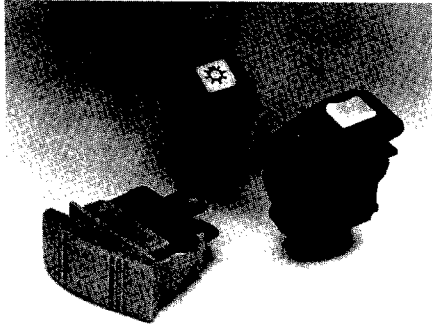
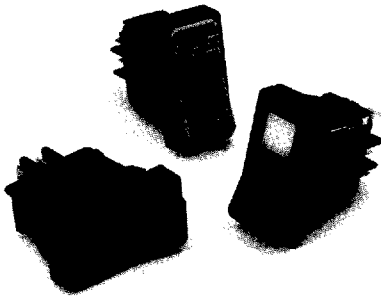


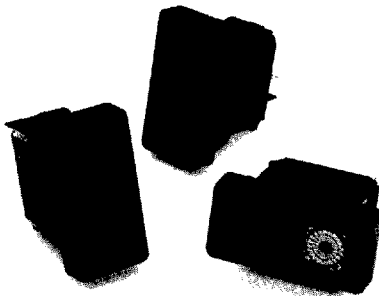
V-Series



CONTURA II & III



CONTURA X



CONTURA XI

The V-Series CONTURA rocker switches offer countless unique options including choices for ratings, colors, illuminations and symbols. These switches feature removable actuators in a choice of actuator styles and colors, are available in single or double pole configurations, and can be illuminated with either square or bar shaped lenses. An optional plug-in terminal connector enables pre-wiring of wire harness.

All CONTURA switches, with sealed front panel components, are certified to IP66 and IP68, signifying complete protection against dust and prolonged spray and submersion under pressure, and are recognized to UL1500 - Ignition Protection for Marine Products. These switches are vibration, shock, thermo-shock, moisture and salt spray resistant.

The CONTURA II and III actuators are available with optional "soft-touch" surfaces, optional lock-on terminal connector, and actuator removal tools.

The CONTURA X and XI versions are available with one-piece bar lenses, or square lenses in either one or two part construction with back-lit legends, for increased durability of lens symbols. In addition, the CONTURA X and XI actuators also fit on the CONTURA II and CONTURA III base. Thus, actuators and square lenses may be purchased and stocked separately from the base assembly.

The CONTURA X and XI versions include a raised bracket/bezel which helps prevent inadvertent actuation of the rocker.

Specifications

- **Certifications*:**
UL, CSA, VDE, DEMKO, SEMKO, NEMKO, FIMKO, BEAB
- **Dielectric Strength:** 2,000 V RMS opposite polarity; 4,000 VRMS between live parts & operator accessible surface.
- **Insulation Resistance:** 50 Megohms
- **Function:** SPST, DPST, SPDT, DPDT, SP3T. other circuits available, consult factory.
- **Operation:** Two & three positions - maintained & momentary
- **Lighted:** incandescent rated 10,000 hours; Neon rated 25,000 hours; LED rated 100,000 hours 1/2 life (LED is internally ballasted for voltages to 24VDC.
- **Seals:** available with internal seal & optional external gasket panel seal.
- **Mounting:** Snap-in mounting with flexible mounting wings suitable for panel thickness ranges of 0.30" tp 0.187" (0.76mm to 4.75 mm). Mounting hole dimensions are 1.450" by 0.830" (36.83 x 21.08mm).
- **Base Material:** Polyester
- **Actuator Material:**
CONTURA II and III:
Underlay/Lens: Polycarbonate
Hard overlay: Type 66 Nylon
Soft overlay: Thermoplastic elastomer
CONTURA X and XI:
Nylon
Lens Material: Polycarbonate
- **Bracket/Bezel Material:** Type 66 Nylon
- **Temperature Ratings:** -40°C to 85°C

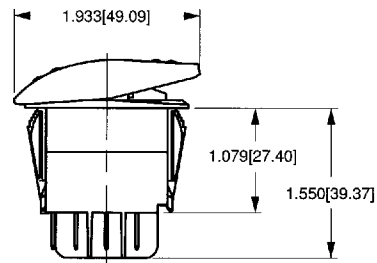
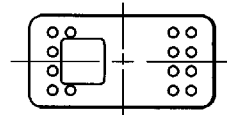
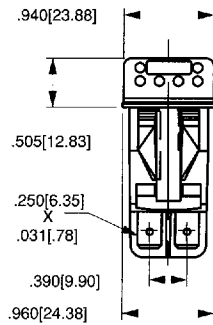
CONTURA switches are designed and tested in accordance with requirements of specification MIL-STD 202F as follows:

- **Vibration:** Method 204D, Test Condition A 0.06 DA or 10G's. 10-500 Hz. Tested with VCH connector. Test criteria - No loss of circuit during test and pre and post test contact resistance.
- **Shock:** Method 213B, Test Condition K @ 30 G's. Tested with VCH connector. Test criteria - No loss of circuit during test and pre and post test contact resistance.
- **Salt Spray:** Method 101D, Test Cond. A, 48 Hrs. Sealed Version only.
- **Thermal Shock:** Method 107F, Test Cond. A, -55° to + 85°C. Test Criteria - pre and post contact resistance.
- **Moisture Resistance:** Method 106E. Test criteria - pre and post test contact resistance.

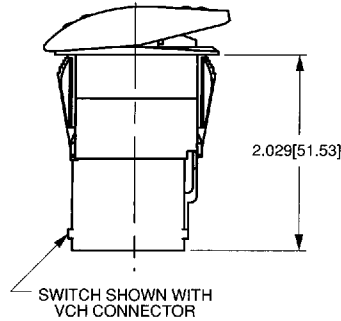
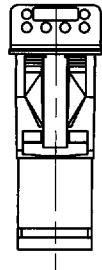
* Due to ongoing technological advances, consult factory for certification specifics.

Dimensional Specifications: in. [mm]

CONTURA II STYLE SHOWN WITH SQUARE LENS

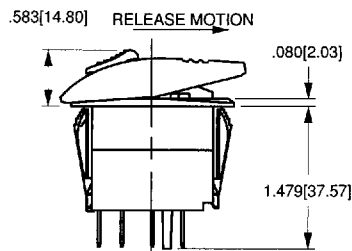
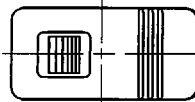
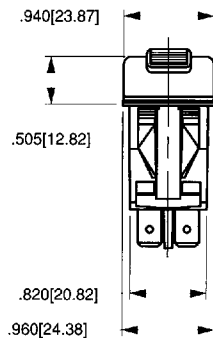


