

## 定位和夹紧单元 (钩销缸) DCA40G

### Locking and holes centring device (Sub level) DCA40G

#### 主要特点:

- 铝制壳体
- 轻型紧凑设计
- 客户定制挂钩，定位销和台阶面厚度  
(定位销直径从 16 mm 至 32 mm, 最大高度为直径的 3,5 倍)
- ± 0,2 mm 公差补偿
- 2 个安装面(正面和背面)
- 扁平气缸缸径 40 mm  
带 4 个 G1/8"气源接口
- 电感式接近开关: 3 个 LED, 接口 M12x1
- 防飞溅滑动保护罩



#### Main characteristics:

- Aluminium flanks
- Light weight version and compact design
- Customized hooks, locator pins  
( $\varnothing$  min. 16 mm  $\div$   $\varnothing$  max. 32 mm, max height 3,5 times the  $\varnothing$  of the pin) and thickness plate
- ± 0,2 mm tolerance compensation
- 2 mounting areas (front and rear)
- Flat pneumatic cylinder bore 40 mm with 4 feeding ports G1/8"
- Inductive proximity switch: 3 LEDs, connection M12x1
- Flowing weld splashes protection



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## 订货举例

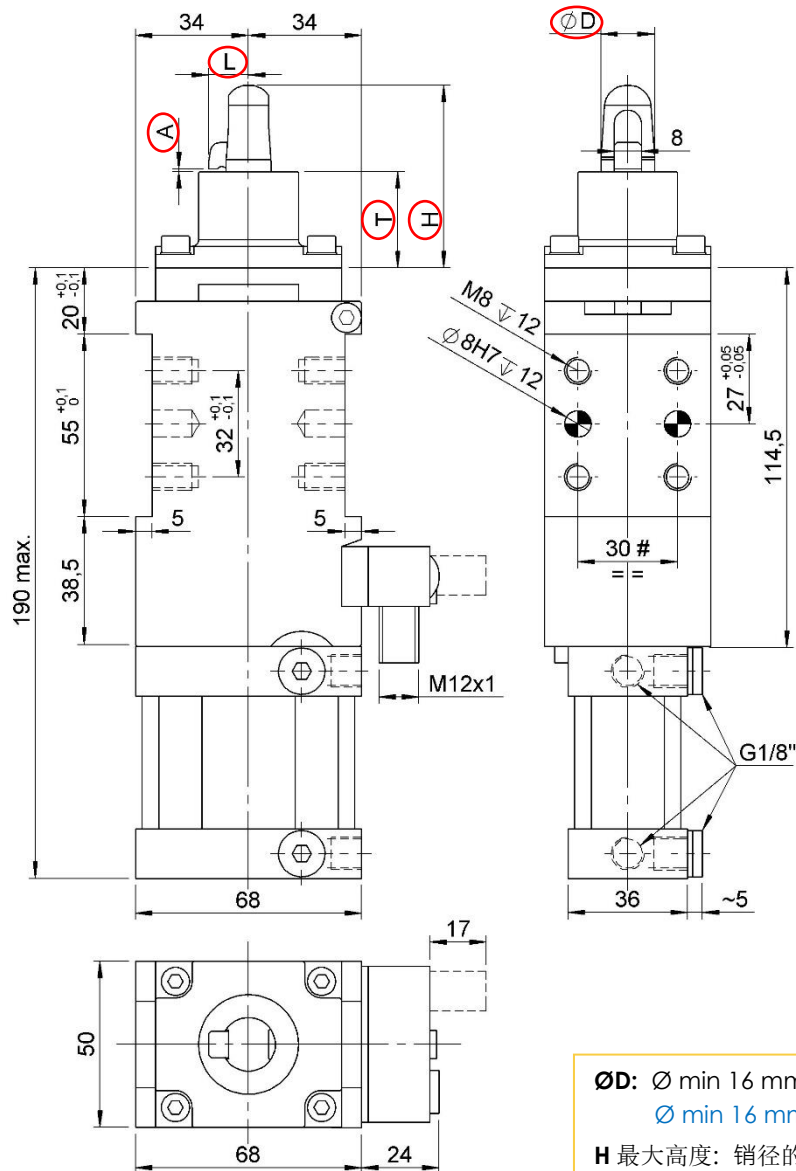
### Ordering example.

