

DH

Magnetic and Electronic proximity sensor

Sensors assembled on cylinders detect the position of the piston by switching an electric signal when the magnetic field, produced by the magnet in the piston, is approaching. Available in two different types: electromechanical with Reed bulb and electronic with magnetoresistive effect both in NO version with PNP output and NC version with NPN output.

The Reed bulb type normally works both in direct and in alternating current while the electronic type works in direct current only (max 30V DC).

Available ATEX version upon request

CE Ex II 3 GD c nA II T5 -10°C ≤ Ta ≤ 45°C

For types and versions, see ATEX catalogue



TECNICAL CHARACTERISTICS

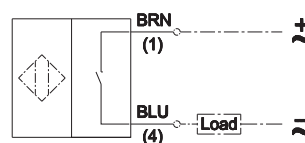
| Type | ELECTROMECHANICAL REED | | | ELECTRONIC PNP |
|--|------------------------|------------------|------------------|------------------|
| | KM-032000 | DH-200 | DH-500 | DH-700 |
| Part no. | | | | |
| Working voltage (V AC/DC) | 5÷250 V AC/DC | 5÷250 V AC/DC | 5÷250 V AC/DC | 10÷30 V DC |
| Max switching current (mA) | 1000 | 200 | 200 | 200 |
| Max switching power (W/VA) | 30 | 10 | 10 | 5 |
| Max voltage drop (V AC/DC) | < 3,5 | < 3,5 | < 3,5 | 0,7 |
| Minimum magnetic field (gauss) | 85 | 85 | 60 | 30 |
| Opening response time (ms) | < 0,5 | < 0,5 | < 0,5 | 0,08 |
| Closing response time (ms) | < 1 | < 1 | < 1 | 0,03 |
| Electric life with resistive load (cycles) | >10 ⁷ | >10 ⁷ | >10 ⁷ | >10 ⁹ |
| State indicator (LED) | red | red | red | red |
| Cable number and section (mmq) | 2x0,25 | 2x0,25 | 2x0,25 | 3x0,25 |
| Cable length (mm) | 3000 | 3000 | 3000 | 3000 |
| Electric circuit | A | A | A | C |
| Protection degree (EN60529) | IP65 | | | |
| Working temperature (°C) | -20 ÷ +80 | | | |

OTHER VERSIONS AVAILABLE

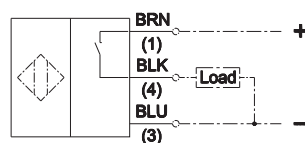
| | | | | |
|--|---|------------|-----------|-----------|
| With 5m cable | - | DH-200L5 | DH-500L5 | DH-700L5 |
| With 10m cable | - | DH-200L10 | DH-500L10 | DH-700L10 |
| With 0,2m cable with M08 connector 60 V | - | DH-200M08 | DH-500M08 | DH-700M08 |
| With 0,2m cable with M12 connector | - | DH-200M12 | DH-500M12 | DH-700M12 |
| 3m ext. cable with M08 3-poles connect. 60 V | | DHF-033M08 | | |
| 5m ext. cable with M08 3-poles connect. 60 V | | DHF-053M08 | | |
| 3m ext. cable with M12 3-poles connect. | | DHF-033M12 | | |
| 5m ext. cable with M12 3-poles connect. | | DHF-053M12 | | |

ELECTRICAL CIRCUITS

A AC/DC 2 wires NO



C DC 3 wires PNP NO

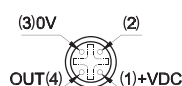


BRN = Brown BLK = Black BLU = Blue

M08



M12



When using the M08 and M12 3-poles extensions cable with DH-200 and DH-500 magnetic sensors, exclude the blue wire before connection.

