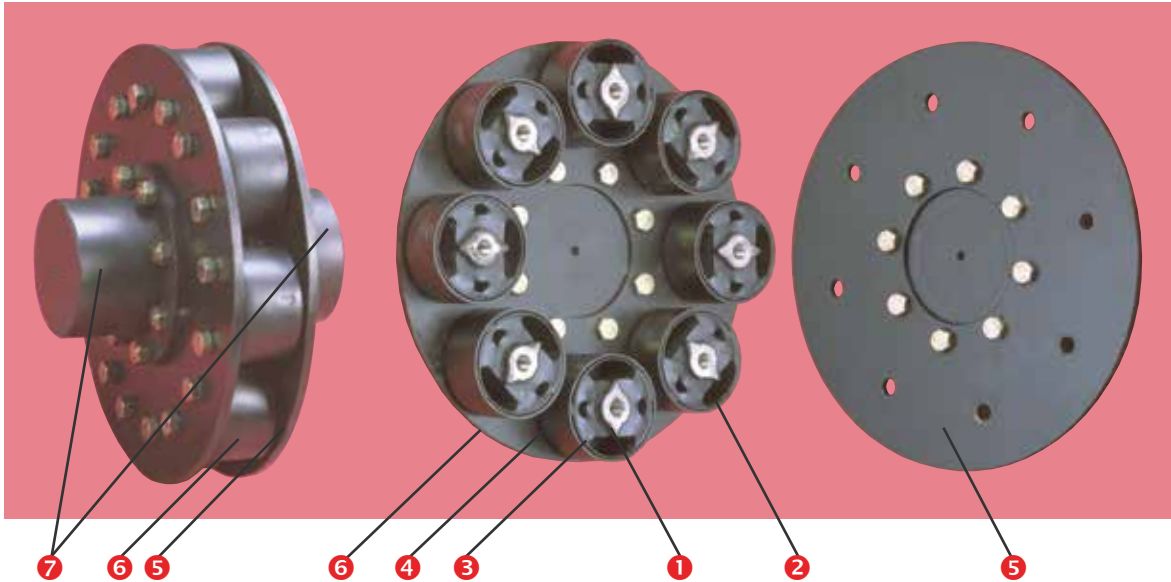




# AXOFLEX®

\* 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

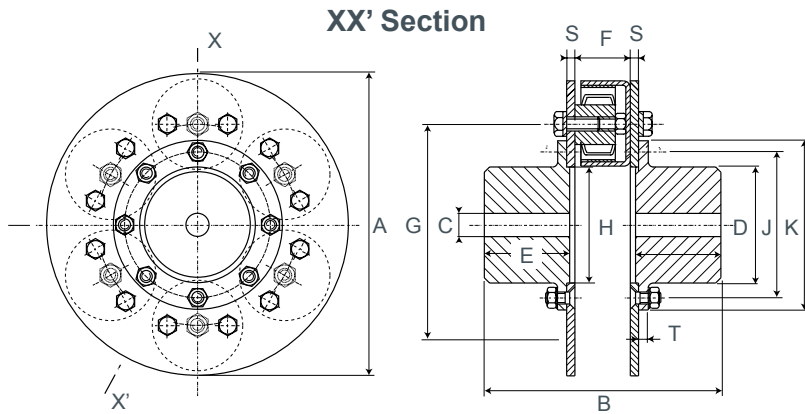
The AXOFLEX coupling is designed with the following features :

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

### Advantage

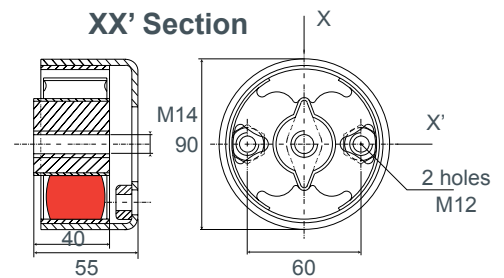
- Good axial flexibility which allows great axial displacement, for example in the case of conical rotor machines.

