

Make life a little  
easier and safer.

*For patients. For caregivers. For you.*



INNOVATIVE ACTUATION SYSTEMS FOR MEDICAL APPLICATIONS



**POWER-PACKER®**

PROGRESS IN MOTION

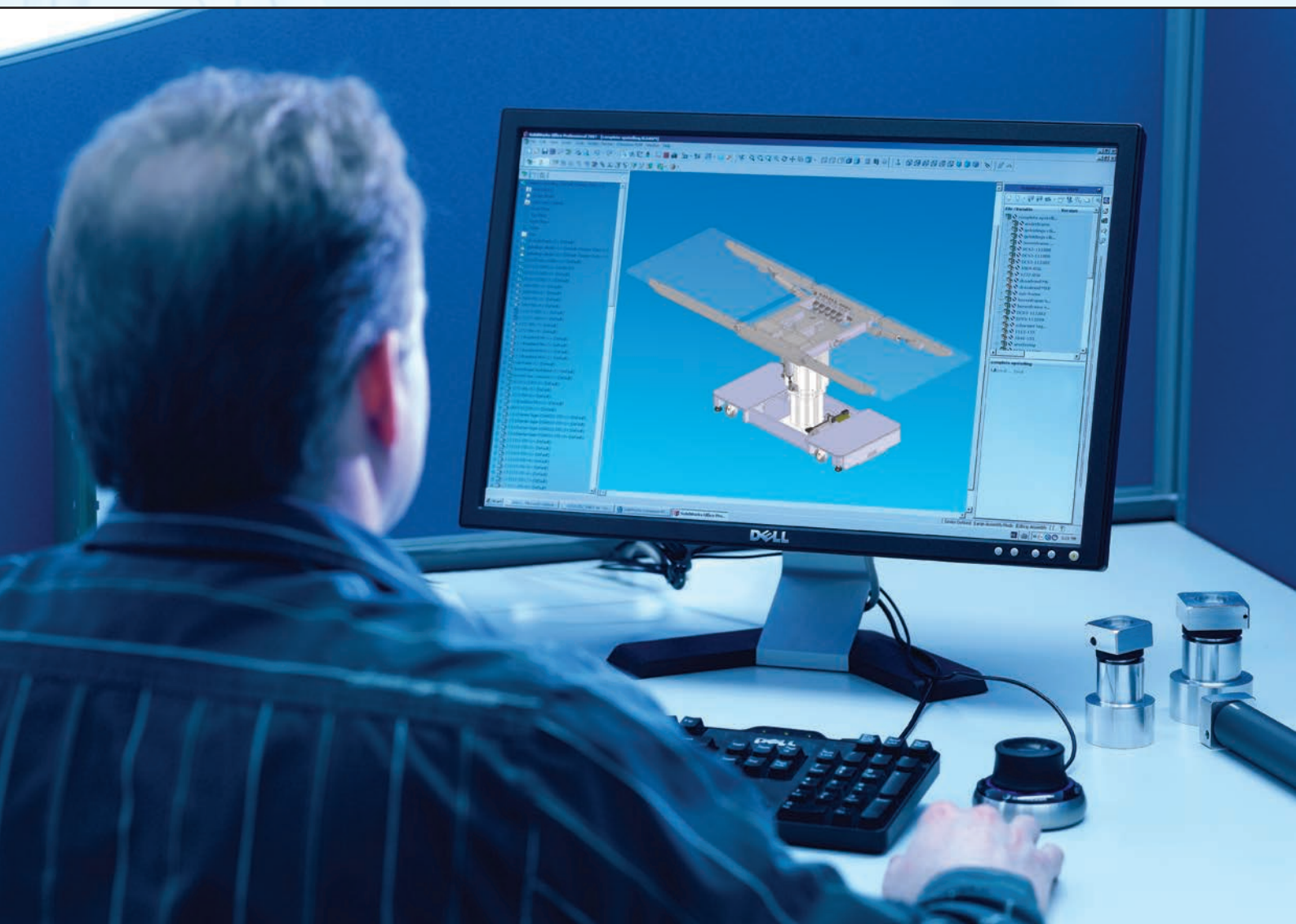
## POWER-PACKER PROVIDES INNOVATIVE MOTION CONTROL SOLUTIONS FOR A FULL RANGE OF MEDICAL APPLICATIONS.

Hospital Beds | Stretchers | Treatment Tables | Operating Tables | Scanners  
Scanner Tables | Lifts | Bariatric Equipment | Shower Trolleys | Emergency Trolleys  
Tilt-in-space & Standing Wheelchairs | Medical and Dental Chairs | Home Care Beds

