



NEWPORT BEACH, CALIFORNIA

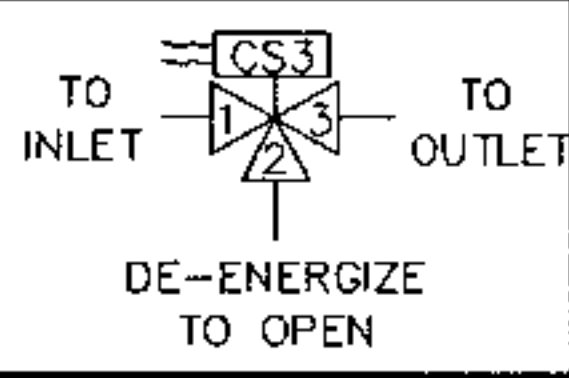
CATALOG NO. 134-60

DRAWING NO. 28301

REV A

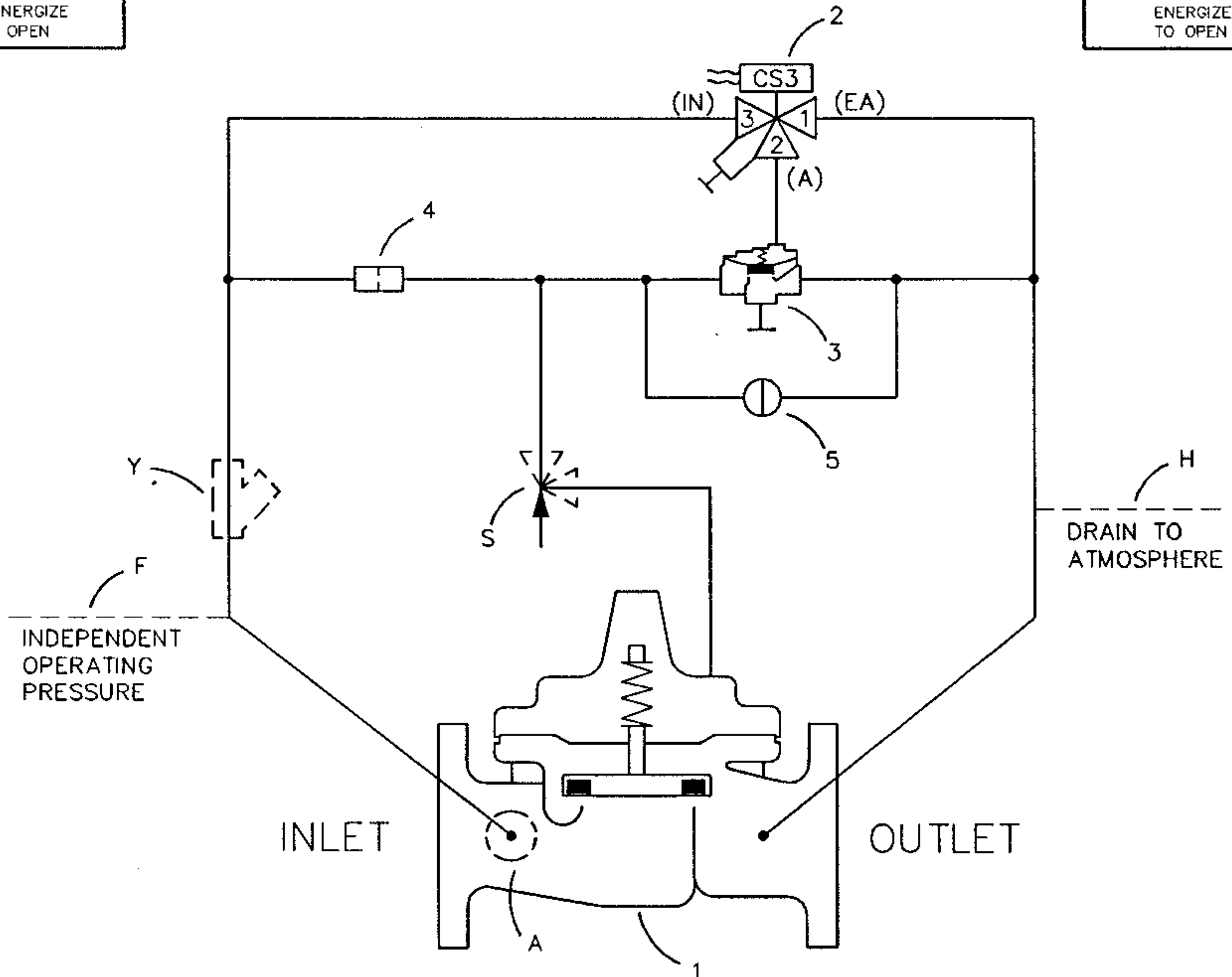
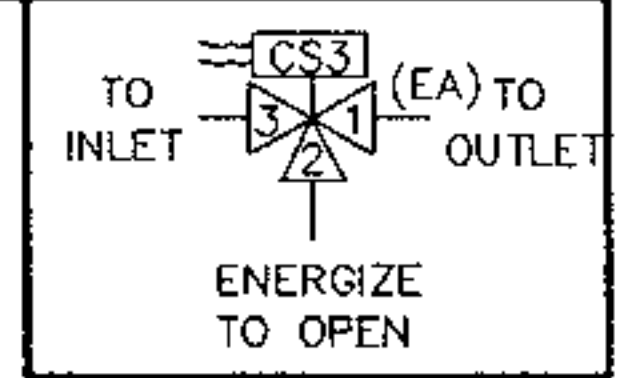
SOLENOID CONTROL VALVE,
EQUIPPED WITH MANUAL BYPASS VALVE
(SEA WATER FIRE DELUGE SERVICE)

