

The palm grip B 2 is an actuating element for our multi-axis controller V 8. It can also be used as an actuating element for hydraulic drives. With each of the two push button one direction-contact (micro change over contact) also one potentiometer pushed. These palm grip realised the 3. direction 9-10 (3. axis) on our multi-axis controller V 8.

The palm grip has a highly flexible cable
8 x 0,25 mm² x 450 mm long.

The mounting piece for the drive rod can be adjusted steplessly up to 20° in all directions.

The palm grip B 2 is made of PA plastic and is black in colour.

Contact complement 0,5 A 110 V AC 15 or 1,5 A 24 V DC 13
I min > 0,2 mA 2 V DC 12 Gold plated for max. load of 0,12 Watt (standard)

Micro change over contacts available on request

Permissible ambient temperature Operating -40°C to +60°C
Storage -50°C to +80°C

Climate resistance IEC 60068-2-78
Damp heat constant IEC 60068-2-30
Damp heat cyclic IEC 60068-2-30
Degree of protection front IP 54 IEC/EN 60529

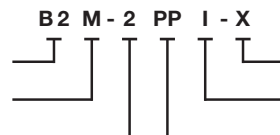
| Pos. | | Contact-complement | Weight gramm | Type | Price EURO |
|------|--|--------------------|--------------|------|------------|
| 1 | Palm grip with mounting piece for control-handle | | 200 | B 2 | |
| 2 | Latch for mechanical interlock for the push buttons | | 30 | M | |
| 3 | 2 direction-contacts | 2 normally open | 30 | 2 | |
| 4 | 2 wire-wound potentiometer T 239 linear life 5 x 10 ⁶ switching cycles resistance 1,2,5 kOhm 1 Watt wiper current max. 10 mA | | 60 | PP | |
| 5 | 2 conductive-plastic potentiometer T 301 linear life 10 ⁷ switching cycles resistance 1,2,5 kOhm 0,5 Watt wiper current max. 1 mA | | 50 | PP | |
| 6 | more potentiometer e.t.c. see catalog 1/240 | | | | |
| 10 | Impedance converter Input ±15 Volt, Output ±10 V /5 mA | | 50 | I | |
| 22 | Cable 8 x 0,25 mm ² x 450 mm long wired included Pos. 1-10 Additional price per metre cable 8-pole | | | | |

Example for type-sign

Palm grip

Mechanical interlock

No. of contacts



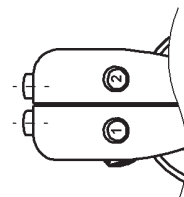
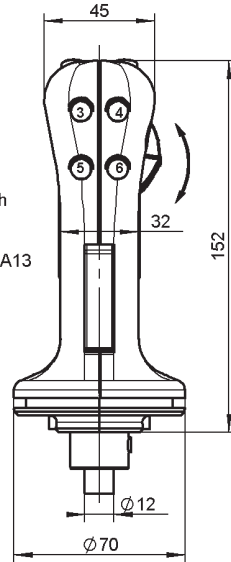
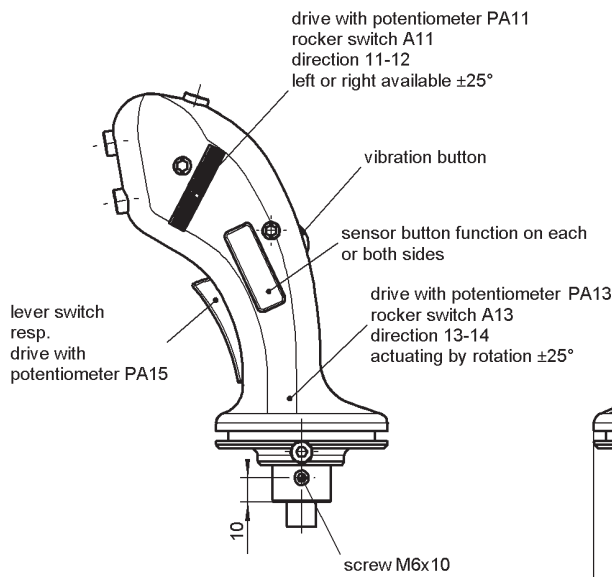
Special please describe

Impedance converter

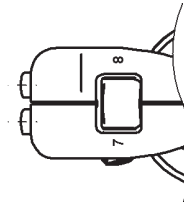
Potentiometer e.t.c.



