



SGK

SGK Clutch Coupling

PT Tech's SGK and SGS Overrunning Clutch Couplings are designed The quality, dependability, and performance of sprag type over-running clutches and gear couplings have made them standards for heavy industry. PT Tech combines these two proven products into a unique clutch coupling package...the SGK Over-running Clutch Coupling.

Automatic Disengagement for auxiliary drives

Drop out center section

Uses standard gear couplings for misalignment

Over-running clutch couplings are widely used in the industry to automatically disengage auxiliary drives such as:

- Stand-by drives
- Inching drives
- Turning gear drives
- Creeper drives
- Sunday drives
- Other specialty applications

Overrunning Clutch Coupling

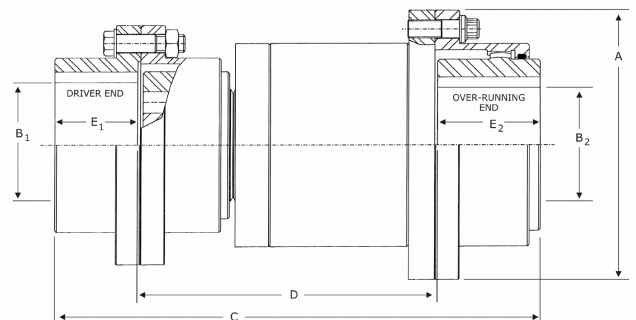
Series 600 Coupling is intended for use in adverse conditions. In addition, it utilizes centrifugal throw-out (C/T) sprags to extend life. It can only be used in applications where the over-running speed is significantly higher than the drive speed. The clutch is oil lubricated and is suitable for operation in temperatures down to -40° F.

Dimensions subject to change. Use certified prints for design purposes.

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The SGK product line is distinguished by its dropout center section. Removing the gear coupling bolts allows the clutch center section to be dropped out without disturbing the driver or driven unit. This provides for ease of service or rebuild.

By combining sprag-type over-running clutches to gear couplings, the result is the best combination of torque capability to bore capacity of any over-running clutch coupling because the unit does not have to be over-sized to accommodate the bore requirements.



Large Coupling Bores

Sprag clutches are severely limited in bore capacity. By placing the sprag clutch on a high strength shaft in the spacer of the coupling, the clutch bore is no longer limiting. Thus, the SGK Clutch Coupling is selected on torque, not bore considerations, and is normally more economical than conventional over-running clutch couplings.

Easy to Install and Service

As simple to install as a gear coupling. The clutch is assembled in the center spacer part of the coupling. The clutch-spacer assembly acts as a drop-out section and can be installed or removed without disturbing driver or driven shafts.

Superior Misalignment

The standard SGK Clutch Coupling is capable of up to 1-1/2° angular misalignment per gear half. The long distance between gear coupling halves ensures excellent offset (parallel) misalignment. For high misalignment conditions, spindle-type gear couplings are available to extend misalignment capabilities to 6° per gear half.

Low Maintenance

The SGK 400 and 600 series clutches are oil-lubricated with 200% greater lube capacity than the standard sprag clutch by virtue of the oil reservoir.

DIMENSIONS

| | | 10 | 15 | 25 | 30 | 35 | 40 | 45 |
|--|----------|------|-------|-------|-------|-------|-------|-------|
| (A) Coupling Diameter | (inches) | 4.56 | 6.00 | 8.38 | 9.44 | 11.00 | 12.50 | 13.62 |
| (C) Overall Length | (inches) | 9.48 | 11.46 | 13.79 | 16.97 | 20.26 | 22.05 | 24.23 |
| (D) Distance between Shaft End | (inches) | 6.23 | 7.68 | 8.48 | 10.47 | 12.66 | 13.33 | 14.48 |
| (E ₁) Length thru bore, Driver End | (inches) | 1.56 | 1.84 | 2.28 | 2.91 | 3.41 | 3.97 | 4.44 |
| (E ₂) Length thru bore, O/R End | (inches) | 1.69 | 1.94 | 3.03 | 3.59 | 4.19 | 4.75 | 5.31 |
| Shipping Weight | (lbs) | 30 | 52 | 125 | 210 | 330 | 460 | 625 |

SELECTION DATA

| | | 10 | 15 | 25 | 30 | 35 | 40 | 45 |
|-------------------------------------|------------|-------|-------|-------|-------|-------|--------|--------|
| Torque Rating | (lb-ft) | 200 | 600 | 1,500 | 4,000 | 6,800 | 11,500 | 18,000 |
| Max Over-running Speed | (rpm)* | 5,000 | 4,000 | 3,600 | 2,500 | 1,800 | 1,500 | 1,350 |
| Max Driver Speed | (rpm)* | 1,100 | 1,000 | 1,000 | 800 | 650 | 525 | 500 |
| Sprag Lift-off Speed | (rpm)* | 1,200 | 1,200 | 1,200 | 1,000 | 800 | 675 | 650 |
| Max Bores B ₁ Driver End | (sq key) | 2.250 | 2.750 | 3.625 | 4.375 | 5.125 | 5.875 | 6.760 |
| Max Bores B ₂ O/R End | (sq key) | 1.875 | 2.375 | 3.625 | 4.125 | 4.875 | 5.750 | 6.500 |
| Resistance After Run In | (lb-ft) | .20 | .23 | .46 | 1.15 | 3.75 | 5.25 | 6.25 |
| Axial End Float | (inches)** | 1/4 | 1/4 | 5/16 | 3/8 | 7/16 | 1/2 | 9/16 |

* If higher driver speeds are required or if long periods of overrunning are expected at speeds below the sprag lift-off speed, consult Plantcare (Beijing) Co.,Ltd.

** Axial end float listed is the maximum total travel. Dimension "D" is based on the midpoint of the travel. Longer axial travel can be provided by reversing the gear coupling hubs or by utilizing slide-type gear couplings. Consult Plantcare (Beijing) Co.,Ltd.