

FRENI E FRIZIONI A POLVERE

**MAGNETIC POWDER
BRAKES FOR UNWINDERS
AND CLUTCHES FOR REWINDERS**

Powderex particularly stands out for its:

- Compact size
- High sensitivity
- Low residual torque
- Soundless operating
- No dust development
- Long service life

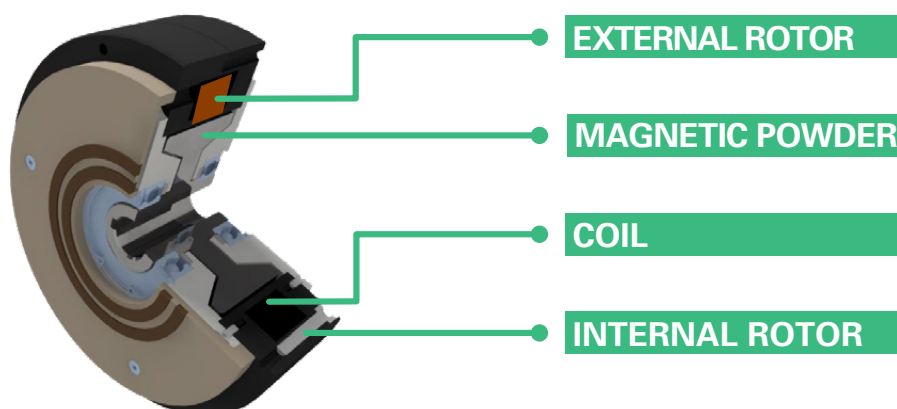
Powderex is available in a wide range of sizes and models - in the standard version, equipped with radiator or with fan - to offer solutions to all drive problems requiring torque between 3Nm and 170Nm.

DIFFERENT MODELS

Wide range of sizes in the standard version, equipped with radiator or with fan.

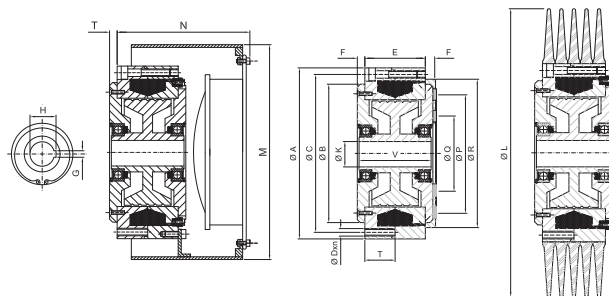
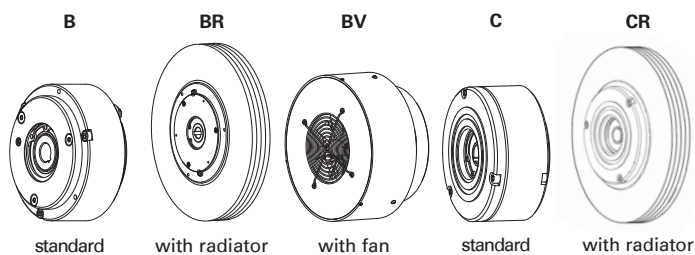
HIGH SENSITIVITY

Powderex is the solutions to all drive problems requiring torque between 3 Nm and 170 Nm.



An electromagnetic coil generates a variable and controlled magnetic field which directly modifies the magnetic powder viscosity. The powder viscosity controls the torque transmission between the external and the internal rotors. The device acts as a brake when the external rotor is fixed, otherwise it acts as a clutch.

PWX



dimensions (mm)	PWX 003	PWX 006	PWX 012	PWX 035	PWX 065	PWX 080	PWX 120	PWX 170
A	75	91	114	156	188	205	254	254
B	62	78	92	125	146	149	214	214
C	69	85	105	146	174	188	233	233
D x n	M 3x3	M 3x3	M 5x3	M 5x6	M 6x6	M 6x6	Ø 8,5x8	Ø 8,5x8
E	25	32	40	48	56	64	70	86
F	5,5	5,5	5	5	5	6	6	6
G	3P9	4P9	4P9	5P9	8P9	8P9	10P9	10P9
H	11 ^{+0,1}	19,3 ^{+0,1}	16 ^{+0,1}	19,7 ^{+0,1}	22,8 ^{+0,1}	31,3 ^{+0,2}	31,3 ^{+0,2}	31,3 ^{+0,2}
K	10	17	15	17	20	28	28	28
K max	15	22	25	35	38	38	42	42
L (radiator)	110	140	200	260	330	350	390	390
M (with fan)	100	120	154	203	236	255	284	284
N (with fan)	86	93	99	125	137	145	202	218
T	12,5	16	20	24	28	32	70	86
O	42	52	54	64	70	90	108	108
P	60	70	74	84	90	110	132	132
R	74,5	90,5	114	132	154	184	222	222
S	10	10	10	10	10	10	10	10
T	12,5	16	20	24	28	32	70	86
P-O/2	9	9	10	10	10	10	12	12
V	31	37	45	50	58	66	74	90

Performance	PWX 003	PWX 006	PWX 012	PWX 035	PWX 065	PWX 080	PWX 120	PWX 170
nominal torque	3 Nm	6 Nm	12 Nm	35 Nm	65 Nm	80 Nm	120 Nm	170 Nm
residual torque	0,04 Nm	0,06 Nm	0,15 Nm	0,25 Nm	0,4 Nm	0,4 Nm	0,6 Nm	1,5 Nm
supply voltage	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC
current intensity	0.8 A	0.96 A	0.92 A	1 A	1 A	1,1 A	1,2 A	1,2 A
resistance	30 Ohm	25 Ohm	26 Ohm	24 Ohm	24 Ohm	22 Ohm	21 Ohm	21 Ohm
engaging time (t ₉)	100 m/s	110 m/s	130 m/s	280 m/s	360 m/s	450 m/s	530 m/s	800 m/s
disengaging time (t ₀₁)	50 m/s	60 m/s	70 m/s	100 m/s	140 m/s	170 m/s	200 m/s	270 m/s
cont. heat dissipation	50 W	80 W	100 W	150 W	200 W	250 W	400 W	500 W
weight	0,75 kg	1,4 kg	2,6 kg	5,0 kg	9,0 kg	12,7 kg	18 kg	24 kg
cont. heat dissipation	100 W	160 W	200 W	280 W	400 W	500 W	800 W	1000 W
weight	1,1 kg	1,9 kg	3,8 kg	7,5 kg	13,0 kg	18,5 kg	23 kg	30 kg
cont. heat dissipation	150 W	300 W	400 W	600 W	800 W	1050 W	1600 W	2000 W
weight	1,4 kg	2,2 kg	4,5 kg	8,0 kg	13,0 kg	17,0 kg	24 kg	28 kg
heat diss. (500 rpm)	80 W	100 W	120 W	250 W	280 W	350 W	800 W	1000 W
heat diss. (1000 rpm)	100 W	120 W	150 W	250 W	350 W	550 W	1000 W	1250 W
weight	0,8 kg	1,5 kg	2,8 kg	5,2 kg	9,4 kg	13,3 kg	18,9 kg	24,8 kg
heat diss. (500 rpm)	250 W	350 W	440 W	640 W	960 W	1200 W	1600 W	2200 W
heat diss. (1000 rpm)	300 W	400 W	500 W	800 W	1200 W	1550 W	2000 W	2750 W
weight	1,2 kg	2,0 kg	4,0 kg	7,7 kg	13,4 kg	19,0 kg	23,7 kg	28,8 kg

(* fan voltage: 24, 115 or 230 VAC)

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