

Cylinder Position Sensor Selection Guide

Cylinder Position Sensors				
				
Housing	UNT	UNTK	INT	UNR
Pages	G13	G15	G17	G19
Style of Cylinder				

Cylinder Position Sensors				
				
Housing	PST	KST	AKT	IKE/IKT
Pages	G21	G23	G25	G27
Style of Cylinder				

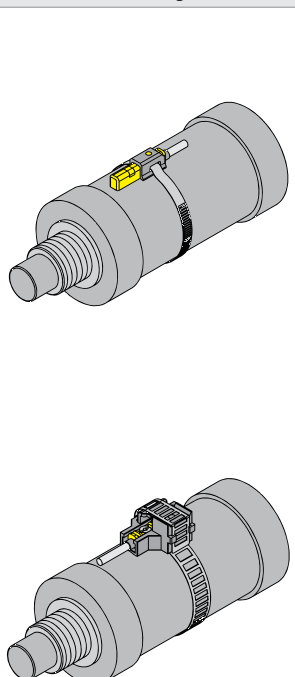
Cylinder Position Sensors		Inductive		World Clamp Sensors
				
Housing	IKM	NST	CRS	Variable
Pages	G29	G31	G33 - 36	G37 - 42
Style of Cylinder				

	Magnetic Analog		
			
Housing	UNTL	25 mm	Variable
Pages	G43	G45	G47
Style of Cylinder			

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors

Drawing	Manufacturer	Cylinder Series	Turck Sensor	Turck Bracket	
	Parker	P, SRM, SRDM, XLT, XLR, XKB, (S, SRD) ³	UNT Style	KLRC-UNT* ⁴	KLRC with ASB Clamp ²
			UNR Style	KLRC-2 with ASB Clamp ²	
	Festo	CRDG, CRDSNU, CRDSW, DSNU, SDNUL, DSEU, ESEU, ESNU, ESW, (DSN) ³	UNT Style	KLRC-UNT* ⁴	KLRC with ASB Clamp ²
			UNR Style	KLRC-2 with ASB Clamp ²	
	Bimba	Original Line II (OL2), Original Line (M, MH, MNR, MC, MRS), Double Wall (DW, DWD, DWN, DWM), PC, Z Series (M04, M09, M17, M31), Linear Thrusters (T, TE)	UNT Style	KLRC-UNT* ⁴	KLRC with ASB Clamp ²
			UNR Style	KLRC-2 with ASB Clamp ²	
	SMC	NCM, NCJ2, NCG, NCA1, CJ2, CM2, CG1, MGG	UNT Style	KLRC-UNT* ⁴	KLRC with ASB Clamp ²
			UNR Style	KLRC-2 with ASB Clamp ²	
	Norgren	Round Line (RL)	UNT Style	KLRC-UNT* ⁴	KLRC with ASB Clamp ²
			UNR Style	KLRC-2 with ASB Clamp ²	
	Fabco-Air	Pancake (X, XK, O, OP, XDR, XDRK, ODR), Linear Slide (L, S, E)	UNT Style	KLRC-UNT* ⁴	KLRC with ASB Clamp ²
			UNR Style	KLRC-2 with ASB Clamp ²	

1. This Mounting is to be used only when "Switch Rail" is present on the cylinder.
2. ASB size is determined by the cylinder diameter. See Table 1. KLDT is required when the UNT sensor has integral quick disconnect.
3. These styles are not usually available with magnets.
4. Bracket size determined by the cylinder diameter. See Table 2.

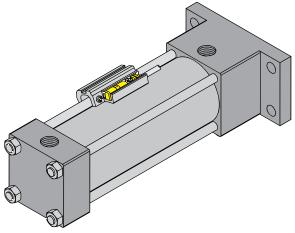
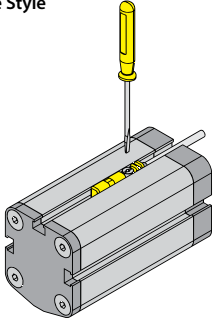
UNT Housing with KLDT-UNT and ASB Style Strap		
Cylinder Diameter		Clamp (Stainless Steel)
Inches	Millimeters	
.276 - .433	7 - 11	ASB-1
.433 - .748	11 - 19	ASB-2
.709 - 1.142	18 - 29	ASB-3
1.102 - 1.535	28 - 39	ASB-4
1.496 - 1.929	38 - 49	ASB-5
1.890 - 2.323	48 - 59	ASB-6
2.283 - 2.717	58 - 69	ASB-7
2.677 - 3.110	68 - 79	ASB-8

Table 1

UNT Housing with KLRC-UNT*		
Part Number	Cylinder Diameter	
	Inches	Millimeters
KLRC-UNT1	.315 - .984	8 - 25
KLRC-UNT2	.984 - 2.480	25 - 63
KLRC-UNT3	2.480 - 5.118	63 - 130
KLRC-UNT4	5.118 - 9.843	130 - 250

Table 2

Cylinder Position Sensors

Drawing	Manufacturer	Cylinder Series	Turck Sensor	Turck Bracket
Tie Rod Style  KLZ* (Table 3)	Numatics	A, E, S, L, B Square, VDMA-Z	UNT Style	KLZ Series Clamp ¹
	Parker	P5E, HBT, LPM, (S, C, LP) ²	UNT Style	KLZ Series Clamp ¹
	PHD	A2, A3, AS, AV, AV2, A3V, AVS, HV, HV2, H3V, HVS, DAV, DHV, EA, EL, EH, ES, NPG, NHG, NEAG, NEHG, TD, (A) ²	UNT Style	KLZ Series Clamp ¹
	Festo	DNGU, DNGUL, DNGUT, DNU, DNUL, CRDNG, CRDNGS, DNG, DNGL, DNGZK, DNGZL, DNGZS, DKE	UNT Style	KLZ Series Clamp ¹
	Bimba	Flat-I (FO, FOD, FOP, FOR, FOS, FS, FSD, FSR, FSS, F02, F03, F04), Flat-II (FT, FST)	UNT Style	KLZ Series Clamp ¹
	SMC	ECQ2, MB, C95	UNT Style	KLZ Series Clamp ¹
	Norgren	A, EA, SS, N, J, EJ, 8000/M	UNT Style	KLZ Series Clamp ¹
	Turn-Act	NFPA Series	UNT Style	KLZ Series Clamp ¹
	Fabco-Air	Long Stroke (321, 521, 721, 1221, S321, S521, S721, S1221), Hi-Power (HP, THP, UHP), Multi-Power (MP, BA, BP), Linear Slide ³ (SE, EZ, TS)	UNT Style	KLZ Series Clamp ¹
T-Groove Style 	Parker	P1M, PST, SST	UNT Style	No Additional Bracket Required
	Festo	DNC, DNCT, DFM, DPZ, DPZJ, DZF, EZH, ADVU, ADVULQ, ADVUL	UNT Style	No Additional Bracket Required
	SMC	CUJ, CXS, MGQ, MY1B, MHC, MHL2	UNT Style	No Additional Bracket Required

1. When using KLZ Series Clamps, user must determine clamp size best suited for application.
2. These styles are usually not available with magnets.
3. Some of these may be equipped to handle 5, 8, or 12 mm inductive proximity sensors.

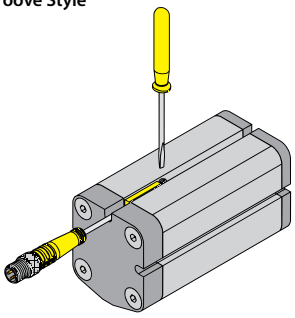
UNT Sensor with KLZ* Mounting		
Part Number	Tie Rod Diameter Maximum	
	Inches	Millimeters
KLZ1A-INT CLAMP	.236	6.0
KLZ1M-UNT CLAMP	.290	7.37
KLZ2M-UNT CLAMP	.351	8.93
KLZ3M-UNT CLAMP	.482	12.25

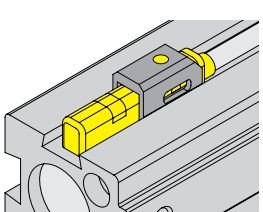
Table 3

We reserve the right to make technical alterations without prior notice.



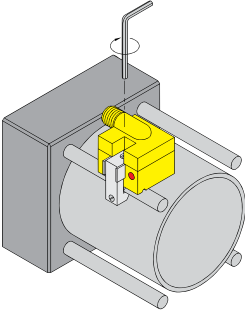
Cylinder Position Sensors

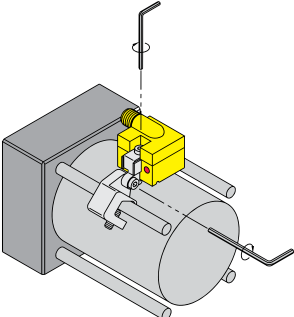
Drawing	Manufacturer	Cylinder Series	Turck Sensor	Turck Bracket
C-groove Style 	Numatics	K	UNR Style	No Additional Bracket Required
	Festo	ADVC	UNR Style	No Additional Bracket Required
	Bimba	Twin Bore (TB, TBA, TBD), EF1 Series (EF, EFD, EFS, EFR), EF2 Series (EFT), PneuMoment Series (PM)	UNR Style	No Additional Bracket Required
	SMC	(CQ2, CQs, NCDQ2, NCQ2) ¹ , (CDQ2) ¹ , CU, CUK, CUW, MU, MHF2, Air Slides (MXQ)	UNR Style	No Additional Bracket Required
	Compact Air	B, C	UNR Style	No Additional Bracket Required
	PHD	CRH O-groove	UNR Style	No Additional Bracket Required

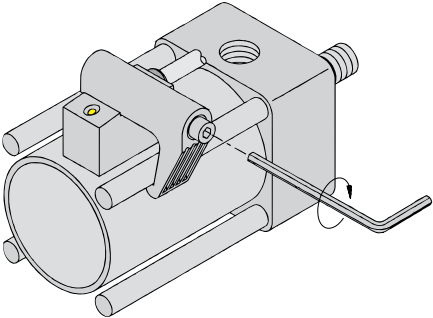
Drawing	Manufacturer	Cylinder Series	Turck Sensor	Turck Bracket
Dovetail Style 	Numatics	B,F, Compact C, Short Stroke, Rotary Actuator, Pee Wee (O, P, Q), VDMA-V, Ring Series	UNT Style	KLDT-UNT3
	Norgren	90000, 91000, 92000, 93000, Lite (A44000)	UNT Style	KLDT-UNT3
	Fabco-Air	Square 1 (SQ, SQF, SQL) Pancake (X,XK, O, OP, XDR, XDRK, ODR) Linear Slide1 (GB, L, S, E, SE, EZ, TS) ²	UNR Style	KLFA-2UNR
	Compact Air	Inch Series (AB, AS, AR, AT) Inch Series (B, R, S, T) ³ Ball Slide (BSC) GC, CD, ACLA, ACLAD, (CLA, CLAD) ³ Metric Series (AWS, AWB, AWT) Metric Series (WS, WB, WT) ³ B/Base Mount, S/End Mount R/ End Mount, (CSC, PSC, TCL) ⁴	UNT Style	KLDT-UNT4
	SMC	CP95	UNT Style	KLDT-UNT6

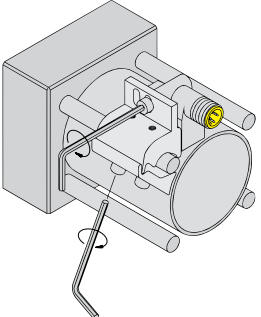
1. CQ2, NC(D) Q2, CQs, NCQ2 cylinders may have multiple grooves and may not be suited for the UNR style sensor.
2. This mounting is to be used only when dovetail style mounting rail is present on the cylinder.
3. These styles are usually not available with magnets.
4. This mounting is to be used only when sensor mounting rail is present on collet.

