Single Keys	*Contacteur sensi-touche*
Push Button Switches and Keyboards	*Commutateurs à poussoir et claviers*

Single Keys
1 - Pole

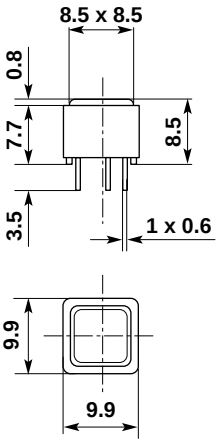
Mechanical Data

Travel:	0.6 ± 0.1 mm
Operating force:	0.8 ÷ 2.5 N
Permissible force at end stop:	50 N (1 min max)
Contact bouncing:	≤ 0.5 ms
Life:	≥ 1, 000,000 cycles
Weight:	~ 1 g

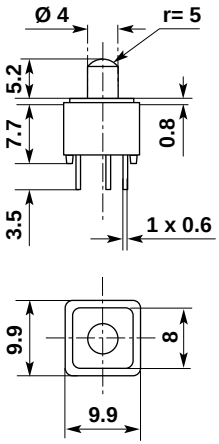
Electrical Data

Breaking capacity:	20 mA - 30 VDC
Contact resistance:	≤ 25 mΩ
Insulation resistance:	≥ 1 GΩ
Rated temperature range:	-20°C to +70°C

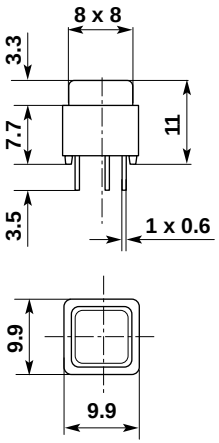
Features:
- Short travel
- Momentary switch with "click-effect"
- Self-cleaning contact
- Suitable for keyboards arrangement.



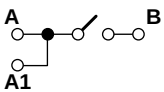
ST 1034
1-pole



ST 1034D
1-pole



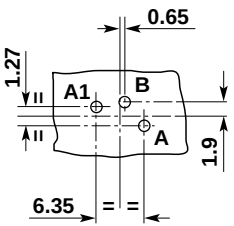
ST 1034E
1-pole



Button colour
Standard: black
Optional: light grey, red, yellow, blue, green

Case colour: black

viewed on component side



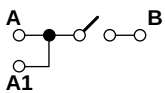
Mechanical Data

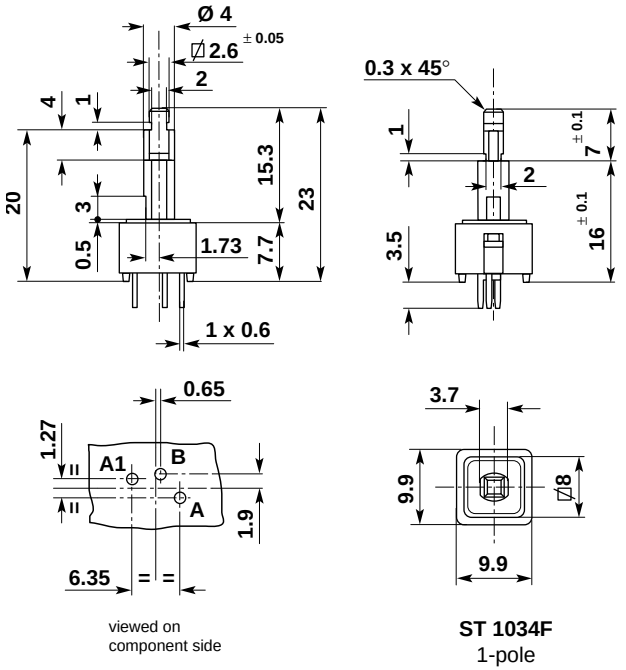
Travel:	0.6 ± 0.1 mm
Operating force:	0.8 ÷ 2.5 N
Permissible force at end stop:	50 N (1 min max)
Contact bouncing:	≤ 0.5 ms
Life:	≥ 1,000,000 cycles
Weight:	~ 1.10 g

