

Series **86P30-1D5** Product Overview

Pneumatic pin packages, enclosed twin units with 32mm diameter cylinders

Models: **86P30-1D5.....**

**Application:**

Accurate positioning, with high precision of rotation, of sheet metal parts in welding equipment and handling systems. At the end of the welding process, the pins are retracted from the pin holes. The component can thus be easily removed from the jig. The pin package can also be used for centering pin positions outside the piston rod axis.

**Features:**

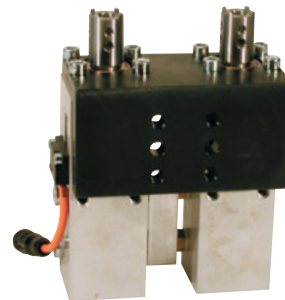
- Compact, low weight design
- High accuracy due to twin piston rod guide
- Lateral mounting areas
- Mounting base for centering pin incl. precision bore holes and grooves
- 1 inductive sensing module with LED display
- Twin guide for off-center pins
- Long body for 40mm stroke, short body 20mm stroke
- Long & short body are interchangeable in connecting

**Key areas of application:**

Automotive manufacturing, sheet processing industry, jig and general mechanical engineering.



**86P30-1D5B8004**  
base model w/ sensing  
(w/o add-ons)



**86P30-1D5B8G12**  
with central air connection  
and sensing

Series **86P30-1D5** Technical Information

Model no.		Pushing force at 5 bar N [lbs]	Retraction force at 5 bar N [lbs]	Max. operating pressure bar [psi]	Piston Ø mm [in]	Stroke mm [in]	Weight Kg [lbs]	Air consumption per double stroke at 5 bar dm <sup>3</sup> [ft <sup>3</sup> ]
w/o sensing	with inductive sensing connector M12x1 w/ lead							
<b>86P30-1D5L3004</b>	<b>86P30-1D5B8004</b>	780 [175]	580 [130]	6 [87]	2x32 [1.26]	40 [1.57]	3,0 [6.60]	0,96 [0.03]
<b>86P30-1D5L3002</b>	<b>86P30-1D5B8002</b>	780 [175]	580 [130]	6 [87]	2x32 [1.26]	20 [0.79]	2,7 [5.94]	0,68 [0.02]
<b>86P30-1D5L3G14</b>	<b>86P30-1D5B8G14</b>	780 [175]	580 [130]	6 [87]	2x32 [1.26]	40 [1.57]	3,1 [6.82]	0,96 [0.03]
<b>86P30-1D5L3G12</b>	<b>86P30-1D5B8G12</b>	780 [175]	580 [130]	6 [87]	2x32 [1.26]	20 [0.79]	2,8 [6.16]	0,68 [0.02]

