

Rencol

COMPONENTS

INDUSTRIAL MANUFACTURING SINCE 1923



Rencol

COMPONENTS

INDUSTRIAL MANUFACTURING
SINCE 1923

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

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:

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

Visit our website to:

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

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)



Nick Dowden, 30 years with Rencol.
Customer Service Manager

Index

Technical Specifications & Key

Material performance data, tolerances, colour options, quality certifications and product icon key.



Page 4

Model 01 HI Plastic Adjustable Tension Hinge

Page 6



Model 02 HI Plastic Hinge

Page 7



Model 03 HI Plastic Hinge

Page 8



Model 04 HI Polished Metal Hinge with Quick Release

Page 9



Model 05 HI Polished Metal Hinge with Quick Release

Page 10



Model 06 HI Die Cast Aluminium Positioning Hinge

Page 11



Model 07 HI Die Cast Zinc Hinge

Page 12



Model 08 HI Nylon In-line Removable Lift-off Hinge

Page 13



Model 09 HI Nylon Offset Removable Lift-off Hinge

Page 14-15



Model 10 HI Die Cast Zinc Removable In-line Lift-off Hinge

Page 16



Model 11 HI Die Cast Zinc Removable Offset Lift-off Hinge

Page 17-18



Model 12 HI Die Cast Zinc Adjustable Removable In-Line Lift-off Hinge

Page 19



Model 13 HI Free Swinging or Detent Plastic Hinge with Caps

Page 20



Model 14 HI
Free Swinging or Detent
Plastic Hinge with Caps

Page 21-22



Modifications & Custom
Components

Custom colours, threads,
materials, sizes, finishes, etc.

Page 23



Technical Specifications & Key

Thermoplastic

Material: Nylon 6 + Polypropylene (PP)

Working temperatures: Nylon up to 130°C peak and 80°C continuous use. Polypropylene maximum 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: $\pm 0.1\text{mm}$ (0.004in)

Outside dimensions: $\pm 0.5\text{mm}$ (0.020in)

Male thread length: $\pm 1\text{mm}$ (0.040in)

Tightening Torque

All tightening torques are to Standard 0.5T, which assumes a metal screw fixed into a non-metallic substrate. If the mode of employment is metal to metal assume the tightening force should be double this value.

Mounting Hardware








Screw shear values are calculated on the basis of the largest metric screw which will fit the bore.

Load Values

Axial loads are parallel to the hinge pin. Radial loads are perpendicular to it.

All values are approximate and for guidance only.

Key

-  **Colour options** - RAL colours on request.
-  **Heavy duty** - Particularly 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**



Material

Acetal polymer (POM) with stainless steel 304 countersunk screw.

Pin material

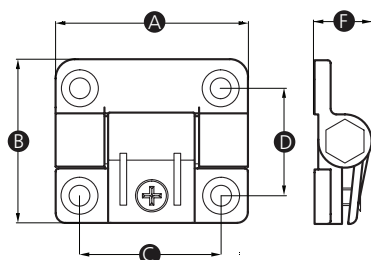
Polycarbonate

Colour

Black or white. Other RAL colours available (MOQs apply).

Function

The friction of this hinge can be adjusted by tightening or loosening the screw, giving you full flexibility and ease of use.



Part No.	A	B	C	D	E	F	Hole size (mm)	Colour
12824X	43	37	32	25	-	12	5.2	Black
10896Y	43	37	32	25	-	12	5.2	White
15058X	65	56	48	36	-	19	5.5	Black
15282S	65	56	48	36	-	19	5.5	White

Part No.	Hinge torque (Nm)	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
12824X	0.7	300	575	1.5	0.28
10896Y	0.7	300	575	1.5	0.28
15058X	0.7	350	690	2.5	0.5
15282S	0.7	350	690	2.5	0.5


Material

High impact resistant thermoplastic

Pin material

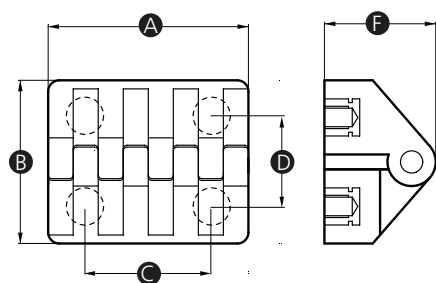
Zinc plated steel

Colour

Black. Other RAL colours available (MOQs apply).

