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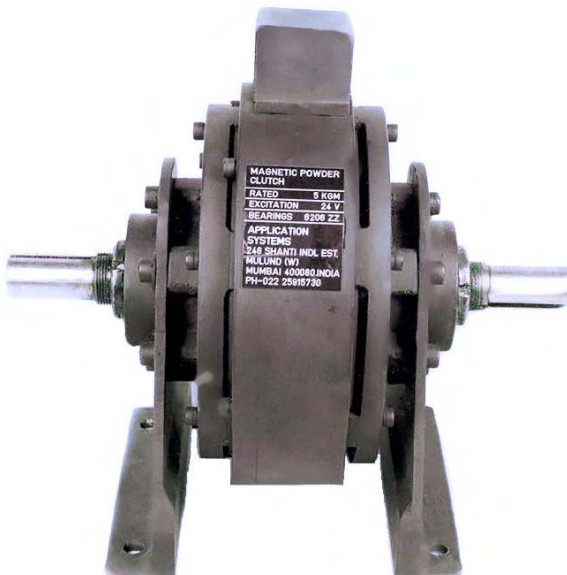


Magnetic Particle Brakes & Clutches are popularly known as Powder brakes & clutches. These powder brakes & clutches are manufactured by us in wide range from tiny 0.1 KgM to massive 200 KgM torque range

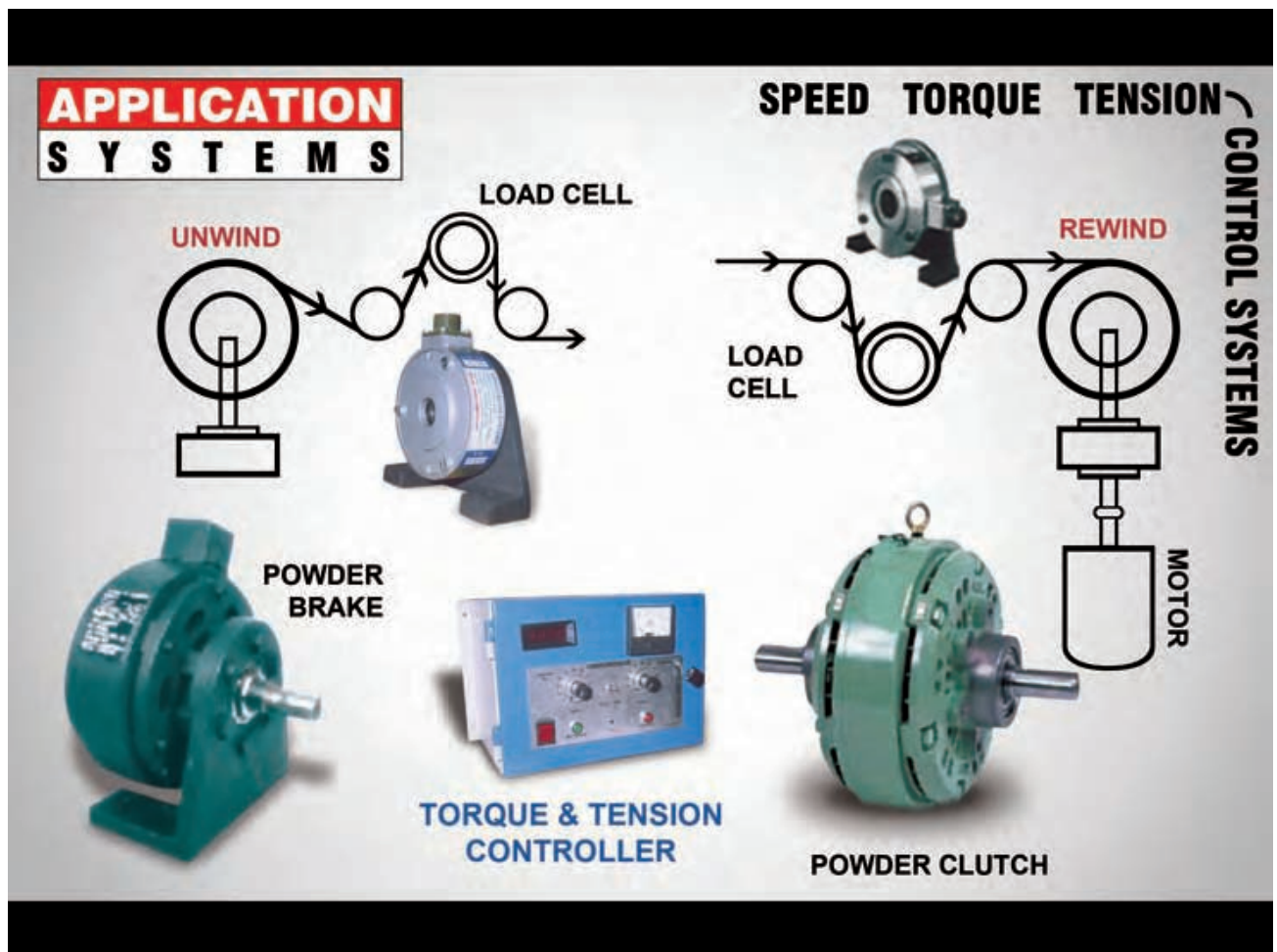
These are manufactured in self cooled, forced air cooled & water cooled version. Powder brakes & clutches are real torque control device, meaning braking or clutching torque is strictly proportional to excitation current,



