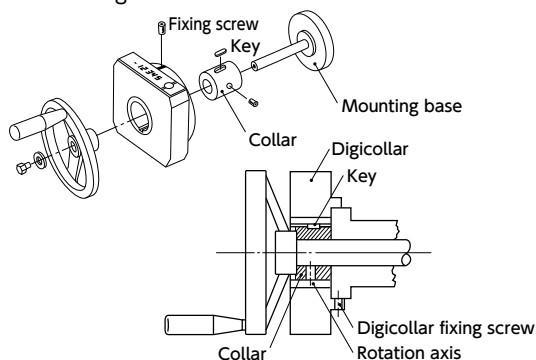


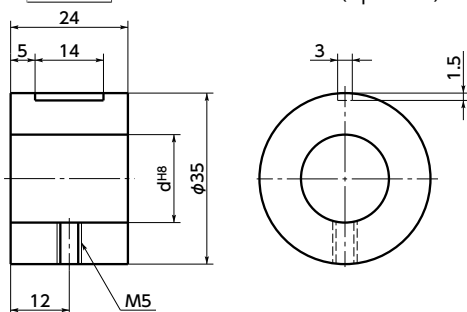


● Mounting



- ① Process the mounting base in accordance with the mounting-pilot section of the main body ($\phi 820$ to $+0.054$) (Recommended dimension: $\phi 82f7$).
- ② Process the collar to match the shaft diameter. Bore diameter collar **RNCL-R** (optional) is available.
- ③ After mounting the shaft to the collar, set-in the main body to the mounting base, and then secure it with fixing screws.

● **RNCL-R** Bore diameter collar (optional)



● Material/Finish



	RNCL-R
Main body	SUM22L Ferrosoferric Oxide Film (Black)

● Dimensions

Unit : mm

Part Number	d	Mass (g)
RNCL-R18	18	136
RNCL-R20	20	125
RNCL-R22	22	112
RNCL-R24	24	98
RNCL-R25	25	90
RNCL-R26	26	83

- With hex socket set screw without key.
- Use the key provided with the main body of the Digicollar.

● Measuring unit

Correct digital display of the feed rate is possible by just setting it to the feed rotation axis.

- Preset function to set the current value to the home position is provided.
- The custom decimal point position can be set (range from 1 to 0.0001 mm).
- It can be applied to any lead value by setting the parameter. It can be converted to millimeter or inch.
- A nonvolatile memory stores the count value / the parameter setting values for 10 years.
- 100 V AC (50 / 60 Hz) supported.
- Dust-proof structure is provided, however, it is not protected from water / oil.
Front: IP62
Back: IP50
- Bore diameter of the attached collar is $\phi 9$ mm. Shaft hole processing can be performed upon the order. Please feel free to contact our customer service.
- Bore diameter collar whose shaft hole is already processed **RNCL-R** (optional) is available.

● Part number specification

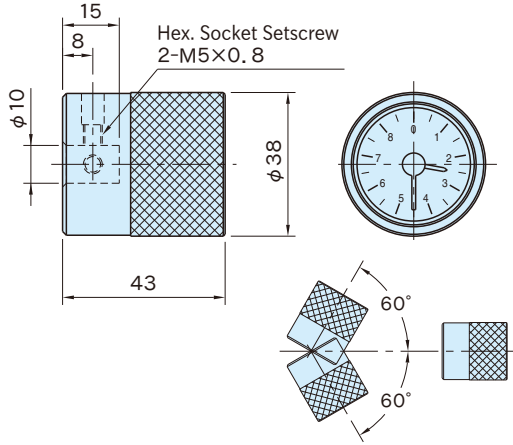
RNCL-300

① Main body of Digicollar

RNCL-R18

② Bore diameter collar (optional)

D38 DIAL INDICATOR KNURLED KNOBS



Angular Range of Mounting

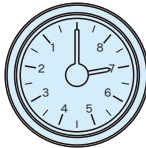
Knob	Window	Dial	Long Hand	Short Hand
Aluminum	Acrylic plastic	Aluminum (A1050P)	Red (printed on acrylic window)	Red

