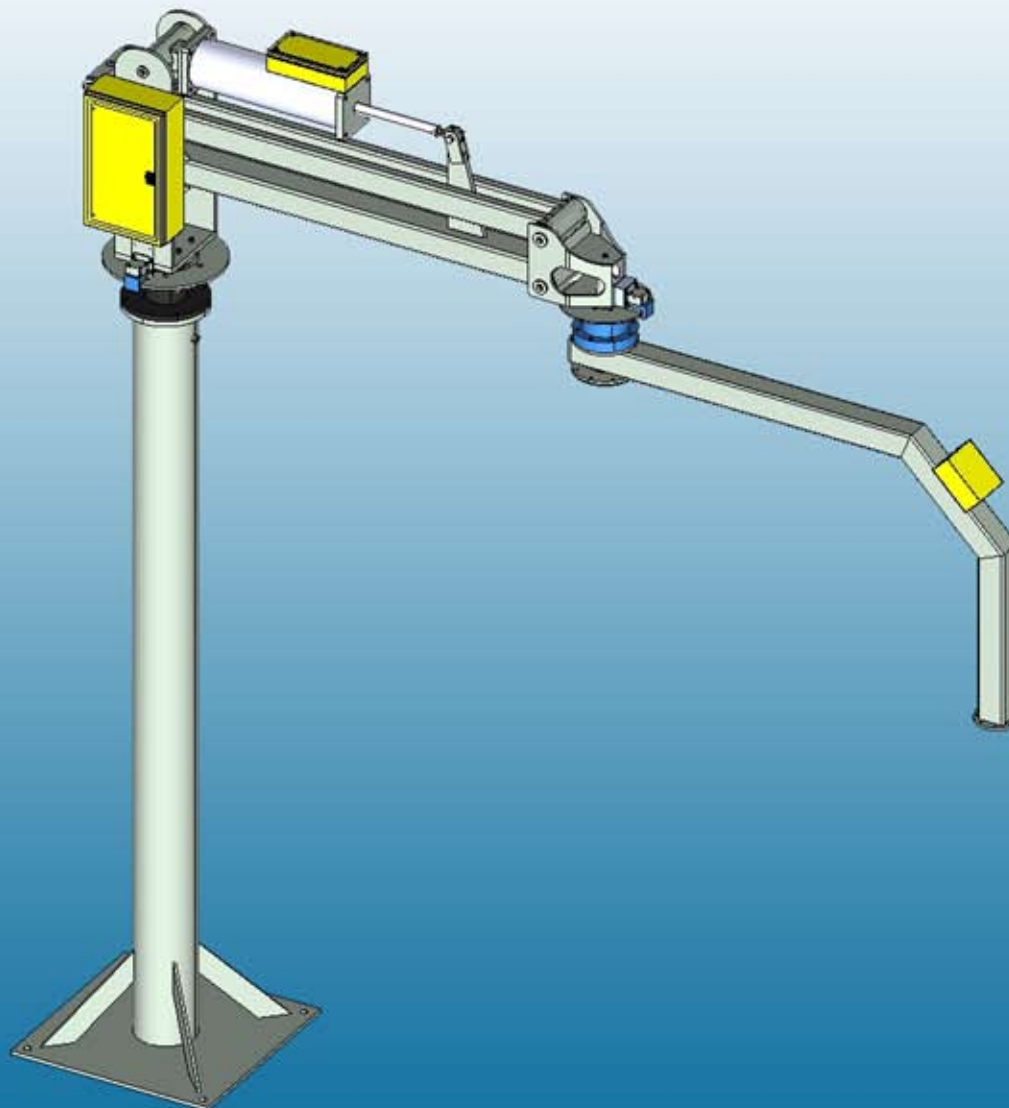


PNEUMATIC INDUSTRIAL ARM MANIPULATORS

MANIPULATOR SERIES "L"

