

PUSH BUTTONS NEF22T

DATA SHEET

no: KK-N_NEF22T



Drives of the NEF22T series control buttons with plastic bodies are intended for installation in standardized $\varnothing 22.5$ mm holes, in numerous types of control and signal equipment or directly into bodies of machines and equipment. They are intended to work with EF22GX and EF22GY switching elements manufactured by SN PROMET and with EF22L backlight block.

Push buttons NEF22T consists of:

- a drive of NEF22T,
- 1-6 switching elements of the EF22G type, ordered separately (max 4 switching elements, when using backlit buttons and knob- or lock-operated buttons switched separately),
- an all-purpose EF22L backlight block for backlit buttons.

TECHNICAL DATA:

Parameter	Value
Insulation rated voltage U_i	500V
Rated thermal current I_{th}	10A
Rated voltages and switching currents per utilization category I_e - U_e 230V/400V (AC15) - U_e 110V/220V (DC13)	6A / 4A 1A / 0,25A
Rated impulse withstand voltage U_{imp}	4000V
Limited withstand current	1000A
Mechanical life: - for return drives - for knob-operated and interlocked drives	1 x 10 ⁶ 0,7 x 10 ⁵
Rated frequency of switching	600 switches/h
IP for button drives IP for under-desk part	IP 65, 40 IP 20
Cross-sections of terminals	1x or 2x LY 0,75 – 1,5 mm ² 1x or 2x DY 1,0 – 1,5 mm ²
Working temperature	-40...+50°C
Working position	any
Minimum force for effective opening	1,7N
Travel of effective opening	3 mm
Rated voltage of the backlight block EF22L U_e	24-230 V AC/DC

The product conforms to the following standard PN-EN 60947-5-1. Drives of emergency interlocked buttons conform to standard PN-EN 60947-5-5.


RETURN DRIVES

	Type	Designation	Colour	Weight [g]
	Return drive with a covered button ☼ backlight available IP65	NEF22T-K c NEF22T-K z NEF22T-K g NEF22T-K s NEF22T-K n NEF22T-K b	red green yellow black blue white	13
	Return drive with an extending button ☼ backlight available IP65	NEF22T-W c NEF22T-W z NEF22T-W g NEF22T-W s NEF22T-W n NEF22T-W b	red green yellow black blue white	14
	Return drive with a palm button ☼ backlight available IP65	NEF22T-D c NEF22T-D z NEF22T-D g NEF22T-D s	red green yellow black	15



KNOB-OPERATED DRIVES

	Type	Designation	Colour	Weight [g]
 <p>IP 65</p> <p>☉ backlight available</p>	0 – I stable, knob's angle of rotation 60°	NEF22T-Pa s NEF22T-Pa c NEF22T-Pa z NEF22T-Pa g NEF22T-Pa n	black red green yellow blue	16
	0 ← I unstable, knob's angle of rotation 60°	NEF22T-Pb s NEF22T-Pb c NEF22T-Pb z NEF22T-Pb g NEF22T-Pb n	black red green yellow blue	16
	I – 0 – II stable, knob's angle of rotation 2x45°, contacts of the switch are switched separately	NEF22T-Pc s NEF22T-Pc c NEF22T-Pc z NEF22T-Pc g NEF22T-Pc n	black red green yellow blue	16
	I – 0 ← II pos. I – stable, pos. II - unstable, knob's angle of rotation: 60° to pos. I, 45° to pos. II, contacts of the switch are switched simultaneously	NEF22T-Pd s NEF22T-Pd c NEF22T-Pd z NEF22T-Pd g NEF22T-Pd n	black red green yellow blue	16
	I → 0 ← II unstable, knob's angle of rotation 2x45°, contacts of the switch are switched separately	NEF22T-Pe s NEF22T-Pe c NEF22T-Pe z NEF22T-Pe g NEF22T-Pe n	black red green yellow blue	16
	I – 0 ← II pos. I – stable, pos. II - unstable, knob's angle of rotation 2x45°, contacts of the switch are switched separately	NEF22T-Pf s NEF22T-Pf c NEF22T-Pf z NEF22T-Pf g NEF22T-Pf n	black red green yellow blue	16
	I → 0 – II pos. I – unstable, pos. II - stable, knob's angle of rotation 2x45°, contacts of the switch are switched separately	NEF22T-Pg s NEF22T-Pg c NEF22T-Pg z NEF22T-Pg g NEF22T-Pg n	black red green yellow blue	16
	0 – I – II stable, knob's angle of rotation 2x45°, contacts of the switch are switched separately	NEF22T-Ph s NEF22T-Ph c NEF22T-Ph z NEF22T-Ph g NEF22T-Ph n	black red green yellow blue	16