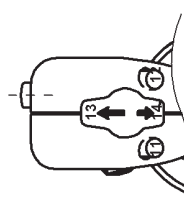
B3 with push button look catalog 1/286 Pos. 2.1 or 2.2



edition:
push button



edition:
rocker switch
installed Pos. 7,8
installed Pos. 3,4 inapplicable

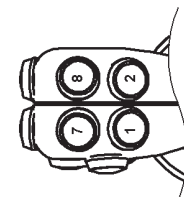
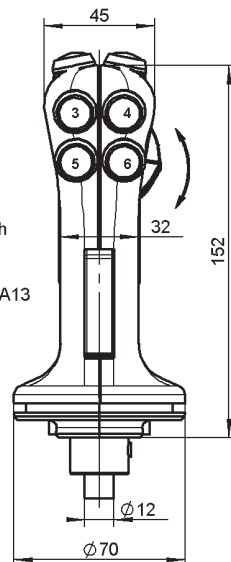
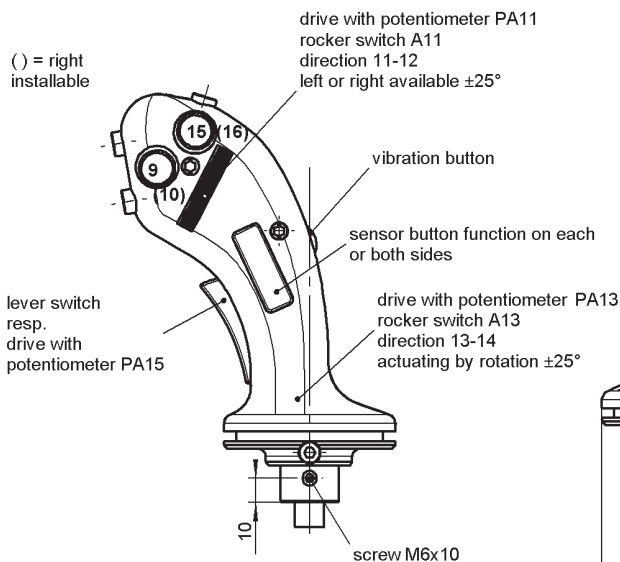


edition:
sliding switch
installed Pos. 13,14
installed Pos. 1,2,4,6,7,8
inapplicable

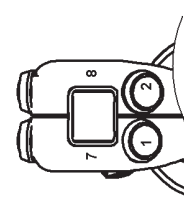
drive with potentiometer PA12 resp.
push button with 2 steps ZD
installed Pos. 11,12
PA11 resp. A11 inapplicable

edition: (only one option possible)
vibration button, drive with potentiometer PA 13 resp. A13, drive with potentiometer PA 15 resp. lever switch

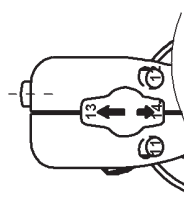
B3 with push button look catalog 1/286 Pos. 2.3



edition:
push button



edition:
rocker switch
installed Pos. 7,8
push button
installed Pos. 1,2



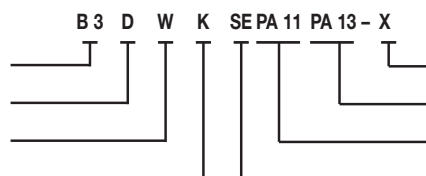
edition:
sliding switch
installed Pos. 13,14
installed Pos. 1,2,4,6,7,8,10,16
inapplicable

drive with potentiometer PA12 resp.
push button with 2 steps ZD
installed Pos. 11,12
PA11 resp. A11 inapplicable

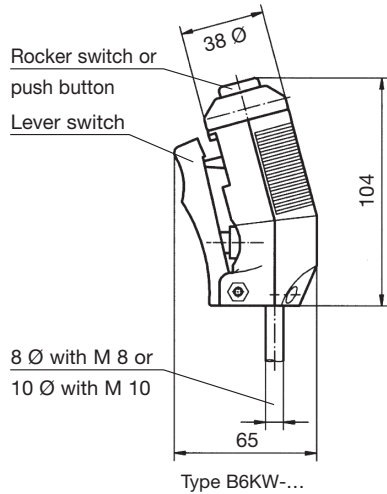
edition: (only one option possible)
vibration button, drive with potentiometer PA 13 resp. A13, drive with potentiometer PA 15 resp. lever switch

Example for type-sign

- Palm grip
- Push button
- Rocker switch
- Lever switch



- Special please describe
- Drive with potentiometer PA 13
- Drive with potentiometer PA 11
- Sensor button



The palm grip B 6 is an actuating element for our multi-axis and single-axis controller. It can also be used as an actuating element with hydraulic drives. Push buttons, rocker switches, e.t.c., can also be fitted to suit appropriate requirements. These devices have micro changeover contacts.

The palm grip has a highly flexible cable 4 (8) x 0,25 mm² x 450 mm long.

The mounting piece for the drive rod can be supplied with a tapped hole M 8 or M 10 (standard = M 10).

The palm grip B 6 is made of PA plastic and is black in colour.

