

## U0 (ST5021; ST5022)

Dimensions (mm)	∅ 50 x 21
Step angle (°)	7,5/11,25
Holding torque (cNm)	3,7–4 (ST5021); 4 (ST5022)
Detent torque (cNm)	0,25 (ST5021); 1 (ST5022)
Winding	bipolar
Gear combination	O, P, R



## Standard Data

Climatic class	wide-spread according to DIN IEC 60721-2-1
Ambient temperature operation	°C -15 ... +40
Ambient temperature storage	°C -20 ... +100
Thermal class	B (ST5021); A (ST5022) according to DIN EN 60085
Approval	standard
Mounting	any position
Electrical connection	cable
Protection	IP 30 according to DIN EN 60529
Weight	180 g (ST5021); 195 g (ST5022)
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	Sintered bronze, self-lubricating

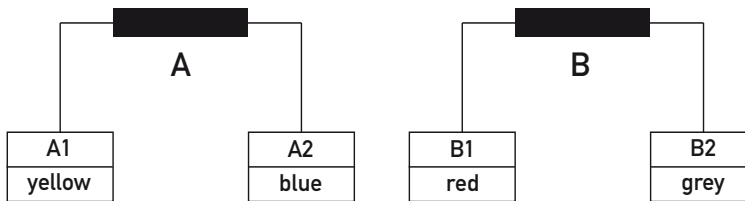
## Order Reference

Type	Stepper Motor	ST5021 / ST5022	7,5°	7 Ω
Step angle	7,5° 11,25°			
Resistance	7 Ω			

## Technical Data

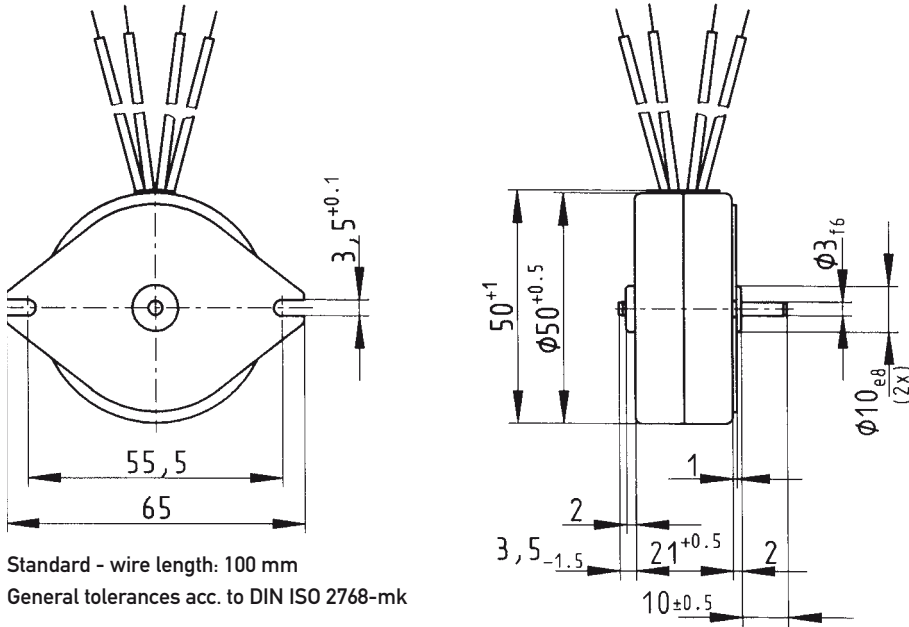
ST5021	Step angle	°	7,5	11,25	
	Rated voltage $U_N$	V	4	4	
	Holding torque $M_H$	cNm	4	3,7	
	Detent torque $M_S$	cNm	0,25		
	Rotor inertia $J_R$	gcm <sup>2</sup>	14,5		
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	Winding temperature increase	K	65		
	Current per winding	A	0,53		
	Resistance per winding $R_{20}$	Ω	7		
	Inductance per winding	mH	12,5	11,5	
Power consumption	W	4			
Driver mode	Chopper drive				
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ST5022	Step angle	°	7,5/11,25		
	Rated voltage $U_N$	V	4		
	Holding torque $M_H$	cNm	7,5		
	Detent torque $M_S$	cNm	1		
	Rotor inertia $J_R$	gcm <sup>2</sup>	25		
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	Winding temperature increase	K	65		
	Current per winding	A	0,53		
	Resistance per winding $R_{20}$	Ω	7		
	Inductance per winding	mH	11		
Power consumption	W	4			
Driver mode	Chopper drive				

Circuit diagram Motor connections - bipolar



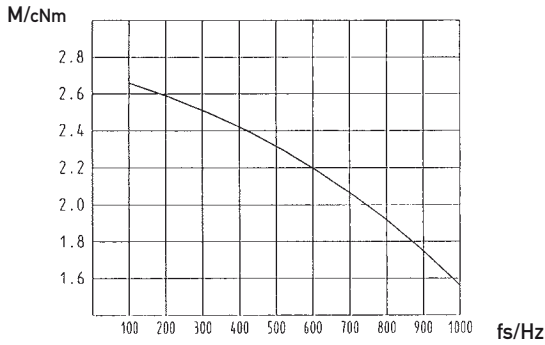
		clockwise rotation				
A	$\frac{A1}{A2}$	↓	↑	↑	↓	↓
B	$\frac{B1}{B2}$	↑	↑	↓	↓	↑

Dimensions

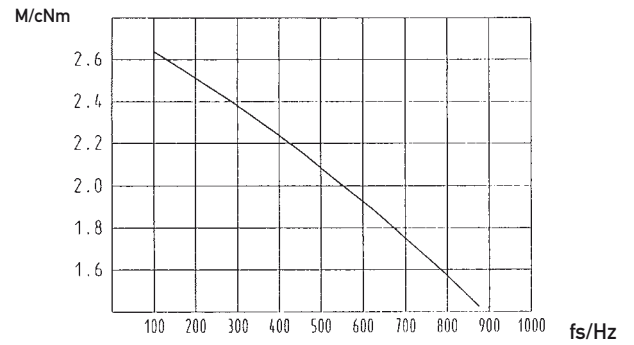


## Performance Chart (chopper driver)

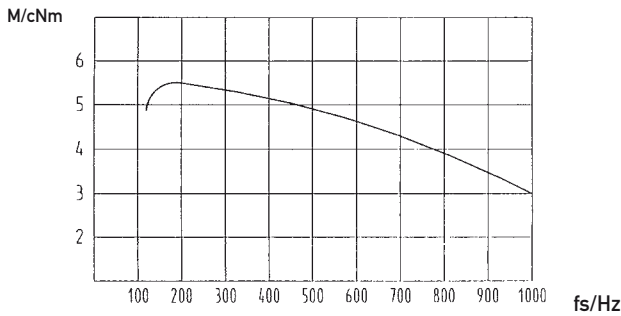
ST5021 UOD1 (ST 5021/7.5/1)



UOJ1 (ST 5021/11.25/1)



ST5022 UOD5 (ST 5022/7.5/1)



UOJ5 (ST 5022/11.25/1)

