

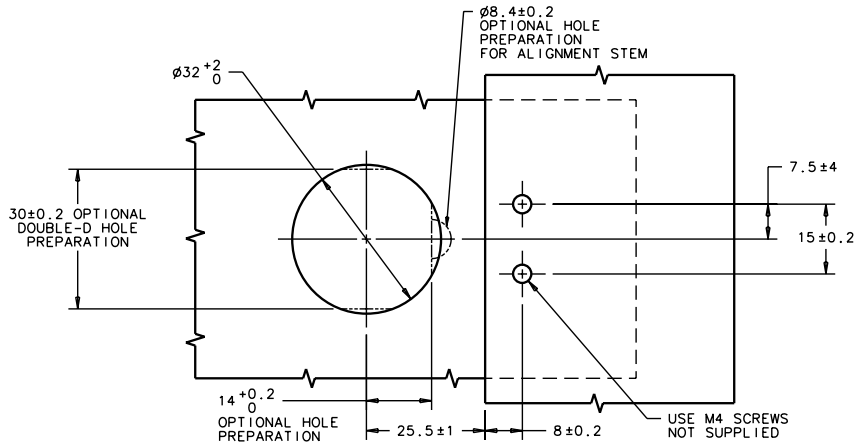
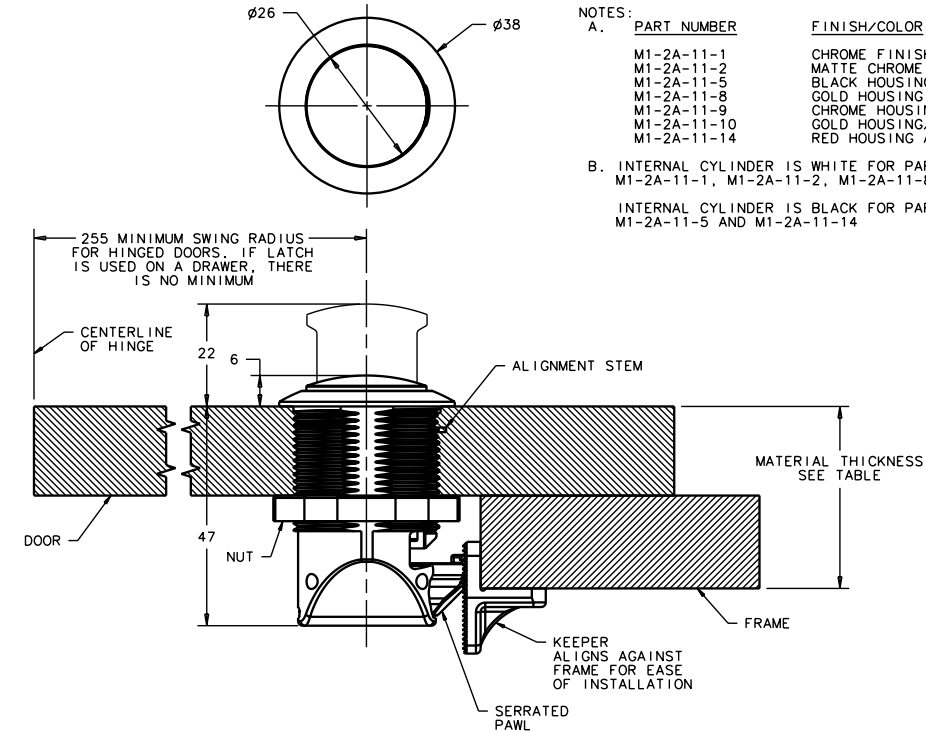
### M1-2A SELF-ADJUSTING SURFACE MOUNT ASSEMBLY

