Certificate Number UL-US-L189727-111-61208991-6

**Report Reference** E189727-19980216

Date 8-Aug-2022

Issued to: wenglor sensoric GmbH

wenglor Strasse 3 Tettnang 88069

Germany

This is to certify that representative samples of

NRKH - Proximity Switches

See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 508, 18th Ed., Issue Date: 2018-03-30

Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.





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**Report Reference** E189727-19980216

**Date** 8-Aug-2022

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
AB-0003	Connection equipments
AB-0003-1	Connection boxes for scanners
AB-6700	Connection equipments
AB-BLU01	Connection equipments
AB-USB01	Connection equipments
AW02	Analog evaluation units
B or C, followed by NN, B1, B2, B3, 50, 5N, 5P, 5T, 5S, 5M, 5L, SL or SH, followed by C, H, L, K, M, R or S, followed by three digits.	Image processing products
B, followed by K, L, M, R, S or V, followed by C, N, S, 3 or 4, followed by 0, P or G, followed by A, C, H, I, L, M or S, followed by one digit, followed by A, B, I, R, U or W, followed by two digits.	Image processing products
BD25BD9V01	Connection equipments
BD25SD25V02	Connection equipments
BD9BD9V01	Connection equipments
BG2SG2V1	Connecting cables for connection boxes
BG2V1-N	Connection equipments
BG7SG2V1	Connecting cables for connection boxes
BG7SG7V1	Connecting cables for connection boxes
BG7V1P-N	Connection equipments
BG88SG88V2	Connection equipments
BG8SG8V1	Connecting cables for connection boxes
BG8V1P-N	Connection equipments
BS30Vxxx (BS=vision sensor, 30=dimension of description, xxx=number representing the software version number BS40Vxxx).	Vision sensors
BVCxxx (BVC=vsion control unit, xxx=pro number).	Wenglor computers
BVK001 (BVK=color dikital camera, 001=pro number).	Color digital cameras
BW2SG2V1	Connecting cables for connection boxes
BW7SG7V1	Connecting cables for connection boxes
FISZ-RS232	Connection equipments
FW, followed by 05, 06, 07, 08, 09, 10 or 11, followed by WH, RD, BU, GN, IR, UV or YE, etc. (color of the light), may be followed by suffixes.	Photoelectronic sensors, lamps
I, followed by NN, FB, HS, PT, 12, 08, 18, 30, 1A, 1B, 1C, 1D, 1E, 1H, 1G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R, 1S, 1T, 1U, 1X, EB, EF, EM, ED, NR, NT, 50 or 5N, followed by, A, G, H, N, S or T, followed by three digits.	Proximity switches





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I or K, followed by A, N, G or S, may be followed by B, E, G, H, I, J, L, M, O, P, Q, R, U, W or X, followed by S, may be followed by 008, 010, 015, 020, 025, 030, 040, 045, 050, 060, 070, 080, 100, 120, 130, 150, 200, 250, 300 or 350 or followed by digits, followed by B, C, D, E,	Proximity switches
N, Q, R, S or T, followed by A, E, K, M or T, followed by	
any two digits, followed by A, B, K, M, N, P, Q, S, T, U,	
V, X or Z, followed by A, B, C, D, G or I, may be followed	
by additional suffixes	<u> </u>
L followed by, BA, BB, BD, B9, FD, MR, MD, ML,	Proximity Switches
followed by I, R, W, X, followed by additional suffixes.	Dhata da atmania a ana am
MLSL101	Photoelectronic sensors
MLSL102	Photoelectronic sensors
MLSL103	Photoelectronic sensors
MLSL104	Photoelectronic sensors
MLSL121	Photoelectronic sensors
MLSL122	Photoelectronic sensors
MLSL123	Photoelectronic sensors
MLSL124	Photoelectronic sensors
MLSL131	Photoelectronic sensors
MLSL132	Photoelectronic sensors
MLSL133	Photoelectronic sensors
MLSL134	Photoelectronic sensors
MLSL225	Photoelectronic sensors
MLSL226	Photoelectronic sensors
MLSL235	Photoelectronic sensors
MLSL236	Photoelectronic sensors
MLSL245	Photoelectronic sensors
MLSL246	Photoelectronic sensors
MLSL255	Photoelectronic sensors
MLSL256	Photoelectronic sensors
MLSL275	Photoelectronic sensors
MLSL276	Photoelectronic sensors
MLWL101	Photoelectronic sensors
MLWL102	Photoelectronic sensors
MLWL103	Photoelectronic sensors
MLWL104	Photoelectronic sensors
MLWL105	Photoelectronic sensors
MLWL121	Photoelectronic sensors
MLWL122	Photoelectronic sensors
MLWL123	Photoelectronic sensors
MLWL124	Photoelectronic sensors
MLWL125	Photoelectronic sensors
MLWL131	Photoelectronic sensors
MLWL132	Photoelectronic sensors



