

Simplatroll Replacement Simplatorque Magnetic Particle Brakes

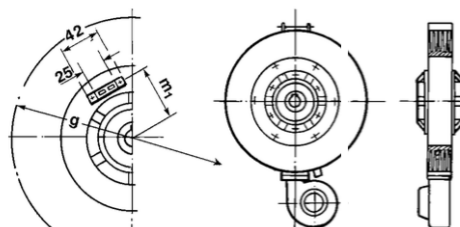
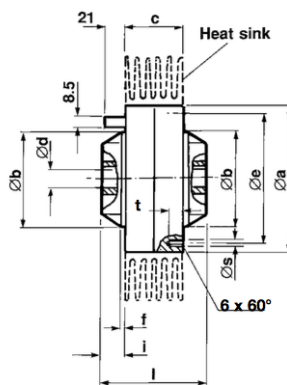
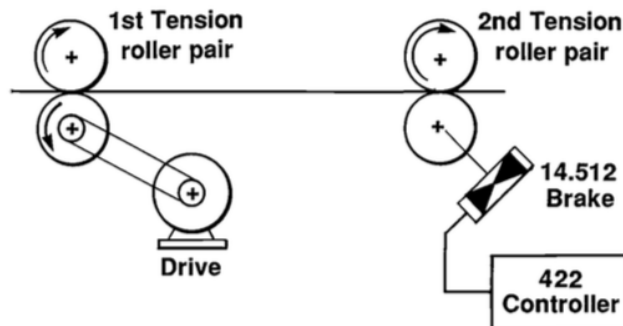
Special magnetic powder energised by an electromagnetic coil generates a braking torque from the stationary housing to the shaft.

Key Features

Torque controllable proportional to applied current
Suits continuous slip on unwinds and pinch rolls, also small dynamometers

Smooth, shock free torque

Torque accuracy of 1 – 2% possible with use of the 422 controller



Shafts must be horizontal.

Blowers with shrouds to suit sizes 08 - 16 on request

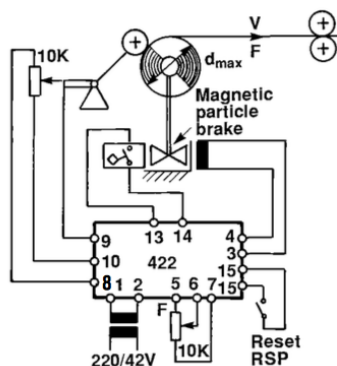
Size	Rated torque Nm	Bore* dH7	P 20°C W	a _{s7}	b ₁₇	c	e	g	i	l	m ₁	s	t	Heat dissipation W** without heat sink	Heat dissipation W** with heat sink
01	10	14	11	100	70	45	90	160	20	85	39	M5	10	25	85
02	20	20	16	120	80	50	110	200	24	98	47	M6	10	40	120
04	40	24	19	150	96	60	135	250	24	108	58	M6	10	60	220
08	80	35	16	200	135	65	185	320	33.5	132	82.5	M8	12	100	280
16	160	42	26	250	180	70	235	400	28	126	106	M10	14	130	400
32	320	60	28	320	235	80	300	480	35	150	137	M10	16	210	630

* Other bores on request, keyways to BS4235

** Blowers increase heat dissipation by 2.5 times

Unit weights are as for clutches

For common dimensions see also facing page



Brake and controller used in roll follower arm tension control system

Thermal selection

It is essential that Simplatorque brakes are not damaged by overheating. Heat generated on an unwind is defined by:

$$\text{Heat (W)} = \text{Pull (N)} \times \text{Line speed (m/s)}$$

The steady state dissipation figures above are for guidance only. Always check from the detailed catalogue, available on request.

Current controllers

The 422 current controllers suit all sizes of Simplatorque clutches and brakes. They are supplied complete with transformer for mains 220/240V connection and accept control voltage signals or 10k Ω potentiometer control.