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**POWER-PACKER®**





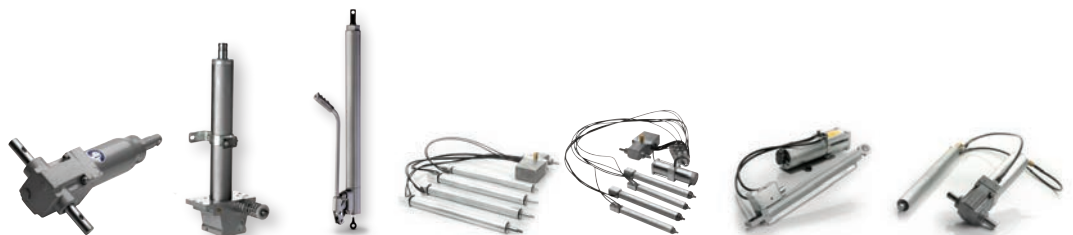
# PROGRESS IN MOTION



## We're ready to raise your expectations.

In the fast-paced, ever-evolving world of health care, lives are on the line every second. Medical personnel need a safe and clean environment, equipped with reliable tools and technology, to do their jobs effectively and keep their patients — and themselves — healthy and free from harm. At Power-Packer, we understand your critical needs and offer innovative, long-lasting, easy-to-use, hydraulic solutions for patient handling, whether electrical power is available or not. That's why leading medical equipment OEMs around the globe trust Power-Packer hydraulic actuation systems in their hospital beds, chairs, stretchers, treatment tables, operating tables, shower trolleys, lifts and more.

Make life just a little easier and safer with Power-Packer hydraulic motion control systems for medical applications. [www.power-packer.com](http://www.power-packer.com) | [www.powerpackerus.com](http://www.powerpackerus.com).



# MK5



## MK5 (SELF-CONTAINED HYDRAULIC ACTUATOR)

### MK5 APPLICATIONS

HOSPITAL BEDS

HOME CARE BEDS

PATIENT LIFTING DEVICES

EXAMINATION COUCHES

PHYSIOTHERAPY TABLES

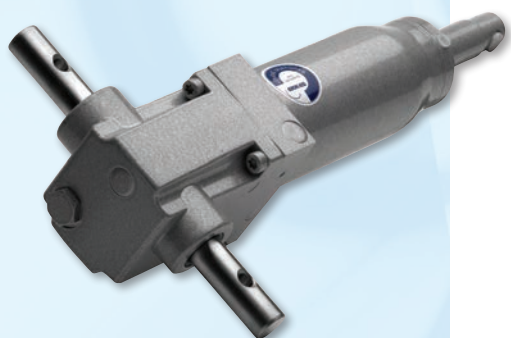
CHAIRS

UNIQUE APPLICATIONS

## You'll love our bedside manner.

**When caring for patients, ease of operation and installation, along with consistent, dependable performance are critical.** Power-Packer's self-contained MK5 hydraulic actuator is a reliable, cost-effective solution for a wide range of patient handling and lifting devices. Its smart, intuitive design combines a pump, cylinder, valves and reservoir into one compact, maintenance-free unit, giving you years of trouble-free operation and trusted performance. Every MK5 hydraulic actuator includes an installed pressure relief and flow control valve to ensure smooth descent independent from the patient weight.

- Zero-maintenance design
- Easy to install
- Compact self-contained design
- Quiet and smooth performance
- Reliable load-holding capability
- Simple installation and operation
- No external source of power required
- Fully manual/foot operation
- Manual override, hand release option
- Reduces overall equipment maintenance and cost-of-ownership for end-users







## MK5 SPECIFICATIONS

Stroke lengths: multiple possibilities between 80 and 400 mm (3.1" and 15.7")

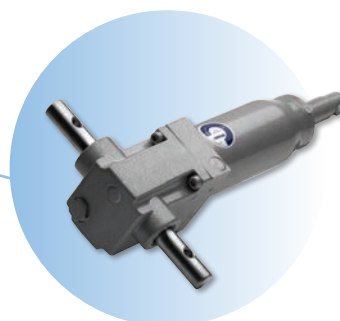
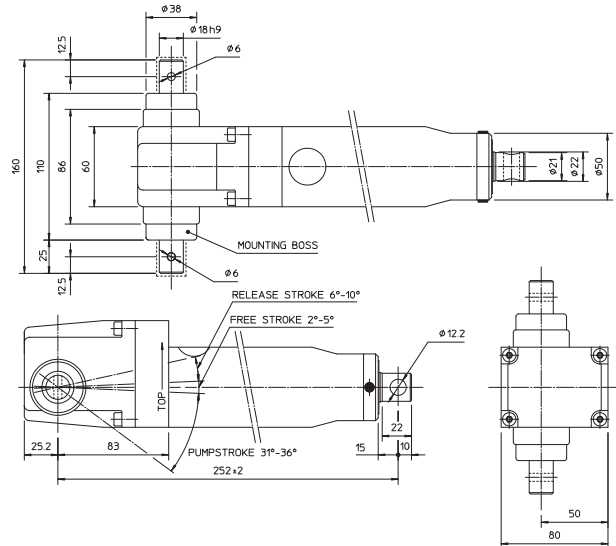
Maximum dynamic push force: Up to 10 kN (2,248 lbs.)

