

#### INDUSTRIAL MANUFACTURING SINCE 1923



Leaflet No. A05.1

Index & Cam Plungers



#### INDUSTRIAL MANUFACTURING SINCE 1923

#### Who we are

In the early twentieth century Rencol developed engineered plastic solutions ranging from electric car batteries and recharging stations to the plastic "Joylight" internal combustion engine.

By the 1970s our focus on components had emerged and the Rencol name became synonymous with high quality plastic knobs, handles and handwheels.

#### Today, we continue to grow, adapt and innovate:

- Our product range is extensive, industry-standard and growing.
- Our manufacturing partners are in key international locations, each chosen for their expertise, compatibility with our values and cost effectiveness.
- Our distribution network is worldwide and expanding.
- Our global supply chain has been in successful continuous operation for over a decade.

### We are here to help

Exceptional customer service is central to our company philosophy. Our customer service team, on-site engineers, product designers and supply chain experts are here to advise and assist at all stages of the purchase and fulfilment process.

#### Call or email to:

#### Visit our website to:

- Check price and availability
- Make technical queries and request product advice
- Request samples
- Place and progress your order
- Request CAD drawings

**Tel:** +44 (0) 117 916 0090 **Fax:** +44 (0) 117 982 2235

Email: sales@rencol.com Website: www.rencol.com

#### Office opening hours:

Monday to Friday 8.30 AM to 5.00 PM (GMT)

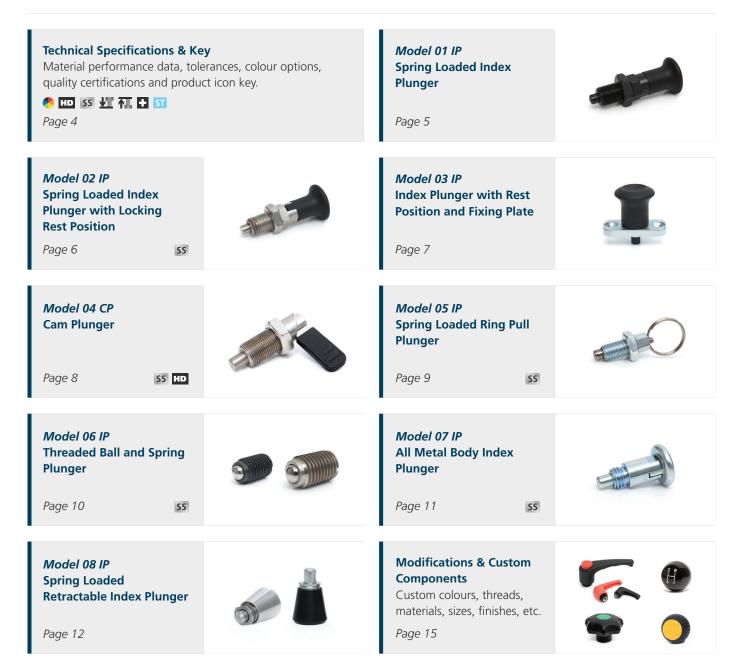
- Request a quotation
- View product specifications and MOQs
- Find your local distributor
- Request CAD drawings
- Request a catalogue

manufacturing capabilities, engineering expertise, global supply chain and market knowledge allow us to develop cost-effective product solutions that exceed our customers' expectations.

Rencol's flexible

Nick Dowden, 30 years with Rencol. Customer Service Manager

## Index



# **Technical Specifications & Key**

#### Thermoplastic

Material: Nylon 6 + Polypropylene (PP) Working temperatures: Nylon up to 130°C peak and 80°C continuous use. Polypropylene maximium 70°C. Resistant to: alcohols, esters, aromatic hydrocarbons, dilute alkalis, ketones, oils, fuels, grease, fats, weatherability (including UV light - excludes coloured Nylon) and salt water. With PP also avoid halogenated hydrocarbons and flammable materials (can hold static charge).

#### **Reinforced Thermoplastic**

Material: Nylon 6 glass filled

Working temperature: up to 180°C peak, 110°C continuous use. Resistant to: alcohols, esters, aromatic hydrocarbons, dilute alkalis, ketones, oils, fuels, grease, fats, weatherability (including UV light) and salt water.

#### Duroplast

Material: Phenolic Based Duroplast (PF)

Working temperature: -30°C to 160°C

Resistant to: diluted mineral acids, alcohols, chlorinated hydrocarbons, aromatic hydrocarbons, detergents, grease, oils, weatherability (including UV light). Avoid high pressure or high impact loads (can shatter).

