OEM Automatic Ltd
Address: Whiteacres, Whetstone Leicester, LE8 6ZG
0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

NAFSA - ER SERIES

ER40/CT
ER40/CT

- 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 to 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.

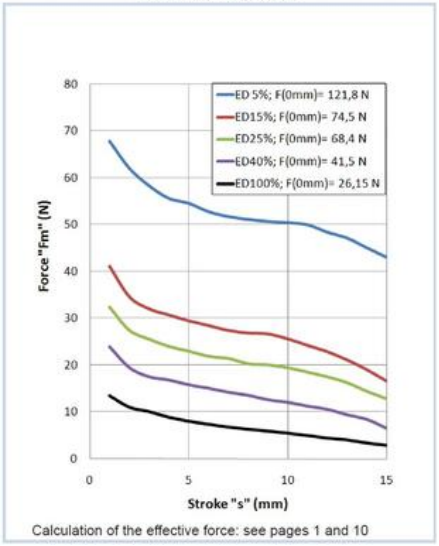
Many different standard versions are available (please see catalogue PDF below) and application specific designs can be provided for larger volume requirements.

TECHNICAL DATA

Absorbed power @ 20°C, 100% duty	13 W
Absorbed power @ 20°C, 15% duty	76 W
Absorbed power @ 20°C, 25% duty	44 W
Absorbed power @ 20°C, 40% duty	27 W
Absorbed power @ 20°C, 5% duty	218 W
Beginning of stroke force at 100% duty	2.9 N
Beginning of stroke force at 15% duty	16.5 N
Beginning of stroke force at 25% duty	13 N
Beginning of stroke force at 40% duty	6.5 N
Beginning of stroke force at 5% duty	43 N
End of stroke force at 100% duty	26.1 N
End of stroke force at 15% duty	74.5 N
End of stroke force at 25% duty	68.4 N
End of stroke force at 40% duty	41.5 N

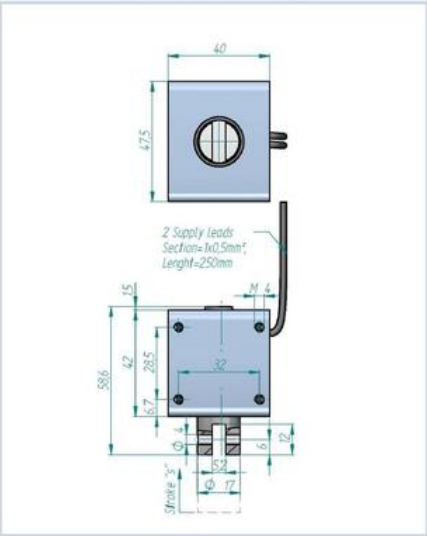
End of stroke force at 5% duty	121.8 N
Function	pull/push
Insulation class	B (130°C)
IP class	IP00
Spring return	No
Stroke	15 mm
Total weight	368 g
Voltage ac max	230 V
Voltage ac min	110 V
Voltage dc max	205 V
Voltage dc min	6 V

Force stroke curve



Calculation of the effective force: see pages 1 and 10

Duty-cycle	Standard voltages									Under demand voltages			
ED%	VDC							VAC		VDC		VAC	
	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	31	230
40%	x	o	o	o	o	o	o	o	o	8	230	64	230
25%	x	o	o	o	o	o	o	o	o	9	230	104	230
15%	x	o	o	o	o	o	o	x	o	11	230	180	230
5%	x	x	o	o	o	o	o	x	x	24	230	x	x

Layout: o = Available ; x = Unavailable

Solenoid under voltage