Product sheet

Mechspace Pro

Handle eccentric loads

Easy to manoeuvre and smooth
Mechspace Pro is pneumatic moment absorbing manipulator for loads up to 150 kg and a moment up to 1500 Nm. Mechspace Pro is easy to manoeuvre and provides ergonomic freedom of movement within a large working area.

Beneficial moment absorbing capacity
The moment absorbing features gives important advantages for complex material handling operations, and for gripping and rotation of eccentric loads.

Impressive reach and flexibility
Mechspace Pro is the natural choice where the working reach is of high importance, as for example when the operator is working under a protruding roof, inside a vehicle or in a working area with restricted accessibility. Pillar-mounted Mechspace Pro 70P can also be equipped with a mobile footplate for easy repositioning by forklift truck.

Several pneumatic versions
Each type of material handling requires its pneumatic solution. Mechspace Pro is available in several standard versions: counterbalanced for 1 or 2 loads, or in a pilot control version for balancing of varying loads in combination with an external control unit.

Standard vs. Automotive
Mechspace Pro is available in two pneumatic variants.

The standard version is the natural solution for material handling and lifting technique within the general industry.

For more demanding environments where increased reliability is required, such as in assembly processes in the automotive industry, we offer a variant Automotive using impulse signals via bistable valves for load switching.

Many areas of applications
Typical application areas for Mechspace Pro is handling of components and various forms of assembly work in the manufacturing and automotive industries.

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movomech pro. series

Mechspace Pro 70P

Technical data		70 / 70P	150 /150P
Max load[1]	kg	70	150
Max moment[1]	Nm	500	1500
Stroke SL	mm	900	1250
Max tare weight	kg	100 /195	200 /330
Air consumption	l_n/cycle	8	16
Work pressure	bar	5 (4-7)	6 (5-7)

[1] See load table

	Mechspace Pro
Media	air, non-lubr. (40 µm)[2]
Noice level	<70 dB (A)
Work temperature	5-40°C (indoor use)

[2] To MS Pro: 0,01 µm, FRL unit is included
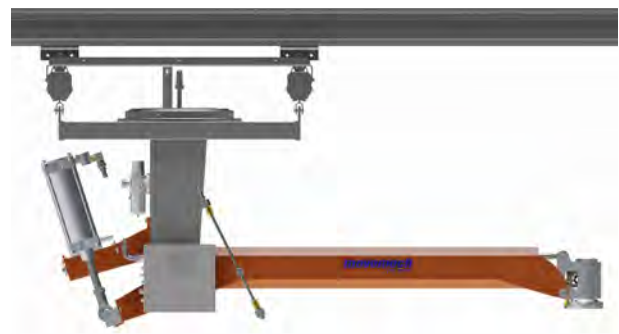

Mechspace Pro 70

Mechspace Pro 70P

Mechspace Pro 150P

See also Movomech's selection of gripper tool arms for Mechspace Pro.

Mechspace Pro 150

Pneumatics and load charts

Balanced 2-weight

Handling of one balanced load; with an external actuator the operator selects "Load" or "Without load".

Balanced 3-weight

Handling of two balanced loads; with external actuator the operator selects "Load 1", "Load 2", or "Without load".

Pilot control (various loads)

A precise and smooth handling of various loads using an external control unit. A load cell (parallelogram) is available as standard option.

Slow speed function

The 2-weight and 3-weight pneumatic versions can be equipped with a slow speed function for a controlled lowering motion. Functional conditions are configured by the customer, and depend on the specific application.

Automotive (AM)

The load is switched by bistable valves, ie. load alternation is done by impulse signals.

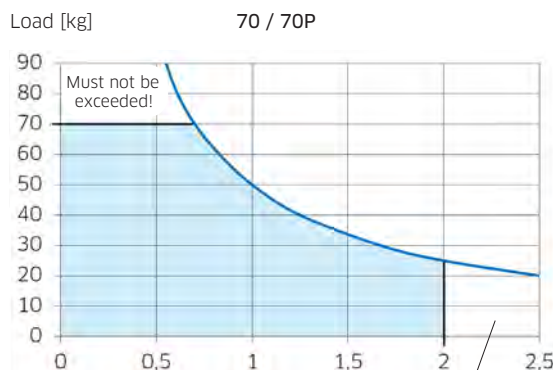For more information, please contact Movomech.

