

# MM

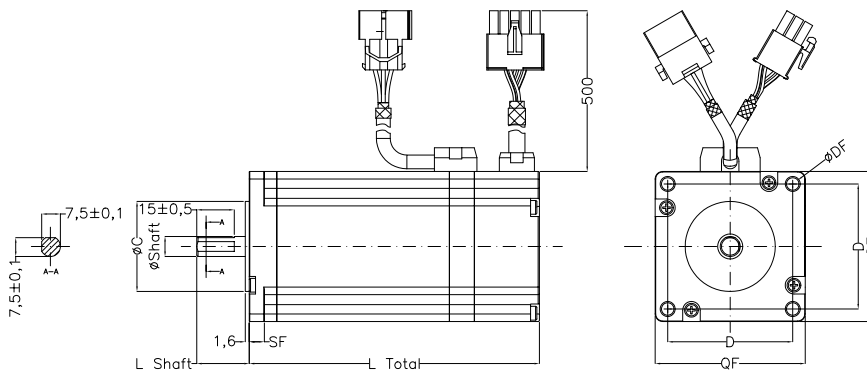
Stepless motors



## • OVERALL DIMENSIONS

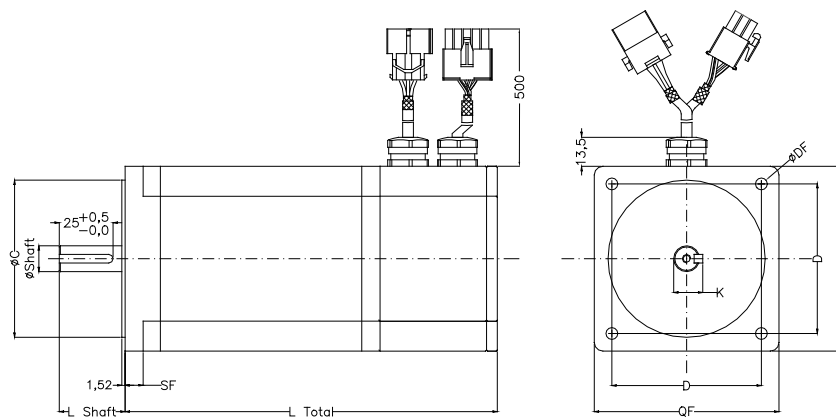
| Motor type | Stall torque (Nm) | L total Length (mm) | QF Flange (mm) | C Centering (mm) | SF Thickness flange (mm) | D Holes distances (mm) | DF Fixing holes (mm) | Ø Shaft (mm) | K (mm) | L Shaft (mm) | Weight (kg) |
|------------|-------------------|---------------------|----------------|------------------|--------------------------|------------------------|----------------------|--------------|--------|--------------|-------------|
| MM609442   | 2,8               | 116                 | 60             | 36,05            | 6,00                     | 50,2                   | 4-Ø5,5               | 8            | -      | 21,0         | 1,5         |
| MM868055   | 4,6               | 135                 | 86             | 73,02            | 8,38                     | 69,5                   | 4-Ø5,5               | 12           | 13,5   | 30,6         | 2,8         |
| MM8611880  | 8,7               | 173                 | 86             | 73,02            | 8,38                     | 69,5                   | 4-Ø5,5               | 12/14        | 16,0   | 30,6         | 4,3         |
| MM8615699  | 12                | 211                 | 86             | 73,02            | 8,38                     | 69,5                   | 4-Ø5,5               | 14           | 16,0   | 30,6         | 5,8         |
| MM11015065 | 21                | 205                 | 110            | 55,52            | 12,5                     | 89,00                  | 4-Ø8,5               | 19           | 21,5   | 55,37        | 9           |

