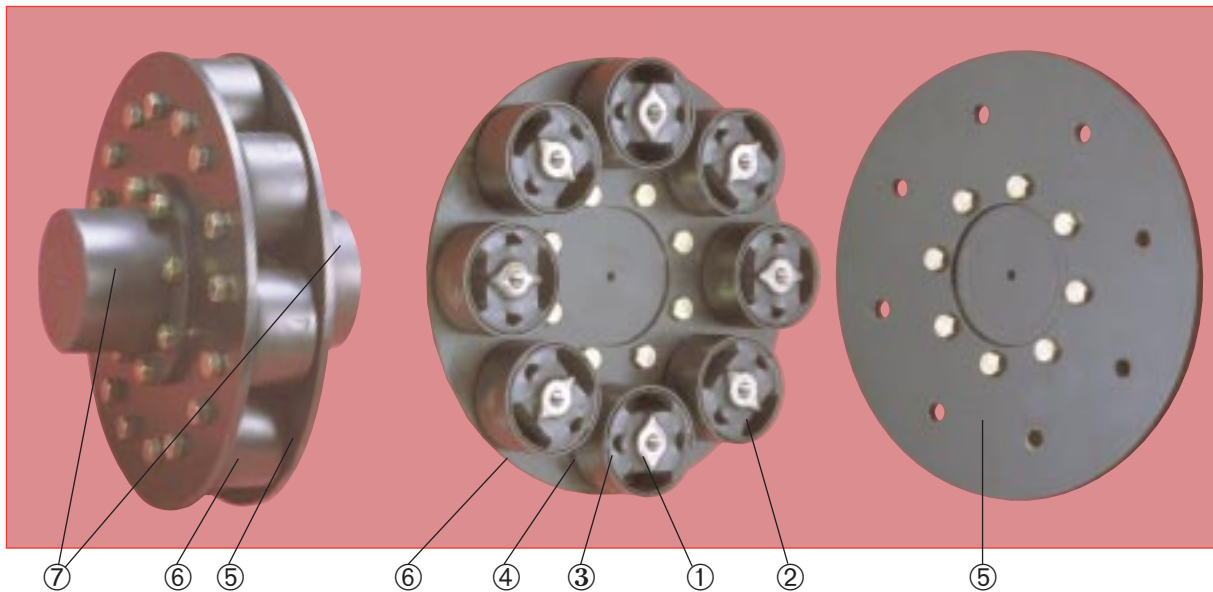


AXOFLEX

| | | | | | | | |
|---|-----------------------|---|--------------------|-----|-------------------|---|---------------------|
| * | Torsional flexibility | * | Radial flexibility | * * | Axial flexibility | * | Conical flexibility |
|---|-----------------------|---|--------------------|-----|-------------------|---|---------------------|



DESCRIPTION

- **Flexible element** comprising a variable number of flexible bushes, depending on the torque to be transmitted.
 - ① Inner with tapped or smooth holes (normal mounting or on flywheel).
 - ② Precompressed natural rubber bonded to inner 1 and to outer the half-cylinders ③.
 - ③ Half-cylinders bonded to the rubber.
 - ④ Outer housing ensuring precompression of rubber by exerting pressure on the half-cylinders ③.
- **Steel disks :**
 - ⑤ Flange to which the inner studs are attached (normal mounting).
 - ⑥ Disk to which the studs are attached (flywheel mounting).
- **Die cast steel hubs :**
 - ⑦ The two hubs are identical. They may be bolted to disks ⑤ or ⑥ depending on the mounting used.

OPERATION

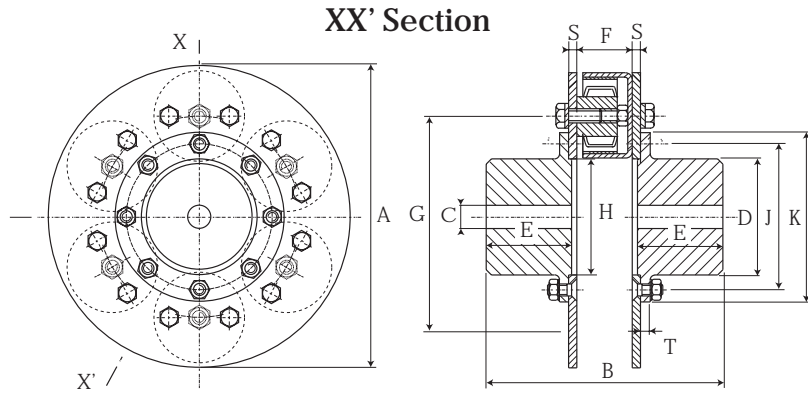
The AXOFLEX coupling is designed with the following features :

