

## NAFSA - ER SERIES

ER50-15/CT  
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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.

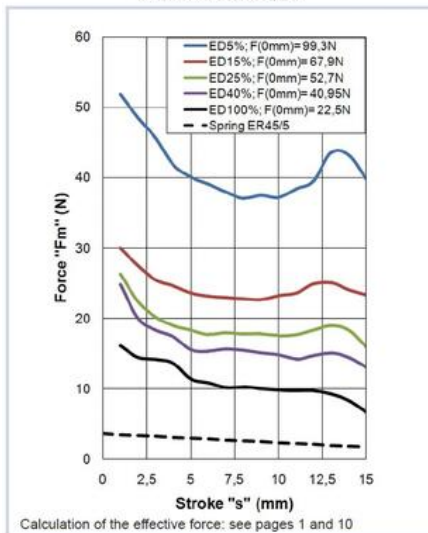
Many different standard versions are available (please see catalogue PDF below) and application specific designs can be provided for larger volume requirements.

### TECHNICAL DATA

<b>Absorbed power @ 20°C, 100% duty</b>	14 W
<b>Absorbed power @ 20°C, 15% duty</b>	93 W
<b>Absorbed power @ 20°C, 25% duty</b>	56 W
<b>Absorbed power @ 20°C, 40% duty</b>	35 W
<b>Absorbed power @ 20°C, 5% duty</b>	280 W
<b>Beginning of stroke force at 100% duty</b>	6.5 N
<b>Beginning of stroke force at 15% duty</b>	23 N
<b>Beginning of stroke force at 25% duty</b>	22.8 N
<b>Beginning of stroke force at 40% duty</b>	12.8 N
<b>Beginning of stroke force at 5% duty</b>	36.8 N
<b>End of stroke force at 100% duty</b>	22.3 N
<b>End of stroke force at 15% duty</b>	67.7 N
<b>End of stroke force at 25% duty</b>	52.5 N
<b>End of stroke force at 40% duty</b>	40.8 N

End of stroke force at 5% duty	99 N
Function	pull/push
Insulation class	B (130°C)
IP class	IP00
Spring return	Yes
Stroke	15 mm
Total weight	380 g
Voltage ac max	230 V
Voltage ac min	110 V
Voltage dc max	205 V
Voltage dc min	6 V

Force stroke curve



Duty-cycle	Standard voltages										Under demand voltages			
	VDC										VDC		VAC	
ED%	6	12	24	48	100	125	205	110	230		Min	Max	Min	Max
100%	o	o	o	o	o	o	o	o	o	6	230	41	230	
40%	x	o	o	o	o	o	o	o	o	9	230	100	230	
25%	x	o	o	o	o	o	o	x	o	11	230	160	230	
15%	x	x	o	o	o	o	o	x	o	15	230	230	230	
5%	x	x	o	o	o	o	o	x	x	24	230	x	x	

Layout: o = Available ; x = Unavailable

Solenoid under voltage

