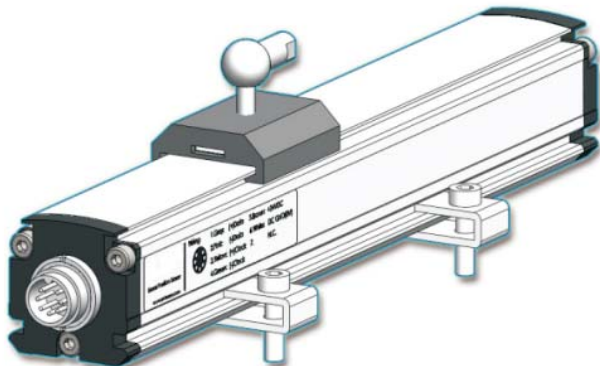


Analog/SSI Output



Features

- External installation, easy to use
- No zero, absolute displacement output
- Non-contact sensing technology, never worn
- High accuracy, 16 bit D/A for Analog output type, min. 2um for SSI output type
- Non-linearity $\leq \pm 0.01\%$ of full stroke
- Repeatability: $\leq \pm 0.002\%$ of full stroke.
- Modular design, replaced by convenience
- Low power design, reduce the heat

PARAMETERS SPECIFICATIONS

Analog output

SSI output

Measuring parameters

Measured range: 50mm-4500mm
 Output : Current 4-20mA(Load resistance: $\leq 500\Omega$)
 Voltage 0- 10Vdc (Load resistance: $>5k\Omega$)
 Resolution: 16 bit D/A(no limit)
 Non-linearity : $\leq \pm 0.01\%$ of full stroke(Min.50um).
 Repeatability: $\leq \pm 0.002\%$ of full stroke.(Min.2um)
 Updated time: 0.5ms(stroke $<0.5m$)
 1.0ms($0.5m < \text{stroke} < 1m$)
 2.0ms($1m < \text{stroke} < 2m$)
 3.0ms($2m < \text{stroke} < 3m$)

Measured range: 50mm-4500mm
 SSI signal : 24,25,26 bit binary/Gray code
 Transmission speed: 70kBd-1Mb
 Wire length: <3 <50 <100 <200 <400 m
 Speed: 1000 <400 <300 <200 <100 kBd
 Resolution: 2/5/10/20/50/100 um
 Non-linearity : $\leq \pm 0.01\%$ of full stroke(Min.40um).
 Repeatability: $\leq \pm 0.002\%$ of full stroke.(Min.1 bit)
 Updated time: stroke 300 750 1000 2000 5000 (mm)
 Frequency 3.7 3.0 2.3 1.2 0.5 (kHz)

Operation conditions

Operating Temperature: -40°C to $+85^\circ\text{C}$
 Temperature coefficient: $<30\text{ppm}^\circ\text{C}$
 Relative humidity: 90% no condensation
 Electronic protection: IP65

Operating Temperature: -40°C to $+85^\circ\text{C}$
 Temperature coefficient: $<30\text{ppm}^\circ\text{C}$
 Relative humidity: 90% no condensation
 Electronic protection: IP65

Mounting and attachment

Mounting direction: any
 Mounting type: fixing clamp, with screw M5x20
 Magnet type: float magnet, sliding magnet

Mounting direction: any
 Mounting type: fixing clamp, with screw M5x20
 Magnet type: float magnet, sliding magnet

Electrical characteristics

Wiring type: Integral cable or 6 pin Aviation connector
 Operating voltage: 24Vdc(-15/+20%)
 Operating current: $<50\text{mA}$
 Polarity protection: up to -30Vdc
 Overvoltage protection: up to 36Vdc
 Insulating ability: 500V(between Signal and housing)
 Fault display: N/A

Wiring type: Integral cable or 7 pin Aviation connector
 Operating voltage: 24Vdc(-15/+20%)
 Operating current: $<50\text{mA}$
 Polarity protection: up to -30Vdc
 Overvoltage protection: up to 36Vdc
 Insulating ability: 500V(between Signal and housing)
 Fault display: N/A

