

Magneta miniature brakes

0.6 to 3.6 Nm

Type 14.110.□□.10□

New design with 50% torque increase

Energise to engage, 100% duty rated

Backlash-free

No running-in required

Bores 5 to 15mm

Long life, maintenance-free

Fast response



Select the type 1 armature assembly for connection direct to the shaft required to be braked.

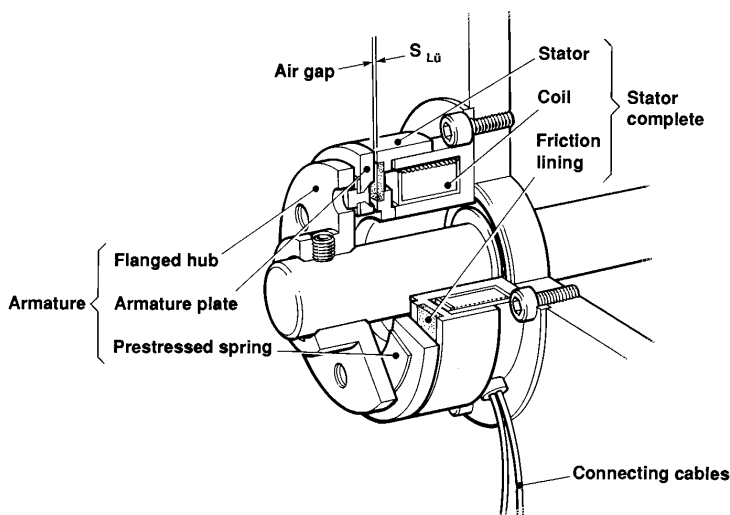
Select the type 3 armature assembly for mounting directly to a disc, gear, sprocket, pulley, etc., to be braked. This forms a more compact and economical assembly.

Armature 1 assemblies			Armature 2 assemblies			Armature 3 assemblies	
Type No.	Bore d	Stockline No.	Type No.	Bore d	Stockline No.	Type No.	Stockline No.
14.110.02.101	5	A7-78 768	Not available			14.110.02.103	A7-79 879
	6	A7-78 839					
	8	A7-79 075					
14.110.03.101	6	A7-73 221	Not available			14.110.03.103	A7-73 378
	8	A7-73 256					
14.110.04.101	8	A7-75 20X	14.110.04.102	8	A7-475 816	14.110.04.103	A7-75 565
	10	A7-99 634		10	A7-85 760		
14.110.05.101	10	A7-75 975	14.110.05.102	10	A7-90 27X	14.110.05.103	A7-76 065
	15	A7-75 991		15	A7-91 269		

Stockline numbers in black – delivery time on request.

Operation

D.C. voltage applied to the coil creates a magnetic field which passes from the stator across the air gap and attracts the armature plate. The armature plate moves axially away from the flanged hub by means of pre-stressed spring. The rated torque is generated. On removal of the supply, the magnetic field collapses and the spring pulls back the armature leaving the brake free of residual torque.



