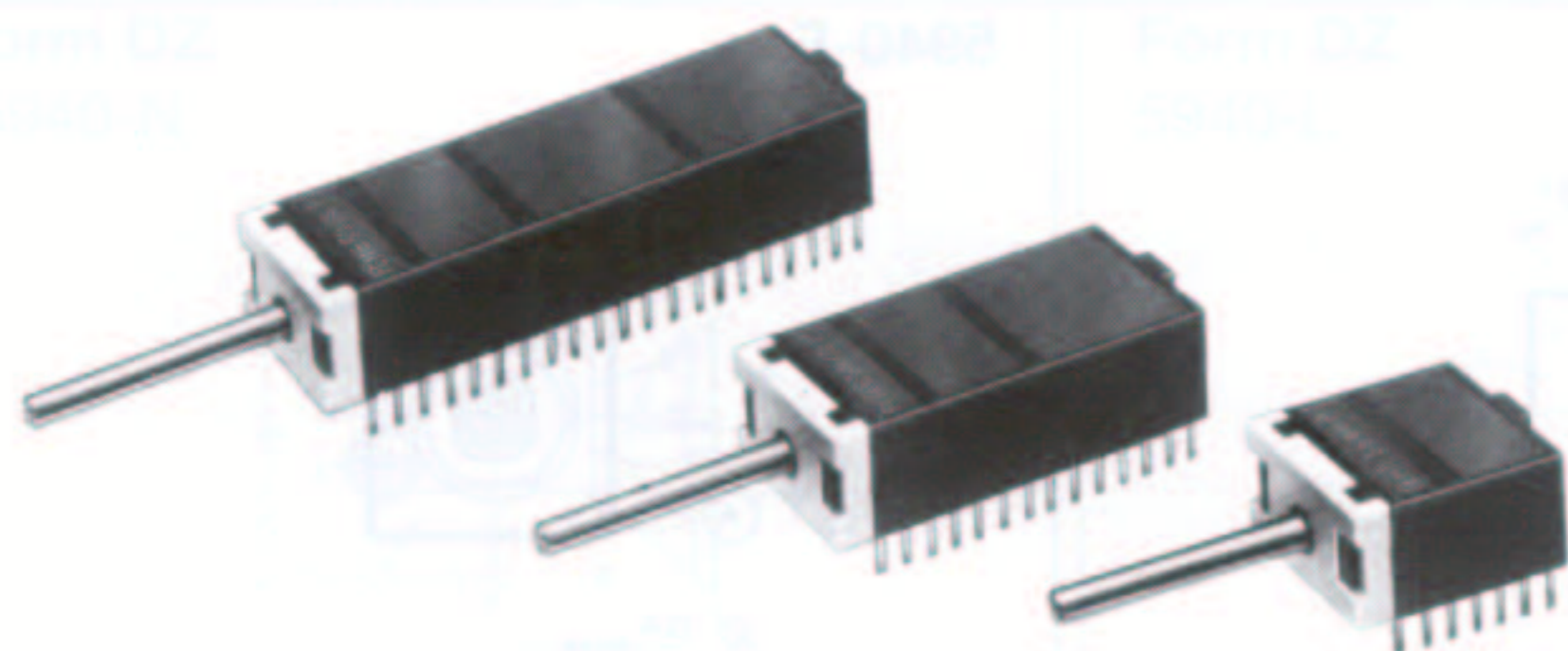


# Rotary Switches Series 5940-P

CARLO GAVAZZI



- For dual-in-line circuit application
- Sealed (IP 67)
- 1 to 3 elements
- 1 to 4 poles, 12 to 2 positions
- Switching current 100 mA/120 VAC/DC
- Short-circuiting or non short-circuiting contacts
- Control parallel to the mounting plane

## Product Description

These switches fit particularly for active switching in low level applications and programming use. The switches are sealed to IP 67. Fixed contacts brass, gold over nickel plated, movable contacts gold over silver plated. Contacts may be short-

circuiting (they close the following circuit before opening the preceding one) or non short-circuiting (they close the circuit after having opened the preceding one). Available with three different shaft variants.

