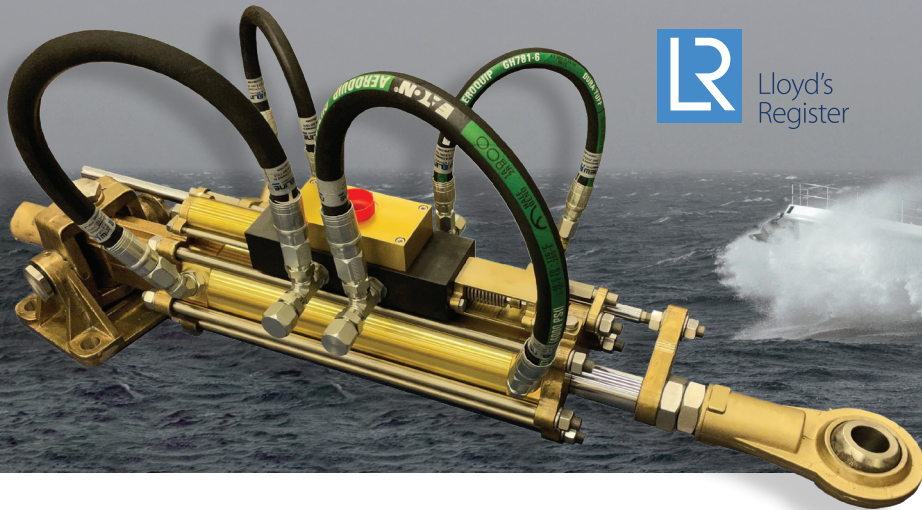


7085-S

POWER ASSIST STEERING CYLINDER



Putting You In Control.

The Kobelt 7085 servo cylinder provides power-assisted steering for manual helms. When the primary pressure source is present, the 7085-S cylinder allows power-assisted steering. When the primary pressure source is removed the cylinder defaults automatically to manual back-up mode.

Constructed in corrosion resistant materials and finishes, the 7085-S cylinder is suited for harsh marine applications. When a single balanced cylinder is not sufficient to provide the required rudder torque, it can be installed in a twin cylinder configuration whereby the 7085-SB would serve as a master with a 7085-B second cylinder of the same stroke. Unbalanced cylinders always should be installed in a twin cylinder configuration.

Key Features

- LR type approved
- Constructed from corrosion resistant materials for harsh environments
- Input from helm pump and/or an electric steering pump
- Compact design
- Available in balanced and unbalanced models
- Available in four different cylinder strokes

Specifications

WORKING PRESSURES

- Normal: 1000 psi [69 bar]
- Maximum Allowable: 800 psi [55 bar]
- Minimum Operating: 180 psi [12.4 bar]
- Minimum Pilot: 40 psi [2.8 bar]

RECOMMENDED FLUID ISO VG32 Hydraulic oil

ARTICULATION

- Rod End: +/-11°
- Base End: +/-5° (horizontal plane)
+/-15° (vertical plane)

AMBIENT TEMPERATURE 14 °F... +122 °F [-10 °C... + 50 °C]

FINISH

- Cylinders: Bare bronze & stainless steel
- Servo Manifold: Nitrided steel

FORCE OUTPUT

BALANCED
6283 lbf [27.9 kN]

UNBALANCED¹
13,980 lbf [62.2 kN]

DISPLACEMENT

- 10" Stroke: 9.2 in³ [151 mL]
- 12" Stroke: 11.0 in³ [180 mL]
- 16" Stroke: 14.7 in³ [241 mL]
- 20" Stroke: 18.4 in³ [302 mL]

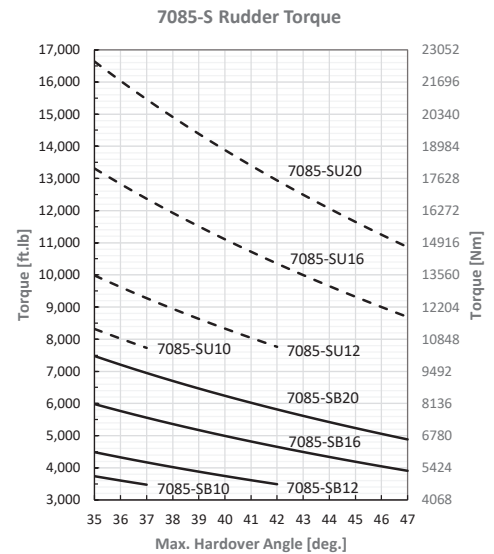
SERVO CYLINDER

MAIN CYLINDER BALANCED

- 79 in³ [1.3 L]
- 94 in³ [15 L]
- 126 in³ [2.1 L]
- 157 in³ [2.6 L]

