
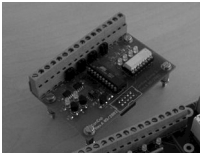


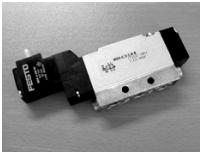

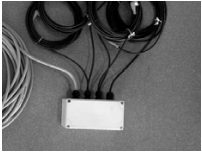
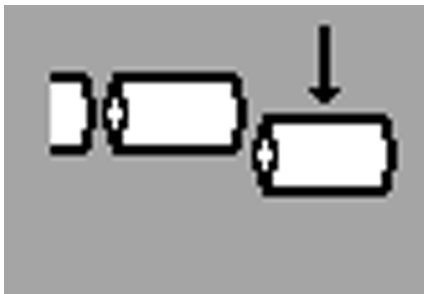


FAQ_PM_022 How to install a reject station?

a). Scope delivery

	1	Software (through direct download or hardware exchange)
	1	Extension PCB (Printed Circuit Board) (Sensor + valve-interface)
	1	"Counting up" tool sensor (magnetic field resistant)
	2	"Counting down" - light barrier
	1	Solenoid valve
	1	Set of wires with plugs to sensor and solenoids
	1	Distribution box (to be mounted on the line conveyor)

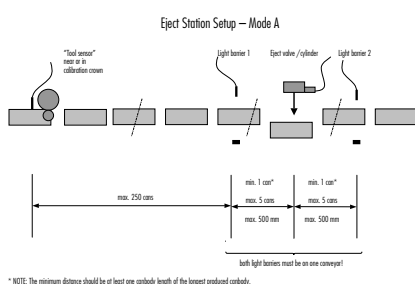
b). Features



The eject station is an option for the Pacemaker for ejecting faulty cans, which are detected by the current/time monitor of the Pacemaker. This is not a high-end monitor system, but it can detect big “problems” during welding and will avoid wire break caused by overlacquerings (contaminations).

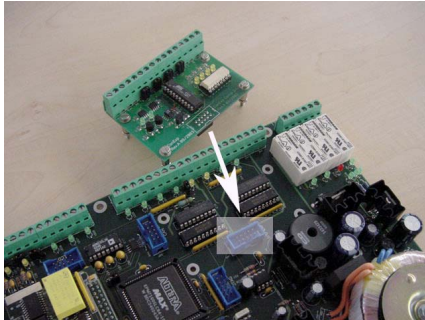


The eject station is a setup of various sensors and a “blower”/cylinder mounted to a conveyor belt within the range of max. of 250 canbodies from the welding station. It is activated through the weld-monitor and the frequency inverter.

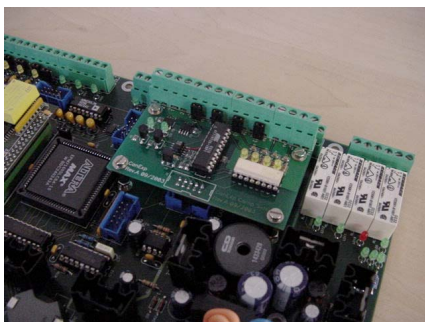


There are three different modes depending on your configuration. See page 8-10 for the detailed layouts.

c). Installation of the PCB (if applicable)



Install the extension PCB (printed circuit board) on the pacemaker main board.



NOTE:
Be careful about the position of the pins inside of the connector between the new PCB and main board without the necessary care. It's possible to plug in wrong! This can destroy the main board!

Welding Sensor

For a machine without a welding sensor, we need to install a new sensor after the welding tool. It's important to install this sensor as near as possible to the welding roll. It "picks up" a welded canbody and starts a counter in the Pacemaker.

d). Settings of the Eject Station

C	a	n	E	j	e	c	t	:										O	N	
R	e	s	e	t	E	j	e	c	t	s					0					
R	e	s	e	t	C	a	n	M	e	m	o	r	y						0	
M	a	x	.	C	a	n	M	e	m	o	r	y							2	0

Select can eject function ON or OFF (self explanatory)

C	a	n	E	j	e	c	t	:											O	N	
R	e	s	e	t	E	j	e	c	t	s					0						
R	e	s	e	t	C	a	n	M	e	m	o	r	y							0	
M	a	x	.	C	a	n	M	e	m	o	r	y								2	0


= Reset counter ejected cans.

