Carbon Rotary Potentiometers - 16 mm size

Dust-proof **Plastic Case**

Types
CIP160TZC
P160TZC

Mechanical data

Rotation angle:	270° ± 5°
Operating torque:	0.4 ÷ 1.5 Ncm
Permissible torque at end stop:	60 Ncm max
Permissible axial spindle load:	100 N (5 sec max)
Life:	≥ 15.000 cycles
Weight, std spindle:	~ 13 g

Optional feature

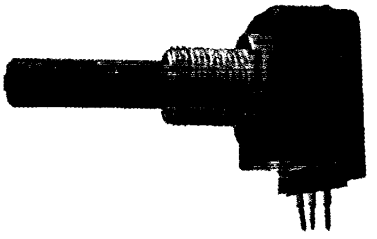
- Rotation angle 300° ± 5°:
  Types **CIP162TZC** and **P162TZC.**

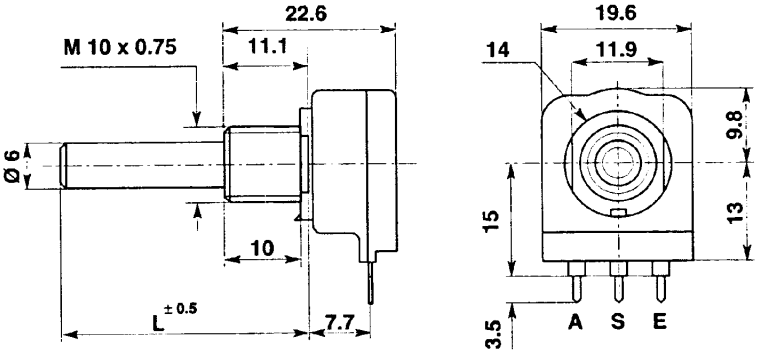
Resin compounding-proof

These potentiometers - except the bush and spindle - can be dipped into the usual insulating resin compounding.

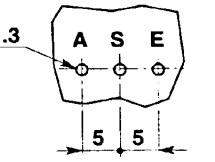
Electrical data

Rated dissipation @ 40°C:	0.25 W linear law 0.12 W non-linear law
Limiting element voltage:	350 VDC
Insulation resistance:	≥ 5 GΩ
Insulation voltage:	500 VAC
Rated resistance: E3 Series; optional E6 Series	
• linear law:	100R to 4M7
• non-linear law:	1K0 to 2M2
Tolerance on rated resistance:	
• 100R to 1M0:	± 20%
• over 1M0:	± 30%
• optional (1K0 to 1M0):	± 10%
Resistance law:	A, B, C, F, S, T, X





CIP16TZC



viewed on component side

Types

CIP160TZC	P.c. terminations
P160TZC	Solder tag terminations

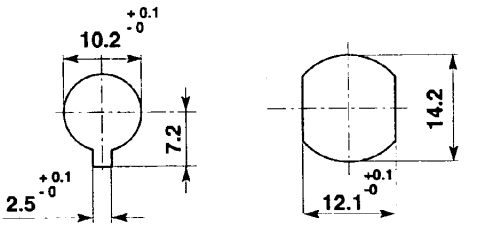
Standard spindle

L = 50 mm, plastic, F1 type

Spindle variations

Available types	
Plastic spindle	Metal spindle
F1, F2, F3, F4, F5, F6, F10, F11, F12	M1, M2, M3, M4, M 10, M11, M12

Chassis piercing
2 possibilities



Spindle details: see p. 81 - 82.
Normalised spindles: see p. 84.

