

NEPTUN BOX

Il box in acciaio inox per condizioni ambientali estreme

Il box di finecorsa neptun è stato sviluppato nel 2015 e viene prodotto esclusivamente in Germania. Tutte le parti esterne sono composte di materiali di elevata qualità AISI 316 Ti o AISI 316. L'elevata resistenza alla corrosione ne favorisce l'uso nel settore chimico e negli ambienti esterni.

Grazie alla sua forma classica, il box neptun si rende molto flessibile. Possono essere montati 1-4 finecorsa meccanici e sensori in design V3. Inoltre possono essere inseriti 1-3 sensori di tipo slot e 1-2 sensori cilindrici (diametro max. 18mm - lunghezza 70mm).

Tutti i nostri bracket sono regolabili in altezza e larghezza e sono forniti insieme al tipo di box scelto.

The stainless steel switch box for extreme environments

The neptun limit switch box was developed in 2015 and is exclusively produced in Germany. All external parts are made of high class materials AISI 316 Ti or AISI 316. This switch box is predestined not only for use in chemical apparatus construction but also in offshore applications, thanks to its high resistance against corrosion and pitting. By means of its classic design, it is very flexible - up to 4 mechanical micro switches or sensors in V3 design could be installed inside. Alternatively 1-3 slot type sensors and 1-2 cylindrical sensors (with max. diameter 18mm / max. length 70mm) can be used. All our brackets are adjustable in height and length and are always included in the delivery.



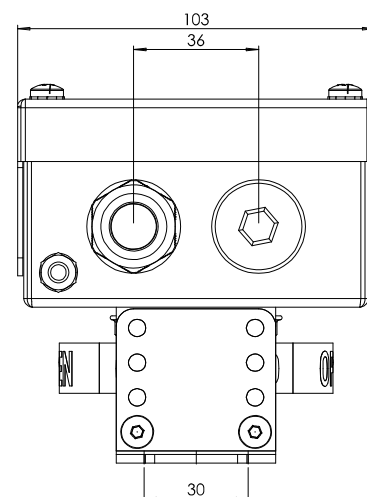
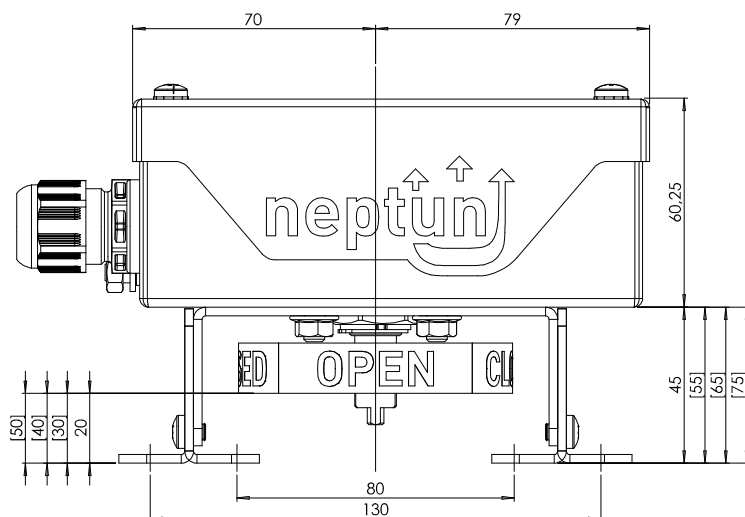
Box di finecorsa robusto e flessibile, AISI 316L