C	a	n	E	j	e	c	t	:											O	N	
R	e	s	e	t	E	j	e	c	t	s					0						
R	e	s	e	t	C	a	n	M	e	m	o	r	y							0	
M	a	x	.	C	a	n	M	e	m	o	r	y								2	0

= Clear the memory (in/out of cans). If the light barrier before the eject station does miss out some cans (because light barrier is not correctly adjusted, damaged or dirty), the counter will count up until the max value is reached and the machine will shut down, indicating "Can memory overflow".

C	a	n	E	j	e	c	t	:											O	N	
R	e	s	e	t	E	j	e	c	t	s					0						
R	e	s	e	t	C	a	n	M	e	m	o	r	y							0	
M	a	x	.	C	a	n	M	e	m	o	r	y								2	0

= Set number of cans between weld station and eject-station + 2 canbodies.



Press this arrow and jump to next the setting window (2).

E	j	e	c	t	F	i	r	s	t				1	C	a	n	s		
E	j	e	c	t	L	a	s	t					1	C	a	n	s		
S	e	n	s	o	r	1	D	i	s	t	.	:			2	5	0	m	m
E	j	e	c	t	P	u	l	s	:					1	0	0	m	s	

= Select number of ejected cans ("First can ejection"), when starting the production (factory setting = 1).

Eject	First		1	Cans
Eject	Last		1	Cans
Sensor 1 Dist.:			250	mm
Eject Puls:			100	ms


= Enter the number of ejected cans ("Last can ejection"), (factory setting = 1).

Eject	First		1	Cans
Eject	Last		1	Cans
Sensor 1 Dist.:			250	mm
Eject Puls:			100	ms

= Enter the distance from the first sensor to the valve/cylinder (max. 500mm).

Eject	First		1	Cans
Eject	Last		1	Cans
Sensor 1 Dist.:			250	mm
Eject Puls:			100	ms

= Enter the duration of the eject pulse.



Press this arrow and jump to next the setting window (3).

Sensor 2 Dist.:			250	mm
Auto-Reset:				ON
Serie Fail:				OFF
Eject All:				OFF

= Enter the distance from the second sensor to the valve/cylinder (max. 500mm).

Sensor 2 Dist.:			250	mm
Auto-Reset:				ON
Serie Fail:				OFF
Eject All:				OFF

= When "ON" is selected an automatic resetting of the can memory to 0 (zero) will be executed, activated when "OFF" the main supply of the Pacemaker.

Sensor 2 Dist.:			250	mm
Auto-Reset:				ON
Serie Fail:				OFF
Eject All:				OFF

= This function set to "ON" will switch off the production by the error relay, if for example 3 of 5 cans are "bad".

S	e	n	s	o	r	2	D	i	s	t	.	:					2	5	0	m	m		
A	u	t	o	-	R	e	s	e	t	:											O	N	
S	e	r	i	e	F	a	i	l	:												O	F	F
E	j	e	c	t	A	i	l	:													O	F	F

=

This function set to "ON" will eject all cans for testing purposes.



Press this arrow and jump to next the setting window (4).



B	a	n	d	-	S	p	e	e	d	:	3	0	.	0	m	/	m	i	n	
C	a	n	l	e	n	g	t	h	:	1	0	0	m	m						
R	e	j	e	c	t	D	e	l	a	y	:	-					2	0	m	s
A	u	t	o	d	e	c	r	e	m	e	n	t	:	O	F	F				

=

The conveyor speed can be set here.

NOTE:
In case of a format change, you only have to alter this value!



B	a	n	d	-	S	p	e	e	d	:	3	0	.	0	m	/	m	i	n	
C	a	n	l	e	n	g	t	h	:	1	0	0	m	m						
R	e	j	e	c	t	D	e	l	a	y	:	-					2	0	m	s
A	u	t	o	d	e	c	r	e	m	e	n	t	:	O	F	F				

=

During the production the can length value will be calculated and displayed.



B	a	n	d	-	S	p	e	e	d	:	3	0	.	0	m	/	m	i	n	
C	a	n	l	e	n	g	t	h	:	?	?	?	?							
R	e	j	e	c	t	D	e	l	a	y	:	-					2	0	m	s
A	u	t	o	d	e	c	r	e	m	e	n	t	:	O	F	F				



NOTE:
If the displayed value is bigger than the real can length, you have to reduce the band speed. If the value is smaller increase the speed.
When the production stops, four questions marks are displayed ("????").



B	a	n	d	-	S	p	e	e	d	:	3	0	.	0	m	/	m	i	n	
C	a	n	l	e	n	g	t	h	:	1	0	0	m	m						
R	e	j	e	c	t	D	e	l	a	y	:	-					2	0	m	s
A	u	t	o	d	e	c	r	e	m	e	n	t	:	O	F	F				

=

The reject delay value is a fixed value depending on the cylinder stroke (setting range between -20 to -50ms).



