efficiency et safety... Why choose ?





WELCOME TO THE

C modec WORLD



Modec motors have been used for almost 30 years for many heavy duty applications, particularly in the chemical, petrochemical and automotive industries.

OIL & GAS





PETROCHEM

Our team's technical expertise and commercial flexibility enable us to develop and provide innovative, robust and powerful motors and solutions such as 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.

motally materia

Welcome to a world of innovation, expertise and flexibility. Welcome to the modec world !

>Plug & Play



ASI NO

3

Efficiency



0

⇒ Safety

> Anywhere

A comprehensive and modular range

3





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

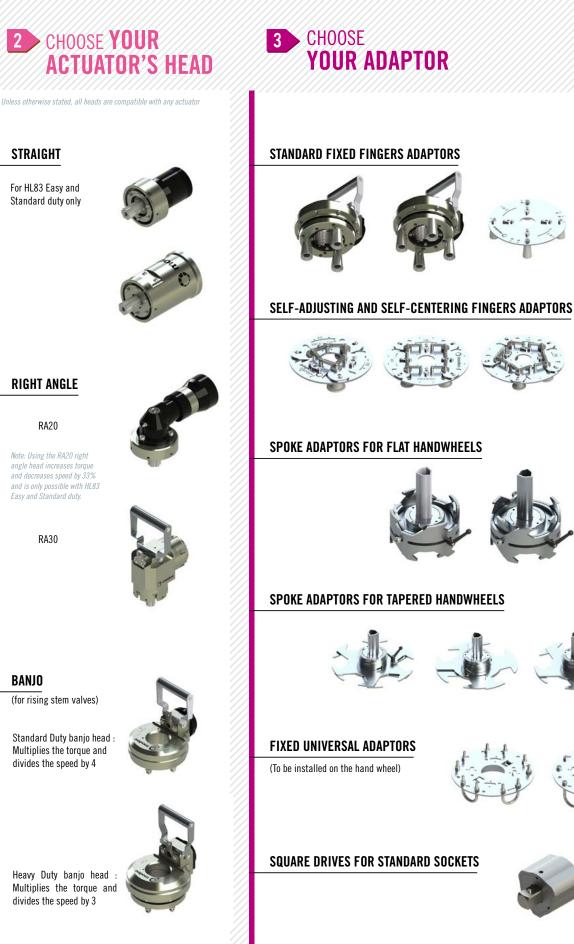
Maximum torque : 1000 Nm (740 lb.ft)





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

Maximum torque : 1000 Nm (740 lb.ft)







BANJO

(for rising stem valves)

Standard Duty banjo head :



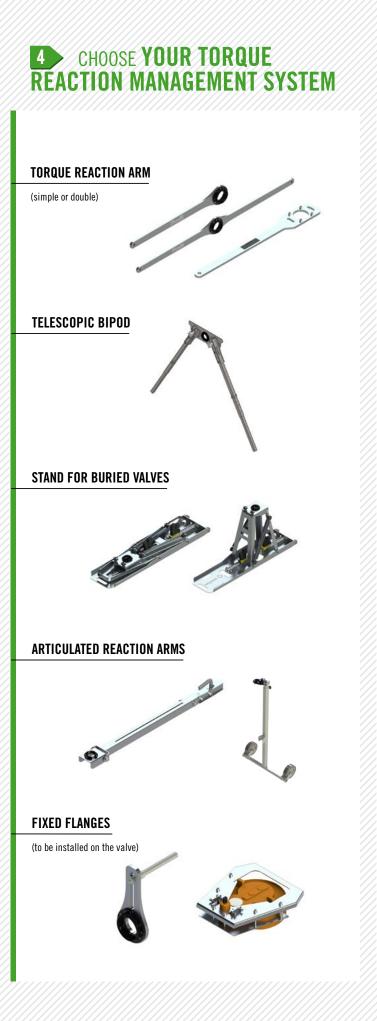
SPOKE ADAPTORS FOR FLAT HANDWHEELS



SPOKE ADAPTORS FOR TAPERED HANDWHEELS









REVOLUTION COUNTER

Digital display Two ways rev. counter + cumul and speed. Memory



Mechanical torque limiter, manual re-engage Adjustable torque limit

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

TRANSPORTATION AND STORAGE CASES

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



BATTERIES

Long-life battery Backpack



«KIT BOX»

Complete and smart metal case for professional use

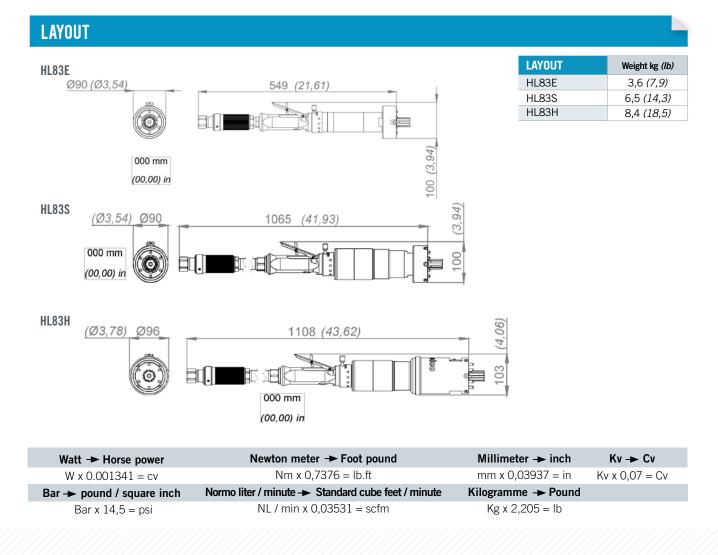




PNEUMATIC PORTABLE HL83 VALVE ACTUATORS



You can have them **ATEX II 2 GD c IIC T6 to T4** certified, they can go to stall and they don't generate heat, sparks or smoke.



OPTIONS AND ACCESSORIES

| OPTIONS (page 5) | | | | | | |
|----------------------------|----|----|----|----|----|----|
| Right-angled head RA20 | | | | | | |
| Digital revolution counter | | | | | | |
| Torque limiter* | | | | | | |
| CODE | 00 | 01 | 02 | 03 | 04 | 05 |

| ACCESSORIES | Page |
|-------------------------|-------|
| Drive head | 6 |
| Adaptors and interfaces | 7-14 |
| Torque reaction systems | 15-17 |
| Air management | 18-19 |
| Other accessories | 20 |

*see torque and speed values page 5 : « 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 !

| CONNECTION | AND LUBRIC | ATION | | | | | |
|-----------------------------|----------------------------------|------------|-----------------------------------|--------------------------------|--------------------------|----------|---------|
| CONNECTION & LUBRICATION | Air consumption NI/min (scfm) | Connection | Minimum Ø for fittings mm (in) | Minimum Ø for pipes mm (in) | Lubrication Drops/min | FRL unit | SAT Box |
| HL83S/H | 2000 (71) | 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.

