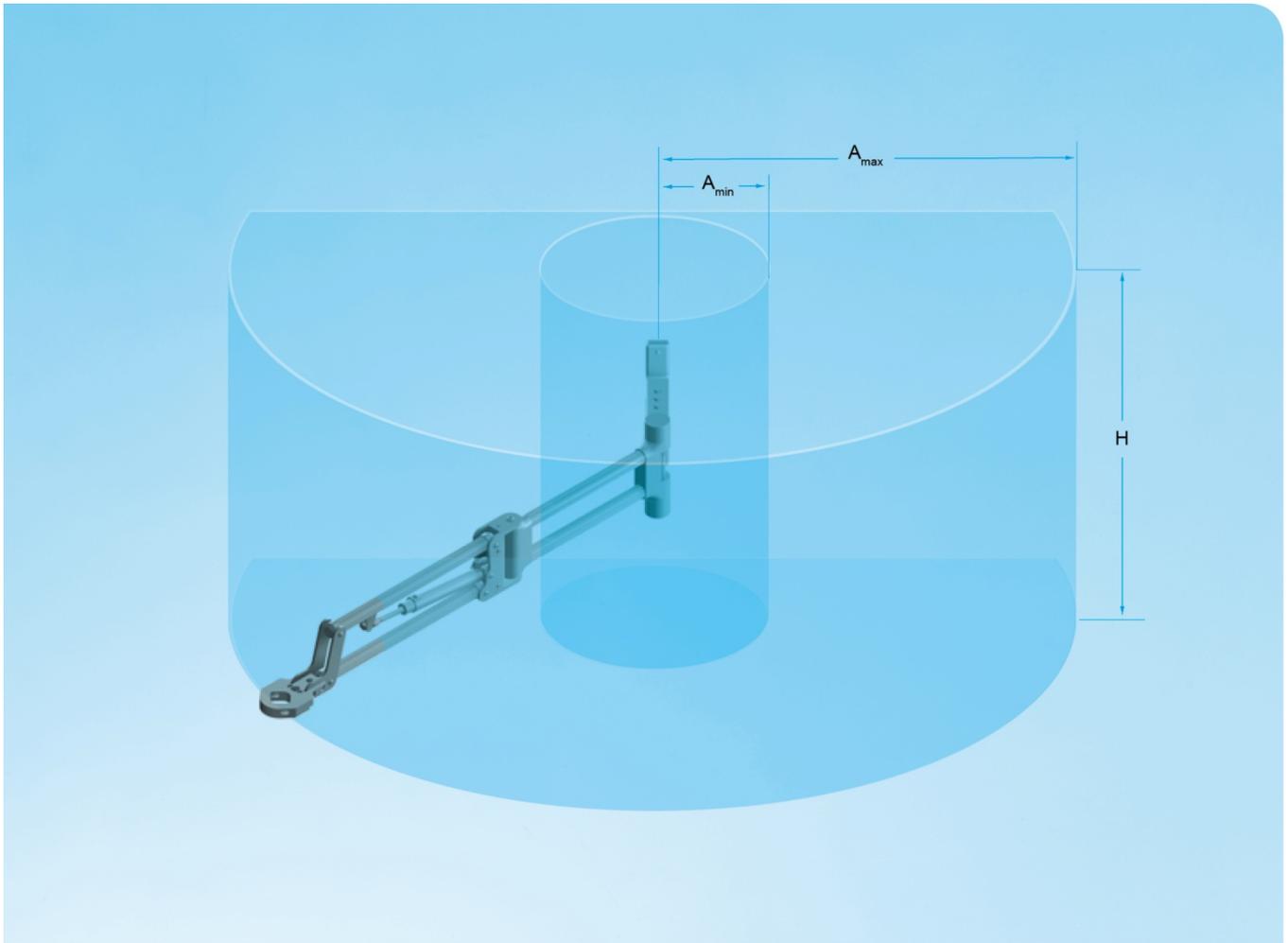


Type	Article number
For torque reaction arm GG-40	DSM-600159
For torque reaction arm GG-150	DSM-600164
For torque reaction arm GG-300	DSM-600170

Diameter acc. to customers specification

POSI 1 Interconnecting cable

Type	Cable length	Article number
Cable for interconnection between transmitter-sensoric XY incremental and PosiControl	3 m	DSM-600173
Cable for interconnection between transmitter-sensoric XY absolute and PosiControl	3 m	DSM-600373
Cable for interconnection between transmitter-sensoric XY absolute and PosiControl4	3 m	DSM-600374
Y-interconnecting cable for interconnection between XYZ sensoric and PosiControl	2 x 0,3 m	DSM-600174
Y-cable from PosiControl to Self-starter handle and tightening control system (Basic, Classic, Pro)	5 m	DSM-600154



Handling swivel arm POSI 2

POSI 2 swivel arms are available with or without position monitoring. The monitoring of the working positions is made in the XY coordinates with absolute encoder. In a stiff system the positioning accuracy is < 0,2 mm.

