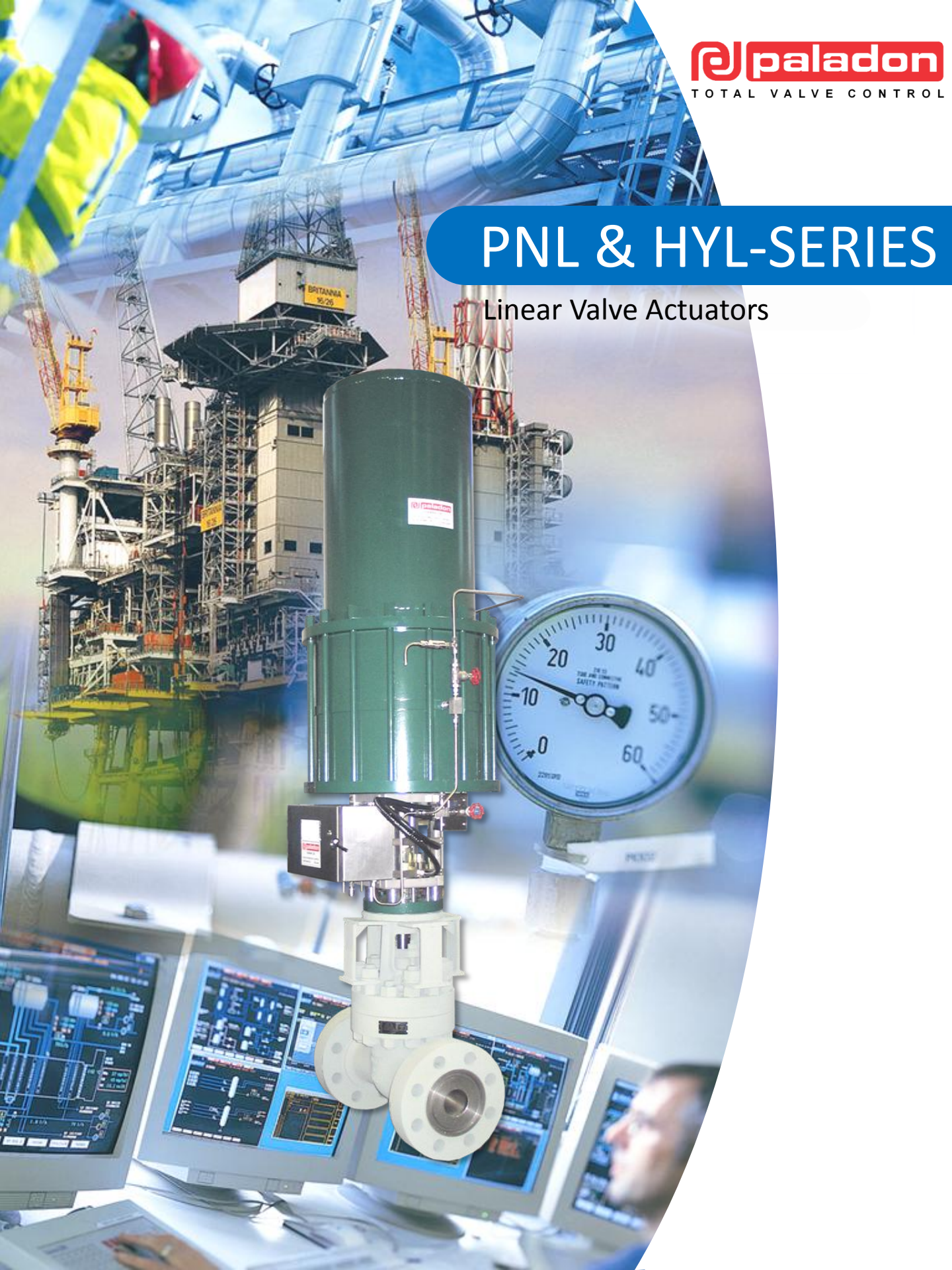


PNL & HYL-SERIES

Linear Valve Actuators



Paladon Systems Ltd is an actuator manufacturer and valve automation centre. Our business is to design, manufacture and test all types and sizes of valve actuators and control systems. Paladon's philosophy has always been to provide comprehensive, fit for purpose and cost effective valve automation solutions to our clients and the industry sectors they serve. By building close working relationships with our customers, we are able to fully understand their operational requirements and develop all our actuator series to ensure that they meet or exceed those requirements. We have continuously improved our design, engineering, organizational, quality and management capabilities since the Company was founded in 1981.

