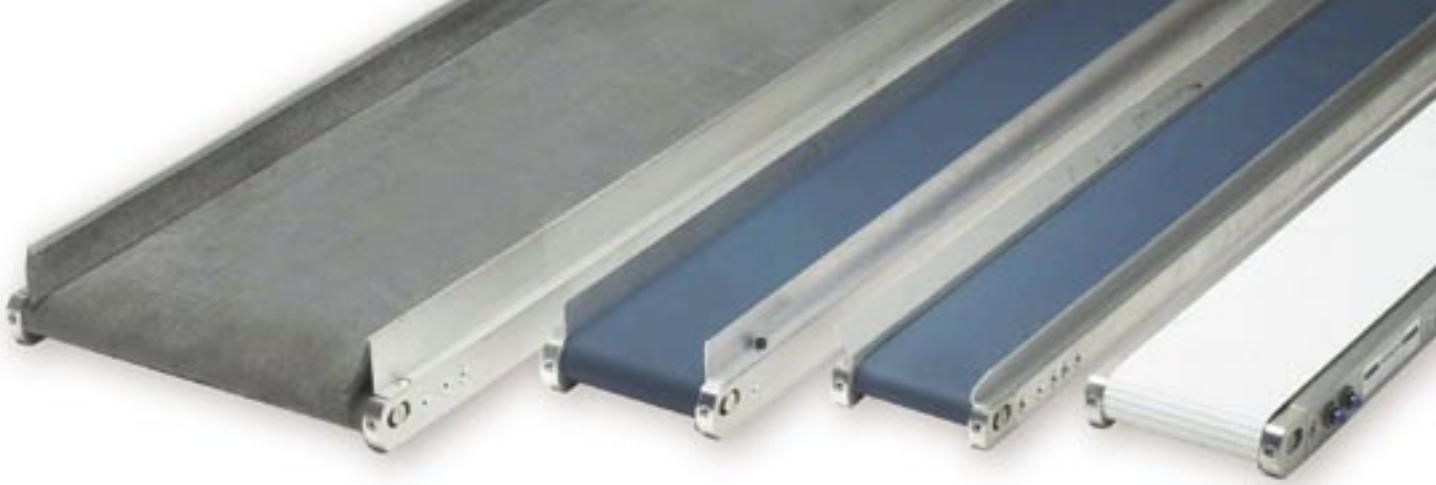


# Non-slip, pneumatic conveyors with low installation height.

When money and space are at a premium!

**P<sup>30</sup>** **P<sup>40</sup>**





## Pneumatic conveyors with low installation height.

Promotex develops, manufactures and sells pneumatic conveyors with a low installation height - the p30 and the p40. The conveyors are suitable for transporting products of all sizes, making them a good choice in most types and sectors of industry (including food and pharmaceuticals). They have a robust design, using an aluminium channel as standard\*. The p30 has an installation height of 32 mm (without the belt) and the p40 has an installation height of 42 mm (without the belt). \*) The channel is also available in stainless steel on request.

