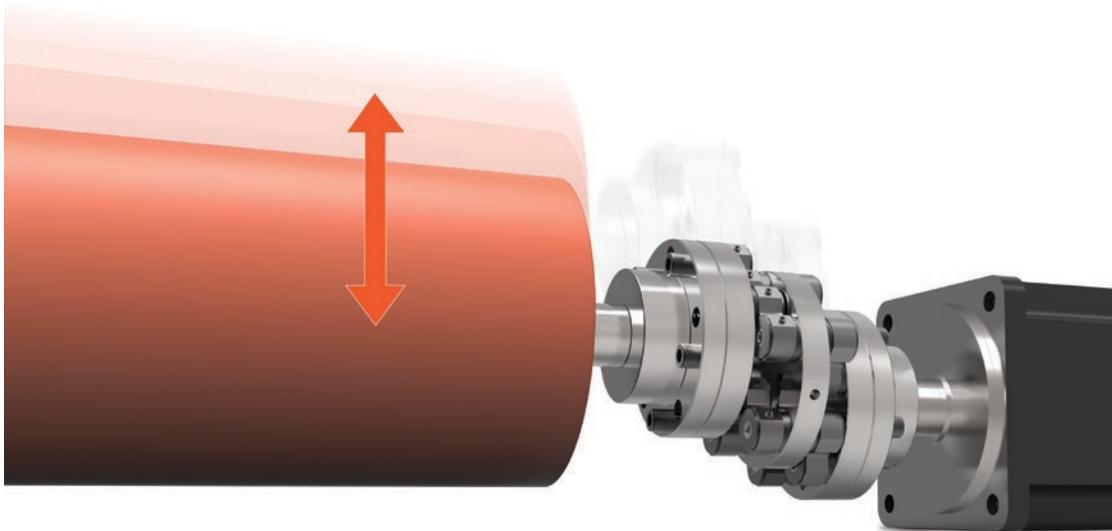


////// ZERO-MAX[®]

Schmidt Couplings





Replace Universal Joint Shaft for Better Performance and Space Savings

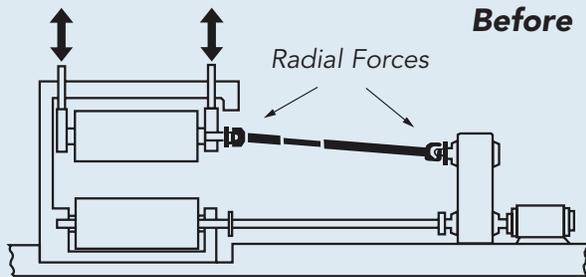


Diagram shows how this can be achieved with double universal joints – but causes radial forces at the joints and requires large lateral space

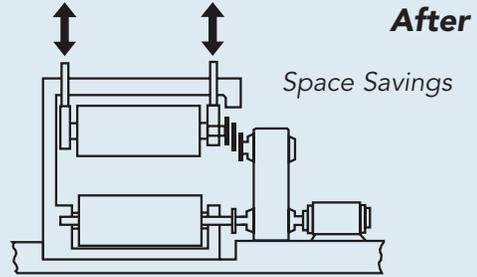
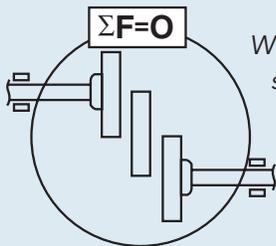


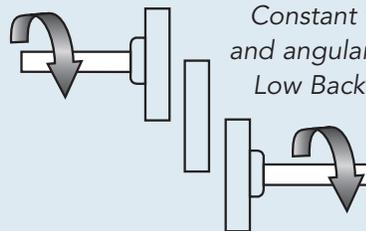
Diagram overcomes both problems – by the use of a Schmidt Offset Coupling

No Sideloads



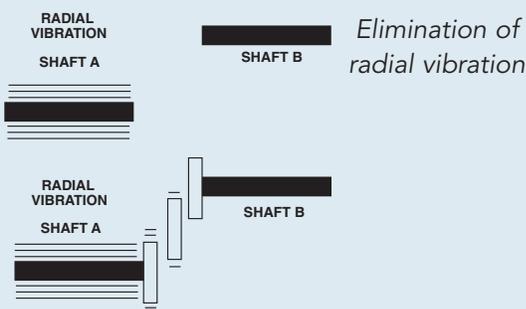
Wide range of parallel shaft displacement without side loads

