

POWDER BRAKES AND CLUTCHES

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

Powderex brakes for unwinders and clutches for rewinders particularly stand out for their:

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

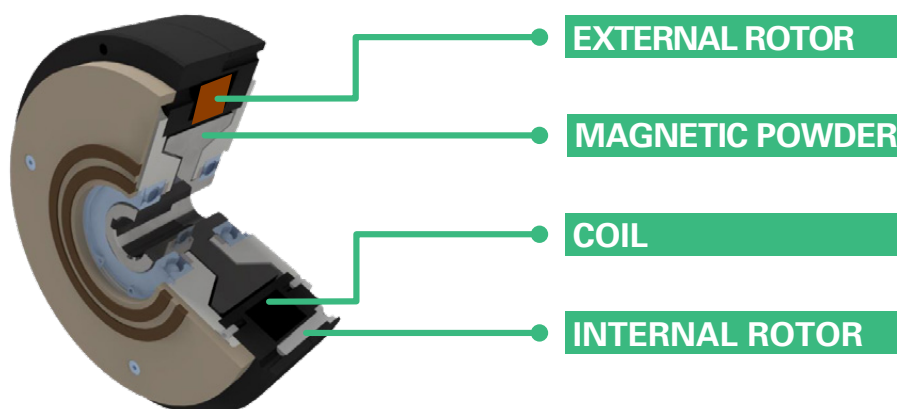
Powderex is available in a wide range of sizes and models - in the standard version, equipped with radiator or with fan - to offer solutions to all drive problems requiring torque between 3Nm and 170Nm.

DIFFERENT MODELS

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

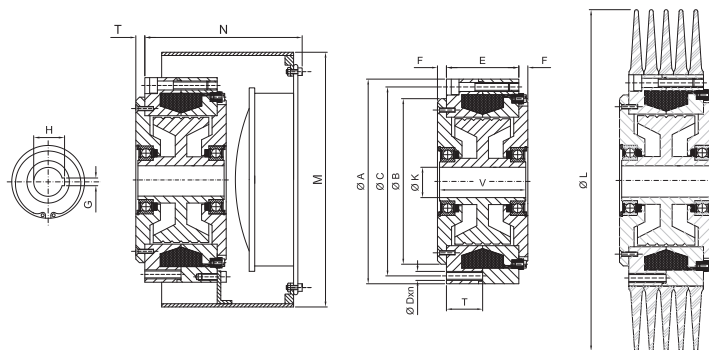
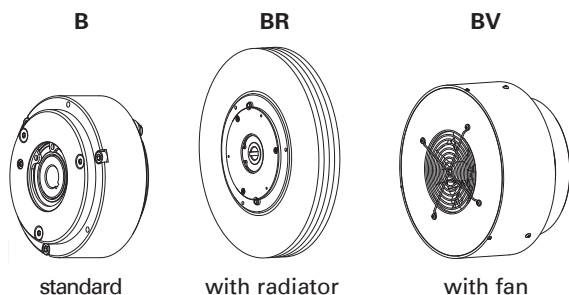
HIGH SENSITIVITY

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.

POWDEREX BRAKES



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 (with 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
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 (t₉)	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 (t₀₁)	50 m/s	60 m/s	70 m/s	100 m/s	140 m/s	170 m/s	200 m/s	270 m/s
brake	PWX 003 B	PWX 006 B	PWX 012 B	PWX 035 B	PWX 065 B	PWX 080 B	PWX 120 B	PWX 170 B
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
brake with radiator	PWX 003 BR	PWX 006 BR	PWX 012 BR	PWX 035 BR	PWX 065 BR	PWX 080 BR	PWX 120 BR	PWX 170 BR
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
brake with fan*	PWX 003 BV	PWX 006 BV	PWX 012 BV	PWX 035 BV	PWX 065 BV	PWX 080 BV	PWX 120 BV	PWX 170 BV
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

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

renova srl
 registered office: via palmanova 24, 20132 milano - italy
 operational hq: viale rimembranze 93, 20099 sesto s. g., milano - italy
 VAT IT03758670965 | REA MI-1699970 | share capital. €10.000,00

www.renova-srl.com
 support@renova-srl.com
 info@renova-srl.com
 t. +39 02 27007394