POSI 2 Swivel arm long execution

Type	with position control XY	without position control
Max. torque	40 Nm	40 Nm
Max. tool weight	3,5 kg	3,5 kg
Min. stroke A_{min}	555 mm	555 mm
Max. stroke A_{max}	915 mm	915 mm
Lift height working area H	530 mm	530 mm
Article number	DSM-600601	DSM-600600

POSI 2 Swivel arm short execution

Type	with position control XY	without position control
Max. torque	40 Nm	40 Nm
Max. tool weight	3,5 kg	3,5 kg
Min. stroke A_{min}	405 mm	405 mm
Max. stroke A_{max}	610 mm	610 mm
Lift height working area H	230 mm	230 mm
Article number	DSM-600615	DSM-600614

POSI 2 Tool fitting



Type	Article number
Universal tool fitting for tools with diameter from 36 up to 42 mm	DSM-600660
Tool fitting for DS 34 / DS 44	DSM-600662
Tool fitting for DS 57	DSM-600665

POSI 2 Ergo handle



Type	Article number
Ergo handle with holding device	DSM-600253

POSI 2 Ergo handle with start button



Type	Article number
Ergo handle with start button	DSM-600257

POSI 2 Double handle with start buttons



Type	Article number
Double handle with start buttons	DSM-600258

POSI 2 Self-starter handle for DS 44



Type	Article number
Self-starter handle for DS 44	DSM-440210

POSI 2 Interconnecting cable

Type	Cable length	Article number
Cable for interconnection between transmitter-sensoric XY and PosiControl	3 m	DSM-600650
Cable for interconnection between transmitter-sensoric XY and PosiControl4	3 m	DSM-600658



PosiControl

PosiControl

The positioning control electronic PControl checks if a defined operation sequence is maintained and makes sure that no position will be forgotten. Because of its small size, the unit only requires less space. The handling is made menu and user guided.

The input of the positions is made very easy by Teach-In, i.e. it's driven to the required positions and stored via keystroke. Changes of the sequence of the order or of the flow are quickly possible at any time.

As standard the unit offers eight inputs and four outputs. Further inputs and outputs for arbitrary switching jobs can be set by corresponding IO-Extension modules, which are available as option.

Features

- PVC desk housing, double insulated
- Keyboard for data input
- Graphics display illuminated
- Permanent status report in clear text
- 8 inputs, 4 outputs (upgradeable via IO-Extension)
- In-/output pre-allocation, predefined seizures of the in- and outputs; several choices
- Manual in-/output pre-allocation, all available in-/outputs can be specified by an in-/output chart
- Programming wizard
- Storage of up to 31 programs (work pieces)
- Context-sensitive programming
- Input of positions via Teach-In during the programming
- Storage of up to 200 positions
- RS232 interface
- Print function, output of all entered data
- System bus interface for communication with the control unit (Basic, Classic, Pro) and for connection of the IO-Extension

PosiControl



Type	Article number
PosiControl control unit	DSM-600610
DSM USB module RS232 USB	DSM-210100

Universal bracket for assembly to wall or table



Type	Article number
Universal bracket	DSM-600612

Plug-in power supply AC 230 V / 50 Hz | DC 24 V / 1 A

Type	Article number
Plug-in power supply	DSM-600611

A plug-in power supply isn't needed by connection to a control system (Basic, Classic, Pro).

Systembus Accessories

Type	Article number
System bus cable 1 m	MS-1003001
System bus cable 2 m	MS-1003002
System bus cable 5 m	MS-1003005
System bus terminating resistor	MS-1003044
T-piece for system bus connection	DSM-200722
Y-piece for system bus connection	DSM-200724

IO-Extension System bus unit for additional inputs and outputs

Type	Inputs / Outputs	Article number
IO-Extension 4/4S with terminal block	4IN, 4OUT	MS-1003044
IO-Extension 4/4C with M8 circular plug-in connector	4IN, 4OUT	MS-1003144
IO-Extension 8/8S with terminal block	8IN, 8OUT	MS-1003088
IO-Extension 8/8C with M8 circular plug-in connector	8IN, 8OUT	MS-1003188



PosiControl4

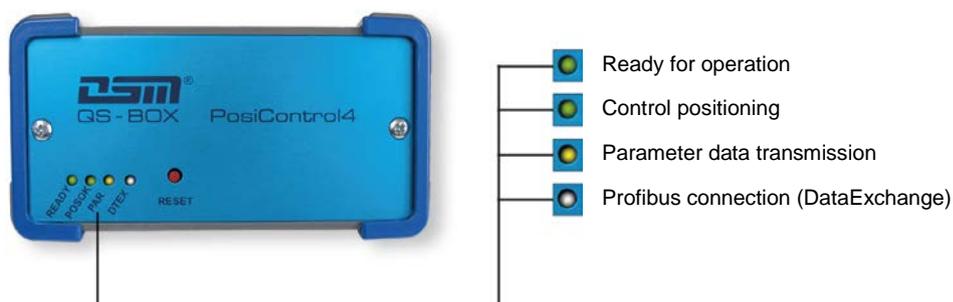
PosiControl4

In combination with a superordinated control the positioning-electronic PosiControl4 checks, if a defined operation sequence is followed and makes sure, that no position will be forgotten. For this, the PosiControl4 provides a storage capacity for up to 200 positions. The configuration of the hardware as well as the administration of the positions is made by the application software.

The input of the positions is made very easy by Teach-In, i.e. it's driven to the required positions and stored via keystroke. Changes of the sequence of the order or of the flow are quickly possible at any time.

