

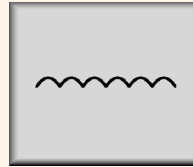
# Three phase tachogenerator

## TD 4... F B 3 KA, TD 4... F B10



### Qualities:

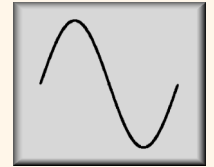
- Cost effective
- Safe to operate



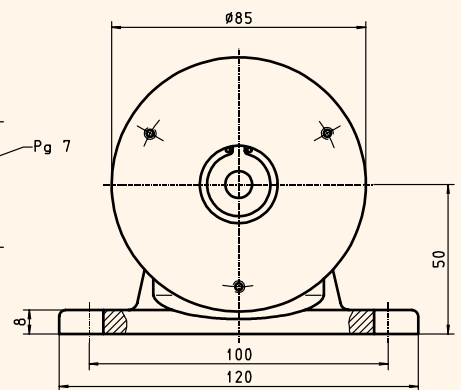
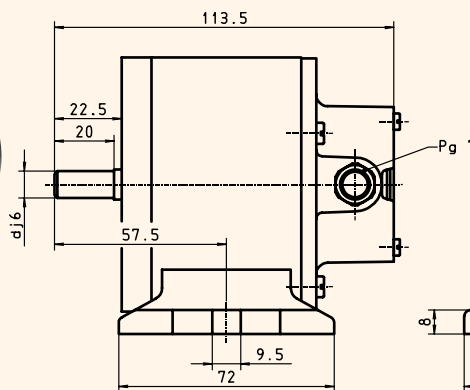
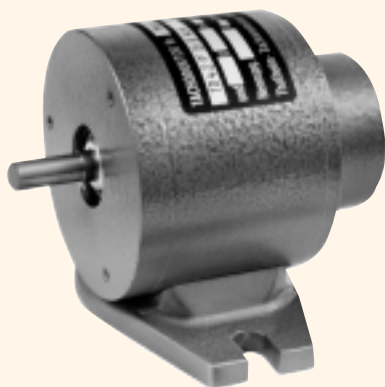
TD



DTD

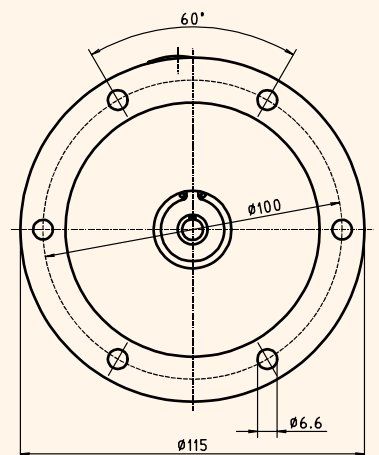
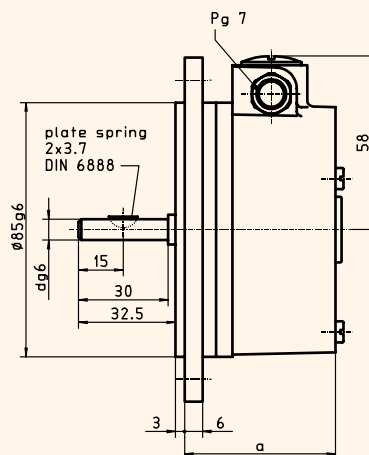
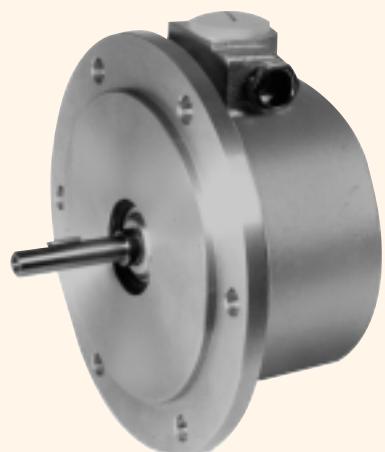


WTD



TD 4... F B 3 KA

drawing-no.: 08 - 24



Type	V	a
TD 41 F B10	≤ 50	50.5
TD 42 F B10	≤ 100	60.5

TD 4... F B10

drawing-no.: 08 - 19

# Three phase tachogenerator

## TD 4... F B 3 KA, TD 4... F B10



### Mechanical data:

Housing			light - alloy metal, unpainted
Design style			B 3, B10
Protective class			IP 54 <i>according to DIN 40 050, IEC 529</i>
Upper speed limit		$n_{\max}$	$\leq 12000$ rpm
Shaft diameter	TD 4... F B 3	d	9 mm
	TD 4... F B10	d	7 mm
Mass moment of inertia	TD 41 ...	J	256 gcm <sup>2</sup>
	TD 42 ...	J	404 gcm <sup>2</sup>
Weight	TD 41 F B 3		approx. 1200 g
	TD 42 F B 3		approx. 1490 g
	TD 41 F B10		approx. 920 g
	TD 42 F B10		approx. 1210 g

### Electrical data:

Output voltage ( no - load )	TD 41 ...	$U_0$	50 VDC $\pm$ 3 %
	TD 42 ...	$U_0$	100 VDC $\pm$ 3 %
Polarity			independent on rotational direction
max. output current		$I_{\max}$	30 mA
Magnet			Al Ni Co, 8- pole, stabilized
Residual ripple			$\leq 15$ % peak - peak
Residual ripple frequency			400 Hz $f = 0,4 * n$
Linearity error		$F_{\text{Regulation}}$	$\leq 1$ %
Regulation range lower limit	TD 41 ...	$n_R$	20 rpm
	TD 42 ...	$n_R$	10 rpm
Temperature drift	( magnet )	$n_R$	- 0,2 % pro 10 K
Type of connection			terminal box, 2-pole
Isolation class			E
Operating temperature range			- 30 °C to + 100 °C
Maintenance			bearing inspection after 20.000 hours in service

### referenced to 1000 rpm

### Options:

• Output voltage	( no - load )		< 50 VDC or < 100 VDC
• Balancing to rated voltage			
• Three phase output	at B 3	<b>DTD</b>	with or without cable
	at B10	<b>DTD</b>	only with cable
• Alternating current output		<b>WTD</b>	with or without cable
• Double winding	at B 3		with or without cable
	at B10		only with cable
• Enhanced protective class			