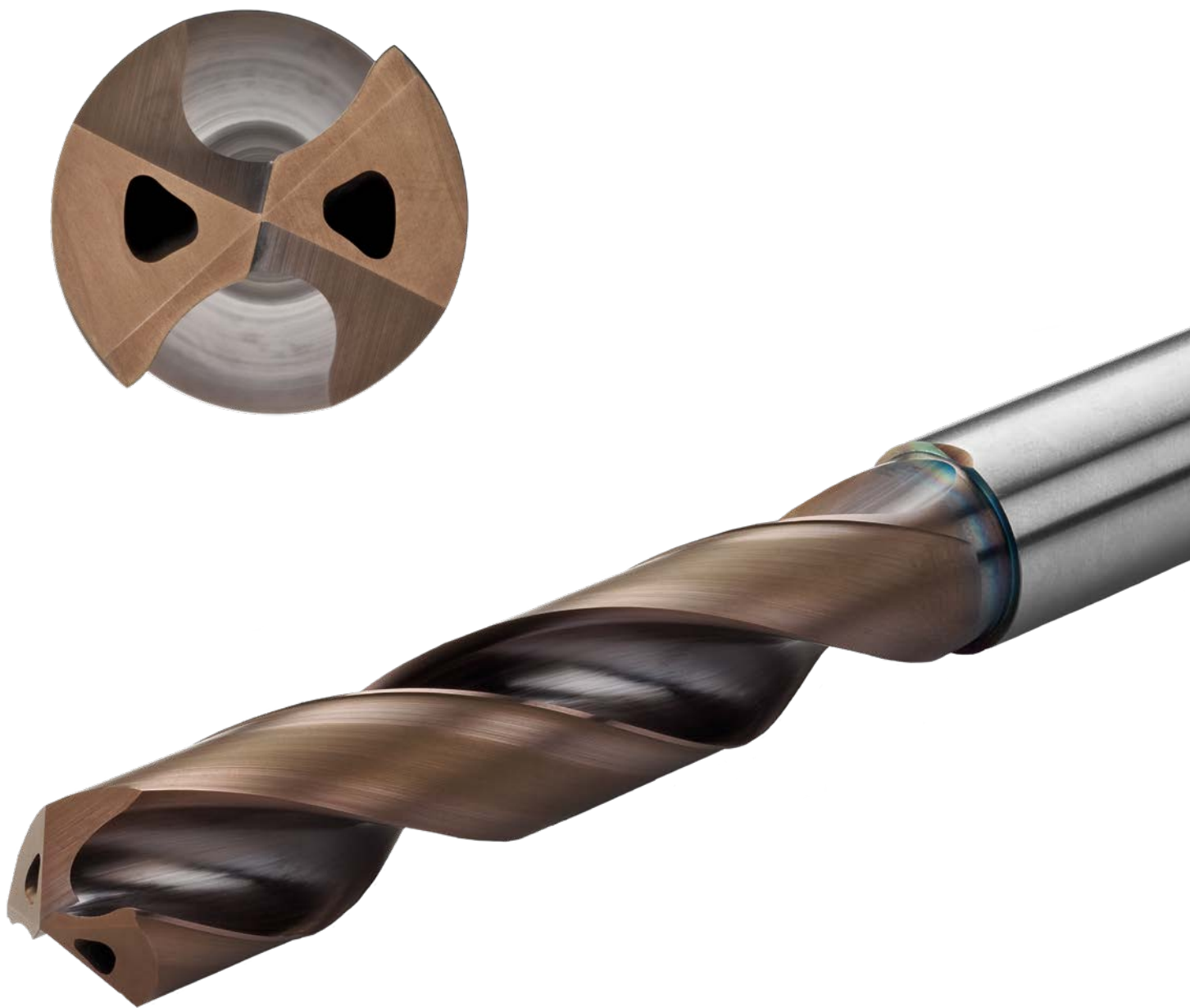


# MMS

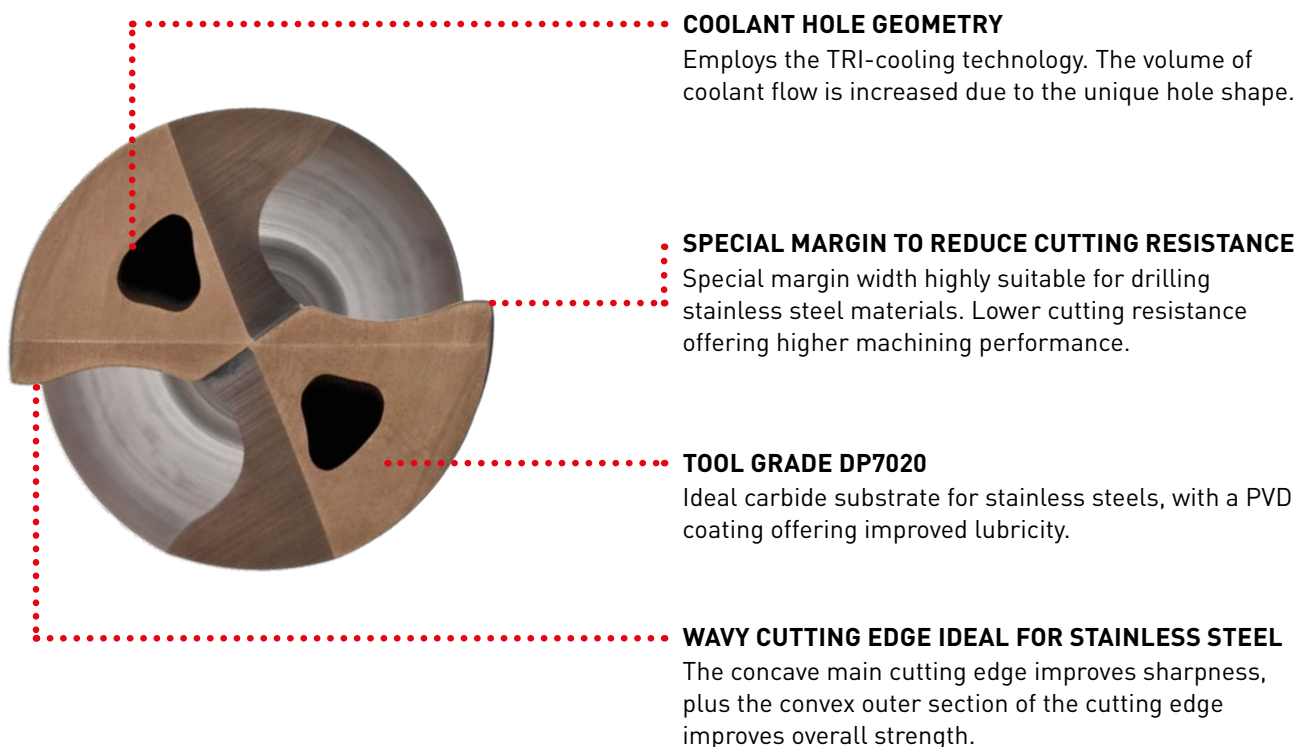
## SOLID CARBIDE DRILL FOR STAINLESS STEEL MATERIALS



# MMS

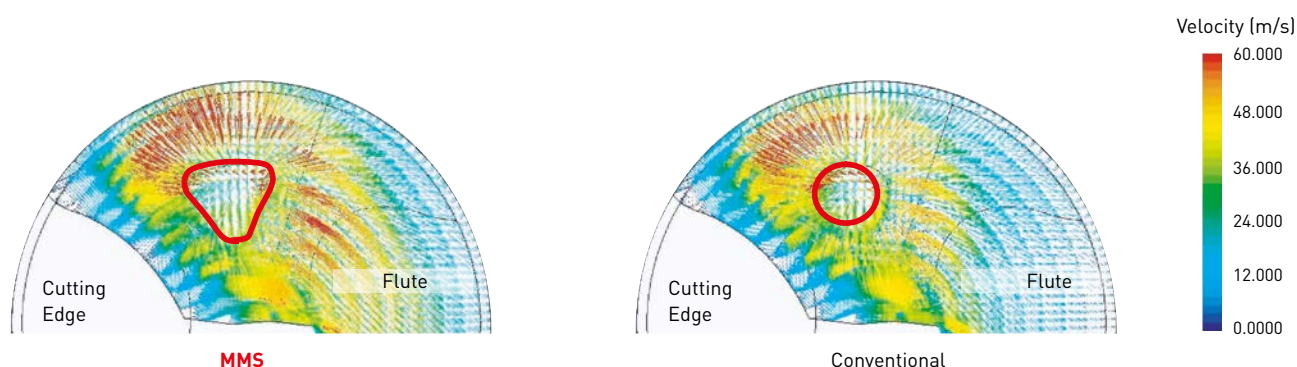
## SOLID CARBIDE DRILL FOR STAINLESS STEEL MATERIALS

### UNIQUE COOLANT HOLE GEOMETRY FOR HIGH PRODUCTIVITY & LONG TOOL LIFE



**COMPARED TO CONVENTIONAL DRILLS, COOLANT VOLUME IS DOUBLED.  
WITH IMPROVED COOLING FOR LONGER TOOL LIFE.**

### COOLANT FLOW SPEED SIMULATION (4700RPM)



# MMS



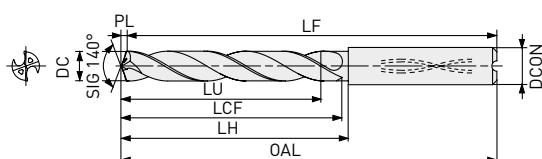
## SOLID CARBIDE DRILL FOR STAINLESS STEEL MATERIALS

**M**


### 1 Cylindrical shank type

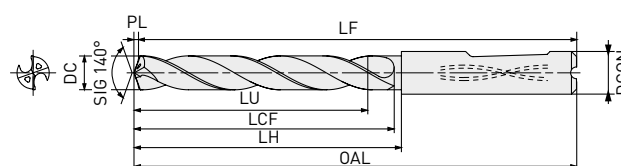
MMS---S/L-DIN-C (l/d 3-5)

MMS---X3/X5DB (l/d 3-5)



### 2 Whistle notch shank type

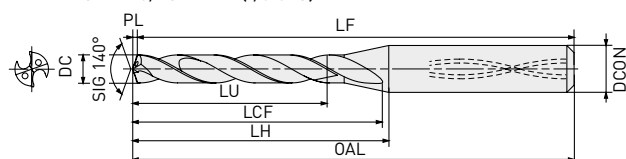
MMS---S/L-DIN (l/d 3-5)



### 3 Cylindrical shank type with taper neck

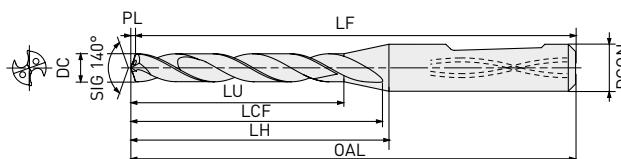
MMS---S/L-DIN-C (l/d 3-5)

MMS---X3/X5DB (l/d 3-5)



### 4 Whistle notch shank type with taper neck

MMS---S/L-DIN (l/d 3-5)



|               | DC=3             | 3<DC≤6           | 6<DC≤10          | 10<DC≤18         | 18<DC≤20         |
|---------------|------------------|------------------|------------------|------------------|------------------|
| DIN type (m7) | +0.012<br>+0.002 | +0.016<br>+0.004 | +0.021<br>+0.006 | +0.025<br>+0.007 | +0.029<br>+0.008 |
| Others (h8)   | 0<br>-0.014      | 0<br>-0.018      | 0<br>-0.022      | 0<br>-0.027      | 0<br>-0.033      |
|               |                  | 0<br>-0.008      | 0<br>-0.009      | 0<br>-0.011      | 0<br>-0.013      |

- For high accuracy and efficient drilling of stainless steels.
- Drills with TRI coolant holes start from Ø4.60mm.

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |      |      |      |      |     | Type |      |
|----------------|--------|------------|------|-----------------|------|------|------|------|-----|------|------|
|                |        |            |      | LU              | LCF  | LH   | OAL  | LF   | PL  |      | DCON |
| MMS0300S-DIN-C | ●      | 3          | 3.0  | 9.0             | 20.0 | 26.0 | 62.0 | 61.5 | 0.5 | 6    | 3    |
| MMS0300L-DIN-C | ●      | 5          |      | 15.0            | 28.0 | 30.0 | 66.0 | 65.5 | 0.5 | 6    | 3    |
| MMS0300X3DB    | ★      | 3          |      | 9.0             | 22.0 | 24.0 | 70.5 | 70.0 | 0.5 | 6    | 3    |
| MMS0300X5DB    | ★      | 5          |      | 15.0            | 29.0 | 32.0 | 78.5 | 78.0 | 0.5 | 6    | 3    |
| MMS0305S-DIN   | □      | 3          | 3.05 | 9.2             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 4    |
| MMS0305S-DIN-C | ●      | 3          |      | 9.2             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 3    |
| MMS0305L-DIN   | □      | 5          |      | 15.3            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 4    |
| MMS0305L-DIN-C | ●      | 5          |      | 15.3            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 3    |