Constant Torque and Angular Velocity

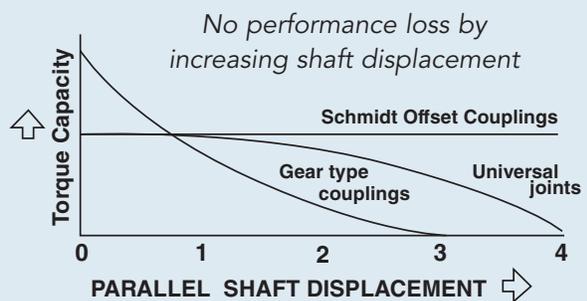


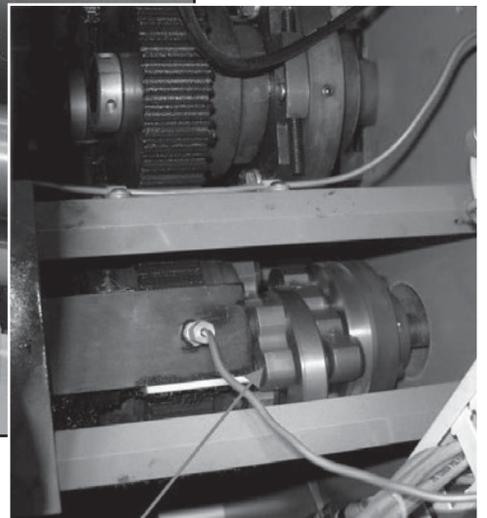
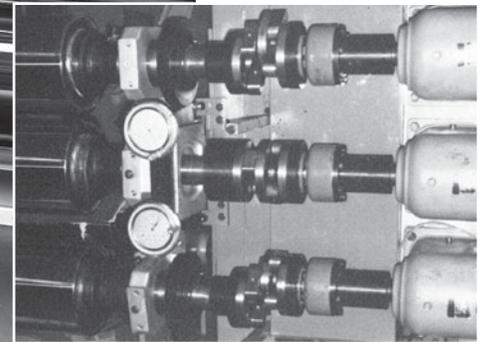
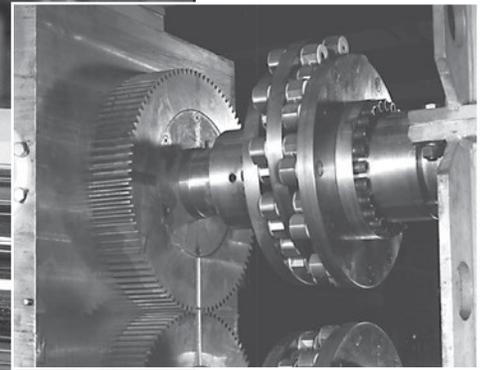
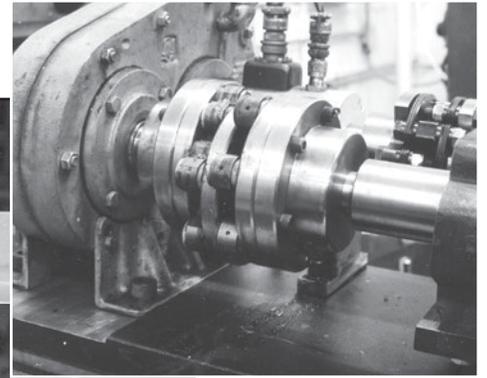
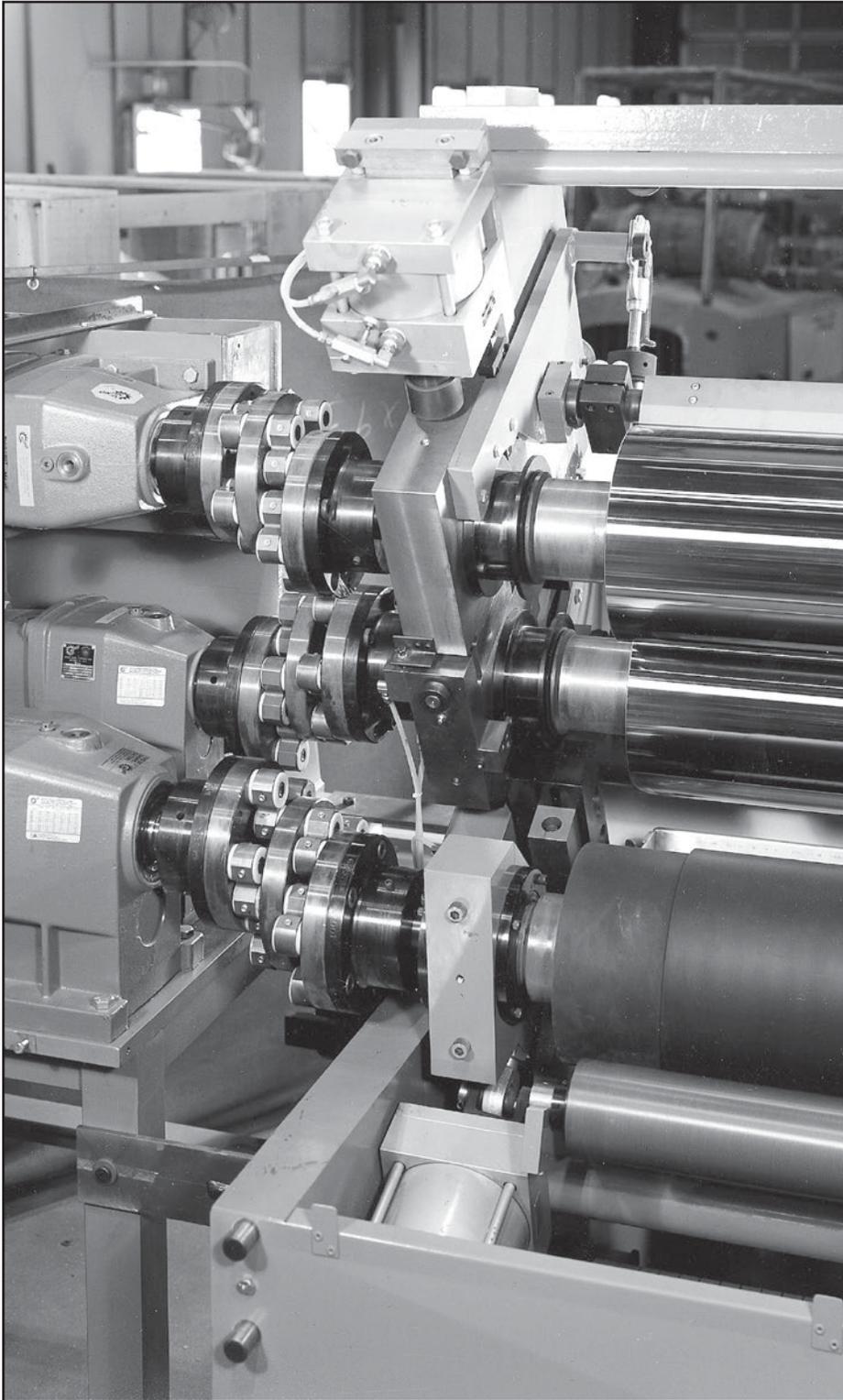
Constant transmission of torque and angular velocity. Low and Ultra Low Backlash models available.

