DATASHEET





NWS21.1WS

- with two or three switch positions
- hygienic design
- Protection class IP69K
- Mounting hole 22.3 mm

Data

Ordering data

Product type description	NWS21.1WS
Article number (order number)	101164775
EAN (European Article Number)	4250116200368
eCl@ss number, version 12.0	27-37-12-13
eCl@ss number, version 11.0	27-37-12-13
eCl@ss number, version 9.0	27-37-12-13
ETIM number, version 7.0	EC000222
ETIM number, version 6.0	EC000222

Approvals - Standards

Certificates	BG
	cULus

General data

Standards	EN IEC 60947-5-1 EN IEC 60947-1
Versions	Selector switch
Design	Long toggle
Installation conditions (mechanical)	arbitrarily
Sealing type	Membrane Lip gaskets
Material of the operators	ABS
Material of the operators Material of the front ring	ABS ABS, chrome-plated
	-
Material of the front ring	ABS, chrome-plated
Material of the front ring Colour of the operating element	ABS, chrome-plated White

General data - Features

Latching	Yes
Fully insulated	Yes
Number of plunger	1
Number of switch positions	2
Number of contact elements, maximum	3

Mechanical data

Unlocking	Rotating unlatcher
Mechanical life, minimum	100,000 Operations
Switching angle, right	70 °
Actuating force, approx.	0.2 N
Mounting	Mounting flange EFM
Tightening torque of the screw	0.6 Nm

Mechanical data - Dimensions

Height	11 mm
diameters for the actuating heads	44.5 mm
Length of the handle	46 mm
Mounting diameter	22.3 mm
Thickness, of the front panel, minimum	1.5 mm
Thickness of the front panel, maximum	6 mm
Spacing	50 x 60 mm

Ambient conditions

Degree of protection	IР67 IР69К
Ambient temperature	+0 +80 °C
Resistance to vibrations	10 - 150 Hz (0.5 mm / 5 g)
Restistance to shock	50 g

Electrical data

Switching element

latching

Ordering code

Product type description:

(1)DT(8)(2)	Pushbutton
(1)DM(2)	Pushbutton with diaphragm for dust protection
(1)DL(8)(2)	Illuminated pushbutton
(1)DLM(2)	Illuminated pushbutton with diaphragm for dust protection
(1)ML(2)	Indicator light with flat collar

(1)MLH(2)	Indicator light with high collar
(1)DP(3)(8)(2)	Mushroom head impact button without latching
(1)DTP(3)(8)(2)	Mushroom head impact button without latching (only N- programm)
(1)DLP(3)(8)(2)	Mushroom head impact button illuminated, without latching (only N programme)
(1)DRR(3)(8)(2)	Mushroom head impact button with latching, unlock by turning and pulling (pulling only in N programme)
(1)DRZ(3)(8)(2)	Mushroom head impact button with latching, unlock by pulling
(1)WS21(4)(5)	Selector switch with 2 positions:
(1)WT21(4)(5)	Selector switch with 1 momentary position
(1)WS32(4)(5)	Selector switch with 3 maintained positions
(1)WT32(4)(5)	Wahlschalter mit 2 Taststellungen
(1)WST32(4)(5)	Selector switch: switching, latching
(1)WTS32(4)(5)	Selector switch: latching, switching
(1)SS21S(4)(5)	Key-operated selector switch with 2 maintained positions
(1)ST21S(4)(5)	Key-operated selector switch with 1 momentary position
(1)SS32S(4)(5)	Key-operated selector switch with 3 maintained positions
(1)ST32S(4)(5)	Key-operated selector switch with 2 momentary positions, left and right
(1)SST32S(4)(5)	Key-operated selector switch: switching, latching
(1)STS32S(4)(5)	Key-operated selector switch: latching, switching
В	Blanking plug
(1)	
-	Command and signalling devices:
E	"E" program
Ν	"N" program
R	"R" program
(2)	