# DIMENSIONS AXO 2

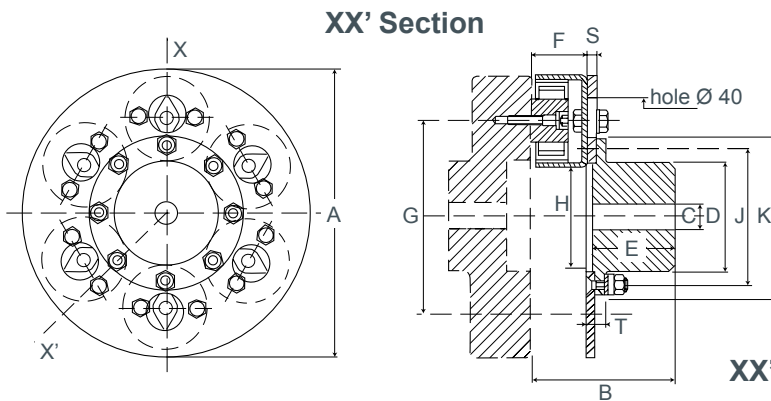


AXO 2

## AXO 2 Coupling

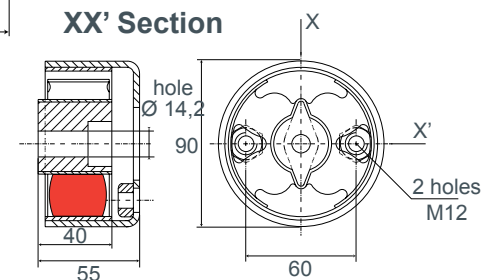


AXO 2 stud N° 525210-60 Weight : 0.9 kg



AXO 2V

## AXO 2V Flywheel coupling



AXO 2V stud N° 525211-60 Weight : 0.9 kg

### Flanges supplied unbores

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	max		stan.	flyw.												
600	1 200	3 000	18	60	270	181	138	86	60	615203	615253	55	180	85	115	138	6	7	14
800	1 600	3 000	18	60	270	181	138	86	60	615204	615254	55	180	85	115	138	6	7	15
1 300	2 600	3 000	23	80	300	235	145	115	85	615206	615256	55	200	115	145	168	8	9,5	28
2 300	4 600	2 500	23	80	364	235	145	115	85	615208	615258	55	268	115	145	168	8	9,5	45
3 600	7 200	2 500	28	100	424	274	164	145	102	615210	615260	55	324	145	180	210	10	12,5	72
5 000	10 000	2 000	28	120	475	345	200	177	136	615212	615262	55	380	178	213	247	12	16	103

1 N.m ≈ 0,1 mkg

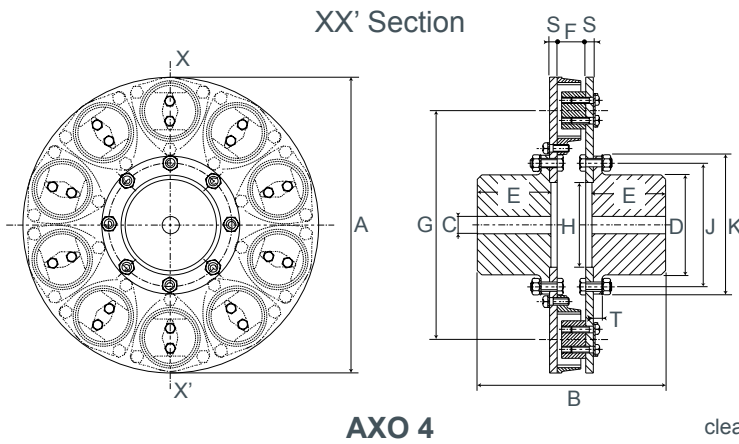
Please see current price list for availability of items.