Thread material

Brass



Part No.	A	B	C	D	E	F	Thread size
14277X	30	35	25	15	-	25	M5
14278T	54	44	30	23	-	29	M6

Part No.	Hinge torque (Nm)	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
14277X	0.4	300	530	1.5	0.22
14278T	0.2	800	1550	2.5	0.5


Material

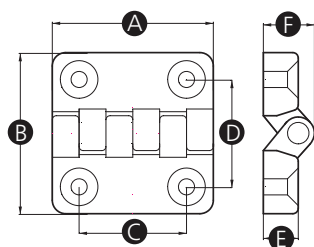
High impact resistant thermoplastic

Pin material

Zinc plated steel

Colour

Black. Other RAL colours available (MOQs apply).



Part No.	A	B	C	D	E	F	Bore size (mm)
14279P	48	48	30	30	11	16	7
14280W	64	64	40	40	13	19	7

Part No.	Hinge torque (Nm)	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
14279P	0.3	280	580	2.5	0.5
14280W	0.3	800	1400	2.5	0.5



Material

Stainless steel 304

Pin material

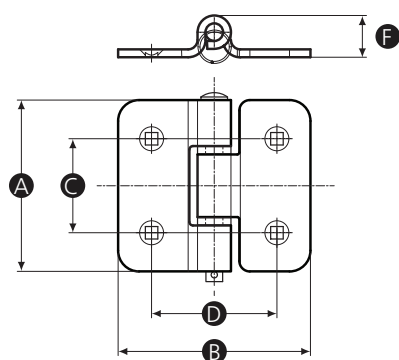
Stainless steel 304 pin and nylon washers

Finish

Electrolytic polish

Function

Quick release pin allows lateral separation of hinge leaves.



Part No.	A	B	C	D	E	F	Square bore (mm)
15431Q	82	92	45	60	-	20	6

Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15431Q	400	750	2.5	0.5



Material

Stainless steel 304

Pin material

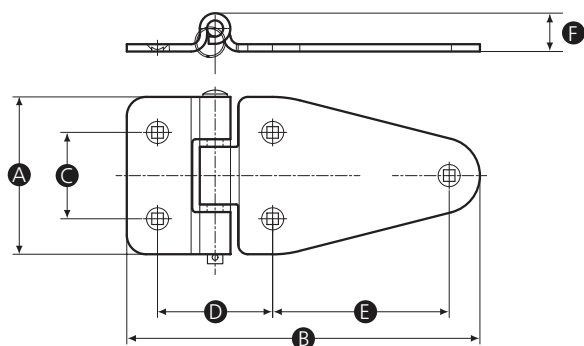
Stainless steel 304 pin and nylon washers

Finish

Electrolytic polish

Function

Quick release pin allows lateral separation of hinge leaves.



Part No.	A	B	C	D	E	F	Square bore (mm)
15432X	82	184	45	60	92	20	6

Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15432X	400	750	2.5	0.5



Material

Die cast aluminium

Pin material

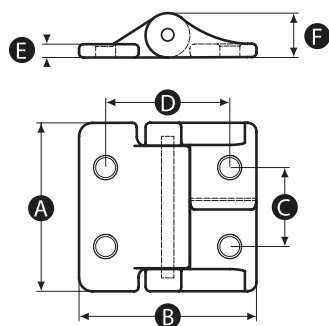
Stainless steel - 304

Finish

Powder coated

Colour

Black



Part No.	A	B	C	D	E	F	Bore size (mm)
15744S	38	40	18	28	3	10	4.5

Part No.	Hinge torque (Nm)	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15744S	0.4	1100	2100	1.5	0.28


Material

Die cast zinc

Pin material

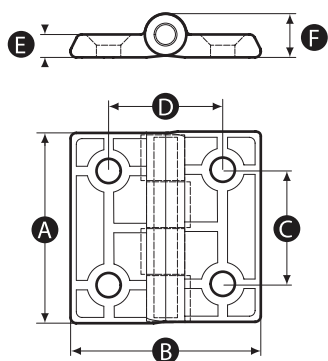
Stainless steel - 316

Finish

Powder coated

Colour

Black



Part No.	A	B	C	D	E	F	Bore size (mm)
15765W	40	40	25	25	5	10	5.2
15750Q	50	50	30	30	6	12	6.4

Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15765W	1250	2100	1.5	0.28
15750Q	1300	2200	2.5	0.5



Material

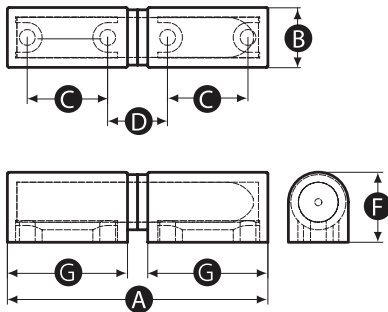
High impact resistant thermoplastic

Finish

Matt

Colour

Black



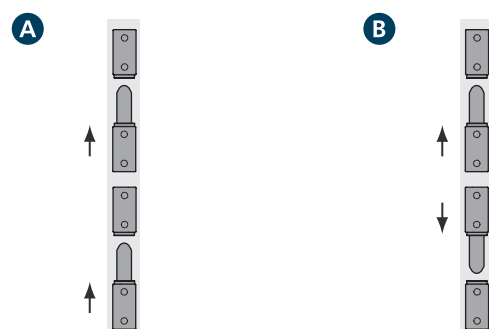
Part No.	A	B	C	D	E	F	G	Thread size	Min. thread depth
15745Z	83	19	25.5	19	-	22	38	M6	6

Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15745Z	220	640	2.5	0.5

Mounting options

- A** Install hinges with matching vertical orientation to enable quick, easy and safe removal of doors without the use of tools.

B Install hinges with opposing vertical orientation to enable doors to be permanently mounted.




Material

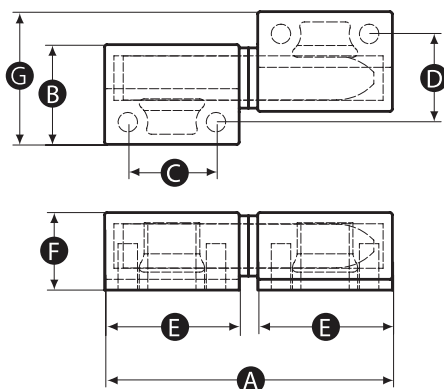
High impact resistant thermoplastic

Finish

Matt

Colour

Black



Part No.	A	B	C	D	E	F	G	Thread size	Min. thread depth	Chirality
15746V	62	22	19	19	29	17	29	M5	10	Left Handed
15748Y	62	22	19	19	29	17	29	M5	10	Right Handed
15747R	83	28	25.5	25.5	38	22	38	M6	10	Left Handed
15749U	83	28	25.5	25.5	38	22	38	M6	10	Right Handed

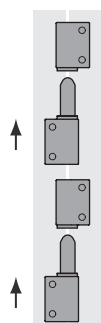
Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15746V	170	490	1.5	0.28
15748Y	170	490	1.5	0.28
15747R	220	640	2.5	0.5
15749U	220	640	2.5	0.5

Continued on facing page »

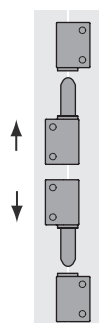
« Continued from facing page

Mounting options

- A** Install hinges with matching vertical orientation to enable quick, easy and safe removal of doors without the use of tools.

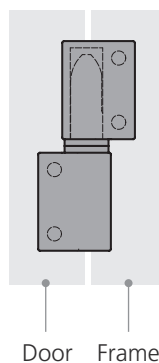


- B** Install hinges with opposing vertical orientation to enable doors to be permanently mounted.