Colour of button surface:

-

SW	Black
GB	Yellow
RT	Red
GN	Green
WS	White
BL	Blue
GR	Grey
(3)	
-	Head diameter of mushroom head impact button 30 mm:
30	30 mm
35	35 mm
40	40 mm
42	42 mm
45	45 mm
50	50 mm
55	55 mm
70	70 mm
(4)	
-	Toggle length in mm:
without	Short toggle
.1	Long toggle
(5)	
-	Colour of toggle:
without	Grey
WS	White
(6)	
-	Key-withdrawal position (3 positions):

1	Position left
2	Position middle
3	Position right
(7)	
-	Key-withdrawal position (2 positions):
1	Position left
2	Position right
(8)	
-	Colour of diaphragm (only N programme):
without	White
GR/	Black
BL/	Blue

Pictures

Product picture (catalogue individual photo)



ID: knws-f03 | 223.4 kB | .jpg | 352.425 x 388.056 mm - 999 x 1100 px - 72 dpi | 39.5 kB | .png | 74.083 x 81.492 mm - 210 x 231 px - 72 dpi

System components

Contact element



EF03.1

- Screw connection
- Mounting flange position 1
- 13-14 (Contact labelling)



EF03.2

- Screw connection
- Mounting flange position 2
- 23-24 (Contact labelling)



EF03.3

- Screw connection
- Mounting flange position 3
- 33-34 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF033.1

- Screw connection
- Mounting flange position 1
- 13-14; 23-24 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF033.2

- Screw connection
- Mounting flange position 2
- 33-34; 43-44 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF033.3

- Screw connection
- Mounting flange position 3
- 53-54; 63-64 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF033F.1

- Flat plug-in connector
- Mounting flange position 1
- 13-14; 23-24 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF033F.2

- Flat plug-in connector
- Mounting flange position 2
- 33-34; 43-44 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF033F.3

- Flat plug-in connector
- Mounting flange position 3
- 53-54; 63-64 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF03F.1

- Flat plug-in connector
- Mounting flange position 1
- 13-14 (Contact labelling)



EF03F.2

- Flat plug-in connector
- Mounting flange position 2
- 23-24 (Contact labelling)



EF03F.3

- Flat plug-in connector
- Mounting flange position 3
- 33-34 (Contact labelling)
- Suitable for EMERGENCY-OFF



EF10.1

- Screw connection
- Mounting flange position 1
- 11-12 (Contact labelling)



EF10.2

- Screw connection
- Mounting flange position 2
- 21-22 (Contact labelling)



EF10.3

- Screw connection
- Mounting flange position 3
- 31-32 (Contact labelling)



EF102.2

- Screw connection
- Mounting flange position 2
- 31-32; 43-44 (Contact labelling)



EF103.1

- Screw connection
- Mounting flange position 1
- 11-12; 23-24 (Contact labelling)



EF103.2

- Screw connection
- Mounting flange position 2
- 31-32; 43-44 (Contact labelling)



EF103.3

- Screw connection
- Mounting flange position 3
- 51-52; 63-64 (Contact labelling)



EF103F.1

- Flat plug-in connector
- Mounting flange position 1
- 11-12; 23-24 (Contact labelling)



EF103F.2

- Flat plug-in connector
- Mounting flange position 2
- 31-32; 43-44 (Contact labelling)



EF10F.1

- Flat plug-in connector
- Mounting flange position 1
- 11-12 (Contact labelling)



EF10F.2

- Flat plug-in connector
- Mounting flange position 2
- 21-22 (Contact labelling)



EF10F.3

- Flat plug-in connector
- Mounting flange position 3
- 31-32 (Contact labelling)



EF110.1

- Screw connection
- Mounting flange position 1
- 11-12; 21-22 (Contact labelling)



EF110.2

- Screw connection
- Mounting flange position 2
- 31-32; 41-42 (Contact labelling)



