

# Product data sheet

Specifications



## AC servo motors BRH - 0.76 N.m - 1500 rpm - untapped shaft - with brake - IP56

BRH0571T20F1A

### Main

|                           |                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | Motion servo motors                                                                                                                                                                                                                                                                                                                                                   |
| Component name            | BRH                                                                                                                                                                                                                                                                                                                                                                   |
| Continuous stall torque   | 0.46 N.m                                                                                                                                                                                                                                                                                                                                                              |
| Peak stall torque         | 0.88 N.m for LXM05CU70M2<br>1.15 N.m for LXM05AD10F1<br>1.15 N.m for LXM05AD10M2<br>1.15 N.m for LXM05AD10M3X<br>1.15 N.m for LXM05BD10F1<br>1.15 N.m for LXM05BD10M2<br>1.15 N.m for LXM05BD10M3X<br>1.15 N.m for LXM05CD10F1<br>1.15 N.m for LXM05CD10M2<br>1.15 N.m for LXM05CD10M3X                                                                               |
| Nominal output power      | 135 W for LXM05AD10F1<br>135 W for LXM05BD10F1<br>135 W for LXM05CD10F1<br>260 W for LXM05AD10M2<br>260 W for LXM05AD10M3X<br>260 W for LXM05BD10M2<br>260 W for LXM05BD10M3X<br>260 W for LXM05CD10M2<br>260 W for LXM05CD10M3X<br>260 W for LXM05CU70M2                                                                                                             |
| Nominal speed             | 3000 rpm for LXM05AD10F1<br>3000 rpm for LXM05BD10F1<br>3000 rpm for LXM05CD10F1<br>6000 rpm for LXM05AD10M2<br>6000 rpm for LXM05AD10M3X<br>6000 rpm for LXM05BD10M2<br>6000 rpm for LXM05BD10M3X<br>6000 rpm for LXM05CD10M2<br>6000 rpm for LXM05CD10M3X<br>6000 rpm for LXM05CU70M2                                                                               |
| Maximum mechanical speed  | 8000 rpm                                                                                                                                                                                                                                                                                                                                                              |
| Product compatibility     | LXM05AD10F1 at 115 V single phase<br>LXM05AD10M2 at 230 V single phase<br>LXM05AD10M3X at 230 V 3 phases<br>LXM05BD10F1 at 115 V single phase<br>LXM05BD10M2 at 230 V single phase<br>LXM05BD10M3X at 230 V 3 phases<br>LXM05CD10F1 at 115 V single phase<br>LXM05CD10M2 at 230 V single phase<br>LXM05CD10M3X at 230 V 3 phases<br>LXM05CU70M2 at 230 V single phase |
| Shaft end                 | Untapped                                                                                                                                                                                                                                                                                                                                                              |
| IP degree of protection   | IP56                                                                                                                                                                                                                                                                                                                                                                  |
| Encoder type              | Single turn SinCos Hiperface                                                                                                                                                                                                                                                                                                                                          |
| Speed feedback resolution | 16384 points/turn                                                                                                                                                                                                                                                                                                                                                     |
| Holding brake             | With                                                                                                                                                                                                                                                                                                                                                                  |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                         |                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting support        | International standard flange                                                                                                                                                                                                                                                           |
| Electrical connection   | Straight connectors                                                                                                                                                                                                                                                                     |
| Nominal torque          | 0.41 N.m for LXM05AD10M2<br>0.41 N.m for LXM05AD10M3X<br>0.41 N.m for LXM05BD10M2<br>0.41 N.m for LXM05BD10M3X<br>0.41 N.m for LXM05CD10M2<br>0.41 N.m for LXM05CD10M3X<br>0.41 N.m for LXM05CU70M2<br>0.43 N.m for LXM05AD10F1<br>0.43 N.m for LXM05BD10F1<br>0.43 N.m for LXM05CD10F1 |
| Number of poles         | 10                                                                                                                                                                                                                                                                                      |
| Maximum radial force Fr | 109 N at 1000 rpm<br>72 N at 6000 rpm<br>73 N at 5000 rpm<br>74 N at 4000 rpm<br>76 N at 3000 rpm<br>81 N at 2000 rpm                                                                                                                                                                   |

## Complementary

|                                 |                                                                                                                                                                                                                                         |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range compatibility             | Lexium 05                                                                                                                                                                                                                               |
| Switching frequency             | 8 kHz                                                                                                                                                                                                                                   |
| Maximum current Irms            | 6 A for LXM05AD10F1<br>6 A for LXM05AD10M2<br>6 A for LXM05AD10M3X<br>6 A for LXM05BD10F1<br>6 A for LXM05BD10M2<br>6 A for LXM05BD10M3X<br>6 A for LXM05CD10F1<br>6 A for LXM05CD10M2<br>6 A for LXM05CD10M3X<br>4.3 A for LXM05CU70M2 |
| Torque constant                 | 0.21 N.m/A at 120 °C                                                                                                                                                                                                                    |
| Back emf constant               | 13.1 V/krpm at 120 °C                                                                                                                                                                                                                   |
| Rotor inertia                   | 0.18 kg.cm² with brake<br>0.18 kg.cm² without brake                                                                                                                                                                                     |
| Stator resistance               | 5 Ohm                                                                                                                                                                                                                                   |
| Stator inductance               | 9.5 mH                                                                                                                                                                                                                                  |
| Stator electrical time constant | 1.9 ms                                                                                                                                                                                                                                  |
| Maximum axial force Fa          | 0.2 x Fr                                                                                                                                                                                                                                |
| Product weight                  | 1.1 kg                                                                                                                                                                                                                                  |



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |