

INDUCTIVE

INDUCTIVE SENSORS

SENSOR

Namur



II 1 GD

EEx ia IIC T6 T 85 °C

p-u-l-s-o-t-r-o-n-i-c



(1) **EC-TYPE EXAMINATION CERTIFICATE**

(2) Equipment or protective system intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **KEMA 03ATEX1495 X**

(4) Equipment or protective system: **Namur Proximity Switches Types 08317 32 and 08318 32**

(5) Manufacturer: **Pulsotronic GmbH & Co. KG**

(6) Address: **Neue Schichtstrasse 14, D-09366 Niederdorf, Germany**

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the directive.

The examination and test results are recorded in confidential report no. 2030767.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1997 EN 50020 : 2002 EN 50281-1-1 : 1998 EN 50284 : 1999

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:



II 1 GD EEx ia IIC T6 T 85 °C

Arnhem, 23 April 2004
KEMA Quality B.V.

C.G. van Es
Certification Manager

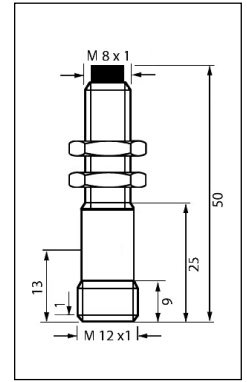
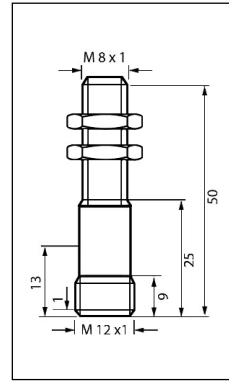
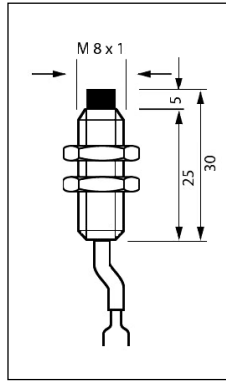
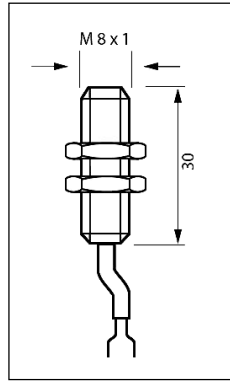
* This Certificate may only be reproduced in its entirety and without any change

K J 10 - M 30 M B 45 - D P S - V1 - X000
T T T T T T T T T T T T
1 2 3 4 5 6 7 8 9 10 11 12

1= Working principle:	J	inductive	JR	inductive ring
			JF	inductive surface
			JG	inductive slot
			JD	full metal
	C	capacitive		
	M	magneto-resistive		
2= Switching distance / range				
3= Design:	M	cylindrical housings with metrical thread		
	G	cylindrical housings without thread		
	Q	square housings		
	D	ring housings		
4= Housing diameter / edge length				
5= Housing material:	M	brass, nickel plated	11= Kind of Connection:	V1 M8 screw / snap in
	E	stainless steel 1.4305		V2 M12 metal
	K	plastic		V2/1 M12 plastic
	A	aluminium		V3 M5 metal
				V4 Amphenol Tuchel
				V6 Brad Harrison
6= installation type:	B	shielded		V7 valve connector type A
	N	non shielded		V8 M8 only snap in
				V9 M12 only snap in
7= Tube length:		for cylindrical devices in mm		V10 valve connector type C
				V11 AC-connector 1/2" UNF
				V12 M18 plastic
8= Operating voltage:	D	DC direct-current voltage		VE Euchner connector
	AZ	AC alternating-current voltage		ZW termination box 90°
	VZ	AC/DC all voltages		RS232 data interface
				PG thread joint PG
				Mxx thread joint metrical
9= Type of the output signal:	P	PNP		more at inquiry
	N	NPN		
	Z	two-wire		
	AN	analog	ANI	current output
			ANU	voltage output
	NA	Namur		
10= Function:	S	N.O.		
	Ö	N.C.		
	A	changeover		
	U	switchable		
	I	impulse output		
	D	data interface		
12= Addition mark:	SF	weld field immune		
	T	high temperature		
	FE	reduction 1 to steel/iron		
	NF	reduction 1 to aluminium		
	X	customized design		
	W	angled sensing face / angled cable exit		
	AM	middle sensing face		

Proximity switch - Connection pictures

wiring diagrams	cable- / clampconnection	connector V1 ... V9
DPS DC PNP N.O.		
DPÖ DC PNP N.C.		
DPA DC PNP changeover		
DPU DC NO/NC switchable		
DNS DC NPN N.O.		
DNÖ DC NPN N.C.		
DNA DC NPN changeover		
DNU DC NO/NC switchable		
NA Namur DIN 19234		
DZS DC 2-wire N.O.		
DZÖ DC 2-wire N.C.		
AZS/VZS AC/DC 2-wire N.O.		
AZÖ/VZÖ AC/DC 2-wire N.C.		
Analog		



Switching Distance
Mounting

1,0 mm
Shielded

2,0 mm
Non - Shielded

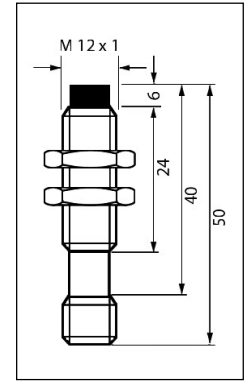
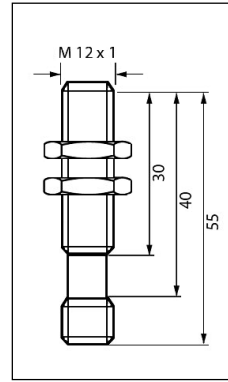
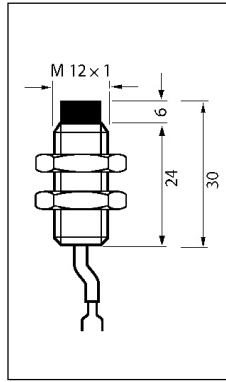
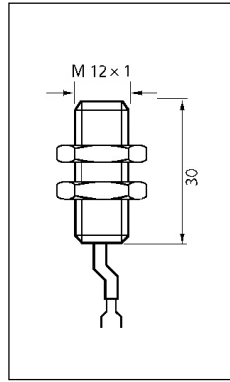
1,0 mm
Shielded

2,0 mm
Non - Shielded

Type	KJ1-M8MB30-NA 9932-0100	KJ2-M8MN30-NA 9932-0200	KJ1-M8MB50-NA-V2 9932-0165	KJ2-M8MN50-NA-V2 9932-0265
ATEX - certificate	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C
Operating Voltage U_b	nom. 8,2 V DC Ri 1K	nom. 8,2 V DC Ri 1K	nom. 8,2 V DC Ri 1K	nom. 8,2 V DC Ri 1K
Ripple Voltage U_b	£ 5 %	£ 5 %	£ 5 %	£ 5 %
Rev. Polarity/ Overload Protection	Yes	Yes	Yes	Yes
Current When Damped	< 1,1 mA	< 1,1 mA	< 1,1 mA	< 1,1 mA
Current When Undamped	> 2,2 mA	> 2,2 mA	> 2,2 mA	> 2,2 mA
Switching Frequency f	2000 Hz	1000 Hz	2000 Hz	1000 Hz
Hysteresis H	Like Controller	Like Controller	Like Controller	Like Controller
Operating Temperature T_a	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C
Temperature Drift	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Repeat Accuracy R	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Protection Class	IP 67	IP 67	IP 67	IP 67
Controller Required	Yes	Yes	Yes	Yes
EMC-Standard	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2
Housing Material	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated
Front Cap	PCP	PCP	PCP	PCP
Termination	Cable 2 x 0,14	Cable 2 x 0,14	M12 - 4pol. Connector	M12 - 4pol. Connector

More special versions by separate inquiries!

Connection and Termination picture at page 3.



Switching Distance
Mounting

2,0 mm
Shielded

4,0 mm
Non - Shielded

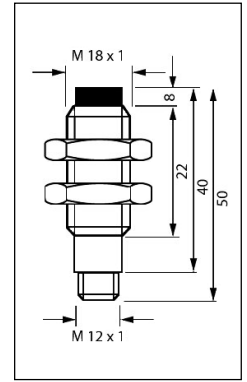
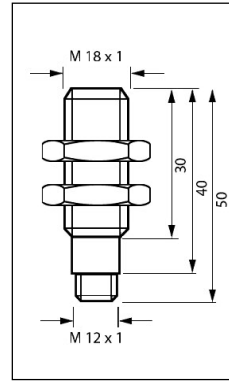
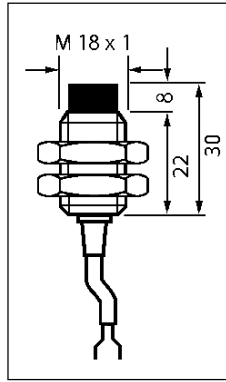
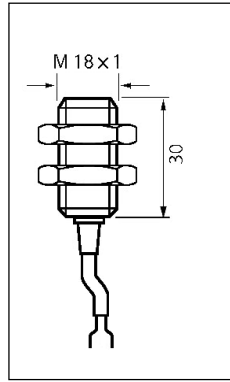
2,0 mm
Shielded

4,0 mm
Non - Shielded

Type	KJ2-M12MB30-NA 9932-0300	KJ4-M12MN30-NA 9932-0400	KJ2-M12MB55-NA-V2 9932-0365	KJ4-M12MN50-NA-V2 9932-0465
ATEX - certificate	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C
Operating Voltage U_b	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K
Ripple Voltage U_b	£ 5 %	£ 5 %	£ 5 %	£ 5 %
Rev. Polarity/ Overload Protection	Yes	Yes	Yes	Yes
Current When Damped	< 1,1 mA	< 1,1 mA	< 1,1 mA	< 1,1 mA
Current When Undamped	> 2,2 mA	> 2,2 mA	> 2,2 mA	> 2,2 mA
Switching Frequency f	2000 Hz	1000 Hz	2000 Hz	1000 Hz
Hysteresis H	Like Controller	Like Controller	Like Controller	Like Controller
Operating Temperature T_a	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C
Temperature Drift	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Repeat Accuracy R	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Protection Class	IP 67	IP 67	IP 67	IP 67
Controller Required	Yes	Yes	Yes	Yes
EMC-Standard	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2
Housing Material	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated
Front Cap	PCP	PCP	PCP	PCP
Termination	Cable 2 x 0,25	Cable PVC 2 x 0,25	M12 - 4pol. Connector	M12 - 4pol. Connector

More special versions by separate inquiries!

Connection and Termination picture at page 3.

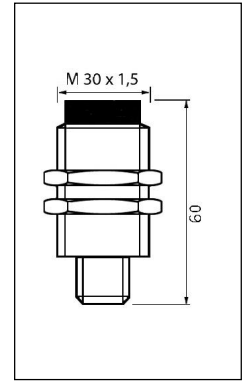
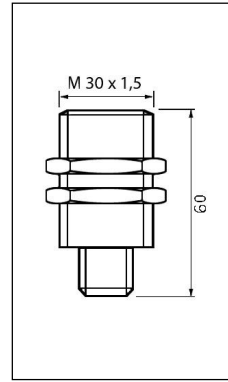
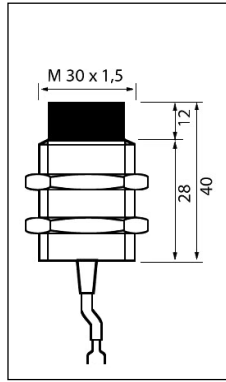
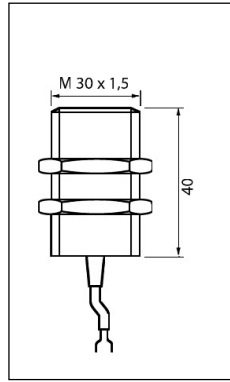


Switching Distance	5,0 mm	8,0 mm	5,0 mm	8,0 mm
Mounting	Shielded	Non - Shielded	Shielded	Non - Shielded

Type	KJ5-M18MB30-NA 9932-0500	KJ8-M18MN30-NA 9932-0600	KJ5-M18MB50-NA-V2 9932-0565	KJ8-M18MN50-NA-V2 9932-0665
ATEX - certificate	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C
Operating Voltage U_b	nom. 8,2 V DC Ri 1K	nom. 8,2 V DC Ri 1K	nom. 8,2 V DC Ri 1K	nom. 8,2 V DC Ri 1K
Ripple Voltage U_b	£ 5 %	£ 5 %	£ 5 %	£ 5 %
Rev. Polarity/ Overload Protection	Yes	Yes	Yes	Yes
Current When Damped	< 1,1 mA	< 1,1 mA	< 1,1 mA	< 1,1 mA
Current When Undamped	> 2,2 mA	> 2,2 mA	> 2,2 mA	> 2,2 mA
Switching Frequency f	1000 Hz	500 Hz	1000 Hz	500 Hz
Hysteresis H	Like Controller	Like Controller	Like Controller	Like Controller
Operating Temperature T_a	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C
Temperature Drift	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Repeat Accuracy R	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Protection Class	IP 67	IP 67	IP 67	IP 67
Controller Required	Yes	Yes	Yes	Yes
EMC-Standard	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2
Housing Material	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated
Front Cap	PCP	PCP	PCP	PCP
Termination	Cable 2 x 0,25	Cable 2 x 0,25	M12 - 4pol. Connector	M12 - 4pol. Connector

More special versions by separate inquiries!

Connection and Termination picture at page 3.



Switching Distance
Mounting

10,0 mm
Shielded

15,0 mm
Non - Shielded

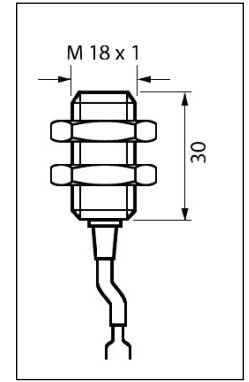
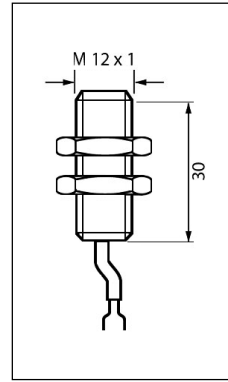
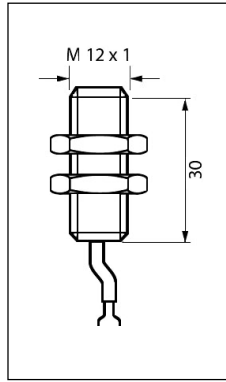
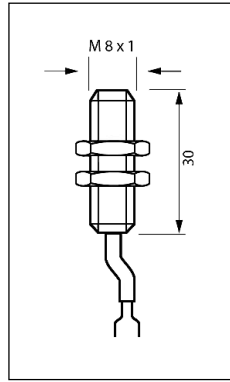
10,0 mm
Shielded

15,0 mm
Non - Shielded

Type	KJ10-M30MB40-NA <i>9932-0700</i>	KJ2-M8MN30-NA <i>9932-0800</i>	KJ10-M30MB60-NA-V2 <i>9932-0765</i>	KJ15-M30MN60-NA-V2 <i>9932-0865</i>
ATEX - certificate	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C	II 1 GD EEx ia IIC T6 T 85°C
Operating Voltage U_b	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K
Ripple Voltage U_b	£ 5 %	£ 5 %	£ 5 %	£ 5 %
Rev. Polarity/ Overload Protection	Yes	Yes	Yes	Yes
Current When Damped	<1,1 mA	<1,1 mA	<1,1 mA	<1,1 mA
Current When Undamped	>2,2 mA	>2,2 mA	>2,2 mA	>2,2 mA
Switching Frequency f	500 Hz	300 Hz	500 Hz	300 Hz
Hysteresis H	Like Controller	Like Controller	Like Controller	Like Controller
Operating Temperature T_a	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C
Temperature Drift	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Repeat Accuracy R	£ 10 %	£ 10 %	£ 10 %	£ 10 %
Protection Class	IP 67	IP 67	IP 67	IP 67
Controller Required	Yes	Yes	Yes	Yes
EMC-Standard	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2
Housing Material	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated	Brass Nickel-Plated
Front Cap	PCP	PCP	PCP	PCP
Termination	Cable 2 x 0,25	Cable 2 x 0,14	M12 - 4pol. Connector	M12 - 4pol. Connector

More special versions by separate inquiries!

Connection and Termination picture at page 3.



Switching Distance

2,0 mm

2,0 mm

4,0 mm

5,0 mm

Mounting

Non - Shielded

Shielded

Non - Shielded

Shielded

Type

KJ2-M8KN30-NA
9932-1600

KJ2-M12KB30-NA
9932-1100

KJ4-M12KN30-NA
9932-1000

KJ5-M18KB30-NA
9932-1300

ATEX - certificate

Operating Voltage U_b

nom. 8,2 V DC Ri 1K

nom. 8,2 V DC Ri 1K

nom. 8,2 V DC Ri 1K

nom. 8,2 V DC Ri 1K

Ripple Voltage U_b

£ 5 %

£ 5 %

£ 5 %

£ 5 %

Rev. Polarity/
Overload Protection

Yes

Yes

Yes

Yes

Current When Damped

< 1,1 mA

< 1,1 mA

< 1,1 mA

< 1,1 mA

Current When Undamped

> 2,2 mA

> 2,2 mA

> 2,2 mA

> 2,2 mA

Switching Frequency f

1000 Hz

2000 Hz

1000 Hz

1000 Hz

Hysteresis H

Like Controller

Like Controller

Like Controller

Like Controller

Operating Temperature T_a

-25°C ... +60°C

-25°C ... +60°C

-25°C ... +60°C

-25°C ... +60°C

Temperature Drift

£ 10 %

£ 10 %

£ 10 %

£ 10 %

Repeat Accuracy R

£ 10 %

£ 10 %

£ 10 %

£ 10 %

Protection Class

IP 67

IP 67

IP 67

IP 67

Controller Required

Yes

Yes

Yes

Yes

EMC-Standard

EN 60947-5-2

EN 60947-5-2

EN 60947-5-2

EN 60947-5-2

Housing Material

Trogamid T

Trogamid T

Trogamid T

Trogamid T

Front Cap

Termination

Cable 2 x 0,14

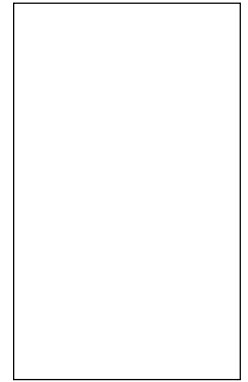
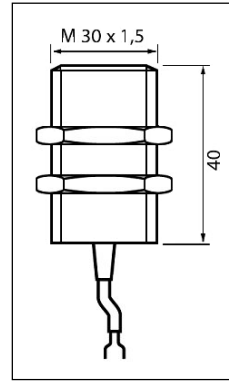
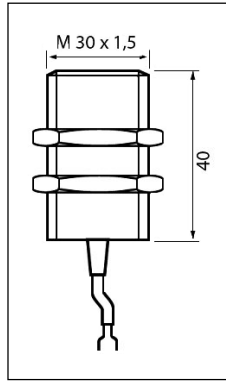
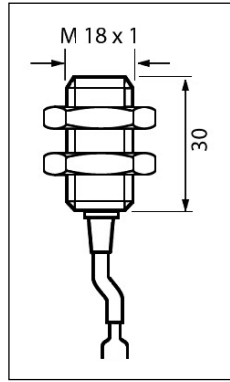
Cable 2 x 0,25

Cable 2 x 0,25

Cable 2 x 0,25

More special versions by separate inquiries!

Connection and Termination picture at page 3.



Switching Distance
Mounting

8,0 mm
Non - Shielded

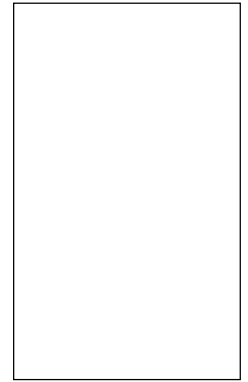
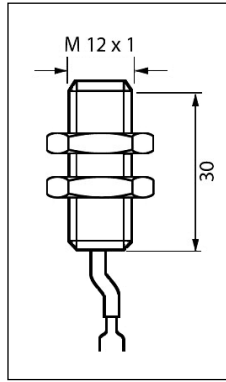
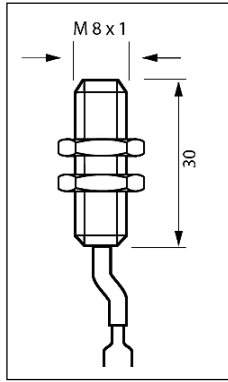
10,0 mm
Shielded

15,0 mm
Non - Shielded

Type	KJ8-M18KN30-NA <i>9932-1200</i>	KJ10-M30KB40-NA <i>9932-1500</i>	KJ15-M30KN40-NA <i>9932-1400</i>	
ATEX - certificate				
Operating Voltage U_b	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K	nom. 8,2V DC Ri 1K	
Ripple Voltage U_b	£ 5 %	£ 5 %	£ 5 %	
Rev. Polarity/ Overload Protection	Yes	Yes	Yes	
Current When Damped	<1,1 mA	<1,1 mA	<1,1 mA	
Current When Undamped	>2,2 mA	>2,2 mA	>2,2 mA	
Switching Frequency f	500 Hz	500 Hz	300 Hz	
Hysteresis H	Like Controller	Like Controller	Like Controller	
Operating Temperature T_a	-25°C ... +60°C	-25°C ... +60°C	-25°C ... +60°C	
Temperature Drift	£ 10 %	£ 10 %	£ 10 %	
Repeat Accuracy R	£ 10 %	£ 10 %	£ 10 %	
Protection Class	IP 67	IP 67	IP 67	
Controller Required	Yes	Yes	Yes	
EMC-Standard	EN 60947-5-2	EN 60947-5-2	EN 60947-5-2	
Housing Material	Trogamid T	Trogamid T	Trogamid T	
Front Cap				
Termination	Cable 2 x 0,25	Cable 2 x 0,25	Cable 2 x 0,25	