Part Number	No. of Graduations	Rotative Direction	Weight (g)
D38R1/9	9	Clockwise	100
D38L1/9		Counterclockwise	

Display Examples



Rotative Direction : Clockwise
Graduations : 9
Part Number : D38R1/9
Display after 3-1/2 clockwise revolutions



Rotative Direction : Counterclockwise
Graduations : 9
Part Number : D38L1/9
Display after 7 counterclockwise revolutions

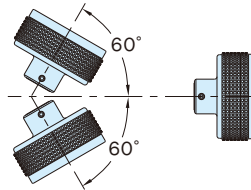
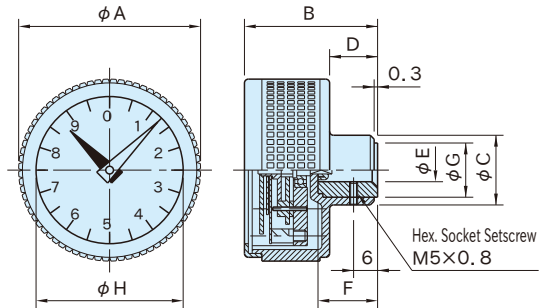
- The two-hands feature allows precisely reading the number of revolutions.
- Working temperature ranges from -20°C to 60°C . The plastic window can be blurred with steam that will be caused by a big difference in working temperatures.
- Ensure Dial Indicator Knurled Knobs are completely kept away from water and dust.

Technical Information

For detailed installation instructions, see page of “**IMAO** INDICATOR HANDWHEELS & INDICATOR KNOBS”.



Original ELESA Model MBT-GA



Angular Range of Mounting

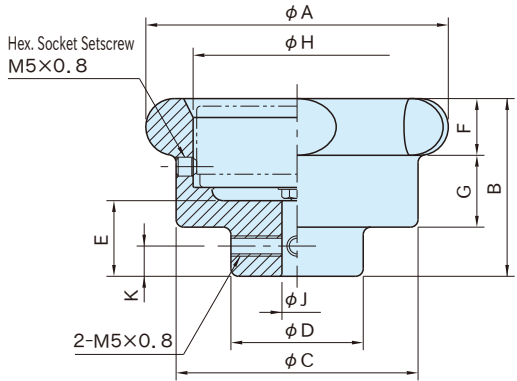
Housing	Hub	Dial Plate	Long Hand	Short Hand
Glass-fiber reinforced polyamide plastic Black matte	Steel (SUM22L) Black oxide finish	Aluminum (A1050P)	Red	Black

Part Number			Rotative Direction	A	B	C	D	E (H7)	F	G	H	Weight (g)
No. of Graduations : 10	No. of Graduations : 20	No. of Graduations : 30										
DGK50R-1/10	DGK50R-1/20	DGK50R-1/30	Clockwise	51	48	24	16.5	8	17	18	42	120
DGK50L-1/10	DGK50L-1/20	DGK50L-1/30	Counterclockwise									
DGK70R-1/10	DGK70R-1/20	DGK70R-1/30	Clockwise	70	52	28	19	10	22	22	60	200
DGK70L-1/10	DGK70L-1/20	DGK70L-1/30	Counterclockwise									

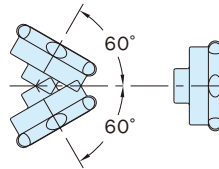
- "R" and "L" at the end of the part number stands for "Clockwise" and "Counterclockwise" respectively.
- Working temperature : Between 0°C and 100°C
- Comes with a Plastic Dial Indicator.

Technical Information

For detailed installation instructions, see page of "Elesa INDICATOR HANDWHEELS & INDICATOR KNOBS".



Note : Dial Indicator must be ordered separately.