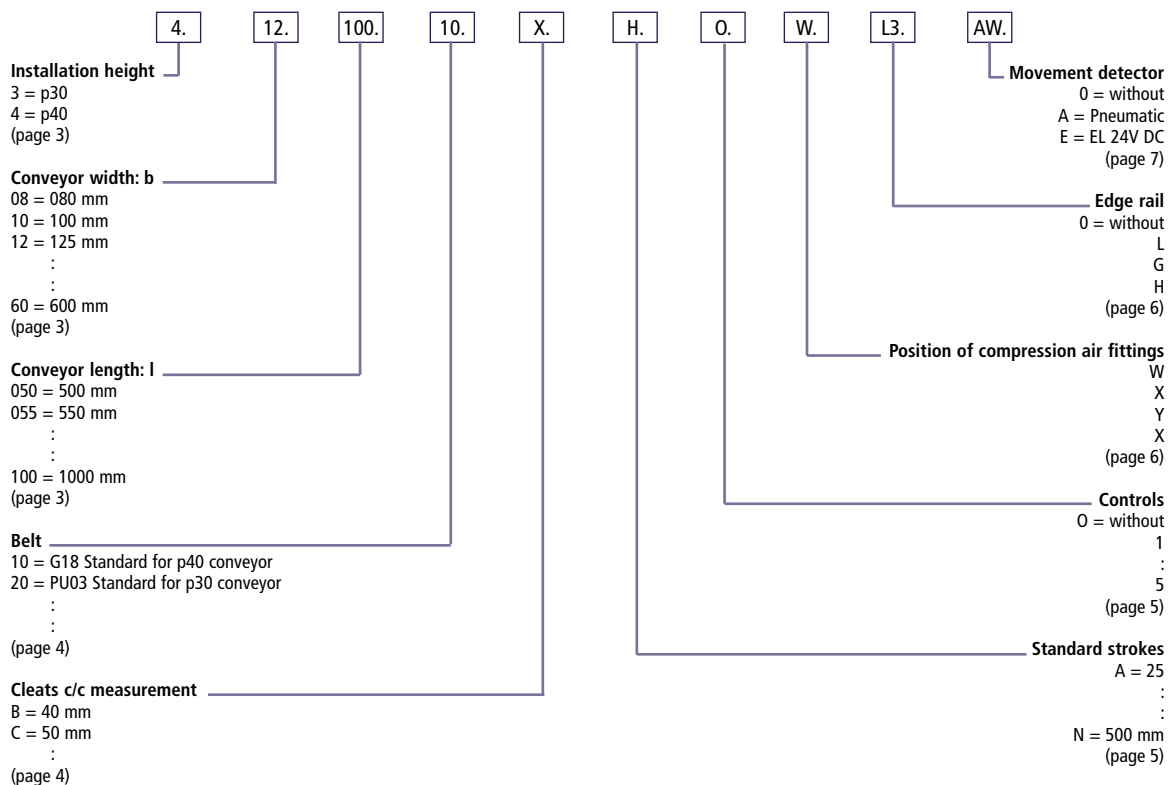
The sides and the bottom are flat, making the conveyor suitable for use in confined spaces. The belt is contained within the channel. This means that the conveyor can be placed directly on a flat surface, such as a table.

The conveyor is powered by pneumatic cylinders and can be connected directly to a machine's existing pneumatic system, with operation automatically coordinated with the machine. One step of the belt can be set to correspond to one working cycle of the machine. If you want the conveyor to operate independently, you can select a different control system. A wide range of belts can be fitted to the conveyor - with or without cleats. The belt drive system is non-slip for dry and oily applications, providing good operating reliability. The small number of moving parts keeps operating and maintenance costs to a minimum.

The conveyor works best at room temperature (≈20°C). However, it can be used for applications between -10°C and + 60°C. In some cases, the products carried on the conveyor can have an even higher temperature because they only remain on the belt for a short time.

The following pages are intended to help you choose a conveyor that meets your specific needs.

### Example of an order number: 4 . 1 2 . 1 0 0 . 1 0 . X . H . O . W . L 3 . A W



## Dimensions - Selecting the installation height

### p30 or p40?

Selecting the conveyor width and conveyor length

#### p30

Conveyor width\* 80, 100 - 250 mm

Conveyor length\*\* 500 - 1500 mm

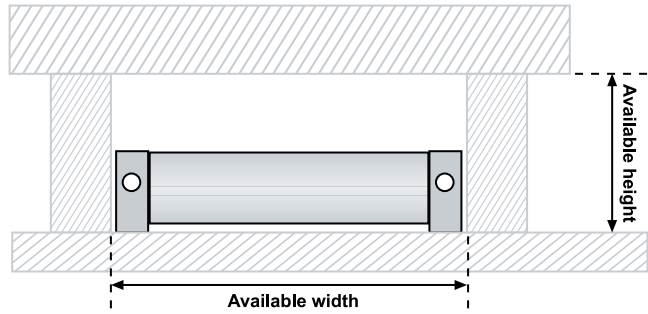
\*) Tolerance  $\pm 0,5$  mm \*\*\*) Tolerance  $\pm 1$  mm.

#### p40

Conveyor width\* 80, 100 - 600 mm

Conveyor length\*\* 500 - 5000 mm

\*) Tolerance  $\pm 0,5$  mm \*\*\*) Tolerance  $\pm 1$  mm.



The flat sides mean that the width of the conveyor only needs to be a couple of millimetres less than the available width.

Belt width = Conveyor width - 31 mm.

Other lengths and widths are available on request.

The table contains the standard range for the p30

Conveyor length (mm) \ Conveyor width (mm)	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500
80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
125	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
150	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
175	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
225	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
250	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The table contains the standard range for the p40

Conveyor length (mm) \ Conveyor width (mm)	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600-5000	> 5000							
80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							
100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
125	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
150	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
175	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
225	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
250	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					
300	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				
350		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				
400			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			
450				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
500					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
550						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
600							•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Contact us

## Belts

### Suggested belt qualities for various applications.

The p30 and p40 can be fitted with a wide range of conveyor belts.