The magnetic powder clutch and brake achieves at low control power a high torque being independent from the slip speed. It distinguishes itself by a simple construction, low weight and small required space. Due to this advantage the clutch / brake is used for the solution of many technical problems. For the various applications also appropriate control devices are necessary. By changing the exciting power force, the torque to be transmitted can be adjusted infinitely variable in the range 1:30



The Powder Brakes & Clutches contain, as their name suggests, a magnetic powder. The electrical current passing through the coil generates a magnetic field, which changes the property of the powder, from free flowing condition at no excitation to solid rock condition at full excitation. Thus producing a smooth braking torque through friction between rotor and stator. The Powder Brakes & Clutches produces their rated torque at zero speed. The element to be tested / Clutched, can be loaded at standstill to determine the starting torque.



Schematic: Powder Brakes & Clutched are used as Unwind & Rewind Torque control, with Load Cells Dancer & Tension Control, to maintain **CONSTANT TENSION**.

#### Control Options:

- \* Manual Torque Control
- \* Manual Tension Control
- \* Auto Tension Control with Load Cell Feedback
- \* Dancer feedback Tension Control
- \* Non-contact Tension Control, by electronic Diameter computation
- \* Intermediate section Tension / Stretch Control
- \* Digital & Analogue Tension / Torque Control



#### Salient Features of Powder Brakes / Clutches:

- \* Models available in wide Torque ranges, from tiny 0.1 KgM to massive 100 KgM
- \* Smooth, Infinitely adjustable Torque
- \* Set Torque maintained independent of Speed
- \* Torque is Linear to Coil Excitation
- \* Fast response due to low Inertia
- \* Available in Self Cooled, Forced Air Fan Cooled & Water Cooled Versions

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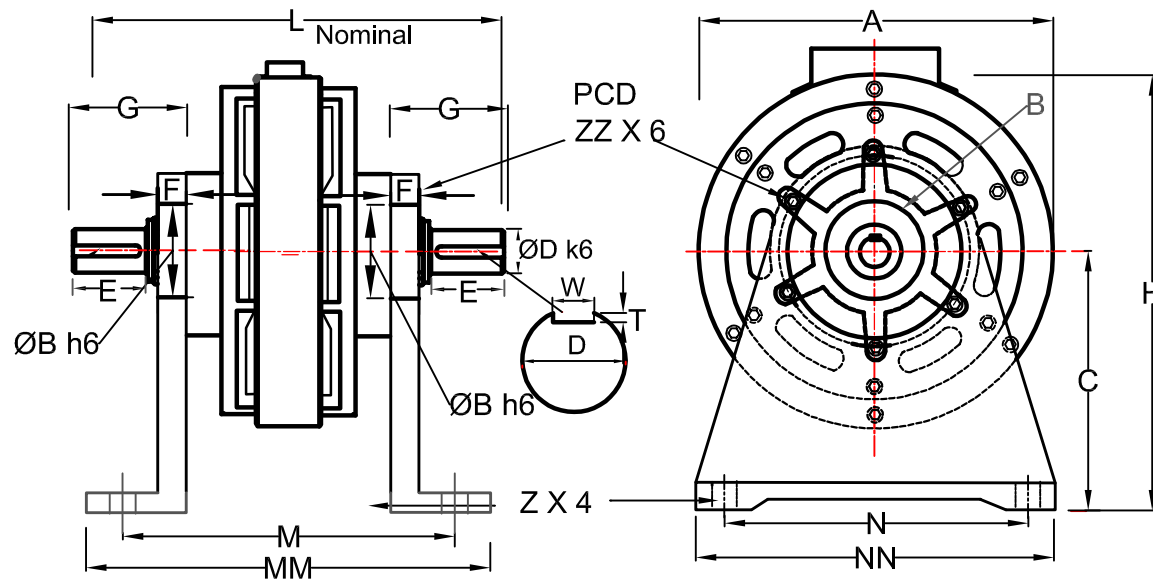
MAGNETIC POWDER BRAKES, AXIAL FAN COOLED																	
Rating	A	ØB	C	ØD	E	F	G	H	L	M	MM	N	NN	ØZ	PCD ØZZ	W	T
2.5	190	70	135	20	40	20	70	230	253	60	120	160	200	10	92	6	3.5
5	225	82	140	25	55	20	85	255	293	60	120	150	200	10	105	6	3.5
10	290	100	185	30	60	22	92	330	312	90	160	220	280	12	138	8	4.5
20	335	107	195	35	70	22	102	360	422	100	160	240	295	12	138	10	5.5
40	415	120	240	40	80	40	130	450	540	110	190	250	300	15	160	12	6.5

Note: Above dimensions are only indicative. For latest dimensions, please contact us.