Angular Range of Mounting

Knob
Aluminum alloy (ADC12)
Baked finish
Silver gray

Part Number	A	B	C	D	E	F	G	H	J (H8)	K	Weight (g)
DHK 80	79	47	64	35	20	15	19	55	8	8	330
DHK100	99	53	86	38	25		21	75.7	10		530

Proper Dial Indicators

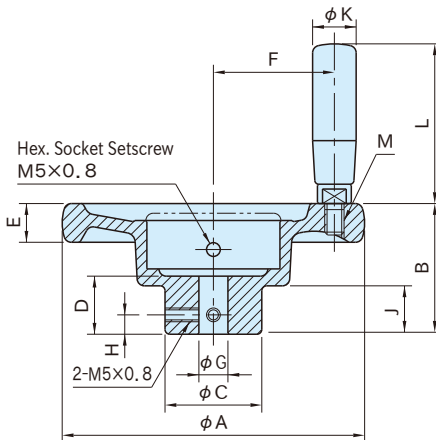
Handwheels	Dial Indicators	
	D50R/L/C	D75R/L/C
DHK 80	○	×
DHK100	×	○

• Center Caps are available for applications without a indicator

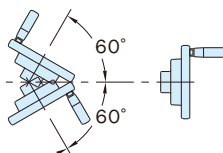
Technical Information

For detailed installation instructions, see page of "IMAO INDICATOR HANDWHEELS & INDICATOR KNOBS".

DHW ALUMINUM SOLID INDICATOR HANDWHEELS



Note : Dial Indicator must be ordered separately.



Angular Range of Mounting

Handwheel	Handle
Aluminum alloy (ADC12) Baked finish Silver gray	Polyamide plastic Black

Part Number	A	B	C	D	E	F	G (H8)	H	J	K	L	M	Weight (g)
DHW125ER	122	54	40	24	16	50	12	8	20	18	66	M 8x1.25	530
DHW140ER	139	55				56			19				650
DHW160ER	159	58	45	28		63	14	10	23	22	85	M10x1.5	810

- Comes with an **ER-S** revolving handle
- Center Caps are available for applications without a indicator

Technical Information

For detailed installation instructions, see page of "IMAO INDICATOR HANDWHEELS & INDICATOR KNOBS".

Proper Dial Indicators

Handwheels	Dial Indicators	
	D50R/L/C	D75R/L/C
DHW125ER	○	×
DHW140ER	×	○
DHW160ER	×	○

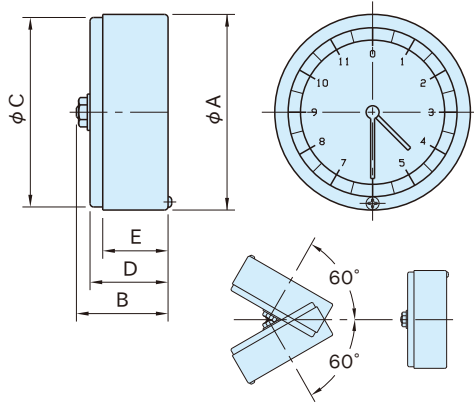
D-R / D-L / D-C DIAL INDICATORS



D75R1/12



D75C30-30



Angular Range of Mounting

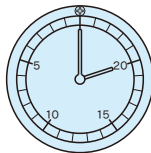
Housing	Window	Dial Plate	Long Hand	Short Hand
Steel Black matte	Acrylic plastic	Aluminum (A1050P)	Red (printed on acrylic window)	Black

Part Number					Rotative Direction	A	B	C	D	E	Weight (g)
No. of Graduations :12	No. of Graduations :25	No. of Graduations :30	No. of Graduations :36	No. of Graduations :64							
D50R1/12	D50R1/25	-	-	-	Clockwise	53.9	25	52.2	21.5	20	75
D50L 1/12	D50L 1/25	-	-	-	Counterclockwise						
D50C12-12	-	-	-	-	CW & CCW						
D75R1/12	D75R1/25	-	D75R1/36	D75R1/64	Clockwise	75.3	25	73.5	22	18	135
D75L 1/12	D75L 1/25	-	D75L 1/36	D75L 1/64	Counterclockwise						
-	-	D75C30-30	-	-	CW & CCW						

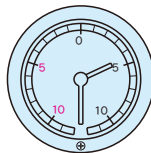
Display Examples



Type : Clockwise
Graduations : 12
Part No. : D75R1/12
Display after 4-1/2 revolution



Type : Counterclockwise
Graduations : 25
Part No. : D75L1/25
Display after 20 revolutions



