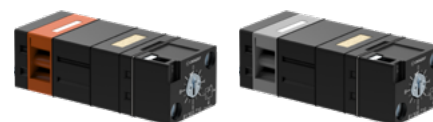


› Pneumatic Timers

Sub-base Mount

- › 4 Timing Functions: Positive Output (On-delay), Negative Output, Impulse Generator and Frequency Generator
- › Timing ranges: 0.4 s, 0.1 to 15 s, 0.1 to 30 s, 0.1 to 60 s
- › Long lifetime (10⁷ operation cycles)
- › ATEX compliant options for explosive environments



Standard version

ATEX Compliant Version

Selection guide			
Timing Functions	Timing/Frequency	Standard Part Number	ATEX compliant Part Number
Positive Output (On-Delay)	0.4 s (Fixed)	81503540	81503543
	0.1 → 15 s (Adjustable)	81503710	81503728
	0.1 → 30 s (Adjustable)	81503720	81503729
	0.1 → 60 s (Adjustable)	81503725	81503731
Negative Output	0.1 → 15 s (Adjustable)	81506710	81506714
	0.1 → 30 s (Adjustable)	81506720	81506721
	0.1 → 60 s (Adjustable)	81506725	81506727
Impulse Generator	0.4 s (Fixed)	81507540	81507543
	0.1 → 30 s (Adjustable)	81507720	81507724
Frequency Generator	0.02 → 8 Hz (Adjustable)	81506940	81506945
	0.02 → 14 Hz (Adjustable)	81506920	-

Do you have a special project with specific needs? Contact us on www.crouzet.com

Description:

Crouzet offers a wide **pneumatic timers'** range, with several functions and timing range to suit different customer needs.

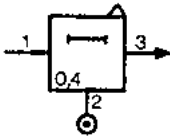
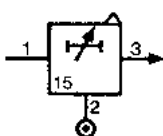
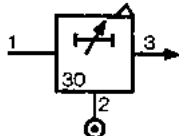
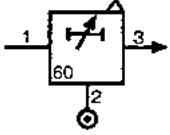
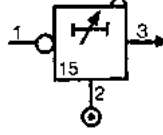
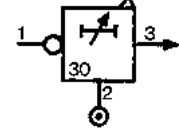
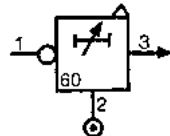
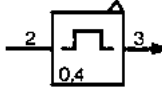
ATEX compliant options are also available for applications in explosive environment.

For more information about Crouzet's pneumatic timers range, please visit www.crouzet.com

	Positive Output (On-Delay)	Negative Output	Impulse Generator	Frequency Generator
Timing Specifications				
Specified time ranges	Fixed: 0.4 s Adjustable 1: 0.1 → 15 s Adjustable 2: 0.1 → 30 s Adjustable 3: 0.1 → 60 s	- Adjustable 1: 0.1 → 15 s Adjustable 2: 0.1 → 30 s Adjustable 3: 0.1 → 60 s	Single: 0.4 s Adjustable: 0.1 → 30 s	Adjustable 1: 0.02 → 8 Hz Adjustable 2: 0.02 → 14 Hz

Accuracy	± 5 %
Min. reset time	<0.1 s

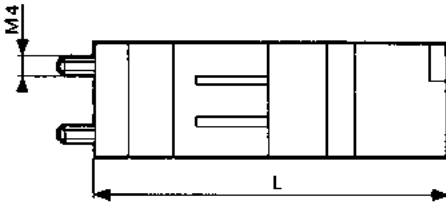
General characteristics	
Operating pressure	2 → 8 bar
Flow at 6 bars	170 NI/min.
Orifice diameter	2.7 mm (without sub-base) 4 mm with sub-base
Mounting	Sub-base Mount
Casing	32 x 25 mm
Operating temperature	-5 → + 50 °C
Mechanical life	10 ⁷ operations