More special versions by separate inquiries!

Connection and Termination picture at page 3.



Switching Distance	2,0 mm	4,0 mm		
Mounting	Non - Shielded	Non - Shielded		
Type	KJ2-M8KN30-NA-T 9932-1632	KJ4-M12KN30-NA-T 9932-1032		
ATEX - certificate				
Operating Voltage U_b	nom. 8,2 V DC Ri 1K	nom. 8,2 V DC Ri 1K		
Ripple Voltage U_b	£ 5 %	£ 5 %		
Rev. Polarity/ Overload Protection	Yes	Yes		
Current When Damped	< 1,1 mA	< 1,1 mA		
Current When Undamped	> 2,2 mA	> 2,2 mA		
Switching Frequency f	1000 Hz	1000 Hz		
Hysteresis H	Like Controller	Like Controller		
Operating Temperature T_a	-25°C ... +60°C	-25°C ... +60°C		
Temperature Drift	£ 10 %	£ 10 %		
Repeat Accuracy R	£ 10 %	£ 10 %		
Protection Class	IP 67	IP 67		
Controller Required	Yes	Yes		
EMC-Standard	EN 60947-5-2	EN 60947-5-2		
Housing Material	Arnite	Arnite		
Front Cap				
Termination	Cable 2 x 0,14	Cable 2 x 0,25		

More special versions by separate inquiries!

Connection and Termination picture at page 3.

A large empty rectangular box with a black border, intended for taking notes.

Blank area for notes.

Type	Art-Nr.	Site	Typ	Art-Nr.	Site
M8			M18		
KJ1-M8MB30-NA	08317320100	4	KJ5-M18MB30-NA	08317320500	6
KJ1-M8MB50-NA-V2	08317320165	4	KJ5-M18KB30-NA	08317321300	8
KJ2-M8MN30-NA	08317320200	4	KJ5-M18MB50-NA-V2	08317320565	6
KJ2-M8KN30-NA	08317321600	8	KJ8-M18MN30-NA	08317320600	6
KJ2-M8KN30-NA-T	08317321632	10	KJ8-M18KN30-NA	08317321200	9
KJ2-M8MN50-NA-V2	08317320265	4	KJ8-M18MN50-NA-V2	08317320665	6
M12			M30		
KJ2-M12MB30-NA	08317320300	5	KJ10-M30MB40-NA	08317320700	7
KJ2-M12KB30-NA	08317321100	8	KJ10-M30KB40-NA	08317321500	9
KJ2-M12MB55-NA-V2	08317320365	5	KJ10-M30MB60-NA-V2	08317320765	7
KJ4-M12MN30-NA	08317320400	5	KJ15-M30MN40-NA	08317320800	7
KJ4-M12KN30-NA	08317321000	8	KJ15-M30KN40-NA	08317321400	9
KJ4-M12KN30-NA-T	08317321032	10	KJ15-M30MN60-NA-V2	08317320865	7
KJ4-M12MN50-NA-V2	08317320465	5			

AUSTRALIA

PCA Plant Control & Automation Pty
LTD
Unit 3 No. 3 Hunter Street
2077 Hornsby NSW
Tel. 00 61 / 29 48 23 73 3
Fax 00 61 / 29 47 66 82 2
E-mail: sales@pca-us.com.au

CZECH REPUBLIC

Bibus S.R.O.
Videnská 125
63927 Brno
Tel. 00 42 / 05 47 12 53 24
Fax 00 42 / 05 47 12 53 10
E-mail: duchon@bibus.cz

FRANCE

Verco France
32, Rue Commandant Fuzier
Tel. 00 33 / 47 28 44 10 5
Fax 00 33 / 47 86 26 02 3
E-mail: verco@alyon.org