Electrical Data

Breaking capacity:	20 mA - 30 VDC
Contact resistance:	≤ 25 mΩ
Insulation resistance:	≥ 1 GΩ
Rated temperature range:	–20°C to +70°C

Features:
- Short travel
- Momentary switch with “click-effect”
- Self-cleaning contact
- Suitable for keyboards arrangement





viewed on component side

ST 1034F
1-pole

Button colour

Standard:	black
Optional:	light grey, red, yellow, blue, green
Case colour:	black

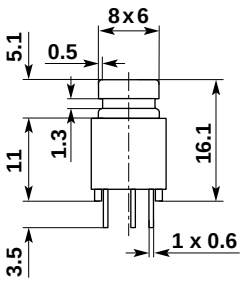
Mechanical data

Travel:	0.6 ± 0.1 mm
Operating force:	0.8 ÷ 2.5 N
Permissible force at end stop:	50 N (1 min max)
Contact bouncing:	≤ 0.5 ms
Life:	≥ 1,000,000 cycles
Weight:	~ 1.35 g

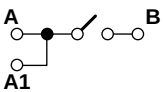
Electrical data

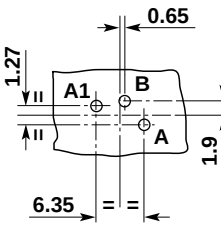
Breaking capacity:	20 mA - 30 VDC
Contact resistance:	≤ 25 mΩ
Insulation resistance:	≥ 1 GΩ
Rated temperature range:	–20°C to +70°C

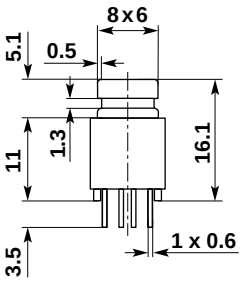
Features
- Short travel
- Momentary switch with “click-effect”
- Self-cleaning contact
- Suitable for keyboards arrangement



ST 1044
1-pole

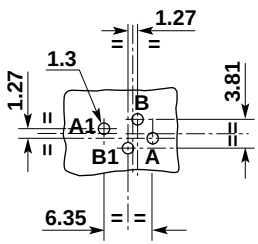


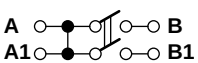




ST 1042
2-pole

viewed on component side





Button colour

Standard:	black
Optional:	light grey, red, yellow, blue, green

Case colour: black

Mechanical Data

CT32

Terminations pitch:	3.2 mm
Latching travel:	2.6 mm
Total travel:	3.8 mm

CT40

Terminations pitch:	4 mm
Latching travel:	2.6 mm
Total travel:	3.8 mm

Operating force CT32D and CT40D	
- 2 changeovers and release blocks:	≤ 2.4 N
- 4 changeovers block:	≤ 3 N
- 6 changeovers block:	≤ 4 N
Operating force CT32F and CT40F	
- 2 changeovers and release blocks:	≤ 3 N
- 4 changeovers block:	≤ 4 N
- 6 changeovers block:	≤ 6 N
Permissible force applied in operation direction:	100 N (10 sec max)
Life single block:	operations ≥ 50,000
Life keyboard:	operations ≥ 100,000

Electrical Data

Dielectric strength:	1.000 VAC
Contact resistance:	≤ 15 mΩ
Insulation resistance:	> 5 GΩ at 100 VDC
Inter-contacts capacity:	≤ 1.5 pF at 1 MHz
Capacity between one contact and all other connected contacts:	≤ 3 pF at 1 Mhz
Breaking capacity	
CT32D and CT40D	0.35 A - 12 VDC
CT32F and CT40F	
• standard:	0.35 A - 12 VDC
• optional:	1 A - 12 VDC
Load life:	> 15,000 operations
Rated temperature range:	–20°C to +70°C

According to NCF 93410 and IEC 341-1.

Mechanical functions

Independent (push-push) block: inserted by pressing, it returns to the rest position when pressed again.

