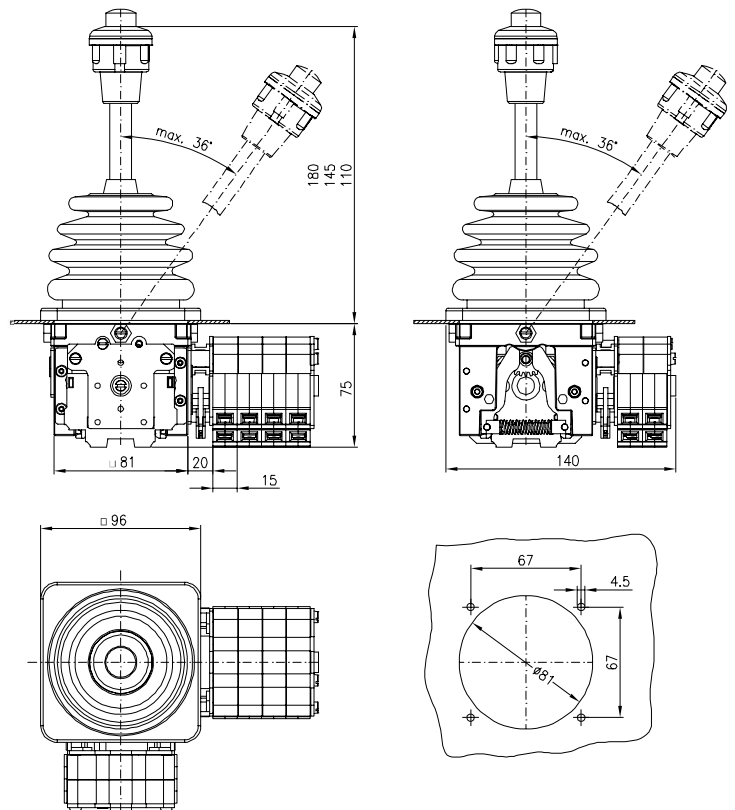
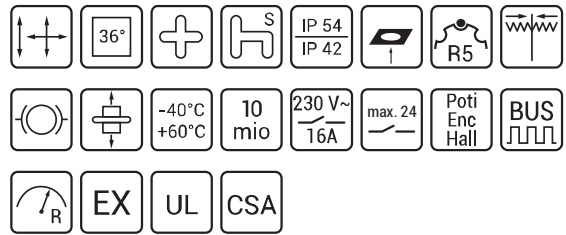


# VNSO

The Allrounder.

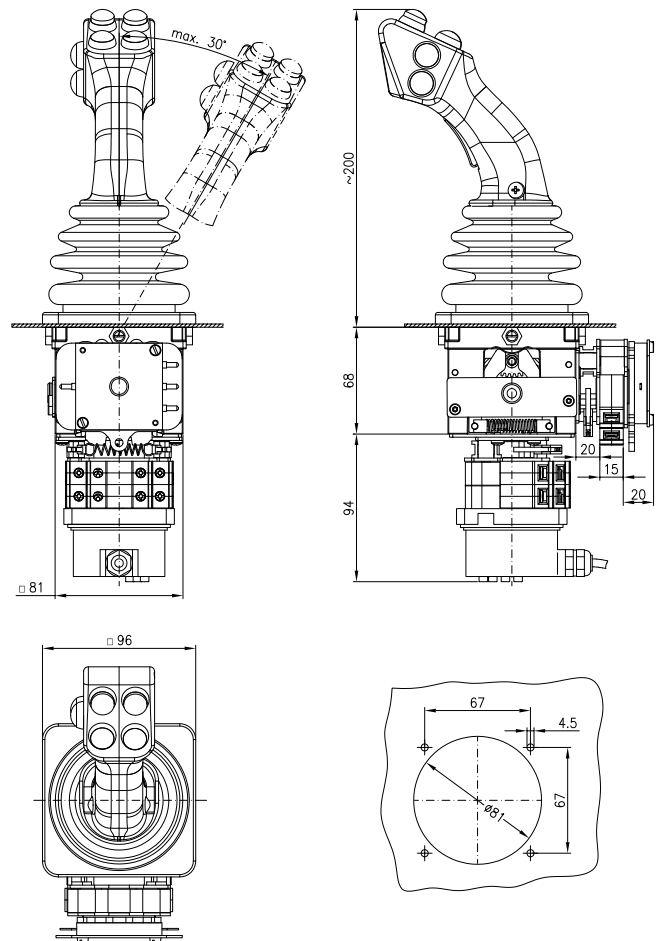
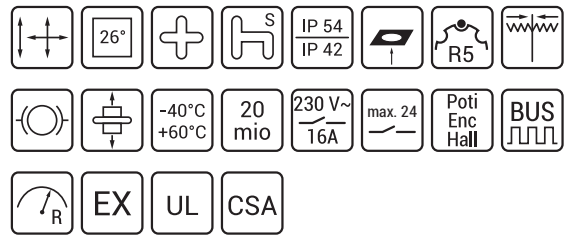


