

Specifications

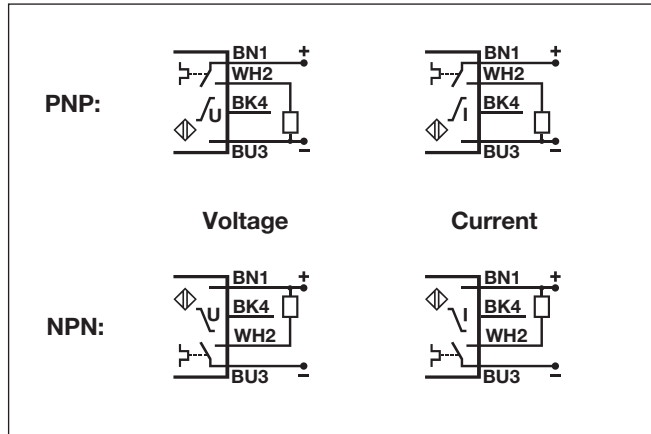
Rated operating distance (S_n)	Reference target: 1 mm metal rolled finish. CAD04: 100 x 100 mm CAD09 and CAD22: 200 x 200 mm	Operating frequency digital output (f)	
UA18CAD04	50 - 400 mm	UA18CAD04...	≤ 10 Hz
UA18CAD09	100 - 900 mm	UA18CAD09...	≤ 4 Hz
UA18CAD22	200 - 2200 mm	UA18CAD22...	≤ 1 Hz
Blind zone		Response time OFF-ON digital output (t_{ON})	
UA18CAD04...	≤ 50 mm	UA18CAD04...	≤ 50 mS
UA18CAD09...	≤ 100 mm	UA18CAD09...	≤ 125 mS
UA18CAD22...	≤ 200 mm	UA18CAD22...	≤ 500 mS
Repeatability	0.5%	Response time ON-OFF digital output (t_{OFF})	
Linear Accuracy	1%	UA18CAD04...	≤ 50 mS
Beam angle		UA18CAD09...	≤ 125 mS
UA18CAD04...	±8°	UA18CAD22...	≤ 500 mS
UA18CAD09...	±7°	Response time analog output	≤ 500 mS
UA18CAD22...	±7°	Power ON delay	≤ 500 mS
Sensitivity		Output function, open collector	
Push-button	P1 (farthest setpoint) P2 (nearest setpoint)	By sensor type	NPN or PNP
Resolution	1 mm	Output switching function	One open collector transistor and one analogue output to be configured as: Window function with N.O or N.C. output. Analogue output with positive or negative slope.
Temperature drift	0.1%/°C @ -20° to +60° C	Indication Output ON	Yellow LED
Temperature compensation	Yes	Environment	
Hysteresis (H)	Min. 1%	Installation category	III (IEC 60664/60664A; 60947-1)
Rated operational voltage (U_B)	15 to 30 VDC (ripple included)	Pollution degree	3 (IEC 60664/60664A; 60947-1)
Ripple (U_{pp})	≤ 5%	Degree of protection	IP67 (IEC 60529; 60947-1)
No-load supply current (I_o)		Ambient temperature	
UA18CAD04...	45 mA @ U _B max	Operating	-20° to +60°C (-4° to +140°F)
UA18CAD09...	45 mA @ U _B max	Storage	-35° to +70°C (-31° to +158°F)
UA18CAD22...	50 mA @ U _B max	Vibration	10 to 55 Hz, 1.0 mm/6g (IEC/EN 60068-2-6)
Output current continuous digital output (I_o)		Shock	30 g / 11 ms, 3 directions (IEC/EN 60068-2-27)
Max. load capacity 100 nF UL508 specification	500 mA 100 mA	Rated insulation voltage	< 500 VAC (rms)
Output current short-time digital output (I)		Housing	
Max. load capacity 100 nF UL508 specification	500 mA 100 mA	Material body	PBT
Minimum operational current digital output (I_m)	0.5 mA	Material front	Epoxy-glass resin
OFF-state current digital output (I_o)	10 μA	Material back, plug	Grilamid
Voltage drop digital output (U_d)	≤ 2.2 VDC @ I _g max.	Material back, cable	Grilamid
Protection digital output	Short-circuit, overvoltage and reverse polarity	Material trimmer	POM
Output analog output		Sealing around trimmer	TPE
NG.. or PG.. types	4 to 20 mA	Material sealing front	
NK.. or PK.. types	0 to 10 VDC	UA18CAD04...	TPE
Load		UA18CAD09...	TPE
4 to 20 mA	max. 500 Ω	UA18CAD22...	PBT
0 to 10 VDC	min. 3 kΩ	Connection	
Carrier frequency		Cable	PVC, grey, 2 m, 4 x 0.32 mm ² , Ø = 4.7 mm M12, 4-pin (CON. 14-series)
UA18CAD04...	400 kHz	Plug	
UA18CAD09...	300 kHz	Tightening torque	≤ 1 Nm
UA18CAD22...	200 kHz		

Specifications (cont.)

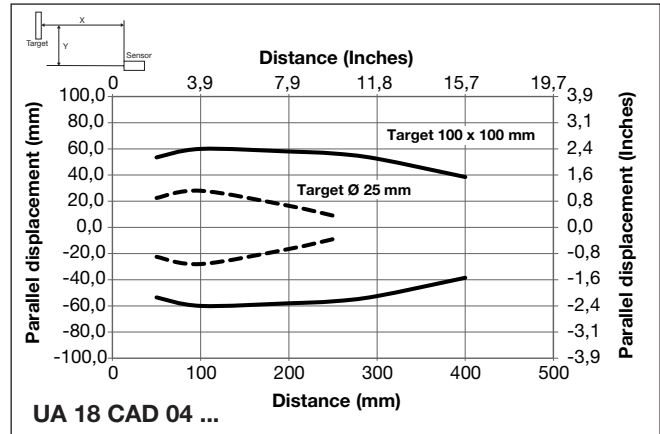
Weight	
Cable version	98 g
Plug version	35 g

CE-marking	Yes
Approvals	cULus (UL508)

Wiring Diagram



Detection Range



Dimensions

