

# MFS210



## Full-metal magnetic sensor

MFK3060-APKG/AM/G/US



### Product characteristics

|                    |                                |
|--------------------|--------------------------------|
| Electrical design  | PNP                            |
| Output function    | normally closed                |
| Sensing range [mm] | 60; (referred to magnet M 4.0) |
| Housing            | threaded type                  |
| Dimensions [mm]    | M12 x 1 / L = 60               |

### Application

|                       |                                          |
|-----------------------|------------------------------------------|
| Special feature       | Gold-plated contacts; Full-metal housing |
| Pressure rating [bar] | 100                                      |
| Pressure rating [MPa] | 10                                       |

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 10       |
| Protection class            | III        |
| Reverse polarity protection | yes        |

### Outputs

|                                                      |                 |
|------------------------------------------------------|-----------------|
| Electrical design                                    | PNP             |
| Output function                                      | normally closed |
| Max. voltage drop switching output DC [V]            | 2.5             |
| Permanent current rating of switching output DC [mA] | 200             |
| Switching frequency DC [Hz]                          | 5000            |
| Short-circuit protection                             | yes             |
| Overload protection                                  | yes             |

### Detection zone

|                           |                                |
|---------------------------|--------------------------------|
| Sensing range [mm]        | 60; (referred to magnet M 4.0) |
| Response sensitivity [mT] | 1.3                            |

### Accuracy / deviations

|                      |        |
|----------------------|--------|
| Hysteresis [% of Sr] | 1...10 |
|----------------------|--------|

### Operating conditions

|                          |          |
|--------------------------|----------|
| Ambient temperature [°C] | -25...75 |
|--------------------------|----------|

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|            |              |
|------------|--------------|
| Protection | IP 65; IP 67 |
|------------|--------------|

### Tests / approvals

|      |                           |                                |
|------|---------------------------|--------------------------------|
| EMC  | EN 61000-4-2 ESD          | 4 kV CD / 8 kV AD              |
|      | EN 61000-4-3 HF radiated  | 10 V/m                         |
|      | EN 61000-4-4 Burst        | 2 kV                           |
|      | EN 61000-4-5 Surge        | 0,5 kV line to line, Ri: 2 Ohm |
|      | EN 61000-4-6 HF conducted | 10 V                           |
|      | EN 55011 emission         | class B                        |
|      | DIN ISO 11452-2           | 100 V/m                        |
| MTTF | [years]                   | 1370                           |

### Mechanical data

|                    |      |                                                                                                                       |
|--------------------|------|-----------------------------------------------------------------------------------------------------------------------|
| Weight             | [g]  | 27.8                                                                                                                  |
| Housing            |      | threaded type                                                                                                         |
| Dimensions         | [mm] | M12 x 1 / L = 60                                                                                                      |
| Thread designation |      | M12 x 1                                                                                                               |
| Materials          |      | housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PA; lock nuts: brass |
| Full-metal housing |      | yes                                                                                                                   |

### Displays / operating elements

|         |                  |                     |
|---------|------------------|---------------------|
| Display | switching status | 4 x 90° LED, yellow |
|---------|------------------|---------------------|

### Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated



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### Connection