MAIN CYLINDER UNBALANCED¹

- 175 in³ [2.9 L]
- 210 in³ [3.4 L]
- 280 in³ [4.6 L]
- 350 in³ [5.7 L]



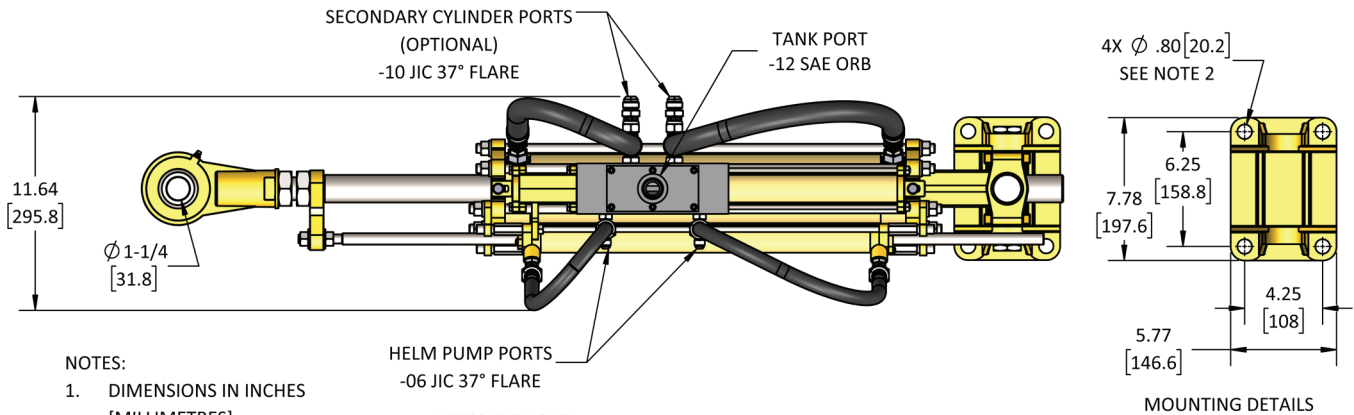
NOTES

1. Torques for 7085-SU series expressed for paired configuration.
2. Indicated torque is specified at the hard-over angle.

¹ Data expressed for paired configuration.

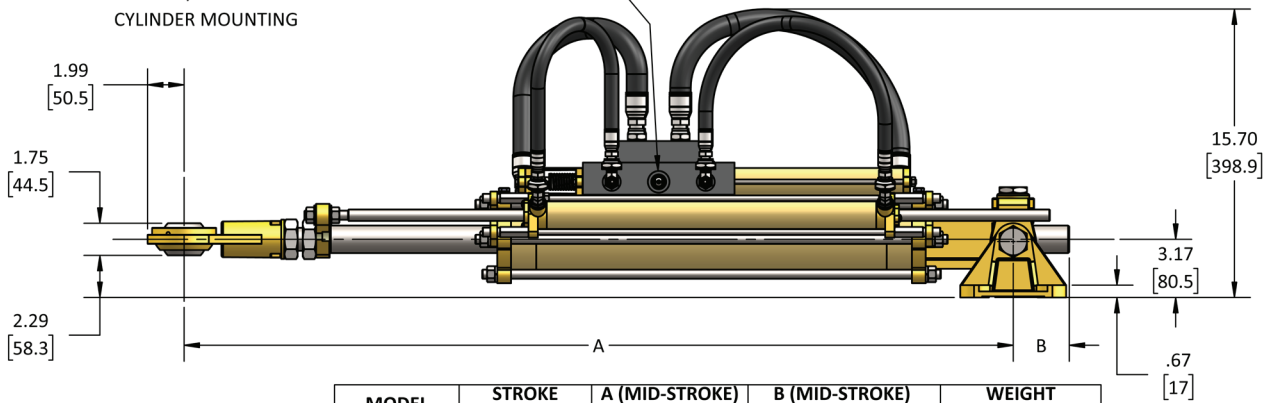
SPECIFICATIONS

GENERAL ARRANGEMENT



NOTES:

1. DIMENSIONS IN INCHES [MILLIMETRES]
2. USE 4X 3/4 Gr. 5 BOLTS FOR CYLINDER MOUNTING



MODEL	STROKE in [mm]	A (MID-STROKE) in [mm]	B (MID-STROKE) in [mm]	WEIGHT lbs [kg]
7085-SB10	10 [254.0]	36.19 [919.2]	0.06 [1.4]	97 [44]
7085-SB12	12 [304.8]	39.19 [995.4]	1.06 [26.8]	102 [46]
7085-SB16	16 [406.4]	45.19 [1147.8]	3.06 [77.6]	112 [51]
7085-SB20	20 [508.0]	51.19 [1300.2]	5.06 [128.4]	121 [55]