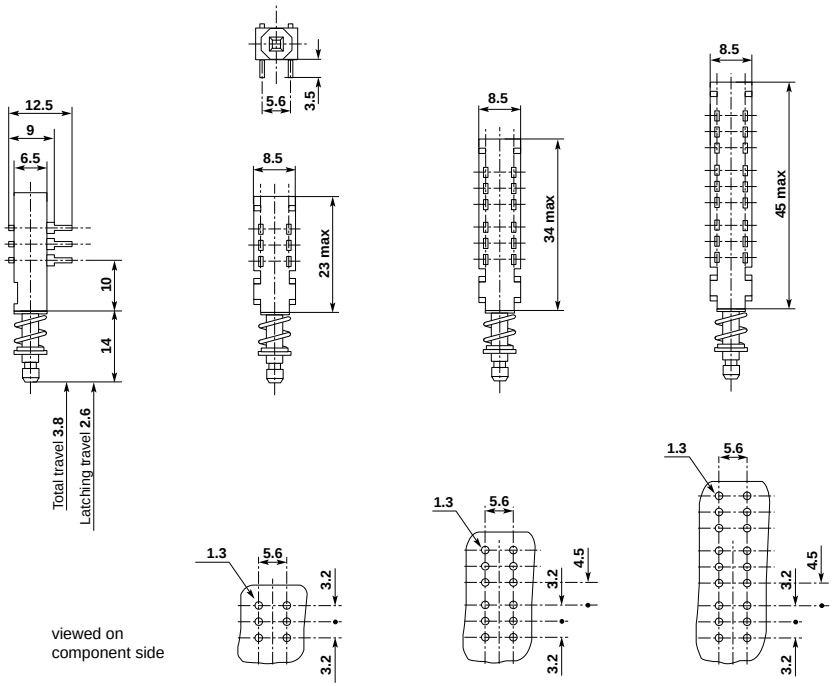
Interlocked (connected) block: inserted by pressing, it makes the previously inserted blocks return to the rest position.

Free (momentary action) block: inserted while pressing, it returns to the rest position when released.

Zero (release) block: without changeovers circuit; when pressed it makes all other inserted blocks return to the rest position; the button remains in the inserted position when pressed.

Series CT32 is described from p. 151 to 153.
Series CT40 is described from p. 154 to 156.

Single Blocks
Fixing on P.c. board by terminations



2 changeovers | 4 changeovers | 6 changeovers

Push-push function

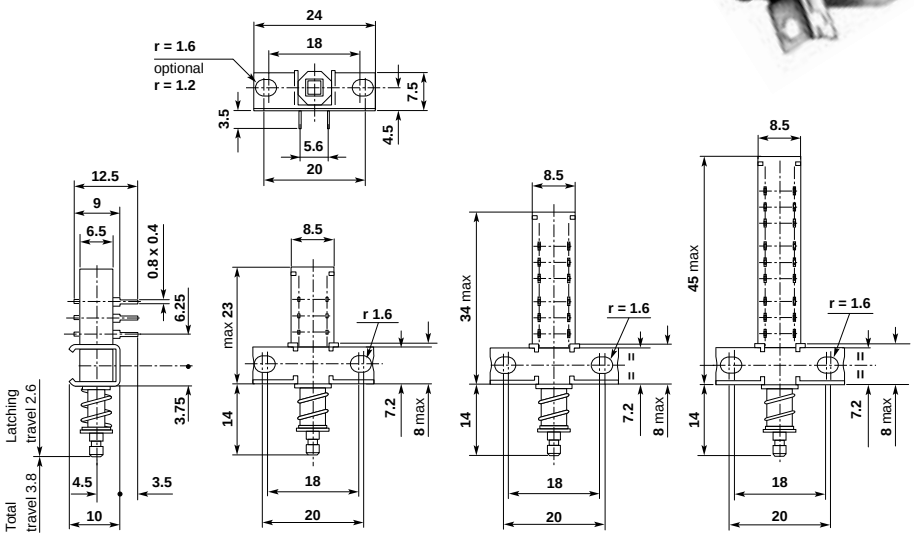
Type	Changeovers
CT32D.2N.FT	2
CT32D.4N.FT	4
CT32D.6N.FT	6

