

GVS®



Heavy Duty Actuators



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8 ➤ Pneumatic Scotch Yoke SY-Series;

9 ➤ Hydraulic Scotch Yoke HY-Series;

10 ➤ Direct Gas Scotch Yoke PY-Series;

11 ➤ Gas Over Oil Scotch Yoke GY-Series;

12 ➤ Electro-Hydraulic Scotch Yoke EY-Series;

13 ➤ Linear pneumatic and hydraulic TL/TH Series;

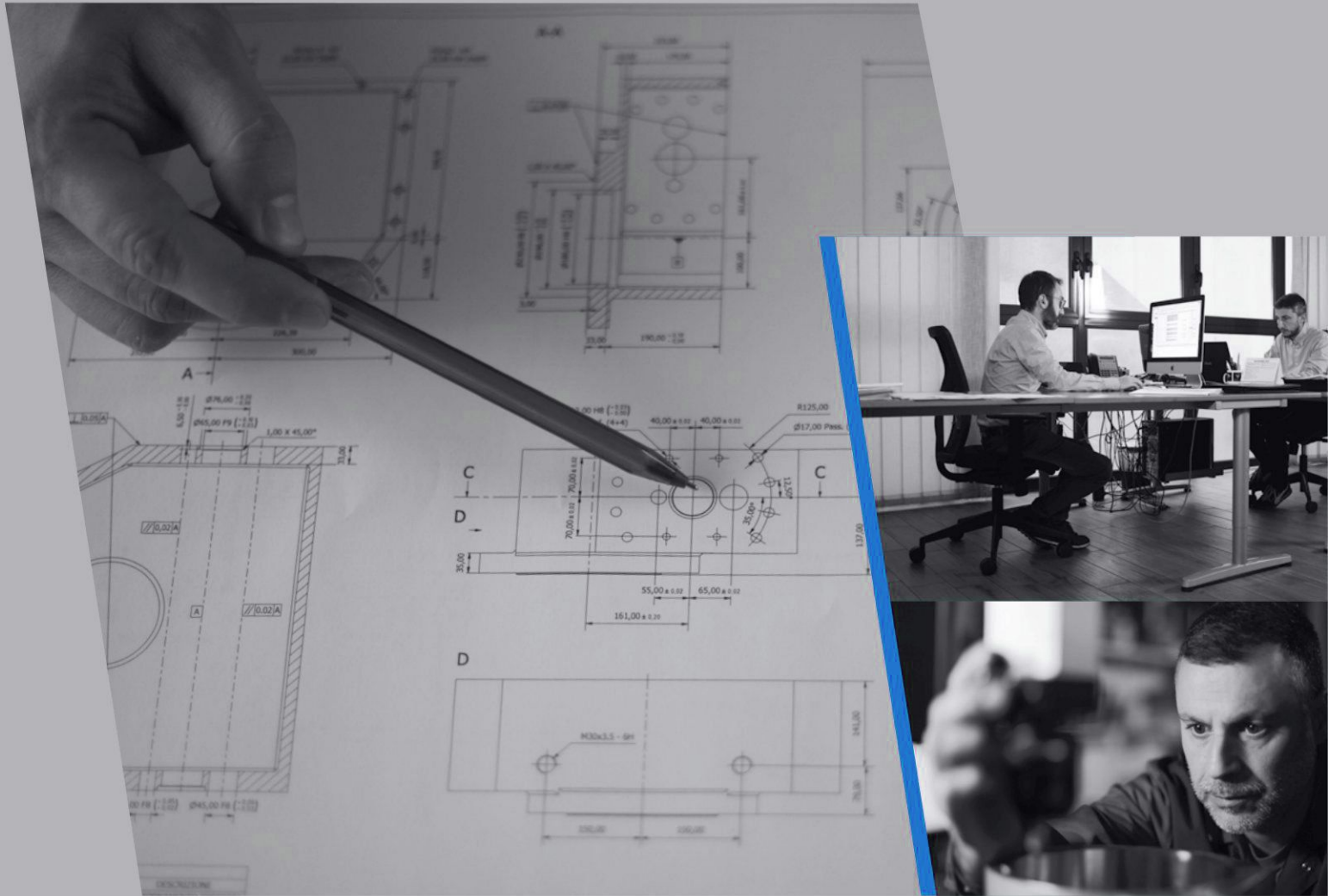
14 ➤ Self-Contained.

COMPANY OVERVIEW

Guide Valve Limited is a leader in the manufacturing and supply of several solutions for valve automation. Many years of **experience in different kind of applications** allowed us to establish a strong reputation in products design innovation especially dedicated to customer satisfaction.

With actuator production located in northern Italy, we have efficient access to the best technology and engineering know-how in the world, giving us the capability to provide to our customers a world-class range of products and services which are 100% made in Italy.