Descent control: flow control valve

Pressure relief valve: installed

Single acting cylinder

Optional: Holes on the pedal shaft, mounting brackets, suction tube, different actuator colors, TÜV certified



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# STRETCHER ACTUATOR

## STRETCHER ACTUATOR (SELF-CONTAINED HYDRAULIC ACTUATOR)

### STRETCHER ACTUATOR APPLICATIONS

STRETCHERS

PATIENT TROLLEYS

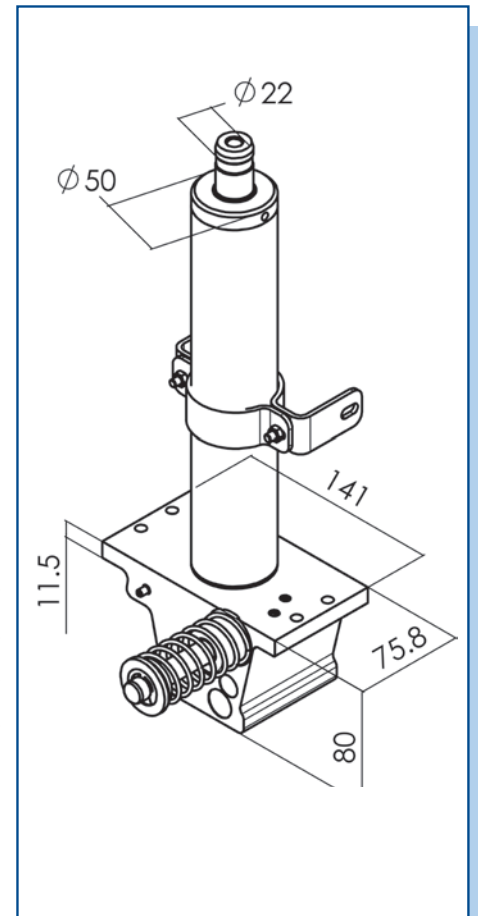
UNIQUE APPLICATIONS



## Get carried away by our performance.

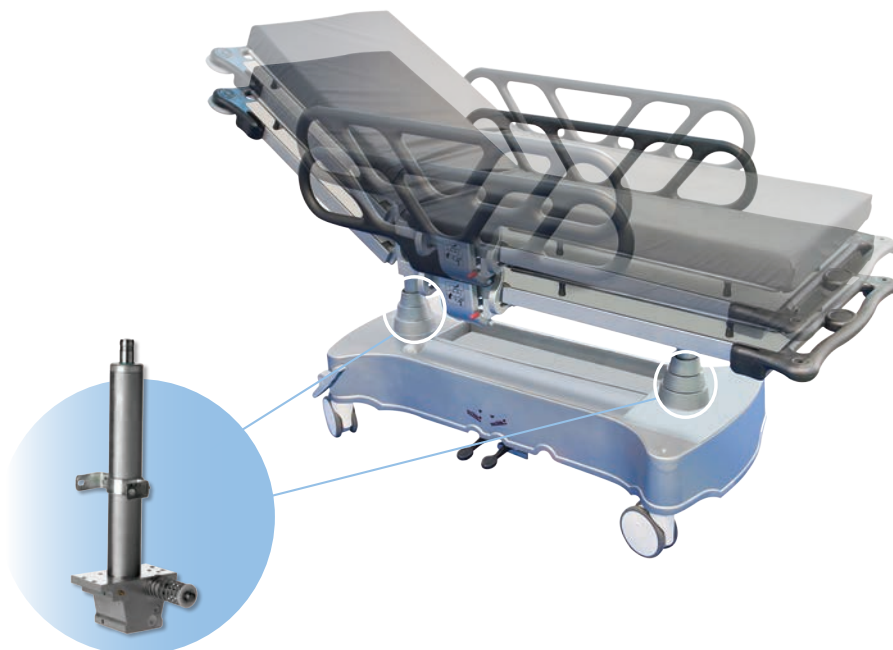
**Patient comfort and safety are critical during transport. And medical personnel rely upon equipment that performs flawlessly every time.** Power Packer's Stretcher Actuator is always on call and ready to perform. This reliable, self-contained hydraulic actuator is specifically designed for use in stretchers and trolleys, and features built-in guidance to handle high-side loads. This means that no additional actuation or support mechanism is needed in the stretcher or gurney's design, which can lower your overall manufacturing costs. To provide optimal functionality, the pump, cylinder, valves and reservoir are combined into one compact, maintenance-free unit. Power-Packer's Stretcher Actuator is easy to install and built for longest life.

- Zero-maintenance design
- Quiet, smooth operation
- Enhanced performance and operator comfort
- Fast, regulated descent time
- Reduces overall equipment maintenance and cost-of-ownership for end-users
- Requires no external source of power



### STRETCHER ACTUATOR SPECIFICATIONS

Stroke lengths:	280 mm (11.0")	330 mm (13.0")
Closed length between mounting points:	299 mm (11.8")	349 mm (13.7")
Maximum dynamic push force:	4.5 kN (1,000 lbs.)	4.5 kN (1,000 lbs.)
Maximum static load:	8 kN (1,798 lbs.)	8 kN (1,798 lbs.)
Maximum pump strokes till extended length:	17	20
Maximum static torque on plunger:	290 Nm (214 ft.-lbs.)	290 Nm (214 ft.-lbs.)
Descent time:	3-7 sec	4-8 sec
Single acting cylinder		
Descent control: flow control valve		
Pressure relief valve: installed		