ITALY

Tritecnica S.R.L.
Viale Lazio 26
20135 Milano
Tel. 00 39 / 02-54 19 45 2
Fax 00 39 / 02-55 18 12 97
E-mail: info@tritecnica.it

NETHERLANDS

Solar Elektro B.V.
Effect 5
6921 RG Duiven
Tel. 00 31 / 26 36 52 91
Fax 00 31 / 26 36 52 34 6
E-mail: algemeen@beng.nl

SPAIN

Automatica Electronica
Y Control S.L.
08018 Barcelona
Tel. 00 34 / 93 48 50 034
Fax 00 34 / 93 48 50 296
E-mail: p.dalmases@automatica-elec.es

SWEDEN

Tillquist Elteknik AB
Finlandsgatan 16
16422 Kista
Tel. 00 46 / 8-59 46 32 00
Fax 00 46 / 8-75 13 69 5
E-mail: info@tillquisteltechnik.se

SWITZERLAND

Ymatron AG
Brüelstraße 7
8157 Dielsdorf
Tel. 0041 / 18 55 23 88
Fax 0041 / 18 55 23 81
Email: info@ymatron.ch

USA

Altech Corp.
35 Royal Road
08822 Flemington NJ-6000
Tel. 00 1 / 90 88 06 94 00
Fax 00 1 / 90 88 06 94 9
E-mail: info@altechcorp.com

BELGIUM

Bintz Technics N.V.
Business Park
Brixtonlaan 25
1930 Zaventem
Tel. 00 32 / 27 20 49 16
Fax 00 32 / 27 20 37 50
E-Mail: beyens@bintz-technics.be

DENMARK

Scancomp
Bøgedals Allé 18
DK 5250 Odense SV
Tel. 00 45 / 66 11 29 89
Fax 00 45 / 66 11 29 63
E-mail: mh@scancomp.dk
Internet: www.scancomp.dk

GREECE

Panayiotis Vassiliou S.A.
91, Achamon
10440 Athen
Te. 00 30 / 21 05 22 27 11
Fax 0030 / 21 05 24 67 5
E-mail: vasben@otenet.gr

JAPAN

System Electronic Co. Ltd.
2-13-3 Yayoi- Bunkyo-Ku
Tokyo
Tel. 0081 / 3 5803 7151
Fax 0081 / 3 5803 7152
E-mail: Isao@system-electronic-japan.co.jp

POLAND

P.W. Romex
Roman Siecla
UL. Wzlotowa 5
60411 Poznan
Tel. 00 48 / 61 84 17 82 4
Fax 00 48 / 61 84 36 34 3
E-mail: siecla.r@pwrromex.com.pl

SOUTH KOREA

EURO Corperation
Room Nr. 103
Tae Sung BLDG 199-1
Jangsa-Dorg Jongro-Ku
Tel. 00 82 / 2-22 63 14 96 7
Fax 00 82 / 2-22 63 14 98
E-mail: europilz@chol.com

SWITZERLAND

Quarz AG
Wiesenstraße 2
8617 Mönchaltorf
Tel. 00 41 / 19 48 18 48
Fax 00 41 / 19 48 09 09
E-mail: robo@quarz.ch

SOUTH AFRICA

Countapulse Controls
Pty. Ltd.
P.O. Box 40393
Cleveland, 2022
Tel. 00 27 / 11-61 57 55 6
Fax 00 27 / 11-61 57 51 3
E-mail: clive@countapulse.co.za

CANADA

Sircon Controls Ltd.
5359 Timberlea Blvd., Unit 36
L4W4N5 Ontario
Tel. 00 1 / 90 5-23 89 50 5
Fax 00 1 / 90 5-23 88 38 0
E-mail: info@sirconcontrols.co

FINLAND

SKS-Automaatio Oy
Martinkyläntie 50
01721 Vantaa
Tel. 00 35 8 / 9-85 26 61
Fax 00 35 8 / 9-85 26 82 0
E-mail: sks-automaatio@sks.fi

ISRAEL

E.I.D. Electronics Ltd.
5, Saphir Street
Ramat Gan, 52622
Tel.00 97 / 2-3-53 43 38 0
Fax 00 97 / 2-3-53 43 38 5
E-mail: eidelec@attglobal.net

NETHERLANDS

SEN-TECH Benelux B.V.
Middelweg 8 e
5253 CA Nieuwkuijk
Tel. 00 31 / 73 51 83 12 1
Fax 00 31 / 73 51 83 12 2
E-mail: info@sentech.nl

