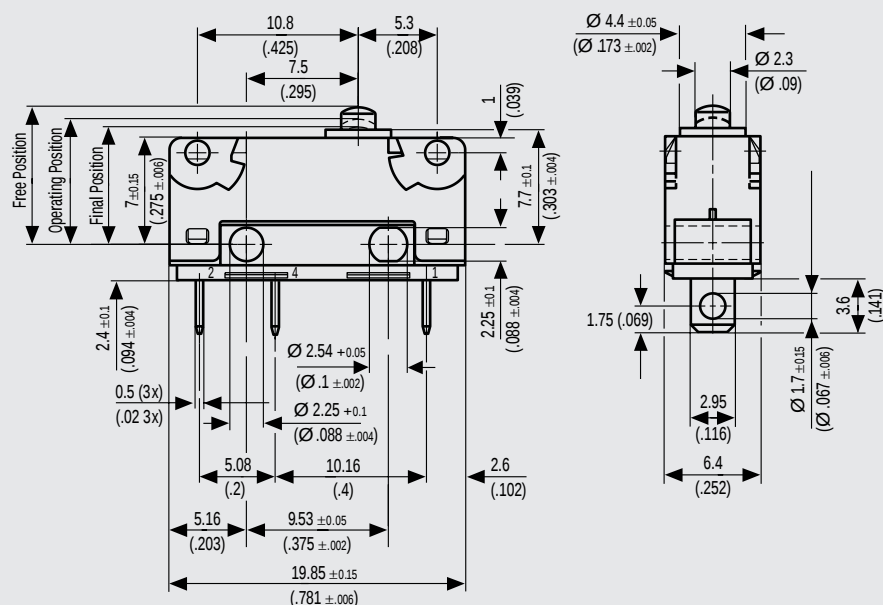


V4NC-Series



V4NCT7

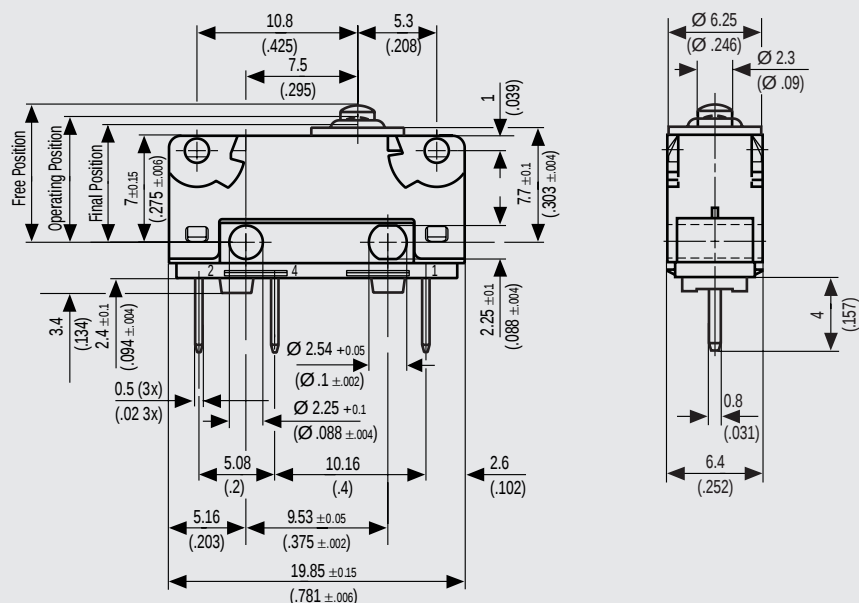


An exciting new range of sub-miniature switches embracing a host of innovative design features:

- Seven terminal options all sealed
- Mounting holes or moulded pegs
- Standard and low force models
- Wide range of clip on levers – two styles
- Choice of lever position
- Silver contacts for power switching; gold on silver for logic circuits
- Long overtravel versions
- Snap-on terminal covers

The ultimate in versatility.

V4NSCT8



Specifications

V4NC

Housing:

Glass fibre reinforced Polyamide (PA 6.6)

Plunger:

Polyacetal (POM)

Mechanism:

Snap-action coil spring mechanism with stainless steel spring. Changeover, normally-closed or normally-open

Contacts:

Fine silver

Gold plate on silver

Gold alloy on silver palladium (crosspoint)

Terminals:

All terminals are gold flashed

Refer to page 39

Temperature Range:

–40°C to +85°C

Mechanical Life:

5 x 10⁶ cycles minimum (impact free actuation)

Type of Protection:

V4NC – Enclosure IP 40

V4NCS – Enclosure IP 6K7

Flux-proof terminal entries

Mounting:

Side mounting

Versions with moulded mounting pegs of 2.25 mm or 3.2 mm diameter are also available. Please consult Burgess.