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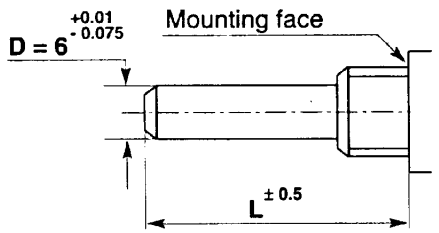
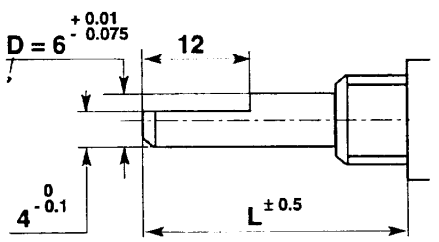
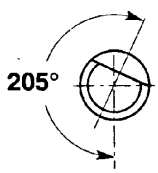
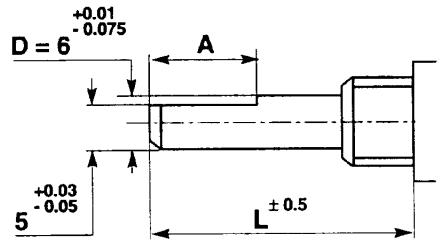
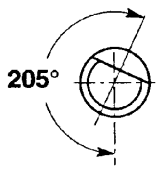
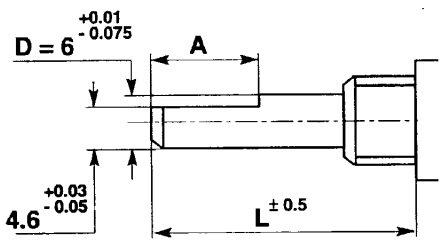
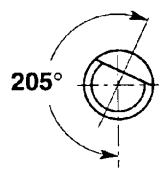
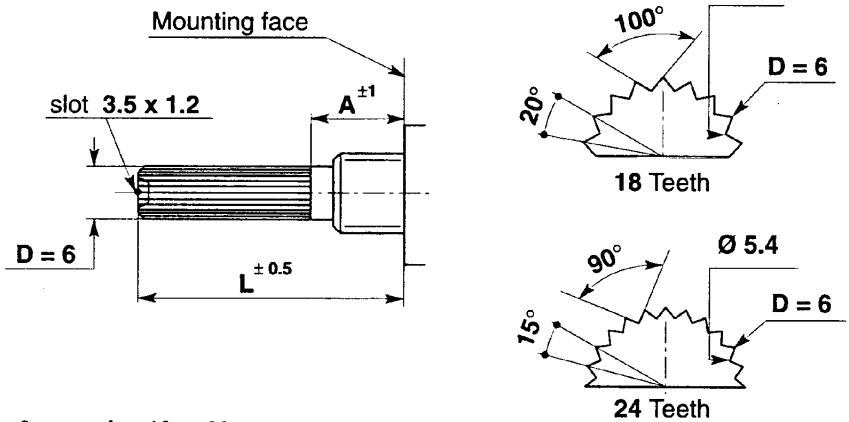
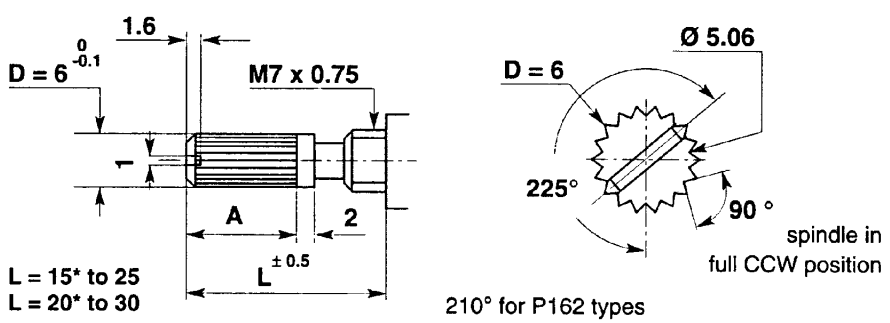
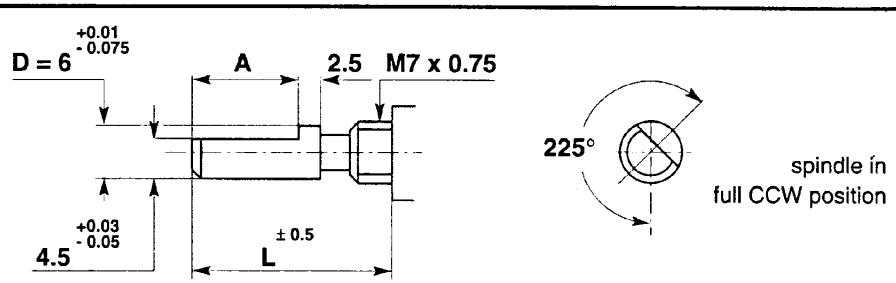
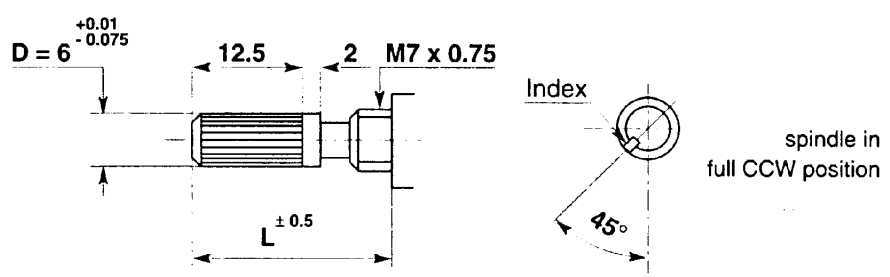
Spindle variations - 6 mm diameter	Available types	
	Plastic	Metal
 L = 15 to 60	**F1**	**M1**
  spindle in full CCW position Optional 210° Optional 225° standard L = 15 to 60	**F2**	**M2**
  spindle in full CCW position Optional 210° Optional 225° standard A = 15 - L = 20 to 60 A = 10 - L = 15 to 60	**F3** A = 15	**M3** A = 15
	F4 A = 10	**M4** A = 10
  spindle in full CCW position A = 10 - L = 15 to 60 A = 15 - L = 20 to 60 A = 20 - L = 25 to 60	**F10** A = 10	**M10** A = 10
	F11 A = 15	**M11** A = 15
	F12 A = 20	**M12** A = 20