#### **Soft-Touch Mouldings**

Material: Polypropylene substrate, TPE over-mould. Rencol has standard parts already available in this design, used particularly extensively in both industrial and special needs market products.

#### Brass

Material: BS2874 CZ121. Especially recommended for any materials likely to have continued exposure to temperatures below -30°C, where most steel grades become brittle. Also used as a marine grade material when nickel plated.

#### Zinc Plated Steel

Material: EN1A leaded-bright zinc passivated.

#### **Stainless Steel**

Material: Standard grade is 304. For medical, catering or marine use recommended grade is 316 - has high chloride resistance.

#### Aluminium

Grades are 6061 and A380. Others available on request.

#### Colours

Colour options include black, red, yellow, green, blue, white and grey. Other colours are available on request. If you would like to see the colours before ordering, samples can be provided free of charge.

#### **Thread Depths**

Wherever possible thread depths are a minimum of 1.5 x the diameter of the thread.

#### Tolerances

In general, our products are produced to the following tolerances: Bore sizes:  $\pm$  0.1mm (0.004in) Outside dimensions:  $\pm$  0.5mm (0.020in) Male thread length:  $\pm$  1mm (0.040in)

#### Key

- Scolour options RAL colours on request.
- **HD Heavy duty** Particularily hard wearing item.
- **Stainless steel** Partly or totally stainless steel.
- **Fixing from above**
- **Fixing from below**
- Multi component build Assembly available.
- **Soft touch** TPE over mould. Oil resistant.



Rencol Components is **ISO 9001:2008 Certified** Our components are **REACH & RoHS Compliant** 

Rencol

#### **Knob** material

High impact resistant thermoplastic

#### Knob finish

Matt

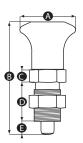
**Body material** Blackened steel

**Standard colour** Black knob

#### Options

Available with or without a 90° locking rest position.





| Part No. | A  | В  | с | D  | E | Thread<br>size | Plunger<br>diameter<br>(mm) | Rest<br>position |
|----------|----|----|---|----|---|----------------|-----------------------------|------------------|
| 125425   | 21 | 45 | 5 | 17 | 5 | M10x1.0        | 5                           | No               |
| 12672P   | 21 | 51 | 5 | 17 | 5 | M10x1.0        | 5                           | No               |
| 11831Y   | 25 | 45 | 5 | 10 | 6 | M12x1.5        | 6                           | No               |
| 12673W   | 25 | 61 | 6 | 20 | 6 | M12x1.5        | 6                           | No               |
| 11833Q   | 31 | 54 | 6 | 12 | 8 | M16x1.5        | 8                           | No               |
| 126745   | 31 | 76 | 8 | 26 | 7 | M16x1.5        | 8                           | No               |
| 11832U   | 25 | 45 | 5 | 10 | 6 | M12x1.5        | 6                           | Yes              |
| 11834X   | 31 | 54 | 6 | 12 | 8 | M16x1.5        | 8                           | Yes              |



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#### **Knob material**

High impact resistant thermoplastic

#### Knob finish

Matt

#### **Body material**

Blackened steel or stainless steel

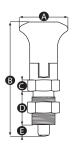
#### Standard colour

Black knob

#### Options

Comes as standard with 90° locking rest position in plunger body.





| Part No. | A  | В  | С | D  | E | Thread<br>size | Plunger<br>diameter<br>(mm) | Body material   |
|----------|----|----|---|----|---|----------------|-----------------------------|-----------------|
| 11817Z   | 21 | 51 | 5 | 17 | 5 | M10x1.0        | 5                           | Blackened steel |
| 11821U   | 25 | 61 | 6 | 20 | 6 | M12x1.5        | 6                           | Blackened steel |
| 11825P   | 31 | 76 | 8 | 26 | 7 | M16x1.5        | 8                           | Blackened steel |
| 11818V   | 21 | 51 | 5 | 17 | 5 | M10x1.0        | 5                           | Stainless steel |
| 11822Q   | 25 | 61 | 6 | 20 | 6 | M12x1.5        | 6                           | Stainless steel |
| 11826W   | 31 | 76 | 8 | 26 | 7 | M16x1.5        | 8                           | Stainless steel |



#### **Knob** material

High impact resistant thermoplastic

**Knob finish** Matt

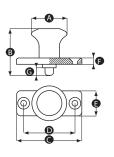
**Fixing plate material** Zinc plated diecast steel

**Standard colour** Black knob

#### Options

Available with or without a 90° rest position.





