

## MODEL 4602 HYDRAULIC SERVO CYLINDER

Model 4602 is a very compact and non-hunting servo cylinder. It is used to control stiff throttles (mechanical governors).

Push-pull cables are not suitable for heavy workloads, as they will generate a lot of friction. Control over the engine speed can therefore be very difficult. The use of a servo cylinder in such applications will provide infinite and fingertip control. The output movement is absolutely proportional to the input movement.

A 4602 servo cylinder together with a 3015 pressure hold back valve can also be used as a throttle delay. This is however only possible if the gear has a differential oil pressure from neutral to the engaged position. The adjustable pressure hold back valve keeps the 4602 servo cylinder inoperative until gear engagement takes place. Once gear oil pressure is high enough to open the 3015 valve, oil is permitted to flow to the servo cylinder making the throttle operative.

### SPECIFICATIONS

**Stroke:** Input 1.75" (44 mm)  
Output 1.75" (44 mm)

**Output force:** at 100 P.S.I. (6.9 bar) 233 lbs. (105 kg)  
at 200 P.S.I. (13.8 bar) 466 lbs. (211 kg)  
at 300 P.S.I. (20.7 bar) 699 lbs. (317 kg)

**Oil flow:** at 100 P.S.I. 0.24 U.S.gal/min. (0.9 l/min)  
at 200 P.S.I. 0.48 U.S.gal/min. (1.8 l/min)  
at 300 P.S.I. 0.61 U.S.gal/min. (2.3 l/min)

**Max. operating pressure:** 350 P.S.I. (24 bar)

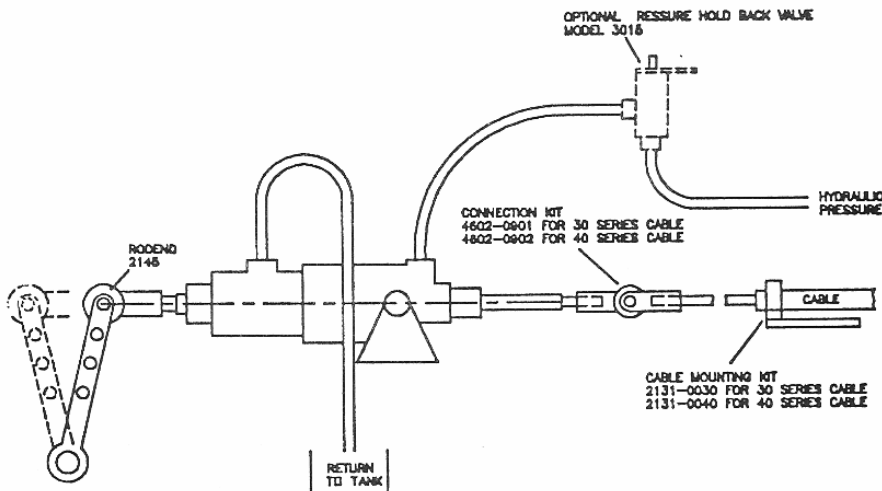
**Max. operating temperature:** 250°F (120°C)

**Pipe port size:** 1/4" N.P.T.

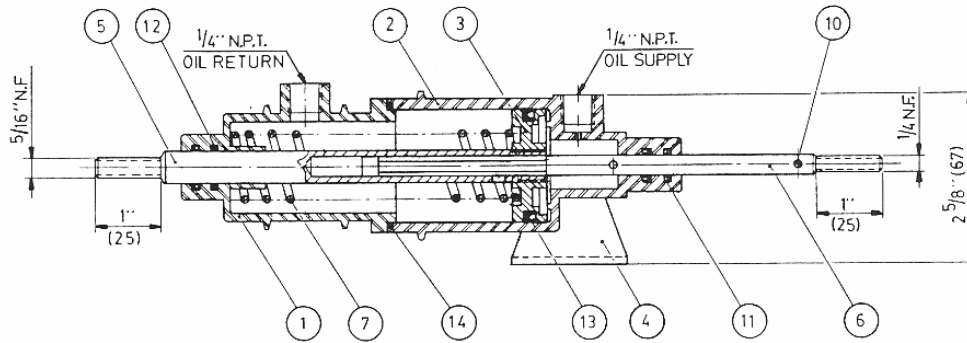
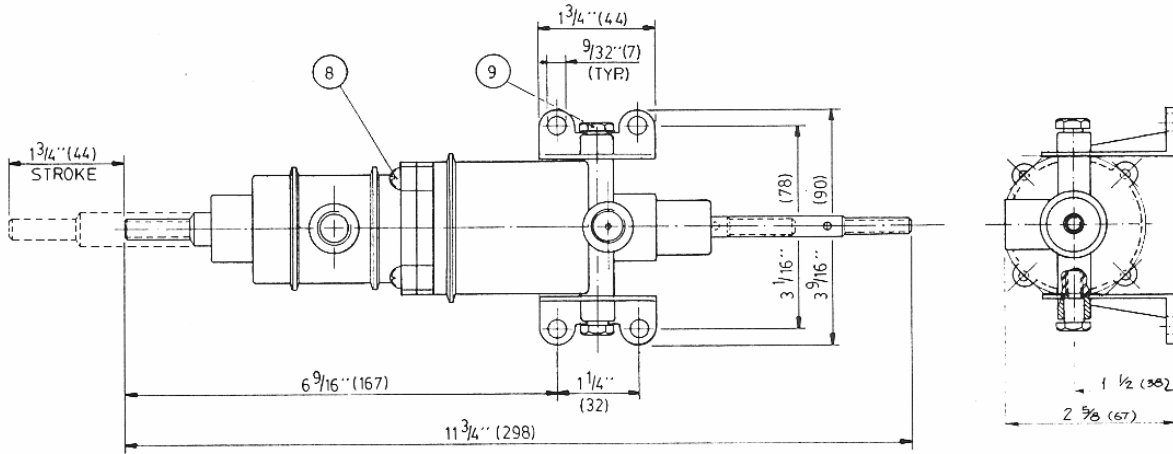
**Weight:** 2.9 lbs. (1.3 kg)

### ORDERING INFORMATION

To order Model 4602 state part number.  
To order connection kits specify number.  
4602 - 0901 for 30 series cable or  
4602 - 0902 for 40 series cable



## DIMENSIONS AND PARTS MODEL 4602



### 4602

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	4602-0001	Front Barrel
2	1	4602-0002	Rear Barrel
3	1	4602-0003	Piston
4	2	4602-0004	Bracket
5	1	4602-0005	Piston Rod
6	1	4602-0006	Actuator Rod
7	1	1201-0137	Spring
8	4	1010-0808	Round Head Screw
9	2	4602-0009	Shoulder Bolt
10	2	1024-0510	Spring Pin
11	2	1102-1001	Viton "U" Cup
12	2	1102-1005	Viton "U" Cup
13	1	1102-0052	"U" Cup
14	1	1101-0031	"O" Ring

ALL DIMENSIONS IN INCHES (MM)

**KOBELT** MANUFACTURING  
COMPANY LIMITED

April 2000