## MMS

| Order number   | DP7020 | Hole depth | DC  | Dimensions (mm) |      |      |      |      |     | Type |      |
|----------------|--------|------------|-----|-----------------|------|------|------|------|-----|------|------|
|                |        |            |     | LU              | LCF  | LH   | OAL  | LF   | PL  |      | DCON |
| MMS0310S-DIN   | □      | 3          | 3.1 | 9.3             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 4    |
| MMS0310S-DIN-C | ●      | 3          |     | 9.3             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 3    |
| MMS0310L-DIN   | □      | 5          |     | 15.5            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 4    |
| MMS0310L-DIN-C | ●      | 5          |     | 15.5            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 3    |
| MMS0310X3DB    | ★      | 3          |     | 9.3             | 22.0 | 24.0 | 70.6 | 70.0 | 0.6 | 6    | 3    |
| MMS0310X5DB    | ★      | 5          |     | 15.5            | 29.0 | 32.0 | 78.6 | 78.0 | 0.6 | 6    | 3    |
| MMS0320S-DIN   | □      | 3          | 3.2 | 9.6             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 4    |
| MMS0320S-DIN-C | ●      | 3          |     | 9.6             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 3    |
| MMS0320L-DIN   | □      | 5          |     | 16.0            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 4    |
| MMS0320L-DIN-C | ●      | 5          |     | 16.0            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 3    |
| MMS0320X3DB    | ★      | 3          |     | 9.6             | 22.0 | 24.0 | 70.6 | 70.0 | 0.6 | 6    | 3    |
| MMS0320X5DB    | ★      | 5          |     | 16.0            | 29.0 | 32.0 | 78.6 | 78.0 | 0.6 | 6    | 3    |
| MMS0330S-DIN   | □      | 3          | 3.3 | 9.9             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 4    |
| MMS0330S-DIN-C | ●      | 3          |     | 9.9             | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 3    |
| MMS0330L-DIN   | □      | 5          |     | 16.5            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 4    |
| MMS0330L-DIN-C | ●      | 5          |     | 16.5            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 3    |
| MMS0330X3DB    | ★      | 3          |     | 9.9             | 22.0 | 24.0 | 70.6 | 70.0 | 0.6 | 6    | 3    |
| MMS0330X5DB    | ★      | 5          |     | 16.5            | 29.0 | 32.0 | 78.6 | 78.0 | 0.6 | 6    | 3    |
| MMS0340S-DIN   | □      | 3          | 3.4 | 10.2            | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 4    |
| MMS0340S-DIN-C | ●      | 3          |     | 10.2            | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 3    |
| MMS0340L-DIN   | □      | 5          |     | 17.0            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 4    |
| MMS0340L-DIN-C | ●      | 5          |     | 17.0            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 3    |
| MMS0340X3DB    | ★      | 3          |     | 10.2            | 22.0 | 24.0 | 70.6 | 70.0 | 0.6 | 6    | 3    |
| MMS0340X5DB    | ★      | 5          |     | 17.0            | 29.0 | 32.0 | 78.6 | 78.0 | 0.6 | 6    | 3    |
| MMS0350S-DIN   | □      | 3          | 3.5 | 10.5            | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 4    |
| MMS0350S-DIN-C | ●      | 3          |     | 10.5            | 20.0 | 26.0 | 62.0 | 61.4 | 0.6 | 6    | 3    |
| MMS0350L-DIN   | □      | 5          |     | 17.5            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 4    |
| MMS0350L-DIN-C | ●      | 5          |     | 17.5            | 28.0 | 30.0 | 66.0 | 65.4 | 0.6 | 6    | 3    |
| MMS0350X3DB    | ★      | 3          |     | 10.5            | 22.0 | 24.0 | 70.6 | 70.0 | 0.6 | 6    | 3    |
| MMS0350X5DB    | ★      | 5          |     | 17.5            | 29.0 | 32.0 | 78.6 | 78.0 | 0.6 | 6    | 3    |
| MMS0360S-DIN   | □      | 3          | 3.6 | 10.8            | 20.0 | 26.0 | 62.0 | 61.3 | 0.7 | 6    | 4    |
| MMS0360S-DIN-C | ●      | 3          |     | 10.8            | 20.0 | 26.0 | 62.0 | 61.3 | 0.7 | 6    | 3    |
| MMS0360L-DIN   | □      | 5          |     | 18.0            | 28.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 4    |
| MMS0360L-DIN-C | ●      | 5          |     | 18.0            | 28.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 3    |
| MMS0360X3DB    | ★      | 3          |     | 10.8            | 23.0 | 24.0 | 70.7 | 70.0 | 0.7 | 6    | 3    |
| MMS0360X5DB    | ★      | 5          |     | 18.0            | 31.0 | 32.0 | 78.7 | 78.0 | 0.7 | 6    | 3    |
| MMS0370S-DIN   | □      | 3          | 3.7 | 11.1            | 20.0 | 26.0 | 62.0 | 61.3 | 0.7 | 6    | 4    |
| MMS0370S-DIN-C | ●      | 3          |     | 11.1            | 20.0 | 26.0 | 62.0 | 61.3 | 0.7 | 6    | 3    |
| MMS0370L-DIN   | □      | 5          |     | 18.5            | 28.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 4    |
| MMS0370L-DIN-C | ●      | 5          |     | 18.5            | 28.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 3    |
| MMS0370X3DB    | ★      | 3          |     | 11.1            | 23.0 | 24.0 | 70.7 | 70.0 | 0.7 | 6    | 3    |
| MMS0370X5DB    | ★      | 5          |     | 18.5            | 31.0 | 32.0 | 78.7 | 78.0 | 0.7 | 6    | 3    |
| MMS0380S-DIN   | □      | 3          | 3.8 | 11.4            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 4    |
| MMS0380S-DIN-C | ●      | 3          |     | 11.4            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 3    |
| MMS0380L-DIN   | □      | 5          |     | 19.0            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 4    |
| MMS0380L-DIN-C | ●      | 5          |     | 19.0            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 3    |
| MMS0380X3DB    | ★      | 3          |     | 11.4            | 23.0 | 24.0 | 70.7 | 70.0 | 0.7 | 6    | 3    |
| MMS0380X5DB    | ★      | 5          |     | 19.0            | 31.0 | 32.0 | 78.7 | 78.0 | 0.7 | 6    | 3    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |      |      |      |      |     | Type |      |
|----------------|--------|------------|------|-----------------|------|------|------|------|-----|------|------|
|                |        |            |      | LU              | LCF  | LH   | OAL  | LF   | PL  |      | DCON |
| MMS0390S-DIN   | □      | 3          | 3.9  | 11.7            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 4    |
| MMS0390S-DIN-C | ●      | 3          |      | 11.7            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 3    |
| MMS0390L-DIN   | □      | 5          |      | 19.5            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 4    |
| MMS0390L-DIN-C | ●      | 5          |      | 19.5            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 3    |
| MMS0390X3DB    | ★      | 3          |      | 11.7            | 23.0 | 24.0 | 70.7 | 70.0 | 0.7 | 6    | 3    |
| MMS0390X5DB    | ★      | 5          |      | 19.5            | 31.0 | 32.0 | 78.7 | 78.0 | 0.7 | 6    | 3    |
| MMS0400S-DIN-C | ●      | 3          | 4.0  | 12.0            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 3    |
| MMS0400L-DIN-C | ●      | 5          |      | 20.0            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 3    |
| MMS0400X3DB    | ★      | 3          |      | 12.0            | 23.0 | 24.0 | 70.7 | 70.0 | 0.7 | 6    | 3    |
| MMS0400X5DB    | ★      | 5          |      | 20.0            | 31.0 | 32.0 | 78.7 | 78.0 | 0.7 | 6    | 3    |
| MMS0405S-DIN   | □      | 3          | 4.05 | 12.2            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 4    |
| MMS0405S-DIN-C | ●      | 3          |      | 12.2            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 3    |
| MMS0405L-DIN   | □      | 5          |      | 20.3            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 4    |
| MMS0405L-DIN-C | ●      | 5          |      | 20.3            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 3    |
| MMS0410S-DIN   | □      | 3          | 4.1  | 12.3            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 4    |
| MMS0410S-DIN-C | ●      | 3          |      | 12.3            | 24.0 | 30.0 | 66.0 | 65.3 | 0.7 | 6    | 3    |
| MMS0410L-DIN   | □      | 5          |      | 20.5            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 4    |
| MMS0410L-DIN-C | ●      | 5          |      | 20.5            | 36.0 | 38.0 | 74.0 | 73.3 | 0.7 | 6    | 3    |
| MMS0410X3DB    | ★      | 3          |      | 12.3            | 25.0 | 27.0 | 73.7 | 73.0 | 0.7 | 6    | 3    |
| MMS0410X5DB    | ★      | 5          |      | 20.5            | 34.0 | 36.0 | 82.7 | 82.0 | 0.7 | 6    | 3    |
| MMS0420S-DIN-C | ●      | 3          | 4.2  | 12.6            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 3    |
| MMS0420L-DIN-C | ●      | 5          |      | 21.0            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 3    |
| MMS0420X3DB    | ★      | 3          |      | 12.6            | 25.0 | 27.0 | 73.8 | 73.0 | 0.8 | 6    | 3    |
| MMS0420X5DB    | ★      | 5          |      | 21.0            | 34.0 | 36.0 | 82.8 | 82.0 | 0.8 | 6    | 3    |
| MMS0430S-DIN   | □      | 3          | 4.3  | 12.9            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 4    |
| MMS0430S-DIN-C | ●      | 3          |      | 12.9            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 3    |
| MMS0430L-DIN   | □      | 5          |      | 21.5            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 4    |
| MMS0430L-DIN-C | ●      | 5          |      | 21.5            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 3    |
| MMS0430X3DB    | ★      | 3          |      | 12.9            | 25.0 | 27.0 | 73.8 | 73.0 | 0.8 | 6    | 3    |
| MMS0430X5DB    | ★      | 5          |      | 21.5            | 34.0 | 36.0 | 82.8 | 82.0 | 0.8 | 6    | 3    |
| MMS0440S-DIN   | □      | 3          | 4.4  | 13.2            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 4    |
| MMS0440S-DIN-C | □      | 3          |      | 13.2            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 3    |
| MMS0440L-DIN   | □      | 5          |      | 22.0            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 4    |
| MMS0440L-DIN-C | □      | 5          |      | 22.0            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 3    |
| MMS0440X3DB    | ★      | 3          |      | 13.2            | 25.0 | 27.0 | 73.8 | 73.0 | 0.8 | 6    | 3    |
| MMS0440X5DB    | ★      | 5          |      | 22.0            | 34.0 | 36.0 | 82.8 | 82.0 | 0.8 | 6    | 3    |
| MMS0450S-DIN   | □      | 3          | 4.5  | 13.5            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 4    |
| MMS0450S-DIN-C | ●      | 3          |      | 13.5            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 3    |
| MMS0450L-DIN   | □      | 5          |      | 22.5            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 4    |
| MMS0450L-DIN-C | ●      | 5          |      | 22.5            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 3    |
| MMS0450X3DB    | ★      | 3          |      | 13.5            | 25.0 | 27.0 | 73.8 | 73.0 | 0.8 | 6    | 3    |
| MMS0450X5DB    | ★      | 5          |      | 22.5            | 34.0 | 36.0 | 82.8 | 82.0 | 0.8 | 6    | 3    |
| MMS0460S-DIN   | □      | 3          | 4.6  | 13.8            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 2    |
| MMS0460S-DIN-C | ●      | 3          |      | 13.8            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 1    |
| MMS0460L-DIN   | □      | 5          |      | 23.0            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 2    |
| MMS0460L-DIN-C | ●      | 5          |      | 23.0            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 1    |
| MMS0460X3DB    | ★      | 3          |      | 13.8            | 26.0 | 29.0 | 75.8 | 75.0 | 0.8 | 6    | 1    |
| MMS0460X5DB    | ★      | 5          |      | 23.0            | 36.0 | 39.0 | 85.8 | 85.0 | 0.8 | 6    | 1    |
| MMS0465S-DIN   | □      | 3          | 4.65 | 14.0            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 2    |
| MMS0465S-DIN-C | ●      | 3          |      | 14.0            | 24.0 | 30.0 | 66.0 | 65.2 | 0.8 | 6    | 1    |
| MMS0465L-DIN   | □      | 5          |      | 23.3            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 2    |
| MMS0465L-DIN-C | ●      | 5          |      | 23.3            | 36.0 | 38.0 | 74.0 | 73.2 | 0.8 | 6    | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |      |      |      |      |     | Type |      |
|----------------|--------|------------|------|-----------------|------|------|------|------|-----|------|------|
|                |        |            |      | LU              | LCF  | LH   | OAL  | LF   | PL  |      | DCON |
| MMS0470S-DIN   | □      | 3          | 4.7  | 14.1            | 24.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 2    |
| MMS0470S-DIN-C | □      | 3          |      | 14.1            | 24.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 1    |
| MMS0470L-DIN   | □      | 5          |      | 23.5            | 36.0 | 38.0 | 74.0 | 73.1 | 0.9 | 6    | 2    |
| MMS0470L-DIN-C | □      | 5          |      | 23.5            | 36.0 | 38.0 | 74.0 | 73.1 | 0.9 | 6    | 1    |
| MMS0470X3DB    | ★      | 3          |      | 14.1            | 26.0 | 29.0 | 75.9 | 75.0 | 0.9 | 6    | 1    |
| MMS0470X5DB    | ★      | 5          |      | 23.5            | 36.0 | 39.0 | 85.9 | 85.0 | 0.9 | 6    | 1    |
| MMS0480S-DIN   | □      | 3          | 4.8  | 14.4            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 2    |
| MMS0480S-DIN-C | ●      | 3          |      | 14.4            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 1    |
| MMS0480L-DIN   | □      | 5          |      | 24.0            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 2    |
| MMS0480L-DIN-C | ●      | 5          |      | 24.0            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 1    |
| MMS0480X3DB    | ★      | 3          |      | 14.4            | 26.0 | 29.0 | 75.9 | 75.0 | 0.9 | 6    | 1    |
| MMS0480X5DB    | ★      | 5          |      | 24.0            | 36.0 | 39.0 | 85.9 | 85.0 | 0.9 | 6    | 1    |
| MMS0490S-DIN   | □      | 3          | 4.9  | 14.7            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 2    |
| MMS0490S-DIN-C | □      | 3          |      | 14.7            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 1    |
| MMS0490L-DIN   | □      | 5          |      | 24.5            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 2    |
| MMS0490L-DIN-C | □      | 5          |      | 24.5            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 1    |
| MMS0490X3DB    | ★      | 3          |      | 14.7            | 26.0 | 29.0 | 75.9 | 75.0 | 0.9 | 6    | 1    |
| MMS0490X5DB    | ★      | 5          |      | 24.5            | 36.0 | 39.0 | 85.9 | 85.0 | 0.9 | 6    | 1    |
| MMS0500S-DIN-C | ●      | 3          | 5.0  | 15.0            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 1    |
| MMS0500L-DIN-C | ●      | 5          |      | 25.0            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 1    |
| MMS0500X3DB    | ★      | 3          |      | 15.0            | 26.0 | 29.0 | 75.9 | 75.0 | 0.9 | 6    | 1    |
| MMS0500X5DB    | ★      | 5          |      | 25.0            | 36.0 | 39.0 | 85.9 | 85.0 | 0.9 | 6    | 1    |
| MMS0505S-DIN   | □      | 3          | 5.05 | 15.2            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 2    |
| MMS0505S-DIN-C | ●      | 3          |      | 15.2            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 1    |
| MMS0505L-DIN   | □      | 5          |      | 25.3            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 2    |
| MMS0505L-DIN-C | ●      | 5          |      | 25.3            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 1    |
| MMS0510S-DIN   | □      | 3          | 5.1  | 15.3            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 2    |
| MMS0510S-DIN-C | ●      | 3          |      | 15.3            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 1    |
| MMS0510L-DIN   | □      | 5          |      | 25.5            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 2    |
| MMS0510L-DIN-C | ●      | 5          |      | 25.5            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 1    |
| MMS0510X3DB    | ★      | 3          |      | 15.3            | 29.0 | 31.0 | 81.9 | 81.0 | 0.9 | 6    | 1    |
| MMS0510X5DB    | ★      | 5          |      | 25.5            | 40.0 | 43.0 | 89.9 | 89.0 | 0.9 | 6    | 1    |
| MMS0520S-DIN   | □      | 3          | 5.2  | 15.6            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 2    |
| MMS0520S-DIN-C | ●      | 3          |      | 15.6            | 28.0 | 30.0 | 66.0 | 65.1 | 0.9 | 6    | 1    |
| MMS0520L-DIN   | □      | 5          |      | 26.0            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 2    |
| MMS0520L-DIN-C | ●      | 5          |      | 26.0            | 44.0 | 46.0 | 82.0 | 81.1 | 0.9 | 6    | 1    |
| MMS0520X3DB    | ★      | 3          |      | 15.6            | 29.0 | 31.0 | 81.9 | 81.0 | 0.9 | 6    | 1    |
| MMS0520X5DB    | ★      | 5          |      | 26.0            | 40.0 | 43.0 | 89.9 | 89.0 | 0.9 | 6    | 1    |
| MMS0530S-DIN   | □      | 3          | 5.3  | 15.9            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 2    |
| MMS0530S-DIN-C | □      | 3          |      | 15.9            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 1    |
| MMS0530L-DIN   | □      | 5          |      | 26.5            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 2    |
| MMS0530L-DIN-C | □      | 5          |      | 26.5            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0530X3DB    | ★      | 3          |      | 15.9            | 29.0 | 31.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0530X5DB    | ★      | 5          |      | 26.5            | 40.0 | 43.0 | 90.0 | 89.0 | 1.0 | 6    | 1    |
| MMS0540S-DIN   | □      | 3          | 5.4  | 16.2            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 2    |
| MMS0540S-DIN-C | □      | 3          |      | 16.2            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 1    |
| MMS0540L-DIN   | □      | 5          |      | 27.0            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 2    |
| MMS0540L-DIN-C | □      | 5          |      | 27.0            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0540X3DB    | ★      | 3          |      | 16.2            | 29.0 | 31.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0540X5DB    | ★      | 5          |      | 27.0            | 40.0 | 43.0 | 90.0 | 89.0 | 1.0 | 6    | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |      |      |      |      |     | Type |      |
|----------------|--------|------------|------|-----------------|------|------|------|------|-----|------|------|
|                |        |            |      | LU              | LCF  | LH   | OAL  | LF   | PL  |      | DCON |
| MMS0550S-DIN   | □      | 3          | 5.5  | 16.5            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 2    |
| MMS0550S-DIN-C | ●      | 3          |      | 16.5            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 1    |
| MMS0550L-DIN   | □      | 5          |      | 27.5            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 2    |
| MMS0550L-DIN-C | ●      | 5          |      | 27.5            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0550X3DB    | ★      | 3          |      | 16.5            | 29.0 | 31.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0550X5DB    | ★      | 5          |      | 27.5            | 40.0 | 43.0 | 90.0 | 89.0 | 1.0 | 6    | 1    |
| MMS0555S-DIN   | □      | 3          | 5.55 | 16.7            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 2    |
| MMS0555S-DIN-C | ●      | 3          |      | 16.7            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 1    |
| MMS0555L-DIN-C | ●      | 5          |      | 27.8            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0560S-DIN   | □      | 3          | 5.6  | 16.8            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 2    |
| MMS0560S-DIN-C | ●      | 3          |      | 16.8            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 1    |
| MMS0560L-DIN   | □      | 5          |      | 28.0            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 2    |
| MMS0560L-DIN-C | ●      | 5          |      | 28.0            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0560X3DB    | ★      | 3          |      | 16.8            | 31.0 | 31.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0560X5DB    | ★      | 5          |      | 28.0            | 43.0 | 43.0 | 90.0 | 89.0 | 1.0 | 6    | 1    |
| MMS0570S-DIN   | □      | 3          | 5.7  | 17.1            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 2    |
| MMS0570S-DIN-C | ●      | 3          |      | 17.1            | 28.0 | 30.0 | 66.0 | 65.0 | 1.0 | 6    | 1    |
| MMS0570L-DIN   | □      | 5          |      | 28.5            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 2    |
| MMS0570L-DIN-C | ●      | 5          |      | 28.5            | 44.0 | 46.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0570X3DB    | ★      | 3          |      | 17.1            | 31.0 | 31.0 | 82.0 | 81.0 | 1.0 | 6    | 1    |
| MMS0570X5DB    | ★      | 5          |      | 28.5            | 43.0 | 43.0 | 90.0 | 89.0 | 1.0 | 6    | 1    |
| MMS0580S-DIN   | □      | 3          | 5.8  | 17.4            | 28.0 | 30.0 | 66.0 | 64.9 | 1.1 | 6    | 2    |
| MMS0580S-DIN-C | ●      | 3          |      | 17.4            | 28.0 | 30.0 | 66.0 | 64.9 | 1.1 | 6    | 1    |
| MMS0580L-DIN   | □      | 5          |      | 29.0            | 44.0 | 46.0 | 82.0 | 80.9 | 1.1 | 6    | 2    |
| MMS0580L-DIN-C | ●      | 5          |      | 29.0            | 44.0 | 46.0 | 82.0 | 80.9 | 1.1 | 6    | 1    |
| MMS0580X3DB    | ★      | 3          |      | 17.4            | 31.0 | 31.0 | 82.1 | 81.0 | 1.1 | 6    | 1    |
| MMS0580X5DB    | ★      | 5          |      | 29.0            | 43.0 | 43.0 | 90.1 | 89.0 | 1.1 | 6    | 1    |
| MMS0590S-DIN   | □      | 3          | 5.9  | 17.7            | 28.0 | 30.0 | 66.0 | 64.9 | 1.1 | 6    | 2    |
| MMS0590S-DIN-C | □      | 3          |      | 17.7            | 28.0 | 30.0 | 66.0 | 64.9 | 1.1 | 6    | 1    |
| MMS0590L-DIN   | □      | 5          |      | 29.5            | 44.0 | 46.0 | 82.0 | 80.9 | 1.1 | 6    | 2    |
| MMS0590L-DIN-C | □      | 5          |      | 29.5            | 44.0 | 46.0 | 82.0 | 80.9 | 1.1 | 6    | 1    |
| MMS0590X3DB    | ★      | 3          |      | 17.7            | 31.0 | 31.0 | 82.1 | 81.0 | 1.1 | 6    | 1    |
| MMS0590X5DB    | ★      | 5          |      | 29.5            | 43.0 | 43.0 | 90.1 | 89.0 | 1.1 | 6    | 1    |
| MMS0600S-DIN-C | ●      | 3          | 6.0  | 18.0            | 28.0 | 30.0 | 66.0 | 64.9 | 1.1 | 6    | 1    |
| MMS0600L-DIN-C | ●      | 5          |      | 30.0            | 44.0 | 46.0 | 82.0 | 80.9 | 1.1 | 6    | 1    |
| MMS0600X3DB    | ★      | 3          |      | 18.0            | 31.0 | 31.0 | 82.1 | 81.0 | 1.1 | 6    | 1    |
| MMS0600X5DB    | ★      | 5          |      | 30.0            | 43.0 | 43.0 | 90.1 | 89.0 | 1.1 | 6    | 1    |
| MMS0605S-DIN   | □      | 3          | 6.05 | 18.2            | 34.0 | 43.0 | 79.0 | 77.9 | 1.1 | 8    | 2    |
| MMS0605S-DIN-C | ●      | 3          |      | 18.2            | 34.0 | 43.0 | 79.0 | 77.9 | 1.1 | 8    | 1    |
| MMS0605L-DIN   | □      | 5          |      | 30.3            | 53.0 | 55.0 | 91.0 | 89.9 | 1.1 | 8    | 2    |
| MMS0605L-DIN-C | ●      | 5          |      | 30.3            | 53.0 | 55.0 | 91.0 | 89.9 | 1.1 | 8    | 1    |
| MMS0610S-DIN   | □      | 3          | 6.1  | 18.3            | 34.0 | 43.0 | 79.0 | 77.9 | 1.1 | 8    | 2    |
| MMS0610S-DIN-C | ●      | 3          |      | 18.3            | 34.0 | 43.0 | 79.0 | 77.9 | 1.1 | 8    | 1    |
| MMS0610L-DIN   | □      | 5          |      | 30.5            | 53.0 | 55.0 | 91.0 | 89.9 | 1.1 | 8    | 2    |
| MMS0610L-DIN-C | ●      | 5          |      | 30.5            | 53.0 | 55.0 | 91.0 | 89.9 | 1.1 | 8    | 1    |
| MMS0610X3DB    | ★      | 3          |      | 18.3            | 34.0 | 36.0 | 87.1 | 86.0 | 1.1 | 8    | 1    |
| MMS0610X5DB    | ★      | 5          |      | 30.5            | 47.0 | 49.0 | 96.1 | 95.0 | 1.1 | 8    | 1    |
| MMS0620S-DIN   | □      | 3          | 6.2  | 18.6            | 34.0 | 43.0 | 79.0 | 77.9 | 1.1 | 8    | 2    |
| MMS0620S-DIN-C | ●      | 3          |      | 18.6            | 34.0 | 43.0 | 79.0 | 77.9 | 1.1 | 8    | 1    |
| MMS0620L-DIN   | □      | 5          |      | 31.0            | 53.0 | 55.0 | 91.0 | 89.9 | 1.1 | 8    | 2    |
| MMS0620L-DIN-C | ●      | 5          |      | 31.0            | 53.0 | 55.0 | 91.0 | 89.9 | 1.1 | 8    | 1    |
| MMS0620X3DB    | ★      | 3          |      | 18.6            | 34.0 | 36.0 | 87.1 | 86.0 | 1.1 | 8    | 1    |
| MMS0620X5DB    | ★      | 5          |      | 31.0            | 47.0 | 49.0 | 96.1 | 95.0 | 1.1 | 8    | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC  | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|-----|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |     | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS0630S-DIN   | □      | 3          | 6.3 | 18.9            | 34.0 | 43.0 | 79.0  | 77.9  | 1.1 | 8    | 2    |
| MMS0630S-DIN-C | □      | 3          |     | 18.9            | 34.0 | 43.0 | 79.0  | 77.9  | 1.1 | 8    | 1    |
| MMS0630L-DIN   | □      | 5          |     | 31.5            | 53.0 | 55.0 | 91.0  | 89.9  | 1.1 | 8    | 2    |
| MMS0630L-DIN-C | □      | 5          |     | 31.5            | 53.0 | 55.0 | 91.0  | 89.9  | 1.1 | 8    | 1    |
| MMS0630X3DB    | ★      | 3          |     | 18.9            | 34.0 | 36.0 | 87.1  | 86.0  | 1.1 | 8    | 1    |
| MMS0630X5DB    | ★      | 5          |     | 31.5            | 47.0 | 49.0 | 96.1  | 95.0  | 1.1 | 8    | 1    |
| MMS0640S-DIN   | □      | 3          | 6.4 | 19.2            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 2    |
| MMS0640S-DIN-C | □      | 3          |     | 19.2            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 1    |
| MMS0640L-DIN   | □      | 5          |     | 32.0            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 2    |
| MMS0640L-DIN-C | □      | 5          |     | 32.0            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 1    |
| MMS0640X3DB    | ★      | 3          |     | 19.2            | 34.0 | 36.0 | 87.2  | 86.0  | 1.2 | 8    | 1    |
| MMS0640X5DB    | ★      | 5          |     | 32.0            | 47.0 | 49.0 | 96.2  | 95.0  | 1.2 | 8    | 1    |
| MMS0650S-DIN   | □      | 3          | 6.5 | 19.5            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 2    |
| MMS0650S-DIN-C | ●      | 3          |     | 19.5            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 1    |
| MMS0650L-DIN   | □      | 5          |     | 32.5            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 2    |
| MMS0650L-DIN-C | ●      | 5          |     | 32.5            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 1    |
| MMS0650X3DB    | ★      | 3          |     | 19.5            | 34.0 | 36.0 | 87.2  | 86.0  | 1.2 | 8    | 1    |
| MMS0650X5DB    | ★      | 5          |     | 32.5            | 47.0 | 49.0 | 96.2  | 95.0  | 1.2 | 8    | 1    |
| MMS0660S-DIN   | □      | 3          | 6.6 | 19.8            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 2    |
| MMS0660S-DIN-C | ●      | 3          |     | 19.8            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 1    |
| MMS0660L-DIN   | □      | 5          |     | 33.0            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 2    |