The orientation of the flat indicated in the drawings is for plastic spindles only. The optional orientations of 210° and 225° place the flat in horizontal position (zero degrees) at half of rotation angle, respectively in potentiometers with 300° and 270° of rotation angle.
For metal spindles, unless specified in the order, the orientation of the flat may change in each potentiometer.

Carbon Rotary Potentiometers - 16 mm size

Spindle variations - 6 mm diameter	Available types	
	Plastic	Metal
 A = 10 or 6 L = 10 to 60	**F5** 18 teeth	NOT
	F6 24 teeth	NOT
18 teeth  A = 7,5 L = 15* to 25 A = 12,5 L = 20* to 30 210° for P162 types	**F31** A = 7.5	**M31** A = 7.5
	F32 A = 12.5	**M32** A = 12.5
 A = 7 L = 15* to 25 A = 12 L = 20* to 30 210° for P162 types	**F33** A = 7	**M33** A = 7
	F34 A = 12	**M34** A = 12
40 teeth  L = 20* to 30 30° for P162 types	**F35**	**M35**

* Bush lengths: 4,5 mm or 5 mm.

Available spindles are specified on the pages describing each potentiometer type.

Carbon Rotary Potentiometers - 16 mm size

Normalised plastic spindles

☐ Standard types & lengths

Potentiometer types	D mm	Spindle types	Normalised lengths - mm									
(CI) P160C	4	[F21] - F22-F23	15	18	20	22	25	30	[32]	40	60	
CI P161C	6	F31-F32-F33-F34-F35-F1-F6	(2) 15	20	25	30						
P160BA	6	[F1] - F3-F6	(1) 20	22	25	30	40	[50]				
(CI) JP16C	4	[F21] - F22-F23	15	18	20	22	25	30	[32]	40	60	
	6	F31-F32-F33-F34-F35-F1-F6	(2) 15	20	25	30						
(CI) PC160C IL/2IL EP160C IL/2IL P161EC IL/2IL	4	[F21] - F22-F23	15	18	20	22	25	30	[32]	40	60	
	6	F31-F32-F33-F34-F35-F1-F6	(2) 15	20	25	30						
P160 IBA	6	[F1] - F3-F6	(1) 20	22	25	30	40	[50]				
(CI) P160KC	4	F21-F22-F23	15	18	20	22	25	30	40			
	6	[F1] -F6	15	18	20	22	25	30	40	[50]	60	
EP160Z-EPP160Z	6	[F1] -F6	21	26	29	31	33	36	41	[51]	61	
EP160KC EPP160KC P160EKC	6	[F1] -F6	10	15	18	20	22	25	30	40	[50]	60
P160ZCS	4	F21-F22-F23	15	18	20	22	25	30	40			
	6	[F1] -F6	15	18	20	22	25	30	40	[50]	60	
SP160Z	6	[F1] -F6	21.5	24.5	26.5	28.5	31.5	36.5	46.5	[50]		
EP160KC IPP CI P160KC IPP	4	F21-[F22]-F23	15	18.5	[20.5]	22	25	30	40			
CI P160KC IP (CI) JP160KC	4	F21-F22-F23	15	18	20	22	25	30	40			
	6	[F1] -F6	15	18	20	22	25	30	40	[50]	60	
(CI) TJP160KC (CI) QJP160KC	6	[F1] -F6	10	15	18	20	22	25	30	35	[50]	60
(CI) P160TZC	6	[F1] -F6	16	19	21	23	26	31	41	[50]		

(1) F6 type only
(2) F31 and F33 types only
F22-F23 types: with flat in standard position

Normalised metal spindles

(CI) P160C	4	M21	13	15	17	20	25					
(CI) JP16C	4	M22 flat 90°	13	15	17							
(CI) P160KC	4	M22 flat 225°	13	15	17	20	25					
(CI) JP160KC	4	M23 flat 90°	18	20	22	25	30					
(CI) P160C IL/2IL	6	M31-M33	15	17								
(CI) P160KC IP	6	M32-M34-M35	20	22	25	30						