



Mitsubishi Electric

## HG-SR702

AC brushless rotary servo motor with straight shaft + built-in absolute feedback encod. (22-bit) - Mitsubishi Electric (MELSERVO J4 series) - Rated output 7000W / 7kW - 22-bit (equivalent to 4194304ppr) feedback - Rated current 26A - Supply voltage 200Vac class - Rated torque 33.4Nm nominal - Rated rotational speed 2000rpm - 176x176mm flange mounting - IP67 - with 2 x MS-type connectors - rated for 0...+40°C ambient - equivalent to HGSR702

### Specifications

Primary brand	Mitsubishi Electric
Main function	AC servo motor
Product series / family name	MELSERVO J4 series
Sub-range name	HG-SR series
Functions	AC brushless rotary servo motor
Design	straight shaft built-in absolute feedback encod. (22-bit) medium inertia / medium power capacity natural cooling
Supply voltage (AC)	200Vac class
Rated current	26A
Rated active power (kW)	7000W / 7kW
Rotational speed	2000rpm 3000rpm (maximum)
Torque	33.4Nm nominal
Maximum torque	100Nm
Moment of inertia	0.0151kg.m <sup>2</sup> (151kg.cm <sup>2</sup> )
Connection type	2 x MS-type connectors
Mounting mode	176x176mm flange mounting
Resolution	22-bit (equivalent to 4194304ppr) feedback
Degree of protection	IP67

<b>Dimensions</b>	H237.1mm x W176mm x D297.5mm
<b>Net Height (mm)</b>	237.1 mm
<b>Net Width (mm)</b>	176 mm
<b>Net Depth (mm)</b>	297.5 mm
<b>Ambient air temperature for operation</b>	0...+40 °C
<b>Ambient air temperature for storage</b>	-15°C...+70 °C
<b>Maximum radial load</b>	2058 N
<b>Maximum axial load</b>	980 N
<b>Maximum current</b>	83 A
<b>Order code / Manufacturer SKU</b>	HG-SR702
<b>Manufacturer product status</b>	Commercialized
<b>Equivalent to</b>	HGSR702
<b>Compliant with standard(s)</b>	CE marking TUV Rheinland cULus UL KC EN61800-3 EN60034-1 EN62061 SILCL3 EN50581 UL1004-1 UL1004-6 CSA KC EAC

## Recommended accessories

for standard 1-axis use amplifiers

- [MR-J4-700GF](/products/MR-J4-700GF)
- [MR-J4-700GF-RJ](/products/MR-J4-700GF-RJ)
- [MR-J4-700B](/products/MR-J4-700B)
- [MR-J4-700B-RJ](/products/MR-J4-700B-RJ)
- [MR-J4-700A](/products/MR-J4-700A)
- [MR-J4-700A-RJ](/products/MR-J4-700A-RJ)

Use amplifier <=> motor cables as follows

- Encoder cable for HG-SR and HG-SR (direct connection type)
  - Standard bending life
    - > 2m ([MR-J3ENSCBL2M-L](/products/))
  - Encoder cable for HG-SR and HG-SR (direct connection type)
    - Standard bending life
      - > 2m ([MR-J3ENSCBL2M-L](/products/MR-J3ENSCBL2M-L))
      - > 5m ([MR-J3ENSCBL5M-L](/products/MR-J3ENSCBL5M-L))
      - > 10m ([MR-J3ENSCBL10M-L](/products/))
      - > 20m ([MR-J3ENSCBL20M-L](/products/MR-J3ENSCBL20M-L))
      - > 30m ([MR-J3ENSCBL30M-L](/products/MR-J3ENSCBL30M-L))
    - Long bending life
      - > 2m ([MR-J3ENSCBL2M-H](/products/MR-J3ENSCBL2M-H))
      - > 5m ([MR-J3ENSCBL5M-H](/products/MR-J3ENSCBL5M-H))
      - > 10m ([MR-J3ENSCBL10M-H](/products/MR-J3ENSCBL10M-H))
      - > 15m ([MR-J3ENSCBL15M-H](/products/MR-J3ENSCBL15M-H))
      - > 17m ([MR-J3ENSCBL17M-H](/products/MR-J3ENSCBL30M-L))
      - > 20m ([MR-J3ENSCBL20M-H](/products/MR-J3ENSCBL20M-H))
      - > 30m ([MR-J3ENSCBL30M-H](/products/MR-J3ENSCBL30M-H))
      - > 40m ([MR-J3ENSCBL40M-H](/products/MR-J3ENSCBL40M-H))
      - > 50m ([MR-J3ENSCBL50M-H](/products/MR-J3ENSCBL50M-H)) or ([MR-J3ENS4CBL50M-H](/products/MR-J3ENS4CBL50M-H))
      - > 60m ([MR-J3ENSCBL60M-H](/products/MR-J3ENSCBL50M-H)) or ([MR-J3ENS4CBL60M-H](/products/MR-J3ENS4CBL60M-H))
      - > 80m ([MR-J3ENS4CBL80M-H](/products/MR-J3ENS4CBL80M-H))
      - > 90m ([MR-J3ENS4CBL90M-H](/products/MR-J3ENS4CBL90M-H))
      - > 100m ([MR-J3ENS4CBL100M-H](/products/MR-J3ENS4CBL100M-H))
  - Power supply cable cables (straight type connector)
    - Standard bending life
      - > 2m ([MR-J3P7-2M](/products/MR-J3P7-2M))
      - > 5m ([MR-J3P7-5M](/products/MR-J3P7-5M))
      - > 7m ([MR-J3P7-7M](/products/MR-J3P7-7M))
      - > 10m ([MR-J3P7-](/products/MR-J3P7-10M)

## Documents

[Mitsubishi Electric - MELSERVO J4 series - Catalogue.pdf](#)

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[Mitsubishi Electric - MR-J4 Servo Brochure.pdf](#)

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