Our allrounder VNSO and our special type NNSO  
 Both the VNSO and the NNSO are very robust joysticks with aluminium pressure casting consoles and metal gears. Their resistance against ozone, UV radiation, oil and maritime climate makes them especially suitable for heavy operations and in Ex-areas. They are available both as single and compound axis drives. The intelligent modular design allows customized

solutions for contact elements for up to twelve units, each of them with two switching contacts. Those may be flanged in the x-y- and z-axis as well as in series. A maximum of nine contact elements is feasible with spring return and notches. A large standard portfolio allows to choose the notches as well as the cams. They are also programmable according to client's request. Silver or gold contacts are optional.

# NNSO

Our special type.



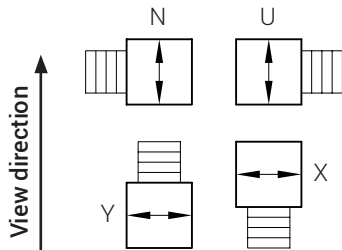
The hollow special-alloy lever (VNSO 8 mm, NNSO 12 mm diameter) allows to assemble a variety of grips and the wires can be routed through the joystick. Grip rotation may come in different grip versions. Due to the special coupling design it is easy to flange different potentiometers as well as optoelectro-

nic encoders. Moreover, various bus interfaces are available in customized system sizes. As an optical finish, you will get the escutcheon plate of your choice either in transparent plastic with specified engraving or as an engraved aluminium version.

Please note the view direction for following handles: G1, G13, UG, UGN, UGD, UGA

Drive arrangement E

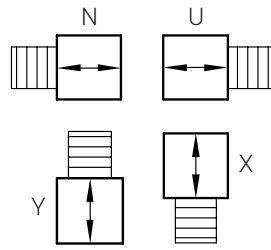
Dimension sheet TI-VNS0-1/7, 2/7



VNS0-F E- $\begin{matrix} \text{N} \\ \text{U} \\ \text{Y} \\ \text{X} \end{matrix}$ --AK

Drive arrangement G

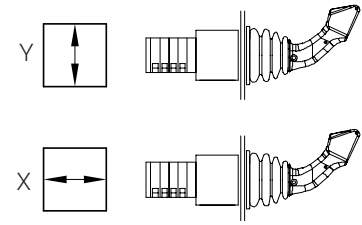
Dimension sheet TI-VNS0-3/7



VNS0-F G- $\begin{matrix} \text{N} \\ \text{U} \\ \text{Y} \\ \text{X} \end{matrix}$ --AK

Drive arrangement A

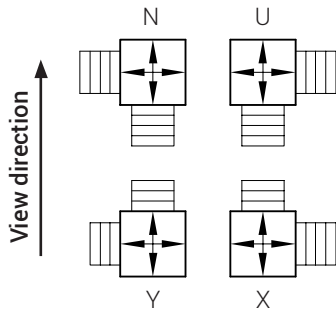
Dimension sheet TI-VNS0-4/7



VNS0-F A- $\begin{matrix} \text{Y} \\ \text{X} \end{matrix}$ --AK

Drive arrangement V

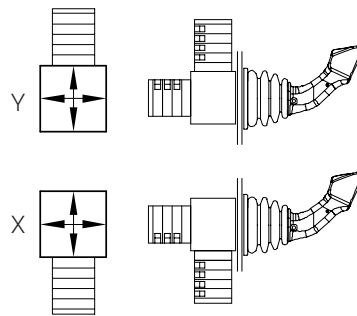
Dimension sheet TI-VNS0-1/7, 2/7



VNS0--F V- $\begin{matrix} \text{N} \\ \text{U} \\ \text{Y} \\ \text{X} \end{matrix}$ --AK