ATTENTION TO QUALITY

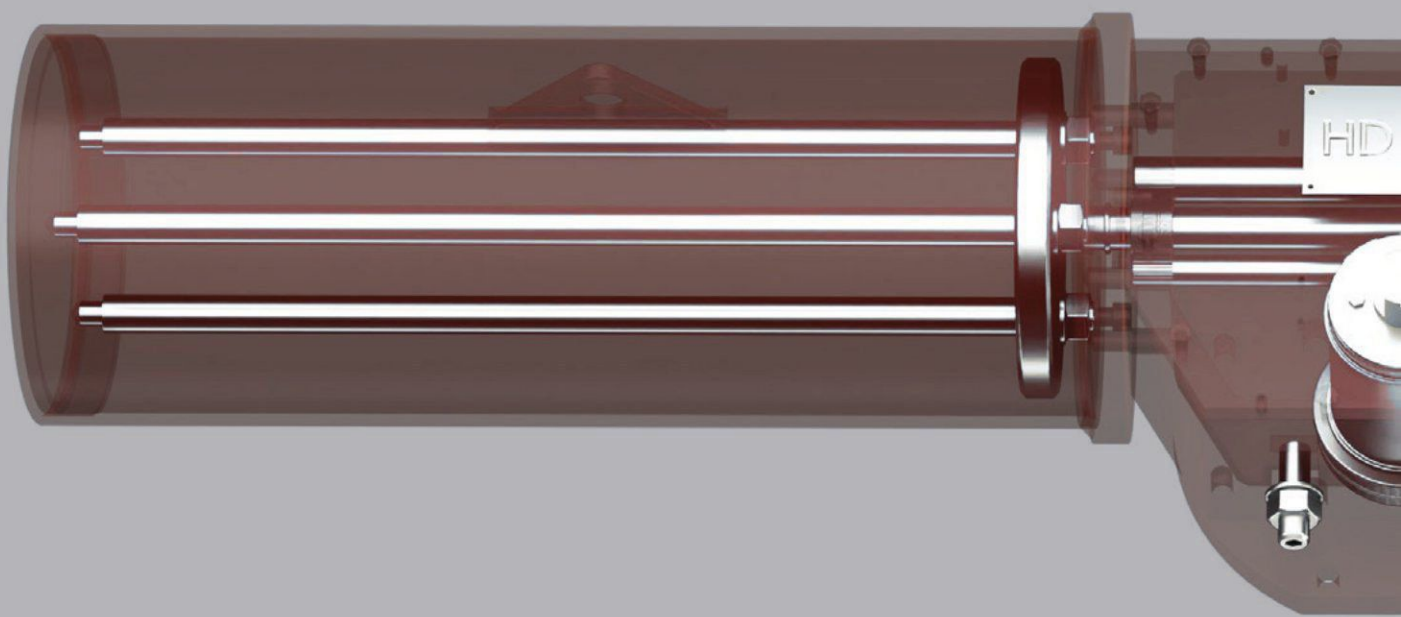
The company operates all the activities complying with:

- ISO 9001:2015 certified by Tüv Süd
- ISO 14001:2015 certified by Tüv Süd
- OHSAS 18001:2007 certified by Tüv Süd

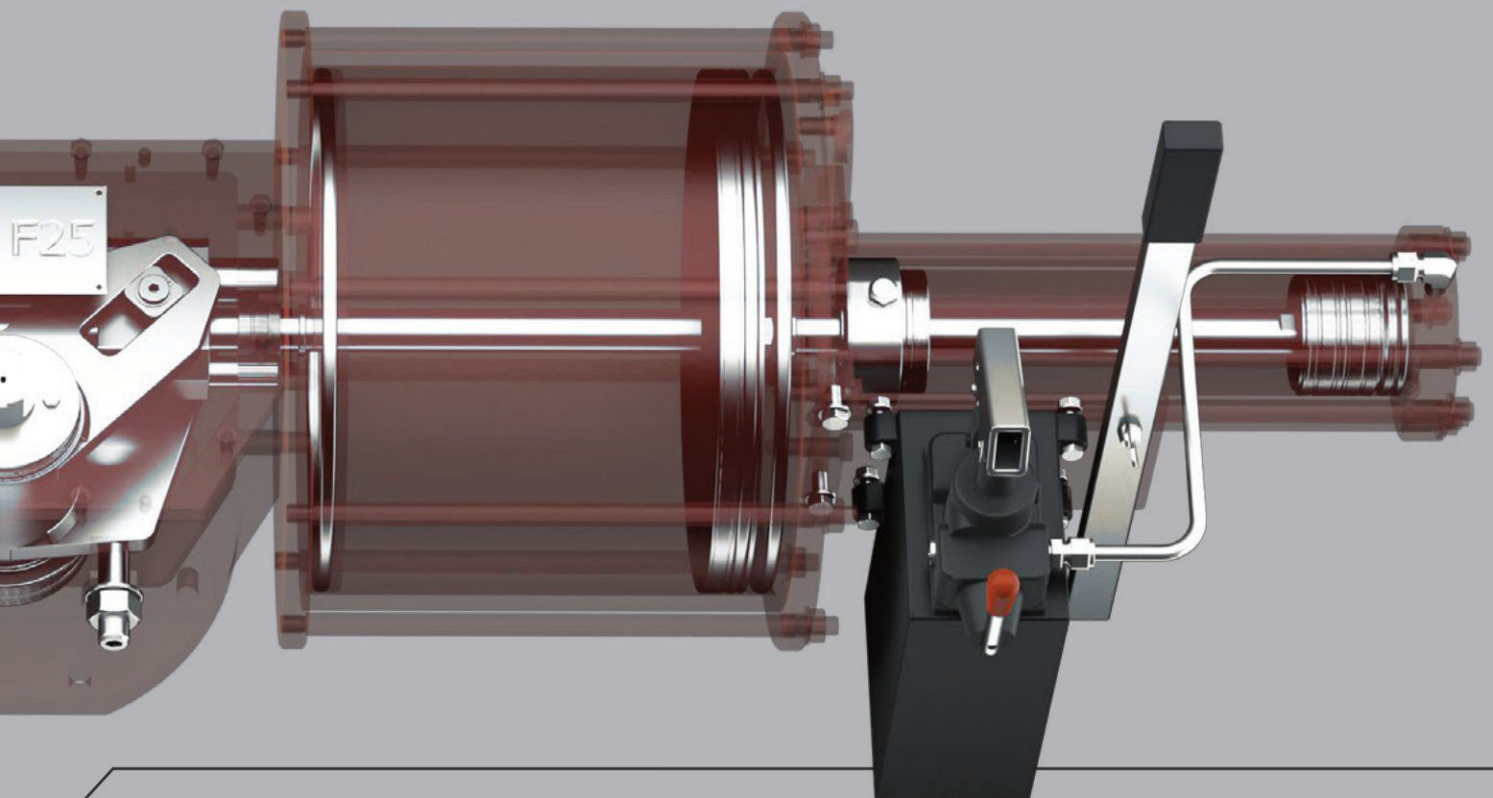
GVS Actuators hold several international certificates:

- SIL (with IEC EN 61508:2010) certified by Tüv Süd
- EAC TU-CR
- DNV GL
- ATEX Directive 2014/34/EU
- PED

HEAVY DUTY PRODUCT OVERVIEW

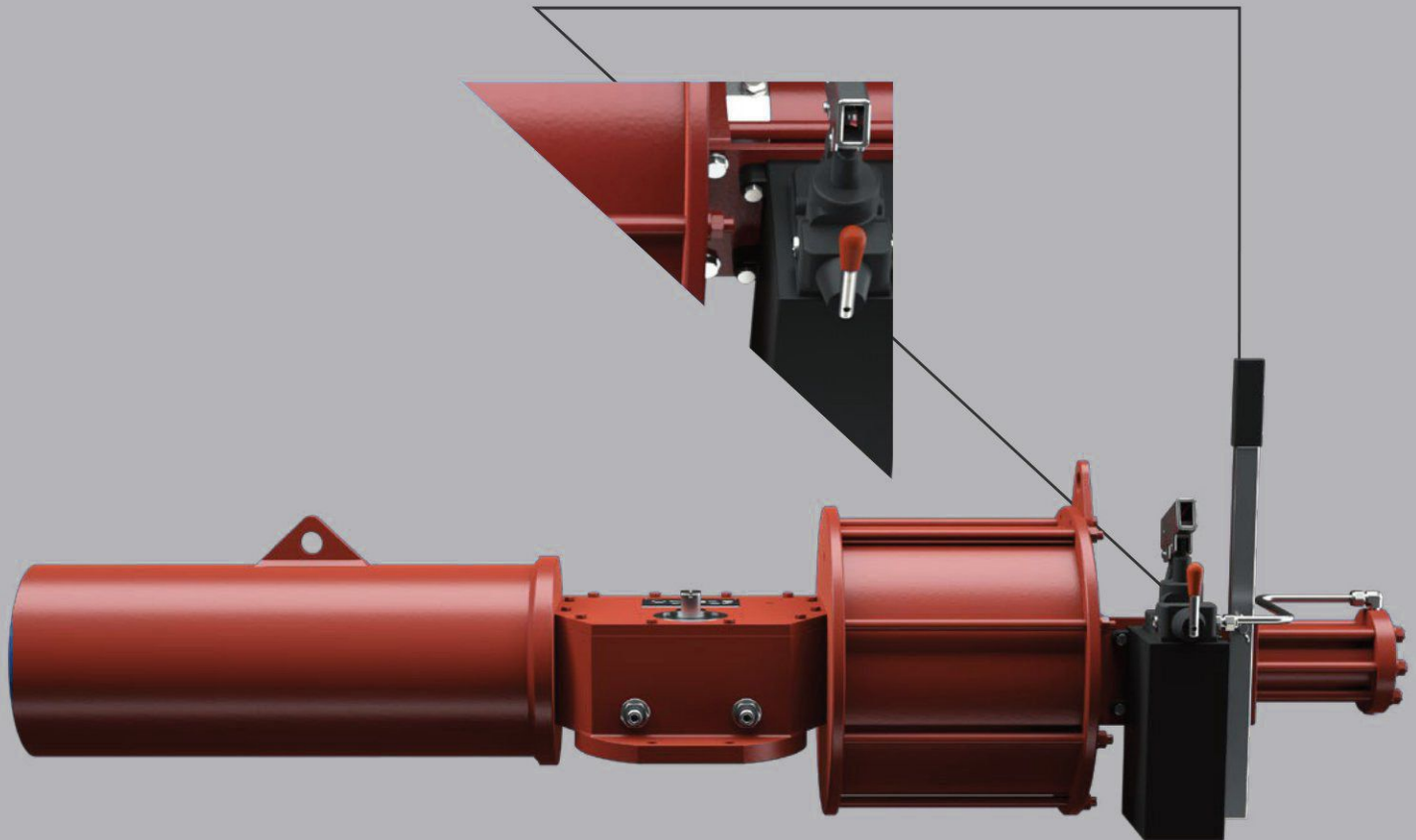


During design stage the main target to the base of the concept has been concrete **Heavy Duty designed products dedicated to long life valve automation service**. This philosophy is at the base of material selection (full Carbon Steel without Cast Iron components), dimensions and guiding system of the products:



- ▀ Pneumatic Scotch Yoke SY-Series;
- ▀ Hydraulic Scotch Yoke HY-Series;
- ▀ Direct Gas Scotch Yoke PY-Series;
- ▀ Gas Over Oil Scotch Yoke GY-Series;
- ▀ Electro-Hydraulic Scotch Yoke EY-Series;
- ▀ Linear pneumatic and hydraulic TL/TH Series;
- ▀ Self-Contained.