Flexible and robust limit switch box, stainless steel AISI 316L



Modello box Housing type	NEK	NEK-40°C NEK-55°C
Materiale box/bracket/albero Housing material/bracket/shaft	AISI 316 Ti / albero: AISI 316 Stainless steel AISI 316 Ti / Shaft: Stainless steel AISI 316	AISI 316 / albero: AISI 316 Stainless steel AISI 316 Ti / Shaft: Stainless steel AISI 316
Materiale guarnizioni/viti Sealing material/screws	EPDM, NBR / AISI 316 EPDM, NBR / Stainless steel AISI 316	-40 °C: EPDM, Silicone / -55 °C: Silicone / AISI 316 -40 °C: EPDM, silicone / -55 °C: silicone / Stainless steel AISI 316
Indicatore di posizione Visual indicator	OPEN-CLOSED (OC)	OPEN-CLOSED (OC)
Foratura attuatore Actuator hole spacings	80x30 mm / 130x30 mm (Optional: 50x25 mm)	80x30 mm / 130x30 mm (Optional: 50x25 mm)
Altezza albero attuatore Actuator shaft heights	20, 30, 40, 50 mm	20, 30, 40, 50 mm
Foratura F05 F05 interface	Standard (Necessario particolare bracket con fili 4x 8 mm) Standard (Special bracket with 4x 8 mm threads is needed)	Standard (Necessario particolare bracket con fili 4x 8 mm) Standard (Special bracket with 4x 8 mm threads is needed)
Connessioni Connections	2x M20x1,5 di cui 1x con connessione cavo one of which with cable gland	2x M20x1,5 di cui 1x con connessione cavo one of which with cable gland
Temperatura ambiente Ambient temperature	-25 °C ... +100 °C	-55 °C / -40 °C ... +100 °C

Dimensioni Dimensions



Box di finecorsa robusto e flessibile, AISI 316L, Ex ia

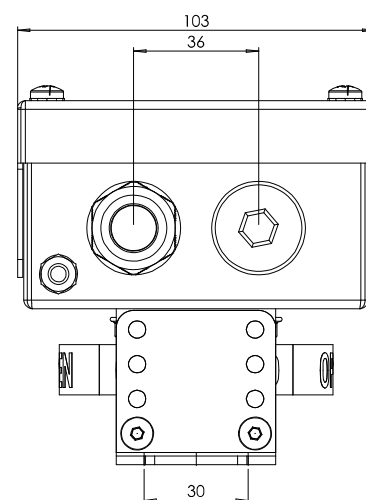
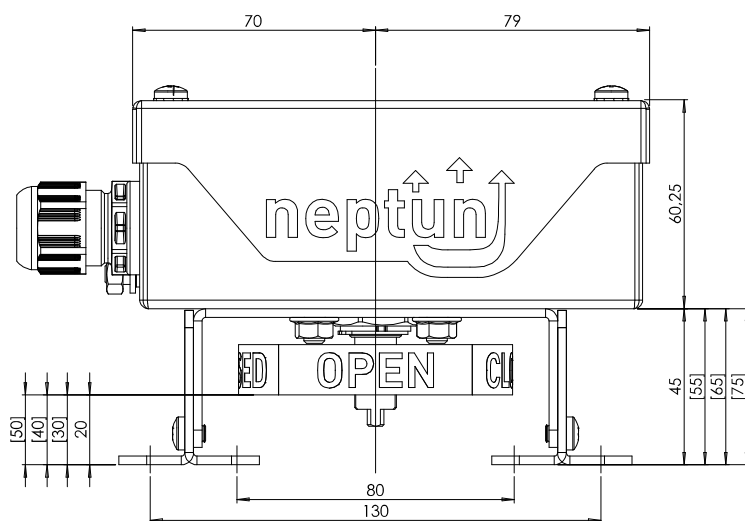
Flexible and robust limit switch box, stainless steel AISI 316L, Ex ia