Ordering example

(20) off brakes type 14.110.05.101
24V, 10mm bore

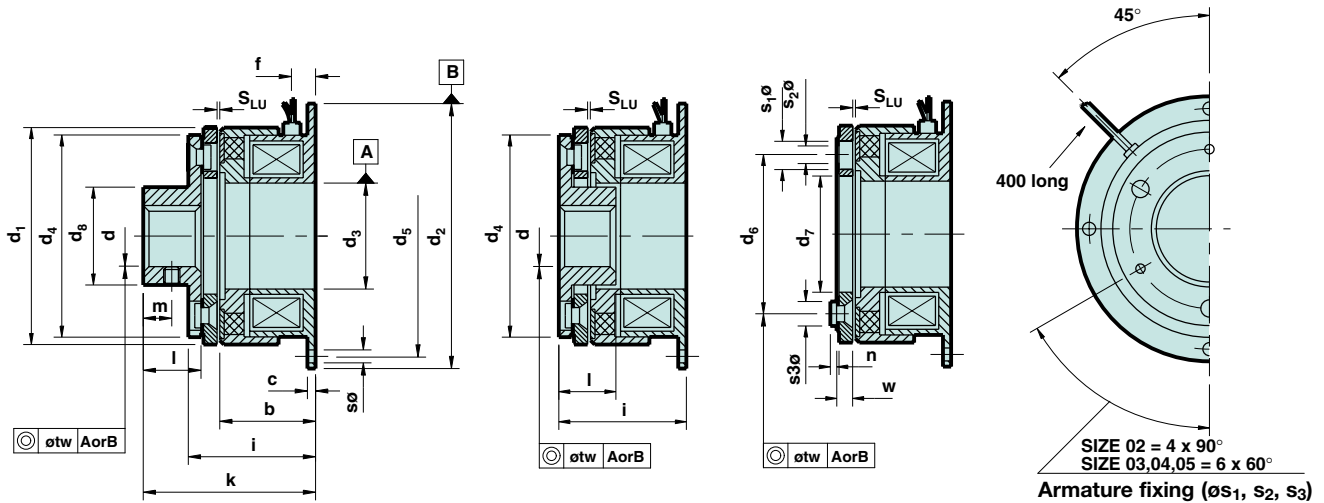
Stockline No. A7-75 975

Magneta miniature brakes

Type 14.110.□□.10□

Type 14.110.□□.101

Type 14.110.□□.102 Type 14.110.□□.103



Keyways to BS4235

Size	Torque M Nm	P 20°C W	b	c	d (H7)			d ₁	d ₂ h9	d ₃ H9	d ₄	d ₅	d ₆	d ₇	d ₈	f	i	k
02	0.6	6	16	1.5	5	6	8	31	39	11	28	33.5	19.5	12.5	13	4	20.35	26.35
03	0.9	6	19	2	5	6	8	34	45	13	32	38	23	15	15	4.5	23.55	31.55
04	1.8	8	22.3	2	6	8	10	43	54	19	40	47	30	21	17	5.5	28.4	37.4
05	3.6	10	23.5	2	10	12	15	54	65	26	50	58	38	29	24	5.5	29.7	38.7

Size	l	m	n	s	s ₁	s ₂	s ₃	S _{Lü}	t _w	W	g	Stator m (kg)	Armature 001 m (kg)	003 m (kg)
02	8	3.5	0.8	3.4	2x5	2x2.1	2x3.7	0.1	0.03	2.25	M3	0.054	0.015	0.009
03	10	4	1.2	3.4	3x6	3x2.6	3x4.5	0.15	0.03	2.4	M3	0.083	0.026	0.011
04	12	5	1.6	3.4	3x6.5	3x3.1	3x5	0.15	0.03	2.95	M3	0.140	0.037	0.023
05	12	5	1.6	3.4	3x6.5	3x3.1	3x5	0.2	0.03	3	M3	0.220	0.056	0.033

Mounting

1. Mount the stator concentric and square to the shaft. The armature should run concentric to the stator with a maximum runout value t_w .
2. If armature 3 is selected, arrange it to be fully supported, square and concentric to the stator with maximum runout t_w . Counter bore diameter s_3 to clear the rivet heads. Use the screws and shakeproof washers provided, cone under the screw head. We recommend the use of thread adhesive.
3. Armature 1 can be fixed axially with the grub screw. Additional security from shims/spacers is not absolutely necessary. For armature 3 shims are necessary to set the air gap $S_{Lü}$. There should be no axial movement of the armature in excess of $1/2 S_{Lü}$.
4. Magneta miniature series brakes in practice, never need wear adjustment except on the most severe duties. Keep the friction surface free from oil and grease.
5. A 24V d.c. power supply is required, either smoothed or unsmoothed. Simplavolt units can be used. These brakes are not polarity sensitive.

For more detailed mounting information refer to Publication No. 251 – available on request, or on the web: www.lenze.co.uk under 'Downloads' and Lenze download area.