Contact complement **2 A 250 V AC 15 / 3 A 24 V DC 13**
or **0,5 A 250 V AC 15 / 1,5 A 24 V DC 13**

Micro change over contacts

Permissible ambient temperature Operating -40°C to +60°C
Storage -50°C to +80°C

Climate resistance
Damp heat constant IEC 60068-2-78
Damp heat cyclic IEC 60068-2-30
Degree of protection front IP 54 IEC/EN 60529

| Pos. | | | Contact-complement | Weight gramm | Type | Price EURO |
|------|--|--|--|--------------|--------|------------|
| 1 | | with built in lever switch side 0-tip | 1 change over contact 1,5A 24 V DC 13 | 120 | B 6 K | |
| 2 | | Lever switch side 0-tip | | | | |
| 3 | | with rocker switch top tip-0-tip T-0-T | 3 change over contact | | | |
| 4 | | with rocker switch top tip-0-rest T-0-R | 1,5A 24 V DC 13 | 130 | B 6 KW | |
| | | with rocker switch top rest-0-rest R-0-R | | | | |
| 5 | | Lever switch side 0-tip with push button top | 2 change over contact 1,5A 24 V DC 13 | 130 | B 6 KD | |
| 21 | | Cable 4 or 8 x 0,25 mm ² x 450 mm long wired included Pos. 1-5 | | | | |
| 22 | | Additional price per metre cable 4-pole Additional price per metre cable 8-pole | | | | |



Type B76DV-...

Type B86DV-...

The palm grip B 7 is an actuating element for our multi-axis controller V 8, VV 8, V 6, VV 6, VV 5 design left, B 8 for design right.
It can also be used as an actuating element for hydraulic drives.
Push buttons, rocker switches, e.t.c., can also be fitted to suit appropriate requirements.

The palm grip has a highly flexible single wire 0,1 mm² x 450 mm long.

The mounting piece for the drive rod can be supplied with a tapped hole 12 or 10 mm (standard = 12 mm).

The palm grip B 7/8 is made of PA plastic and is black in colour.

Contact complement 0,5 A 110 V AC 15 or 1,5 A 24 V DC 13
I min > 0,2 mA 2 V DC 12 Gold plated for max. load of 0,12 Watt (standard)

Micro change over contacts available on request

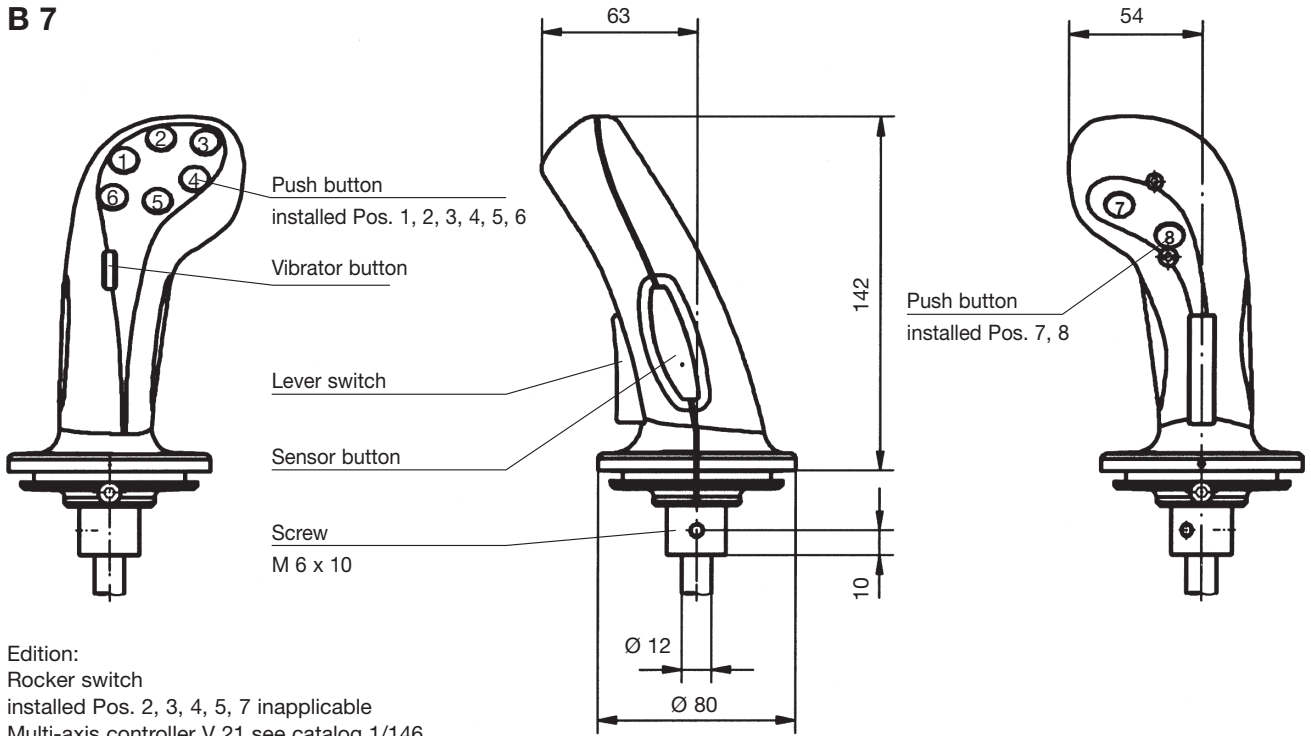
Permissible ambient temperature Operating -40°C to +60°C
Storage -50°C to +80°C