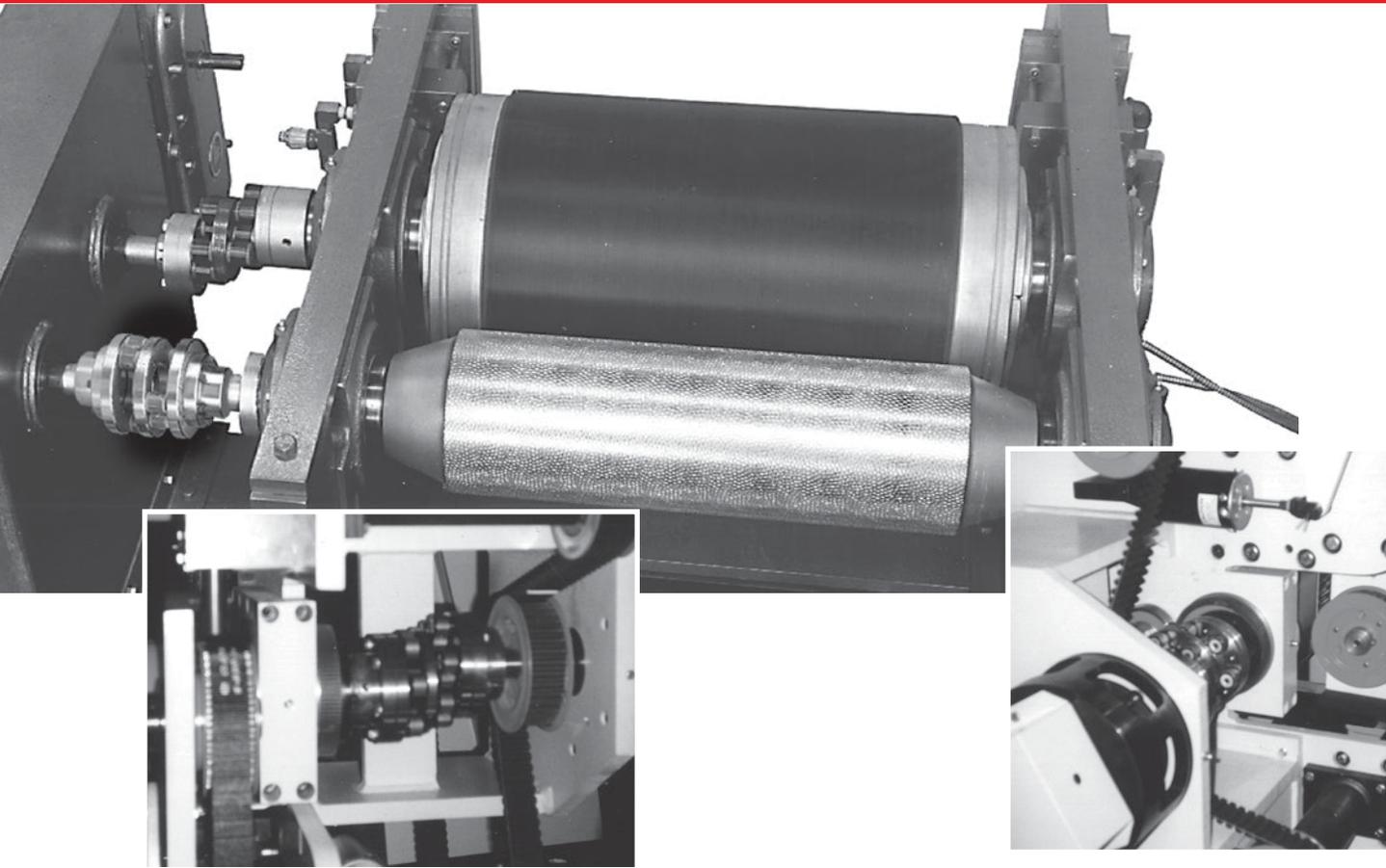
Eliminate Radial Vibration



Consistent Performance







Three Schmidt styles for a wide range of applications – or ask about customizing a coupling for you.



Offset Coupling

Provides the utmost in precision for parallel offset shafts. Transmits constant angular velocity and torque in a wide range of parallel shaft misalignments. Imposes no sideloads on shafts or bearings and eliminates radial shaft vibrations. No performance loss for increasing offset. It provides large floor space savings because of its compact design. **Pages 5-7, (Hubs Page 10)**



Inline Coupling

A linkage coupling designed with high torsional stiffness, this coupling accommodates small parallel shaft misalignments at constant angular velocity. Designed as a dropout coupling, it can be easily installed and offers excellent drive performance for low to medium shaft speeds and medium to high torque applications. **Page 8, (Hubs Page 10)**



5-D Coupling

Provides parallel shaft misalignment and a $\pm 5^\circ$ angular misalignment with moderate axial shaft displacement capability. This coupling maintains constant angular velocity at all misalignment modes. Recommended for high torque, low RPM applications, the coupling has spherical roller bearings which are easy to maintain. **Page 9, (Hubs Page 10)**

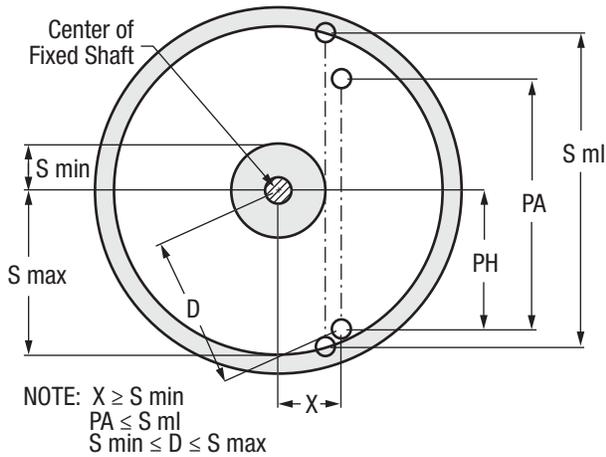
How To Select L200 & L300 Schmidt Offset Couplings

Example:

Step 1. List the performance requirements

- a) Horsepower H=55 (HP)
- b) Shaft Speed N=1000 (RPM)
- c) B-10 Bearing Lifetime B-10=25000(HRS)
- d) Offset From Fixed Shaft PH=2 (INCH)
- e) Variable Offset (if required) PA=5 (INCH)

Step 2. Select a coupling with the required offset characteristics. All offset couplings have a minimum offset (Smin), a maximum offset (Smax) and a maximum linear range of shaft displacement (Sml). For applications where the offset distance between shafts remains FIXED, simply select a coupling with an offset larger than Smin and smaller than Smax. For applications where the shaft offset distance VARIES during operation, select a coupling where the linear range of displacement is less than the Sml. Note: At no time can the shafts be separated by more than Smax nor less than Smin. To use all of Sml, X (see diagram below) must be equal to Smin and PH must equal PA/2. Consult dimension chart on page 6.



Step 3. Select the lifetime speed factor "L" from chart to the right. For N=1000 (RPM) and B10=(25000) (HRS) L=6.034

Step 4. Calculate the required performance factor $P_r = H/L = 55/6.034 = 9.115$

Step 5. Compare the required performance factor "Pr" with the coupling performance factor "P" listed on the performance data table on page 6. Select a coupling size which has an equal or higher "P" factor as "Pr". The coupling size L280C meets these requirements.

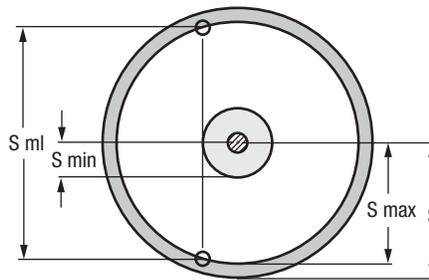
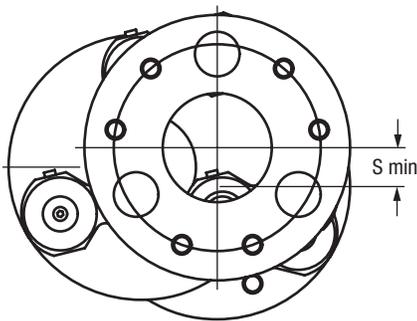
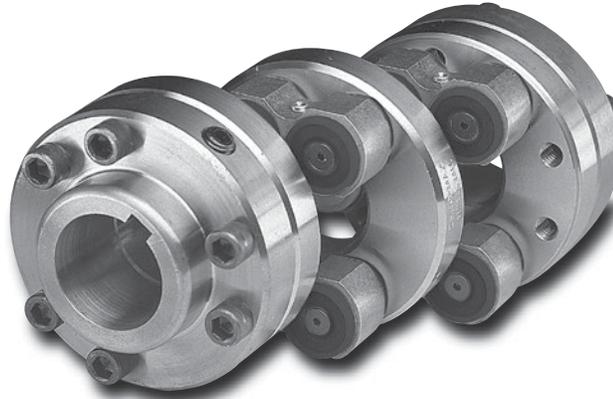
Step 6. Compare the practical speed limit (see performance data table on page 6). The data shows that the coupling size L280C can operate at 1500 RPM.

Step 7. Select hubs (if required) from chart on page 11.

