

AUXILIARY ACTUATORS

Easy to assemble auxiliary actuators for the MM Series provides the end-user with the capability to operate the switch with force not directly in line with the operating button. Actuators are available in either the plain-leaf or roller-leaf style. Each actuator kit consists of the stainless steel spring-leaf with an integral side mounting plate, flexible insulator, two (2) #2-56 x 7/16" roundhead screws, with lockwashers and hex nuts. Actuator and hardware are supplied unassembled. Specially formed auxiliary actuators are available, consult Customer Service Center.

ALS-1 LEAF



SWITCH CHARACTERISTICS

OPERATING FORCE (MAX)	$\frac{\text{oz}}{\text{grams}}$	$\frac{6}{170}$
RELEASE FORCE (MIN)	$\frac{\text{oz}}{\text{grams}}$	$\frac{2}{56}$
DIFFERENTIAL TRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.025}{(0,64)}$
PRETRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.110}{(2,79)}$
OVERTRAVEL (MIN)	$\frac{\text{in}}{\text{mm}}$	$\frac{.015}{(0,38)}$

ALS-2 LEAF (Low Motion)



SWITCH CHARACTERISTICS

OPERATING FORCE (MAX)	$\frac{\text{oz}}{\text{grams}}$	$\frac{7}{198}$
RELEASE FORCE (MIN)	$\frac{\text{oz}}{\text{grams}}$	$\frac{2}{56}$
DIFFERENTIAL TRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.025}{(0,64)}$
PRETRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.225}{(5,72)}$
OVERTRAVEL (MIN)	$\frac{\text{in}}{\text{mm}}$	$\frac{.015}{(0,38)}$

AWS-1 LEAF ROLLER



SWITCH CHARACTERISTICS

OPERATING FORCE (MAX)	$\frac{\text{oz}}{\text{grams}}$	$\frac{6}{170}$
RELEASE FORCE (MIN)	$\frac{\text{oz}}{\text{grams}}$	$\frac{2}{56}$
DIFFERENTIAL TRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.025}{(0,64)}$
PRETRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.110}{(2,79)}$
OVERTRAVEL (MIN)	$\frac{\text{in}}{\text{mm}}$	$\frac{.015}{(0,38)}$

AWS-2 LEAF ROLLER (Low Motion)



SWITCH CHARACTERISTICS

OPERATING FORCE (MAX)	$\frac{\text{oz}}{\text{grams}}$	$\frac{7}{198}$
RELEASE FORCE (MIN)	$\frac{\text{oz}}{\text{grams}}$	$\frac{2}{56}$
DIFFERENTIAL TRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.025}{(0,64)}$
PRETRAVEL (MAX)	$\frac{\text{in}}{\text{mm}}$	$\frac{.225}{(5,72)}$
OVERTRAVEL (MIN)	$\frac{\text{in}}{\text{mm}}$	$\frac{.015}{(0,38)}$

CODED SWITCHES – END PLATES

S2 SERIES REAR MOUNT, MOUNTING STYLE S2S
WITH .157" (4MM) FLANGE



PART NO.

211702000 BLACK
211709000 GRAY

Two required for complete assembly.

S2 SERIES REAR MOUNT, MOUNTING STYLE S2R
WITH .315" (8MM) FLANGE



PART NO.

211802000 BLACK
211809000 GRAY

Two required for complete assembly.

S2 SERIES REAR MOUNT, MOUNTING STYLE S2T
WITH NO FLANGE



PART NO.

212002000 BLACK
212009000 GRAY

Two required for complete assembly.

S2 SERIES FRONT MOUNT, MOUNTING STYLE S2F



PART NO.

211902000 BLACK
211909000 GRAY

Two required for complete assembly.

3U SERIES



LEFT-with hole RIGHT-with pin

PART NO.

113B02000 LEFT-BLACK
113B09000 LEFT-GRAY

114B02000 RIGHT-BLACK
114B09000 RIGHT-GRAY

One left and one right piece required for complete assembly.

3 SERIES FRONT MOUNT, TYPE 3



PART NO.

655702000 BLACK
655709000 GRAY

Two required for complete assembly.

3 SERIES FRONT MOUNT, TYPE 0



PART NO.

413402000 BLACK
413409000 GRAY

Two required for complete assembly.

3 SERIES REAR MOUNT, TYPE 1



PART NO.

400402000 BLACK
400409000 GRAY

Two required for complete assembly.

3 SERIES REAR MOUNT, TYPE 2



PART NO.

473202000 BLACK
473209000 GRAY

Two required for complete assembly.

3P SERIES



LEFT-with hole RIGHT-with pin

PART NO.

623502000 LEFT-BLACK
623509000 LEFT-GRAY

623602000 RIGHT-BLACK
623609000 RIGHT-GRAY

One left and one right piece required for complete assembly.