Climate resistance
Damp heat constant IEC 60068-2-78
Damp heat cyclic IEC 60068-2-30
Degree of protection front IP 65 IEC/IEC 60529

| Pos. | | | Contact-complement | Weight gramm | Type | Price EURO |
|------|---|--------------------|--------------------|--------------|------|------------|
| 1 | Palm grip with mounting piece for control-handle design left | | | 200 | B 7 | |
| 2 | Palm grip with mounting piece for control-handle design right | | | 200 | B 8 | |
| 3 | Push button installed Pos. 1, 2, 3, 4, 5, 6, 7, 8 color red RD, black BK, yellow YE, green GN, blue BU, white WH | | 1 normally open | 20 | D | |
| 4 | Rocker switch installed Pos. 2, 3, 4 | KEM/59 | 2 normally open | | | |
| 4.1 | Rocker switch tip-0-tip T-0-T | | | 30 | W | |
| 4.2 | Rocker switch 0-tip 0-T | | | 30 | W | |
| 4.3 | Rocker switch rest-0-tip R-0-T | | | 30 | W | |
| 4.4 | Rocker switch rest-0-rest R-0-R | | | 30 | W | |
| 4.5 | Rocker switch 0-rest 0-R | | | 30 | W | |
| 4.6 | Rocker switch rest - rest R - R | | | 30 | W | |
| 7 | Lever switch | | 1 normally open | 30 | K | |
| 20 | Vibrator button actuating through solenoid 24 V DC impulse signal 100% duty cycle factor | | | 60 | V | |
| 21 | Sensor button and/or annexed with a regulator electronic board EY / 42-10 or -11 24 V DC (separate) | | | 20 | SE | |
| 22 | Multi-axis controller V 21 see catalog 1/146 installed Pos. 1-4 | | | | | |
| 30 | Bellow for palm grip B 7/8 required for multi-axis controller V 8, VV 8 | KMD 109 | | | | |
| 31 | Bellow for palm grip B 7/8 and front plate with 4 screws M5 x 15 (for mounting the bellow) required for multi-axis controller V 6, VV 6, VV 5 | KMD 190 KBF 905 | | | | |
| 32 | Pressure cap protection IP 67 for push button Pos. 3 color red RD, black BK, yellow YE, green GN, blue BU | KMD 179 | | | | |