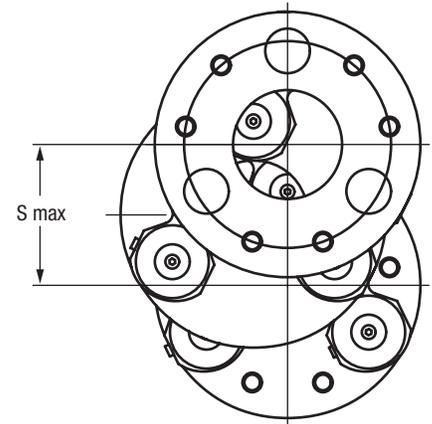
| Shaft Speed N (rpm) | Lifetime-Speed Factor "L" | | | | | |
|---------------------|---------------------------|-------|-------|--------|--------|--------|
| | B-10 Lifetime (Hours) | | | | | |
| | 1,000 | 2,500 | 5,000 | 10,000 | 25,000 | 50,000 |
| 10 | 0.631 | 0.479 | 0.389 | 0.316 | 0.240 | 0.195 |
| 25 | 1.198 | 0.910 | 0.739 | 0.601 | 0.456 | 0.371 |
| 50 | 1.947 | 1.479 | 1.201 | 0.976 | 0.741 | 0.601 |
| 100 | 3.162 | 2.402 | 1.951 | 1.585 | 1.204 | 0.978 |
| 150 | 4.200 | 3.191 | 2.502 | 2.105 | 1.599 | 1.299 |
| 200 | 5.137 | 3.902 | 3.170 | 2.575 | 1.956 | 1.589 |
| 250 | 6.011 | 4.562 | 3.706 | 3.010 | 2.287 | 1.857 |
| 300 | 6.823 | 5.183 | 4.210 | 3.420 | 2.598 | 2.110 |
| 400 | 8.345 | 6.340 | 5.149 | 4.182 | 3.177 | 2.581 |
| 500 | 9.756 | 7.411 | 6.020 | 4.889 | 3.714 | 3.017 |
| 600 | 11.08 | 8.420 | 6.839 | 5.555 | 4.220 | 3.428 |
| 700 | 12.34 | 9.379 | 7.618 | 6.188 | 4.700 | 3.818 |
| 800 | 13.56 | 10.30 | 8.365 | 6.795 | 5.161 | 4.192 |
| 900 | 14.72 | 11.18 | 9.084 | 7.378 | 5.605 | 4.553 |
| 1,000 | 15.85 | 12.04 | 9.779 | 7.943 | 6.034 | 4.901 |
| 1,100 | 16.94 | 12.87 | 10.45 | 8.491 | 6.450 | 5.391 |
| 1,200 | 18.01 | 13.68 | 11.11 | 9.025 | 6.856 | 5.568 |
| 1,300 | 19.04 | 14.47 | 11.75 | 9.545 | 7.250 | 5.889 |
| 1,400 | 20.06 | 15.24 | 12.38 | 10.05 | 7.636 | 6.203 |
| 1,500 | 21.05 | 15.99 | 12.99 | 10.55 | 8.015 | 6.510 |
| 1,600 | 22.02 | 16.73 | 13.59 | 11.04 | 8.385 | 6.810 |
| 1,700 | 22.98 | 17.45 | 14.18 | 11.52 | 8.748 | 7.106 |
| 1,800 | 23.92 | 18.17 | 14.76 | 11.99 | 9.105 | 7.396 |
| 1,900 | 24.84 | 18.87 | 15.33 | 12.45 | 9.456 | 7.681 |
| 2,000 | 25.75 | 19.56 | 15.89 | 12.90 | 9.803 | 7.962 |
| 2,100 | 26.64 | 20.24 | 16.44 | 13.35 | 10.14 | 8.238 |
| 2,200 | 27.52 | 20.91 | 16.98 | 13.79 | 10.48 | 8.511 |
| 2,300 | 28.39 | 21.57 | 17.52 | 14.23 | 10.81 | 8.780 |
| 2,400 | 29.25 | 22.22 | 18.05 | 14.66 | 11.14 | 9.046 |
| 2,500 | 30.10 | 22.86 | 18.57 | 15.08 | 11.46 | 9.308 |

The L200 & L300 Series couplings use needle bearings. The B-10 lifetime on the bearing is considered the life of the coupling, assuming that the bearing is the weakest part in the coupling. The lifetime-speed factor accounts for the B-10 lifetime and shaft speed.

Performance Data



Recommended operational area for shaft displacement



| Coupling Designation | Performance Data | | | | | | | | | |
|----------------------|------------------|---------------------|------------|-----------|-------|---------------|----------------------|--------------------------------|-------------------------------|----------------------|
| | Part No. | Shaft Displacements | | | | Angular (In)* | Performance Factor P | Max. Torque Capacity (In-Lbs)* | Practical Speed Limit (rpm)** | Coupling Weight (Lb) |
| S (In) | | S min (In) | S max (In) | S ml (In) | | | | | | |
| L230C | 1.75 | 0.437 | 1.575 | 3.026 | 0.020 | 0.186 | 637 | 2,500 | 2 | 2 |
| L234C | 2.00 | 0.50 | 1.80 | 3.46 | 0.025 | 0.878 | 3,000 | 2,000 | 6 | 9 |
| L239C | | | | | | 1.465 | 5,000 | 2,000 | 7 | 17 |
| L246C | | | | | | 2.285 | 7,800 | 2,000 | 9 | 31 |
| L253C | | | | | | 3.222 | 11,000 | 2,000 | 11 | 50 |
| L259C | 3.50 | 0.87 | 3.15 | 6.05 | 0.025 | 5.272 | 18,000 | 1,750 | 30 | 155 |
| L270C | | | | | | 8.787 | 30,000 | 1,750 | 39 | 297 |
| L280C | | | | | | 13.035 | 44,500 | 1,500 | 47 | 496 |
| L290C | | | | | | 18.160 | 62,000 | 1,250 | 55 | 770 |
| L281C | 4.50 | 1.12 | 4.05 | 7.78 | 0.025 | 10.691 | 36,500 | 1,250 | 65 | 608 |
| L289C | | | | | | 16.549 | 56,500 | 1,250 | 77 | 948 |
| L210C | | | | | | 24.605 | 84,000 | 1,000 | 96 | 616 |
| L211C | | | | | | 34.856 | 119,000 | 1,000 | 112 | 2,594 |
| L214C | | | | | | 60.633 | 207,000 | 1,000 | 171 | 6,049 |
| L217C | | | | | | 93.732 | 320,000 | 1,000 | 223 | 11,917 |
| L220C | | | | | | 134.446 | 459,000 | 750 | 273 | 20,913 |
| L350C | | | | | | 4.00 | 1.00 | 3.60 | 6.92 | 0.025 |
| L355C | 2.255 | 7,700 | 2,500 | 12 | 55 | | | | | |
| L360C | 6.00 | 1.50 | 5.40 | 10.37 | 0.025 | 1.845 | 6,300 | 2,000 | 12 | 70 |
| L375C | 5.00 | 1.25 | 4.50 | 8.64 | | 6.883 | 23,500 | 1,750 | 45 | 360 |
| L385C | 7.00 | 1.75 | 6.30 | 12.10 | | 8.143 | 27,800 | 1,750 | 57 | 583 |
| L310C | 7.00 | 1.75 | 6.30 | 12.10 | | 13.767 | 47,000 | 1,250 | 95 | 1,368 |
| L312C | 10.00 | 2.50 | 9.00 | 17.29 | 0.025 | 17.135 | 58,500 | 1,000 | 129 | 2,594 |