Actuators:

Plain lever

Cam follower

Roller lever

} Choice of two styles

Accessories:

Lug mounting frame

Clip-on terminal covers

Insulating sheet

Recom. Max. El. Ratings V4NC(S)-series		
Voltage	Resistive load	Inductive load
VAC	A	A
125	5	2
250	5	2

Recom. Max. El. Ratings V4NC(S)-series		
Voltage	Resistive load	Inductive load
VDC	A	A
up to		
30	5	3
50	1	1
75	0.75	0.75
125	0.5	0.03
250	0.25	0.03

Recom. Max. El. Ratings V4NCS-series		
Voltage	Resistive load	Inductive load
VDC/VAC	mA	mA
12 to 30	10	10

Recom. Max. El. Ratings V4NC-series		
Voltage	Resistive load	Inductive load
VDC/VAC	mA	mA
12 to 30	100	100

Recom. Max. El. Ratings V4NC(S)4-series		
Voltage	Resistive load	Inductive load
VAC	A	A
125	10	5
250	10	5

Recom. Max. El. Ratings V4NC(S)4-series		
Voltage	Resistive load	Inductive load
VDC	A	A
up to		
30	10	3
50	1	1
75	0.75	0.75
125	0.5	0.03
250	0.25	0.03

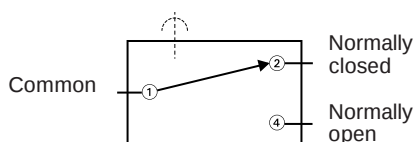
Recom. Max. El. Ratings V4NCS4-series		
Voltage	Resistive load	Inductive load
VDC/VAC	mA	mA
12 to 30	10	10

Recom. Max. El. Ratings V4NC4-series		
Voltage	Resistive load	Inductive load
VDC/VAC	mA	mA
12 to 30	100	100

The breaking capacities in the tables refer to silver contacts. For gold contacts see the text on right.

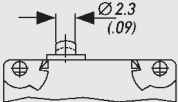
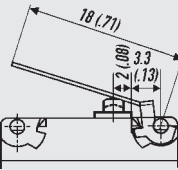
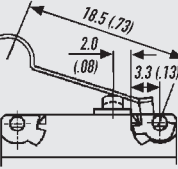
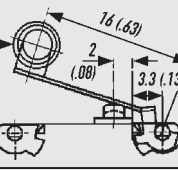
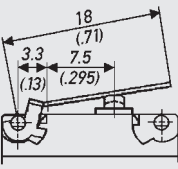
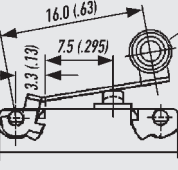
Gold-plated contacts are intended for use in signal circuits where the energy being switched is at the milliwatt level. Power being switched must be limited in order to avoid overheating and possible dispersal of the gold from the contact area.