- QUARTER TURN PNEUMATIC ACTUATOR
- DOUBLE ACTING AND SPRING RETURN
- SY-SERIES



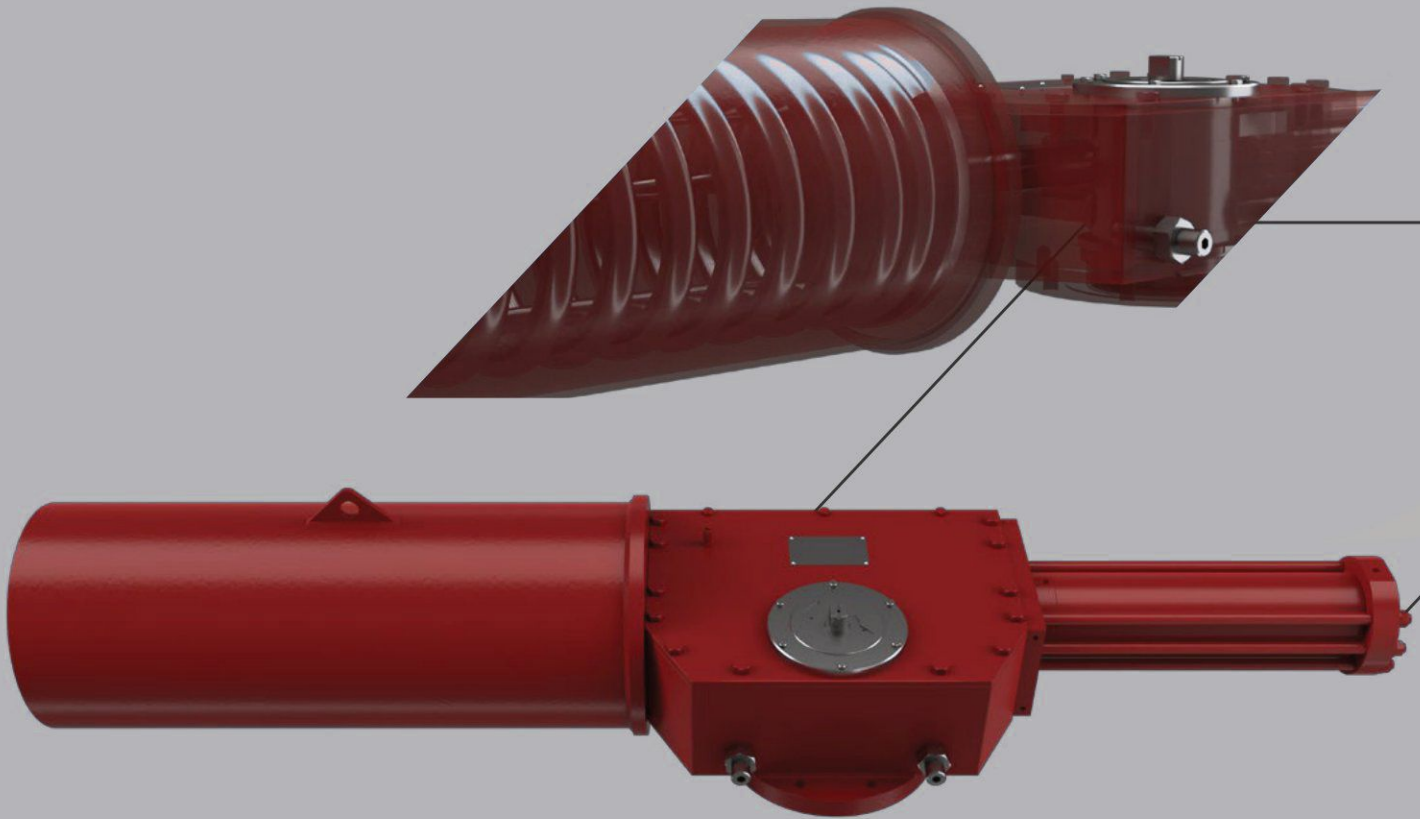
DESCRIPTION:

GVS SY-Series is a heavy duty design Pneumatic actuator complete range. The strong design and robust construction material allows to SY-Series to be suitable for heavy application (in terms of torque development, corrosion resistance and low temperature applications) **especially for Emergency shut-down and blow-down applications.**

KEY FEATURES:

- Fabricated entirely in low temperature Carbon Steel (no cast parts);
- Pneumatic cylinder suitable to maximum supply pressure 12 barg (175 psi)
- Available in Double and Single Acting;
- Double end-stop adjustment;
- Completely waterproof;
- Spring system designed for safe maintenance and anti-jerky solution;
- Various options available (Jack-screw, hydraulic damper, hydraulic hand pump, etc.).