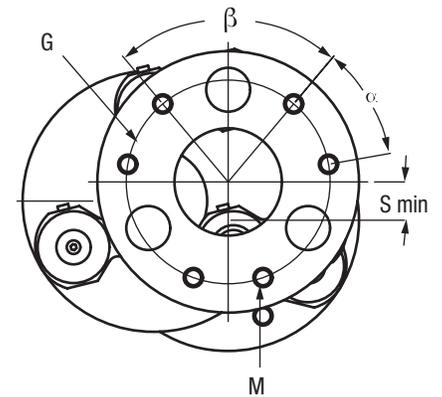
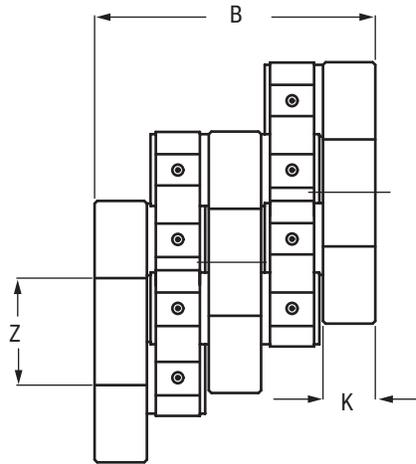
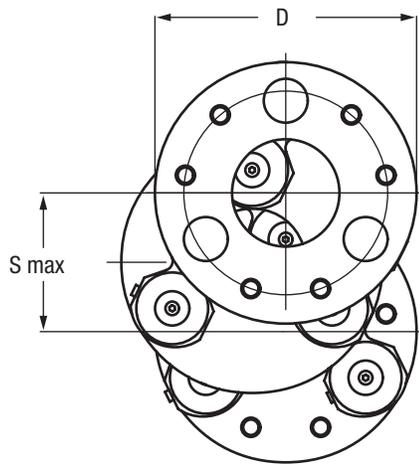
*The torque capacity of the Schmidt Coupling is primarily a function of the bearing size, the number of bearings and the torque radius of the coupling.

These design parameters are expressed by the performance factor P.

**If shaft speed requirement is higher than the practical speed limit consult our engineering department.

*Angular displacement values shown are the maximum distance within the hub faces must be parallel to each other.

Dimension Data



Note: Hubs are found on page 10

| Coupling Designation | Dimension Data | | | | | | | | | |
|----------------------|----------------|--------------|------------------------|--------|--------|---------|-----------------|-------|-------------|----------------|
| | Coupling | | End Disc Assembly Data | | | | | | | |
| Part No. | D (In) | B ±.032 (In) | Z (In) | K (In) | G (In) | M (In) | Number of Bolts | α (°) | β (°) | Bolt Size (In) |
| L230C | 3.00 | 2.75 | 1.280 | 0.380 | 2.187 | 8-32* | 6 | 40 | 80 | 8-32 Fl. Hd.* |
| L234C | 3.37 | 3.81 | 1.375 | 0.60 | 2.750 | 5/16-18 | 6 | 40 | 80 | 5/16-18x1 |
| L239C | 3.93 | | 1.937 | | 3.000 | | 4 | 90 | 90 | |
| L246C | 4.62 | | 2.625 | | 3.750 | | 5 | 72 | 72 | |
| L253C | 5.25 | | 3.250 | | 4.375 | | 6 | 60 | 60 | |
| L259C | 5.94 | 6.37 | 2.437 | 1.19 | 4.625 | 7/16-14 | 6 | 40 | 80 | 7/16-14x1.75 |
| L270C | 7.00 | | 3.500 | | 5.625 | 4 | 90 | 90 | 5/8-11x2 | |
| L280C | 8.00 | | 4.500 | | 6.625 | 5 | 72 | 72 | | |
| L290C | 9.00 | | 5.500 | | 7.625 | 6 | 60 | 60 | | |
| L281C | 8.00 | 7.62 | 3.500 | 1.44 | 6.500 | 5/8-11 | 6 | 40 | 80 | 5/8-11x2 |
| L289C | 8.90 | | 4.375 | | 7.375 | 4 | 90 | 90 | 3/4-10x2.25 | |
| L210C | 10.20 | | 5.500 | | 8.500 | 5 | 72 | 72 | | |
| L211C | 11.60 | | 7.000 | | 10.000 | 6 | 60 | 60 | | |
| L214C | 14.41 | 1.44 | 9.500 | 1.44 | 12.625 | 1-8 | 8 | 45 | 45 | 1-8x2.25 |
| L217C | 17.31 | | 12.000 | | 15.500 | | 10 | 36 | 36 | |
| L220C | 20.25 | | 14.500 | | 18.250 | | 12 | 30 | 30 | |
| L350C | 5.00 | 3.81 | 1.375 | 0.60 | 2.750 | 5/16-18 | 6 | 40 | 80 | 5/16-18x1 |
| L355C | 5.56 | | 1.625 | | | | | | | |
| L360C | 6.00 | | 1.375 | | | | | | | |
| L375C | 7.50 | 6.37 | 2.437 | 1.19 | 4.625 | 7/16-14 | 6 | 40 | 80 | 7/16-14x2 |
| L385C | 8.50 | | 2.437 | | | | | | | |
| L310C | 10.00 | 7.62 | 3.500 | 1.44 | 6.500 | 5/8-11 | 6 | 40 | 80 | 5/8-11x2 |
| L312C | 11.80 | | 3.500 | | | | | | | |

*L230C end discs have countersunk clearance holes to accept flat head screws. All other end discs have threaded holes as indicated.

Schmidt Inline Couplings - L400 Series

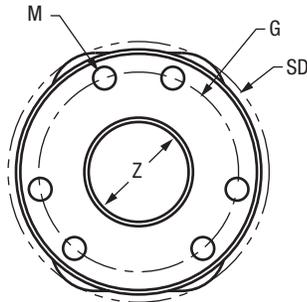
Schmidt Inline Couplings are a torque-rigid type, designed with two pairs of parallel links installed 90 degrees out of phase with each other. This linkage arrangement allows for the precise transmission of torque and constant angular velocity between shafts with small to moderate parallel misalignments. The coupling utilizes needle bearings which can be preloaded for Low and Ultra Low backlash conditions. Where backlash is not as critical, non-lubricated filament wound teflon bearings are available for higher torque capacity and where relubrication of the coupling is difficult.

Typical applications which benefit from the high accuracy provided by Schmidt Inline Couplings are feeders, embossers, compactors, printing presses and many others.

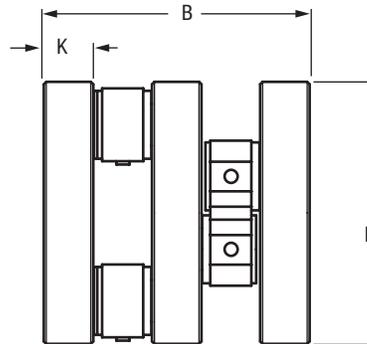
Schmidt Inline Couplings are available for a torque range from 500 to 35,000 inch-pounds. Couplings for higher torque requirements are made available on special orders.



