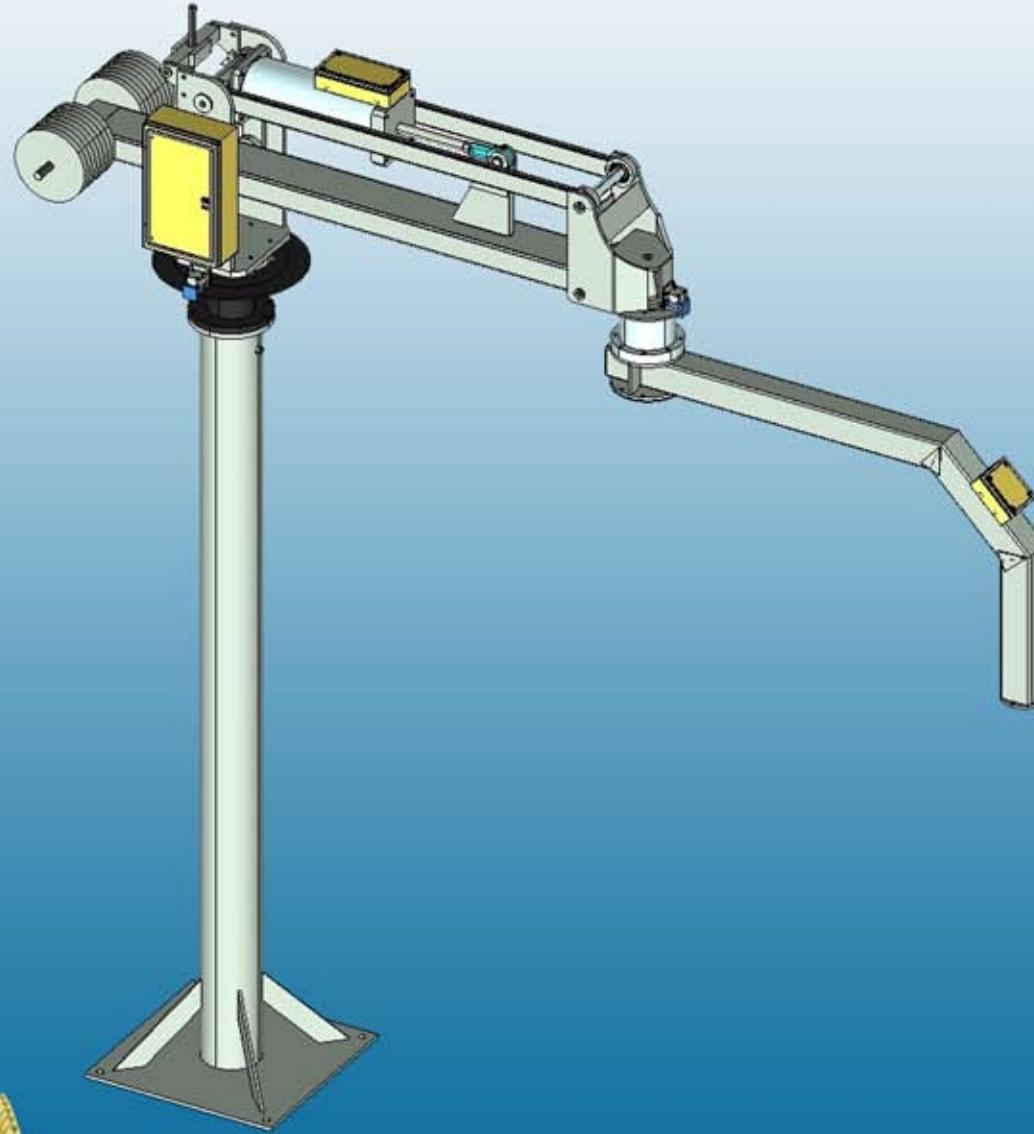


PNEUMATIC INDUSTRIAL ARM MANIPULATORS

MANIPULATOR SERIES "M"

