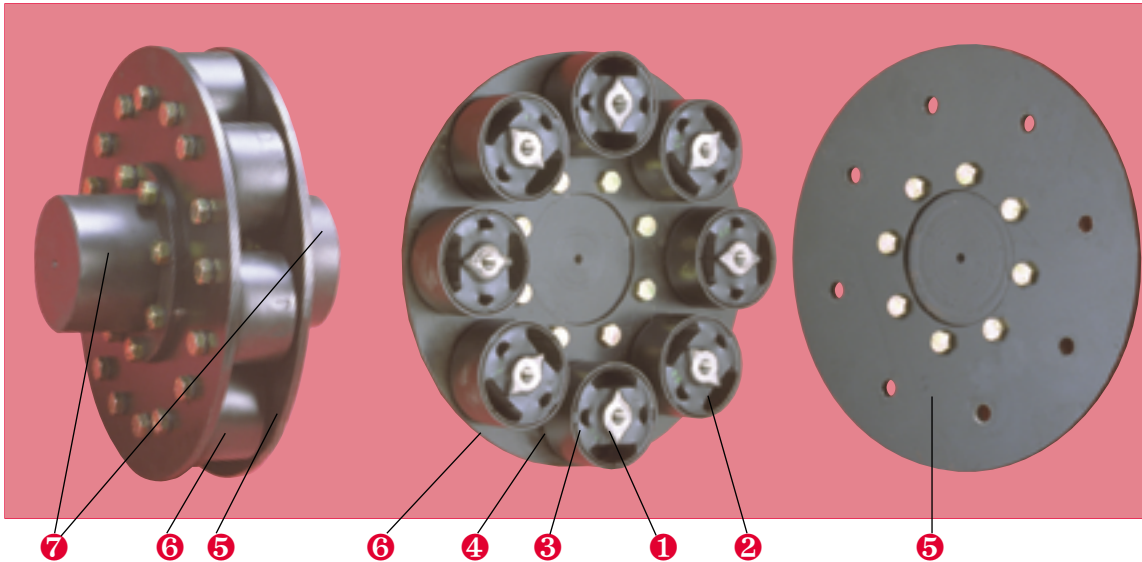




AXOFLEX®

* 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

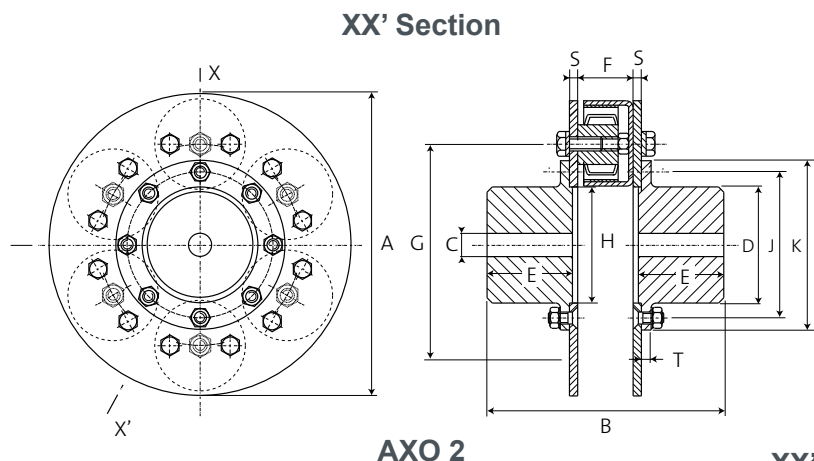
The AXOFLEX coupling is designed with the following features :

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

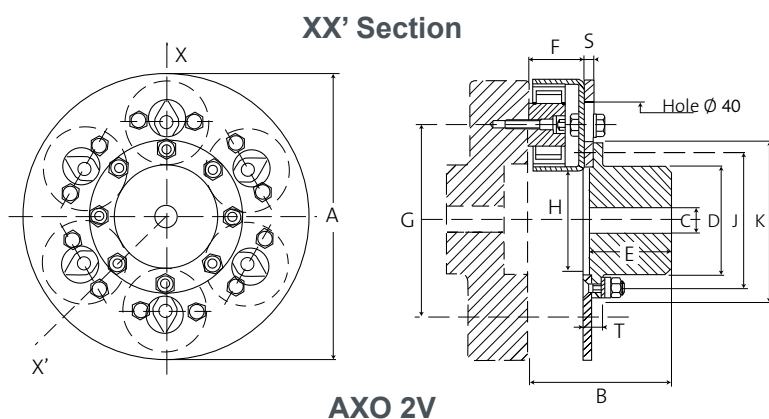
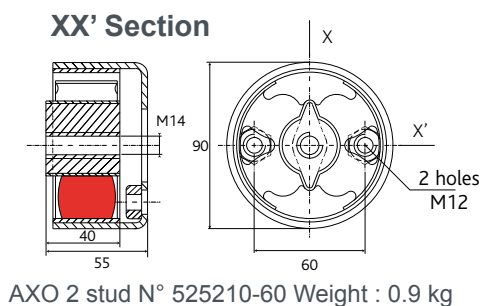
Advantage :

