

## Singleturn Potentiometers

PD200/210

φ 20.0mm

100,000 cycles

Wirewound



### Features

- Immersion proof and washable
- Excellent resolution
- Good Linearity
- High life expectancy
- Stable long-term behavior

### Options

- Shaft length up to 50 mm
- Flattened shaft
- Other shafts according to drawings (rimmed, notched, toothed, etc.)
- Pilot diameter
- Flattened bushing
- Index point
- Increased torque

### Mechanical Data

Diameter	20.0 mm
Shaft diameter	6.0 mm
Life expectancy	100,000 cycle
Life expectancy	10,000 cycles with higher torque
Max. torque	0.6 Ncm

### Electrical Data

Nominal resistance R	100...10KΩ
Resistance tolerance	+/- 5%
Linearity	+/-0.4%
Maximum wiper current	100mA
Power rating	2W/40°C
Maximum supply voltage	$U_{max} = (P \times R)^{-1/2}$
Maximum contact resistance	ENR 100Ω
Temperature coefficient	40 ppm/°C
Dielectric strength	1500VAC/1min
Insulating resistance	10GΩ at 500VDC

### Environmental Conditions

Storage temperature range	-55...+125°C
Operating temperature range	-55...+125°C
Climatic rating	55/125/56
Protection rating	IP67
Vibration	10G (30-2,000 Hz, 0.75mm)
Shock	50G (half sine pulse, 7ms)

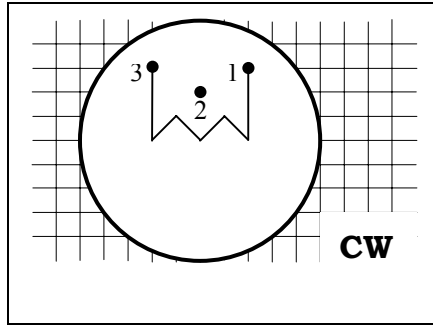
### Material

Housing	Plastic
Shaft	Brass nickel plated
Connections	Brass gold plated

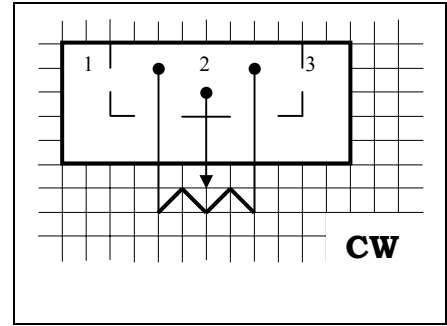


Model	PD 200-1A-MB	PD 202-1A-MB	PD 203-1A -MB	PD 204-1A-MB	PD 200-1B-MB	PD 202-1B-MB
Connecting diagram	1	1	1	1	2	2
Dimension drawing	A	A	A	A	B	B
Electr. angle	318°	268°	298°	278°	318°	268°
Mech. angle	320°	270°	300°	280°	320°	270°