# MANUAL LIFT



## MANUAL LIFT (SELF-CONTAINED HYDRAULIC ACTUATOR)

### STRETCHER ACTUATOR APPLICATIONS

PATIENT LIFTING DEVICES  
STRETCHERS

MULTI-FUNCTION TABLES

MULTI-FUNCTION CHAIRS



## Lifting outcomes you can rely on.

**In your day-to-day world, you need to know that your patients and caregivers are safe and secure, in every situation.** Power-Packer's self-contained manual lift hydraulic actuator is a reliable, cost-effective solution for patient handling and lifting devices. This smooth action hydraulic system consists of a pump, reservoir, cylinder and valve. Added external hoses or fittings help ensure easiest installation and use. The maintenance-free design is built to exact standards for years of trouble-free operation.

- Zero-maintenance design
- Self-contained, fully manual operation
- Simple installation and operation
- Dependable load-holding capability
- Requires no external source of power





### MANUAL LIFT SPECIFICATIONS

Stroke length: 483 mm (19.0")

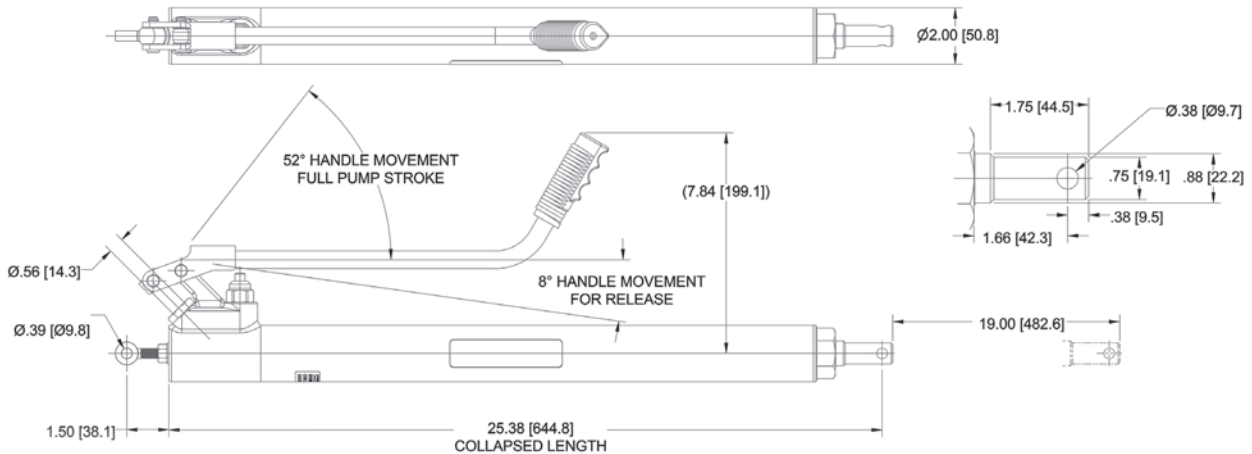
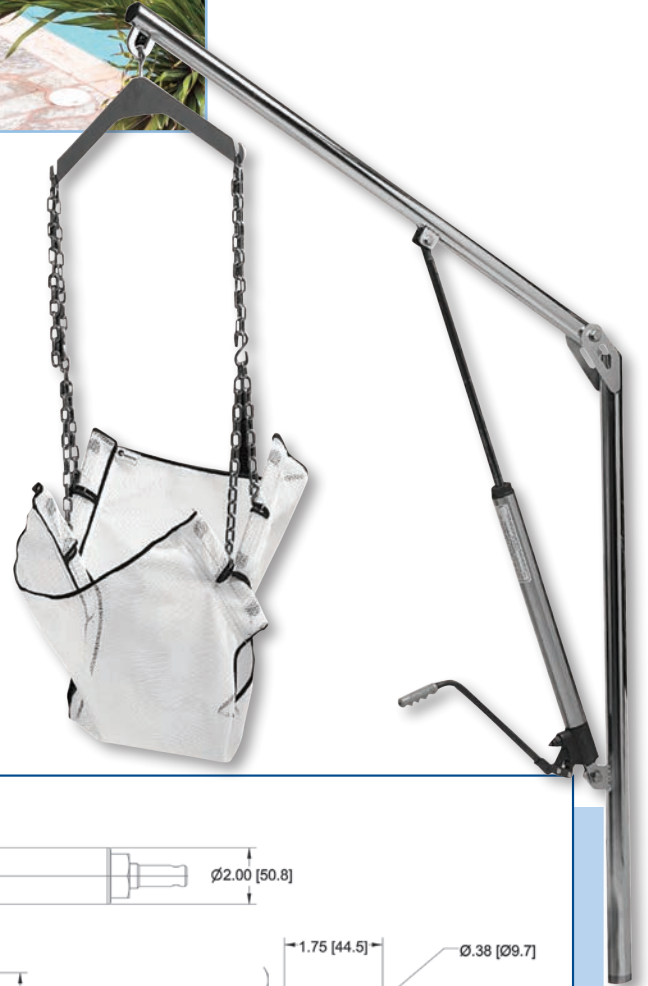
Maximum dynamic push force: 4.5 kN (1,000 lbs.)