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

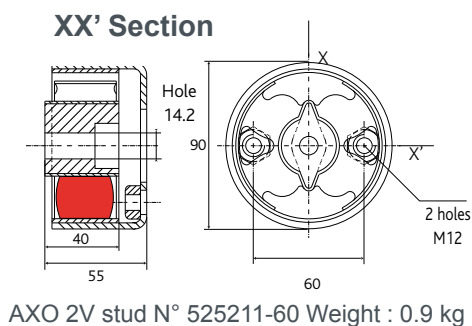
DIMENSIONS AXO 2



AXO 2 Coupling



AXO 2V Flywheel coupling



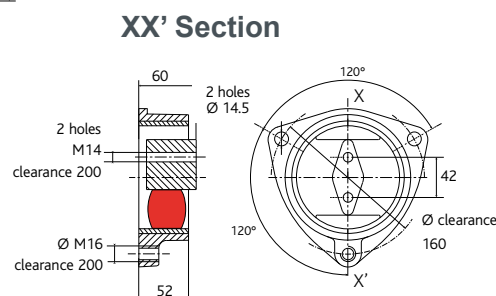
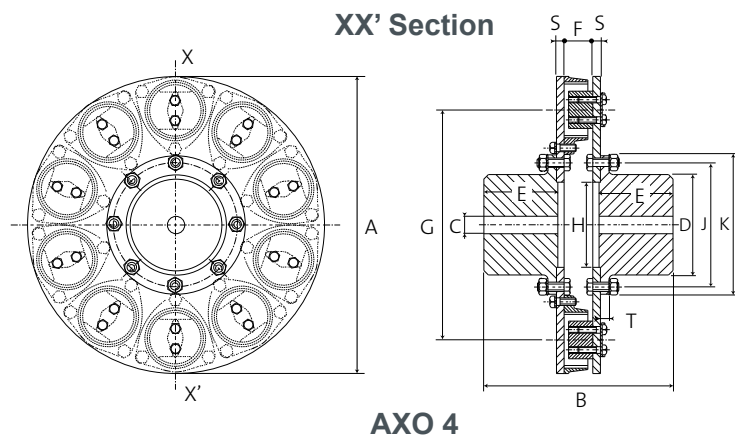
Flanges supplied unbored

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

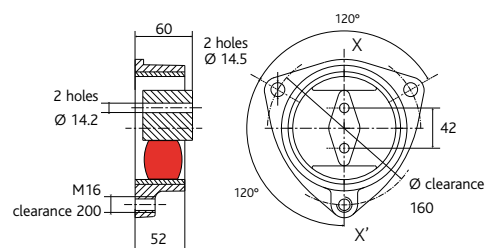
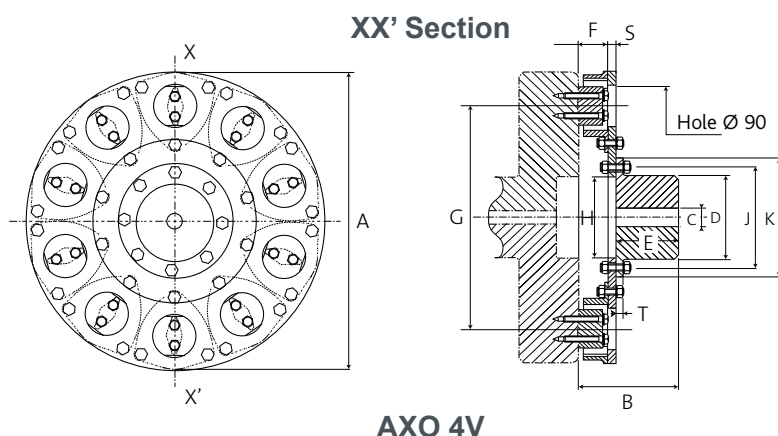
1 N.m ≈ 0.1 mkg

Please see current price list for availability of items.

DIMENSIONS AXO 4



AXO 4 Coupling



AXO 4V Flywheel coupling

Flanges supplied unbored

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
			min	ma		stan.	flyw.												
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