## • OVERALL DIMENSIONS FLANGE 60

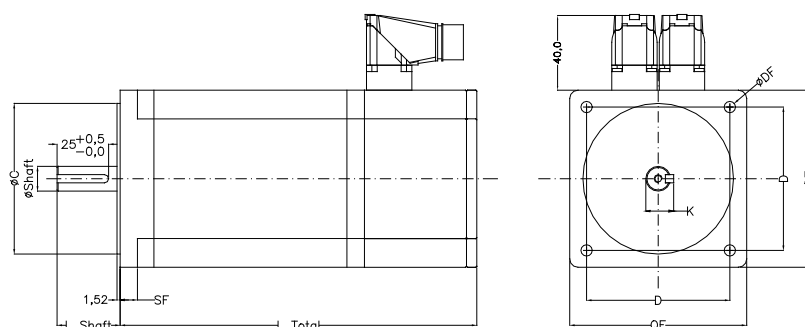


• AMP CONNECTORS

## • OVERALL DIMENSIONS FLANGE 86 - 110



• AMP CONNECTORS



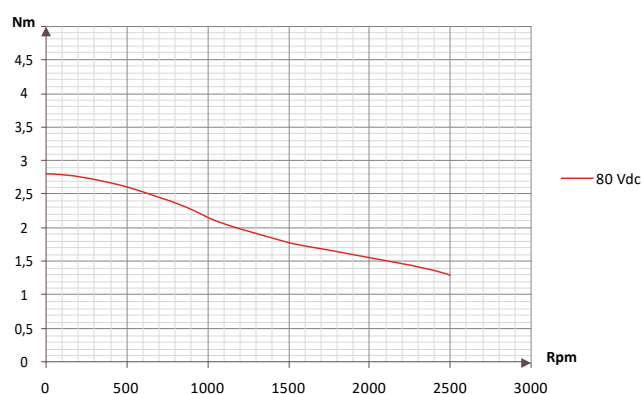
• CIRCULAR CONNECTORS

# MM

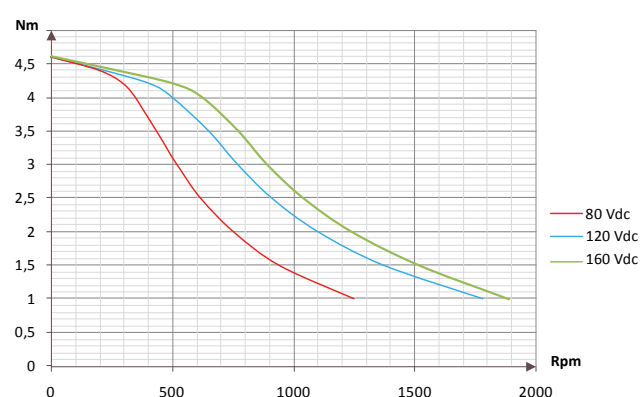
Stepless motors



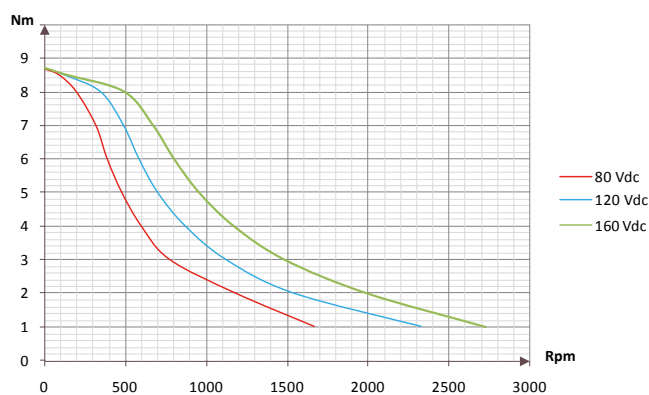
## • TORQUE CURVES



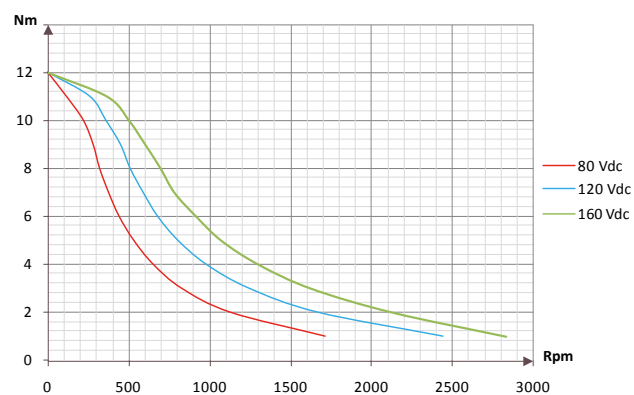
SVM - MM609442 - 2,8 Nm



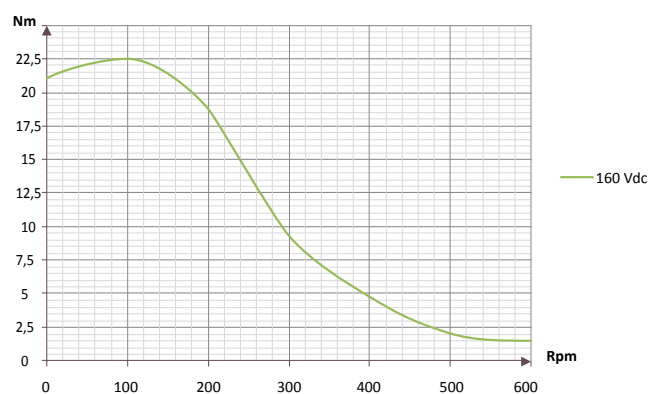
SVM - MM868055 - 4,6 Nm



SVM - MM8611880 - 8,7 Nm



SVM - MM8615699 - 12Nm



SVM - MM11015065 - 21Nm



# MM

## Ordering Codes

### • MM

#### Ordering codes with Optionals:

| x  |    |      |       |  | a                                                                              |  | b          | c                      | d            |                         |  |
|----|----|------|-------|--|--------------------------------------------------------------------------------|--|------------|------------------------|--------------|-------------------------|--|
| MM | 60 | 9442 | .     |  | 3                                                                              |  | 6          | 1                      | 0            |                         |  |
| x  | MM | 60   | 9442  |  | Holding torque 2,8 Nm                                                          |  | □ FL60 mm  | 780 gcm <sup>2</sup>   | Ø 8mm        | Inc enc 1000 pulse/turn |  |
|    | MM | 86   | 8055  |  | Holding torque 4,6 Nm                                                          |  | □ FL86 mm  | 1400 gcm <sup>2</sup>  | Ø 12mm       | Inc enc 2000 pulse/turn |  |
|    | MM | 86   | 11880 |  | Holding torque 8,7 Nm                                                          |  | □ FL86 mm  | 2700 gcm <sup>2</sup>  | Ø 12 or 14mm | Inc enc 2000 pulse/turn |  |
|    | MM | 86   | 15699 |  | Holding torque 12 Nm                                                           |  | □ FL86 mm  | 4000 gcm <sup>2</sup>  | Ø 14mm       | Inc enc 2000 pulse/turn |  |