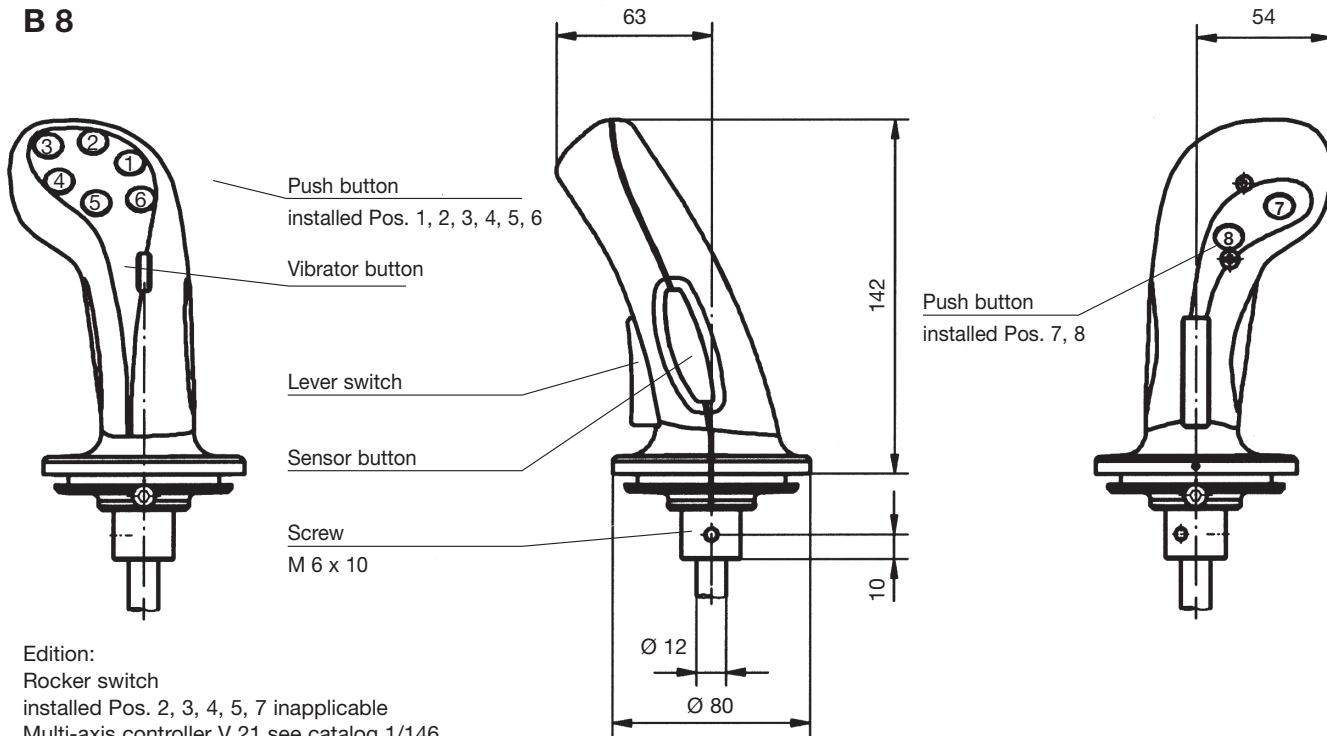


B 7



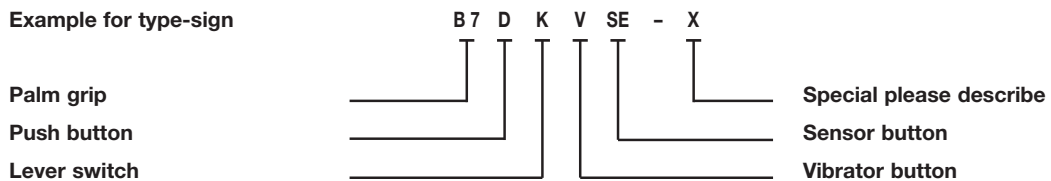
Edition:
Rocker switch
installed Pos. 2, 3, 4, 5, 7 inapplicable
Multi-axis controller V 21 see catalog 1/146
installed Pos. 1, 2, 3, 4 inapplicable

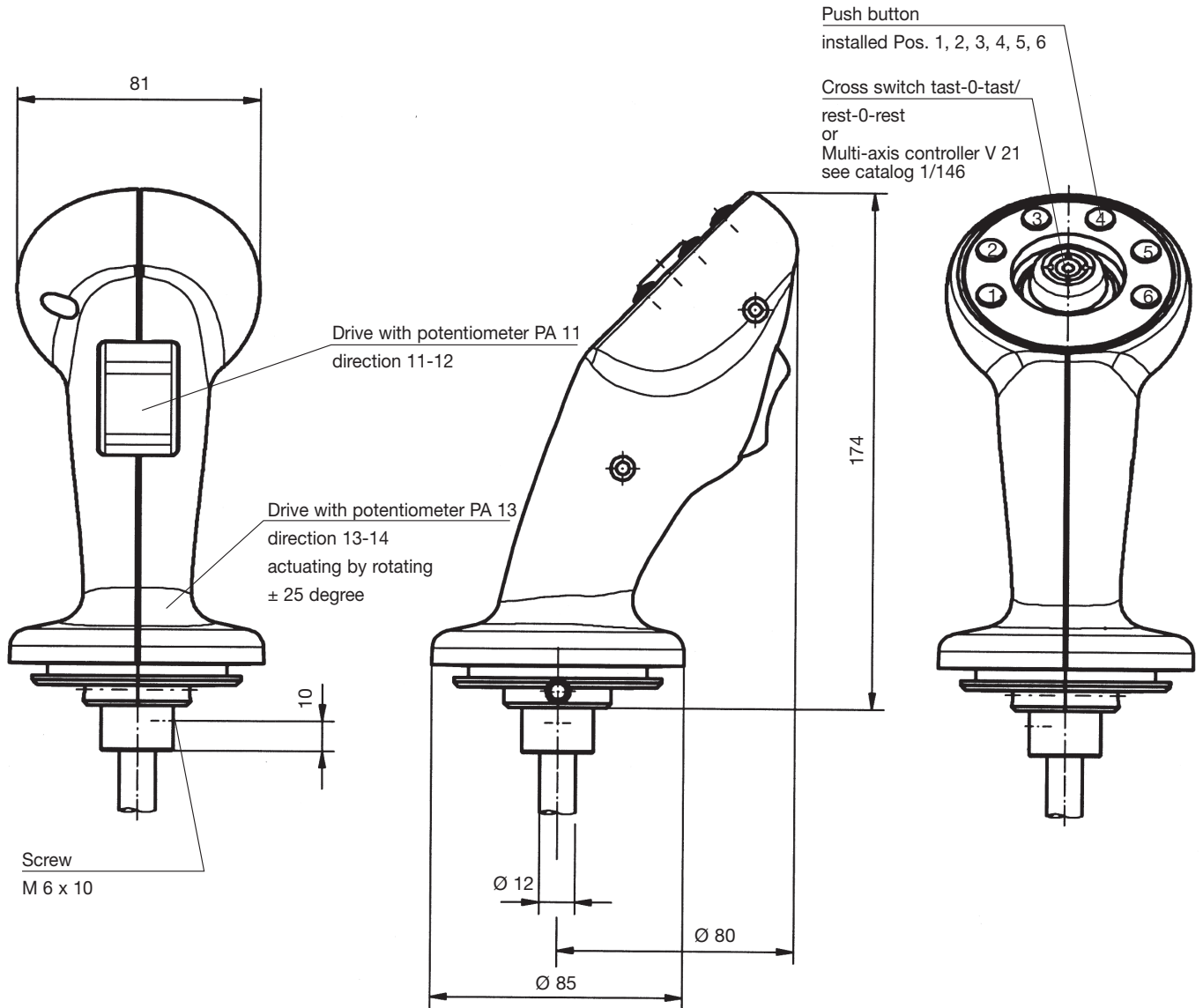
B 8



Edition:
Rocker switch
installed Pos. 2, 3, 4, 5, 7 inapplicable
Multi-axis controller V 21 see catalog 1/146
installed Pos. 1, 2, 3, 4 inapplicable