Drive arrangement EA

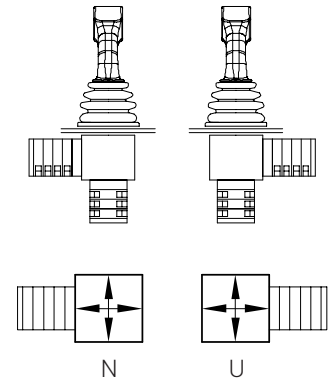
Dimension sheet TI-VNS0-4/7



VNS0--F EA- $\begin{matrix} \text{Y} \\ \text{X} \end{matrix}$ --AK

Drive arrangement EA

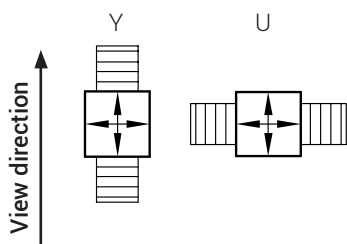
Dimension sheet TI-VNS0-4/7



VNS0--F EA- $\begin{matrix} \text{N} \\ \text{U} \end{matrix}$ --AK

Drive arrangement M

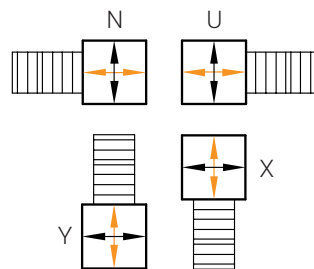
Dimension sheet TI-VNS0-3/7



VNS0--F M- $\begin{matrix} \text{U} \\ \text{Y} \end{matrix}$ --AK

Drive arrangement H

Dimension sheet TI-VNS0-3/7

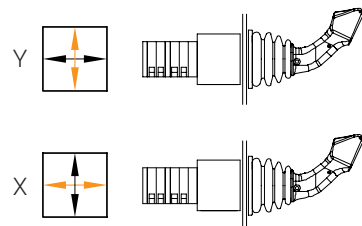


Potentiometer and encoder coupling only for colour-coded axis

VNS0--F H- $\begin{matrix} \text{N} \\ \text{U} \\ \text{Y} \\ \text{X} \end{matrix}$ --AK

Drive arrangement AA

Dimension sheet TI-VNS0-4/7

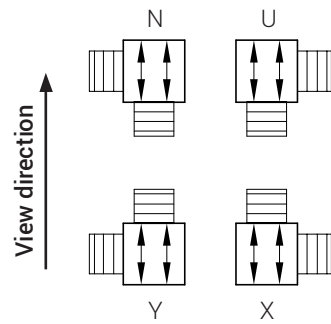


Potentiometer and encoder coupling only for colour-coded axis

VNS0-F AA- $\begin{matrix} \text{Y} \\ \text{X} \end{matrix}$ --AK

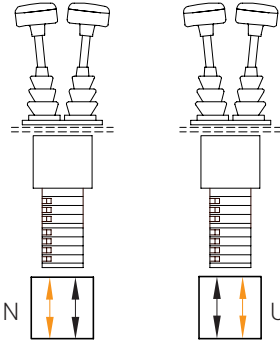
Please note the view direction for following handles: G1, G13, UG, UGN, UGD, UGA

Drive arrangement GGV



VNS0--F GGV-  
N  
U  
Y  
X

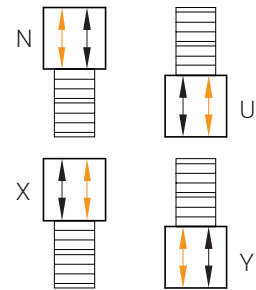
Drive arrangement GGAA  
Dimension sheet TI-NS0-1/4



Potentiometer and encoder coupling only for colourcoded axis

VNS0--F GGAA-  
N  
U

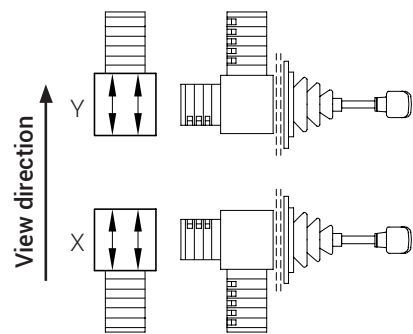
Drive arrangement GGH  
Dimension sheet TI-NS0-1/4



