



Den Ingenieur - Claude Loullingen 1a rue de Weiler L-3328 Crauthem Mobile: +352 691 832 656

TVA: LU35175931 RSC: A44543 Aut. d'établ.: 10158248/0-3 Banque Raiffeisen LU72 0099 7800 0129 7241 Email info@dening.lu Web dening.lu





The Click Clack kit is a training application for industrial robots. The exercise is to fill click clack cans with chocolates, to close the cans and palletise them.

Initially designed for a Fanuc Educational cell the kit can be adapted on request to other training cells like Kuka ready2\_educate or ETS SafetyCUBE.

### **Features**

- Application with two tools.
- Mounting plate The kit can be ordered with a mounting plate for fast installation.
- Multitude of possible layouts due to:
  - Free choice of holder positions.
  - All parts can be mounted at 0° or 90° angle to the 40mm pitch of the slotted plate, if installed without the mounting plate.
- Forgiving design to reduce the risk of c after collisions.
- Pop-off function
- Industry grade parts (pneumatic and electric parts).
- Stainless steel laser cut metal sheets.
- High quality 3D printed parts (MJF and SLS technique).
- TCP teaching tools included.

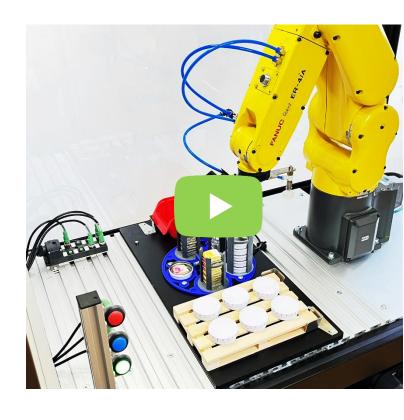
The pneumatic valves to control the vacuum generator are already integrated in the Fanuc ER-4iA robot.



### See application in action

dening.lu/applications/clickclack





### Pricing & Options<sup>1</sup>

All prices excl. VAT (B2B) and excl. transport.

Basic kit: 1250€

Option Mounting plate:  $150€^2$ Option LED tower:  $300€^2$ Option Fanuc IO block:  $450€^2$ Option Training documents: on demand

Option Branded cans & chocolates: on demand

In case you need a silent compressor, I can recommend:

- Implotex 480W Silent, ~50dB noise level and 9I reservoir. (Low budget but perfectly ok for this application.)
- Jun-Air 6-15 (High end oil-lubricated silent compressor, hardly louder than your fridge.)

Don't hesitate to contact me for a personalized offer.

<sup>&</sup>lt;sup>1</sup> These prices are presumably only valid in 2024.

<sup>&</sup>lt;sup>2</sup> This price is only valid in combination with the basic kit.



# Bill of material (Basic kit)

### Assembly station:

Qty	Part	Reference
1	Assembly station including 1 locator and 4 interchangeable holders (3D printed in SLS and MJF)	
1	Assembly station fixing kit with 4 M5x10 washer head screws and 4 nut stones.	
1	Inductive proximity switch from Sick	
1	Cable M12 1.5m for proximity switch from Phoenix Contact	
30	Click Clack Cans white, unbranded, 56mm outer diameter	
2x100	Chocolates unbranded, 35x35mm	



Qty	Part	Reference
10	Spacer discs in Plexiglas to put between the can lids	
5	Cable tie clips Rose+Krieger Vario Quick K30	-
100	Cable ties 2,5mm	

### Tool assembly:

Qty	Part	Reference
1	Tool assembly with 1 stainless steel flange adaptor, 1 high quality 3D printed closing tool (MJF), 1 suction cup from SMC with 25mm bellows and 2 TCP teaching tools.	
1	Tool assembly fixing kit with 6 screws, 1 long nut and 1 alignment dowel.	
1	Vacuum generator assembly with 1 vacuum generator from SMC and 1 bracket (high quality 3D printed or stainless steel).	
1	Vacuum generator fixing kit with 4 screws and 2 nuts.	



Qty	Part	Reference
9m	TU Hose Pipe, Polyurethane 6mm OD	
2	Adaptor M5 Male to 6mm Push In	
1	TU Hose Adaptor Kit	
2	Adaptor RC1/4 Male to 6mm Push In	ELE ALL
1	Adaptor Pneumatic Quick Connect to R1/4 Female	



### Pallet:

Qty	Part	Reference
1	Mini-Pallet with 2 stainless-steel pallet locators.	
1	Mini-Pallet fixing kit with 4 screws and 4 nut stones	

# Storage Bin:

Qty	Part	Reference
1	Storage Bin with 2 stainless-steel pallet locators.	
1	Mini-Pallet fixing kit with 4 screws and 4 nut stones	

### Auto-exposure field:

Qty	Part	Reference
1	Auto-exposure field (grey, 50x50x3mm).	
1	Double sided glue patch	



# **Bill of material (Option Mounting Plate)**

Qty	Part	Reference
1	Mounting Plate (laser cut 12mm HD-PE plate) with M5 thread inserts to fix all parts.	
1	Mounting Plate fixing kit with 4 screws and 4 nut stones	

# **Bill of material (Option LED Tower)**

Qty	Part	Reference
1	LED Tower assembly with:  • 1 Aluminium profil Rose+Krieger complete (250mm, with cap and profile fixing kit)  • 3 RAFI-LEDs (red, blue, green) with stainless steel brackets  • 3 M12 cables from Phoenix Contact	
1	LED Tower assembly fixing kit with 3 screws and 3 nut stones	



### **Bill of material (Option Fanuc IO Block)**

# 1 IO Block assembly with: • 1 IO block from Phoenix Contact • IO block cable with Honda connector from Fanuc • 1 stainless steel mounting plate for optional mounting next to the robot or on the slotted plate. or 1 IO Block assembly fixing kit with 8 screws and 2 nut stones