| PERFORMA | NCE | | | | | | | | | | | | | |
|------------------|--------------------|--------------------|----------------------|--------------------|--------------------|----------------------|--------------------|--------------------|----------------------|----|-------|---------|---------|-----|
| Straight or with | Fre | e speed (r | om) | Max to | orque (Nm | (lb.ft)) | Starting | g torque (N | m (lb.ft)) | | Optio | ons ava | ailable | |
| RA30 | 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) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 01 | 02 | 03* | 04* | 05* |
| HL83E-023 | 500 | 530 | 560 | 13 (10) | 17 <i>(13</i>) | 21 (15) | 10 (7) | 14 (10) | 17 <i>(13)</i> | | | | | |
| HL83E-054 | 220 | 230 | 240 | 31 <i>(23)</i> | 39 <i>(29)</i> | 49 <i>(36)</i> | 25 (18) | 31 (23) | 39 (<i>29</i>) | | | | | |
| HL83S-035 | 230 | 250 | 270 | 100 (74) | 120 (89) | 145 (107) | 80 (59) | 96 (71) | 116 (85) | | | | | |
| HL83S-060 | 130 | 140 | 150 | 170 (125) | 200 (150) | 250 (180) | 130 (96) | 160 (120) | 200 (150) | | | | | |
| HL83H-111 | 70 | 76 | 83 | 250 (180) | 300 (220) | 370 (270) | 230 (170) | 280 (210) | 350 <i>(260)</i> | | | | | |
| HL83H-169 | 46 | 50 | 54 | 380 <i>(280)</i> | 450 <i>(330)</i> | 570 (420) | 300 (220) | 360 <i>(270)</i> | 450 <i>(330)</i> | | | | | |
| HL83H-321 | 24 | 26 | 29 | 720 (530) | 860 (640) | 1070 (790)** | 670 (490) | 810 (600) | 1010(750)** | - | | | | |
| th RA20 right | Fre | e speed (r | pm) | Max to | orque (Nm | (lb.ft)) | Starting | g torque (N | m (lb.ft)) | | Optio | ons ava | ilable | |
| angle head | 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) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 01 | 02 | 03* | 04* | 05* |
| HL83E-023 | 380 | 400 | 420 | 18 (13) | 22 (16) | 28 (21) | 14 (10) | 18 (13) | 22 (16) | | | | | |
| HL83E-054 | 160 | 170 | 180 | 41 (30) | 52 <i>(38)</i> | 65 <i>(48)</i> | 33 (24) | 42 (31) | 52 (38) | | | | | |
| HL83S-035 | 170 | 180 | 190 | 120 (90) | 160 (120) | 190 (140) | 96 (71) | 130 (95) | 150 (110) | | | | | |
| HL83S-060 | 100 | 105 | 115 | 220 (160) | 270 (200) | 330 (240) | 175 <i>(130</i>) | 215 (160) | 265 (200) | | | | | |
| HL83H-111 | | | | | | | | | | | | | | |
| HL83H-169 | | | | | | Not av | vailable | | | | | | | |
| HL83H-321 | | | | | | | | | | | | | | |
| With banio | Fre | e speed (rp | om) | Max to | rque (Nm | (lb.ft)) | Starting | torque (Nr | n (lb.ft)) | | Optio | ns ava | ilable | |
| ead BJH01 | 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) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 01 | 02 | 03* | 04* | 05* |
| L83E-023 | 120 | 130 | 140 | 54 (40) | 65 <i>(48)</i> | 82 (60) | 52 <i>(38)</i> | 64 (47) | 72 (53) | | | | | |
| HL83E-054 | 52 | 56 | 60 | 125 <i>(92)</i> | 150 (110) | 190 (140) | 115 (84) | 150 (110) | 180 <i>(130)</i> | | | | | |
| IL83S-035 | 57 | 62 | 67 | 350 <i>(260)</i> | 430 <i>(320)</i> | 530 <i>(390)</i> | 280 (210) | 340 <i>(250)</i> | 420 <i>(310</i>) | | | | | |
| HL83S-060 | | | | | | | | | | | | | | |
| HL83H-111 | | | | | | Not av | ailable | | | | | | | |
| HL83H-169 | | | | | | not a | anabic | | | | | | | |
| HL83H-321 | | | | | | | | | | | | | | |
| With banjo | | e speed (rp | | | rque (Nm | | | torque (Nr | | | Optio | ns ava | ilable | |
| head BJHO2 | 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) | 4 bars (58 psi) | 5 bars (72 psi) | 6,2 bars (90 psi) | 01 | 02 | 03* | 04* | 05* |
| HL83E-023 | 160 | 170 | 180 | 40 <i>(30)</i> | 49 <i>(36)</i> | 62 (46) | 32 (24) | 39 <i>(29)</i> | 50 <i>(37)</i> | | | | | |
| HL83E-054 | 70 | 75 | 80 | 95 <i>(70)</i> | 115 <i>(84)</i> | 145 (110) | 76 <i>(56)</i> | 92 (68) | 115 (84) | | | | | |
| HL83S-035 | 75 | 82 | 90 | 260 (190) | 320 <i>(240)</i> | 400 <i>(290)</i> | 210 (155) | 260 (190) | 320 <i>(240)</i> | | | | | |
| HL83S-060 | 44 | 48 | 52 | 450 (330) | 550 <i>(400)</i> | 680 <i>(500)</i> | 360 <i>(270)</i> | 440 <i>(320)</i> | 540 <i>(400)</i> | | | | | |
| HL83H-111 | 23 | 25 | 28 | 750 <i>(550)</i> | 900 <i>(660)</i> | 1100 (810)** | 690 <i>(510</i>) | 840 <i>(620)</i> | 1050 (770)** | | | | | |
| HL83H-169 | | | | | | Not av | ailable | | | | | | | |
| L83H-321 | | | | | | | | | | | | | | |

*see torque and speed values page 5 : « Options » **Warning ! Do not use the actuator when the torque is higher than 1000 Nm (740 lb.ft) or use a torque limiter

IMPORTANT

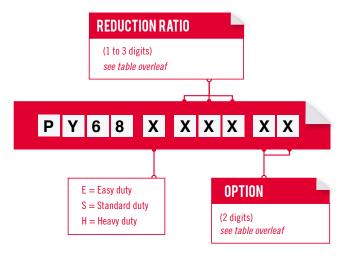




PETROL PORTABLE PY68 VALVE ACTUATORS

2

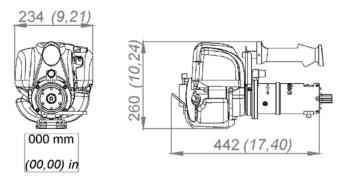




modec petrol portable valve actuators can be used in total autonomy – the only limit being the available petrol supply. They are particularly suitable for use in isolated outdoor places.

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

LAYOUT



| LAYOUT | Weight*(kg) <i>(lb)</i> |
|--------|-------------------------|
| PY68E | 10 (22) |
| PY68S | 10,3 <i>(22,7)</i> |
| PY68H | 10,3 (22,7) |

*Empty weight Gas tank capacity : 0.5 l (0.13 US gal)

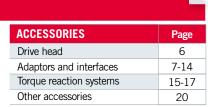
| Watt -> Horse power | Newton meter -> Foot pound | Millimeter 🔶 inch | Kv 🔶 Cv |
|---------------------------|---|--------------------|----------------|
| $W \ge 0.001341 = cv$ | Nm x 0,7376 = lb.ft | mm x 0,03937 = in | Kv x 0,07 = Cv |
| Bar 🔶 pound / square inch | Normo liter / minute -> Standard 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 5) | | | | |
|----------------------------|----|----|----|----|
| Digital revolution counter | | | | |
| Torque limiter* | | | | |
| CODE | 00 | 02 | 03 | 05 |
| | - | | | |

*see torque and speed values page 5 : « 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 !