Example for type-sign





Example for type-sign

B 9 D KT PA 11 PA 13 - X

Palm grip
Push button
Cross switch



Special please describe
Drive with potentiometer PA 13
Drive with potentiometer PA 11



Type B10.1-13DW-...

The palm grip B 10-1 is an actuating element for double-handle controller D 64, DD 64, D8. Control-handle left, B10-2 for control-handle right. It can also be used as an actuating element for hydraulic drives. Push buttons, rocker switches, e.t.c., can also be fitted to suit appropriate requirements.

The palm grip has a highly flexible single wire 0,1 mm² x 450 mm long.

The mounting piece for the drive rod can be supplied with a tapped hole 10 mm. The palm grip B 10 is made of PA plastic and is black in colour.

Contact complement 0,5 A 110 V AC 15 or 1,5 A 24 V DC 13
I min > 0,2 mA 2 V DC 12 Gold plated for max. load of 0,12 Watt (standard)

Micro change over contacts available on request

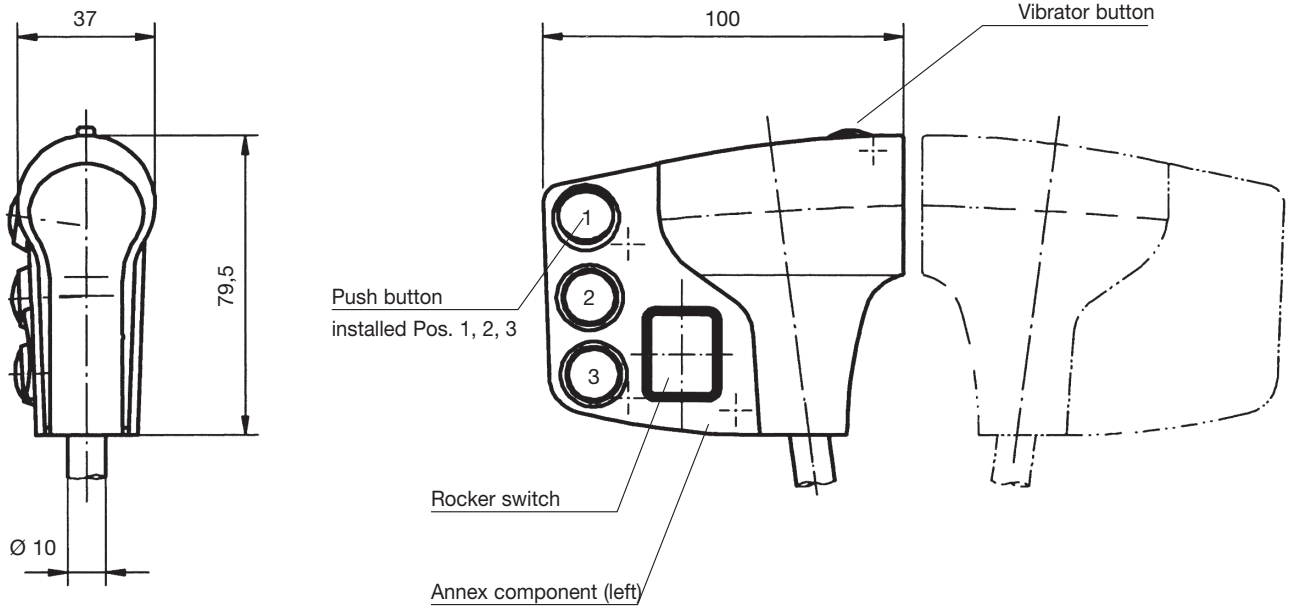
Permissible ambient temperature Operating -40°C to +60°C
Storage -50°C to +80°C

Climate resistance IEC 60068-2-78
Damp heat constant IEC 60068-2-30
Damp heat cyclic IP 65 IEC/EN 60529
Degree of protection front