BASE W/BARRIERS

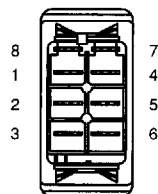


SWITCH SHOWN WITH
VCH CONNECTOR

CONTURA III STYLE SHOWN WITH LOCKING ROCKER

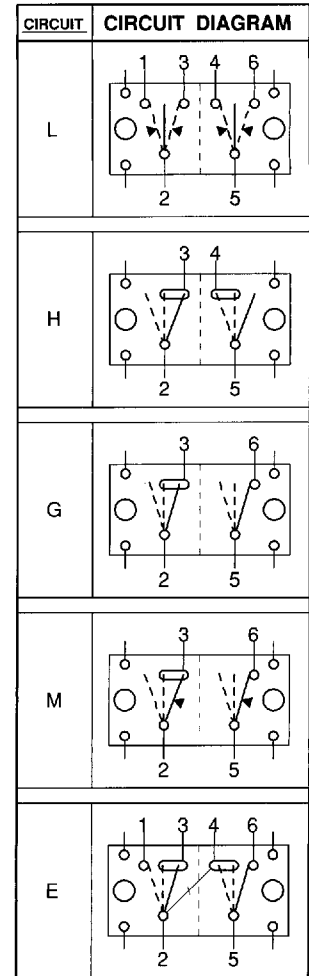
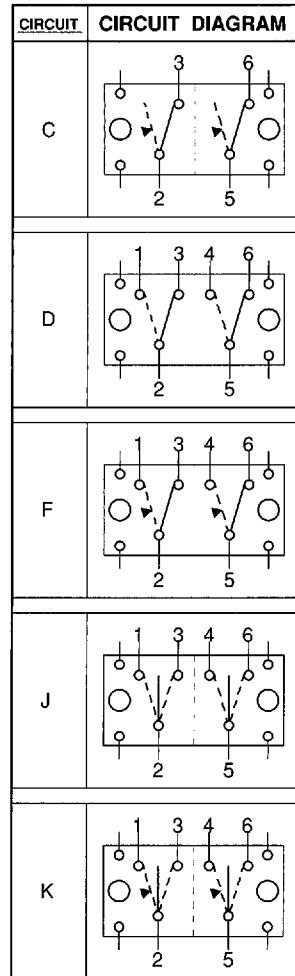
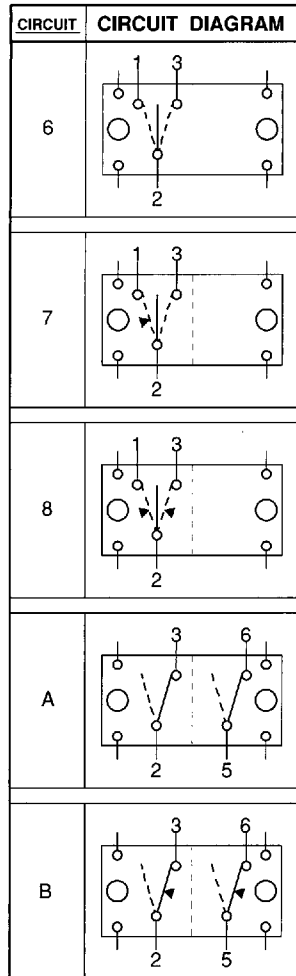
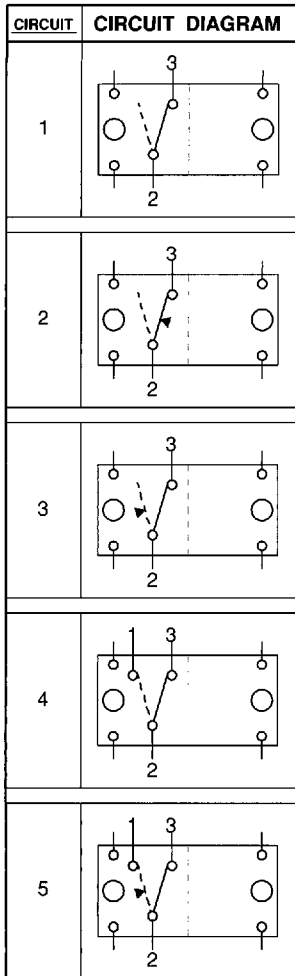