Potentiometer and encoder coupling only for colourcoded axis

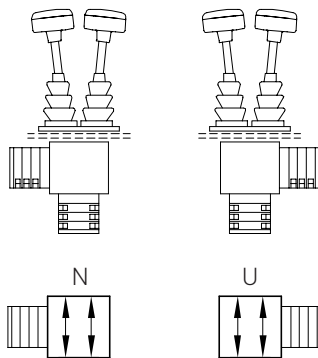
VNS0--F GGH-  
N  
U  
Y  
X

Drive arrangement GGEA  
Dimension sheet TI-NS0-2/4



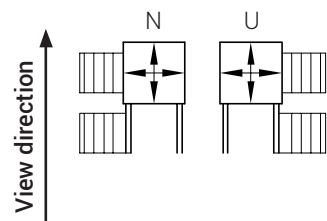
VNS0--F GGEA-  
Y  
X

Drive arrangement GGEA  
Dimension sheet TI-NS0-2/4



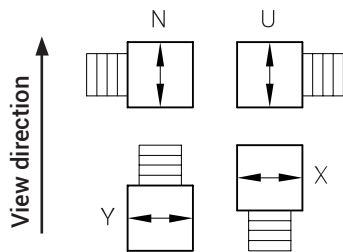
VNS0--F GGEA-  
N  
U

Drive arrangement D  
Dimension sheet TI-NS0-3/4



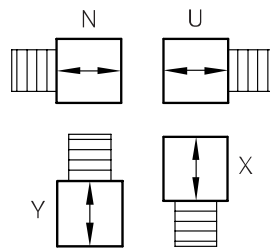
VNS0--F D-  
N  
U

## Drive arrangement EPI



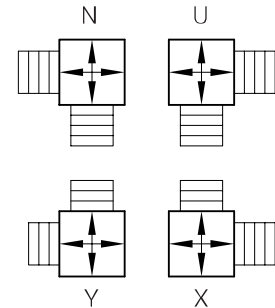
NNS0--F EPI-  
 N  
 U  
 Y  
 X --AK

## Drive arrangement GPI



NNS0--F GPI-  
 N  
 U  
 Y  
 X --AK

## Drive arrangement VPI



NNS0--F VPI-  
 N  
 U  
 Y  
 X --AK

**Standard scope of supply for NNS0-EPI, -GPI, -VPI:**

- Deflection 26°
- Potentiometer coupling for Bxx potentiometer in drive block
- Model with zero notches
- Limiting gate
- Lever 12 mm

**Additional charge for drive arrangement EPI, GPI, VPI:**

- Spring return per axis R
- Model without zero notches per axis (only with spring return)
- Mounted housing for bus interface
- Limiting gate 18°
- More information see page J-NS0-P
- Type code see page J-NS0-P

### Scope of supply, additional charge, type code

#### Scope of supply for VNS0, NNS0:

- Standard handle G41 for VNS0, G48 for NNS0
- Rubber boot
- Synthetical escutcheon with labelling foil
- Limiting gate (36° for VNS0, 26° for NNS0)

Fitting in handle	see sheet G-1...
Universal, special handle	see sheet G-...
Absolute encoder, potentiometer, encoder	see sheet E-Electronic-1
Circuit	siehe TI-S-...

#### Additional charge:

- Model NNS0 for E-, A-, G-drive arrangement (Blatt J-NS0-3/5)
- Model NNS0 for V-, EA-, M-drive arrangement (Blatt J-NS0-3/5)
- Console model for E-, G-, H-, or GGH-drive arrangement (see TI-VNS0-9/7) (Included 1x empty chamber for overall length adaptation)
- Circuits
- Per double contact element (silver contacts)
- Per double contact element (gold contacts) K
- Spring return per axis R
- Friction brake per axis B
- Floor mounting (not possible for A, AA, EA, EPI, GPI, VPI)
- Special limiting gate SAK
- Cross gate KK
- Special gate SK
- Slot gate SZK
- Special notching disc
- Aluminium escutcheon, black, 96x96 mm
- Escutcheon plate V048-100-A1
- Escutcheon plate V048-100-A1, escutcheon V048-100-A2
- Labelling per switch direction with max. 14 letters at plastic escutcheon, aluminium escutcheon t
- Labelling foil for synthetical escutcheon with symbols see sheet 2/3, each pair

Type code:	K	NNS0	1	2	UK	V-N	14	SZK	B	H	8P1	9P1	PQ55	B55
Gold plated contacts														
Type														
Double contact in view direction *														
Double contact in cross direction *														
Front mounting, base mounting, bracket version														
Drive-Arrangement														
Shaft 110   140   180 mm														
Limiting-   special-   cross-   special limiting-   Slot gate														
Spring return   friction brake														
Fitting in handle														
Circuit in view direction														
Circuit in cross direction														
Potentiometer in view direction														
Potentiometer in cross direction														

\* model with friction brake add 1 | Note: special handle, engraving should be described