

efficiency vs safety ...
Why choose ?



**PORTABLE
VALVE
ACTUATORS
CATALOGUE**



moddec
portable valve actuators

WELCOME TO THE



modec products have been used for more than 30 years for many heavy duty applications, particularly in the water, oil & gas and power industries.

Our team's technical expertise and commercial flexibility enable us to develop and provide innovative, robust and powerful solutions such as air motors, portable valve actuators, tapping machines and nut runners in a short and reliable time frame.

Carefully assembled by our experienced workers in our factory based in Valence (South East of France), made of parts designed by our engineers and manufactured by thoroughly selected French and European suppliers, our products offer the highest quality standards.

Our technical team is at your disposal for any definition, design and realization of solution that will meet your specific needs and requirements.

Welcome to a world of innovation, expertise and flexibility.

Welcome to the modec world !



Plug & Play



Comfort



Safety



Anywhere



Efficiency



ATEX



➤ A comprehensive
and modular range

1 CHOOSE YOUR POWER SUPPLY

PNEUMATIC



No heat, spark or smoke
ATEX certified
High torque and speed
Light & compact
Jam & blockage resistant

Maximum torque :
1000 Nm (740 lb.ft)

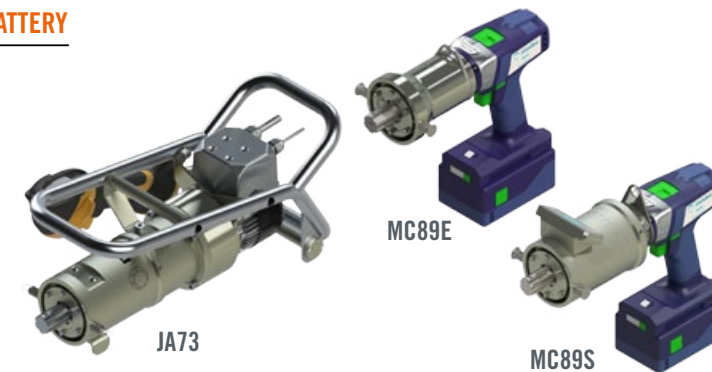
PETROL



Unlimited autonomy
Ideal for remote environments

Maximum torque :
1000 Nm (740 lb.ft)

BATTERY



Excellent autonomy
Smoke free
Easy implementation
Integrated electronic torque
& power limiter

Maximum torque :
1000 Nm (740 lb.ft)

KIT H₂O



The perfect kits for underground
water distribution valves.
Easy transport. Simple setup.
Safe operation.

Maximum torque :
850 Nm (630 lb.ft)

1 CHOOSE YOUR OPTIONS AND ACCESSORIES

OPTIONS

P.22 REVOLUTION COUNTER

Digital display
Two ways rev. counter + cumulated speed.
Memory



P.22 TORQUE LIMITER

Mechanical torque limiter, manual re-engage
Adjustable torque limit



ACCESSORIES

P.29 RIGHT ANGLE

RA30
The right angle head connects directly on any portable actuators and allows an optimal positioning for operators as well as a better access to the valves handwheels / output shafts. It is suitable for high torques, up to 600 Nm (442 lb.ft)



P.28 BANJO

(for rising stem valves)

STANDARD DUTY BANJO HEAD:
Multiplies the torque and divides the speed by 4



HEAVY DUTY BANJO HEAD:
Multiplies the torque and divides the speed by 3



P.29 TORQUE MULTIPLIER

Multiplies the torque and divides the speed by 3,71.
Very lightweight and compact



P.26 MODEC CONNECT SMART SENSOR

Collects data : torque, speed, number of revolutions, location ... For simple valve monitoring



P.32 TRANSPORTATION AND STORAGE CASES & BAGS

Protection case for transport and storage
Convenient and sturdy with foam prints inside



BATTERIES

Long-life battery
Backpack



P.30-31 AIR TREATMENT AND SAFETY UNITS

For HL83 pneumatic portable actuators



2 CHOOSE YOUR ADAPTOR

P.33 STANDARD FIXED FINGERS ADAPTORS



P.34 SELF-ADJUSTING AND SELF-CENTERING FINGERS ADAPTORS



P.35 SPOKE ADAPTORS FOR FLAT HANDWHEELS



P.36 SPOKE ADAPTORS FOR TAPERED HANDWHEELS



P.37 FIXED UNIVERSAL ADAPTORS

(To be installed on the hand wheel)



P.39 SQUARE DRIVES & STANDARD SOCKETS



P.39 EXTENSION BARS AND UNIVERSAL JOINT

200 / 400 / 600 mm
(7.9 / 15.7 / 23.6 in)

Telescopic « Tee-key » for buried valve
Universal joints available



3 CHOOSE YOUR TORQUE REACTION MANAGEMENT SYSTEM

P.41 TORQUE REACTION ARM

(simple or double)



P.42 TORQUE REACTION FINGER



P.42 ARTICULATED REACTION ARMS



P.43 TELESCOPIC BIPOD

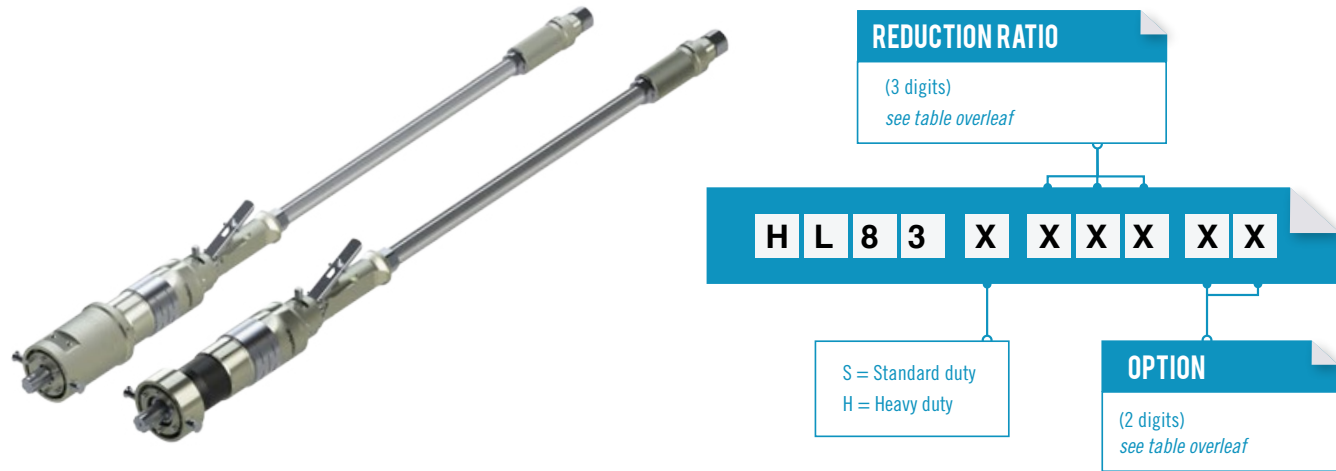


P.43 MAKE TO ORDER SPECIAL FLANGES

(to be installed on the valve)



CUSTOM DESIGN



modec pneumatic portable valve actuators HL83 are the most powerful. They offer a wide choice in terms of power and can be used in all environments, even the very difficult ones.

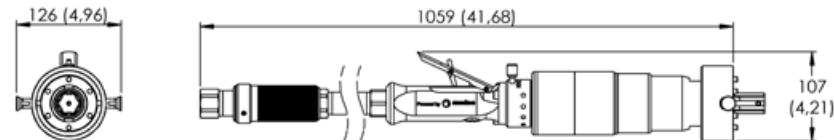
They come with the ATEX II 2 GD c IIC T6 to T4 certification (except when equipped with the revolution counter).

The maximum torque can be set by simply adjusting air supply pressure : No risk for your valves.

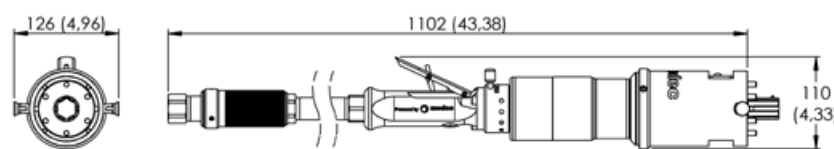
LAYOUT

| LAYOUT | Weight (kg (lb)) |
|--------|------------------|
| HL83S | 6,5 (14,3) |
| HL83H | 8,4 (18,5) |

HL83S



HL83H



| Watt → Horse power | Newton meter → Foot pound | Millimeter → inch | Kv → Cv |
|---------------------------|--|--------------------|----------------|
| W x 0,001341 = cv | Nm x 0,7376 = lb.ft | mm x 0,03937 = in | Kv x 0,07 = Cv |
| Bar → pound / square inch | Normo liter / minute → Standard cube feet / minute | Kilogramme → Pound | |
| Bar x 14,5 = psi | NL / min x 0,03531 = scfm | Kg x 2,205 = lb | |

OPTIONS AND ACCESSORIES

| OPTIONS (page 22) | |
|-----------------------------|-------|
| Digital revolution counter* | ▶ |
| CODE | 00 02 |

! Check the technical data sheet to see which options and accessories are capable of withstanding the torque created by the actuator !

*digital revolution counter can't be ATEX certified.

Not all options are available for all models. See below for availability.

| ACCESSORIES | Page |
|-------------------------|-------|
| Drive head | 28-29 |
| Adaptors and interfaces | 33-40 |
| Torque reaction systems | 41-43 |
| Air management | 30-31 |
| Other accessories | 32 |

CONNECTION AND LUBRICATION

| CONNECTION & LUBRICATION | Air consumption at 6,2 bars (scfm) | Connection | Minimum Ø for fittings mm (in) | Minimum Ø for pipes mm (in) | Lubrication (Drops/min) | FRL unit | SAT Box |
|--------------------------|------------------------------------|------------|--------------------------------|-----------------------------|-------------------------|----------|---------|
| HL83S/H | 1800 (64) | G 3/4 | 8,2 (0,32) | 12 (0,47) | 6 | AC107 | AC118 |

Make sure you use a good quality FRL unit (Filtration, Pressure Regulation and Lubrication), capable of filtering air at 40µm.

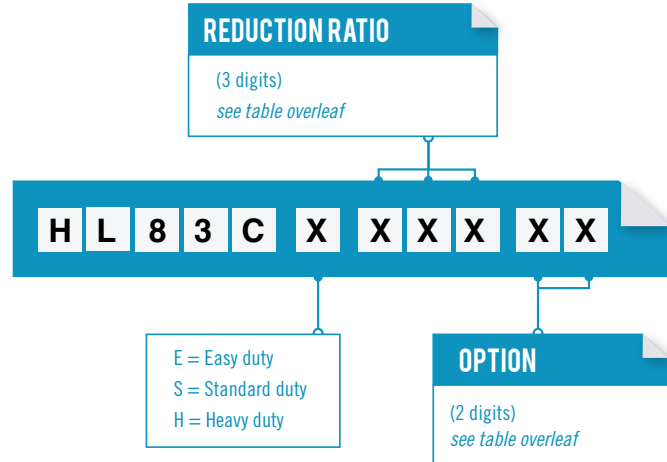
PERFORMANCE

| Straight | Free speed (rpm) | | | Max torque (Nm (lb.ft)) | | | Options available |
|------------|------------------|-----------------|-------------------|-------------------------|-----------------|-------------------|-------------------|
| | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 02 |
| HL83S-035 | 230 | 250 | 270 | 100 (74) | 120 (89) | 145 (107) | ▶ |
| HL83S-060 | 130 | 140 | 150 | 170 (125) | 200 (150) | 250 (180) | ▶ |
| HL83H-111 | 70 | 76 | 83 | 250 (180) | 300 (220) | 370 (270) | ▶ |
| HL83H-169 | 46 | 50 | 54 | 380 (280) | 450 (330) | 570 (420) | ▶ |
| HL83H-321 | 24 | 26 | 29 | 720 (530) | 860 (640) | 1070 (790)** | ▶ |
| With RA30 | Free speed (rpm) | | | Max torque (Nm (lb.ft)) | | | Options available |
| | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 02 |
| HL83S-035 | 230 | 250 | 270 | 100 (74) | 120 (89) | 145 (107) | ▶ |
| HL83S-060 | 130 | 140 | 150 | 170 (125) | 200 (150) | 250 (180) | ▶ |
| HL83H-111 | 70 | 76 | 83 | 250 (180) | 300 (220) | 370 (270) | ▶ |
| HL83H-169 | 46 | 50 | 54 | 380 (280) | 450 (330) | 570 (420) | ▶ |
| HL83H-321 | Not available | | | | | | |
| With BJH01 | Free speed (rpm) | | | Max torque (Nm (lb.ft)) | | | Options available |
| | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 02 |
| HL83S-035 | 57 | 62 | 67 | 400 (290) | 480 (350) | 580 (420) | ▶ |
| HL83S-060 | Not available | | | | | | |
| HL83H-111 | Not available | | | | | | |
| HL83H-169 | Not available | | | | | | |
| HL83H-321 | Not available | | | | | | |
| With BJH02 | Free speed (rpm) | | | Max torque (Nm (lb.ft)) | | | Options available |
| | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 02 |
| HL83S-035 | 75 | 82 | 90 | 300 (220) | 360 (260) | 430 (320) | ▶ |
| HL83S-060 | 44 | 48 | 52 | 510 (375) | 600 (440) | 750 (550) | ▶ |
| HL83H-111 | 23 | 25 | 28 | 750 (550) | 900 (660) | NA | ▶ |
| HL83H-169 | Not available | | | | | | |
| HL83H-321 | Not available | | | | | | |
| With TM004 | Free speed (rpm) | | | Max torque (Nm (lb.ft)) | | | Options available |
| | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 02 |
| HL83S-035 | 230 | 250 | 270 | 370 (270) | 440 (320) | 530 (400) | ▶ |
| HL83S-060 | Not available | | | | | | |
| HL83H-111 | Not available | | | | | | |
| HL83H-169 | Not available | | | | | | |
| HL83H-321 | Not available | | | | | | |

** Warning ! Do not use the actuator when the torque is higher than 1000 Nm (740 lb.ft) or 600 Nm (440 lb.ft) with RA30, BJH01 and TM004. Use pressure to limit torque

IMPORTANT

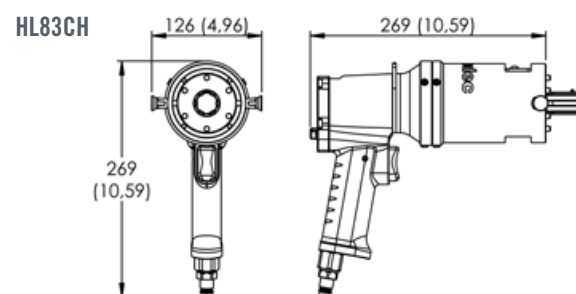
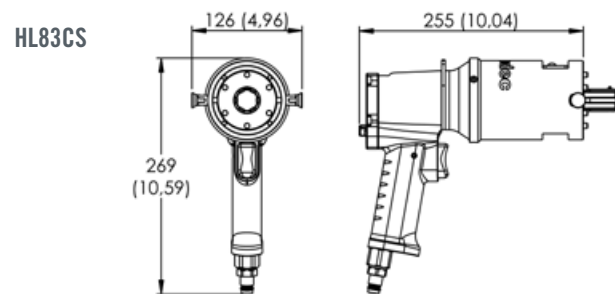
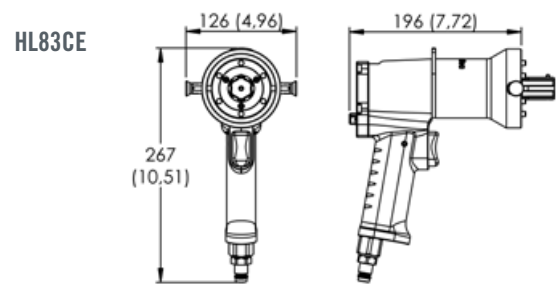
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.



Modec pneumatic portable valve actuators **HL83C** are the **most compact and lightweight**. Despite their **small size**, they offer a wide range of power options and can perform in **any environment**, including the most challenging ones.

They are certified **ATEX II 2 GD c IIC T6 to T4** (except when fitted with a revolution counter). Additionally, the maximum torque can be easily controlled by adjusting the air supply pressure, ensuring safe operation for your valves.

LAYOUT



| LAYOUT | Weight (kg (lb)) |
|------------|------------------|
| HL83CE-077 | 3,2 (7) |
| HL83CS-258 | 5,6 (12,3) |
| HL83CH-564 | 6,3 (13,9) |

OPTIONS AND ACCESSORIES

| OPTIONS (page 22) | |
|-----------------------------|-------|
| Digital revolution counter* | ▶ |
| CODE | 00 02 |

*digital revolution counter can't be ATEX certified.

Not all options are available for all models. See below for availability.

! Check the technical data sheet to see which options and accessories are capable of withstanding the torque created by the actuator !

| ACCESSORIES | Page |
|-------------------------|-------|
| Drive head | 28-29 |
| Adaptors and interfaces | 33-40 |
| Torque reaction systems | 41-43 |
| Air management | 30-31 |
| Other accessories | 32 |

CONNECTION AND LUBRICATION

| CONNECTION & LUBRICATION | Air consumption at 7 bars NL/min (scfm) | Connection | Minimum Ø for fittings mm (in) | Minimum Ø for pipes mm (in) | Lubrication (Drops/min) | FRL unit | SAT Box |
|--------------------------|--|------------|--------------------------------|-----------------------------|-------------------------|----------|---------|
| HL83CE-077 | 1200 (42) | G 1/2 | 8,2 (0,32) | 12 (0,47) | 6 | AC107 | AC118 |
| HL83CS-258 | 1200 (42) | G 1/2 | 8,2 (0,32) | 12 (0,47) | 6 | AC107 | AC118 |
| HL83CH-564 | 1200 (42) | G 1/2 | 8,2 (0,32) | 12 (0,47) | 6 | AC107 | AC118 |

Make sure you use a good quality FRL unit (Filtration, Pressure Regulation and Lubrication), capable of filtering air at 40µm.

