

● **ECH 150-40 TYPE**



Protection rate: **IP40**  
 Insulation class: **B (130°C)**  
 Reference cycle: **5 minutes**  
 Standard stroke (s): **40 mm**  
 Temperature rise " $\Delta V_{31}$ ": **70°C**  
 Working temperature: **-10 to 45°C**  
 Work: **Push / Pull**

**Release spring NOT**  
 incorporated in standard  
 product.

(ED) Duty-cycle ED(%)	100	40	25	15	5
(P20) Power at 20°C (W)	120	290	460	750	2200
(Fm) Solenoid force (N) 1)	250	480	580	780	1300
Max time under voltage(s)	Inf	120	75	45	15
Opening time (ms) 2)	1272	985	877	829	773
Release time (ms) 3)	781	610	545	517	484
Plunger weight (Kg)	4.6				
Solenoid weight (Kg)	21				

1) Fm Solenoid force is given according to VDE0580 without deducting the spring force or the plunger weight if vertical mounting.

2) Time is given on these conditions: Coil supplied under nominal voltage ; Stabilized in it's working temperature ; Load 70% of the solenoid force ; Horizontal assembly ; Standard stroke initial position; 20°C ambient temperature.

3) Time is given on these conditions: without load on shaft ; Horizontal assembly ; Standard stroke initial position.

Duty-cycle ED%	Standard voltages								Under demand				
	VDC								VDC		VAC		
	6	12	24	48	100	125	205	110	230	Min	Max	Min	Max
100	x	x	o	o	o	o	o	o	o	20	250	72	230
40	x	x	x	o	o	o	o	x	o	29	250	175	230
25	x	x	x	o	o	o	o	x	o	36	250	230	230
15	x	x	x	o	o	o	o	x	x	46	250	x	x
5	x	x	x	x	o	o	o	x	x	80	250	x	x

Layout: o = Available ; x = Unavailable

- Voltage under demand:  
 They can be manufactured at voltages between the maximum and minimum voltage values shown in the chart.

- To feed in alternating current the solenoid will have a rectifier incorporated in the connector.

- The duty cycles described in the chart are standard, they can be manufactured in any intermediate value.

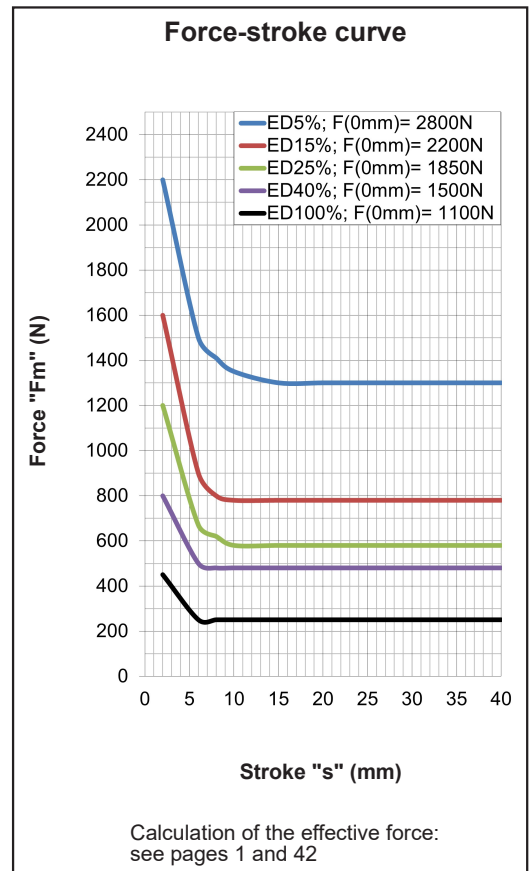
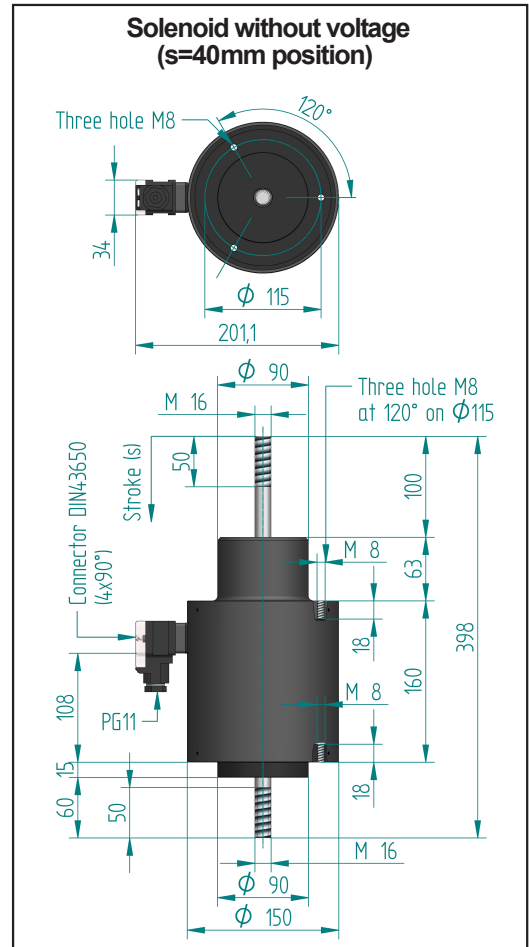
- If any customization from the original is needed, please ask us.

- Earthing is recommended if the metallic parts are accessible.

**Ordering code:** ECH110-45 --V ED--%

Voltage: 24Vdc; Duty cycle: ED100%;  
 ECH110-45 24Vdc ED100%

Voltage: 48Vdc; Duty cycle: ED15%;  
 ECH110-45 48Vdc ED15%



For fixation and mounting positions: see page 42