

PROCONTROL



**LHS & LHD
linear hydraulic
actuators**

the Linear series

ProControl the Company

ProControl is an independent highly flexible versatile and professional company specializing in the manufacture and supply of complete valve actuation. Our customers can rely on many years of industry experience and dedicated service, our products have been designed to meet tomorrow's requirements in order to achieve maximum efficiency, safety and reliability.

From our factory located in Castell'Arquato, ProControl personnel have built up a sound and strong reputation in being able to supply first class support to our clients, by offering innovative solutions and designs for all applications.

ProControl's talented workforce is also ideally suited to offer clients' purpose built specifically engineered products as well as a standard product range. ProControl technical expertise can offer creative solutions to clients' problems thanks to years of experience from the field and to continual research into new technology.

Our highly trained personnel is committed to meet today's fast response demands, responding rapidly and efficiently to clients requirements from the initial inquiry stage throughout contract handling to final delivery and commissioning.

Our clients can count on first class after sales support thanks to our efficient rapid response after sales service department, which coordinates together with our service support centres located in all key territories around the world. If required, ProControl's highly qualified English speaking service engineers can be deployed from our factory at a moment's notice, and can be onsite anywhere in the world within 24 hours from callout.



ProControl
factory in Aksai,
Kazakhstan





ProControl GMBH
factory in
Landau-Pfalz,
Germany



ProControl srl Headquarter in Italy

factory area m² 8.500

LINEAR

HYDRAULIC ACTUATORS

SINGLE & DOUBLE ACTING

LHS & LHD series

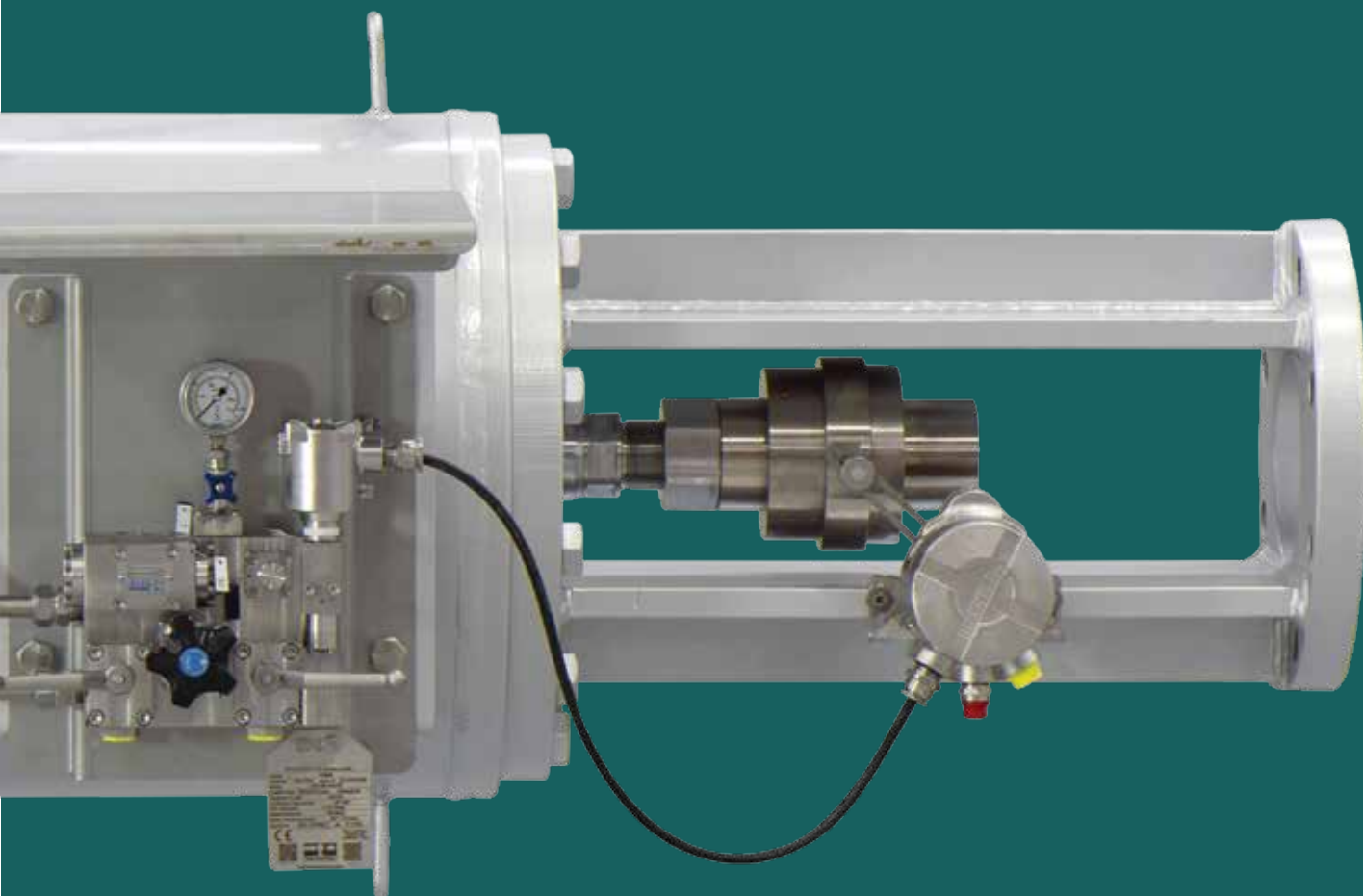


TECHNICAL SPECIFICATIONS

- Supply pressure up to **400 bar design**
- Actuator thrust output up to **10.000.000 N**
- Spring thrust up to **400.000 N**
- Standard operating temperature range **-30°C / +100°C**
- Special low temperature application up to **-60°C**
- All ProControl pressure containing parts are designed according to **ASME VIII div.1 and EN 13445**
- All ProControl actuators are designed for **30 years' service life**

KEY FEATURES

- Fabricated entirely from **carbon steel**
- Low pressure **carbon steel hydraulic cylinder** suitable for supply pressures up to **120 bar design**
- High pressure **carbon steel hydraulic cylinder** suitable for supply pressures up to **400 bar design**
- **Carbon steel piston** with dynamic floating O-ring seals coupled with lubricating piston guide rings allow for reduced friction avoid sticking even after long standstill periods
