



### STANDARD EQUIPMENT

No	Description	Qty	Type
1	MAIN VALVE HYTROL AE/GE/NGE	1	100-34/KR *
2	EJECTOR (12" & smaller)	1	X47-A
3	AUXILIARY VALVE HYTROL	1	100-KHR
4	VALVE POSITION INDICATOR	1	X101
5	PLUG	2	-

### OPTIONAL FEATURES

No	Description	Qty	Type
A	FLOW CLEAN STRAINER	1	X46A
B	ISOLATION BALL VALVE	4	RB-117
C	ONE-WAY FLOW CONTROL (CLOSING SPEED)	1	CV
G	CHECK VALVE	2	81-01
Q	QUICK CONNECT ASSEMBLY	3	-
S	ONE-WAY FLOW CONTROL (OPENING SPEED)	1	CV
T	PRESSURE RELIEF VALVE	1	55F
Y	STRAINER	1	X43

### NOTES

AE/GE : DN 32 - DN 400 / NGE : DN 50 - DN 600  
 (#) = According to valve size this feature type could change  
 \*MAIN VALVE OPTIONS = 9HS999

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

### ► Operating data

#### 1.1 ► REMOTE CONTROL FEATURE

When pressure is applied to cover of valve (3) through the remote control connection, the main valve will close. When pressure is relieved from cover of valve (3), the main valve will open.

#### 1.2 ► SWITCH ASSEMBLY FEATURE

Switch assembly X101 (4) is actuated by a stem extension attached to the main valve stem. The switch assembly is factory adjusted to actuate a single-pole double-throw switch when the main valve is almost open/closed. When the main valve (1) starts to close/open, the spring loaded switch actuating lever is released and returns the switch to its normal position.

#### 1.3 ► OPTIONAL FEATURES

Suffix (A) - Flow clean strainer:

A self-cleaning strainer is installed in the main valve inlet body boss which protects the pilot system from foreign particles.

Suffix (B) - Isolation ball valve:

Isolation ball valves (B) are used to isolate the pilot system from main line pressure.

These valves must be open during normal operation.

Suffix (C) - Closing speed control:

Flow control (C) controls the closing speed of the main valve (1).

**Flow control (C) adjustment:** Turn the adjusting stem clockwise to make the main valve (1) close slower.

Suffix (G) - Check feature:

When outlet pressure is higher than inlet pressure, check valve (G2) opens and permits the higher outlet pressure to close the main valve (1), check valve (G1) closes and prevents flow out of the main valve cover to the inlet.

Suffix (Q) - Quick connect assembly:

Quick connect assemblies (Q) let pressure gages be easily connected or disconnected to the valve pilot system.

Suffix (S) - Opening speed control:

Flow control (S) controls the opening speed of the main valve (1).

**Flow control (S) adjustment:** Turn the adjusting stem clockwise to make the main valve (1) open slower.

Suffix (T) - Thermal relief control:

Thermal relief control (T) is a normally closed control that senses pressure changes at the main valve (1) inlet. When inlet pressure exceeds the set point of control (T) it opens. This permits the greater inlet pressure to flow through control (T) to the outlet and relieve upstream pressure.

**Thermal relief control (T) adjustment:** Turn the adjusting screw clockwise to increase the setting.

Suffix (Y) - Strainer:

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



# CLA-VAL 413-01

## Fuel Discharge Valve

### 1.4 ► 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.
- Cocks [optional feature (**B**) and (**G3**)] open during normal operation.
- Periodic cleaning of strainer [optional feature (**Y**)] is recommended.
- Flow controls [optional feature (**C**) and (**S**)] open at least 4 turns.
- Remote control line properly connected.