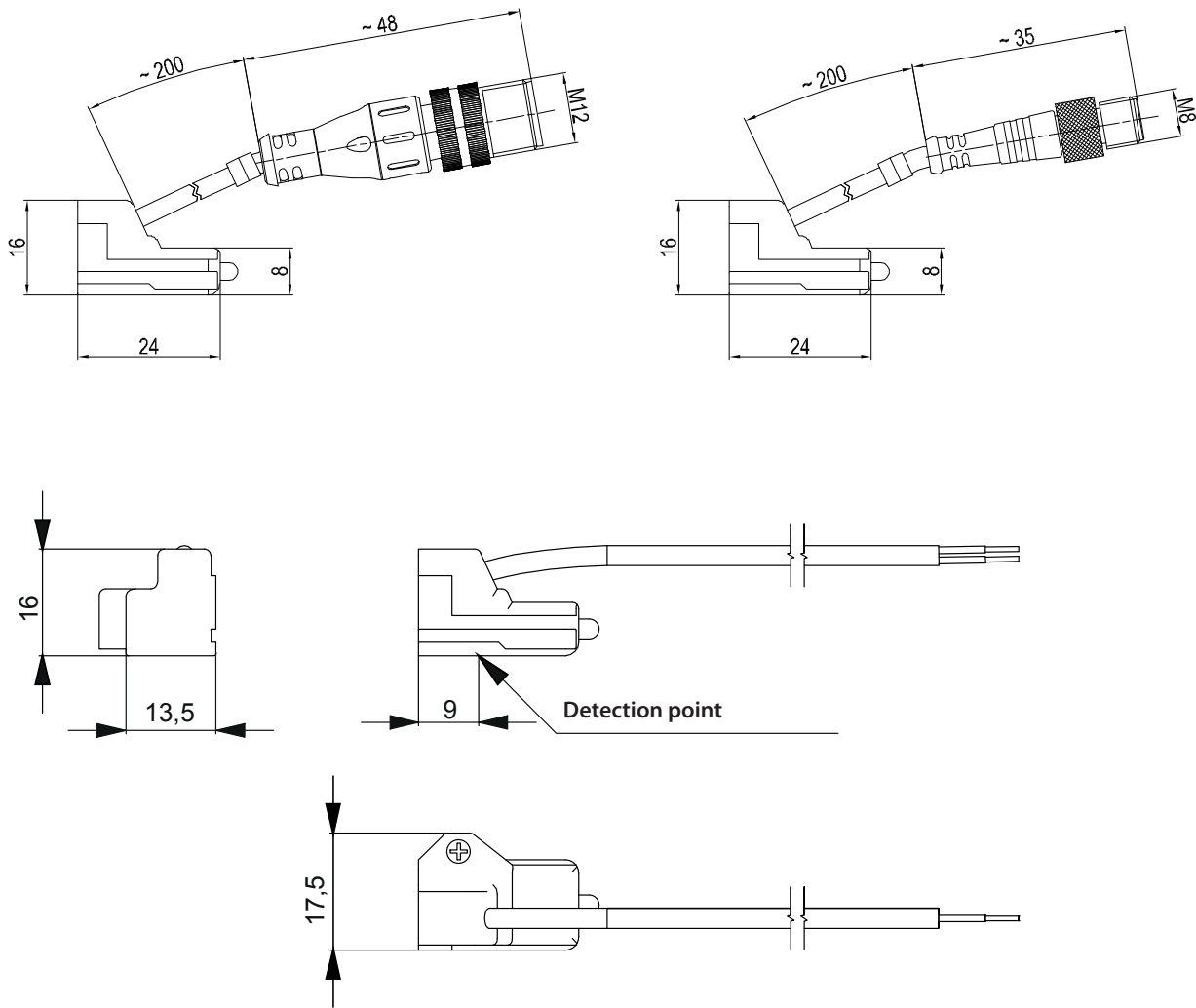
Make sure to correct polarity connection while using direct current; avoid magnetic fields influencing the electronic sensor; install the KM-008200 protection filter in case of extension cables longer than 10m; install dedicated filters in case of inductive loads.

The extension cable may be supplied at the requested length.

For the version without LED indicator, please add suffix "E".

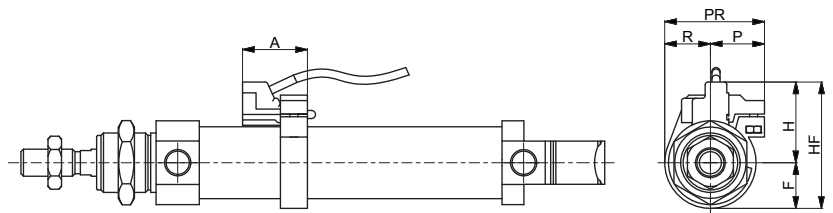
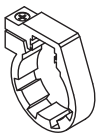
Subject to change