## Ordering Key 5940-P/3/A/4/25-A

Type \_\_\_\_\_  
 Number of elements \_\_\_\_\_  
 Contact version \_\_\_\_\_  
 Number of switching positions <sup>1)</sup> \_\_\_\_\_  
 Shaft length (standard 25 mm) \_\_\_\_\_  
 Shaft form (standard A) \_\_\_\_\_

<sup>1)</sup> The number of the switching positions to be used can be different from the maximum number indicated for the standard version. Possibility to adjust the stop, see "Stop adjustment".

## General Data

<b>Materials</b>	
Shaft	Stainless steel
Fixed contacts	Brass, gold over nickel plated
Movable contacts	Gold over silver plated
<b>Operating torque</b>	0.02 ... 0.04 Nm
<b>Max torque applicable to the stop</b>	0.8 Nm
<b>Test voltage during 1 min.</b>	750 V peak/50 Hz
<b>Electrical life</b> 3 VA load	≥ 20000 rotations
<b>Mechanical life</b>	≥ 50000 rotations
<b>Ambient temperature</b>	-40 ... +85 °C
<b>Climatic category</b> according to IEC 68-1	40/085/21
<b>Inside protection (IEC 144)</b>	IP 67
<b>Solvent resistance</b>	Cleaning with freon and ultrasound, flux resistant

## Contact Characteristics

<b>Max voltage</b>	120 VAC/DC
<b>Max switching current</b>	100 mA
<b>Non switching current</b>	400 mA
<b>Max switching power</b>	3 VA
<b>Max capacitance between adjacent contacts</b>	4 pF
<b>Contact resistance</b>	≤ 30 mΩ
<b>Insulation resistance between contacts and ground</b>	10 <sup>6</sup> MΩ