PERFORMANCE

| Straight | Free speed (rpm) | | | | Max torque (Nm (lb.ft)) | | | | Options available |
|------------|------------------|-----------------|-----------------|------------------|-------------------------|-----------------|-----------------|------------------|-------------------|
| | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | |
| HL83CE-077 | 150 | 160 | 170 | 180 | 90 (66) | 110 (81) | 130 (96) | 150 (111) | 02 |
| HL83CS-258 | 45 | 48 | 51 | 54 | 302 (222) | 369 (272) | 436 (321) | 503 (371) | ▶ |
| HL83CH-564 | 20 | 22 | 23 | NA | 659 (486) | 806 (594) | 952 (702) | NA | ▶ |

| With RA30 | Free speed (rpm) | | | | Max torque (Nm (lb.ft)) | | | | Options available |
|------------|------------------|-----------------|-----------------|------------------|-------------------------|-----------------|-----------------|------------------|-------------------|
| | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | |
| HL83CE-077 | 150 | 160 | 170 | 180 | 90 (66) | 110 (81) | 130 (96) | 150 (111) | 02 |
| HL83CS-258 | 45 | 48 | 51 | 54 | 302 (222) | 369 (272) | 436 (321) | 503 (371) | ▶ |
| HL83CH-564 | Not available | | | | | | | | |

| With BJH01 | Free speed (rpm) | | | | Max torque (Nm (lb.ft)) | | | | Options available |
|------------|------------------|-----------------|-----------------|------------------|-------------------------|-----------------|-----------------|------------------|-------------------|
| | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | |
| HL83CE-077 | 38 | 40 | 43 | 45 | 360 (266) | 440 (325) | 520 (384) | 600 (440) | 02 |
| HL83CS-258 | Not available | | | | | | | | |
| HL83CH-564 | Not available | | | | | | | | |

| With BJH02 | Free speed (rpm) | | | | Max torque (Nm (lb.ft)) | | | | Options available |
|------------|------------------|-----------------|-----------------|------------------|-------------------------|-----------------|-----------------|------------------|-------------------|
| | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | |
| HL83CE-077 | 50 | 53 | 57 | 60 | 270 (199) | 330 (243) | 390 (288) | 450 (332) | 02 |
| HL83CS-258 | 45 | Not available | | 60 | 905 (667) | Not available | | 450 (332) | ▶ |
| HL83CH-564 | Not available | | | | | | | | |

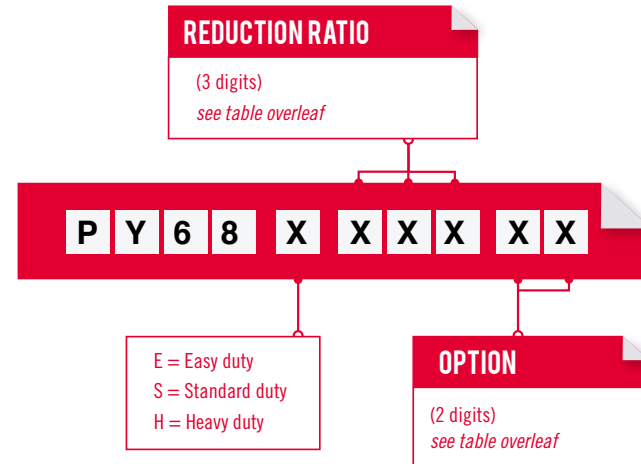
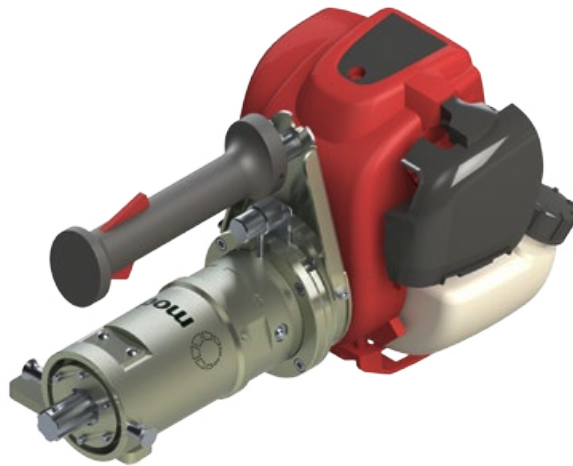
| With TM004 | Free speed (rpm) | | | | Max torque (Nm (lb.ft)) | | | | Options available |
|------------|------------------|-----------------|-----------------|------------------|-------------------------|-----------------|-----------------|------------------|-------------------|
| | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | 4 bars (58 psi) | 5 bars (72 psi) | 6 bars (87 psi) | 7 bars (101 psi) | |
| HL83CE-077 | 41 | 43 | 46 | 49 | 333 (246) | 407 (300) | 481 (355) | 555 (409) | 02 |
| HL83CS-258 | Not available | | | | | | | | |
| HL83CH-564 | Not available | | | | | | | | |

** Warning ! Do not use the actuator when the torque is higher than 1000 Nm (740 lb.ft) or 600 Nm (440 lb.ft) with RA30, BJH01 and TM004. Use pressure to limit torque

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

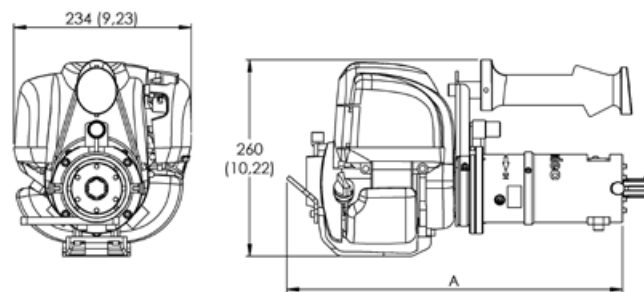




modec petrol portable valve actuators can be used in **total autonomy** – the only limit being the available petrol supply. They are particularly suitable for use in **isolated outdoor places**.

Extremely robust, they have an **integrated clutch system which protects the operator and the equipment**, even if a valve is completely blocked.

LAYOUT



| PY68 | | |
|-----------|------------------|----------------------|
| LAYOUT | Weight (kg (lb)) | Lenght «A» (mm (in)) |
| PY68E-031 | 10 (22) | 444 (17,48) |
| PY68S-087 | 10,3 (22,7) | |
| PY68S-148 | | |
| PY68H-192 | | |
| PY68H-293 | 10,6 (23,4) | 457 (17,99) |
| PY68H-641 | | |

OPTIONS AND ACCESSORIES

| OPTIONS (page 22) | | | | |
|----------------------------|----|----|----|----|
| Digital revolution counter | | ▶ | | ▶ |
| Torque limiter* | | | ▶ | ▶ |
| CODE | 00 | 02 | 03 | 05 |

*see torque and speed values page 22 : « Options »
Not all options are available for all models.
See below for availability.

! Check the technical data sheet to see which options and accessories are capable of withstanding the torque created by the actuator !

| ACCESSORIES | Page |
|-------------------------|-------|
| Drive head | 28-29 |
| Adaptors and interfaces | 33-40 |
| Torque reaction systems | 41-43 |
| Other accessories | 32 |

PERFORMANCE

| Straight | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | Options available | | |
|-----------|------------------|-------------------------|------------------------------|-------------------|-----|-----|
| | | | | 02 | 03* | 05* |
| PY68E-031 | 305 | 55 (41) | 41 (30) | ▶ | ▶ | ▶ |
| PY68S-087 | 100 | 150 (110) | 115 (85) | ▶ | ▶ | ▶ |
| PY68S-148 | 64 | 260 (190) | 195 (145) | ▶ | ▶ | ▶ |
| PY68H-192 | 50 | 340 (250) | 250 (180) | ▶ | ▶ | ▶ |
| PY68H-293 | 32 | 520 (380) | 390 (290) | ▶ | ▶ | ▶ |
| PY68H-641 | 15 | 1140 (840)** | 850 (630)** | ▶ | ▶ | ▶ |

| With RA30 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | Options available | | |
|-----------|--|-------------------------|------------------------------|-------------------|-----|-----|
| | | | | 02 | 03* | 05* |
| PY68E-031 | 305 | 55 (41) | 41 (30) | ▶ | ▶ | ▶ |
| PY68S-087 | 100 | 150 (110) | 115 (85) | ▶ | ▶ | ▶ |
| PY68S-148 | 64 | 260 (190) | 195 (145) | ▶ | ▶ | ▶ |
| PY68H-192 | 50 | 340 (250) | 250 (180) | ▶ | ▶ | ▶ |
| PY68H-293 | 32 | 520 (380) | 390 (290) | ▶ | ▶ | ▶ |
| PY68H-641 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | | ▶ | ▶ | ▶ |

| With banjo head BJJH01 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | Options available | | |
|------------------------|--|-------------------------|------------------------------|-------------------|-----|-----|
| | | | | 02 | 03* | 05* |
| PY68E-031 | 75 | 220 (160) | 160 (120) | ▶ | ▶ | ▶ |
| PY68S-087 | 25 | 600 (440) | 460 (340) | ▶ | ▶ | ▶ |
| PY68S-148 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | | ▶ | ▶ | ▶ |
| PY68H-192 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | | ▶ | ▶ | ▶ |
| PY68H-293 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | | ▶ | ▶ | ▶ |
| PY68H-641 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | | ▶ | ▶ | ▶ |

| With banjo head BJJH02 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | Options available | | |
|------------------------|------------------|-------------------------|------------------------------|-------------------|-----|-----|
| | | | | 02 | 03* | 05* |
| PY68E-031 | 100 | 165 (120) | 120 (90) | ▶ | ▶ | ▶ |
| PY68S-087 | 36 | 460 (340) | 350 (260) | ▶ | ▶ | ▶ |
| PY68S-148 | 21 | 790 (580) | 590 (440) | ▶ | ▶ | ▶ |
| PY68H-192 | 16 | 1000 (740)** | 760 (560) | ▶ | ▶ | ▶ |
| PY68H-293 | Not available | | | | | |
| PY68H-641 | Not available | | | | | |

| With torque multiplier TM004 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | Options available | | |
|------------------------------|------------------|-------------------------|------------------------------|-------------------|-----|-----|
| | | | | 02 | 03* | 05* |
| PY68E-031 | 82 | 204 (150) | 152 (112) | ▶ | ▶ | ▶ |
| PY68S-087 | 27 | 557 (411) | 427 (315) | ▶ | ▶ | ▶ |
| PY68S-148 | Not available | | | | | |
| PY68H-192 | Not available | | | | | |
| PY68H-293 | Not available | | | | | |
| PY68H-641 | Not available | | | | | |

** Warning ! Do not use the actuator when the torque is higher than 1000 Nm (740 lb.ft) or use a torque limiter
See torque and speed values page 22 : « Options »

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

Watt → Horse power

W x 0,001341 = cv

Newton meter → Foot pound

Nm x 0,7376 = lb.ft

Millimeter → inch

mm x 0,03937 = in

Kv → Cv

Kv x 0,07 = Cv

Bar → pound / square inch

Bar x 14,5 = psi

Normo liter / minute → Standard cube feet / minute

NL / min x 0,03531 = scfm

Kilogramme → Pound

Kg x 2,205 = lb



REDUCTION RATIO

(3 digits)
see table overleaf

M C 8 9 X X X X X X

E = Easy duty
S = Standard duty

OPTION

(2 digits)
Vsee table overleaf

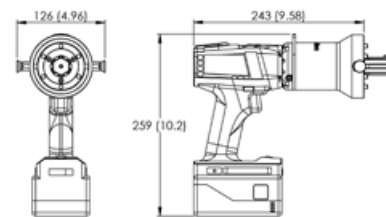
Although it is **super light and compact**, the MC89 Portable Valves Actuator delivers a **850 Nm** (630 lb.ft) maximum torque. This makes it the perfect tool for any « Easy » or « Standard » duty job, for any valve type, indoor or outdoor, with a great autonomy. Its two **18V Lithium-Ion batteries** allow to use it continuously during **up to one hour**. For an even more intensive usage, use the **main power connection kit** that plugs on the actuator just like a battery and provides an **unlimited autonomy**.

Designed for any type of operation, the MC89 comes with 3 models only that cover a **0 to 450 rpm speed** range and a **850 Nm maximum torque**. No need to say that even the most stubborn valves can be operated! No worry though, the **integrated electronic torque limiter** will easily prevent any damages for your valve or the tool itself.

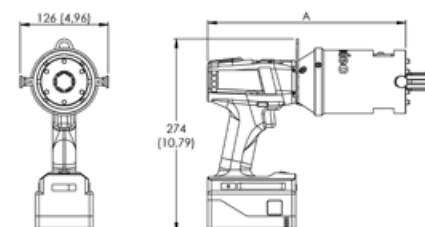
Ingress protection marking : **IP20 equivalent**

LAYOUT

MC89E



MC89S



| MC89 | | |
|-----------|------------------|----------------------|
| LAYOUT | Weight (kg (lb)) | Length «A» (mm (in)) |
| MC89E-011 | 3,5 (7,7) | 243 (9,57) |
| MC89S-035 | 5,1 (11,2) | 283 (11,14) |
| MC89S-054 | 5,4 (11,9) | 296 (11,65) |
| Battery | 0,7 (1,5) | |

| Watt → Horse power | Newton meter → Foot pound | Millimeter → inch | Kv → Cv |
|---------------------------|--|--------------------|----------------|
| W x 0,001341 = cv | Nm x 0,7376 = lb.ft | mm x 0,03937 = in | Kv x 0,07 = Cv |
| Bar → pound / square inch | Normo liter / minute → Standard cube feet / minute | Kilogramme → Pound | |
| Bar x 14,5 = psi | NL / min x 0,03531 = scfm | Kg x 2,205 = lb | |

BATTERIES AND CHARGERS

| Batteries technical data | BAT150 | BAT154-US |
|--|------------------|----------------|
| Voltage | 18V | |
| Capacity | 5 Ah | 8 Ah |
| Autonomy* | 24 min | 37 min |
| Charging times with standard charger BAT 152 | 45 min | 87 min |
| Charging times with quick charger 156-US | 33 min | 34 min |
| Weight | 0,7 kg (1,5 lbs) | 1 kg (2,2 lbs) |



| Charger technical data | BAT152 | BAT156-US |
|----------------------------|-------------------------|------------------|
| Power supply (input) | 220-240V AC | |
| Mains frequency | 50 / 60 Hz | |
| Charging voltage (output) | 10,8 - 18 V DC | |
| Quick charging | Max 6A | Max 16A |
| Charging temperature range | 0°C à +40°C (32- 104°F) | |
| Safety class | II | |
| Weight (kg) | 0,8 kg (1,7 lbs) | 1,1 kg (2,4 lbs) |



*Autonomy measured at 50% of the maximum load

The main power connection kit (ref BAT147) connects any main power plug to the actuator (in place of the battery) and provides an unlimited autonomy.

SPEED CONTROLLER & ELECTRONIC TORQUE LIMITER (See details on page 22)

The MC89 comes with an built-in **speed control and torque limiter electronic system** for an optimal **people and material protection** as well as a **perfect adaptation** to different constraints and environments. By adjusting the speed control trigger (4 positions) and the max torque scroll wheel (13 po-

sitions), you can set the required torque limit and / or rotation speed. When reaching the torque limit, the actuator will stop and sound a beep.

See page 23-24 to get the speed and torque values for each settings.



OPTIONS AND ACCESSORIES

| OPTIONS* (page 22) | | |
|----------------------------|----|----|
| Digital revolution counter | | ▶ |
| CODE | 00 | 02 |

! Check the technical data sheet to see which options and accessories are capable of withstanding the torque created by the actuator !

| ACCESSORIES | Page |
|-------------------------|-------|
| Drive head | 28-29 |
| Adaptors and interfaces | 33-40 |
| Torque reaction systems | 41-43 |
| Other accessories | 32 |

*Except MC89E-011

PERFORMANCE

| Straight | Free speed (rpm) | Max torque (Nm (lb.ft)) | Options available |
|------------------------------|---|-------------------------|-------------------|
| MC89E-011 | 314 | 167 (121) | 02 |
| MC89S-035 | 94 | 550 (400) | ▶ |
| MC89S-054 | 61 | 850 (630) | ▶ |
| With RA30 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Options available |
| MC89E-011 | 314 | 167 (121) | 02 |
| MC89S-035 | 94 | 550 (400) | ▶ |
| MC89S-054 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | ▶ |
| With banjo head BJH01 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Options available |
| MC89E-011 | 79 | 600* (440)* | 02 |
| MC89S-035 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | ▶ |
| MC89S-054 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | ▶ |
| With banjo head BJH02 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Options available |
| MC89E-011 | 104 | 495 (365) | 02 |
| MC89S-035 | Max 1000 Nm (740 lb.ft). Use torque limiter (see values p.22) | | ▶ |
| MC89S-054 | Max 1000 Nm (740 lb.ft). Use torque limiter (see values p.22) | | ▶ |
| With torque multiplier TM004 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Options available |
| MC89E-011 | 85 | 612* (451)* | 02 |
| MC89S-035 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | ▶ |
| MC89S-054 | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | ▶ |



* Warning ! Do not use the RA30 right angle head when the torque is higher than 600 Nm (440 lb.ft) or set the torque limit to 600 Nm before use. Read user's manual for more information.

