

Schematic Symbol

MODEL 4224 DOUBLE ACTING SELF- CENTERING POSITIONING ACTUATOR

DESCRIPTION

The 4224 is a self centering, single spring, two direction positioner. Its unique and patented design permits positioning within 0.5% accuracy. This cylinder is available in various pressure ranges and preloaded to customer specifications.

APPLICATIONS

The primary use of this cylinder is for positioning controllable pitch propellers, variable delivery hydraulic pumps where precise positioning is required and any equipment requiring a control of similar nature. This cylinder can be used in conjunction with Kobelt control head models 2543 and 2573, and for twin cylinder installations, Kobelt models 2547 and 2579.

NOTE: This cylinder is not capable of producing a mechanical force as any external mechanical load will interfere with the accuracy of its output. Each 12 lbs of external load will result in a 1% accuracy loss. Due to the extra stroke and large bore, the 4224 is capable of handling three times the external mechanical

forces than the 4221 with proportional accuracy loss.

SPECIFICATION

Weight: 20¾ lb. (9.2 kg)

Materials: Die cast silicon bronze housing with stainless steel hardware. Reactor spring is steel. (Stainless steel spring can be installed but this will result in a slight loss in accuracy).

Maximum Input Pressure: 200 psi (13.8 bar)

Operating Temperature Range: -40°C to +90°C

Pipe Port Size: ¼" NPT

Stroke: 1 7/16" (36.5 mm) each way, or total stroke 2 7/8" (73 mm)

Bore: 4" (101.6 mm)

ORDERING INFORMATION

Standard pressure ranges available are:-

N – 0-60 psi

P – 0-80 psi

R – 0-100 psi

T – 10-60 psi

U – 10-80 psi

W – 10-100 psi

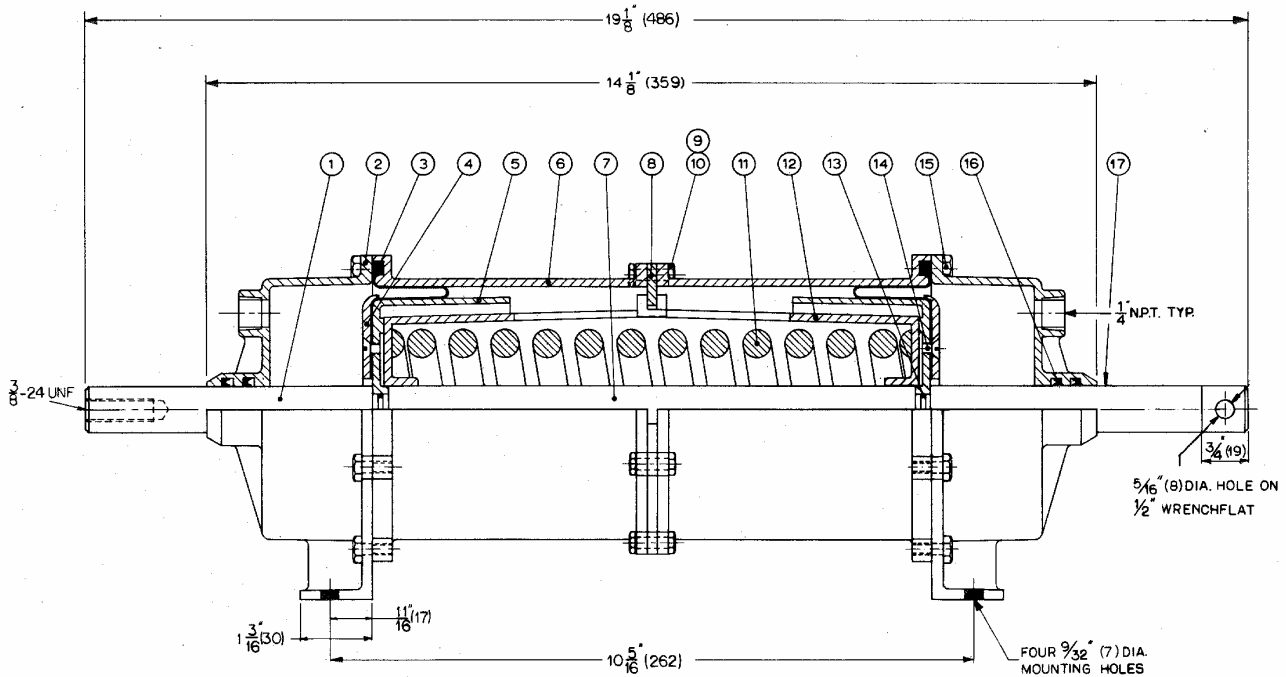
Any pressure range and preload can be ordered. Please specify.

Protected under one or more of the following patents:

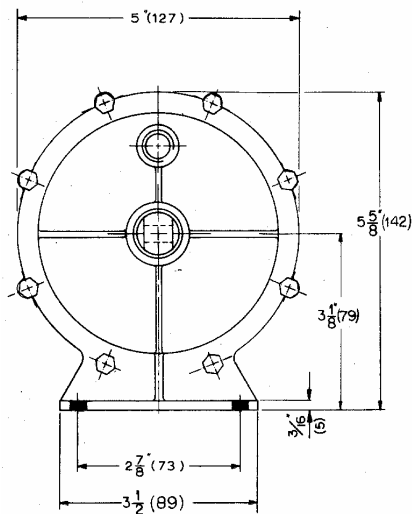
US Patent No. 3838630

Canadian Patent No. 964555

DIMENSIONS AND PARTS LIST MODEL 4224



All Dimensions in inches (mm)



Item	Qty	Part Number	Description
1	1	4224-0008	Piston rod extension (threaded)
2	2	4224-0006	End cap
3	2	1104-2003	Rolling diaphragm
4	2	4224-0005	Retainer plate
5	2	4224-0004	Piston
6	2	4224-0001	Cylinder housing
7	1	4224-0007	Piston rod
8	2	4224-0002	Half ring
9	8	1001-0812	Hex capscrew
10	8	1022-0108	Nut
11	1	*1201-0026	Spring
12	2	4224-0003	Stop cup
13	2	1101-0012	"O" ring
14	12	1003-0804	Screw
15	16	1001-0810	Hex screw
16	4	1102-0007	"U" cup
17	1	4224-0009	Piston rod extension (flat)

* other options available