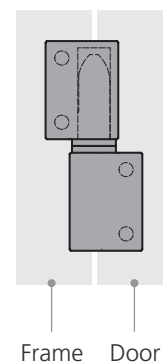


Chirality

Left-Handed



Right-Handed





Material

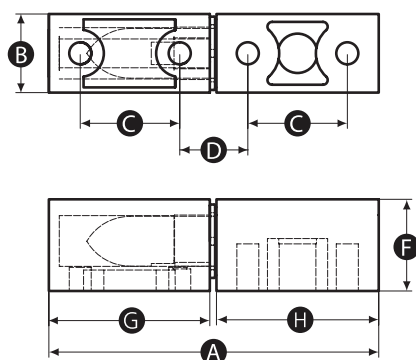
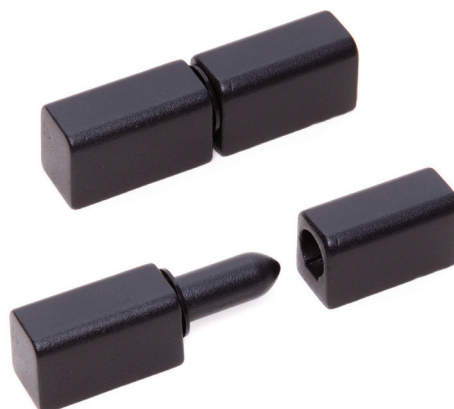
Die cast zinc

Finish

Powder coated

Colour

Black



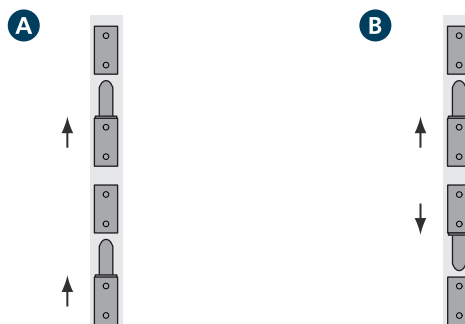
Part No.	A	B	C	D	E	F	G	H	Thread size	Min. thread depth
15766S	63	15	19	13	-	17.5	30.75	31	M5	4.5

Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15766S	400	1150	1.5	0.28

Mounting options

- A** Install hinges with matching vertical orientation to enable quick, easy and safe removal of doors without the use of tools.

B Install hinges with opposing vertical orientation to enable doors to be permanently mounted.




Material

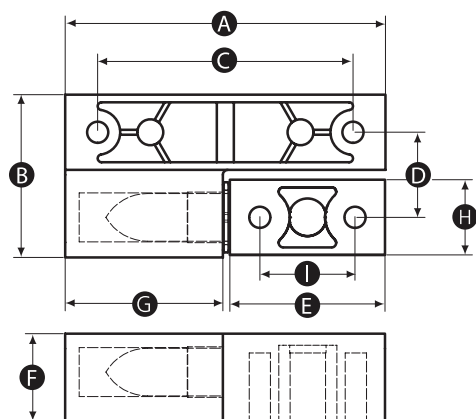
Die cast zinc

Finish

Powder coated

Colour

Black



Part No.	A	B	C	D	E	F	G	H	I	Thread size	Min. thread depth	Chirality
15767Z	64	32.5	51	17	31	17.5	31.5	15	19	M5	15	Left-Handed
15768V	64	32.5	51	17	31	17.5	31.5	15	19	M5	15	Right-Handed

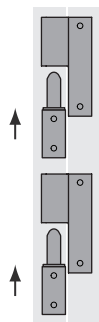
Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15767Z	400	1130	1.5	0.28
15768V	400	1130	1.5	0.28

Continued overleaf »

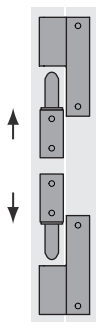
« Continued from overleaf

Mounting options

- A** Install hinges with matching vertical orientation to enable quick, easy and safe removal of doors without the use of tools.

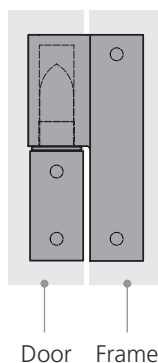


- B** Install hinges with opposing vertical orientation to enable doors to be permanently mounted.