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**Date** 8-Aug-2022

MLWL133	Photoelectronic sensors
MLWL134	Photoelectronic sensors
MLWL135	Photoelectronic sensors
MLWL141	Photoelectronic sensors
MLWL142	Photoelectronic sensors
MLWL143	Photoelectronic sensors
MLWL144	Photoelectronic sensors
MLWL145	Photoelectronic sensors
MLWL151	Photoelectronic sensors
MLWL152	Photoelectronic sensors
MLWL153	Photoelectronic sensors
MLWL154	Photoelectronic sensors
MLWL155	Photoelectronic sensors
MLWL171	Photoelectronic sensors
MLWL172	Photoelectronic sensors
MLWL173	Photoelectronic sensors
MLWL174	Photoelectronic sensors
MLWL175	Photoelectronic sensors
MLWL201	Photoelectronic sensors
MLWL202	Photoelectronic sensors
MLWL203	Photoelectronic sensors
MLWL204	Photoelectronic sensors
MLWL221	Photoelectronic sensors
MLWL222	Photoelectronic sensors
MLWL223	Photoelectronic sensors
MLWL224	Photoelectronic sensors
MLWL225	Photoelectronic sensors
MLWL231	Photoelectronic sensors
MLWL232	Photoelectronic sensors
MLWL233	Photoelectronic sensors
MLWL234	Photoelectronic sensors
MLWL235	Photoelectronic sensors
MLWL241	Photoelectronic sensors
MLWL242	Photoelectronic sensors
MLWL243	Photoelectronic sensors
MLWL244	Photoelectronic sensors
MLWL245	Photoelectronic sensors
MLWL251	Photoelectronic sensors
MLWL252	Photoelectronic sensors
MLWL253	Photoelectronic sensors
MLWL254	Photoelectronic sensors
MLWL255	Photoelectronic sensors
MLWL271	Photoelectronic sensors
MLWL272	Photoelectronic sensors
MLWL273	Photoelectronic sensors



