



ROEMHELD

PROGRAM SUMMARY

Power Workholding

Workholding elements



Hydraulic cylinders



Clamping power units



Hydraulic components



Pneumatic elements



FSS clamping systems



Assembly and Handling Technology

Handling technology



Press-in devices



Drive technology





Hydraulic elements for positioning and clamping of workpieces
Operating pressure: up to 500 bar

Bore clamps

Clamping elements for clamping in bore holes
with/without centring function / with pull-down clamping
with/without seat check
bore hole diameter: 6.6 ... 46 mm
max. low-clamping force 0.6 ... 24.5 kN



Position flexible clamping elements

Clamping elements for "floating" clamping
for exterior and interior clamping
with/without position monitoring
max. clamping force: 7.5 kN



Clamps / clamping cylinders

Clamping elements for clamping in small recesses
with/without position monitoring
with/without self-locking
max. clamping force: 2 ... 50 kN



Hinge clamps

Clamping elements with operation of a clamping lever
with/without position monitoring
max. clamping force: 1.3 ... 21.5 kN
clamping stroke/clamping range: 2.0 ... 9.0 mm



Swing clamps

Clamping elements with swing piston
with/without position monitoring
max. clamping force: 0.6 ... 41 kN
clamping stroke: 6 ... 50 mm



Work supports

Elements to support workpieces
single or double acting
max. load force: 4 ... 102 kN
plunger diameter: 16 ... 50 mm
plunger stroke: 6 ... 20 mm



Concentric clamping elements

Clamping elements for concentric positioning and clamping
for exterior and interior clamping
with/without contact or stroke end control
max. clamping force: 0.6 ... 44 kN



Fixture clamps

Compact standard clamping systems for use on fixtures
with fixed jaw, concentric or position flexible
max. clamping force: 6.5 ... 15 kN
jaw width: 40 ... 65 mm



Hollow-piston cylinders

Clamping cylinders with through hole in the piston
piston diameter: 20 ... 80 mm
max. push force: 10 ... 153 kN
clamping stroke: 6 ... 40 mm



Hydraulic cylinders for linear motions of every type

Operating pressure: up to 500 bar

Hydraulic cylinders

Hydraulic cylinders, design with tube

with/without stroke end control
piston diameter: 25 ... 80 mm
stroke: 60 ... 1200 mm



Universal cylinders

Hydraulic cylinders with round housing

for axial adjustability
piston diameter: 10 ... 63 mm
stroke: 8 ... 100 mm



Threaded-body cylinders

Compact hydraulic cylinders and built-in pistons for screwing in

piston diameter: 8 ... 50 mm
stroke: 4 ... 40 mm



Block cylinders

Hydraulic cylinders with block-type body made of steel, aluminium or bronze

with/without stroke end control
piston diameter: 16 ... 200 mm
stroke: 8 ... 200 mm



Hydraulic slides

Hydraulic cylinders with integrated guides

with/without stroke end control
piston diameter: 25 ... 100 mm
stroke: 20 ... 200 mm



Clamping power units, hydraulic power units, hydro-pneumatic pump units and manually-operated pumps to generate and control hydraulic pressure

Power units

Completely equipped standard power units

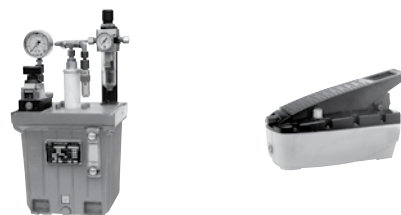
with gear pumps or radial piston pumps
with programmable control, electric control or terminal box
max. flow rate from 0.82 to 24.0 l/min
operating pressure from 50 to 500 bar



Hydro-pneumatic pumps

for single and double acting cylinders

flow rate: 0.85 ... 1.5 l/min
air pressure: 0.85 ... 5.0 bar
max. operating pressure: 500 bar



Manually-operated pumps

Hydraulic pumps for single-acting cylinders

operation by hand or foot lever
displacement per stroke: 2 ... 12 cm³

Screw pumps

displacement: 21 cm³





Elements for oil supply and control to hydraulic elements Operating pressure: up to 500 bar

Rotary couplings

Rotary couplings and rotary valve couplings
for oil supply to rotating and swivelling installations
max. operating pressure: 500 bar



Coupling elements

Couplings to separate and connect hydraulic, pneumatic and vacuum lines
single elements and multi-couplings
nominal diameter: ND 3 ... 8
max. flow rate: 8 ... 35 l/min
max. operating pressure: 300 ... 500 bar



Piping elements

Fittings, hydraulic oil, precision steel tubes, connecting inserts, pressure gauges, tube clamps, high-pressure hydraulic hoses, high-pressure filters, hydraulic accumulators, pressure switches, pressure sensor



Intensifiers

Hydraulic-hydraulic or pneumatic-hydraulic
single and double acting
max. output pressure: 500 bar



Hydraulic valves

Directional control and shut-off valves
Throttle and pressure control valves
Pressure relief valves
Check valves
Sequence valves
Valve combinations



Pneumatically-operated swing clamps and rotary couplings for pneumatics

Pneumatic swing clamps

with adjustable magnetic sensors
double acting
max. clamping force: 140 ... 1400 N
max. operating pressure: 7 bar



Pneumatic rotary valve couplings

Number of stations: 5 ... 8
nominal diameter 3
max. operating pressure: 10 bar



Electro-mechanical clamping elements

Electric swing clamps
max. clamping force: 7 kN

Electric work supports
max. load force: 20 kN

Electric block cylinders
max. clamping force: 10 = 20 kN





ROEMHELD FSS clamping systems

Flexible clamping and support elements for clamping of thin-walled workpieces with free-form surfaces

Clamping and supporting elements

elements with their own linear actuator and vacuum clamping technology
piston rod diameter: up to 70 mm
strokes: 100 to 1000 mm
max. axial support force: 1.2 = 12.0 kN



The core elements of a FSS clamping system are the clamping and support elements that can be used in unlimited quantity and that together form the contact surface of the workpiece. Since each element can be positioned individually on the relevant workpiece geometry, FSS clamping systems allow for a flexible configuration of individual surfaces to clamp and support workpieces. Depending on the workpiece surface and geometry, clamping forces of 300 N per element and more can be obtained.

Handling technology

moduhub module programme

Modules for rotating, lifting, tilting and moving of heavy workpieces up to 1.000 kg
All modules are complete functional units that can be easily combined to built multi-functional units.



Press-in devices

modupress module programme

Hydraulically or electrically-operated press-in devices for power-operated processes
With O-shaped or C-shaped press-in frame
Cylinder stroke from 100 to 500 mm
Nominal push force from 25 to 150 kN



Electrically and manually-operated linear actuators for adjusting procedures

under demanding conditions in industry, automotive engineering and medicine technology

Electrically-operated linear actuators

Version with limit switches or stroke measuring system

max. lifting force: 0.3 ... 6.0 kN
stroke: 100 ... 600 mm
voltage: 12 or 24 VDC



Manually-operated linear actuators

Hydro-mechanical linear actuators for adjusting procedures in medical-technical devices and beds

max. lifting force: 4.5 ... 12.5 kN
stroke: 80 ... 250 mm



Service

Service products, technical customer service

- Service products
- Maintenance, mounting and repair





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Are you interested in an individual consultation or do you have any questions about our products?

We are pleased to support you.

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for metal cutting and non-cutting manufacturing**

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