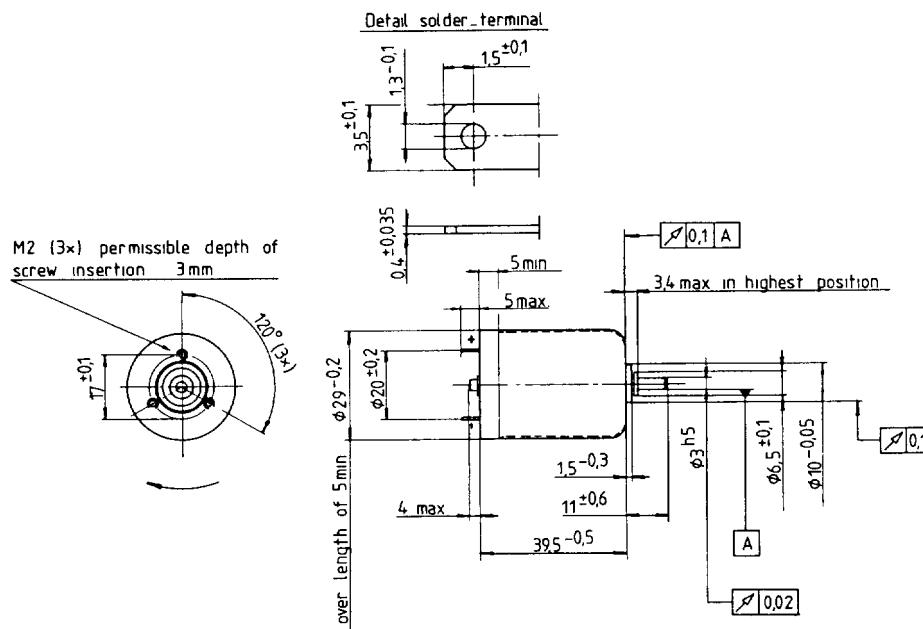


147-375

9904 120 18105
(4322 010 76052)

DIRECT CURRENT MOTORS

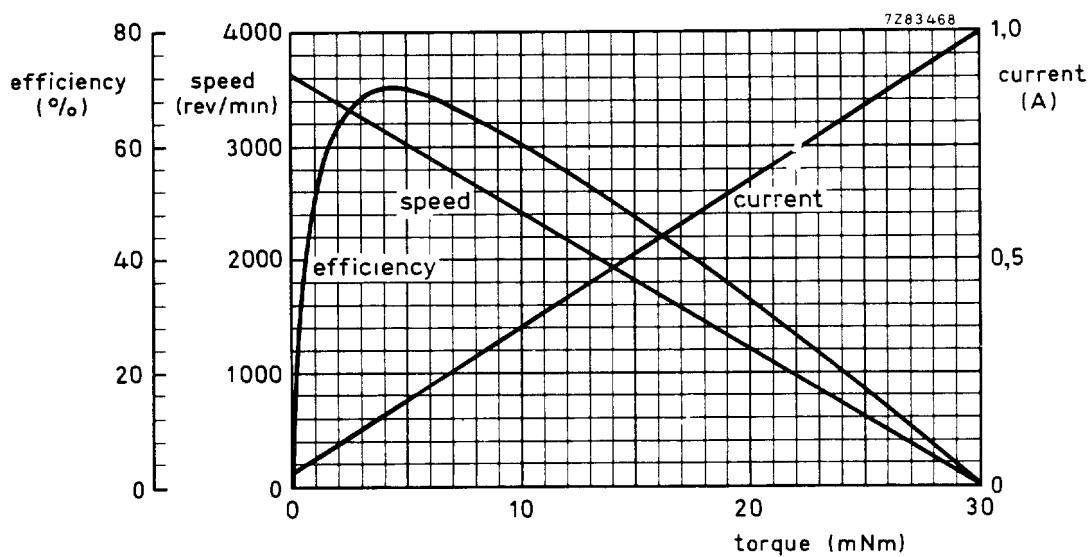
ironless rotor type



Axial play of rotor 0,2 + 0,3

The direction of rotation is given in connection with the polarity

The position of the solder terminals with respect to the position of mounting holes arbitrarily



Typical curves at 12 V, T_{amb} = 22 °C.

9904 120 18105
(4322 010 76052)

TECHNICAL DATA

The values given below apply to an ambient temperature of $22 \pm 5^\circ\text{C}$, an atmospheric pressure of 86 to 106 kPa and a relative humidity of 45 to 75%.

Nominal voltage (d.c.)	12	V
Nominal torque	5	mNm
Bearings	slide	
Direction of rotation	reversible	
Climatic category (IEC 68)	10/060/21	
E.M.F. at 3000 rev/min	8,4-10,8	V
Rotor resistance	$12 \pm 10\%$	Ω
Current at nominal voltage		
at nominal torque	164-238	mA
at no load	max. 56	mA
at a radial force of 3,5 N at 8 mm from mounting plane	max. 110	mA
Insulation between terminals and housing	min. 2	$M\Omega$
Test voltage (50 Hz) between terminals and housing, for 1 minute	250	V
Torque constant	e.m.f./ 100π	Nm/A
Starting torque at nominal voltage	30	mNm
Rotor inductance	1	mH
Rotor moment of inertia	$0,9 \times 10^{-6}$	kg m^2
Mechanical time constant	11,0	ms
Ambient temperature range		
operating	-10 to +60	$^\circ\text{C}$
storage	-40 to +70	$^\circ\text{C}$
Temperature coefficient of rotor resistance	0,4	%/K
E.M.F.	-0,02	%/K
Mass	approx. 120	g

Limiting conditions

The following maximum values indicate those circumstances under which the motor can run continuously without being damaged, but under these circumstances the motor life is reduced.

Voltage	15	V
Torque	8	mNm
Current	325	mA
Repetitive peak current, 10 ms, 1 Hz	1100	mA
Speed	6000	rev/min
Output power	3	W
Continuous blocking permitted at	6,2	V
Radial force	5	N
Axial force	0,5	N