Features

- Aluminium tube case, impact resistant plastic cover
- Data input via PC software
- 4 LED Status indication
- Input of positions via Teach-in during the programming
- Storage of up to 200 positions
- Positions monitoring
- Report mode of the stored positions
- Direct output mode as "X/Y position"
- USB interface for configuration via PC
- Systembus interface for communication with DSM tightening control system (Basic, Classic, Pro)
- Profibus DP-Slave interface for the integration in a PLC system
- Option: TCP/IP module for network connection



PosiControl4



Type	Article number
PosiControl4 electronic including USB connection cable 1,8 m	DSM-600635
Ethernet TCP/IP module	DSM-161905

Universal bracket for assembly to wall or table



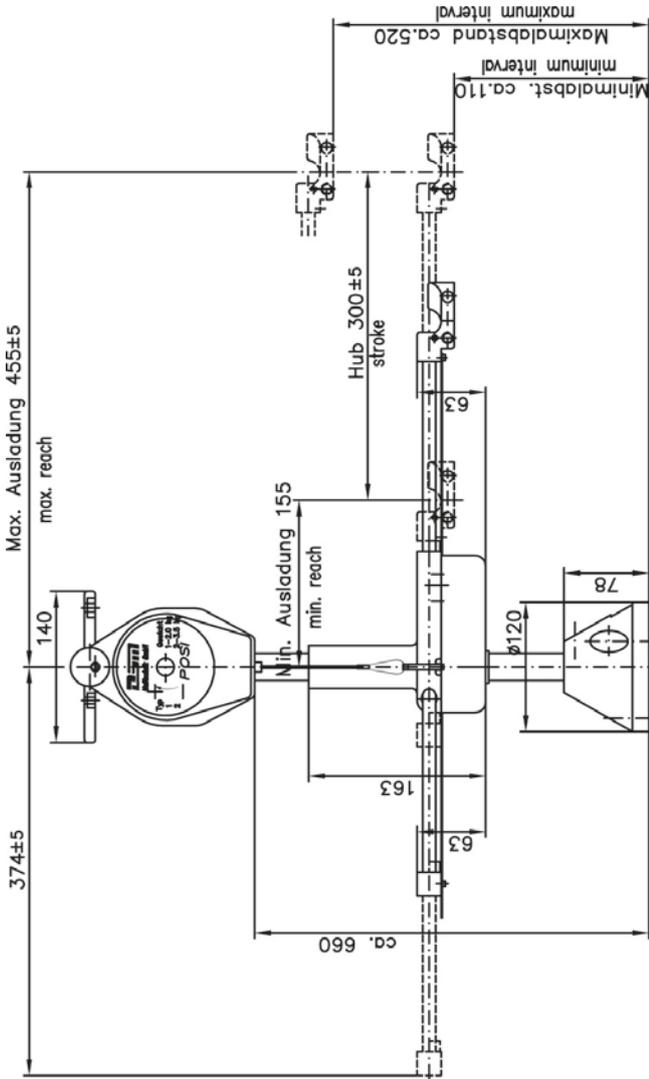
Type	Article number
Universal bracket	DSM-600612

Plug-in power supply AC 230 V / 50 Hz | DC 24 V / 1 A

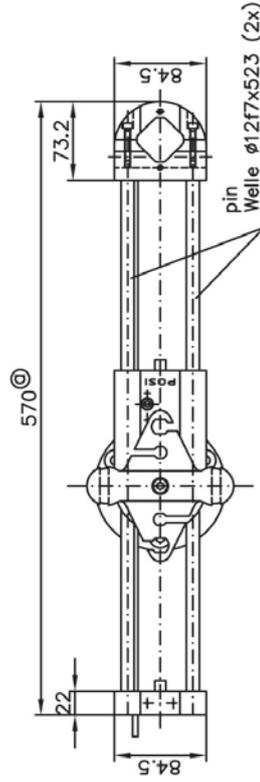
Type	Article number
Plug-in power supply	DSM-600611

A plug-in power supply isn't needed by connection to a control system (Basic, Classic, Pro).

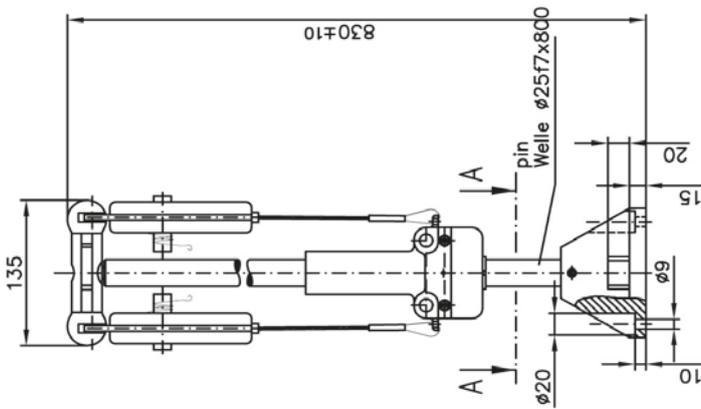
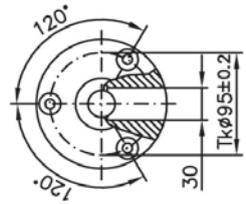
Handling stand Type GG-40



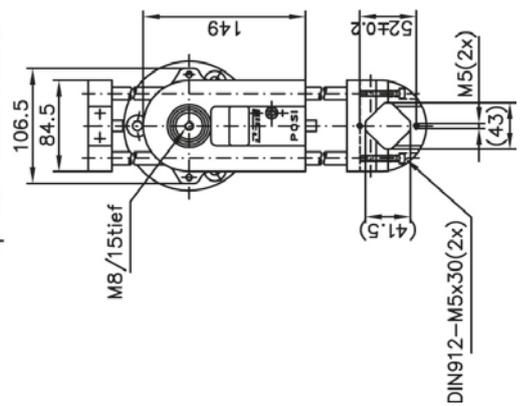
Draufsicht ohne Balancer
top view without balancer

