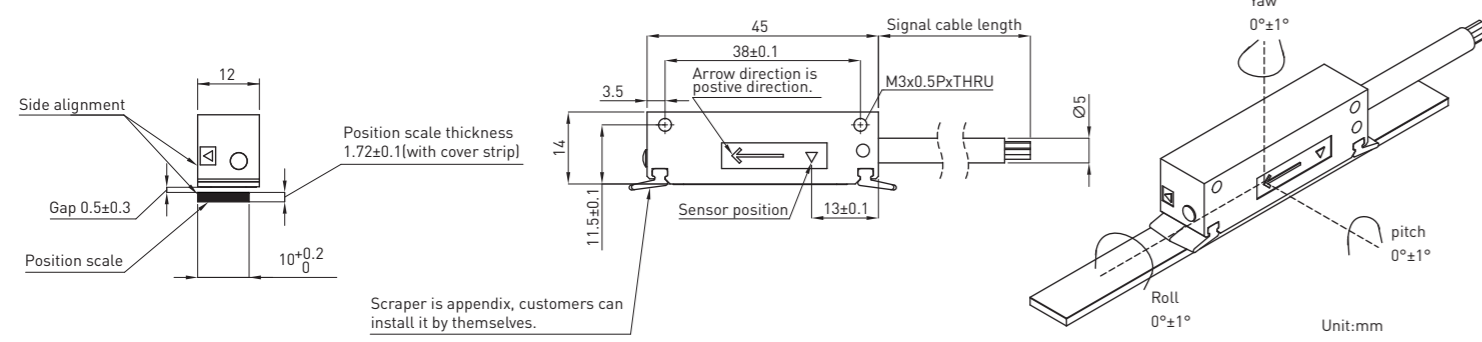
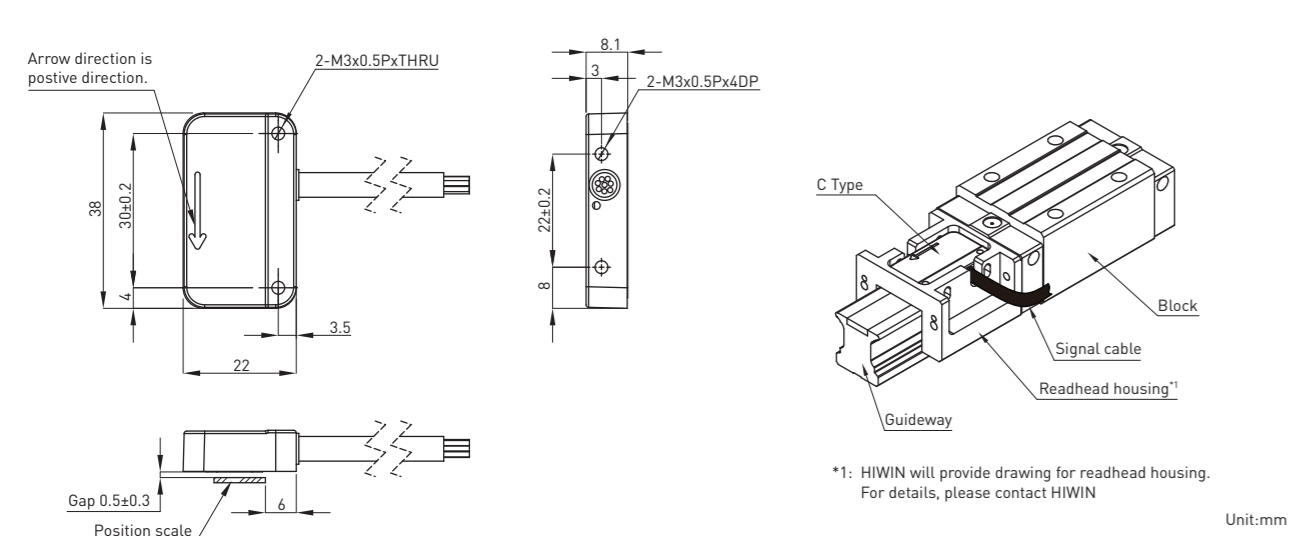