PERFORMANCE

| Straight or with | | | | Opti | ons avai | lable |
|--|---|--|--|------------|-----------------|---------------|
| RA30 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | 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 <i>(380)</i> | 390 <i>(290)</i> | | | |
| PY68H-641 | 15 | 1140 (840)** | 850 (630) | | | |
| With banjo head BJH01 | Free speed (rpm) | Max torque (Nm (lb.ft)) | Starting torque (Nm (lb.ft)) | Opti 02 | ons avai 03* | lable 05* |
| PY68E-031 | 75 | 220 (160) | 160 (120) | | | |
| F 100E-U31 | | | | | | |
| PY68S-087 | 27 | 600 (440) | 460 (340) | | | |
| | | | · · · · · | | | |
| PY68S-087 | | 600 (440) | 460 (340) | | | |
| PY68S-087 PY68S-148 | | | 460 (340) | | | Þ |
| PY68S-087 PY68S-148 PY68H-192 | | 600 (440) | 460 (340) | | | |
| PY68S-087 PY68S-148 PY68H-192 PY68H-293 PY68H-641 | 27 | 600 (440) Not ava | 460 <i>(340)</i> ilable | Opti | ons avai | ilable |
| PY68S-087 PY68S-148 PY68H-192 PY68H-293 PY68H-641 | | 600 (440) | 460 (340) | Opti 02 | ons avai 03* | |
| PY68S-087 PY68S-148 PY68H-192 PY68H-293 PY68H-641 With banjo head | 27 | 600 (440) Not ava | 460 <i>(340)</i> ilable | | | |
| PY68S-087 PY68S-148 PY68H-192 PY68H-293 PY68H-641 With banjo head BJH02 | 27 Free speed (rpm) | 600 (440) Not avai | 460 (340) ilable Starting torque (Nm (lb.ft)) | | | ilable 05* |
| PY68S-087 PY68S-148 PY68H-192 PY68H-293 PY68H-641 With banjo head BJH02 PY68E-031 | 27 Free speed (rpm) 100 | 600 (440) Not ava Max torque (Nm (lb.ft)) 165 (120) | 460 (340) ilable Starting torque (Nm (lb.ft)) 120 (90) | | | |
| PY68S-087 PY68S-148 PY68H-192 PY68H-293 PY68H-641 With banjo head BJH02 PY68E-031 PY68S-087 | 27 Free speed (rpm) 100 36 | 600 (440) Not avai Max torque (Nm (lb.ft)) 165 (120) 460 (340) | 460 (340) ilable Starting torque (Nm (lb.ft)) 120 (90) 350 (260) | | | |
| PY68S-087 PY68S-148 PY68H-192 PY68H-293 PY68H-641 With banjo head BJH02 PY68E-031 PY68S-087 PY68S-148 | 27 Free speed (rpm) 100 36 21 | 600 (440) Not avait Max torque (Nm (lb.ft)) 165 (120) 460 (340) 790 (580) | 460 (340) ilable Starting torque (Nm (lb.ft)) 120 (90) 350 (260) 590 (440) 760 (560) | | | |







*see torque and speed values page 5 : « Options » ** Warning ! Do not use the actuator when the torque is higher than 1000 Nm (740 lb.ft) or use a torque limiter

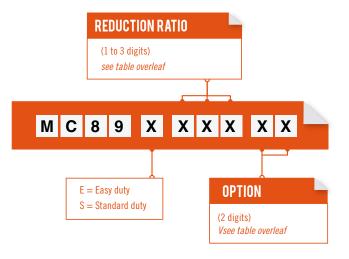
IMPORTANT





BATTERY POWERED PORTABLE MC89

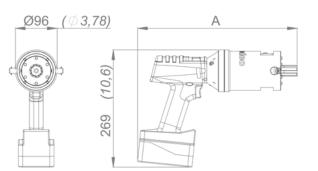




Although it is **super light and compact**, the MC89 Portable **Valves Actuator delivers a 850 Nm** (620 lb.ft) maximum torque. This makes it the perfect tool for any **« Easy » or « Standard » duty job**, for any valve type, indoor or outdoor, with a great autonomy. Its two **18V Lithium-Ion batteries** 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.

LAYOUT



| LAYOUT | Weight (kg) | Length "A" (mm) |
|-------------|-------------|--------------------|
| MC89E - 007 | 5,1 | 354 |
| MC89S - 035 | 5,1 | 354 |
| MC89S - 054 | 5,4 | 367 |
| Battery | 0,7 | |

| Watt -> Horse power | Newton meter -> Foot pound | Millimeter 🔶 inch | Kv 🔶 Cv |
|---------------------------|---|--------------------|----------------|
| $W \ge 0.001341 = cv$ | 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 | BAT143 | BAT144 | |
|--|---------|---------|--|
| Voltage | 18 | BV | |
| Capacity | 5,20 Ah | 6,20 Ah | |
| Autonomy* | 24 mn | 29 mn | |
| Charging times with standard charger BAT145 | 45 mn | 53 mn | |
| Charging times with quick charger BAT146 | 33 mn | 40 mn | |
| Weight (kg) | 0,7 kg | 0,7 kg | |

| Charger technical data | BAT145 | BAT146 |
|----------------------------|---------------|---------|
| Power supply (input) | 220-240V AC | |
| Mains frequency | 50/6 | 50 Hz |
| Charging voltage (output) | 10,8 - 1 | L8 V DC |
| Quick charging | Max 6A Max 8A | |
| Charging temperature range | -5 à +55°C | |
| Safety class | I | I |
| Weight (kg) | 0,8 kg | 1,1 kg |

*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 CONTROLER & ELECTRONIC TORQUE LIMITER

The MC89 comes with an embedded **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 positions), you can set the required torque limit and / or rotation speed. When reaching the torque limit, the actuator will stop and sound a beep. The speed control trigger allows to set 4 different speeds and for each of these speeds, the torque scroll wheel allows to set 13 different torque limits.



OPTIONS AND ACCESSORIES

| OPTIONS (page 5) | | |
|----------------------------|----|----|
| 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 | 6 |
| Adaptors and interfaces | 7-14 |
| Torque reaction systems | 15-17 |
| Other accessories | 20 |

PERFORMANCE

| Straight or with RA30 | Free speed (rpm) | Max torque (Nm) | Options available |
|--------------------------|---------------------|--------------------|-------------------|
| | | | 02 |
| MC89E-007 | 450 | 115 | |
| MC89S-035 | 94 | 550 | |
| MC89S-054 | 61 | 850* | |



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.

| With banjo head BJH01 | Free speed (rpm) | Max torque (Nm) |
|--------------------------|---------------------|--------------------|
| MC89E-007 | 113 | 460 |
| MC89S-035 | 24 | 600* |
| MC89S-054 | 14 | 600* |

| With banjo head BJH02 | Free speed (rpm) | Max torque (Nm) |
|--------------------------|---------------------|--------------------|
| | | |
| MC89E-007 | 150 | 350 |
| MC89S-035 | 31 | 1000* |
| MC89S-054 | 20 | 1000* |

* 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).





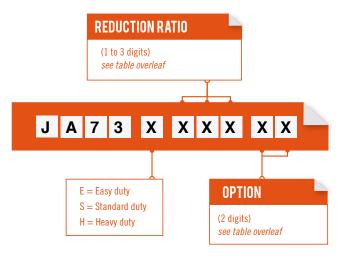
IMPORTANT





BATTERY POWERED PORTABLE JA73 VALVE ACTUATORS





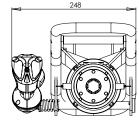
Dedicated to the most demanding applications!