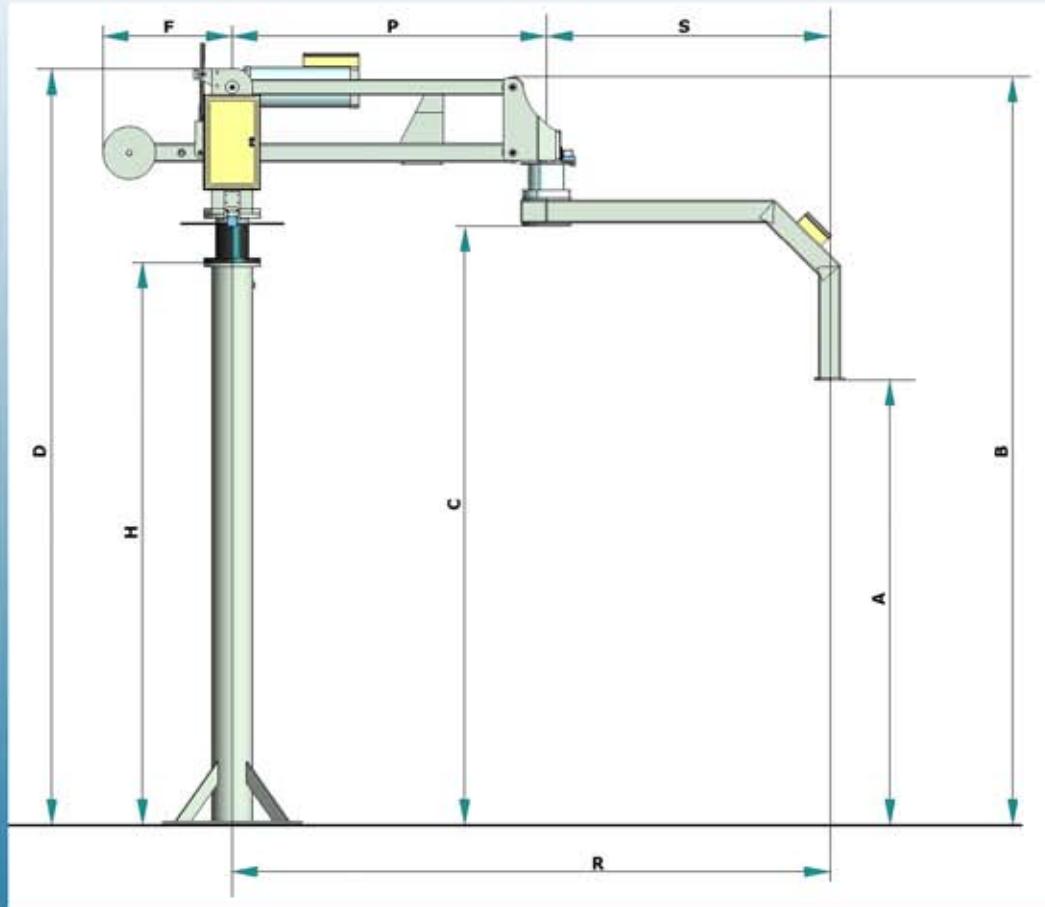


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PNEUMATIC INDUSTRIAL ARM MANIPULATORS



Dimensional data:

	150 XM	250 MA	350 M	450 MR
A_{max} (mm)	H + 780	H + 604	H + 429	H + 97
A_{min} (mm)	H - 1979	H - 1800	H - 1640	H - 1336
B_{max} (mm)	H + 2396	H + 2210	H + 2044	H + 1712
C_{min} (mm)	H - 1152	H - 983	H - 814	H - 509
D (mm)	H + 1040	H + 1040	H + 1040	H + 1040
R_{max} (mm)	4194	3694	3194	2694
R_{min} (mm)	1612	1422	1232	1042
R_{utile} (mm)	3616	3188	2761	2464
H (mm)	a scelta	a scelta	a scelta	a scelta
P (mm)	2180	1930	1680	1430
S (mm)	2014	1764	1514	1264
F (mm)	690	690	690	690
Portata (kg)	150	250	350	450

dimensions in mm



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Technical characteristics:

- Air feeding pressure 7 bar
- 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



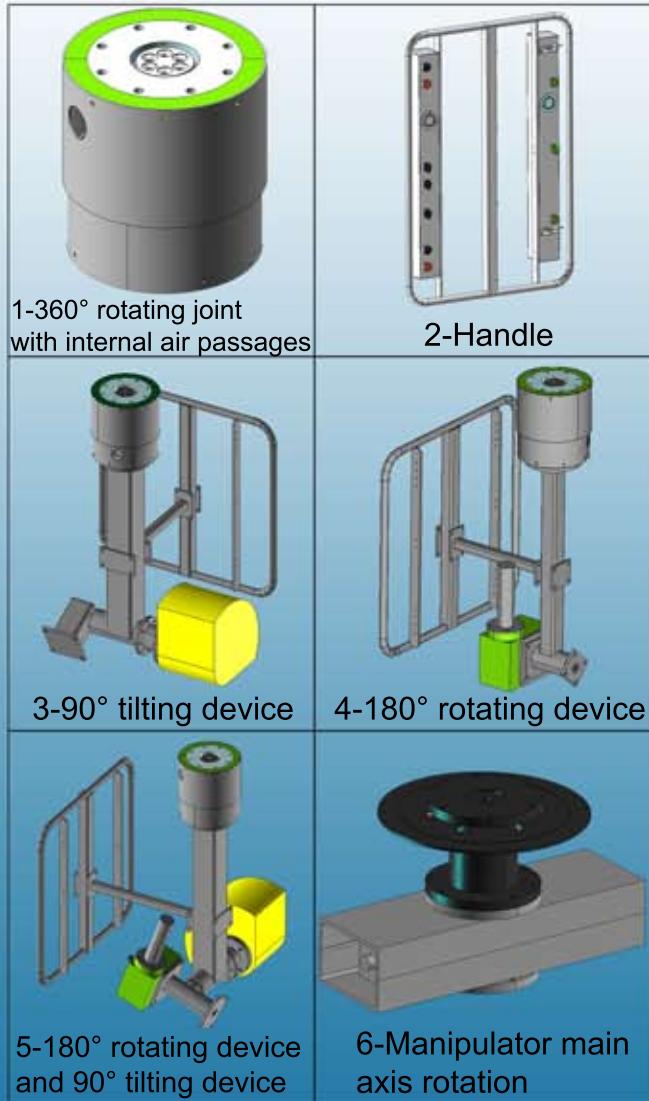
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PNEUMATIC INDUSTRIAL ARM MANIPULATORS



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.