| Part No. | Α  | В  | C  | D  | E  | F | G | Plunger<br>diameter<br>(mm) | Rest<br>position |
|----------|----|----|----|----|----|---|---|-----------------------------|------------------|
| 11819R   | 25 | 37 | 40 | 30 | 18 | 5 | 6 | 6                           | No               |
| 11823X   | 31 | 44 | 46 | 34 | 20 | 6 | 8 | 8                           | No               |
| 11820Y   | 25 | 37 | 40 | 30 | 18 | 5 | 6 | 6                           | Yes              |
| 11824T   | 31 | 44 | 46 | 34 | 20 | 6 | 8 | 8                           | Yes              |

# Model 04 CP Cam Plunger

#### SS HD

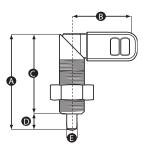
#### **Body** material

Blackened steel or stainless steel

#### Includes

Comes as standard with locking nut. Stainless steel body comes complete with black plastic cap, burnished steel without cap.





| Part No. | A  | В  | с  | D  | E  | Thread<br>size | Plunger<br>diameter<br>(mm) | Body<br>material | Includes<br>cap |
|----------|----|----|----|----|----|----------------|-----------------------------|------------------|-----------------|
| 15714R   | 47 | 32 | 39 | 8  | 8  | M12x1.5        | 8                           | Blackened steel  | Yes             |
| 11788U   | 69 | 37 | 36 | 12 | 8  | M20x1.5        | 8                           | Blackened steel  | Yes             |
| 11786R   | 69 | 37 | 36 | 12 | 10 | M20x1.5        | 10                          | Blackened steel  | Yes             |
| 11787Y   | 69 | 37 | 36 | 12 | 12 | M20x1.5        | 12                          | Blackened steel  | Yes             |
| 117945   | 69 | 52 | 36 | 12 | 8  | M20x1.5        | 8                           | Stainless steel  | No              |
| 11795Z   | 69 | 52 | 36 | 12 | 10 | M20x1.5        | 10                          | Stainless steel  | No              |
| 11796V   | 69 | 52 | 36 | 12 | 12 | M20x1.5        | 12                          | Stainless steel  | No              |



# Model 05 IP | Spring Loaded Ring Pull Plunger



#### SS

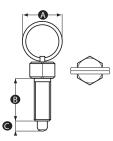
#### Material

Zinc plated housing with stainless steel pin

#### Includes

Comes as standard with lift ring and locking nut.





| Part No. | A  | В  | c | Thread size | Plunger<br>diameter<br>(mm) |
|----------|----|----|---|-------------|-----------------------------|
| 118275   | 14 | 12 | 4 | M6          | 4                           |
| 11828Z   | 18 | 16 | 5 | M8          | 5                           |
| 11829V   | 24 | 20 | 6 | M10         | 6                           |
| 11830R   | 30 | 24 | 8 | M12         | 8                           |

# Model 06 IP | Threaded Ball and Spring Plunger



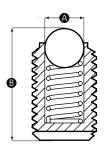
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**Body material** Blackened steel or stainless steel

**Ball material** Bearing steel or stainless steel

**Spring material** Spring steel or stainless steel





| Part No. | А   | В  | Thread size | Body material   | Ball material   | Spring material |
|----------|-----|----|-------------|-----------------|-----------------|-----------------|
| 12681X   | 1.5 | 8  | M3          | Blackened steel | Bearing steel   | Spring steel    |
| 12682T   | 2.5 | 10 | M4          | Blackened steel | Bearing steel   | Spring steel    |
| 12683P   | 3   | 13 | M5          | Blackened steel | Bearing steel   | Spring steel    |
| 12684W   | 3.5 | 15 | M6          | Blackened steel | Bearing steel   | Spring steel    |
| 126855   | 5   | 18 | M8          | Blackened steel | Bearing steel   | Spring steel    |
| 12686Z   | 6   | 21 | M10         | Blackened steel | Bearing steel   | Spring steel    |
| 12687V   | 8   | 25 | M12         | Blackened steel | Bearing steel   | Spring steel    |
| 12688R   | 10  | 28 | M16         | Blackened steel | Bearing steel   | Spring steel    |
| 12689Y   | 12  | 35 | M20         | Blackened steel | Bearing steel   | Spring steel    |
| 12690U   | 1.5 | 8  | M3          | Stainless Steel | Stainless steel | Stainless Steel |
| 12691Q   | 2.5 | 10 | M4          | Stainless Steel | Stainless steel | Stainless Steel |
| 12692X   | 3   | 13 | M5          | Stainless Steel | Stainless steel | Stainless Steel |
| 12693T   | 3.5 | 15 | M6          | Stainless Steel | Stainless steel | Stainless Steel |
| 12694P   | 5   | 18 | M8          | Stainless Steel | Stainless steel | Stainless Steel |
| 12695W   | 6   | 21 | M10         | Stainless Steel | Stainless steel | Stainless Steel |
| 126965   | 8   | 25 | M12         | Stainless Steel | Stainless steel | Stainless Steel |
| 12697Z   | 10  | 28 | M16         | Stainless Steel | Stainless steel | Stainless Steel |
| 12698V   | 12  | 35 | M20         | Stainless Steel | Stainless steel | Stainless Steel |