We are happy to help you select the right belt quality for your application. Why not get in touch?

The conveyor's low installation height means that the belt must be flexible enough for a rolling diameter of 22 mm (p30) or 33 mm (p40) respectively.

We also supply belts that are suitable for use in the food and pharmaceuticals industries. For these applications, components made of stainless and acid-resisting materials can be used on request. The table is intended as a guide, only showing a selection of belts. The details are provided as general information, and do not represent a guarantee commitment for specific items.

Technical information	PU03	PUM2	NBR
Oil resistant	•	•	•
Hard wearing	•	•	•
Friction	Medium	Low	High
Antistatic	Low	High	Medium
<b>Applications</b>			
Sheet metal working: Punches Hydraulic presses (sharp details and machine oil)	•	•	•
Timber and paper industry	•	•	•
Plastics industry	•	•	•
Lathes (coolants)	•	•	•
Assembly lines. Transporting dry products within the industry	•	•	•

If you need a belt with cleats, enter the following details:

Number of cleats: ..... st

or

Approximate c/c distance

between the cleats: .....mm

Length of cleats: .....mm

See also the product drawings.

Approximate c/c distance between the cleats:

25 40 50 80 100 125 160 200  
A B C D E F G H

250 300 320 400 500 Special Without  
J K L M N S X

Technical information	G18	PU03	PUM2	PU07	NBR	PVC
Oil resistant	•	•	•	•	•	•
Hard wearing	•	•	•	•	•	•
Friction	Medel	Medel	Låg	Medel	Hög	Hög
Antistatic	Hög	Låg	Hög	Låg	Medel	Medel
<b>Applications</b>						
Sheet metal working: Punches Hydraulic presses (sharp details and machine oil)	•	•	•	•	•	•
Timber and paper industry	•	•	•	•	•	•
Plastics industry	•	•	•	•	•	•
Lathes (coolants)	Finished details	•	•	•	•	•
Assembly lines. Transporting dry products within the industry	•	•	•	•	•	•

= The p30 is only available with these belt types.

= p40

10 Standard for p40: G18 needle felt belt, flat, colour black, t= 2,5 mm. Temperature range: ≤ 150°C.

20 PU-belt, Standard for p30: PU03, flat, colour blue/green, t= 1,7 mm.

21 PU-belt, PU03 with PU-foil cleats, transparent. t= 2 mm, h= 5 mm, L= beltwidth - 54 mm.

22 PU-belt, PU03 with PU-foil cleats, transparent. t= 2 mm, h= 10 mm, L= beltwidth - 54 mm.

23 PU-belt, PU03 with PU-foil cleats, transparent. t= 2 mm, h= 15 mm, L= beltwidth - 54 mm.

31 PU-belt, PU03 with PU-foil cleats, transparent. t= 3 mm, h= 5 mm, L= beltwidth - 54 mm.

32 PU-belt, PU03 with PU-foil cleats, transparent. t= 3 mm, h= 10 mm, L= beltwidth - 54 mm.

33 PU-belt, PU03 with PU-foil cleats, transparent. t= 3 mm, h= 15 mm, L= beltwidth - 54 mm.

44 PU-belt, PU03 with PU cleats straight, blue/green, t= 3 mm, h= 20 mm, L= beltwidth - 54 mm.

45 PU-belt, PU03 with PU cleats straight, blue/green, t= 3 mm, h= 25 mm, L= beltwidth - 54 mm.

46 PU-belt, PU03 with PU cleats straight, blue/green, t= 3 mm, h= 30 mm, L= beltwidth - 54 mm.

50 PU-belt, PUM2, flat, colour light blue, t= 1,6 mm

59 PU-belt, PUM2, colour light blue, t= 1,6 mm, with PU cleats V60 light blue, t= 3 mm, h= 50 mm, L= beltwidth - 54 mm (V60 = slanting forwards approx 60 degrees). c/c ≥ 55 mm.

70 PU-belt, PU07 with rough texture, colour white. (Reduces the detail's surface area coming into contact with the belt)

76 PU-belt, PU07 with PU-cleats straight, t= 3 mm, h= 30 mm, L= beltwidth - 54 mm.

Temperature range: PU-belt ≤ 90°C. Woven Polyester (PET).

The number of cleats or the c/c measurement must be included in the order. Minimum c/c = 25 mm.

80 NBR-belt, HAT8P. Rubberised surface with high friction. Colour green, t=2mm.

Temperature range: ≤ 100°C. Extra lasting belt for heavy applications

Woven polyamide (PA). Oil resistant. Very hard wearing

90 PVC belt, SAQ8E, checked texture on surface with high friction, colour grey/green, t= 2,1 mm.

Temperature range: ≤ 60°C. Woven polyester (PET).