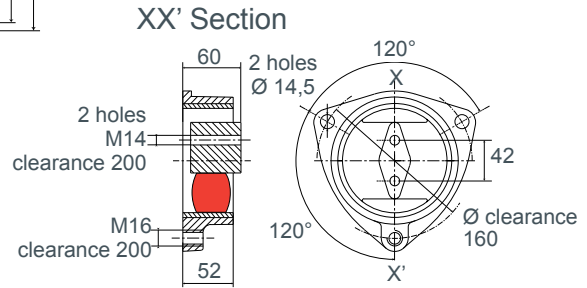
**HUTCHINSON**  
PAULSTRA

PAULSTRA - 61 rue Marius AUFAN - 92309 Levallois-Perret Cedex - France - T. +33 1 40 89 53 31 - F. +33 1 47 25 28 96  
www.paulstra-industry.com

# DIMENSIONS AXO 4

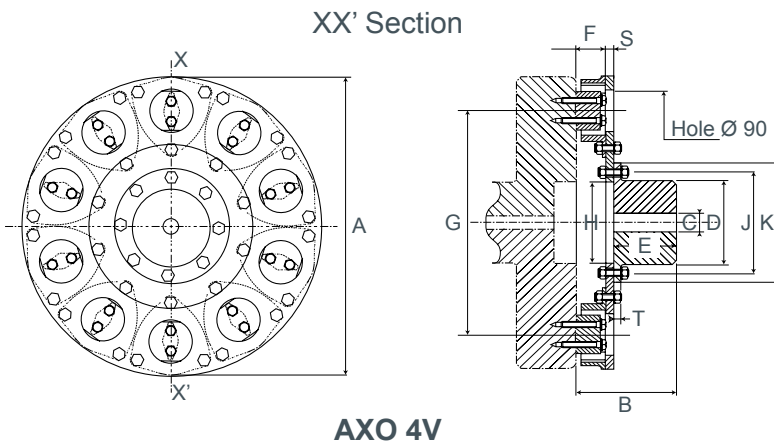


AXO 4

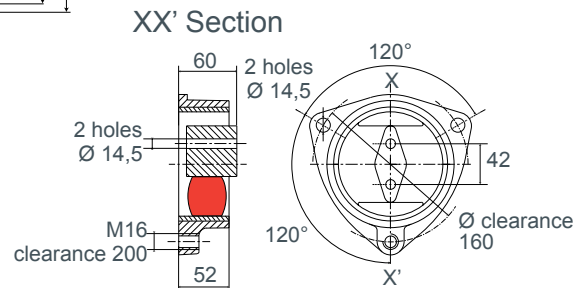


AXO 4 stud N° 525400-60 Weight : 2.7 kg

## AXO 4 Coupling



AXO 4V



AXO 4V stud N° 525403-60 Weight: 2.7 kg

## 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	max		stan.	flyw.												
5 000	10 000	1 800	28	100	480	279	170	145	102	615406	615456	60	340	145	180	210	10	12,5	80
7 500	15 000	1 800	28	120	513	346	203	177	136	615408	615458	60	373	178	213	247	10	16	115
12 000	24 000	1 500	28	120	622	358	209	177	136	615410	615460	60	482	178	213	247	16	16	178
12 000	24 000	1 500	32	150	622	396	228	210	155	615440	615490	60	482	178	260	290	16	18	200
17 500	35 000	1 500	32	150	720	396	228	210	155	615412	615462	60	580	178	260	290	16	18	240
17 500	35 000	1 500	36	170	720	516	288	240	215	615442	615492	60	580	240	290	335	16	24	300
24 000		1 400	36	170	840	524	292	240	215	615414	615464	60	700	240	290	335	20	24	400
24 000		1 400	36	200	840	570	315	285	240	615444	615494	60	700	240	335	380	20	40	500
40 000		1 200	36	200	1 040	590	325	285	240	615418	615468	60	900	240	335	380	30	40	700

1 N.m ≈ 0,1 mkg

Please see current price list for availability of items.