Load table

Max load depends on incoming work pressure according to:

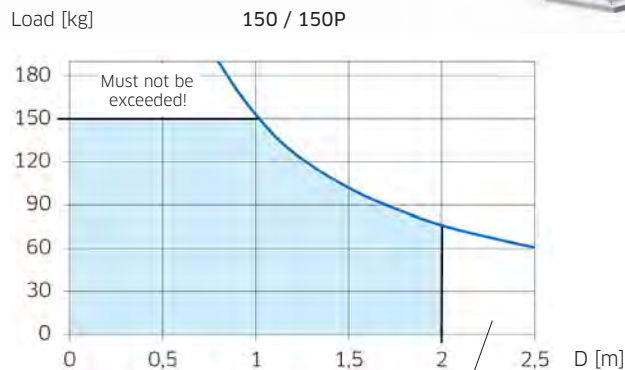| Work pressure (bar)		4	5	5,5	6	7
Max load (kg)	70/70P	50	60	65	70	70
Max load (kg)	150/150P	100	150	150	150	150

Load diagram

Mechspace Pro can work with loads within the shaded graphics area for each model.

- Max moment M_{max} at tool adapter.
- Max load m_{max} at the tool adapter: includes tool arm, gripper tool and handled object.

M_{max} [Nm]

x [mm]

D [m]

m_{max} [kg]

Load [kg]   **70 / 70P**

Must not be exceeded!

D [m]

Not recommended due to unpredictable dynamic loads. Contact Movomech for advice.

Load [kg]   **150 / 150P**
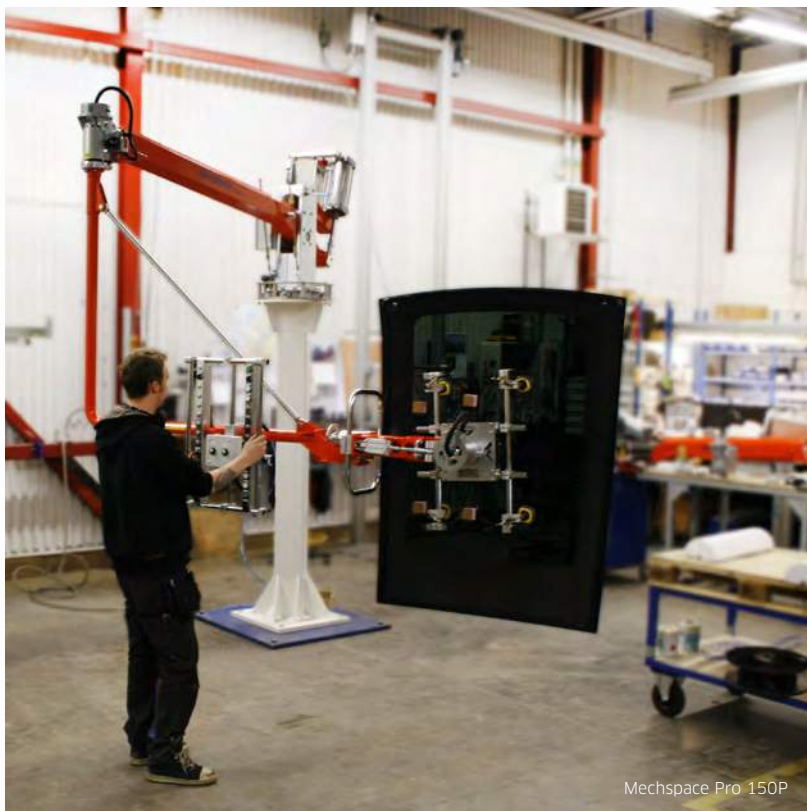
Must not be exceeded!

D [m]

Not recommended due to unpredictable dynamic loads. Contact Movomech for advice.

"Mechspace Pro is extremely easy to manoeuvre and provides ergonomic freedom of movement within a large working area."

Mechspace Pro 150

"Mechspace Pro's moment absorbing features gives important advantages for complex material handling operations, and for gripping and rotation of eccentric loads."

Mechspace Pro 150P

+1 866 543 8635   info@roni.com
+1 704 847 2464   www.roni.co

RONI
8001 Tower Point Drive
Charlotte, NC 28227
US