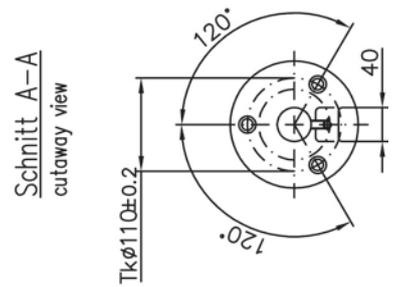
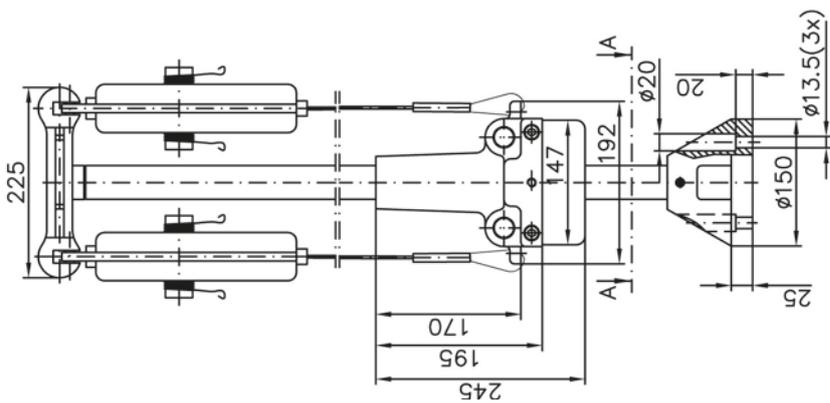
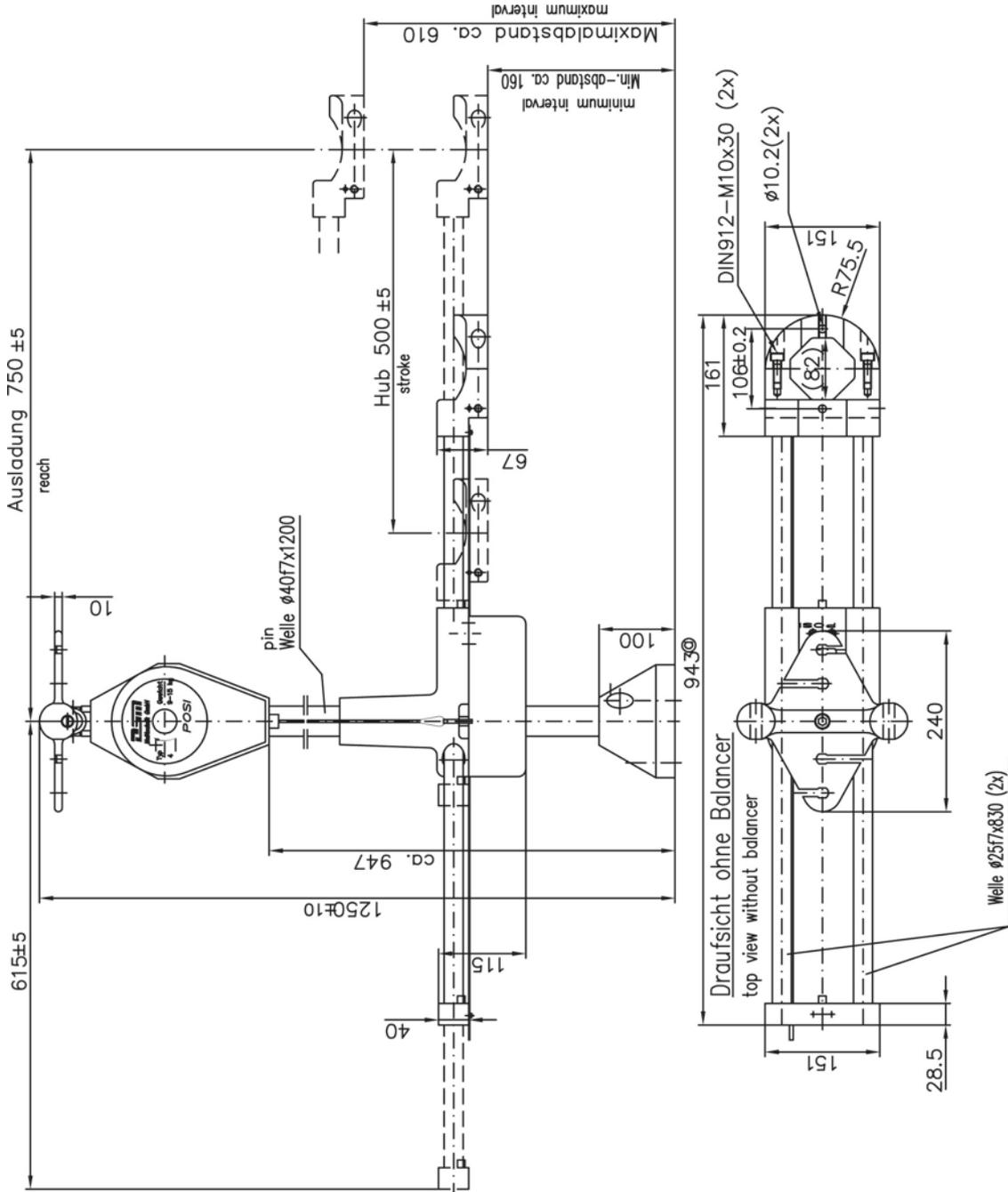