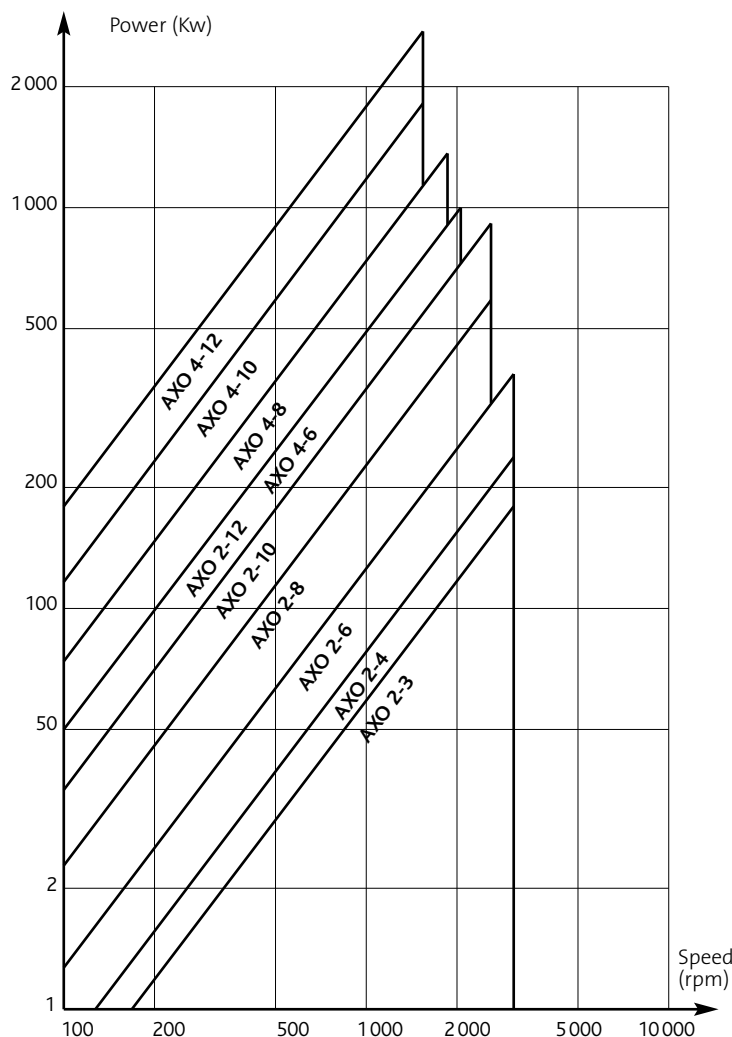
1 N.m ≈ 0.1 mkg

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

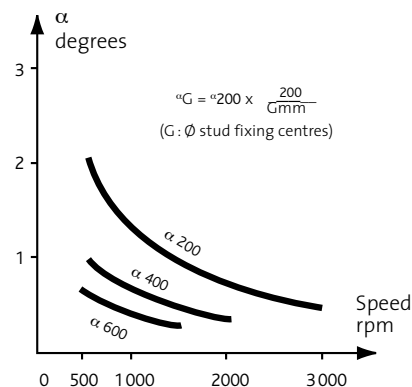
Please see current price list for availability of items.

OPERATING LIMITS

POWER RANGE



CONICAL MISALIGNMENT



RADIAL MISALIGNMENT

Nominal torque N.m	Axial displacement at 1,500 rpm
600	2 rpm
800	2 rpm
1 300	2 rpm
2 300	2 rpm
3 600	2 rpm
5 000	3 rpm
7 500	3 rpm
12 000	3 rpm
17 500	3 rpm

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
1 300	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.)
2 300	1 150	2° 20'	60	210	53.3
3 600	1 800	2°	75	250	114.6
5 000	2 500	1° 50'	90	300	190

1 N.m ≈ 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.)
5 000	2 500	1° 50'	100	360	157
8 000	4 000	1° 40'	130	480	252
12 000	6 000	1° 20'	170	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.)
17 500	8 750	1°	200	720	916
24 000	12 000	0° 50'	240	850	1550
40 000	20 000	0° 40'	300	1100	3300

1 N.m ≈ 0.1 mkg

PARTS LIST

Coupling reference	Flexible stud reference	Quantity	Flange reference	Quantity	Disk reference	Quantity
615203	525210-60	3	321138	2	351026 -351027	1 -1
615204	525210-60	4	321136	2	351028 -351029	1 -1
615206	525210-60	6	321147	2	351011 -351012	1 -1
615208	525210-60	8	321147	2	351013 -351014	1 -1
615210	525210-60	10	321154	2	351015 -351016	1 -1
615212	525210-60	12	321167	2	351017 -351018	1 -1
615253	525211-60	3	321138	1	351042	1
615254	525211-60	4	321136	1	351043	1
615256	525211-60	6	321147	1	351044	1
615258	525211-60	8	321147	1	351045	1
615260	525211-60	10	321154	1	351046	1
615262	525211-60	12	321167	1	351047	1

Coupling reference	Flexible stud reference	Quantity	Flange reference	Quantity	Disk reference	Quantity
615406	525400-60	6	321154	2	351665 -351666	1 -1
615408	525400-60	8	321167	2	351667 -351668	1 -1
615410	525400-60	10	321167	2	351663 -351664	1 -1
615412	525400-60	12	321191	2	351659 -351660	1 -1
615414	525400-60	14	324602	2	351655 -351656	1 -1
615418	525400-60	18	324601	2	351651 -351652	1 -1
615440	525400-60	10	321191	2	351661 -351662	1 -1
615442	525400-60	12	324602	2	351657 -351658	1 -1
615444	525400-60	14	324601	2	351653 -351654	1 -1
615456	525403-60	6	321154	1	351669	1
615458	525403-60	8	321167	1	351670	1
615460	525403-60	10	321167	1	351671	1
615462	525403-60	12	321191	1	351672	1
615464	525403-60	14	324602	1	351675	1
615468	525403-60	18	324601	1	351677	1
615490	525403-60	10	321191	1	351673	1
615492	525403-60	12	324602	1	351676	1
915494	525403-60	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 16 ➔ 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.