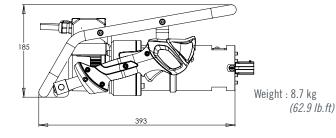
Thanks to its **robustness** and high autonomy batteries, the **JA73** modec electric portable valve actuator is able to deliver a high power for more than one hour continuously. It does not depend on any energy source (electric plug or compressed air network) and can operate freely anywhere. Much more 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.**

LAYOUT





| Watt → Horse power | Newton meter -> Foot pound | Millimeter inch | Kv 🔶 Cv |
|----------------------------|---|--------------------|----------------|
| $W \ge 0.001341 = cv$ | 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 = Ib | |

BATTERIES

| Technical data | BAT520 | BAT750 | BAT1200 | BAT1500 |
|----------------------------------|-----------|------------|------------|------------|
| Туре | 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 | 4,5 | 6,3 | 7,5 |

* Autonomy is measured for an equivalent torque of 50% of maximum torque.

** One cycle means one complete battery charge and discharge.

OPTIONS AND ACCESSORIES



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 | 6 |
| Adaptors and interfaces | 7-14 |
| Torque reaction systems | 15-17 |
| Other accessories | 20 |
| | |

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.

PERFORMANCE

| RA30 Free speed (rpm) (Nm (lb.ft)) (Nm (lb.ft)) 02 JA73E-023 360 44 (32) 35 (26) • • JA73S-077 110 150 (110) 120 (89) • • JA73S-132 63 250 (180) 200 (150) • • JA73H-169 49 325 (240) 260 (190) • • JA73H-309 27 590 (435) 470 (350) • • JA73H-564 15 1080* (800)* 860 (640) • • Vith banjo head BJH01 Free speed (rpm) Max torque (Nm (lb.ft)) 140 (100) • • JA73H-169 90 180 (130) 140 (100) • • • JA73S-077 27 590 (435) 470 (350) • • • JA73H-169 90 180 (130) 140 (100) • • • JA73H-309 JA73H-309 JA73H-309 • • • • • • | | | | | |
|---|--------------------------|------------------|------------------|------------------|-------------------------|
| JA73S-077 110 150 (110) 120 (89) JA73S-077 110 150 (110) 120 (89) JA73S-132 63 250 (180) 200 (150) JA73H-169 49 325 (240) 260 (190) JA73H-309 27 590 (435) 470 (350) JA73H-564 15 1080* (800)* 860 (640) Vith banjo head BJH01 Free speed (rpm) Max torque (Nm (lb.ft)) Options available JA73S-077 27 590 (435) 470 (350) JA73S-132 90 180 (130) 140 (100) JA73H-169 non disponible JA73H-564 120 135 (100) 105 (77) | Straight or with RA30 | Free speed (rpm) | | | Options available 02 |
| JA73S-132 63 250 (180) 200 (150) Image: constraint of the system | JA73E-023 | 360 | 44 (32) | 35 (26) | |
| JA73H-169 49 325 (240) 260 (190) JA73H-309 27 590 (435) 470 (350) JA73H-564 15 1080* (800)* 860 (640) JA73H-564 Free speed (rpm) Max torque (Nm (lb.ft)) Options available (Nm (lb.ft)) JA73S-077 27 590 (435) 470 (350) JA73H-169 JA73H-309 140 (100) JA73H-564 /ith banjo head BJHO2 Free speed (rpm) Max torque (Nm (lb.ft)) Starting torque (Nm (lb.ft)) Options available 02 JA73H-564 02 JA73E-023 120 135 (100) 105 (77) | JA73S-077 | 110 | 150 (110) | 120 (89) | |
| Max torque BJH01 Free speed (rpm) Max torque (Nm (lb.ft)) Starting torque (Nm (lb.ft)) Options available 02 JA73H-564 15 1080*(800)* 860 (640) Image: constraint of the speed (rpm) Options available 02 Vith banjo head BJH01 Free speed (rpm) Max torque (Nm (lb.ft)) Starting torque (Nm (lb.ft)) Options available 02 JA73S-023 90 180 (130) 140 (100) Image: constraint of the speed (rpm) 02 JA73S-132 3473H-169 1mon disponible Image: constraint of the speed (rpm) 02 JA73H-564 Free speed (rpm) Max torque (Nm (lb.ft)) Starting torque (Nm (lb.ft)) Options available 02 JA73E-023 120 135 (100) 105 (77) Image: constraint of the speed (rpm) | JA73S-132 | 63 | 250 (180) | 200 (150) | |
| JA73H-564 15 1080* (800)* 860 (640) Image: constraint of the second seco | JA73H-169 | 49 | 325 (240) | 260 (190) | |
| Vith banjo head BJH01Free speed (rpm)Max torque (Nm (lb.ft))Starting torque (Nm (lb.ft))Options available o2JA73E-02390180 (130)140 (100)Image: constraint of the speed (rpm)Image: constraint of the speed (| JA73H-309 | 27 | 590 <i>(435)</i> | 470 (350) | |
| BillO1 Free speed (rpm) (Nm (lb.ft)) (Nm (lb.ft)) 02 JA73E-023 90 180 (130) 140 (100) 02 JA73S-077 27 590 (435) 470 (350) 0 JA73S-132 JA73H-169 Image: speed (rpm) Image: speed (rpm) Nax torque (Nm (lb.ft)) 02 JA73H-564 Vith banjo head BJHO2 JA73E-023 120 135 (100) 105 (77) 0 | JA73H-564 | 15 | 1080* (800)* | 860 (640) | |
| JA73E-023 90 180 (130) 140 (100) JA73S-077 27 590 (435) 470 (350) JA73S-132 JA73H-169 Image: Starting torque (Nm (lb.ft)) Image: Starting torque (Nm (lb.ft)) JA73H-564 Vith banjo head BJHO2 JA73E-023 120 135 (100) 105 (77) | | Free speed (rpm) | | | Options available |
| JA73S-132 JA73H-169 non disponible Options available JA73H-309 JA73H-564 Options available 02 /ith banjo head BJH02 Free speed (rpm) Max torque (Nm (lb.ft)) Starting torque (Nm (lb.ft)) Options available 02 JA73E-023 120 135 (100) 105 (77) | | 90 | | | |
| JA73H-169 non disponible JA73H-309 JA73H-564 JA73H-564 /ith banjo head BJH02 Free speed (rpm) Max torque (Nm (lb.ft)) Options available 02 JA73E-023 120 135 (100) 105 (77) | JA73S-077 | 27 | 590 (435) | 470 (350) | |
| JA73H-309 JA73H-564 //ith banjo head BJH02 JA73E-023 120 135 (100) 105 (77) | JA73S-132 | | | | |
| JA73H-309 Max torque (Nm (lb.ft)) Options available 02 JA73H-564 Free speed (rpm) Max torque (Nm (lb.ft)) Options available 02 JA73E-023 120 135 (100) 105 (77) Image: 05 (77) | JA73H-169 | | non disn | niblo | |
| With banjo head BJH02Free speed (rpm)Max torque (Nm (lb.ft))Starting torque (Nm (lb.ft))Options available 02JA73E-023120135 (100)105 (77)Image: Constraint of the second secon | JA73H-309 | | | JIIIDIE | |
| BJH02 Free speed (rpm) (Nm (lb.ft)) (Nm (lb.ft)) 02 JA73E-023 120 135 (100) 105 (77) | JA73H-564 | | | | |
| JA73E-023 120 135 (100) 105 (77) | Vith banjo head BJH02 | Free speed (rpm) | | | Options available |
| 14735 077 36 440 (220) 350 (260) | | 120 | 135 (100) | 105 (77) | |
| JA/35-0// 50 4440 (520) 550 (200) | JA73S-077 | 36 | 440 (320) | 350 (260) | |
| JA735-132 21 760 (560) 600 (440) | JA73S-132 | 21 | 760 (560) | 600 (440) | |
| JA73H-169 16 975 (720) 780 (580) | JA73H-169 | 16 | 975 <i>(720)</i> | 780 <i>(580)</i> | |
| JA73H-309 JA73H-564 non disponible | | | non_dispo | onible | |

* 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 modec battery are designed and tested to deliver the stated performance level with no time limit other than the length of the battery life.

