

Valve solenoid on/off Robust 37

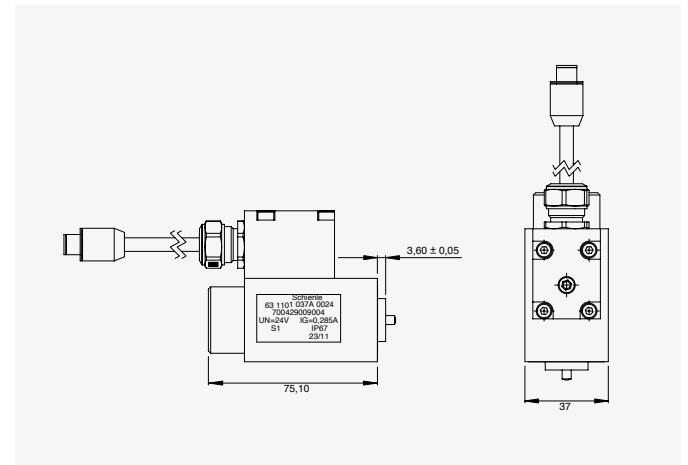


The pressure-proof Robust 37 solenoid stands out thanks to its exceptional reliability under critical operating conditions.

- Extreme ambient und process temperatures of -40 to +135 °C
- Strong vibrations 40 g
- Large fluctuations in supply voltage

The four point valve fastening is designed to secure the solenoids reliably and safely even in the presence of strong vibrations. The reduced anchor mass is designed to guarantee safe operation of the valve even at 40 g (11 ms, half-sine).

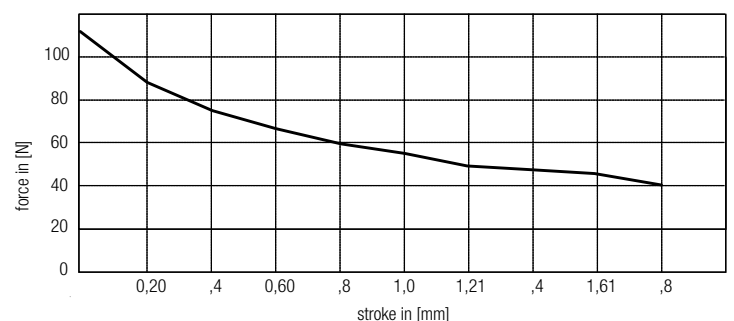
Tailored for mobile applications, the coil is designed to be able to perform lifting work even at 25% undervoltage. Thanks to appropriate lay-out design and material choice, the coil temperature will remain at uncritical levels even at 30% overvoltage.



Technical data

duty cycle [%]	100
max. ambient temperature [C°]	40
working stroke [mm]	1,5+0,5
nominal power [W]	8
nominal voltage [V]	24
ingress protection rating	IP 69K / IP 67
thermal class (coil)	F
electrical connection	cable
surface protection	conical cover and housing zinc-coated

Force vs. stroke diagram



General	
medium:	Mineral oil
nominal pressure:	100 bar
Electrical data	
operating voltage:	24 V DC. Voltage tolerance 18–32 V
power consumption:	8 W
Resistance (Ohm, 20°C):	72 (+10 %/-10 %)
duty cycle:	Magnet or V-Block ambient temp. 135 °C S3 30 % ED 5 min at 30 V, 15 min at 32 V & 20 °C
quenching circuit:	Varistor S10V-S07K50
cable entry:	Bolting
electrical connection:	fixed
class of insulating material according to VDE 0580:	F
insulation strength:	≥ 10 M Ohm
overvoltage strength:	55 V / 100 ms
actuation time:	≤ 25 ms
Environmental conditions	
temperature	
medium:	-40° to +135 °C
environment:	-40° to +135 °C
stock:	-50° to +135 °C
cable / plug:	-50° to +150 °C
humidity:	< 98 % rel. humidity at 55 °C

Vibration	
white noise:	30 g rms (10 to 2000 Hz)
sine:	30 g (55,7 to 2000 Hz)
shock:	50 g/11 ms, half-sine
protection type (DIN 40050):	IP69 K; IP67
wear resistance of housing material:	Iron parts galvanized according to DIN 50979 Fe//Zn8//Cn//TO aluminium components bl elox.
housing / cable wear resistance:	Lubricating oil, diesel fuel, coolant, detergent
Interfaces/Connections	
electrical	
connection:	Cable tail with 3-pole plug M12x1 according to EN 60947-5-2
Mechanical data	
cable	
tensile strength:	> 100 N at 23 °C and 100 °C
EMC	
requirements:	MIL-STD 461E (2007), VG 95373, depending on plug and cable
Installation info	
installation position:	any
position of magnet to valve body:	selectable in 90 degree position