DATE	12DEC98
DRAWN/CHKD	RJB
SCALE	1:1
DRAWING NUMBER	J-M1-2A-1-2

REV	DESCRIPTION
A	28MAY89 RJB PRN: M1-96
B	20DEC93 RJB PRN: M1-102
C	04JAN2003 VNT/AJH PRN: P2002-0934

ITEM	MATERIAL	FINISH
ASSEMBLY		
HOUSING	PC/ABS BLEND	SEE NOTE A
KNOB	SEE NOTE A	SEE NOTE A
INTERNAL CYLINDER	ACETAL	SEE NOTE B
PAWL	GLASS FILLED NYLON	BLACK
NUT	GLASS FILLED NYLON	BLACK
SPRING - PAWL	304 STAINLESS STEEL	PASSIVATED
SPRING - KNOB	304 STAINLESS STEEL	PASSIVATED
KEEPER	GLASS FILLED NYLON	BLACK

MILLIMETERS	
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	
A3 PAPER	
THIRD ANGLE PROJECTION	



DOOR/FRAME PREPARATION

#### NOTES:

A.	PART NUMBER	FINISH/COLOR	KNOB MATERIAL
	M1-2A-11-1	CHROME FINISH HOUSING AND KNOB	ABS
	M1-2A-11-2	MATTE CHROME FINISH HOUSING AND KNOB	ABS
	M1-2A-11-5	BLACK HOUSING AND KNOB	PC/ABS BLEND
	M1-2A-11-8	GOLD HOUSING AND KNOB	ABS
	M1-2A-11-9	CHROME HOUSING/GOLD KNOB	ABS
	M1-2A-11-10	GOLD HOUSING/CHROME KNOB	ABS
	M1-2A-11-14	RED HOUSING AND KNOB	PC/ABS BLEND
B.	INTERNAL CYLINDER IS WHITE FOR PART NUMBERS M1-2A-11-1, M1-2A-11-2, M1-2A-11-8, M1-2A-11-9 AND M1-2A-11-10		
	INTERNAL CYLINDER IS BLACK FOR PART NUMBERS M1-2A-11-5 AND M1-2A-11-14		

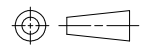
#### INSTALLATION INSTRUCTIONS

- PREPARE DOOR AND FRAME AS SHOWN. THE FOLLOWING OPTIONAL PANEL PREPARATIONS MAY BE USED TO ENSURE LATCH ANTI-ROTATION: ALIGNMENT STEM HOLE FOR PANELS THICKER THAN 6.4 OR A DOUBLE-D HOLE. ALIGNMENT STEM FOLDS AWAY IF ROUND HOLE PREPARATION IS USED
- INSERT LATCH THROUGH HOLE AND TIGHTEN NUT (38 ACROSS FLATS) MAXIMUM RECOMMENDED TIGHTENING TORQUE IS 4.2 N m
- FOR ALIGNMENT STEM USAGE, PUSH ALIGNMENT STEM INTO SEMI-CURCULAR HOLE AND HOLD IN PLACE AS NUT IS TIGHTENED
- INSTALL KEEPER

#### DOOR TO FRAME THICKNESS RATIOS

DOOR THICKNESS	FRAME THICKNESS	
	MINIMUM	MAXIMUM
1.2	23.8	40.3
3.2	21.8	38.3
6.4	18.2	35.8
9.5	15.5	32.5
12.7	12.7	29.2
15.9	10	21.1
19	10	23

REV	DATE	DRAWN/CHKD	DESCRIPTION
C	4FEB2000	GDM	ADDED -8 FINISH
D	09APR2002	GDM	UPDATE FORMAT



THIRD ANGLE PROJECTION

A4 PAPER SIZE

### SOUTHCO PERFORMANCE GUIDELINES

THE PERFORMANCE GUIDELINES SHOWN ON THIS PAGE ARE SUPPLIED AS A GENERAL GUIDE ONLY, AS CONDITIONS VARY WITH EACH APPLICATION AND METHOD OF INSTALLATION. STRENGTH DATA GIVEN IS FOR FAILURE OF THE PRODUCT OR FOR SUFFICIENT DEFORMATION TO MAKE PRODUCT INOPERABLE. NO SAFETY FACTOR HAS BEEN APPLIED IT IS RECOMMENDED THAT THE USER REQUEST A PRODUCT SAMPLE FOR TESTING TO DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE PURPOSE INTENDED AND USER'S PARTICULAR APPLICATION.

