



### STANDARD EQUIPMENT

No	Description	Qty	Type
1	MAIN VALVE HYTROL AE/GE/NGE	1	100-01
2	ISOLATION BALL VALVE	1	RB-117
3	STRAINER	1	X43
4A	3-WAY SOLENOID VALVE (NO)	1	311-D
4B	3-WAY SOLENOID VALVE (NC)	1	311-C
5	NEEDLE VALVE	1	6120

### OPTIONAL FEATURES

No	Description	Qty	Type
F	REMOTE SENSING	1	-
H1	DRAIN TO MAIN VALVE OUTLET	1	RB-117

### NOTES

AE/GE : DN 32 - DN 150 / NGE : DN 50 - DN 200  
 From DN 1" and inferior : assembly uniquely with X46A  
 and solenoid valve

OPTIONAL FEATURES : \_\_\_\_\_  
 NOT FURNISHED BY CLA-VAL : \_\_\_\_\_



# CLA-VAL 136E/D-01

## On/Off Electrical Remote Control Valve

### ▶ Operating data

#### 1.1 ▶ SOLENOID CONTROL FEATURE

Solenoid control (4) is a direct acting, 3-way solenoid control valve that applies or relieves pressure in the cover chamber of the main valve (1), providing the operation shown in the following table:

Solenoid valve (4)			Main valve (1)	
Electrical position	(4A)	(4B)	136E-01	136D-01
	311-D	311-C		
Energized	1 - 2	2 - 1	Open	Closed
De-energized	0 - 1	1 - 0	Closed	Open

#### 1.2 ▶ CLOSING / OPENING SPEED CONTROL

Flow control valve (5) controls the closing and the opening speed of the main valve (1).

**Flow control valve (5) adjustment:** Turn the adjusting screw of control (5) clockwise to make the main valve (1) close and open slower.

**Note:** Do not close flow control valve (5) completely or the main valve (1) will not close or open (suggested initial setting of needle valve is 1/4 turn open).

#### 1.3 ▶ (E\*) EUROPEAN STANDARDS

ITEM (2) - Isolation ball valve:

The isolation ball valves are used to isolate the pilot system from main line pressure. These valves must be open during normal operation.

ITEM (3) - Strainer:

The strainer is installed in the pilot supply line to protect the pilot system from foreign particles. The strainer screen must be cleaned periodically.

#### 1.4 ▶ OPTIONAL FEATURE

Suffix (F) - Remote sensing:

Solenoid supply pressure is obtained from an independent source; Independent operating pressure must be equal to or greater than pressure at the main valve inlet at all times (one-way flow). If the independent operating pressure is always greater than the pressure at inlet or outlet of main valve (1), this one can be used for two-way flow operation.

Suffix (H1) - 3-way solenoid valve drain:

The drain port of 3-way solenoid valve (4) is connected directly to the outlet of main valve (1), preventing any discharge of fluid pressure to the atmosphere. The lift of the main valve is therefore only created by the rate of flow and cannot any more be used for indicating the physical valve's opening position.



# CLA-VAL 136E/D-01

## On/Off Electrical Remote Control Valve

### 1.5 ▶ CHECK LIST FOR PROPER OPERATION

- System valves open upstream and downstream.
- Air removed from the main valve cover and pilot system at all high points.
- Isolation valves **(2A)** open.
- Periodical cleaning of the filter screen **(3)**.
- Flow control **(5)** at minimum  $\frac{1}{4}$  turn open.
- Correct voltage to solenoid control **(4A)** or **(4B)**.
- Manual override valve **(4A)** or **(4B)** closed.