|    | MM | 110  | 15065 |  | Holding torque 21 Nm *                                                         |  | □ FL110 mm | 10900 gcm <sup>2</sup> | Ø 19mm       | Inc enc 2000 pulse/turn |  |
| a  | 0  |      |       |  | Shaft Diameter: 12 mm Keyed shaft (ONLY FOR 4,6 Nm and 8,7Nm)                  |  |            |                        |              |                         |  |
|    | 1  |      |       |  | Shaft Diameter: 14 mm Keyed shaft (ONLY FOR 8,7 Nm and 12Nm)                   |  |            |                        |              |                         |  |
|    | 2  |      |       |  | Shaft Diameter: 19 mm Keyed shaft (ONLY FOR 21Nm)                              |  |            |                        |              |                         |  |
|    | 3  |      |       |  | Shaft Diameter: 8 mm Keyed shaft (ONLY FOR 2,8 Nm)                             |  |            |                        |              |                         |  |
| b  | 0  |      |       |  | Incremental encoder 2000 pulse/turn (ONLY FOR MM86 and MM110)                  |  |            |                        |              |                         |  |
|    | 3  |      |       |  | Incremental encoder 2000 pulse/turn + Thermal sensor (ONLY FOR MM86 and MM110) |  |            |                        |              |                         |  |
|    | 6  |      |       |  | Incremental encoder 1000 pulse/turn (ONLY FOR MM60)                            |  |            |                        |              |                         |  |
| c  | 1  |      |       |  | AMP connectors with cable output 50cm                                          |  |            |                        |              |                         |  |
|    | 2  |      |       |  | Circular connector output 90°                                                  |  |            |                        |              |                         |  |
| d  | 0  |      |       |  | IP44                                                                           |  |            |                        |              |                         |  |