Timers symbols		
Part Number 81503540 	Part Number 81503710 	Part Number 81503720 
Part Number 81503725 	Part Number 81506710 	Part Number 81506720 
Part Number 81506725 	Part Number 81507540 	Part Number 81507720 
Part Number 81506940 	Part Number 81506920 	

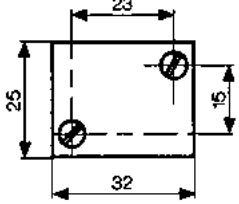
Diagrams

Dimensions (mm)

Side View



Front view

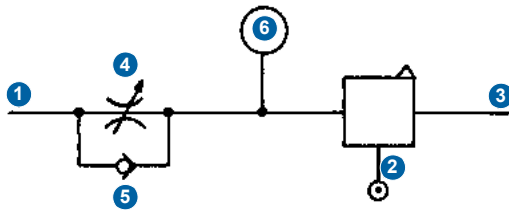


Standard / ATEX compliant Part Number	L (mm)	Weight (g)
81503540 / 81503543	76	106
81503710 / 81503728	78	90
81506710 / 81506714		
81503720 / 81503729	92	100
81506720 / 81506721		
81503725 / 81503731	125	120
81506725 / 81506727		
81507540 / 81507543	73	106
81507720 / 81507724	99	180
81506940 / 81506945	72	85
81506920	58	

Functional Diagram

The operation of these pneumatic timers is similar to the one of electronic timers (circuit with capacitor/resistor) as can be seen in the following functional diagram:

Timing by charging of reservoir



1 Control input

2 Air supply

3 Air Output

4 Flow Restrictor

5 Non-return valve

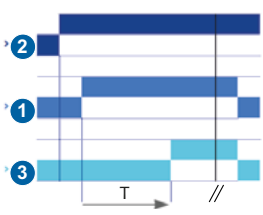
6 Capacitor

The reservoir inside the timer fills via the connection (1) that is passing through the flow restrictor (4), until it reaches the switching point (Timing set-up). The non-return valve (5) allows the reservoir of the timer to be emptied rapidly for the next timing.

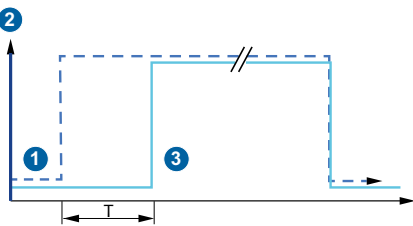
Timing Functions

Positive Output (On-Delay)

