

Unless otherwise stated, all heads are compatible with any motor



STANDARD FIXED FINGERS ADAPTORS

SPOKE ADAPTORS FOR FLAT HANDWHEELS

STRAIGHT

For HL83 Easy and Standard duty only





RIGHT ANGLE

RA20

Note: Using the RA20 right angle head increases torque and decreases speed by 33% and is only possible with HL83 Easy and Standard duty.

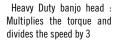
RA30



BANJU

(for rising stem valves)

Standard Duty banjo head : Multiplies the torque and divides the speed by 4









SELF-ADJUSTING AND SELF-CENTERING FINGERS ADAPTORS











SQUARE DRIVES FOR STANDARD SOCKETS





ACTUATOR'S DRIVE HEADS

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

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

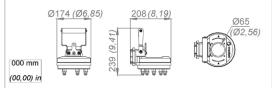


Essential for all rising stem handwheels, the Standard duty banjo drive head caters for all stems up to a maximum diameter of 63mm (2.48"). It can also operate all clamping systems for handwheel and other interfaces. What's more, it brings additional reduction which means you can multiply the actuator's 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 the following Standard duty actuators: HL83S-035, JA73S-077 and PY68S-087.

Reference : BJH01





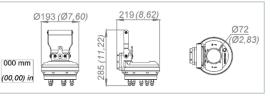
HEAVY DUTY RING-TYPE DRIVE HEAD ("BANJO HEAD")



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 900 Nm** (660 lb.ft), the Heavy duty banjo head can be mounted quickly and easily on **all Easy duty and Standard duty actuators**.

Reference : BJH02



Weight: 8.6kg (19 lb)

RIGHT-ANGLE DRIVE HEAD RA30

Maximum allowed torque: 900 Nm (660 lb ft)



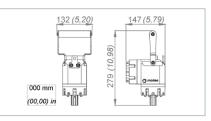
Maximum allowed torque : 630 Nm (465 lb.ft) Weight : 5.2 kg (11.5 lb)

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 630 Nm (465 lb.ft)).

The right angle drive head RA30 can be mounted quickly and easily on all our actuators.

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 $< 30^{\circ}$ in relation to the wheel's plane) and are composed of **removable fingers** that can be added according to the number of spokes on the handwheel you want to turn. If used with a **banjo head**, the fingers screw directly on to the head, leaving space for the **rising stem** to pass through.

If used with a straight or right angle head, then use a drive plate and screw the fingers on to it. In this case, you also need to use the KPA004 interface in order to fix the drive plate on to the actuator head (see technical sheet 11). This drive plate can also be used directly with the banjo head.

FOR USE WITH A BANJO HEAD :



3 X SUA001 FIXED ON THE BANJO HEAD



4 X SUA001 FIXED ON THE BANJO HEAD

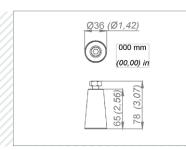


5 X SUA001 FIXED ON THE BANJO HEAD

FOR USE WITH A STRAIGHT OR RIGHT ANGLE HEAD :



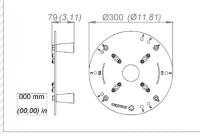
SUA003 (1 DRIVE PLATE + 3 FINGERS)



SUA001 (SINGLE FINGER)



SUA004 (1 DRIVE PLATE + 4 FINGERS) Requires KPA004 interface with a straight or right angle drive head



SUA3/4/5 (SET OF 1 DRIVE PLATE + FINGERS)



SUA005 (1 DRIVE PLATE + 5 FINGERS)

	Weight kg (lb)	Max torque Nm (Ib.ft)
SUA001	0,3 <i>(0,7)</i>	3: 350 <i>(260)</i> 4 or 5: 800 <i>(590)</i>
SUA003	3,4 <i>(7,5)</i>	350 <i>(260)</i>
SUA004	3,7 <i>(8,2)</i>	800 <i>(590)</i>
SUA005	4 <i>(8,8)</i>	800 <i>(590)</i>