### Connecting diagrams

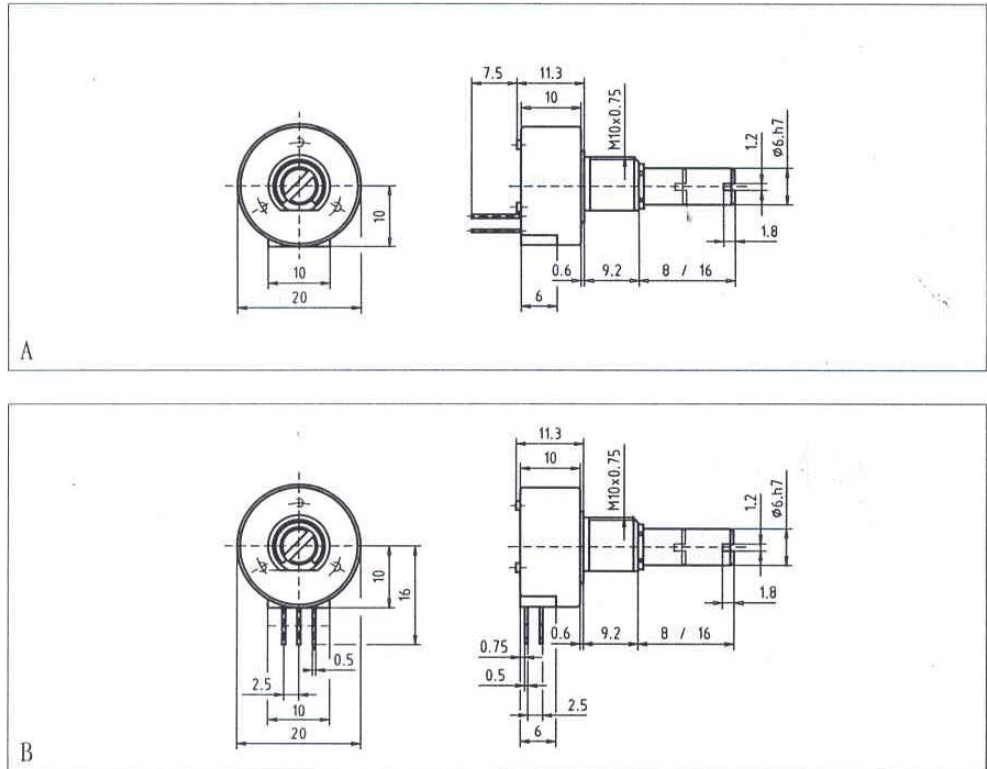


1 grid: 2.5 mm  
top view



2 grid: 2.5 mm  
top view

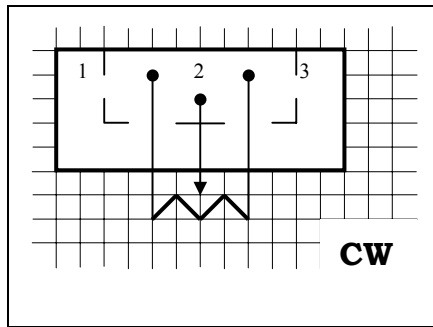
### Dimension drawings



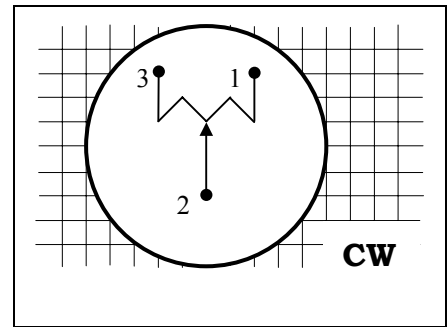


Model	PD 203-1B-MB	PD 204-1B-MB	PD 200-1C -MB	PD 202-1C-MB	PD 203-1C-MB	PD 204-1C-MB
Connecting diagram	2	2	3	3	3	3
Dimension drawing	B	B	C	C	C	C
Electr. angle	298°	278°	318°	268°	298°	278°
Mech. angle	300°	280°	320°	270°	300°	280°