## Readhead

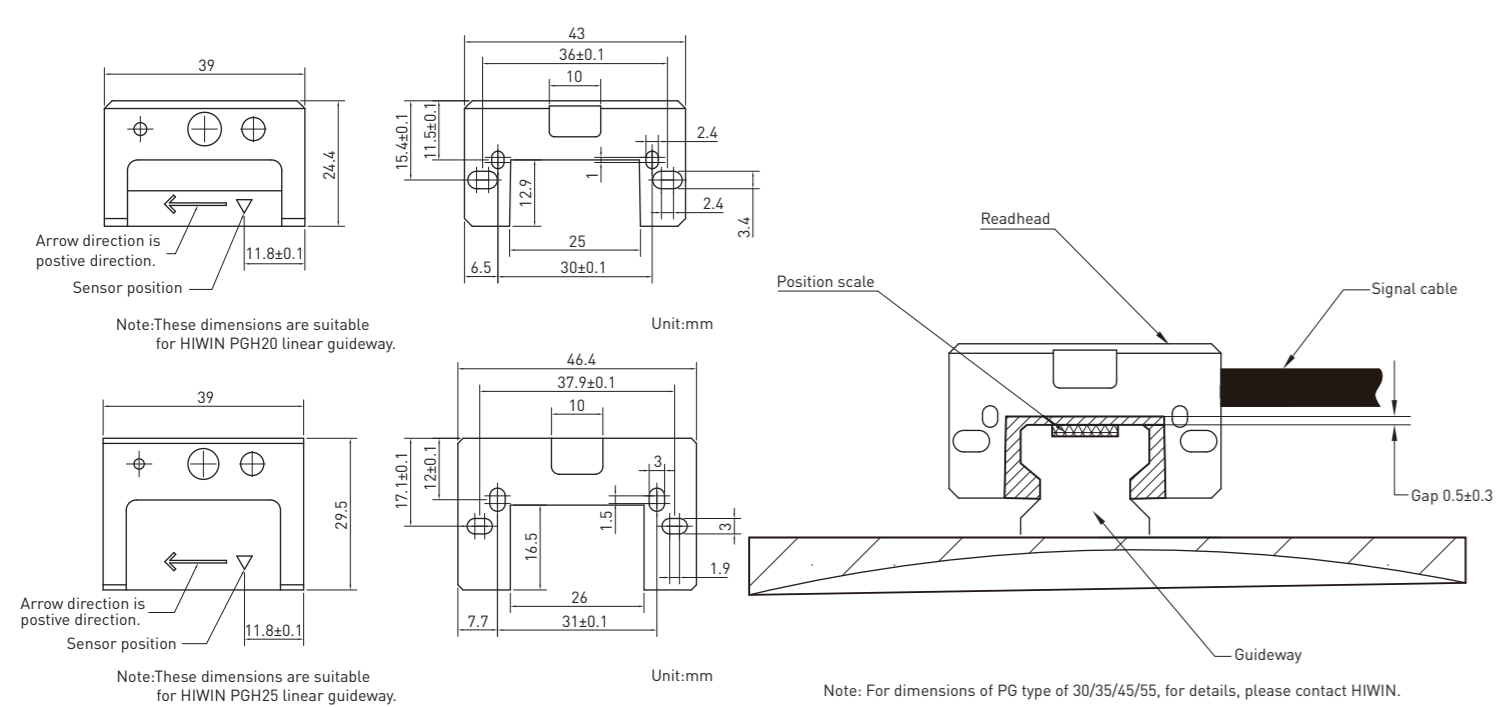
### T Type



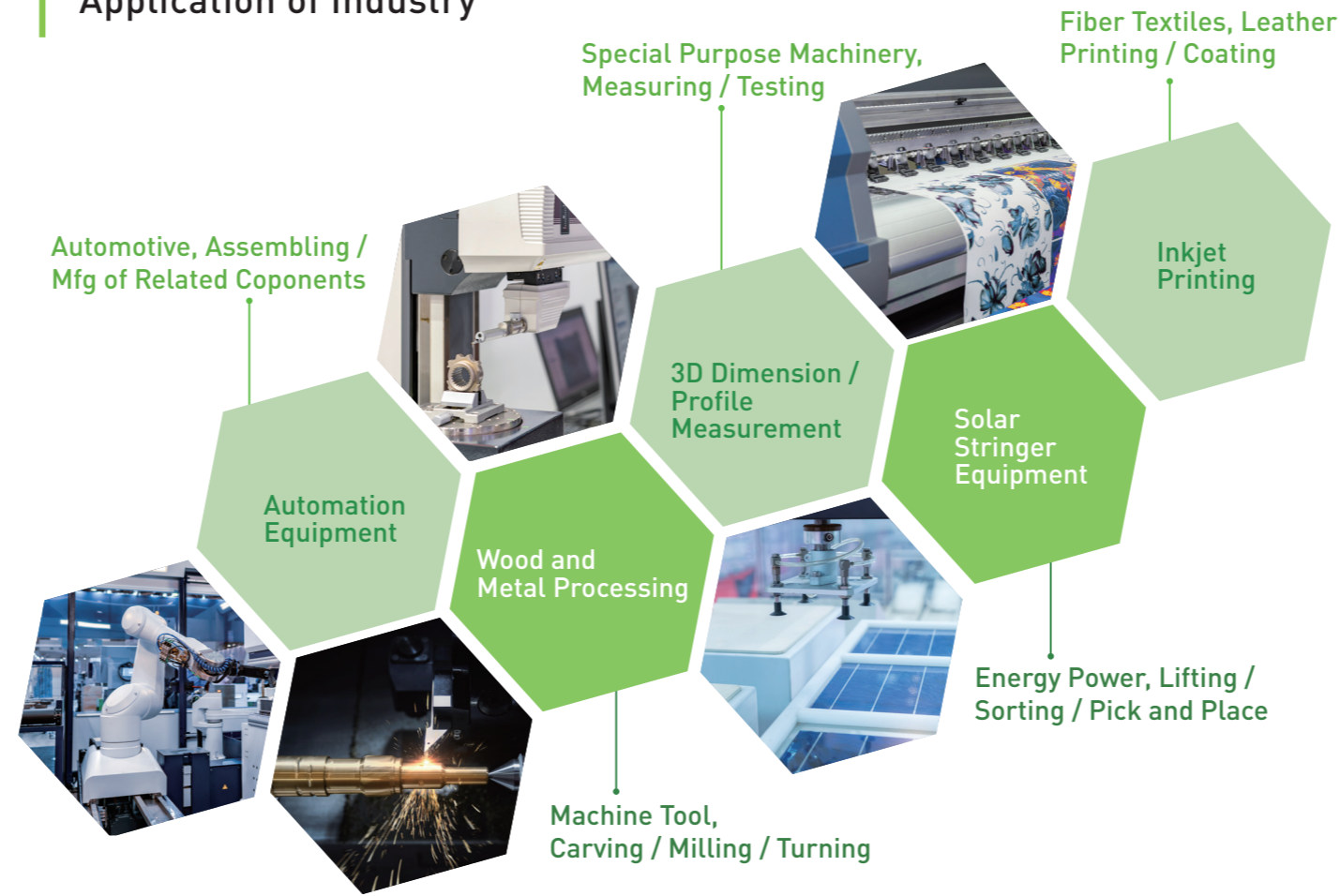
### C Type



### PG Type



## Application of Industry



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# PM Series

## Incremental Position Measurement System

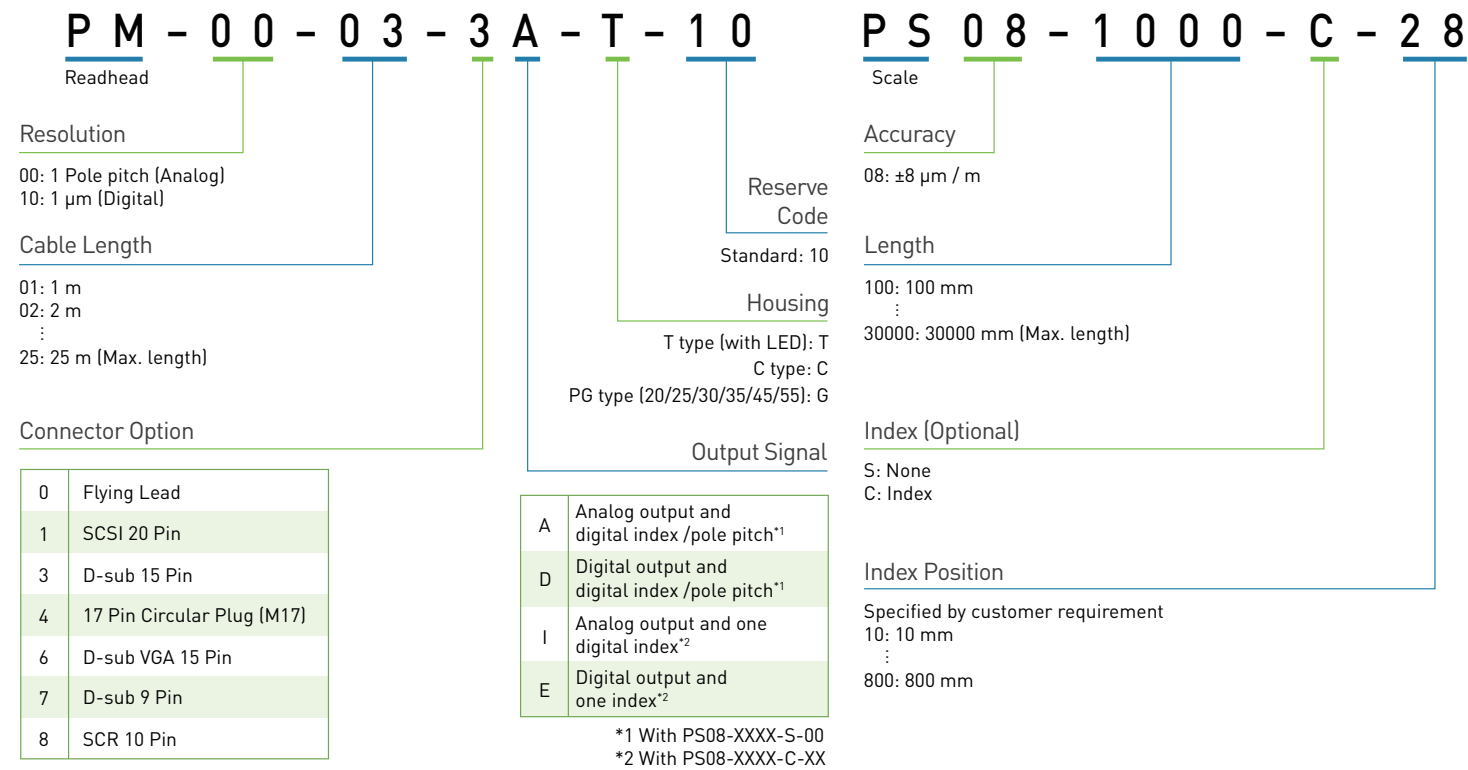
## Features

# High accuracy, high repeatability and easy assembly

- Easy installation
- Repeatability up to  $\pm 1 \mu\text{m}$
- Accuracy level  $8 \mu\text{m}$
- Analog / Digital signal output
- Oilproof, dustproof and waterproof
- LED status assisted installation (T type)
- Combined with guideway and greatly save installation space (C type, PG type)



## Model



## Specifications

### System Data

Feature	Technical		Addition Information	
	Resolution	2 mm 1 $\mu\text{m}$	Analog	Digital
Repeatability	$\pm 1 \mu\text{m}$	Unidirectional		
Hysteresis	$\pm 1 \mu\text{m}$	-		
Maximum travel speed	15 m/s	Analog		
