# HYDRAULIC POWER TAKE-OFF HP610S

## QUALITY IS STANDARD

- NO PILOT BEARING
- HYDRAULICALLY ACTUATED
- STRADDLE BEARING DESIGN
- EASE OF INSTALLATION
- REMOTE ACTUATION
- CLUTCH ADJUSTMENT NOT REQUIRED



At the heart of the HP610S is an oil-filled, multiple disc, hydraulically-actuated self-adjusting clutch. Twin Disc's patented actuating technology facilitates seamless engagements and provides extraordinary durability resulting in long life and low maintenance.

### FEATURES AND BENEFITS

- Modular design
- Up to 1050 hp
- Side load (shown)
- Four live pump pads 300 hp each, 480 hp total
- Torsional coupling input
- SAE #1, #0
- 18" diameter sheave housing rotates 360°
- Charge pump included

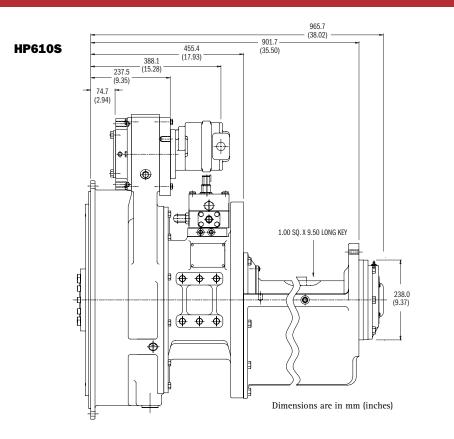
### **SPECIFICATIONS - HP610S**

Model Number	Maximum Torque Rating* Nm (lb-ft)	Maximum Speed	Maximum Pulley Diameter	Maximum Pulley Length (Grooves)	Weight kg (lbs)
HP610S – Short	4070 (3000)	2100	18.00	12.62 (10)	586 (1289)
HP610S – Long	4070 (3000)	2100	18.00	14.38 (12)	632 (1390)

\* Actual rating depends on application, prime mover and shock loads. Contact Twin Disc Application Engineering for load classification and assistance in the selection of the correct hydraulic PTO.



Specifications subject to change without prior notice in the interest of continual product improvement. Contact your local Twin Disc representative for engineering specifications.



#### STANDARD AND STRETCH SIDE LOAD CAPACITY VALUES

S DIMENSION mm (in)	2100 RPM MAX. LOAD Nm (lbs)	1800 RPM MAX. LOAD Nm (lbs)	1200 RPM MAX. LOAD Nm (lbs)
127.0 (5.0)	67165 (15100)	70728 (15800)	79619 (17900)
152.4 (6.0)	73837 (16600)	77395 (17400)	87181 (19600)
177.8 (7.0)	81843 (18400)	85846 (19300)	96966 (21800)
203.2 (8.0)	83622 (18800)	87626 (19700)	97856 (22000)
228.6 (9.0)	78730 (17700)	82288 (18500)	92074 (20700)
254.0 (10.0)	70723 (15900)	73837 (16600)	82510 (18550)
279.0 (11.0)	64051 (14400)	66720 (15000)	74726 (16800)
	mm (in)   127.0 (5.0)   152.4 (6.0)   177.8 (7.0)   203.2 (8.0)   228.6 (9.0)   254.0 (10.0)	Sometrion Nm (lbs)   127.0 (5.0) 67165 (15100)   152.4 (6.0) 73837 (16600)   177.8 (7.0) 81843 (18400)   203.2 (8.0) 83622 (18800)   228.6 (9.0) 78730 (17700)   254.0 (10.0) 70723 (15900)	Nm (ibs) Nm (ibs)   127.0 (5.0) 67165 (15100) 70728 (15800)   152.4 (6.0) 73837 (16600) 77395 (17400)   177.8 (7.0) 81843 (18400) 85846 (19300)   203.2 (8.0) 83622 (18800) 87626 (19700)   228.6 (9.0) 78730 (17700) 82288 (18500)   254.0 (10.0) 70723 (15900) 73837 (16600)

The following general formula should be used for determining the actual applied load  $L = \frac{126,000 \text{ x HP}}{\text{N x D}} \text{ x F x LF}$ 

- WHERE L = Actual Applied Load (lbs)
  - N = Shaft Speed (RPM) D = Pitch Diameter (in) of Sheave, etc.
  - F = Load Factor
    - 1.0 for Chain or Gear Drive, 1.5 for Timing Belts, 2.5 for All V Belts, 3.5 for Flat Belts
  - LF = 2.1 for Reciprocating Compressors and other Severe Shock Drives and 1.8 for Large Inertia Type Drives (i.e. crushers, chippers, planers, etc.)

#### TORSIONAL VIBRATION

Responsibility for ensuring that the torsional compatibility of the drive train is satisfactory rests with the assembler of the drive and driven equipment, regardless of whether Twin Disc supplies the flexible input coupling or it is customer supplied. Torsional vibration analysis can be made by the engine builder, independent consultants or others. Twin Disc is prepared to assist in finding solutions to potential torsional problems that relate to the Twin Disc supplied equipment.

Twin Disc, Incorporated reminds users of these products that their safe operation depends on use in compliance with engineering information provided in our catalog. Users are also reminded that safe operation depends on proper installation, operation and routine maintenance and inspection under prevailing conditions. It is the responsibility of users (and not Twin Disc, Incorporated) to provide and install guards or safety devices which may be required by recognized safety standards or by the Occupational Safety and Health Act of 1970 and its subsequent provisions.

For nearly a century, we've been putting horsepower to work by designing, engineering and manufacturing rugged-duty industrial products. Our products and our reputation are bolted to the most renowned engine manufacturers and equipment OEMs in the world. Our mission is to make your machines and vehicles more productive, more durable, more operatorfriendly, more cost-effective. From design and installation consultation through aftersale support, Twin Disc and its distributors are committed to your business. No one knows more about managing horsepower in more ways than Twin Disc.

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