- **Carbon steel spring cartridge** (only for single acting) with safety facility which allows safe installation and removal of the whole cartridge assembly
- Piston is supported by **2 high strength alloy steel chromium plated piston rod** (other materials suitable on specific request)
- Visual position indicator directly connected to the valve stem showing actuator / valve full linear stroke
- **ASTM A 320 L7 alloy steel tie rods**, with standard electrolytic zinc coating according to **ASTM B633 FeZn 12** (thickness 12 µm)
- **Carbon steel mounting adapter** with bottom flange machined according to the valve top mounting with **carbon steel nickel-plated special coupling mechanism**. Optional for wedge gate valves: coupling with **hammer blow effect** to facilitate valve unseating
- **Alloy steel galvanized end stoppers** available on request
- Integral manual override facilities



DESCRIPTION

ProControl **LHS** & **LHD** series actuators are similar to the LPS & LPD range. Many components are interchangeable, the only major difference is the hydraulic power cylinder.

Modular Design Construction

ProControl actuators all share a common construction philosophy known as **modularity**, which is achieved by utilizing a consistent engineering design throughout our complete range.

Power cylinders, spring containers, manual overrides, control systems and other features can be assembled in various different positions thus allowing to cover all requests in terms of fail position and additional features.

With **large stock** of finished and semi-finished components always available, actuators can be assembled and supplied with very **fast deliveries**.

Linear Actuators

ITEM	DESCRIPTION	NOTES
1	Spring container	- Several spring containers available
2	Pneumatic cylinder	- Widest variety of cylinders available - Optional: version with spring included inside pneumatic cylinder
3	Hydraulic cylinder	- Widest variety of cylinders available - Implemented with hydraulic pump for manual override HP
4	Jack screw with hand-wheel	- HW manual override suitable for smaller actuators
5	Hand-wheel with gearbox	- Manual override suitable for medium size actuators
6	Mounting bracket	- Open type
7	Control system	- Panel or cabinet version - Customized design

COMPANY CERTIFICATIONS

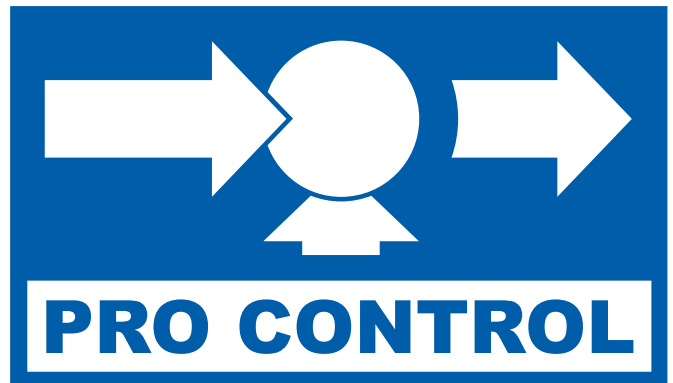
Every aspect of our company's activities complies with **SO 9001:2008** certified by Det Norske Veritas, no: 65458-2009-AQ-ITA-SINCERT, **ISO 14001:2004** certified by TÜV Rheinland, no: 01 104 1419947, **BS OHSAS 18001:2007** certified by TÜV Rheinland, no: 01 113 1419947

ProControl range of products holds the following international accreditations:

SIL (Certified by RWTÜV), TR-CU.

ProControl actuators are also in accordance with European directive 94/9/EC art.8.1.b.II group II category 2 - ATEX, -and the European Pressure Equipment directive PED 97/23/EC.





VALVE ACTUATION & CONTROL

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