



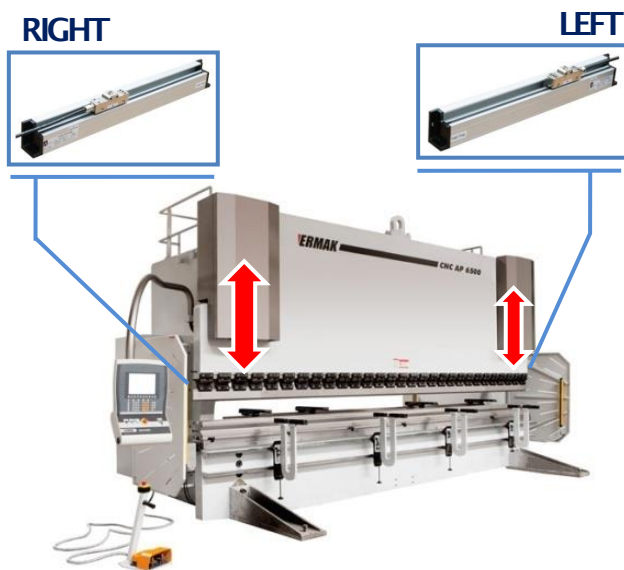
- Self-bearing integrated ball system
- Magnetic measurement
- Contactless / non-friction system
- High tolerance to vibration and shocks
- Easy mounting with wide mounting tolerances
- Stroke up to 4 meters
- Resistant to dust, oil and moisture
- Robust aluminum body
- Excellent Stability
- IP67 Protection Class
- Compatible with Delem, Cybelec, ESA and STEP

The MLC 410 system measures without contact and the incremental encoder gives the output signal as a pulse.

The MLC 410 series is equipped with 4 roller bearings against counter vibrations, specially designed especially for press brakes. Due to excellent bearing, it is possible to prevent any mistakes that may occur during vibration measurement.

It is used to control right and left hydraulic cylinders to provide synchronization in press brakes.

It can also be used for applications with vibrations other than press brakes.



Technical Specifications

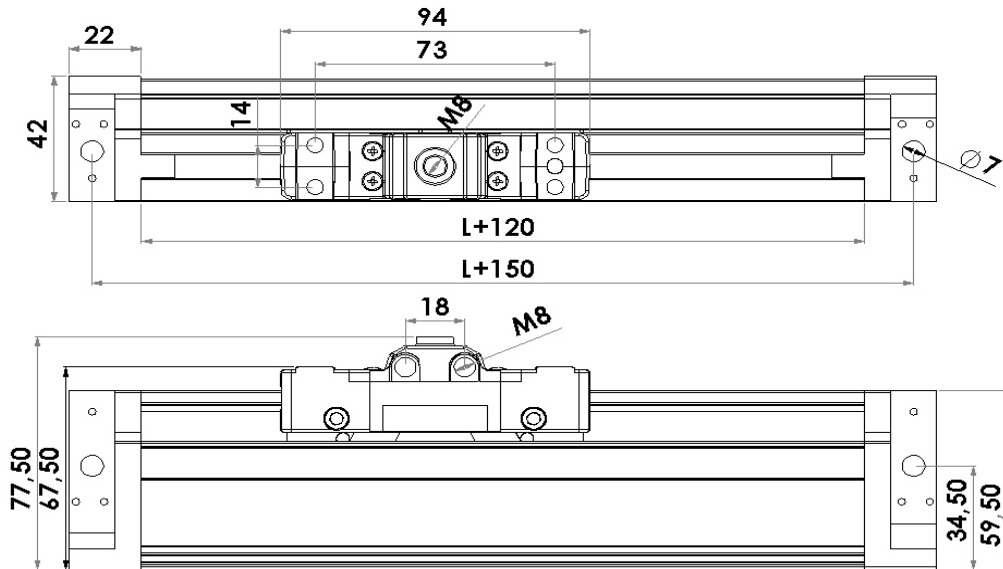
Resolution	5µm, 10µm, 25µm, 50 µm, 62.5µm, 100µm (Or on request)
Measuring Principle	Magnetic
Output Type	Push-Pull or TTLRS422 Line Driver
Output Signals	A, /A, B, /B, Z, /Z
Input Current	40 mA/per channel max.
Output Current	40 mA/per channel max.
Power Supply	PPL:10..30 VDC or TTL:5 VDC
Body Material	Sensor: Nickel Plated Aluminum Scale Profile: Anodized Aluminum
Electrical Connection	D-Sub9 Pin socket, 5 or 8 x 0,14 mm ² shielded cable
Magnetic Tape	B5
Operating Speed	3 m/s
Repeatability	±1 pulse
Operating Temperature	-25 to +85°
Protection Class	IP67
Compatible Systems	ESA, DELEM, CYBELEC