SLOVAKIA

Bibus SK S.R.O.
Priemyselna 4
94901 Nitra
Tel. 00 42 / 1-3 77 41 25 25
Fax 0042 / 1-3 77 51 67 01
E-mail: gyenes@bibus.sk

SWEDEN

Octab Industrieelektronik AB
Leif Bergquist
Maskingatan 8B
19560 Märsta
Tel. 00 46 / 8-59 11 50 00
Fax 00 46 / 8-59 11 50 01
Email:info@octab.se

SWITZERLAND

Spälti Schaltgeräte AG
Wässerstraße 25
8340 Hinwil
Tel. 00 41 / 1-93 88 09 0
Fax 00 41 / 1-93 88 09 1
E-mail: spaelti-ag@swissonline.ch

TAIWAN

DWO & TOM Enterprise Co.
Majestic Trading Co. Ltd.
No. 178-4-Sec. 2
Chang an E. Road
Taipei Taiwan R.O.C.
Tel. 00 88 6 / 22 75 28 15 1
Fax 00 88 6 / 22 75 11 86 8
E-mail: dwotom@so-net.tw

Distribution office:

Postcode area:
16, 17, 18, 19, 20-29,
30, 31, 32, 38, 39, 49
Uwe Reisewitz
Waakhauserstraße 9
D-28719 Bremen
Phone: +49 4 21 / 64 26 44
Fax: +49 4 21 / 64 40 28 1
Mobile: +49 1 71 / 63 75 86 8

Postcode area:
40, 41, 42, 44, 45, 46, 47, 48,
50, 51, 52, 53, 54, 55, 56
Christoph Gilgenberg
Pascalstraße 22
D-53840 Troisdorf
Phone: +49 22 41 / 97 41 24
Fax: +49 22 41 / 97 30 63
Mobile: +49 1 71 / 63 75 86 6

Postcode area:
33-37, 57, 58, 59, 60,
61, 63, 64, 65, 68, 69
Konrad Wiegand
Am Heydewolf 6
D-35274 Kirchhain
Phone: +49 64 22 / 92 29 23
Fax: +49 64 22 / 92 29 24
Mobile: +49 1 71 / 63 75 86 3

Postcode area:
01-04, 08-10, 12, 13,
14, 15
Mark Braun
Neue Schichtstraße 14
D-09366 Niederdorf
Phone: +49 3 72 96 / 930 203
Fax: +49 3 72 96 / 930 187
Mobile: +49 1 71 / 637 58 57

Postcode area:
66, 67, 77, 78,
79, 721, 722
SKA Tec GmbH & Co. KG
Dieter Schley
Alemannenstraße 53
D-77767 Appenweier
Phone.: +49 78 05 / 99 85 0
Fax: +49 78 05 / 91 02 55

Postcode area:
80, 81, 82, 83, 84, 85,
90, 91, 92, 93, 94
Adolf Hutner
Ascherbachweg 2a
D-85232 Neuhimmelreich
Phone: +49 81 31 / 35 08 73
Fax: +49 81 31 / 35 08 72
Mobile: +49 1 71 / 63 75 86 2

Postcode area:
92, 93, 95, 96, 97
C + R Automation GmbH
Christian Rott
Weinzierleiner Straße 9
D-90513 Zirndorf
Phone: +49 9 11 / 60 43 67
Fax: +49 9 11 / 600 24 09
Mobile: +49 1 70 / 798 72 39

Postcode area:
70, 71, 72, 73, 74, 75,
76, 86, 87, 88, 89
Andreas Barth
Vogelstraße 15
D-89269 Vöhringen
Phone: +49 73 06 / 92 40 82
Fax: +49 73 06 / 92 24 61
Mobile: +49 1 71 / 63 75 85 6

Postcode area:
06, 07, 98, 99
Riese Electronic GmbH
Thomas Schüler
Schleizerstraße 36 - 38
D-07937 Zeulenroda
Phone: +49 3 66 28 / 725 11
Fax: +49 3 66 28 / 725 17
Mobile: +49 1 72 / 367 13 62



p·u·l·s·o·t·r·o·n·i·c

Pulsotronic GmbH & Co. KG

Neue Schichtstraße 14

D-09366 Niederdorf

Phone +49 37 296 / 930 100

Telefax +49 37 296 / 930 180

info@pulsotronic.de

www.pulsotronic.de