



NEWPORT BEACH, CALIFORNIA

CATALOG NO.

403-11

DRAWING NO.

91537

REV

A

TYPE OF VALVE AND MAIN FEATURES

REMOTE CONTROL VALVE WITH MANUAL OVERRIDE

DESIGN

DRAWN

CH

8-1-80

CHK'D

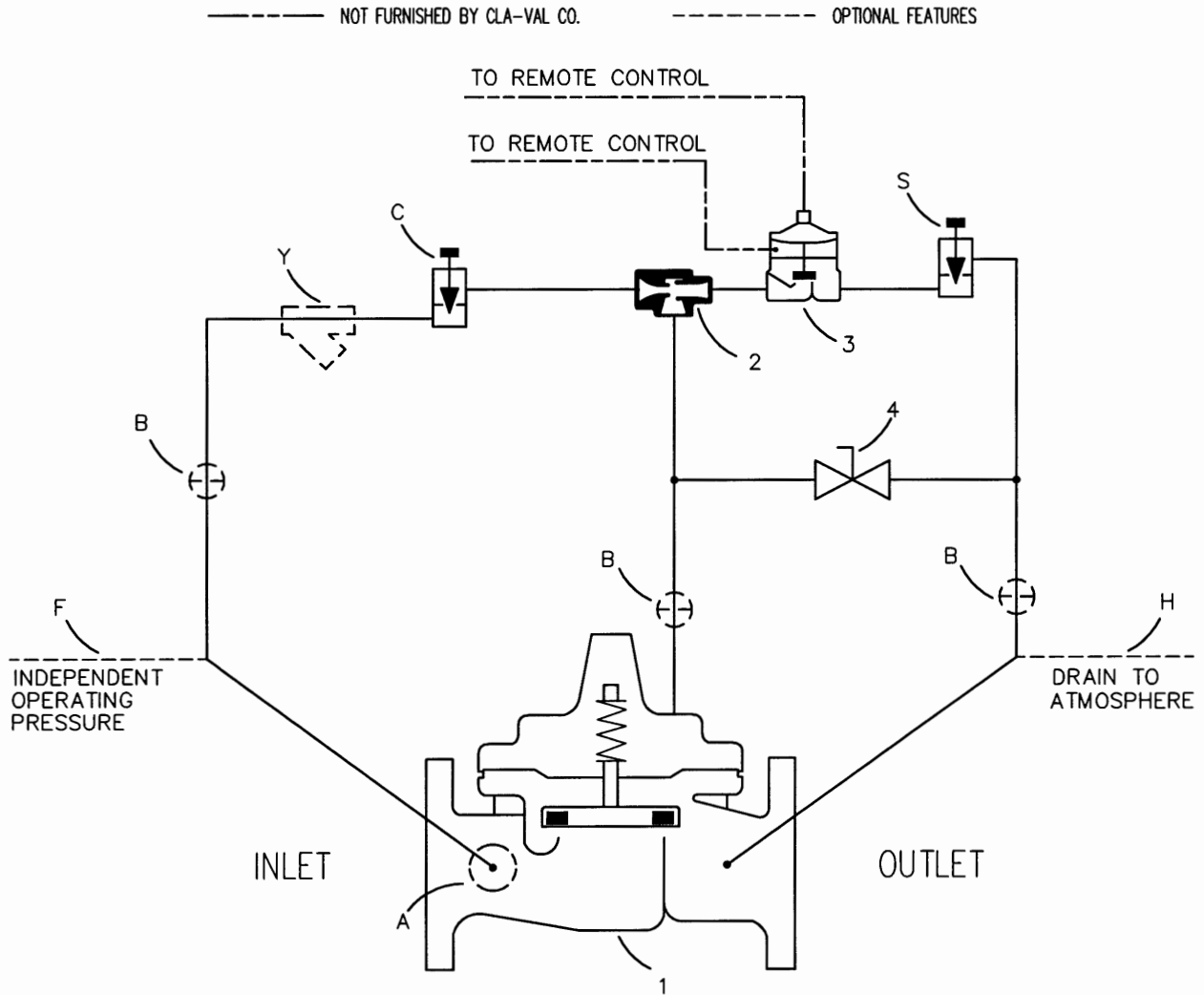
KD

8-15-80

APVD

CH

8-26-80



CAD REVISION RECORD - DO NOT REVISE MANUALLY

DESCRIPTION	BY	DATE
REDRAWN ON CAD; CHANGED TEXT FOR OPERATING DATA IN 1.REMOTE CONTROL FEATURE LAST WORD IN OPENING CYCLE FROM CLOSES TO OPENS (ECO 18975)	AK	04-29-02