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MLWL274	Photoelectronic sensors
MLWL275	Photoelectronic sensors
Models starts maybe with O followed by A, A1, A2, A42,	Photoelectronic sensors
A57, C, D, E, E1, F, G, H, H1, J, K, K1, L, L1, O1, R, S,	
S1, T, T1, U, V, W, X, X1, Y, Y1, Y2 or Z, followed by A,	
B, C, D, DK, E, EB, EI, F, FL, FK, G, H, K, II, L, M, N, O,	
P, Q, R, S, T, U, TA, V, W, WK, or X, followed by S, 01,	
02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 16, 22, 24, 25,	
33, 35, 40, 44, 50, 55, 60, 66, 70, 77, 80, 83, 86, 87, 88,	
89, 95, 96, 98, 99, or followed by other digits, may be	
followed by A, B, C, D, E, F, G, H, I, K, L, M, N, O, P, Q,	
R, T, U, V, W, X or Z, may be followed by A, B, C, D, E,	
F, G, H, I, S, T, V, X or Y, or followed by four digits, may	
be followed by A, B, C, D, F, H, S, T, V, or X, may be	
followed by additional suffixes.	
OPT, followed by 70, may be followed by N or S.	Photoelectronic sensors
OPT, followed by 87, 89, 104, 110, 114, 123, 144, 162,	Photoelectronic sensors
164, 167 or followed by other digits.	$<$ $\times$ $\times$ $\times$
OPT70N	Connection equipments
OPT70S	Connection equipments
OPT70S+	Connection equipments
P, followed by, NN,, FB, HS, PT, 12, 08, 18, 30, 1A, 1B,	Proximity switches
1C, 1D, 1E, 1H, 1G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R, 1S, 1T,	
1U, 1X, 2K, 2P, 3E, 3P, EB, EF, EM, ED, 50, 5N, NB,	
followed by, A, C, D, E, F, G, H, J, K, L, M, P, R, T, S, W,	
X, Y, followed by, additional suffixes.	. 3/11. 3/11. 3/11. 3/11. 3
PNBC001, PNBC002, PNBC003, PNBC004, PNBC005,	Photoelectronic sensors
PNBC006, PNBC007 and PNBC008	
S23	Connection equipments
S232W3	Connection equipments
S27	Connection equipments
S29	Connection equipments
S35G	Connection equipments
S35W	Connection equipments
S49	Connection equipments
S56	Connection equipments
S60	Connection equipments
S61	Connection equipments
S80	Connection equipments
S80W	Connection equipments
S88	Connection equipments
S88W	Connection equipments
T, followed by I, followed by F, followed by three numbers, followed by A, B, C, D, E, F, G, H, I, M, N, P, U, V or X, followed by four numbers.	Temperature measurement sensors





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T, followed by NN, FB, HS, PT, 12, 08,18,30, 1A, 1B, 1C, 1D, 1E, 1H, 1G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R, 1S, 1T, 1U, 1X, EB, EF, EM, ED, 50 or 5N, followed by 0, followed by three digits.	Temperature measurement sensors
U followed by NN,, FB, HS, PT, 12, 08,18,30, 1A, 1B, 1C, 1D, 1E, 1H, 1G, 2G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R, 1S, 1T, 1U, 1X, EB, EF, EM, ED, 50 or 5N, followed by T, Y, followed by three digits	Ultrasonic sensors
U, followed by R or M, followed by D, F or S, followed by three numbers, followed by A, B, C, D, E, F, G, H, I, M, N, O, P, U, V or X, followed by one digit, followed by two numbers	Ultrasonic sensors
Z followed by VZ, followed by F, followed by additional suffixes.	Proximity Switches
ZF, followed by D, F, K, L, R or S, followed by B, G, I, U, R or W, followed by two digits, followed by -, followed by two digits.	Photoelectronic sensors, lamps
ZKA100	Photoelectronic sensors





Certificate Number UL-CA-L189727-311-61208991-6

**Report Reference** E189727-19980216

Date 8-Aug-2022

Issued to: wenglor sensoric GmbH

wenglor Strasse 3 Tettnang 88069

Germany

This is to certify that representative samples of

NRKH7 - Proximity Switches Certified for Canada See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: CSA C22.2 NO. 14-18, 13th Ed., Issue Date: 2018-03-01

Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.





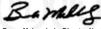
Certificate Number UL-CA-L189727-311-61208991-6