BASE W/O BARRIERS



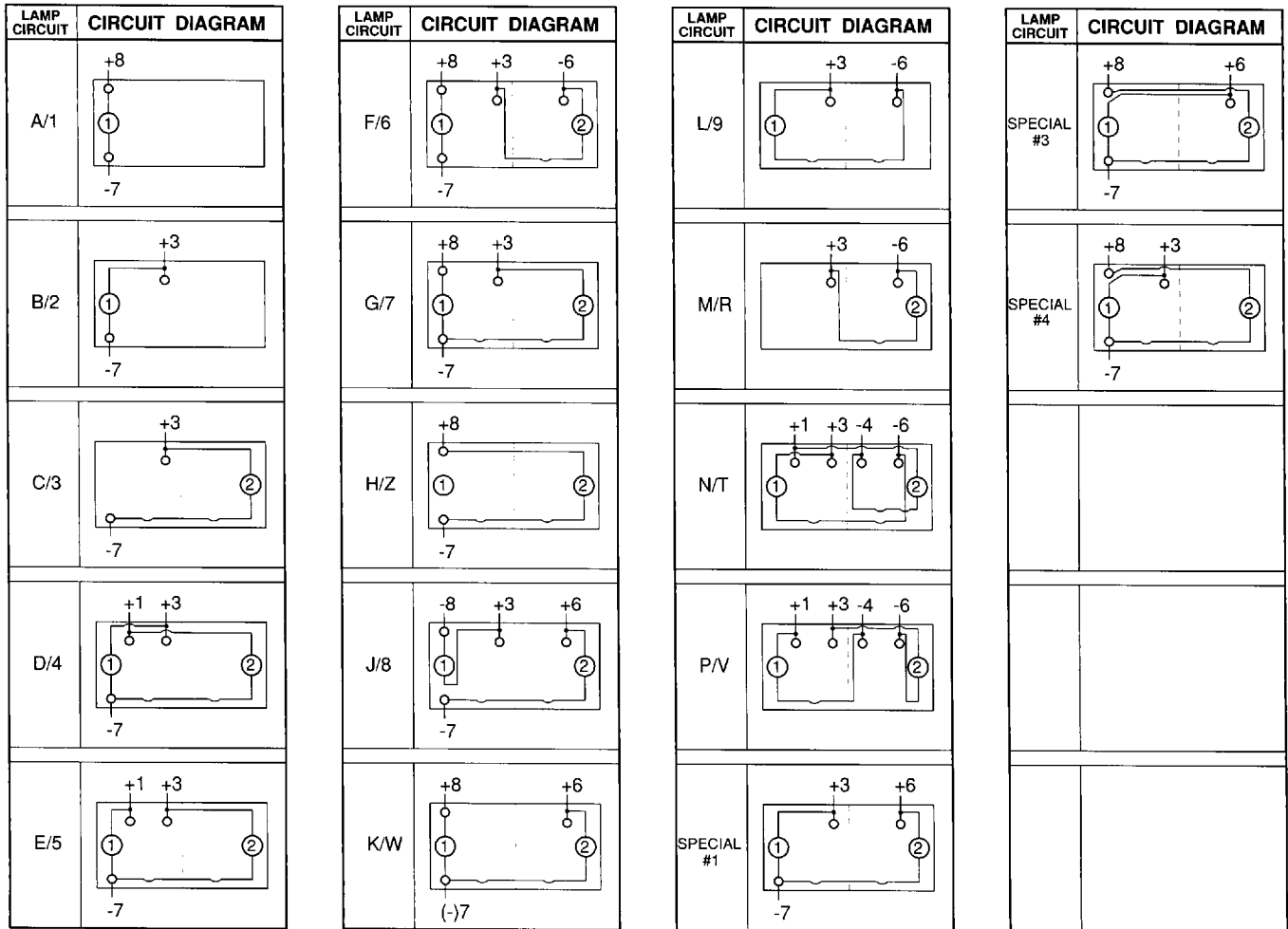
BOTTOM VIEW
TERMINAL ARRANGEMENT

Circuit Diagrams



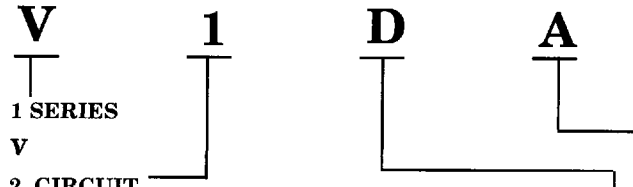
SYMBOL LEGEND	
SYM.	DEFINITION
○	DESIGNATES TERMINALS AND CONTACTS
○	DESIGNATES LAMP LOCATION
○—○	DESIGNATES MAINTAINED CIRCUITS
---○	DESIGNATES OTHER POSITION
○—○	DESIGNATES MOMENTARY CIRCUITS
○—○	DESIGNATES TWO POSITION CONNECTION
—	DESIGNATES EXTERNAL JUMPER PROVIDED BY CUSTOMER

Lamp Circuits



SYMBOL LEGEND	
SYM.	DEFINITION
○	DESIGNATES TERMINALS AND CONTACTS
○	DESIGNATES LAMP LOCATION

OTHER CIRCUITS AVAILABLE.
CONSULT FACTORY.



1 SERIES

V

2 CIRCUIT

Terminal Connections as viewed from bottom of switch:

- 8 - -7
- 1 - -4
- 2 - -5
- 3 - -6

SP - single pole - uses terminals 1, 2 & 3.

DP - double pole uses terminals 1, 2, 3, 4, 5 & 6.

Terminals 7 & 8 for lamp circuit only.

Position:	1	2	3
	2 & 3	CONNECTED	1 & 2
	5 & 6	TERMINALS	4 & 5
SP DP	5 & 6	TERMINALS	4 & 5
1 A	ON	NONE	OFF
2 B	(ON)	NONE	OFF
3 C	ON	NONE	(OFF)
4 D	ON	NONE	ON
5 F	ON	NONE	(ON)
6 J	ON	OFF	ON
7 K	ON	OFF	(ON)
8 L	(ON)	OFF	(ON)

SPECIAL CIRCUITS

H*	2 & 3	2 & 3, 5 & 4	5 & 4
G*	2 & 3, 5 & 6	2 & 3	OFF
M*	(2 & 3, 5 & 6)	2 & 3	OFF
E*	5 & 6	5 & 3	5 & 1

* Jumper between terminals 2 & 5 for circuits H, G, & M to be specified in selection 4. External jumper between terminals 2 & 4 for circuit E are to be provided by customer. Circuit E may be used for SP OFF-ON-ON circuit. Special circuits H, M and E not available with ratings 5 through 9.