DCA40G	-		-	00000	-	STD
<p><b>产品类型和气缸缸径:</b> <b>Type and cylinder bore:</b></p> <p><b>DCA40G</b> 锁紧和定位单元 缸径 40 mm locking and holes centering device with pneumatic cylinder bore 40 mm</p> 				<p><b>产品特殊编号:</b> 根据客户要求定制的钩子，定位销和台阶面厚度的 VEP 编号。</p> <p><b>Drawing reference number:</b> VEP code with client references to build the hook, the locator pin and the thickness plates.</p> 		
<p><b>传感器:</b> <b>Inductive sensor:</b></p>  <p><b>X:</b> 无传感器 without sensor</p> <p><b>I:</b> 电感式传感器 Inductive sensor</p>				<p><b>定位销类型</b> <b>Type of locator pin:</b></p> <p><b>XXX:</b> 无定位销 without locator pin</p> <p><b>NT3:</b> 定位销带渗氮涂层 locator pin with NT3 treatment</p> <p><b>STD:</b> 标准定位销（渗碳抛光） standard locator pin</p> <p><b>WCC:</b> 标准定位销带碳化钨涂层 standard locator pin with WC/C treatment</p> <p><b>DLC:</b> 定位销带类金刚石碳涂层 locator pin with DLC treatment</p> <p>更多信息，请参考第 4 页 For more information see page 4</p>		

DCA40G-I-00000-XXX

钩销缸, D. 40, 结构紧凑, 轻型

Sub-Level, D. 40, compact design, lightweight version



- ØD:** Ø min 16 mm ÷ Ø max 32 mm  
Ø min 16 mm ÷ Ø max 32 mm
- H** 最大高度: 销径的 3,5 倍 (D)  
3,5 times the Ø of the pin (D)
- L** 最大宽度: 销径的 0,75 倍 (D)  
0,75 times the Ø of the pin (D)
- A:** 请标明钣金件厚度  
indicate the thickness of the sheet

**夹紧范围:**

如果工作范围 不正确(±0,2) 可能会导致钩子变形。

**Clamping zone:**

A not correct working range (±0,2), could causing a hook deformation

#公差: 定位销孔 ±0.02, 螺纹孔 ±0.1

#Tolerances: dowel holes ±0.02, screw holes ±0.1

类型 Type	缸径 Cylinder bore	最大夹紧扭矩(5 bar) Max. clamping force (5bar)	重量 Weight	最大工作气压 Max. working pressure	保持力 Holding force	耗气量 (5 bar) Air consumption (5 bar)
	[ mm ]	[ daN ]	[ Kg ]	[ bar ]	[ daN ]	[ l ]
DCA40G...	40	110	~ 1,8	6	200	~ 0,2

## 表面处理工艺描述.

### Treatments description.

#### NT3 (表面渗氮)

NT3表面渗碳处理工艺可以达到 HV1> 600 (~ >55HRC)的硬度和0.3 毫米的深度，然后逐渐衰减，使材料恢复到自然硬度 (HV~280)。NT3 表面处理通常用于直径较小的定位销。外观是灰色。

#### NT3 (Nitriding)

Nitriding NT3 treatment has an hardness HV1> 600 (~ >55HRC) up to a depth of 0.3mm, then it collapses leaving the material to its natural hardness (HV~280). NT3 treatment is often recommended for small sizes locating pins. Its color is grey

#### STD (标准渗碳抛光)

标准表面渗碳加抛光处理工艺，硬度达58÷62 HRC，深度达0.5mm，然后逐渐减小。对缺口具有良好的抗御性。因为抛光，表面呈黑色。

#### STD (Standard Option)

Standard carburizing treatment + burnishing has an hardness of 58÷62 HRC up to a depth of 0.5mm, then it decreases progressively. Good resistance to nicking problems. Its color is black due to the burnishing

#### WCC (WC/C 碳化钨表面涂层)

WCC处理工艺 是在STD标准 渗碳处理基础上添加碳化物涂层。WCC 处理硬度可达 (1000 ÷ 1500 HV 0.05)，厚度达 0,003 毫米。

WCC 涂层 (WC/C) 由钨和非晶碳组成。它具有优异的耐磨性和较低的摩擦系数。它是减少癫痫发作或其他粘连现象的理想选择。外观是煤灰色。

#### WCC (WC/C Tungsten Carbide)

The surface coating based on tungsten carbide WCC is in addition to STD cementation treatment described above. The WCC treatment has high hardness characteristics (1000 ÷ 1500 HV 0.05) and a thickness of 0,003mm.