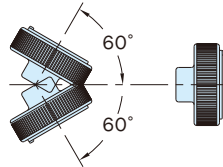
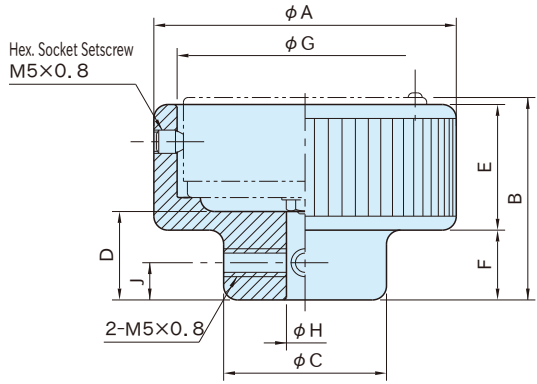
Type : CW & CCW
Graduations : 12
Part No. : D50C12-12
Display after 4-1/2 clockwise revolutions

Technical Information

For detailed installation instructions, see page of "IMAO INDICATOR HANDWHEELS & INDICATOR KNOBS".

- Allowable revolution speed : 300 min⁻¹
- These indicators can mount onto **DHW** Indicator Handwheels, **DHK** Indicator Knobs, or **DRK** Knurled Indicator Knobs.
- The two-hands feature allows precisely reading the number of revolutions.
- Working temperatures range from -20°C to 60°C.
- The plastic window can be blurred with some steam caused by a big difference in working temperatures.
- Ensure that these indicators are completely kept away from water and dust.

DRK ALUMINUM KNURLED INDICATOR KNOBS



Angular Range of Mounting

Note : Dial Indicator must be ordered separately.

Knob
Aluminum alloy(ADC12)
Baked finish
Silver gray

Part Number	A	B	C	D	E	F	G	H (H8)	J	Weight (g)
DRK65	65	43.5	35	19	27	15	55	8	8	280
DRK90	90	51	38	24	28	20	75.7	10		450

Proper Dial Indicators

Handwheels	Dial Indicators	
	D50R/L/C	D75R/L/C
DRK65	○	×
DRK90	×	○

· Center Caps are available for applications without a indicator

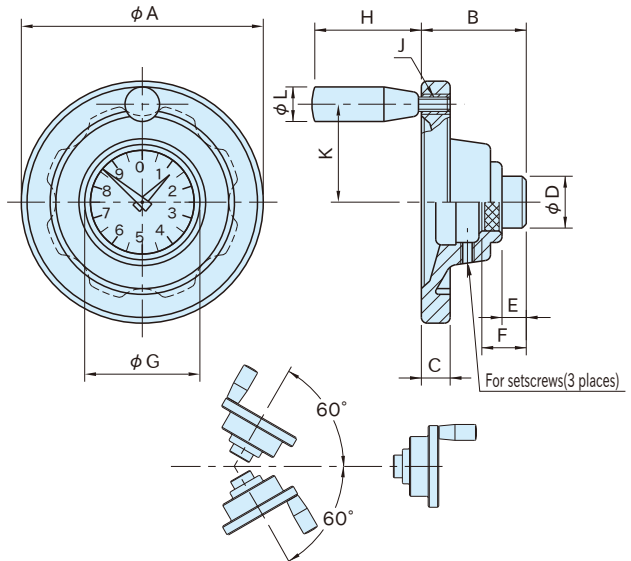
Technical Information

For detailed installation instructions, see page of "IMAO INDICATOR HANDWHEELS & INDICATOR KNOBS".

PDH PLASTIC INDICATOR HANDWHEELS



ELESA Original Design VDC+I



Angular Range of Mounting

Handwheel & Handle	Insert	Indicator	Dial Plate	Long Hand	Short Hand
Phenolic plastic Glossy Finish Black	Steel (SUM22L) Black oxide finish	Polyamide plastic Black matte	Aluminum (A1050P)	Red	Black

Size	A	B	C	D	E	F	G	H	J	K	L	Weight (g)
PDH	80	87	57	14	25	11	23	42	M6×1	34	18	255
	100	108	60		30	12	25	60		50	45	21
	125	125	61	16		35	15		30	M8×1.25	53	23
	160	160	72	18	15		30	80	68		26	775