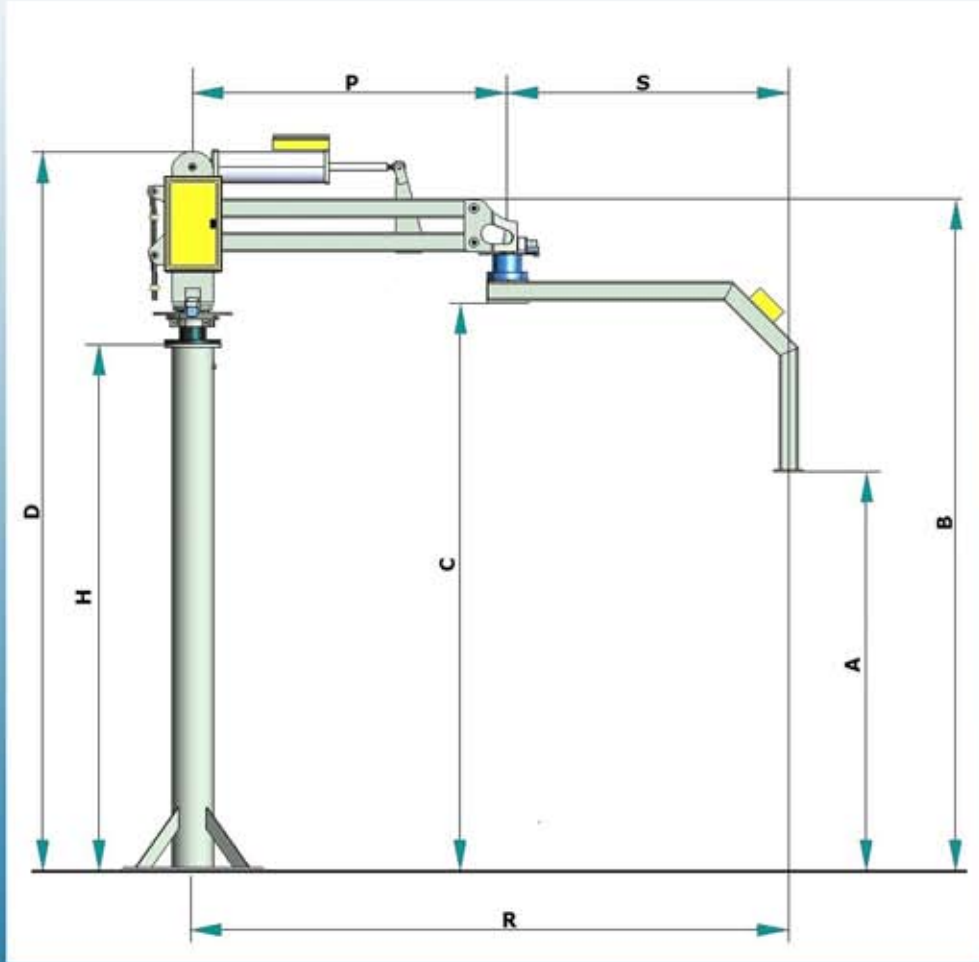


MANIBO s.r.l.
Workshop: Via Armaroli, 16/a-b
40012 Calderara di Reno BO

Tel. 051 6468143
Fax 051 6468179

Web: www.mani-bo.com
Email: manibo@mani-bo.com

PNEUMATIC INDUSTRIAL ARM MANIPULATORS



Dimensional data:

	150 L 1.5	210 LR 1.25
A_{max}	H + 316	H + 151
A_{min}	H - 1645	H - 1483
B_{max}	H + 1765	H + 1597
C_{min}	H - 746	H - 599
D	H + 1020	H + 1020
R_{max}	3177	2677
R_{min}	1227	1038
R_{utile}	2797	2359
H	a scelta	a scelta
P	1678	1428
S	1499	1249

dimensions in mm



MANIBO s.r.l.
Workshop: Via Armaroli, 16/a-b
40012 Calderara di Reno BO

Tel. 051 6468143
Fax 051 6468179

Web: www.mani-bo.com
Email: manibo@mani-bo.com

PNEUMATIC INDUSTRIAL ARM MANIPULATORS

Technical characteristics:

- Air feeding pressure 7 bar
- Capacity manipulator model 150 L 1.5 : 150 kg
- Capacity manipulator model 210 LR 1.25 : 210 kg
- Rotation around the column 360° continuous
- Rotation between the arms 270°
- Instant air consumption 250 NI/min
- Air consumption for each complete manouver 28 NI
- Base plate dimensions 750 x 750 mm
- Fixed to the ground by 4 screws M20 x 240 mm
- Both the models of manipulators can be installed hanged to a proper supporting structure instead than on a column
- The manipulators can be installed also on a self bearing fork liftable base, on a trolley sliding on rails fixed to the ground or a trolley sliding on suspended rails