DESIGN		
DRAW	EK	3-24-97
CHK'D	CH	3-26-97
APVD	CH	3-26-97



----- NOT FURNISHED BY CLA-VAL CO.

----- OPTIONAL FEATURES



*100GS ON 3", 4", 6", 8" & 10" ONLY
100GSKX ON 12" & 16" ONLY
KX = WITH STANDARD HYTROL BODY

ITEM NO.	BASIC COMPONENTS	QTY
1	*100GS/100GSKX HYTROL (MAIN VALVE)	1
2	CS3XM SOLENOID CONTROL	1
3	100-01 AUXILIARY HYTROL (REVERSE FLOW)	1
4	X58C RESTRICTION ASSEMBLY	1
5	CK2 COCK (MANUAL BYPASS)	1

OPTIONAL FEATURE SUFFIX	ADDED TO CATALOG NUMBER	QTY
A	X46A FLOW CLEAN STRAINER	1
F	INDEPENDENT OPERATING PRESSURE	
H	DRAIN TO ATMOSPHERE	1
S	CV FLOW CONTROL (OPENING)	1
Y	X43 "Y" STRAINER	1

CAD REVISION RECORD - DO NOT REVISE MANUALLY
 DESCRIPTION
 BY DATE
 EK 3-24-97
 LTR
 - RELEASED FOR PRODUCTION (NED 42195)
 A CONNECTED PILOT LINE TO MAIN VALVE; ADDED OPTIONAL

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CLA-VAL CO.

NEWPORT BEACH, CALIFORNIA

CATALOG NO.

134-60

DRAWING NO.

28301

REV

A

TYPE OF VALVE AND MAIN FEATURES

SOLENOID CONTROL VALVE,
EQUIPPED WITH MANUAL BYPASS VALVE
(SEA WATER FIRE DELUGE SERVICE)

DESIGN

DRAW	EK	3-24-97
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APVD	CH	3-26-97

OPERATING DATA

I. SOLENOID CONTROL FEATURE:

SOLENOID CONTROL (2) IS A DIRECT ACTING, 3-WAY SOLENOID CONTROL THAT CHANGES POSITION WHEN THE COIL IS ENERGIZED OR DE-ENERGIZED. THIS APPLIES OR RELIEVES PRESSURE IN THE COVER CHAMBER OF AUXILIARY HYTROL (3) PROVIDING THE OPERATION SHOWN IN THE FOLLOWING TABLE:

SOLENOID CONTROL (2)		134E-60 SERIES		134D-60 SERIES	
		AUXILIARY HYTROL (3) POSITION	MAIN VALVE (1) POSITION	AUXILIARY HYTROL (3) POSITION	MAIN VALVE (1) POSITION
POSITION	PORTS CONNECTED				
ENERGIZED	2 (A) & 1 (EA)	OPEN	OPEN	CLOSED	CLOSED
DE-ENERGIZED	2 (A) & 3 (IN)	CLOSED	CLOSED	OPEN	OPEN

NOTE: SOLENOID CONTROL (2) IS EQUIPPED WITH A MANUAL ACTUATOR WHICH CAN BE USED TO OPERATE THE SOLENOID WITHOUT ELECTRICAL POWER. AFTER MANUAL ACTUATION, ALWAYS RETURN THE ACTUATOR TO ITS ORIGINAL POSITION OR THE SOLENOID WILL NOT RETURN TO THE DE-ENERGIZED POSITION.

II. MANUAL BYPASS FEATURE:

OPEN CK2 COCK (5) TO BYPASS BOTH SOLENOID CONTROL (2) AND AUXILIARY HYTROL (3). THIS RELIEVES PRESSURE IN THE MAIN VALVE COVER, THEREBY, OPENING THE MAIN VALVE.

CK2 COCK (5) MUST BE CLOSE DURING NORMAL OPERATION.

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DATE

BY

DESCRIPTION

SEE SHEET 1.

LTR



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OPERATING DATA-CONTINUED

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 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.]

SUFFIX S (OPENING SPEED CONTROL)

FLOW CONTROL (S) CONTROLS THE OPENING SPEED OF THE MAIN VALVE. TURN THE ADJUSTING STEM CLOCKWISE TO MAKE THE MAIN VALVE OPEN SLOWER.