- Radial disassembly without moving the machines that are coupled (usually very large machines).
- Precompression of the rubber which limits operation under tension.

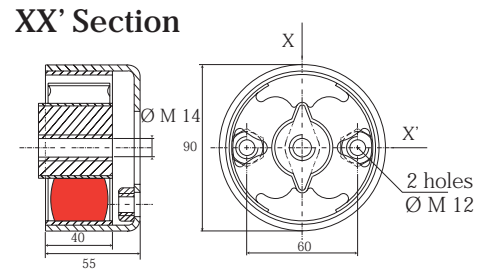
Advantages :

- Good axial flexibility which allows great axial displacement, for example in the case of conical rotor machines.

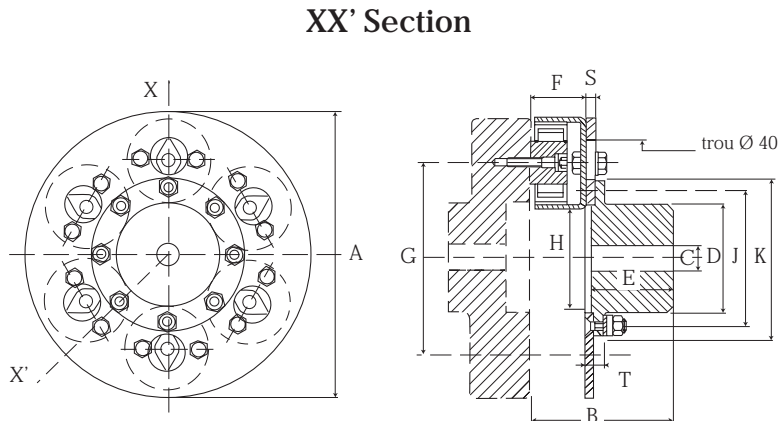
DIMENSIONS AXO2



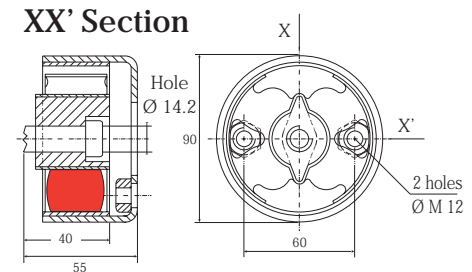
AXO 2 Coupling



AXO 2 stud N° 525210 Weight : 0.9 kg



AXO 2V Flywheel coupling



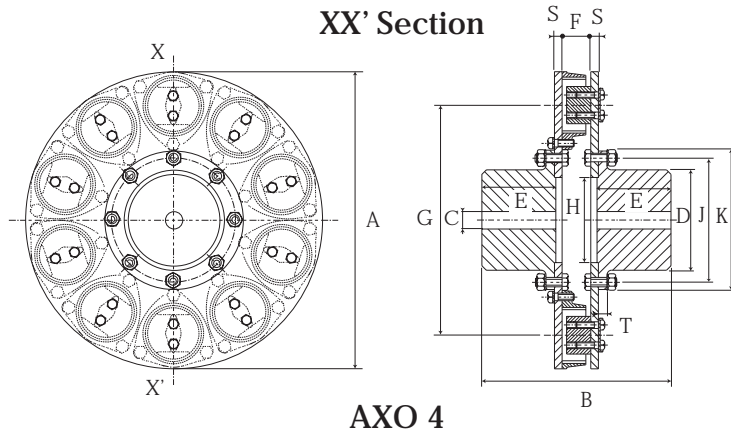
AXO 2V stud N° 525211 Weight : 0.9 kg

| Nominal torque N.m | Max torque N.m | Max speed rpm | Hole size C mm | | A mm | B mm type | | D mm | E mm | Ref. Standard coupling | Ref. Flywheel coupling | F mm | G mm | H mm | J mm | K mm | S mm | T mm | Weight stand. coupling |
|--------------------|----------------|---------------|----------------|-----|------|-----------|-------|------|------|------------------------|------------------------|------|------|------|------|------|------|------|------------------------|
