STANDARD SP CLUTCH

SP318S

QUALITY IS STANDARD

- STRADDLE BEARING DESIGN
- NO PILOT
- BALL BEARING THROW OUT
- OPTIONAL SINTERED IRON PLATES
- BUILT IN HEX NUT
- MORE SUITABLE FOR SIDE LOAD APPLICATIONS
- EASE OF INSTALLATION
- ALLOWS FOR MORE FREQUENT ENGAGEMENTS
- CREATES 25% HIGHER TORQUE CAPACITY
- EASES ADJUSTMENT VERIFICATION

SPECIFICATIONS – SP318S

Model Number	SAE HSG.	Max. Input Torque Nm (lb-ft)		Maximum Safe Speed	Weight kg (lbs)
		Organic	Sintered		
SP318S0	0	8141 (6000)	10176 (7500)	2200	477 (1050)

LOAD CLASSIFICATIONS BASED UPON AGMA LOAD CHARACTERISTICS

PRIME MOVER	DURATION OF SERVICE	DRIVEN MACHINE LOAD CLASSIFICATIONS		
		UNIFORM	MODERATE SHOCK	HEAVY SHOCK
Electric motor	Up to 3 hours per day 3-10 hours per day Over 10 hours per day	1.00 1.00 1.25	1.25 1.25 1.50	1.50 1.75 2.00
Multi-cylinder internal combustion engine	Up to 3 hours per day 3-10 hours per day Over 10 hours per day	1.00 1.25 1.50	1.25 1.50 1.75	1.75 2.00 2.25
Multi-cylinder internal combustion engine with high torque rise	Up to 3 hours per day 3-10 hours per day Over 10 hours per day	1.50 1.75 2.00	1.75 2.00 2.25	2.25 2.50 2.75
Single cylinder internal combustion engine	Up to 3 hours per day 3-10 hours per day Over 10 hours per day	1.25 1.50 1.75	1.50 1.75 2.00	2.00 2.25 2.50

All clutch engagements to be with prime mover below 1000 RPM. High inertia loads may require use of larger clutch. Contact Twin Disc application engineering department for assistance.

TO CALCULATE APPLICATION TORQUE:

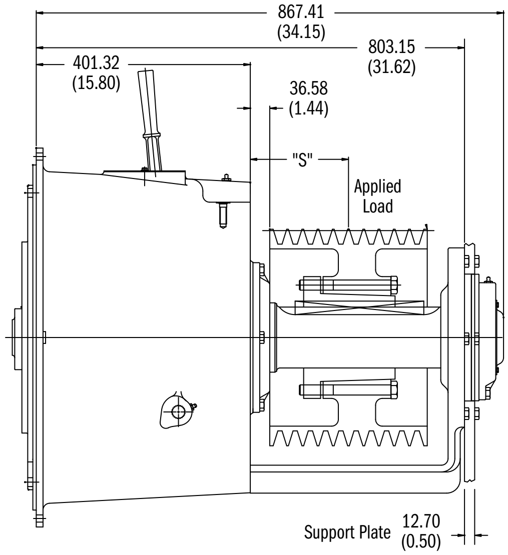
$$\frac{5252 \times HP}{\text{Engine RPM}} = \text{Torque}$$

Torque x Load Factor = Application Torque

Use load factor from chart at left

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

SP318S



Dimensions are in mm (inches)

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)	70278 (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)

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

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.)

Compound Drives and Power Engaged Power Take-Off applications must have written factory review.

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.

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Twin Disc, Incorporated
Racine, Wisconsin 53403 USA
Phone +1-262-638-4000
Fax +1-262-638-4482
www.twindisc.com

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