

MODEL 7093 4" I.D. STEERING CYLINDER



This cylinder offers the very latest in design and engineering. It is entirely made of non-corrosive materials. Heavy duty urethane "U" cups are used to ensure positive sealing and long life. The cylinder can be ordered with the rod end secured with a jam nut.

Materials: Cylinder tube is 4" ID steel tube. Piston, end caps and bearings are silicon bronze. Piston rod is stainless steel and hard chromed.

Max. Pressure: 1000 psi (69 bar)

Weight: 124 lb. (56.5 kg) for 24" stroke

ORDERING INFORMATION

- B – Balanced cylinder
- U – Unbalanced cylinder
- 12 – With 12" stroke
- 16 – With 16" stroke
- 20 – With 20" stroke
- 24 – With 24" stroke

Note: Other strokes are available on request.

Example: Balanced steering cylinder with rod end and 12" stroke, the ordering number is 7093-B12

Balanced Cylinders Rudder angle 35°

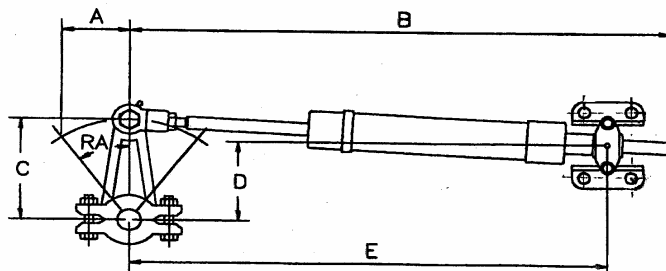
Torque *		Stroke		Displacement		A		B		C		D		E	
lb-ft	kg-m	in.	mm	in ³	cm ³	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
7256	1004	12	305	122	1999	6	152	39.3	999	10.5	266	9.5	242	38.6	980
9674	1339	16	406	163	2671	8	203	47.3	1202	13.9	354	12.7	322	44.6	1133
12093	1673	20	508	203	3327	10	254	55.3	1406	17.4	443	15.8	403	50.6	1285
14512	2008	24	610	244	3998	12	305	63.3	1609	20.9	531	19.0	483	56.6	1437

Note - * Torque is based on **ONE** cylinder at 1000 psi (69 bar)

Unbalanced Cylinders Rudder angle 35°

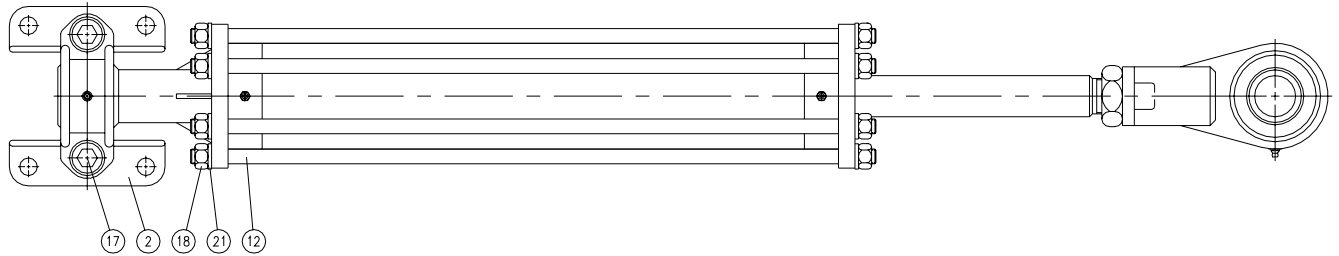
Torque **		Stroke		Displacement		A		B		C		D		E	
lb-ft	kg-m	in.	mm	in ³	cm ³	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
16229	2246	12	305	272	4457	6	152	41.9	1064	10.5	266	9.5	242	38.6	980
21639	2994	16	406	363	5949	8	203	47.9	1217	13.9	354	12.7	322	44.6	1133
27048	3743	20	508	454	7440	10	254	53.9	1369	17.4	443	15.8	403	50.6	1285
32458	4492	24	610	546	8947	12	305	59.9	1521	20.9	531	19.0	483	56.6	1437

Note - ** Torque is based on **TWO** cylinders at 1000 psi (69 bar)

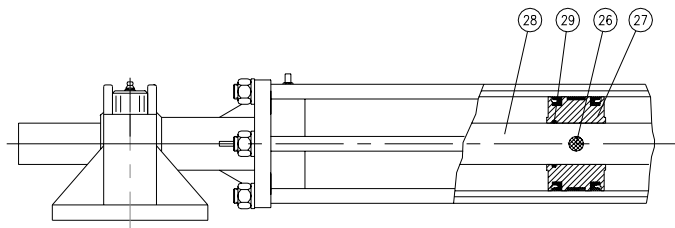
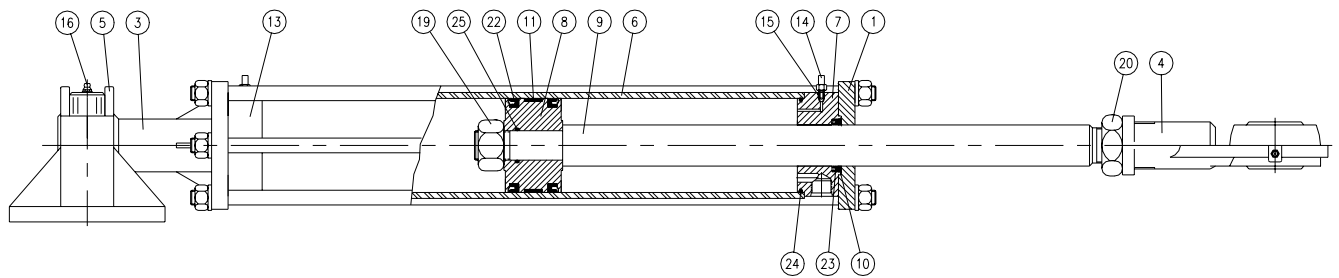


Data displayed are for information only and subject to change without notice

MODEL 7093 PARTS LIST



UNBALANCED MODEL



BALANCED MODEL

ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
1	1	7093-0001	Front End Cap	16	2	1501-0301	Grease Nipple
2	1	7093-0002	Trunnion Foot	17	2	1002-2240	Hex Socket Cap Screw
3	1	7093-0003	Trunnion End Cap	18	12	1022-0166	Hex Nut
4	1	7093-0004	Rod End Cap	19	1	1022-0172	Hex Nut
5	1	7093-0005	Trunnion Cap	20	1	1022-0276	Jam Nut
6	1	7093-0006	Tube	21	12	1023-0316	Lock Washer
7	1 [†]	7093-0008	Shaft Guide	22	2	1102-2053	"U" Cup
8	1	7093-0109	Piston (unbal.)	23	1	1102-2058	"U" Cup
9	1	7093-0110	Piston Rod (unbal.)	24	2	1101-0240	"O" Ring
10	1	7093-0011	Retaining Washer	25	1	1101-0218	"O" Ring
11	1	7093-0013	Wear Ring	26*	1	7093-0012	Pin
12	6	7093-0014	Tie Rod	27*	1	7093-0019	Piston (balanced)
13	1 [†]	7093-0015	Rear End Cap	28*	1	7093-0010	Piston Rod (balanced)
14	2	7040-0011	Bleeder Screw	29*	1	1101-0224	"O" Ring
15	2	1301-0005	Ball				

[†] Quantity varies with model

* Items for 7093-B balanced cylinder

Please visit our website www.kobel.com for more information.