ITEM NO.	BASIC COMPONENTS	QTY
1	100-01 HYTROL (MAIN VALVE)	1
2	X47A EJECTOR	1
3	100-02 POWERTRON	1
4	BALL VALVE	1

OPTIONAL FEATURE SUFFIX		ADDED TO CATALOG NUMBER	
A	X46A FLOW CLEAN STRAINER	1	
B	CK2 COCKS (ISOLATION VALVES)	3	
C	CNB NEEDLE VALVE (CLOSING)	1	
F	INDEPENDENT OPERATING PRESSURE		
H	ATMOSPHERIC DRAIN		
S	CNB NEEDLE VALVE (OPENING)	1	
Y	X43 "Y" STRAINER		1

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OPERATING DATAI. REMOTE CONTROL FEATURE:OPENING CYCLE:

WHEN REMOTE OPERATING PRESSURE IS APPLIED TO THE UNDERSIDE OF THE DIAPHRAGM AND RELIEVED FROM ABOVE THE DIAPHRAGM OF PILOT (3), IT OPENS. THIS RELIEVES MAIN VALVE (1) COVER TO THE OUTLET AND THE MAIN VALVE (1) OPENS.

CLOSING CYCLE:

WHEN REMOTE OPERATING PRESSURE IS RELIEVED FROM THE UNDERSIDE OF THE DIAPHRAGM AND APPLIED ABOVE THE DIAPHRAGM OF PILOT (3), IT CLOSSES. THIS DIRECTS INLET PRESSURE INTO THE MAIN VALVE COVER CHAMBER AND THE MAIN VALVE (1) CLOSSES.

II. MANUAL OVERRIDE FEATURE

MANUALLY OPEN BALL VALVE (4) TO BYPASS REMOTE CONTROL (3) AND OPEN MAIN VALVE (1). WHEN BALL VALVE (4) IS CLOSED, THE MAIN VALVE (1) IS UNDER COMMAND OF REMOTE CONTROL (3). BALL VALVE (4) MUST BE CLOSED DURING NORMAL OPERATION.

III. OPTIONAL FEATURE OPERATING DATA: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 VALVES)

CK2 COCKS (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)

CNB NEEDLE VALVE (C) CONTROLS THE CLOSING SPEED OF THE MAIN VALVE. TURN THE ADJUSTING STEM CLOCKWISE TO MAKE THE MAIN VALVE CLOSE SLOWER. DO NOT CLOSE VALVE (C) COMPLETELY OR MAIN VALVE WILL NOT CLOSE. SUGGESTED INITIAL SETTING 1/4 TURN OPEN.

SUFFIX "F" (INDEPENDENT OPERATING PRESSURE)

PILOT SUPPLY PRESSURE IS OBTAINED FROM AN INDEPENDENT SOURCE. (PILOT SUPPLY PRESSURE IS OBTAINED FROM THE MAIN VALVE INLET IF SUFFIX "F" IS NOT SPECIFIED.) NOTE: INDEPENDENT OPERATING PRESSURE MUST BE EQUAL TO OR GREATER THAN PRESSURE AT THE MAIN VALVE INLET AT ALL TIMES.

SUFFIX "H" (ATMOSPHERIC DRAIN)

PILOT SYSTEM DRAIN LINE IS DISCHARGED TO ATMOSPHERE. (PILOT SYSTEM DRAIN LINE IS CONNECTED TO THE MAIN VALVE OUTLET BOSS IF SUFFIX "H" IS NOT SPECIFIED.)

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SEE SHEET 1

LTR

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OPERATING DATASUFFIX "S" (OPENING SPEED CONTROL)

CNB NEEDLE VALVE (S) CONTROLS THE OPENING SPEED OF THE MAIN VALVE. TURN THE ADJUSTING STEM CLOCKWISE TO MAKE THE MAIN VALVE OPEN SLOWER. DO NOT CLOSE VALVE (S) COMPLETELY OR MAIN VALVE WILL NOT OPEN. SUGGESTED INITIAL SETTING 1/4 TURN OPEN.

SUFFIX "Y" (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.

IV. 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.
- CK2 COCKS (B) OPEN (OPTIONAL FEATURE).
- PERIODIC CLEANING OF STRAINER (Y) IS RECOMMENDED (OPTIONAL FEATURE).
- CNB NEEDLE VALVES (C) AND (S) OPEN AT LEAST 1/4 TURN (OPTIONAL FEATURE).
- REMOTE CONTROL LINE PROPERLY CONNECTED.
- INDEPENDENT OPERATING PRESSURE CONNECTION PROPERLY CONNECTED.
- VALVE (4) CLOSED DURING NORMAL OPERATION.

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