End View



Side View



Dimensions and Performance Data of Inline Couplings

Note: Hubs are found on page 10

| Coupling Designation | | L4xxC or L4xxD Series* | | | | | | | |
|--------------------------------------|-------------------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | L431C/D | L442C/D | L436C/D | L448C/D | L463C/D | L485C/D | L481C/D | L411C/D |
| Performance Capacity | HP/100 rpm** | 0.88 | 1.35 | 3.17 | 5.08 | 19.04 | 29.51 | 36.49 | 56.49 |
| | Torque (In x Lb)** | 550 | 850 | 2,000 | 3,200 | 12,000 | 18,600 | 23,000 | 35,600 |
| | Displacement | Parallel* (In) | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| Angular (°) | | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 | ±0.5 |
| Coupling Dimensions (In.) | Disc Diameter D | 3.098 | 4.190 | 3.613 | 4.863 | 6.286 | 8.475 | 8.129 | 10.943 |
| | Swing Diameter SD | 3.23 | 4.32 | 3.70 | 4.95 | 6.44 | 8.63 | 8.33 | 11.14 |
| | Coupling Length B | 3.156 | 3.156 | 3.810 | 3.810 | 6.373 | 6.373 | 7.623 | 7.623 |
| | Disc Width K | 0.500 | 0.500 | 0.600 | 0.600 | 1.187 | 1.187 | 1.437 | 1.437 |
| | Center Bore Dia Z | 1.500 | 1.812 | 1.625 | 2.562 | 2.875 | 4.000 | 3.625 | 5.500 |
| | Bolt Circle G | 2.412 | 2.412 | 3.000 | 3.000 | 5.000 | 5.000 | 7.000 | 7.000 |
| | No. of Bolts and Size M | 3 1/4"-20 | 3 1/4"-20 | 6 1/4"-20 | 6 1/4"-20 | 6 1/2"-13 | 6 1/2"-13 | 8 5/8"-11 | 8 5/8"-11 |
| Net Weight (Lb) | 3.1 | 5.1 | 5.6 | 7.8 | 32.0 | 47.0 | 64.2 | 93.2 | |
| Inertia Wk^2 (Lb-In ²) | 6.7 | 18.6 | 10.2 | 29.7 | 178.7 | 534.0 | 604.0 | 1,783 | |

Notes: *Data apply to shaft speed under 1800 RPM. Greater parallel misalignment is possible at lower RPM. Consult factory.

**LC Series Inline Couplings are equipped with needle bearings. LD Series Inline Couplings are equipped with filament wound teflon bearings for 20% higher torque capacities than shown above.

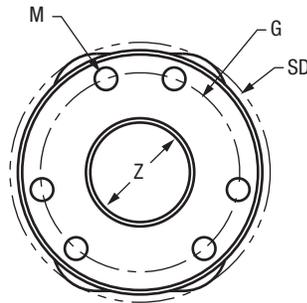
Schmidt 5-D Couplings - L500 Series



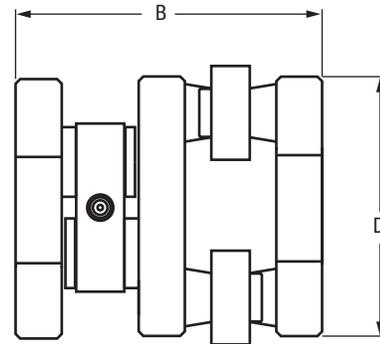
Schmidt 5-D Couplings were developed to fill a gap in the family of torque-rigid couplings. Most couplings in the Schmidt Coupling line are designed to accommodate either axial, angular, or parallel shaft displacements only. For some applications, however, the operational conditions require all possible shaft misalignments. If these shaft misalignments exceed the limit of the selected coupling capacity, excess sideloads are introduced into the equipment which can cause vibrations, life reduction or failure of vital machine components such as bearings, motors, etc.

The 5-D Couplings are a modification of the Schmidt Inline Coupling, designed to accommodate up to 5 degrees of angular shaft misalignment. This coupling allows easy adjustment to any possible misaligned shaft position without imposing heavy sideloads on shafts, bearings or other machine equipment. Schmidt 5-D Couplings offer large shaft misalignment capabilities and constant angular velocity. The acting forces within the coupling can be precisely calculated, assuring a sound coupling design for heavy-duty applications.

End View



Side View



Dimensions and Performance Data of 5-D Couplings

Note: Hubs are found on page 10

| Coupling Designation* | | L5xxS Series* | | | | | | | | | |
|-----------------------------------------------|-------------------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|---------------|--------------|------------|
| | | L536S** | L558S** | L564S | L585S | L582S | L511S | L514S | L517S | L519S | L526S |
| Performance Capacity | HP/100 rpm | 4.44 | 9.52 | 20.3 | 31.4 | 46.5 | 71.8 | 136 | 211 | 373 | 793 |
| | Torque (In - Lb) | 2,800 | 6,000 | 12,800 | 19,800 | 29,300 | 45,300 | 86,000 | 133,000 | 235,000 | 500,000 |
| | Displacement | Parallel (In) | 3/16 | 3/16 | 1/4 | 1/4 | 3/8 | 3/8 | 7/16 | 7/16 | 1 |
| Angular (°) | | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 | ±5 |
| Coupling Dimensions (In.) | Disc Diameter D | 3.38 | 5.63 | 6.25 | 8.38 | 8.00 | 10.75 | 13.25 | 16.38 | 19.25 | 25.13 |
| | Swing Diameter SD | 3.60 | 5.82 | 6.36 | 8.55 | 8.21 | 11.03 | 13.52 | 16.52 | 19.88 | 26.28 |
| | Coupling Length B | 4.18 | 4.18 | 5.38 | 5.38 | 7.23 | 7.23 | 8.70 | 12.75 | 13.75 | 15.00 |
| | Center Bore Dia Z | 1.375 | 3.25 | 3.25 | 2.44 | 3.50 | 4.38 | 7.00 | 6.75 | 7.25 | 10.00 |
| | Bolt Circle G | 2.75 | 4.38 | 4.38 | 4.63 | 6.63 | 6.50 | 10.00 | 13.50 | 16.88 | 21.75 |
| | No. of Bolts and Size M | 6 5/16"-18 | 6 5/16"-18 | 6 5/16"-18 | 6 7/16"-14 | 5 5/8"-11 | 6 5/8"-11 | 6 3/4"-10 | 12 3/4"-10 | 12 7/8"-9 | 12 1"-8 |
| Net Weight (Lb) | | 6 | 10 | 21 | 38 | 52 | 86 | 139 | 345 | 577 | 1,205 |
| Inertia Wk ² (Lb-In ²) | | 7 | 26 | 77 | 281 | 331 | 1,050 | 2,290 | 8,615 | 22,000 | 70,350 |

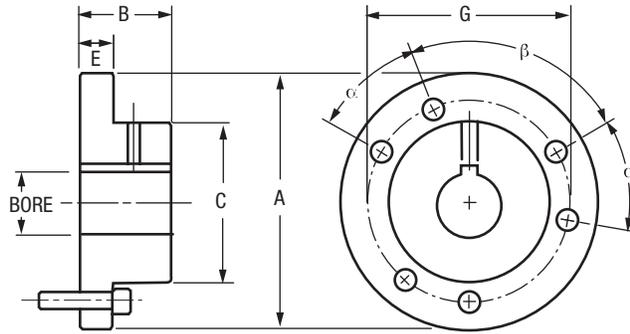
*Other sizes available for special applications.

