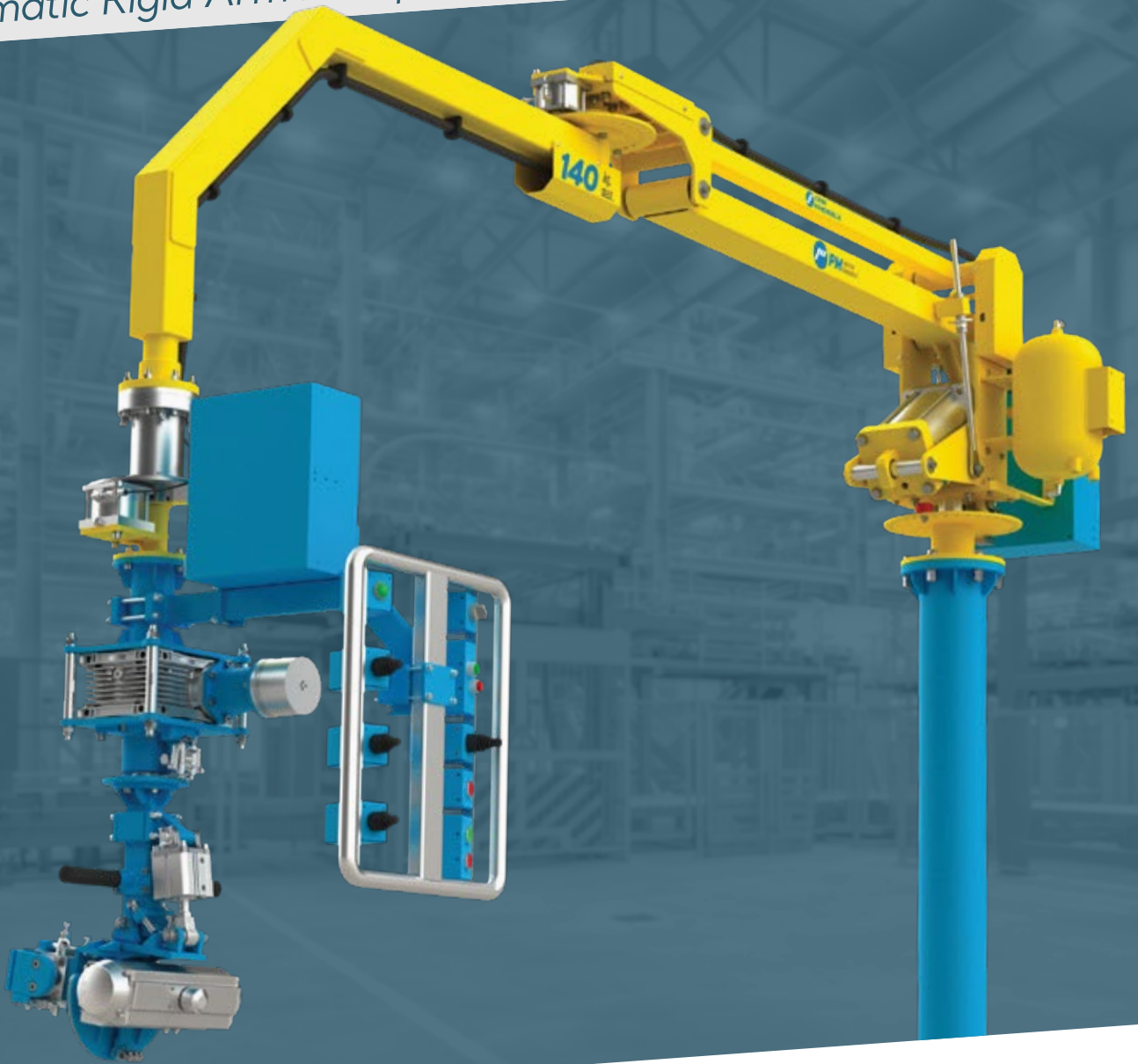


# **PM Forceful Mini**

Pneumatic Rigid Arm Manipulator



**PM Forceful Mini Rigid Arm Manipulators** are designed for **stable and controlled transport of loads under weightless conditions**. They are especially characterized by the **safe handling of off-set loads and vibration-free operation**.

**Maximum Safety** – Brake and safety systems compliant with CE standards

**Off-Set Load Handling** – Stable balance with asymmetrical load distribution

**Vibration-Free Transport** – Smooth, shock- and vibration-free movement

**Weightless Operation** – Nearly zero operator effort thanks to pneumatic balancing

**Precise Positioning** – Micro-adjustments and full control in all directions

**Drift Control** – Special brakes ensure secure stopping

**Flexible Mounting** – Floor, ceiling, or rail-mounted configurations available

**Gripper Options** – Standard hooks or customized gripping tools

Operates with dry, filtered (40µm), oil-free compressed air at min. 0.7/0.8 MPa

Max. load capacity: **140 kg**, max. working radius: **3.000 mm**, vertical stroke: **1.600 mm**