EPS 16 ATEX 1007 X | IECEx EPS 16.0002 X



Modello box Housing type	NEK-IA	NEK-IA-40°C NEK-IA-55°C
Materiale box/bracket/albero Housing/bracket/shaft material	AISI 316 Ti / albero: AISI 316 Stainless steel AISI 316 Ti / Shaft: Stainless steel AISI 316	AISI 316 Ti / albero: AISI 316 Stainless steel AISI 316 Ti / Shaft: Stainless steel AISI 316
Materiale guarnizioni/viti Sealing/screw material	EPDM, NBR / AISI 316 EPDM, NBR / Stainless steel AISI 316	-40 °C: EPDM, Silicone / -55 °C: Silicone / AISI 316 -40 °C: EPDM, silicone / -55 °C: silicone / Stainless steel AISI 316
Indicatore di posizione Visual indicator	OPEN-CLOSED (OC)	OPEN-CLOSED (OC)
Foratura attuatore Actuator hole spacings	80x30 mm / 130x30 mm (Optional: 50x25 mm)	80x30 mm / 130x30 mm (Optional: 50x25 mm)
Altezza albero attuatore Actuator shaft heights	20, 30, 40, 50 mm	20, 30, 40, 50 mm
Foratura F05 F05 interface	Standard (Necessario bracket con fili 4x 8 mm) Standard (Special bracket with 4x 8 mm threads is needed)	Standard (Necessario bracket con fili 4x 8) Standard (Special bracket with 4x 8 mm threads is needed)
Connessioni Connections	2x M20x1,5 davon 1x con connessione cavo, blu one of which with cable gland, blue	2x M20x1,5 davon 1x con connessione cavo, blu one of which with cable gland, blue
Temperatura ambiente Ambient temperature	-25 °C ... +100 °C	-55 °C / -40 °C ... +100 °C

Dimensioni Dimensions



Box di finecorsa robusto e flessibile, AISI 316L, Ex e / Ex t

Flexible and robust limit switch box, stainless steel AISI 316L, Ex e / Ex t

EPS 16 ATEX 1007 X | IECEx EPS 16.0002 X | Zone 1+2, Zone 21+22



IP65

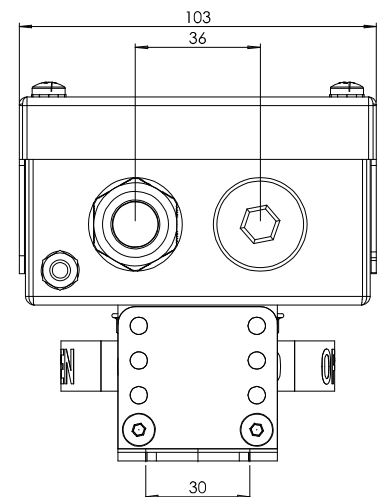
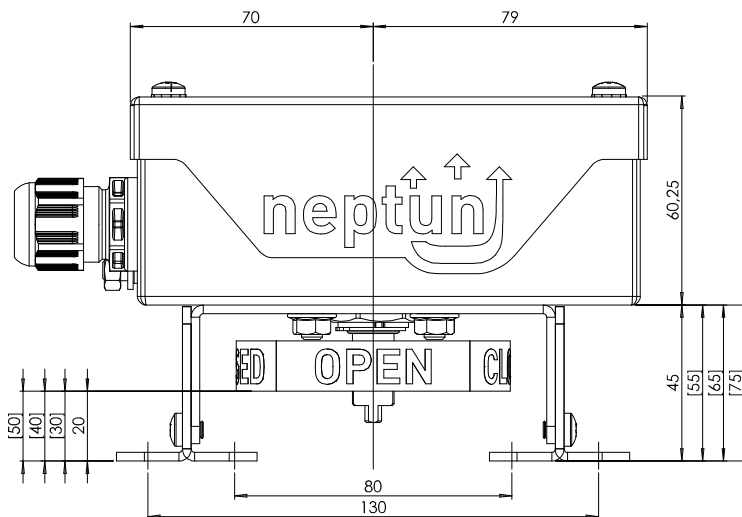