- QUARTER TURN PNEUMATIC ACTUATOR
- DOUBLE ACTING AND SPRING RETURN
- HY-SERIES



DESCRIPTION:

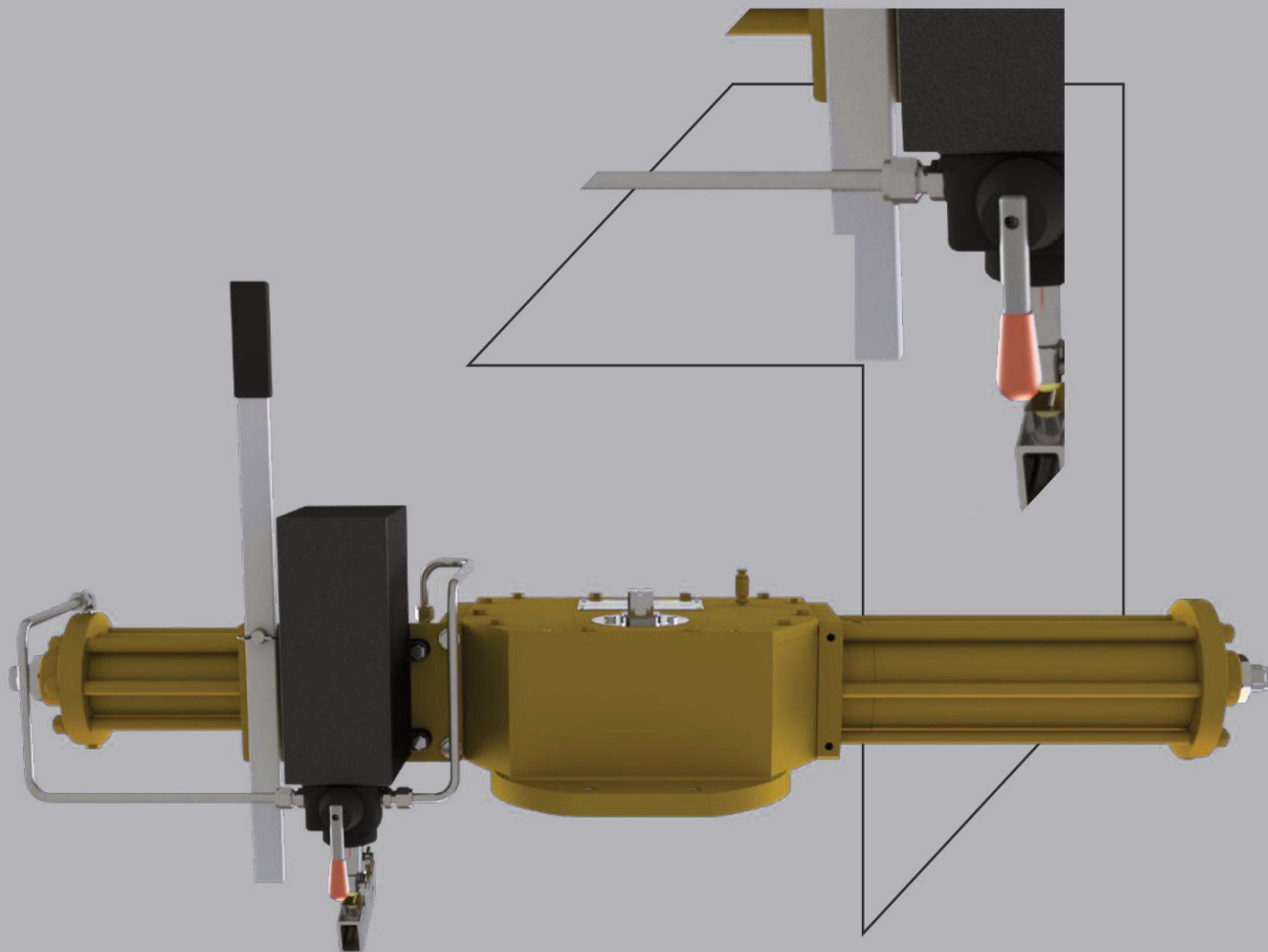
GVS HY-Series is a heavy duty design Hydraulic actuator complete range. Fine machining of the components makes HY-Series very precise on Modular applications and Regulation requirements (cooling systems, controlled flow CV). **GVS has the skill to design and to build Hydraulic Power Units for hydraulic supply pressure to the actuators and electronic controls for Customer connections.**

KEY FEATURES:

- Fabricated entirely in low temperature Carbon Steel (no cast parts);
- Available in Double and Single Acting;
- Double end-stop adjustment;
- Completely waterproof;
- Spring system designed for safe maintenance and anti-jerky solution;
- GVS has the skills to design and build customized HPU, equipped with electronic controls.

