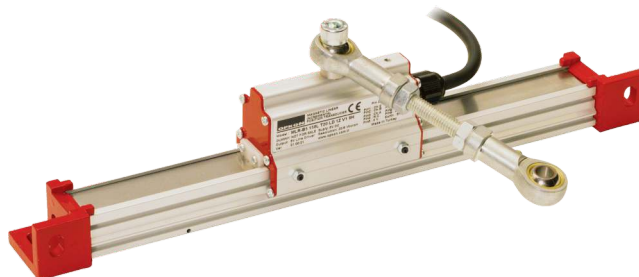


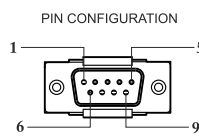
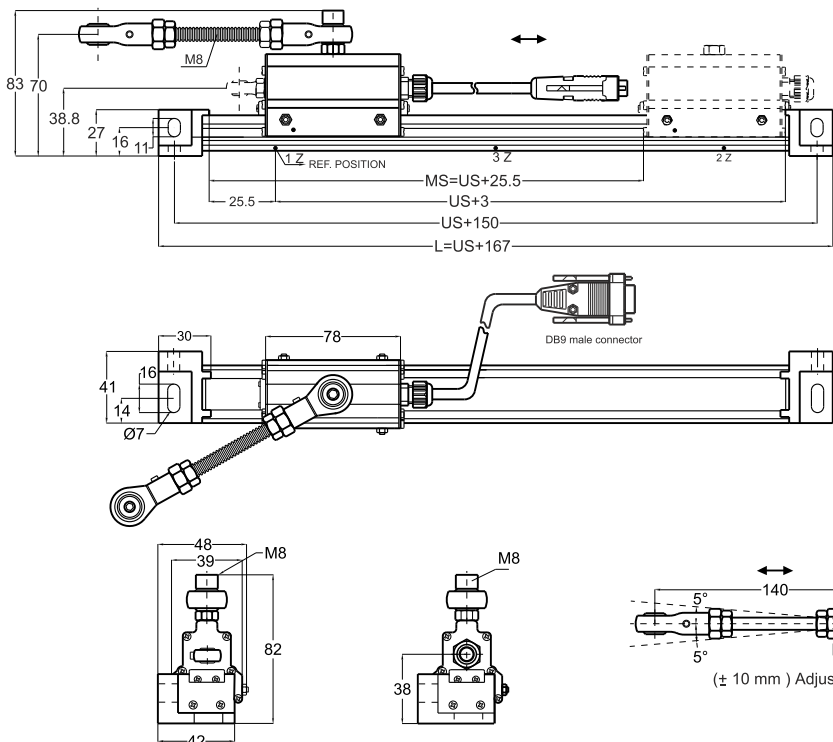
Magnetic linear incremental encoders For press brakes

- 5 µm resolution, TTL Linedriver output
- Measuring range 150 - 720 mm (other options on request)
- Magnetic contactless measurement
- Protective steel cover for measurement tape
- Teflon guiding system
- Selectable reference position options
- ± 40 µm accuracy



Technical specifications

Type of measurement	Magnetic incremental non-contact
Measurement stroke	150 to 720 mm
Resolution	5 µm
Accuracy	± 40 µm
Output channels	A, \bar{A} , B, \bar{B} , Z, \bar{Z}
Output type	TTL Linedriver
Supply voltage	5 Volt DC
Power consumption (without load)	< 40 mA (24 VDC)
Electrical connections	DB9 connector with 1m cable
Max. speed	< 3 m/s
Case material	Anodized aluminium
Mechanical fixing	End-caps on the both side
IP degree	IP 65
Operating temperature	-20°C ... +80°C
Storage temperature	-30°C ... +90°C



Cable output
 V+ : Brown
 0V : Blue
 A : Black
 B : White
 Z : Orange
 A inv. : Yellow
 B inv. : Green
 Z inv. : Red
 GND : Earth

9G Type Electrical Connections

Pin 1 : Ch A
 Pin 2 : Ch A inv.
 Pin 3 : Ch Z
 Pin 4 : Ch B
 Pin 5 : Ch B inv.
 Pin 6 : Ch Z inv.
 Pin 7 : +V
 Pin 8 : GND
 Pin 9 : Shield

9H Type Electrical Connections

Pin 1 : Ch Z
 Pin 2 : Ch B
 Pin 3 : Ch A
 Pin 4 : NC
 Pin 5 : GND
 Pin 6 : Ch Z inv.
 Pin 7 : Ch B inv.
 Pin 8 : Ch A inv.
 Pin 9 : +V

MLR (mm)	150	170	220	270	320	370	420	470	520	570	620	670	720
US (Usefull Stroke)	153	173	223	273	323	373	423	473	523	573	623	673	723
MS (Mechanical Stroke)	178.5	198.5	248.5	298.5	348.5	398.5	448.5	498.5	548.5	598.5	648.5	698.5	748.5
L (Total Length)	317	337	387	437	487	537	587	637	687	737	787	837	887

Model	Pole pitch	Stroke	Resolution	Output type	Output	Supply voltage	Connector / Cable
(example) MLR	B5	270R	T20	TT	Z	V1	9G
MLR	B5 : 5mm pole pitch B2 : 2mm pole pitch	270R : 270mm right 270L : 270mm left (150 ... 720mm strokes)	T20 : 5µm	TT : TTL Linedriver	Z : A, B, Z 1Z : Ref. at c. cable side 2Z : Ref. at cable side 3Z : Ref. at middle 5Z : Continues ref. 0Z : Without ref.	V1 : 5V DC V2 : 8-24V DC	9G : 9 pin connector with meter cable (standard) 9H : 9 pin connector with meter cable (standard)