### Connecting diagrams

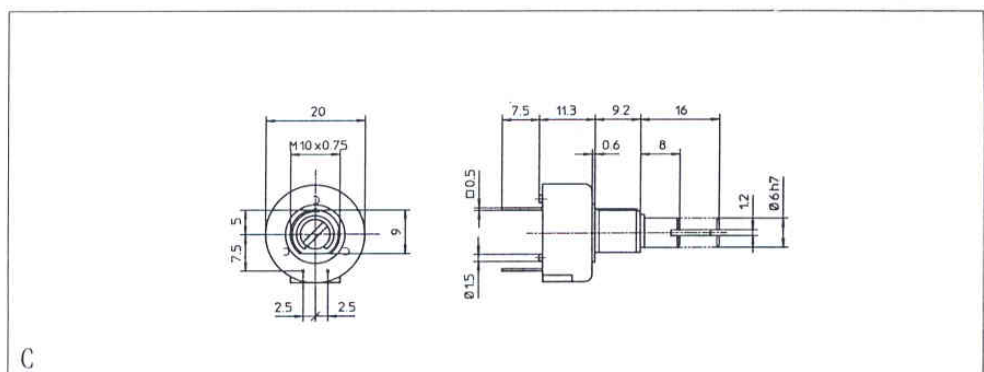
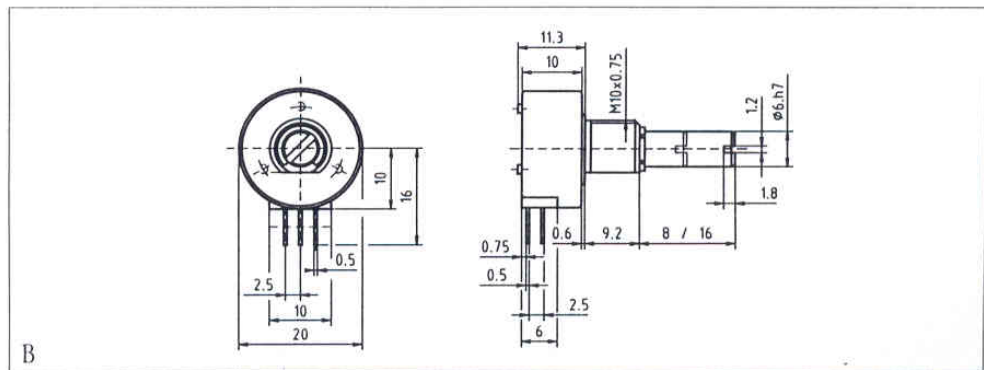


2 grid: 2.5 mm  
top view



3 grid: 2.5 mm  
top view

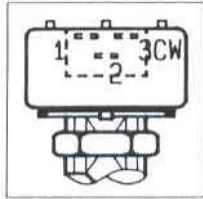
### Dimension drawings



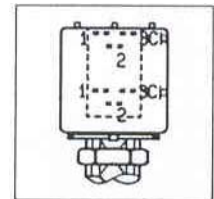


Model	PD 210-4B-MB	PD 212-4B-MB	PD 213-4B -MB	PD 214-4B-MB	PD 210-4F-MB
Connecting diagram	4	4	4	4	5
Dimension drawing	D	D	D	D	E
Electr. angle	318°	268°	298°	278°	318°
Mech. angle	320°	270°	300°	280°	320°

### Connecting diagrams

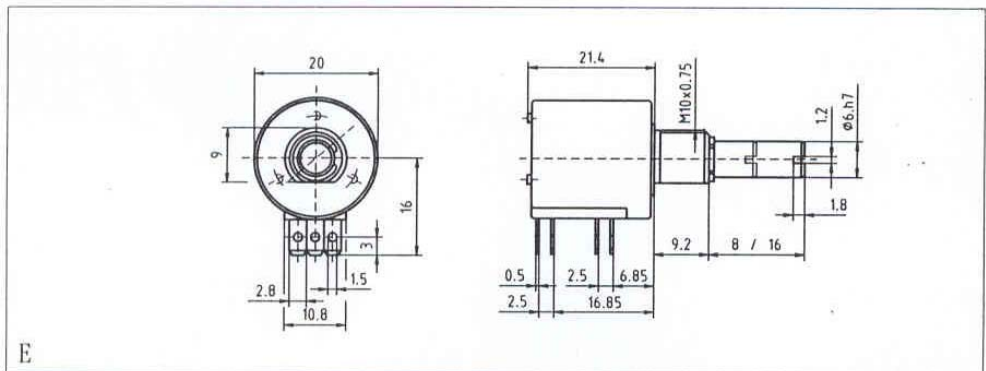
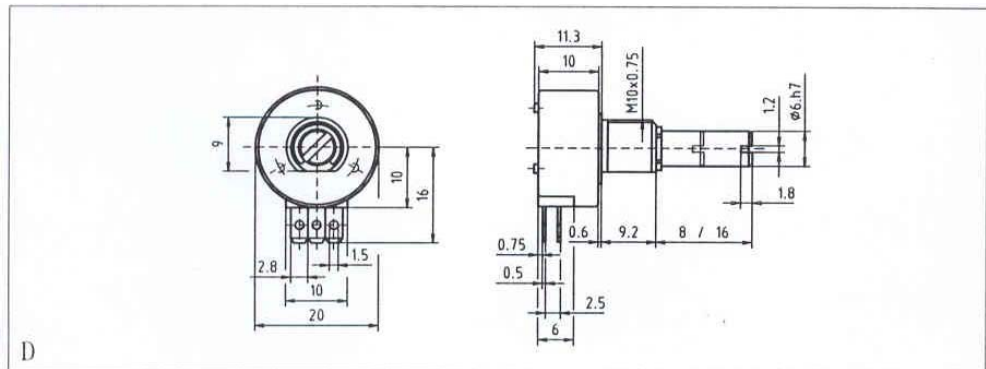