IP65
IP66



Modello box Housing type	NEK-ED	NEK-ED-40°C NEK-ED-55°C
Materiale box/bracket/albero Housing/bracket/shaft material	AISI 316 Ti / albero: AISI 316 Stainless steel AISI 316 Ti / Shaft: Stainless steel AISI 316	AISI 316 Ti / albero: AISI 316 Stainless steel AISI 316 Ti / Shaft: Stainless steel AISI 316
Materiale guarnizioni/viti Sealings/screw material	EPDM, NBR / AISI 316 EPDM, NBR / Stainless steel AISI 316	-40 °C: EPDM, Silicone / -55 °C: Silicone / AISI 316 -40 °C: EPDM, silicone / -55 °C: silicone / Stainless steel AISI 316
Indicatore di posizione Visual indicator	OPEN-CLOSED (OC)	OPEN-CLOSED (OC)
Foratura attuatore Actuator hole spacings	80x30 mm / 130x30 mm (Optional: 50x25 mm)	80x30 mm / 130x30 mm (Optional: 50x25 mm)
Altezza albero attuatore Actuator shaft heights	20, 30, 40, 50 mm	20, 30, 40, 50 mm
Foratura F05 F05 interface	Standard (Necessario bracket con fili 4x 8 mm) Standard (Special bracket with 4x 8 mm threads is needed)	Standard (Necessario bracket con fili 4x 8 mm) Standard (Special bracket with 4x 8 mm threads is needed)
Connessioni Connections	2x M20x1,5 di cui 1x con connessione cavo, nero Ex e one of which with cable gland, black Ex e	2x M20x1,5 di cui 1x con connessione cavo, nero Ex e one of which with cable gland, black Ex e
Temperatura ambiente Ambient temperature	T4: -25 °C ... + 75 °C T5: -25 °C ... + 60 °C T6: -25 °C ... + 40 °C	T4: -55 °C / -40 °C ... + 75 °C T5: -55 °C / -40 °C ... + 60 °C T6: -55 °C / -40 °C ... + 40 °C

Dimensioni Dimensions



Box Ex e, con inecorsa meccanici Ex d per basse temperature

Limit switch box Ex e, with mechanical switches, Ex d for low temperature area



Immagine a seguire
Image follows

Immagine a seguire
Image follows

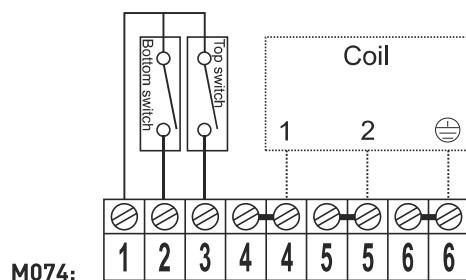
Box con 2x M20x1,5
Housing with 2x M20x1,5



Modello finecorsa Switch type	Bartec, 07-1511-5520 (SPST, NO)	Bartec, 07-1511-8520 (SPST, NO)	
Tensione Voltage	Max. 24 V DC	Max. 24 V DC	
Corrente d'esercizio Operating current	0,1 - 4 A	20 - 400 mA	
Contatti Contacts	Argento Silver	Oro	
Livello SIL SIL Level	SIL 1 - 3 (IEC 61508:2010)	SIL 1 - 3 (IEC 61508:2010)	
ATEX/IECEx ATEX/IECEx	Ⓜ II 2G Ex de IIC T5 - T6 Gb Ⓜ II 2D Ex t IIIC T80 °C - T95 °C Db	Ⓜ II 2G Ex de IIC T5 - T6 Gb Ⓜ II 2D Ex t IIIC T80 °C - T95 °C Db	
Certificazione EU EU-Type examination certificate	EPS 16 ATEX 1007 X IECEx EPS 16,0002 X	EPS 16 ATEX 1007 X IECEx EPS 16,0002 X	
Zona Ex Ex zone	Zone 1, 2 Zone 21, 22	Zone 1, 2 Zone 21, 22	
Temperatura ambiente Ambient temperature	T6/T80 °C: -55 °C ... +40 °C T5/T95 °C: -55 °C ... +60 °C T4/T135 °C: -55 °C ... +70 °C	T6/T80 °C: -55 °C ... +40 °C T5/T95 °C: -55 °C ... +60 °C T4/T135 °C: -55 °C ... +70 °C	
Nr. max. di finecorsa Max. number of switches	3	3	
Codice articolo* Part number*	NEK2M01-555-ED-2KV-40°C NEK2M01-555-ED-2KV-55°C	NEK2M01-557-ED-2KV-40°C NEK2M01-557-ED-2KV-55°C	

*Codice articolo alla fine del capitolo
*General ordering code at the end of chapter