Order no. code for pin packages **86P30-1D5.....**

Example Order no.: **86P30 - 1 D 5 B8 00 4**

**86P30-1D5** = Base model without sensing system, without accessories

piston rod adapter location hole for Ø10, cross groove 11 mm

**Base model**

**B8** = sensing system, connector plug M12x1  
8EA-033-2 (for 86P30-1...4)  
8EA-091-1 (for 86P30-1...2)



**Sensing system**

**B8** = without sensing system  
Cover plate  
8AD-036-1 (for 86P30-1...4)  
8AD-069-1 (for 86P30-1...2)



**00** = without accessories  
**G1** Air Manifold  
**82ZB-029-1** 40mm stroke  
**82ZB-041-1** 20mm stroke

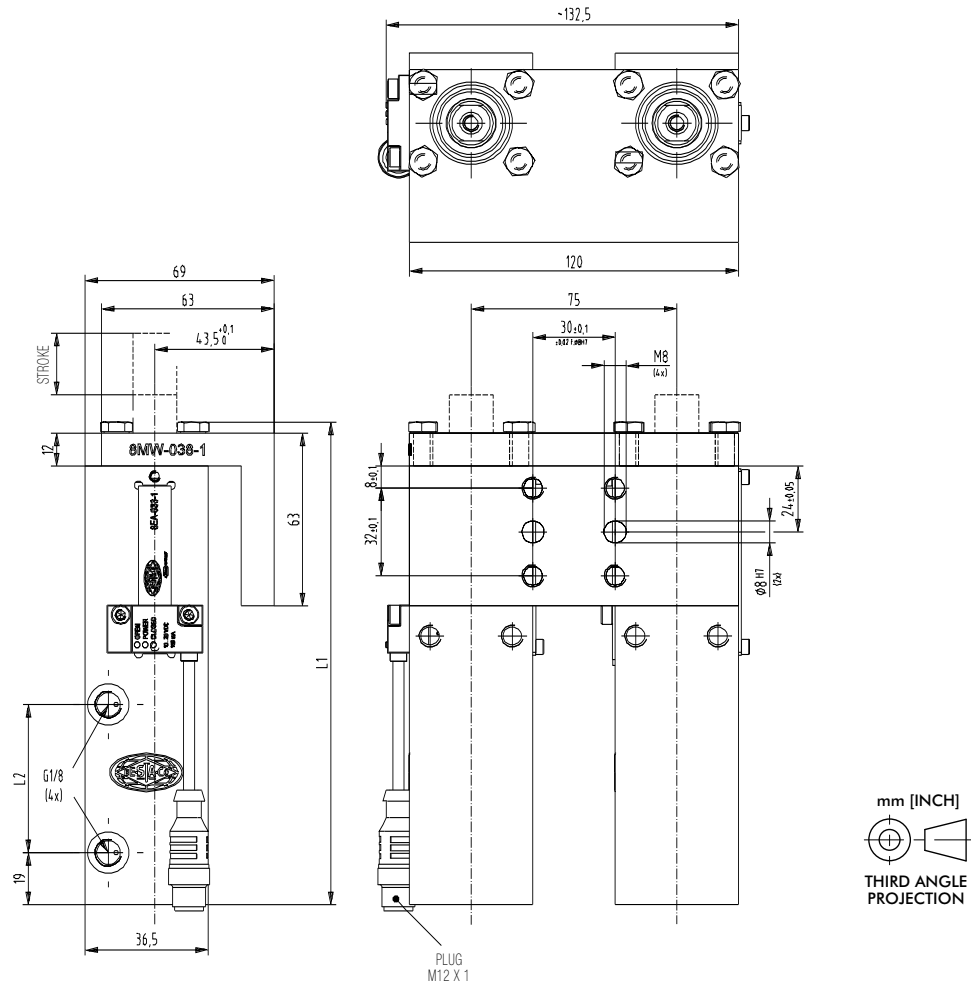


**Accessories**

**4** = stroke 40 mm  
**2** = stroke 20 mm

Series **86P30-1D5** Standard Pin Package Dimensions

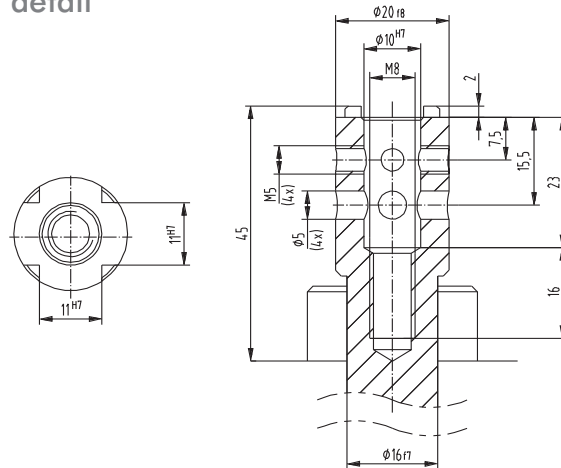
**86P30-1D5.....**



mm [INCH]  
  
 THIRD ANGLE PROJECTION

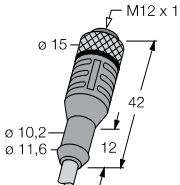
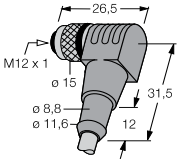
Model no.	L1 [mm]	L1 [mm]	Stroke [mm]
<b>86P30-1D5..004</b>	176	54	40
<b>86P30-1D5..002</b>	141	34	20

**86P30-1D5** Piston rod detail



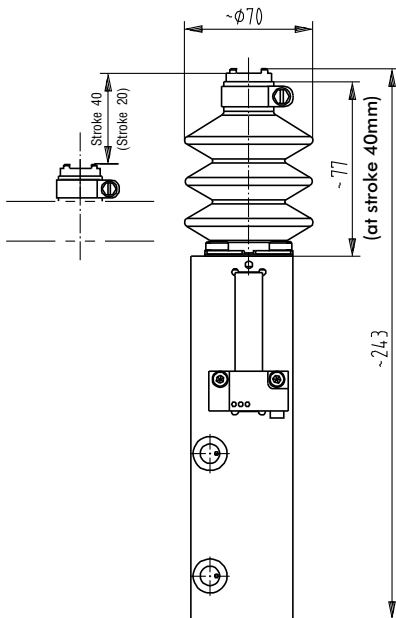
View shows piston rod in retracted position

Series **86P30-1D5** Accessories

Specifications	Order no. for 86P30-1D5.....
<b>Bellows</b>	<b>82ZB-016-4</b>
<b>Connecting cable</b> (1 connector socket & 5 m cable)	<b>8EL-002-1</b>
<p><b>Connector socket M12x1 straight, 5-pin</b></p> 	<b>8EL-003-1</b>
<p><b>Connector socket M12x1 angular 4-pin</b></p> 	

**Bellows 82ZB-016-4**

Mounted on piston rod



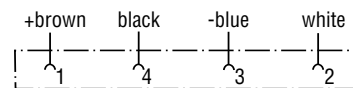
**Wiring diagram of electrical sensing system**