Circuit diagram V4NC



Product Range Operating Characteristics

V4NC

Actuator	Reference	Actuating Force Maximum N (ozf)	Release Force Minimum N (ozf)	Free Position Maximum mm (in)	Operating Position mm (in)	Movement Differential Maximum mm (in)	Over Travel
Plunger 	V4NC.. V4NC4.. V4NCE.. V4NC4E.. V4NCS.. V4NC4S.. V4NCSE.. V4NC4SE..	1.7 (6.114) 2.5 (8.992) 1.7 (6.114) 2.5 (8.992) 2.5 (8.992) 2.8 (10.071) 2.5 (8.992) 2.8 (10.071)	0.3 (1.079) 0.5 (1.798) 0.3 (1.079) 0.5 (1.798) 0.5 (1.798) 0.7 (2.517) 0.5 (1.798) 0.7 (2.517)	9.2 (.362) 9.2 (.362) 9.7 (.382) 9.7 (.382) 9.2 (.362) 9.2 (.362) 9.7 (.382) 9.7 (.382)	8.4 (.331) 8.4 (.331) 8.9 (.350) 8.9 (.350) 8.4 (.331) 8.4 (.331) 8.9 (.350) 8.9 (.350)	0.1 (.004) 0.1 (.004) 0.1 (.004) 0.1 (.004) 0.1 (.004) 0.1 (.004) 0.1 (.004) 0.1 (.004)	
A1 Lever  Width of lever: 4.0 mm (.16)	V4NC.. V4NC4.. V4NCE.. V4NC4E.. V4NCS.. V4NC4S.. V4NCSE.. V4NC4SE..	0.8 (2.877) 1.1 (3.956) 0.8 (2.877) 1.1 (3.956) 0.9 (3.237) 1.1 (3.956) 0.9 (3.237) 1.1 (3.956)	0.07 (0.251) 0.1 (0.359) 0.07 (0.251) 0.1 (0.359) 0.1 (0.359) 0.15 (0.539) 0.1 (0.359) 0.15 (0.539)	13.4 (.527) 13.4 (.527) 14.8 (.582) 14.8 (.582) 13.4 (.527) 13.4 (.527) 14.8 (.582) 14.8 (.582)	10.85 (.427) 10.85 (.427) 12.4 (.488) 12.4 (.488) 10.8 (.425) 10.8 (.425) 12.4 (.488) 12.4 (.488)	0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016)	
AC1 Lever  Width of lever: 4.0 mm (.16)	V4NC.. V4NC4.. V4NCE.. V4NC4E.. V4NCS.. V4NC4S.. V4NCSE.. V4NC4SE..	0.8 (2.877) 1.1 (3.956) 0.8 (2.877) 1.1 (3.956) 0.9 (3.237) 1.1 (3.956) 0.9 (3.237) 1.1 (3.956)	0.07 (0.251) 0.1 (0.359) 0.07 (0.251) 0.1 (0.359) 0.1 (0.359) 0.15 (0.539) 0.1 (0.359) 0.15 (0.539)	16.1 (.634) 16.1 (.634) 17.6 (.693) 17.6 (.693) 16.1 (.634) 16.1 (.634) 17.6 (.693) 17.6 (.693)	13.5 (.531) 13.5 (.531) 15.1 (.594) 15.1 (.594) 13.4 (.527) 13.4 (.527) 15.1 (.594) 15.1 (.594)	0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016)	
AR1 Lever  Width of roller: 4.0 mm (.16)	V4NC.. V4NC4.. V4NCE.. V4NC4E.. V4NCS.. V4NC4S.. V4NCSE.. V4NC4SE..	0.8 (2.877) 1.2 (4.316) 0.8 (2.877) 1.2 (4.316) 0.9 (3.237) 1.2 (4.316) 0.9 (3.237) 1.2 (4.316)	0.07 (0.251) 0.1 (0.359) 0.07 (0.251) 0.1 (0.359) 0.1 (0.359) 0.15 (0.539) 0.1 (0.359) 0.15 (0.539)	18.1 (.712) 18.1 (.712) 19.2 (.756) 19.2 (.756) 18.1 (.712) 18.1 (.712) 19.2 (.756) 19.2 (.756)	16.0 (.630) 16.0 (.630) 17.3 (.681) 17.3 (.681) 15.9 (.626) 15.9 (.626) 17.3 (.681) 17.3 (.681)	0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016) 0.4 (.016)	
A10 Lever  Width of lever: 4.0 mm (.16)	V4NC.. V4NC4.. V4NCE.. V4NC4E.. V4NCS.. V4NC4S.. V4NCSE.. V4NC4SE..	1.3 (4.676) 1.7 (6.114) 1.3 (4.676) 1.7 (6.114) 1.8 (6.474) 2.0 (7.193) 1.8 (6.474) 2.0 (7.193)	0.13 (0.467) 0.2 (0.719) 0.13 (0.467) 0.2 (0.719) 0.2 (0.719) 0.3 (1.079) 0.2 (0.719) 0.3 (1.079)	10.7 (.421) 10.7 (.421) 11.5 (.453) 11.5 (.453) 10.7 (.421) 10.7 (.421) 11.5 (.453) 11.5 (.453)	9.4 (.370) 9.4 (.370) 10.2 (.401) 10.2 (.401) 9.3 (.366) 9.3 (.366) 10.1 (.397) 10.1 (.397)	0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008)	
AR10 Lever  Width of roller: 4.0 mm (.16)	V4NC.. V4NC4.. V4NCE.. V4NC4E.. V4NCS.. V4NC4S.. V4NCSE.. V4NC4SE..	1.3 (4.676) 1.9 (6.834) 1.3 (4.676) 1.9 (6.834) 1.8 (6.474) 2.1 (7.553) 1.8 (6.474) 2.1 (7.553)	0.13 (0.467) 0.2 (0.719) 0.13 (0.467) 0.2 (0.719) 0.2 (0.719) 0.3 (1.079) 0.2 (0.719) 0.3 (1.079)	15.8 (.622) 15.8 (.622) 16.5 (.649) 16.5 (.649) 15.8 (.622) 15.8 (.622) 16.5 (.649) 16.5 (.649)	14.7 (.579) 14.7 (.579) 15.4 (.606) 15.4 (.606) 14.7 (.579) 14.7 (.579) 15.4 (.606) 15.4 (.606)	0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008) 0.2 (.008)	