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.
- PERIODIC CLEANING OF STRAINER (Y) IS RECOMMENDED (OPTIONAL FEATURE).
- FLOW CONTROL VALVE (S) OPEN AT LEAST 1/4 TURN (OPTIONAL FEATURE).
- CORRECT VOLTAGE TO SOLENOID CONTROL (2).

CAD REVISION RECORD - DO NOT REVISE MANUALLY

DATE

BY

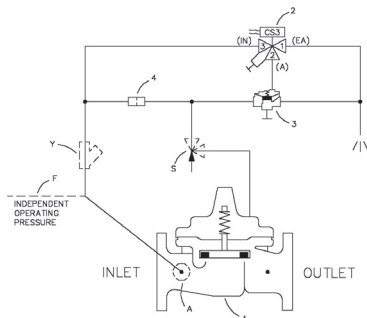
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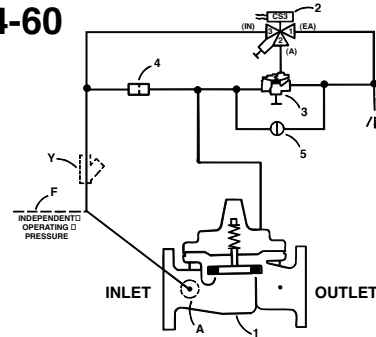
SEE SHEET 1.

134 Series Optional Electric Control Arrangements

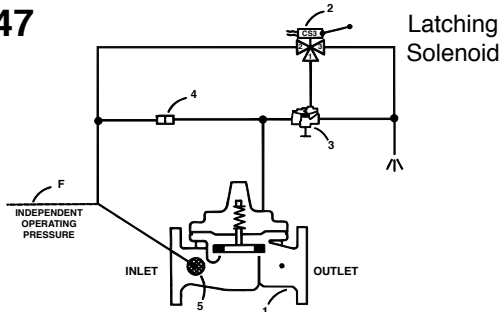
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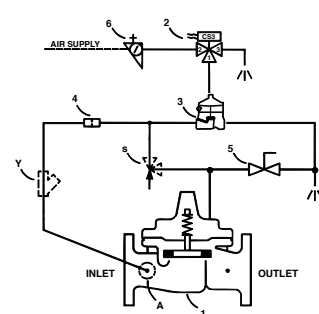
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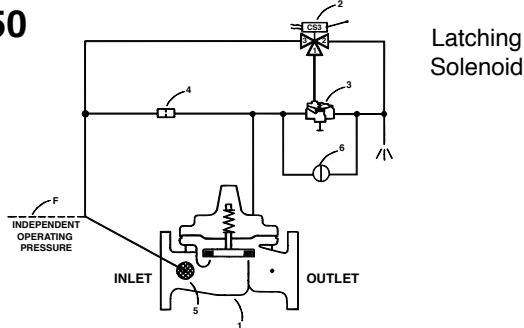
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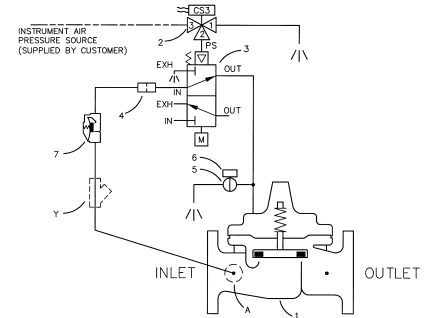
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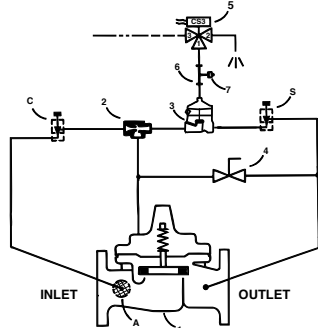
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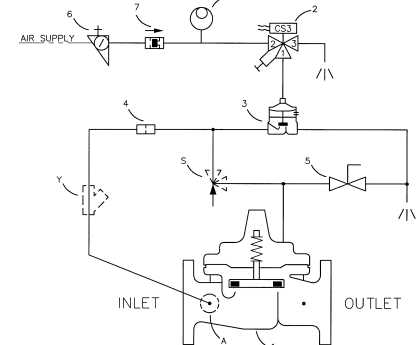
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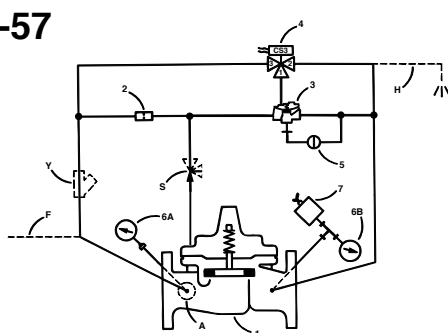
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134-82



134-57



134-83