Size	Part Number			Rotative Direction
	No. of Graduations : 10	No. of Graduations : 20	No. of Graduations : 30	
80	PDH 80R-1/10	PDH 80R-1/20	PDH 80R-1/30	Clockwise
	PDH 80L-1/10	PDH 80L-1/20	PDH 80L-1/30	Counterclockwise
100	PDH100R-1/10	PDH100R-1/20	PDH100R-1/30	Clockwise
	PDH100L-1/10	PDH100L-1/20	PDH100L-1/30	Counterclockwise
125	PDH125R-1/10	PDH125R-1/20	PDH125R-1/30	Clockwise
	PDH125L-1/10	PDH125L-1/20	PDH125L-1/30	Counterclockwise
160	PDH160R-1/10	PDH160R-1/20	PDH160R-1/30	Clockwise
	PDH160L-1/10	PDH160L-1/20	PDH160L-1/30	Counterclockwise

SDP-02

DIGITAL POSITION INDICATORS



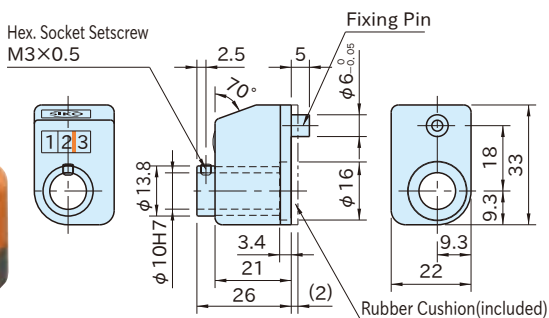
SDP-02H
(Style H)



SDP-02V
(Style V)



SDP-02F
(Style F)



Note : The flat-end fixing pin can not work to mark a fixing point.

Housing
Polyamide (nylon 6) plastic
Orange

Features

- Lightweight and extra-compact.
- Shaft-hole diameter : 10mm
- Displayed figure height : 4mm

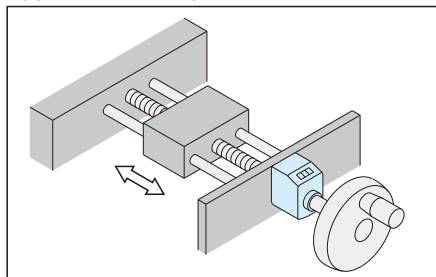
Furnished With

Rubber Cushion

How To Use

- 1 Stick the rubber cushion to the back of the indicator.
- 2 Drill a fixing-pin hole in the mounting wall, 18mm above the shaft center.
- 3 Slide the indicator onto the shaft to the mounting wall and then tighten the setscrew.

Application Example



Notes

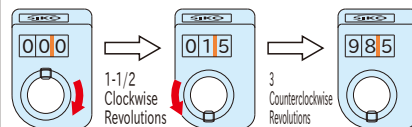
- Ensure that the start-up revolution speed is 1/3 or less of the allowable revolution speed.
- Do not give rapid acceleration or sudden stop.
- These position indicators can not be used in applications where the shaft moves in the axial direction.

Technical Information

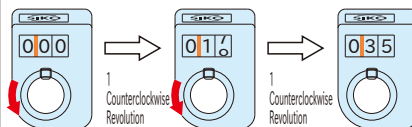
Working temperature : Up to 80°C

Display Example

SDP-02FR-1B



SDP-02FL-1.75A On Request

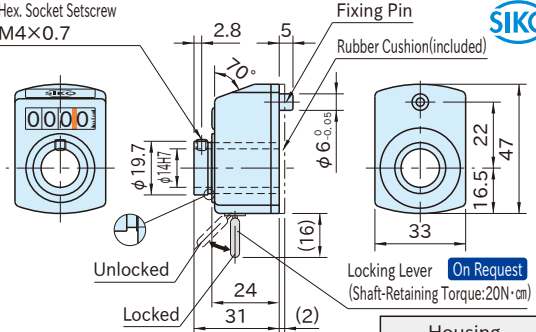


SDP-04

DIGITAL POSITION INDICATORS



Hex. Socket Setscrew
M4×0.7



Housing
Polyamide (nylon 6) plastic
Orange
Black (on request)
Gray (on request)