Structure and Housing

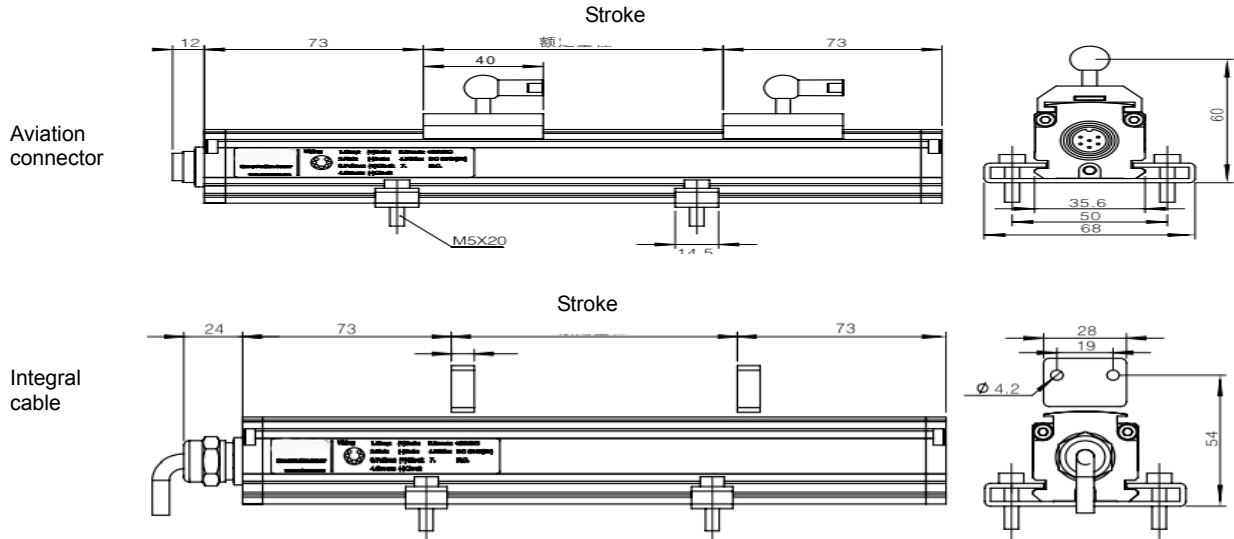
Sensor head: Aluminium
 Housing: Aluminium
 Fixing clamp: 304L stainless steel

Sensor head: Aluminium
 Housing: Aluminium
 Fixing clamp: 304L stainless steel

Analog/SSI Output

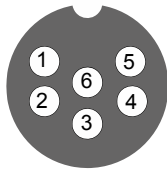
Model RP sensor dimension reference

Model RP Sensor: Drawing is for reference only, contact applications engineering for tolerance specific information



Electronic wiring

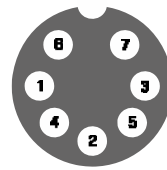
Analog Output type



Male connector
(Face to sensor head)

Pin	Color	Description
1	Gray	Output Signal(0-20mA, 0-10V)
2	Pink	Output(GND)
3	Yellow	(+) Communication interface
4	Green	(-) Communication interface
5	Brown	(+) Power +24Vdc(-15/+20%)
6	White	(GND) Power

SSI Output type



Male connector
(Face to sensor head)

Pin	Color	Description
1	Gray	(-)Output Signal
2	Pink	(+)Output Signal
3	Yellow	(+) Clock
4	Green	(-) Clock
5	Brown	(+) Power +24Vdc(-15/+20%)
6	White	(GND) Power
7	N.C.	

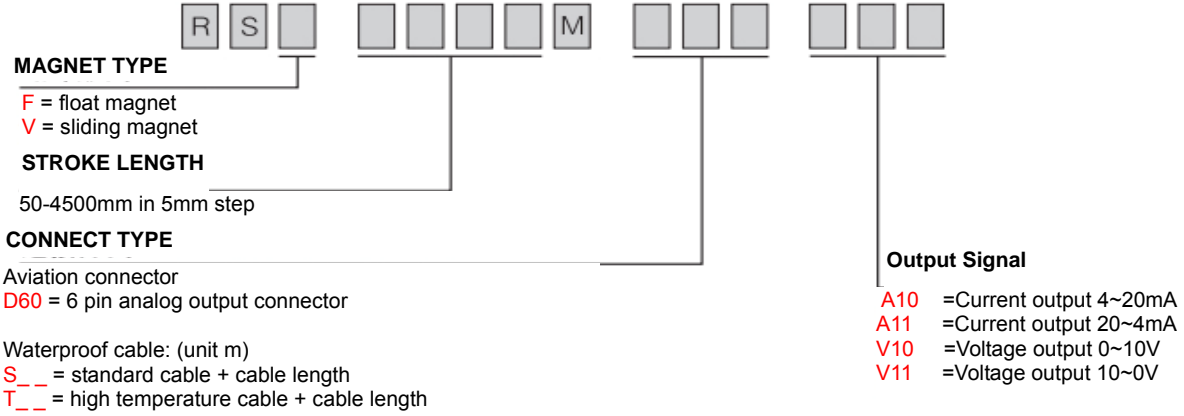
Remark:

- Number of fixed clip should be related to stroke, suggest add one more fixed clip if stroke add 500mm
- Have two types position magnet for RS series
 - sliding magnet: move on the slide way, measured parts connect with rod of sliding magnet
 - float magnet: directly fixed on moving parts, no contact with sensor, max. bias error of linearity ± 3 mm, max. vertical space 6mm.

Analog/SSI Output

Ordering Information

Analog Output type



SSI Output type