**Sealed bearings not available

Note: Data applies to shaft speeds under 1,000 RPM. For higher RPM, please consult factory

Consult Factory

- Standard Hub Data For Schmidt Couplings
- Typical shaft/hub configurations determined by amount of axial shaft separation



Contact factory for custom hub options

| Used on Coupling | | Hub Part No. | Hub Dimensions (Inch) | | | | | | | | Wt. (Lbs) | |
|------------------|-------------------------|--------------|-----------------------|-------|-------|-------|-----------|--------|----------------------------|----------|-----------|---------|
| L200 | L300 | | A | B | C | E | Max Bore† | G | Number & Size of Fasteners | α | | β |
| L230C | | S6025XX | 2.812 | 1.000 | 1.750 | 0.500 | 1.125 | 2.188 | (6) #8-32 x 3/4* | 40° | 80° | 1.2 |
| L234C | L350C L355C L360C | S6027XX | 3.375 | 1.250 | 2.000 | 0.687 | 1.250 | 2.750 | (6) 5/16-18 x 1 | 40° | 80° | 2.2 |
| L239C | | S6030XX | 3.938 | 1.500 | 2.250 | 0.687 | 1.500 | 3.000 | (4) 5/16-18 x 1 | 90° | 90° | 3.2 |
| L246C | | S6031XX | 4.625 | 1.750 | 3.000 | 0.687 | 2.000 | 3.750 | (5) 5/16-18 x 1 | 72° | 72° | 5.3 |
| L253C | | S6032XX | 5.250 | 1.875 | 3.625 | 0.687 | 2.500 | 4.375 | (6) 5/16-18 x 1 | 60° | 60° | 7.6 |
| L259C | L375C L385C | S6033XX | 5.938 | 2.125 | 3.750 | 0.750 | 2.500 | 4.625 | (6) 7/16-14 x 1-3/4 | 40° | 80° | 10.1 |
| L270C | | S6035XX | 7.000 | 2.500 | 4.375 | 1.000 | 3.000 | 5.625 | (4) 5/8-11 x 2 | 90° | 90° | 17.2 |
| L280C | | S6039XX | 8.000 | 2.875 | 5.375 | 1.000 | 3.750 | 6.625 | (5) 5/8-11 x 2 | 72° | 72° | 26.1 |
| L290C | | S6042XX | 9.000 | 3.375 | 6.375 | 1.000 | 4.500 | 7.625 | (6) 5/8-11 x 2 | 60° | 60° | 39.5 |
| L281C | L310C L312C | S6038XX | 8.000 | 3.250 | 5.250 | 1.000 | 3.500 | 6.500 | (6) 5/8-11 x 2 | 40° | 80° | 28.0 |
| L289C | | S6040XX | 8.900 | 3.500 | 6.000 | 1.250 | 4.125 | 7.375 | (4) 3/4-10 x 2-1/4 | 90° | 90° | 39.8 |
| L210C | | S6043XX | 10.000 | 4.000 | 7.125 | 1.250 | 5.250 | 8.500 | (5) 3/4-10 x 2-1/4 | 72° | 72° | 58.6 |
| L211C | | S6044XX | 11.600 | 4.500 | 8.625 | 1.250 | 6.375 | 10.000 | (6) 3/4-10 x 2-1/4 | 60° | 60° | 90.4 |
| L214C | Contact Factory | | | | | | | | | | | |
| L217C | | | | | | | | | | | | |
| L220C | | | | | | | | | | | | |

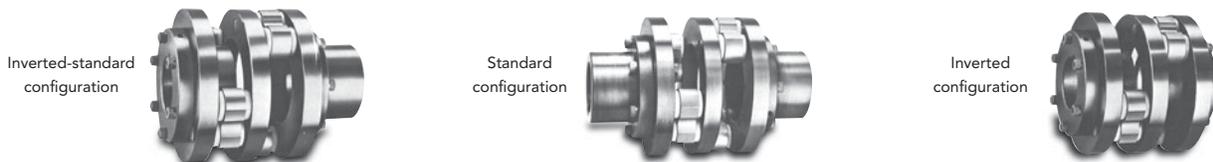
†Please specify bore and keyway size.

*L230C hubs have threaded mounting holes. All other hubs have clearance holes as shown above.

| Standard Hub Data for Inline and 5-D Couplings (Inch) | | | | | | | | | | | |
|-------------------------------------------------------|--------------|--------|-------|-------|-------|-----------|--------|----------------------------|----------|---------|-------------------|
| Used on Coupling | Hub Part No. | A | B | C | E | Max Bore† | G | Number & Size of Fasteners | α | β | Hub Wts. Net Lbs. |
| L431C/D L442C/D | S6026XX | 3.000 | 1.250 | 3.000 | 1.250 | 1.500 | 2.412 | (3) 1/4-20 x 1 | 120° | 120° | 2.5 |
| L436C/D L448C/D** | S6029XX | 3.613 | 1.750 | 2.500 | 0.687 | 1.750 | 3.000 | (6) 1/4-20 x 1-1/4 | 60° | 60° | 3.4 |
| L463C/D L485C/D** | S6034XX | 6.250 | 3.000 | 3.937 | 1.000 | 2.625 | 5.000 | (6) 1/2-13 x 2 | 60° | 60° | 15.5 |
| L481C/D L411C/D** | S6037XX | 8.125 | 4.000 | 5.437 | 1.250 | 3.500 | 7.000 | (8) 5/8-11 x 2-1/4 | 45° | 45° | 36.4 |
| L536S | S6027XX | 3.375 | 1.250 | 2.000 | 0.687 | 1.250 | 2.750 | (6) 5/16-18 x 1 | 40° | 80° | 2.2 |
| L558S L564S | S6032XX | 5.250 | 1.875 | 3.625 | 0.687 | 2.500 | 4.375 | (6) 5/16-18 x 1 | 60° | 60° | 7.6 |
| L585S | S6033XX | 5.938 | 2.125 | 3.750 | 0.750 | 2.500 | 4.625 | (6) 7/16-14 x 1-3/4 | 40° | 80° | 10.1 |
| L582S | S6039XX | 8.000 | 2.875 | 5.375 | 1.000 | 3.750 | 6.625 | (5) 5/8-11 x 2 | 72° | 72° | 26.1 |
| L511S | S6038XX | 8.000 | 3.250 | 5.250 | 1.000 | 3.500 | 6.500 | (6) 5/8-11 x 2 | 40° | 80° | 28.0 |
| L514S | S6044XX | 11.600 | 4.500 | 8.625 | 1.250 | 6.375 | 10.000 | (6) 3/4-10 x 2-1/4 | 60° | 60° | 90.4 |

†Please specify bore and keyway size.