▸ QUARTER TURN DIRECT GAS ACTUATOR

▸ PY-SERIES



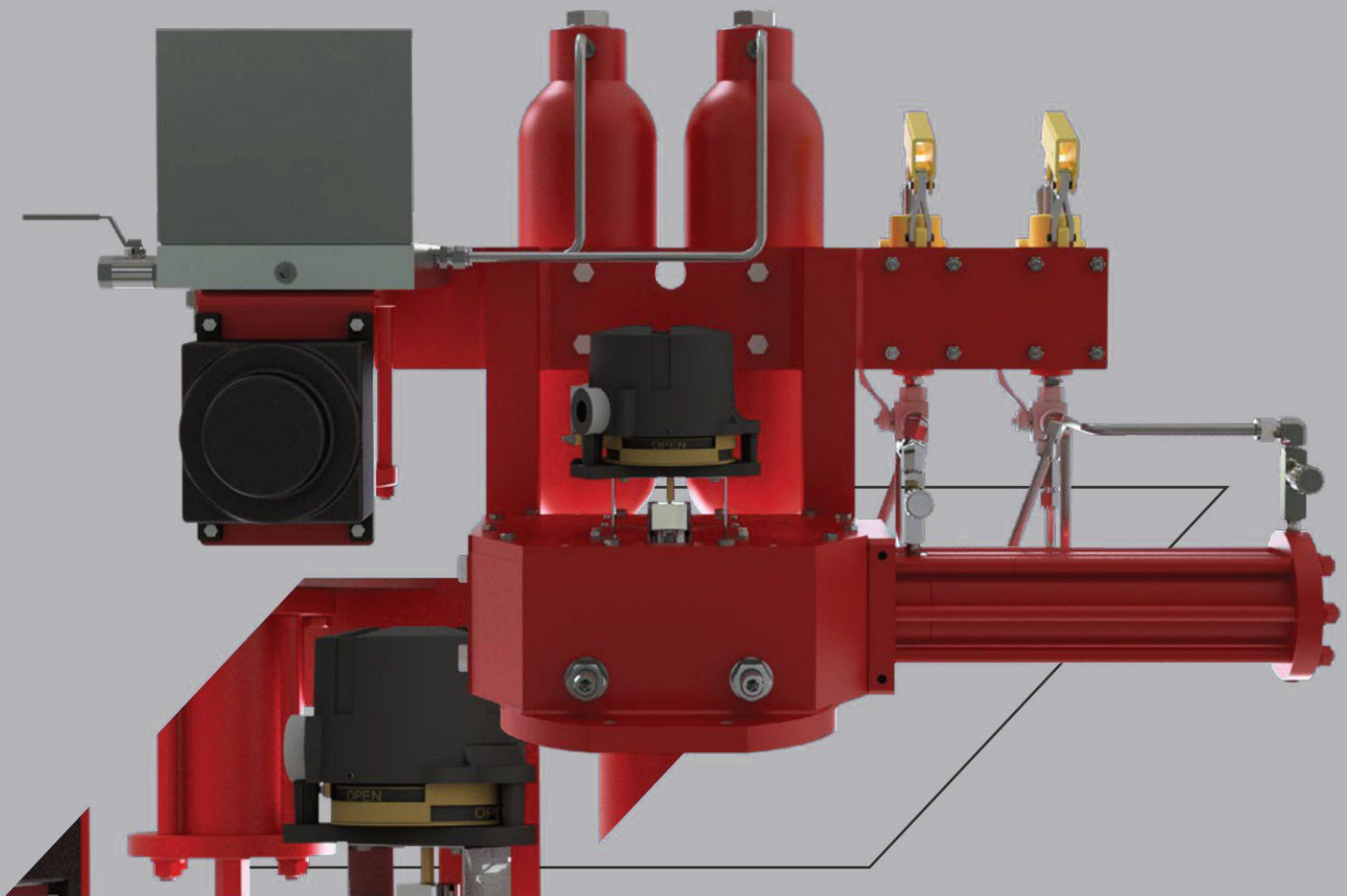
DESCRIPTION:

GVS PY-Series is a heavy duty design actuator suitable for high pressure Direct-Gas supply. Due to the particular application of this type of actuators the design is for heavy duty applications and long life, with minimum maintenance. Sealing type design allows to PY actuators to high and low pressure Gas supply. **Further the pneumatic system is isolated from the hydraulic system to avoid contamination and safe maintenance.**

KEY FEATURES:

- Fabricated entirely in low temperature Carbon Steel (no cast parts);
- Pneumatic system divided from hydraulic system;
- Double end-stop adjustment;
- Completely waterproof;
- Flexible connections types to the valves (ISO5211 flanges and connections to the stem).

- QUARTER TURN DIRECT GAS OVER OIL ACTUATOR
- GY-SERIES



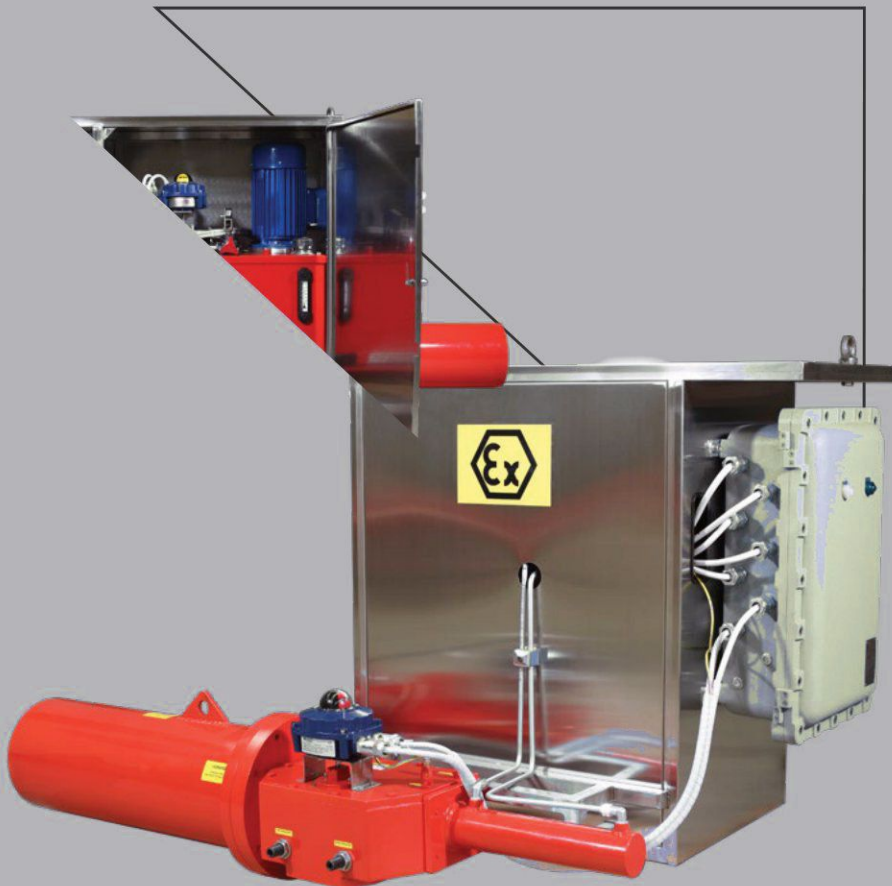
DESCRIPTION:

GVS GY-Series is a heavy duty design actuator suitable for high pressure Gas supply moved into hydraulic pressure supply through hydraulic bottles system. Gas Over Oil systems are generally used on gas transmission lines, when any other supply (pneumatic, hydraulic, power) sources are unavailable or economically not feasible. Gas Over Oil actuator is fed by pressurized gas after being filtered.