The illustration shows a p40

## Stroke

### p30

25 40 50 80 100 125 **160** 200 Special

A B C D E F **G** H S

Our standard stroke is 160 mm. Other strokes available on request.

### p40

25 40 50 80 100 125 160 **200** 250 300 320 400 500 Special

A B C D E F G **H** J K L M N S

Our standard stroke is 200 mm. Other strokes available on request.

## Longest stroke (standard) for the shortest conveyor:

Stroke	Conveyor length
C = 50 mm	500 mm
D = 80 mm	550 mm
E = 100 mm	600 mm
F = 125 mm	650 mm
G = 160 mm	700 mm
H = 200 mm	800 mm

**Number of pneumatic cylinders:**

Conveyor width	Number
≤ 125 mm	1
> 150 mm	2

Stroke	Conveyor length
A = 25 mm	500 mm
C = 50 mm	550 mm
D = 80 mm	600 mm
E = 100 mm	650 mm
F = 125 mm	700 mm
G = 160 mm	800 mm
H = 200 mm	850 mm
J = 250 mm	950 mm
K = 300 mm	1050 mm
L = 320 mm	1100 mm
M = 400 mm	1250 mm
N = 500 mm	1450 mm

### Number of pneumatic cylinders:

Conveyor width	Number
≤ 200 mm	1
> 225 mm	2

## Controls

The conveyor belt is using double acting cylinders, according ISO 6432, Ø 16 mm for the p30 and Ø 25 mm for the p40, with adjustable cushioning.

The piston activates an eccentric clamp, which grips the belt when the piston moves forward. When the piston moves backwards, the belt stays still. The distance by which the belt moves forward depends on the stroke of the piston\*.

Working pressure: 6 bar. Temperature range: Max. 60°C. (80°C on request). The belt speed can be controlled directly from the machine's existing pneumatic system, or using a range of control systems supplied by Promotex.

Important: Very low air consumption. Forward/backward movement, 6 bar and 20°C = approx. 0.06 NI/cm of stroke (p40), = approx. 0.03 NI/cm of stroke (p30).

  = Only p40

0 Standard: Customer's own system. Direct air connection to the machine's existing pneumatic system.

1 Electric pneumatic: 230V AC, in separate box (IP65).<sup>1)</sup>

2 Electric pneumatic: 24V DC, in separate box (IP65).<sup>1)</sup>

3 Fully pneumatic: Magnetic sensor on cylinder, built into the conveyor.<sup>2) 3)</sup>

4 Fully pneumatic: Logic element with timer, built into the conveyor.<sup>2)</sup>

5 Fully pneumatic: In separate box (IP65).<sup>3) 4)</sup>

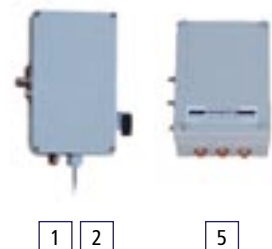
1) The frequency (working time/pause time) is adjusted using a time lag relay. One or more conveyors can be controlled (get in touch if you want to control more conveyors).

2) Fits into conveyors with width ≥ 200 mm. Conveyor length + 200 mm.

3) The speed and frequency are adjusted using 2 one-way restrictors.

4) Minimum 6 bar.

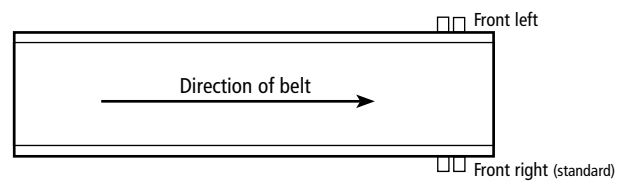
\*) The forward movement of the belt may be a few millimeters shorter than the specified stroke.



## Compressed-air supply

The conveyor is fitted with plug-in connections for soft PU air hoses (Ø 6/4 mm).

- W Front right (direction of belt).
- X Front left (direction of belt).
- Y Back right (direction of belt).
- Z Back left (direction of belt).

