

Pneumatic Rubber Air Grippers / Pickers

BLQ

PRECAUTIONS

Maximum Recommended Working Pressure

Pneumatic Rubber Pickers and Pneumatic Rubber Grippers should not be used beyond their maximum recommended working pressure. This pressure varies depending on the fabric reinforcement and rubber material.

Standard Neoprene Construction

BLQ 8,5-10I – BLQ 12-17I with standard radial fabric reinforced neoprene **4 bar (55 PSI)**

BLQ 16-21I – BLQ 32-52I with standard radial fabric reinforced neoprene **5 bar (70 PSI)**

BLQ 45-65I – BLQ 70-105I with standard bias fabric reinforced neoprene **5 bar (70 PSI)**

BLQ 05-15E – BLQ 20-45E with standard radial fabric reinforced neoprene **1.5 bar (20 PSI)**

High Temperature Silicone Construction

BLQ 21-27I – BLQ 45-65I with radial fabric reinforced silicone **1.8 bar (25 PSI)**

BLQ 05-15E – BLQ 20-45E with radial fabric reinforced silicone **1 bar (15 PSI)**



Contact Surface

The preferred contact surface for Rubber Grippers / Pickers is smooth and dry. A dry surface is preferred to optimize the load carrying capacity of BLQ. Wet surfaces will decrease the grip that a BLQ has on a handled object.

A smooth surface is preferred to avoid abrasion.

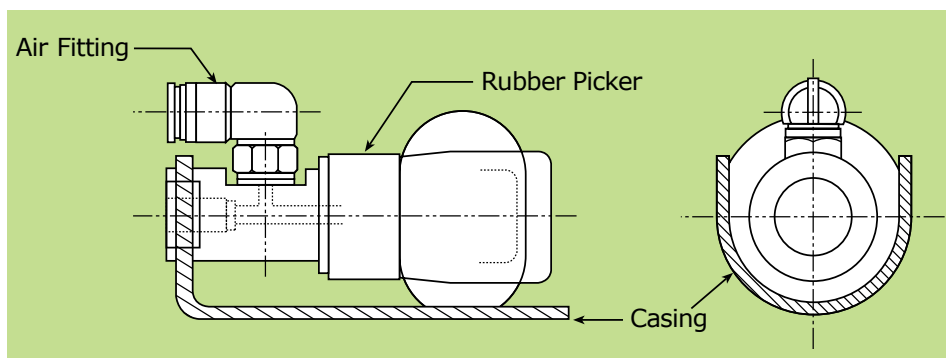
Threads, burrs, or sharp contact areas will hasten wear and decrease the useful life of the rubber bladder. Protective neoprene sleeves for BLQ are available to increase the life of the bladder when the contact surface conditions are abrasive.

Minimum and Maximum Working Diameter

The maximum working diameter range given for each Rubber Gripper / Picker insures a secure hold on the object as well as maximizing the life of the rubber. Exceeding this diameter range will increase the strain on the rubber and cause premature damage. Using a BLQ below the working diameter range may allow the rubber to be abraded as it is placed into and removed from the handled object. When the clearance between the work piece and the BLQ approaches the minimum recommended, a protective nose cone for the Rubber Grippers / Pickers is suggested.

Unrestricted Inflation

Repeated unrestricted inflation will prematurely damage a BLQ. The cycle life of an unrestricted BLQ can be as low as 1000 cycles. Because of the decreased durability of an unrestricted bladder, the maximum recommended pressure for unrestricted inflation drops to half of the maximum recommended pressure for restricted inflation. If the application requires unrestricted inflation, a protective rubber sleeve or a casing surrounding the bladder is recommended. The sleeve or casing will reduce the amount of strain on the rubber bladder.



Preconditioning

All of the fabric reinforced rubber bladders have small cotton threads, called pick cords, used to hold the nylon fabric cords together during production. Before BLQ are able to reach recommended working diameters, these pick cords must be broken through preconditioning. In order to break these pick cords, BLQ must be inflated unrestricted at the maximum recommended working pressure for 30 cycles.

NOTE: Excessive unrestricted inflation will harm the rubber. Be sure NOT TO HOLD pressure for an extended period when preconditioning.

Contaminates

Neoprene and silicone each have their advantages and disadvantages when in contact with lubricants, acids, solutions, etc. Please contact Effecto Group with specific applications.