



Internal details shown are representative of typical cylinder construction. Variations in design are necessary in some combinations of bore, rod, and mounting style due to space limitations.

## **Typical Construction Features of Lynair Series “CS2” Cylinder and Equivalent Model Per Chrysler Series “MMAC-100” Specifications**

### **PRESSURE RATING**

Series “CS2” and “MMAC-100” cylinders are rated for 200 P.S.I. air or 1000 P.S.I. hydraulic service.

### **ADJUSTABLE CUSHION OPTION**

Cushions are optional at either one or both ends of the cylinder. When provided, close fitting surfaces of mating components trap operating fluid to decelerate the piston before reaching the end of stroke position. Flush fitting Cushion Screw permits adjustment in deceleration rate while interchangeable Ball Check aids start up upon reversal of travel direction.

### **CYLINDER TUBE**

Heavy wall steel tubing is honed to 15 micro inch finish and hard chrome plated on the bore surface to resist wear and promote optimum seal life.

### **O-RING TUBE END SEALS**

Provides leak-free seal at maximum operating pressure levels.

### **CYLINDER PORTS**

N.P.T.F. ports are standard and provided unless otherwise requested. Oversize ports are available upon request.

### **PISTON ROD**

Precision ground, polished, and hard chrome plated piston rods made from high yield strength steel are offered with the choice of three end style options. Male rod threads thru 1½ diameter are rolled for maximum strength and uniformity. Four wrench flats are provided to aid in making the rod end connection. The rod surface is reduced in size in area of flats to eliminate contact with seals at assembly.

### **ROD BEARING/ REMOVABLE RETAINERS**

Precision machined bronze bearing supports and centers rod to maintain concentricity with bore while housing rod seal and wiper. Retainer construction allows removal without tie rod disassembly in most size and mounting style combinations.

### **ROD SEAL**

Pressure energized cup seal of abrasion resistant Buna-N assures positive sealing with minimal frictional drag. Flared lips seal at low pressure while deep base provides stability to resist “rollover” and “extrusion.”

### **ROD WIPER**

Double Lip Wiper cleans rod surface of contaminants and prevents entry of harmful particles into sensitive bearing and seal areas. Integral cup form on inboard side of wiper service as secondary seal to insure leak-free performance.

### **INTERIOR MATERIALS/ EXTERIOR FINISH**

Front and Rear Heads are accurately machined from square steel blocks. Cylinder Tubes, Bearing Retainers, and mountings are constructed of steel for maximum strength and durability.

Cylinders have enamel finish on exterior with mounting and machined surfaces protected by anti-rust film lubricant at time of shipment.

### **PISTON/SECURELY LOCKED**

One piece high tensile cast iron piston with wide surface area contacting cylinder bore stabilizes rod and reduces bearing loads. The piston is pilot fitted onto rod and secured by self-locking nut when sizes permit.

### **PISTON SEALS**

Pressure energized cup seals of Buna-N material provide low friction, leak-free sealing with air or hydraulic service. Deep base design is self compensating to adjust for normal wear with stability needed to prevent premature failure from “rollover” or “extrusion”.

### **TIE RODS WITH LOCKNUTS**

Made from steel having 100,000 P.S.I. minimum yield strength (125,000 P.S.I. for diameters larger than ½”) with rolled threads for maximum strength and uniformity are secured with self-locking nuts.