3 RATING

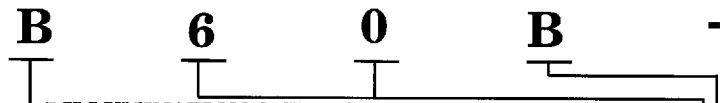
4	10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP No Agency Listings
5	10A 250VAC 1/2 HP, 15A 125 VAC 1/2 HP UL Recognized, CSA Certified
6*	15A 125VAC 1/2 HP, 12(2)A 125 VAC μ T85
7*	15A 125VAC 1/2 HP, 12(6)A 125 VAC T85
8*	10A 250VAC, 15A 125VAC, 1/2 HP 125-250 VAC, 12(2)A 250 VAC μ T85
9*	10A 250VAC, 15A 125VAC, 1/2 HP 125-250 VAC, 12(6)A 250 VAC T85
B	15A 24V
C	20A 18V
D	20A 12V
G	20A 6V
H	20A 3V

* Ratings 6, 7, 8 & 9 are UL, CSA, VDE, DEMKO, SEMKO, NEMKO, FIMKO and BEAB certified. Rating 6 & 8 available with circuits 2, 3, 5, 6, 7, 8, B, C, F, J, K, L only. Rating 8 is 1/2 HP, 250VAC only for circuits 2, 3, 5, 7, 8, K, L. Ratings 7 & 9 available with circuits 1, 4, A, D. Ratings 6 & 7 only available with lamp code 1 (125VAC neon). Ratings 8 & 9 only available with lamp code 2 (250VAC neon).

4 TERMINATION & JUMPER

	TERMINATION	JUMPER
1	.250TAB (QC) NO BARRIERS	NO
A	.250TAB (QC) WITH BARRIERS	NO
J	.250TAB (QC) NO BARRIERS	YES T2 TO 5

NOTE: Base will not have terminal insulating barriers when connector and/or jumpers are used. Code J is optional for circuits H, G and M. Customer may provide externally wired jumper to connect terminals 2 and 5.



5 ILLUMINATION & SWITCH SEALING

Lamp #1 located above terminals 1 & 4 end of switch.

Lamp #2 located above terminals 3 & 6 end of switch.

Positive (+) and negative (-) symbols apply to LED lamps only.

SEALED	UNSEALED	LAMPS	ACTUATOR LENS POSITION WHEN ILLUMINATED	LAMP WIRED TO TERMINALS
S	0	None		
A	1	# 1	Independent	8+ 7-
B	2	# 1	Down	3+ 7-
C	3	# 2	Up	3+ 7-
D	4	# 1	Down	3+ 7-
		and # 2	Down	1+ 7-
E	5	# 1	Up	1+ 7-
		and # 2	Up	3+ 7-
F	6	# 1	Independent	8+ 7-
		and # 2	Up	3+ 6-
G	7	# 1	Independent	8+ 7-
		and # 2	Up	3+ 7-
H	Z	# 2	Independent	8+ 7-
Selections for Single Pole Switches Only:				
J	8	# 1	Down	3+ 8-
		and # 2	Independent	6+ 7-
K	W	# 1	Independent	8+ 7-
		and # 2	Independent	6+ 7-
Selections for Double Pole Switches Only:				
L	9	# 1	Down	3+ 6-
M	R	# 2	Up	3+ 6-
N	T	# 1	Down	3+ 6-
		and # 2	Down	1+ 4-
P	V	# 1	Up	1+ 4-
		and # 2	Up	3+ 6-

6, 7 LAMP

Selection 6: above terminals 1 & 4

Selection 7: above terminals 3 & 6

USE SAME CODING FOR BOTH SELECTIONS

0 - NO LAMP THIS LOCATION

NEON	INCANDESCENT*
1 - 125VAC	4 - 3V
2 - 250VAC	5 - 6V
	6 - 12V
	7 - 18V
	8 - 24V

LED

	RED	AMBER	SUPERBRIGHT GREEN	SUPERBRIGHT RED
2VDC	A	L	F	R
6VDC	B	M	G	S
12VDC	C	N	H	T
24VDC	D	P	J	V

8 BRACKET COLOR¹, PANEL SEAL

FLUSH BRACKET
(CONTURA II, III)

# OF SEALS:	0	1
BRACKET COLOR:		
BLACK	B	C
WHITE	W	Y
GRAY	G	H

Mounting Hole Size: 1.450" x 0.830"

36.83mm 21.08mm

To mount multiple switches in single panel cut-out order optional interlocking mounting panels.

