

## NAFSA - ER SERIES

ER30/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.

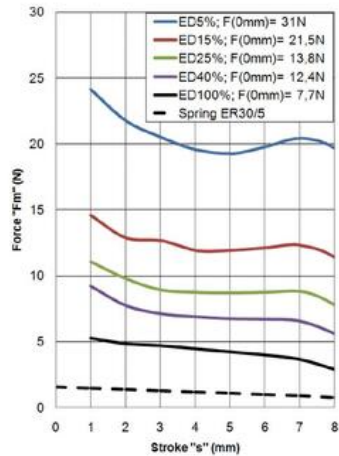
Many different standard versions are available (please see catalogue PDF below) and application specific designs can be provided for larger volume requirements.

### TECHNICAL DATA

Absorbed power @ 20°C, 100% duty	8 W
Absorbed power @ 20°C, 15% duty	50 W
Absorbed power @ 20°C, 25% duty	30 W
Absorbed power @ 20°C, 40% duty	20 W
Absorbed power @ 20°C, 5% duty	120 W
Beginning of stroke force at 100% duty	2.9 N
Beginning of stroke force at 15% duty	11.4 N
Beginning of stroke force at 25% duty	7.8 N
Beginning of stroke force at 40% duty	5.6 N
Beginning of stroke force at 5% duty	19.7 N
End of stroke force at 100% duty	7.7 N
End of stroke force at 15% duty	21.5 N
End of stroke force at 25% duty	13.8 N
End of stroke force at 40% duty	12 N

End of stroke force at 5% duty	35 N
Function	pull/push
Insulation class	B (130°C)
IP class	IP00
Spring return	Yes
Stroke	8 mm
Total weight	140 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	
ED%	6	12	24	48	100	125	205	110	230	Min	Max
100%	o	o	o	o	o	o	x	o	o	3	200
40%	o	o	o	o	o	o	o	o	o	5	230
25%	o	o	o	o	o	o	o	o	o	6	230
15%	o	o	o	o	o	o	o	x	o	6	230
5%	x	o	o	o	o	o	o	x	x	9	230

Layout: o = Available ; x = Unavailable

Solenoid under voltage