Schnitt A-A
cutaway view

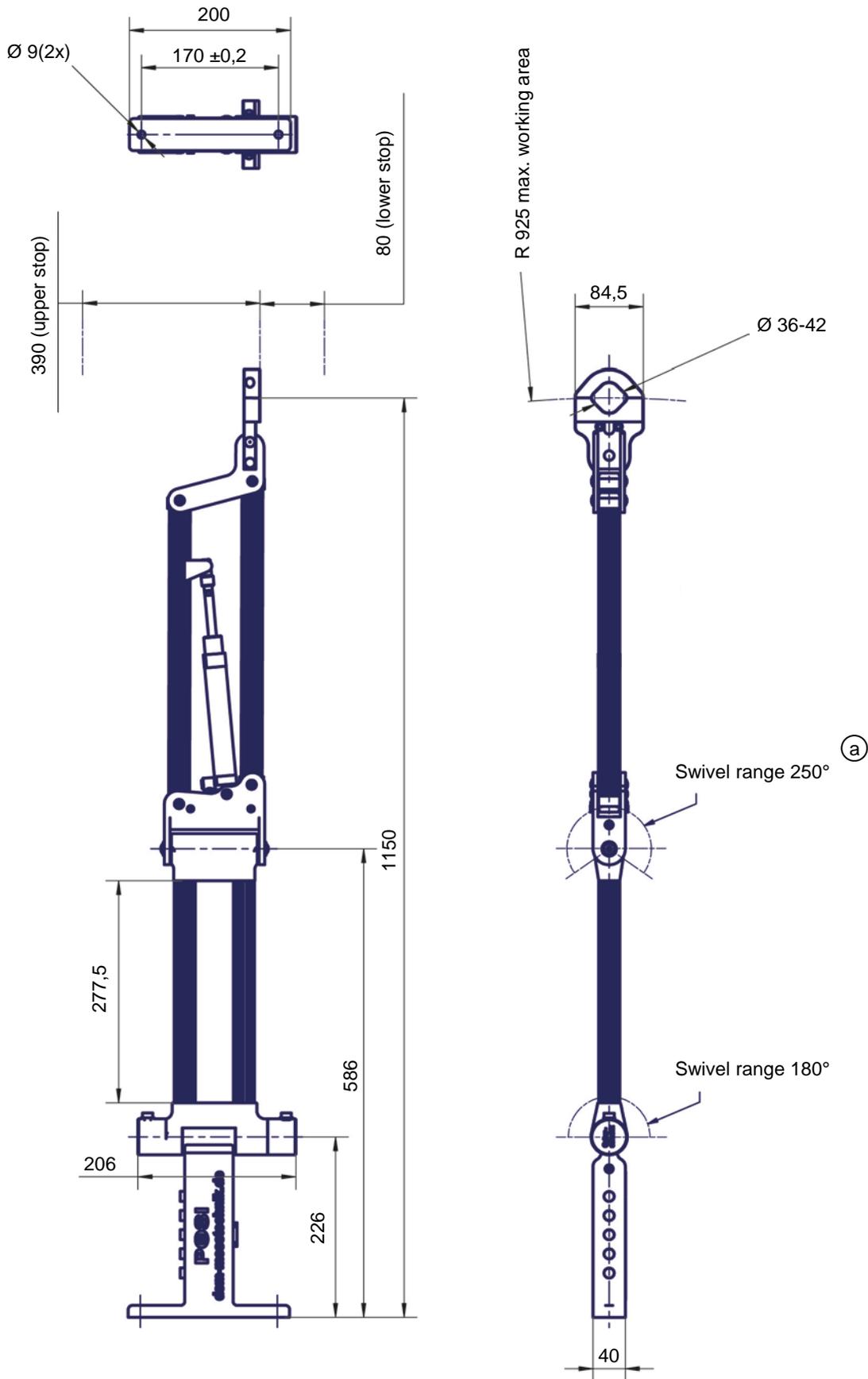


Draufsicht ohne Balancer
top view without balancer