| | | | min | max | | stan. | flyw. | | | | | | | | | | | | |
| 600 | 1200 | 3000 | 18 | 60 | 270 | 181 | 138 | 86 | 60 | 615203 | 615253 | 55 | 180 | 85 | 115 | 138 | 6 | 7 | 14 |
| 800 | 1600 | 3000 | 18 | 60 | 270 | 181 | 138 | 86 | 60 | 615204 | 615254 | 55 | 180 | 85 | 115 | 138 | 6 | 7 | 15 |
| 1300 | 2600 | 3000 | 23 | 80 | 300 | 235 | 145 | 115 | 85 | 615206 | 615256 | 55 | 200 | 115 | 145 | 168 | 8 | 9.5 | 28 |
| 2300 | 4600 | 2500 | 23 | 80 | 364 | 235 | 145 | 115 | 85 | 615208 | 615258 | 55 | 268 | 115 | 145 | 168 | 8 | 9.5 | 45 |
| 3600 | 7200 | 2500 | 28 | 100 | 424 | 274 | 164 | 145 | 102 | 615210 | 615260 | 55 | 324 | 145 | 180 | 210 | 10 | 12.5 | 72 |
| 5000 | 10000 | 2000 | 28 | 120 | 475 | 345 | 200 | 177 | 136 | 615212 | 615262 | 55 | 380 | 178 | 213 | 247 | 12 | 16 | 103 |

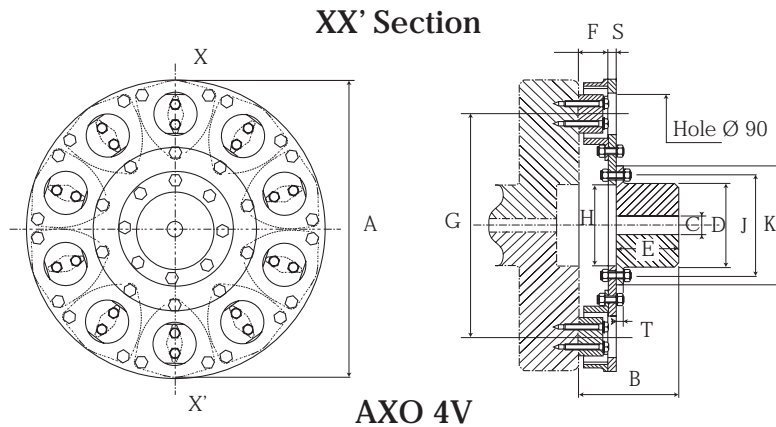
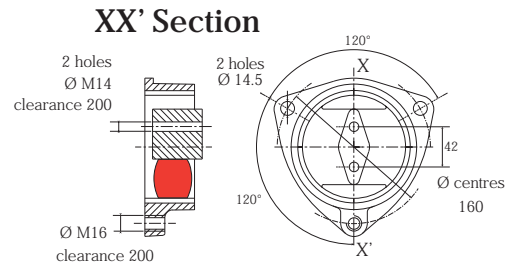
-See current price list for availability of items.