Schema elettrico Wiring diagram



Connessione elettrovalvola:
1 bobina, max. 24V DC,
I max. = 6A, min. 0,5mm²
Solenoid valve connection:
1 coil, max. 24V DC,
I max. = 6A, min. 0,5mm²

Note Notes

Connessioni Connections



Connessione elettrovalvola per 1 bobina con cavo preassemblato di lunghezza 500mm
Solenoid valve connection for 1 coil with 500mm long pre-assembled cable

...-MA



Connessione elettrovalvola per 2 bobine con cavo preassemblato di lunghezza 500mm
Solenoid valve connection for 2 coils with pre-assembled cables of 500mm length

...-2MA



Attacco M12 a 5 poli, maschio, per collegamento facile e veloce
M12 plug connector 5 pole, male, for quick and simple connection

...-M12



Attacco M12 a 5 poli, maschio, per collegamento veloce e attacco M12 a 5 poli, femmina, per connessione a elettrovalvola
M12 plug connector 5 pole, male, for quick and simple connection and M12 plug connector 5 pole, female, for connection of a solenoid valve

...M12-MA12



2 attacchi cavo M20x1,5
2 cable glands M20x1,5

...-2KV



2xconnessioni filettate NPT 1/2
2x Thread connection NPT 1/2

...-2NPT1/2



connessione filettata NPT 1/2
Thread connection NPT 1/2

...-NPT1/2

Utilizzo esterno Outdoor use



Vite di sfiato per evitare la condensa di acqua all'interno del box
Venting screw in order to avoid condensed water inside of the switch box housing

...-DAE

Codici ordine

Order code



NE K 2 I 01 - 14 - IA - MA - DAE - - XY1

Box Housing
Acciaio inox Stainless steel

Lunghezza box Housing length
K **Corto** Short
L **Lungo** Long

Finecorsa Switches
1 **Pezzo** Piece
2 **Pezzi** Pieces
3 **Pezzi** Pieces
4 **Pezzi** Pieces

Modello finecorsa Switch type
M **Meccanico** Mechanical
I **Induttivo** Inductive
S **Slot** Slot type
D **Doppi sensori** Dual sensor
W **Sensore angolare** Angle sensor
R **Reed** Reed sensor
PT **Potenziometro** Potentiometer

Foratura attuatore¹ Hole spacing
00 50x25x20 **04** 130x30x50 **08** 130x30x40
01 80x30x20 **05** 80x30x40 **09** 50x25x30
02 80x30x30 **06** 80x30x50 **10** F05
03 130x30x30 **07** 130x30x20

Codice articolo Switch type code

Protezione atex Explosion protection
Non-Ex (Sicuro) Non-Ex (Safe)
IA **Ex ia** Zone 1, 2 & Zone 21, 22
ED **Ex de / Ex t** Zone 1, 2 & Zone 21, 22
K2D **Ex t** Zone 21, 22
K3 **Ex nA / Ex t** Zone 2 & Zone 21, 22

Opzioni e accessori Options and accessories
Dettagli a pag. n.24 Details on page n.24

Temperatura ambiente² Ambient temperature²
Standard Standard
#°C **Basse tempertaure** Low temp. area
H#°C **Alte temperature** High temp. area

Design personalizzabile Custom design
Su richiesta Upon request

Esempio codificazione Sample part number

NE	Box di finecorsa neptun Switchbox neptun
K	Box corto Short housing
2	2 Finecorsa 2 switches
I	Induttivo Inductive
01	80x30x20 mm
14	IFM, NS5002
IA	Ex ia (Zone 1, 2 + 21, 22)
MA	Conn. elettrovalvola per 1 bobina Solenoid valve connection for 1 coil
DAE	Vite di sfiato Venting screw Temperature standard Standard temperature range
XY1	Design personalizzato 1 Custom design 1

¹ **Bracket disponibili solo in acciaio inox.**
 Brackets available in stainless steel only.

² **Margine di basse temperature: inferiori a -25 °C | Margine di alte temperature : superiori a +80 °C.**
 Low temperature range: below -25 °C | High temperature range: above +80 °C.

Process

Fluid Measure & Control

<https://www.proxess.it>

proxess@proxess.it