Cylinder Position Sensors

Drawing		AKT Housing with KLA-1 Clamp	
	Cylinder Diameter	1.26 - 1.97 inches 32 - 50 mm	
	Rod Diameter	0.16 - 0.31 inches 4 - 8 mm	
	Clamp	KLA-1 (Aluminum)	

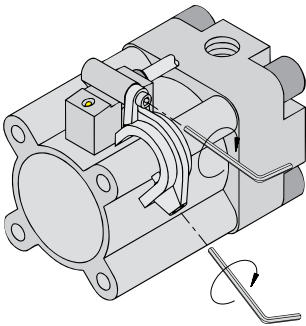
Drawing		AKT Housing with KLA-2 Clamp	
	Cylinder Diameter	1.57 - 4.92 inches 40 - 125 mm	
	Rod Diameter	0.28 - 0.51 inches 7 - 13 mm	
	Clamp	KLA-2 (Die-cast Zinc)	

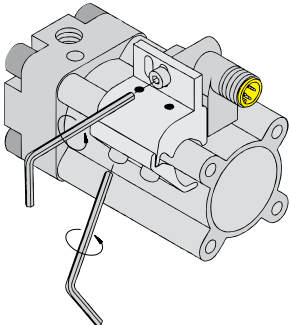
Drawing		IKE, IKT, and IKM Housing with KLI-1 or KLI-3 Clamp			
	Cylinder Diameter	1.26 - 3.94 inches 32 - 100 mm		2.48 - 6.30 inches 63 - 160 mm	
	Rod Diameter	0.16 - 0.51 inches 4 - 13 mm		0.24 - 0.63 inches 6 - 16 mm	
	Clamp	KLI-1 (Die-cast Zinc)		KLI-3 (Die-cast Zinc)	

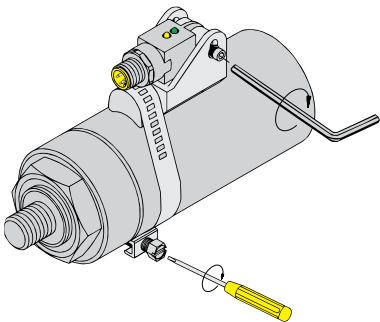
Drawing		IKE, IKT, and IKM Housing with KLI-5Z or KLI-6Z Clamp			
	Cylinder Diameter	1.26 - 2.48 inches 32 - 63 mm		1.97 - 4.92 inches 50 - 125 mm	
	Rod Diameter	0.16 - 0.31 inches 4 - 8 mm		0.24 - 0.51 inches 6 - 13 mm	
	Clamp	KLI-5Z (Aluminum)		KLI-6Z (Aluminum)	

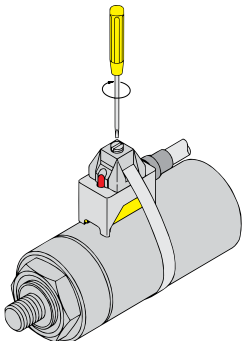
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Cylinder Position Sensors

Drawing		IKE, IKT, and IKM Housing with KLI-2 Clamp	
	Cylinder Diameter	1.26 - 3.94 inches 32 - 100 mm	
	Rod Diameter	0.35 - 0.79 inches 9 - 20 mm	
	Clamp	KLI-2 (Die-cast Zinc)	

Drawing		IKE, IKT, and IKM Housing with KLI-5 or KLI-6 Clamp		
	Cylinder Diameter	1.26 - 1.97 inches 32 - 50 mm	1.97 - 3.94 inches 50 - 100 mm	
	Rod Diameter	0.31 - 0.55 inches 8 - 14 mm	0.43 - 0.75 inches 11 - 19 mm	
	Clamp	KLI-5 (Aluminum)	KLI-6 (Aluminum)	

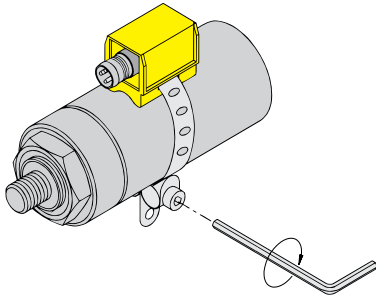
Drawing		IKE, IKT, and IKM Housing with KLI-CB64 or KLI-CB124 Clamp		
	Cylinder Diameter	0.79 - 2.52 inches 20 - 64 mm	0.79 - 4.88 inches 20 - 124 mm	
	Rod Diameter	0.31 - 0.55 inches 8 - 14 mm	0.43 - 0.75 inches 11 - 19 mm	
	Clamp	KLI-CB64 (Stainless Steel/Steel)	KLI-CB124 (Stainless Steel/Steel)	

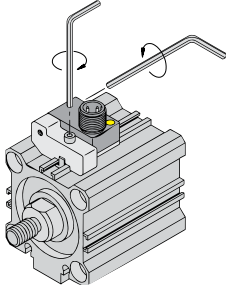
Drawing		KST Housing with KST-SB170 and KST-SB335 Clamps		
	Cylinder Diameter	0.31 - 0.99 inches 8 - 25 mm	0.31 - 3.15 inches 8 - 80 mm	
	Strap	KST-SB170 (Stainless Steel)	KST-SB335 (Stainless Steel)	
	Mount	KST-MG (Die-cast Zinc)		
	Screw Plate	KST-SE (Die-cast Zinc)		

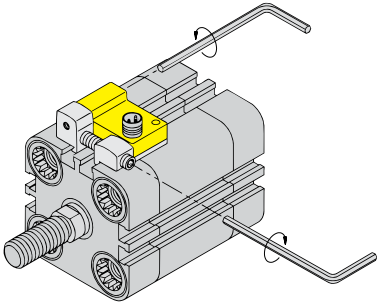
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Cylinder Position Sensors

Cylinder Position Sensors

Drawing		PST Housing with KLP80-VA and KLP200-VA Clamps	
	Cylinder Diameter	0.31 - 3.15 inches 8 - 80 mm	3.15 - 7.87 inches 0 - 200 mm
	Clamp	KLP80-VA (Stainless steel band, brass nuts)	KLP200-VA (Stainless steel band, brass nuts)

Drawing		NST Housing with KLQ-1 or KLQ-2 Clamps	
	Cylinder Diameter	0.47 - 3.94 inches 12 - 100 mm	
	Cylinder Manufacturer	SMC	
	Cylinder Family	NCDQ2	
	Clamp	SMC-325 (Anodized Aluminum)	

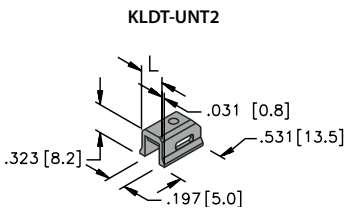
Drawing		NST Housing with KLN-3 Clamp	
	Cylinder Diameter	0.47 - 3.94 inches 12 - 100 mm	
	Groove Diameter	0.20 - 0.53 (0.83) inches 5.2 - 13.5 (21)* mm	
	Clamp	KLN-3 (Anodized Aluminum)	
	*Accessory	Longer M5 x 35 set screw (A0050)	

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Cylinder Position Sensors

UNT Mounting Clamps

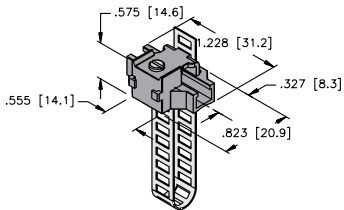


Part Number	"L" inches	"L" mm
KLDT-UNT2	.276	7
KLDT-UNT3	.370	9.4
KLDT-UNT4	.453	11.5
KLDT-UNT5	.496	12.6
KLDT-UNT6	.413	10.5
KLDT-UNT7	.260	6.6

Note: For outside dimension of beveled ears add 1.6 mm to bracket width listed.

UNT Housing with KLDT-UNT and ASB Style Strap		
Cylinder Diameter		Clamp (Stainless Steel)
Inches	Millimeters	
.276 - .433	7 - 11	ASB-1
.433 - .748	11 - 19	ASB-2
.709 - 1.142	18 - 29	ASB-3
1.102 - 1.535	28 - 39	ASB-4
1.496 - 1.929	38 - 49	ASB-5
1.890 - 2.323	48 - 59	ASB-6

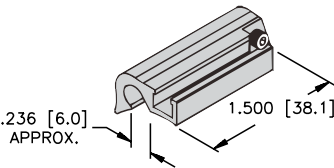
KLRC-UNT2



Part Number	Inches	Millimeters
KLRC-UNT1	.315 - .984	8 - 25
KLRC-UNT2	.984 - 2.480	25 - 63
KLRC-UNT3	2.480 - 5.118	63 - 130
KLRC-UNT4	5.118 - 9.843	130 - 250

KLZ1M-UNT CLAMP	KLZ2M-UNT CLAMP	KLZ3M-UNT CLAMP

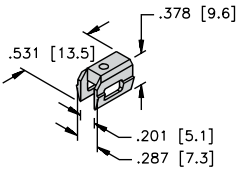
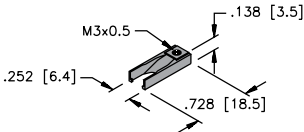
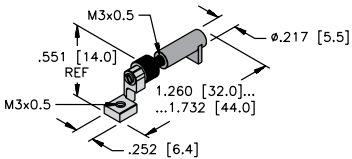
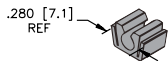
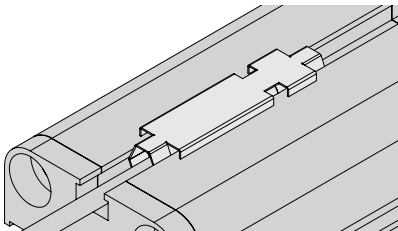
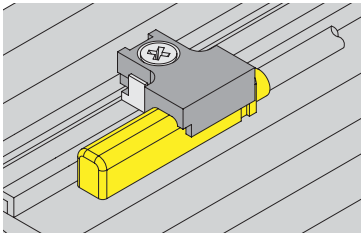
KLZ1A-INT CLAMP



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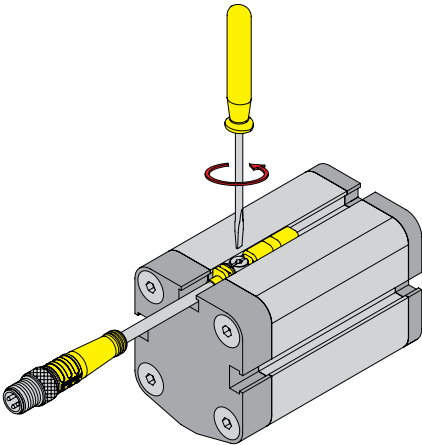
Cylinder Position Sensors

UNT Mounting Accessories

KLDT-UNT6 (6913355) 	UNT-Stopper (4685751) 	UNT-Adjusting Bracket (4685750) 
UNT Mounting Screw, 2.5 mm (6901056) 	M2-BIM-UNT MTG SCRW. 1.5 mm (6901050) 	UNT-Cable Clip (6900456) 
SG-UNT (A9800) 	KLT-UNT1 (6913377)  For use with SMC 325 Rail	

UNT Sensor Mounting

Note: Turn screw counter-clockwise to tighten.