IMPORTANT





OPTIONS

OPTIONS

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

RIGHT-ANGLE HEAD RA20



Only available for the HL83 Easy duty and Standard duty range, the **right angle head RA20** is very light and compact.

It enables the actuator to operate in small, tight spaces.

It adds a reduction ratio of 1.33 to the tool, thus **increasing the torque and reducing the speed by one third.**

Maximum torque allowed: 330Nm

DIGITAL REVOLUTION-COUNTER



TORQUE LIMITER



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 the **HL83E** models.

The **torque limiter** for **modec** portable valve actuators means you can disconnect the motor section from the gear box section when the torque limit is reached. No torque is thereafter applied by the actuator.

The operator can set the torque limit within a +/-40% range of the original value. The torque limiter option is available for the HL83S and H models, as well as for the PY68 models (the JA73 and MC89 models have an electronic torque limiter in series).

| Straight or with RA30 right angle head | Reduction ratio | Free speed @ 6,2 bars (rpm) | Minimum torque limit Nm(lb.ft) | Maximum torque limit Nm(lb.ft) |
|--|-----------------|--------------------------------|-----------------------------------|-----------------------------------|
| HL83S-035-03/05 | 1:54 | 175 | 40 (30) | 90 (66) |
| HL83S-060-03/05 | 1:127 | 71 | 90 (66) | 220 (160) |
| HL83H-111-03/05 | 1:199 | 46 | 140 (100) | 340 (250) |
| HL83H-169-03/05 | 1:258 | 54 | 180 <i>(130)</i> | 440 <i>(320)</i> |
| HL83H-321-03/05 | 1:564 | 25 | 400 (300) | 960 <i>(710)</i> |
| PY68E-031-03/05 | 1:31 | 305 | 20 (15) | 45 <i>(33)</i> |
| PY68S-087-03/05 | 1:40 | 218 | 25 <i>(18)</i> | 60 (44) |
| PY68S-148-03/05 | 1:61 | 155 | 40 <i>(30)</i> | 90 (66) |
| PY68H-192-03/05 | 1:192 | 50 | 120 <i>(90)</i> | 280 (210) |
| PY68H-293-03/05 | 1:293 | 32 | 180 <i>(130)</i> | 440 <i>(320)</i> |
| PY68H-641-03/05 | 1:564 | 25 | 400 (300) | 960 <i>(710)</i> |
| With RA20 right angle head | Reduction ratio | Free speed @ 6,2 bars (rpm) | Minimum torque limit Nm(lb.ft) | Maximum torque limit Nm(lb.ft) |
| HL83S-035-04 | 1:74 | 132 | 50 (37) | 120 (90) |
| With banjo head BJHO1 | Reduction ratio | Free speed @ 6,2 bars (rpm) | Minimum torque limit Nm(lb.ft) | Maximum torque limit Nm(lb.ft) |
| HL83S-035-03/05 | 1:216 | 44 | 160 <i>(120)</i> | 360 <i>(270)</i> |
| HL83S-060-03/05 | 1:504 | 18 | 360 (270) | 880 <i>(650)*</i> |
| PY68E-031-03/05 | 1:124 | 76 | 80 <i>(59)</i> | 180 <i>(130)</i> |
| PY68S-087-03/05 | 1:160 | 54 | 100 (74) | 240 (180) |
| PY68S-148-03/05 | 1:244 | 39 | 160 <i>(120)</i> | 360 <i>(270)</i> |

* Do not use the BJH01 with a maximum torque higher than 600 Nm (440 lb.ft)

| With banjo head BJHO2 | Reduction ratio | Free speed @ 6,2 bars (rpm) | Minimum torque limit Nm(lb.ft) | Maximum torque limit Nm(lb.ft) |
|--------------------------|-----------------|--------------------------------|-----------------------------------|-----------------------------------|
| HL83S-035-03/05 | 1:162 | 58 | 120 <i>(89)</i> | 270 (200) |
| HL83S-060-03/05 | 1:381 | 24 | 270 (200) | 660 <i>(490)</i> |
| HL83H-111-03/05 | 1:597 | 15 | 420 (310) | 1020 (750)* |
| HL83H-169-03/05 | 1:774 | 18 | 540 (400) | 1320 (970)* |
| PY68E-031-03/05 | 1:93 | 102 | 60 (44) | 135 (100) |
| PY68S-087-03/05 | 1:120 | 73 | 75 (55) | 180 (130) |
| PY68S-148-03/05 | 1:183 | 52 | 120 (89) | 270 (200) |
| PY68H-192-03/05 | 1:576 | 17 | 360 (270) | 840 (620) |
| PY68H-293-03/05 | 1:879 | 11 | 540 (400) | 1320 (970)* |

IMPORTANT

* Do not use the BJH02 with a maximum torque higher than 1000 Nm (740 lb.ft)



ACTUATOR'S DRIVE HEADS

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

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

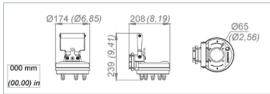


Essential for all **rising stem handwheels**, the **Standard duty banjo drive head** caters for all stems up to a **maximum diameter of 63mm** (2.48"). It can also operate all clamping systems for handwheel and other interfaces. What's more, it brings additional reduction which means you can **multiply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

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



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

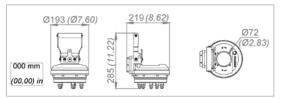


Maximum allowed torque: 1000 Nm *(740 lb.ft)* Weight: 8.6kg *(19 lb)*



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

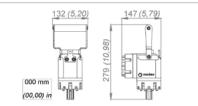


Maximum allowed torque : 600 Nm *(465 lb.ft)* Weight : 4.2 kg *(9.3 lb)* The RA30 right angle drive head can be positioned at 90° to the actuator providing **optimal positioning** for the operator.

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



IMPORTANT







ADAPTORS

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 technical sheet 12). 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

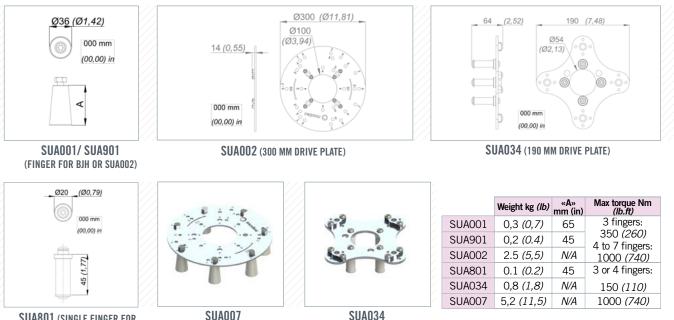
FINGERS USED ON A DRIVE PLATE : Requires KPA004 interface with a straight or right angle drive head



4 X SUA001 FIXED ON THE BANJO HEAD



5 X SUA001 FIXED ON THE BANJO HEAD



SUA801 (SINGLE FINGER FOR SUA034 DRIVE PLATE)

IMPORTANT

(1 DRIVE PLATE + 7 FINGERS)

SUA034 (1 drive plate + 4 fingers)