KEY FEATURES:

- Fabricated entirely in low temperature Carbon Steel (no cast parts);
- Available in several executions (Local, Remote control, Line Break system, Torque limit device, etc.)
- Double end-stop adjustment;
- Completely waterproof;
- Gas Over Oil Actuators can be provided, according specifications, in various Options:
 - Local / Remote Command;
 - Gas Storage Tank;
 - Line Break System;
 - Torque limiting device;
 - Partial Stroke test.

- QUARTER TURN & LINEAR ELECTRO-HYDRAULIC ACTUATOR
- DOUBLE ACTING AND SPRING RETURN
- EY-SERIES



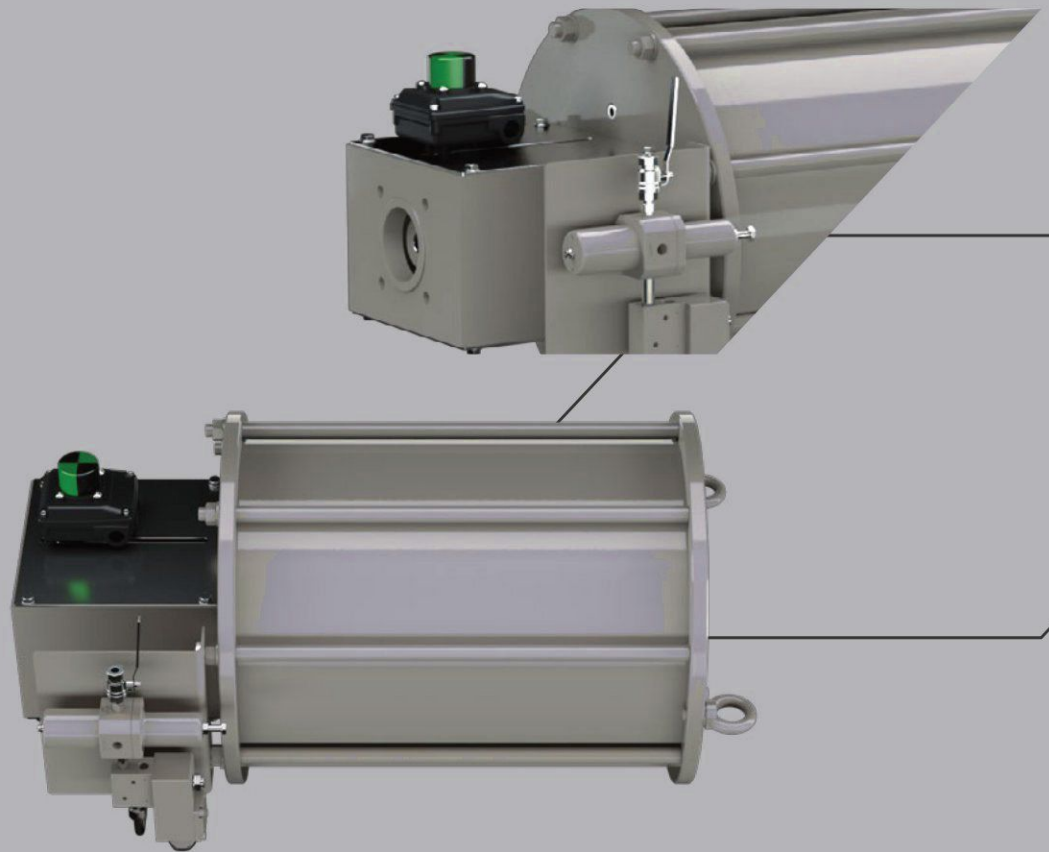
DESCRIPTION:

GVS EY-Series is a heavy duty design Hydraulic actuator complete range. The strong design and robust construction material allows to EY-Series to be suitable for heavy application (in terms of torque development, corrosion resistance and low temperature applications). Fine machining of the components makes HY-Series very precise on Modular applications and Regulation requirements (cooling systems, controlled flow CV). **GVS skills allows to EY design according to space limitations and Customers needs.**

KEY FEATURES:

- Fabricated entirely in low temperature Carbon Steel(no cast parts);
- Available in Double and Single Acting;
- Double end-stop adjustment;
- Completely waterproof;
- Spring system designed for safe maintenance and anti-jerky solution;
- Hydraulic power unit built according to safety loop level required (redundant Motor and Pump, Oil temperature and level monitoring, etc.). Available in Explosion Proof version.
- Electronic control cabinet equipped with Local control and signals for status monitoring, various type of alarms, several protocols of communication(Modbus, Profibus, ect.)