	7 m/s	Digital		
Gap	0.5 $\pm$ 0.3 mm	-		
Maximum scale length	30 m	-		
Pole pitch	2 mm	-		
Accuracy	$\pm 8 \mu\text{m}/\text{m}$	20 °C		

### Electrical Data

Feature	Technical		Addition Information	
	Power supply	5 V $\pm$ 5 %	DC voltage	
Current consumption	< 50 mA	-		
Voltage drops	7.3 mV/m	-		
Output signal	SIN/COS 0.6~1.2 Vp-p	Analog		
	5 V TTL/RS422	Digital		
RoHS certified	Qualified	-		

### Environment Data

Feature	Technical		Addition Information	
	Operation temperature	-25 °C to 80 °C	-	
Storage temperature	-25 °C to 80 °C	-		
Relative humidity	0 to 100%	Condensation admissible		
Protection category	IP 67	IEC60529		
Vibration resistance	300 m/s <sup>2</sup> (50 Hz~2000 Hz)	IEC60068-2-6		
Shock resistance	1000 m/s <sup>2</sup> (11 ms)	IEC60068-2-27		
Maximum external magnetic field	$\pm 5 \text{ mT}$	-		
EMC	EN61000-6-2	-		
	EN61000-6-4	-		

### Mechanical Data

Feature	Technical		Addition Information	