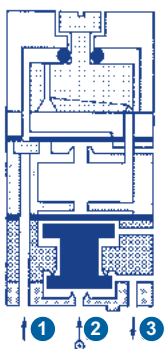
Time chart style 1



Time chart style 2



Timer view in 2D



1 Control input

2 Air supply

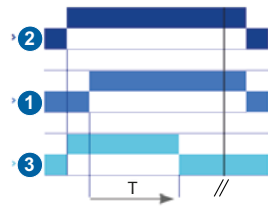
3 Air Output

T: Timing

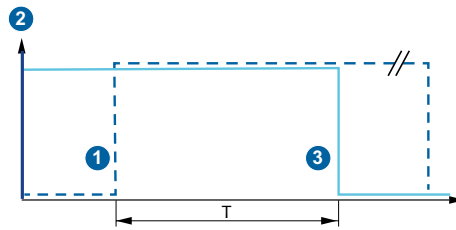
// Supply off

Negative Output

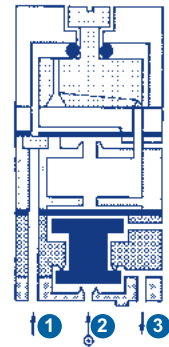
Time chart style 1



Time chart style 2



Timer view in 2D

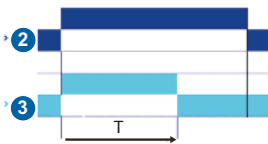


- 1 Control input
- 2 Air supply
- 3 Air Output

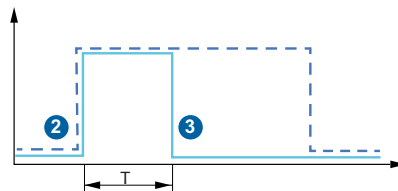
T: Timing
// Supply off

Impulse Generator

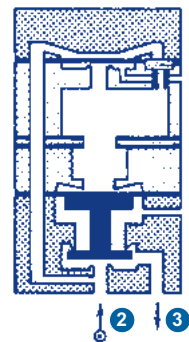
Time chart style 1



Time chart style 2 - Single impulse generator



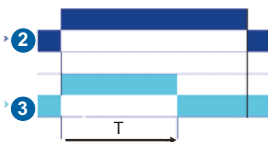
Timer view in 2D



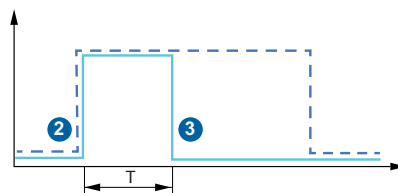
- 2 Air supply
- 3 Air Output

T: Timing

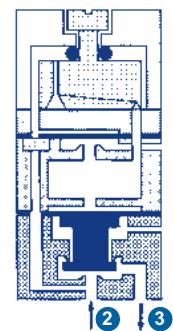
Time chart style 1



Time chart style 2 - Adjustable impulse generator



Timer view in 2D

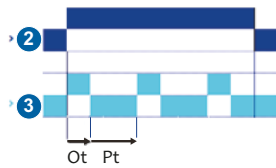


- 2 Air supply
- 3 Air Output

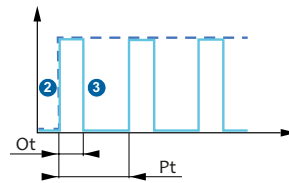
T: Timing

Frequency Generator

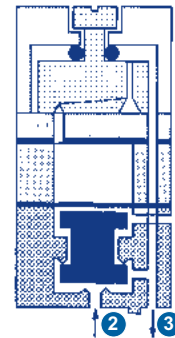
Time chart style 1



Time chart style 2



Timer view in 2D



Air supply



Air Output

Ot: Operating time

Pt: Period time

Complementary Products

SUB-BASE

	Description	Standard P/N	ATEX compliant P/N
	DIN-Rail Mount Multiple products	81 532 102	81 532 109
	DIN-Rail Mount	81 532 104	81 532 111
	Shaft Mount	81 531 001	81 531 008
	Panel Mount	81 532 001	81 532 009

OTHER PRODUCTS

	Description	Standard P/N	ATEX compliant P/N
	Non-return valve (Check-Valve)	81 529 901	-
	Air Pressure Regulator	81 527 001	-
	Air Capacitor	79 452 808	-
	Manual Timing Set-Up Knob	79 451 698 79 451 903 79 451 904 79 451 905	- - - -

AIR FLOW REGULATORS

	Description	Standard P/N	ATEX compliant P/N
	Free flow of 30 NL/min	81 525 101	-
	Free flow of 200 NL/min	81 526 001	-
	At 4 bar 0.18 → 0.30 Nm3/h	81 529 003	81 529 013
	At 4 bar 0.35 → 0.5 Nm3/h	81 529 004	81 529 014
	At 4 bar 0.58 → 0.77 Nm3/h	81 529 005	-
	At 4 bar 0.80 → 1.06 Nm3/h	81 529 006	-
	At 4 bar 1.10 → 1.39 Nm3/h	81 529 007	81 529 017
	At 4 bar 1.45 → 1.65 Nm3/h	81 529 008	81 529 018
	At 4 bar 2.30 → 2.80 Nm3/h	81 529 010	-
	At 4 bar 0.08 → 0.12 Nm3/h	81 529 025	-

Warning:

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.