

UP (ST6443; ST6444)

Dimensions (mm)	∅ 64 x 43
Step angle (°)	7.5/11.25 (ST6443); 11.25 (ST6444)
Holding torque (cNm)	30–35 (ST6443); 45 (ST6444)
Detent torque (cNm)	2–2.5 (ST6443); 7 (ST6444)
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 resistance at f=0 R _{therm}	29 K/W
Thermal class	B (ST6443); A (ST6444) according to DIN EN 60085
Approval	standard
Mounting	any position
Electrical connection	cable
Protection	IP 30 according to DIN EN 60529
Weight	500 g (ST6443); 550 g (ST6444)
Rotor stalling	motor can be stopped when voltage is applied, without being overheated
Bearings	Sintered bronze, self-lubricating

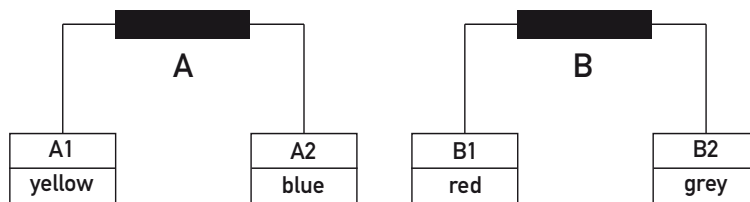
Order Reference

Type	Stepper Motor	ST6443 / ST6444	7.5°	3.7 Ω
Step angle	7.5° (ST6443) 11.25° (ST6443 / ST6444)			
Resistance	3.7 Ω			

Technical Data

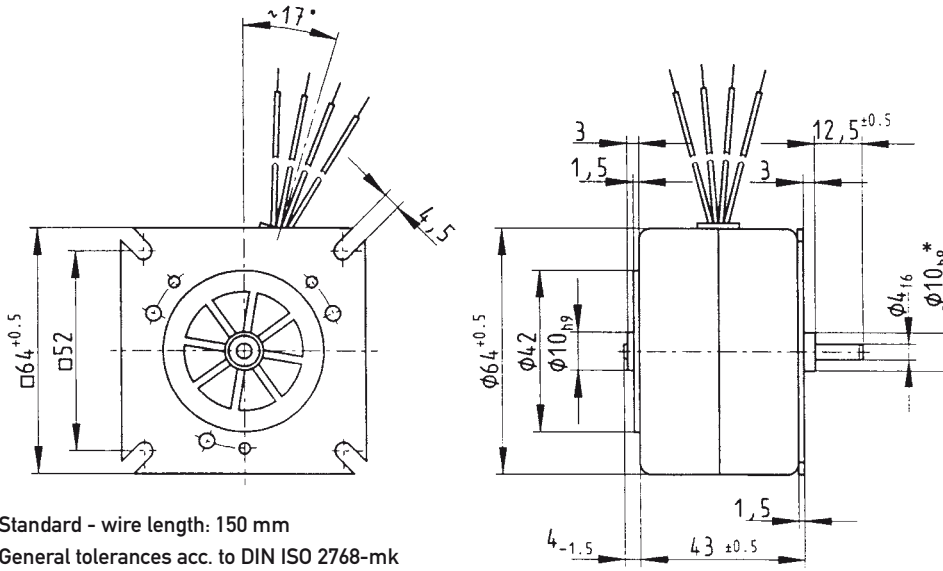
bipolar (ST6443)	Rated voltage U_N	V	4,5	4,5	
	Resistance per winding R_{20}	Ω	3,7		
	Step angle	$^\circ$	7,5	11,25	
	Holding torque M_H	cNm	35	30	
	Detent torque M_S	cNm	2,5	2	
	Rotor inertia J_R	gcm^2	85		
	Steps per revolution			48	32
	Winding temperature increase	K	90		
	Current per winding	A	1,25		
	Inductance per winding	mH	10	9,5	
	Power consumption	W	11,5		
	Driver mode		Chopper drive		
	bipolar (ST6444)	Rated voltage U_N	V	4,5	
Resistance per winding R_{20}		Ω	3,7		
Step angle		$^\circ$	11,25		
Holding torque M_H		cNm	45		
Detent torque M_S		cNm	7		
Rotor inertia J_R		gcm^2	180		
Steps per revolution			32		
Winding temperature increase		K	90		
Current per winding		A	1,25		
Inductance per winding		mH	8		
Power consumption		W	11,5		
Driver mode			Chopper drive		

Circuit diagram Motor connections - bipolar



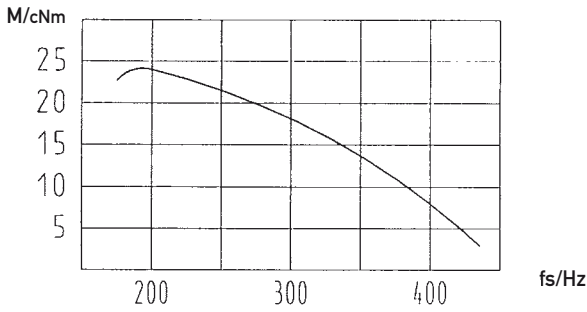
		clockwise rotation				
A	$\frac{A1}{A2}$	↓	↑	↑	↓	↓
B	$\frac{B1}{B2}$	↑	↑	↓	↓	↑

Dimensions

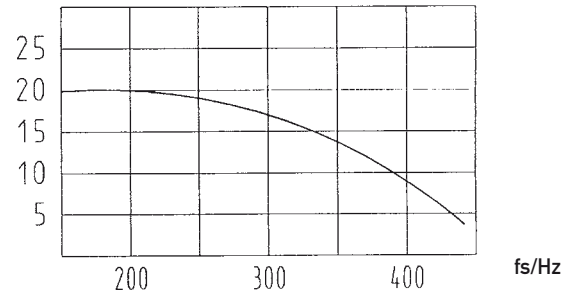


Performance Chart (chopper driver)

ST6443 UPD1 (ST6443/7.5/1)



UPJ1 (ST 6443/11.25/1)



ST6444 UPJ5 (ST 6444/11.25)