B	a	n	d	-	S	p	e	e	d	:	3	0	.	0	m	/	m	i	n
C	a	n	l	e	n	g	t	h	:	1	0	0	m	m					
R	e	j	e	c	t	D	e	l	a	y	:	-			2	0	m	s	
A	u	t	o	d	e	c	r	e	m	e	n	t	:	5	0	%			

=

This function monitors the gap between the canbodies at the light barrier.
The value 50% (factory setting) means a gap of 50% of your producing canbody height. Therefore if you take out a canbody before the light barrier (or eject station), the software is shifting the memory of the canbody counter and still rejects a faulty can.



B	a	n	d	-	S	p	e	e	d	:	3	0	.	0	m	/	m	i	n
C	a	n	l	e	n	g	t	h	:	1	0	0	m	m					
R	e	j	e	c	t	D	e	l	a	y	:	-			2	0	m	s	
A	u	t	o	d	e	c	r	e	m	e	n	t	:	O	F	F			



0% = Autodecrement OFF!

NOTE:
If the value is set to "0%", the function is switched off. When you would take out a canbody before the light barrier, a faulty canbody might pass the reject station.



Important Notes:



NOTE:
Never take out the first canbody of a serie between the welding area and the eject station! If you do that the eject station can not kick out the correct can, bad cans will pass into the further production process!

