



## MATERIAL FACT SHEET

### 248662 HG-MR13

#### General Data

|                     |                          |
|---------------------|--------------------------|
| Product Hierarchy   | IAK30221                 |
|                     | SERVO and Motion         |
|                     | HG-MR                    |
| Ext. Material Group | 10 STANDARD ITEM         |
| ABC Indicator       | A (Available from Stock) |

e-shop: [https://mitsubishi-electric-eshop.mee.com/mee/FA\\_IA/EUR/en/p/000000000000248662](https://mitsubishi-electric-eshop.mee.com/mee/FA_IA/EUR/en/p/000000000000248662)

#### FA-Servo-Motion: Servo Motor

|                            |                   |
|----------------------------|-------------------|
| Series                     | MELSERVO-J4       |
| Type                       | HG-MR             |
| Power Supply (V)           | 200               |
| Rated Capacity (kW)        | 0,1               |
| Inertia                    | ULTRA-LOW INERTIA |
| Rated Torque (Nm)          | 0,32              |
| Maximum Torque (Nm)        | 0,95              |
| Rated Speed (rpm)          | 3000              |
| Maximum Speed (rpm)        | 6000              |
| Inertia (kg*cm2)           | 0,03              |
| Brake                      | NO                |
| Shaft Type                 | STRAIGHT SHAFT    |
| Protection Class           | IP65              |
| Current Type               | AC                |
| Encoder Type               | 22-BIT            |
| Encoder Resolution (p/rev) | 4194304           |

#### Product Dimensions & Weight

|             |      |
|-------------|------|
| Width (mm)  | 40   |
| Height (mm) | 41,7 |
| Depth (mm)  | 82,4 |
| Weight (kg) | 0,54 |

#### Logistic Dimensions & Gross Weight

|                   |       |
|-------------------|-------|
| Length (cm)       | 20,0  |
| Width (cm)        | 10,5  |
| Height (cm)       | 8,5   |
| Gross Weight (kg) | 0,590 |
| Volume (cdm)      | 1,785 |

#### Stock Data

|                              |    |
|------------------------------|----|
| Planned Delivery Time (Days) | 72 |
|------------------------------|----|

#### Life Cycle

|             |                  |
|-------------|------------------|
| Sales Start | 11.04.2012       |
| Predecessor | 161516 / HF-MP13 |

#### Additional Product Information

|                            |                  |
|----------------------------|------------------|
| Binding Tariff Information | DEBTI-10612/21-1 |
| BTI validity date          | 26.09.2024       |
| Battery included           | NO               |

#### Export Data

|                                          |            |
|------------------------------------------|------------|
| Legal Control (Dual Use List)            | Not Listed |
| Country of Origin                        | Japan (JP) |
| Preference Status (Supplier Declaration) | Non EU     |

## Environmental

|                            |           |
|----------------------------|-----------|
| REACH Limit Exceeded       | NO        |
| Dangerous Goods Class      | NO        |
| Dangerous Goods Identifier | NO        |
| RoHS Compliance            | COMPLIANT |
| WEEE                       | B2B       |

## Conformity

|        |           |
|--------|-----------|
| CE     | COMPLIANT |
| UL/cUL | COMPLIANT |
| EAC    | COMPLIANT |
| UKCA   | COMPLIANT |

## Documentation & Media Data

|                            |                                                                                                                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manual URL Indicator       | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=HG-MR13&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2ff94&amp;q=HG-MR13&amp;doc-lang=en</a> |
| Certificates URL Indicator | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=HG-MR13&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=HG-MR13&amp;doc-lang=en</a> |
| CAD URL Indicator          | <a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=HG-MR13&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=HG-MR13&amp;doc-lang=en</a> |

## Product Packaging

|                   |      |
|-------------------|------|
| Cardboard (g)     | 90   |
| Other paper (g)   | 0,3  |
| Aluminum (g)      | 0    |
| Steel (g)         | 0    |
| Styrofoam (g)     | 0    |
| Other plastic (g) | 18,6 |
| Wood (g)          | 0    |
| Glass (g)         | 0    |
| Others (g)        | 1    |