LOCK-OPERATED DRIVES

	Type	Designation	Weight [g]
 <p>IP 40</p>	0 – I stable, key's angle of rotation 60° 1 – removing the key at position 0 2 – removing the key at position 0 and I	NEF22T-Za1 NEF22T-Za2	33
	0 ← I unstable, key's angle of rotation 60° 1 – removing the key at position 0	NEF22T-Zb1	33
	I – 0 – II stable, key's angle of rotation 2x45°, contacts of the switch are switched separately 1 – removing the key at position 0 2 – removing the key at position 0 and I 3 – removing the key at position 0, I and II	NEF22T-Zc1 NEF22T-Zc2 NEF22T-Zc3	33
	I – 0 ← II pos. I – stable; pos. II - unstable, key's angle of rotation: 60° to pos. I, 45° to pos. II, contacts of the switch are switched simultaneously 1 – removing the key at position 0 2 – removing the key at position 0 and I	NEF22T-Zd1 NEF22T-Zd2	33
	I → 0 ← II unstable, key's angle of rotation 2x45°, contacts of the switch are switched separately 1 – removing the key at position 0	NEF22T-Ze1	33
	I – 0 ← II pos. I – stable; pos. II - unstable, key's angle of rotation 2x45°, contacts of the switch are switched separately 1 – removing the key at position 0 2 – removing the key at position 0 and I	NEF22T-Zf1 NEF22T-Zf2	33
	I → 0 – II pos. I – unstable; pos. II – stable, key's angle of rotation 2x45°, contacts of the switch are switched separately 1 – removing the key at position 0	NEF22T-Zg	33
	0 – I – II stable, key's angle of rotation 2x45°, contacts of the switch are switched separately 2 – removing the key at position 0 and I 3 – removing the key at position 0, I and II	NEF22T-Zh2 NEF22T-Zh3	33
	0 – I ← II pos. I – stable; pos. II – unstable, key's angle of rotation 2x45°, contacts of the switch are switched separately 2 – removing the key at position 0 and I	NEF22T-Zi2	33

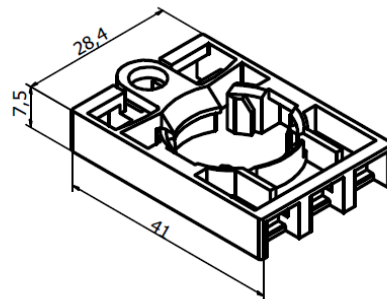
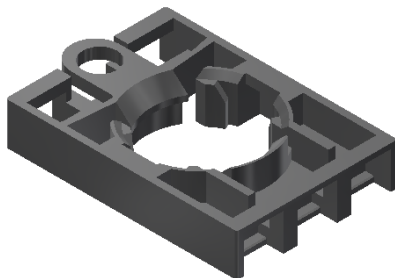
EMERGENCY INTERLOCKED PALM DRIVES

	Type	Designation	Colour	Weight [g]
	Interlocked palm drive, unlocked by rotating the button IP 65	NEF22T-DR/P c	red	43
	Interlocked palm drive, unlocked by rotating the key IP65	NEF22T-DR/Z c	red	59

INTERMEDIATE ELEMENT EF22

Necessary element of NEF22T is intermediate element EF22 (plastic, in black colour).

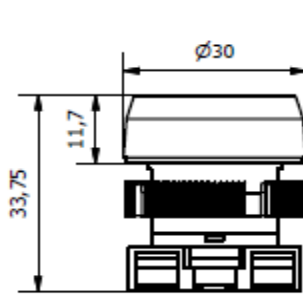
It is used to connect the individual components of the button (drive, switching element, backlight block).



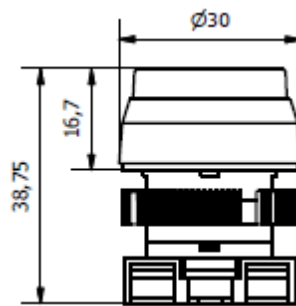
SWITCHING ELEMENTS EF22G AND BACKLIGHT BLOCK EF22L

	Type	Designation	Colour	Weight [g]
	Switching element EF22GX (1NO) IP20	EF22GX	transparent/green	11
	Switching element EF22GY (1NC) With effective opening IP 20	EF22GY	transparent/red	12
	All-purpose LED backlight block, operating under 24-230V AC/DC, continuous illumination IP 20	EF22LN c EF22LN z EF22LN g EF22LN n EF22LN b	red green yellow blue white	12
	All-purpose LED backlight block, operating under 24-230V AC/DC, flashing light IP 20	EF22LB c EF22LB z EF22LB g EF22LB n EF22LB b	red green yellow blue white	12