SELF-ADJUSTING ASSEMBLY PART NUMBERS M1-2A-11-1

M1-2A-11-5

M1-2A-11-8

M1-2A-12-1

M1-2A-12-5

M1-2A-12-8

FIXED GRIP ASSEMBLY PART NUMBERS

M1-2A-13-1

M1-2A-13-5

M1-2A-13-8

① MAXIMUM RECOMMENDED WORKING LOAD:  
 SELF-ADJUSTING GRIP 220 N (50 lbf)  
 FIXED GRIP 310 N (70 lbf)

② AVERAGE ULTIMATE LOAD:  
 SELF-ADJUSTING GRIP 460 N (100 lbf)  
 FIXED GRIP 780 N (175 lbf)

③ MAXIMUM RECOMMENDED TIGHTENING TORQUE FOR MOUNTING NUT:  
 4.2 N·m (37 lbf·in)

④ CYCLE LIFE:  
 80C & AMBIENT: GREATER THAN 10,000 CYCLES  
 -30C: GREATER THAN 1,000 CYCLES

⑤ SALT SPRAY EXPOSURE PER ASTM B117:  
 GREATER THAN 500 HOURS

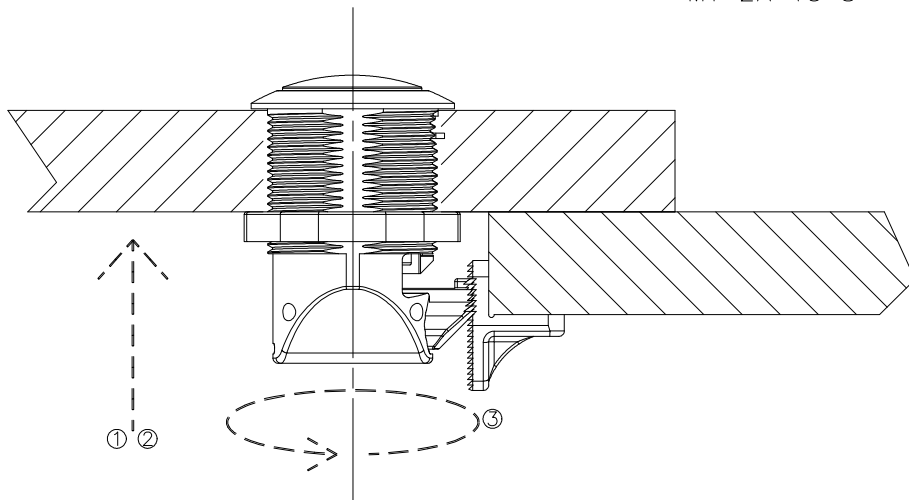
⑥ ULTRA VIOLET LIGHT EXPOSURE PER ASTM G-53:  
 GREATER THAN 500 HOURS

⑦ OPERATING TEMPERATURE RANGE:  
 -30C (-20F) TO 60C (140F)

⑧ MAXIMUM SIDE LOAD ON KNOB:  
 1000 N (225 lbf)

⑨ MAXIMUM TENSILE LOAD ON KNOB:  
 200 N (45 lbf)

⑩ FLAMMABILITY RATING ALL PLASTIC MATERIALS:  
 UL-HB94



SELF-ADJUSTING ASSEMBLY SHOWN

MAXIMUM WORKING LOAD- THE MAXIMUM RECOMMENDED LOAD AT WHICH THE PRODUCT CONTINUES TO FUNCTION PROPERLY.

AVERAGE ULTIMATE LOAD- THE LOAD THAT CAUSES FAILURE OR EXCESSIVE DEFORMATION WHICH RENDERS THE PRODUCT INOPERABLE.

REF:M1-20, M1-23, M1-26.