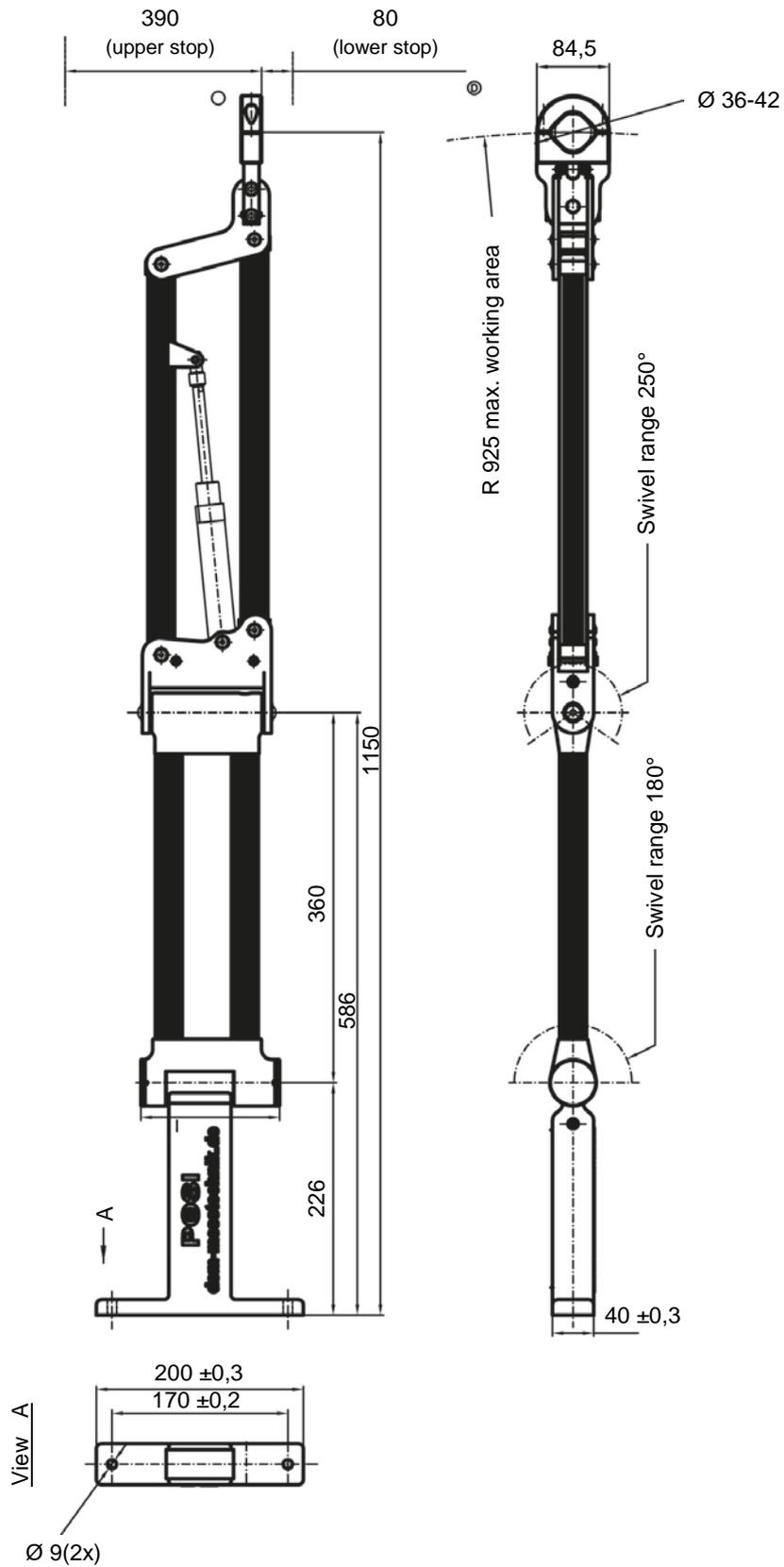




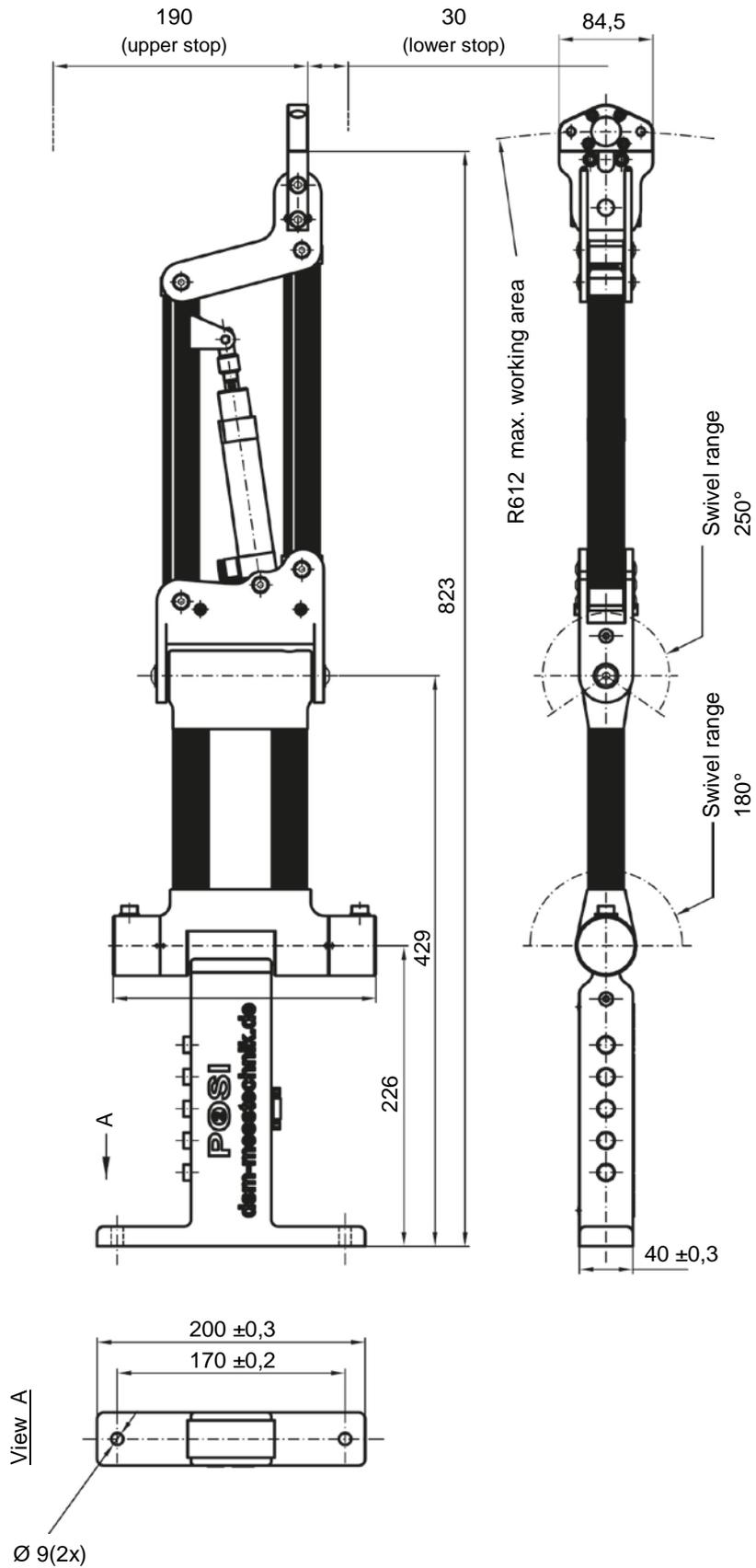
Swivel arm long execution
with position control XY