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

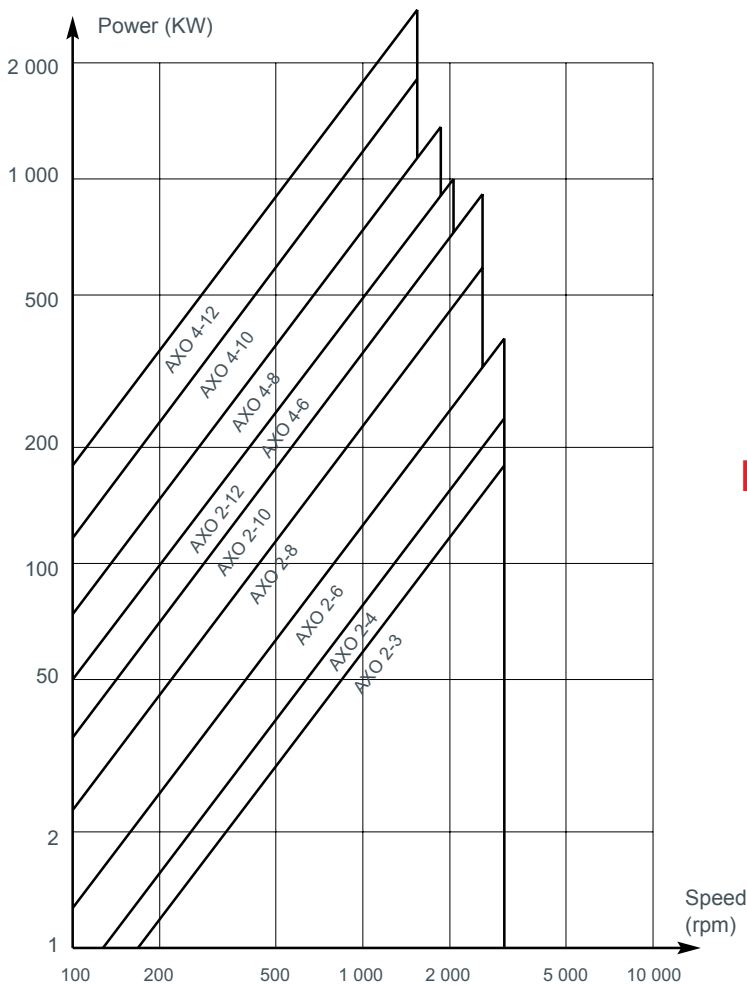


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PAULSTRA

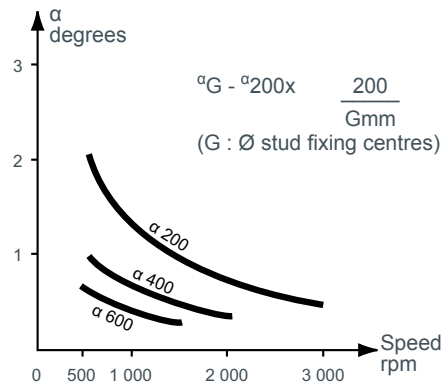
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# OPERATING LIMITS

## 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)	Vibrating 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

1 N.m ≈ 0,1 mkg

Nominal torque (N.m)	Vibrating 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

## OPERATING CHARACTERISTICS AXO 4

Nominal torque (N.m)	Vibrating 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

1 N.m ≈ 0,1 mkg

Nominal torque (N.m)	Vibrating 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	1 550
40 000	20 000	0° 40'	300	1 100	3 300



# PARTS LIST

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

Coupling reference	Flexible stud reference	Quantity	Flange reference	Quantity	Disk reference	Quantity
615406	<b>525400-60</b>	6	321154	2	351665 - 351666	1 - 1
615408	<b>525400-60</b>	8	321167	2	351667 - 351668	1 - 1
615410	<b>525400-60</b>	10	321167	2	351663 - 351664	1 - 1
615412	<b>525400-60</b>	12	321191	2	351659 - 351660	1 - 1
615414	<b>525400-60</b>	14	324602	2	351655 - 351656	1 - 1
615418	<b>525400-60</b>	18	324601	2	351651 - 351652	1 - 1
615440	<b>525400-60</b>	10	321191	2	351661 - 351662	1 - 1
615442	<b>525400-60</b>	12	324602	2	351657 - 351658	1 - 1
615444	<b>525400-60</b>	14	324601	2	351653 - 351654	1 - 1
615456	<b>525403-60</b>	6	321154	1	351669	1
615458	<b>525403-60</b>	8	321167	1	351670	1
615460	<b>525403-60</b>	10	321167	1	351671	1
615462	<b>525403-60</b>	12	321191	1	351672	1
615464	<b>525403-60</b>	14	324602	1	351675	1
615468	<b>525403-60</b>	18	324601	1	351677	1
615490	<b>525403-60</b>	10	321191	1	351673	1
615492	<b>525403-60</b>	12	324602	1	351676	1
615494	<b>525403-60</b>	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.