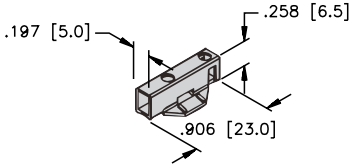
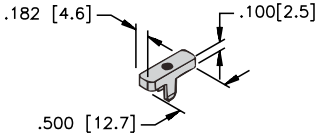
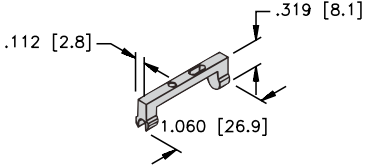
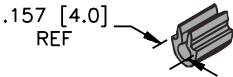


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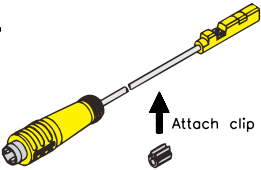
Cylinder Position Sensors

UNR Mounting Accessories

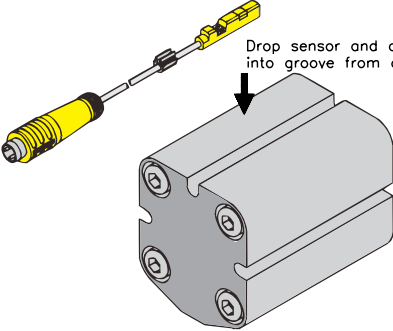
KLR-2 UNR	KLFA-UNR	KLTR-2 UNR
		
UNR Cable Clip (6900428)	M1.6 BIM-UNR-MTG SCR. 1.3 mm (6901055)	
		

UNR Sensor Mounting

1.

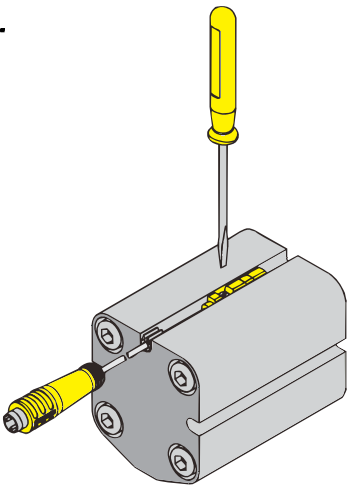


Attach clip to sensor cable
2.



Drop sensor and clip into groove from above

3.



Note: Turn screw counter-clockwise to tighten. Use of mounting clip is optional.

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Cylinder Position Sensors

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Mounting Clamps

KLA-1	KLA-3M	KLA-2	KLI-1
KLI-3	KLI-2	KLI-CB64 and KLI-CB124	

Mounting Brackets for Q25L Sensor

MB-Q21	MN-M5-Q25	MN-M4-Q25
 Mounting Bracket	 Sliding block with M5 thread for the backside profile	 Sliding block with M4 thread for the backside profile
MB2.1-Q25	MB2.2-Q25	MB1-Q25
 Mounting bracket for cylinders 40-60 mm	 Mounting bracket for cylinders 70-120 mm	 Mounting Clip

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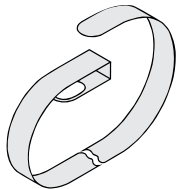


Cylinder Position Sensors

Mounting Clamps

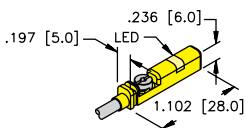
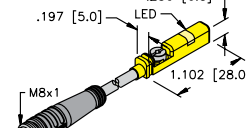
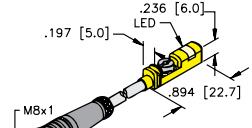
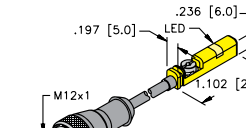
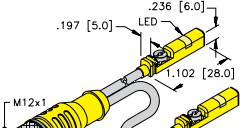
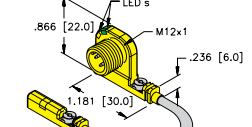
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KLI-6Z	KLP 80-VA and KLP 200-VA	SMC-325
KLN-3	KST-SE (46736)	KST-MG (46735)
KST-SB170 and KST-SB335		

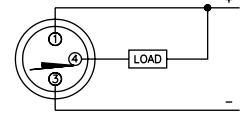
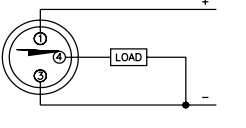
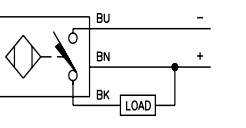
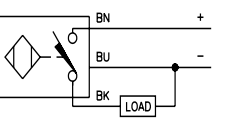
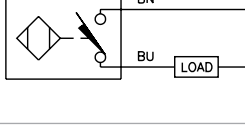
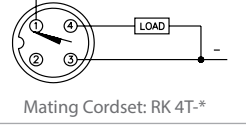
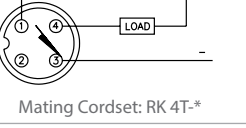
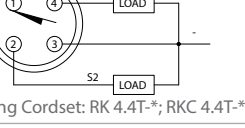
We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-UNT

T-groove, C-groove, Tie-rod, and Round Cylinder Style

Housing Style	Dimension Drawings	
	A  UNT - Potted-In Cable	B  UNT - Picofast® Quick Disconnect
C  UNT - Picofast Quick Disconnect	D  UNT - Eurofast® Quick Disconnect	E  UNT - Eurofast Quick Disconnect
F  UNT - Eurofast Quick Disconnect		

Wiring Diagrams/Mating Cordsets			
1  Mating Cordset: PKG 3Z-*	2  Mating Cordset: PKG 3Z-*, PKG 3M-*	3  Mating Cordset: PKG 3Z-*, PKG 3M-*	4  Mating Cordset: PKG 3Z-*, PKG 3M-*
5  Mating Cordset: PKG 3Z-*, PKG 3M-*	6  Mating Cordset: RK 4T-*	7  Mating Cordset: RK 4T-*	8  Mating Cordset: RK 4.4T-*, RKC 4.4T-*

A13		3-wire DC - Magnetic (AN, RN, AP, RP)	
Ripple: ≤10% Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA; Pass Speed: ≤10 ms; ≤3 ms (UNR)		Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR) Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≥± 0.1 mm, ≥± 0.3 mm (UNR)	
A14		2-wire DC - Magnetic (AD, AG)	
Ripple: ≤10% Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: Non-Polarized (AD) ≤4 V Polarized (AG) ≤3.5 V Trigger Current for Short Circuit Protection: ≥120 mA Pass Speed: ≤3 ms, ≤10 ms (UNT)		Off-State (Leakage) Current: ≤0.8 mA Power-On Effect: Per IEC 947-5-2 Transient Protection: Per EN 60947-5-2 Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≥± 0.1 mm	

Additional Specifications	
Magnetic Actuation Strength (Gauss): 20-350	

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-UNT

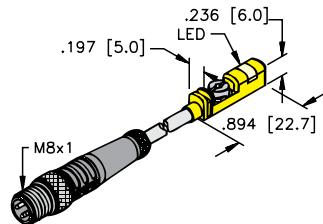
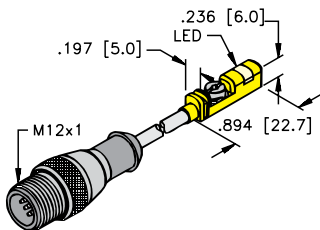
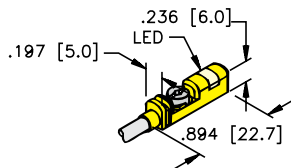
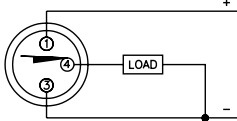
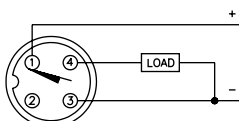
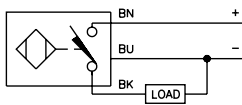
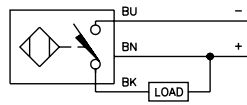
T-groove, C-groove, Tie-rod, and Round Cylinder Style

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-UNT-AN6X 4685702		3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	2M/TPU	A	3	A13
BIM-UNT-AP6X 4685741		3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	2M/TPU	A	4	A13
BIM-UNT-AG41X/S1139/S1160 4685766	Irradiated TPU Cable, Wider Range	2-wire DC	10-55 VDC	300	≤ 100	-25 to +70	IP67	PA 12	2M/TPU	A	5	A14
BIM-UNT-AN6X-0.3-PSG3S 4685705	Fixed Coupling Nut	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	0.3M/TPU	B	1	A13
BIM-UNT-AP6X-0.3-PSG3S 4685722	Fixed Coupling Nut	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	0.3M/TPU	B	2	A13
BIM-UNT-AP6X-0.3-PSG3M 4685723	Rotating Coupling Nut	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	0.3M/TPU	C	2	A13
BIM-UNT-AP6X-0.3-RS4T 46857260		3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	0.3M/TPU	D	6	A13
BIM-UNT-AN6X-0.3-RS4T 4685792		3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	0.3M/TPU	D	7	A13
BIM-UNT-0.3-UNT-2AP6X3-H1141 4685730	Dual Switch	4-wire DC, PNP	10-30 VDC	1000	≤ 150	-25 to +70	IP67	PP	0.3M/TPU	F	8	A13
BIM-UNT-AP6X/S991 4685728	Radial Magnetic Fields	3-wire DC, PNP	10-30 VDC	1000	≤ 150	-25 to +70	IP67	PP	2M/TPU	B	4	A13
BIM-UNT-2AP6X-0.2-RSC4.4T 4685891	Dual Switch	4-wire DC, PNP	10-30 VDC	1000	≤ 150	-25 to +70	IP67	PP	0.2M/TPU	E	8	A13

