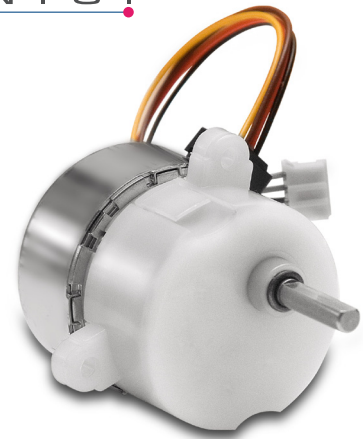


# TECHNICAL DATA

series

# SM138

STEP MOTOR 35S48B07  
with 138 gearbox



- High Torque
- Low noise
- Small size

## TECHNICAL DATA

Motor Step Angle	7,5°	full step	Nominal voltage	12V
Number of Phase	2	bipolar	Voltage driver	3,75 - 36V
Insulation resistance	100 MΩ	500Vdc	Max axial/radial shaft load	5N/20N
Insulation class	E		Max allow torque	50 Ncm
Coil Resistance/Induction	7,5Ω/10mH		Max current (continuous)	250 mA
Max temp. (motor housing)	60 °C		Max current (non-contin.)	500 mA
Racc. temp (motor housing)	35-45 °C		Operating temp.	-20 °C/ +65 °C

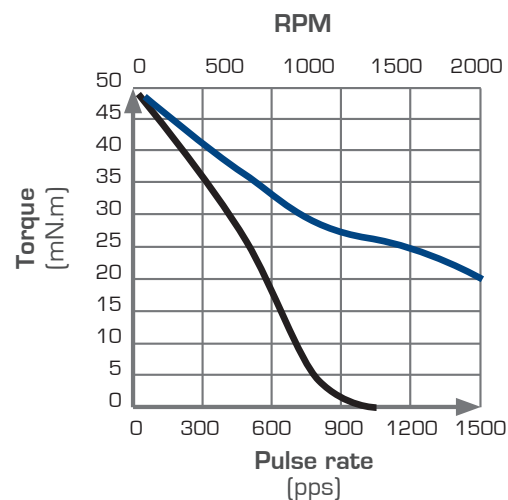
PART NUMBER	Ratio (x:1)	Length mm	Holding Torque mNm	Max Speed (ref.) RPM
SM138.35S.12	12,25	35	600	122
SM138.35S.21	21,14	35	800	71
SM138.35S.36	35,73	35	800	42
SM138.35S.72	71,54	35	800	21
SM138.35S.149	149,05	35	800	10
SM138.35S.208	208,66	35	800	7
SM138.35S.608	608,61	35	800	2,5
SM138.35S.1470	1470,82	35	800	1

# SM138

### Motor Dynamic Torque Curves 24V/0,5A

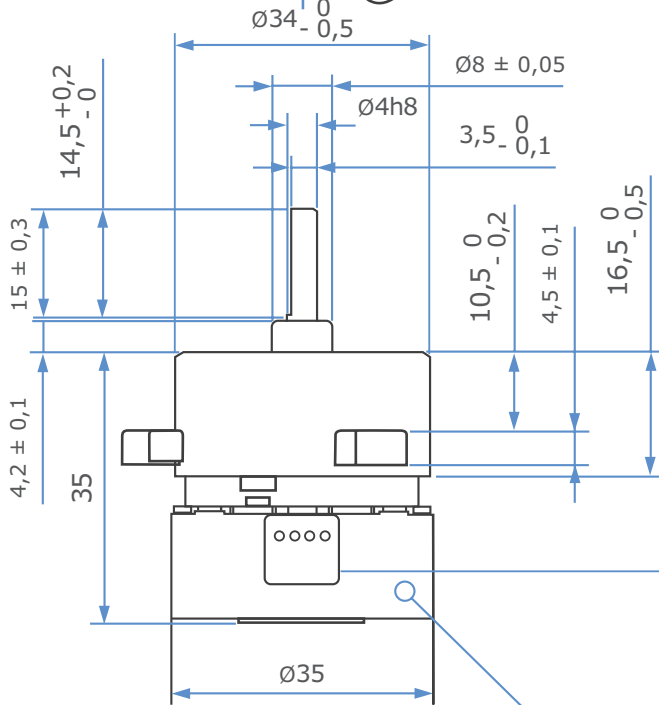
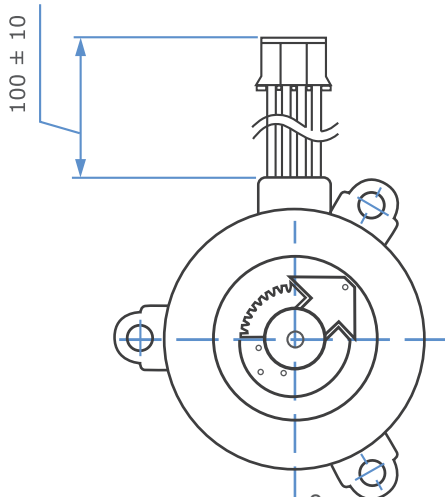
Conditions: Bi-polar Constant Current Driver  
Driver: AMIS 30522  
Mode: Full Step

— Pull in torque — Pull out torque

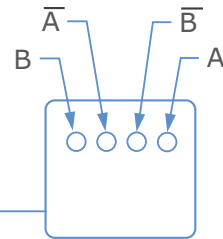
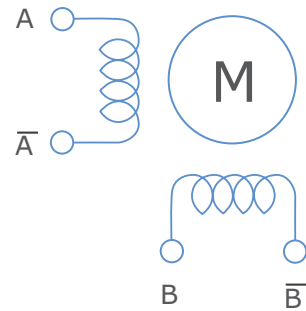


# SM138

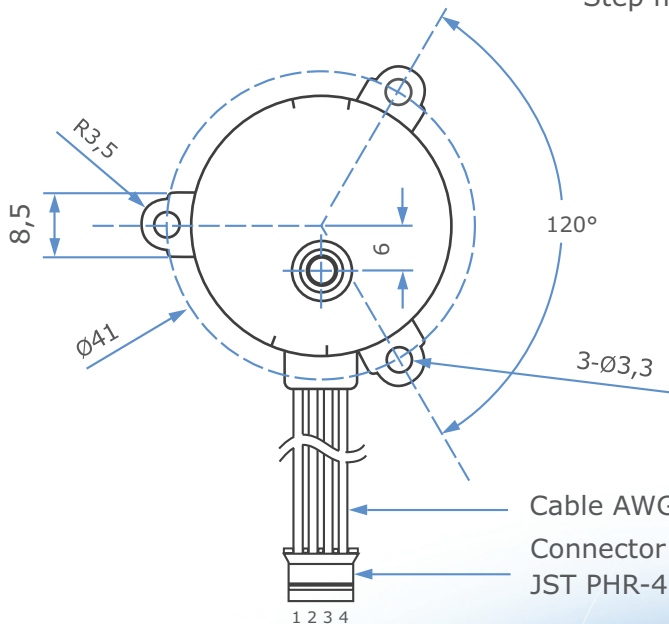
## Mechanical dimensions



SEQUENCE EXCITATION						
PIN	COLOUR	CCW ← → CW (FROM OUTPUT SHAFT SIDE)				PHASE
			+	+		
1	YELLOW		+	+		A
2	ORANGE	+			+	$\bar{A}$
3	BROWN	+	+		+	$\bar{B}$
4	BLACK			+	+	B



Step motor: 35S48B0719



Cable AWG26 UL1061

Connector housing:  
JST PHR-4 (white)