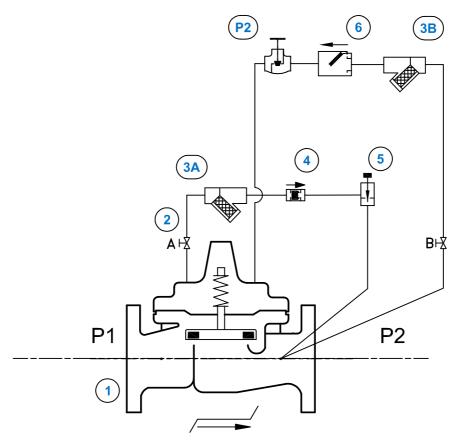




# Check Valve and Opening/Closing Speed Control



	STANDARD EQUIPMENT					
No	Description	Qty	Type			
1	MAIN VALVE HYTROL AE/GE/NGE	1	100-01/KR			
2	ISOLATION BALL VALVE	2	RB-117			
3	STRAINER	2	X43			
4	CHECK VALVE	1	CDC-1 (#)			
5	NEEDLE VALVE	1	6120			
6	SWING CHECK VALVE (HIGH CAPACITY)	1	SW-200			

OPTIONAL FEATURES					
No	Description	Qty	Type		
P2	GLOBE VALVE	1	RAS		

NOTES				
AE/GE: DN 32 - DN 400 / NGE: DN 50 - DN 600  (#) = According to valve size this feature type could change	OPTIONAL FEATURES : NOT FURNISHED BY CLA-VAL :			

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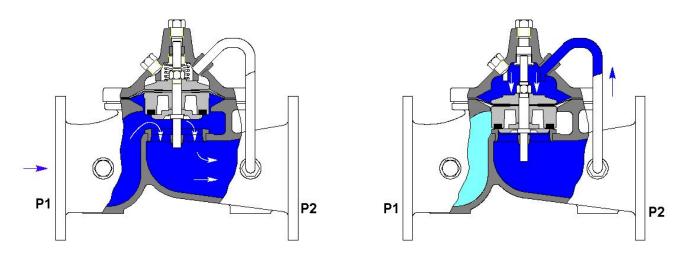


## Check Valve and Opening/Closing Speed Control

### Operating data

#### 1.1 DOPERATING MODE CHECK VALVE

The two check valves (4) and (6) prevent from opening or closing when the main valve operates in the opposite mode.



#### 1.1.1 ▶ VALVE OPEN

When the valve is normally operating the differential between the inlet pressure P1 and the outlet pressure P2 is the differential pressure drop (P1 higher than P2) through the main valve (1). This differential is the force which pushes the diaphragm and disc assembly against the cover chamber and the main valve (1) opens gradually.

#### 1.1.2 ▶ VALVE CLOSED

If inlet pressure P1 is lower than outlet pressure P2 than the force pushes the disc against the seat and closes the main valve (1).

#### 1.2 DOPENING SPEED CONTROL

Flow control (5) regulates the opening speed of the main valve (1).

Flow control (5) adjustment: Turn the adjusting screw clockwise to make the main valve (1) open more slowly (and inversely to close more slowly).

<u>Note</u>: Do not close completely flow control (5), otherwise the main valve (1) will not close or open anymore. Recommended opening degree = 1 turn open.

#### 1.3 ▶ (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 valves must be open during normal operation.

#### ITEM (3) - Strainer:

A strainer X43 (3) is installed in the pilot supply line to protect the pilot system from foreign particles. The strainer screen must be cleaned periodically.

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## **CLA-VAL 81-02**

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#### **1.4** ▶ **OPTIONAL FEATURE**

Suffix (P2) - Closing speed control:

Globe valve (P2) regulates the closing speed of the main valve (1).

#### 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 ball valve (2A) and (2B) open.
Periodic cleaning of strainer screen (3A) and (3B).
Needle valve (5) open from 1 turn.