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors | BIM-UNTK 𐀀 𐀁 𐀂 𐀃

T-groove Short Cylinder Style

Housing Style		Dimension Drawings	
		A	 UNTK - Picofast Quick Disconnect
B	 UNTK - Eurofast Quick Disconnect	C	 UNTK - Potted-In Cable
Wiring Diagrams/Mating Cordsets			
1	 Mating Cordset: PKG 3Z-*	2	 Mating Cordset: RK 4T-*
3		4	
A13 3-wire DC - Magnetic (AN, RN, AP, RP)			
Ripple: ≤10% Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA; Pass Speed: ≤10 ms; ≤3 ms (UNR)		Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR) Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≥± 0.1 mm, ≥± 0.3 mm (UNR)	
A17 3-wire DC - Magnetic w/o Short Circuit Protection (AP7)			
Ripple: ≤10% Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: ≤1.4 V Short Circuit Protection: No Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤10 mA; Pass Speed: ≤3 ms Power-On Effect: Per IEC 947-5-2		Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤0.3 mm Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≥± 0.3 mm	
Additional Specifications			
Magnetic Actuation Strength (Gauss): 20-350			

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-UNTK
T-groove Short Cylinder Style

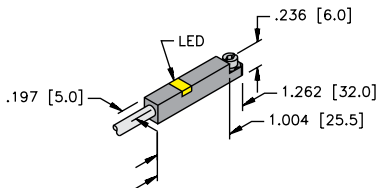
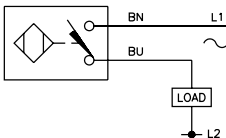
Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-UNTK-AP7X-0.3-PSG3M 4686011	Short Body	3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	0.3M/TPU	A	1	A17
BIM-UNTK-AP7X-0.3-RS4T 4686021	Short Body	3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	0.3M/TPU	B	2	A17
BIM-UNTK-AP7X 4686001	Short Body	3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	2M TPU	C	3	A17
BIM-UNTK-AP6X 4686005	short Body	3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP68	PP	2M TPU	C	3	A13
BIM-UNTK-AN6X 4686006	Short Body	3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP69	PP	2M TPU	C	4	A13

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BR-INT

T-groove Cylinder Style or Universal Mount with Brackets

Housing Style	Dimension Drawings
	A  INT - Picofast Potted-In Cable
Wiring Diagrams/Mating Cordsets	
1	
A32-wire Reed AC and DC (ADZ71)	
Ripple: ≤10%	Reverse Polarity Protection: Yes
Differential Travel (Hysteresis): ≤1 mm (Depends on magnet)	Shock: 30 g, 11 ms
Maximum Switching Capacity: ≤10 W	Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes
Off-State (Leakage) Current: 0 mA	Repeatability: ≥±0.1 mm
Pass Speed: ≤10 m/s	(constant temperature & voltage)
Power-On Effect: Per IEC 947-5-2	Temperature Drift: ≤0.1 mm
Transient Protection: Per EN 60947-5-2	Voltage Drop: ≤0.5 V
Additional Specifications	
Magnetic Actuation Strength (Gauss): 20-350	

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors | BR-INT
T-groove Cylinder Style or Universal Mount with Brackets

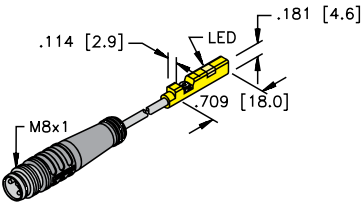
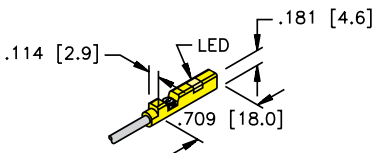
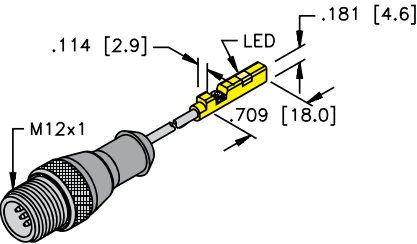
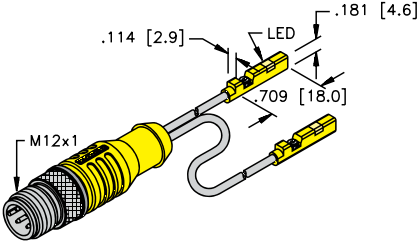
Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BR-INT-ADZ71X 4700510	Reed Contact	2-wire AC/DC, Reed Contact	3-140 VAC/4-200 VDC	500	≤ 500	-25 to +70	IP67	PA 12	2M/PVC	A	1	A3

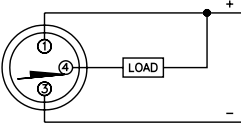
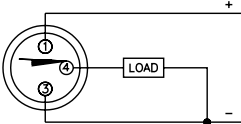
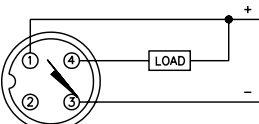
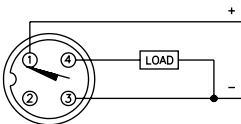
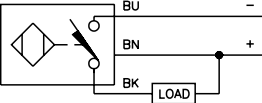
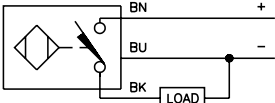
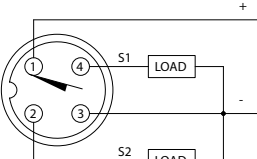
We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-UNR

C-groove Cylinder Style

Housing Style	Dimension Drawings	
	A  UNR - Picofast Quick Disconnect	B  UNR - Potted-In Cable
C  UNR - Eurofast Quick Disconnect	D  UNR - Eurofast Quick Disconnect	

Wiring Diagrams/Mating Cordsets			
1  Mating Cordset: PKG 3Z-*	2  Mating Cordset: PKG 3Z-*	3  Mating Cordset: RK 4T-*	4  Mating Cordset: RK 4T-*
5 	6 	7  Mating Cordset: RKC 4.4T-*	

A13 3-wire DC - Magnetic (AN, RN, AP, RP)			
Ripple: ≤10% Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA; Pass Speed: ≤10 ms; ≤3 ms (UNR)	Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR) Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≥± 0.1 mm, ≥± 0.3 mm (UNR)		

Additional Specifications
Magnetic Actuation Strength (Gauss): 20-350

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors | BIM-UNR
C-groove Cylinder Style

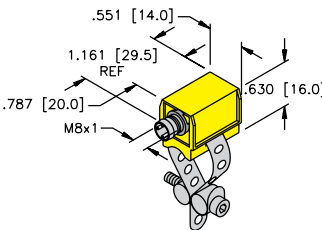
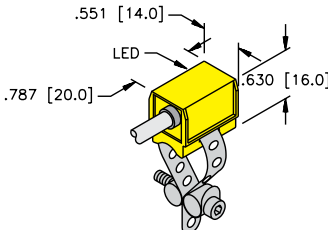
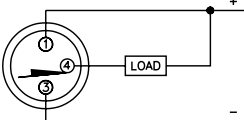
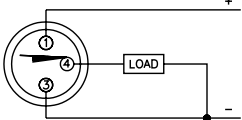
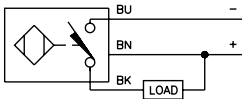
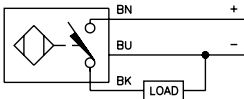
Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-UNR-AN6X-0.3-PSG3S W/M 4685848	Fixed Coupling Nut	3-wire DC, NPN	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	0.3M/TPU	A	1	A13
BIM-UNR-AP6X-0.3-PSG3S W/M 4685843	Fixed Coupling Nut	3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	0.3M/TPU	A	2	A13
BIM-UNR-AN6X-0.3-RS4 W/M 4685850		3-wire DC, NPN	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	0.3M/TPU	C	3	A13
BIM-UNR-AP6X-0.3-RS4 W/M 4685845		3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	0.3M/TPU	C	4	A13
BIM-UNR-AN6X W/M 4685847		3-wire DC, NPN	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	2M/TPU	B	5	A13
BIM-UNR-AP6X W/M 4685842		3-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	2M/TPU	B	6	A13
BIM-UNR-2AP6X-0.2-RSC4.4T 4685899	Dual Switch	4-wire DC, PNP	10-30 VDC	300	≤ 100	-25 to +70	IP67	PP	0.2M/TPU	D	7	A13

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-PST ○

Round Cylinder Style

Housing Style		Dimension Drawings	
		A  PST - Picofast Quick Disconnect	B  PST - Potted-In Cable
Wiring Diagrams/Mating Cordsets			
1  Mating Cordset: PKG 3Z-*	2  Mating Cordset: PKG 3Z-*	3  BU - BN + BK -	4  BN + BU - BK -
A13 3-wire DC - Magnetic (AN, RN, AP, RP)			
Ripple: ≤10% Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA; Pass Speed: ≤10 ms; ≤3 ms (UNR)		Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR) Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≥± 0.1 mm, ≥± 0.3 mm (UNR)	
Additional Specifications			
Magnetic Actuation Strength (Gauss): 20-350			

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-PST
Round Cylinder Style

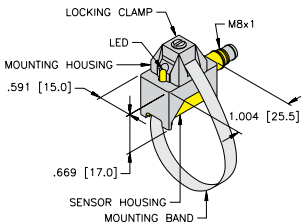
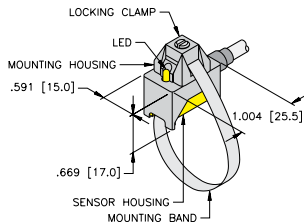
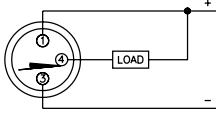
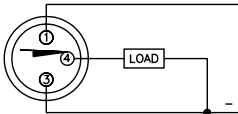
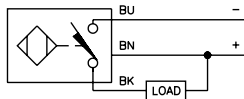
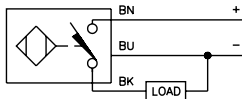
Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-PST-AN6X-V1131 W/KLP-80 4625190	KLP-80 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	--	A	1	A13
BIM-PST-AP6X-V1131 W/KLP-80 4625090	KLP-80 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	--	A	2	A13
BIM-PST-AN6X W/KLP-80 4624191	KLP-80 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	2M/PVC	B	3	A13
BIM-PST-AP6X W/KLP-80 4624090	KLP-80 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	2M/PVC	B	4	A13

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-KST

Round Cylinder Style

Housing Style		Dimension Drawings	
		A  KST - Picofast Quick Disconnect	B  KST - Potted-In Cable
		Wiring Diagrams/Mating Cordsets	
1  Mating Cordset: PKG 3Z-*	2  Mating Cordset: PKG 3Z-*	3 	4 
A13			
3-wire DC - Magnetic (AN, RN, AP, RP)			
Ripple: ≤10%		Power-On Effect: Per IEC 947-5-2	
Differential Travel (Hysteresis): ≤1 mm		Reverse Polarity Protection: Incorporated	
Voltage Drop Across Conducting Sensor: ≤1.8 V		Wire-Break Protection: Incorporated	
Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current		Transient Protection: Per EN 60947-5-2	
≥170 mA on 150 mA Load Current		Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR)	
≥120 mA on 100 mA Load Current		Shock: 30 g, 11 ms	
Off-State (Leakage) Current: ≤0.1 mA		Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes	
No-Load Current: ≤15 mA;		Repeatability: ≥± 0.1 mm, ≥± 0.3 mm (UNR)	
Pass Speed: ≤10 ms; ≤3 ms (UNR)			
Additional Specifications			
Magnetic Actuation Strength (Gauss): 20-350			