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This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Model	Category Description
AB-0003	Connection equipments
AB-0003-1	Connection boxes for scanners
AB-6700	Connection equipments
AB-BLU01	Connection equipments
AB-USB01	Connection equipments
AW02	Analog evaluation units
B or C, followed by NN, B1, B2, B3, 50, 5N, 5P, 5T, 5S, 5M, 5L, SL or SH, followed by C, H, L, K, M, R or S, followed by three digits.	Image processing products
B, followed by K, L, M, R, S or V, followed by C, N, S, 3 or 4, followed by 0, P or G, followed by A, C, H, I, L, M or S, followed by one digit, followed by A, B, I, R, U or W, followed by two digits.	Image processing products
BD25BD9V01	Connection equipments
BD25SD25V02	Connection equipments
BD9BD9V01	Connection equipments
BG2SG2V1	Connecting cables for connection boxes
BG2V1-N	Connection equipments
BG7SG2V1	Connecting cables for connection boxes
BG7SG7V1	Connecting cables for connection boxes
BG7V1P-N	Connection equipments
BG88SG88V2	Connection equipments
BG8SG8V1	Connecting cables for connection boxes
BG8V1P-N	Connection equipments
BS30Vxxx (BS=vision sensor, 30=dimension of description, xxx=number representing the software version number BS40Vxxx).	Vision sensors
BVCxxx (BVC=vsion control unit, xxx=pro number).	Wenglor computers
BVK001 (BVK=color dikital camera, 001=pro number).	Color digital cameras
BW2SG2V1	Connecting cables for connection boxes
BW7SG7V1	Connecting cables for connection boxes
FISZ-RS232	Connection equipments
FW, followed by 05, 06, 07, 08, 09, 10 or 11, followed by WH, RD, BU, GN, IR, UV or YE, etc. (color of the light), may be followed by suffixes.	Photoelectronic sensors, lamps
I, followed by NN, FB, HS, PT, 12, 08, 18, 30, 1A, 1B, 1C, 1D, 1E, 1H, 1G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R, 1S, 1T, 1U, 1X, EB, EF, EM, ED, NR, NT, 50 or 5N, followed by, A, G, H, N, S or T, followed by three digits.	Proximity switches





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I or K, followed by A, N, G or S, may be followed by B, E, G, H, I, J, L, M, O, P, Q, R, U, W or X, followed by S, may be followed by 008, 010, 015, 020, 025, 030, 040, 045, 050, 060, 070, 080, 100, 120, 130, 150, 200, 250, 300 or 350 or followed by digits, followed by B, C, D, E,	Proximity switches
N, Q, R, S or T, followed by A, E, K, M or T, followed by	
any two digits, followed by A, B, K, M, N, P, Q, S, T, U,	
V, X or Z, followed by A, B, C, D, G or I, may be followed	
by additional suffixes	<u> </u>
L followed by, BA, BB, BD, B9, FD, MR, MD, ML,	Proximity Switches
followed by I, R, W, X, followed by additional suffixes.	Dhata da atmania a ana am
MLSL101	Photoelectronic sensors
MLSL102	Photoelectronic sensors
MLSL103	Photoelectronic sensors
MLSL104	Photoelectronic sensors
MLSL121	Photoelectronic sensors
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MLSL123	Photoelectronic sensors
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MLSL275	Photoelectronic sensors
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MLWL172	Photoelectronic sensors
MLWL173	Photoelectronic sensors
MLWL174	Photoelectronic sensors
MLWL175	Photoelectronic sensors
MLWL201	Photoelectronic sensors
MLWL202	Photoelectronic sensors
MLWL203	Photoelectronic sensors
MLWL204	Photoelectronic sensors
MLWL221	Photoelectronic sensors
MLWL222	Photoelectronic sensors
MLWL223	Photoelectronic sensors
MLWL224	Photoelectronic sensors
MLWL225	Photoelectronic sensors
MLWL231	Photoelectronic sensors
MLWL232	Photoelectronic sensors
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MLWL273	Photoelectronic sensors



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**Report Reference** E189727-19980216