OF GASKETS ACCEPTABLE PANEL THICKNESS RANGE

0	.030" to .250"
	.76mm 4.76mm
1	.030" to .109" & .147" to .157"
	.76mm 2.77mm 3.73mm 3.98mm

A

9 ACTUATOR

0 - NO ACTUATOR (FURNISHED SEPARATELY)

CONTURA II

A



CONTURA III

B



Actuator orientation above terminals: 3,6 1,4

10 LENS

Lens color for LEDs must be clear, white, or match color of LED. Green or blue lenses are not recommended with Neon lamps.

0 - NO ACTUATOR

Z - NO LENS

Lens Location & Style:

CLEAR WHITE AMBER GREEN RED BLUE

1 6 B G M T

2 7 C H N U

3 8 D J P V

Square lens options available only for Contura II:

4 9 E K R W

5 A F L S Y

11 ACTUATOR COLOR¹ AND TEXTURE

0 - NO ACTUATOR

	SOFT SURFACE			HARD SURFACE		
BLACK	B			C		
GRAY	G			H		
RED	R			S		
WHITE	W			Y		

12 ACTUATOR LENS OR BODY LEGENDS²

00 - NO LEGEND THIS LOCATION/NO ACTUATOR



11	ON	15	O	O
	OFF		F	N
12	OFF	16	O	O
	ON		N	F
13		17	O	
	O			
14	O	18		O

FOR ADDITIONAL LEGEND OPTIONS & CODES, SEE PAGES 19 TO 25.

NOTES:

Shading indicates standard configurations.

Consult factory to verify horsepower rating for your particular circuit choice.

- Custom colors are available. Consult factory.
- Not available on Soft surface actuators. White imprinting is standard on black actuators. Black imprinting is standard on white, red and gray actuators. Custom colors are available. Consult factory.
- 18V bulbs recommended for 13.8 V applications for sharper illumination.
- For actuator only on CONTURA II with square lens; Orientation 1 & 2 only available with actuator A from selection 9; Orientation 3 & 4 only available with actuator B from selection 9.

R

B

00

-

0

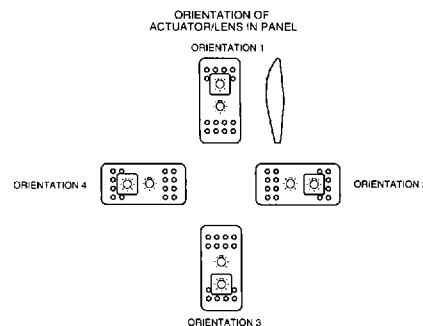
00

13 LEGEND ORIENTATION⁴

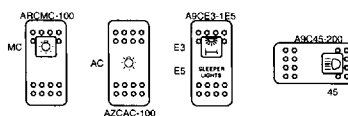
Field 13 must be 0 if legend code in selection 12 is 11 - 18.

0 - NO LEGEND

- Orientation 1
- Orientation 2
- Orientation 3
- Orientation 4



EXAMPLES:



* Additional orientations and locations for legends available, consult factory.

14 ACTUATOR LENS LEGENDS²

Field 14 must be 00 if legend code in selection 12 is 11 - 18.

00 - NO LEGEND THIS LOCATION/NO ACTUATOR

Selection 14 required when switch requires two legends. If the two legends consist of one lens and one body legend, lens legend must be specified in selection 12; body legend specified in selection 14.

FOR LEGEND OPTIONS & CODES, SEE PAGES 19 TO 25.

V-Series Components:

To order **switch without actuator** specify: **V** with code selections **2** through **8**.
(ex.) V1DABC0B-00000-000

To order **actuator separately** specify: **VV** with code **A** or **C** only for selection **9**, and codes from above scheme for selections **10** through **14**.
(ex.) VVARBMA-100