The WCC coating (WC/C) is composed of tungsten carbide and amorphous carbon. It has an excellent wear resistance and a reduced friction coefficient. It is ideal for reducing seizures or other adhesive phenomena. Its color is anthracite.

#### DLC (类金刚石碳涂层)

DLC类金刚石碳涂层是在STD标准渗碳处理基础上添加类金刚石涂层。DLC 处理具超高硬度(1500 ÷ 2500 HV 0.05)，厚度达0,003mm。

DLC 涂层由碳 sp2 (石墨) 和碳 SP3 (金刚石) 组成。它具有较高耐磨性和较低的摩擦系数。它是减少或消除磨损，刮伤及粘附现象的理想选择。外观是亮黑色。

#### DLC (Diamond Like Carbon)

The surface coating carbon based DLC is in addition to STD cementation treatment described above. The DLC treatment has very high hardness characteristics (1500 ÷ 2500 HV 0.05) and a thickness of 0,003mm.

The DLC coating consists of carbon sp2 (graphite) and Carbon SP3 (diamond). It has very high wear resistance and a very low friction coefficient. It is ideal for minimizing or eliminating problems of abrasions and seizures and adhesive phenomena. Its color is shiny black.

- 定位销直径大于 > 20mm 优先选择 **STD/WCC/DLC处理**  
For locator pins with diameter > 20 mm is preferred to use the type **STD/WCC/DLC**
- 定位销直径小于 ≤ 20mm 只能选用 **NT3** 处理以保证组件的正常功能  
For locator pins with diameter ≤ 20mm the functionality of the component is only guaranteed by choosing the type **NT3**

更多信息，请联系 VEP 公司技术部门。

For more information, contact the technical department of VEP Automation.

## 电感式接近开关示意图 (代号 08157/R/C)

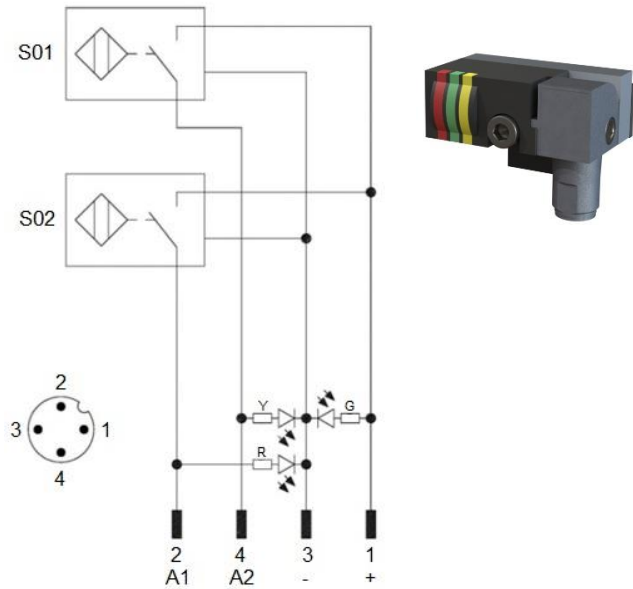
### Diagram for Inductive sensor. (cod. 08636/R/C).

#### 技术参数 (P+F):

- 输出类型: PNP
- 输入电压: 10-30 VDC;
- 最大换向电流: 200 mA;
- 电源供应: < 25 mA;
- 电压差: < 2 V
- 温度范围: -25° / 70° C.

#### Technical data (P+F):

- Output type: PNP
- Feeding voltage: 10-30 VDC;
- Max. commutating current: 200 mA;
- Power supply: < 25 mA;
- Voltage drop: < 2 V;
- Temperature range: -25° / 70° C.