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-KST
Round Cylinder Style

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-KST-AN6X-V1131 46743	KST SB170 and KST SB335 Straps Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	A	1	A13
BIM-KST-AP6X-V1131 46742	KST SB170 and KST SB335 Straps Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	A	2	A13
BIM-KST-AN6X 46741	KST SB170 and KST SB335 Straps Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	2M/ PVC	B	3	A13
BIM-KST-AP6X 46740	KST SB170 and KST SB335 Straps Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	2M/ PVC	B	4	A13

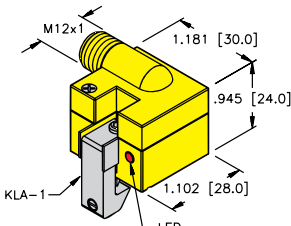
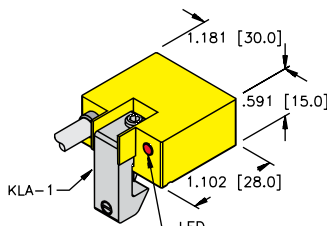
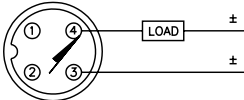
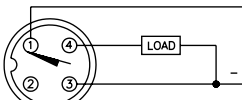
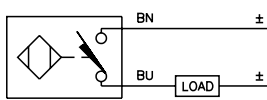
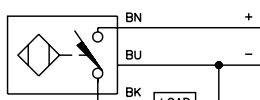
We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-AKT

Tie-rod Cylinder Style



Housing Style		Dimension Drawings	
	A	 AKT - Eurofast Connector	B
			 AKT - Potted-In Cable
Wiring Diagrams/Mating Cordsets			
1	2	3	4
 Mating Cordset: RK 4.2T-*	 Mating Cordset: RK 4T-*		
A13		3-wire DC - Magnetic (AN, RN, AP, RP)	
Ripple: ≤10%		Power-On Effect: Per IEC 947-5-2	
Differential Travel (Hysteresis): ≤1 mm		Reverse Polarity Protection: Incorporated	
Voltage Drop Across Conducting Sensor: ≤1.8 V		Wire-Break Protection: Incorporated	
Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current		Transient Protection: Per EN 60947-5-2	
		Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR)	
		Shock: 30 g, 11 ms	
Off-State (Leakage) Current: ≤0.1 mA		Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes	
No-Load Current: ≤15 mA;		Repeatability: ≥± 0.1 mm, ≥± 0.3 mm (UNR)	
Pass Speed: ≤10 ms; ≤3 ms (UNR)			
A14		2-wire DC - Magnetic (AD, AG)	
Ripple: ≤10%		Off-State (Leakage) Current: ≤0.8 mA	
Differential Travel (Hysteresis): ≤1 mm		Power-On Effect: Per IEC 947-5-2	
Voltage Drop Across Conducting Sensor: Non-Polarized (AD) ≤4 V		Transient Protection: Per EN 60947-5-2	
		Shock: 30 g, 11 ms	
Trigger Current for Short Circuit Protection: ≥120 mA		Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes	
Pass Speed: ≤3 ms, ≤10 ms (UNT)		Repeatability: ≥± 0.1 mm	
Additional Specifications			
Magnetic Actuation Strength (Gauss): 20-350			

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors | BIM-AKT
Tie-rod Cylinder Style

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-AKT-AD4X-H1141 W/KLA-1 4480290	KLA-1 Included	2-wire DC	10-65 VDC	300	≤ 100	-25 to +70	IP67	PA 12	--	A	1	A14
BIM-AKT-AP6X-H1141 W/KLA-1 4675290	KLA-1 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	--	A	2	A13
BIM-AKT-AD4X W/KLA-1 4480090	KLA-1 Included	2-wire DC	10-65 VDC	300	≤ 100	-25 to +70	IP67	PA 12	2M/PVC	B	3	A14
BIM-AKT-AP6X W/KLA-1 4675090	KLA-1 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	2M/PVC	B	4	A13

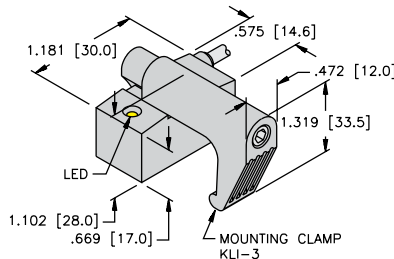
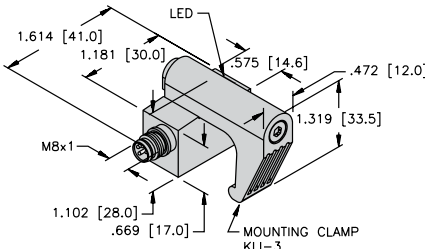
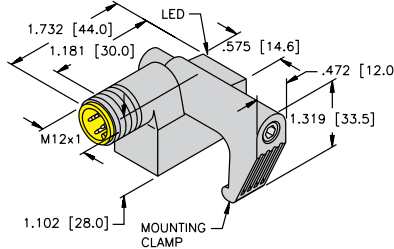
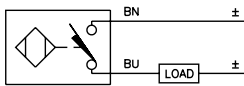
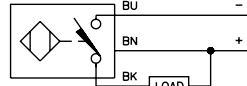
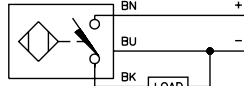
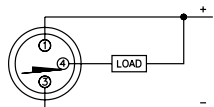
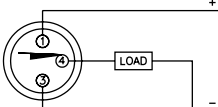
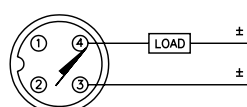
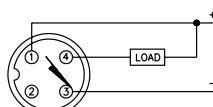
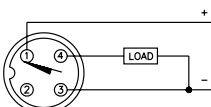
We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-IKE/IKT

Tie-rod Cylinder Style



Housing Style		Dimension Drawings					
		A	 IKE/IKT - Potted-In Cable				
B	 IKE/IKT - Picofast Quick Disconnect	C	 IKE/IKT - Eurofast Quick Disconnect				
Wiring Diagrams/Mating Cordsets							
1		2		3		4	 Mating Cordset: PKG 3Z-*
5	 Mating Cordset: PKG 3Z-*	6	 Mating Cordset: RK 4.2T-*	7	 Mating Cordset: RK 4T-*	8	 Mating Cordset: RK 4T-*
A13 3-wire DC - Magnetic (AN, RN, AP, RP)							
Ripple: ≤10%		Power-On Effect: Per IEC 947-5-2					
Differential Travel (Hysteresis): ≤1 mm		Reverse Polarity Protection: Incorporated					
Voltage Drop Across Conducting Sensor: ≤1.8 V		Wire-Break Protection: Incorporated					
Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current		Transient Protection: Per EN 60947-5-2					
Off-State (Leakage) Current: ≤0.1 mA		Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR)					
No-Load Current: ≤15 mA;		Shock: 30 g, 11 ms					
Pass Speed: ≤10 ms; ≤3 ms (UNR)		Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes					
		Repeatability: ≥± 0.1 mm, ≥± 0.3 mm (UNR)					
A14 2-wire DC - Magnetic (AD, AG)							
Ripple: ≤10%		Off-State (Leakage) Current: ≤0.8 mA					
Differential Travel (Hysteresis): ≤1 mm		Power-On Effect: Per IEC 947-5-2					
Voltage Drop Across Conducting Sensor: Non-Polarized (AD) ≤4 V Polarized (AG) ≤3.5 V		Transient Protection: Per EN 60947-5-2					
Trigger Current for Short Circuit Protection: ≥120 mA		Shock: 30 g, 11 ms					
Pass Speed: ≤3 ms, ≤10 ms (UNT)		Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes					
		Repeatability: ≥± 0.1 mm					
Additional Specifications							
Magnetic Actuation Strength (Gauss): 20-350							

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-IKE/IKT

Tie-rod Cylinder Style

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-IKE-AD4X W/KLI-3 4421490	KLI-3 Included	2-wire DC	10-65 VDC	300	≤ 100	-25 to +70	IP67	Zinc	2M/PVC	A	1	A14
BIM-IKT-AD4X W/KLI-3 4482090	KLI-3 Included	2-wire DC	10-65 VDC	300	≤ 100	-25 to +70	IP67	Zinc	2M/PVC	A	1	A14
BIM-IKE-AN6X W/KLI-3 4621590	KLI-3 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	2M/PVC	A	2	A13
BIM-IKT-AN6X W/KLI-3 4620190	KLI-3 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	2M/PVC	A	2	A13
BIM-IKE-AP6X W/KLI-3 4621490	KLI-3 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	2M/PVC	A	3	A13
BIM-IKT-AP6X W/KLI-3 4620090	KLI-3 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	2M/PVC	A	3	A13
BIM-IKE-AN6X-V1131 W/KLI-3 4621795	KLI-3 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	B	4	A13
BIM-IKT-AN6X-V1131 W/KLI-3 4622195	KLI-3 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	B	4	A13
BIM-IKE-AP6X-V1131 W/KLI-3 4621695	KLI-3 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	B	5	A13
BIM-IKT-AP6X-V1131 W/KLI-3 4622095	KLI-3 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	B	5	A13
BIM-IKE-AD4X-H1141 W/KLI-3 4421690	KLI-3 Included	2-wire DC	10-65 VDC	300	≤ 100	-25 to +70	IP67	Zinc	--	C	6	A14
BIM-IKT-AD4X-H1141 W/KLI-3 4482290	KLI-3 Included	2-wire DC	10-65 VDC	300	≤ 100	-25 to +70	IP67	Zinc	--	C	6	A14
BIM-IKE-AN6X-H1141 W/KLI-3 4621790	KLI-3 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	C	7	A13
BIM-IKT-AN6X-H1141 W/KLI-3 4621190	KLI-3 Included	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	C	7	A13
BIM-IKE-AP6X-H1141 W/KLI-3 4621690	KLI-3 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	C	8	A13
BIM-IKT-AP6X-H1141 W/KLI-3 4621090	KLI-3 Included	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	Zinc	--	C	8	A13

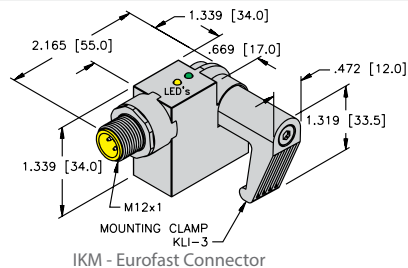
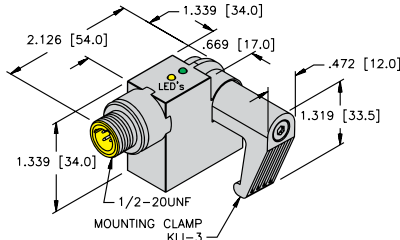
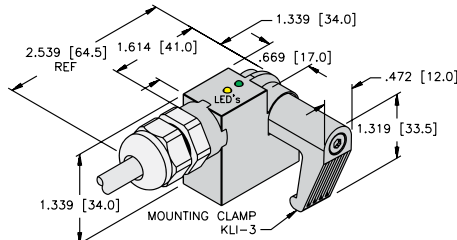
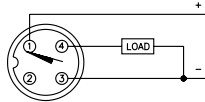
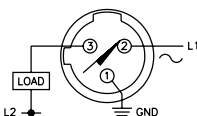
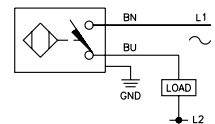
We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-IKM