Paladon's experience in all extremes of operating conditions has enabled us to develop actuation solutions with unsurpassed reliability. Quality is a primary part of our management philosophy, and we have held ISO 9001 certification for over 20 years. We also hold accreditation and approvals from many global institutes, engineering companies and end users.

Being close to our customers has always been a high priority. To support our increasing customer base, Paladon is located in Northampton England, Aberdeen Scotland, Pinarolo Po Italy, Moscow Russia and Kuala Lumpur Malaysia. Our Northampton England headquarters oversees all engineering, quality control and product development to ensure consistency, and to maximize organizational efficiency. To further enhance our customer support, Paladon is backed by agents operating in globally strategic locations.



INTRODUCTION

Paladon's PNL and HYL-Series high performance valve actuators are designed specifically to control all makes and sizes of rising stem valves such as gate and control valves. When designing this next generation of pneumatically and hydraulically powered linear actuators, we set ourselves the following fundamental targets:

- To have a compact and reliable actuator
- To achieve a highly modular design permitting easy field maintenance and easy application to the various valves to be automated
- To accommodate the most current customer-driven design requirements in terms of performance reliability, corrosion and environmental resistance, and maintenance-free life

The rigorous testing that the actuators have undergone, both in the field and on the test bench, have exceeded our expectations and guarantee long cycle-life under severe service conditions.

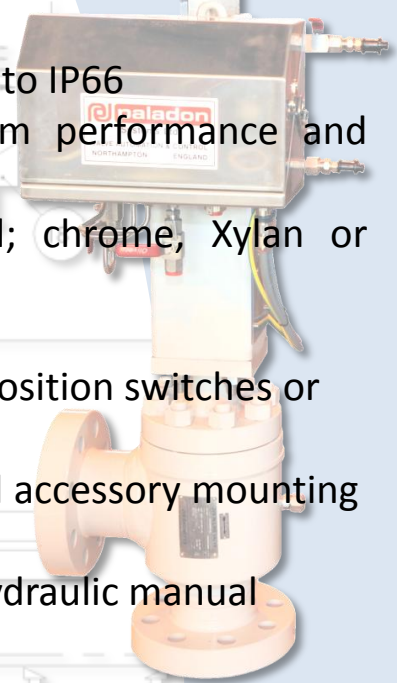


APPLICATIONS

PN & HY-Series valve actuators are designed to operate any sliding stem valve including; wedge gate, expanding gate, through conduit, globe, knife gate, swing check, lift and turn ball valves.

KEY FEATURES

- Available in double-acting or spring-return (fail-safe) configurations
- All steel construction with no external threads
- Totally enclosed weatherproof housings, certified to IP66
- Scragged springs (set removal) ensure optimum performance and reliability
- Electroless nickel plated cylinders as standard; chrome, Xylan or electrofilm coatings are also available
- EN ISO 5210 valve interface
- Valve stem position indicator can accommodate position switches or transmitter
- All actuators are fitted with lifting lugs and control accessory mounting pads
- Available with optional hand wheel, gearbox or hydraulic manual overrides



VALVE MOUNTING OPTIONS

- **Pedestal**
 - ▶ The standard valve mounting design uses a pedestal or a yoke to mount the actuator above the valve from the valve bonnet bolting
- **Compact**
 - ▶ Where space is at a premium, this design allows the actuator body to be directly mounted on the valve body, thus eliminating the height incurred when using pedestal type mounting
- **Integral**
 - ▶ Incorporates the valve bonnet and back seat into the end cap of the actuator, with the valve stem being completely integral with the actuator