**Only these sizes will accept an inverted hub configuration to reduce axial length.



Standard Keyways - Inch Bore Hubs

| Bore Size | | Keyway | Bore Size | | Keyway |
|-----------|-------|-------------|-----------|-------|-------------|
| Over | To | | Over | To | |
| 0.437 | 0.562 | 0.125x0.062 | 2.250 | 2.750 | 0.625x0.312 |
| 0.562 | 0.875 | 0.187x0.094 | 2.750 | 3.250 | 0.750x0.375 |
| 0.875 | 1.250 | 0.250x0.125 | 3.250 | 3.750 | 0.875x0.437 |
| 1.250 | 1.375 | 0.312x0.156 | 3.750 | 4.500 | 1.000x0.500 |
| 1.375 | 1.750 | 0.375x0.187 | 4.500 | 5.500 | 1.250x0.625 |
| 1.750 | 2.250 | 0.500x0.250 | 5.500 | 6.500 | 1.500x0.750 |

Standard Keyways - Metric Bore Hubs

| Bore Size | | Keyway | Bore Size | | Keyway |
|-----------|----|--------|-----------|-----|--------|
| Over | To | | Over | To | |
| 10 | 12 | 4x1.8 | 58 | 65 | 18x4.4 |
| 12 | 17 | 5x2.3 | 65 | 75 | 20x4.9 |
| 17 | 22 | 6x2.8 | 75 | 85 | 22x5.4 |
| 22 | 30 | 8x3.3 | 85 | 95 | 25x5.4 |
| 30 | 38 | 10x3.3 | 95 | 110 | 28x6.4 |
| 38 | 44 | 12x3.3 | 110 | 130 | 32x7.4 |
| 44 | 50 | 14x3.8 | 130 | 150 | 36x8.4 |
| 50 | 58 | 16x4.3 | 150 | 170 | 40x9.4 |

Note: Inch bore hubs will be supplied with inch size setscrews. Metric bore hubs will be supplied with metric size setscrews. Standard keyways are for square keys. Keyways for rectangular keys are available - consult factory.

Bore Tolerances

| Nominal | | Bore Tolerance | | | |
|----------------|-------|----------------|---------|--------------|---------|
| Shaft Diameter | | Class 1 | | Interference | |
| Over | To | Clearance Fit | | Fit | |
| 0.437 | 1.500 | -0.000 | +0.001 | -0.001 | -0.0005 |
| 1.500 | 2.000 | -0.000 | +0.001 | -0.002 | -0.001 |
| 2.000 | 3.000 | -0.000 | +0.0015 | -0.002 | -0.001 |
| 3.000 | 4.000 | -0.000 | +0.0015 | -0.003 | -0.0015 |
| 4.000 | 5.000 | -0.000 | +0.002 | -0.0035 | -0.002 |
| 5.000 | 6.000 | -0.000 | +0.002 | -0.004 | -0.0025 |

Based on nominal shaft diameter (AGMA Standard 511.02) Clearance Fit Standard. Metric hub bores will be supplied with H7 clearance fit as standard. S7 interference fit available.

Service Factor Guide

| | |
|--------------|-----|
| Uniform | 1.0 |
| Light Shock | 1.5 |
| Medium Shock | 2.0 |
| Heavy Shock | 2.5 |

The service factors listed are intended only as a general guide. For typical service factors used in various applications, refer to "AGMA Standard-Lc classification and Service Factors For Flexible Couplings" (AGMA 514.02).

How to Select An Inline or 5-D Coupling Selection Formula

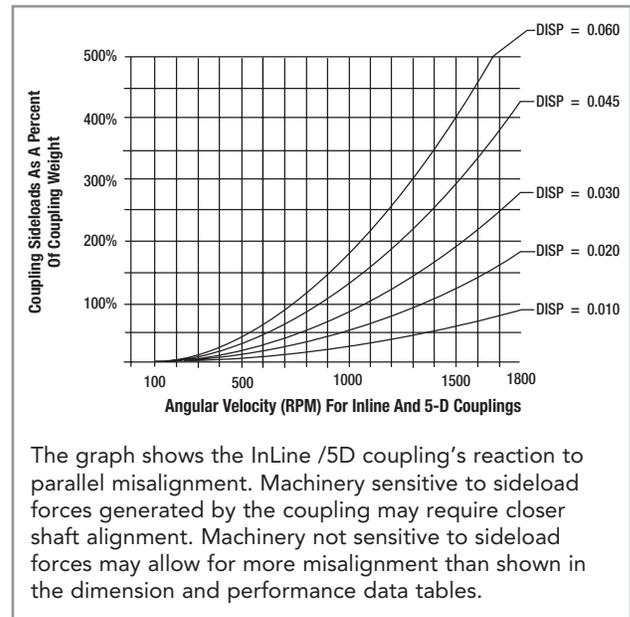
$$(HP/100 \text{ RPM}) = \frac{(\text{Required HP}) \times (\text{Service Factor}) \times 100}{\text{RPM}}$$

Selection Formula Example

Required HP = 100 at 1750 RPM and 1.5 Service Factor

$$(HP/100 \text{ RPM}) = \frac{100 \times 1.5 \times 100}{1750} = 8.57$$

Look for a coupling size which has a HP/100 RPM rating equal to or greater than the required 8.57. For this example the coupling size L463C with a HP/100 RPM rating of 19.04 can be selected. If the backlash requirement is not critical the coupling L463D, which does not require any further lubrication, can be chosen.



The graph shows the InLine /5D coupling's reaction to parallel misalignment. Machinery sensitive to sideload forces generated by the coupling may require closer shaft alignment. Machinery not sensitive to sideload forces may allow for more misalignment than shown in the dimension and performance data tables.

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CD® Couplings

High-performance couplings that outperform and outlast bellows and steel disc designs. The unique design of the composite disc enables the CD Couplings to withstand punishing applications and deliver high precision performance. Fully Customizable.



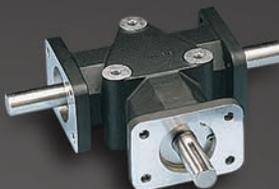
Keyless Shaft Locking Devices

ETP® keyless connections and Posi-Lok® keyless bushings provide quick, easy and accurate assembly of mounted shaft components. Both inch and metric bore sizes are available from stock.



ServoClass® Couplings

Designed for demanding servomotor applications. Zero backlash, high torsional stiffness, high speed design. Features flexible metal discs for high misalignment capacity and keyless clamp-type mounting hubs.



Crown Gear Drives

Available in 5-sizes, 3 configurations, and with 1:1 and 2:1 ratios. High quality AGMA class 10 spiral bevel gears. Stainless steel shafts and either black anodized or IP65-Rated nickel-plated aluminum housing.



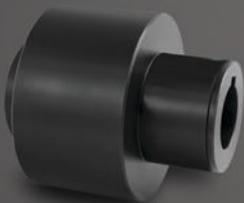
Schmidt Offset Couplings

Designed to handle high amounts (up to 17") of parallel shaft offset with constant angular velocity. Standard models with torque capacities up to 459,000 in-lbs and extensive custom capabilities.



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Easy to install and maintenance free. Zero-Max® Drives offer infinitely variable speeds from 0 rpm to 1/4 of input rpm. 5 models with torque ranges from 12 in-lbs to 200 in-lbs.



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Torque Tender® Couplings provide reliable overload protection in any mechanical power transmission system. Full selection of styles and sizes with set-point torque ranges from 3 to 3,000 in-lbs.



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Simple conversion of rotary motion into precise linear motion. Available in five models and multiple configurations. Roh'Lix actuators have thrust ratings from 5 to 200 lbs. All models feature built-in overload protection.



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Designed to protect hydraulic motors and pumps from radial/axial loads and to provide additional seal protection. 11 models available for mounts from SAE A to SAE F. Fully customizable.

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