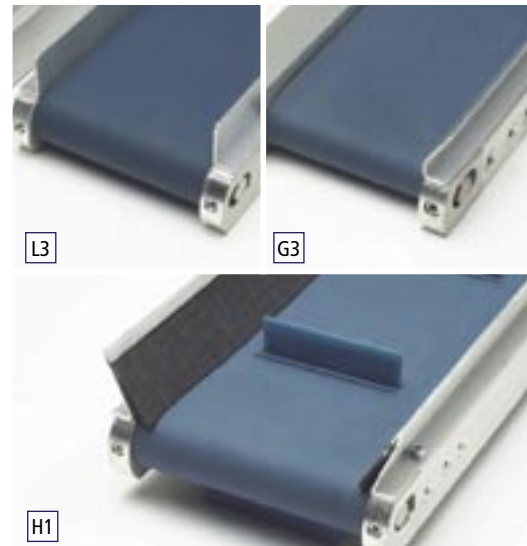


## Edge rail

The side-mounted edge rails are made of 1,5 mm stainless steel sheet.

  = The p30 is only available with these side-mounted edge rail.

- 0 Conveyor without edge rail.
- L1 L-profile, h = 10 mm.      L4 L-profile horizontal, h = 10 mm
- L2 L-profile, h = 20 mm.      L5 L-profile horizontal, h = 20 mm
- L3 L-profile, h = 30 mm.      L6 L-profile horizontal, h = 30 mm  
Covers the exposed area of the belt.
- G3 G-profile, h = 30 mm.
- H1 H-profile, h = 45 mm with belt packing - G18, h = 55 mm (Oil resistant).
- H2 H-profile, h = 45 mm with belt packing - E41, h = 55 mm (PVC).
- H3 H-profile, h = 90 mm with belt packing - PU03, h = 100 mm (Oil resistant).
- S1 Edge rail for PU belt, with longitudinal slit, h = 30 mm, t = 3 mm, white.
- M1 Used to subdivide belts.      (Only fitted to PU belts)



## Installation

It is important to install the conveyor so it is stable and flat. It must not be subject to lateral loads. You are therefore recommended to use the M8 threaded holes on the channel, which are also used to secure the end attachments. The threaded holes can also be used as a fixing point. If this fixing point cannot be used, we recommended **profix** fasteners.

**profix** is available in four versions, for conveyors with and without side-mounted edge rails.

**profix 30170**: For the p30 without side-mounted edge rail.

**profix 30175**: For the p30 with side-mounted edge rail.

**profix 40155**: For the p40 without side-mounted edge rail.

**profix 40160**: For the p40 with side-mounted edge rail.



**profix** fastener

## Options

We aim to offer the widest possible choice of conveyor solutions, including accessories and peripheral equipment.

- **profix** fixings for secure installation on a flat surface.
- **proflex** fixings for secure installation of inclined conveyors.
- Supporting frame made of stainless steel tubings, as per customer specification.
- Angled conveyor with 40 mm installation height.
- Scraper.
- Special design for the electronics industry.
- Special design for highly sensitive applications.



Supporting frame with **proflex**



Triangular feeder

## Movement detector

**Provakt** is a movement detector that responds to the movement of rollers and the belt. It can be fitted to all Promotex conveyors..

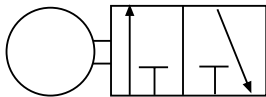
**Provakt** transmits ON and OFF signals(+/-), which can be connected to the control unit of the machine or the logic module box.

**Provakt** is always supplied complete with end roller and two end fixings. It is easy to install and can be fitted to older conveyors.

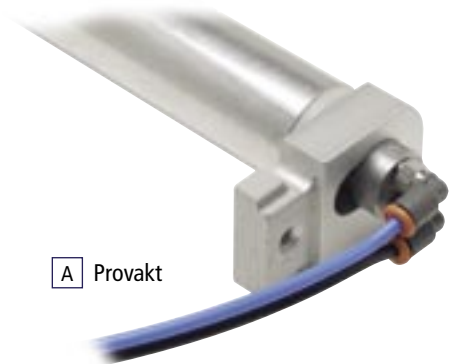
When ordering **Provakt** for older conveyors, please quote the serial number of the conveyor.



**Provakt:** Two compressed-air connections. M5 - Ø 4 mm.



**Adapter:** PNEL-R with air checker pressure switch.



**A** Provakt

**A** Provakt

**EH** Adapter PNEL-R, contact with Harax connection, no cable.

**EL** Adapter PNEL-R, contact without cable. Straight, male, soldered.

**0** None

**W** Front right (direction of belt). Standard

**X** Front left (direction of belt).

**Y** Back right (direction of belt).

**Z** Back left (direction of belt).



Adapter PNEL-R

### Accessories for Provakt:

Separate box with time lag relay and connection to pressure control.

Separate box with logic module.



Provakt with adapter PNEL-R

**Promotex** 

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