

SLN.300 – 3 kN / 1/3 ton

Operating Specifications

Charging Medium:	Nitrogen Gas
Charging Pressure Range:	20 – 150 bar (250 psi – 2175 psi)
Operating Temperature:	-6°C – 71°C (20°F – 160°F)
Maximum Speed:	48 m/min (30 in/sec)
Angular Accuracy*:	90° ± 1° from the narrow axis of the mount

DO NOT EXCEED 90% OF STROKE

*Accuracy is dependent upon the key being properly installed with a .13 mm (.005") shim.

On-Contact Force

psi charging pressure	lb. actuating force
2175	667
2000	613
1750	537
1500	460
1250	383
1000	307
750	230
500	153
250	77

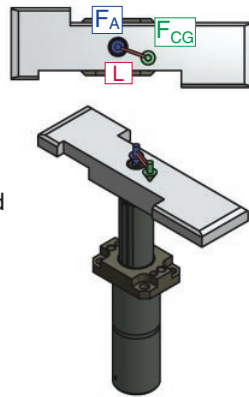
Loading Capacity for Maximum Reliability

F_A = Compression force to depress the lifter on the lifter centerline.

F_{CG} = Force at the center of gravity of the attachment.

L = Distance from **F_A** to **F_{CG}**.

To maximize the reliability of a stand-alone lifter, actuate as close to **F_A** as possible. Good design practice should minimize **L** and locate **F_{CG}** on the centerline of the lifter. Increased wear on the bearing will occur if **L** exceeds 30 mm (1.2") or if **F_A** is offset from the centerline. If a large offset is required, reduce the attachment load or add a second lifter.



Maximum Attachment Capacity Per Lifter*

Metric			Imperial		
Ram Velocity	Attachment Mass		Ram Velocity	Attachment Mass	
mm/s	m/min	kg	in/s	ft/s	lb-mass
300	18	29	12	1.0	64
400	24	16	16	1.3	36
500	30	10	20	1.7	23
700	42	5.3	24	2.0	16
800	48	4.1	30	2.5	10

*Attachment mass assumes balanced load and actuation force. For increased capacity, install external positive stops to prevent lifter damage.

Application Example



The SLN.300 saves design, build and installation cost by providing an all-in-one approach to guided lift applications. DADCO's SLN.300 Non-Rotating Nitrogen Gas Stock Lifters are well suited for progressive stamping tools. The lifters may be used in dies to support the material and facilitate continuous feed. The application illustrated above depicts eighteen SLN.300's as support lifters in a progressive stamping tool.