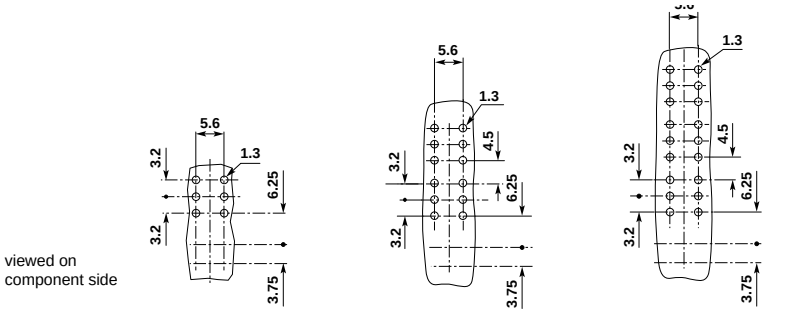
Momentary function

Type	Changeovers
CT32D.2F.FT	2
CT32D.4F.FT	4
CT32D.6F.FT	6

Spindle and termination details: see p. 157
Buttons: see p. 158.

Single Blocks
Fixing by bracket





2 changeovers | 4 changeovers | 6 changeovers

Push-push function

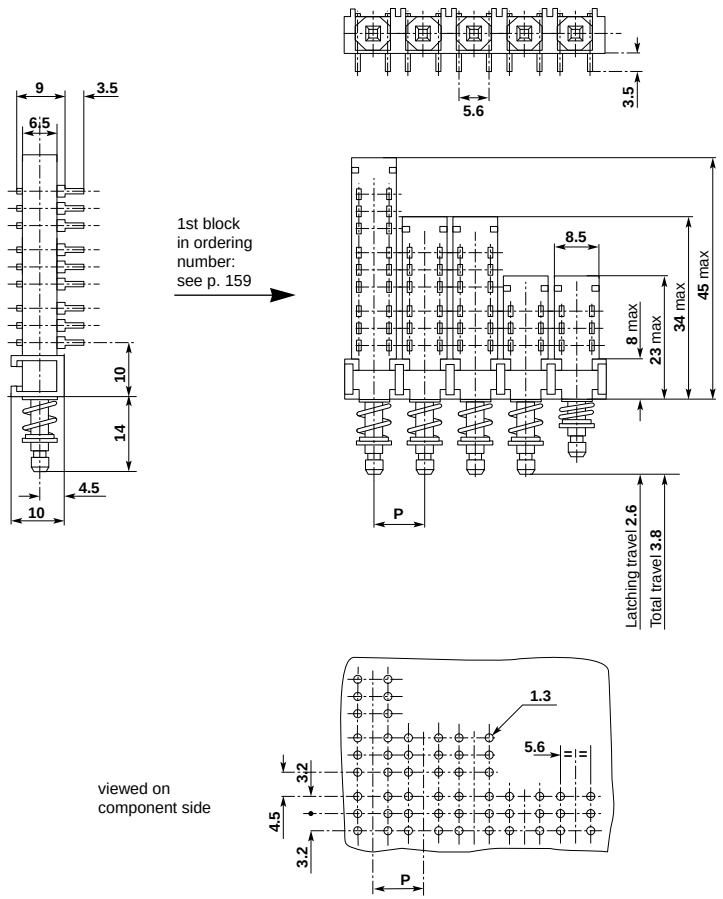
Type	Changeovers
CT32D.2N.F10	2
CT32D.4N.F10	4
CT32D.6N.F10	6

Momentary function

Type	Changeovers
CT32D.2F.F10	2
CT32D.4F.F10	4
CT32D.6F.F10	6

Spindle and termination details: see p. 157
Buttons: see p. 158.

Keyboards
Assembly example



Available pitches between blocks: P = 10 - 12.5 - 15 - 20 mm
- A keyboard may have different pitches between block: 10 - 15 - 20 mm
- Keyboards with pitch 10 mm: the 1st block must be interlocked.

Bracket. Drawing refers to mounting bracket FS style; see other available mounting bracket styles at p.158.

Terminations. Drawing shows to terminations CI type; see other available termination types at p. 157. A keyboard may have different termination types.

