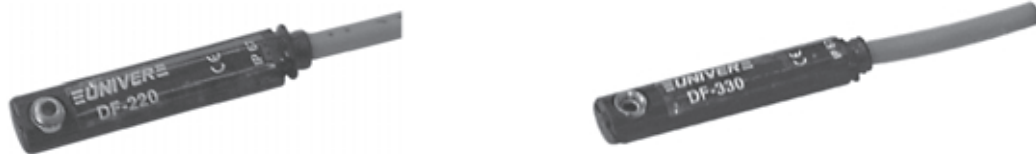


The sensors mounted onto the cylinders detect the position of the piston by commutating an electric signal when approaching the magnetic field produced by the magnet incorporated in the piston itself. They are manufactured using two different technologies: electromechanical with Reed bulb; electronic with magneto-resistive effect (normally open with PNP output); upon request with NPN output. The first one with Reed bulb function both in d.c. and a.c.; the second ones, electronic type function only in d.c. 30V max. In both versions the active status is indicated by the lighting of a luminous diode.



Characteristics	Type	electronic		electromechanical		DF-520 3 wires PNP N.C. more sensitive
		DF-770 3 wires PNP N.O.	DF-220 2 wires N.O.	DF-330 3 wires PNP N.O.	DF-440 3 wires PNP N.C.	
Nominal voltage	V AC/DC	24V DC	24V AC/DC	24V AC/DC	24V AC/DC	24V AC/DC
Working voltage	V AC/DC	7...30V	5...30V	5...30V	5...30V	5...30V
Max. switching current	mA	200	120	500	500	120
Max. switching power	W/VA	6	3,6	6	6	3,6
Max. voltage drop	V AC/DC	0,7V	2,8V	0,1V	0,1V	2,8V
Minimum magnetic field	gauss	30	60	60	60	50
Opening response time	ms	0,08	< 0,5	< 0,5	< 0,5	< 0,5
Closing response time	ms	0,03	< 1	< 1	< 1	< 1
Electric life with resistive load	Cicli	>10 ⁹	>10 ⁷	>10 ⁷	>10 ⁷	>10 ⁷
State indicator	Red	LED	LED	LED	LED	LED
Cable number and section	mmq	3 x 0,14	2 x 0,14	3 x 0,14	3 x 0,14	3 x 0,14
Electric circuit (page 4)	Type	C	A	C	D	D
Protection degree	DIN40050	IP65				
Working temperature	°C	- 20 + 80 °C				

Part numbers

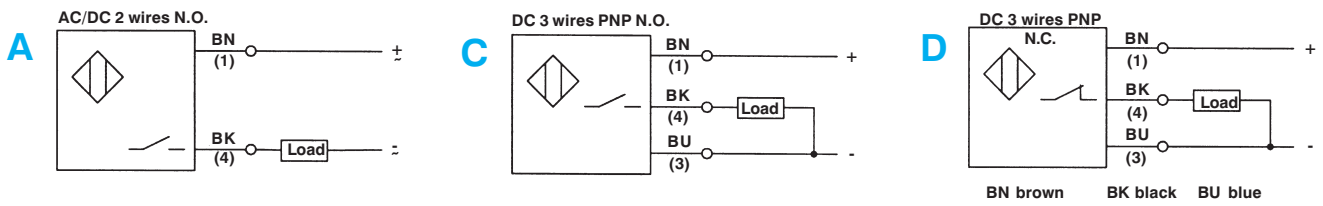
	DF-770	DF-220	DF-330	DF-440	DF-520
- Sensor with cable 3 m					
- Sensor with cable 20 cm male connector M08	DF-770M08	DF-220M08	DF-330M08	DF-440M08	DF-520M08
- Sensor with cable 20 cm male connector M12	DF-770M12	DF-220M12	DF-330M12	DF-440M12	DF-520M12
- Cable extension M08 3 m 3 poles	DHF-033M08				
- Cable extension M08 5 m 3 poles	DHF-053M08				
- Cable extension M12 3 m 3 poles	DHF-033M12				
- Cable extension M12 5 m 3 poles	DHF-053M12				
- Cable clamping	DF -001				

For the use of 3-pole cable extensions M08 and M12 with magnetic sensor DF-220, DF-220M08, DF-220M12 exclude blue wire when connecting.

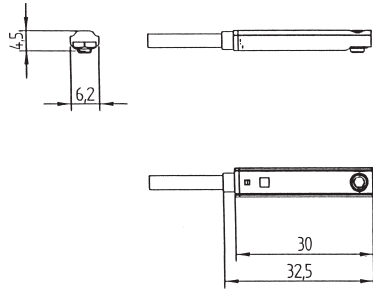
Note: observe polarity for d.c. use, avoid that magnetic fields affect the sensor, for cables with length exceeding 10 m insert filter KM-008200, for use with inductive loads foresee suitable filters on the load itself.



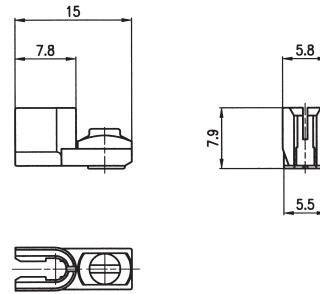
Electric circuits



Overall dimensions DF-...



Cable clamping DF-001



Male connector M08, M12