* Warning ! The maximum acceptable torque for the BJH01 is 600 Nm (440 lb.ft). Do not use the BJH01 if the torque required is higher than 600 Nm (440 lb.ft), use the torque limiter to limit the input torque to 150 Nm (110 lb.ft) (see stickers on the actuator and table hereafter).

* Warning ! The maximum acceptable torque for the BJH02 is 1000 Nm (740 lb.ft). Do not use the BJH02 if the torque required is higher than 1000 Nm (740 lb.ft), use the torque limiter to limit the input torque to 330 Nm (240 lb.ft) (see stickers on the actuator and table hereafter).

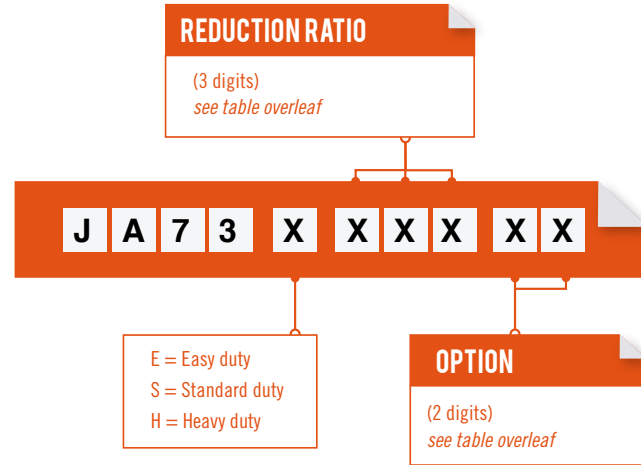
* Warning ! The maximum acceptable torque for the TM004 is 600 Nm (440 lb.ft). Do not use the TM004 if the torque required is higher than 600 Nm (440 lb.ft), use the torque limiter to limit the input torque to 150 Nm (110 lb.ft) (see table (p.22)).



IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

BATTERY POWERED PORTABLE VALVE ACTUATORS JA73



Dedicated to the most demanding applications!

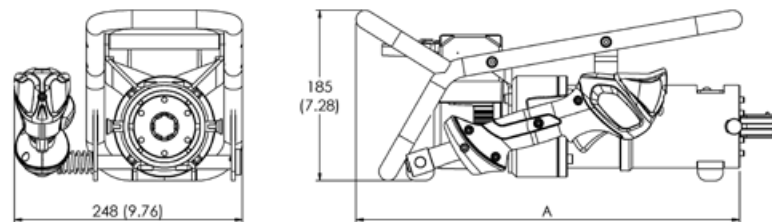
Thanks to its **robustness** and high autonomy batteries, the **JA73 moddec electric portable valve actuator** is able to deliver a **high power** for **more than one hour** continuously. It does not depend on any energy source (electric plug or compressed air network) and can operate freely anywhere. Much more **powerful** than its little brother (MC89), it can deliver **high speed** and **high torque** simultaneously, which makes it **the perfect tool for Heavy duty jobs**. Extremely robust, it has got an **integrated clutch system** which protects the operator and the equipment, even if a valve is completely blocked.

The **ergonomic control handle** allows the display and control of the many actuator and battery's functions and parameters in a **simple and intuitive way**.

The **integrated electronic torque limiter** (available as standard on all models) allows to adapt to any configuration and further improve the **safety of the user and the equipment**.

Ingress protection marking : IP20 equivalent

LAYOUT



| JA73 | | |
|-----------|------------------|----------------------|
| LAYOUT | Weight (kg (lb)) | Length «A» (mm (in)) |
| JA73E-023 | 8,7 (19,2) | 408 (16,06) |
| JA73S-077 | | |
| JA73S-132 | | |
| JA73H-169 | | |
| JA73H-309 | | |
| JA73H-564 | 9 (19,8) | 425 (16,73) |

| | | | |
|--|--|---|----------------------------------|
| Watt → Horse power W x 0,001341 = cv | Newton meter → Foot pound Nm x 0,7376 = lb.ft | Millimeter → inch mm x 0,03937 = in | Kv → Cv Kv x 0,07 = Cv |
| Bar → pound / square inch Bar x 14,5 = psi | Normo liter / minute → Standard cube feet / minute NL / min x 0,03531 = scfm | Kilogramme → Pound Kg x 2,205 = lb | |

BATTERIES

| Technical data | BAT520-US | BAT750-US | BAT1200-US | BAT1500-US |
|-----------------------------------|-----------|------------|------------|------------|
| Type | Li-ion | Li-ion | Li-ion | Li-ion |
| Output voltage | 43.2 V | 43.2 V | 43.62 V | 43.62 V |
| Capacity | 12 Ah | 17.25 Ah | 28 Ah | 35 Ah |
| Stored energy | 520 Wh | 745 Wh | 1221 Wh | 1527 Wh |
| Maximum power | 2 kW | 2 kW | 2 kW | 2 kW |
| Autonomy* | 25 min | 35 min | 60 min | 90 min |
| Charging time | 6h30 | 9h | 10h | 12h |
| Average life (number of cycles)** | up to 800 | up to 1200 | up to 1300 | up to 1300 |
| Weight (kg (lb)) | 3,6 (7,9) | 4,5 (9,9) | 6,3 (13,9) | 7,5 (16,5) |



The electric portable actuators use high performance batteries for greater autonomy. Both battery and charger need to be ordered separately. These batteries comes with a light, comfortable harness for use during transport or when using the actuator.

* Autonomy is measured for an equivalent torque of 50% of maximum torque.
** One cycle means one complete battery charge and discharge.

ELECTRONIC TORQUE LIMITER & DIGITAL REVOLUTION COUNTER (See details on page 22)

The JA73 comes with an embedded electronic torque limiter for an optimal people and material protection as well as a perfect adaptation to different constraints and environments. By adjusting the power level (4 positions) you can set the required torque limit. When reaching the torque limit, the actuator will stop. Electronic torque limiter and revolution counter for the different settings and torque values available. Additionally, the handle includes a built-in revolution counter for precise monitoring.



ACCESSORIES

| ACCESSORIES | Page |
|-------------------------|-------|
| Drive head | 28-29 |
| Adaptors and interfaces | 33-40 |
| Torque reaction systems | 41-43 |
| Other accessories | 32 |

PERFORMANCE

| Straight | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | With RA30 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) |
|------------------------------|------------------|-------------------------|------------------------------|---|---|-------------------------|------------------------------|
| JA73E-023 | 360 | 44 (32) | 35 (26) | JA73E-023 | 360 | 44 (32) | 35 (26) |
| JA73S-077 | 110 | 150 (110) | 120 (89) | JA73S-077 | 110 | 150 (110) | 120 (89) |
| JA73S-132 | 63 | 250 (180) | 200 (150) | JA73S-132 | 63 | 250 (180) | 200 (150) |
| JA73H-169 | 49 | 325 (240) | 260 (190) | JA73H-169 | 49 | 325 (240) | 260 (190) |
| JA73H-309 | 27 | 590 (435) | 470 (350) | JA73H-309 | 27 | 590 (435) | 470 (350) |
| JA73H-564 | 15 | 1080* (800)* | 860 (640) | JA73H-564 | Max 600 Nm. Use torque limiter (see values) | | |
| With banjo head BJH01 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | | | | |
| JA73E-023 | 90 | 180 (130) | 140 (100) | | | | |
| JA73S-077 | 27 | 590 (435) | 470 (350) | | | | |
| JA73S-132 | | | | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | | |
| JA73H-169 | | | | | | | |
| JA73H-309 | | | | | | | |
| JA73H-564 | | | | | | | |
| With banjo head BJH02 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | | | | |
| JA73E-023 | 120 | 135 (100) | 105 (77) | | | | |
| JA73S-077 | 36 | 440 (320) | 350 (260) | | | | |
| JA73S-132 | 21 | 760 (560) | 600 (440) | | | | |
| JA73H-169 | 16 | 975 (720) | 780 (580) | | | | |
| JA73H-309 | | | | Max 1000 Nm (740 lb.ft). Use torque limiter (see values p.22) | | | |
| JA73H-564 | | | | | | | |
| with torque multiplier TMO04 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | | | | |
| JA73E-023 | 97 | 163 (120) | 130 (96) | | | | |
| JA73S-077 | 30 | 557 (411) | 445 (328) | | | | |
| JA73S-132 | | | | Max 600 Nm (440 lb.ft). Use torque limiter (see values p.22) | | | |
| JA73H-169 | | | | | | | |
| JA73H-309 | | | | Not available | | | |
| JA73H-564 | | | | | | | |

* Warning ! Do not use the actuator when the torque is higher than 1000 Nm (740 lb.ft) or use a torque limiter

Some electric portable actuator manufacturers give torque and speed performance without reference to the length of operating time. This can suggest a high performance level when in reality the level can only be achieved for a few seconds and with significant risk of damage to the actuator's motor. Portable actuators using a moddec battery are designed and tested to deliver the stated performance level with no time limit other than the length of the battery life.

IMPORTANT
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

**MAKE UNDERGROUND
VALVES OPERATIONS
SAFE AND EFFICIENT**



**BUILD
YOUR OWN KIT**



- **Easy** transport
- **Simple** setup
- **Safe** Operations



**CHOOSE
YOUR MC89** (see page 14)



MC89

PORTABLE VALVE ACTUATOR

Compact and lightweight
Maximum torque : 850 Nm (630 lb.ft)
Maximum speed : 450 rpm
Autonomy : 20/30 mins continuously per battery
Speed controller
Integrated revolution counter (except Easy Duty)



N°2 FOOT HELD ARTICULATED REACTION ARM

Max. torque : 250 Nm (185 lb.ft)
Does not require any special attachment point

BA012



N°6 2 BATTERIES & 1 CHARGER

Voltage : 18 DC & 220-240V AC
Capacity : 5 Ah
Charging time : 45 min

BAT143 & BAT145



N°3 REACTION ARM

Max torque : 1 000 Nm (740 lb.ft)

BR001



N°7 TRANSPORT AND STORAGE SUITCASE

Allows you to check at a glance that everything is there.
Weight of the complete kit : less than 25 Kg (55 lbs)

VT005



N°4 TELESCOPIC VALVE KEY

Max torque : 1 000 Nm (740 lb.ft)
Lenght : 0.6 to 0.9 m (23,6 - 35,4 in)

EB002



N°8 CHOOSE YOUR SOCKET

Go page 40

DCxxx



N°5 EXTENSION FOR TELESCOPIC VALVE KEY

Max. torque : 1 000 Nm (740 lb.ft)
Length 0.5 m (19,7 in)

EB012



| Actuator | MC89E-011-00 | MC89S-035-02 | MC89S-054-02 |
|-----------|----------------------------|--------------|--------------|
| Socket | Without revolution counter | | |
| DC020 | H20100 | H20500 | H20600 |
| DC027 | H20101 | H20501 | H20601 |
| DC030 | H20102 | H20502 | H20602 |
| DC040 | H20103 | H20503 | H20603 |
| DC050 | H20104 | H20504 | H20604 |
| DC012-025 | H20105 | H20505 | H20605 |
| DC031-035 | H20106 | H20506 | H20606 |
| DC025 | H20107 | H20507 | H20607 |
| DPO40-044 | H20108 | H20508 | H20608 |

In case you don't want batteries and charger in your kit, add « -NB » to the reference

MAKE UNDERGROUND VALVES OPERATIONS SAFE AND EFFICIENT



MINI H₂O KIT

The lightweight and functional kit to simplify your operations

CHOOSE YOUR MC89 (see page 14)



MC89

PORTABLE VALVE ACTUATOR

Compact and lightweight
Maximum torque : 850 Nm (630 lb.ft)
Maximum speed : 450 rpm
Autonomy : 20/30 mins continuously per battery
Speed controller
Integrated revolution counter (except Easy Duty)



REACTION ARM

Max. torque 1000 Nm (740 lb.ft)

BR001



CHOOSE YOUR SOCKET
Go page 40

DCxxx



TELESCOPIC VALVE KEY

Max torque 1000 Nm (740 lb.ft)
Lenght : 0.6 to 0.9 m (23,6 to 35,6 in)

EB002



2 BATTERIES & 1 CHARGER

Voltage : 18DC & 220-240V AV
Capacity : 5Ah
Charging time 45min

BAT143 & BAT145



BACK PACK

Enables you to fit only the necessary
Pre-cutted protective foam
PVC fabric bag with double reflective striping
Weight of the complete kit Less than 15 kg

VT009



- **Easy** transport less than 15kg
- **Simple** set up
- **Safe** operations

| Actuator | MC89E-011-00 | MC89S-035-02 | MC89S-054-02 |
|-----------|----------------------------|--------------|--------------|
| Socket | Without revolution counter | | |
| DC020 | H20110 | H20510 | H20610 |
| DC027 | H20111 | H20511 | H20611 |
| DC030 | H20112 | H20512 | H20612 |
| DC040 | H20113 | H20513 | H20613 |
| DC050 | H20114 | H20514 | H20614 |
| DC012-025 | H20115 | H20515 | H20615 |
| DC031-035 | H20116 | H20516 | H20616 |
| DC025 | H20117 | H20517 | H20617 |
| DPO40-044 | H20118 | H20518 | H20618 |

In case you don't want batteries and charger in your kit, add « -NB » to the reference

OPTIONS

Options are built into the actuator during factory assembly and cannot be added or removed at a later stage.

OPTIONS

DIGITAL REVOLUTION-COUNTER



The **digital revolution counter** adds up the turns in one direction and subtracts them in the other direction so that the operator always knows where he is in relation to the starting point. **It also measures and indicates the rotating speed.**

It can be **easily configured** to adapt to the different actuator heads available (right angle or ring-type).
not available for ATEX certified actuators.

TORQUE LIMITER



All our portable valve actuators are equipped, or can be equipped as an option, with an adjustable torque limiter to protect equipment and operators from the risks associated with applying too much torque. This also ensures that a minimum torque has been applied by the device.

On the JA73

As the JA73 rotational speed is constant, a change in power results in a proportional change in maximum torque. Therefore, by setting the power to one of the 4 available levels, the maximum torque of the actuator is adjusted to a limit.

The following table shows the maximum torque values for the different JA73 models depending on the selected power level:

| Without drive head | Torque limit setting (Nm (lb.ft)) | | | |
|--------------------|-----------------------------------|-----------|-----------|-------------|
| | 1 | 2 | 3 | 4 |
| JA73E-023 | 6 (4,4) | 16 (12) | 30 (22) | 44 (32) |
| JA73S-077 | 20 (15) | 55 (40) | 100 (70) | 150 (110) |
| JA73S-132 | 35 (26) | 95 (70) | 170 (125) | 250 (180) |
| JA73H-169 | 45 (33) | 120 (90) | 220 (160) | 320 (240) |
| JA73H-309 | 80 (59) | 220 (160) | 400 (300) | 590 (430) |
| JA73H-564 | 140 (100) | 390 (290) | 720 (530) | 1080 (800)* |

* Max 1000 Nm (740 lb.ft)

| With RA30 right angle head | Torque limit setting (Nm (lb.ft)) | | | |
|----------------------------|-----------------------------------|-----------|-----------|-----------|
| | 1 | 2 | 3 | 4 |
| JA73E-023 | 6 (4,4) | 16 (12) | 30 (22) | 44 (32) |
| JA73S-077 | 20 (15) | 55 (40) | 100 (70) | 150 (110) |
| JA73S-132 | 35 (26) | 95 (70) | 170 (125) | 250 (180) |
| JA73H-169 | 45 (33) | 120 (90) | 220 (160) | 320 (240) |
| JA73H-309 | 80 (59) | 220 (160) | 400 (300) | 590 (430) |
| JA73H-564 | 140 (100) | 390 (290) | | |

** Max 600Nm (440 lb.ft)

| With banjo head BJH01 | Torque limit setting (Nm (lb.ft)) | | | |
|-----------------------|-----------------------------------|-----------|-----------|-----------|
| | 1 | 2 | 3 | 4 |
| JA73E-023 | 25 (18) | 65 (48) | 120 (90) | 175 (130) |
| JA73S-077 | 80 (60) | 220 (160) | 400 (300) | 600 (440) |
| JA73S-132 | 140 (100) | 380 (280) | | |
| JA73H-169 | 180 (130) | 480 (350) | | |
| JA73H-309 | 320 (240) | | | |
| JA73H-564 | 560 (410) | | | |

* Max 600Nm (440 lb.ft)

| With banjo head BJH02 | Torque limit setting (Nm (lb.ft)) | | | |
|-----------------------|-----------------------------------|-----------|-----------|-----------|
| | 1 | 2 | 3 | 4 |
| JA73E-023 | 20 (15) | 50 (37) | 90 (66) | 130 (95) |
| JA73S-077 | 60 (44) | 160 (120) | 300 (220) | 450 (330) |
| JA73S-132 | 100 (70) | 280 (210) | 510 (380) | 750 (550) |
| JA73H-169 | 130 (95) | 360 (270) | 660 (490) | 970 (720) |
| JA73H-309 | 240 (180) | 660 (490) | | |
| JA73H-564 | 420 (310) | | | |

* Max 1000 Nm (740 lb.ft)

| With torque multiplier | Torque limit setting (Nm (lb.ft)) | | | |
|------------------------|-----------------------------------|-----------|-------------|-----------|
| | 1 | 2 | 3 | 4 |
| JA73E-023 | 22 (16) | 59 (45) | 111 (82) | 163 (119) |
| JA73S-077 | 74 (56) | 204 (148) | 371 (280) | 557 (408) |
| JA73S-132 | 130 (97) | 353 (260) | 631* (464)* | |
| JA73S-169 | | | | |
| JA73H-309 | | | | |
| JA73H-564 | | | | |

* Max 600Nm (440 lb.ft)

IMPORTANT
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

OPTIONS

OPTIONS



On the MC89

For each of the four speed levels (selected by the button on the top of the unit), the maximum torque can be set with the knob at the foot of the handle at the back of the actuator.