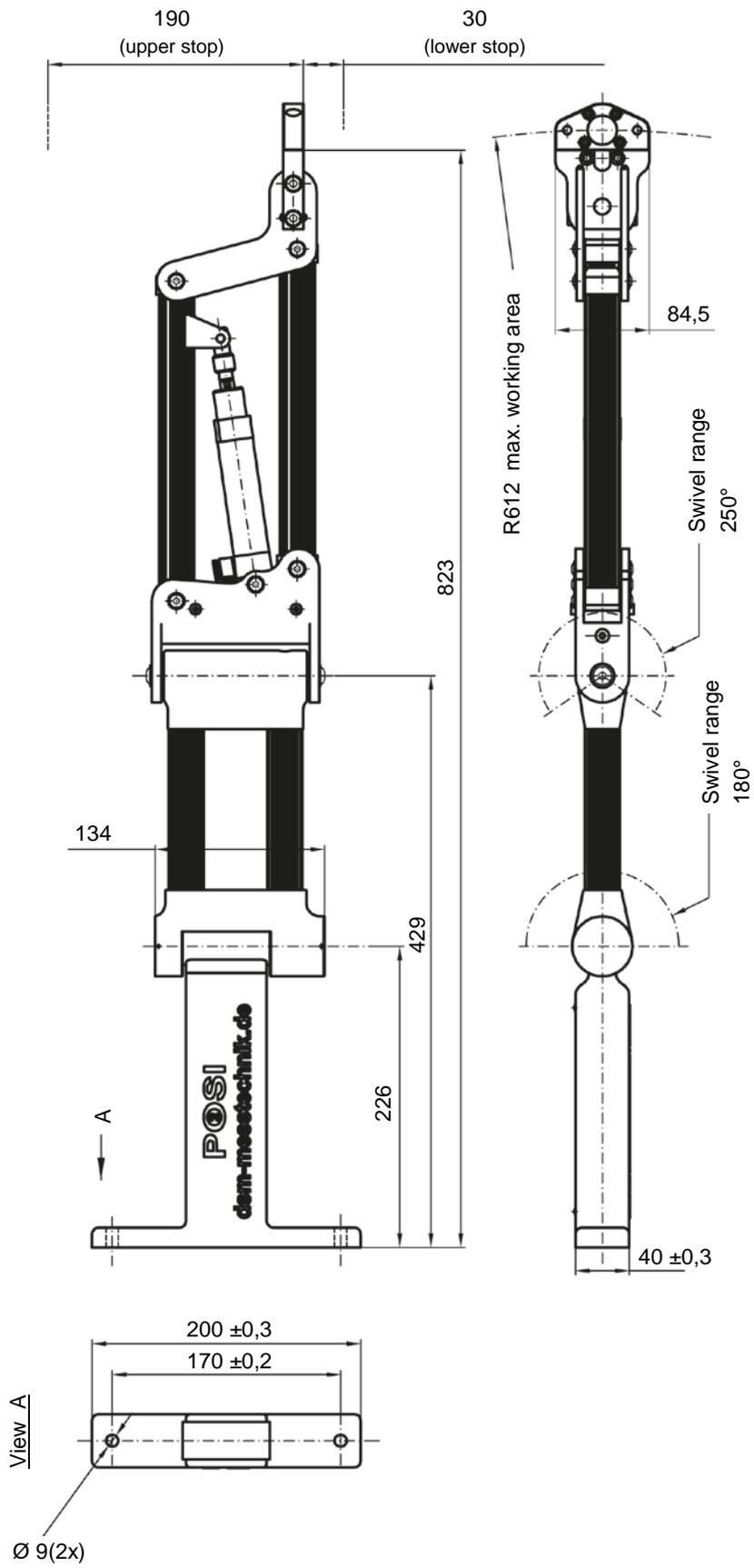
Swivel arm long execution
without position control



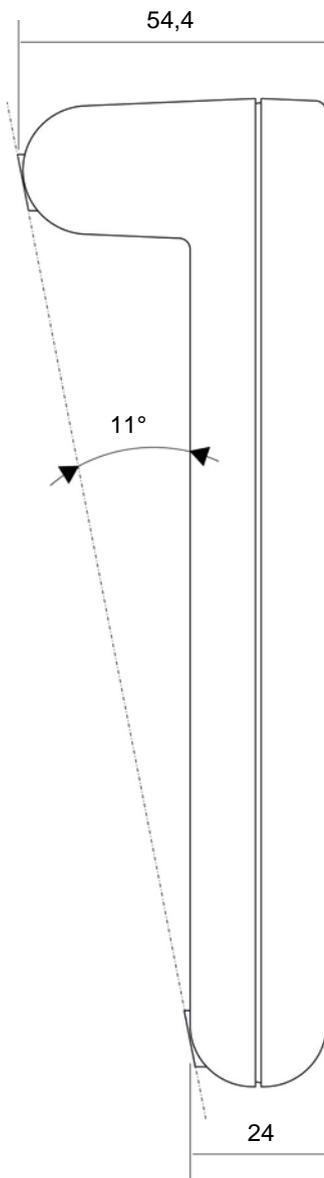
Swivel arm short execution
with position control XY