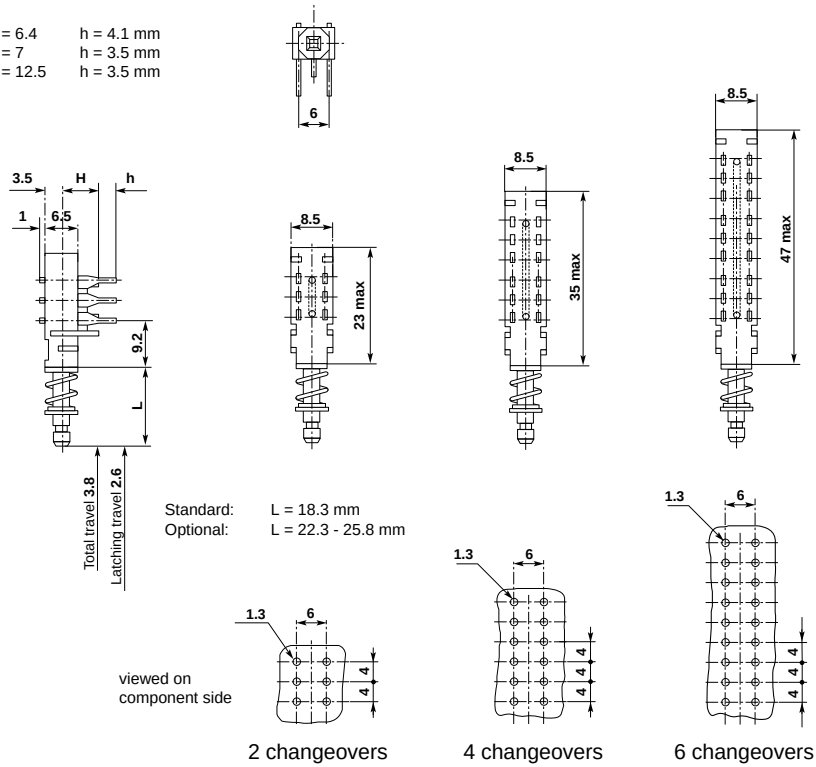
Spindle details: see p. 157.

Buttons: see p. 158.

Single Blocks

Fixing on P.c. board by terminations.

Standard: H = 6.4 h = 4.1 mm
Optional: H = 7 h = 3.5 mm
H = 12.5 h = 3.5 mm



Push-push function

Type	Changeovers
CT40D.2N.FT	2
CT40D.4N.FT	4
CT40D.6N.FT	6

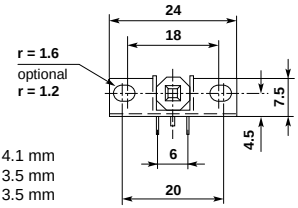
Momentary function

Type	Changeovers
CT40D.2F.FT	2
CT40D.4F.FT	4
CT40D.6F.FT	6

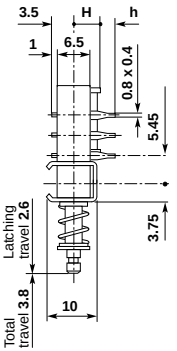
Spindle and termination details: see p. 157
Buttons: see p. 158.