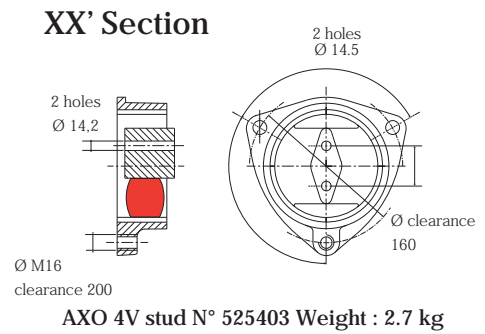
DIMENSIONS AXO4



AXO 4 Coupling



AXO 4V Flywheel coupling



| Nominal torque N.m | Max torque N.m | Max speed rpm | Hole size C mm | | A mm | B mm | | D mm | E mm | Ref. Standard coupling | Ref. Flywheel coupling | F mm | G mm | H mm | J mm | K mm | S mm | T mm | Weight stand. coupling |
|-----------------------|-------------------|------------------|-------------------|------|---------|---------|------|---------|---------|------------------------------|------------------------------|---------|---------|---------|---------|---------|---------|---------|------------------------------|
| | | | mini | maxi | | st. | fly. | | | | | | | | | | | | |
| 5000 | 10000 | 1800 | 28 | 100 | 480 | 279 | 170 | 145 | 102 | 615406 | 615456 | 60 | 340 | 145 | 180 | 210 | 10 | 12.5 | 80 |
| 7500 | 15000 | 1800 | 28 | 120 | 513 | 346 | 203 | 177 | 136 | 615408 | 615458 | 60 | 373 | 178 | 213 | 247 | 10 | 16 | 115 |
| 12000 | 24000 | 1500 | 28 | 120 | 622 | 358 | 209 | 177 | 136 | 615410 | 615460 | 60 | 482 | 178 | 213 | 247 | 16 | 16 | 178 |
| 12000 | 24000 | 1500 | 32 | 150 | 622 | 396 | 228 | 210 | 155 | 615440 | 615490 | 60 | 482 | 178 | 260 | 290 | 16 | 18 | 200 |
| 17500 | 35000 | 1500 | 32 | 150 | 720 | 396 | 228 | 210 | 155 | 615412 | 615462 | 60 | 580 | 178 | 260 | 290 | 16 | 18 | 240 |
| 17500 | 35000 | 1500 | 36 | 170 | 720 | 516 | 288 | 240 | 215 | 615442 | 615492 | 60 | 580 | 240 | 290 | 335 | 16 | 24 | 300 |
| 24000 | | 1400 | 36 | 170 | 840 | 524 | 292 | 240 | 215 | 615414 | 615464 | 60 | 700 | 240 | 290 | 335 | 20 | 24 | 400 |
| 24000 | | 1400 | 36 | 200 | 840 | 570 | 315 | 285 | 240 | 615444 | 615494 | 60 | 700 | 240 | 335 | 380 | 20 | 40 | 500 |
| 40000 | | 1200 | 36 | 200 | 1040 | 590 | 325 | 285 | 240 | 615418 | 615468 | 60 | 900 | 240 | 335 | 380 | 30 | 40 | 700 |

1 Nm \neq 0.1 mkg

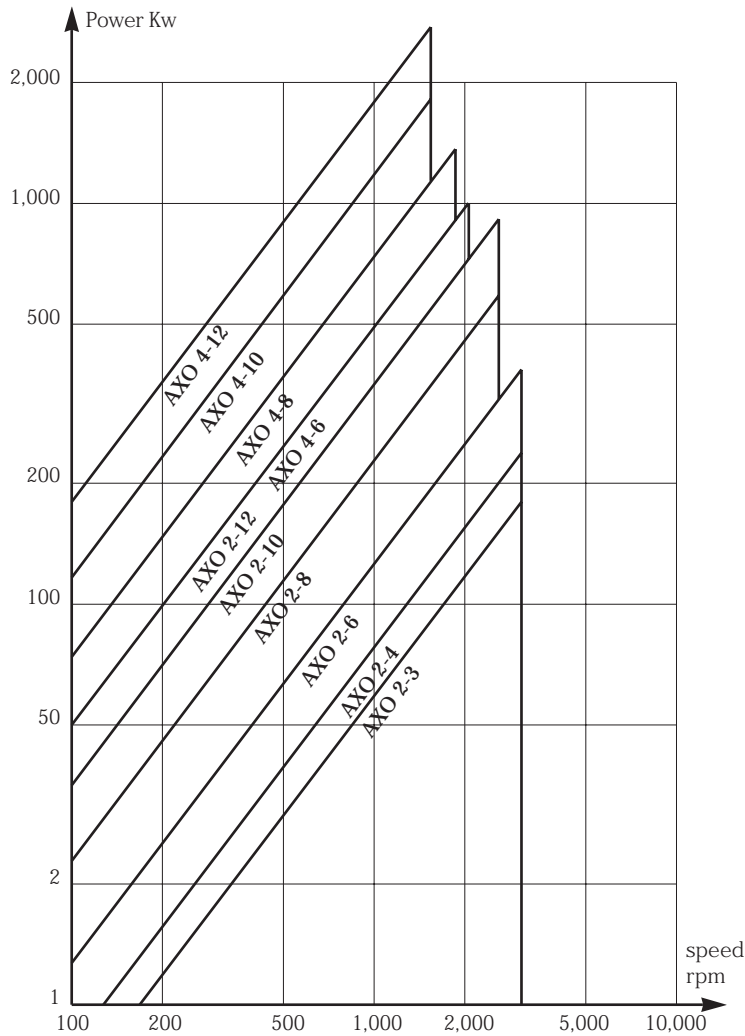
See current price list for availability of items.