## APPLICATION SYSTEMS

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### MAGNETIC POWDER CLUTCHES, SELF COOLED

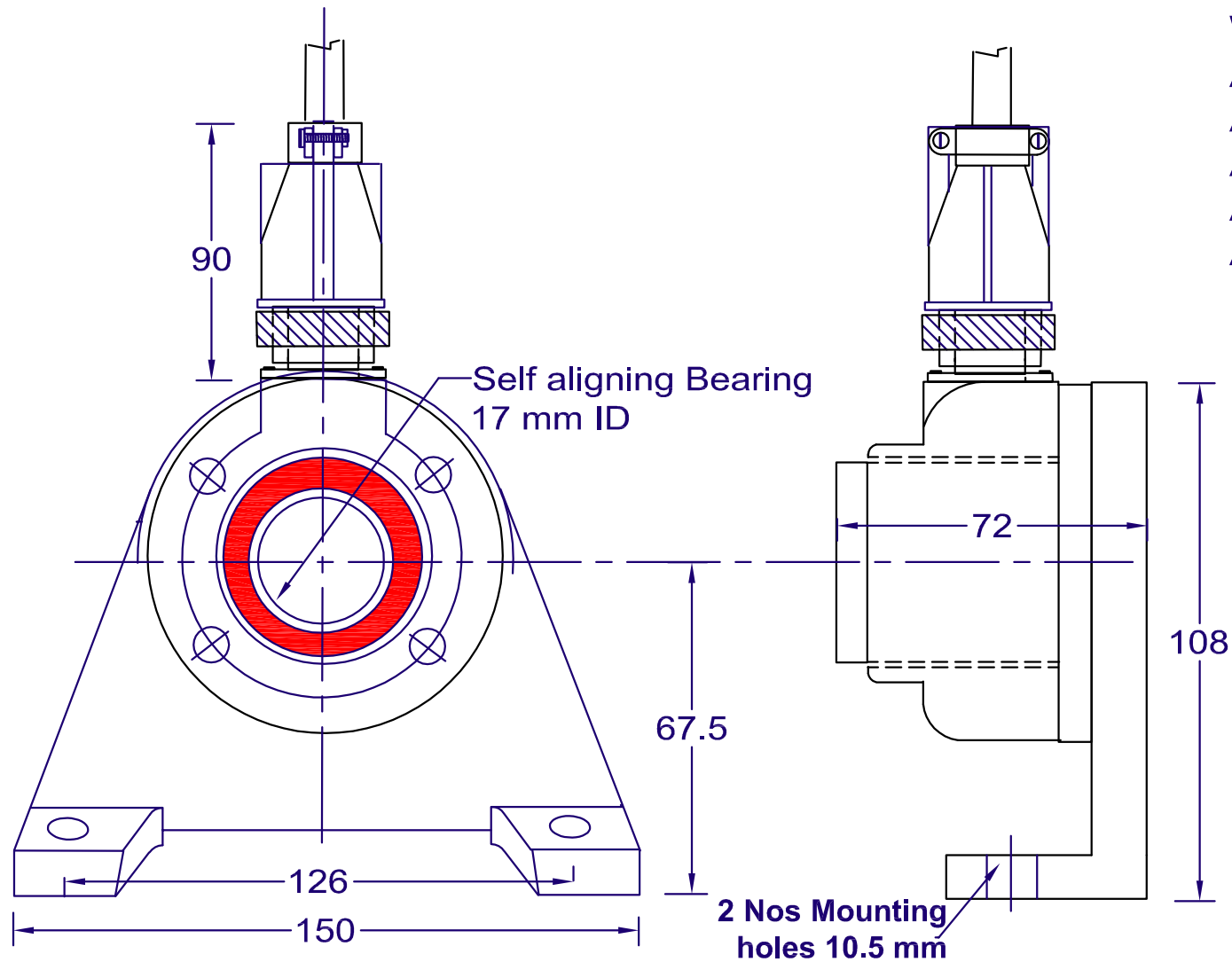
Rating	A	ØB	C	ØD	E	F	G	H	L	M	MM	N	NN	ØZ	PCD ØZZ	W	T
2.5	190	70	140	20	40	20	65	260	300	220	250	160	200	9	90	6	6
5	230	82	140	25	55	20	80	310	318	220	250	160	200	9	100	6	6
10	290	100	185	30	60	22	85	360	362	250	280	220	280	12	138	8	7
20	328	107	195	35	70	22	110	400	437	300	350	240	300	14	138	10	8
40	400	130	240	40	90	40	135	470	525	110	190	240	380	19	200	12	8

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## APPLICATION SYSTEMS

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### Web Tension Load Cell

ASB20 - 20 Kg

ASB25 - 25 Kg

ASB50 - 50 Kg

ASB 75 - 75 Kg

ASB100 -100Kg



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