| MMS0660L-DIN-C | ●      | 5          |     | 33.0            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 1    |
| MMS0660X3DB    | ★      | 3          |     | 19.8            | 36.0 | 38.0 | 91.2  | 90.0  | 1.2 | 8    | 1    |
| MMS0660X5DB    | ★      | 5          |     | 33.0            | 50.0 | 52.0 | 99.2  | 98.0  | 1.2 | 8    | 1    |
| MMS0670S-DIN   | □      | 3          | 6.7 | 20.1            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 2    |
| MMS0670S-DIN-C | □      | 3          |     | 20.1            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 1    |
| MMS0670L-DIN   | □      | 5          |     | 33.5            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 2    |
| MMS0670L-DIN-C | □      | 5          |     | 33.5            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 1    |
| MMS0670X3DB    | ★      | 3          |     | 20.1            | 36.0 | 38.0 | 91.2  | 90.0  | 1.2 | 8    | 1    |
| MMS0670X5DB    | ★      | 5          |     | 33.5            | 50.0 | 52.0 | 99.2  | 98.0  | 1.2 | 8    | 1    |
| MMS0680S-DIN-C | ●      | 3          | 6.8 | 20.4            | 34.0 | 43.0 | 79.0  | 77.8  | 1.2 | 8    | 1    |
| MMS0680L-DIN-C | ●      | 5          |     | 34.0            | 53.0 | 55.0 | 91.0  | 89.8  | 1.2 | 8    | 1    |
| MMS0680X3DB    | ★      | 3          |     | 20.4            | 36.0 | 38.0 | 91.2  | 90.0  | 1.2 | 8    | 1    |
| MMS0680X5DB    | ★      | 5          |     | 34.0            | 50.0 | 52.0 | 99.2  | 98.0  | 1.2 | 8    | 1    |
| MMS0690S-DIN   | □      | 3          | 6.9 | 20.7            | 34.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 2    |
| MMS0690S-DIN-C | ●      | 3          |     | 20.7            | 34.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 1    |
| MMS0690L-DIN   | □      | 5          |     | 34.5            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 2    |
| MMS0690L-DIN-C | ●      | 5          |     | 34.5            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 1    |
| MMS0690X3DB    | ★      | 3          |     | 20.7            | 36.0 | 38.0 | 91.3  | 90.0  | 1.3 | 8    | 1    |
| MMS0690X5DB    | ★      | 5          |     | 34.5            | 50.0 | 52.0 | 99.3  | 98.0  | 1.3 | 8    | 1    |
| MMS0700S-DIN-C | ●      | 3          | 7.0 | 21.0            | 34.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 1    |
| MMS0700L-DIN-C | ●      | 5          |     | 35.0            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 1    |
| MMS0700X3DB    | ★      | 3          |     | 21.0            | 36.0 | 38.0 | 91.3  | 90.0  | 1.3 | 8    | 1    |
| MMS0700X5DB    | ★      | 5          |     | 35.0            | 50.0 | 52.0 | 99.3  | 98.0  | 1.3 | 8    | 1    |
| MMS0710S-DIN   | □      | 3          | 7.1 | 21.3            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 2    |
| MMS0710S-DIN-C | □      | 3          |     | 21.3            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 1    |
| MMS0710L-DIN   | □      | 5          |     | 35.5            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 2    |
| MMS0710L-DIN-C | □      | 5          |     | 35.5            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 1    |
| MMS0710X3DB    | ★      | 3          |     | 21.3            | 39.0 | 40.0 | 91.3  | 90.0  | 1.3 | 8    | 1    |
| MMS0710X5DB    | ★      | 5          |     | 35.5            | 54.0 | 57.0 | 104.3 | 103.0 | 1.3 | 8    | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC  | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|-----|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |     | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS0720S-DIN   | □      | 3          | 7.2 | 21.6            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 2    |
| MMS0720S-DIN-C | □      | 3          |     | 21.6            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 1    |
| MMS0720L-DIN   | □      | 5          |     | 36.0            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 2    |
| MMS0720L-DIN-C | □      | 5          |     | 36.0            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 1    |
| MMS0720X3DB    | ★      | 3          |     | 21.6            | 39.0 | 40.0 | 91.3  | 90.0  | 1.3 | 8    | 1    |
| MMS0720X5DB    | ★      | 5          |     | 36.0            | 54.0 | 57.0 | 104.3 | 103.0 | 1.3 | 8    | 1    |
| MMS0730S-DIN   | □      | 3          | 7.3 | 21.9            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 2    |
| MMS0730S-DIN-C | ●      | 3          |     | 21.9            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 1    |
| MMS0730L-DIN   | □      | 5          |     | 36.5            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 2    |
| MMS0730L-DIN-C | ●      | 5          |     | 36.5            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 1    |
| MMS0730X3DB    | ★      | 3          |     | 21.9            | 39.0 | 40.0 | 91.3  | 90.0  | 1.3 | 8    | 1    |
| MMS0730X5DB    | ★      | 5          |     | 36.5            | 54.0 | 57.0 | 104.3 | 103.0 | 1.3 | 8    | 1    |
| MMS0740S-DIN   | □      | 3          | 7.4 | 22.2            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 2    |
| MMS0740S-DIN-C | ●      | 3          |     | 22.2            | 41.0 | 43.0 | 79.0  | 77.7  | 1.3 | 8    | 1    |
| MMS0740L-DIN   | □      | 5          |     | 37.0            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 2    |
| MMS0740L-DIN-C | ●      | 5          |     | 37.0            | 53.0 | 55.0 | 91.0  | 89.7  | 1.3 | 8    | 1    |
| MMS0740X3DB    | ★      | 3          |     | 22.2            | 39.0 | 40.0 | 91.3  | 90.0  | 1.3 | 8    | 1    |
| MMS0740X5DB    | ★      | 5          |     | 37.0            | 54.0 | 57.0 | 104.3 | 103.0 | 1.3 | 8    | 1    |
| MMS0750S-DIN   | □      | 3          | 7.5 | 22.5            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 2    |
| MMS0750S-DIN-C | ●      | 3          |     | 22.5            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 1    |
| MMS0750L-DIN   | □      | 5          |     | 37.5            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 2    |
| MMS0750L-DIN-C | ●      | 5          |     | 37.5            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 1    |
| MMS0750X3DB    | ★      | 3          |     | 22.5            | 39.0 | 40.0 | 91.4  | 90.0  | 1.4 | 8    | 1    |
| MMS0750X5DB    | ★      | 5          |     | 37.5            | 54.0 | 57.0 | 104.4 | 103.0 | 1.4 | 8    | 1    |
| MMS0760S-DIN   | □      | 3          | 7.6 | 22.8            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 2    |
| MMS0760S-DIN-C | □      | 3          |     | 22.8            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 1    |
| MMS0760L-DIN   | □      | 5          |     | 38.0            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 2    |
| MMS0760L-DIN-C | □      | 5          |     | 38.0            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 1    |
| MMS0760X3DB    | ★      | 3          |     | 22.8            | 41.0 | 41.0 | 91.4  | 90.0  | 1.4 | 8    | 1    |
| MMS0760X5DB    | ★      | 5          |     | 38.0            | 57.0 | 57.0 | 104.4 | 103.0 | 1.4 | 8    | 1    |
| MMS0770S-DIN   | □      | 3          | 7.7 | 23.1            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 2    |
| MMS0770S-DIN-C | □      | 3          |     | 23.1            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 1    |
| MMS0770L-DIN   | □      | 5          |     | 38.5            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 2    |
| MMS0770L-DIN-C | □      | 5          |     | 38.5            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 1    |
| MMS0770X3DB    | ★      | 3          |     | 23.1            | 41.0 | 41.0 | 91.4  | 90.0  | 1.4 | 8    | 1    |
| MMS0770X5DB    | ★      | 5          |     | 38.5            | 57.0 | 57.0 | 104.4 | 103.0 | 1.4 | 8    | 1    |
| MMS0780S-DIN   | □      | 3          | 7.8 | 23.4            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 2    |
| MMS0780S-DIN-C | ●      | 3          |     | 23.4            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 1    |
| MMS0780L-DIN   | □      | 5          |     | 39.0            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 2    |
| MMS0780L-DIN-C | ●      | 5          |     | 39.0            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 1    |
| MMS0780X3DB    | ★      | 3          |     | 23.4            | 41.0 | 41.0 | 91.4  | 90.0  | 1.4 | 8    | 1    |
| MMS0780X5DB    | ★      | 5          |     | 39.0            | 57.0 | 57.0 | 104.4 | 103.0 | 1.4 | 8    | 1    |
| MMS0790S-DIN   | □      | 3          | 7.9 | 23.7            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 2    |
| MMS0790S-DIN-C | □      | 3          |     | 23.7            | 41.0 | 43.0 | 79.0  | 77.6  | 1.4 | 8    | 1    |
| MMS0790L-DIN   | □      | 5          |     | 39.5            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 2    |
| MMS0790L-DIN-C | □      | 5          |     | 39.5            | 53.0 | 55.0 | 91.0  | 89.6  | 1.4 | 8    | 1    |
| MMS0790X3DB    | ★      | 3          |     | 23.7            | 41.0 | 41.0 | 91.4  | 90.0  | 1.4 | 8    | 1    |
| MMS0790X5DB    | ★      | 5          |     | 39.5            | 57.0 | 57.0 | 104.4 | 103.0 | 1.4 | 8    | 1    |
| MMS0800S-DIN-C | ●      | 3          | 8.0 | 24.0            | 41.0 | 43.0 | 79.0  | 77.5  | 1.5 | 8    | 1    |
| MMS0800L-DIN-C | ●      | 5          |     | 40.0            | 53.0 | 55.0 | 91.0  | 89.5  | 1.5 | 8    | 1    |
| MMS0800X3DB    | ★      | 3          |     | 24.0            | 41.0 | 41.0 | 91.5  | 90.0  | 1.5 | 8    | 1    |
| MMS0800X5DB    | ★      | 5          |     | 40.0            | 57.0 | 57.0 | 104.5 | 103.0 | 1.5 | 8    | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS0805S-DIN   | □      | 3          | 8.05 | 24.2            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 2    |
| MMS0805S-DIN-C | ●      | 3          |      | 24.2            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 1    |
| MMS0805L-DIN   | □      | 5          |      | 40.3            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 2    |
| MMS0805L-DIN-C | ●      | 5          |      | 40.3            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 1    |
| MMS0810S-DIN   | □      | 3          | 8.1  | 24.3            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 2    |
| MMS0810S-DIN-C | □      | 3          |      | 24.3            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 1    |
| MMS0810L-DIN   | □      | 5          |      | 40.5            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 2    |
| MMS0810L-DIN-C | □      | 5          |      | 40.5            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 1    |
| MMS0810X3DB    | ★      | 3          | 8.2  | 24.3            | 44.0 | 46.0 | 97.5  | 96.0  | 1.5 | 10   | 1    |
| MMS0810X5DB    | ★      | 5          |      | 40.5            | 61.0 | 63.0 | 114.5 | 113.0 | 1.5 | 10   | 1    |
| MMS0820S-DIN   | □      | 3          |      | 24.6            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 2    |
| MMS0820S-DIN-C | □      | 3          |      | 24.6            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 1    |
| MMS0820L-DIN   | □      | 5          | 8.2  | 41.0            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 2    |
| MMS0820L-DIN-C | □      | 5          |      | 41.0            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 1    |
| MMS0820X3DB    | ★      | 3          |      | 24.6            | 44.0 | 46.0 | 97.5  | 96.0  | 1.5 | 10   | 1    |
| MMS0820X5DB    | ★      | 5          |      | 41.0            | 61.0 | 63.0 | 114.5 | 113.0 | 1.5 | 10   | 1    |
| MMS0830S-DIN   | □      | 3          | 8.3  | 24.9            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 2    |
| MMS0830S-DIN-C | ●      | 3          |      | 24.9            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 1    |
| MMS0830L-DIN   | □      | 5          |      | 41.5            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 2    |
| MMS0830L-DIN-C | ●      | 5          |      | 41.5            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 1    |
| MMS0830X3DB    | ★      | 3          |      | 24.9            | 44.0 | 46.0 | 97.5  | 96.0  | 1.5 | 10   | 1    |
| MMS0830X5DB    | ★      | 5          |      | 41.5            | 61.0 | 63.0 | 114.5 | 113.0 | 1.5 | 10   | 1    |
| MMS0840S-DIN   | □      | 3          | 8.4  | 25.2            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 2    |
| MMS0840S-DIN-C | □      | 3          |      | 25.2            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 1    |
| MMS0840L-DIN   | □      | 5          |      | 42.0            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 2    |
| MMS0840L-DIN-C | □      | 5          |      | 42.0            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 1    |
| MMS0840X3DB    | ★      | 3          |      | 25.2            | 44.0 | 46.0 | 97.5  | 96.0  | 1.5 | 10   | 1    |
| MMS0840X5DB    | ★      | 5          |      | 42.0            | 61.0 | 63.0 | 114.5 | 113.0 | 1.5 | 10   | 1    |
| MMS0850S-DIN-C | ●      | 3          | 8.5  | 25.5            | 46.0 | 48.0 | 88.0  | 86.5  | 1.5 | 10   | 1    |
| MMS0850L-DIN-C | ●      | 5          |      | 42.5            | 60.0 | 62.0 | 102.0 | 100.5 | 1.5 | 10   | 1    |
| MMS0850X3DB    | ★      | 3          |      | 25.5            | 44.0 | 46.0 | 97.5  | 96.0  | 1.5 | 10   | 1    |
| MMS0850X5DB    | ★      | 5          |      | 42.5            | 61.0 | 63.0 | 114.5 | 113.0 | 1.5 | 10   | 1    |
| MMS0860S-DIN   | □      | 3          | 8.6  | 25.8            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 2    |
| MMS0860S-DIN-C | ●      | 3          |      | 25.8            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 1    |
| MMS0860L-DIN   | □      | 5          |      | 43.0            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 2    |
| MMS0860L-DIN-C | ●      | 5          |      | 43.0            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 1    |
| MMS0860X3DB    | ★      | 3          |      | 25.8            | 47.0 | 49.0 | 102.6 | 101.0 | 1.6 | 10   | 1    |
| MMS0860X5DB    | ★      | 5          |      | 43.0            | 65.0 | 67.0 | 117.6 | 116.0 | 1.6 | 10   | 1    |
| MMS0870S-DIN   | □      | 3          | 8.7  | 26.1            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 2    |
| MMS0870S-DIN-C | ●      | 3          |      | 26.1            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 1    |
| MMS0870L-DIN   | □      | 5          |      | 43.5            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 2    |
| MMS0870L-DIN-C | ●      | 5          |      | 43.5            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 1    |
| MMS0870X3DB    | ★      | 3          |      | 26.1            | 47.0 | 49.0 | 102.6 | 101.0 | 1.6 | 10   | 1    |
| MMS0870X5DB    | ★      | 5          |      | 43.5            | 65.0 | 67.0 | 117.6 | 116.0 | 1.6 | 10   | 1    |
| MMS0880S-DIN   | □      | 3          | 8.8  | 26.4            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 2    |
| MMS0880S-DIN-C | ●      | 3          |      | 26.4            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 1    |
| MMS0880L-DIN   | □      | 5          |      | 44.0            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 2    |
| MMS0880L-DIN-C | ●      | 5          |      | 44.0            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 1    |
| MMS0880X3DB    | ★      | 3          |      | 26.4            | 47.0 | 49.0 | 102.6 | 101.0 | 1.6 | 10   | 1    |
| MMS0880X5DB    | ★      | 5          |      | 44.0            | 65.0 | 67.0 | 117.6 | 116.0 | 1.6 | 10   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC  | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|-----|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |     | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS0890S-DIN   | □      | 3          | 8.9 | 26.7            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 2    |
| MMS0890S-DIN-C | □      | 3          |     | 26.7            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 1    |
| MMS0890L-DIN   | □      | 5          |     | 44.5            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 2    |
| MMS0890L-DIN-C | □      | 5          |     | 44.5            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 1    |
| MMS0890X3DB    | ★      | 3          |     | 26.7            | 47.0 | 49.0 | 102.6 | 101.0 | 1.6 | 10   | 1    |
| MMS0890X5DB    | ★      | 5          |     | 44.5            | 65.0 | 67.0 | 117.6 | 116.0 | 1.6 | 10   | 1    |
| MMS0900S-DIN   | □      | 3          | 9.0 | 27.0            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 2    |
| MMS0900S-DIN-C | ●      | 3          |     | 27.0            | 46.0 | 48.0 | 88.0  | 86.4  | 1.6 | 10   | 1    |
| MMS0900L-DIN   | □      | 5          |     | 45.0            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 2    |
| MMS0900L-DIN-C | ●      | 5          |     | 45.0            | 60.0 | 62.0 | 102.0 | 100.4 | 1.6 | 10   | 1    |
| MMS0900X3DB    | ★      | 3          |     | 27.0            | 47.0 | 49.0 | 102.6 | 101.0 | 1.6 | 10   | 1    |
| MMS0900X5DB    | ★      | 5          |     | 45.0            | 65.0 | 67.0 | 117.6 | 116.0 | 1.6 | 10   | 1    |
| MMS0910S-DIN   | □      | 3          | 9.1 | 27.3            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 2    |
| MMS0910S-DIN-C | □      | 3          |     | 27.3            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 1    |
| MMS0910L-DIN   | □      | 5          |     | 45.5            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 2    |
| MMS0910L-DIN-C | □      | 5          |     | 45.5            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 1    |
| MMS0910X3DB    | ★      | 3          |     | 27.3            | 50.0 | 52.0 | 102.7 | 101.0 | 1.7 | 10   | 1    |
| MMS0910X5DB    | ★      | 5          |     | 45.5            | 69.0 | 72.0 | 122.7 | 121.0 | 1.7 | 10   | 1    |
| MMS0920S-DIN   | □      | 3          | 9.2 | 27.6            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 2    |
| MMS0920S-DIN-C | □      | 3          |     | 27.6            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 1    |
| MMS0920L-DIN   | □      | 5          |     | 46.0            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 2    |
| MMS0920L-DIN-C | □      | 5          |     | 46.0            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 1    |
| MMS0920X3DB    | ★      | 3          |     | 27.6            | 50.0 | 52.0 | 102.7 | 101.0 | 1.7 | 10   | 1    |
| MMS0920X5DB    | ★      | 5          |     | 46.0            | 69.0 | 72.0 | 122.7 | 121.0 | 1.7 | 10   | 1    |
| MMS0930S-DIN   | □      | 3          | 9.3 | 27.9            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 2    |
| MMS0930S-DIN-C | ●      | 3          |     | 27.9            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 1    |
| MMS0930L-DIN   | □      | 5          |     | 46.5            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 2    |
| MMS0930L-DIN-C | ●      | 5          |     | 46.5            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 1    |
| MMS0930X3DB    | ★      | 3          |     | 27.9            | 50.0 | 52.0 | 102.7 | 101.0 | 1.7 | 10   | 1    |
| MMS0930X5DB    | ★      | 5          |     | 46.5            | 69.0 | 72.0 | 122.7 | 121.0 | 1.7 | 10   | 1    |
| MMS0940S-DIN   | □      | 3          | 9.4 | 28.2            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 2    |
| MMS0940S-DIN-C | □      | 3          |     | 28.2            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 1    |
| MMS0940L-DIN   | □      | 5          |     | 47.0            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 2    |
| MMS0940L-DIN-C | □      | 5          |     | 47.0            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 1    |
| MMS0940X3DB    | ★      | 3          |     | 28.2            | 50.0 | 52.0 | 102.7 | 101.0 | 1.7 | 10   | 1    |
| MMS0940X5DB    | ★      | 5          |     | 47.0            | 69.0 | 72.0 | 122.7 | 121.0 | 1.7 | 10   | 1    |
| MMS0950S-DIN   | □      | 3          | 9.5 | 28.5            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 2    |
| MMS0950S-DIN-C | ●      | 3          |     | 28.5            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 1    |
| MMS0950L-DIN   | □      | 5          |     | 47.5            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 2    |
| MMS0950L-DIN-C | ●      | 5          |     | 47.5            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 1    |
| MMS0950X3DB    | ★      | 3          |     | 28.5            | 50.0 | 52.0 | 102.7 | 101.0 | 1.7 | 10   | 1    |
| MMS0950X5DB    | ★      | 5          |     | 47.5            | 69.0 | 72.0 | 122.7 | 121.0 | 1.7 | 10   | 1    |
| MMS0960S-DIN   | □      | 3          | 9.6 | 28.8            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 2    |
| MMS0960S-DIN-C | □      | 3          |     | 28.8            | 47.0 | 49.0 | 89.0  | 87.3  | 1.7 | 10   | 1    |
| MMS0960L-DIN   | □      | 5          |     | 48.0            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 2    |
| MMS0960L-DIN-C | □      | 5          |     | 48.0            | 62.0 | 63.0 | 103.0 | 101.3 | 1.7 | 10   | 1    |
| MMS0960X3DB    | ★      | 3          |     | 28.8            | 52.0 | 52.0 | 102.7 | 101.0 | 1.7 | 10   | 1    |
| MMS0960X5DB    | ★      | 5          |     | 48.0            | 72.0 | 72.0 | 122.7 | 121.0 | 1.7 | 10   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC    | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|-------|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |       | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS0970S-DIN   | □      | 3          | 9.7   | 29.1            | 47.0 | 49.0 | 89.0  | 87.2  | 1.8 | 10   | 2    |
| MMS0970S-DIN-C | □      | 3          |       | 29.1            | 47.0 | 49.0 | 89.0  | 87.2  | 1.8 | 10   | 1    |
| MMS0970L-DIN   | □      | 5          |       | 48.5            | 62.0 | 63.0 | 103.0 | 101.2 | 1.8 | 10   | 2    |
| MMS0970L-DIN-C | □      | 5          |       | 48.5            | 62.0 | 63.0 | 103.0 | 101.2 | 1.8 | 10   | 1    |
| MMS0970X3DB    | ★      | 3          |       | 29.1            | 52.0 | 52.0 | 102.8 | 101.0 | 1.8 | 10   | 1    |
| MMS0970X5DB    | ★      | 5          |       | 48.5            | 72.0 | 72.0 | 122.8 | 121.0 | 1.8 | 10   | 1    |
| MMS0980S-DIN   | □      | 3          | 9.8   | 29.4            | 47.0 | 49.0 | 89.0  | 87.2  | 1.8 | 10   | 2    |
| MMS0980S-DIN-C | ●      | 3          |       | 29.4            | 47.0 | 49.0 | 89.0  | 87.2  | 1.8 | 10   | 1    |
| MMS0980L-DIN   | □      | 5          |       | 49.0            | 62.0 | 63.0 | 103.0 | 101.2 | 1.8 | 10   | 2    |
| MMS0980L-DIN-C | ●      | 5          |       | 49.0            | 62.0 | 63.0 | 103.0 | 101.2 | 1.8 | 10   | 1    |
| MMS0980X3DB    | ★      | 3          |       | 29.4            | 52.0 | 52.0 | 102.8 | 101.0 | 1.8 | 10   | 1    |
| MMS0980X5DB    | ★      | 5          |       | 49.0            | 72.0 | 72.0 | 122.8 | 121.0 | 1.8 | 10   | 1    |
| MMS0990S-DIN   | □      | 3          | 9.9   | 29.7            | 47.0 | 49.0 | 89.0  | 87.2  | 1.8 | 10   | 2    |
| MMS0990S-DIN-C | □      | 3          |       | 29.7            | 47.0 | 49.0 | 89.0  | 87.2  | 1.8 | 10   | 1    |
| MMS0990L-DIN   | □      | 5          |       | 49.5            | 62.0 | 63.0 | 103.0 | 101.2 | 1.8 | 10   | 2    |
| MMS0990L-DIN-C | □      | 5          |       | 49.5            | 62.0 | 63.0 | 103.0 | 101.2 | 1.8 | 10   | 1    |
| MMS0990X3DB    | ★      | 3          |       | 29.7            | 52.0 | 52.0 | 102.8 | 101.0 | 1.8 | 10   | 1    |
| MMS0990X5DB    | ★      | 5          |       | 49.5            | 72.0 | 72.0 | 122.8 | 121.0 | 1.8 | 10   | 1    |
| MMS1000S-DIN-C | ●      | 3          | 10.0  | 30.0            | 47.0 | 49.0 | 89.0  | 87.2  | 1.8 | 10   | 1    |
| MMS1000L-DIN-C | ●      | 5          |       | 50.0            | 62.0 | 63.0 | 103.0 | 101.2 | 1.8 | 10   | 1    |
| MMS1000X3DB    | ★      | 3          |       | 30.0            | 52.0 | 52.0 | 102.8 | 101.0 | 1.8 | 10   | 1    |
| MMS1000X5DB    | ★      | 5          |       | 50.0            | 72.0 | 72.0 | 122.8 | 121.0 | 1.8 | 10   | 1    |
| MMS1005S-DIN   | □      | 3          | 10.05 | 30.2            | 55.0 | 57.0 | 102.0 | 100.2 | 1.8 | 12   | 2    |
| MMS1005S-DIN-C | ●      | 3          |       | 30.2            | 55.0 | 57.0 | 102.0 | 100.2 | 1.8 | 12   | 1    |
| MMS1005L-DIN   | □      | 5          |       | 50.3            | 71.0 | 73.0 | 118.0 | 116.2 | 1.8 | 12   | 2    |
| MMS1005L-DIN-C | ●      | 5          |       | 50.3            | 71.0 | 73.0 | 118.0 | 116.2 | 1.8 | 12   | 1    |
| MMS1010S-DIN   | □      | 3          | 10.1  | 30.3            | 55.0 | 57.0 | 102.0 | 100.2 | 1.8 | 12   | 2    |
| MMS1010S-DIN-C | □      | 3          |       | 30.3            | 55.0 | 57.0 | 102.0 | 100.2 | 1.8 | 12   | 1    |
| MMS1010L-DIN   | □      | 5          |       | 50.5            | 71.0 | 73.0 | 118.0 | 116.2 | 1.8 | 12   | 2    |
| MMS1010L-DIN-C | □      | 5          |       | 50.5            | 71.0 | 73.0 | 118.0 | 116.2 | 1.8 | 12   | 1    |
| MMS1010X3DB    | ★      | 3          |       | 30.3            | 55.0 | 57.0 | 112.8 | 111.0 | 1.8 | 12   | 1    |
| MMS1010X5DB    | ★      | 5          |       | 50.5            | 76.0 | 80.0 | 135.8 | 134.0 | 1.8 | 12   | 1    |
| MMS1020S-DIN   | □      | 3          | 10.2  | 30.6            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 2    |
| MMS1020S-DIN-C | ●      | 3          |       | 30.6            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 1    |
| MMS1020L-DIN   | □      | 5          |       | 51.0            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 2    |
| MMS1020L-DIN-C | ●      | 5          |       | 51.0            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 1    |
| MMS1020X3DB    | ★      | 3          |       | 30.6            | 55.0 | 57.0 | 112.9 | 111.0 | 1.9 | 12   | 1    |
| MMS1020X5DB    | ★      | 5          |       | 51.0            | 76.0 | 80.0 | 135.9 | 134.0 | 1.9 | 12   | 1    |
| MMS1030S-DIN   | □      | 3          | 10.3  | 30.9            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 2    |
| MMS1030S-DIN-C | ●      | 3          |       | 30.9            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 1    |
| MMS1030L-DIN   | □      | 5          |       | 51.5            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 2    |
| MMS1030L-DIN-C | ●      | 5          |       | 51.5            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 1    |
| MMS1030X3DB    | ★      | 3          |       | 30.9            | 55.0 | 57.0 | 112.9 | 111.0 | 1.9 | 12   | 1    |
| MMS1030X5DB    | ★      | 5          |       | 51.5            | 76.0 | 80.0 | 135.9 | 134.0 | 1.9 | 12   | 1    |
| MMS1040S-DIN   | □      | 3          | 10.4  | 31.2            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 2    |
| MMS1040S-DIN-C | ●      | 3          |       | 31.2            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 1    |
| MMS1040L-DIN   | □      | 5          |       | 52.0            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 2    |
| MMS1040L-DIN-C | ●      | 5          |       | 52.0            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 1    |
| MMS1040X3DB    | ★      | 3          |       | 31.2            | 55.0 | 57.0 | 112.9 | 111.0 | 1.9 | 12   | 1    |
| MMS1040X5DB    | ★      | 5          |       | 52.0            | 76.0 | 80.0 | 135.9 | 134.0 | 1.9 | 12   | 1    |

# MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS1050S-DIN   | □      | 3          | 10.5 | 31.5            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 2    |
| MMS1050S-DIN-C | ●      | 3          |      | 31.5            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 1    |
| MMS1050L-DIN   | □      | 5          |      | 52.5            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 2    |
| MMS1050L-DIN-C | ●      | 5          |      | 52.5            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 1    |
| MMS1050X3DB    | ★      | 3          |      | 31.5            | 55.0 | 57.0 | 112.9 | 111.0 | 1.9 | 12   | 1    |
| MMS1050X5DB    | ★      | 5          |      | 52.5            | 76.0 | 80.0 | 135.9 | 134.0 | 1.9 | 12   | 1    |
| MMS1060S-DIN   | □      | 3          | 10.6 | 31.8            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 2    |
| MMS1060S-DIN-C | □      | 3          |      | 31.8            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 1    |
| MMS1060L-DIN   | □      | 5          |      | 53.0            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 2    |
| MMS1060L-DIN-C | □      | 5          |      | 53.0            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 1    |
| MMS1060X3DB    | ★      | 3          |      | 31.8            | 57.0 | 58.0 | 117.9 | 116.0 | 1.9 | 12   | 1    |
| MMS1060X5DB    | ★      | 5          |      | 53.0            | 79.0 | 80.0 | 135.9 | 134.0 | 1.9 | 12   | 1    |
| MMS1070S-DIN   | □      | 3          | 10.7 | 32.1            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 2    |
| MMS1070S-DIN-C | ●      | 3          |      | 32.1            | 55.0 | 57.0 | 102.0 | 100.1 | 1.9 | 12   | 1    |
| MMS1070L-DIN   | □      | 5          |      | 53.5            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 2    |
| MMS1070L-DIN-C | ●      | 5          |      | 53.5            | 71.0 | 73.0 | 118.0 | 116.1 | 1.9 | 12   | 1    |
| MMS1070X3DB    | ★      | 3          |      | 32.1            | 57.0 | 58.0 | 117.9 | 116.0 | 1.9 | 12   | 1    |
| MMS1070X5DB    | ★      | 5          |      | 53.5            | 79.0 | 80.0 | 135.9 | 134.0 | 1.9 | 12   | 1    |
| MMS1080S-DIN   | □      | 3          | 10.8 | 32.4            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 2    |
| MMS1080S-DIN-C | ●      | 3          |      | 32.4            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 1    |
| MMS1080L-DIN   | □      | 5          |      | 54.0            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 2    |
| MMS1080L-DIN-C | ●      | 5          |      | 54.0            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1080X3DB    | ★      | 3          |      | 32.4            | 57.0 | 58.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1080X5DB    | ★      | 5          |      | 54.0            | 79.0 | 80.0 | 136.0 | 134.0 | 2.0 | 12   | 1    |
| MMS1090S-DIN   | □      | 3          | 10.9 | 32.7            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 2    |
| MMS1090S-DIN-C | □      | 3          |      | 32.7            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 1    |
| MMS1090L-DIN   | □      | 5          |      | 54.5            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 2    |
| MMS1090L-DIN-C | □      | 5          |      | 54.5            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1090X3DB    | ★      | 3          |      | 32.7            | 57.0 | 58.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1090X5DB    | ★      | 5          |      | 54.5            | 79.0 | 80.0 | 136.0 | 134.0 | 2.0 | 12   | 1    |
| MMS1100S-DIN   | □      | 3          | 11.0 | 33.0            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 2    |
| MMS1100S-DIN-C | ●      | 3          |      | 33.0            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 1    |
| MMS1100L-DIN   | □      | 5          |      | 55.0            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 2    |
| MMS1100L-DIN-C | ●      | 5          |      | 55.0            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1100X3DB    | ★      | 3          |      | 33.0            | 57.0 | 58.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1100X5DB    | ★      | 5          |      | 55.0            | 79.0 | 80.0 | 136.0 | 134.0 | 2.0 | 12   | 1    |
| MMS1110S-DIN   | □      | 3          | 11.1 | 33.3            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 2    |
| MMS1110S-DIN-C | □      | 3          |      | 33.3            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 1    |
| MMS1110L-DIN   | □      | 5          |      | 55.5            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 2    |
| MMS1110L-DIN-C | □      | 5          |      | 55.5            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1110X3DB    | ★      | 3          |      | 33.3            | 60.0 | 62.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1110X5DB    | ★      | 5          |      | 55.5            | 83.0 | 86.0 | 142.0 | 140.0 | 2.0 | 12   | 1    |
| MMS1120S-DIN   | □      | 3          | 11.2 | 33.6            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 2    |
| MMS1120S-DIN-C | ●      | 3          |      | 33.6            | 55.0 | 57.0 | 102.0 | 100.0 | 2.0 | 12   | 1    |
| MMS1120L-DIN   | □      | 5          |      | 56.0            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 2    |
| MMS1120L-DIN-C | ●      | 5          |      | 56.0            | 71.0 | 73.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1120X3DB    | ★      | 3          |      | 33.6            | 60.0 | 62.0 | 118.0 | 116.0 | 2.0 | 12   | 1    |
| MMS1120X5DB    | ★      | 5          |      | 56.0            | 83.0 | 86.0 | 142.0 | 140.0 | 2.0 | 12   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC    | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|-------|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |       | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS1130S-DIN   | □      | 3          | 11.3  | 33.9            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 2    |
| MMS1130S-DIN-C | □      | 3          |       | 33.9            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 1    |
| MMS1130L-DIN   | □      | 5          |       | 56.5            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 2    |
| MMS1130L-DIN-C | □      | 5          |       | 56.5            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 1    |
| MMS1130X3DB    | ★      | 3          |       | 33.9            | 60.0 | 62.0 | 118.1 | 116.0 | 2.1 | 12   | 1    |
| MMS1130X5DB    | ★      | 5          |       | 56.5            | 83.0 | 86.0 | 142.1 | 140.0 | 2.1 | 12   | 1    |
| MMS1140S-DIN   | □      | 3          | 11.4  | 34.2            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 2    |
| MMS1140S-DIN-C | ●      | 3          |       | 34.2            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 1    |
| MMS1140L-DIN   | □      | 5          |       | 57.0            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 2    |
| MMS1140L-DIN-C | ●      | 5          |       | 57.0            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 1    |
| MMS1140X3DB    | ★      | 3          |       | 34.2            | 60.0 | 62.0 | 118.1 | 116.0 | 2.1 | 12   | 1    |
| MMS1140X5DB    | ★      | 5          |       | 57.0            | 83.0 | 86.0 | 142.1 | 140.0 | 2.1 | 12   | 1    |
| MMS1150S-DIN   | □      | 3          | 11.5  | 34.5            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 2    |
| MMS1150S-DIN-C | ●      | 3          |       | 34.5            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 1    |
| MMS1150L-DIN   | □      | 5          |       | 57.5            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 2    |
| MMS1150L-DIN-C | ●      | 5          |       | 57.5            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 1    |
| MMS1150X3DB    | ★      | 3          |       | 34.5            | 60.0 | 62.0 | 118.1 | 116.0 | 2.1 | 12   | 1    |
| MMS1150X5DB    | ★      | 5          |       | 57.5            | 83.0 | 86.0 | 142.1 | 140.0 | 2.1 | 12   | 1    |
| MMS1160S-DIN   | □      | 3          | 11.6  | 34.8            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 2    |
| MMS1160S-DIN-C | □      | 3          |       | 34.8            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 1    |
| MMS1160L-DIN   | □      | 5          |       | 58.0            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 2    |
| MMS1160L-DIN-C | □      | 5          |       | 58.0            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 1    |
| MMS1160X3DB    | ★      | 3          |       | 34.8            | 62.0 | 62.0 | 118.1 | 116.0 | 2.1 | 12   | 1    |
| MMS1160X5DB    | ★      | 5          |       | 58.0            | 86.0 | 86.0 | 142.1 | 140.0 | 2.1 | 12   | 1    |
| MMS1170S-DIN   | □      | 3          | 11.7  | 35.1            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 2    |
| MMS1170S-DIN-C | ●      | 3          |       | 35.1            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 1    |
| MMS1170L-DIN   | □      | 5          |       | 58.5            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 2    |
| MMS1170L-DIN-C | ●      | 5          |       | 58.5            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 1    |
| MMS1170X3DB    | ★      | 3          |       | 35.1            | 62.0 | 62.0 | 118.1 | 116.0 | 2.1 | 12   | 1    |
| MMS1170X5DB    | ★      | 5          |       | 58.5            | 86.0 | 86.0 | 142.1 | 140.0 | 2.1 | 12   | 1    |
| MMS1180S-DIN   | □      | 3          | 11.8  | 35.4            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 2    |
| MMS1180S-DIN-C | ●      | 3          |       | 35.4            | 55.0 | 57.0 | 102.0 | 99.9  | 2.1 | 12   | 1    |
| MMS1180L-DIN   | □      | 5          |       | 59.0            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 2    |
| MMS1180L-DIN-C | ●      | 5          |       | 59.0            | 71.0 | 73.0 | 118.0 | 115.9 | 2.1 | 12   | 1    |
| MMS1180X3DB    | ★      | 3          |       | 35.4            | 62.0 | 62.0 | 118.1 | 116.0 | 2.1 | 12   | 1    |
| MMS1180X5DB    | ★      | 5          |       | 59.0            | 86.0 | 86.0 | 142.1 | 140.0 | 2.1 | 12   | 1    |
| MMS1190S-DIN   | □      | 3          | 11.9  | 35.7            | 55.0 | 57.0 | 102.0 | 99.8  | 2.2 | 12   | 2    |
| MMS1190S-DIN-C | □      | 3          |       | 35.7            | 55.0 | 57.0 | 102.0 | 99.8  | 2.2 | 12   | 1    |
| MMS1190L-DIN   | □      | 5          |       | 59.5            | 71.0 | 73.0 | 118.0 | 115.8 | 2.2 | 12   | 2    |
| MMS1190L-DIN-C | □      | 5          |       | 59.5            | 71.0 | 73.0 | 118.0 | 115.8 | 2.2 | 12   | 1    |
| MMS1190X3DB    | ★      | 3          |       | 35.7            | 62.0 | 62.0 | 118.2 | 116.0 | 2.2 | 12   | 1    |
| MMS1190X5DB    | ★      | 5          |       | 59.5            | 86.0 | 86.0 | 142.2 | 140.0 | 2.2 | 12   | 1    |
| MMS1200S-DIN-C | ●      | 3          | 12.0  | 36.0            | 55.0 | 57.0 | 102.0 | 99.8  | 2.2 | 12   | 1    |
| MMS1200L-DIN-C | ●      | 5          |       | 60.0            | 71.0 | 73.0 | 118.0 | 115.8 | 2.2 | 12   | 1    |
| MMS1200X3DB    | ★      | 3          |       | 36.0            | 62.0 | 62.0 | 118.2 | 116.0 | 2.2 | 12   | 1    |
| MMS1200X5DB    | ★      | 5          |       | 60.0            | 86.0 | 86.0 | 142.2 | 140.0 | 2.2 | 12   | 1    |
| MMS1205S-DIN   | □      | 3          | 12.05 | 36.2            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 2    |
| MMS1205S-DIN-C | ●      | 3          |       | 36.2            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 1    |
| MMS1205L-DIN   | □      | 5          |       | 60.3            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 2    |
| MMS1205L-DIN-C | ●      | 5          |       | 60.3            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |      |      |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|------|------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF  | LH   | OAL   | LF    | PL  |      | DCON |
| MMS1210S-DIN   | □      | 3          | 12.1 | 36.3            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 2    |
| MMS1210S-DIN-C | □      | 3          |      | 36.3            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 1    |
| MMS1210L-DIN   | □      | 5          |      | 60.5            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 2    |
| MMS1210L-DIN-C | □      | 5          |      | 60.5            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 1    |
| MMS1210X3DB    | ★      | 3          |      | 36.3            | 65.0 | 68.0 | 124.2 | 122.0 | 2.2 | 14   | 1    |
| MMS1210X5DB    | ★      | 5          |      | 60.5            | 90.0 | 94.0 | 150.2 | 148.0 | 2.2 | 14   | 1    |
| MMS1220S-DIN   | □      | 3          | 12.2 | 36.6            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 2    |
| MMS1220S-DIN-C | □      | 3          |      | 36.6            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 1    |
| MMS1220L-DIN   | □      | 5          |      | 61.0            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 2    |
| MMS1220L-DIN-C | □      | 5          |      | 61.0            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 1    |
| MMS1220X3DB    | ★      | 3          |      | 36.6            | 65.0 | 68.0 | 124.2 | 122.0 | 2.2 | 14   | 1    |
| MMS1220X5DB    | ★      | 5          |      | 61.0            | 90.0 | 94.0 | 150.2 | 148.0 | 2.2 | 14   | 1    |
| MMS1230S-DIN   | □      | 3          | 12.3 | 36.9            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 2    |
| MMS1230S-DIN-C | □      | 3          |      | 36.9            | 60.0 | 62.0 | 107.0 | 104.8 | 2.2 | 14   | 1    |
| MMS1230L-DIN   | □      | 5          |      | 61.5            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 2    |
| MMS1230L-DIN-C | □      | 5          |      | 61.5            | 77.0 | 79.0 | 124.0 | 121.8 | 2.2 | 14   | 1    |
| MMS1230X3DB    | ★      | 3          |      | 36.9            | 65.0 | 68.0 | 124.2 | 122.0 | 2.2 | 14   | 1    |
| MMS1230X5DB    | ★      | 5          |      | 61.5            | 90.0 | 94.0 | 150.2 | 148.0 | 2.2 | 14   | 1    |
| MMS1240S-DIN   | □      | 3          | 12.4 | 37.2            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 2    |
| MMS1240S-DIN-C | □      | 3          |      | 37.2            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 1    |
| MMS1240L-DIN   | □      | 5          |      | 62.0            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 2    |
| MMS1240L-DIN-C | □      | 5          |      | 62.0            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 1    |
| MMS1240X3DB    | ★      | 3          |      | 37.2            | 65.0 | 68.0 | 124.3 | 122.0 | 2.3 | 14   | 1    |
| MMS1240X5DB    | ★      | 5          |      | 62.0            | 90.0 | 94.0 | 150.3 | 148.0 | 2.3 | 14   | 1    |
| MMS1250S-DIN   | □      | 3          | 12.5 | 37.5            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 2    |
| MMS1250S-DIN-C | ●      | 3          |      | 37.5            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 1    |
| MMS1250L-DIN   | □      | 5          |      | 62.5            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 2    |
| MMS1250L-DIN-C | ●      | 5          |      | 62.5            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 1    |
| MMS1250X3DB    | ★      | 3          |      | 37.5            | 65.0 | 68.0 | 124.3 | 122.0 | 2.3 | 14   | 1    |
| MMS1250X5DB    | ★      | 5          |      | 62.5            | 90.0 | 94.0 | 150.3 | 148.0 | 2.3 | 14   | 1    |
| MMS1260S-DIN   | □      | 3          | 12.6 | 37.8            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 2    |
| MMS1260S-DIN-C | ●      | 3          |      | 37.8            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 1    |
| MMS1260L-DIN   | □      | 5          |      | 63.0            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 2    |
| MMS1260L-DIN-C | ●      | 5          |      | 63.0            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 1    |
| MMS1260X3DB    | ★      | 3          |      | 37.8            | 67.0 | 68.0 | 124.3 | 122.0 | 2.3 | 14   | 1    |
| MMS1260X5DB    | ★      | 5          |      | 63.0            | 93.0 | 94.0 | 150.3 | 148.0 | 2.3 | 14   | 1    |
| MMS1270S-DIN   | □      | 3          | 12.7 | 38.1            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 2    |
| MMS1270S-DIN-C | ●      | 3          |      | 38.1            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 1    |
| MMS1270L-DIN   | □      | 5          |      | 63.5            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 2    |
| MMS1270L-DIN-C | ●      | 5          |      | 63.5            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 1    |
| MMS1270X3DB    | ★      | 3          |      | 38.1            | 67.0 | 68.0 | 124.3 | 122.0 | 2.3 | 14   | 1    |
| MMS1270X5DB    | ★      | 5          |      | 63.5            | 93.0 | 94.0 | 150.3 | 148.0 | 2.3 | 14   | 1    |
| MMS1280S-DIN   | □      | 3          | 12.8 | 38.4            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 2    |
| MMS1280S-DIN-C | □      | 3          |      | 38.4            | 60.0 | 62.0 | 107.0 | 104.7 | 2.3 | 14   | 1    |
| MMS1280L-DIN   | □      | 5          |      | 64.0            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 2    |
| MMS1280L-DIN-C | □      | 5          |      | 64.0            | 77.0 | 79.0 | 124.0 | 121.7 | 2.3 | 14   | 1    |
| MMS1280X3DB    | ★      | 3          |      | 38.4            | 67.0 | 68.0 | 124.3 | 122.0 | 2.3 | 14   | 1    |
| MMS1280X5DB    | ★      | 5          |      | 64.0            | 93.0 | 94.0 | 150.3 | 148.0 | 2.3 | 14   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  |      | DCON |
| MMS1290S-DIN   | □      | 3          | 12.9 | 38.7            | 60.0  | 62.0  | 107.0 | 104.7 | 2.3 | 14   | 2    |
| MMS1290S-DIN-C | □      | 3          |      | 38.7            | 60.0  | 62.0  | 107.0 | 104.7 | 2.3 | 14   | 1    |
| MMS1290L-DIN   | □      | 5          |      | 64.5            | 77.0  | 79.0  | 124.0 | 121.7 | 2.3 | 14   | 2    |
| MMS1290L-DIN-C | □      | 5          |      | 64.5            | 77.0  | 79.0  | 124.0 | 121.7 | 2.3 | 14   | 1    |
| MMS1290X3DB    | ★      | 3          |      | 38.7            | 67.0  | 68.0  | 124.3 | 122.0 | 2.3 | 14   | 1    |
| MMS1290X5DB    | ★      | 5          |      | 64.5            | 93.0  | 94.0  | 150.3 | 148.0 | 2.3 | 14   | 1    |
| MMS1300S-DIN   | □      | 3          | 13.0 | 39.0            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 2    |
| MMS1300S-DIN-C | ●      | 3          |      | 39.0            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 1    |
| MMS1300L-DIN   | □      | 5          |      | 65.0            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 2    |
| MMS1300L-DIN-C | ●      | 5          |      | 65.0            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 1    |
| MMS1300X3DB    | ★      | 3          |      | 39.0            | 67.0  | 68.0  | 124.4 | 122.0 | 2.4 | 14   | 1    |
| MMS1300X5DB    | ★      | 5          |      | 65.0            | 93.0  | 94.0  | 150.4 | 148.0 | 2.4 | 14   | 1    |
| MMS1310S-DIN   | □      | 3          | 13.1 | 39.3            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 2    |
| MMS1310S-DIN-C | □      | 3          |      | 39.3            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 1    |
| MMS1310L-DIN   | □      | 5          |      | 65.5            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 2    |
| MMS1310L-DIN-C | □      | 5          |      | 65.5            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 1    |
| MMS1310X3DB    | ★      | 3          |      | 39.3            | 70.0  | 72.0  | 128.4 | 126.0 | 2.4 | 14   | 1    |
| MMS1310X5DB    | ★      | 5          |      | 65.5            | 97.0  | 100.0 | 156.4 | 154.0 | 2.4 | 14   | 1    |
| MMS1320S-DIN   | □      | 3          | 13.2 | 39.6            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 2    |
| MMS1320S-DIN-C | □      | 3          |      | 39.6            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 1    |
| MMS1320L-DIN   | □      | 5          |      | 66.0            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 2    |
| MMS1320L-DIN-C | □      | 5          |      | 66.0            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 1    |
| MMS1320X3DB    | ★      | 3          |      | 39.6            | 70.0  | 72.0  | 128.4 | 126.0 | 2.4 | 14   | 1    |
| MMS1320X5DB    | ★      | 5          |      | 66.0            | 97.0  | 100.0 | 156.4 | 154.0 | 2.4 | 14   | 1    |
| MMS1330S-DIN   | □      | 3          | 13.3 | 39.9            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 2    |
| MMS1330S-DIN-C | □      | 3          |      | 39.9            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 1    |
| MMS1330L-DIN   | □      | 5          |      | 66.5            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 2    |
| MMS1330L-DIN-C | □      | 5          |      | 66.5            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 1    |
| MMS1330X3DB    | ★      | 3          |      | 39.9            | 70.0  | 72.0  | 128.4 | 126.0 | 2.4 | 14   | 1    |
| MMS1330X5DB    | ★      | 5          |      | 66.5            | 97.0  | 100.0 | 156.4 | 154.0 | 2.4 | 14   | 1    |
| MMS1340S-DIN   | □      | 3          | 13.4 | 40.2            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 2    |
| MMS1340S-DIN-C | □      | 3          |      | 40.2            | 60.0  | 62.0  | 107.0 | 104.6 | 2.4 | 14   | 1    |
| MMS1340L-DIN   | □      | 5          |      | 67.0            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 2    |
| MMS1340L-DIN-C | □      | 5          |      | 67.0            | 77.0  | 79.0  | 124.0 | 121.6 | 2.4 | 14   | 1    |
| MMS1340X3DB    | ★      | 3          |      | 40.2            | 70.0  | 72.0  | 128.4 | 126.0 | 2.4 | 14   | 1    |
| MMS1340X5DB    | ★      | 5          |      | 67.0            | 97.0  | 100.0 | 156.4 | 154.0 | 2.4 | 14   | 1    |
| MMS1350S-DIN   | □      | 3          | 13.5 | 40.5            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 2    |
| MMS1350S-DIN-C | ●      | 3          |      | 40.5            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 1    |
| MMS1350L-DIN   | □      | 5          |      | 67.5            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 2    |
| MMS1350L-DIN-C | ●      | 5          |      | 67.5            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 1    |
| MMS1350X3DB    | ★      | 3          |      | 40.5            | 70.0  | 72.0  | 128.5 | 126.0 | 2.5 | 14   | 1    |
| MMS1350X5DB    | ★      | 5          |      | 67.5            | 97.0  | 100.0 | 156.5 | 154.0 | 2.5 | 14   | 1    |
| MMS1360S-DIN   | □      | 3          | 13.6 | 40.8            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 2    |
| MMS1360S-DIN-C | □      | 3          |      | 40.8            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 1    |
| MMS1360L-DIN   | □      | 5          |      | 68.0            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 2    |
| MMS1360L-DIN-C | □      | 5          |      | 68.0            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 1    |
| MMS1360X3DB    | ★      | 3          |      | 40.8            | 72.0  | 72.0  | 128.5 | 126.0 | 2.5 | 14   | 1    |
| MMS1360X5DB    | ★      | 5          |      | 68.0            | 100.0 | 100.0 | 156.5 | 154.0 | 2.5 | 14   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC    | Dimensions (mm) |       |       |       |       |     | Type |      |
|----------------|--------|------------|-------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |       | LU              | LCF   | LH    | OAL   | LF    | PL  |      | DCON |
| MMS1370S-DIN   | □      | 3          | 13.7  | 41.1            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 2    |
| MMS1370S-DIN-C | ●      | 3          |       | 41.1            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 1    |
| MMS1370L-DIN   | □      | 5          |       | 68.5            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 2    |
| MMS1370L-DIN-C | ●      | 5          |       | 68.5            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 1    |
| MMS1370X3DB    | ★      | 3          |       | 41.1            | 72.0  | 72.0  | 128.5 | 126.0 | 2.5 | 14   | 1    |
| MMS1370X5DB    | ★      | 5          |       | 68.5            | 100.0 | 100.0 | 156.5 | 154.0 | 2.5 | 14   | 1    |
| MMS1380S-DIN   | □      | 3          | 13.8  | 41.4            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 2    |
| MMS1380S-DIN-C | □      | 3          |       | 41.4            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 1    |
| MMS1380L-DIN   | □      | 5          |       | 69.0            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 2    |
| MMS1380L-DIN-C | □      | 5          |       | 69.0            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 1    |
| MMS1380X3DB    | ★      | 3          |       | 41.4            | 72.0  | 72.0  | 128.5 | 126.0 | 2.5 | 14   | 1    |
| MMS1380X5DB    | ★      | 5          |       | 69.0            | 100.0 | 100.0 | 156.5 | 154.0 | 2.5 | 14   | 1    |
| MMS1390S-DIN   | □      | 3          | 13.9  | 41.7            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 2    |
| MMS1390S-DIN-C | □      | 3          |       | 41.7            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 1    |
| MMS1390L-DIN   | □      | 5          |       | 69.5            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 2    |
| MMS1390L-DIN-C | □      | 5          |       | 69.5            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 1    |
| MMS1390X3DB    | ★      | 3          |       | 41.7            | 72.0  | 72.0  | 128.5 | 126.0 | 2.5 | 14   | 1    |
| MMS1390X5DB    | ★      | 5          |       | 69.5            | 100.0 | 100.0 | 156.5 | 154.0 | 2.5 | 14   | 1    |
| MMS1400S-DIN-C | ●      | 3          | 14.0  | 42.0            | 60.0  | 62.0  | 107.0 | 104.5 | 2.5 | 14   | 1    |
| MMS1400L-DIN-C | ●      | 5          |       | 70.0            | 77.0  | 79.0  | 124.0 | 121.5 | 2.5 | 14   | 1    |
| MMS1400X3DB    | ★      | 3          |       | 42.0            | 72.0  | 72.0  | 128.5 | 126.0 | 2.5 | 14   | 1    |
| MMS1400X5DB    | ★      | 5          |       | 70.0            | 100.0 | 100.0 | 156.5 | 154.0 | 2.5 | 14   | 1    |
| MMS1405S-DIN-C | □      | 3          | 14.05 | 42.2            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 1    |
| MMS1405L-DIN-C | □      | 5          |       | 70.3            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 1    |
| MMS1410S-DIN   | □      | 3          | 14.1  | 42.3            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 2    |
| MMS1410S-DIN-C | □      | 3          |       | 42.3            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 1    |
| MMS1410L-DIN   | □      | 5          |       | 70.5            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 2    |
| MMS1410L-DIN-C | □      | 5          |       | 70.5            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 1    |
| MMS1410X3DB    | ★      | 3          |       | 42.3            | 76.0  | 79.0  | 137.6 | 135.0 | 2.6 | 16   | 1    |
| MMS1410X5DB    | ★      | 5          |       | 70.5            | 105.0 | 109.0 | 167.6 | 165.0 | 2.6 | 16   | 1    |
| MMS1420S-DIN   | □      | 3          | 14.2  | 42.6            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 2    |
| MMS1420S-DIN-C | □      | 3          |       | 42.6            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 1    |
| MMS1420L-DIN   | □      | 5          |       | 71.0            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 2    |
| MMS1420L-DIN-C | □      | 5          |       | 71.0            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 1    |
| MMS1420X3DB    | ★      | 3          |       | 42.6            | 76.0  | 79.0  | 137.6 | 135.0 | 2.6 | 16   | 1    |
| MMS1420X5DB    | ★      | 5          |       | 71.0            | 105.0 | 109.0 | 167.6 | 165.0 | 2.6 | 16   | 1    |
| MMS1430S-DIN   | □      | 3          | 14.3  | 42.9            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 2    |
| MMS1430S-DIN-C | □      | 3          |       | 42.9            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 1    |
| MMS1430L-DIN   | □      | 5          |       | 71.5            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 2    |
| MMS1430L-DIN-C | □      | 5          |       | 71.5            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 1    |
| MMS1430X3DB    | ★      | 3          |       | 42.9            | 76.0  | 79.0  | 137.6 | 135.0 | 2.6 | 16   | 1    |
| MMS1430X5DB    | ★      | 5          |       | 71.5            | 105.0 | 109.0 | 167.6 | 165.0 | 2.6 | 16   | 1    |
| MMS1440S-DIN   | □      | 3          | 14.4  | 43.2            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 2    |
| MMS1440S-DIN-C | □      | 3          |       | 43.2            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 1    |
| MMS1440L-DIN   | □      | 5          |       | 72.0            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 2    |
| MMS1440L-DIN-C | □      | 5          |       | 72.0            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 1    |
| MMS1440X3DB    | ★      | 3          |       | 43.2            | 76.0  | 79.0  | 137.6 | 135.0 | 2.6 | 16   | 1    |
| MMS1440X5DB    | ★      | 5          |       | 72.0            | 105.0 | 109.0 | 167.6 | 165.0 | 2.6 | 16   | 1    |
| MMS1450S-DIN-C | □      | 3          | 14.5  | 43.5            | 64.0  | 66.0  | 114.0 | 111.4 | 2.6 | 16   | 1    |
| MMS1450L-DIN-C | □      | 5          |       | 72.5            | 82.0  | 84.0  | 132.0 | 129.4 | 2.6 | 16   | 1    |
| MMS1450X3DB    | ★      | 3          |       | 43.5            | 76.0  | 79.0  | 137.6 | 135.0 | 2.6 | 16   | 1    |
| MMS1450X5DB    | ★      | 5          |       | 72.5            | 105.0 | 109.0 | 167.6 | 165.0 | 2.6 | 16   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  |      | DCON |
| MMS1460S-DIN   | □      | 3          | 14.6 | 43.8            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 2    |
| MMS1460S-DIN-C | □      | 3          |      | 43.8            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 1    |
| MMS1460L-DIN   | □      | 5          |      | 73.0            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 2    |
| MMS1460L-DIN-C | □      | 5          |      | 73.0            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 1    |
| MMS1460X3DB    | ★      | 3          |      | 43.8            | 78.0  | 79.0  | 137.7 | 135.0 | 2.7 | 16   | 1    |
| MMS1460X5DB    | ★      | 5          |      | 73.0            | 108.0 | 109.0 | 167.7 | 165.0 | 2.7 | 16   | 1    |
| MMS1470S-DIN   | □      | 3          | 14.7 | 44.1            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 2    |
| MMS1470S-DIN-C | □      | 3          |      | 44.1            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 1    |
| MMS1470L-DIN   | □      | 5          |      | 73.5            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 2    |
| MMS1470L-DIN-C | □      | 5          |      | 73.5            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 1    |
| MMS1470X3DB    | ★      | 3          |      | 44.1            | 78.0  | 79.0  | 137.7 | 135.0 | 2.7 | 16   | 1    |
| MMS1470X5DB    | ★      | 5          |      | 73.5            | 108.0 | 109.0 | 167.7 | 165.0 | 2.7 | 16   | 1    |
| MMS1480S-DIN   | □      | 3          | 14.8 | 44.4            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 2    |
| MMS1480S-DIN-C | □      | 3          |      | 44.4            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 1    |
| MMS1480L-DIN   | □      | 5          |      | 74.0            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 2    |
| MMS1480L-DIN-C | □      | 5          |      | 74.0            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 1    |
| MMS1480X3DB    | ★      | 3          |      | 44.4            | 78.0  | 79.0  | 137.7 | 135.0 | 2.7 | 16   | 1    |
| MMS1480X5DB    | ★      | 5          |      | 74.0            | 108.0 | 109.0 | 167.7 | 165.0 | 2.7 | 16   | 1    |
| MMS1490S-DIN   | □      | 3          | 14.9 | 44.7            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 2    |
| MMS1490S-DIN-C | □      | 3          |      | 44.7            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 1    |
| MMS1490L-DIN   | □      | 5          |      | 74.5            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 2    |
| MMS1490L-DIN-C | □      | 5          |      | 74.5            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 1    |
| MMS1490X3DB    | ★      | 3          |      | 44.7            | 78.0  | 79.0  | 137.7 | 135.0 | 2.7 | 16   | 1    |
| MMS1490X5DB    | ★      | 5          |      | 74.5            | 108.0 | 109.0 | 167.7 | 165.0 | 2.7 | 16   | 1    |
| MMS1500S-DIN-C | □      | 3          | 15.0 | 45.0            | 64.0  | 66.0  | 114.0 | 111.3 | 2.7 | 16   | 1    |
| MMS1500L-DIN-C | □      | 5          |      | 75.0            | 82.0  | 84.0  | 132.0 | 129.3 | 2.7 | 16   | 1    |
| MMS1500X3DB    | ★      | 3          |      | 45.0            | 78.0  | 79.0  | 137.7 | 135.0 | 2.7 | 16   | 1    |
| MMS1500X5DB    | ★      | 5          |      | 75.0            | 108.0 | 109.0 | 167.7 | 165.0 | 2.7 | 16   | 1    |
| MMS1510S-DIN   | □      | 3          | 15.1 | 45.3            | 65.0  | 67.0  | 115.0 | 112.3 | 2.7 | 16   | 2    |
| MMS1510S-DIN-C | □      | 3          |      | 45.3            | 65.0  | 67.0  | 115.0 | 112.3 | 2.7 | 16   | 1    |
| MMS1510L-DIN   | □      | 5          |      | 75.5            | 83.0  | 85.0  | 133.0 | 130.3 | 2.7 | 16   | 2    |
| MMS1510L-DIN-C | □      | 5          |      | 75.5            | 83.0  | 85.0  | 133.0 | 130.3 | 2.7 | 16   | 1    |
| MMS1510X3DB    | ★      | 3          |      | 45.3            | 81.0  | 83.0  | 141.7 | 139.0 | 2.7 | 16   | 1    |
| MMS1510X5DB    | ★      | 5          |      | 75.5            | 112.0 | 115.0 | 173.7 | 171.0 | 2.7 | 16   | 1    |
| MMS1520S-DIN   | □      | 3          | 15.2 | 45.6            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 2    |
| MMS1520S-DIN-C | □      | 3          |      | 45.6            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 1    |
| MMS1520L-DIN   | □      | 5          |      | 76.0            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 2    |
| MMS1520L-DIN-C | □      | 5          |      | 76.0            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 1    |
| MMS1520X3DB    | ★      | 3          |      | 45.6            | 81.0  | 83.0  | 141.8 | 139.0 | 2.8 | 16   | 1    |
| MMS1520X5DB    | ★      | 5          |      | 76.0            | 112.0 | 115.0 | 173.8 | 171.0 | 2.8 | 16   | 1    |
| MMS1530S-DIN   | □      | 3          | 15.3 | 45.9            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 2    |
| MMS1530S-DIN-C | □      | 3          |      | 45.9            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 1    |
| MMS1530L-DIN   | □      | 5          |      | 76.5            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 2    |
| MMS1530L-DIN-C | □      | 5          |      | 76.5            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 1    |
| MMS1530X3DB    | ★      | 3          |      | 45.9            | 81.0  | 83.0  | 141.8 | 139.0 | 2.8 | 16   | 1    |
| MMS1530X5DB    | ★      | 5          |      | 76.5            | 112.0 | 115.0 | 173.8 | 171.0 | 2.8 | 16   | 1    |

# MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  |      | DCON |
| MMS1540S-DIN   | □      | 3          | 15.4 | 46.2            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 2    |
| MMS1540S-DIN-C | □      | 3          |      | 46.2            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 1    |
| MMS1540L-DIN   | □      | 5          |      | 77.0            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 2    |
| MMS1540L-DIN-C | □      | 5          |      | 77.0            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 1    |
| MMS1540X3DB    | ★      | 3          |      | 46.2            | 81.0  | 83.0  | 141.8 | 139.0 | 2.8 | 16   | 1    |
| MMS1540X5DB    | ★      | 5          |      | 77.0            | 112.0 | 115.0 | 173.8 | 171.0 | 2.8 | 16   | 1    |
| MMS1550S-DIN-C | □      | 3          |      | 46.5            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 1    |
| MMS1550L-DIN-C | □      | 5          |      | 77.5            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 1    |
| MMS1550X3DB    | ★      | 3          |      | 46.5            | 81.0  | 83.0  | 141.8 | 139.0 | 2.8 | 16   | 1    |
| MMS1550X5DB    | ★      | 5          |      | 77.5            | 112.0 | 115.0 | 173.8 | 171.0 | 2.8 | 16   | 1    |
| MMS1560S-DIN   | □      | 3          | 15.6 | 46.8            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 2    |
| MMS1560S-DIN-C | □      | 3          |      | 46.8            | 65.0  | 67.0  | 115.0 | 112.2 | 2.8 | 16   | 1    |
| MMS1560L-DIN   | □      | 5          |      | 78.0            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 2    |
| MMS1560L-DIN-C | □      | 5          |      | 78.0            | 83.0  | 85.0  | 133.0 | 130.2 | 2.8 | 16   | 1    |
| MMS1560X3DB    | ★      | 3          |      | 46.8            | 83.0  | 83.0  | 141.8 | 139.0 | 2.8 | 16   | 1    |
| MMS1560X5DB    | ★      | 5          |      | 78.0            | 115.0 | 115.0 | 173.8 | 171.0 | 2.8 | 16   | 1    |
| MMS1570S-DIN   | □      | 3          | 15.7 | 47.1            | 65.0  | 67.0  | 115.0 | 112.1 | 2.9 | 16   | 2    |
| MMS1570S-DIN-C | □      | 3          |      | 47.1            | 65.0  | 67.0  | 115.0 | 112.1 | 2.9 | 16   | 1    |
| MMS1570L-DIN   | □      | 5          |      | 78.5            | 83.0  | 85.0  | 133.0 | 130.1 | 2.9 | 16   | 2    |
| MMS1570L-DIN-C | □      | 5          |      | 78.5            | 83.0  | 85.0  | 133.0 | 130.1 | 2.9 | 16   | 1    |
| MMS1570X3DB    | ★      | 3          |      | 47.1            | 83.0  | 83.0  | 141.9 | 139.0 | 2.9 | 16   | 1    |
| MMS1570X5DB    | ★      | 5          |      | 78.5            | 115.0 | 115.0 | 173.9 | 171.0 | 2.9 | 16   | 1    |
| MMS1580S-DIN   | □      | 3          | 15.8 | 47.4            | 65.0  | 67.0  | 115.0 | 112.1 | 2.9 | 16   | 2    |
| MMS1580S-DIN-C | □      | 3          |      | 47.4            | 65.0  | 67.0  | 115.0 | 112.1 | 2.9 | 16   | 1    |
| MMS1580L-DIN   | □      | 5          |      | 79.0            | 83.0  | 85.0  | 133.0 | 130.1 | 2.9 | 16   | 2    |
| MMS1580L-DIN-C | □      | 5          |      | 79.0            | 83.0  | 85.0  | 133.0 | 130.1 | 2.9 | 16   | 1    |
| MMS1580X3DB    | ★      | 3          |      | 47.4            | 83.0  | 83.0  | 141.9 | 139.0 | 2.9 | 16   | 1    |
| MMS1580X5DB    | ★      | 5          |      | 79.0            | 115.0 | 115.0 | 173.9 | 171.0 | 2.9 | 16   | 1    |
| MMS1590S-DIN   | □      | 3          | 15.9 | 47.7            | 65.0  | 67.0  | 115.0 | 112.1 | 2.9 | 16   | 2    |
| MMS1590S-DIN-C | □      | 3          |      | 47.7            | 65.0  | 67.0  | 115.0 | 112.1 | 2.9 | 16   | 1    |
| MMS1590L-DIN   | □      | 5          |      | 79.5            | 83.0  | 85.0  | 133.0 | 130.1 | 2.9 | 16   | 2    |
| MMS1590L-DIN-C | □      | 5          |      | 79.5            | 83.0  | 85.0  | 133.0 | 130.1 | 2.9 | 16   | 1    |
| MMS1590X3DB    | ★      | 3          |      | 47.7            | 83.0  | 83.0  | 141.9 | 139.0 | 2.9 | 16   | 1    |
| MMS1590X5DB    | ★      | 5          |      | 79.5            | 115.0 | 115.0 | 173.9 | 171.0 | 2.9 | 16   | 1    |
| MMS1600S-DIN-C | □      | 3          | 16.0 | 48.0            | 65.0  | 67.0  | 115.0 | 112.1 | 2.9 | 16   | 1    |
| MMS1600L-DIN-C | □      | 5          |      | 80.0            | 83.0  | 85.0  | 133.0 | 130.1 | 2.9 | 16   | 1    |
| MMS1600X3DB    | ★      | 3          |      | 48.0            | 83.0  | 83.0  | 141.9 | 139.0 | 2.9 | 16   | 1    |
| MMS1600X5DB    | ★      | 5          |      | 80.0            | 115.0 | 115.0 | 173.9 | 171.0 | 2.9 | 16   | 1    |
| MMS1610S-DIN   | □      | 3          | 16.1 | 48.3            | 73.0  | 75.0  | 123.0 | 120.1 | 2.9 | 18   | 2    |
| MMS1610S-DIN-C | □      | 3          |      | 48.3            | 73.0  | 75.0  | 123.0 | 120.1 | 2.9 | 18   | 1    |
| MMS1610L-DIN   | □      | 5          |      | 80.5            | 93.0  | 95.0  | 143.0 | 140.1 | 2.9 | 18   | 2    |
| MMS1610L-DIN-C | □      | 5          |      | 80.5            | 93.0  | 95.0  | 143.0 | 140.1 | 2.9 | 18   | 1    |
| MMS1610X3DB    | □      | 3          |      | 48.3            | 86.0  | 89.0  | 147.9 | 145.0 | 2.9 | 18   | 1    |
| MMS1610X5DB    | □      | 5          |      | 80.5            | 119.0 | 123.0 | 181.9 | 179.0 | 2.9 | 18   | 1    |
| MMS1620S-DIN   | □      | 3          | 16.2 | 48.6            | 73.0  | 75.0  | 123.0 | 120.1 | 2.9 | 18   | 2    |
| MMS1620S-DIN-C | □      | 3          |      | 48.6            | 73.0  | 75.0  | 123.0 | 120.1 | 2.9 | 18   | 1    |
| MMS1620L-DIN   | □      | 5          |      | 81.0            | 93.0  | 95.0  | 143.0 | 140.1 | 2.9 | 18   | 2    |
| MMS1620L-DIN-C | □      | 5          |      | 81.0            | 93.0  | 95.0  | 143.0 | 140.1 | 2.9 | 18   | 1    |
| MMS1620X3DB    | □      | 3          |      | 48.6            | 86.0  | 89.0  | 147.9 | 145.0 | 2.9 | 18   | 1    |
| MMS1620X5DB    | □      | 5          |      | 81.0            | 119.0 | 123.0 | 181.9 | 179.0 | 2.9 | 18   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  |      | DCON |
| MMS1630S-DIN   | □      | 3          | 16.3 | 48.9            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 2    |
| MMS1630S-DIN-C | □      | 3          |      | 48.9            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 1    |
| MMS1630L-DIN   | □      | 5          |      | 81.5            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 2    |
| MMS1630L-DIN-C | □      | 5          |      | 81.5            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 1    |
| MMS1630X3DB    | □      | 3          |      | 48.9            | 86.0  | 89.0  | 148.0 | 145.0 | 3.0 | 18   | 1    |
| MMS1630X5DB    | □      | 5          |      | 81.5            | 119.0 | 123.0 | 182.0 | 179.0 | 3.0 | 18   | 1    |
| MMS1640S-DIN   | □      | 3          | 16.4 | 49.2            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 2    |
| MMS1640S-DIN-C | □      | 3          |      | 49.2            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 1    |
| MMS1640L-DIN   | □      | 5          |      | 82.0            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 2    |
| MMS1640L-DIN-C | □      | 5          |      | 82.0            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 1    |
| MMS1640X3DB    | □      | 3          |      | 49.2            | 86.0  | 89.0  | 148.0 | 145.0 | 3.0 | 18   | 1    |
| MMS1640X5DB    | □      | 5          |      | 82.0            | 119.0 | 123.0 | 182.0 | 179.0 | 3.0 | 18   | 1    |
| MMS1650S-DIN-C | □      | 3          | 16.5 | 49.5            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 1    |
| MMS1650L-DIN-C | □      | 5          |      | 82.5            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 1    |
| MMS1650X3DB    | ★      | 3          |      | 49.5            | 86.0  | 89.0  | 148.0 | 145.0 | 3.0 | 18   | 1    |
| MMS1650X5DB    | ★      | 5          |      | 82.5            | 119.0 | 123.0 | 182.0 | 179.0 | 3.0 | 18   | 1    |
| MMS1660S-DIN   | □      | 3          | 16.6 | 49.8            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 2    |
| MMS1660S-DIN-C | □      | 3          |      | 49.8            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 1    |
| MMS1660L-DIN   | □      | 5          |      | 83.0            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 2    |
| MMS1660L-DIN-C | □      | 5          |      | 83.0            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 1    |
| MMS1660X3DB    | □      | 3          |      | 49.8            | 88.0  | 89.0  | 148.0 | 145.0 | 3.0 | 18   | 1    |
| MMS1660X5DB    | □      | 5          |      | 83.0            | 122.0 | 123.0 | 182.0 | 179.0 | 3.0 | 18   | 1    |
| MMS1670S-DIN   | □      | 3          | 16.7 | 50.1            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 2    |
| MMS1670S-DIN-C | □      | 3          |      | 50.1            | 73.0  | 75.0  | 123.0 | 120.0 | 3.0 | 18   | 1    |
| MMS1670L-DIN   | □      | 5          |      | 83.5            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 2    |
| MMS1670L-DIN-C | □      | 5          |      | 83.5            | 93.0  | 95.0  | 143.0 | 140.0 | 3.0 | 18   | 1    |
| MMS1670X3DB    | □      | 3          |      | 50.1            | 88.0  | 89.0  | 148.0 | 145.0 | 3.0 | 18   | 1    |
| MMS1670X5DB    | □      | 5          |      | 83.5            | 122.0 | 123.0 | 182.0 | 179.0 | 3.0 | 18   | 1    |
| MMS1680S-DIN   | □      | 3          | 16.8 | 50.4            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 2    |
| MMS1680S-DIN-C | □      | 3          |      | 50.4            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 1    |
| MMS1680L-DIN   | □      | 5          |      | 84.0            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 2    |
| MMS1680L-DIN-C | □      | 5          |      | 84.0            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 1    |
| MMS1680X3DB    | □      | 3          |      | 50.4            | 88.0  | 89.0  | 148.1 | 145.0 | 3.1 | 18   | 1    |
| MMS1680X5DB    | □      | 5          |      | 84.0            | 122.0 | 123.0 | 182.1 | 179.0 | 3.1 | 18   | 1    |
| MMS1690S-DIN   | □      | 3          | 16.9 | 50.7            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 2    |
| MMS1690S-DIN-C | □      | 3          |      | 50.7            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 1    |
| MMS1690L-DIN   | □      | 5          |      | 84.5            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 2    |
| MMS1690L-DIN-C | □      | 5          |      | 84.5            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 1    |
| MMS1690X3DB    | □      | 3          |      | 50.7            | 88.0  | 89.0  | 148.1 | 145.0 | 3.1 | 18   | 1    |
| MMS1690X5DB    | □      | 5          |      | 84.5            | 122.0 | 123.0 | 182.1 | 179.0 | 3.1 | 18   | 1    |
| MMS1700S-DIN-C | □      | 3          | 17.0 | 51.0            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 1    |
| MMS1700L-DIN-C | □      | 5          |      | 85.0            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 1    |
| MMS1700X3DB    | ★      | 3          |      | 51.0            | 88.0  | 89.0  | 148.1 | 145.0 | 3.1 | 18   | 1    |
| MMS1700X5DB    | ★      | 5          |      | 85.0            | 122.0 | 123.0 | 182.1 | 179.0 | 3.1 | 18   | 1    |
| MMS1710S-DIN   | □      | 3          | 17.1 | 51.3            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 2    |
| MMS1710S-DIN-C | □      | 3          |      | 51.3            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 1    |
| MMS1710L-DIN   | □      | 5          |      | 85.5            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 2    |
| MMS1710L-DIN-C | □      | 5          |      | 85.5            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 1    |
| MMS1710X3DB    | □      | 3          |      | 51.3            | 91.0  | 93.0  | 152.1 | 149.0 | 3.1 | 18   | 1    |
| MMS1710X5DB    | □      | 5          |      | 85.5            | 126.0 | 129.0 | 188.1 | 185.0 | 3.1 | 18   | 1    |

# MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     |      | Type |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  | DCON |      |
| MMS1720S-DIN   | □      | 3          | 17.2 | 51.6            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 2    |
| MMS1720S-DIN-C | □      | 3          |      | 51.6            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 1    |
| MMS1720L-DIN   | □      | 5          |      | 86.0            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 2    |
| MMS1720L-DIN-C | □      | 5          |      | 86.0            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 1    |
| MMS1720X3DB    | □      | 3          |      | 51.6            | 91.0  | 93.0  | 152.1 | 149.0 | 3.1 | 18   | 1    |
| MMS1720X5DB    | □      | 5          |      | 86.0            | 126.0 | 129.0 | 188.1 | 185.0 | 3.1 | 18   | 1    |
| MMS1730S-DIN   | □      | 3          | 17.3 | 51.9            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 2    |
| MMS1730S-DIN-C | □      | 3          |      | 51.9            | 73.0  | 75.0  | 123.0 | 119.9 | 3.1 | 18   | 1    |
| MMS1730L-DIN   | □      | 5          |      | 86.5            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 2    |
| MMS1730L-DIN-C | □      | 5          |      | 86.5            | 93.0  | 95.0  | 143.0 | 139.9 | 3.1 | 18   | 1    |
| MMS1730X3DB    | □      | 3          |      | 51.9            | 91.0  | 93.0  | 152.1 | 149.0 | 3.1 | 18   | 1    |
| MMS1730X5DB    | □      | 5          |      | 86.5            | 126.0 | 129.0 | 188.1 | 185.0 | 3.1 | 18   | 1    |
| MMS1740S-DIN   | □      | 3          | 17.4 | 52.2            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 2    |
| MMS1740S-DIN-C | □      | 3          |      | 52.2            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 1    |
| MMS1740L-DIN   | □      | 5          |      | 87.0            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 2    |
| MMS1740L-DIN-C | □      | 5          |      | 87.0            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 1    |
| MMS1740X3DB    | □      | 3          |      | 52.2            | 91.0  | 93.0  | 152.2 | 149.0 | 3.2 | 18   | 1    |
| MMS1740X5DB    | □      | 5          |      | 87.0            | 126.0 | 129.0 | 188.2 | 185.0 | 3.2 | 18   | 1    |
| MMS1750S-DIN-C | □      | 3          | 17.5 | 52.5            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 1    |
| MMS1750L-DIN-C | □      | 5          |      | 87.5            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 1    |
| MMS1750X3DB    | ★      | 3          |      | 52.5            | 91.0  | 93.0  | 152.2 | 149.0 | 3.2 | 18   | 1    |
| MMS1750X5DB    | ★      | 5          |      | 87.5            | 126.0 | 129.0 | 188.2 | 185.0 | 3.2 | 18   | 1    |
| MMS1760S-DIN   | □      | 3          | 17.6 | 52.8            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 2    |
| MMS1760S-DIN-C | □      | 3          |      | 52.8            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 1    |
| MMS1760L-DIN   | □      | 5          |      | 88.0            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 2    |
| MMS1760L-DIN-C | □      | 5          |      | 88.0            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 1    |
| MMS1760X3DB    | □      | 3          |      | 52.8            | 93.0  | 93.0  | 152.2 | 149.0 | 3.2 | 18   | 1    |
| MMS1760X5DB    | □      | 5          |      | 88.0            | 129.0 | 129.0 | 188.2 | 185.0 | 3.2 | 18   | 1    |
| MMS1770S-DIN   | □      | 3          | 17.7 | 53.1            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 2    |
| MMS1770S-DIN-C | □      | 3          |      | 53.1            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 1    |
| MMS1770L-DIN   | □      | 5          |      | 88.5            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 2    |
| MMS1770L-DIN-C | □      | 5          |      | 88.5            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 1    |
| MMS1770X3DB    | □      | 3          |      | 53.1            | 93.0  | 93.0  | 152.2 | 149.0 | 3.2 | 18   | 1    |
| MMS1770X5DB    | □      | 5          |      | 88.5            | 129.0 | 129.0 | 188.2 | 185.0 | 3.2 | 18   | 1    |
| MMS1780S-DIN   | □      | 3          | 17.8 | 53.4            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 2    |
| MMS1780S-DIN-C | □      | 3          |      | 53.4            | 73.0  | 75.0  | 123.0 | 119.8 | 3.2 | 18   | 1    |
| MMS1780L-DIN   | □      | 5          |      | 89.0            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 2    |
| MMS1780L-DIN-C | □      | 5          |      | 89.0            | 93.0  | 95.0  | 143.0 | 139.8 | 3.2 | 18   | 1    |
| MMS1780X3DB    | □      | 3          |      | 53.4            | 93.0  | 93.0  | 152.2 | 149.0 | 3.2 | 18   | 1    |
| MMS1780X5DB    | □      | 5          |      | 89.0            | 129.0 | 129.0 | 188.2 | 185.0 | 3.2 | 18   | 1    |
| MMS1790S-DIN   | □      | 3          | 17.9 | 53.7            | 73.0  | 75.0  | 123.0 | 119.7 | 3.3 | 18   | 2    |
| MMS1790S-DIN-C | □      | 3          |      | 53.7            | 73.0  | 75.0  | 123.0 | 119.7 | 3.3 | 18   | 1    |
| MMS1790L-DIN   | □      | 5          |      | 89.5            | 93.0  | 95.0  | 143.0 | 139.7 | 3.3 | 18   | 2    |
| MMS1790L-DIN-C | □      | 5          |      | 89.5            | 93.0  | 95.0  | 143.0 | 139.7 | 3.3 | 18   | 1    |
| MMS1790X3DB    | □      | 3          |      | 53.7            | 93.0  | 93.0  | 152.3 | 149.0 | 3.3 | 18   | 1    |
| MMS1790X5DB    | □      | 5          |      | 89.5            | 129.0 | 129.0 | 188.3 | 185.0 | 3.3 | 18   | 1    |
| MMS1800S-DIN-C | □      | 3          | 18.0 | 54.0            | 73.0  | 75.0  | 123.0 | 119.7 | 3.3 | 18   | 1    |
| MMS1800L-DIN-C | □      | 5          |      | 90.0            | 93.0  | 95.0  | 143.0 | 139.7 | 3.3 | 18   | 1    |
| MMS1800X3DB    | ★      | 3          |      | 54.0            | 93.0  | 93.0  | 152.3 | 149.0 | 3.3 | 18   | 1    |
| MMS1800X5DB    | ★      | 5          |      | 90.0            | 129.0 | 129.0 | 188.3 | 185.0 | 3.3 | 18   | 1    |

## MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  |      | DCON |
| MMS1810S-DIN   | □      | 3          | 18.1 | 54.3            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 2    |
| MMS1810S-DIN-C | □      | 3          |      | 54.3            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 1    |
| MMS1810L-DIN   | □      | 5          |      | 90.5            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 2    |
| MMS1810L-DIN-C | □      | 5          |      | 90.5            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 1    |
| MMS1810X3DB    | □      | 3          |      | 54.3            | 96.0  | 99.0  | 160.3 | 157.0 | 3.3 | 20   | 1    |
| MMS1810X5DB    | □      | 5          |      | 90.5            | 133.0 | 137.0 | 198.3 | 195.0 | 3.3 | 20   | 1    |
| MMS1820S-DIN   | □      | 3          | 18.2 | 54.6            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 2    |
| MMS1820S-DIN-C | □      | 3          |      | 54.6            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 1    |
| MMS1820L-DIN   | □      | 5          |      | 91.0            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 2    |
| MMS1820L-DIN-C | □      | 5          |      | 91.0            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 1    |
| MMS1820X3DB    | □      | 3          |      | 54.6            | 96.0  | 99.0  | 160.3 | 157.0 | 3.3 | 20   | 1    |
| MMS1820X5DB    | □      | 5          |      | 91.0            | 133.0 | 137.0 | 198.3 | 195.0 | 3.3 | 20   | 1    |
| MMS1830S-DIN   | □      | 3          | 18.3 | 54.9            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 2    |
| MMS1830S-DIN-C | □      | 3          |      | 54.9            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 1    |
| MMS1830L-DIN   | □      | 5          |      | 91.5            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 2    |
| MMS1830L-DIN-C | □      | 5          |      | 91.5            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 1    |
| MMS1830X3DB    | □      | 3          |      | 54.9            | 96.0  | 99.0  | 160.3 | 157.0 | 3.3 | 20   | 1    |
| MMS1830X5DB    | □      | 5          |      | 91.5            | 133.0 | 137.0 | 198.3 | 195.0 | 3.3 | 20   | 1    |
| MMS1840S-DIN   | □      | 3          | 18.4 | 55.2            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 2    |
| MMS1840S-DIN-C | □      | 3          |      | 55.2            | 79.0  | 81.0  | 131.0 | 127.7 | 3.3 | 20   | 1    |
| MMS1840L-DIN   | □      | 5          |      | 92.0            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 2    |
| MMS1840L-DIN-C | □      | 5          |      | 92.0            | 101.0 | 103.0 | 153.0 | 149.7 | 3.3 | 20   | 1    |
| MMS1840X3DB    | □      | 3          |      | 55.2            | 96.0  | 99.0  | 160.3 | 157.0 | 3.3 | 20   | 1    |
| MMS1840X5DB    | □      | 5          |      | 92.0            | 133.0 | 137.0 | 198.3 | 195.0 | 3.3 | 20   | 1    |
| MMS1850S-DIN-C | □      | 3          | 18.5 | 55.5            | 79.0  | 81.0  | 131.0 | 127.6 | 3.4 | 20   | 1    |
| MMS1850L-DIN-C | □      | 5          |      | 92.5            | 101.0 | 103.0 | 153.0 | 149.6 | 3.4 | 20   | 1    |
| MMS1850X3DB    | ★      | 3          |      | 55.5            | 96.0  | 99.0  | 160.4 | 157.0 | 3.4 | 20   | 1    |
| MMS1850X5DB    | ★      | 5          |      | 92.5            | 133.0 | 137.0 | 198.4 | 195.0 | 3.4 | 20   | 1    |
| MMS1860S-DIN   | □      | 3          | 18.6 | 55.8            | 79.0  | 81.0  | 123.0 | 119.6 | 3.4 | 20   | 2    |
| MMS1860S-DIN-C | □      | 3          |      | 55.8            | 79.0  | 81.0  | 123.0 | 119.6 | 3.4 | 20   | 1    |
| MMS1860L-DIN   | □      | 5          |      | 93.0            | 101.0 | 103.0 | 143.0 | 139.6 | 3.4 | 20   | 2    |
| MMS1860L-DIN-C | □      | 5          |      | 93.0            | 101.0 | 103.0 | 143.0 | 139.6 | 3.4 | 20   | 1    |
| MMS1860X3DB    | □      | 3          |      | 55.8            | 98.0  | 99.0  | 160.4 | 157.0 | 3.4 | 20   | 1    |
| MMS1860X5DB    | □      | 5          |      | 93.0            | 136.0 | 137.0 | 198.4 | 195.0 | 3.4 | 20   | 1    |
| MMS1870S-DIN   | □      | 3          | 18.7 | 56.1            | 79.0  | 81.0  | 123.0 | 119.6 | 3.4 | 20   | 2    |
| MMS1870S-DIN-C | □      | 3          |      | 56.1            | 79.0  | 81.0  | 123.0 | 119.6 | 3.4 | 20   | 1    |
| MMS1870L-DIN   | □      | 5          |      | 93.5            | 101.0 | 103.0 | 143.0 | 139.6 | 3.4 | 20   | 2    |
| MMS1870L-DIN-C | □      | 5          |      | 93.5            | 101.0 | 103.0 | 143.0 | 139.6 | 3.4 | 20   | 1    |
| MMS1870X3DB    | □      | 3          |      | 56.1            | 98.0  | 99.0  | 160.4 | 157.0 | 3.4 | 20   | 1    |
| MMS1870X5DB    | □      | 5          |      | 93.5            | 136.0 | 137.0 | 198.4 | 195.0 | 3.4 | 20   | 1    |
| MMS1880S-DIN   | □      | 3          | 18.8 | 56.4            | 79.0  | 81.0  | 123.0 | 119.6 | 3.4 | 20   | 2    |
| MMS1880S-DIN-C | □      | 3          |      | 56.4            | 79.0  | 81.0  | 123.0 | 119.6 | 3.4 | 20   | 1    |
| MMS1880L-DIN   | □      | 5          |      | 94.0            | 101.0 | 103.0 | 143.0 | 139.6 | 3.4 | 20   | 2    |
| MMS1880L-DIN-C | □      | 5          |      | 94.0            | 101.0 | 103.0 | 143.0 | 139.6 | 3.4 | 20   | 1    |
| MMS1880X3DB    | □      | 3          |      | 56.4            | 98.0  | 99.0  | 160.4 | 157.0 | 3.4 | 20   | 1    |
| MMS1880X5DB    | □      | 5          |      | 94.0            | 136.0 | 137.0 | 198.4 | 195.0 | 3.4 | 20   | 1    |
| MMS1890S-DIN   | □      | 3          | 18.9 | 56.7            | 79.0  | 81.0  | 131.0 | 127.6 | 3.4 | 20   | 2    |
| MMS1890S-DIN-C | □      | 3          |      | 56.7            | 79.0  | 81.0  | 131.0 | 127.6 | 3.4 | 20   | 1    |
| MMS1890L-DIN   | □      | 5          |      | 94.5            | 101.0 | 103.0 | 153.0 | 149.6 | 3.4 | 20   | 2    |
| MMS1890L-DIN-C | □      | 5          |      | 94.5            | 101.0 | 103.0 | 153.0 | 149.6 | 3.4 | 20   | 1    |
| MMS1890X3DB    | □      | 3          |      | 56.7            | 98.0  | 99.0  | 160.4 | 157.0 | 3.4 | 20   | 1    |
| MMS1890X5DB    | □      | 5          |      | 94.5            | 136.0 | 137.0 | 198.4 | 195.0 | 3.4 | 20   | 1    |

# MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     | Type |      |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  |      | DCON |
| MMS1900S-DIN-C | □      | 3          | 19.0 | 57.0            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 1    |
| MMS1900L-DIN-C | □      | 5          |      | 95.0            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 1    |
| MMS1900X3DB    | ★      | 3          |      | 57.0            | 98.0  | 99.0  | 160.5 | 157.0 | 3.5 | 20   | 1    |
| MMS1900X5DB    | ★      | 5          |      | 95.0            | 136.0 | 137.0 | 198.5 | 195.0 | 3.5 | 20   | 1    |
| MMS1910S-DIN   | □      | 3          | 19.1 | 57.3            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 2    |
| MMS1910S-DIN-C | □      | 3          |      | 57.3            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 1    |
| MMS1910L-DIN   | □      | 5          |      | 95.5            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 2    |
| MMS1910L-DIN-C | □      | 5          |      | 95.5            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 1    |
| MMS1910X3DB    | □      | 3          |      | 57.3            | 101.0 | 103.0 | 164.5 | 161.0 | 3.5 | 20   | 1    |
| MMS1910X5DB    | □      | 5          |      | 95.5            | 140.0 | 143.0 | 204.5 | 201.0 | 3.5 | 20   | 1    |
| MMS1920S-DIN   | □      | 3          | 19.2 | 57.6            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 2    |
| MMS1920S-DIN-C | □      | 3          |      | 57.6            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 1    |
| MMS1920L-DIN   | □      | 5          |      | 96.0            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 2    |
| MMS1920L-DIN-C | □      | 5          |      | 96.0            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 1    |
| MMS1920X3DB    | □      | 3          |      | 57.6            | 101.0 | 103.0 | 164.5 | 161.0 | 3.5 | 20   | 1    |
| MMS1920X5DB    | □      | 5          |      | 96.0            | 140.0 | 143.0 | 204.5 | 201.0 | 3.5 | 20   | 1    |
| MMS1930S-DIN   | □      | 3          | 19.3 | 57.9            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 2    |
| MMS1930S-DIN-C | □      | 3          |      | 57.9            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 1    |
| MMS1930L-DIN   | □      | 5          |      | 96.5            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 2    |
| MMS1930L-DIN-C | □      | 5          |      | 96.5            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 1    |
| MMS1930X3DB    | □      | 3          |      | 57.9            | 101.0 | 103.0 | 164.5 | 161.0 | 3.5 | 20   | 1    |
| MMS1930X5DB    | □      | 5          |      | 96.5            | 140.0 | 143.0 | 204.5 | 201.0 | 3.5 | 20   | 1    |
| MMS1940S-DIN   | □      | 3          | 19.4 | 58.2            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 2    |
| MMS1940S-DIN-C | □      | 3          |      | 58.2            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 1    |
| MMS1940L-DIN   | □      | 5          |      | 97.0            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 2    |
| MMS1940L-DIN-C | □      | 5          |      | 97.0            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 1    |
| MMS1940X3DB    | □      | 3          |      | 58.2            | 101.0 | 103.0 | 164.5 | 161.0 | 3.5 | 20   | 1    |
| MMS1940X5DB    | □      | 5          |      | 97.0            | 140.0 | 143.0 | 204.5 | 201.0 | 3.5 | 20   | 1    |
| MMS1950S-DIN-C | □      | 3          | 19.5 | 58.5            | 79.0  | 81.0  | 131.0 | 127.5 | 3.5 | 20   | 1    |
| MMS1950L-DIN   | ●      | 5          |      | 97.5            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 2    |
| MMS1950L-DIN-C | □      | 5          |      | 97.5            | 101.0 | 103.0 | 153.0 | 149.5 | 3.5 | 20   | 1    |
| MMS1950X3DB    | ★      | 3          |      | 58.5            | 101.0 | 103.0 | 164.5 | 161.0 | 3.5 | 20   | 1    |
| MMS1950X5DB    | ★      | 5          |      | 97.5            | 140.0 | 143.0 | 204.5 | 201.0 | 3.5 | 20   | 1    |
| MMS1960S-DIN   | □      | 3          | 19.6 | 58.8            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 2    |
| MMS1960S-DIN-C | □      | 3          |      | 58.8            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 1    |
| MMS1960L-DIN   | □      | 5          |      | 98.0            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 2    |
| MMS1960L-DIN-C | □      | 5          |      | 98.0            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 1    |
| MMS1960X3DB    | □      | 3          |      | 58.8            | 104.0 | 104.0 | 164.6 | 161.0 | 3.6 | 20   | 1    |
| MMS1960X5DB    | □      | 5          |      | 98.0            | 144.0 | 144.0 | 204.6 | 201.0 | 3.6 | 20   | 1    |
| MMS1970S-DIN   | □      | 3          | 19.7 | 59.1            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 2    |
| MMS1970S-DIN-C | □      | 3          |      | 59.1            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 1    |
| MMS1970L-DIN   | □      | 5          |      | 98.5            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 2    |
| MMS1970L-DIN-C | □      | 5          |      | 98.5            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 1    |
| MMS1970X3DB    | □      | 3          |      | 59.1            | 104.0 | 104.0 | 164.6 | 161.0 | 3.6 | 20   | 1    |
| MMS1970X5DB    | □      | 5          |      | 98.5            | 144.0 | 144.0 | 204.6 | 201.0 | 3.6 | 20   | 1    |
| MMS1980S-DIN   | □      | 3          | 19.8 | 59.4            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 2    |
| MMS1980S-DIN-C | □      | 3          |      | 59.4            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 1    |
| MMS1980L-DIN   | □      | 5          |      | 99.0            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 2    |
| MMS1980L-DIN-C | □      | 5          |      | 99.0            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 1    |
| MMS1980X3DB    | □      | 3          |      | 59.4            | 104.0 | 104.0 | 164.6 | 161.0 | 3.6 | 20   | 1    |
| MMS1980X5DB    | □      | 5          |      | 99.0            | 144.0 | 144.0 | 204.6 | 201.0 | 3.6 | 20   | 1    |