The tables below show the maximum speed and torque values for each of the selected combinations.

An audible signal (two beeps) sounds and the actuator stops when the set torque is reached. The tool will restart only after the on/off switch is released and pressed again.

Torque / Speed matrix : MC89E-011 without BJH, with or without RA30

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|---------|----------|---------|----------|-----------|
| 1 | max speed (rpm) | 26 | 29 | 34 | 37 | 41 |
| | max torque (Nm (lb.ft)) | 17 (12) | 54 (40) | 89 (65) | 129 (95) | 165 (122) |
| 2 | max speed (rpm) | 41 | 46 | 52 | 57 | 61 |
| | max torque (Nm (lb.ft)) | 16 (12) | 49 (36) | 82 (60) | 116 (85) | 153 (113) |
| 3 | max speed (rpm) | 126 | 147 | 168 | 188 | 209 |
| | max torque (Nm (lb.ft)) | 4 (3) | 16 (12) | 29 (21) | 40 (29) | 53 (39) |
| 4 | max speed (rpm) | 195 | 223 | 258 | 279 | 314 |
| | max torque (Nm (lb.ft)) | 3 (2) | 11 (8,1) | 19 (14) | 29 (21) | 37 (27) |

Torque / Speed matrix MC89S-035 without BJH, with or without RA30

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|---------|-----------|-----------|-------------|-----------|
| 1 | max speed (rpm) | 8,0 | 9,0 | 10 | 11 | 12 |
| | max torque (Nm (lb.ft)) | 60 (44) | 180 (132) | 300 (221) | 430 (317) | 550 (410) |
| 2 | max speed (rpm) | 12 | 14 | 15 | 17 | 18 |
| | max torque (Nm (lb.ft)) | 50 (37) | 160 (118) | 270 (199) | 390 (287,5) | 515 (380) |
| 3 | max speed (rpm) | 38 | 44 | 51 | 57 | 63 |
| | max torque (Nm (lb.ft)) | 13 (9) | 50 (37) | 100 (73) | 140 (103) | 175 (130) |
| 4 | max speed (rpm) | 58 | 67 | 77 | 84 | 94 |
| | max torque (Nm (lb.ft)) | 10 (7) | 35 (26) | 65 (48) | 95 (70) | 125 (92) |

Torque / Speed matrix : MC89E-011 with BJH01

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|---------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 6,5 | 7,3 | 8,4 | 9,2 | |
| | max torque (Nm (lb.ft)) | 69 (50) | 218 (153) | 355 (262) | 516 (381) | |
| 2 | max speed (rpm) | 10 | 12 | 13 | 14 | 15 |
| | max torque (Nm (lb.ft)) | 63 (46) | 195 (144) | 327 (241) | 464 (342) | 613 (450) |
| 3 | max speed (rpm) | 31 | 37 | 42 | 47 | 52 |
| | max torque (Nm (lb.ft)) | 17(13) | 63 (46) | 115 (85) | 160 (118) | 212 (156) |
| 4 | max speed (rpm) | 49 | 56 | 65 | 70 | 79 |
| | max torque (Nm (lb.ft)) | 11 (8) | 43 (32) | 77 (57) | 115 (85) | 149 (110) |

Torque / Speed matrix MC89S-035 with BJH01

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|-----------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 2 | | | | |
| | max torque (Nm (lb.ft)) | 240 (180) | | | | |
| 2 | max speed (rpm) | 3 | | | | |
| | max torque (Nm (lb.ft)) | 200 (150) | | | | |
| 3 | max speed (rpm) | 10 | 11 | 13 | 14 | |
| | max torque (Nm (lb.ft)) | 52 (38) | 200 (147) | 400 (295) | 560 (410) | |
| 4 | max speed (rpm) | 15 | 17 | 19 | 21 | 24 |
| | max torque (Nm (lb.ft)) | 40 (29) | 140 (103) | 260 (192) | 380 (280) | 500 (369) |

Torque / Speed matrix : MC89E-011 with BJH02

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|---------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 9 | 10 | 11 | 12 | 14 |
| | max torque (Nm (lb.ft)) | 52 (38) | 163 (120) | 266 (196) | 387 (285) | 490 (360) |
| 2 | max speed (rpm) | 14 | 15 | 17 | 19 | 20 |
| | max torque (Nm (lb.ft)) | 47 (35) | 146 (108) | 245 (180) | 348 (257) | 460 (340) |
| 3 | max speed (rpm) | 42 | 49 | 56 | 63 | 70 |
| | max torque (Nm (lb.ft)) | 12 (9) | 47 (35) | 86 (63) | 120 (88) | 159 (117) |
| 4 | max speed (rpm) | 65 | 74 | 86 | 93 | 105 |
| | max torque (Nm (lb.ft)) | 8,(6) | 32 (24) | 58 (43) | 86 (63) | 112 (83) |

Torque / Speed matrix MC89S-035 with BJH02

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|-----------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 3 | 3 | 3 | | |
| | max torque (Nm (lb.ft)) | 180 (132) | 540 (398) | 900 (660) | | |
| 2 | max speed (rpm) | 4 | 5 | 5 | | |
| | max torque (Nm (lb.ft)) | 150 (110) | 480 (354) | 810 (600) | | |
| 3 | max speed (rpm) | 13 | 15 | 17 | 19 | 21 |
| | max torque (Nm (lb.ft)) | 39 (28) | 150 (110) | 300 (221) | 420 (310) | 525 (390) |
| 4 | max speed (rpm) | 19 | 22 | 26 | 28 | 31 |
| | max torque (Nm (lb.ft)) | 30 (22) | 105 (77) | 195 (144) | 285 (210) | 375 (280) |

Torque / Speed matrix : MC89E-011 with torque multiplier

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|---------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 7 | 7,9 | 9,0 | 10 | 11 |
| | max torque (Nm (lb.ft)) | 64 (47) | 202 (149) | 329 (243) | 478 (353) | 611(450) |
| 2 | max speed (rpm) | 11 | 12 | 14 | 15 | 17 |
| | max torque (Nm (lb.ft)) | 58 (43) | 181 (133) | 303 (223) | 430 (317) | 569 (419) |
| 3 | max speed (rpm) | 34 | 40 | 45 | 51 | 56 |
| | max torque (Nm (lb.ft)) | 15 (11) | 58 (43) | 106 (78) | 149 (110) | 197 (145) |
| 4 | max speed (rpm) | 53 | 60 | 70 | 75 | 85 |
| | max torque (Nm (lb.ft)) | 11 (8) | 40 (29) | 72 (53) | 106 (78) | 138 (102) |

Torque / Speed matrix MC89S-035 with torque multiplier

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|-----------|-----------|-------------|-----------|-------------|
| 1 | max speed (rpm) | 2 | | | | |
| | max torque (Nm (lb.ft)) | 223 (163) | | | | |
| 2 | max speed (rpm) | 3 | 4 | | | |
| | max torque (Nm (lb.ft)) | 186 (137) | 594 (438) | | | |
| 3 | max speed (rpm) | 10 | 12 | 14 | 15 | |
| | max torque (Nm (lb.ft)) | 48 (35) | 186 (137) | 371 (272,7) | 519 (383) | |
| 4 | max speed (rpm) | 16 | 18 | 21 | 23 | 25 |
| | max torque (Nm (lb.ft)) | 37 (27) | 130 (96) | 241 (178) | 352 (259) | 464 (341,2) |

IMPORTANT
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

Torque / Speed matrix : MC89S-054 without drive head

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|---------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 5 | 6 | 7 | 7 | 8 |
| | max torque (Nm (lb.ft)) | 90 (66) | 280 (206) | 460 (340) | 660 (487) | 850 (630) |
| 2 | max speed (rpm) | 8,0 | 9,0 | 10 | 11 | 12 |
| | max torque (Nm (lb.ft)) | 80 (59) | 250 (184) | 420 (309) | 600 (440) | 790 (580) |
| 3 | max speed (rpm) | 25 | 29 | 33 | 37 | 41 |
| | max torque (Nm (lb.ft)) | 20 (14) | 80 (60) | 150 (110) | 210 (155) | 270 (200) |
| 4 | max speed (rpm) | 38 | 44 | 50 | 55 | 61 |
| | max torque (Nm (lb.ft)) | 15 (11) | 55 (40) | 100 (74) | 145 (107) | 190 (140) |

Torque / Speed matrix : MC89S-054 with RA30 right angle head

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|---------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 5,0 | 5,8 | 7 | | |
| | max torque (Nm (lb.ft)) | 90 (66) | 280 (206) | 460 (340) | | |
| 2 | max speed (rpm) | 8 | 9 | 10 | 11 | |
| | max torque (Nm (lb.ft)) | 80 (59) | 250 (184) | 420 (309) | 600 (440) | |
| 3 | max speed (rpm) | 25 | 29 | 33 | 37 | 41 |
| | max torque (Nm (lb.ft)) | 20 (14) | 80 (60) | 150 (110) | 210 (155) | 270 (200) |
| 4 | max speed (rpm) | 38 | 44 | 50 | 55 | 61 |
| | max torque (Nm (lb.ft)) | 15 (11) | 55 (40) | 100 (74) | 145 (107) | 190 (140) |

Torque / Speed matrix MC89S-054 with BJH01

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|-----------|-----------|-----------|-----------|---|
| 1 | max speed (rpm) | 1 | | | | |
| | max torque (Nm (lb.ft)) | 360 (265) | | | | |
| 2 | max speed (rpm) | 2 | | | | |
| | max torque (Nm (lb.ft)) | 320 (240) | | | | |
| 3 | max speed (rpm) | 6 | 7 | 8 | | |
| | max torque (Nm (lb.ft)) | 80 (59) | 320 (236) | 600 (440) | | |
| 4 | max speed (rpm) | 10 | 11 | 13 | 14 | |
| | max torque (Nm (lb.ft)) | 60 (45) | 220 (162) | 400 (295) | 580 (430) | |

Torque / Speed matrix MC89S-054 with BJH02

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|-----------|-----------|-----------|-----------|-----------|
| 1 | max speed (rpm) | 2 | 2 | | | |
| | max torque (Nm (lb.ft)) | 270 (199) | 840 (620) | | | |
| 2 | max speed (rpm) | 3 | 3 | | | |
| | max torque (Nm (lb.ft)) | 240 (177) | 750 (553) | | | |
| 3 | max speed (rpm) | 8 | 10 | 11 | 12 | 14 |
| | max torque (Nm (lb.ft)) | 60 (44) | 240 (177) | 450 (332) | 630 (465) | 810 (600) |
| 4 | max speed (rpm) | 13 | 15 | 17 | 18 | 20 |
| | max torque (Nm (lb.ft)) | 45 (33) | 165 (122) | 300 (221) | 435 (321) | 570 (421) |

Torque / Speed matrix MC89S-054 with torque multiplier

| Speed setting | Torque limit setting | 1 | 2 | 3 | 4 | 5 |
|---------------|-------------------------|-----------|----------|-----------|-----------|---|
| 1 | max speed (rpm) | 1 | | | | |
| | max torque (Nm (lb.ft)) | 330 (240) | | | | |
| 2 | max speed (rpm) | 2 | | | | |
| | max torque (Nm (lb.ft)) | 300 (220) | | | | |
| 3 | max speed (rpm) | 7 | 8 | 9 | | |
| | max torque (Nm (lb.ft)) | 74 (52) | 297 (23) | 550 (405) | | |
| 4 | max speed (rpm) | 10 | 12 | 13 | 15 | |
| | max torque (Nm (lb.ft)) | 56 (41) | 204 | 371 | 540 (400) | |

On the PY68

On this actuator, the torque limiter is an option that disconnects the motor from the gearbox when the torque limit is reached. The actuator head then has no residual torque applied.

The operator can change the torque limit over a range of +/- 40% of the median value. The following tables show the maximum torque setting ranges for each actuator model selected :

| Without drive head | Reduction ratio | Free speed (rpm) | Torque limit setting range (Nm (lb.ft)) | |
|--------------------|-----------------|------------------|---|-----------|
| | | | min | Max |
| PY68E-031-03/05 | 1:31 | 305 | 20 (15) | 45 (33) |
| PY68S-087-03/05 | 1:40 | 218 | 25 (18) | 60 (44) |
| PY68S-148-03/05 | 1:61 | 155 | 40 (30) | 90 (66) |
| PY68H-192-03/05 | 1:227 | 42 | 140 (103) | 340 (251) |
| PH68H-293-03/05 | 1:293 | 32 | 180 (133) | 440 (325) |
| PY68H-641-03/05 | 1:641 | 15 | 400 (295) | 960 (708) |

| With banjo head BJH01 | Reduction ratio | Free speed (rpm) | Torque limit setting range (Nm (lb.ft)) | |
|-----------------------|-----------------|------------------|---|-----------|
| | | | min | Max |
| PY68E-031-03/05 | 1:124 | 76 | 80 (60) | 180 (132) |
| PY68S-087-03/05 | 1:160 | 54 | 100 (72) | 240 (176) |
| PY68S-148-03/05 | 1:244 | 38 | 160 (120) | 360 (264) |
| PY68H-192-03/05 | 1:908 | 10 | | |
| PH68H-293-03/05 | 1:1172 | 8 | | |
| PY68H-641-03/05 | 1:2564 | 4 | | |

| With RA30 right angle head | Reduction ratio | Free speed (rpm) | Torque limit setting range (Nm (lb.ft)) | |
|----------------------------|-----------------|------------------|---|-----------|
| | | | min | Max |
| PY68E-031-03/05 | 1:31 | 305 | 20 (15) | 45 (33) |
| PY68S-087-03/05 | 1:40 | 218 | 25 (18) | 60 (44) |
| PY68S-148-03/05 | 1:61 | 155 | 40 (30) | 90 (66) |
| PY68H-192-03/05 | 1:227 | 42 | 140 (103) | 340 (251) |
| PH68H-293-03/05 | 1:293 | 32 | 180 (133) | 440 (325) |
| PY68H-641-03/05 | 1:641 | 15 | 400 (295) | |

| With banjo head BJH02 | Reduction ratio | Free speed (rpm) | Torque limit setting range (Nm (lb.ft)) | |
|-----------------------|-----------------|------------------|---|-----------|
| | | | min | Max |
| PY68E-031-03/05 | 1:162 | 101 | 60 (45) | 135 (100) |
| PY68S-087-03/05 | 1:381 | 72 | 75 (54) | 180 (132) |
| PY68S-148-03/05 | 1:597 | 51 | 120 (90) | 270 (198) |
| PY68H-192-03/05 | 1:774 | 14 | 420 (310) | |
| PH68H-293-03/05 | 1:879 | 10 | 540 (399) | |
| PY68H-641-03/05 | 1:1692 | 5 | | |

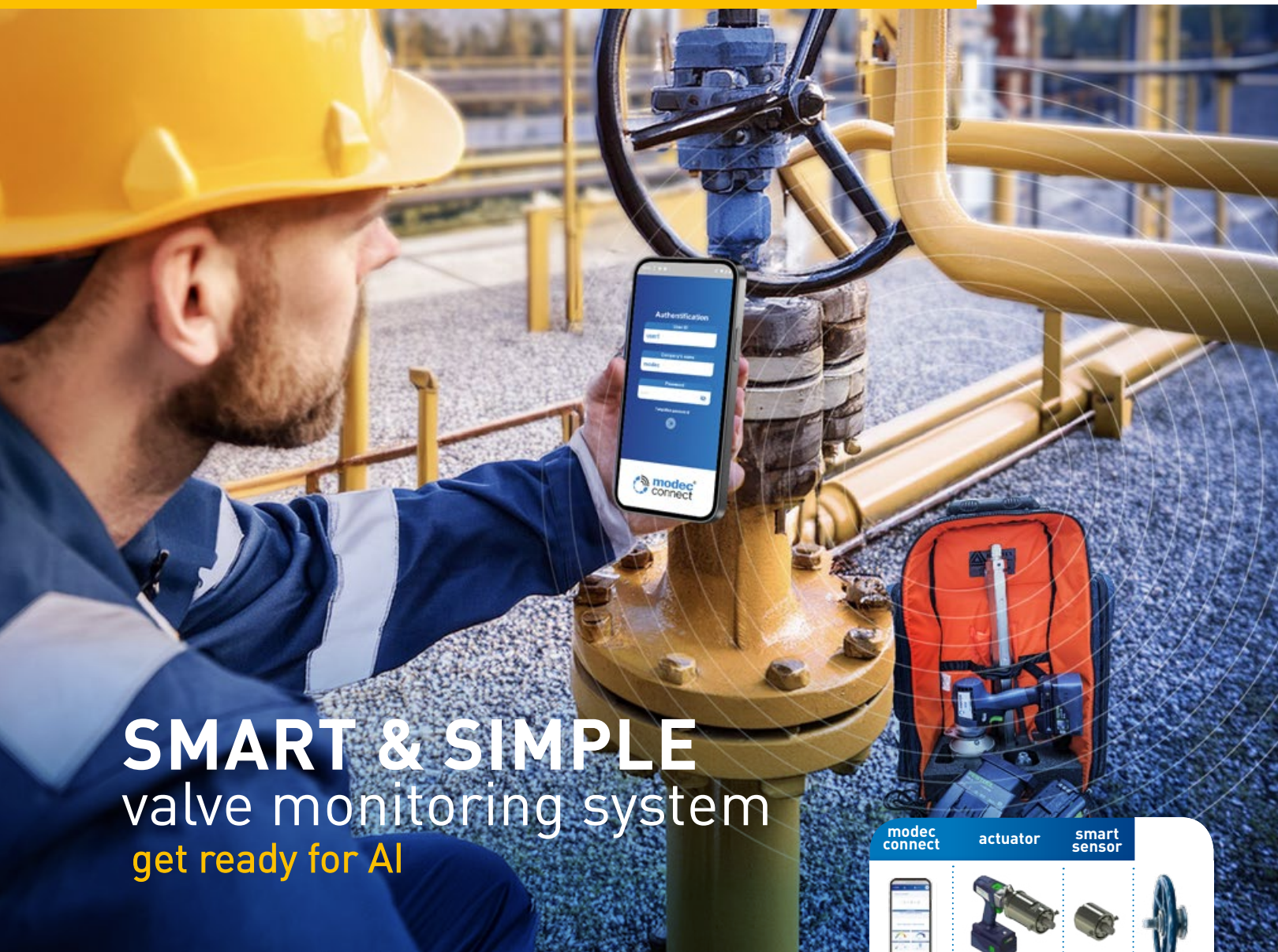
| With torque multiplier | Reduction ratio | Free speed (rpm) | Torque limit setting range (Nm (lb.ft)) | |
|------------------------|-----------------|------------------|---|-----|
| | | | min | Max |
| PY68E-031 | 115 | 82 | 74 | 167 |
| PY68S-087 | 148 | 59 | 93 | 223 |
| PY68S-148 | 226 | 42 | 148 | 334 |
| PY68H-192 | 842 | 11 | | |
| PY68H-293 | 1087 | 9 | | |
| PY68H-641 | 2378 | 4 | | |

