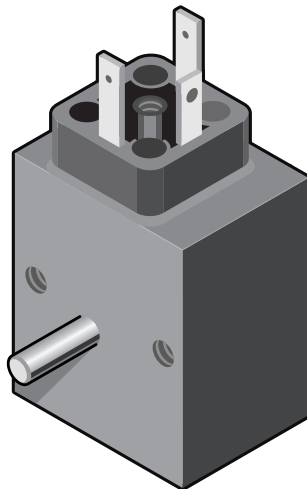


E5 Series Rotary Solenoid

Voltage rating	V DC	24						205						V DC	Voltage rating
ED* LK	%	100	75	45	25	15	7	100	70	45	20	9	6	%	ED* LK
Current rating	A	0,80	0,96	1,55	2,45	3,90	9,20	0,08	0,12	0,18	0,35	0,77	1,18	A	Current rating
Nominal resistance	Ω	30,0	25,0	15,5	9,8	6,2	2,6	2.600	1.735	1.148	592	268	174	Ω	Nominal resistance
E 52, 25°	MA Ncm	13,0	15,0	20,0	25,0	31,0	41,0	10,5	14,5	18,5	26,0	36,0	40,0	Ncm	MA E 52, 25°
	ME Ncm	18,5	21,5	26,0	30,0	34,0	41,0	16,5	21,0	25,0	31,0	37,0	40,5	Ncm	ME E 52, 25°
E 53, 35°	MA Ncm	10,0	11,5	16,0	22,0	27,0	36,5	8,0	11,0	15,0	23,0	32,0	36,0	Ncm	MA E 53, 35°
	ME Ncm	18,0	19,5	23,5	27,0	29,0	31,0	15,5	19,0	22,0	27,5	30,5	31,0	Ncm	ME E 53, 35°
E 54, 45°	MA Ncm	7,0	8,1	11,5	16,4	21,0	30,5	5,4	7,8	10,5	17,0	26,0	30,0	Ncm	MA E 54, 45°
	ME Ncm	15,6	17,2	20,8	23,0	25,5	27,5	13,3	16,6	20,0	24,0	27,0	27,0	Ncm	ME E 54, 45°
E 56, 65°	MA Ncm	3,9	4,8	7,2	10,5	14,5	24,0	3,0	4,5	6,5	11,3	19,0	23,5	Ncm	MA E 56, 65°
	ME Ncm	14,5	15,7	18,5	21,0	22,0	22,5	12,3	15,0	18,0	21,3	22,5	22,5	Ncm	ME E 56, 65°
E 59, 95°	MA Ncm	1,8	2,2	3,6	5,4	8,0	14,4	1,5	2,1	3,2	5,9	11,0	14,2	Ncm	MA E 59, 95°
	ME Ncm	12,7	13,7	15,2	16,1	16,5	15,0	11,3	13,4	14,8	16,3	16,0	15,0	Ncm	ME E 59, 95°

* By using a cooling surface $\geq 300 \text{ cm}^2$, the permissible duty cycle can be extended up to 1.7x normal rating

MA = Initial torque
 ME = End torque (5° before end of rotary angle)

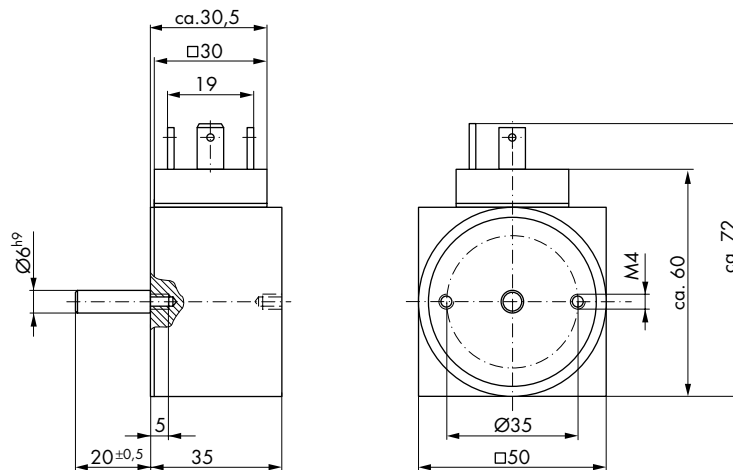


Coil terminals: - Flying leads
 - Terminal box (6.3 DIN 46247)

Weight: appr. 570 g
 Dyn. moment of inertia (rotational mass): appr. $4.25 \cdot 10^{-6} \text{ kg m}^2$
 Time constant: appr. 7–24 ms

All solenoids with MA > 2.5 Ncm are available with spring return, with a rating of MR = 2.0 Ncm approximately.

The operational voltage of 205 V DC results from rectifying 230 V AC with a bridge rectifier.



