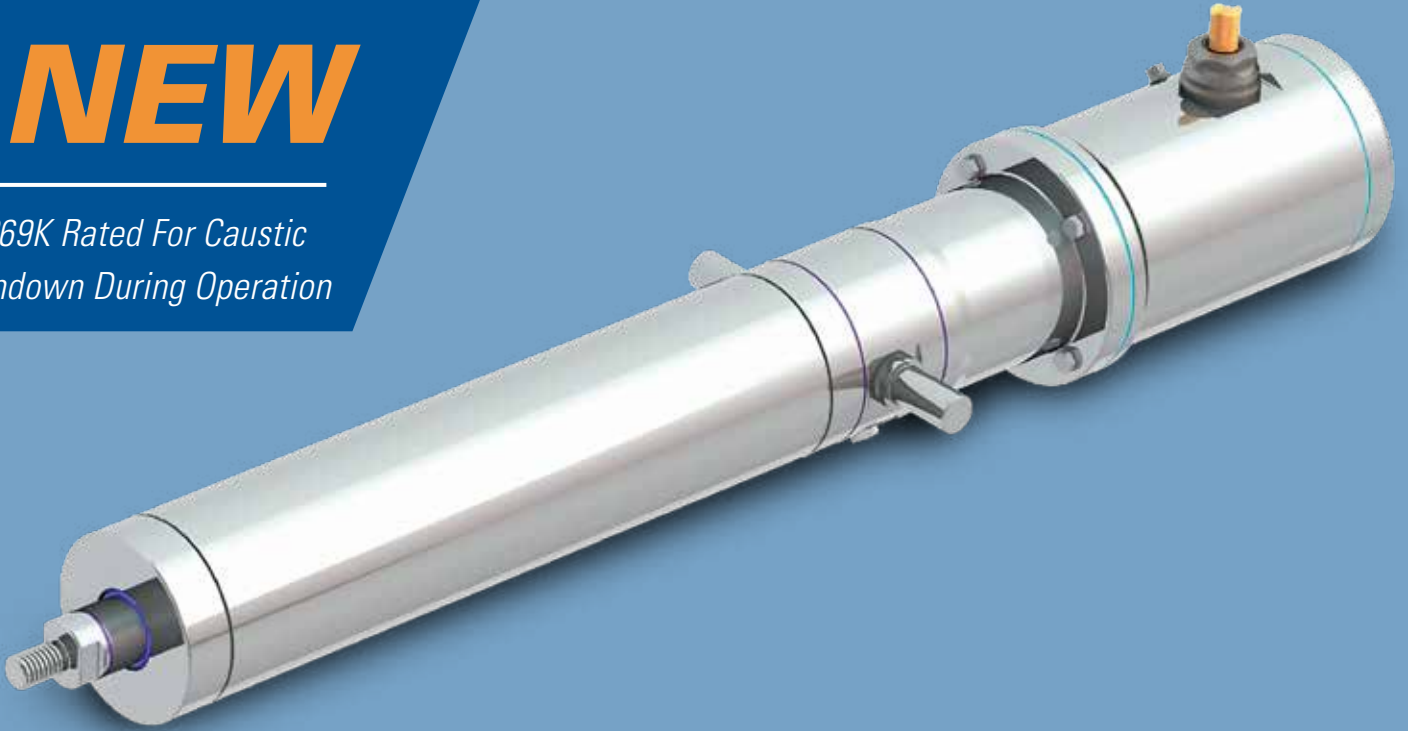


**NEW**

*IP69K Rated For Caustic  
Washdown During Operation*



## SA-20 Stainless Steel Linear Actuators

Hygienic Electromechanical Actuators for the Food and Beverage Industry

## Thomson SA-20 Stainless Steel Food Grade Actuators

SA-20 stainless steel linear actuators conform to several hygienic design guidelines, including 3-A Dairy for the food and beverage industry, and are IP69K rated, enabling sanitary washdown during operation.

SA-20 actuators are suited for a wide variety of applications where reliability, durability, hygiene and corrosion resistance are critical.