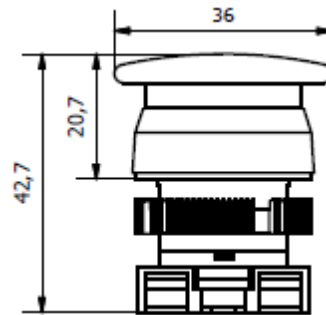
DIMENSIONS



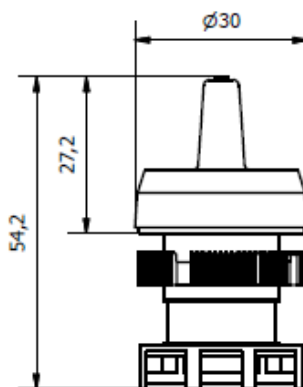
NEF22T-K,



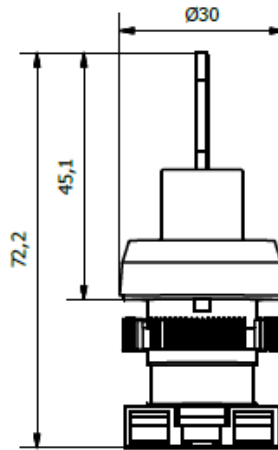
NEF22T-W



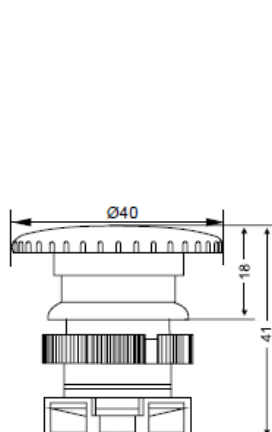
NEF22T-D



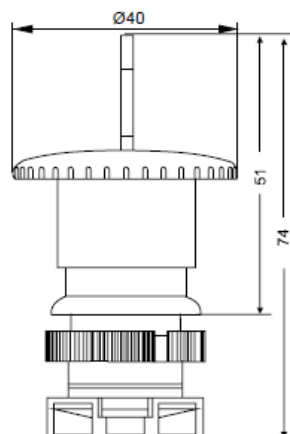
NEF22T-Ka, NEF22T-Kb
NEF22T-Kc, NEF22T-Kd
NEF22T-Ke, NEF22T-Kf
NEF22T-Kg, NEF22T-Kh



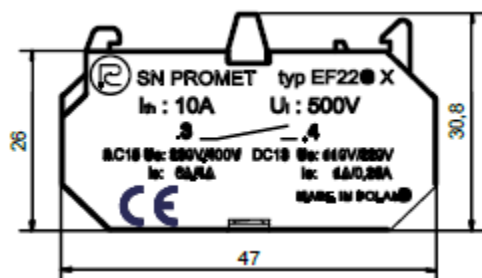
NEF22T-Za1, NEF22T-Za2
NEF22T-Zb1, NEF22T-Zc1
NEF22T-Zc2, NEF22T-Zc3
NEF22T-Zd1, NEF22T-Zd2
NEF22T-Ze1, NEF22T-Zf1
NEF22T-Zf2, NEF22T-Zg1
NEF22T-Zh2, NEF22T-Zh3
NEF22T-Zi2



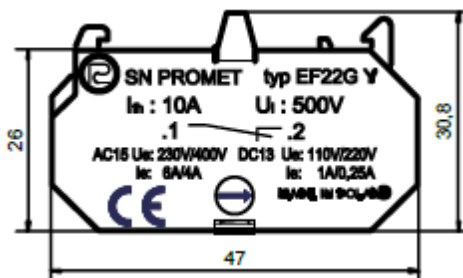
NEF22T-DR/P c



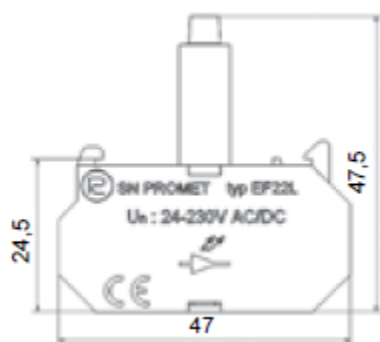
NEF22T-DR/Z c



EF22GX



EF22GY



EF22LN, EF22LB