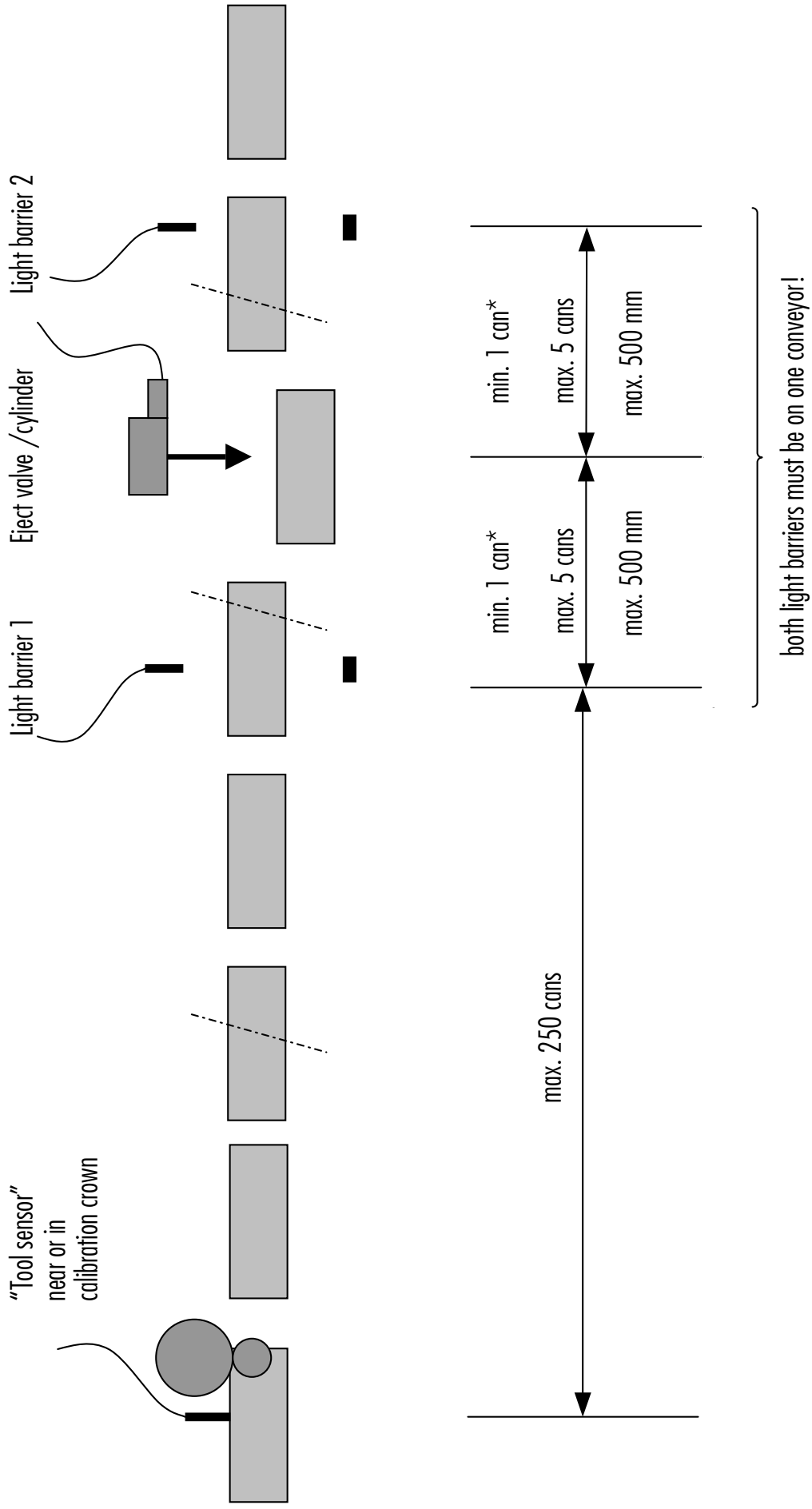


NOTE:
Before you start the production, check the can memory. It must indicate 0 (zero) without a can between welding area and reject station.



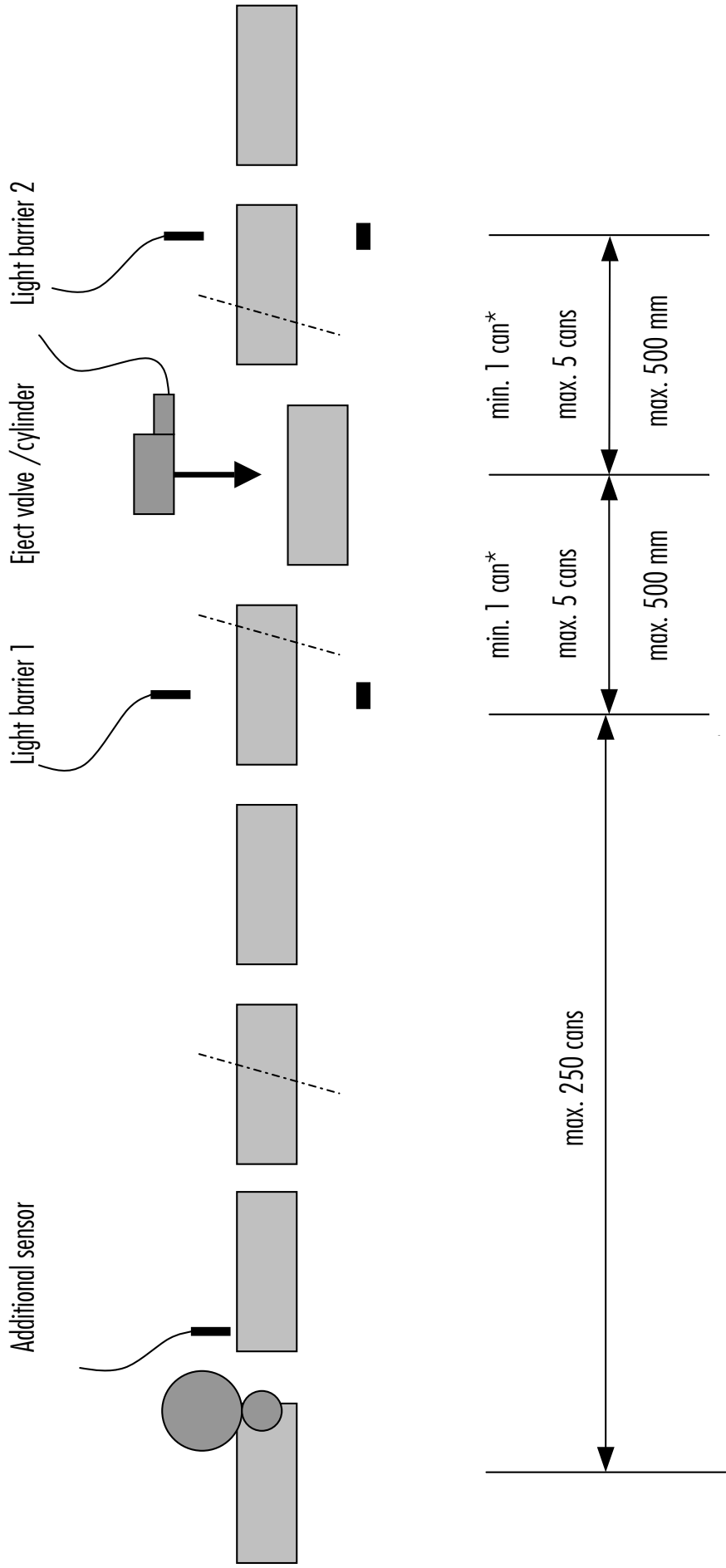
NOTE:
The values of t2 and t1 must be set correctly. If you switch on reduce current the beginning and end must be 2mm unwelded. The eject station can't count the canbodies if t2 and t1 are set wrong!