## Spare parts

| Material               | Description                            | Quantity | Unit |
|------------------------|----------------------------------------|----------|------|
| <a href="#">278651</a> | HG-KR/MR-53/53B - 13/13B P-BRACKET     | 1        | PC   |
| <a href="#">278654</a> | HG-KR/MR-053/13 O-BRACKET              | 1        | PC   |
| <a href="#">278666</a> | HG-KR/MR 053(B) - 73(B) ENCODER OBA24R | 1        | PC   |
| <a href="#">278667</a> | HG-KR/MR 053(B) - 73(B) ENCODER LEAD   | 1        | PC   |
| <a href="#">191209</a> | HF-KP/MP053-13(B) ENCODER COVER        | 1        | PC   |

## Compatible products

| Material               | Description / Price List Text / Classification                                                                                                    |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">154367</a> | MR-J3JCB L03M-A2-L<br>Encoder cable; for HF-KN,-KP,-MP, HG-KR,-MR, 0.3m (lead out encoder), IP20<br>Class 100100508: FA-Servo-Motion: Cable       |
| <a href="#">160226</a> | MR-J3ENCBL2M-H<br>Encoder cable; for HC-RP, HF-SN/SP/JP, HG-SN/SR, HK-KT/RT/ST; high flex.,2m, IP67<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">160227</a> | MR-PWS1CBL2M-A1-H<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, high flex, 2m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">160228</a> | MR-PWS1CBL2M-A2-H<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, high flexible, 2m (Encoder)<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">160230</a> | MR-J3ENCBL2M-A2-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, highflexible, 2m (encoder)<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">160312</a> | MR-J3ENCBL2M-A1-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, highflex. 2m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">161547</a> | MR-J3ENCBL5M-A1-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, highflex. 5m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">161548</a> | MR-J3ENCBL10M-A1-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, highflex. 10m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable |
| <a href="#">161549</a> | MR-J3ENCBL2M-A1-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 2m (lead out motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable    |