The maximum torque is considered to be an infrequent start-up torque and is not periodic.

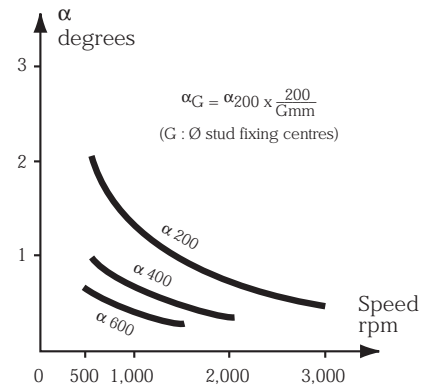


OPERATING LIMITS

POWER RANGE



CONICAL MISALIGNMENT



AXIAL DISPLACEMENT

| Nominal torque N.m | Axial displacement at 1500 rpm |
|-----------------------|-----------------------------------|
| 600 | 2 mm |
| 800 | 2 mm |
| 1300 | 2 mm |
| 2300 | 2 mm |
| 3600 | 2 mm |
| 5000 | 3 mm |
| 7500 | 3 mm |
| 12000 | 3 mm |
| 17500 | 3 mm |

OPERATING CHARACTERISTICS AXO 2

| Nominal torque N.m | Vibrat; coupling N.m | Torsion under NT degrees | STIFFNESS | | |
|-----------------------|----------------------------|--------------------------------|-----------------|------------------|------------------------|
| | | | AXIAL daN/mm | RADIAL daN/mm | TORSIONAL m.KN/rad. |
| 600 | 300 | 3° 30' | 22 | 75 | 10.9 |
| 800 | 400 | 3° 30' | 30 | 100 | 14.3 |
| 1300 | 650 | 3° | 45 | 150 | 25.8 |

| Nominal torque N.m | Vibrat; coupling N.m | Torsion under NT degrees | STIFFNESS | | |
|-----------------------|----------------------------|--------------------------------|-----------------|------------------|------------------------|
| | | | AXIAL daN/mm | RADIAL daN/mm | TORSIONAL m.KN/rad. |
| 2300 | 1150 | 2° 20' | 60 | 210 | 53.3 |
| 3600 | 1800 | 2° | 75 | 250 | 114.6 |
| 5000 | 2500 | 1° 50' | 90 | 300 | 190 |

1 Nm ≠ 0.1 mkg

OPERATING CHARACTERISTICS AXO 4

| Nominal torque N.m | Vibrat; coupling N.m | Torsion under NT degrees | STIFFNESS | | |
|-----------------------|----------------------------|--------------------------------|-----------------|------------------|------------------------|
| | | | AXIAL daN/mm | RADIAL daN/mm | TORSIONAL m.KN/rad. |
| 5000 | 2500 | 1° 50' | 1° 50' | 360 | 157 |
| 8000 | 4000 | 1° 40' | 1° 40' | 480 | 252 |
| 12000 | 6000 | 1° 20' | 1° 20' | 600 | 528 |

| Nominal torque N.m | Vibrat; coupling N.m | Torsion under NT degrees | STIFFNESS | | |
|-----------------------|----------------------------|--------------------------------|-----------------|------------------|------------------------|
| | | | AXIAL daN/mm | RADIAL daN/mm | TORSIONAL m.KN/rad. |
| 17500 | 8750 | 1° | 200 | 720 | 916 |
| 24000 | 12000 | 0° 50' | 240 | 850 | 1550 |
| 40000 | 20000 | 0° 40' | 300 | 1100 | 3300 |