Descent control: flow control valve

Ram effective area: 4.4 sq cm (0.69 sq. in.)

Pump plunger dia 14.3 mm (0.56")

Displacement per stroke: 3.6 cu. cm. (0.22 cu. in.)



# DMI



## DMI (MANUAL-HYDRAULIC SYSTEM)

### DMI APPLICATIONS

HOSPITAL BEDS

STRETCHERS

EMERGENCY TROLLEYS

OPERATING TABLES

UNIQUE APPLICATIONS

## Expect best practices in all spaces.

**Medical needs can arise at any time, in any location. You need to know that your equipment will do the job regardless of where a patient requires care.** Power-Packer's DMI is a reliable, long-lasting hydraulic actuator designed to perform in applications that require maximum versatility. Ideal for situations with limited space, the DMI is designed with a pump, cylinder, couplers and hoses — all combined into one, compact, maintenance-free unit. Every DMI includes a pressure relief valve and a flow control valve to ensure smooth descent. The system is delivered fully assembled and tested, providing easy installation and longest life.

- Compact for optimal versatility in a variety of applications
- Cylinder and pump are separated allowing maximum flexibility in applications
- Quiet and smooth operation
- Zero-maintenance design
- Comfortable to use
- Reduces overall equipment maintenance and cost-of-ownership for end-users





## DMI SPECIFICATIONS

Stroke lengths: Multiple possibilities between 165 and 250 mm (6.5" and 9.8")

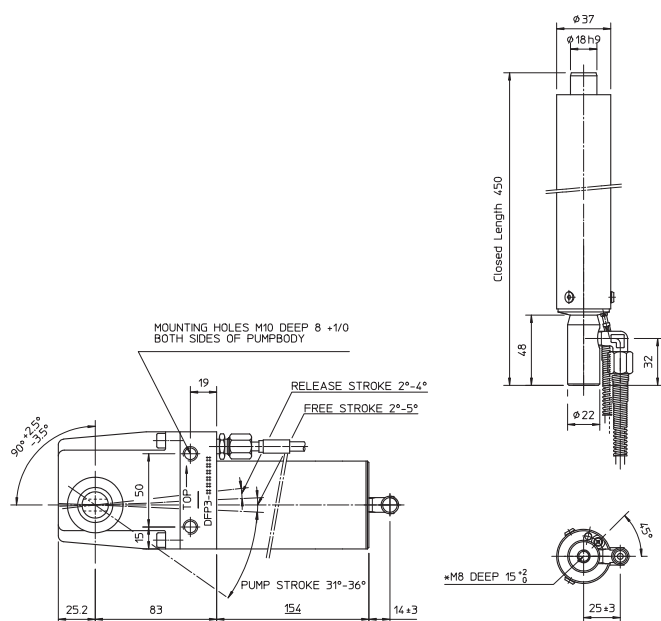
Maximum dynamic push force: 6 kN (1,349 lbs.)

Descent control: flow control valve

Pressure relief valve: installed

Single acting cylinder

Pump and cylinder connected through hoses



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## MMC (MANUAL-MULTI-CYLINDER SYSTEM)

### MANUAL-MULTI-CYLINDER APPLICATIONS

OPERATING TABLES

HOSPITAL BEDS

PSYCHIATRIC BEDS

MEDICAL CHAIRS

STRETCHERS

BARIATRIC EQUIPMENT

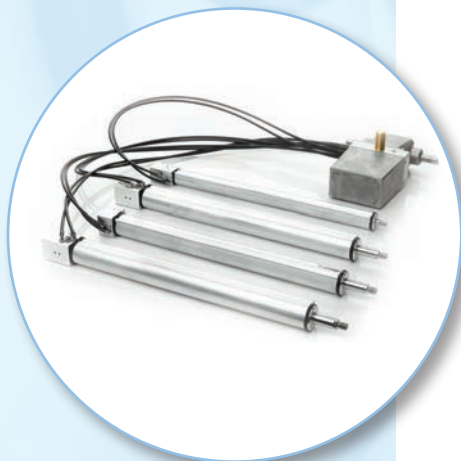
MOBILE APPLICATIONS

UNIQUE APPLICATIONS

## Wait 'til you see how we operate.

**In a health care setting, there's simply no room for hesitation, poor performance or failure.** That's why Power-Packer's manual multi-cylinder (MMC) hydraulic systems are designed to operate multiple movements within a wide range of applications. Our smart, straightforward systems allow you to select which cylinder to operate at any given time. An intuitive selector is integrated directly into the pump for the most compact, lightweight design possible. Choose a Power-Packer MMC system and you can combine a wide variety of single- and double-acting cylinders to create the optimal configuration for your specific need. All Power-Packer MMCs are designed for maximum life.