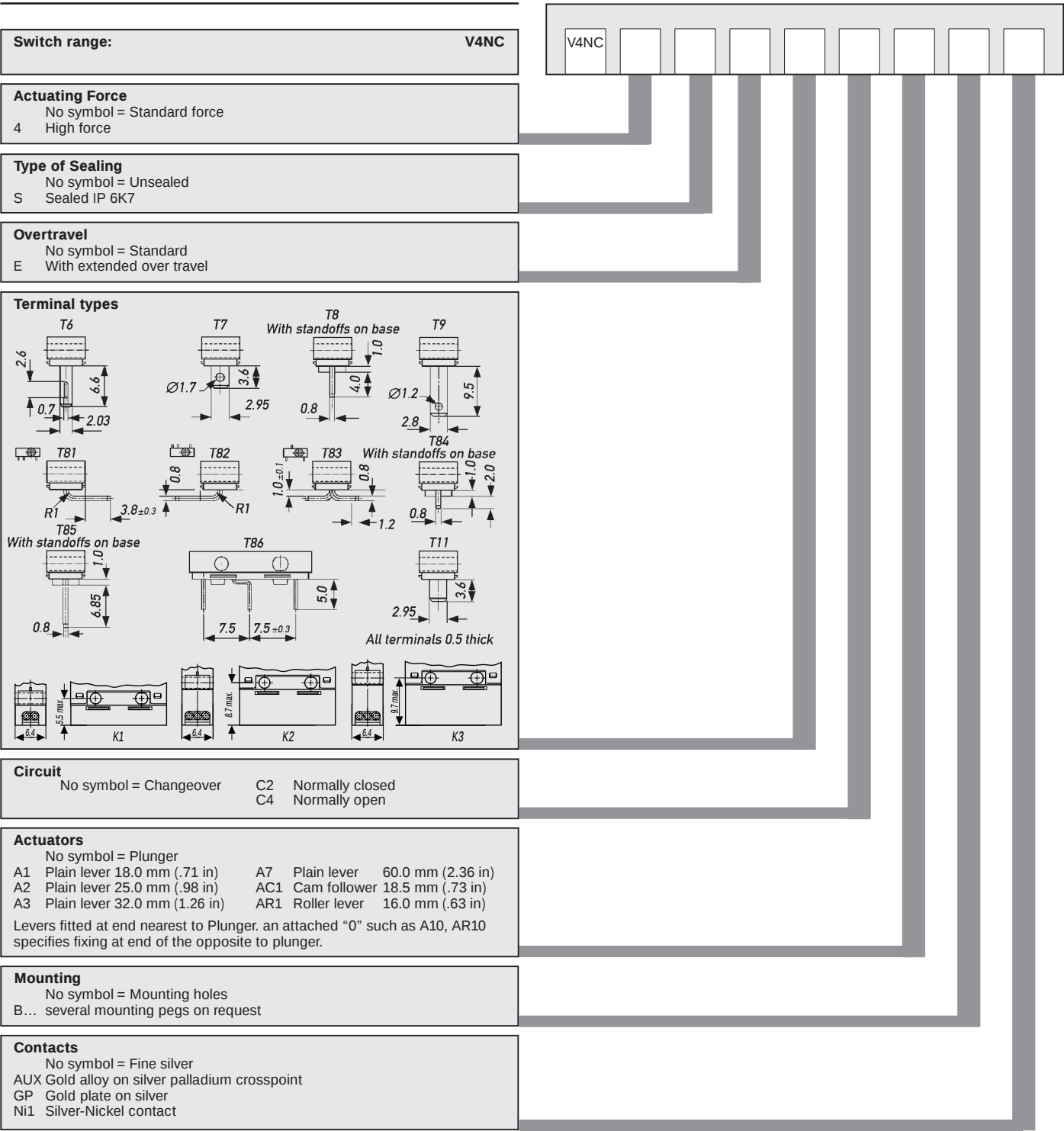
Flush with case.
The case should not be used as an end stop.

Operating characteristics

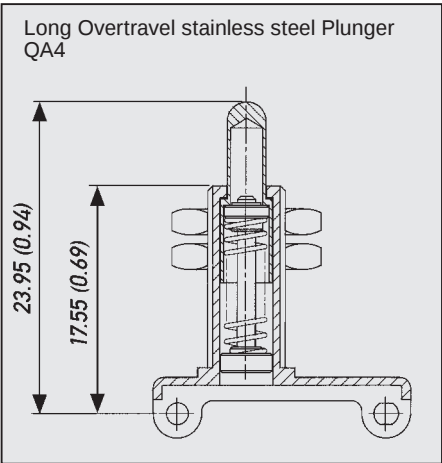
Operating characteristics shown above are specified from mounting hole centres.

