

DF



Type	ELECTROMECHANICAL			ELECTRONIC
	DF-220	DF-330	DF-440	PNP
Part No.				DF-770
Working voltage (V AC/DC)	5÷30 V AC/DC	5÷30 V AC/DC	5÷30 V AC/DC	5÷30 V DC
Max switching voltage (mA)	100	100	100	100
Max switching power (W/VA)	3	3	3	3
Max voltage drop (V AC/DC)	<3,5	0,1	0,1	0,7
Minimum magnetic field (gauss)	60	60	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)	2x0,14	3x0,14	3x0,14	3x0,14
Cable length (mm)	3000	3000	3000	3000
Electric circuit	A	C	D	C
Protection degree (EN60529)	IP67			
Working temperature (°C)	-20 ÷ +80			

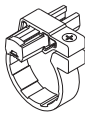
Other available versions (M08-M12)

- DF-220M08 DF-220M12
- DF-330M08 DF-330M12
- DF-440M08 DF-440M12
- DF-770M08 DF-770M12

Cable extensions

- DHF-033 M08 = 3 m M08
- DHF-033 M12 = 3 m M12
- DHF-053 M08 = 5 m M08
- DHF-053 M12 = 5 m M12

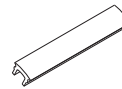
■ Fixing elements



DH-M10DF DH-M20DF
DH-M12DF DH-M25DF
DH-M16DF
Fixing bracket for M series cylinders



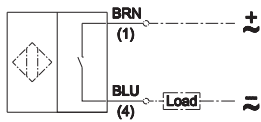
DF-001
Cable clamping



DHF-0020100
Covering strip

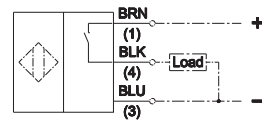
■ Electrical Circuit

A AC/DC 2 wires NO

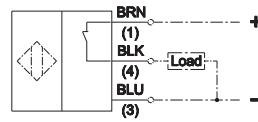


BRN = Brown BLK = Black BLU = Blue

C DC 3 wires PNP NO



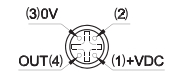
D DC 3 wires PNP NC



■ M08

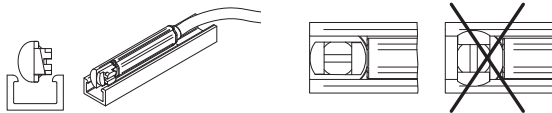


■ M12



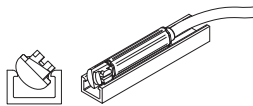
ASSEMBLY SCHEME

1



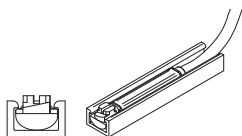
Put the sensor in the proper groove and make sure that the fastening plate has the slot for screwdriver along the sensor axis.

2



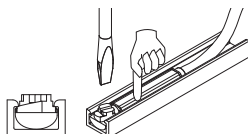
Put the sensor inside its groove and make sure that the fastening plate is on the open part of the groove.

3



Check the correct position of the sensor in the groove. Turn it to the wished position for detection.

4



Keep the sensor in its position and screw the fastening plate to fix the sensor in the groove.
Max torque: 0,5 ÷ 1 Nm

DH



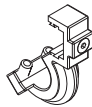
Other available versions (M08-M12)
 DH-200M08 DH-200M12
 DH-500M08 DH-500M12
 DH-700M08 DH-700M12

Cable extensions
 DHF-033 M08 = 3 m M08
 DHF-033 M12 = 3 m M12
 DHF-053 M08 = 5 m M08
 DHF-053 M12 = 5 m M12

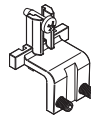
■ Fixing elements



DH-M10 DH-M20
DH-M12 DH-M25
DH-M16
 Fixing bracket for M series cylinders



DH-K032050
DH-K063125
DH-K160200
 Fixing bracket for KE-K-KL series cylinders



KM-032050-1
KM-063100-1
KM-125000-1
 Fixing bracket for KM sensors on ISO cylinders (upon request)



DH-S25
DH-S32
DH-S40
DH-S50
 Fixing bracket for S1 series rodless cylinders

Type	ELECTROMECHANICAL			ELECTRONIC PNP
	Part No.	KM-032000	DH-200	DH-500
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 voltage (mA)	1000	200	200	100
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			