Safety devices:

- Valve to lock the arm and the of the handling attachment, if it is istalled, in case of air feeding pressure fall down
- Valve to control the lowering of the arm in case of breaking of thelifting cylinder feeding tube
- Valve to limit the max lifting speed
- Parking brakes on the articulations, against spontaneous movements of the arm (supplied on request)
- Possibility to limit the arm rotation
- Other device, to warrant the the manipulator to operate only if the gripping is made correctly, can be installed depending on the the kind of the handling attachment

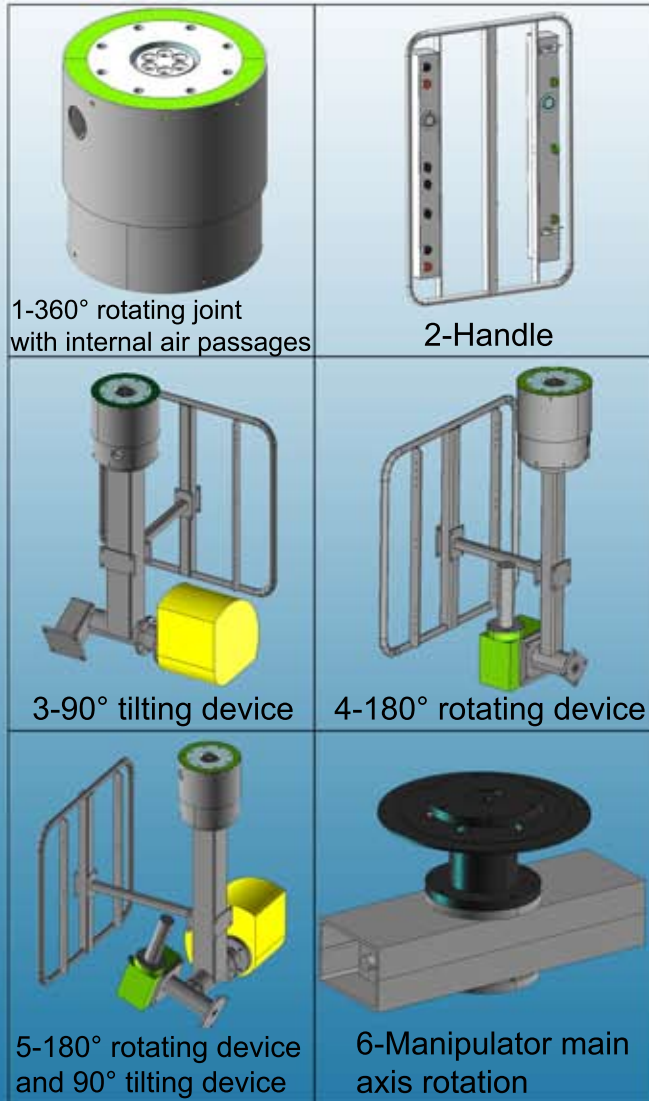


MANIBO s.r.l.
Workshop: Via Armaroli, 16/a-b
40012 Calderara di Reno BO

Tel. 051 6468143
Fax 051 6468179

Web: www.mani-bo.com
Email: manibo@mani-bo.com

PNEUMATIC INDUSTRIAL ARM MANIPULATORS



ACCESSORIES

The manipulator can be supplied with a rotating joint or with a handling attachment custom designed and manufactured for a specific application.

1. 360° continuous rotating joint with 7 internal air passages, to connect the handling attachment to the manipulator arm, with free rotation around the vertical axis
2. Control handle on which are located both the controls of the manipulator and of the handling attachment. Supplied in different sizes and, if necessary, with double controls to ensure ease of use at different working heights.
3. 90° pneumatic tilting device to move parts from the horizontal to the vertical position and vice versa.
4. 180° rotation around the horizontal axis of the handling attachment, by non reversible pneumatic motor gear reducer.
5. Coupling of rotation and tilting movements.
6. Pneumatic powered rotation around the manipulator column main axis, allowing fully powered rotation.