Standard Stroke Lengths (mm)

100	120	150	170	200	220	250	270	300	320
350	370	400	420	450	470	500	520	550	570
600	650	700	750	800	850	900	950	1000	1100
1200	1300	1400	1500	1600	1700	1800	2000	3000	4000

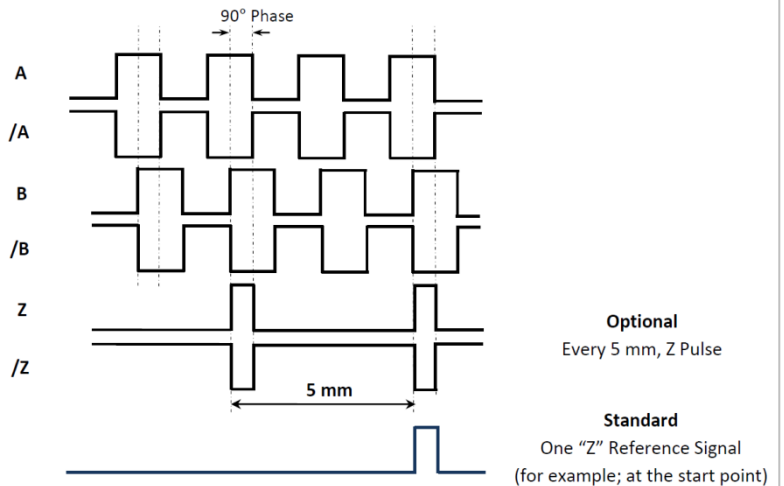
Please inquire us for the other strokes.

Mechanical Dimensions



Electrical Connections

SIGNAL	CABLE COLOR	D-SUB9 PIN / SOCKET PIN NO
A	Yellow	1
/B	White	2
+V	Red	3
0V	Black	4
/A	Blue	5
B	Green	6
/Z	Grey	7
Z	Pink	8
-	Shield	9



Order Details

Magnetic Tape

B5

Power Supply and Output

TTL: 5VDC Supply Voltage,
5 VDCTTLRS422 Line Driver Signal Output
PP: 10...30VDC Supply Voltage,
10...30VDC Push-Pull Signal Output
HTL: 10...30VDC Supply Voltage,
5 VDCTTLRS422 Line Driver Signal Output
HPL: 5...30VDC Supply Voltage,
5...30VDC Push-Pull Signal Output

Cable Length

3M : 3 meters
3.5M : 3,5 meters
4M : 4 meters
5M : 5 meters
6M : 6 meters
7M : 7 meters
8M : 8 meters
9M : 9 meters
10M : 10 meters
15M : 15 meters
* Please ask for other options

Measuring Stroke

See standard stroke lengths table, contact for other stroke lengths.

MLC410	-	X	X	-	X	X	-	X	X	X	-	X	-	X	X	-	X	-	X	X	X	mm	-	X
Model	Resolution		Signal Output Type		Sensor Type		LEFT / RIGHT																	
	05 : 5µm	10 : 10µm	2 : A, B	C : PUR Cable	LEFT / RIGHT																			
	25 : 25µm	50 : 50µm	3 : A, B, Z	S : Spiral																				
	62 : 62,5µm	100 : 100µm	4 : A, /A, B, /B																					
			6 : A, /A, B, /B, Z, /Z																					
			Standard: Single Z reference signal																					
			Optional: Z Signal at every 5 mm																					