

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 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		

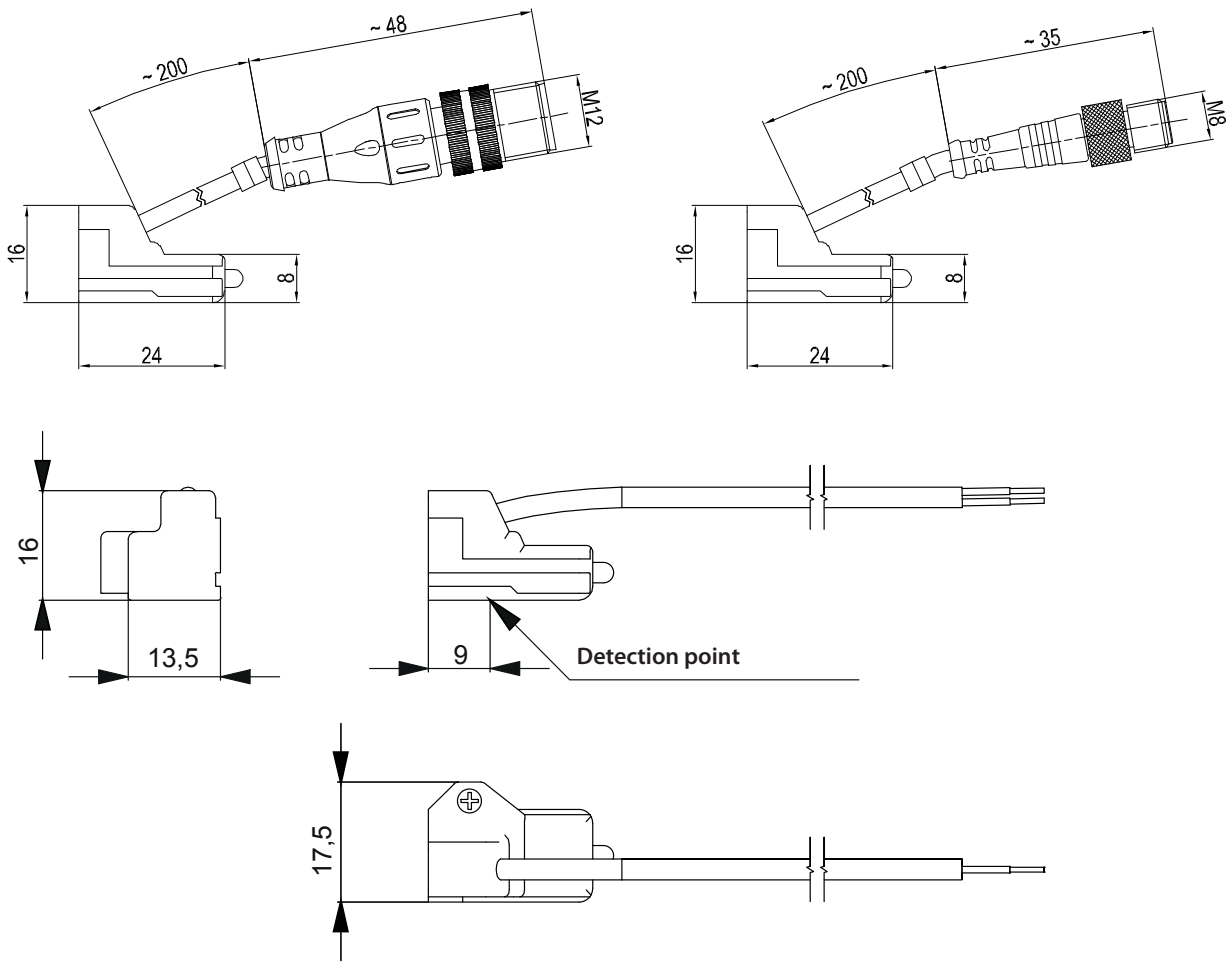
When using the M08 and M12 3-poles extensions cable with DH-200 and DH-500 magnetic sensors, exclude the blue wire before connection.

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".

Dimensions

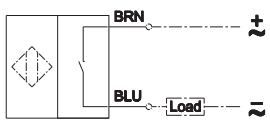


Electrical Circuit

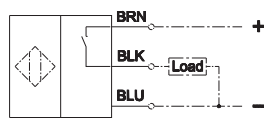
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Version with cable