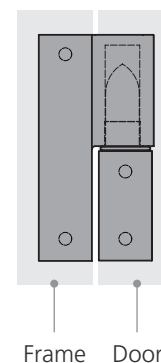


Chirality

Left-Handed



Right-Handed





Material

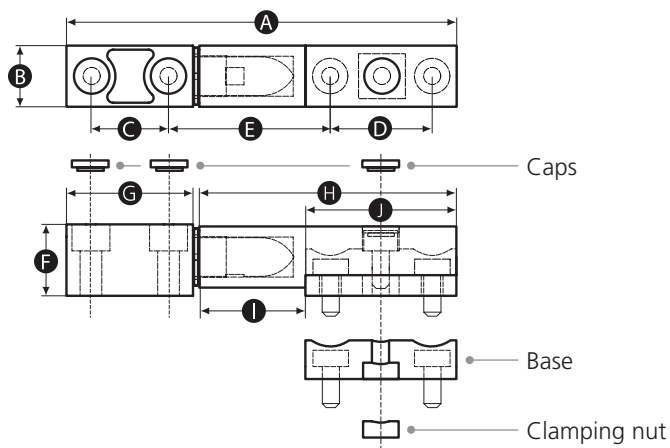
Die cast zinc

Finish

Powder coated

Colour

Black

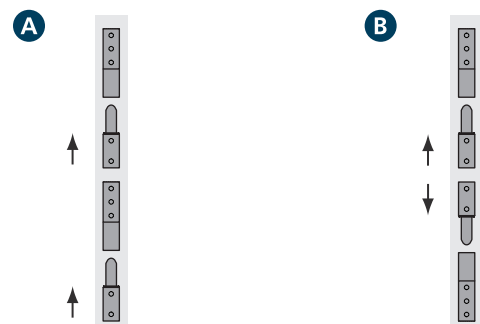


Part No.	A	B	C	D	E	F	G	H	I	J	Thread size	Min. thread depth
15769R	96	15	19	25	40	17.5	31	63	26	37	M5	11

Part No.	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15769R	510	1480	1.5	0.28

Mounting options

- A** Install hinges with matching vertical orientation to enable quick, easy and safe removal of doors without the use of tools.
- B** Install hinges with opposing vertical orientation to enable doors to be permanently mounted.




Material

High impact resistant thermoplastic

Finish

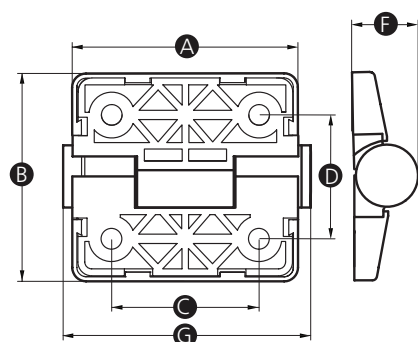
Matt

Colour

Black

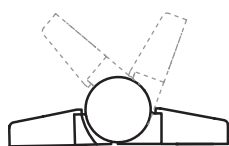
Function

Multiple detents allow doors to be held at three predetermined angles. Secure, snap-on caps fully conceal mounting screws.



Part No.	A	B	C	D	E	F	G	Hole size	Detent	Detent angle
15792Y	49	45	32	27	-	14	54	4.5	None	-
15933V	49	45	32	27	-	14	54	4.5	Triple	0, 120, 170

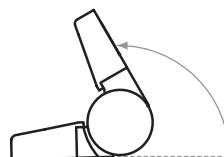
Part No.	Hinge positioning torque (Nm)	Screw	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15792Y	-	M4	150	150	0.75	0.12
15933V	0.8	M4	150	150	0.75	0.12

Detent angle


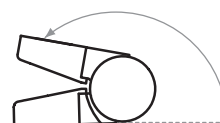
No detent / Free swinging



0°



120°



170°


Material

High impact resistant thermoplastic

Finish

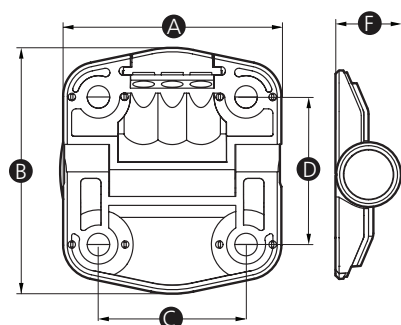
Matt

Colour

Black

Function

Select one of the available detent options to allow doors to be held open at a predetermined opening angle. Secure, snap-on caps fully conceal mounting screws.