CODED SWITCHES – SPACERS

3P SERIES, .100" THK.
(Makes section pitch .400")



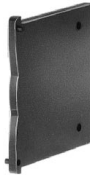
PART NO.
663602000 BLACK
663609000 GRAY

3 SERIES FRONT MOUNT-FITS TYPE 0 & 3,
.185" THK. (Makes section pitch .500")



PART NO.
410602000 BLACK
410609000 GRAY

3 SERIES FRONT MOUNT, FITS TYPE 0 & 3,
.078" THK. (Makes section pitch 10mm)



PART NO.
410802000 BLACK
410809000 GRAY

3 SERIES REAR MOUNT, FITS TYPE 1,
.150" THK. (Makes section pitch .500")



PART NO.
410702000 BLACK
410709000 GRAY

3 SERIES REAR MOUNT, FITS TYPE 2,
.150" THK. (Makes section pitch .500")



PART NO.
473602000 BLACK
473609000 GRAY

HARDWARE FOR FIELD ASSEMBLY-3 SERIES ONLY.

SCREWS FOR FIELD ASSEMBLY OF THUMBWHEEL SWITCHES
(2 screws needed per assembly + 403500000 nuts)

SCREW PART NUMBER (0-80 UNF THD. SIZE)	NUMBER OF SECTIONS IN ASSEMBLY				
	FRONT MOUNTING			REAR MOUNTING	
	MTG. STYLE – 00, 30	MTG. STYLE – 03, 33	MTG. STYLE – 04, 34	MTG. STYLE – 10, 20	MTG. STYLE – 14, 24
412700000	1 – 2	1	1	1 – 2	1
412701000	3 – 4	2 – 3	2	3	2
412702000	5 – 7	4 – 5	3 – 4	4 – 6	3 – 4
412703000	8 – 10	6 – 8	5 – 6	7 – 9	5 – 6
412704000	11 – 13	9 – 10	7 – 8	10 – 12	7 – 8
412705000	14 – 16	11 – 13	9 – 10	13 – 15	9 – 10

See 3 series mounting styles, pages J-11 thru J-14.

NUT



PART NO.
403500000

Two nuts required per assembly and screws.

NUT DRIVER (For 403500000 nut)



PART NO.
406100652

Not required for assembly.
Not supplied with sample pieces.

FIXING SPANNERS

RAFI 15.2mm, Lumotast 75 & 8.1mm



PART NO.
5.58002.0190000

DESCRIPTION
Tool used to secure switch to panel.
Tightens threaded fixing ring.

RAFIX 16



PART NO.
5.58002.0340000

DESCRIPTION
Tool used to secure switch to panel.
Tightens hexagon nut.

FRAMES

7000 & E SERIES
J11, J21 ACTUATORS



Material: Spring Steel.

PART NO.
764500223 BRIGHT CHROME
764500252 SATIN CHROME
764500746 BLACK ENAMEL
764500747 WHITE ENAMEL
764601106 RETAINING SPRING

7000 & E SERIES
J16, J26 ACTUATORS



Material: Nylon.
Finish: Matte.

PART NO.
459101000 WHITE
459102000 BLACK
459103000 RED

7000, 8020, 8060 & 8500 SERIES
J51, J61, J81, J83, J85, J86, J91 ACTUATORS



Material: Nylon.
Finish: Matte.

PART NO.
615601000 WHITE
615602263 BLACK
615603000 RED

J19 ACTUATOR



Material: Spring Steel.

PART NO.
781000223 BRIGHT CHROME
781000252 SATIN CHROME
781000746 BLACK ENAMEL
781000747 WHITE ENAMEL

7000 & 9000 SERIES
J37, J47, J57 ACTUATORS



Material: Spring Steel.

PART NO.
445400223 BRIGHT CHROME
445400252 SATIN CHROME
445400746 BLACK ENAMEL
445400747 WHITE ENAMEL

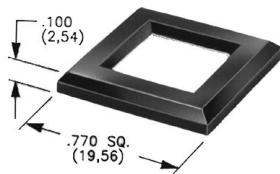
7000, 8020, 8060 & 8500 SERIES
J52, J62, J82, J84, J92 ACTUATORS



Material: Nylon.
Finish: Matte.

PART NO.
613301000 WHITE
613302263 BLACK
613303000 RED

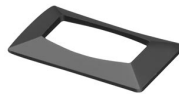
J50, J60, J80, J83, J90 ACTUATORS



Material: Nylon.
Finish: Matte or Gloss.

MATTE GLOSS
PART NO. PART NO.
486701000 486801000 WHITE
486702000 486802000 BLACK
486703000 486803000 RED

7000 SERIES
J76 ACTUATORS



Material: Nylon.
Finish: Matte.

PART NO.
724A01000 WHITE
724A02000 BLACK
724A03000 RED

Special colors, custom markings available, consult Customer Service Center.