MLWL274	Photoelectronic sensors
MLWL275	Photoelectronic sensors
Models starts maybe with O followed by A, A1, A2, A42,	Photoelectronic sensors
A57, C, D, E, E1, F, G, H, H1, J, K, K1, L, L1, O1, R, S,	
S1, T, T1, U, V, W, X, X1, Y, Y1, Y2 or Z, followed by A,	
B, C, D, DK, E, EB, EI, F, FL, FK, G, H, K, II, L, M, N, O,	
P, Q, R, S, T, U, TA, V, W, WK, or X, followed by S, 01,	
02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 16, 22, 24, 25,	
33, 35, 40, 44, 50, 55, 60, 66, 70, 77, 80, 83, 86, 87, 88,	
89, 95, 96, 98, 99, or followed by other digits, may be	
followed by A, B, C, D, E, F, G, H, I, K, L, M, N, O, P, Q,	
R, T, U, V, W, X or Z, may be followed by A, B, C, D, E,	
F, G, H, I, S, T, V, X or Y, or followed by four digits, may	
be followed by A, B, C, D, F, H, S, T, V, or X, may be	
followed by additional suffixes.	
OPT, followed by 70, may be followed by N or S.	Photoelectronic sensors
OPT, followed by 87, 89, 104, 110, 114, 123, 144, 162,	Photoelectronic sensors
164, 167 or followed by other digits.	$<$ $\times$ $\times$ $\times$
OPT70N	Connection equipments
OPT70S	Connection equipments
OPT70S+	Connection equipments
P, followed by, NN,, FB, HS, PT, 12, 08, 18, 30, 1A, 1B,	Proximity switches
1C, 1D, 1E, 1H, 1G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R, 1S, 1T,	
1U, 1X, 2K, 2P, 3E, 3P, EB, EF, EM, ED, 50, 5N, NB,	
followed by, A, C, D, E, F, G, H, J, K, L, M, P, R, T, S, W,	
X, Y, followed by, additional suffixes.	. 3/11. 3/11. 3/11. 3/11. 3
PNBC001, PNBC002, PNBC003, PNBC004, PNBC005,	Photoelectronic sensors
PNBC006, PNBC007 and PNBC008	
S23	Connection equipments
S232W3	Connection equipments
S27	Connection equipments
S29	Connection equipments
S35G	Connection equipments
S35W	Connection equipments
S49	Connection equipments
S56	Connection equipments
S60	Connection equipments
S61	Connection equipments
S80	Connection equipments
S80W	Connection equipments
S88	Connection equipments
S88W	Connection equipments
T, followed by I, followed by F, followed by three numbers, followed by A, B, C, D, E, F, G, H, I, M, N, P, U, V or X, followed by four numbers.	Temperature measurement sensors





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T, followed by NN, FB, HS, PT, 12, 08,18,30, 1A, 1B,	Temperature measurement sensors
1C, 1D, 1E, 1H, 1G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R, 1S, 1T,	U
1U, 1X, EB, EF, EM, ED, 50 or 5N, followed by 0,	
followed by three digits.	$\times$ $\times$ $\times$ $\times$
U followed by NN,, FB, HS, PT, 12, 08,18,30, 1A, 1B,	Ultrasonic sensors
1C, 1D, 1E, 1H, 1G, 2G, 1K, 1L, 1M, 1N, 1P, 1Q, 1R,	P L ハ U L ハ U L ハ U L ハ U L ハ
1S, 1T, 1U, 1X, EB, EF, EM, ED, 50 or 5N, followed by	
T, Y, followed by three digits	
U, followed by R or M, followed by D, F or S, followed by	Ultrasonic sensors
three numbers, followed by A, B, C, D, E, F, G, H, I, M,	
N, O, P, U, V or X, followed by one digit, followed by two	
numbers	1. \(\frac{11.}{11.}\)\(\frac{11.}\)\(\frac{11.}{11.}\)\(\frac{11.}{11.}\)\(\frac{11.}{11.}\)\(\frac{11.}{11.}\)\(\frac{11.}{11.}\)\(\frac{11.}{11.}\)\(\frac{11.}\)\(\frac{11.}{11.}\)\(\frac{11.}\)\(\frac{11.}\)\(\frac{11.}
Z followed by VZ, followed by F, followed by additional	Proximity Switches
suffixes.	
ZF, followed by D, F, K, L, R or S, followed by B, G, I, U,	Photoelectronic sensors, lamps
R or W, followed by two digits, followed by -, followed by	II. YIII. YIII. YIII. Y
two digits.	LLVALVALVALVALV
ZKA100	Photoelectronic sensors