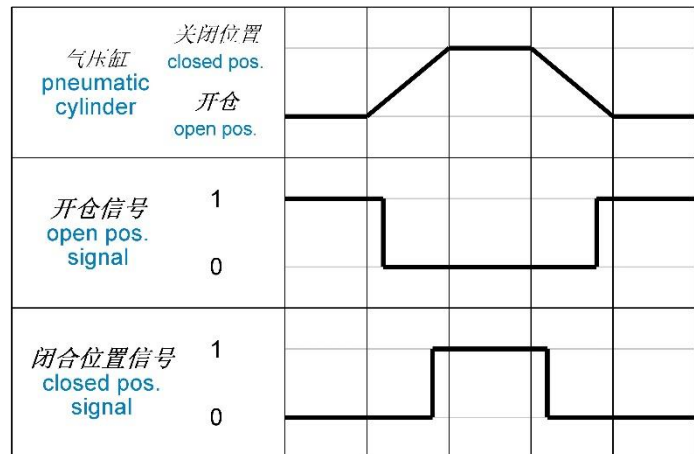
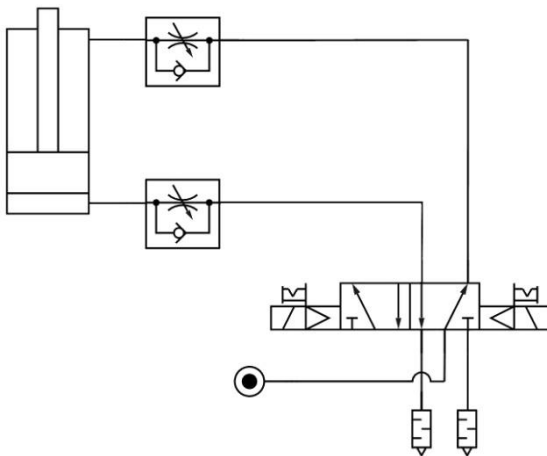
S01 = 打开信号  
S01 = opening signal  
S02 = 关闭信号  
S02 = closing signal

Y = 黄色 LED / yellow LED  
G = 绿色 LED / green LED  
R = 红色 LED / red LED

1 = 棕色系 / brown wire  
2 = 黑色线 / black wire  
3 = 蓝色线 / blue wire  
4 = 白色线 / white wire

## 气路图

### Pneumatic plant.



工作气压 Working pressure	耗气量 (5 bar) Air consumption (5 bar)
[ bar ]	[ l ]
4 - 6	~ 0,2

## 备件

### Spare parts.

配套元件 # Kit	图片 Picture	描述 Description	代号 Article
密封圈套装 Seals kit		缸径40 mm的气缸密封组件 Seal components for pneumatic cylinder bore 40 mm	SCR-DCA40G
电感式传感器 Inductive sensor		电感式接近开关 Inductive proximity switch	08636/R/C
功率放大器 Power amplifier		功率放大器带红色 LED Power amplifier red LED	3/413
传感器附件 Sensor's satellite		传感器附件 Sensor's satellite	3/447
钩子 Hook		钩子 + 滑动防焊溅保护板 Hook + flowing weld splashes protection	HK-00000*
定位销 Locator pin		定位销 Locator pin	LP-00000xxx**
缸体 Cylinder liner		铝制气缸缸体 Cylinder liner	CL-00000*

## 产品参考编号

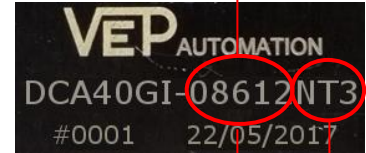
### Drawing reference number.

\* **00000** = 在产品完整代码中描述的参考编号。  
举例: **HK** - "08612"为钩子备件  
**CL** - "08612" 为铝制缸体备件

\* **00000** = reference number describe in the complete code of the device.  
Example: **HK** - "08612" for spare hook  
**CL** - "08612" for spare cylinder liner

\*\* **00000XXX** = 在产品完整代码中描述的参考编号 + 定位销表面处理工艺  
举例: **LP** - "08612NT3" 为带 NT3 表面渗氮处理的定位销

\*\* **00000XXX** = reference number describe in the complete code of the device + type of the treatment present on the locator pin.  
Example: **LP** - "08612NT3" for locator pin with NT3 treatment



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