- Operate up to four cylinders with one foot pump for maximum efficiency
- Easy function selection
- Single- and double-acting cylinders
- High load forces are comfortable to operate
- 8.5 and 14 kN push forces (1910, 3147 lbs.)
- System-tested and pre-filled for immediate guaranteed performance
- Reduces overall equipment maintenance and cost-of-ownership for end-users
- No external source of power required





## MMC SPECIFICATIONS

Stroke lengths available 60 to 400 mm (2.4" to 15.7")

One foot pump easily operates up to four cylinders

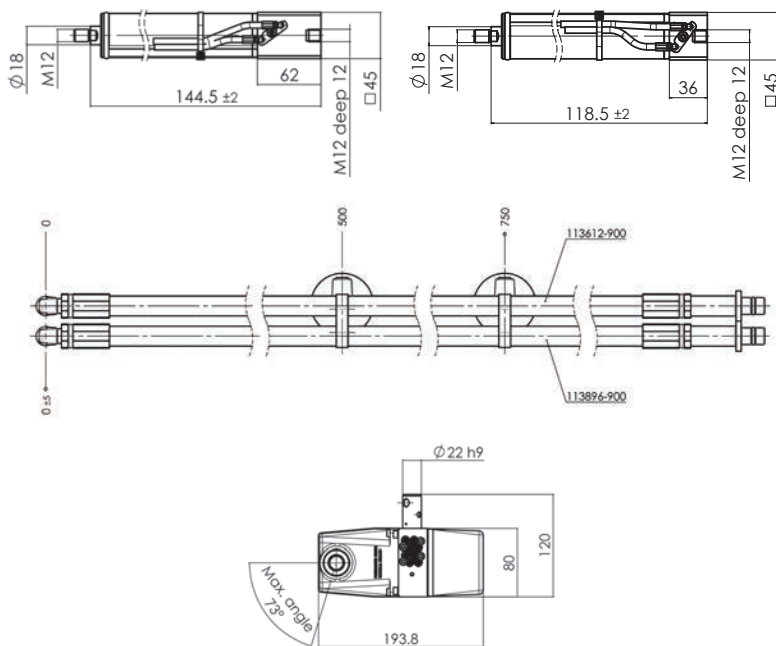
One to four single/double acting hydraulic cylinders:  
8.5 and 14 kN push forces (1910, 3147 lbs.)

Two hoses per cylinder

Selector and pump are integrated into one component

Selector function: by rotating the shaft, one of the cylinders can be selected.

Pump function: the selected cylinder is extended by pumping the pump foot pedal down. The selected cylinder is retracted by moving (single-acting cylinder) or pumping (double-acting cylinder) the pump foot pedal down.



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# ELECTRO-HYDRAULIC MMC



## EH-MMC (ELECTRO-HYDRAULIC MULTI-CYLINDER SYSTEM)

### ELECTRO-HYDRAULIC MMC APPLICATIONS

OPERATING TABLES

HOSPITAL BEDS

PSYCHIATRIC BEDS

MEDICAL CHAIRS

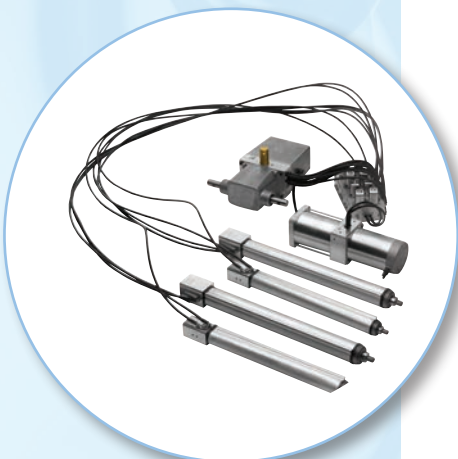
STRETCHERS

UNIQUE APPLICATIONS

## Add our specialist to your team.

**In health care, emergencies can happen at any time. And you need to know that your equipment will work no matter what happens.** Power-Packer's Electro-Hydraulic Manual Multi-Cylinder (MMC) won't let you down. This long-lasting system is designed to operate multiple movements in the most innovative medical applications. It combines the performance of an electro-hydraulic and manual-hydraulic system, with up to four manual back-up functions should you lose power. Using a simple handset selector, the operator can choose which cylinder to use. The selector is integrated into the pump, for optimal savings in size and weight. All available double-acting cylinders can be combined, giving you the flexibility to create the ideal system for your needs.

- Reduces overall equipment maintenance and cost-of-ownership for end-users
- Enhanced performance, high load forces, optimum technology for bariatric needs
- Manual override for 4 cylinders to ensure operation if power supply fails
- Operating comfort for manual override (selector), easy cylinder selection by means of handset
- Zero-maintenance design
- System-tested and pre-filled for immediate guaranteed performance
- Valves have integrated safety function mounted to cylinder





## ELECTRO-HYDRAULIC MMC SPECIFICATIONS

Operate up to 12 cylinders (electro-hydraulic) including up to four back up functions (manual-hydraulic)

One to 12 double acting hydraulic cylinders: 8.5 and 14 kN push forces (1910, 3147 lbs.)