Sensing system immune to interference from d.c. arc welding and a.c. arc welding

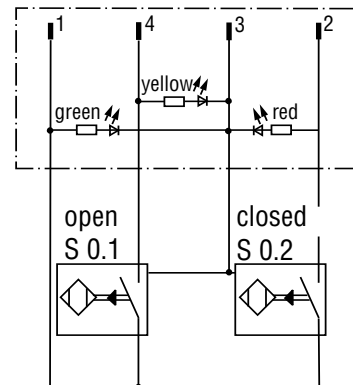
**Inductive design:**

- **B8** Connector plug M12x1 w/ lead (just 1 sensing system required)

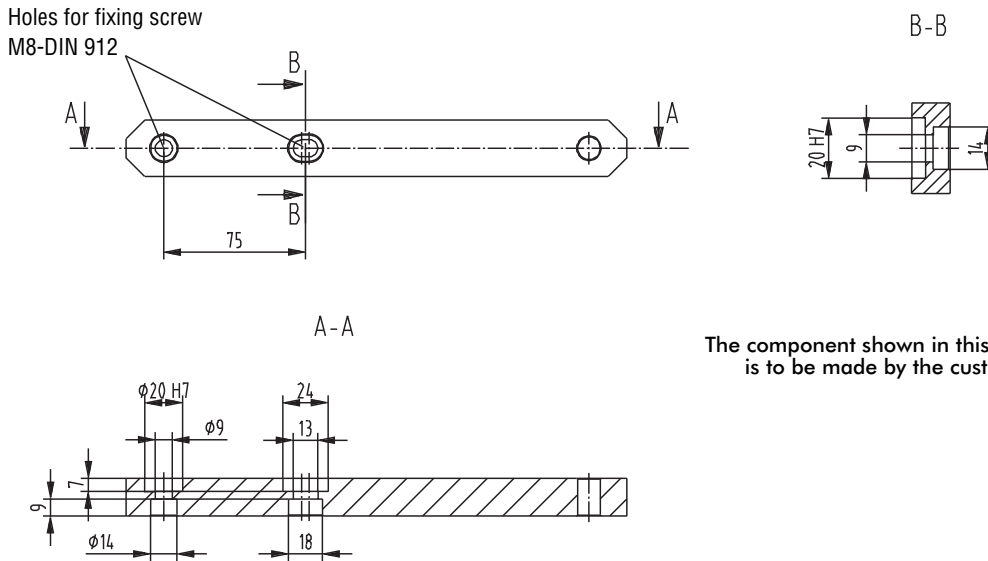
**Pin assignment**



Plug M12x1

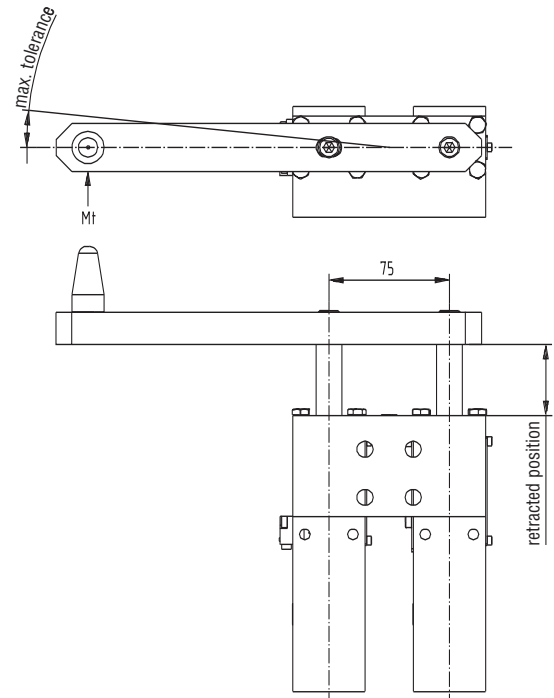
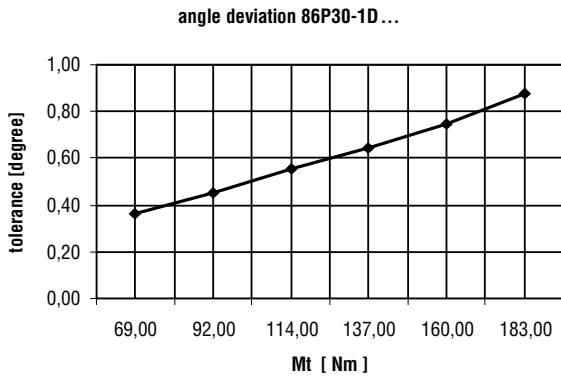


Example application of off-center centering pin of **86P30-1D5.....**



The component shown in this example is to be made by the customer

Concept guidelines: angle deviation of off-center centering pins



Major spare parts for **86P30-1D5.....**

Specifications	Order no. for 86P30-1D5..4	Order no. for 86P30-1D5..2
End position sensing system B8 inductive connector plug M12x1 w/ lead	<b>8EA-033-2</b>	<b>8EA-091-1</b>
Seal kit	<b>86P3-1-00</b>	