PERFORMANCE DATA

Supply Pressures

- ▶ PNL-Series
- ▶ HYL-Series

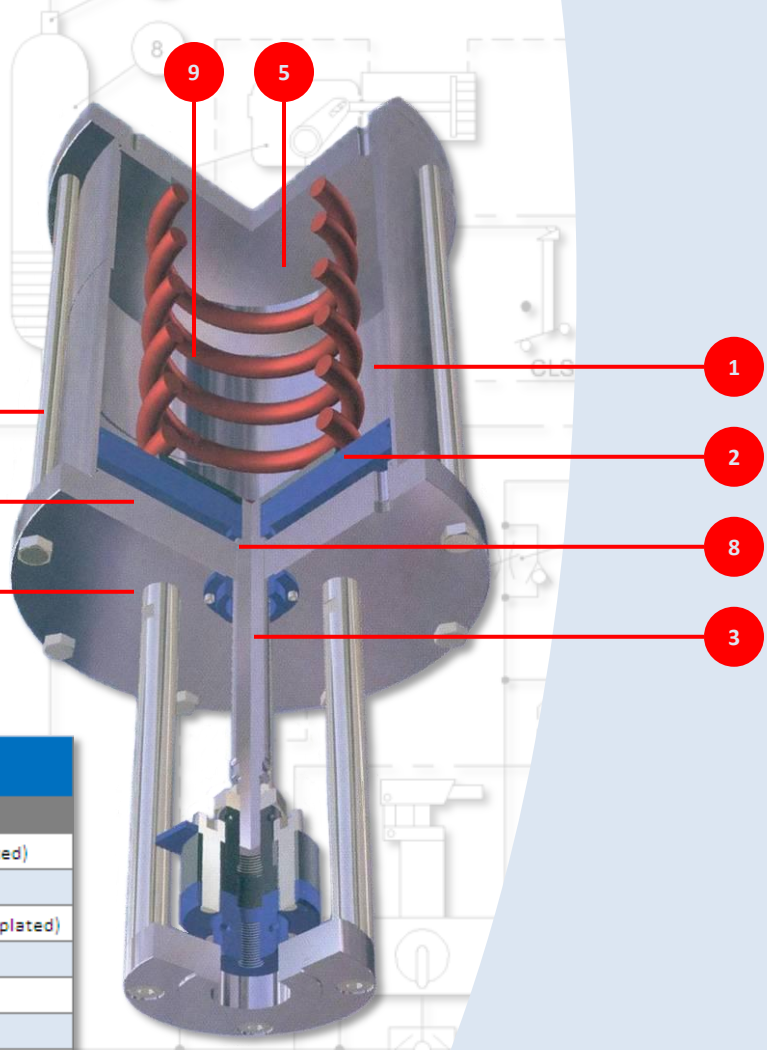
2.7 to 12 Barg (40 to 175 psig)
13 to 250 Barg (90 to 3,625 psig)

Thrust Output Range

- ▶ PNL & HYL-Series

Up to 222,000 N (50,000 lbs)

MATERIALS OF CONSTRUCTION



Item No.	COMPONENT DESCRIPTION	MATERIAL
PISTON CYLINDER		
1	Cylinder Liner	Carbon Steel (ENP coated)
2	Piston	Carbon Steel
3	Piston Rod	Alloy Steel (Chromium plated)
4	Rod Head flange	Carbon Steel
5	Blank Head Flange	Carbon Steel
6	Tie Rod	Carbon Steel
7	'O'-Rings	NBR
8	Bearing	Fe-Bz-Teflon
9	Spring	Spring Steel

- **PN & HY-Series Scotch-Yoke Actuators**

PN & HY-Series actuators are high performance pneumatic and hydraulic scotch-yoke actuators designed to operate any quarter-turn mechanism in both double-acting and spring-return configurations.

- **Electro-Hydraulic Control Systems**

These systems use electric pumps to pressurize hydraulic accumulators to provide hydraulic power. Stand-alone units using solar panels are also available when local utilities are unavailable or unreliable.

- **Electro Hydraulic Positional Control Systems**

Suitable for both Choke and Control Valve applications, operating from either existing ring main or self-contained power sources. Available for both Offshore Hazardous locations and Industrial Power Generation.

- **GH-Series Gas-over-Oil and DG-Series Direct Gas Actuators**

GH-Series and DG-Series actuators are typically used in gas pipeline applications. For GH-Series, the hydraulic supply pressure is provided by the pipeline gas pressure acting on oil within the tanks in the control system. For DG-Series, the pipeline gas is used directly to power the actuator.

- **Subsea Actuators**

The robust and flexible design does not require pressure compensation for depths down to 200m. For deeper applications, a pressure compensated design is available for depths down to 2,000m.

- **Autonomous Shutdown Valve (ASV)**

The ASV is designed to be applied to pipeline loading systems, Calm Buoy, SLS and similar systems. The ASV provides full automatic fail-safe operation of subsea valves to isolate pipelines from flexible risers.

CONTACT DETAILS



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