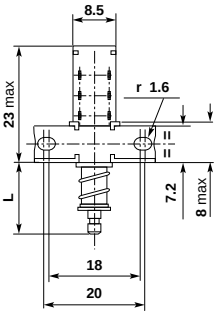
Single Blocks

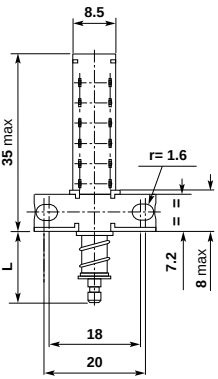
Fixing by bracket

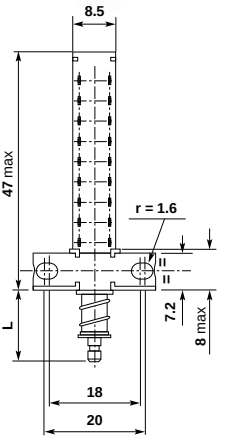


Standard: H = 6.4 h = 4.1 mm
Optional: H = 7 h = 3.5 mm
H = 12.5 h = 3.5 mm



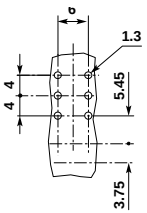


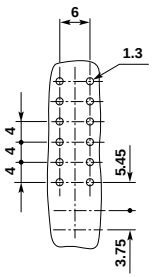


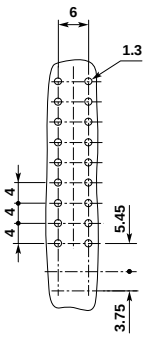


Standard: L = 18.3 mm
Optional: L = 22.3 - 25.8 mm

viewed on component side







2 changeovers | 4 changeovers | 6 changeovers

Push-push function

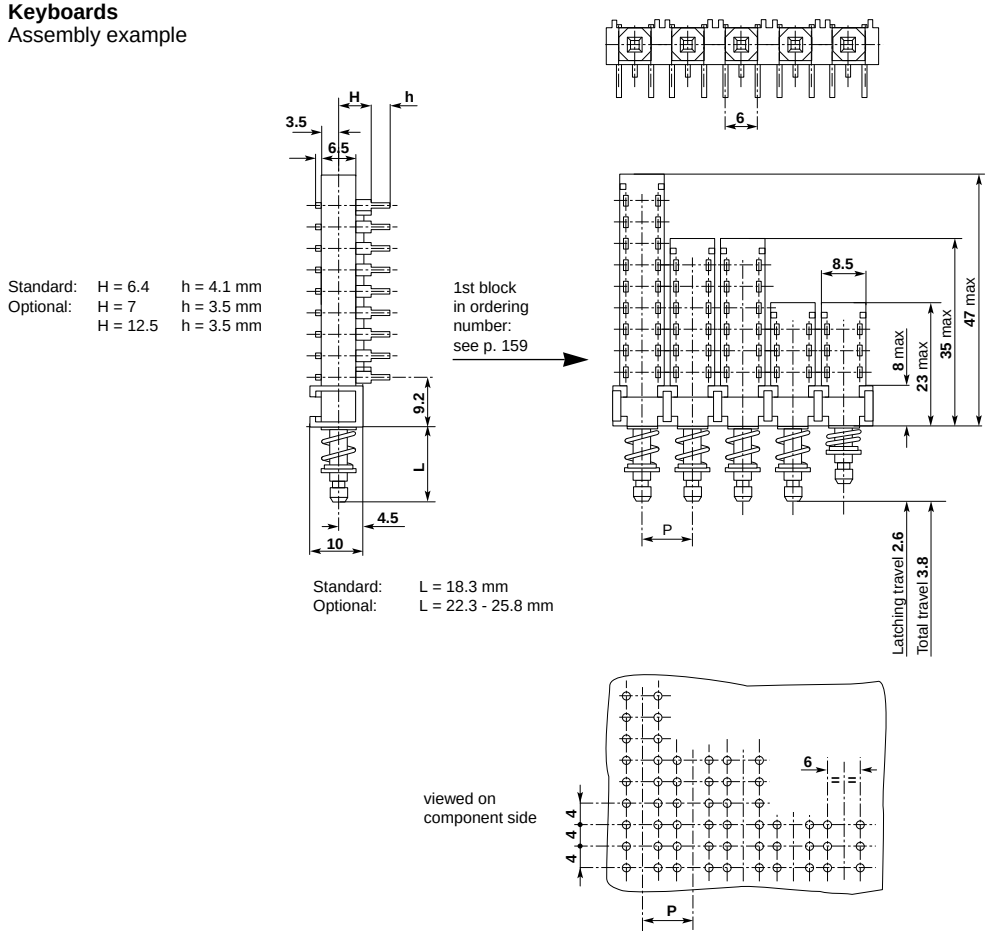
Type	Changeovers
CT40D.2N.F10	2
CT40D.4N.F10	4
CT40D.6N.F10	6

Momentary function

Type	Changeovers
CT40D.2F.F10	2
CT40D.4F.F10	4
CT40D.6F.F10	6

Spindle and termination details: see p. 157. Buttons: see p. 158.