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

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SMART & SIMPLE

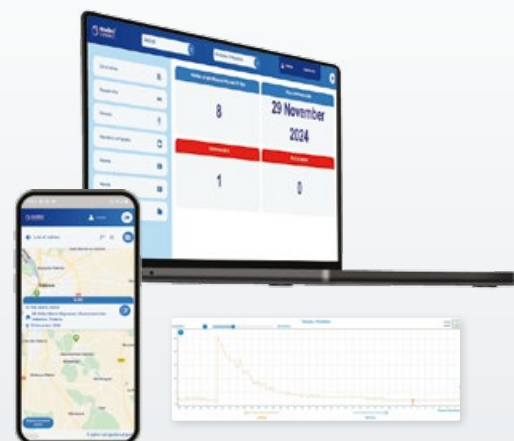
valve monitoring system

get ready for AI



Why modec connect

- **Characterize your valves**
Get to know your valve network better by collecting key data
- **Anticipate maintenance**
Prevent and decrease the number of unexpected shutdowns & Expand your equipment lifetime
- **Follow up Operations**
Keep tracks of every operation and enhance teamwork
- **Get ready for AI**
Build a solid and appropriate database for future AI analysis (Predictive maintenance, operations & investment optimization)



What it does

- 1. Collects data during operations :**
 - Torque
 - Speed
 - Number of rotation
 - Rotation direction
- 2. Generates report of your operation**
Gather key data and share it with the rest of your team to keep track of your work
- 3. Enables you to analyse data**
Create guided operation in order to be able to perform effective analyses thanks to an intuitive interface

How it works

The Modec Connect sensor seamlessly collects data during operation by connecting to the Modec portable valve actuator, transmitting the information via Bluetooth.

- **No modification of your installation**
- **Compatible with every modec actuators**
- **Plug and play set up**

How to begin

1 Get the "modec connect" smart sensor



The modec connect sensor needs to be connected to a modec portable valve actuator before the operation. It will then record real-time data including torque, speed, number of turns, and direction. Data will be transmitted to the phone app by Bluetooth.

| TECHNICAL DATA | |
|-------------------------------|---------------------------|
| Weight kg (lb) | 1,8 (4) |
| Protection class | IP44 |
| Charging time | 5h |
| Operating Temperature °C (°F) | -30 - +50°C (22 - 122 °F) |
| Autonomy min | Until 40 (hours) |
| Measuring range Nm (lb.ft) | 0 -1000 (0-740) |

2 Choose your app subscription



| STANDARD | PREMIUM | EXTENSION |
|---|--|--|
| Enter industry 4.0 and start to digitize valve operations on budget | Access all premium features, extra storage, and a web app for full monitoring | |
| <ul style="list-style-type: none"> • Access mobile app • Capture real-time data • Generate pdf reports of your operation | <ul style="list-style-type: none"> • Access mobile app & web app • Guided operations • Other software's data import & export • More storage • Build your team | <ul style="list-style-type: none"> • More valves storage • More operations storage • More users |
| <p>! Extensions are only valid in case of premium subscriptions</p> | | |

Details

| | STANDARD | PREMIUM | EXTENSION |
|--------------------------------------|----------|---------|-----------|
| Cost | Free | \$ | \$\$ |
| Mobile App | | | |
| Nb of valves stored | 1 | 100 | +100 |
| Nb of measures per valve stored | 1 | 5 | - |
| Géolocalization | - | Yes | - |
| Data display pdf | Yes | Yes | - |
| Graph display pdf | Yes | Yes | - |
| Valves QR code | - | Yes | - |
| Web App | | | |
| Nb of valves stored on the web App | - | 100 | +100 |
| Nb of measures/valves stored web App | - | 10 | +10 |
| Nb of scenarii/valves | - | 5 | +10 |
| Operation PDF export | - | Yes | - |
| CSV & JSON data export | - | Yes | - |
| History and comparison | - | Yes | - |
| Accounts | | | |
| Admin | - | 1 | 1 |
| Super-user accounts | - | 1 | +3 |
| User accounts | 1 | 5 | +15 |

The actuator heads are compatible with all **moddec** portable valve actuators.

STANDARD DUTY RING-TYPE DRIVE HEAD ("BANJO HEAD")

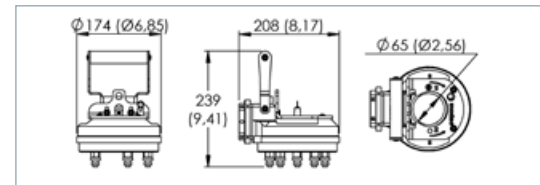


Maximum allowed torque: 600 Nm (440 lb.ft)
Weight: 5kg (11 lb)

Essential for all **rising stem handwheels**, the **Standard duty banjo drive head** caters for all stems up to a **maximum diameter of 63mm (2.48")**. It can also operate all clamping systems for handwheel and other interfaces. What's more, it brings additional reduction which means you can **multiply the actuator's torque by 4** and reduce the speed by the same factor. **Perfect for difficult or stiff handwheels.**

With a **maximum torque of 600 Nm (440 lb.ft)**, the Standard duty banjo head can be mounted quickly and easily on all **Easy duty actuators** and on some **Standard duty actuators** (see product files).

Reference : BJH01



HEAVY DUTY RING-TYPE DRIVE HEAD ("BANJO HEAD")

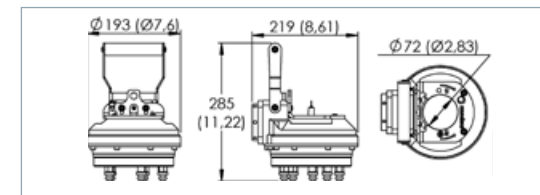


Maximum allowed torque: 1000 Nm (740 lb.ft)
Weight: 8.6 kg (19 lb)

The **Heavy duty banjo drive head** should be used for **very high torques**. It caters for **rising stems up to a maximum diameter of 70mm (2.75")** and is compatible with all clamping systems for handwheel and other interfaces. It brings additional reduction which means you can **multiply the actuator's torque by 3** and reduce the speed by the same factor.

With a **maximum torque of 1000 Nm (740 lb.ft)**, the Heavy duty banjo head can be mounted quickly and easily on **all Easy and Standard duty actuators, as well as some Heavy duty ones** (see product files).

Reference : BJH02



RIGHT-ANGLE DRIVE HEAD RA30



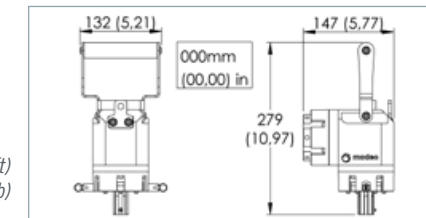
Maximum allowed torque : 600 Nm (440 lb.ft)
Weight : 4.2 kg (9.3 lb)

The RA30 right angle drive head can be positioned at 90° to the actuator providing **optimal positioning for the operator.**

It is suitable for **high torques** (up to 600 Nm (465 lb.ft)).

The right angle drive head RA30 can be mounted quickly and easily on all our actuators. It brings no change in the speed and the torque as the reduction ratio is 1:1.

Reference : RA30



TORQUE MULTIPLIER

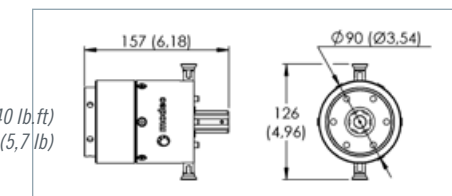


Maximum allowed torque : 600 Nm (440 lb.ft)
Weight : 2,6 kg (5,7 lb)

The **Torque Multiplier TM004** is a **light and sturdy additional gearbox that simply connects to the PVA** when torque needs to be increased. The Torque Multiplier increases torque by 3,7 and reduces speed by the same. It constitutes a **perfect way to keep using a light and fast portable actuators** for most of the valves and change them into "high torque tools" only when required.

With a **maximum output torque capacity of 600 Nm (442 lb.ft)**, the TM004 is compatible with all Easy Duty actuators and some Standard Duty actuators (see product specifications for details). The Torque Multiplier is compatible with the same moddec adapters and interfaces than the portable actuator itself.

Reference : TM004



We have a range of accessories specifically for pneumatic portable actuators designed to improve user comfort as well as the protection of both operator and equipment.

AIR FILTRATION, PRESSURE REGULATION AND LUBRICATION UNITS

Pneumatic portable valve actuators (HL83) require **dry, clean and properly lubricated air** in order to work effectively. The FRL unit filters, dries and lubricates the compressed air, guaranteeing that the motor operates as required. It also controls the air supply pressure, which in turn controls the actuator's performance (maximum torque).

The FRL should be positioned **less than 5 meters away from the tool**. When selecting the FRL, check that it has a flow capacity suitable for the actuator's requirement.

modec offers a complete range of FRL units that are compact, robust, adapted to the constraints of work sites and easy to connect. A **connection kit** between the FRL and the actuator is available (ref **AC051**) with a quick connector for more comfort.

Self-relieving regulator. Lubrication with selective oil fog. Metal bowl with oil level viewing window.

Automatic oil tank fill-in system

Recommended oil type : MODEC Co-16 oil (reference **AC149**).

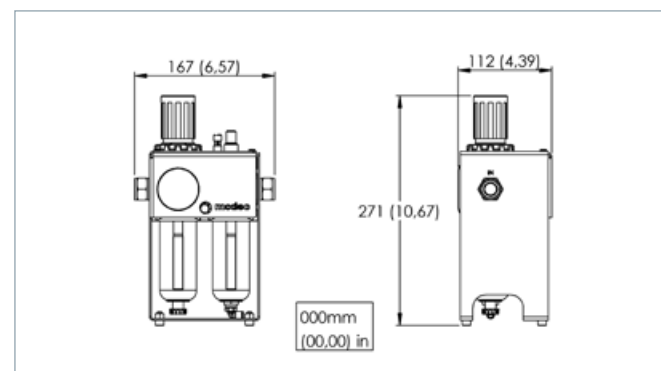
| Reference | AC107 |
|----------------------------------|---|
| Max inlet pressure (23°C / 50°C) | 16 / 10 bars 232 / 145 psi |
| Pressure gauge | 0 / 10 bars 0 / 145 psi |
| Controlled pressure | 0,5 / 8 bars 7 / 116 psi |
| Ambient temperature | 0 à +50°C 0 / 122°F |
| Oil bowl capacity | 80 cm ³ 0,003 cfm |
| Filtration | 5 µm |
| Purge system | Semi-auto |
| Connection | G ½ |
| Dimensions | 271 x 167 x 112 mm 10,7 x 6,6 x 4,4 in |
| Weight (empty) | 2,9 kg / 6,4 lb |



AC107



AC051



IMPORTANT

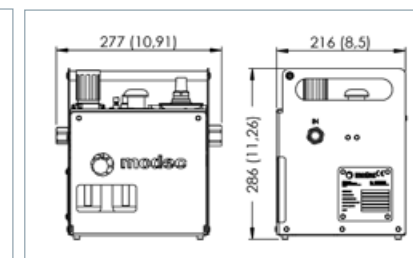
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

We have a range of accessories specifically for pneumatic portable actuators designed to improve user comfort as well as the protection of both operator and equipment.

SAFETY AIR TREATMENT BOX (SAT BOX)



AC118



AC052

The **SAT Box** (Safety Air Treatment box) is a **safety device** that protects the user and the equipment.

The **SAT Box** provides numerous important safety features:

- Emergency kill switch
- Key safety lock (optional)
- Downstream automatic air-bleed
- Automatic switch off when air pressure drop detected

Reference: **AC118**

| Reference | AC118 |
|--------------------------------|--|
| FRL Type | AC107 |
| Emergency kill switch | YES |
| Automatic downstream air bleed | YES |
| Pressure gauge | 0 / 10 bars 0 / 145 psi |
| Filtration | 5 µm |
| Oil bowl capacity | 80 cm ³ / 0,003 cfm |
| Connections | input : G½ / output : G¾ |
| Min & max inlet pressure | 2 / 8 bars 29 / 174 psi |
| Dimensions | 277 x 216 x 286 mm 10,9 x 8,5 x 11,3 in |
| Weight (empty) | 7,6 kg / 16,8 lb |
| Ambient temperature | -10 / +50 °C 14 / 122 °F |

Those Safety devices ensure an instantaneous air bleed in the downstream circuit when the emergency kill switch is hit and/or when air supply stops. As a consequence, no residual energy may create an accidental motion after the stop. All these safety features are energized by air pressure, without any other source of energy required.

If the air feed pressure falls below 2 bars, the SAT box will automatically shut down in order to prevent the actuator inadvertently restarting if the pressure climbs back up (if the compressor stops and then restarts for example).

All of these functions are operational with the air supply pressure - there's no need for another energy source.

Finally, the SAT box integrates the FRL unit (Filtration, air pressure Regulation and Lubrication) in order to ensure that the air feed is clean and correctly lubricated.

A **connection kit** between the SAT Box and the actuator is available (ref **AC052**) with a quick connector for more comfort.

EXHAUST COLLECTOR AND SILENCER

It is recommended to use a **silencer** with pneumatic portable actuators. It fixes to the actuator's exhaust vent and **reduces the sound level**. We have silencers of varying sizes and performance levels for different applications and constraints of use of the actuators.

> **Heavy duty exhaust silencers**: Extremely robust and compact, this stainless steel silencer reduces the noise level and protects against foreign bodies getting into the motor via the exhaust vent.

References: **AC155** for Easy Duty actuators

AC156 for Standard Duty and Heavy Duty actuators

> **High flow exhaust silencer**: Constructed with a unique expansion chamber, completely free of obstruction, exhaust air softly flows to the atmosphere with significant noise and oil fog reduction, providing a clean comfortable productive work environment. Composed entirely of corrosion-resistant material for long life and maintenance-free performance, this model is especially recommended for Standard Duty and Heavy Duty actuators.

References: **AC159** for Standard Duty and Heavy Duty actuators only

> **The exhaust collector** must be assembled on Standard duty and Heavy duty actuators radial exhaust to accommodate the silencer. For Easy duty actuators, the silencer can be directly fixed to the exhaust vent at the back of the motor.

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

To maintain optimum performance and durability, your portable valve actuator needs to be stored in the right conditions. We have two types of box for storing and transporting actuators and their accessories.

As well as providing protection, these boxes are also ideal for transporting all the equipment to sites and minimizing the risk of misplacing any parts.

TRANSPORT CASES



Extremely robust, with wheels and handles, these transport and storage cases are **designed to order** so that all the equipment fits snugly into a **thick, pre-cut protective foam**.

Available in five sizes, the cases are adapted to accommodate the required equipment by cutting the protective foam to measure.

| Dimensions | VT001 | VT002 | VT004* | VT005 | VT009 |
|----------------|-------------|------------|------------|------------|------------|
| Length mm | 1200 (47,2) | 860 (33,9) | 630 (24,8) | 670 (26,4) | 300 (11,8) |
| Height mm (in) | 420 (16,5) | 560 (22,0) | 500 (19,7) | 510 (20,1) | 700 (27,7) |
| Width mm (in) | 234 (9,2) | 355 (14,0) | 370 (14,6) | 262 (10,3) | 200 (7,8) |

* No foam included



«MODEC KIT BOX»

For **regular professional use**, the **modec kit box** is a metal case that can hold all the equipment necessary for various operations (actuators, adaptors, torque management systems, batteries, chargers, FRL unit, air feed pipes etc). With the kit box, you can transport all the equipment to the work site **without difficulty** and **get started quickly and simply**.

The Kit box can be positioned vertically or horizontally and comes with 2x3 wheels so it can be easily moved around, even up and down stairs. The interior has compartments so the different parts can be stored easily and efficiently, and, more importantly, can be put together quickly.

In the case of a pneumatic actuator, for example, it can hold the FRL unit and an air feed pipe on a reel.

