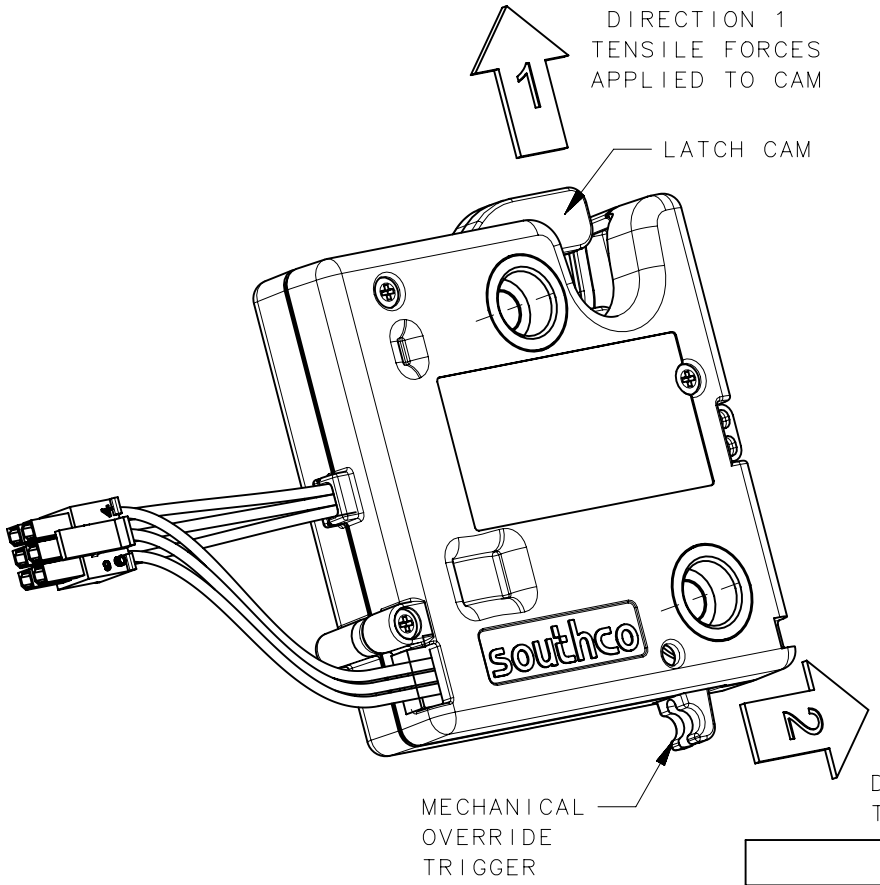
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
D	05 OCT 11	IR/	PRN: P2011-1274

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-4X-XXX AND R4-EM-6X-XXX
SEE J-R4-EM-40-151, J-R4-EM-40-161, AND J-R4-EM-60-161

1. TESTING PERFORMED ON R4-EM-43-151 AND R4-EM-65-161.
2. CYCLE LIFE WITH 44 N (10 lbf) TENSILE FORCE ON CAM R4-EM-43-151 AT AMBIENT TEMPERATURE: 100,000 CYCLES.
3. CYCLE LIFE WITH 26 N (6 lbf) TENSILE FORCE ON CAM R4-EM-65-161 AT AMBIENT TEMPERATURE: 100,000 CYCLES.
4. TENSILE FORCES (DIRECTION 1) ARE APPLIED AT THE NOMINAL LATER POSITION (ZERO MISALIGNMENT).
5. MAXIMUM TENSILE FORCE (DIRECTION 1) ON THE CAM THAT THE LATCH CAN RELEASE (OPEN) ELECTRONICALLY
   ONE TIME: 665 N (150 lbf)
6. AVERAGE ULTIMATE TENSILE LOAD (DIRECTION 1) ON THE CAM BEFORE LATCH FAILURE: 800 N (180 lbf).
7. AVERAGE TENSILE FORCE (DIRECTION 2) REQUIRED ON THE MECHANICAL OVERRIDE TRIGGER TO OPERATE (OPEN) THE LATCH MANUALLY WITH A TENSILE FORCE ON THE CAM IS AS FOLLOWS:

CAM LOAD	22 N (5 lbf)	44 N (10 lbf)	90 N (20 lbf)	180 N (40 lbf)	265 N (60 lbf)	350 N (80 lbf)
RELEASE FORCE	6 N (1.4 lbf)	7.5 N (1.7 lbf)	10 N (2.2 lbf)	12 N (2.7 lbf)	14 N (3.2 lbf)	15 N (3.4 lbf)

8. OPERATING TEMPERATURE RANGE 0 TO 60°C.

DIRECTION 2 FORCE REQUIRED
TO OPERATE LATCH MANUALLY

REF: TR R4-8167, TR R4-8272, AND TR R4-8525

SURFACE AREA XXXXXmm²
VOLUME XXXXXmm³
PROPRIETARY ITEM

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THIRD ANGLE PROJECTION

MILLIMETERS [IN]

TOLERANCES UNLESS OTHERWISE NOTED

ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.

PER ASME Y14.5M-1994

southco®
CONNECT·CREATE·INNOVATE

DESCRIPTION: LIGHT DUTY R4-EM ROTARY LATCH

SIZE	SYSTEM	DWG NO.			
A4	NX	TD-R4-EM-3-J			
DRAWN BY	DATE	SCALE	SHEET		
IR/	14 JUL 11	DNS	1 OF 1		