# MMS

| Order number   | DP7020 | Hole depth | DC   | Dimensions (mm) |       |       |       |       |     |      | Type |
|----------------|--------|------------|------|-----------------|-------|-------|-------|-------|-----|------|------|
|                |        |            |      | LU              | LCF   | LH    | OAL   | LF    | PL  | DCON |      |
| MMS1990S-DIN   | □      | 3          | 19.9 | 59.7            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 2    |
| MMS1990S-DIN-C | □      | 3          |      | 59.7            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 1    |
| MMS1990L-DIN   | □      | 5          |      | 99.5            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 2    |
| MMS1990L-DIN-C | □      | 5          |      | 99.5            | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 1    |
| MMS1990X3DB    | □      | 3          |      | 59.7            | 104.0 | 104.0 | 164.6 | 161.0 | 3.6 | 20   | 1    |
| MMS1990X5DB    | □      | 5          |      | 99.5            | 144.0 | 144.0 | 204.6 | 201.0 | 3.6 | 20   | 1    |
| MMS2000S-DIN-C | □      | 3          | 20.0 | 60.0            | 79.0  | 81.0  | 131.0 | 127.4 | 3.6 | 20   | 1    |
| MMS2000L-DIN-C | □      | 5          |      | 100.0           | 101.0 | 103.0 | 153.0 | 149.4 | 3.6 | 20   | 1    |
| MMS2000X3DB    | ★      | 3          |      | 60.0            | 104.0 | 104.0 | 164.6 | 161.0 | 3.6 | 20   | 1    |
| MMS2000X5DB    | ★      | 5          |      | 100.0           | 144.0 | 144.0 | 204.6 | 201.0 | 3.6 | 20   | 1    |

# MMS

## RECOMMENDED CUTTING CONDITIONS

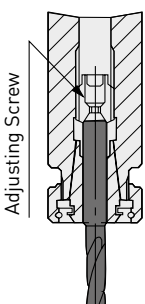
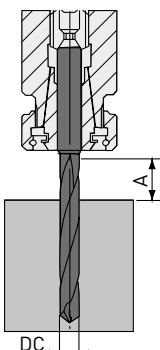
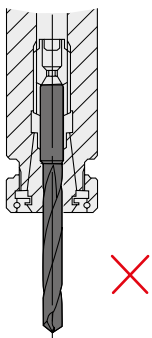
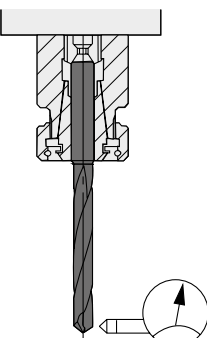
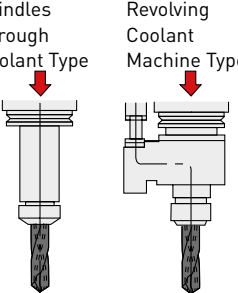
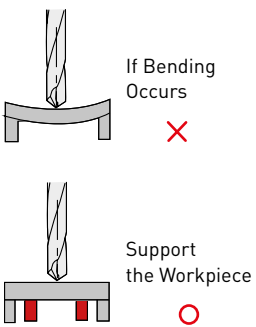
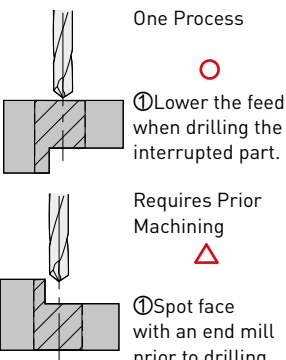
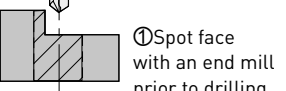
| Material                                          | DC   | Vc | n    | f                | Vf   |
|---------------------------------------------------|------|----|------|------------------|------|
| Austenitic stainless steel (≤200HB)               | 3.2  | 80 | 7900 | 0.13 [0.08–0.18] | 1025 |
|                                                   | 4.0  | 80 | 6300 | 0.15 [0.10–0.20] | 945  |
|                                                   | 5.0  | 80 | 5000 | 0.15 [0.10–0.20] | 750  |
|                                                   | 6.3  | 80 | 4000 | 0.17 [0.12–0.22] | 680  |
|                                                   | 8.0  | 80 | 3100 | 0.19 [0.14–0.24] | 585  |
|                                                   | 10.0 | 60 | 1900 | 0.2 [0.15–0.25]  | 380  |
|                                                   | 12.0 | 60 | 1500 | 0.21 [0.16–0.26] | 315  |
|                                                   | 16.0 | 60 | 1100 | 0.22 [0.17–0.27] | 240  |
| Austenitic stainless steel (>200HB)               | 20.0 | 60 | 900  | 0.23 [0.18–0.28] | 205  |
|                                                   | 3.2  | 60 | 5900 | 0.1 [0.05–0.15]  | 590  |
|                                                   | 4.0  | 60 | 4700 | 0.12 [0.08–0.18] | 560  |
|                                                   | 5.0  | 60 | 3800 | 0.12 [0.08–0.18] | 455  |
|                                                   | 6.3  | 60 | 3000 | 0.15 [0.1–0.2]   | 450  |
|                                                   | 8.0  | 60 | 2300 | 0.17 [0.12–0.22] | 390  |
|                                                   | 10.0 | 50 | 1500 | 0.18 [0.13–0.23] | 270  |
|                                                   | 12.0 | 50 | 1300 | 0.19 [0.14–0.24] | 245  |
| Two-phase stainless steel (≤280HB)                | 16.0 | 50 | 900  | 0.2 [0.15–0.25]  | 180  |
|                                                   | 20.0 | 50 | 700  | 0.21 [0.16–0.26] | 145  |
|                                                   | 3.2  | 50 | 4900 | 0.1 [0.05–0.15]  | 490  |
|                                                   | 4.0  | 50 | 3900 | 0.12 [0.08–0.18] | 465  |
|                                                   | 5.0  | 50 | 3100 | 0.12 [0.08–0.18] | 370  |
|                                                   | 6.3  | 50 | 2500 | 0.15 [0.1–0.2]   | 375  |
|                                                   | 8.0  | 50 | 1900 | 0.17 [0.12–0.22] | 320  |
|                                                   | 10.0 | 40 | 1200 | 0.18 [0.13–0.23] | 215  |
| Ferritic and martensitic stainless steel (≤200HB) | 12.0 | 40 | 1000 | 0.19 [0.14–0.24] | 190  |
|                                                   | 16.0 | 40 | 700  | 0.2 [0.15–0.25]  | 140  |
|                                                   | 20.0 | 40 | 600  | 0.21 [0.16–0.26] | 125  |
|                                                   | 3.2  | 80 | 7900 | 0.13 [0.08–0.18] | 1025 |
|                                                   | 4.0  | 80 | 6300 | 0.15 [0.10–0.20] | 945  |
|                                                   | 5.0  | 80 | 5000 | 0.15 [0.10–0.20] | 750  |
|                                                   | 6.3  | 80 | 4000 | 0.17 [0.12–0.22] | 680  |
|                                                   | 8.0  | 80 | 3100 | 0.19 [0.14–0.24] | 585  |
| Ferritic and martensitic stainless steel (>200HB) | 10.0 | 60 | 1900 | 0.2 [0.15–0.25]  | 380  |
|                                                   | 12.0 | 60 | 1500 | 0.21 [0.16–0.26] | 315  |
|                                                   | 16.0 | 60 | 1100 | 0.22 [0.17–0.27] | 240  |
|                                                   | 20.0 | 60 | 900  | 0.23 [0.18–0.28] | 205  |
|                                                   | 3.2  | 60 | 5900 | 0.1 [0.05–0.15]  | 590  |
|                                                   | 4.0  | 60 | 4700 | 0.12 [0.08–0.18] | 560  |
|                                                   | 5.0  | 60 | 3800 | 0.12 [0.08–0.18] | 455  |
|                                                   | 6.3  | 60 | 3000 | 0.15 [0.1–0.2]   | 450  |
|                                                   | 8.0  | 60 | 2300 | 0.17 [0.12–0.22] | 390  |
|                                                   | 10.0 | 50 | 1500 | 0.18 [0.13–0.23] | 270  |
|                                                   | 12.0 | 50 | 1300 | 0.19 [0.14–0.24] | 245  |
|                                                   | 16.0 | 50 | 900  | 0.2 [0.15–0.25]  | 180  |
|                                                   | 20.0 | 50 | 700  | 0.21 [0.16–0.26] | 145  |

# MMS

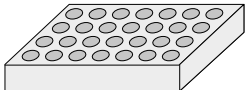
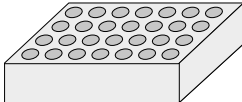
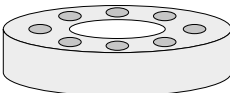
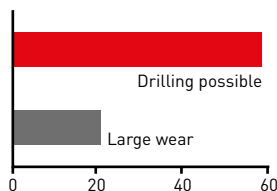
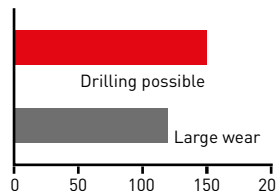
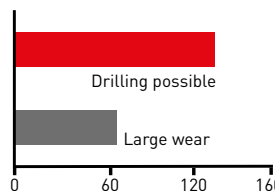
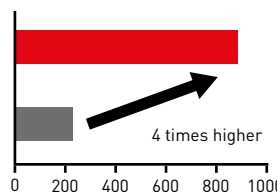
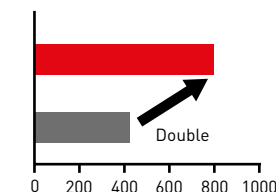
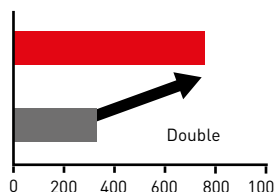
| Material                                                        | DC   | Vc | n    | f                | Vf  |
|-----------------------------------------------------------------|------|----|------|------------------|-----|
| M<br>PH / Precipitation hardened<br>stainless steel<br>(<450HB) | 3.2  | 50 | 4900 | 0.1 [0.05–0.15]  | 490 |
|                                                                 | 4.0  | 50 | 3900 | 0.12 [0.08–0.18] | 465 |
|                                                                 | 5.0  | 50 | 3100 | 0.12 [0.08–0.18] | 370 |
|                                                                 | 6.3  | 50 | 2500 | 0.15 [0.1–0.2]   | 375 |
|                                                                 | 8.0  | 50 | 1900 | 0.17 [0.12–0.22] | 320 |
|                                                                 | 10.0 | 40 | 1200 | 0.18 [0.13–0.23] | 215 |
|                                                                 | 12.0 | 40 | 1000 | 0.19 [0.14–0.24] | 190 |
|                                                                 | 16.0 | 40 | 700  | 0.2 [0.15–0.25]  | 140 |
|                                                                 | 20.0 | 40 | 600  | 0.21 [0.16–0.26] | 125 |

Using a high pressure, through spindle coolant system is recommended.  
Emulsion type water based coolant is recommended.  
When using non-water coolant, reduce the revolution by 10%–20%.

## OPERATIONAL GUIDANCE

| Drill Holding                                                                                                                                         | Drill Length                                                                                                                                                                                                                                                                                               | Drill Installation                                                                                                                         | Installation Tolerance                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Thrust bearing type collet chuck holds the drill securely.</p> |  <p><math>A &gt; DC \times 1.5</math></p>                                                                                                                                                                                |  <p>Do not clamp on the flutes.</p>                    |  <p>Run-out <math>\leq 0.03\text{mm}</math></p>                                                                                                                                                                                                              |
| Through Coolant Type                                                                                                                                  | Coolant Handling                                                                                                                                                                                                                                                                                           | Thin Workpiece                                                                                                                             | Interrupted Cutting                                                                                                                                                                                                                                                                                                                               |
|  <p>Coolant pressure is approx. 5 bar-70 bar</p>                   | <p>1) Dirt and dust particles in old coolant can clog the oil hole and prevent effective flow. Regular coolant exchange is recommended.</p> <p>2) Small particles of chips will jam in the oil hole. Use a filter as a preventative measure. When using small diameter drills, use a fine mesh filter.</p> |  <p>If Bending Occurs</p> <p>Support the Workpiece</p> | <p>One Process</p>  <p>① Lower the feed when drilling the interrupted part.</p> <p>Requires Prior Machining</p>  <p>① Spot face with an end mill prior to drilling.</p> |

# APPLICATION EXAMPLE

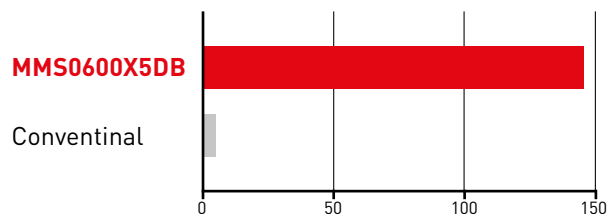
|                    |                        |                                                                                     |              |                                                                                      |              |                                                                                       |              |
|--------------------|------------------------|-------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------|--------------|
| Drill              |                        | MMS0560X5DB                                                                         |              | MMS0500X5DB                                                                          |              | MMS0970X3DB                                                                           |              |
| Workpiece          |                        | Austenitic stainless steel<br>JIS SUS304(200HB)<br>Hole depth : 20mm                |              | PH stainless steel<br>JIS SUS630<br>Hole depth : 30mm                                |              | Austenitic stainless steel<br>JIS SUS304L(200HB)<br>Hole depth : 25.4mm               |              |
|                    |                        |    |              |    |              |    |              |
| Component          |                        | Medical parts                                                                       |              | Spinneret                                                                            |              | Heat exchanger parts                                                                  |              |
| Drill              |                        | MMS0560X5DB                                                                         | Conventional | MMS0500X5DB                                                                          | Conventional | MMS0970X3DB                                                                           | Conventional |
| Cutting conditions | Vc (m/min)             | 70                                                                                  | 39           | 64                                                                                   | 66           | 99                                                                                    | 70           |
|                    | f (mm/rev)             | 0.22                                                                                | 0.1          | 0.2                                                                                  | 0.1          | 0.23                                                                                  | 0.14         |
|                    | n (min <sup>-1</sup> ) | 3979                                                                                | 2217         | 4074                                                                                 | 4210         | 3249                                                                                  | 2297         |
|                    | fr (mm/min)            | 875                                                                                 | 222          | 815                                                                                  | 421          | 747                                                                                   | 322          |
| Coolant            |                        | Emulsion                                                                            |              |                                                                                      |              |                                                                                       |              |
| Machine            |                        | Machining centre                                                                    |              |                                                                                      |              |                                                                                       |              |
|                    |                        | TOOL LIFE                                                                           |              |                                                                                      |              |                                                                                       |              |
| Result             |                        |   |              |   |              |   |              |
|                    |                        | FEED RATE                                                                           |              |                                                                                      |              |                                                                                       |              |
|                    |                        |  |              |  |              |  |              |

# CUTTING PERFORMANCE

MMS drills offer longer tool life and are ideal for drilling stainless steels.

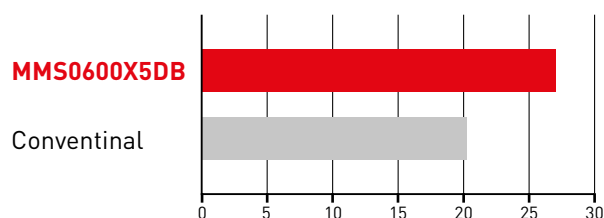
## AUSTENITIC STAINLESS STEEL

|                   |                  |
|-------------------|------------------|
| Drill (mm)        | Ø 6.0            |
| Workpiece         | JIS SUS316L      |
| Hole depth (mm)   | 30 (L/D=5)       |
| Vc (m/min)        | 90               |
| f (mm/rev)        | 0.2              |
| fr (mm/min)       | 955 (Non stop)   |
| Coolant           | W.S.O            |
| Emission pressure | 3 MPa            |
| Machine           | Machining centre |



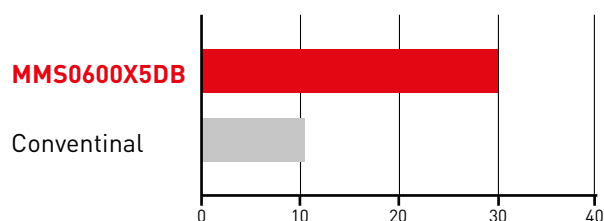
## MARTENSITIC STAINLESS STEEL

|                   |                  |
|-------------------|------------------|
| Drill (mm)        | Ø6.0             |
| Workpiece         | JIS SUS420J2     |
| Hole depth (mm)   | 30 (L/D=5)       |
| Vc (m/min)        | 50               |
| f (mm/rev)        | 0.13             |
| fr (mm/min)       | 345 (Non stop)   |
| Coolant           | W.S.O            |
| Emission pressure | 3 MPa            |
| Machine           | Machining centre |



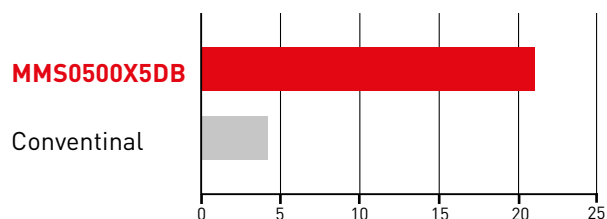
## DUPLEX STEEL

|                   |                  |
|-------------------|------------------|
| Drill (mm)        | Ø6.0             |
| Workpiece         | JIS SUS329J1     |
| Hole depth (mm)   | 30 (L/D=5)       |
| Vc (m/min)        | 50               |
| f (mm/rev)        | 0.13             |
| fr (mm/min)       | 345 (Non stop)   |
| Coolant           | W.S.O            |
| Emission pressure | 3 MPa            |
| Machine           | Machining centre |



## PH STAINLESS STEEL

|                   |                  |
|-------------------|------------------|
| Drill (mm)        | Ø5.0             |
| Workpiece         | JIS SUS630       |
| Hole depth (mm)   | 25 (L/D=5)       |
| Vc (m/min)        | 50               |
| f (mm/rev)        | 0.08             |
| fr (mm/min)       | 255 (Non stop)   |
| Coolant           | W.S.O            |
| Emission pressure | 3 MPa            |
| Machine           | Machining centre |



# MEMO



# MEMO

## EUROPEAN SALES COMPANIES

### GERMANY

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