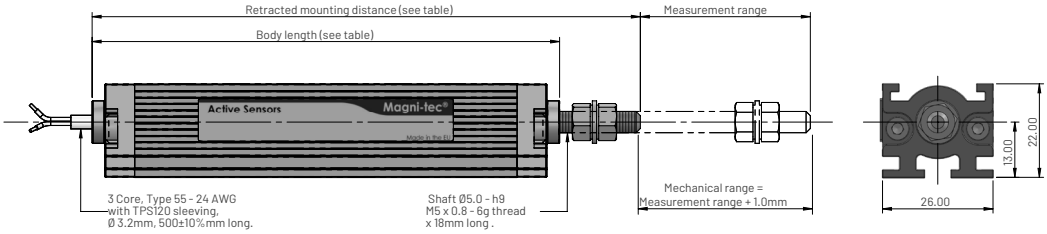
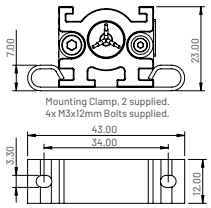
MHL2600 Series - Magnetic Hall linear position sensor (Measurement range 50 - 300mm)
Square-bodied. Body clamp mounting. Shaft operated or Side operated carriage.

Active sensors

Dimensions for MHL2621 - Shaft operated



Clamping information



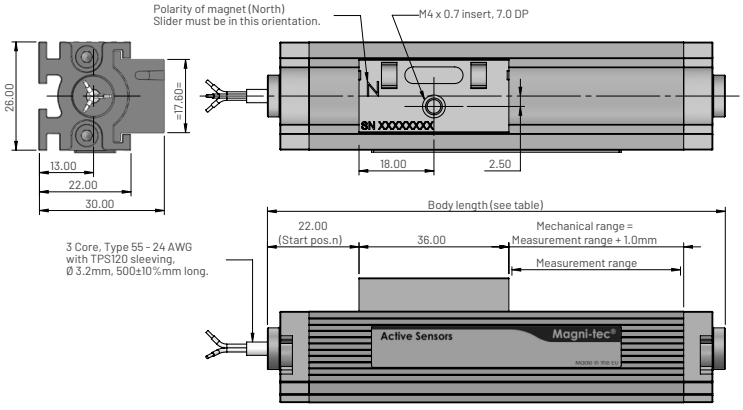
Measurement range	Body length	Retracted mounting distance	Approx. weight (grams)
50	120	139	114
75	145	164	135
100	170	189	156
125	195	214	177
150	220	239	198
175	245	264	219
200	270	289	240
250	320	339	282
300	370	389	324

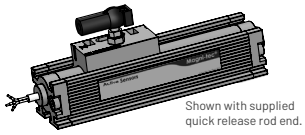
Ordering information

MHL2621 XV-XX

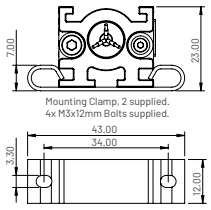
Output option (see graph)
L = Retracted output increases
R = Extended output increases
Measurement range in mm

Dimensions for MHL2624 - Side operated carriage




Shown with supplied
quick release rod end.

Clamping information



Measurement range	Body length	Approx. weight (grams)
50	120	93
75	145	114
100	170	135
125	195	156
150	220	177
175	245	198
200	270	219
250	320	261
300	370	303

Ordering information

MHL2624 XV-XX

Output option (see graph)
L = Retracted output increases
R = Extended output increases
Measurement range in mm

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Tel +39 02 48 009 757 Fax +39 02 48 002 070 info@dspmindustria.it www.dspmindustria.it