DF-R/DF-T

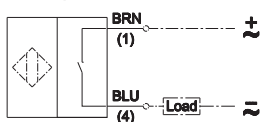


Type	ELECTROMECHANICAL		ELECTRONIC PNP	
	Part No.	DF-R200L02	DF-R200M08	DF-R700L02
Working voltage (V AC/DC)	5÷120 V AC/DC	5÷120 V AC/DC	5÷30 V DC	5÷30 V DC
Max switching voltage (mA)	100	100	50	50
Max switching power (W/VA)	10	10	1,5	1,5
Shock resistance (G)	30	30	50	50
Max voltage drop (V AC/DC)	2,5	2,5	1,5	1,5
Cable number and section (mmq)	2 x 2,8 (PUR)	2 x 2,8 (PUR)	3x3 (PUR)	3x3 (PUR)
Cable length (mm)	2000	150	2000	150
Contact	NO	NO	NO	NO
Max response time (ms)	1	1	1	1
State indicator (LED)	red	red	green	green
Electric circuit	A	-	C	-
Protection degree (NEMA 6)	IP67			
Working temperature (°C)	-10 ÷ +70			

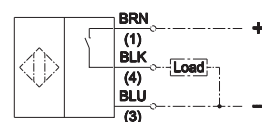
Type	ELECTROMECHANICAL		ELECTRONIC PNP	
	Part No.	DF-T200L03	DF-T200M08	DF-T700L03
Working voltage (V AC/DC)	5÷120 V AC/DC	5÷120 V AC/DC	5÷30 V DC	5÷30 V DC
Max switching voltage (mA)	100	100	200	200
Max switching power (W/VA)	10	10	6	6
Shock resistance (G)	30	30	50	50
Max voltage drop (V AC/DC)	2,5	2,5 V	1	1
Cable number and section (mmq)	2 x 2,8 (PUR)	2 x 2,8 (PUR)	3 x 2,8 (PUR)	3 x 2,8 (PUR)
Cable length (mm)	3000	150	3000	150
Contact	NO	NO	NO	NO
Max response time (ms)	1	1	1	1
Protection degree (NEMA 6)	red	red	green	green
Electric circuit	A	-	C	-
State indicator (LED)	IP67			
Working temperature (°C)	-10 ÷ +70			

■ Electrical Circuit

A AC/DC 2 wires NO



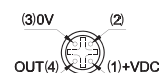
C DC 3 wires PNP NO



M8



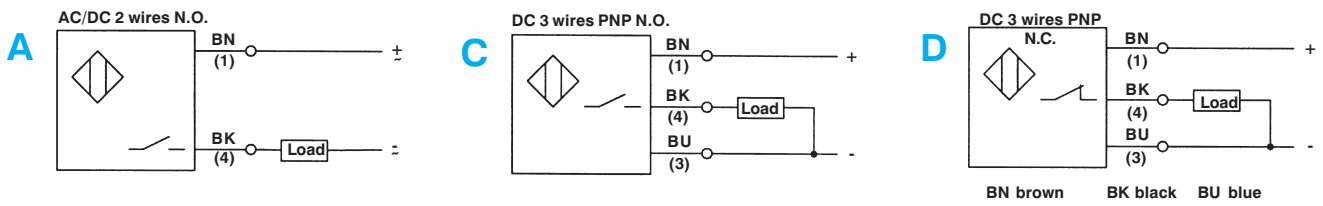
M12



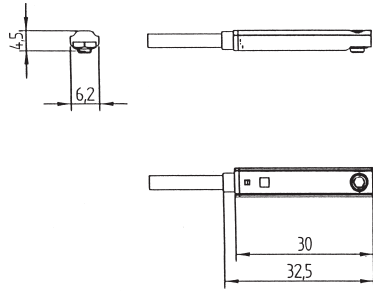
BRN = Brown BLK = Black BLU = Blue



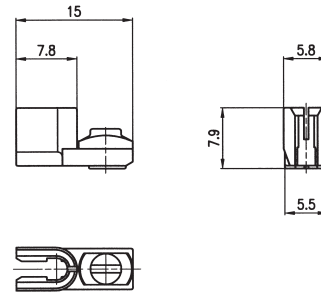
Electric circuits



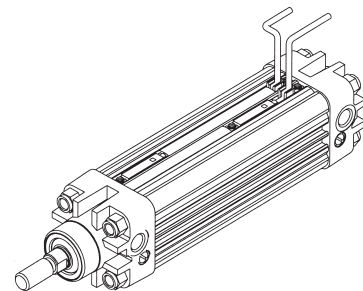
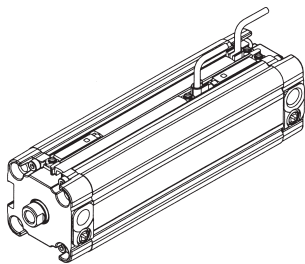
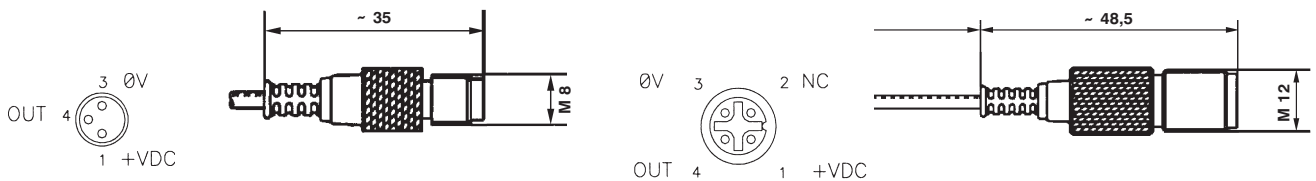
Overall dimensions DF-...