ADAPTORS

ADAPTORS

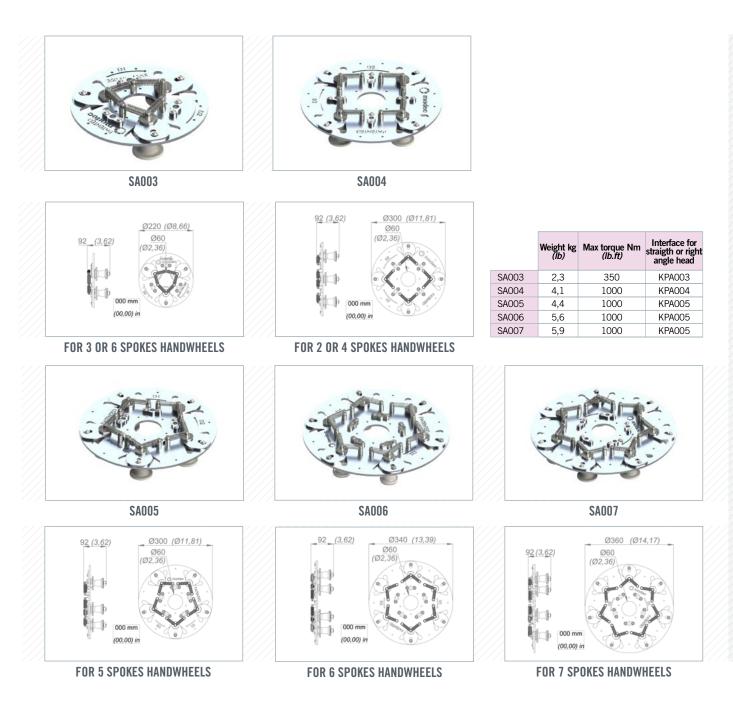
SELF-ADJUSTING AND SELF-CENTERING FINGERS ADAPTORS (SAxxx)



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 $< 10^{\circ}$ 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 technical sheet 12). To **avoid scratching the handwheel**, use the protector **SA103/104/105/106/107** (see technical sheet 12).

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.



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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 ($< 30^\circ$) handwheels; a second for tapered handwheels ($> 30^\circ$).

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.

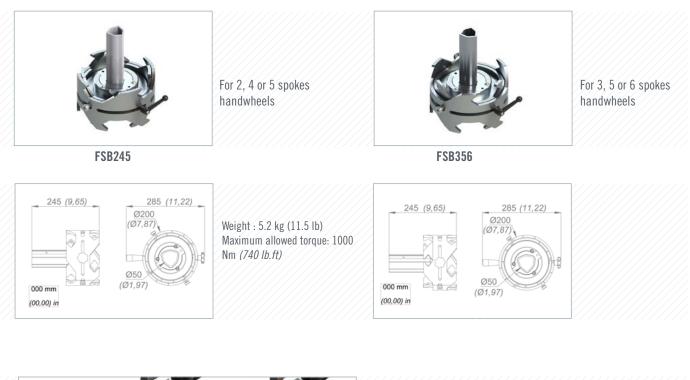
These adaptors save a significant amount of time and money as there's no need to buy and install a drive plate for each handwheel.

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 **KTA002** interface, and with a **banjo head** in conjunction with the **TTA002** (see technical sheet 14).





FSB adaptors require the KTA002 interface with a straight or right angle drive head, and the TTA002 interface with a banjo head.

IMPORTANT



10 **ADAPTORS**

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 KTA002, and with a banjo head in conjunction with the TTA002 interface (see technical sheet 14).

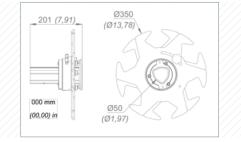
These adaptors save a significant amount of time and money as there's no need to buy and install a drive plate for each handwheel.







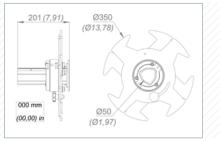
CSB005



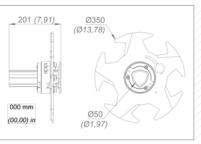
CSB003

FOR 3 OR 6 SPOKES HANDWHEELS

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



FOR 2 OR 4 SPOKES HANDWHEELS



FOR 5 SPOKES HANDWHEELS



CSB adaptors require the KTA002 interface with a straight or right angle drive head, and the TTA002 interface with a banjo head.







ADAPTORS 5/5

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 for flat or tapered handwheels: **FUA001**(or **FUA316** for stainless steel version) **for flight or slightly tapered handwheels** with spokes inclined up to 30 ° in relation to the wheel's plane; **FUA002** (or **FUA317** for stainless steel version) **for tapered handwheels** with spokes inclined from 30° to 40° in relation to the wheel's plane.

These drive plate adaptors can be used **directly on a banjo head.** To use them with a **straight or right angle head**, you need to use the **KPA004 interface** (see technical sheet 12). They can also be used with **EBx04 extension bars** using the interface **TTA** (see technical sheet 13).



FUA001 FOR FLAT OR SLIGHTLY TAPERED HANDWHEELS (<30°)





FUA002 FOR TAPERED HANDWHEELS (30° TO 40°)

| | «A» mm <i>(in)</i> | Weight kg <i>(lb)</i> |
|--------|-----------------------|--------------------------|
| FUA001 | 45 <i>(1,77)</i> | 3,1 <i>(6,8)</i> |
| FUA002 | 65 <i>(2,56)</i> | 3,3 <i>(7,3)</i> |

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





INTERFACES

1/3

INTERFACES

12

INTERFACES FOR ADAPTORS SAXXX, SUAXXX AND FUAXXX WITHOUT A BANJO HEAD

Using the KPA interface, you can manipulate the SAxxx, SUAxxx and FUAxxx 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 (or KPA316 stainless steel) for the SA004, SUA and FUA adaptors KPA005 for the SA005, SA006 and SA007 adaptors

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



HANDWHEEL PROTECTORS FOR USE WITH SAXXX ADAPTORS

These protectors, integrated into the self-adjusting and self-centering fingers adaptors (SAxxx), are designed to protect the handwheel from being scratched during use. They can be built into the adaptor during assembly in the factory or added later without difficulty.

They are made from high performance polyethylene, which is anti-static and resists wear and tear.

Each adaptor has a corresponding interface:

SA103 for the SA003 adaptor SA104 for the SA004 adaptor SA105 for the SA005 adaptor SA106 for the SA006 adapter SA107 for the SA007 adaptor





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







SA103

IMPORTANT

SA104

SA105

SA106

SA107

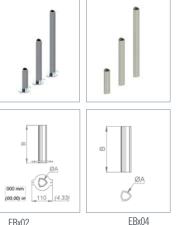
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13 **INTERFACES** 2/3

EXTENSION BARS



EBx02





EB001 / EB002

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 14).

