

Schematic Symbol

MODEL 4221 DOUBLE ACTING SELF- CENTERING POSITIONING ACTUATOR

DESCRIPTION

The 4221 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 5 lbs of external load will result in a 1% accuracy loss.

Weight: 7.5 lb. (3.4 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: 150 psi (10.3 bar)

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

Pipe Port Size: ¼" NPT

Stroke: 1" (25.4 mm) each way.

Bore: 2.5" (64 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

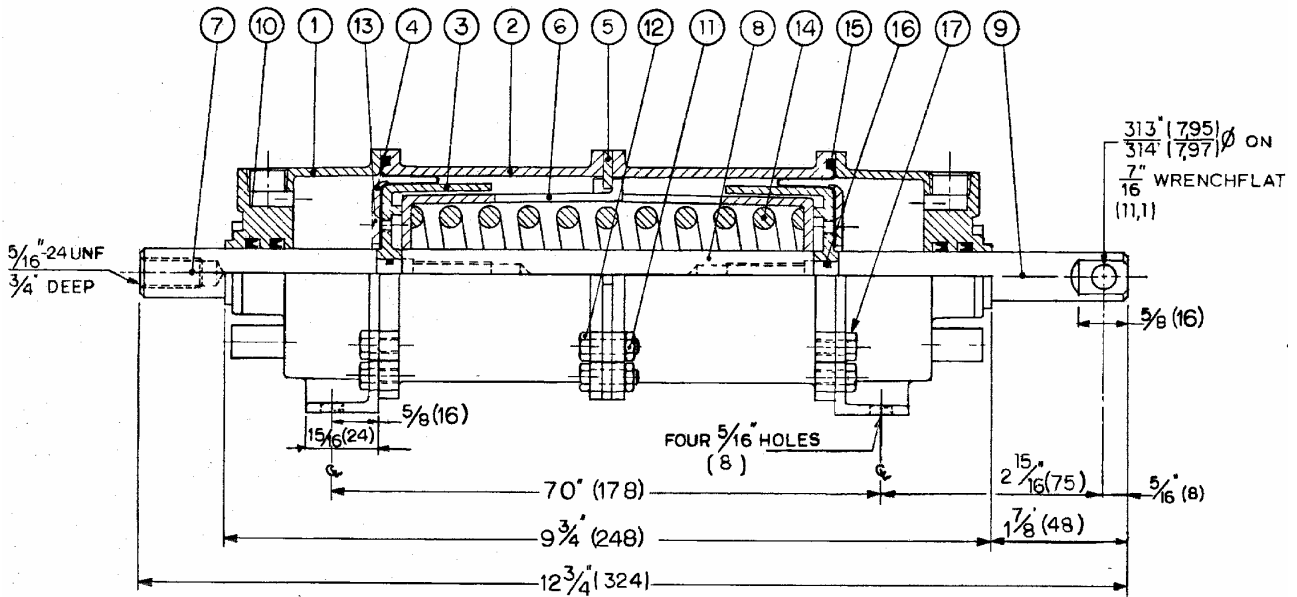
Any pressure range and preload can be ordered. Please specify.

Protected under one or more of the following patents:

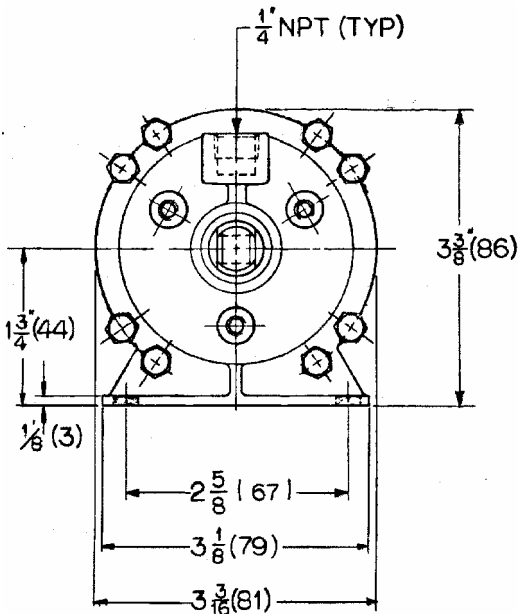
US Patent No. 3838630

Canadian Patent No. 964555

DIMENSIONS AND PARTS LIST MODEL 4221



All Dimensions in inches (mm)



Item	Qty	Part Number	Description
1	2	4221-0001	End Cap
2	2	4221-0002	Cylinder Housing
3	2	4221-0003	Piston
4	2	4221-0004	Diaphragm Retainer Plate
5	2	4221-0005	Half Ring
6	2	4221-0006	Stop Cup
7	1	4221-0007	Output Rod – threaded end
8	1	4221-0008	Centre Rod
9	1	4221-0009	Output Rod - wrench flat end
10	4	1102-0006	"U" Cup
11	5	1022-0109	Nut
12	8	1001-0810	Hex Hd Capscrew
13	8	1009-0504	Flat Hd Capscrew
14	1	1201-0031	Spring "U"
15	2	1104-2004	Rolling Diaphragm
16	2	1101-0012	"O" Ring
17	16	1001-0808	Hex Hd Capscrew