Once again, the **modec kit box** can be modified to order and **adapted to your needs**.



IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

FINGERS TYPE ADAPTORS

This **exclusive patented system** is the **simplest** and **most effective** for clamping on to **flat or slightly tapered handwheels**.

No need to pre-install drive plates on the handwheel before use. The fingers type adaptors fix simply on to the portable actuator head, and can then be used to turn every handwheel that has the same number of spokes. It takes less than a minute to change the adaptor. It can also be used for rising stem valves (if used with a banjo head).

These adaptors **save a significant amount of time and money** as there's no need to buy and install a drive plate for each handwheel.

FIXED FINGERS ADAPTORS (SUAxxx)

The fixed fingers adaptors should be used for **flat or slightly tapered handwheels** (spokes at an angle < 30° in relation to the wheel's plane) and are composed of a **drive plate** on which one can screw up to **7 removable fingers** according to the number of spokes on the handwheel you want to turn.

If used with a **banjo head**, fingers can also be screwed directly on to the head (maximum 5 fingers in that case), leaving space for the **rising stem** to pass through. If used with a **straight or right angle head**, the **KPA004 interface** is required to fix the drive plate on to the actuator head (see page 38).

For **small diameters** handwheels, one can use the standard drive plate and place three or four fingers on the small diameter (150 mm) or use the **SUA034** drive plate with shorter and smaller fingers placed on a 75 mm diameter.

FINGERS USED DIRECTLY ON A BANJO HEAD :



3 X SUA001 FIXED ON THE BANJO HEAD



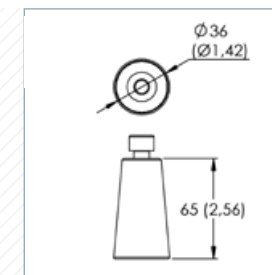
4 X SUA001 FIXED ON THE BANJO HEAD



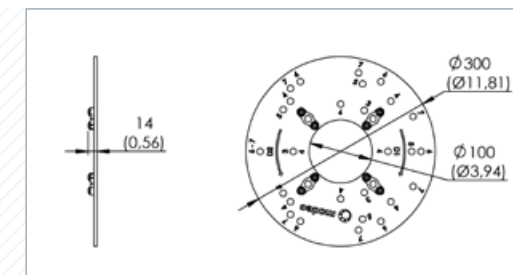
5 X SUA001 FIXED ON THE BANJO HEAD

FINGERS USED ON A DRIVE PLATE :

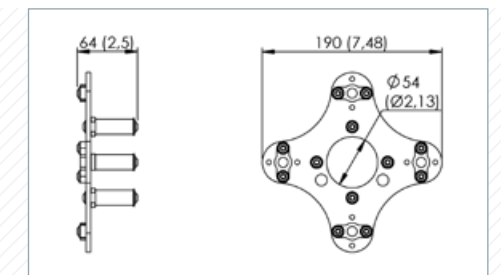
Requires KPA004 interface with a straight or right angle drive head



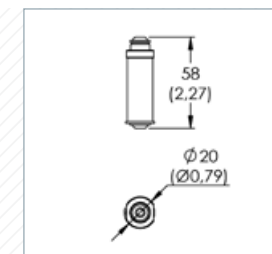
SUA001/ SUA901
(FINGER FOR BIH OR SUA002)



SUA002 (300 MM DRIVE PLATE)



SUA034 (190 MM DRIVE PLATE)



SUA801 (SINGLE FINGER FOR
SUA034 DRIVE PLATE)



SUA007
(1 DRIVE PLATE + 7 FINGERS)



SUA034
(1 DRIVE PLATE + 4 FINGERS)

| | Weight (kg (lb)) | «A» (mm (in)) | Max torque (Nm (lb.ft)) |
|--------|---------------------|------------------|-------------------------------|
| SUA001 | 0,3 (0,7) | 65 (3) | 3 fingers: 350 (260) |
| SUA901 | 0,2 (0,4) | 45 (1,8) | 4 to 7 fingers: 1000 (740) |
| SUA002 | 2,5 (5,5) | N/A | |
| SUA801 | 0,1 (0,2) | 45 (1,8) | 3 or 4 fingers: 150 (110) |
| SUA034 | 0,8 (1,8) | N/A | |
| SUA007 | 5,2 (11,5) | N/A | 1000 (740) |

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

SELF-ADJUSTING AND SELF-CENTERING FINGERS ADAPTORS (SAxxx)



Thanks to its **patented system**, these adaptors clamp instantly on to the handwheel and **the actuator automatically centres itself giving greater ease and efficiency.**

This adaptor should be selected for **flat or slightly tapered handwheels** (spokes at an angle of < 10° in relation to the wheel's plane). It fixes directly on to the banjo head, and via a **KPA003, KPA004 or KPA005** interface on the standard splined shaft of the **straight and right angle actuators** (see page 38).

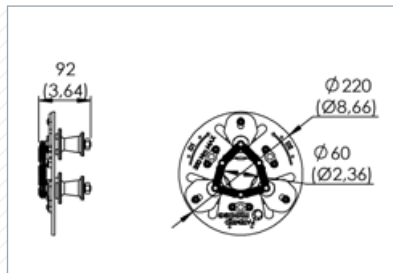
These adaptors **save a significant amount of time and money** as there's no need to buy and install a drive plate for each handwheel.



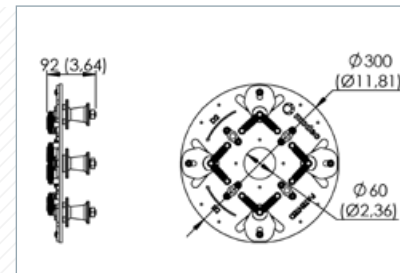
SA003



SA004



FOR 3 OR 6 SPOKES HANDWHEELS



FOR 2 OR 4 SPOKES HANDWHEELS

| | Weight (kg (lb)) | Max torque (Nm (lb.ft)) | Interface for straight or right angle head |
|-------|------------------|-------------------------|--|
| SA003 | 2,3 (5,1) | 350 (260) | KPA003 |
| SA004 | 4,1 (9) | 1000 (740) | KPA004 |
| SA005 | 4,4 (9,7) | 1000 (740) | KPA005 |
| SA006 | 5,6 (12,4) | 1000 (740) | KPA005 |
| SA007 | 5,9 (13) | 1000 (740) | KPA005 |



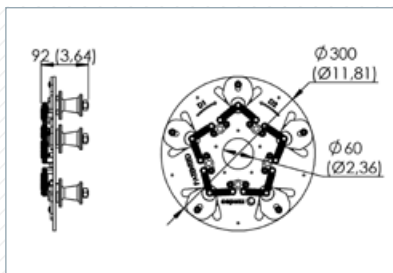
SA005



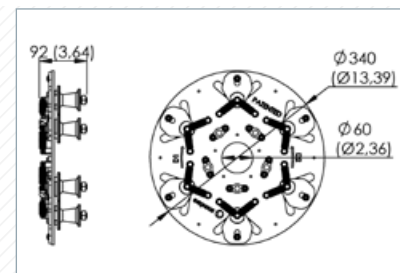
SA006



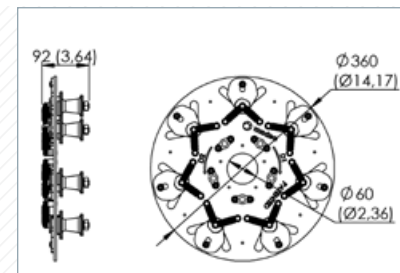
SA007



FOR 5 SPOKES HANDWHEELS



FOR 6 SPOKES HANDWHEELS



FOR 7 SPOKES HANDWHEELS

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

SPOKE ADAPTORS

The **spoke adaptors** clamp **solidly** and **quickly** to the handwheel and can turn in both directions, **with or without a rising stem**. It is available in two versions – one that adapts to flat or slightly tapered (< 30°) handwheels; a second for tapered handwheels (> 30°).

The adaptor has a strong hold on the handwheel and also fixes firmly to the actuator, providing complete **safety** during manoeuvres, even in difficult positions.

These adaptors **save a significant amount of time and money** as there's no need to buy and install a drive plate for each handwheel.

SPOKE ADAPTORS FOR FLAT HANDWHEELS (FSB)

These adaptors should be used for **flat or slightly tapered handwheels** (spokes at an angle < 30° in relation to the wheel's plane).

A choice of two models are available according to the **number of spokes** in the handwheel you want to turn.

These adaptors can be used with a **straight or right angle actuator** using the **KTA3/4** interface, and with a **banjo head** in conjunction with the **TTA002** (see page 40).

| FSB | | |
|-----------|------------------|----------------------|
| LAYOUT | Weight (kg (lb)) | Length «A» (mm (in)) |
| FSBxxx-20 | 5,2 (11,5) | 242 (9,53) |
| FSBxxx-40 | 6,4 (14,1) | 442 (17,4) |
| FSBxxx-60 | 7,6 (16,8) | 642 (25,28) |



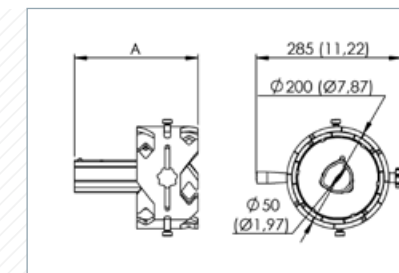
FSB245

For 2, 4 or 5 spokes handwheels

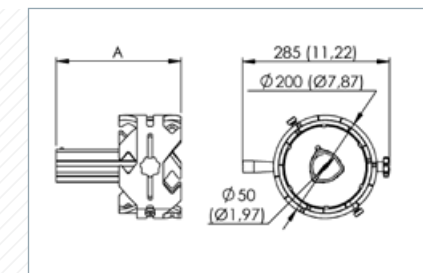


FSB356

For 3, 5 or 6 spokes handwheels



Weight : 5.2 kg (11.5 lb)
Maximum allowed torque: 1000 Nm (740 lb.ft)



FSB adaptors require the **KTA3/4** interface with a straight or right angle drive head, and the **TTA002** interface with a banjo head.

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

► SPOKE ADAPTORS FOR TAPERED HANDWHEELS (CSB)

These adaptors should be used for **tapered handwheels** with spokes at an angle greater than 30° in relation to the wheel's plane. A choice of three models are available according to **the number of spokes in the handwheel you want to turn**.

These adaptors can be used with a **straight or right angle actuator** due to the **KTA3/4**, and with a **banjo head** in conjunction with the **TTA002 interface** (see page 40).

These adaptors **save a significant amount of time and money** as there's no need to buy and install a drive plate for each handwheel.

| CSB | | |
|-----------|------------------|----------------------|
| LAYOUT | Weight (kg (lb)) | Length «A» (mm (in)) |
| CSBxxx-20 | 4,2 (9,3) | 201 (7,91) |
| CSBxxx-40 | 5,4 (11,9) | 401 (15,79) |
| CSBxxx-60 | 6,6 (14,6) | 601 (23,66) |



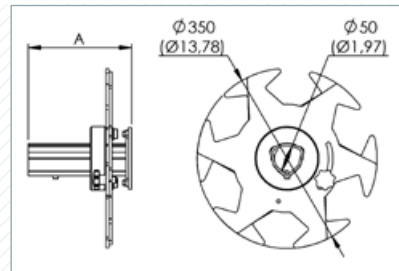
CSB003



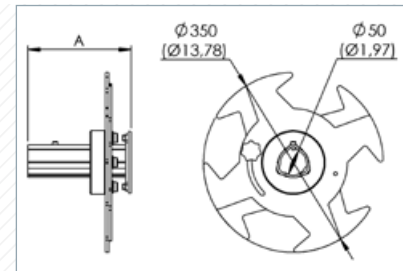
CSB004



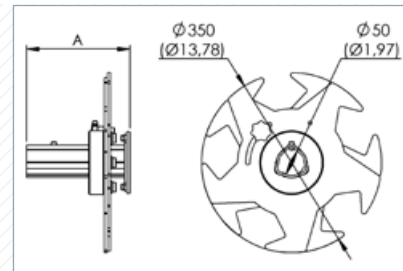
CSB005



FOR 3 OR 6 SPOKES HANDWHEELS

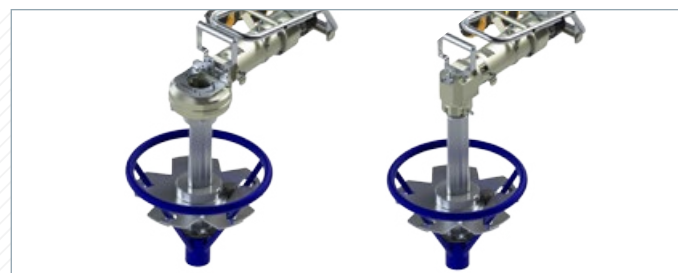


FOR 2 OR 4 SPOKES HANDWHEELS



FOR 5 SPOKES HANDWHEELS

Maximum allowed torque: 1000 Nm (740 lb.ft)
Weight : 4.2 kg (9,3 lb)



CSB adaptors require the KTA3/4 interface with a straight or right angle drive head, and the TTA002 interface with a banjo head.

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

► FIXED UNIVERSAL ADAPTORS (FUAxxx)

These adaptors must be **fixed to the handwheel before use**. Thanks to their multiple "U" clamps that catch the handwheel's spokes, they can fix on to almost every type of handwheel.

The FUA adaptor is available in 4 versions, all in stainless steel :

FUA003 : for flat or slightly tapered handwheels with spokes inclined up to 30° in relation to the wheel's plane without rising stem

FUA004 : for tapered handwheels with spokes inclined from 30° to 40° in relation to the wheel's plane, without rising stem

FUA005 : for flat or slightly tapered handwheels with spokes inclined up to 30° in relation to the wheel's plane WITH rising stem

FUA006 : for tapered handwheels with spokes inclined from 30° to 40° in relation to the wheel's plane, WITH rising stem

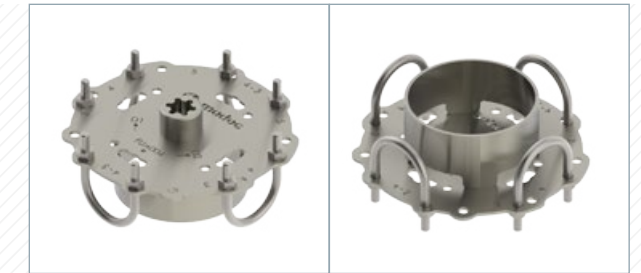
FUA003 and FUA004 can be used directly with the actuator shaft.

All these drive plate adaptors can be used **directly on a banjo head**.

All these drive plate adaptors can be used with an EBX04 extension with the TTA002 interface (see page 39-40).



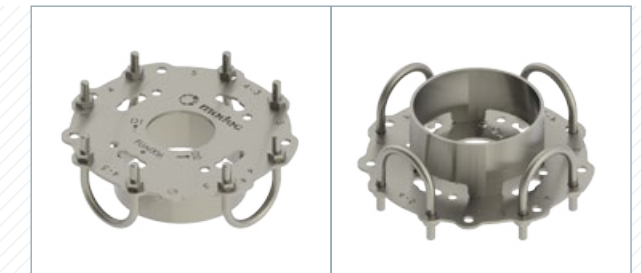
FUA003 FOR FLAT OR SLIGHTLY TAPERED HANDWHEELS (<30°) WITHOUT RISING STEM



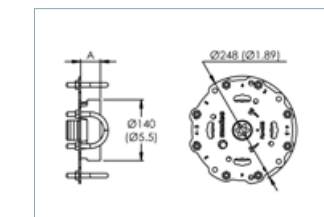
FUA004 FOR TAPERED HANDWHEELS (30° TO 40°) WITHOUT RISING STEM



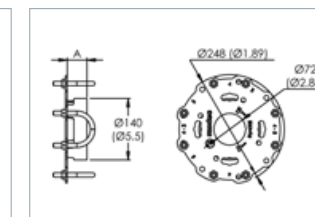
FUA005 FOR FLAT OR SLIGHTLY TAPERED HANDWHEELS (<30°) WITH RISING STEM



FUA006 FOR TAPERED HANDWHEELS (30° TO 40°) WITH RISING STEM



FUA003 / FUA004



FUA005 / FUA006



| | Length «A» (mm (in)) | Weight (kg (lb)) |
|--------|----------------------|------------------|
| FUA003 | 45 (1,77) | 2,7 (5,9) |
| FUA004 | 65 (2,56) | 3 (6,6) |
| FUA005 | 45 (1,77) | 2,4 (5,3) |
| FUA006 | 65 (2,56) | 2,6 (5,7) |

Maximum allowed torque: 1000 Nm (740 lb.ft)

IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

Thanks to the various interfaces, the adaptors can be used with any portable valve actuator and any head (straight, right angle or banjo). They also enable you to use the actuators for applications other than activating valves and on many types of interface other than handwheels.

INTERFACES FOR ADAPTORS SAxxx AND SUAxxx WITHOUT A BANJO HEAD

Using the **KPA** interface, you can manipulate the **SAxxx and SUAxxx** adaptors without a banjo head.

Please note, this configuration is not compatible with handwheels that have a rising stem.