The EBOOX 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 **EBOOX**.

| Reference | Weight kg <i>(lb)</i> | Max torque Nm <i>(lb.ft)</i> | "L" mm <i>(in)</i> | "A" mm <i>(in)</i> | Maxi stem Ø mm <i>(in)</i> |
|-------------|-----------------------|---------------------------------|--------------------------|--------------------|-------------------------------|
| EB001 | 4,4 <i>(9,7)</i> | 1000 (740) | 1020-1726 (40) (68) | 37 (1,46) | N/A |
| EB002 | 2,2 (4,9) | 1000 (740) | 570-940 <i>(22) (37)</i> | 37 (1,26) | N/A |
| EB011 | 3,7 <i>(8,2)</i> | 1000 (740) | 1000 (39,4) | 37 (1,46) | N/A |
| EB012 | 1,9 <i>(4,2)</i> | 1000 (740) | 500 <i>(19,7)</i> | 37 (1,46) | N/A |
| EB202/EB204 | 1,3 <i>(2,9)</i> | 1000 (740) | 200 <i>(7,9)</i> | 50 <i>(1,97)</i> | 48 <i>(1,89)</i> |
| EB402/EB404 | 2,5 <i>(5,5)</i> | 1000 (740) | 400 (15,7) | 50 <i>(1,97)</i> | 48 (1,89) |
| EB602/EB604 | 3,7 <i>(8,2)</i> | 1000 (740) | 600 <i>(23,6)</i> | 50 <i>(1,97)</i> | 48 (1,89) |

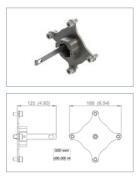
| Reference | Interface for straight or right angle heads | Interface for Banjo head | Interface for adaptor | Type of adaptor |
|-------------|--|-----------------------------|-----------------------|-----------------|
| EB001/EB002 | Direct | KHA002 | Direct | DCxxx / CA3/4 |
| EBX02 | KTA002 | TTA002 | Direct | CSB |
| EBX04 | KTA002 | TTA002 | Direct / TTA002 | FSB / FUA |

INTERFACES FOR TELESCOPIC VALVE KEY AND BJH

With the KHA002 interface, you can manipulate the EB0xx extension bars (telescopic valve keys) with a banjohead.

Please note, this configuration cannot be used for handwheels with a rising stem.

| Reference | Weight kg <i>(lb)</i> | Max torque Nm (lb.ft) |
|-----------|-----------------------|--------------------------|
| KHA002 | 0,9 <i>(2,0</i>) | 1000 (740) |



KHA002



INTERFACES



INTERFACES FOR ADAPTORS FS, CS AND EXTENSION BARS

The KTA and TTA interfaces enable the actuators to drive the FSB and CSB adaptors, plus the extension bars.

The KTA models should be used for actuators with a straight or right angle head.

The TTA models fix directly on to the banjo head.



KTA002 (for straight or right angle heads)

TTA002 (for banjo heads)

| Reference | Weight kg <i>(lb)</i> | «A» mm <i>(in)</i> | «B» mm <i>(in)</i> |
|-----------|-----------------------|-----------------------|-----------------------|
| KTA002 | 0,4 <i>(0,88)</i> | 50 (1,97) | N/A |
| TTA002 | 0,4 (1,54) | 52 <i>(2,05)</i> | 95 <i>(3,74)</i> |

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

SQUARE DRIVES

Weight kg (lb)

1,1 (2,43)

1,1 (2,43)

Max torque Nm (lb.ft)

1000 (740)

1000 (740)

Reference

KTA3/4

TTA3/4

actionneurs rotatifs portables

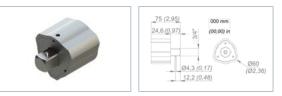
www.modec.fr

The KTA3/4 and TTA3/4 interfaces can take a ¾" square drive which connects to all types of socket thereby turning all kinds of screws and bolts - this makes it possible to use your actuator for various types of applications.

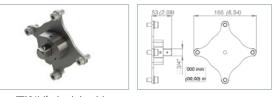
The KTA models should be used for actuators with a straight or right angle head.

The TTA models fix directly on to the banjo head.

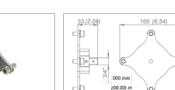
A large range of standard square sockets is also available to match most of the valves standards square drives



KTA3/4 (for straight or right angle heads)



TTA3/4 (for banjo heads)









Reference

BR001

BR011

BR021

BR002

BR003

TORQUE REACTION MANAGEMENT SYSTEM

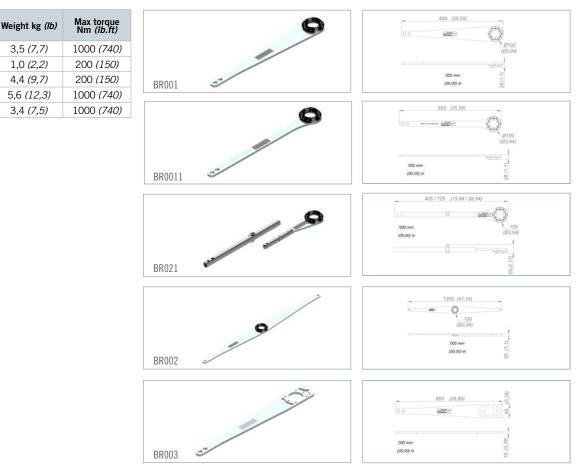
1/3

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.

SINGLE AND DOUBLE REACTION ARMS

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.

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.

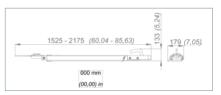


ARTICULATED REACTION ARM FIXED TO VEHICLE TRAILER HITCH

 Reference
 Weight kg (lb)
 Max torque Nm (lb.ft)

 BA001
 12.3 (27,1)
 1000 (740)





IMPORTANT



TORQUE REACTION MANAGEMENT SYSTEM

16

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 !

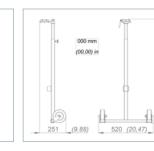
- 56,26)

(30,02 -

864 - 1429

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

BA002





Example of use with a buried / underground valve.

STAND FOR UNDERGROUND / BURIED VALVES

| Reference | Weight kg <i>(lb)</i> | Max torque Nm (Ib.ft) |
|-----------|-----------------------|--------------------------|
| SE001 | 13.5 <i>(29,8)</i> | 350 <i>(260)</i> |

Designed for underground water distribution system valves, this stand makes the actuator easy and safe to use with a telescopic «Tee-key». Light and pliable, it's simple to transport with the two wheels, takes up minimal space and **can be erected in a couple of minutes** using just a few knurled screws.

Once in place, the stand - not the operator - bears the load of both the torque and the weight of the actuator.

It's the perfect tool for water distribution system operators.







TORQUE REACTION MANAGEMENT SYSTEM 3/3

17

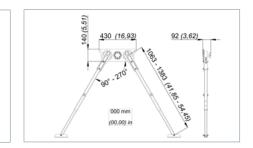
TELESCOPIC BIPOD

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 <i>(lb)</i> | Max torque Nm (Ib.ft) |
|-----------|-----------------------|--------------------------|
| BP002 | 12.3 (27.1) | 1000 (740) |

BP002



OTHER 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.



BS001



Special, made to order flanges



ACCESSORIES for pneumatic portable actuators 1/3

ACCESSORIES

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.

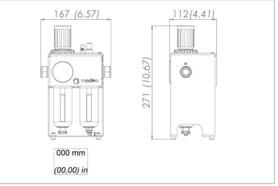
Self-relieving regulator. Lubrication with selective oil fog. Metal bowl with oil level viewing window.

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 <i>0 / 145 psi</i> | |
| Controlled pressure | 0,5 / 8 bars 7 / 116 psi | |
| Ambient temperature | 0 à +50°C <i>0 / 122°F</i> | |
| Oil bowl capacity | 80 cm ³ 0,003 cfm | |
| Filtration | 5 µm | |
| Purge system | Semi-auto | |
| Connection | G 1⁄2 | |
| Dimensions | 271 x 167 x 112 mm <i>10,7 x 6,6 x 4,4 in</i> | |
| Weight (empty) | 2,9 kg / <i>6,4 lb</i> | |







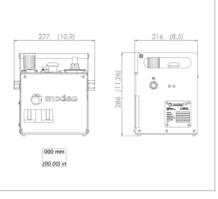


ACCESSORIES for pneumatic portable actuators 2/3

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)





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 <i>0 / 145 psi</i> |
| Filtration | 5 µm |
| Oil bowl capacity | 80 cm3 / <i>0,003 cfm</i> |
| Connections | input : G½ / output : G¾ |
| Min & max inlet pressure | 2 / 8 bars <i>29 / 174 psi</i> |
| Dimensions | 277 x 216 x 286 mm <i>10,9 x 8,5 x 11.3 in</i> |
| Weight (empty) | 7.6 kg / <i>16,8 lb</i> |
| Ambient temperature | 0/+50 °C 0/122 °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.