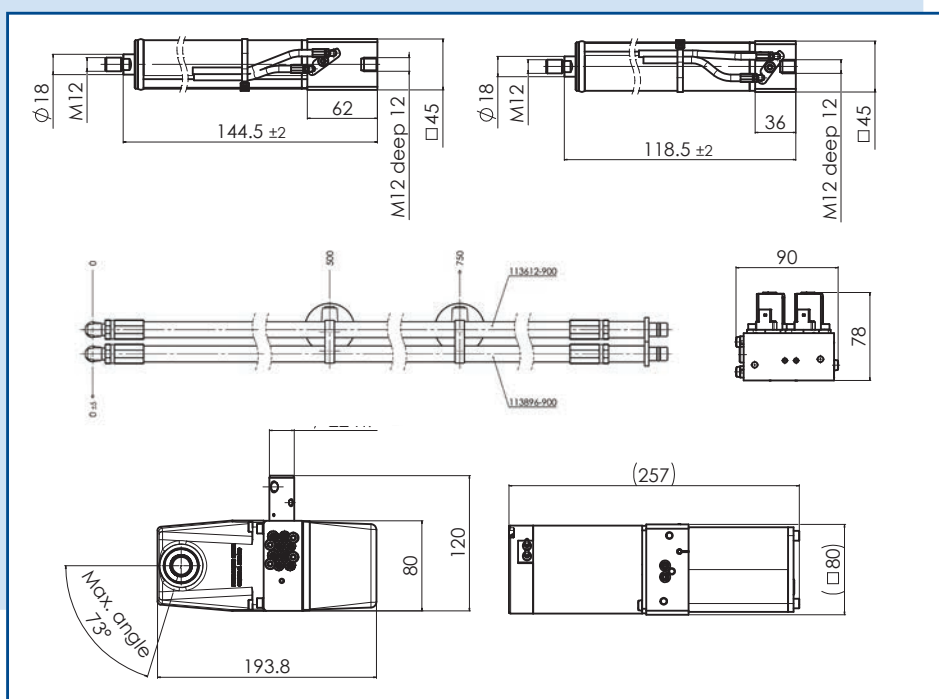
Two hoses per cylinder: 1.0 mtr/1.5 mtr/2.0 mtr (3.3 ft/4.9 ft/6.6 ft)

Pump motor: 12V or 24V

Electrical part: IP 68

Selector function: manual or electrical. Manual by rotating the shaft, one of the cylinders can be selected.

Pump function: manual or electrical. The selected cylinder is extended by pumping the foot pedal down or by handset (electro-hydraulic). The selected cylinder is retracted by pumping the foot pedal down or by handset (electro-hydraulic)



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# QUATTRO



## QUATTRO (ELECTRO-HYDRAULIC ACTUATOR)

### QUATTRO APPLICATIONS

SCANNING TABLES

OPERATING TABLES

UNIQUE APPLICATIONS

## We put you in complete control.

**During a surgical or scanning procedure, precision is everything.** Power-Packer's QUATTRO electro-hydraulic actuator gives you the flexibility to position a patient just as needed to ensure the best outcome. This state-of-the-art system allows you to vary load and velocity in either direction, independently of each other. Designed for scanner tables and operating tables, the QUATTRO is also the ideal choice for any application that demands extreme precision.

- Enhanced performance
- Optimal operator comfort
- Allows continuously variable velocity in both directions
- Permits variable load, independent of direction of movement
  - Minimum play when reversing the direction of the movement
  - 100% tight valves, no creep under load
- Valves have integrated safety function mounted to cylinder
- Reduces overall equipment maintenance and cost-of-ownership for end-users