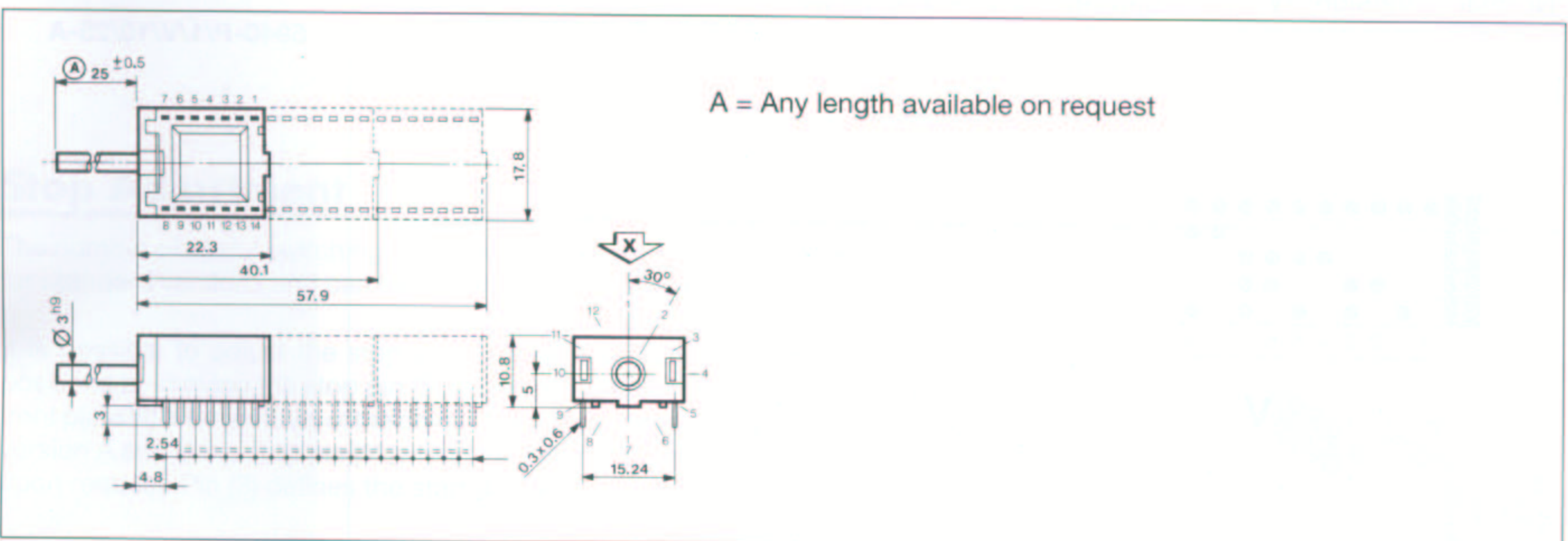


## Type Selection, Standard Types

Switching <sup>3)</sup> functions	Number of poles/positions active connections	Contact configuration CC (short-circ.) or NC (non short-circ.)	VERSIONS	Ordering No. <sup>1) 2)</sup> 5940-P types, non protruding shaft
	1 Pole/12 Positions	CC	A	5940-P/.A/12/25-A
	I II III IV V VI VII VIII IX X XI XII <hr/> 1 2 3 5 6 7 8 9 10 12 13 14 (4/11) (4/11) (4/11) (4/11) (4/11) (4/11) (4/11) (4/11) (4/11) (4/11) (4/11) (4/11)			
	2 Poles/6 Positions	CC	C	5940-P./C/6/25-A
	I II III IV V VI <hr/> 4-1 4-2 4-3 4-5 4-6 4-7 11-8 11-9 11-10 11-12 11-13 11-14	NC	D	5940-P./D/6/25-A
	3 Poles/3 Positions	CC	E	5940-P./E/3/25-A
	I II III <hr/> 1-2 1-3 1-5 6-7 6-8 6-9 10-12 10-13 10-14	NC	F	5940-P./F/3/25-A
	4 Poles/2 Positions	CC	G	5940-P./G/2/25-A
	I II <hr/> 3-5 3-6 7-8 7-9 10-12 10-13 14-1 14-2	NC	H	5940-P./H/2/25-A

1) For complete ordering No. insert in place of ./ number of elements: 1...3, e.g. /2/  
 2) For not standard shafts, replace ...25-A, see table "Shaft variants" page 82.  
 3) Diagrams are viewed in the direction of see table "dimensions"

## Dimensions

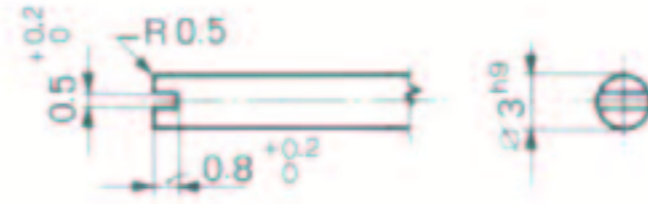


## Shaft Variants, Sealing

Form A



Form D



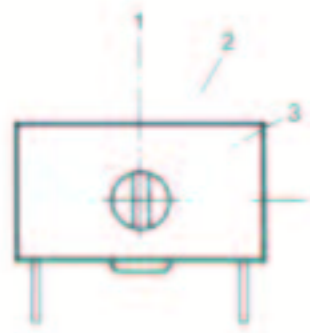
Form E



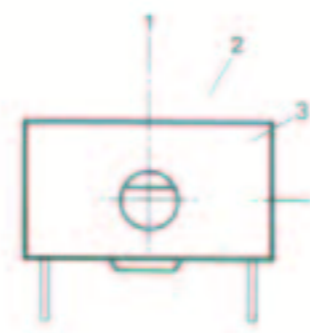
Ordering key: ... length (mm) - form, standard is 25-A

Angle position of the screwdriver slot (form D) and spindle flat (form E) is seen with the shaft turned counter clockwise.

Form D



Form E



Sealing

Sealing ring

Sealed terminals

## Type Selection, BCD Versions

BCD versions shown are sealed as equivalent standard versions.

Ordering No. 1)

Normal - version "V"

C	●	●	●	●	●	●	●	●	●
8								●	●
4				●	●	●	●		
2		●	●			●	●		
1	●		●		●		●		●
	0	1	2	3	4	5	6	7	8

V

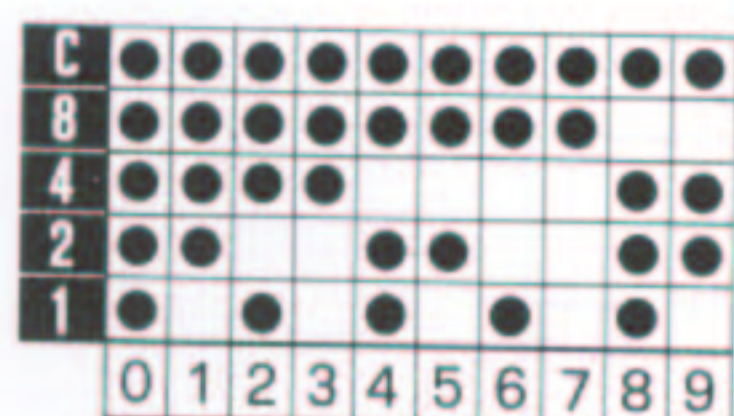
5940-P/1/V/10/25-A

Ordering No. <sup>1)</sup>

5940-P/1/W/10/25-A

## Type Selection, BCD Versions

Complementary - version "W"

