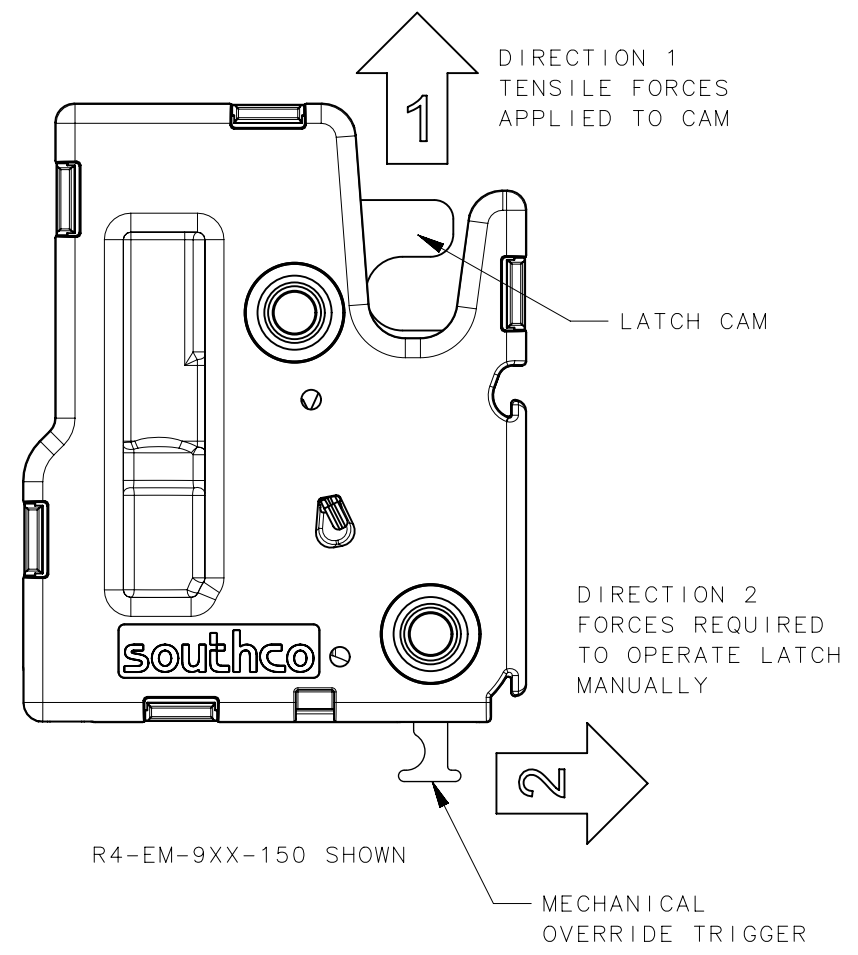


REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
D	29MAY2020	DKP/DMS	PRN: P2020-1011

### 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 THE PRODUCT INOPERABLE. NO SAFETY FACTOR HAS BEEN APPLIED. IT'S RECOMMENDED THAT THE USER REQUEST A PRODUCT SAMPLE FOR TESTING TO DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE PURPOSE INTENDED AND THE USER'S PARTICULAR APPLICATION.



PERFORMANCE VALUES FOR R4-EM-9PX-150 AND R4-EM-9DX-150 SEE J-R4-EM-9-1.

1. TESTING PERFORMED ON R4-EM-9P7-150 AND R4-EM-9D7-150.
2. TENSILE FORCES (DIRECTION 1) ARE APPLIED AT THE NOMINAL LATERAL POSITION (ZERO MISALIGNMENT).
3. MAXIMUM TENSILE FORCE (DIRECTION 1) ON THE CAM THAT THE LATCH CAN RELEASE (OPEN) ELECTRICALLY ONE TIME:  
800 N (180 lbf)
4. ULTIMATE TENSILE LOAD (DIRECTION 1) ON THE CAM BEFORE LATCH CAM FAILURE: 5800 N (1304 lbf).
5. AVERAGE TENSILE FORCE (DIRECTION 2) REQUIRED ON THE MECHANICAL OVERRIDE TRIGGER TO OPERATE (OPEN) THE LATCH MANUALLY WITH A TENSILE FORCE ON THE CAM:

AVERAGE FORCE TO OPERATE LATCH WITH MECHANICAL OVERRIDE VS. LATCH CAM LOAD					
FORCE 1 (N) ON CAM	100 N (22.48 lbf)	200 N (44.96 lbf)	300 N (67.44 lbf)	400 N (89.92 lbf)	500 N (112.40 lbf)
FORCE 2 (N) ON MECHANICAL OVERRIDE	14.3 N (3.21 lbf)	20.5 N (4.61 lbf)	25.3 N (5.69 lbf)	30.8 N (6.92 lbf)	37.1 N (8.34 lbf)

6. CYCLE LIFE WITH 44N (10lbf) TENSILE FORCE (DIRECTION 1) FOR R4-EM-9PX-150 WITH TEST PROFILE AS FOLLOWS:  
 AMBIENT TEAMPRATURE : 90,000  
 CHAMBER TEAMPRATURE: -10C: 5,000  
 CHAMBER TEAMPRATURE: 50C: 5,000

REF:  
FOR SOUTHCO INTERNAL USE ONLY:  
trR4-22247, trR4-24835, trR4-25368 AND trR4-37511.

	THIRD ANGLE PROJECTION	 CONNECT • CREATE • INNOVATE		
	MILLIMETERS [IN]			
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION R4-EM 9 SERIES ELECTROMECHANICAL ROTARY LATCH		
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE A3	SYSTEM NX	DWG NO. TD-R4-EM-9-1-J
PROPRIETARY ITEM <small>EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.</small>	PER ASME Y14.5M-1994	DRAWN BY DMS/IGS	DATE 10MAR2016	SCALE 1:1
				SHEET 1 OF 1