

Protection rate: **IP40**Insulation class: **B (130°C)**Reference cycle: **5 minutes**Standard stroke (s): **45 mm**Temperature rise "ΔV<sub>31</sub>": **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)	76	175	260	420	1260			
(Fm) Solenoid force (N) 1)	75	150	165	240	460			
Max time under voltage(s)	Inf	120	75	45	15			
Opening time (ms) 2)	784	592	517	504	456			
Release time (ms) 3)	485	371	326	318	290			
Plunger weight (Kg)	1.1							
Solenoid weight (Kg) 7.3								

- 1) Fm Solenoid force is given acording 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	Standard voltages								Under demand				
·	VDC						VAC		VDC		VAC		
ED%	6	12	24	48	100	125	205	110	230	Min	Max	Min	Max
100	Х	0	0	0	0	0	0	0	0	12	250	45	230
40	Х	Х	0	0	0	0	0	0	0	19	250	105	230
25	Х	Х	0	0	0	0	0	Х	0	23	250	155	230
15	Х	Х	Х	0	0	0	0	Х	0	29	250	230	230
5	Х	Х	Х	0	0	0	0	Х	Х	48	250	Х	Х

Layout: o = Available ; x = Unavailable

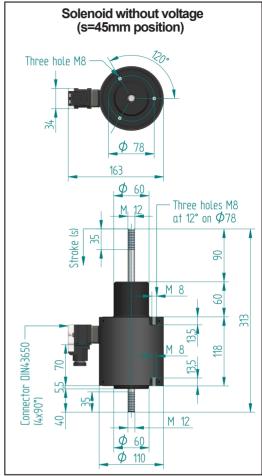
- Voltage under demand:
- They can be manufactured at voltages between the maximum and minimum voltage values shown in the chart.
- To feed in alterning current the solenoid will have a rectifier incorporated in the connector.
- The duty cycles described in the chart are standard, they can be manufactured in any intermediate value.
- If any customization from the original is needed, please ask us.
- Earthing is recommended if the metallic parts are accessible.

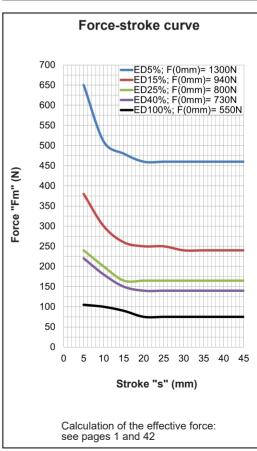
Ordering code: ECH110-45 -- V ED---%

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

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

## ECH 110-45 TYPE





For fixation and mounting positions: see page 42