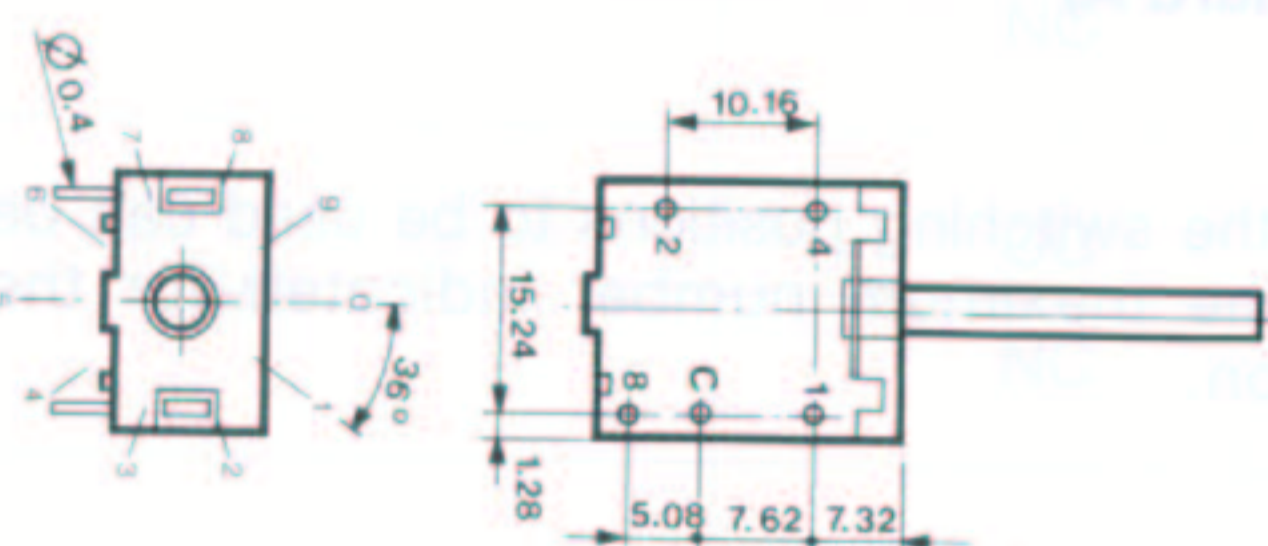


W

<sup>1)</sup> For not standard shaft see table "Shaft variants" page 82

## BCD Versions - Dimensions

BCD switches are supplied without stop. Other dimensions see table "dimensions"



### BCD versions

## General Data

As different from standard version, other characteristics see table "General data"

<b>Materials</b>	
fixed contacts	Bronze, gold over nickel plated
Movable contacts	Copper, gold over nickel plated
<b>Test voltage during 1 min.</b>	500 V peak/50 Hz
<b>Electrical life</b> 0.4 VA load	≥ 50000 rotations

## Contact Characteristics

As different from standard version, other characteristics see table "Contact characteristics"

<b>Max voltage</b>	30 VAC/DC
<b>Max capacitance between adjacent contacts</b>	1 pF
<b>Contact resistance</b>	≤ 70 mΩ
<b>Insulation resistance between contacts and ground</b>	10 <sup>6</sup> MΩ

## Stop Adjustment

The number of useful switching positions can be lower than maximum specified for standard versions and can be adjusted by customer.

It is possible to adjust the stop and change the number of useful switching positions by moving the stop pin (5) in one of the holes placed circularly on the front plate (4) after removal of the cover (1) acting upon the wings (2). For switches version A and B the stop pin (5) (which they do not have) is supplied separately, upon request. Pin (3) defines the start position No. 1.