## QUATTRO SPECIFICATIONS

Optimal flexibility to adapt to your unique application

Continuously variable velocity in both directions

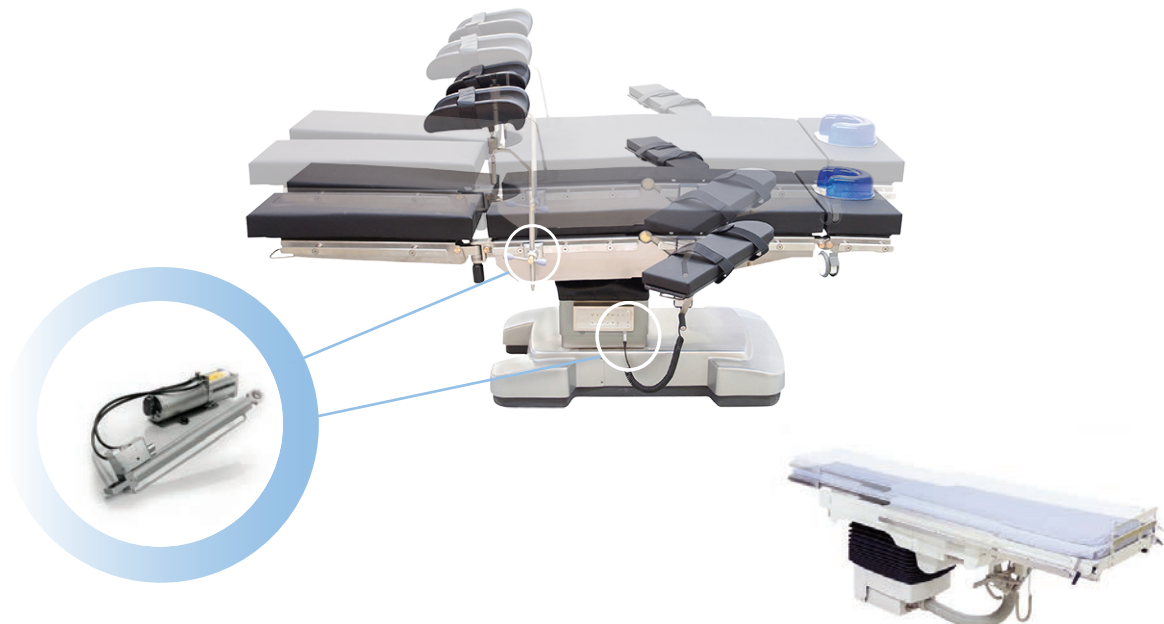
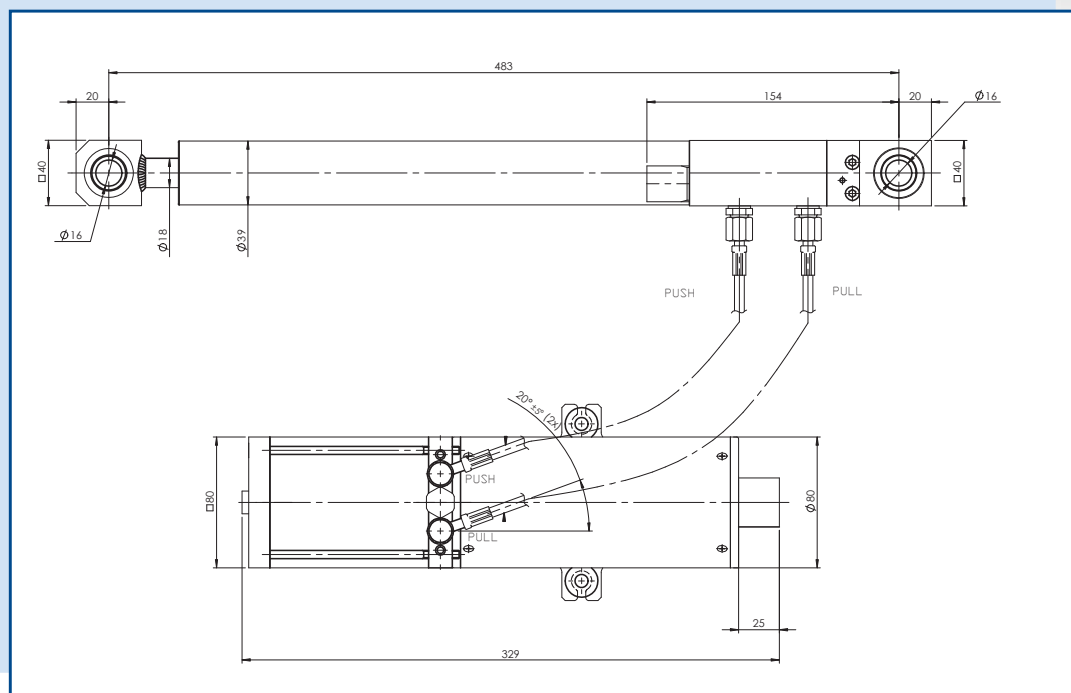
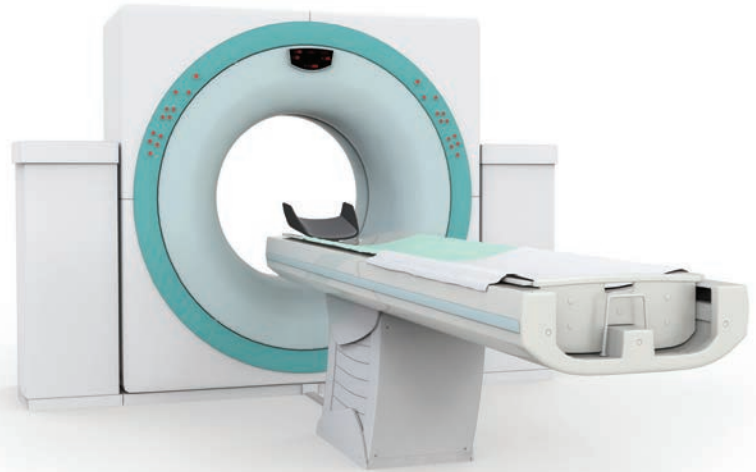
Allows variable load, independent of direction of the movement

Minimum play when reversing the direction of the movement

100% tight valves, no creep under load

Valves with integrated safety function mounted to the cylinder

Double-acting cylinder



**POWER-PACKER®**



## Discover all that we bring to the table.

Power-Packer is an industry leader in innovative, high-quality motion control solutions for medical applications. We offer:

- Customer-focused product optimization
- Best-in-class practices
- Cost-effective, custom solutions
- Continuous improvement and innovation
- Design and engineering expertise
- Exceptional service
- Financial stability
- International manufacturing footprint
- Global sales offices
- Proven, tested quality
- Reliability
- Volume flexibility