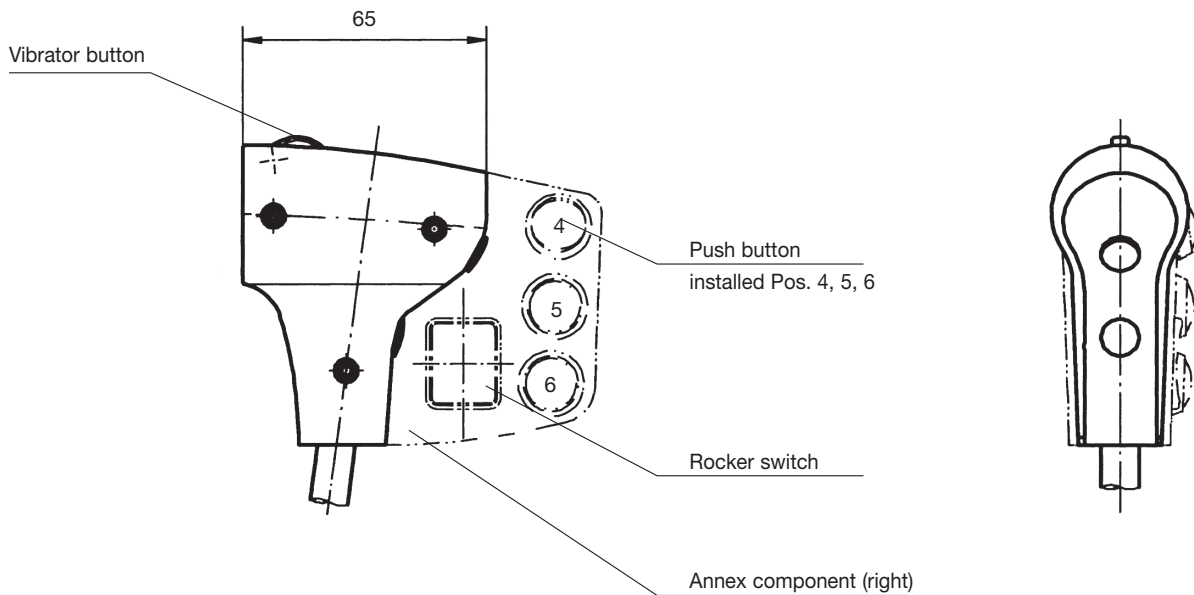
| Pos. | | | Contact-complement | Weight gramm | Type | Price EURO |
|------|--|--------|----------------------|--------------|----------|------------|
| 1 | Palm grip with mounting piece for control-handle design left | | | 100 | B 10-1 | |
| 2 | Palm grip with mounting piece for control-handle with annex component design left | | | 130 | B 10-1-1 | |
| 3 | Palm grip with mounting piece for control-handle design right | | | 100 | B 10-2 | |
| 4 | Palm grip with mounting piece for control-handle with annex component design right | | | 130 | B 10-2-2 | |
| 5 | Push button B 10-1 installed Pos. 1, 2, 3 B 10-2 installed Pos. 4, 5, 6 | KDA21 | 1 NO 0,1 A 24V DC 13 | 20 | D | |
| 8 | Rocker switch | KEM/59 | 2 normally open | | | |
| 8.1 | Rocker switch tip-0-tip T-0-T | | | 30 | W | |
| 8.2 | Rocker switch 0-tip 0-T | | | 30 | W | |
| 8.3 | Rocker switch rest-0-tip R-0-T | | | 30 | W | |
| 8.4 | Rocker switch rest-0-rest R-0-R | | | 30 | W | |
| 8.5 | Rocker switch 0-rest 0-R | | | 30 | W | |
| 8.6 | Rocker switch rest - rest R - R | | | 30 | W | |
| 20 | Vibrator button actuating through solenoid 24 V DC impulse signal 100% duty cycle factor | | | 60 | V | |



B 10-1



B 10-2



Example for type-sign

B 10-1 - 1 D W V - X

Palm grip

Palm grip with annex component

Push button



Special please describe

Vibrator button

Rocker switch



Type B142D-...

Type B152D-...

The palm grip B 14 is an actuating element for our multi-axis controller V 8, VV 8, V 6, VV 6, VV 5 design left, B 15 for design right.
It can also be used as an actuating element for hydraulic drives.
Push buttons, rocker switches, e.t.c., can also be fitted to suit appropriate requirements.

The palm grip has a highly flexible single wire 0,1 mm² x 450 mm long.

The mounting piece for the drive rod can be supplied with a tapped hole 12 or 10 mm (standard = 12 mm).

The palm grip B 14/15 is made of PA plastic and is black in colour.