Features

- Lightweight and compact
- Using a shaft sleeve allows accepting a shaft of 6mm, 8mm, 10mm or 12mm diameter.
- The locking lever (on request) prevents the shaft from rotating due to vibrations from the machine (**SKP-04** **SKPZNO4** Clamp Plates can also be used for the same purpose).
- Displayed figure height : 6mm

Furnished With

- Comes with a rubber cushion

Technical Information

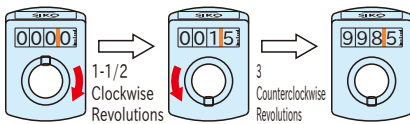
Working temperature : Up to 80°C

How To Use

- 1 Stick the rubber cushion to the back of the indicator. Do not stick it when using the housing seal.
- 2 Drill a fixing-pin hole in the mounting wall, 22mm above the shaft center.
- 3 Slide the indicator onto the shaft to the mounting wall and then tighten the setscrew.

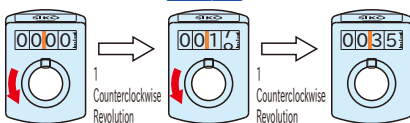
Application Example

•SDP-04FR-1B



•SDP-04FL-1.75A

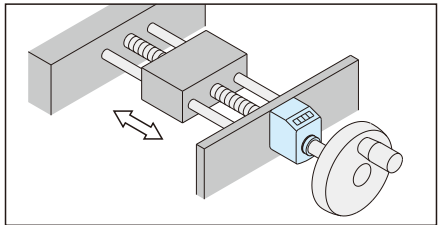
On Request



Notes

- Ensure that the start-up revolution speed is 1/3 or less of the allowable revolution speed.
- Do not give rapid acceleration or sudden stop.
- These position indicators can not be used in applications where the shaft moves in the axial direction.
- The rubber cushion and the housing seal **SDP-04-HS** can not be used together.

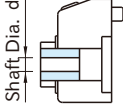
Application Example



Housing seal & Front seal (to be ordered separately)

Part Number	Weight (g)
SDP-04-FS	0.3
SDP-04-HS	3.4

Features
Using the front seal and the housing seal together offers better airtightness.

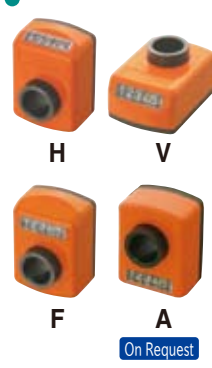
Type	Spindle Thread Pitch	Value Displayed After 1st Revolution		Allowable Revolution Speed (min ⁻¹)	Weight (g)	Shaft Sleeve (To be ordered separately)																		
		Indication	Display																					
SDP-09	0.5	0.50	00050	300	100*)	 <table border="1"> <thead> <tr> <th>Part Number</th> <th>d</th> </tr> </thead> <tbody> <tr><td>STS-12</td><td>12</td></tr> <tr><td>STS-14</td><td>14</td></tr> <tr><td>STS-15</td><td>15</td></tr> <tr><td>STS-16</td><td>16</td></tr> <tr><td>STS-12-SUS</td><td>12</td></tr> <tr><td>STS-14-SUS</td><td>14</td></tr> <tr><td>STS-15-SUS</td><td>15</td></tr> <tr><td>STS-16-SUS</td><td>16</td></tr> </tbody> </table>	Part Number	d	STS-12	12	STS-14	14	STS-15	15	STS-16	16	STS-12-SUS	12	STS-14-SUS	14	STS-15-SUS	15	STS-16-SUS	16
	Part Number	d																						
	STS-12	12																						
	STS-14	14																						
	STS-15	15																						
	STS-16	16																						
	STS-12-SUS	12																						
	STS-14-SUS	14																						
	STS-15-SUS	15																						
	STS-16-SUS	16																						
	1	1.00	00100	150																				
1	1.0	00010																						
1.5	1.5	00015																						
2	2.0	00020	500																					
2.5	2.5	00025																						
3	3.0	00030																						
4	4.0	00040	375																					
5	5.0	00050	300																					
6	6.0	00060	250																					
8	8.0	00080	180																					
10	10.0	00100	150																					
Other Leads of Screw Available on Request				—																				