Ordering References

V4NC

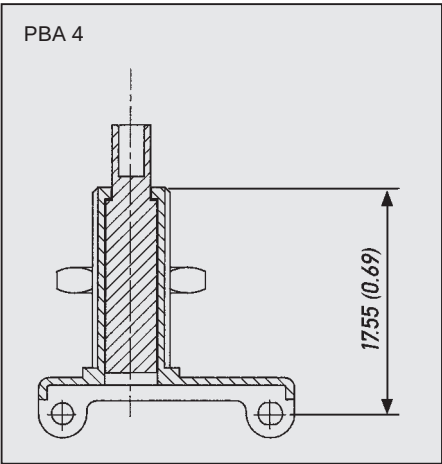


Panel-mounted Actuators for use with the V4NC Series



Long Overtravel stainless steel Plunger
QA4 Moulded frame,
Stainless steel plunger
Overtravel actuator,
2 locknuts
The sleeve is threaded M6 fine

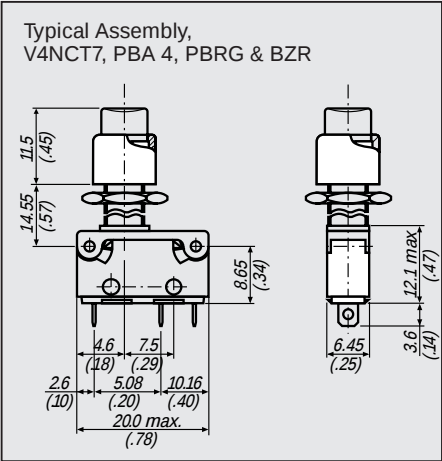
Clip-on frame:
Glass fibre reinforced Polyamide (PA 6.6)
Bezel:
ABS polymer – black
Cowl:
Synthetic Rubber
“O”-Ring:
Nitrile
Locknut:
Brass Nickel plate
Button:
ABS Polymer
Basic switches:
V4NC
(see pages 36–39)
Temperature Range:
–10 °C to +85 °C.



A comprehensive new range of panel-mounted actuators with the following features:

- Can be fitted to all standard travel V4NC switches.
- Simple clip-on attachment.
- Choice of either round or square push buttons and bezels.
- Single hole mounting (Ø 6.35 mm) or via switch mounting holes.
- Panel sealing if required.
- Long overtravel stainless steel actuator version with 5 mm min. overtravel.

Mechanical Life:
10⁷ cycles minimum
Mechanism: 2 · 10⁶ cycles minimum (Impact free actuation).
Mounting:
Single hole Ø 6.4 mm (0.25) suitable for panels up to 8.0 mm (0.3) thick
Maximum torque to be applied to lock-nut 0.4 Nm



Recom. max. El. Ratings V4NC(S)		
Voltage	Resistive Load	Inductive load
VAC	A	A
max.		
250	5	2

Recom. max. El. Ratings V4NC(S)		
Voltage	Resistive Load	Inductive load
VDC	A	A
max.		
30	5	3
50	1	1
75	0,75	0,75

Ordering References

Panel-mounted Actuators

Switch range:
QV4NCT7

QA4 Steel plunger
for assembly with V4NT7 switches

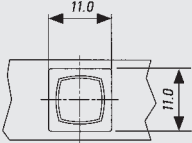
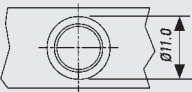
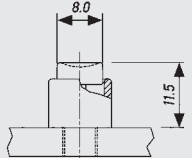
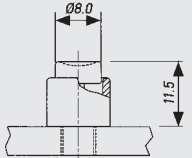
Basic Switches
V4NC...

See pages 36–39

Standard Button Forms

Round button
Round bezel

Square button
Square bezel



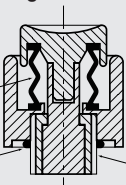
Ordering References

Button Colour	Round	Square
Red	PBRR	PBSR
Yellow	PBRY	PBSY
Green	PBRG	PBSG
Blue	PBRBU	PBSBU
White	PBRW	PBSW
Black	PBRB	PBSB

Bezel
Round
BZR

(black)
Square
BZS

Assembly of Sealing Kit PBSLK



PBSLK Sealing Kit ("O"-Ring and Diaphragm),
suitable for both the square or the round versions.

Actuator Kit
PBA 4
QA 4