Keyboards
Assembly example



Standard: H = 6.4 h = 4.1 mm
Optional: H = 7 h = 3.5 mm
H = 12.5 h = 3.5 mm

1st block in ordering number: see p. 159

Standard: L = 18.3 mm
Optional: L = 22.3 - 25.8 mm

viewed on component side

Available pitches between blocks: P = 10 - 12.5 - 15 - 20 mm
- A keyboard may have different pitches between blocks: 10 - 15 - 20 mm
- Keyboards with pitch 10 mm: the 1st block must be interlocked.

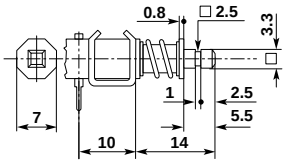
Bracket. Drawing refers to mounting bracket FS style; see other available mounting bracket styles at p. 158.

Terminations. Drawing shows to terminations CI type; see other available terminations types at p. 157. A keyboard may have different termination types.

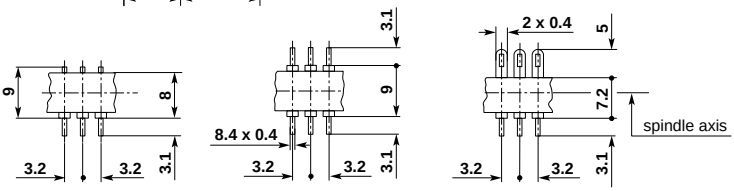
Spindle details: see p. 157.
Buttons: see p. 158.

CT32 - terminations pitch 3.2 mm

Spindle



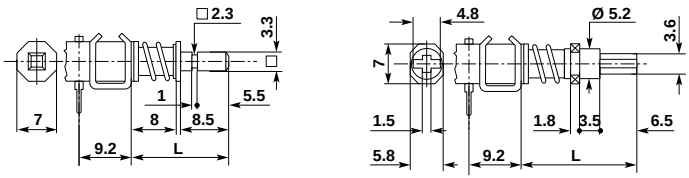
Terminations



Type CI Type CD Type CN

CT40 - terminations pitch 4 mm

Spindles



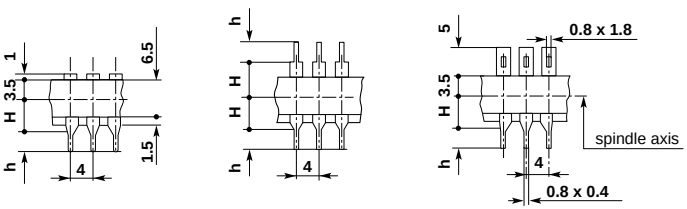
Type 1 standard

Standard L = 18.3 mm
Optional: L = 22.3 - 25.8 mm

Type 2 optional

Standard: L = 19.8
Optional: L = 23.8 - 27.3

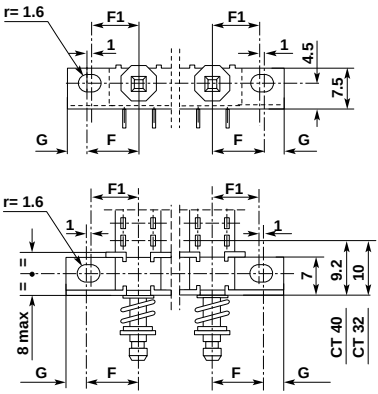
Terminations

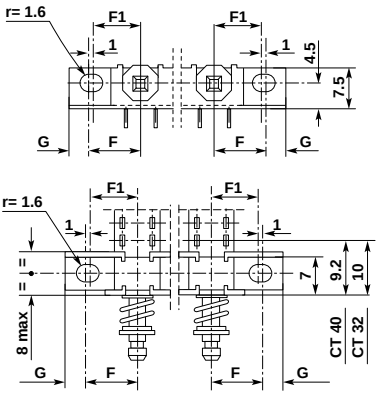


Type CI Type CD Type CN

Standard: H = 6.4 h = 4.1 mm Optional: H = 7 h = 3.5 mm
for type CI only
H = 12.5 H = 3.5 mm