Tie-rod Cylinder Style



Housing Style		Dimension Drawings	
		A	 IKM - Eurofast Connector
 IKM - Microfast® Connector		B	
		C	 IKM - Potted-In Cable
Wiring Diagrams/Mating Cordsets			
1	 Mating Cordset: RK 4T-*	2	 Mating Cordset: KB 3T-*
3			
A133-wire DC - Magnetic (AN, RN, AP, RP)			
Ripple: ≤10% Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA; Pass Speed: ≤10 ms; ≤3 ms (UNR)		Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤0.1 mm, ≤0.3 mm (UNR) Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ± 0.1 mm, ± 0.3 mm (UNR)	
A152-wire AC w/o Short-Circuit Protection - Magnetic (AZ)			
Line Frequency: ≥50... ≤60 Hz Differential Travel (Hysteresis): ≤1 mm Voltage Drop Across Conducting Sensor: ≤6.0 V Continuous Load Current: AC: ≤500 mA Off-State (Leakage) Current: ≤1.7 mA Minimum Load Current: ≥5.0 mA		Pass Speed: ≤1 ms Power-On Effect: Per IEC 947-5-2 Transient Protection: Per EN 60947-5-2 Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes Repeatability: ± 0.1 mm	
Additional Specifications			
Magnetic Actuation Strength (Gauss): 20-350			

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | BIM-IKM
Tie-rod Cylinder Style

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-IKM-AP6X2-H1141/S34W/KLI-3 4627290	KLI-3 Included, WFI	3-wire DC, PNP	10-30 VDC	20	≤ 200	-25 to +70	IP67	Zinc	--	A	1	A13
BIM-IKM-AZ3X2-B3131 W/KLI-3 1347190	KLI-3 Included	2-wire AC	20-250 VAC	20	≤ 500	-25 to +70	IP67	Zinc	--	B	2	A15
BIM-IKM-AZ3X2 W/KLI-3 1347290	KLI-3 Included	2-wire AC	20-250 VAC	20	≤ 500	-25 to +70	IP67	Zinc	2M/PVC	C	3	A15

We reserve the right to make technical alterations without prior notice.



We reserve the right to make technical alterations without prior notice

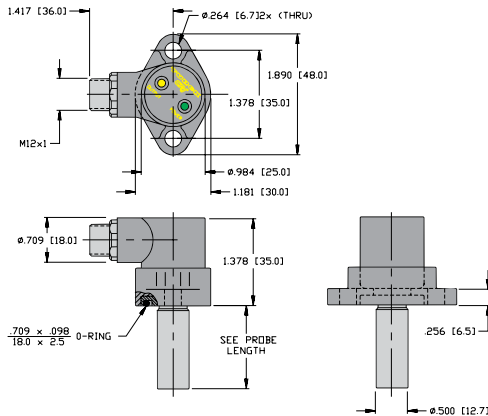
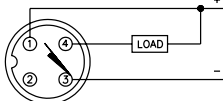
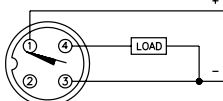
Cylinder Position Sensors | BIM-NST
T-groove or Slot Style

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-NST-AP6X-V1131 4685800	w/o Bracket	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	--	A	1	A13
BIM-NST-AN6X-H1141 4685500	w/o Bracket	3-wire DC, NPN	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	--	B	2	A13
BIM-NST-AP6X-H1141/S34 4685401	w/o Bracket, WFI	3-wire DC, PNP	10-30 VDC	20	≤ 200	-25 to +70	IP67	PA 12	--	B	3	A13
BIM-NST-AP6X-H1141 4685400	w/o Bracket	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	--	B	3	A13
BIM-NST-AP6X 4685600	w/o Bracket	3-wire DC, PNP	10-30 VDC	1000	≤ 200	-25 to +70	IP67	PA 12	2M/PVC	C	4	A13

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | CRS
In-Cylinder Position Sensors

Housing Style		Dimension Drawings	
		A  CRS - Eurofast Connector	
Wiring Diagrams/Mating Cordsets			
1	 Mating Cordset: RK 4T-*	2	 Mating Cordset: RK 4T-*
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)			
Ripple: ≤10% Differential Travel (Hysteresis): 3-15% (5% typical) Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox 3)		Time Delay Before Availability: ≤8 ms Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤±10% Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≤2% of Rated Operating Distance	

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | CRS

In-Cylinder Position Sensors

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Dimension Drawings	Wiring Diagrams	Spec List
Bi2-CRS260-AN4X2-H1141/S34 4580004	WFI; 1,500 PSI Operating	3-wire DC, NPN	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	1	A4
Bi2-CRS317-AN4X2-H1141/S34 4580093	WFI; 1,500 PSI Operating	3-wire DC, NPN	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	1	A4
Bi2-CRS343-AN4X2-H1141/S34 4571890	WFI; 1,500 PSI Operating	3-wire DC, NPN	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	1	A4
Bi2-CRS524-AN4X2-H1141/S34 4568096	WFI; 1,500 PSI Operating	3-wire DC, NPN	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	1	A4
Bi2-CRS232-AP4X2-H1141/S34 4570492	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS260-AP4X2-H1141/S34 4570890	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS287-AP4X2-H1141/S34 4571290	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS317-AP4X2-H1141/S34 4571690	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS343-AP4X2-H1141/S34 4571800	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS476-AP4X2-H1141/S34 4580091	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS524-AP4X2-H1141/S34 4580090	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS603-AP4X2-H1141/S34 4580096	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS705-AP4X2-H1141/S34 4580089	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS730-AP4X2-H1141/S34 4580003	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS959-AP4X2-H1141/S34 4571891	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi2-CRS1159-AP4X2-H1141/S34 4570899	WFI; 1,500 PSI Operating	3-wire DC, PNP	10-65 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi1.5-CRS524C-AP6X2-H1141 4279091	High Pressure; 3,000 PSI Operating	3-wire DC, PNP	10-30 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4
Bi1.5-CRS260C-AP6X2-H1141 4279092	High Pressure; 3,000 PSI Operating	3-wire DC, PNP	10-30 VDC	30	≤ 200	-25 to +70	IP67	Zinc	A	2	A4

Bi *-CRS-XXXX-.. = Length of probe in mm. Example: CRS260 = 26.0 mm

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors



Cylinder Position Sensors | CRS
In-Cylinder Position Sensors

Housing Style		Dimension Drawings	
		A	
		CRS - Microfast Connector	
B			
CRS - Minifast® Connector			
Wiring Diagrams/Mating Cordsets			
1		2	
Mating Cordset: KB 3T-*		Mating Cordset: RKM 311-*M	
A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)			
Line Frequency:		≥50... ≤60 Hz	
Differential Travel (Hysteresis):		3-15% (5% typical)	
Voltage Drop Across Conducting Sensor:		≤6.0 V	
Trigger Current for Short Circuit Protection:		AC: ≥440 mA; DC: ≥330 mA	
		AC: ≥120 mA; DC: ≥120 mA	
Continuous Load Current:		AC: ≤400 mA; DC: ≤300 mA	
		AC: ≤100 mA; DC: ≤100 mA	
Off-State (Leakage) Current:		≤1.7 mA (AC)	
		≤1.5 mA (DC)	
		Minimum Load Current: ≥3.0 mA	
		Inrush Current: ≤3 A (≤20 ms, max 5 Hz)	
		Power-On Effect: Per IEC 947-5-2	
		Transient Protection: Per EN 60947-5-2	
		Shock: 30 g, 11 ms	
		Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes	
		Repeatability: ≤2% of Rated Operating Distance	

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors | CRS

In-Cylinder Position Sensors

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Dimension Drawings	Wiring Diagrams	Spec List
Bi2-CRS232-ADZ30X2-B3131/S34 4275093	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS260-ADZ30X2-B3131/S34 4275493	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS317-ADZ30X2-B3131/S34 4276293	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS476-ADZ30X2-B3131/S34 4276693	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS524-ADZ30X2-B3131/S34 4277093	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS730-ADZ30X2-B3131/S34 4278293	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS959-ADZ30X2-B3131/S34 4279093	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS1159-ADZ30X2-B3131/S34 4279493	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	A	1	A5
Bi2-CRS232-ADZ30X2-B1131/S34 4270093	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS260-ADZ30X2-B1131/S34 4270493	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS317-ADZ30X2-B1131/S34 4271293	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS343-ADZ30X2-B1131/S34 4271493	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS476-ADZ30X2-B1131/S34 4271693	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS524-ADZ30X2-B1131/S34 4272093	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS603-ADZ30X2-B1131/S34 4272493	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS705-ADZ30X2-B1131/S34 4272893	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS730-ADZ30X2-B1131/S34 4273293	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS959-ADZ30X2-B1131/S34 4274093	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi2-CRS1159-ADZ30X2-B1131/S34 4274493	WFI; 1,500 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi1.5-CRS959C-ADZ30X2-B1131 4279094	High Pressure; 3,000 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi1.5-CRS730C-ADZ30X2-B1131 4279095	High Pressure; 3,000 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi1.5-CRS260C-ADZ30X2-B1131 4279096	High Pressure; 3,000 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi1.5-CRS232C-ADZ30X2-B1131 4279097	High Pressure; 3,000 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi1.5-CRS524C-ADZ30X2-B1131 4279098	High Pressure; 3,000 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5
Bi1.5-CRS317C-ADZ30X2-B1131 4279099	High Pressure; 3,000 PSI Operating	2-wire AC/DC	20-250 VAC/10-300 VDC	20	≤ 400/300	-25 to +70	IP67	Zinc	B	2	A5

Bi *-CRS-XXXX-.. = Length of probe in mm. Example: CRS260 = 26.0 mm

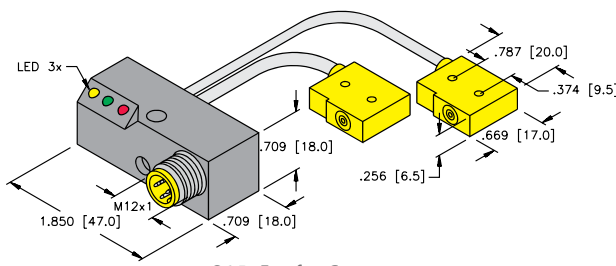
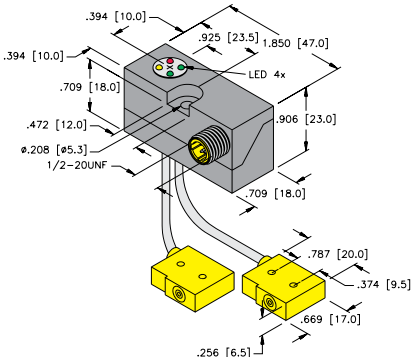
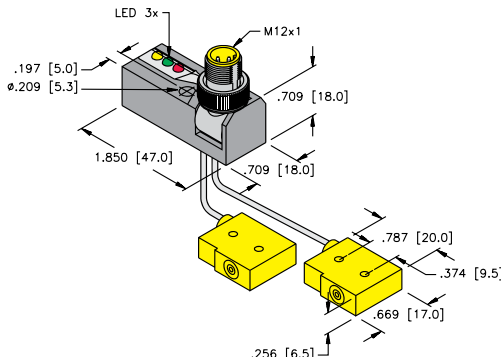
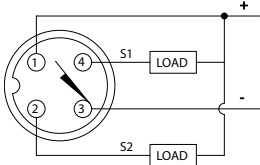
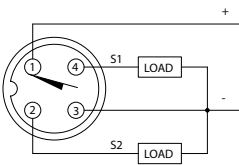
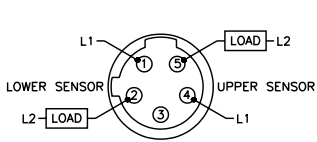
We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors



Cylinder Position Sensors | Q6.5

Power Clamp Position Sensors

Housing Style		Dimension Drawings	
		A  Q6.5 - Eurofast Connector	
B  Q6.5 - Microfast Connector		C  Q6.5 - Eurofast Connector	
Wiring Diagrams/Mating Cordsets			
1  Mating Cordset: RK 4.4T-*	2  Mating Cordset: RK 4.4T-*	3  Mating Cordset: KB 5T-*	
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)			
Ripple: ≤10% Differential Travel (Hysteresis): 3-15% (5% typical) Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox 3)		Time Delay Before Availability: ≤8 ms Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤±10% Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≤2% of Rated Operating Distance	
A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)			
Line Frequency: ≥50... ≤60 Hz Differential Travel (Hysteresis): 3-15% (5% typical) Voltage Drop Across Conducting Sensor: ≤6.0 V Trigger Current for Short Circuit Protection: AC: ≥440 mA; DC: ≥330 mA AC: ≥120 mA; DC: ≥120 mA Continuous Load Current: AC: ≤400 mA; DC: ≤300 mA AC: ≤100 mA; DC: ≤100 mA Off-State (Leakage) Current: ≤1.7 mA (AC) ≤1.5 mA (DC)		Minimum Load Current: ≥3.0 mA Inrush Current: ≤3 A (≤20 ms, max 5 Hz) Power-On Effect: Per IEC 947-5-2 Transient Protection: Per EN 60947-5-2 Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes Repeatability: ≤2% of Rated Operating Distance	

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Cylinder Position Sensors | Q6.5

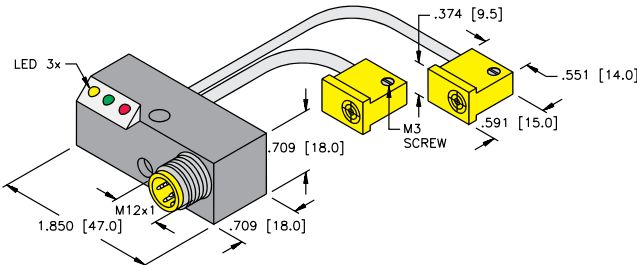
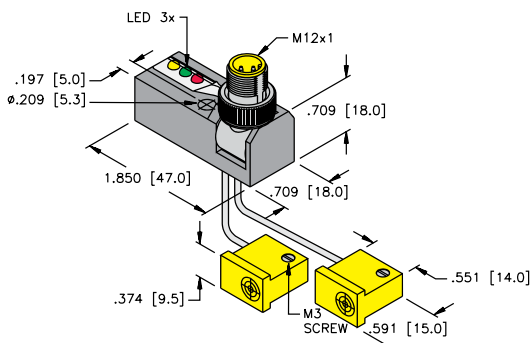
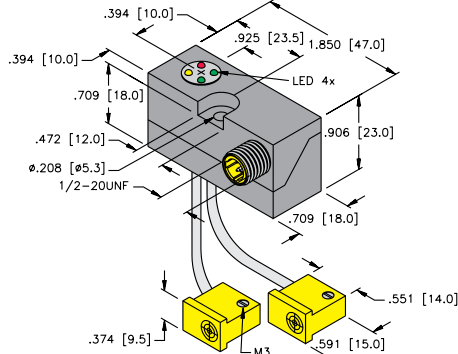
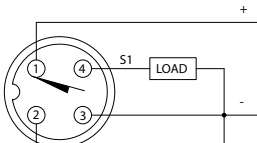
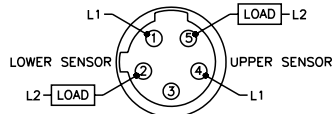
Power Clamp Position Sensors

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni2-Q6.5-AN6-0.1-FS4.4X3/S304 1650079		4-wire DC, NPN	10-30 VDC	30	≤ 500	-25 to +70	IP67	PBT	0.1M/TPU	A	1	A4
Ni2-Q6.5-AN6-0.16-FS4.4X3/S304 1650085		4-wire DC, NPN	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.16M/TPU	A	1	A4
Ni2-Q6.5-AP6-0.1-FS4.4X3/S304 1650048		4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.1M/TPU	A	2	A4
Ni2-Q6.5-AP6-0.16-FS4.4X3/S304 1650086		4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.16M/TPU	A	2	A4
Ni2-Q6.5-AP6-0.2-FS4.4X3/S304 1650047		4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.2M/TPU	A	2	A4
Ni2-Q6.5-0.1-BDS-2AP6X3-H1141/S34 1650098	WFI	4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.1M/TPU	C	2	A4
Ni2-Q6.5-0.16-BDS-2AP6X3-H1141/S34 1650110	WFI	4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.16M/TPU	C	2	A4
Ni2-Q6.5-ADZ32-0.1-FS8.5.4X4/S304 4200204		4-wire, VAC/DC	20-250 VAC/10-300 VDC	30	≤ 100	-25 to +70	IP67	PBT	0.1M/TPU	B	3	A5
Ni2-Q6.5-ADZ32-0.16-FS 5.4X4/S304 4200203		4-wire, VAC/DC	20-250 VAC/10-300 VDC	30	≤ 100	-25 to +70	IP67	PBT	0.16M/TPU	B	3	A5

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors | Q9.5

Power Clamp Position Sensors

Housing Style		Dimension Drawings	
		A  Q9.5 - Eurofast Connector	
B  Q9.5 - Eurofast Connector		C  Q9.5 - Microfast Connector	
Wiring Diagrams/Mating Cordsets			
1  Mating Cordset: RK 4.4T-*		2  Mating Cordset: KB 5T-*	
A4 3 and 4-wire DC - (AN, RN, AP, RP, VN, VP)			
Ripple: ≤10% Differential Travel (Hysteresis): 3-15% (5% typical) Voltage Drop Across Conducting Sensor: ≤1.8 V Trigger Current for Short Circuit Protection: ≥220 mA on 200 mA Load Current ≥170 mA on 150 mA Load Current ≥120 mA on 100 mA Load Current Off-State (Leakage) Current: ≤0.1 mA No-Load Current: ≤15 mA (Ferrite, Uprox) ≤20 mA (Uprox+, Uprox 3)		Time Delay Before Availability: ≤8 ms Power-On Effect: Per IEC 947-5-2 Reverse Polarity Protection: Incorporated Wire-Break Protection: Incorporated Transient Protection: Per EN 60947-5-2 Temperature Drift: ≤±10% Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≤2% of Rated Operating Distance	
A5 2-wire AC/DC w/ Short-Circuit Protection - (ADZ, RDZ, FDZ, VDZ)			
Line Frequency: ≥50... ≤60 Hz Differential Travel (Hysteresis): 3-15% (5% typical) Voltage Drop Across Conducting Sensor: ≤6.0 V Trigger Current for Short Circuit Protection: AC: ≥440 mA; DC: ≥330 mA AC: ≥120 mA; DC: ≥120 mA Continuous Load Current: AC: ≤400 mA; DC: ≤300 mA AC: ≤100 mA; DC: ≤100 mA Off-State (Leakage) Current: ≤1.7 mA (AC) ≤1.5 mA (DC)		Minimum Load Current: ≥3.0 mA Inrush Current: ≤3 A (≤20 ms, max 5 Hz) Power-On Effect: Per IEC 947-5-2 Transient Protection: Per EN 60947-5-2 Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes Repeatability: ≤2% of Rated Operating Distance	

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | Q9.5

Power Clamp Position Sensors

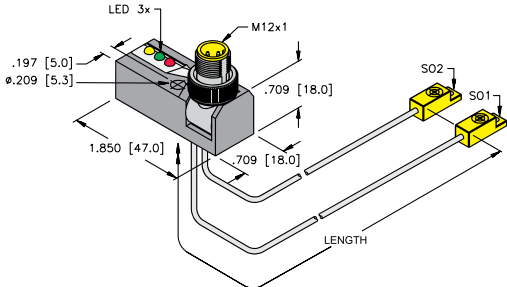
Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni2-Q9.5-AP6-0.1-FS4.4X3/S304 1650060		4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.1M/TPU	A	1	A4
Ni2-Q9.5-0.1-BDS-2AP6X3-H1141/S34 1650099	WFI	4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.1M/TPU	B	1	A4
Ni2-Q9.5-ADZ32-0.1-FSB5.4X4/S304 4200210		4-wire, VAC/DC	20-250 VAC/10-300 VDC	20	≤ 100	-25 to +70	IP67	PBT	0.1M/TPU	C	2	A5

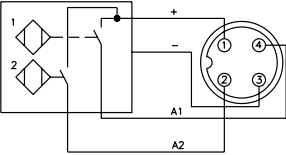
We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | ISI

Power Clamp Position Sensors

Housing Style	Dimension Drawings
	A  ISI - Eurofast Connector

Wiring Diagrams/Mating Cordsets	
1	 Mating Cordset: RK 4.4T-*

A43 and 4-wire DC - (AN, RN, AP, RP, VN, VP)			
Ripple:	≤10%	Time Delay Before Availability:	≤8 ms
Differential Travel (Hysteresis):	3-15% (5% typical)	Power-On Effect:	Per IEC 947-5-2
Voltage Drop Across Conducting Sensor:	≤1.8 V	Reverse Polarity Protection:	Incorporated
Trigger Current for Short Circuit Protection:	≥220 mA on 200 mA Load Current	Wire-Break Protection:	Incorporated
	≥170 mA on 150 mA Load Current	Transient Protection:	Per EN 60947-5-2
	≥120 mA on 100 mA Load Current	Temperature Drift:	≤±10%
Off-State (Leakage) Current:	≤0.1 mA	Shock:	30 g, 11 ms
No-Load Current:	≤15 mA (Ferrite, Uprox)	Vibration:	55 Hz, 1 mm Amplitude in all 3 Planes
	≤20 mA (Uprox+, Uprox 3)	Repeatability:	≤2% of Rated Operating Distance

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | ISI
Power Clamp Position Sensors