1 Nm ≠ 0.1 mkg



PARTS LIST

| Coupling reference | Flexible stud reference | Quantity | Flange reference | Quantity | Disk reference | Quantity |
|--------------------|-------------------------|----------|------------------|----------|-----------------|----------|
| 615203 | 525210 | 3 | 321138 | 2 | 351026 - 351027 | 1 - 1 |
| 615204 | 525210 | 4 | 321136 | 2 | 351028 - 351029 | 1 - 1 |
| 615206 | 525210 | 6 | 321147 | 2 | 351011 - 351012 | 1 - 1 |
| 615208 | 525210 | 8 | 321147 | 2 | 351013 - 351014 | 1 - 1 |
| 615210 | 525210 | 10 | 321154 | 2 | 351015 - 351016 | 1 - 1 |
| 615212 | 525210 | 12 | 321167 | 2 | 351017 - 351018 | 1 - 1 |
| 615253 | 525211 | 3 | 321138 | 1 | 351042 | 1 |
| 615254 | 525211 | 4 | 321136 | 1 | 351043 | 1 |
| 615256 | 525211 | 6 | 321147 | 1 | 351044 | 1 |
| 615258 | 525211 | 8 | 321147 | 1 | 351045 | 1 |
| 615260 | 525211 | 10 | 321154 | 1 | 351046 | 1 |
| 615262 | 525211 | 12 | 321167 | 1 | 351047 | 1 |

| Coupling reference | Flexible stud reference | Quantity | Flange reference | Quantity | Disk reference | Quantity |
|--------------------|-------------------------|----------|------------------|----------|-----------------|----------|
| 615406 | 525400 | 6 | 321154 | 2 | 351665 - 351666 | 1 - 1 |
| 615408 | 525400 | 8 | 321167 | 2 | 351667 - 351668 | 1 - 1 |
| 615410 | 525400 | 10 | 321167 | 2 | 351663 - 351664 | 1 - 1 |
| 615412 | 525400 | 12 | 321191 | 2 | 351659 - 351660 | 1 - 1 |
| 615414 | 525400 | 14 | 324602 | 2 | 351655 - 351656 | 1 - 1 |
| 615418 | 525400 | 18 | 324601 | 2 | 351651 - 351652 | 1 - 1 |
| 615440 | 525400 | 10 | 321191 | 2 | 351661 - 351662 | 1 - 1 |
| 615442 | 525400 | 12 | 324602 | 2 | 351657 - 351658 | 1 - 1 |
| 615444 | 525400 | 14 | 324601 | 2 | 351653 - 351654 | 1 - 1 |
| 615456 | 525403 | 6 | 321154 | 1 | 351669 | 1 |
| 615458 | 525403 | 8 | 321167 | 1 | 351670 | 1 |
| 615460 | 525403 | 10 | 321167 | 1 | 351671 | 1 |
| 615462 | 525403 | 12 | 321191 | 1 | 351672 | 1 |
| 615464 | 525403 | 14 | 324602 | 1 | 351675 | 1 |
| 615468 | 525403 | 18 | 324601 | 1 | 351677 | 1 |
| 615490 | 525403 | 10 | 321191 | 1 | 351673 | 1 |
| 615492 | 525403 | 12 | 324602 | 1 | 351676 | 1 |
| 915494 | 525403 | 14 | 324601 | 1 | 351674 | 1 |

ASSEMBLY

Method : (normal)

- Attach each of the flanges to the ends of the appropriate shafts.
- Use the specially machined recess to centre the disks onto the flanges and screw together.
- Attach the external armature of the studs to the appropriate disk.
- Attach the internal armature of the studs to the other disk.

Torque for the bolts attaching the studs.

Ø 12 → 75 N.m

Ø 14 → 122 N.m

Ø 12 → 185 N.m

Method : (flywheel)

- Mount the flange onto the shaft end.
- Bolt the disk onto the flange.
- Attach the external armature of the studs to the disk.
- Attach the internal armature of the studs to the flywheel of the second machine.