4 grid: 2.5 mm  
top view



5 grid: 2.5 mm  
top view

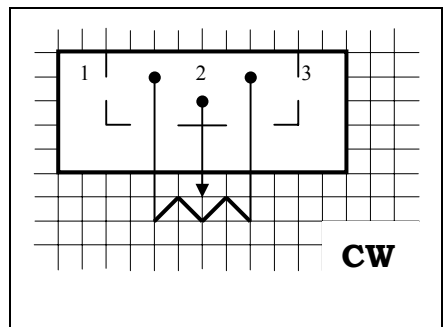
### Dimension drawings



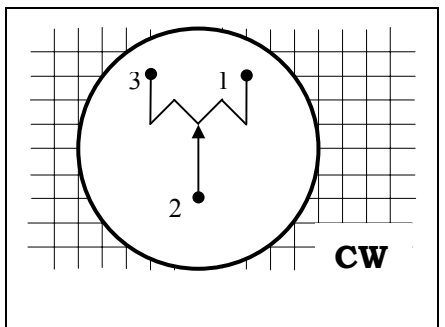


Model	PD 200-1B	PD 210-4B	PD 210-4B-MB	PD 212-1C-MB
Connecting diagram	2	4	4	3
Dimension drawing	G	F	D	D
Electr. angle	318°	318°	318°	268°
Mech. angle	320°	320°	320°	270°

**Connecting diagrams**

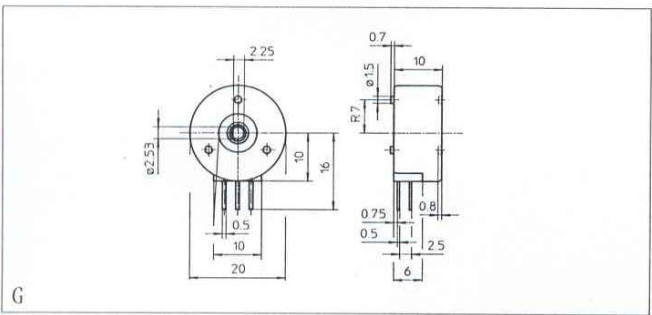
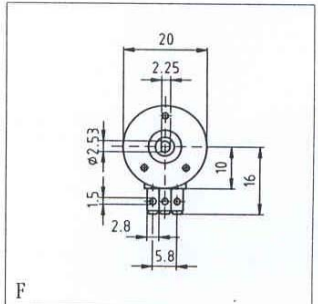
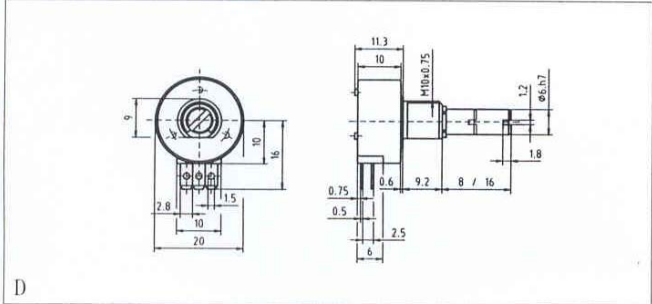


