

## MODEL 7080 3" I.D. STEERING CYLINDER



This cylinder offers the very latest in design and engineering. It is made entirely of corrosion resistant materials providing long trouble-free service. There is a choice for a balanced or an unbalanced version and is available with a stroke of 7.5", 12" or 16". The cylinder can be ordered with the rod end secured with a cotter pin in place of a jam nut.

**Materials:** Brass tube and piston. Endcaps and bearings are silicon bronze. Piston rod is stainless steel and hard chromed.

**Design Pressure:** 1300 psi (90 bar)

**Weight:** 37 lbs. (16.8 kg) 7½" stroke  
43 lbs. (19.5 kg) 12" stroke  
48 lbs. (21.8 kg) 16" stroke

**Effective Piston Area:** 5.84 in<sup>2</sup> (38 cm<sup>2</sup>)

### ORDERING INFORMATION

- B – Balanced cylinder
- U – Unbalanced cylinder
- W – With cotter pin
- 7.5 – With 7.5" stroke
- 12 – With 12" stroke
- 16 – With 16" stroke

**Example:** Balanced steering cylinder with rod end secured with a jam nut and 12" stroke, the ordering number is *7080-B12*

**Note:** Other strokes are available on request.

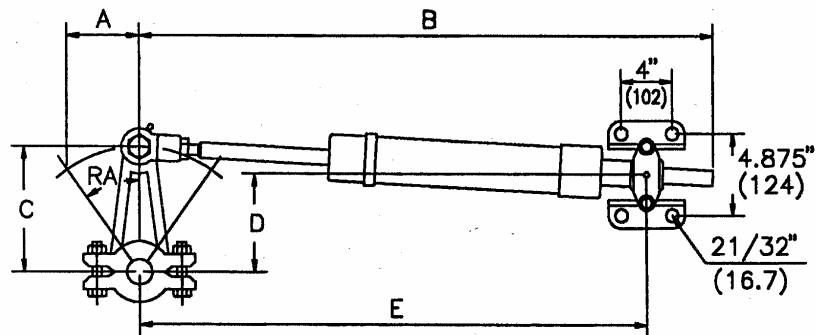
### Balanced Cylinders Rudder angle 35°

Stroke		Torque *		Displacement		A		B		C		D		E	
in.	mm	lb-ft	kg-m	in <sup>3</sup>	cm <sup>3</sup>	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
7.5	191	2605	360	43.8	718	3.8	95	26.8	681	6.5	166	5.9	151	26.3	667
12	305	4170	577	70.1	1149	6.0	152	35.8	910	10.5	266	9.5	242	33.0	838
16	406	5560	770	93.4	1531	8.0	203	43.8	1113	14.0	354	12.7	322	39.0	991

### Rudder angle 45°

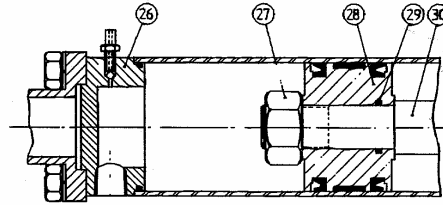
Torque		Stroke		Displacement		A		B		C		D		E	
in.	mm	lb-ft	kg-m	in <sup>3</sup>	cm <sup>3</sup>	in.	mm	in.	Mm	in.	mm	in.	mm	in.	mm
12	305	2915	404	70.1	1149	6	152	35.8	910	8.5	216	7.2	184	33.0	838
16	406	3890	538	93.4	1531	8	203	43.8	1113	11.3	287	9.6	245	39.0	991

\* Torque is based on 1000 psi (69 bar)

