

NAFSA - ER SERIES

ER60-05/C
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- Single acting, spring or load return
- Up to class F winding (155°C)
- Duty cycle from 0 to 100%
- Up to 234N force
- Customer specific version available



PRODUCT DESCRIPTION

The ER series of electromagnets are a single acting solenoid.

When an electrical connection is made to the coil, the plunger moves through the magnetic field and pushes the shaft along its designated stroke.

Upon removing the electrical connection, the shaft is retracted to its rest position using either a mechanical spring or the load applied.

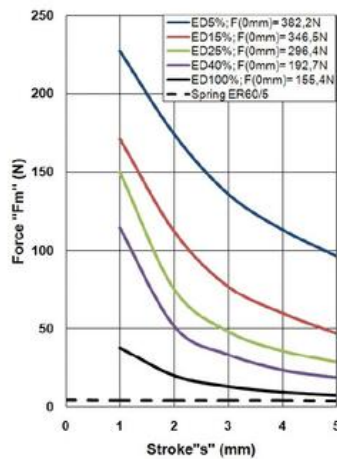
Many different standard versions are available (please see catalogue PDF below) and application specific designs can be provided for larger volume requirements.

TECHNICAL DATA

Absorbed power @ 20°C, 100% duty	18 W
Absorbed power @ 20°C, 15% duty	110 W
Absorbed power @ 20°C, 25% duty	70 W
Absorbed power @ 20°C, 40% duty	45 W
Absorbed power @ 20°C, 5% duty	280 W
Beginning of stroke force at 100% duty	7 N
Beginning of stroke force at 15% duty	47 N
Beginning of stroke force at 25% duty	28 N
Beginning of stroke force at 40% duty	18 N
Beginning of stroke force at 5% duty	96 N
End of stroke force at 100% duty	155 N
End of stroke force at 15% duty	346 N
End of stroke force at 25% duty	296 N
End of stroke force at 40% duty	192 N

End of stroke force at 5% duty	382 N
Function	pull/push
Insulation class	B (130°C)
IP class	IP00
Spring return	Yes
Stroke	5 mm
Total weight	650 g
Voltage ac max	230 V
Voltage ac min	110 V
Voltage dc max	205 V
Voltage dc min	6 V

Force stroke curve



Calculation of the effective force: see pages 1 and 10

Duty-cycle	Standard voltages										Under demand voltages			
	VDC					VAC					VDC		VAC	
ED%	6	12	24	48	100	125	205	110	230		Min	Max	Min	Max
100%	x	o	o	o	o	o	o	o	o	o	7	230	48	230
40%	x	o	o	o	o	o	o	x	o	o	11	230	125	230
25%	x	x	o	o	o	o	o	x	o	o	13	230	200	230
15%	x	x	o	o	o	o	o	x	x	o	16	230	x	x
5%	x	x	o	o	o	o	o	x	x	o	24	230	x	x

Layout: o = Available ; x = Unavailable

Solenoid under voltage