	The mass of scale	60 g	1 m	
The mass of readhead	20 g	-		

## Pin Assignment

Function	Signal		Color	Connector (Male) SCSI 20 Pin		Connector (Male) D-sub 15 Pin		Connector (Male) 17 Pin Circular Plug	Connector (Male) D-sub VGA 15 Pin		Connector (Male) D-sub 9 Pin	Connector (Male) SCR 10 Pin	Flying Lead
	Analog	Digital		Analog	Digital	Analog	Digital		Analog	Digital			
Power supply	5V DC	Brown	3	3	4	7	4 / 5	1	1	2	1	Brown	
	GND	White	2	2	12	2	12 / 13	2	2	1	2	White	
Output signal	SIN+	A+	Green	16	4	9	14	9	11	3	3	5	Green
	SIN-	A-	Yellow	17	5	1	6	1	12	9	8	6	Yellow
	COS+	B+	Blue	18	6	10	13	10	13	4	4	7	Blue
	COS-	B-	Red	19	7	2	5	2	14	10	7	8	Red
Reference point signal	REF+	Z+	Violet	8	8	3	12	3	7	7	5	9	Violet
	REF-	Z-	Gray	9	9	11	4	11	8	8	9	10	Gray
Shield	Shielding	-	Case / Housing	Case / Housing	Case / Housing	Case / Housing	Case / Housing	Case / Housing	Case / Housing	Case / Housing	Case / Housing	Case / Housing	Shielding

## Dimension of PM