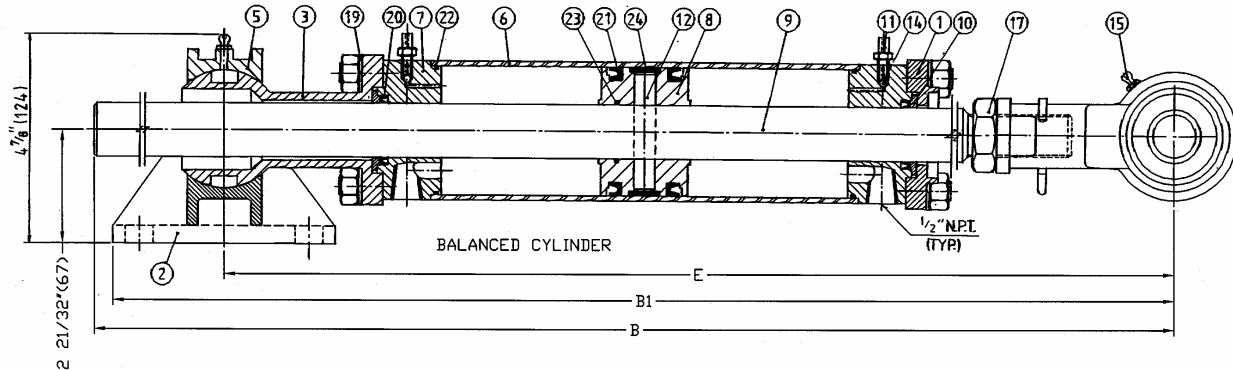
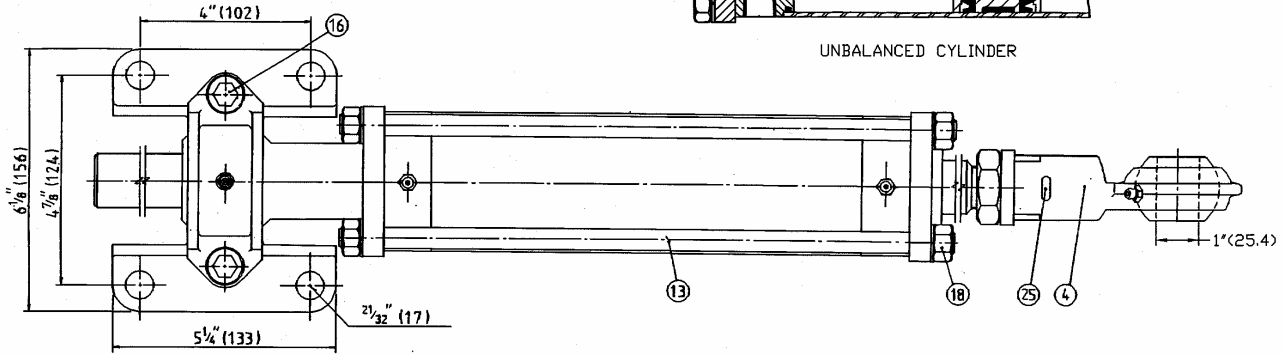


# DIMENSIONS AND PARTS LIST MODEL 7080

STROKE		B		B1		E	
in	mm	in	mm	in	mm	in	mm
7.5	191	26.82	681	28.87	733	26.25	667
16	406	43.82	1113	41.62	1057	39.00	991



UNBALANCED CYLINDER



All dimensions in inches (mm)

ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	7080-0001	End Cap	16	2	1002-1632	Socket Head Screw
2	1	7080-0002	Trunnion foot	17	1	1022-0269	Jam Nut
3	1	7080-0003	Trunnion End Cap	18	8	1022-0164	Nut
4	1	7080-0004	Rod End	19	8	1023-0314	Lock washer
5	1	7080-0005	Trunnion Cap	20	2	1102-2021	"U" Cup
6	1	7080-0006	Cylinder Tube	21	2	1102-2035	"U" Cup
7	2	7080-0007	Rod Guide	22	2	1101-0232	"O" Ring
8	1	7080-0008	Piston	23	1	1101-0218	"O" Ring
9	1	7080-0009	Piston Rod	24	1	7080-0013	Wear Ring
10	2	7080-0010	Retaining Washer	25	1	1026-1032	Cotter Pin
11	2	7040-0011	Bleeder Screw	26	1	7080-0107	Rear End Cap
12	1	7080-0012	Pin	27	1	1022-0169	Nut
13	4	7080-0014	Tie Rod	28	1	7080-0108	Piston
14	2	1301-0005	Ball	29	1	1101-0214	"O" Ring
15	2	1501-0301	Grease Nipple	30	1	7080-0109	Piston Rod