Cable clamping DF-001

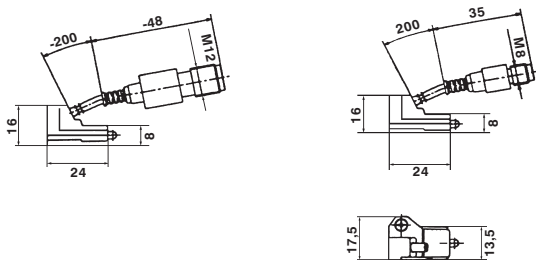


Male connector M08, M12



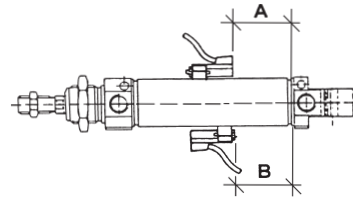


Overall dimensions DH...

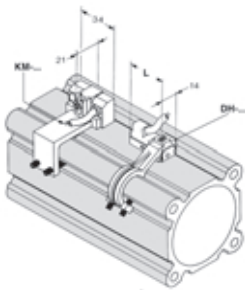


Correct mounting

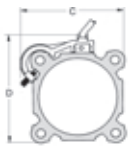
The magnetic sensor is mounted onto the cylinder by means of a special clamp or bracket or simply inserted in the groove of the cylinder barrel.



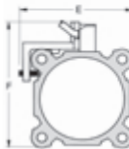
ISO cylinders K series



DH-....



KM-....



Cyl. Ø	A-B	C	D	Bracket part number	E	F	Sensor + bracket part number
32	4 - 4	50	57	DH-K032050	50	62	KM-032050
40	6 - 6	56	63		55	67	
50	6 - 6	64	74		65	77	
63	6 - 7	81	87	DH-K063125	80	82	KM-063100
80	9 - 10	96	104		97	109	
100	10 - 10	114	125		114	126	
125	18 - 18	138	150	DH-K160200	137	149	KM-125000
160	25 - 27	180	180				
200	24 - 26	200	220				

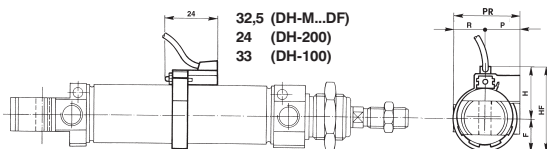
Microcylinders M series



DH-....



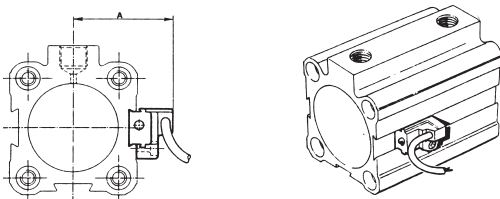
DH-M...DF



Cyl. Ø	A-B	F	H	HF	P	R	PR	M series part number
10	11 - 11	12,5	22,5	35	17	10	27	DH-M10
12	12,5 - 12,5	11,5	23,5	35	17	10	27	DH-M12
16	14 - 14	15	25	40	18	13	31	DH-M16
20	18,5 - 18,5	19	27	46	18	17	35	DH-M20
25	19 - 19	18	30	48	20	17	37	DH-M25

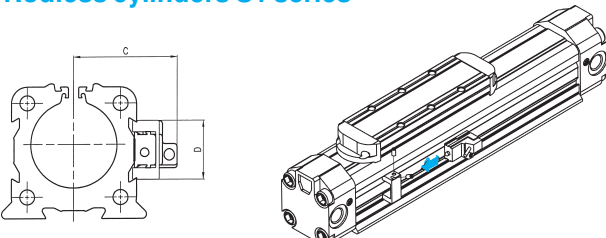
To order the holder for the recessed sensor DF... Series add suffix DF to the part number.

Short-stroke cylinders W series (no fixing necessary)



Cyl. Ø	16	20	25	32	40	50	63	80	100
A-B	8-8	9-9	11-10	11-10	7-7	6-6	5-5	8-7	11-11
A	26,8	28,8	31,3	35,3	39,5	44	52	60,5	71

Rodless cylinders S1 series



Cyl. Ø	A-B	C	D	Bracket part num.
25	25 - 35	34	21	DH-S25
32	35 - 35	39	22	DH-S32
40	50 - 50	46	29	DH-S40
50	60 - 60	54	35	DH-S50