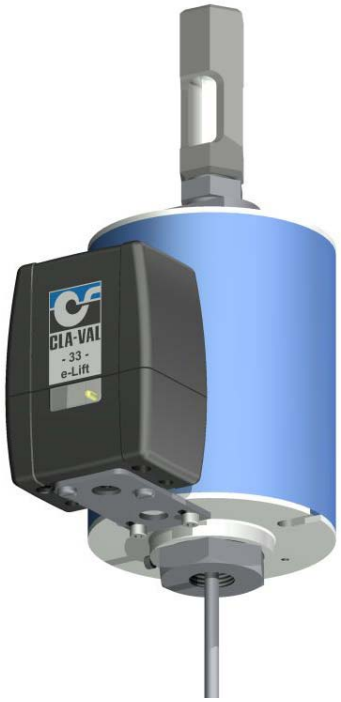
CLA-VAL e-Lift-33

Electronic Valve Position Transmitter

Simple, Reliable and Accurate



Description

- **Simple way to monitor percentage of valve opening. Magnetic sensing without any contact**
- **Ideal for valve position monitoring within a 4-20 mA SCADA system**
- **No loss of calibration when dismantled for valve maintenance**
- **Easy on site calibration. No need to open the valve to calibrate a 100% valve position**

The CLA-VAL e-Lift-33 is an electronic valve position transmitter. The 4-20 mA settings are directly entered according to user desired position values.

If connected to a SCADA system, valve position is monitored in real time via a 4-20 mA signal.

The e-Lift-33 has 2 programmable alarm-relay outputs allowing user to preset a warning or alarm levels at given low or high valve position. Factory preset values for low and high position are 10% and 90% respectively.

Operation

The valve position is transmitted to the e-Lift-33 when the main valve stem is moving up and down the e-Lift-33 stem assembly. The spring force maintains the e-lift-33 stem assembly tight to the main valve stem. The e-Lift-33 assembly accurately tracks the main valve stem movements by the use of spring force. There is no mechanical link, other than the spring force, connecting the e-Lift-33 stem assembly to the main valve stem.

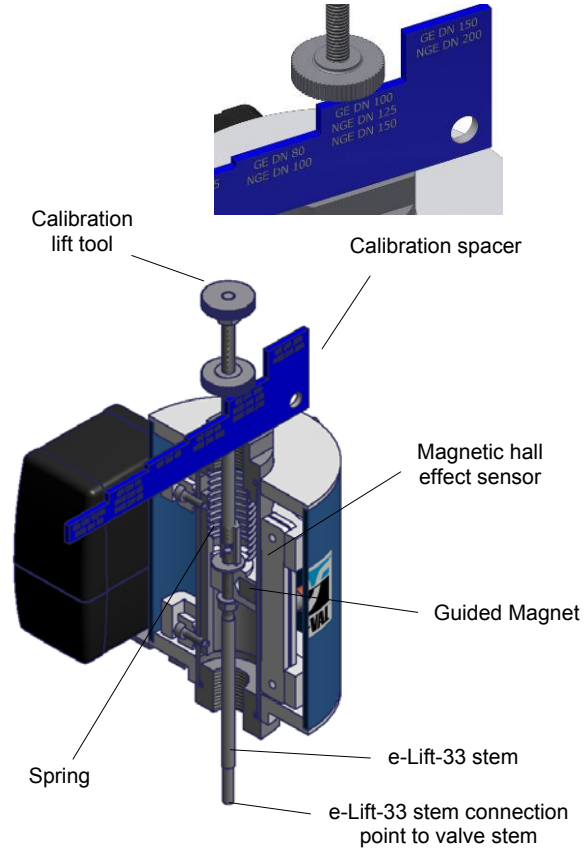
The magnet is mounted on the e-Lift-33 stem assembly. A magnetic hall effect position sensor detects the magnet movement and therefore the valve position.

The magnet holder is guided allowing accurate position measurement and reliability for long term measurement repeatability.

Calibration

The e-Lift-33 lift tool and spacer allow easy on site calibration. Calibration is achieved without the need for total (100%) valve opening.

The lift tool is screwed into the e-Lift-33 stem (instead of the X101 position indicator stem). From a totally closed position the spacer defines the valve lift. The spacer has stem lift sizes for each CLA-VAL valve.

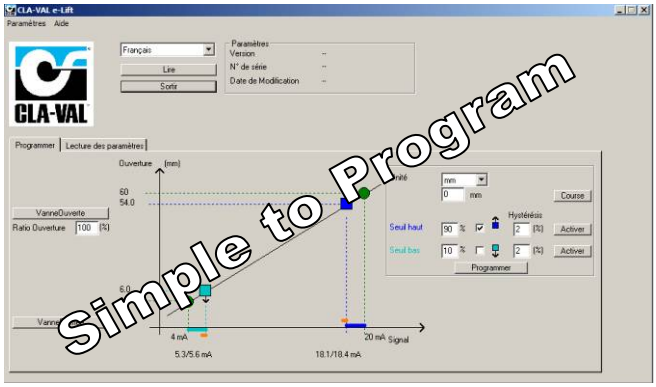


CLA-VAL e-Lift-33

Electronic Valve Position Transmitter

E-Lift Unique Electronic Contact Less Valve Position Transmitter!

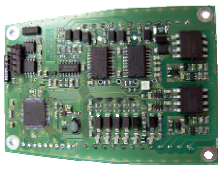
Electronic control device



Programming: The CLA-VAL software allows user friendly parameter setting of the electronic control device. The user defines the 4-20 mA settings for complete valve opening and closing. Calibration can also be achieved by means of a magnet for open/close valve position. This relieves the customer from having to use a PC in the field.

Software and updates: All the updates are free of charge and directly available on the CLA-VAL web site.

USB connection: Plugged directly in your PC USB port e-Lift-33 parameters and data are instantly readable with the calibration software (Windows interface) for both programming and calibration.



Printed Circuit Board (PCB): Designed with the latest technology and manufactured from high quality electronic components the PCB is fully tropical coated to ensure maximum humidity protection. The output is protected against wrong connexion. A resettable fuse is used to protect against over voltage / reverse polarity.

Technical Data:

	Electrical Specifications
Electrical power:	24 VDC +/- 10%, 30 to 250 mA load draw
Power protection:	• Max. 32 VDC over voltage, reverse polarity and & short circuit. • Max. 80°C stop high temperature
Led display:	Green/red led blinking
Electrical connection:	3x moulded 2 m cables
Input command:	1x 4-20 mA contact less magnet sensor Hall effect
Position signal / Output & accuracy:	• 2x 4-20 mA (Output charge ≤ 500 Ω) • 2x programmable position alarms 24 VDC / 240 VAC under 1 A max. <1 mm
Output 4-20 mA protection:	Max. 32 VDC over voltage (the input and output analogue have the same Common, not isolated)
	Other Specifications
Temperature range:	- 10°C à + 80°C (Electronic only)
Protection:	IP68 (solenoid, junction box, sensor, not included in IP68)
Interface:	Plug & Play / NT / 2000 / XP / Vista / Win 7 (32 & 64 bit)
	Default mode
Troubleshooting:	Refer to user manual for LED diagnostics and codes (red-green-blinking)

MEXUSB20401A cable is required for programming and monitoring.