A AC/DC 2 wires NO



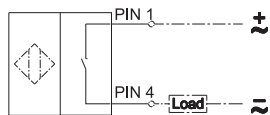
C DC 3 wires PNP NO



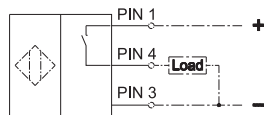
BRN = Brown
BLK = Black
BLU = Blue

Version with connector

A AC/DC 2 wires NO

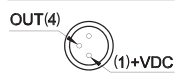


C DC 3 wires PNP NO



PIN 1 = Brown
PIN 2 = White
PIN 3 = Blue
PIN 4 = Black

M08 2 wires



M12 2 wires



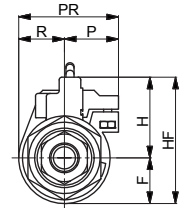
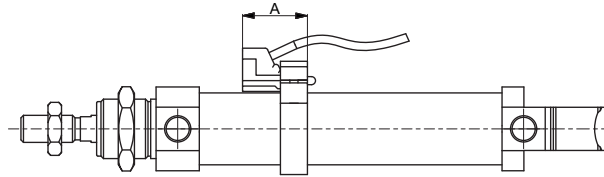
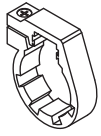
M08 3 wires



M12 3 wires



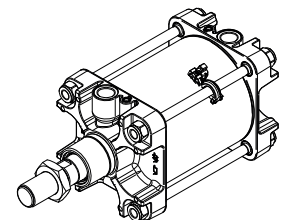
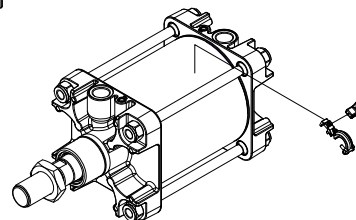
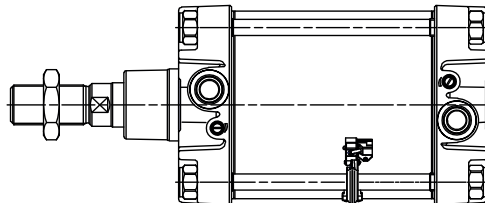
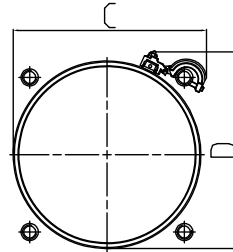
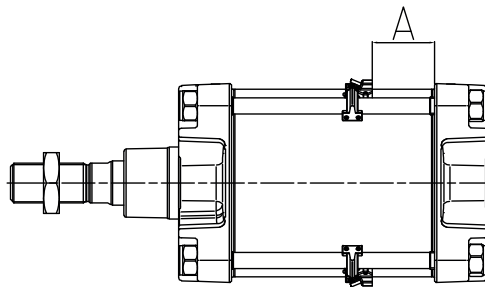
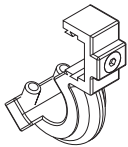
Fixing bracket for M series cylinders



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

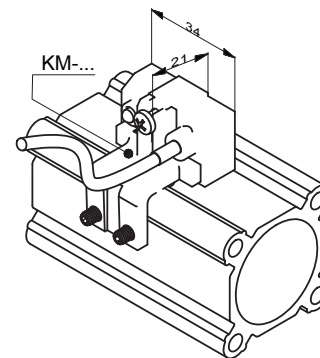
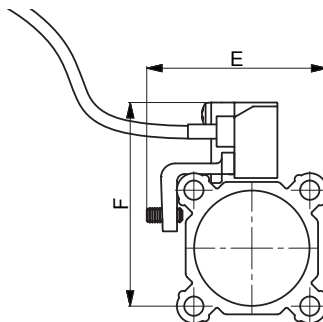
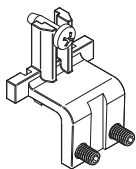
Fixing bracket for K series cylinders (Ø160-200)



Material: Anodized aluminium

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

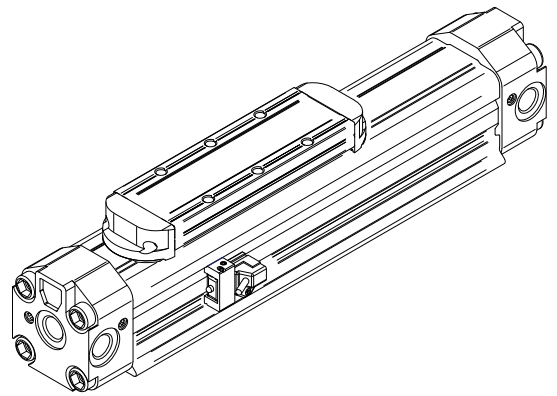
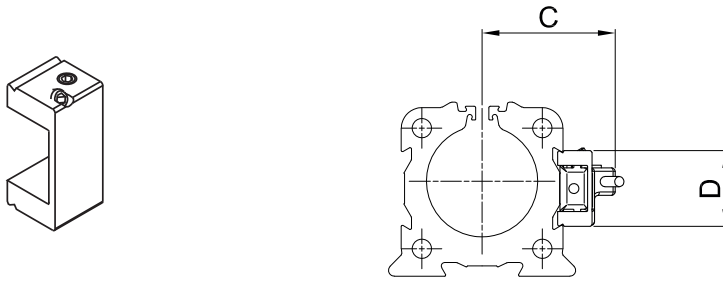
Fixing bracket for ISO cylinders (Ø 32-125)



Material: Anodized aluminium

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

Fixing bracket for S1 series rodless cylinders



Material: Anodized aluminium

∅	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