



STANDARD EQUIPMENT

No	Description	Qty	Type
1	MAIN VALVE HYTROL AE/GE/NGE	1	100-01
2	ISOLATION BALL VALVE	6	RB-117
3	STRAINER WITH INCORPORATED ORIFICE	1	X44-A
4	ONE-WAY FLOW CONTROL	1	CV
5	PRESSURE REDUCING CONTROL	1	CRD
6	PRESSURE RELIEF CONTROL	2	CRL / CRL-60

OPTIONAL FEATURES

No	Description	Qty	Type
C	ONE-WAY FLOW CONTROL (CLOSING SPEED)	1	CV

NOTES

AE/GE : DN 32 - DN 400 / NGE : DN 50 - DN 600

OPTIONAL FEATURES : _____
NOT FURNISHED BY CLA-VAL : _____

▶ Operating data

1.1 ▶ PRESSURE REDUCING FEATURE

Pressure reducing control CRD (5) is a "normally open" control, that senses main valve outlet pressure changes. An increase in outlet pressure tends to close control (5) and a decrease in outlet pressure tends to open control (5). This causes main valve cover pressure to vary and the main valve modulates (opens and closes) maintaining a relatively constant pressure at its outlet.

Pressure reducing control (5) adjustment: Turn the adjusting screw clockwise to increase the setting.

1.2 ▶ PRESSURE SUSTAINING FEATURE

Pressure relief control CRL (6B) is a "normally closed" control that senses main valve inlet pressure changes. Control (6B) is open if inlet pressure is higher than the set point of control (6B). This places pressure reducing control (4) in command of the main valve (1). If inlet pressure lowers to the set point of control (6B), control (6B) closes. This pressurizes the main valve cover and the main valve (1) closes, sustaining the desired minimum pressure at the main valve inlet.

Pressure relief control (6B) adjustment: Turn the adjusting screw clockwise to increase the setting.

1.3 ▶ SURGE CONTROL FEATURE

Pressure relief control CRL (6A) is normally closed control that reacts to pressure changes sensed downstream. When downstream pressure increases to the set point of control (6A), this last one opens and directs inlet pressure into the main valve cover, which closes the main valve (1) until normal downstream pressure is restored. Then the pressure surge control (6A) closes.

Pressure surge control (6A) adjustment: Turn the adjusting screw clockwise to increase the setting.

1.4 ▶ OPENING SPEED CONTROL

Flow control CV (4) regulates the opening speed of the main valve (1).

Flow control (4) adjustment: Turn the adjusting screw clockwise to make the main valve (1) open more slowly.

1.5 ▶ (E*) EUROPEAN STANDARDS

ITEM (2) - Isolation ball valve:

The isolation ball valves RB-117 (2) are used to isolate the pilot system from main line pressure. These isolation ball valves must be open during normal operation.

ITEM (3) - Y-Strainer with incorporated orifice:

The strainer X44-A (3) is installed in the pilot supply line to protect the pilot system from foreign particles. The strainer screen must be cleaned periodically.

1.6 ▶ OPTIONAL FEATURES

Suffix (C) - Closing speed:

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

Flow control (C) adjustment: Turn the adjusting screw clockwise to make the valve close more slowly.



CLA-VAL 94-16

Pressure Reducing Valve Upstream and Downstream Surge Control

1.7 ▶ 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.
- Robinets de barrage **(2)** ouverts.
- Periodic cleaning of the strainer screen **(3)** is recommended.
- Flow control valve **(4)** and/or [optional feature **(C)**] open at least 1 turn.