- LINEAR PNEUMATIC & HYDRAULIC ACTUATOR
- DOUBLE ACTING AND SPRING RETURN
- TL/TH-SERIES



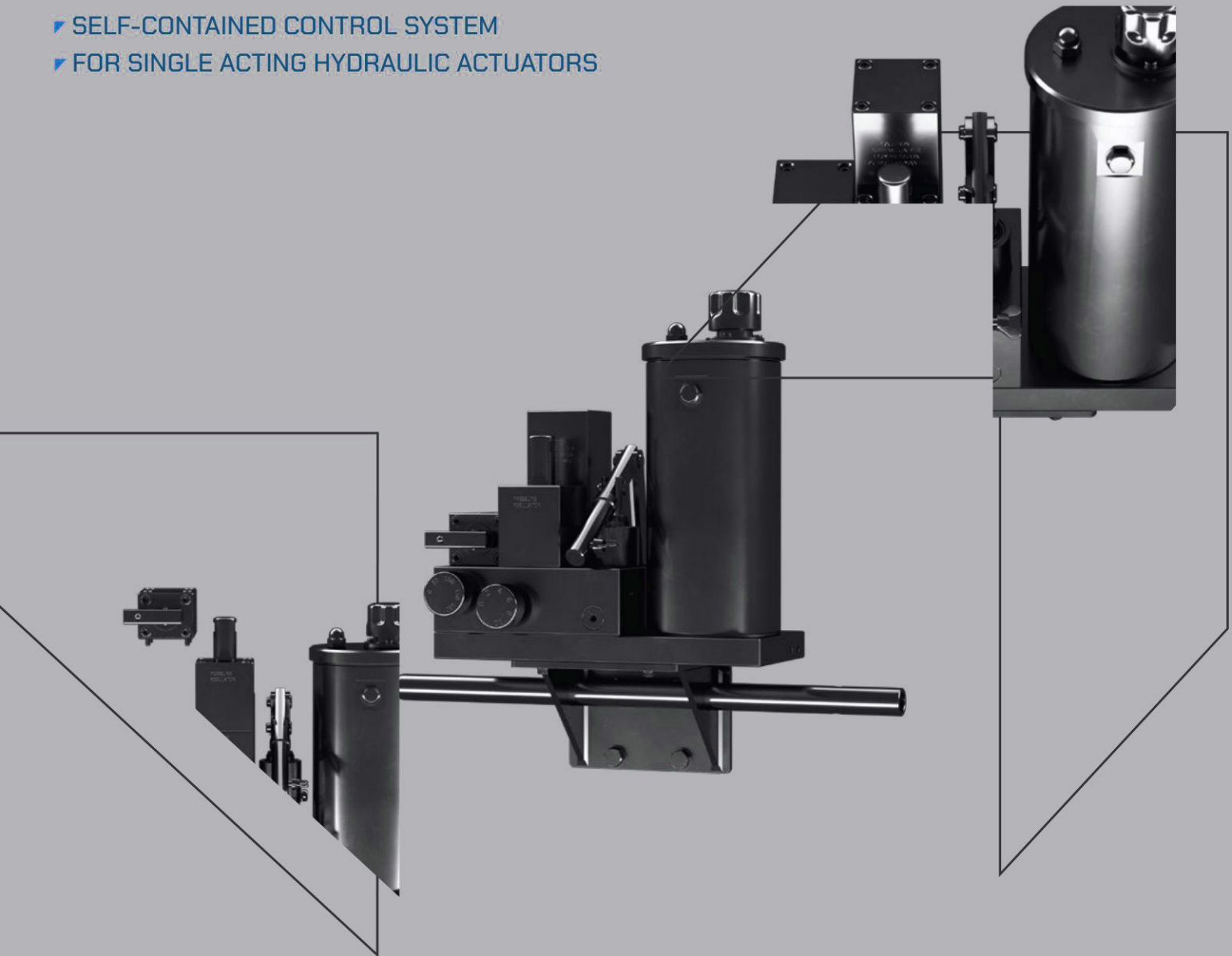
DESCRIPTION:

GVS Linear valve actuator pneumatic & hydraulic linear piston actuators are designed to drive control valves for the most demanding applications in Power and Oil & Gas, such as turbine bypass, steam conditioning, anti-surge compressors and many others. GVS TL/TH-Series is a heavy duty design Pneumatic actuator complete range. The strong design and robust construction material allows to TL/TH-Series to be suitable for heavy application (in terms of torque development, corrosion resistance and low temperature applications).

KEY FEATURES:

- Fabricated entirely in Low temperature Carbon Steel (no cast parts);
- Available in Double and Single Acting;
- Completely waterproof;
- Spring system designed for safe maintenance and anti-jerky solution;
- Various option available (Jack-screw, hydraulic damper, hydraulic hand pump, etc.);

- SELF-CONTAINED CONTROL SYSTEM
- FOR SINGLE ACTING HYDRAULIC ACTUATORS



DESCRIPTION:

GVS Self-contained hydraulic control system is designed to operate hydraulic actuators, quarter turn or linear, for ESD (Emergency Shutdown) applications when an external power source is either not available or not dependable. Design and material construction have been studied for low temperature applications (down to -50°C/-58°F).

KEY FEATURES:

- Hydraulic connections machined in solid block for easy maintenance.;
- The external tubing free design reduce the risk of damages during transport and installation;
- Modular design allows assembly of additional devices for actuator control (High-Low pressure pilot valve, Solenoid Valve, etc.);
- Design studied for minimum maintenance needs.;
- Standard mounting pad for easy mounting onto various sizes TruTorq hydraulic actuators.

GVS

CLEVER AUTOMATIONS

GVS[®]

Manufactured under agreement by TruTorq Italia SRL

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