# Model 07 IP | All Metal Body Index Plunger



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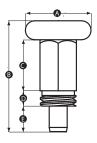
#### Material

Zinc plated or stainless steel body, pin and spring. Zinc plated diecast head.

#### Note

M12 options do not have hexagonal body as per image - M12 options have 12mm A/F flats to accept 12mm spanner size.





| Part No. | A  | В  | С  | D | E | Thread<br>size | Plunger<br>diameter<br>(mm) | Body material     | Rest<br>position |
|----------|----|----|----|---|---|----------------|-----------------------------|-------------------|------------------|
| 152165   | 18 | 30 | 14 | 6 | 7 | M10x1.0        | 6                           | Zinc plated steel | No               |
| 15215W   | 18 | 30 | 14 | 6 | 7 | M10x1.0        | 6                           | Zinc plated steel | Yes              |
| 15214P   | 24 | 39 | 19 | 8 | 7 | M12x1.75       | 7                           | Zinc plated steel | No               |
| 15213T   | 24 | 39 | 19 | 8 | 7 | M12x1.75       | 7                           | Zinc plated steel | Yes              |
| 15217Z   | 18 | 30 | 14 | 6 | 7 | M10x1.0        | 6                           | Stainless steel   | No               |
| 15218V   | 18 | 30 | 14 | 6 | 7 | M10x1.0        | 6                           | Stainless steel   | Yes              |



#### Material

Aluminium body, steel shell (flange), steel plunger pin and steel spring

#### Finish

Bright chrome or black powder coated





| Part No. | A  | В  | C  | D | E | Thread<br>size | Plunger<br>diameter<br>(mm) | Body material                 | Rest<br>position |
|----------|----|----|----|---|---|----------------|-----------------------------|-------------------------------|------------------|
| 15697T   | 14 | 20 | 12 | 2 | 7 | M8             | 4.7                         | Aluminium                     | Yes              |
| 15698P   | 14 | 20 | 12 | 2 | 7 | M8             | 4.7                         | Black powder coated aluminium | Yes              |
| 15222Q   | 17 | 26 | 17 | 2 | 8 | M10            | 6.2                         | Aluminium                     | Yes              |
| 15223X   | 17 | 26 | 17 | 2 | 8 | M10            | 6.2                         | Black powder coated aluminium | Yes              |

## Notes



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## Notes



# **Modifications & Custom Components**

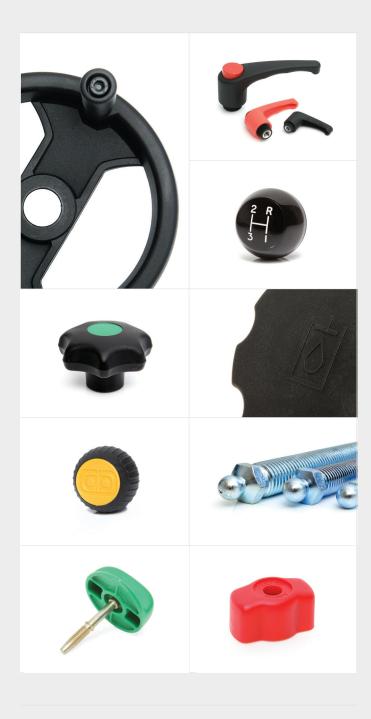
Diverse manufacturing capabilities and experienced on-site technical personnel allows Rencol Components to offer a wide range of product modifications and custom product solutions. We regularly adapt standard components or manufacture custom products to suit our customers' specific requirements. New tooling can be produced quickly and cost effectively with a typical MOQ of just 500 pieces.

#### Manufacturing Processes

Plastic & Metal Injection Moulding / Die casting / Machining / Forging / Stamping / Rapid Prototyping / 3D Printing

#### **Modifications & Custom Options**

Thread size & length / RAL Colours / Engraving / Pad-Printing & Screen-Printing / TPE Over mould / Materials / Finishes / Logos







#### Head Office (UK):

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> Email: sales@rencol.com Website: www.rencol.com

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