EF110.3

- Screw connection
- Mounting flange position 3
- 51-52; 61-62 (Contact labelling)



EF110F.1

- Flat plug-in connector
- Mounting flange position 1
- 11-12; 21-22 (Contact labelling)



EF110F.2

- Flat plug-in connector
- Mounting flange position 2
- 31-32; 41-42 (Contact labelling)



EF110F.3

- Flat plug-in connector
- Mounting flange position 3
- 51-52; 61-62 (Contact labelling)



EF140.1

- Screw connection
- Mounting flange position 1
- 11-12; 21-22 (Contact labelling)



EF140.2

- Screw connection
- Mounting flange position 2
- 31-32; 41-42 (Contact labelling)



EFK 103.1

- Cage clamps
- Mounting flange position 1
- 11-12; 23-24 (Contact labelling)



EFK03.1

- Cage clamps
- Mounting flange position 1
- 13-14 (Contact labelling)



EFK03.2

- Cage clamps
- Mounting flange position 2
- 23-24 (Contact labelling)
- Suitable for EMERGENCY-OFF



EFK03.3

- Cage clamps
- Mounting flange position 3
- 33-34 (Contact labelling)
- Suitable for EMERGENCY-OFF



EFK033.1

- Cage clamps
- Mounting flange position 1
- 13-14; 23-24 (Contact labelling)
- Suitable for EMERGENCY-OFF



EFK10.1

- Cage clamps
- Mounting flange position 1
- 11-12 (Contact labelling)



EFK10.2

- Cage clamps
- Mounting flange position 2
- 21-22 (Contact labelling)



EFK10.3

- Cage clamps
- Mounting flange position 3
- 31-32 (Contact labelling)



EFK103.2

- Cage clamps
- Mounting flange position 2
- 31-32; 43-44 (Contact labelling)



EFK30.1

- Cage clamps
- Mounting flange position 1
- 11-12 (Contact labelling)
- Suitable for EMERGENCY-OFF



EFK30.2

- Cage clamps
- Mounting flange position 2
- 21-22 (Contact labelling)
- Suitable for EMERGENCY-OFF



EFK30.3

- Cage clamps
- Mounting flange position 3
- 31-32 (Contact labelling)
- Suitable for EMERGENCY-OFF

Accessories



NZSO-V4A

- hygienic design
- Protection class IP69K



NWSP21GR

- for 2 position versions
- Grey
- Alternative to key-switch in hygiene area
- hygienic design
- Protection class IP69K
- Mounting hole 22.3 mm



NUE

- Adapter for fitting the device heads of the series N in hole diameter 30.5 mm
- hygienic design
- Protection class IP69K



NZSO2/V4A

- hygienic design
- Protection class IP69K

Spare part



EFM



EDT-25-5ST

- hygienic design
- Protection class IP69K

ASSEMBLY_HOUSING

NBG311



- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG632/NM

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG633

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG633/54.50

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG633/54.50/KLE/NSK

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure

NBG633/54.50/NSK



- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG633/NM

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG664/70.60/NSK

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG664/NM

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG665

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBG665/65.55

- for application in food producing machinery
- Enclosure seal for food machinery
- Stainless steel enclosure



NBGLC11.1

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC11.3

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC32.1

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC32.1/NSK

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC32.3

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC32.3/NSK

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC33.1

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC33.1/NSK

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC33.3

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC33.3/NSK

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC54.1

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure

NBGLC54.1/NSK

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure

••••

NBGLC54.3

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC54.3/NSK

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure

NBGLC55.1

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure



NBGLC55.3

- Stainless steel enclosure
- for application in food producing machinery
- Protection class IP69K
- Variable sizes with up to five holes for command devices
- No additional mounting accessories such as spacers required thanks to flange seal under the enclosure

Schmersal, Inc., 115 E Stevens Ave, Suite 208, Valhalla, NY 10595

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible. Generated on: 5/28/2024, 9:21 AM