



4204 DOUBLE ACTING SELF-CENTERING ACTUATOR

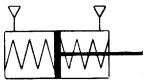
The 4204 is a pivot mounted spring centered cylinder. Applying air pressure to either side of the piston will cause the piston rod to move accordingly. This cylinder is mostly used for the control of marine hydraulic reverse reduction gears and serves as a three position actuator providing control over the hydraulic clutch valve. With no air pressure in either control port, the output rod is centered. By applying air pressure, the piston rod will move to either extreme position. The piston rod stroke is one inch in either direction making a total stroke of two inches. When used as a three position control cylinder, order model 4204-C. The same configuration cylinder is also available for infinite positioning of variable hydraulic delivery valves and pumps. It is possible to infinitely position the output rod by varying the air pressure to either side of the cylinder. When using this configuration, order model 4204-A. The basic difference between the two configurations is the spring.

Constructed in bronze and stainless steel, it will provide many years of trouble-free service.

SPECIFICATIONS

Weight: 3.3 lbs. (1.5 kg)
Materials: Die cast silicon bronze and stainless steel
Maximum Input Pressure: 200 p.s.i. (13.8 bar)
Operating Temperature Range: -40°C to +90°C
Pipe Port Size: ¼" N.P.T.
Stroke: 1" each way

SCHEMATIC SYMBOL



APPLICATIONS

-Used in conjunction with Pressure Control Heads 2543/53 and 2547/57, the 4204-A provides infinite positioning in two directions. It is best suited for accurate positioning of low-force mechanisms.

-Used in conjunction with Kobelt Control Heads 3604, 3609, 2544/54, and 2545/55. The 4204-C is a compact 3-position, self-centering cylinder.

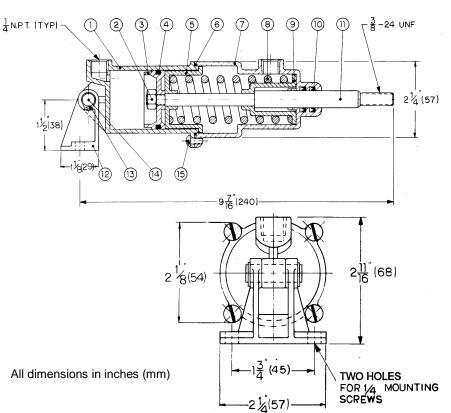
ORDERING INFORMATION

4204-A 2-direction Positioner Actuator 10-80 psi range
4204-C 3-position self-centering (clutch) cylinder 35-65 psi range

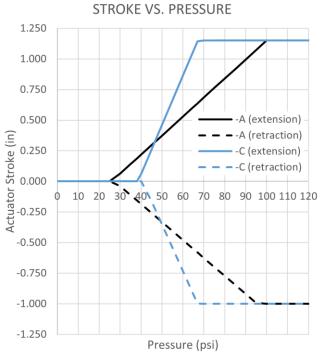
A repair kit No. 4204-RK, comprising all the seals, is available on order.

DIMENSIONS AND PARTS LIST

		PART	
ITEM	QTY	NUMBER	DESCRIPTION
1	1	4204-0001	Cylinder Barrel
2	1	1022-0161	Nut
3	1	4204-0002	Piston
4	1	1101-0222	"O" Ring
5	1	4204-0003	Spring Retainer
6	1	1101-0033	"O" Ring
7	1	4204-0004	Front Barrel
8	1*	1201-0023	Spring (Clutch cylinder) – blk
8	1*	1201-0024	Spring (Positioner) - blue
9	1	4204-0005	Spring Retainer
10	2	1102-0005	"U" Cup
11	1	4204-0006	Piston Rod
12	1	4204-0007	Swivel Mount
13	2	1029-1037	Snap Ring
14	1	4204-0008	Pin
15	4	1012-0806	Screw



* Quantity may vary with option



4204 ACTUATOR

4204 ACTUATOR FORCE VS. PRESSURE

250.0 225.0 200.0 175.0 150.0 125.0 100.0 Actuator Force (lbs) Actuator Force (lbs) Actuator Force (lbs) Actuator Force Actuator Force (lbs) Actuator (lbs) Actuator Force (lbs) Actuator (lbs) 75.0 0 10 20 30 40 50 60 70 80 90 100 110 120 -25.0 -100.0 -125.0 -150.0 -A (extension) -A (retraction) -175.0 -200.0 -C (extension) -225.0 -250.0 Pressure (psi)

