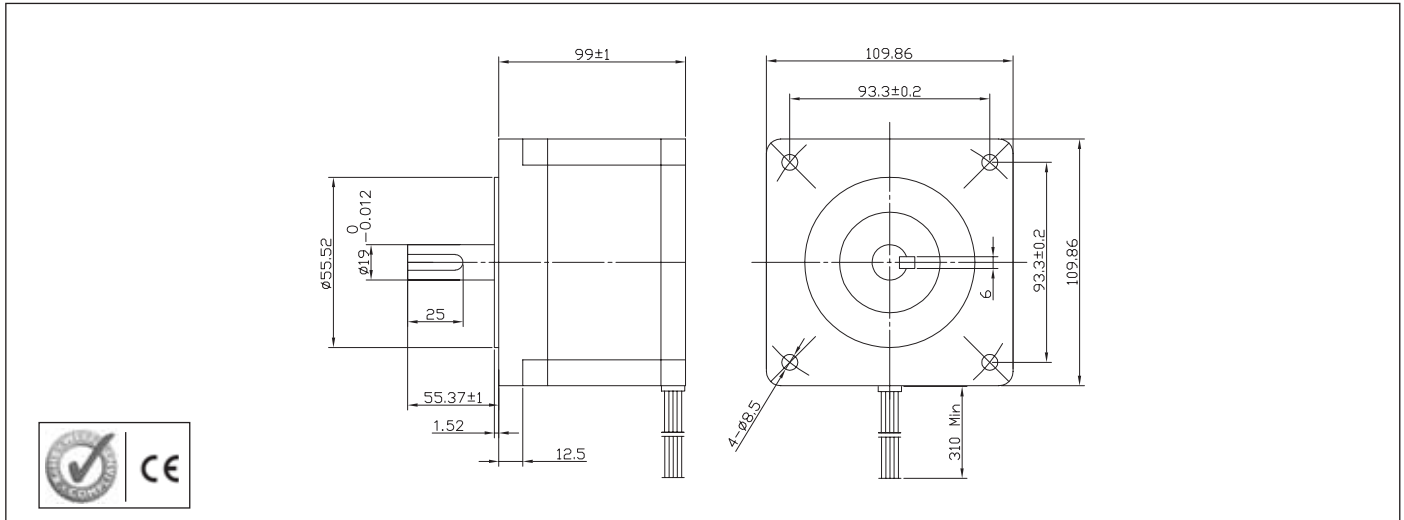


# 110SH99 High Torque Hybrid Stepper Motor



## Characteristics

**STEP ANGLE**  
1,8°

**STEP ANGLE ACCURACY**  
± 5%

**INSULATION CLASS**  
B

**AMBIENT TEMPERATURE**  
-20°C +50°C

**TEMP. RISE**  
80°C MAX (RATED CURRENT, 2 PHASE ON)

**INSULATION RESISTANCE**  
100 M OHM MIN. 500 VDC

**DIELECTRIC STRENGTH**  
820 VAC FOR ONE MINUTE

**SHAFT RADIAL PLAY**  
0,02 MAX (450 G LOAD)

**SHAFT AXIAL PLAY**  
0,08 MAX. (450 G LOAD)

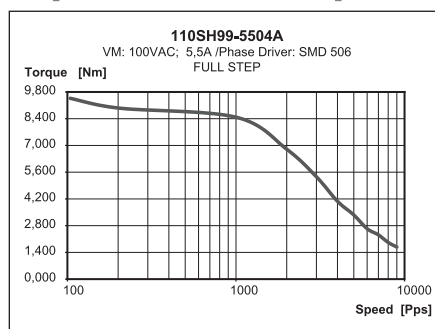
**MAX RADIAL FORCE**  
220 N (20 MM FROM FRONT FLANGE)

**MAX AXIAL FORCE**  
60 N

## Specification

Model		110SH99-5504A			
1	RATED VOLTAGE V	4,95	-	-	-
2	CURRENT/PHASE A	5,5	-	-	-
3	RESISTANCE/PHASE Ω	0,9	-	-	-
4	INDUCTANCE/PHASE MH	12	-	-	-
5	HOLDING TORQUE NM	11,2	-	-	-
6	ROTOR INERTIA G-CM <sup>2</sup>	5500	-	-	-
7	WEIGHT KG	5	-	-	-
8	NUMBER OF LEADS N°	4	-	-	-

## Speed vs. Torque Characteristics



## Connection

LEAD N°	COLOR	GAUGE	FUNCTION
1	RED	UL1430 AWG18	PHASE A
2	WHITE	UL1430 AWG18	PHASE A-
3	YELLOW	UL1430 AWG18	PHASE B
4	GREEN	UL1430 AWG18	PHASE B-