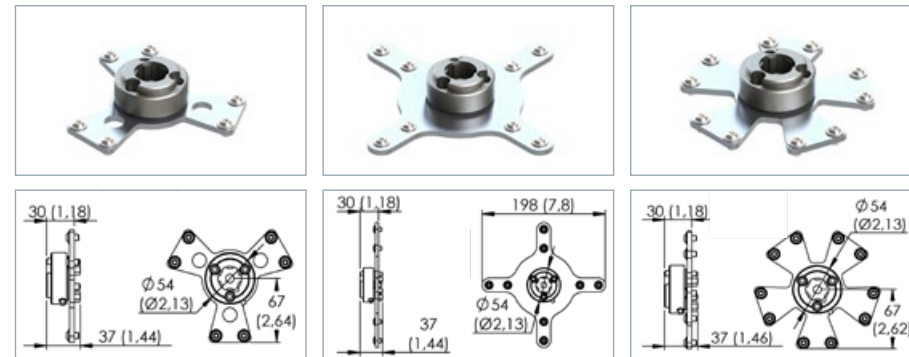
The KPA interface is available in 3 versions:

KPA003 for the SA003 adaptor

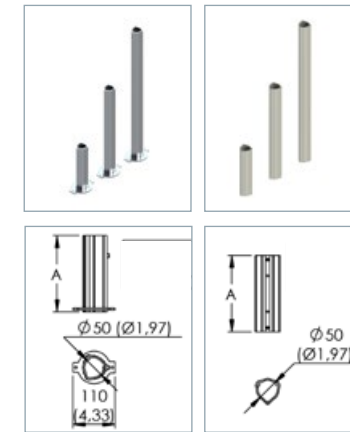
KPA004 for the SA004 and SUA adaptors

KPA005 for the SA005, SA006 and SA007 adaptors

| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) |
|-----------|------------------|-------------------------|
| KPA003 | 0.6 (1,3) | 350 (260) |
| KPA004 | 0.8 (1,8) | 1000 (740) |
| KPA005 | 0.7 (1,5) | 1000 (740) |



EXTENSION BARS



EBx02

EBx04



EB001 / EB002



EB003

We have a wide range of **extension bars** which enable operators to move away from the handwheel or valve, notably in the case of tapered handwheels and underground / buried valves. **Light** and **robust**, they can be used on **rising stems** up to a 48 mm maximum diameters.

The **EBX02** extension bars fix directly on to the **CSB** adaptors.

The **EBX04** extension bars fix on to the **FUA** adaptors using the **TTA** interface, or directly onto the **FSB**.

All the extension bars can connect to our actuators using the **TTA** interface **for the banjo heads** and the **KTA** interface **for straight and right angle heads** (See technical sheet page 41).

The **EB00X telescopic extension bars** are specifically adapted for manipulating **underground / buried valves**. On one end they have a square 3/4" male connector that connects to a standard socket. They can be activated either by a **straight or right angle actuator**, or by an actuator with a **banjo head** (using the **KHA002** interface, see below). In case the valve is deep in the ground, one can use the **EB01X extensions** to the telescopic **EB00X**.

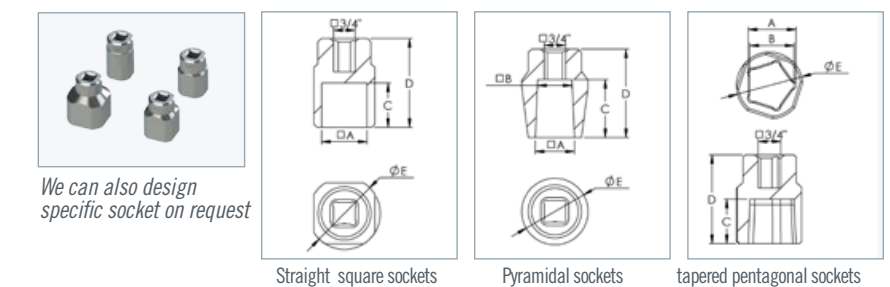
The shaft extension **EB003** fits on any actuator shaft and makes it **160 mm** longer.

| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) | "L" (mm (in)) | length "A" (mm (in)) | Maxi stem Ø (mm (in)) |
|-------------|------------------|-------------------------|---------------------|----------------------|-----------------------|
| EB001 | 4,4 (9,7) | 1000 (740) | 1020-1726 (40) (68) | 1020-1726 (40-68) | N/A |
| EB002 | 2,2 (4,9) | 1000 (740) | 570-940 (22) (37) | 570-940 (22,5-37) | N/A |
| EB003 | 0,85 (1,9) | 1000 (740) | 190 (7,5) | - | N/A |
| EB011 | 3,7 (8,2) | 1000 (740) | 1000 (39,4) | 37 (1,46) | N/A |
| EB012 | 1,9 (4,2) | 1000 (740) | 500 (19,7) | 37 (1,46) | N/A |
| EB202/EB204 | 1,3 (2,9) | 1000 (740) | 200 (7,9) | 50 (1,97) | 48 (1,89) |
| EB402/EB404 | 2,5 (5,5) | 1000 (740) | 400 (15,7) | 50 (1,97) | 48 (1,89) |
| EB602/EB604 | 3,7 (8,7) | 1000 (740) | 600 (23,6) | 50 (1,97) | 48 (1,89) |

| Reference | Interface for straight or right angle heads | Interface for Banjo head | Interface for adaptor | Type of adaptor |
|-------------|---|--------------------------|-----------------------|------------------|
| EB001/EB002 | Direct | KHA002 | Direct | DCxx/CA3/4 |
| EBX02 | KTA 3/4 | TTA002 | Direct | CSB |
| EBX03 | Direct | N/A | KPAxxx/ KTA 3/4 | SUA-FUA/ FSB-CSB |
| EBX04 | KTA 3/4 | TTA002 | Direct/TTA002 | FSB/FUA |

SOCKETS FOR EB00X, KTA3/4 AND TTA3/4

We provide different sockets that can be used with our telescopic valve keys EB001 and EB002 as well as the 3/4" square drives. These sockets are designed to connect to most of the valves output shafts.



We can also design specific socket on request

Straight square sockets

Pyramidal sockets

tapered pentagonal sockets

INTERFACES

TORQUE REACTION

| Straight Square Sockets | | | | | | | | |
|----------------------------|--|--------------------------|-------------------------|---------------------------|--------------------------------|-----------------------------|------------------|------------------------|
| Ref. | Type of shaft (mm (in)) | Connection | A - B : Print dimension | C : Print depth (mm (in)) | E : Outside diameter (mm (in)) | D : Socket height (mm (in)) | Weight (kg (lb)) | Max torque (Nm(lb.ft)) |
| DC020 | 20 (3/4) Square shaft | 3/4" female square drive | 22x22 (0,87x0,87) | 40 (1,6) | 50 (2) | 80 (3,2) | 1 (2,2) | 1000 (740) |
| DC025 | 25 (0,98) Square shaft | | 27x27 (1,06x1,06) | 40 (1,6) | 50 (2) | 80 (3,2) | 0,9 (2) | 1000 (740) |
| DC027 | 27 (1) Square shaft | | 29x29 (1,14x1,14) | 40 (1,6) | 50 (2) | 80 (3,2) | 0,8 (1,8) | 1000 (740) |
| DC030 | 30 (1,2) Square shaft | | 32x32 (1,26x1,26) | 40 (1,6) | 55 (2,2) | 80 (3,2) | 0,9 (2) | 1000 (740) |
| DC040 | 40 (1-1/2) Square shaft | | 42x42 (1,61x1,61) | 40 (1,6) | 65 (2,6) | 80 (3,2) | 1 (2,2) | 1000 (740) |
| DC050 | 50 (2) Square shaft | 52x52 (2,05x2,05) | 50 (2) | 80 (3,2) | 90 (3,5) | 1,3 (2,9) | 1000 (740) | |
| Pyramidal Sockets | | | | | | | | |
| DC012-025 | «Pyramidal shaft 12-25 (1/2-1) | 3/4" female square drive | 12-25 (1/2-1) | 40 (1,6) | 50 (2) | 80 (3,2) | 1 (2,2) | 1000 (740) |
| DC031-035 | «Pyramidal shaft 31-35 (1,2-1,4) | | 31-35 (1,2-1,4) | 52 (2,1) | 60 (2,4) | 80 (3,2) | 0,9 (2) | 1000 (740) |
| tapered pentagonal Sockets | | | | | | | | |
| DP040-044 | tapered pentagonal shaft 40-44 (1-1/2 - 1-3/4) | 3/4" female square drive | 40-44 (1-1/2 - 1-3/4) | 40 (1,6) | 60 (2,4) | 80 (3,2) | 1 (2,2) | 1000 (740) |

INTERFACES FOR ADAPTORS FSB, CSB, EXTENSION BARS AND SOCKETS

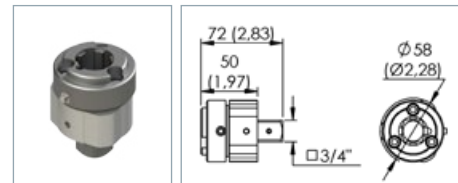
DIRECT CONNECTION

| Reference | Weight (kg (lb)) |
|-----------|------------------|
| KTA3/4 | 0,7 (1,54) |

Maximum allowed torque : 1000 Nm (740 lb.ft)

The **KTA3/4** interface enables actuators to drive FSB and CSB adapters and EBX04 extensions. It also connects to any type of socket with a 3/4" female square connection.

By removing the 3/4" square drive, you can also use it to connect to any 3/4" male square drive.



KTA3/4 (for straight or right angle heads)

INTERFACES FOR BIH

| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) |
|-----------|------------------|-------------------------|
| TTA002 | 0,7 (1,54) | 1000 (740) |
| TTA3/4 | 1,1 (2,43) | 1000 (740) |
| KHA002 | 0,9 (2,0) | 1000 (740) |

Maximum allowed torque : 1000 Nm (740 lb.ft)

The **TTA 3/4** interface enables a banjo head to connect to any type of socket with a 3/4" female square connection. By removing the 3/4" square drive, you can also use it to connect to any 3/4" male square drive.

You can also fix it onto an adapter (SA004, SUAxxx, FUA005, FUA006) and remove the 3/4" square drive so that you can connect a **EB001** or **EB002** telescopic extension to the adapter.

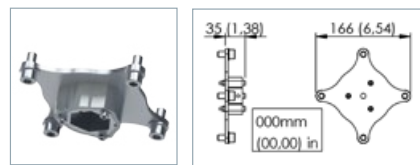
Please note, this interface cannot be used with a rising stem.

The **TTA002** interface enables a banjo head to connect to FSB and CSB adapters and EBX04 extensions. It is also required on some adapters (SA004, SUAxxx, FUAxxx) if you want to use a EBx04 extension.

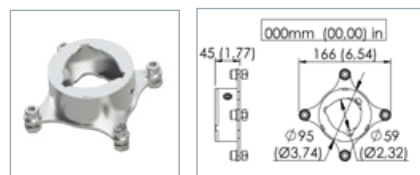
This configuration (except for FUA003 and FUA004) can be used with a rising stem if its diameter is smaller than 48mm and its length shorter than the extension length.

The **KHA002** interface enables a banjo head to connect to EB001 or EB002 telescopic extensions.

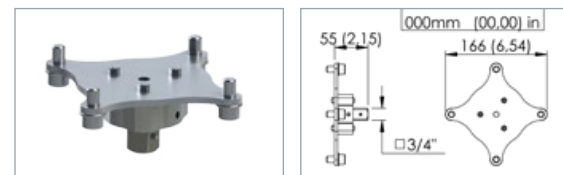
Please note, this interface cannot be used with a rising stem



TTA002 (for banjo heads)



TTA3/4 (for banjo heads)



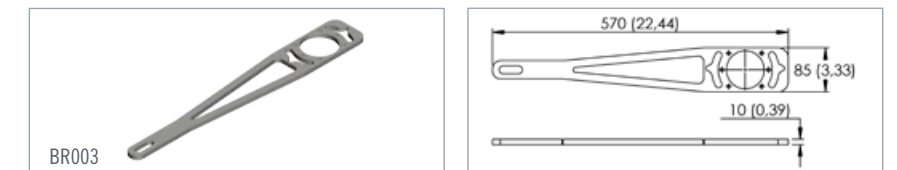
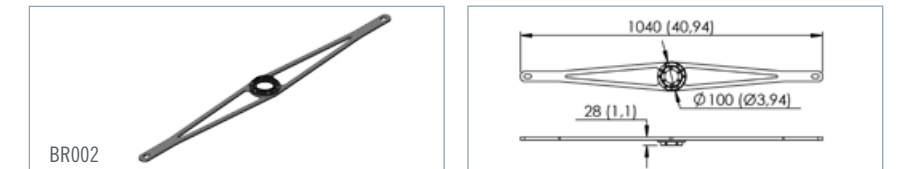
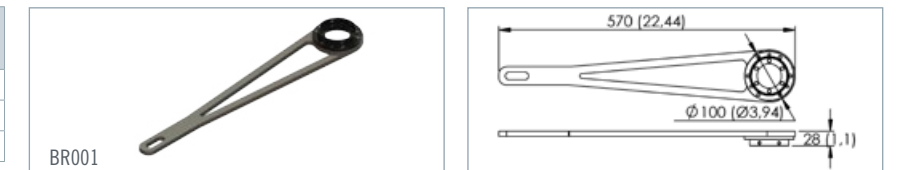
IMPORTANT
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

SINGLE AND DOUBLE REACTION ARMS

To guarantee operator safety and comfort, it's essential to use a torque reaction management system. Several types of system are available for use in different situations. Each is compatible with the whole range of actuators and adaptors because of their standard flange.

Our actuators are supplied with a torque reaction arm which enables the torque to be controlled by a strap attached to the end of the bar and to a fixed point in the working environment. In this way, the operator is not exposed to the torque reaction, in particular at the end of the process.

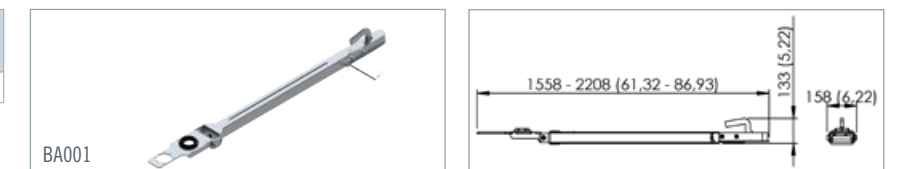
| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) |
|-----------|------------------|-------------------------|
| BR001 | 1,8 (4) | 1000 (740) |
| BR002 | 3 (6,6) | 1000 (740) |
| BR003 | 1,5 (3,3) | 1000 (740) |



ARTICULATED REACTION ARM FIXED TO VEHICLE TRAILER HITCH

This telescopic metal bar can be easily positioned between a vehicle's trailer hitch and the actuator. Ideal for valves buried beneath roads, or for any valve which has an upward facing handwheel.

| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) |
|-----------|------------------|-------------------------|
| BA001 | 12.3 (27,1) | 1000 (740) |

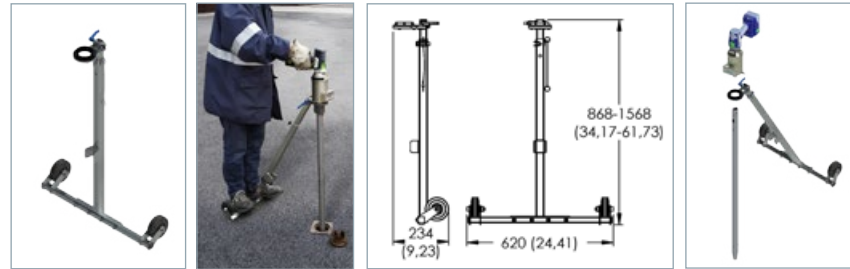


IMPORTANT
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

▶ FOOT HELD ARTICULATED REACTION ARM

You don't need to attach this torque reaction system to anything – By simply standing on the reaction arm, the operator doesn't need to carry the torque reaction with his arms, his own weight does the job !

| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) |
|-----------|------------------|-------------------------|
| BA002 | 5,3 (11,7) | 350 (260) |



BA002

Example of use with a buried / underground valve.

▶ TORQUE REACTION FINGER

This simple reaction system is quickly and easily adjustable to most of the valves and penstocks that do not have handwheel, just an output shaft (square, keyed ...). The distance between the finger and the rotation center can be adjusted. The finger comes inside a flange that is already placed on the valve, or simply comes to rest on the valve body.

The maximum torque depends on where the point of contact is on the finger.

| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) |
|-----------|------------------|-------------------------|
| BS001 | 1,5 (2,2) | 350 (260) |



IMPORTANT

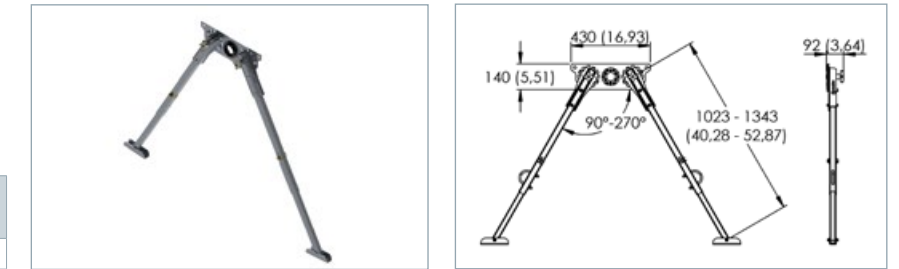
For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

▶ TELESCOPIC BIPOD

The bipod is simple, small, easy to use and practical. It's adapted for use in a wide variety of situations.

With its two telescopic legs and a flange that can be placed in any position, it redirects the torque without any difficulty into the ground, a wall or any other fixed point.

| Reference | Weight (kg (lb)) | Max torque (Nm (lb.ft)) |
|-----------|------------------|-------------------------|
| BP002 | 12.3 (27.1) | 1000 (740) |



BP002

▶ SPECIAL, MADE TO ORDER ADAPTERS AND TORQUE REACTION SYSTEMS

These flanges are designed to be used with a specific valve or system. Before using it, you need to equip the valve with a fixed system on to which the actuator can be placed. Some of them therefore require some preliminary design but thereafter the flange is perfectly adapted to both the system and application. This flange is particularly useful for valves and systems that do not have a handwheel and need activating regularly.

