

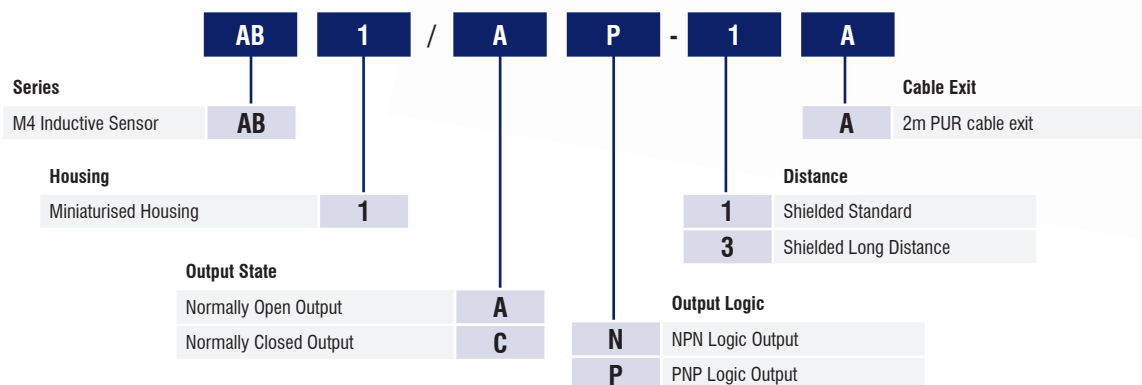
AB1 Series

Miniaturised Cylindrical Inductive Sensors

- Complete range of ultra-miniaturised inductive sensors M4
- IP67 rated
- AISI 303 Steel Housing
- Switching frequency up to 3.5kHz
- Standard and long distance shielded models



Options & Ordering Codes



Technical Specifications

Models	AB/**-1*	AB/**-3*
Niminal Sensing Distance S_n	0.6mm	1mm
Operating Distance	0...0.48mm	0...0.81mm
Hysteresis	1...20%	
Standard Target	4x4mm FE360	
Repeatability	5% @ $U_B = 20...30V$; $T_a = 23^\circ C \pm 5^\circ C$	
Operating Voltage	10...30VDC	
Ripple	$\leq 10\%$	
Output Type	NPN or PNP - NO or NC	
Output Current	$\leq 100\text{ mA}$	
Output Voltage Drop	$\leq 1.5V @ 100mA$	
No-Load Supply Current	$\leq 10\text{ mA}$	
Leakage Current	$\leq 10\text{ }\mu A$	
Switching frequency	3 kHz	3.5 kHz
Power On Delay	$\leq 50\text{ ms}$	
Temperature Range	$-25^\circ C...+70^\circ C$	
Temperature Drift	10%	
Power Supply Protections	Polatiry Reversal	
Output Protection	Short Circuit (Auto-reset), Overvoltage Pulses	
EMC	In conformity with the EMC Directive according to IEC 60947-5-2	
Shock & Vibration	IEC 60947-5-2	
Protection Degree	IP67	
Housing Material	Stainless Steel AISI 303	
Active Head Material	PBT	
Correction Factor	see table	
LEDs	On (Yellow LED)	
Connection	2m PUR cable	

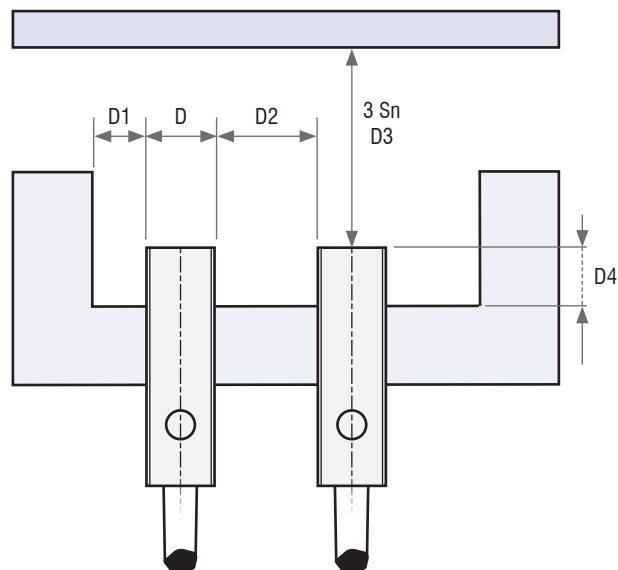
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Correction Factors

Models	FE 360	Copper	Aluminium	Brass	Stainless Steel
AB1/**-**	1	$0.23 \pm 10\%$	$0.26 \pm 10\%$	$0.31 \pm 10\%$	$0.52 \pm 10\%$
AB1/**-3*	1	$0.30 \pm 10\%$	$0.22 \pm 10\%$	$0.32 \pm 10\%$	$0.57 \pm 10\%$

Installation



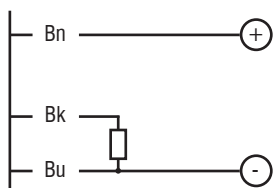
Models	D4	D1	D2	D3
AB1/**-**	$\geq 0\text{mm}$	$\geq 2\text{mm}^{(1)}$	$\geq 4\text{mm}$	$\geq 1.8\text{mm}$
AB1/**-3*	$\geq 0\text{mm}$	$\geq 2\text{mm}^{(2)}$	$\geq 4\text{mm}$	$\geq 3\text{mm}$

⁽¹⁾ $\geq 2.5\text{ mm}$ without ferro-magnetic material

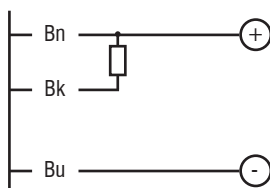
⁽²⁾ $\geq 2.5\text{ mm}$ without ferro-magnetic material

Wiring Diagrams

PNP



NPN



LEGEND

BN - Brown
BU - Blue
BK - Black
WH - White

Dimensions (mm)