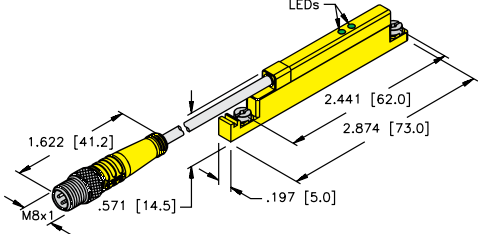
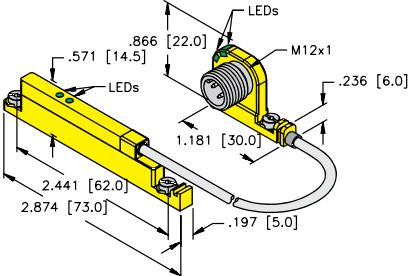
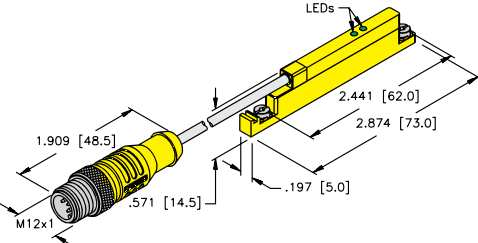
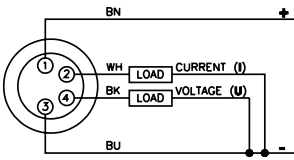
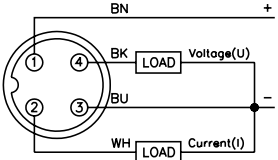
Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
Ni2-ISI-0.1-BDS-2AP6X3-H1141/S34 1650133	WFI	4-wire DC, PNP	10-30 VDC	30	≤ 150	-25 to +70	IP67	PBT	0.1M/TPU	A	1	A4

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | WIM 25

Power Clamp Position Sensors

Housing Style	Dimension Drawings
	A  23 mm - Embeddable, T-groove Pneumatic Cylinders Picofast Quick Disconnect
B  23 mm - Embeddable, T-groove Pneumatic Cylinders Eurofast Quick Disconnect	C  23 mm - Embeddable, T-groove Pneumatic Cylinders Eurofast Quick Disconnect
Wiring Diagrams/Mating Cordsets	
1  Mating Cordset: RK 4.4T-*, PKG 4M-*	2  Mating Cordset: RK 4.4T-*
A7 3 and 4-wire DC Analog - (LIU, SIU)	
Ripple: $\leq 10\%$ No-Load Current: $\leq 8.0 \text{ mA}$ Load Resistance Voltage Output: $0-10 \text{ V}/R_L \geq 4.7 \text{ k}\Omega$ Load Resistance Current Output: $0-20 \text{ mA}/R_L \leq 0.4 \text{ k}\Omega$ Temperature Drift: $\pm 0.06\% / ^\circ\text{C}$ LIU5: 4-20 mA, 0-10 V LIU2: 4-20 mA, 2-10 V	Transient Protection: Per EN 60947-5-2 Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes Repeatability: $\leq 1\%$ of measuring range A-B (0.5% after 30 min. warm up) Short-Circuit Protection: Yes Reverse Polarity Protection: Incorporated
A8 3 and 4-wire DC Analog - (LU)	
Ripple: $\leq 10\%$ No-Load Current: $\leq 8.0 \text{ mA}$ Load Resistance Voltage Output: $0-10 \text{ V}/R_L \geq 4.7 \text{ k}\Omega$ Temperature Drift: $\pm 0.06\% / ^\circ\text{C}$ Reverse Polarity Protection: Incorporated Transient Protection: Per EN 60947-5-2	Short-Circuit Protection: Yes Wire-Break Protection: Yes Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes Repeatability: $\leq 1\%$ of measuring range A-B (0.5% after 30 min. warm up)

We reserve the right to make technical alterations without prior notice.



Cylinder Position Sensors | WIM
Power Clamp Position Sensors

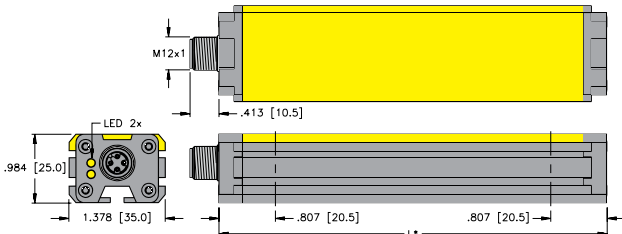
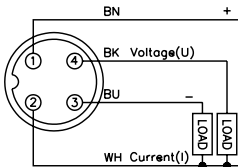
Part Number/ ID Number	Linear Operating Distance (mm)	Resolution	Output	Voltage	Output Voltage/ Current	Operating Temp. (°C)	Protection	Housing	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
WIM45-UNTLLIU5X2-0.3-PSG4M 1536620	45	10 bit	4-wire DC, Current and Voltage	15-30 VDC	0-10 V/4-20 mA	-25 to +70	IP67	PA 12	0.3M/TPU	A	1	A7
WIM45-UNTLL-0.3-BIM-UNT-LUAP6X4-H1141 1536623	45	10 bit	4-wire DC, Current and Voltage	15-30 VDC	0-10 V/4-20 mA	-25 to +70	IP67	PA 12	0.3M/TPU	B	2	A8
WIM45-UNTLLIU5X2-0.3-RS4 1536621	45	10 bit	4-wire DC, Current and Voltage	15-30 VDC	0-10 V/4-20 mA	-25 to +70	IP67	PA 12	0.3M/TPU	C	1	A7

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Cylinder Position Sensors | WIM

Magnetic Linear Position Sensors

Housing Style		Dimension Drawings	
		A  25 mm - Embeddable, Eurofast Quick Disconnect	
Wiring Diagrams/ Mating Cordset			
1		 Mating Cordset: RK 4.4T-*	
A7		3 and 4-wire DC Analog - (LIU, SIU)	
Ripple: ≤10% No-Load Current: ≤8.0 mA Load Resistance Voltage Output: 0-10 V/R_L ≥4.7 kΩ Load Resistance Current Output: 0-20 mA/R_L ≤0.4 kΩ Temperature Drift: ±0.06% / °C LIU5: 4-20 mA, 0-10 V LIU2: 4-20 mA, 2-10 V		Transient Protection: Per EN 60947-5-2 Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude, in all 3 Planes Repeatability: ≤1% of measuring range A-B (0.5% after 30 min. warm up) Short-Circuit Protection: Yes Reverse Polarity Protection: Incorporated	
Additional Specifications			
Magnetic Actuation Strength (Gauss): 50-100			

For mounting accessories see page G9

We reserve the right to make technical alterations without prior notice.

Cylinder Position Sensors | WIM
Magnetic Linear Position Sensors

Part Number/ ID Number	Linear Operating Distance (mm)	Resolution	Output	Voltage	Output Voltage/ Current	Operating Temp. (°C)	Protection	Housing	Face	Dimension Drawings	Wiring Diagrams	Spec List
WIM100-Q25L141-LIU5X2-H1141 1536630	100	10 bit	4-wire DC, Current and Voltage	15-30 VDC	0-10 V/4-20 mA	-25 to +70	IP67	AL	PC-GF20	A	1	A7
WIM125-Q25L166-LIU5X2-H1141 1536631	125	10 bit	4-wire DC, Current and Voltage	15-30 VDC	0-10 V/4-20 mA	-25 to +70	IP67	AL	PC-GF20	A	1	A7
WIM160-Q25L201-LIU5X2-H1141 1536632	160	10 bit	4-wire DC, Current and Voltage	15-30 VDC	0-10 V/4-20 mA	-25 to +70	IP67	AL	PC-GF20	A	1	A7
WIM200-Q25L241-LIU5X2-H1141 1536633	200	10 bit	4-wire DC, Current and Voltage	15-30 VDC	0-10 V/4-20 mA	-25 to +70	IP67	AL	PC-GF20	A	1	A7

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Cylinder Position Sensors | Namur



Dimension Drawings	
A UNT - Potted-In Cable	B INT - Picofast Potted-In Cable
C INT - Eurofast Quick Disconnect	D PST - Potted-In Cable
E AKT - Eurofast Connector	F AKT - Potted-In Cable
G NST - Potted-In Cable	H IKE/IKT - Eurofast Quick Disconnect
I IKE/IKT - Potted-In Cable	
Wiring Diagrams/Mating Cordsets	
1	2 Mating Cordset: RK 4.21T-*
A16 2-wire DC NAMUR - Magnetic (Y0 and Y1)	
Differential Travel (Hysteresis): ≤1 mm Nominal Voltage: 8.2 VDC (EN60947-5-6) Load Resistance: 1000 Ω Non-activated Current Consumption: ≤1.2 mA Activated Current Consumption: ≥2.1 mA Recommended Switching Point for Remote Amplifier: >1.2 to <2.1 mA, typ. 1.55 mA ON/1.75 mA OFF	Power-On Effect: Realized in Amplifier Reverse Polarity Protection: Incorporated Wire-Break Protection: Realized in Amplifier Transient Protection: Realized in Amplifier Shock: 30 g, 11 ms Vibration: 55 Hz, 1 mm Amplitude in all 3 Planes Repeatability: ≥± 0.1 mm Pass Speed: ≤10 ms
Additional Specifications	
Magnetic Actuation Strength (Gauss): 20-350	

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Cylinder Position Sensors | Namur

Intrinsically Safe

Part Number/ ID Number	Features	Output	Voltage	Switching Freq. (Hz)	Operating Current (mA) VAC/VDC	Operating Temp. (°C)	Protection	Housing	Power LED	Output LED	Cable Length/Jacket	Dimension Drawings	Wiring Diagrams	Spec List
BIM-UNT-AY1X/S1139 4685763	Wider Range	2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	PA 12	N/A	YE	2M/ PVC	A	1	A16
BIM-INT-Y1X 1056800		2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	PA 12	N/A	YE	2M/ PVC	B	1	A16
BIM-INT-Y1X-0.2-RS4.21T 1056892		2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	PA 12	N/A	YE	0.2M/ PVC	C	2	A16
BIM-PST-Y1X W/KLP-80 1057090	KLP-80 Included	2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	PA 12	N/A	YE	2M/ PVC	D	1	A16
BIM-AKT-Y1X-H1141 W/KLA-1 1055290	KLA-1 Included	2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	PA 12	N/A	YE	--	E	2	A16
BIM-AKT-Y1X W/KLA-1 1055090	KLA-1 Included	2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	PA 12	N/A	YE	2M/ PVC	F	1	A16
BIM-IKE-Y1X W/KLI-3 1056490	KLI-3 Included	2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	Zinc	N/A	YE	2M/ PVC	I	1	A16
BIM-IKE-Y1X-H1141 W/KLI-3 1056690	KLI-3 Included	2-wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	Zinc	N/A	YE	--	H	2	A16
BIM-NST-Y1X 1058400	w/o Bracket	2-Wire DC NAMUR	8.2 VDC nominal	1000	Remote	-25 to +70	IP67	PA 12	N/A	YE	2M/ PVC	G	1	A16

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