- FDA-compliant exterior components
- Hardened, alloy steel ball screws
- Angular contact bearings minimize wear and extend operation life
- Clean in place (CIP) while actuator is operating
- 316 stainless housing for corrosion resistance
- Several mounting options
- Water and dust resistant (IP69K)
- Reduces the need for protective guards

### Applications

Designed as an alternative to pneumatic cylinders in food and beverage applications, Thomson SA-20 actuators reduce total cost of washdown, including maintenance and air, and eliminate the need for replacement due to leakage. These advantages make them perfect for:

- Conveyors
- Cutting, slicing, filling and dumping
- Operating doors, hatches and lids
- Packaging
- Sorting
- Lifting, positioning, pushing and tilting



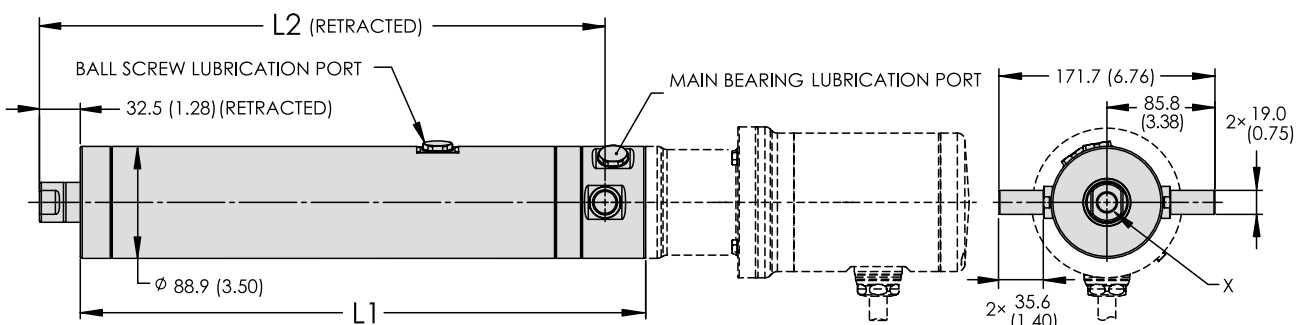
# Technical Specifications

General Specifications	
Parameter	SA-20
Screw type	ball
Nut type	ball nut
Motor configuration	inline
Anti-rotation	yes
End-of-stroke protection	no
External component material	316 S/S
Front adapters	threaded hole or threaded pin
Rear adapter	trunnion
Compliances	NSF/ANSI/3-A SSI 14159-1 – 2014 FDA 21 CFR, Parts 177 & 178

Mechanical Specifications	
Parameter	SA-20
Max. dynamic load (Fx)	[N (lbf)]
screw lead 0.2 in	5783 (1300)
screw lead 0.5 in	5783 (1300)
screw lead 5 mm	5783 (1300)
screw lead 20 mm	5783 (1300)
Max. linear speed	[mm/s (in/s)]
screw lead 0.2 in	254 (10)
screw lead 0.5 in	635 (25)
screw lead 5 mm	250 (9.84)
screw lead 20 mm	1000 (39.37)
Max. input speed	[rpm]
	3000
Ordering stroke (S) lengths	[mm]
	150 - 750
Ordering stroke length increments	[mm]
	150
Operating temperature limits	[°C (F)]
	4 – 49 (40 – 120)
Full load duty cycle	[%]
	100
Protection class	
	IP69K
Food zone rating	
	contact

Life Expectancy - Example Case Calculation	
Parameter	SA-20
Average / max. operating load	[lbs] 230 / 450
Estimated travel life @ 230 lbs load	[in] 1 208 689 488
Total number of 6 inch travel cycles	[in] 201 488 248
Number of cycles/min	40
Expected life	[hour] 83937
Expected life @ 16 h/day, 6 day/week	[year] 16.8

## Dimensions



Shown with threaded hole front adapter.  
Dimensions of dotted portions are dependent upon which motors and flanges are selected by the customer.

Dimensions [mm (in)]		
L1	L2	X
329.2 (12.96) + ordering stroke	L1 + 0.3 (0.01)	5/8"-18 UNF-2B female thread or M16 x 2.0 – 6H metric female thread

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SA-20\_Stainless\_Steel\_Actuator\_BRUK-0039-01 | 20220610TJ

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