These flanges are made to order by our technical department based on the specific characteristics of your system.



IMPORTANT

For your comfort and safety, please carefully read the instruction manual before using the portable valve actuator.

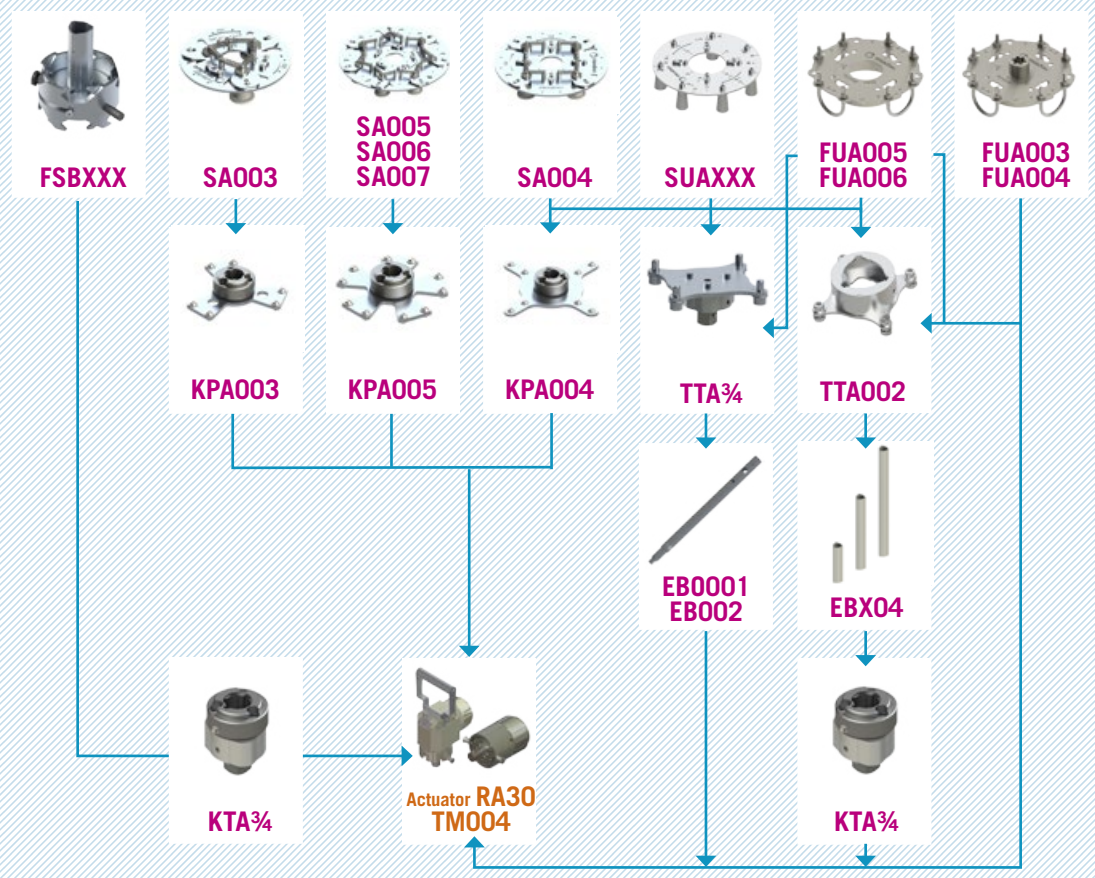


ADAPTORS SELECTION GUIDE

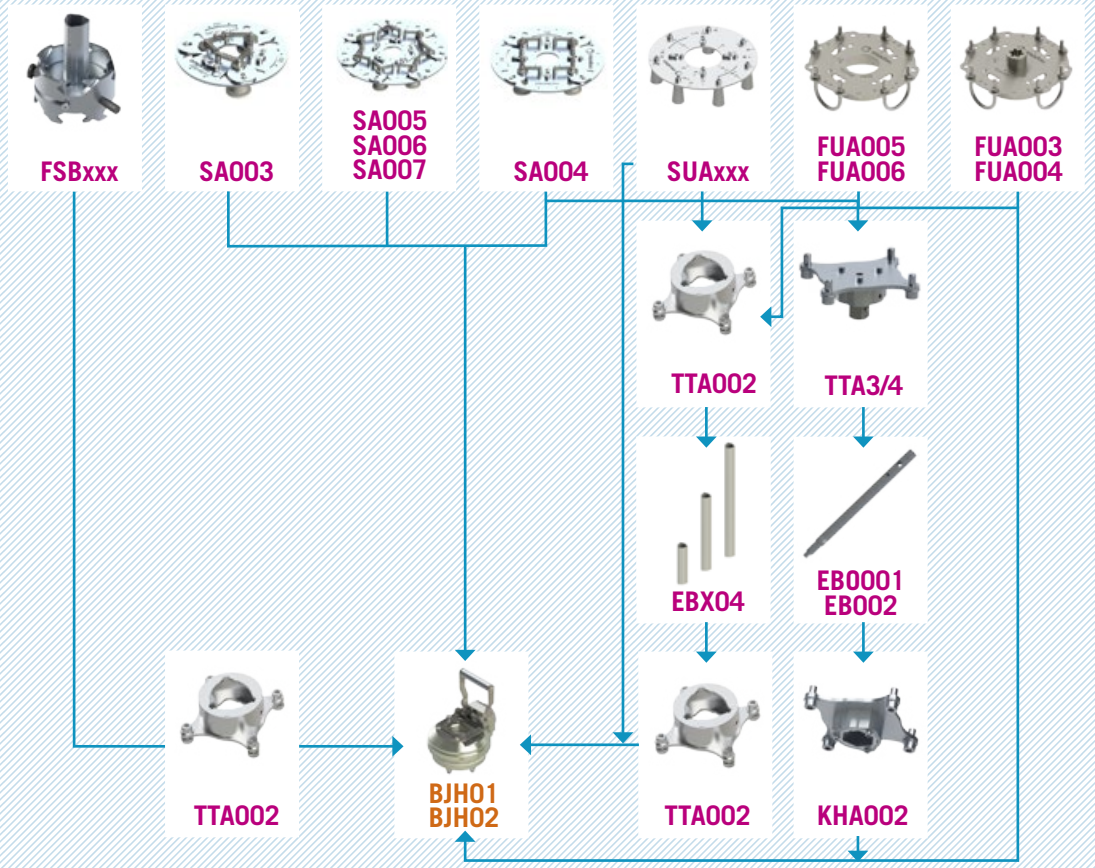
FLAT HANDWHEELS NO RISING STEM



FLAT HANDWHEELS (<30°) No rising stem - No BJH



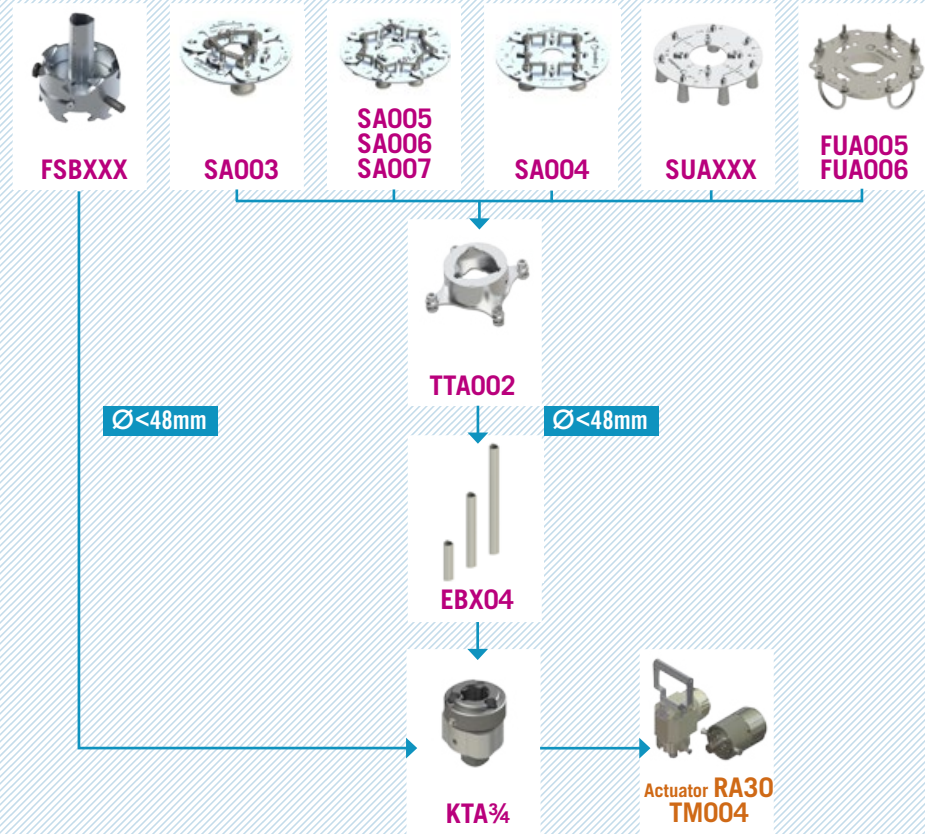
FLAT HANDWHEELS (<30°) No rising stem- with BJH



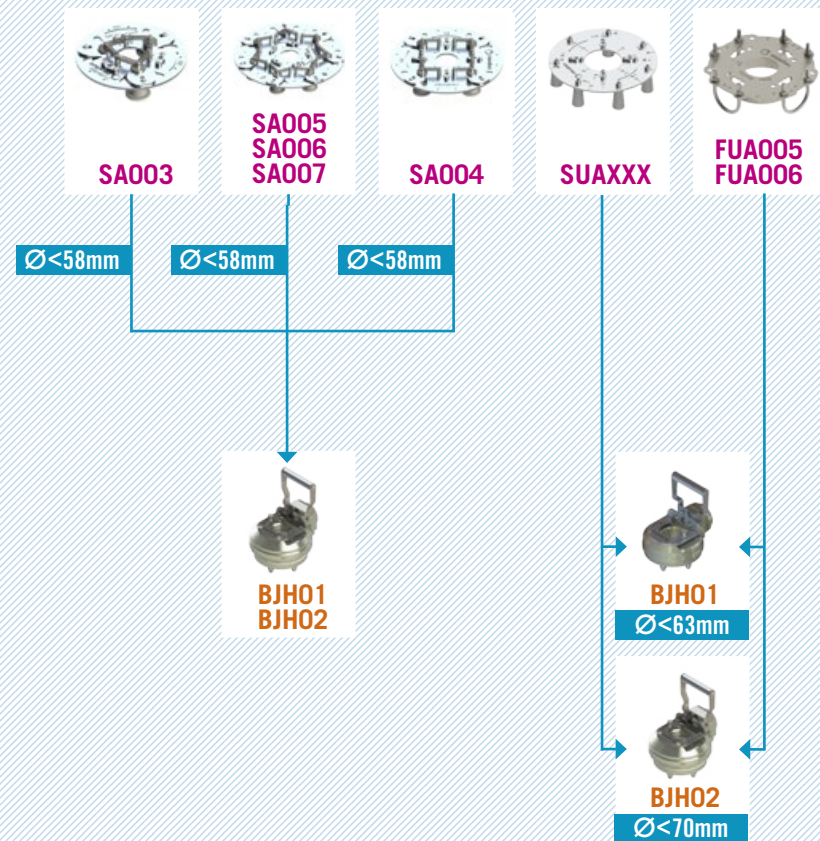
FLAT HANDWHEELS RISING STEM



FLAT HANDWHEELS (<math><30^\circ</math>) Rising stem $\varnothing < 48\text{mm}</math> - No BJH$



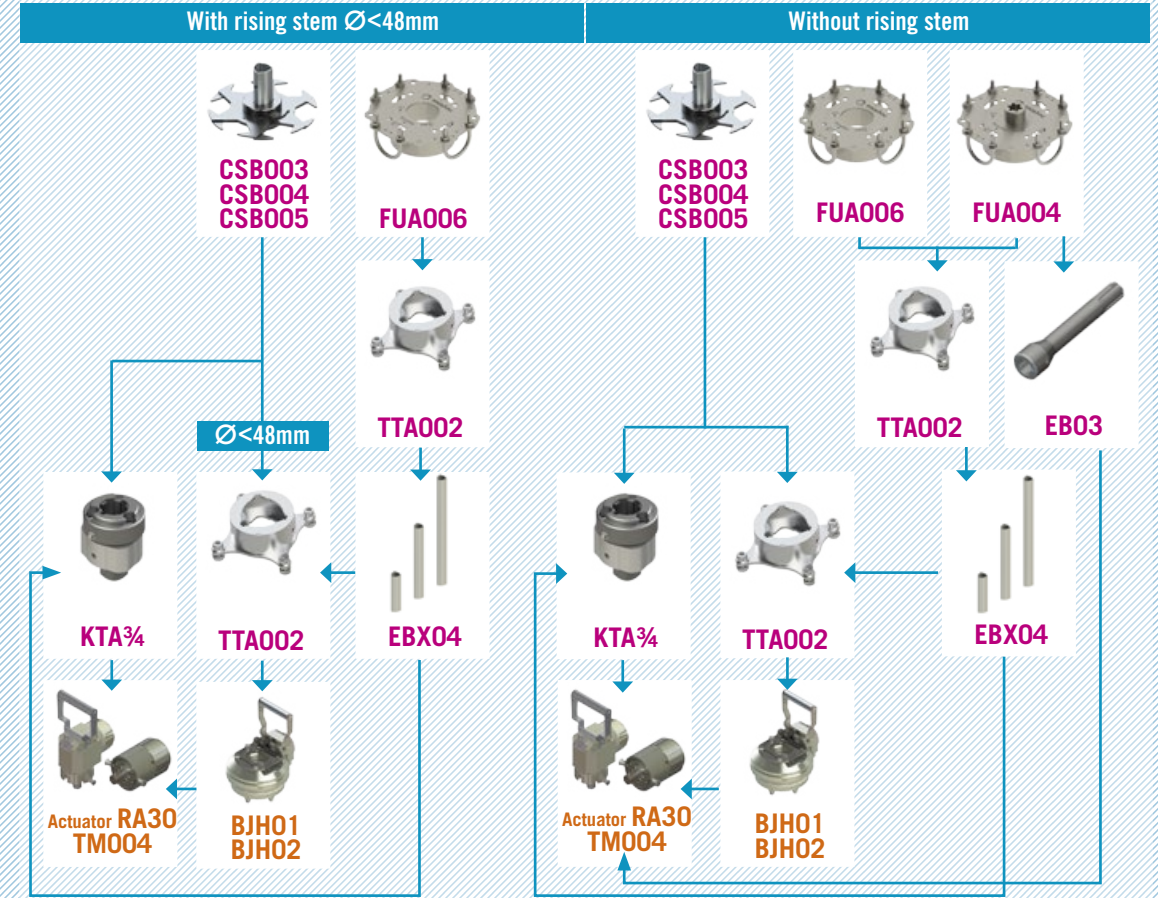
FLAT HANDWHEELS (<math><30^\circ</math>) Rising stem $48 < \varnothing < 72\text{mm}</math> - with BJH$



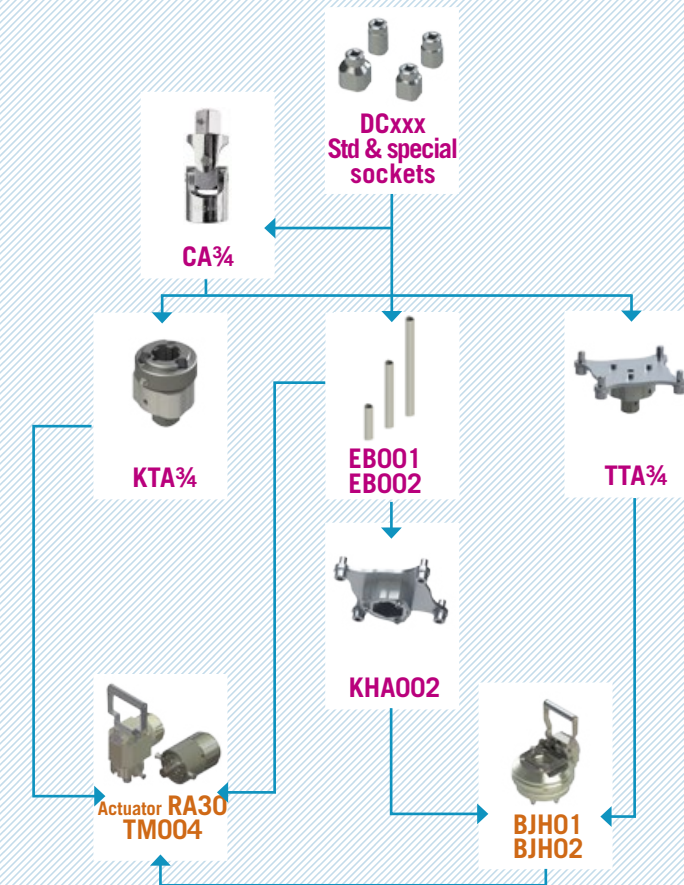
TAPERED HANDWHEELS WITH AND WITHOUT RISING STEM ($\varnothing < 50\text{mm}</math>)$



TAPERED HANDWHEELS (>math><30^\circ</math>) With and without rising stem With and without BJH



NO HANDWHEEL - Drive shaft - With and without BJH





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