\* Usable only up to the speed of 500 rpm

## Ordering Codes

## • CABLES

| Type                                                                    | Description                                                                           | Lenght (mt) |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|
| Cable with connector motor side and drive side for fixed installation   |                                                                                       |             |
| CSMP.IIPS.PF6S.A.0500                                                   | Motor cable for motors cover box with AMP 6 poles                                     | 5           |
| CSMP.IIPS.PF6S.A.0300                                                   | Motor cable for motors cover box with AMP 6 poles                                     | 3           |
| CSEI.DMCS.PF9S.A.0500                                                   | Encoder cable for motors cover box with AMP 15 poles                                  | 5           |
| CSEI.DMCS.PF9S.A.0300                                                   | Encoder cable for motors cover box with AMP 15 poles                                  | 3           |
| CSMP.IIPS.CFCS.A.0500                                                   | Motor cable for motors cover box circular connector 7 poles                           | 5           |
| CSMP.IIPS.CFCS.A.0300                                                   | Motor cable for motors cover box circular connector 7 poles                           | 3           |
| CSEI.DMCS.CFCS.A.0500                                                   | Encoder cable for motors cover box circular connector 12 poles                        | 5           |
| CSEI.DMCS.CFCS.A.0300                                                   | Encoder cable for motors cover box circular connector 12 poles                        | 3           |
| CSIT.DMCS.CFCS.C.0500                                                   | Encoder cable for motor cover box with temperature sensor circular connector 12 poles | 5           |
| CSIT.DMCS.CFCS.C.0300                                                   | Encoder cable for motor cover box with temperature sensor circular connector 12 poles | 3           |
| Cable with connector motor side and drive side for flexing installation |                                                                                       |             |
| CSMP.IIPS.CFCS.B.0500                                                   | Motor cable for motors cover box circular connector 7 poles                           | 5           |
| CSMP.IIPS.CFCS.B.0300                                                   | Motor cable for motors cover box circular connector 7 poles                           | 3           |
| CSEI.DMCS.CFCS.C.0500                                                   | Encoder cable for motors cover box circular connector 12 poles                        | 5           |
| CSEI.DMCS.CFCS.C.0300                                                   | Encoder cable for motors cover box circular connector 12 poles                        | 3           |
| CSIT.DMCS.CFCS.D.0500                                                   | Encoder cable for motor cover box with temperature sensor circular connector 12 poles | 5           |
| CSIT.DMCS.CFCS.D.0300                                                   | Encoder cable for motor cover box with temperature sensor circular connector 12 poles | 3           |

## • POWER SUPPLY

Ordering codes with optional : SDPOW0.xxx

Auxiliary output 24Vdc 150mA

|            |                                             |
|------------|---------------------------------------------|
| SDPOW0.201 | Power supply AC/DC 80Vdc-120Vdc             |
| SDPOW0.211 | Power supply AC/DC 80Vdc-120Vdc + DIN guide |

Ordering code with optional : SDPOWR.xx

Auxiliary output up to 50Vdc 1A

|           |                                                                             |
|-----------|-----------------------------------------------------------------------------|
| SDPOWR.00 | Power Supply AC/DC 80Vdc-170Vdc                                             |
| SDPOWR.10 | Power Supply AC/DC 80Vdc-170Vdc+START UP circuit - It is necessary with ISD |

Ordering code with optional : SDPOWT.00

|           |                                 |
|-----------|---------------------------------|
| SDPOWT.00 | Power Supply AC/DC up to 160Vdc |
|-----------|---------------------------------|