Snap-on caps

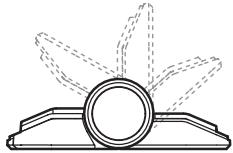
Part No.	A	B	C	D	E	F	Hole size	Detent	Detent angle
15788S	51	57	34	34	-	18	5.2	None	-
15789Z	51	57	34	34	-	18	5.2	Yes	80
15790V	51	57	34	34	-	18	5.2	Yes	115
15791R	51	57	34	34	-	18	5.2	Yes	150

Part No.	Hinge positioning torque (Nm)	Screw	Radial load (N)	Axial load (N)	Recommended tightening torque (Nm)	Approx. shear force per screw (kN)
15788S	-	M5	450	450	1.5	0.28
15789Z	1.2	M5	450	450	1.5	0.28
15790V	1.2	M5	450	450	1.5	0.28
15791R	1.2	M5	450	450	1.5	0.28

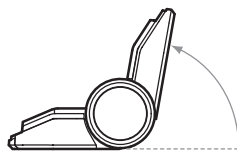
Continued overleaf »

« Continued from overleaf

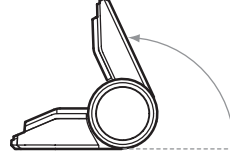
Detent angle



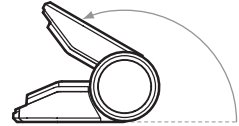
No detent / Free swinging



80°



115°



150°

Modifications & Custom Components

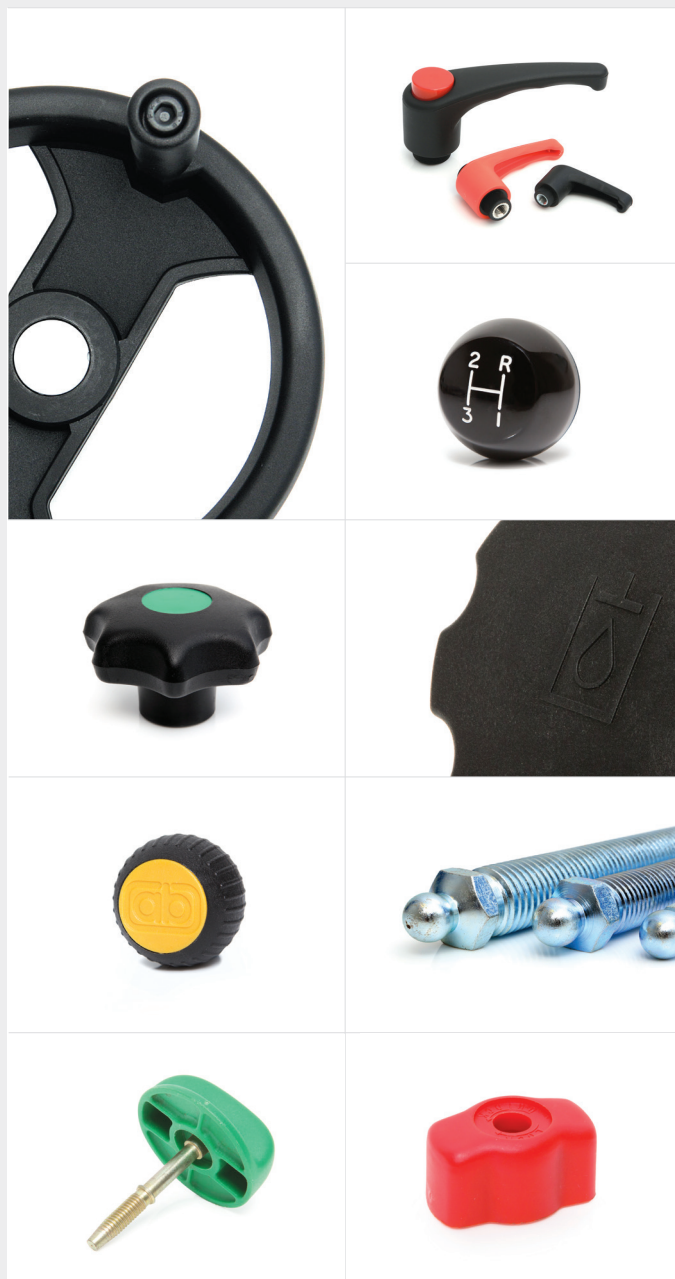
Diverse manufacturing capabilities and experienced on-site technical personnel allow Rencol Components to offer a wide range of product modifications and custom product solutions. We regularly adapt standard components or manufacture custom products to suit our customers' specific requirements. New tooling 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





Rencol COMPONENTS

UK Head Office:

Unit 2 Avonbridge Trading Estate
Atlantic Road
Avonmouth
Bristol BS11 9QD
United Kingdom

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)