| Material               | Description / Price List Text / Classification                                                                                                    |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">161550</a> | MR-J3ENCBL5M-A1-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 5m (lead out motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">161551</a> | MR-J3ENCBL10M-A1-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 10m (lead out motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable  |
| <a href="#">161552</a> | MR-J3ENCBL5M-A2-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, highflexible, 5m (encoder)<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">161553</a> | MR-J3ENCBL10M-A2-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, highflexible, 10m (encoder)<br>Class 100100508: FA-Servo-Motion: Cable |
| <a href="#">161554</a> | MR-J3ENCBL2M-A2-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 2m (lead out encoder)<br>Class 100100508: FA-Servo-Motion: Cable        |
| <a href="#">161555</a> | MR-J3ENCBL5M-A2-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 5m (lead out encoder)<br>Class 100100508: FA-Servo-Motion: Cable        |
| <a href="#">161556</a> | MR-J3ENCBL10M-A2-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 10m (lead out encoder)<br>Class 100100508: FA-Servo-Motion: Cable      |
| <a href="#">161557</a> | MR-J3JCB03M-A1-L<br>Encoder cable; for HF-KN,-KP,-MP, HG-KR,-MR, 0.3m (lead out motor shaft), IP20<br>Class 100100508: FA-Servo-Motion: Cable     |
| <a href="#">161559</a> | MR-EKCBL20M-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, high-flex 20m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable          |
| <a href="#">161560</a> | MR-EKCBL30M-H<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, high-flex 30m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable          |
| <a href="#">161561</a> | MR-EKCBL20M-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, 20m (lead out encoder)<br>Class 100100508: FA-Servo-Motion: Cable               |
| <a href="#">161562</a> | MR-EKCBL30M-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, 30m (lead out encoder)<br>Class 100100508: FA-Servo-Motion: Cable               |
| <a href="#">161563</a> | MR-J3ENSCBL5M-H<br>Encoder cable; for HC-RP, HF-SN/SP/JP, HG-SN/SR, HK-KT/RT/ST; high flex.,5m, IP67<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">161564</a> | MR-J3ENSCBL10M-H<br>Encoder cable; for HC-RP, HF-SN/SP/JP, HG-SN/SR, HK-KT/RT/ST; high flex.,10m,IP67<br>Class 100100508: FA-Servo-Motion: Cable  |
| <a href="#">161565</a> | MR-J3ENSCBL20M-H<br>Encoder cable; for HC-RP, HF-SN,-SP,-JP, HG-SN,-SR, highflexible, 20m, IP67<br>Class 100100508: FA-Servo-Motion: Cable        |
| <a href="#">161566</a> | MR-J3ENSCBL30M-H<br>Encoder cable; for HC-RP, HF-SN,-SP,-JP, HG-SN,-SR, highflexible, 30m, IP67<br>Class 100100508: FA-Servo-Motion: Cable        |
| <a href="#">161567</a> | MR-J3ENSCBL2M-L<br>Encoder cable; for HC-RP, HF-SN/SP/JP, HG-SN/SR, HK-KT/RT/ST; 2m, IP67<br>Class 100100508: FA-Servo-Motion: Cable              |
| <a href="#">161568</a> | MR-J3ENSCBL5M-L<br>Encoder cable; for HC-RP, HF-SN/SP/JP, HG-SN/SR, HK-KT/RT/ST; 5m, IP67<br>Class 100100508: FA-Servo-Motion: Cable              |
| <a href="#">161569</a> | MR-J3ENSCBL10M-L<br>Encoder cable; for HC-RP, HF-SN/SP/JP, HG-SN/SR, HK-KT/RT/ST; 10m, IP67<br>Class 100100508: FA-Servo-Motion: Cable            |
| <a href="#">161570</a> | MR-J3ENSCBL20M-L<br>Encoder cable; for HC-RP, HF-SN,-SP,-JP, HG-SN,-SR, 20m, IP67<br>Class 100100508: FA-Servo-Motion: Cable                      |
| <a href="#">161571</a> | MR-J3ENSCBL30M-L<br>Encoder cable; for HC-RP, HF-SN,-SP,-JP, HG-SN,-SR, 30m, IP67<br>Class 100100508: FA-Servo-Motion: Cable                      |
| <a href="#">161572</a> | MR-ECNM<br>Encoder-connector-set for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR motor types<br>Class 100100509: FA-Servo-Motion: Connector                  |
| <a href="#">161576</a> | MR-J3SCNS<br>Encoder-Connector-Set for HF-SE/SN/SP/JP, HG-JR/SN/SR, HK-ST/RT motor,(Straight)<br>Class 100100509: FA-Servo-Motion: Connector      |