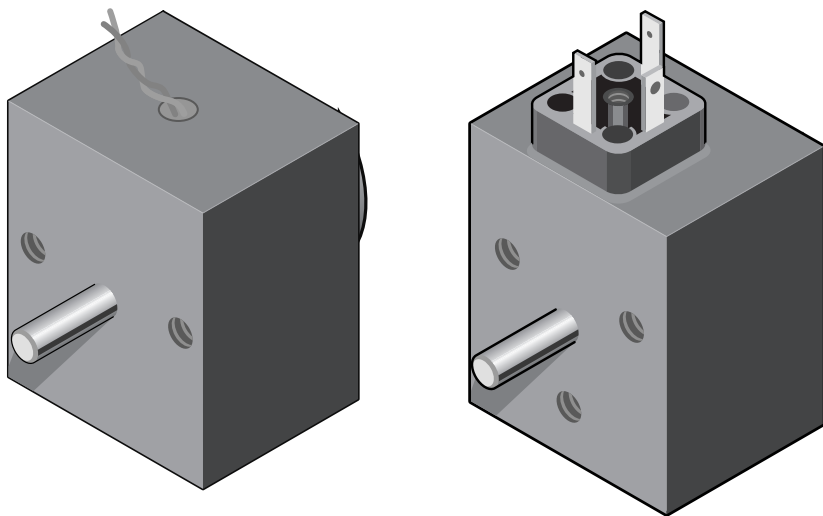
Impulse Automation Limited
 United Kingdom
 Company Registration 665193

Information shown in these data sheets are for guidance purposes only, no liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper use of these parts, assemblies or equipment described.

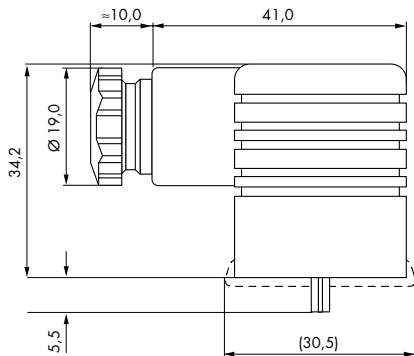
E5 Series Ordering Information

E	5	4	-LOL-	- N -	24 V DC	100 % ED	Order specifications
E							Rotary solenoid
	5						
							Angular travel
		2					25°
		3					35°
		4					45°
		6					65°
		9					95°
			-LOL-				Shaft design
							Coil terminals
				F			Flying leads (20 cm standard length)
				N			Terminal box ²⁾
							Nominal voltage
					24		Standard voltage
					205		(connected to 230 V AC with Si-bridge rectifier)
						100 % ED	Perm. duty cycle under air cooled conditions (LK)

²⁾ Suits push-on connector 6.3 DIN 46247 and plug-in socket Z 801.



Insulation class: B (max. permissible temperature = 130 °C)
 Test voltage: 2500 V (eff)
 Accessories: Plug-in socket Z801



Plug-in socket Z801
 Screw joint PG 9
 for lead diameter 4.5 - 7 mm

Plug-in socket Z811
 Screw joint PG 11
 for lead diameter 6 - 9 mm
 Plug-in socket with built in Si-bridge rectifier

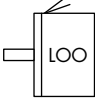
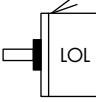
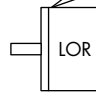
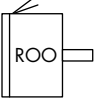
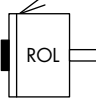
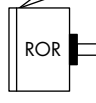
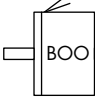
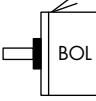
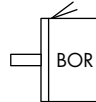


Impulse Automation Limited
United Kingdom
Company Registration 665193

Information shown in these data sheets are for guidance purposes only, no liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper use of these parts, assemblies or equipment described.

E5 Series Shaft & Rotation Options

Shaft designs

Normal	Spring return
	
	
	
	
	
	

The following types of rotary solenoids are available. Resulting in the following abbreviations for ordering:

1. letter

Direction of rotation (facing the output shaft)

- L** anti-clockwise rotation
- R** clockwise rotation
- B** shaft extensions both ends

2. letter

Centering shoulder

- O** standard type without mounting ring
- R** optional
- L** optional

3. letter

Return spring – the torque exerted by the spring is to be subtracted from the torque values given in the data sheets

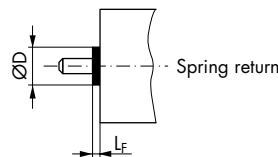
- L** on the anti-clockwise shaft end
- R** on the clockwise shaft end
- O** no return spring fitted
- B** both sides

Example 1

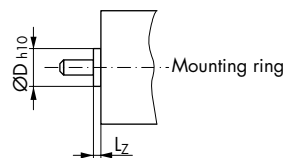
anti-clockwise rotation, no return spring, standard shaft length
LOO -

Example 2

shaft extensions on both ends, return spring on anti-clockwise rotation end
BOL -



Spring return arrangement (with protection cap)



Mounting ring

Dimensions in mm	Solenoid size
	E5
Ø D	21,0
L _F	6,0
Ø D _{h10}	19,0
L _Z	3,0

Impulse Automation Limited
United Kingdom
Company Registration 665193

Information shown in these data sheets are for guidance purposes only, no liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper use of these parts, assemblies or equipment described.