Eject Station Setup – Mode A



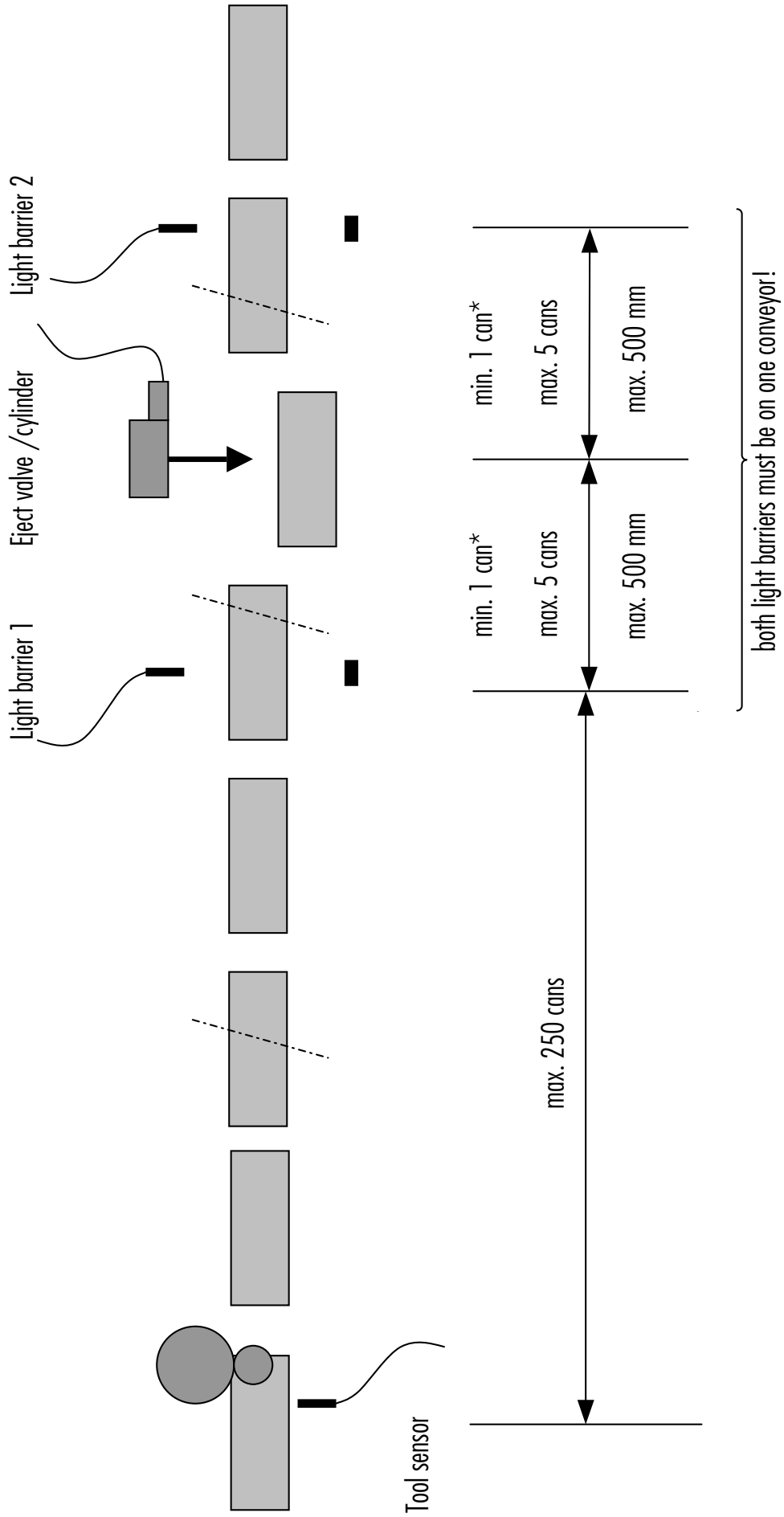
* NOTE: The minimum distance should be at least one canbody length of the longest produced canbody.

Eject Station Setup – Mode B



* NOTE: The minimum distance should be at least one canbody length of the longest produced canbody.

Eject Station Setup – Mode C (Can Man welders)



* NOTE: The minimum distance should be at least one canbody length of the longest produced canbody.