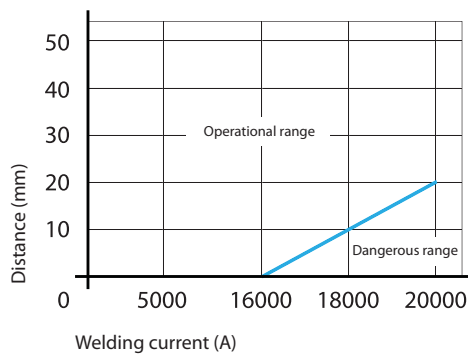# DF-RW

Weld field immune magnetic proximity sensor

- Applied in strong magnetic field environnements such as the welding cells of automotive manufacturing
- 2 colour indication
- Solid state sensor

TECHNICAL CHARACTERISTICS

Wiring method	2-Wire Type
Switching logic	Solid State Output, Normally Open
Working voltage (V DC)	10 ÷ 28
Max Switching current (mA)	5 ÷ 50
Max Contact rating (W) (A)	1,5
Max Voltage drop (V)	5
Max Leakage current (mA)	1
State indicator (LED)	Red: unstable sensing range Green: stable sensing range
Cable number and section (mmq)	2 x 4,8 (PVC)
Max Response time (ms)	50
Magnetic feild resistance (A) (B)	16000
Magnet requirement (Gauss) (C)	85
Working temperature (°C)	-10 ÷ 60
Shock (G) (D)	50
Vibration (G) (E)	9
Protection degree	IEC 60529 IP67
Protection circuit (F)	3,4

ELECTRICAL CIRCUIT

(A) WARNING: Never exceed rating (Watt = Voltage x Amperage). Permanent demage to sensor will occur
(B) The operational distance between DF-RW and welding gun (welding conductor or cable) can be 0 mm when the welding current is less than 16000 A
(C) Measuring standard target: Ø15.5 x Ø8 x 5T (Anisotropy rubber magnet)
(D) Sin wave / X , Y , Z 3 directions / 3 times each direction / 11 ms each time
(E) Double amplitude 1.5 mm / 10 Hz - 55 Hz - 10 Hz (Sweep 1 min) / X, Y, Z 3 directions / 1 hour each time
(F) 1 = None / 2 = Short-circuit / 3 = Power Source Reverse polarity / 4 = Surge Suppression

Weld Field immune

0 mm operational distance between sensor and welding gun (welding conductor or cable) with less than 16000 A AC welding current.
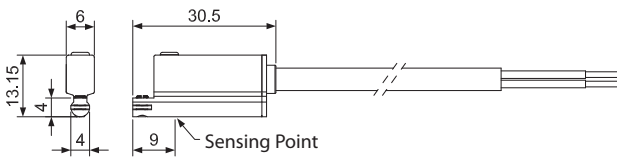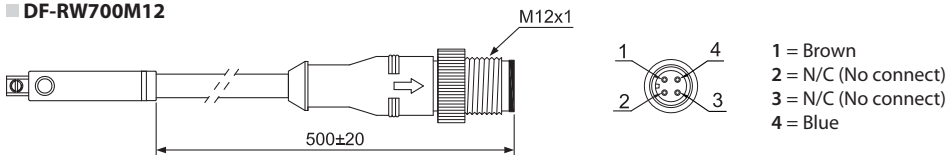
NEW

CODIFICATION KEY

D	F	-	R	W	7	0	0	M	1	2
	1			**2**	**3**			**4**		

1 Series	**2** Type	**3** Model	**4** Terminal
DF-R = Magnetic proximity sensor	**W** = Weld field immune	**700** = Solid state output N.O.	**L03** = 3 m Cable length **M12** = M12 Connector

DIMENSIONS

■ **DF-RW700L03**

6   30.5   13.15   4   4   9   Sensing Point

■ **DF-RW700M12**

M12x1

500±20

1 = Brown
2 = N/C (No connect)
3 = N/C (No connect)
4 = Blue

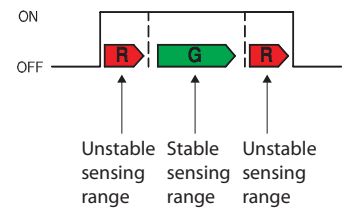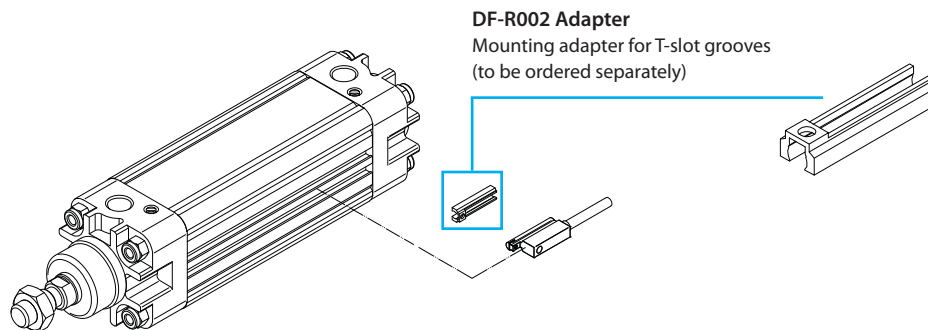## TWO COLOR INDICATION

Precision of setting position.
Unstable sensing range: red LED light on.
Stable sensing range: green LED light on.

ON
OFF

R   G   R

Unstable sensing range   Stable sensing range   Unstable sensing range

MOUNTING SCHEME

DF-R002 Adapter
Mounting adapter for T-slot grooves
(to be ordered separately)

M, KE, KD, KL, RP, RM, RO, RN, RS, RQ, OV, R, W series