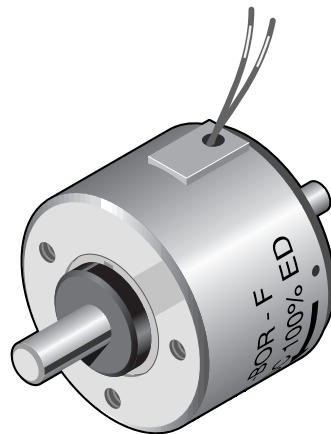


# D6 Series Rotary Solenoid

Voltage rating	V DC	24					205					V DC	Voltage rating
ED* LK	%	100	44	27	17	5	100	34	20	12	5	%	ED* LK
Current rating	A	0,56	1,13	1,75	2,70	8,60	0,54	0,165	0,279	0,430	0,980	A	Current rating
Nominal resistance	Ω	42,7	21,3	13,7	9,0	2,8	3.818	1.241	735	476	209	Ω	Nominal resistance
D 62, 25°	MA Ncm	12,0	21,0	24,5	28,5	40,0	11,0	21,5	25,5	29,5	38,0	Ncm	MA D 62, 25°
	ME Ncm	25,0	31,0	34,5	38,0	44,5	23,0	31,0	35,0	38,0	44,0	Ncm	ME D 62, 25°
D 63, 35°	MA Ncm	9,0	15,5	19,0	23,0	33,0	7,5	16,0	21,0	24,0	31,0	Ncm	MA D 63, 35°
	ME Ncm	22,0	27,0	30,0	32,0	36,0	20,0	27,0	30,0	32,0	35,5	Ncm	ME D 63, 35°
D 64, 45°	MA Ncm	6,0	11,5	15,0	19,0	28,5	5,0	12,0	16,0	20,0	27,0	Ncm	MA D 64, 45°
	ME Ncm	20,0	25,0	27,0	29,0	30,5	19,0	25,0	27,0	29,0	30,5	Ncm	ME D 64, 45°
D 66, 65°	MA Ncm	3,2	7,4	10,5	14,5	23,5	2,6	7,5	11,0	15,0	22,0	Ncm	MA D 66, 65°
	ME Ncm	19,5	23,0	24,0	25,0	24,0	17,5	23,0	24,0	25,0	24,0	Ncm	ME D 66, 65°
D 69, 95°	MA Ncm	1,3	3,3	4,7	7,0	13,2	1,1	3,2	5,2	7,6	12,0	Ncm	MA D 69, 95°
	ME Ncm	15,0	17,0	17,0	16,6	14,2	14,2	17,0	17,0	16,6	14,0	Ncm	ME D 69, 95°

\* By using a cooling surface  $\geq 600 \text{ cm}^2$ , 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)

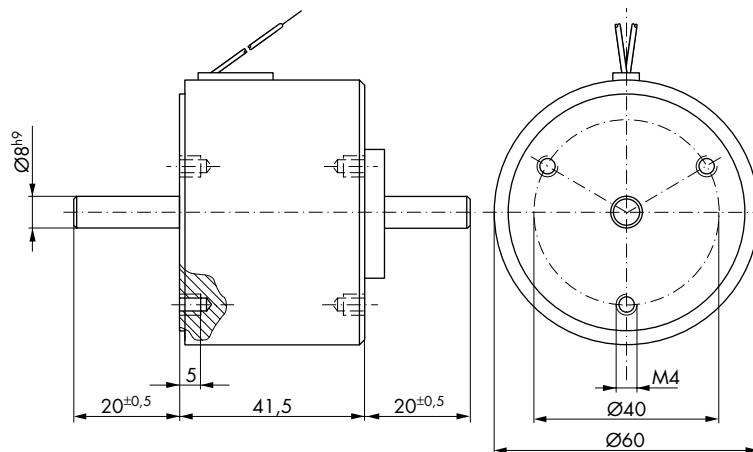


Coil terminals: - Flying leads  
 - Solder terminal box (6.3 DIN 46247)

Weight: appr. 600 g  
 Dyn. moment of inertia (rotational mass): appr.  $3.5 \cdot 10^{-6} \text{ kg m}^2$   
 Time constant: appr. 10–30 ms

All solenoids with MA > 4.8 Ncm are available with spring return, with a rating of MR = 4.0 Ncm approximately.

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



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## D6 Series Ordering Information

D	6	3	-ROR-	- N -	24 V DC	100 % ED	Order specifications
D							Rotary solenoids
	6						
							Angular travel
		2					25°
		3					35°
		4					45°
		6					65°
		9					95°
			-ROR-				Shaft and rotation options
							Coil terminals
				F			Flying leads (20 cm standard length)
				N			Terminal box <sup>3)</sup>
							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)

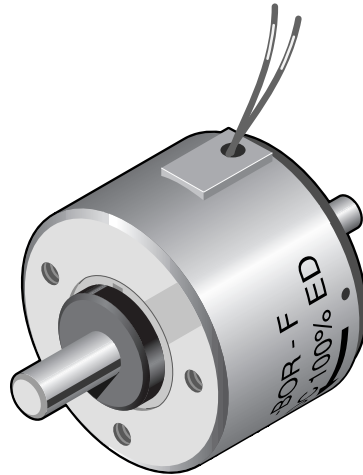
Preferred types competitively priced and available on a quick delivery.

**D64-BOR-F-DS9420-24VDC 100%ED**

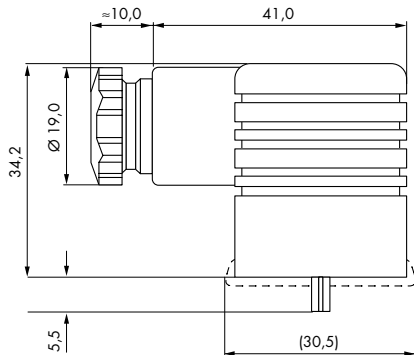
**D69-BOR-F-DS9420-24VDC 100%ED**

**DS9420** refers to a standard adjustable return spring.

<sup>3)</sup> Suits push-on connector 6.3 DIN 46247 and plug-in socket No. Z801.



Insulation class: B (max. permissible temperature = 130 °C)  
 Test voltage: 2500 V (eff)  
 (D 2: 1500 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

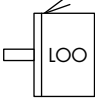
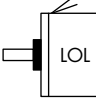
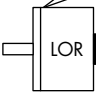
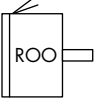
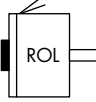
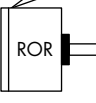
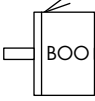
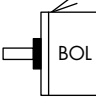
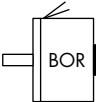


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# D6 Series Shaft & Rotation Options

## 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

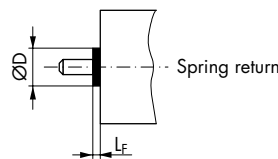
- L** on the anti-clockwise shaft end
- R** on the clockwise shaft end
- O** no return spring fitted
- B** both sides

### Example 1

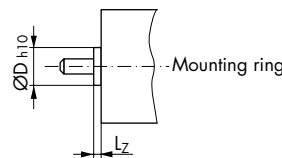
anti-clockwise rotation, no return spring, standard shaft length  
**LOO** -

### 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
	D6
Ø D	24,5
L <sub>F</sub>	6,0
Ø D <sub>h10</sub>	22,0
L <sub>Z</sub>	3,0

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