Electrical and mechanical specification for MHL2600

Parameters		Values		Units
Input specification				
Supply voltage (Vs)		5.0±10% regulated	8 to 30 unregulated	VDC
Over voltage protection		Up to 50		VDC
Supply current		During power on settlement <100, nominal operation <45		mA
Reverse polarity protection		Up to -50		VDC
Power on settlement time		<250		ms
Input voltage rise time		0.25 minimum		V/ms
Output specification				
Output type		Analogue voltage		
Output direction		See output characteristics graph		
Voltage output (Vout)		0 to Vs	0 to 5	VDC
Line regulation		Ratiometric with Vs	<0.01	%FS
Monotonic range		1 to 99% measurement range		
Load resistance		>10K		Ohms
Output noise		<5		mV RMS
Performance specification				
Resolution		0.025		% of measurement range
Sensitivity (Note 2)		Ideal span (5000mV) / Measurement range(mm)		mV/mm
Sensitivity tolerance		<±2.5		%FS
Non-Linearity (Note 5)		<±0.5		%FS
Temperature coefficient (Vout)		<±0.003	<±0.011	%FS/°C
Update rate (nominal)		800		Hz
Max operating speed		1000		mm/s
General specification				
IP rating		IP68 and IP69K		
Shaft operation force (typical)		20		grams
Dither life		Contactless - no degradation		
Operational temperature		-40 to +125	See de-rating graph	°C
Storage temperature		-55 to +150		°C
Materials	Sensor	Case - Anodised aluminium, Shaft - Stainless steel 316		
	Clamps	Steel BZP		
	Rod ends	Body: Anodised aluminium, Spherical Ball: Nickel plated steel		
	QR ball joints	Body: Nylon, Ball Joint: Steel BZP		

Notes

1. Incorrect wiring may cause internal damage.
2. Sensitivity and non-linearity are calculated from least squares best fit method.
3. Due to the Hall effect technology used in this device, close proximity of ferrous materials and magnetic fields may influence output.
4. Do not operate sensor between 5.5V and 8V.
5. General dimension tolerance is ±0.25mm.

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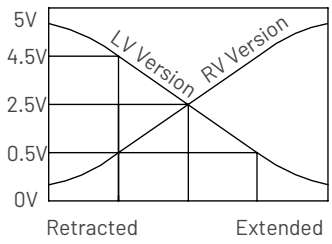
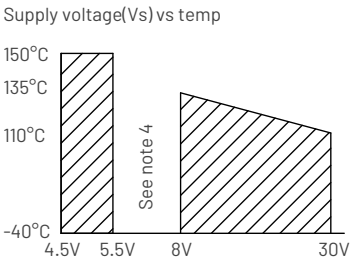
MHL2600 Series - Magnetic Hall linear position sensor (Measurement range 50 - 300mm)
Square-bodied. Body clamp mounting. Shaft operated or Side operated carriage.

Active sensors

Output characteristics



Temperature de-rating

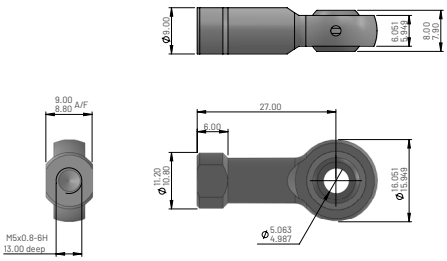


Electrical connections (see note 1)

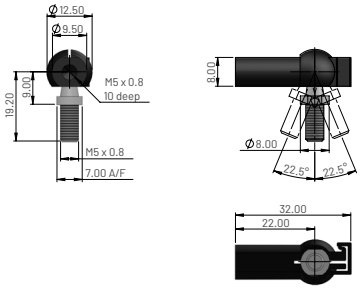
Wire Colour	Function
Red	Supply Voltage (Vs)
White	Output Voltage (Vout)
Black	Ground

Accessories

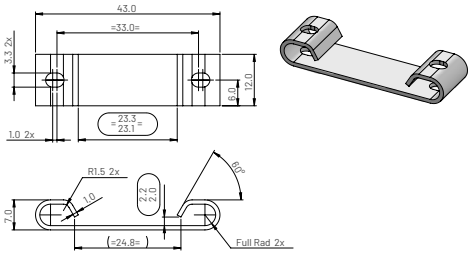
5mm rod end



Quick release ball joint



Base clamp



Ordering code

PT1922-0104-19

Material	
Housing	Aluminium alloy, anodised black
Ball	Steel BS970 230M07, electroless nickel plated
Race	Gr nylon

Ordering code

JN029-007

Material	
Body	PA66, black
Ball stud	Hardened carbon Steel: zinc plated, clear passivate

Ordering code

PT2600-6109

Material
Plain carbon steel
Finish: Bright zinc plate

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