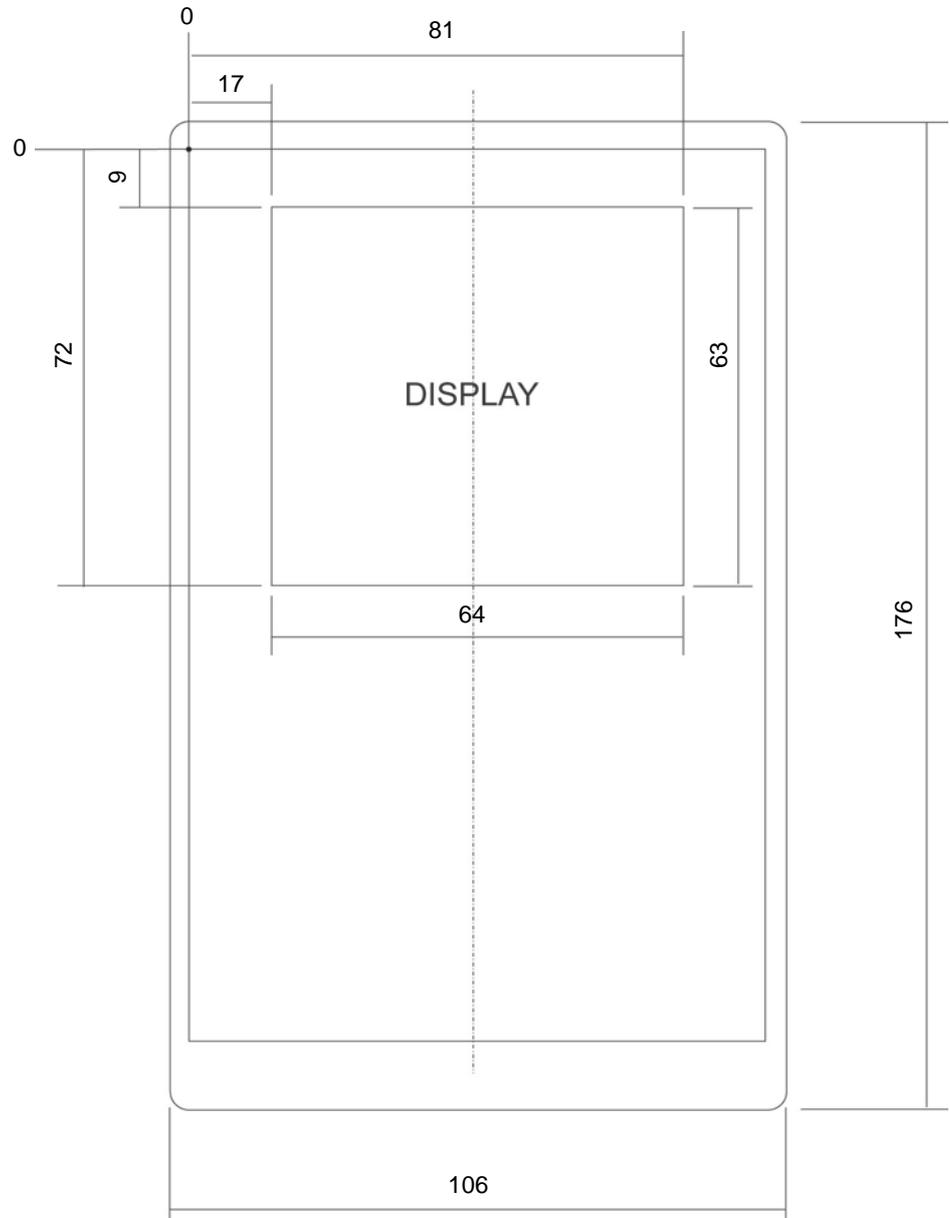
Swivel arm short execution
without position control



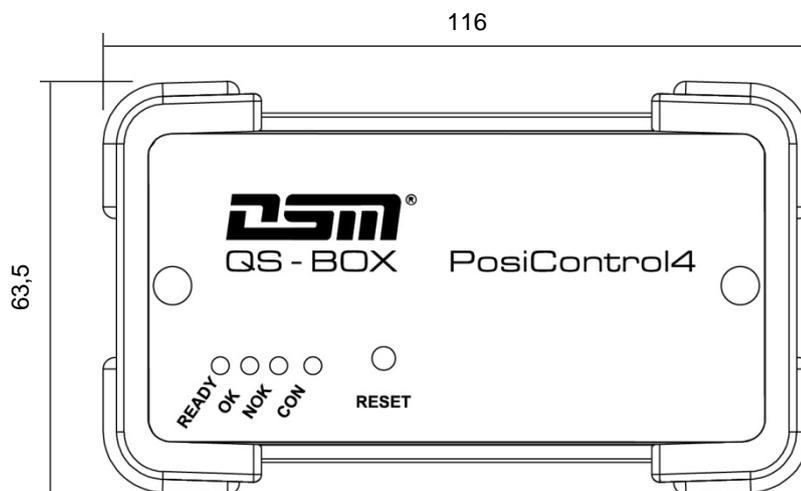
Side view



Front view



Front view



Side view