ACCESSORIES

for transporting and storing portable actuators 3/3

ACCESSORIES

To maintain optimum performance and durability, your pneumatic portable 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 | VT003 | VT004 | VT005 |
|----------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Length mm (in) | 1200 (47,2) | 860 <i>(33,9)</i> | 305 <i>(12,0)</i> | 630 <i>(24,8)</i> | 670 <i>(26,4)</i> |
| Height mm (in) | 420 (16,5) | 560 <i>(22,0)</i> | 270 <i>(10,6)</i> | 500 <i>(19,7)</i> | 510 <i>(20,1)</i> |
| Width mm (in) | 234 <i>(9,2)</i> | 355 <i>(14,0)</i> | 194 <i>(7,6)</i> | 370 <i>(14,6)</i> | 262 (10,3) |

«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**.

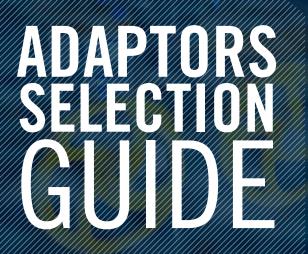
The Kit box can be positioned vertically or horizontally and comes with 2x3 wheels so it can be easily moved around, even up and down stairs. The interior has compartments so the different parts can be stored easily and efficiently, and, more importantly, can be put together quickly.

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**.



References : VT006



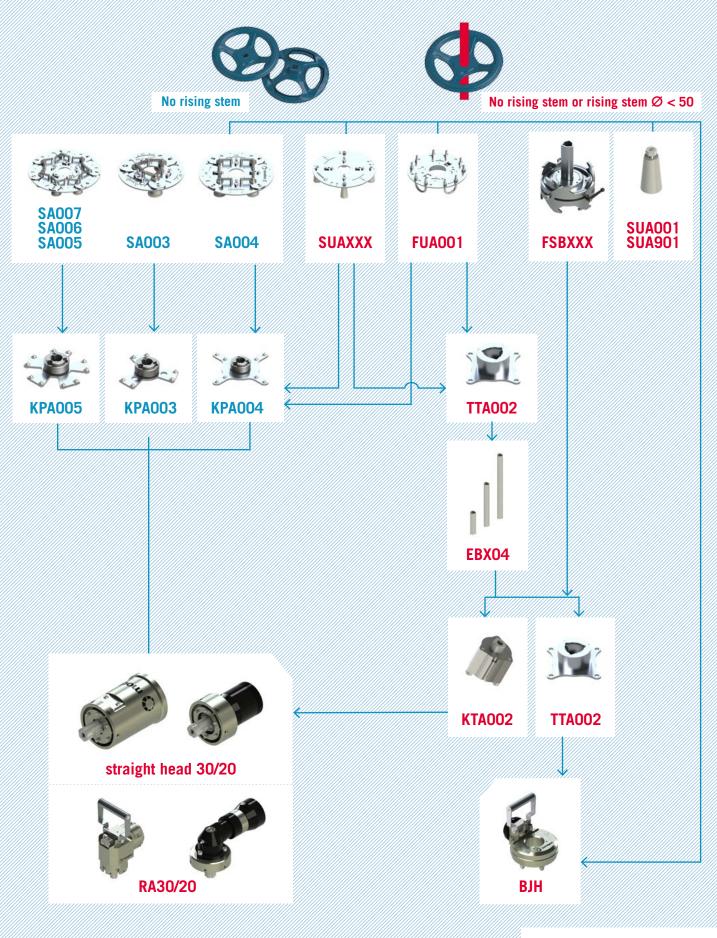


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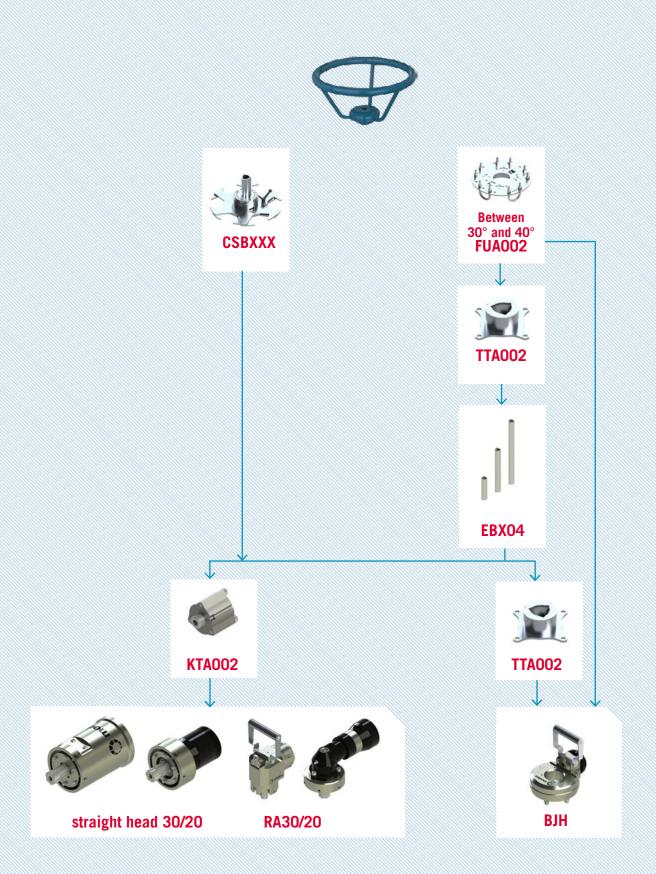
STREE -

FLAT HAND WHEEL WITH OR WITHOUT RISING STEM

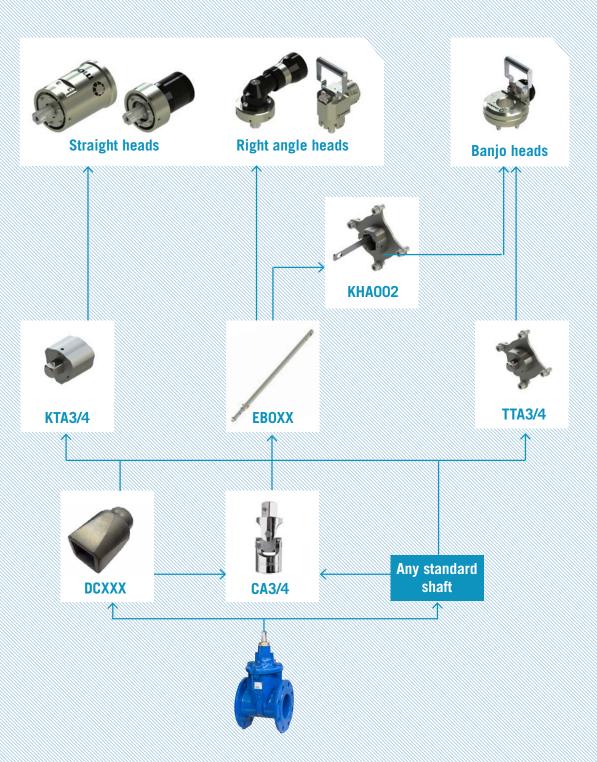




DEEP HAND WHEEL WITH OR WITHOUT RISING STEM (\emptyset < 50 MM)



OTHER TYPES OF VALVE SHAFT









Your local contact:

OLU OLOJO 832-297-7536 olu@hytorctexas.com