*) 145 for housing type M

Ordering Example

SDP-09 H R - 1.0 N S -B

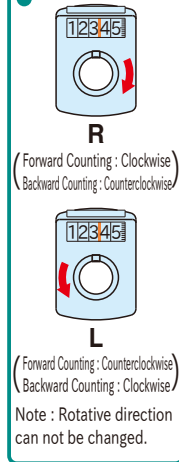
Style Rotative Direction Value Displayed After 1st Revolution Shaft Sleeve Housing Color



H **V**

F **A**

On Request




R

(Forward Counting : Clockwise
Backward Counting : Counterclockwise)

L

(Forward Counting : Counterclockwise
Backward Counting : Clockwise)

Note : Rotative direction can not be changed.

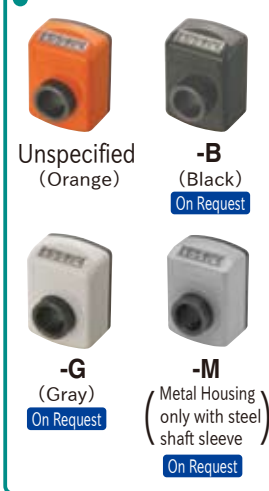


Unspecified
(Steel)

S

(Stainless steel)

On Request



Unspecified
(Orange)

-B
(Black)

On Request

-G
(Gray)

On Request

-M
(Metal Housing
only with steel
shaft sleeve)

On Request

SDP-10

DIGITAL POSITION INDICATORS



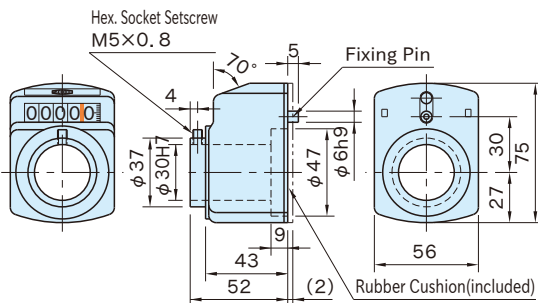
SDP-10H
(Style H)



SDP-10V
(Style V)



SDP-10F
(Style F)



Note : The flat-end fixing pin can not work to mark a fixing point.

Housing
Polyamide (nylon 6) plastic
Orange
Black (on request)

Features

- Using a shaft sleeve allows accepting a shaft of 12mm, 14mm, 15mm, 16mm, 18mm, 20mm, 22mm or 25mm diameter.
- Lightweight
- Displayed figure height : 7mm

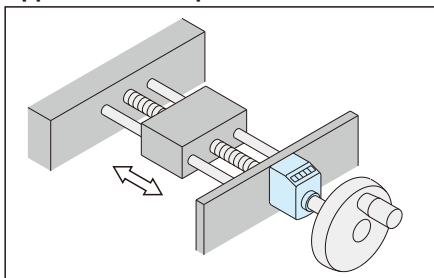
Furnished With

Rubber cushion

How To Use

- 1 Stick the rubber cushion to the back of the indicator.
- 2 Drill a fixing-pin hole in the mounting wall, 30mm above the shaft center.
- 3 Slide the indicator onto the shaft to the mounting wall and then tighten the setscrew.

Application Example



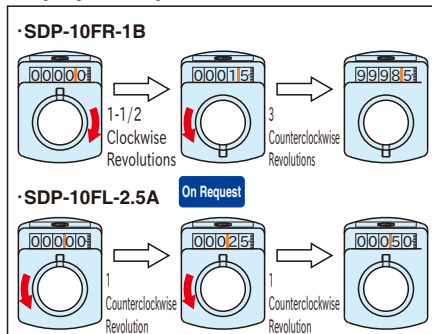
Notes

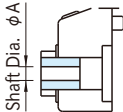
- Ensure that the start-up revolution speed is 1/3 or less of the allowable revolution speed.
- Do not give rapid acceleration or sudden stop.
- These position indicators can not be used in applications where the shaft moves in the axial direction.