Mounting Brackets



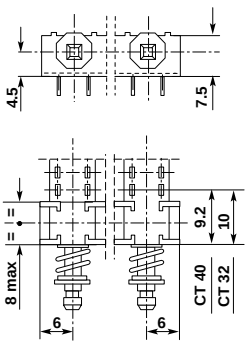


F1 style Max length = 213.5 mm

Pitch between blocks = mm	Bracket type	F	F1	G
10 - 20	F10	10	9	2
12.5	F10	10	9	3
15	F12	15	14	2

F2 style Max length = 213.5 mm

Pitch between blocks = mm	Bracket type	F	F1	G
10 - 20	F20	10	9	2
12.5	F20	10	9	3
15	F22	15	14	2

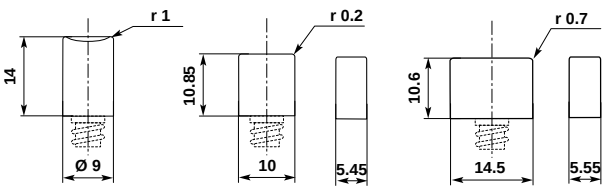


FS style
Max length = 212 mm

Buttons
plastic

Standard: black

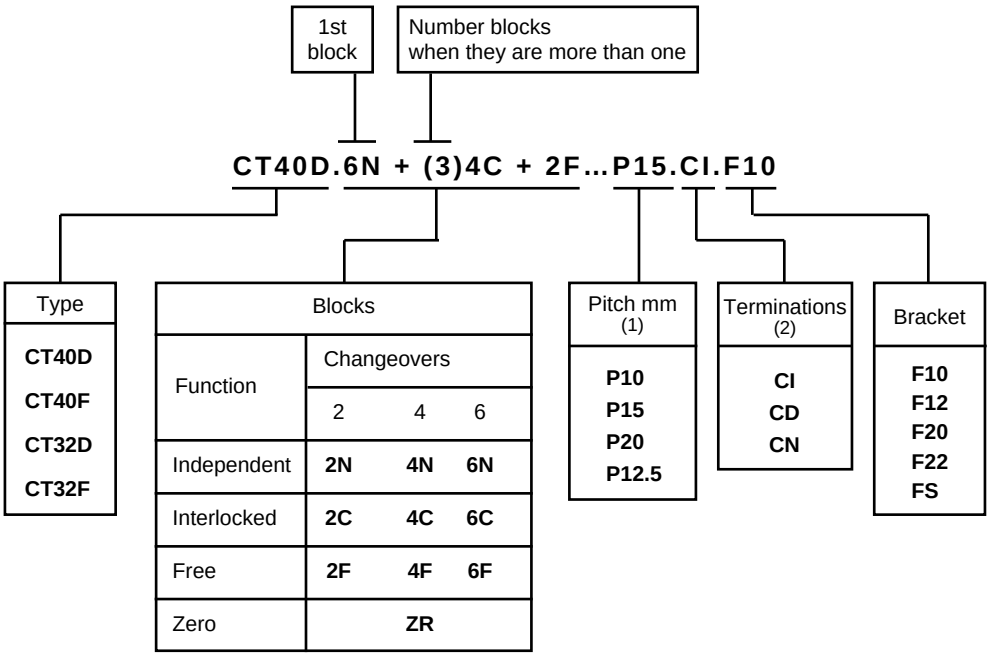
Optional: light grey, red, yellow, blue, green.



Type C1 Type C2 Type C3

Ordering numer for keyboards

Codes pour commandes des claviers



(1) For keyboards with combined pitches, the lengths of pitches must be indicated after each block designation.
Pour les claviers avec pas combinés, ceux-ci doivent être indiqués à la suite de la désignation de chaque cellule.

Example: CT 40D.6N.P15 + (3)4C.P10 + 2F.P20...CI.F10

(2) For keyboards with different terminations, the type of the terminations must be indicated after each block designation.
Pour les claviers avec les cosses différentes, les types des cosses doivent être indiqués à la suite de la désignation de chaque cellule.

Example: CT 40D.6N.CD + (3)4C.CI + 2F.CN...P15.F10