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|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">161592</a> | MR-PWS1CBL5M-A1-H<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, high flex, 5m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">161593</a> | MR-PWS1CBL10M-A1-H<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, high flex, 10m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable |
| <a href="#">161594</a> | MR-PWS1CBL2M-A1-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 2m (Lead out motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable     |
| <a href="#">161595</a> | MR-PWS1CBL5M-A1-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 5m (Lead out motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable     |
| <a href="#">161596</a> | MR-PWS1CBL10M-A1-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 10m (Lead out motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">161597</a> | MR-PWS1CBL5M-A2-H<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, high flexible, 5m (Encoder)<br>Class 100100508: FA-Servo-Motion: Cable   |
| <a href="#">161598</a> | MR-PWS1CBL10M-A2-H<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, high flexible, 10m (Encoder)<br>Class 100100508: FA-Servo-Motion: Cable |
| <a href="#">161599</a> | MR-PWS1CBL2M-A2-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 2m (Lead out Encoder)<br>Class 100100508: FA-Servo-Motion: Cable         |
| <a href="#">161600</a> | MR-PWS1CBL5M-A2-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 5m (Lead out Encoder)<br>Class 100100508: FA-Servo-Motion: Cable         |
| <a href="#">161601</a> | MR-PWS1CBL10M-A2-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 10m (Lead out Encoder)<br>Class 100100508: FA-Servo-Motion: Cable       |
| <a href="#">161602</a> | MR-PWS2CBL03M-A1-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, 0.3 m (Lead out motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable     |
| <a href="#">161603</a> | MR-PWS2CBL03M-A2-L<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, 0.3 m (Lead out Encoder)<br>Class 100100508: FA-Servo-Motion: Cable         |
| <a href="#">209504</a> | MR-J3ENCBL3M-A2-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, 3m (lead out encoder)<br>Class 100100508: FA-Servo-Motion: Cable       |
| <a href="#">220002</a> | PWS007N-02.0-A2<br>Power cable; for HF-KN,-KP,-MP, HG-KN,-KR,-MR,shielded, power chain, 2m (Enc.)<br>Class 100100508: FA-Servo-Motion: Cable     |
| <a href="#">220005</a> | PWS007N-05.0-A2<br>Power cable; for HF-KN,-KP,-MP, HG-KN,-KR,-MR,shielded, power chain, 5m (Enc.)<br>Class 100100508: FA-Servo-Motion: Cable     |
| <a href="#">220007</a> | PWS007N-10.0-A2<br>Power cable; for HF-KN,-KP,-MP, HG-KN,-KR,-MR,shielded, power chain, 10m (Enc.)<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">220009</a> | PWS007N-02.0-A1<br>Power cable; for HF-KN,-KP,-MP, HG-KN,-KR,-MR,shielded, power chain, 2m (shaft)<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">220010</a> | PWS007N-05.0-A1<br>Power cable; for HF-KN,-KP,-MP, HG-KN,-KR,-MR,shielded, power chain, 5m (shaft)<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">220012</a> | PWS007N-10.0-A1<br>Power cable; for HF-KN,-KP,-MP, HG-KN,-KR,-MR,shielded, power chain,10m (shaft)<br>Class 100100508: FA-Servo-Motion: Cable    |
| <a href="#">227425</a> | MR-J3SCNSA<br>Encoder-Connector-Set for HF-SE/SN/SP/JP, HG-JR/SN/SR, HK-ST/RT motor, (Angle)<br>Class 100100509: FA-Servo-Motion: Connector      |
| <a href="#">229788</a> | MR-EKCBL50M-H<br>Encoder cable; for HF-KP(B)/HF-MP(B), high-flex 50m (lead out motor shaft), IP20<br>Class 100100508: FA-Servo-Motion: Cable     |
| <a href="#">239651</a> | MR-J3JSCBL03M-A1-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, 0.3m (motor shaft), IP65<br>Class 100100508: FA-Servo-Motion: Cable       |
| <a href="#">239652</a> | MR-J3JSCBL03M-A2-L<br>Encoder cable; for HF-KE,-KN,-KP,-MP, HG-KR,-MR, 0.3m (lead out encoder), IP65<br>Class 100100508: FA-Servo-Motion: Cable  |

| Material               | Description / Price List Text / Classification                                                                                                   |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">244812</a> | MR-J3ENSCBL50M-H<br>Encoder cable; for HC-RP, HF-SN,-SP,-JP, HG-SN,-SR, highflexible, 50m, IP67<br>Class 100100508: FA-Servo-Motion: Cable       |
| <a href="#">246915</a> | MR-EKCBL5M-H<br>Encoder cable; high-flex, 5m, IP20<br>Class 100100508: FA-Servo-Motion: Cable                                                    |
| <a href="#">248686</a> | MR-ENCNS2<br>Encoder Connector Set for HG-SN/SR, HK-ST/RT motor, IP67 (Straight Type)<br>Class 100100509: FA-Servo-Motion: Connector             |
| <a href="#">248687</a> | MR-ENCNS2A<br>Encoder Connector Set for HG-SN/SR, HK-ST/RT motor, IP67 (Angle Type)<br>Class 100100509: FA-Servo-Motion: Connector               |
| <a href="#">269075</a> | MR-EKCBL40M-H<br><br>Class 100100508: FA-Servo-Motion: Cable                                                                                     |
| <a href="#">269076</a> | MR-J3ENSCBL40M-H<br>Encoder cable; for HC-RP, HF-SN,-SP,-JP, HG-SN,-SR, highflexible, 40m, IP67<br>Class 100100508: FA-Servo-Motion: Cable       |
| 493673                 | MR-PWS1CBL20M-A1-H<br>Power cable; for HF-KE,-KN,-KP,-MP, HG-KN,-KR,-MR, high flex, 20m (motor shaft)<br>Class 100100508: FA-Servo-Motion: Cable |