Air consumption per cycle: **50-100 NI**

# Mounting Options

**Forceful Mini** Column Mounted **FMY**



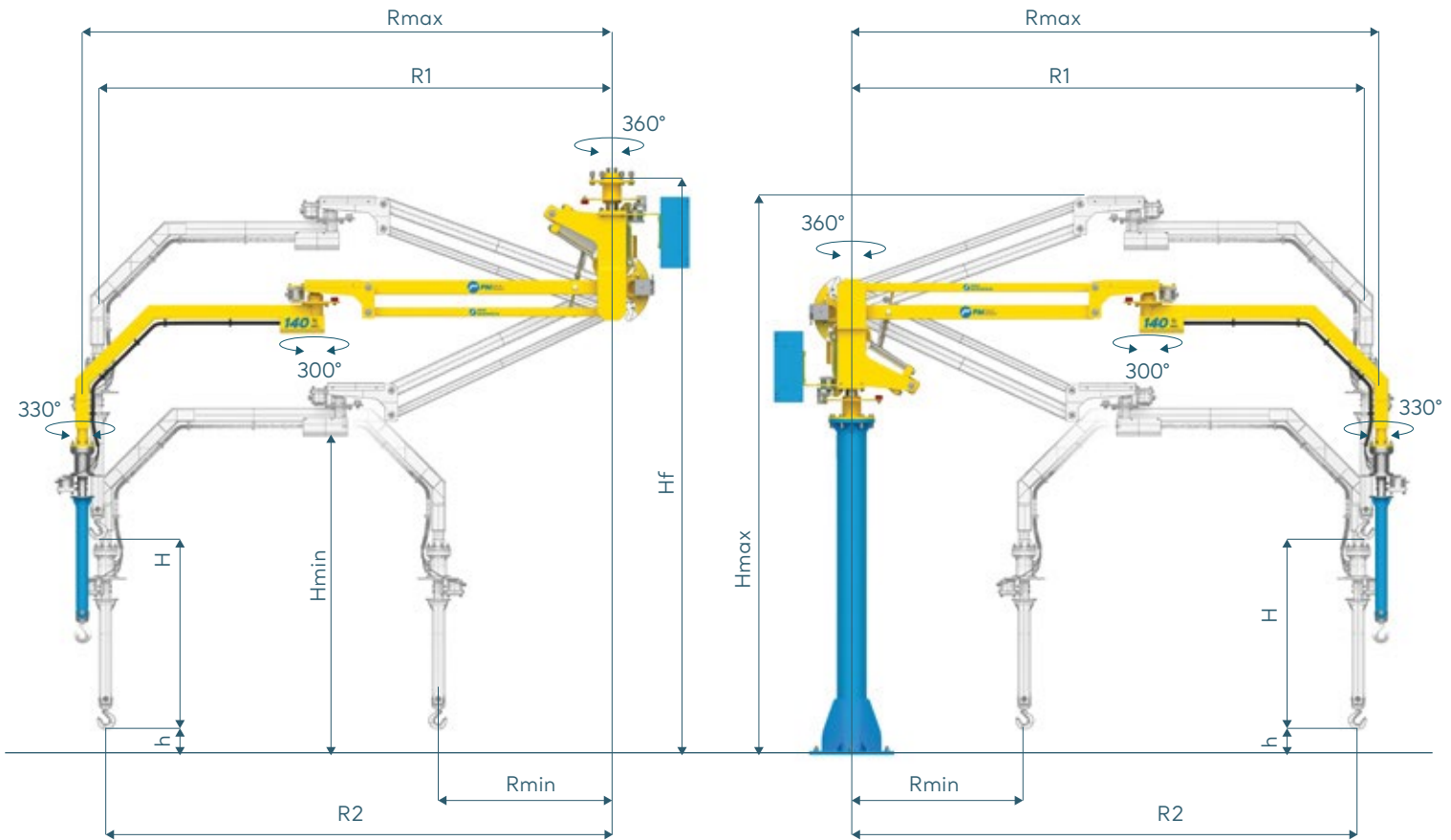
**Forceful Mini** Overhead Mounted **FMT**



**Forceful Mini**  
Overhead Rail-Mounted **FMTA**



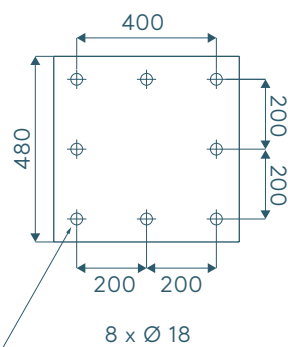
# Forceful Mini Technical Details



## Maximum Load Capacity [kg]

		140	140	100	70
Max. Working Radius [mm]	Rmax	1600	2000	2500	3000
Min. Working Radius [mm]	Rmin	680	750	785	850
Vertical Stroke [mm]	H	900	1130	1370	1600
Min. Pick-up Height [mm]	*h	200	200	200	200
Max. Manipulator Height [mm]	*Hmax	3150	3270	3390	3510
Max. Ceiling Mounting Height [mm]	*Hf	3630	3750	3870	4000
Lower Edge of Main Body [mm]	*Hmin	2000	2000	2000	2000
Working Radius at Top Position [mm]	R1	1445	1805	2265	2725
Working Radius at Bottom Position [mm]	R2	1645	1830	2295	2755

\* Dimensions may vary depending on customer-specific requirements.



Base Plate Dimensions [mm]

# Tailor-made solutions



Visit our YouTube channel to see all our applications.