2 grid: 2.5 mm  
top view



3 grid: 2.5 mm  
top view

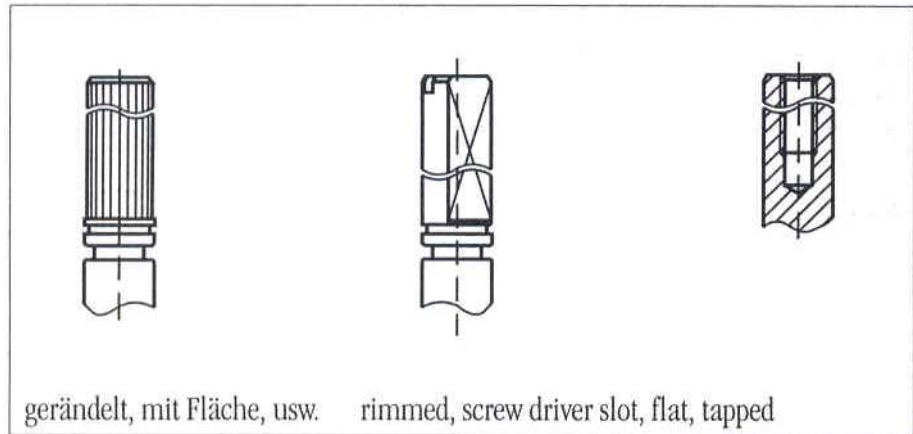
**Dimension drawings**



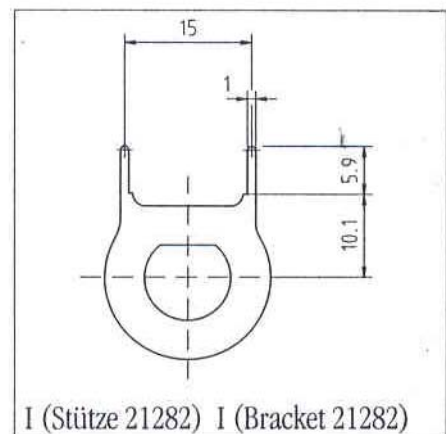
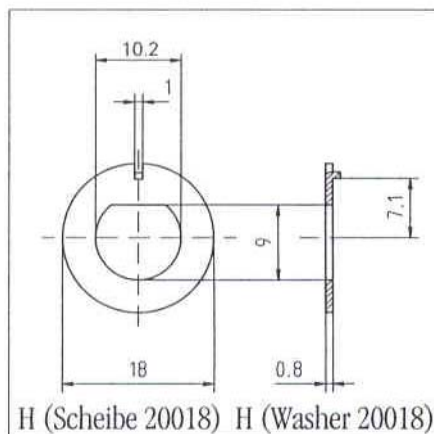
## Marking/Remarks

Connections:	1A = Axial PC pins
	1B = Side PC pins
	1C = Axial PC pins
	4B = Side solder lugs
	4F = Side solder lugs
Bushing:	M = Metric thread
Shaft:	B = $\phi$ 6 mm, slotted
	Z = According to drawing

## Options Shaft



## Accessories/Dimension



Art. No.	Model	Marking	Remarks
20019	Nut	M10 × 0.75	Standard item
20020	Washer	Fan washer 3/8	Standard item
20018	Washer	With cam	Drawing H
21282	Bracket	Mounting horizontal	Drawing I