Dimensions



5

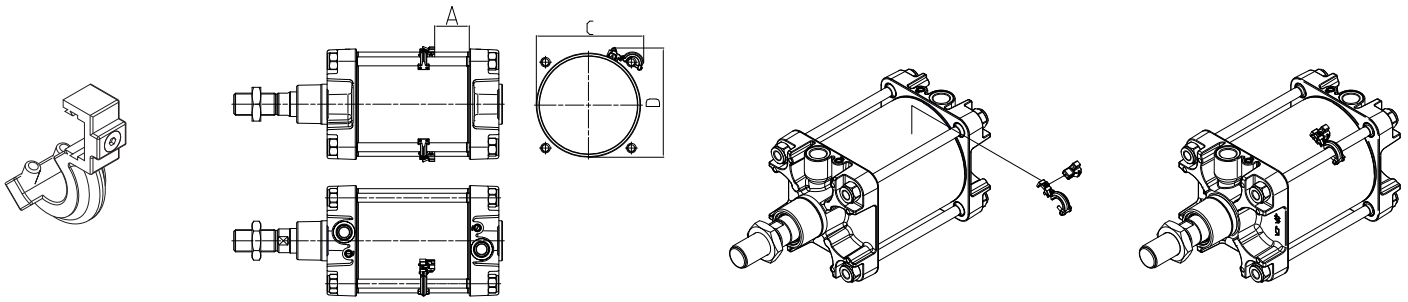
Fixing bracket for M series cylinders



Material: body: polycarbonate
screw: chromium-plated steel

| Ø | A | F | H | HF | P | R | PR | Part no. |
|----|----|------|------|----|----|----|----|----------|
| 10 | 24 | 12,5 | 22,5 | 35 | 17 | 10 | 27 | DH-M10 |
| 12 | 24 | 12,5 | 23,5 | 35 | 17 | 10 | 27 | DH-M12 |
| 16 | 24 | 12,5 | 25 | 40 | 18 | 13 | 31 | DH-M16 |
| 20 | 24 | 12,5 | 27 | 46 | 18 | 17 | 35 | DH-M20 |
| 25 | 24 | 12,5 | 30 | 48 | 20 | 17 | 37 | DH-M25 |

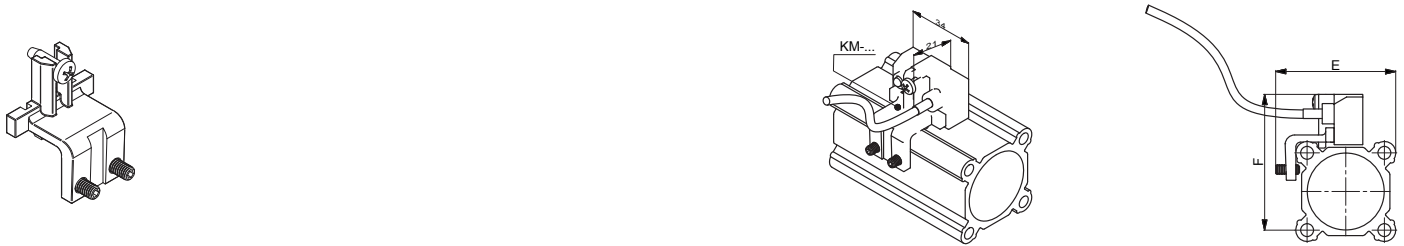
Fixing bracket for K series cylinders (Ø160-200)



Material: Anodized aluminium

| Ø | A - B | C | D | Part no. |
|-----|---------|-----|-----|------------|
| 160 | 25 - 27 | 180 | 180 | DH-K160200 |
| 200 | 24 - 26 | 200 | 220 | |

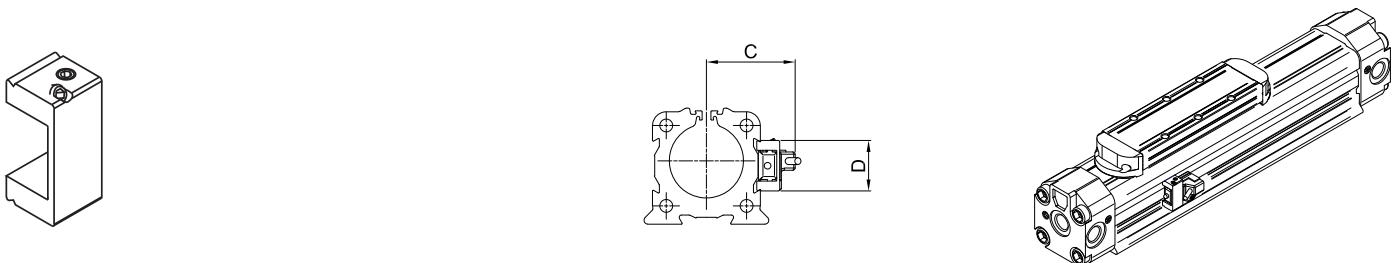
Fixing bracket for ISO cylinders (Ø 32-125)



Material: Anodized aluminium

| Bracket part no. | E | F | Sensor plus bracket part no. |
|------------------|-----|-----|------------------------------|
| DH-K032050 | 50 | 62 | KM-032050 |
| | 55 | 67 | |
| | 65 | 77 | |
| DH-K063125 | 80 | 82 | KM-063100 |
| | 97 | 109 | |
| | 114 | 126 | |
| | 137 | 149 | |

Fixing bracket for S1 series rodless cylinders



Material: Anodized aluminium

| Ø | A - B | C | D | Mass g | Part no. |
|----|---------|----|----|--------|----------|
| 25 | 25 - 35 | 34 | 21 | 4 | DH-S25 |
| 32 | 35 - 35 | 39 | 22 | 6 | DH-S32 |
| 40 | 50 - 50 | 46 | 29 | 8 | DH-S40 |
| 50 | 60 - 60 | 54 | 35 | 12 | DH-S50 |