Technical Information

Working temperature : Up to 80°C

Display Example

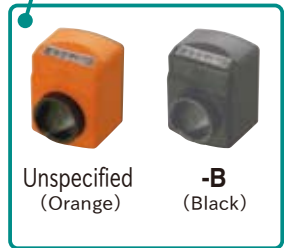
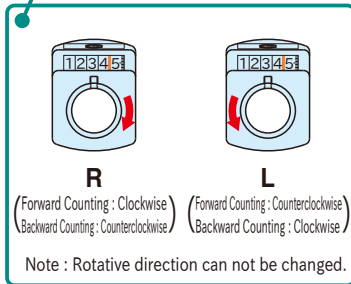


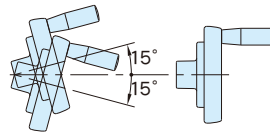
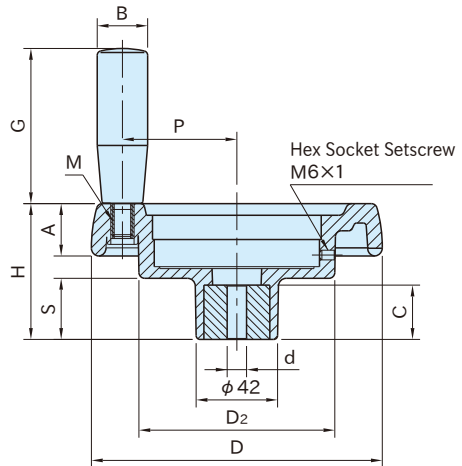
Type	Spindle Thread Pitch	Value Displayed After 1st Revolution				Allowable Revolution Speed (min ⁻¹)	Weight (g)	Shaft Sleeve																			
		A	B	C	D																						
SDP-10	1	00010	00010	00010		500	100																				
	2	00020	00020	00020																							
	2.5	00025	00025	00025																							
	3	00030	00030	00030																							
	4	00040	00040	00040																							
	5	00050	00050	00050																							
	6	00060	00060	00060																							
	8	00080	00080	00080																							
10	00100	00100	00100	00100	150		<table border="1"> <thead> <tr> <th>Part Number</th> <th>A</th> <th>Part Number</th> <th>A</th> </tr> </thead> <tbody> <tr> <td>STS-12A</td> <td>12</td> <td>STS-18</td> <td>18</td> </tr> <tr> <td>STS-14A</td> <td>14</td> <td>STS-20</td> <td>20</td> </tr> <tr> <td>STS-15A</td> <td>15</td> <td>STS-22</td> <td>22</td> </tr> <tr> <td>STS-16A</td> <td>16</td> <td>STS-25</td> <td>25</td> </tr> </tbody> </table>	Part Number	A	Part Number	A	STS-12A	12	STS-18	18	STS-14A	14	STS-20	20	STS-15A	15	STS-22	22	STS-16A	16	STS-25	25
Part Number	A	Part Number	A																								
STS-12A	12	STS-18	18																								
STS-14A	14	STS-20	20																								
STS-15A	15	STS-22	22																								
STS-16A	16	STS-25	25																								

Ordering Example

SDP-10 **H** **R** - **1** **B** **-B**

Style Rotative Direction Spindle Thread Pitch Value Displayed After 1st Revolution Housing Color



SHKP**PLASTIC INDICATOR HANDWHEELS****IMAO****Angular Range of Mounting**

Note : Dial Indicator must be ordered separately.

Handwheel	Insert	Handle
Polyamide plastic(6 Nylon)	Steel(SUM22L)	Phenolic plastic
Black	Zinc plated	Black

Part Number	D	H	A	d		C	D ₂	S	B	G	M	P	Weight (g)
				Prepared Hole	Max.								
SHKP13	130	66	24	7	26	24	98	28.5	23	65	M 8X1.25	54	425
SHKP15	150	70	27			28	101	31.5	26	80	M10X1.5	59	528

FeaturesComes with an **RG** revolving handle.**Technical Information****How To Use**

For detailed usages, see page of "ALUMINUM INDICATOR HANDWHEELS".

Reference

- **SZ** DIGITAL DIAL INDICATORS