Contact complement 0,125 A 110 V AC 15 or 0,1 A 24 V DC 13

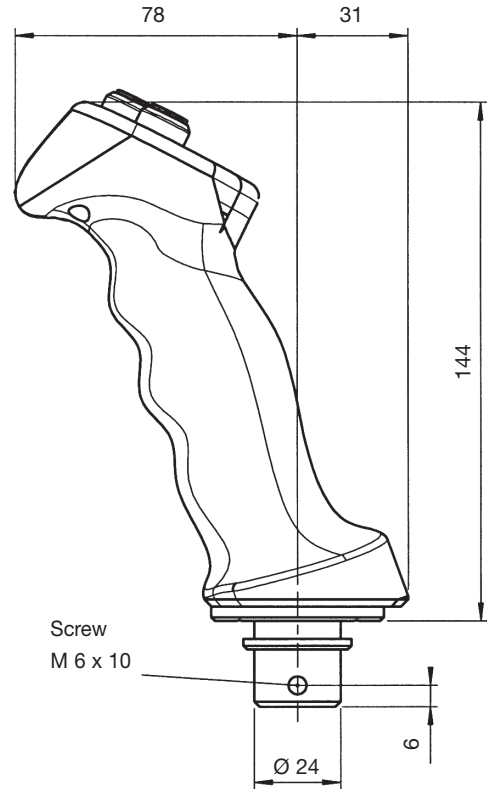
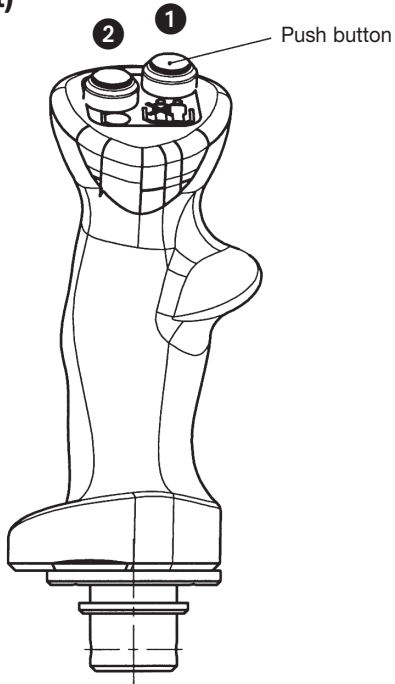
Permissible ambient temperature Operating -40°C to +60°C
Storage -50°C to +80°C

Climate resistance IEC 60068-2-78
Damp heat constant IEC 60068-2-30
Damp heat cyclic IEC 60068-2-30
Degree of protection front IP 65 IEC/EN 60529

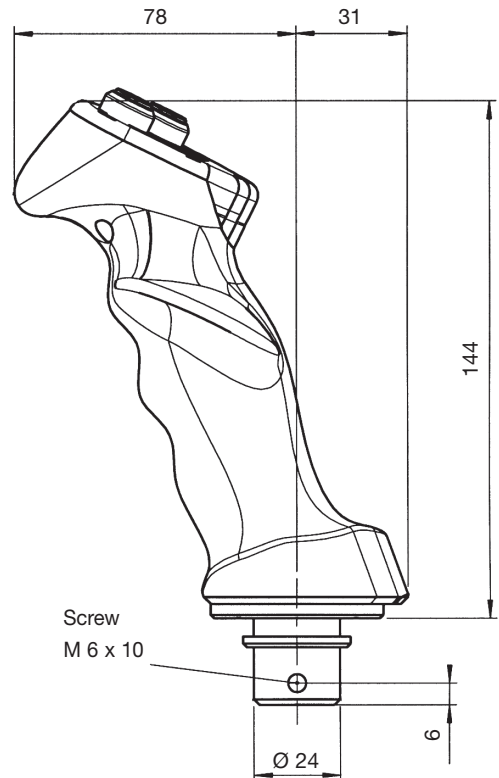
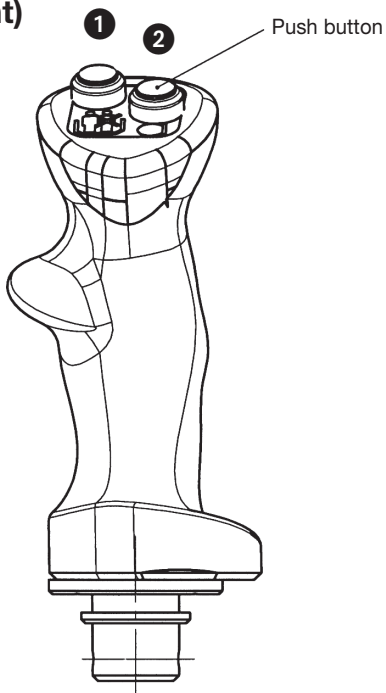
| Pos. | | | Contact-complement | Weight gramm | Type | Price EURO |
|------|---|-------|----------------------|--------------|------|------------|
| 1 | Palm grip with mounting piece for control-handle design left | | | 200 | B 14 | |
| 2 | Palm grip with mounting piece for control-handle design right | | | 200 | B 15 | |
| 3 | Push button installed Pos. 1, 2 color red RD, black BK, yellow YE, green GN, blue BU, white WH | KDA21 | 1 N0 0,1 A 24V DC 13 | 20 | D | |
| 30 | | | | | | |
| 31 | | | | | | |
| 32 | | | | | | |
| 33 | | | | | | |



B 14 (left)

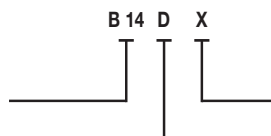


B 15 (right)



Example for type-sign

Palm grip
Push button



Special please describe