IMPORTANT



ADAPTORS

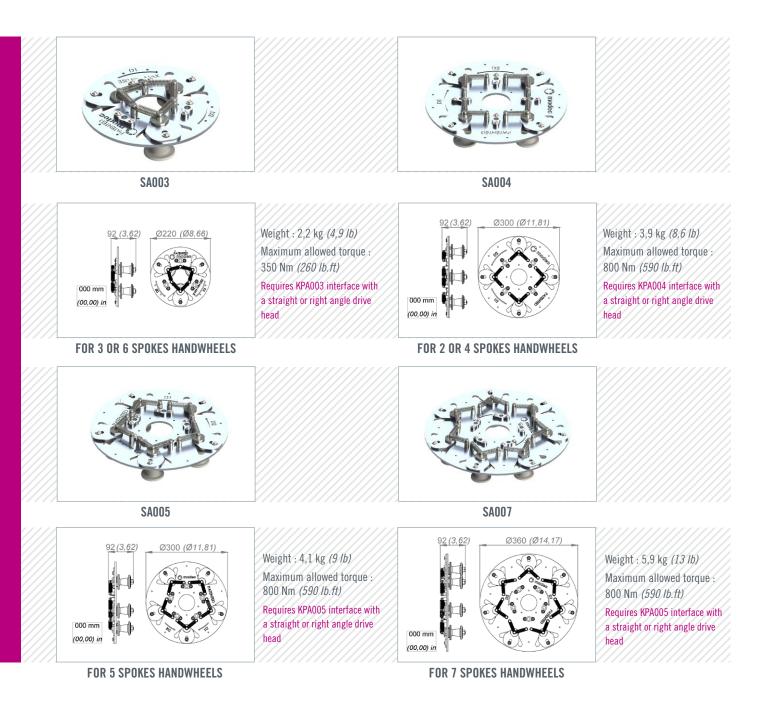
SELF-ADJUSTING AND SELF-CENTERING FINGERS ADAPTORS (SAxxx)



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 11). To **avoid scratching the handwheel**, use the protector **SA103/104/105/107** (see technical sheet 11).

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.



IMPORTANT



ADAPTORS 3/5

SPOKE ADAPTORS

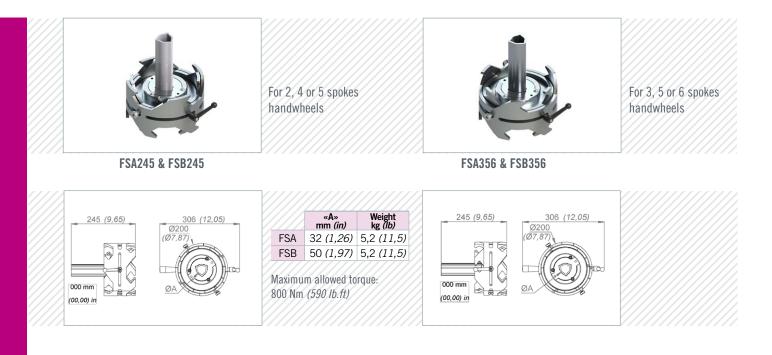
The **spoke adaptors** clamp **solidly** and **quickly** to the handwheel and can turn in both directions, with or without a rising stem. It is available in two versions – one that adapts to flat or slightly tapered ($< 30^\circ$) handwheels; a second for tapered handwheels ($> 30^\circ$).

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 (FSA/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 four models are available according to the **number of spokes** in the handwheel you want to turn and the **maximum diameter of the rising stem**. These adaptors can be used with a **straight or right angle actuator** using the **KTA001** interface (for the FSA) and **KTA002** (for the FSB), and with a **banjo head** in conjunction with the **TTA001** interface (for FSA) and **TTA002** interface (for FSB) (see technical sheet 13).





FSA adaptors require the KTA001 interface with a straight or right angle drive head and the TTA001 interface with a banjo head.

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

IMPORTANT



ADAPTORS

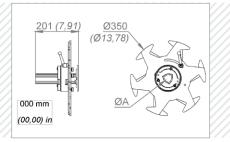
SPOKE ADAPTORS FOR TAPERED HANDWHEELS (CSA/CSB)

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 six models are available according to **the number of spokes in the handwheel you want to turn and the maximum diameter of the rising stem**.

These adaptors can be used with a **straight or right angle actuator** due to the **KTA001** interface (for FSA) and **KTA002** (for FSB), and with a **banjo head** in conjunction with the **TTA001** interface (for FSA) and **TTA002** interface (for FSB) (see technical sheet 13).

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.

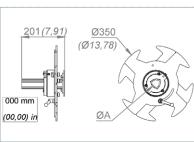




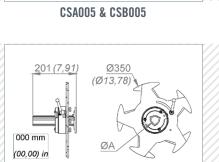
FOR 3 OR 6 SPOKES HANDWHEELS

	«A» mm <i>(in)</i>	Weight kg <i>(lb)</i>
FSA	32 (1,26)	4,2 <i>(9,3)</i>
FSB	50 (1,97)	4,2 (9,3)

Maximum allowed torque: 800 Nm (590 lb.ft)



FOR 2 OR 4 SPOKES HANDWHEELS



FOR 5 SPOKES HANDWHEELS



CSA adaptors require the KTA001 interface with a straight or right angle drive head and the TTA001 interface with a banjo head.

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



ADAPTATEURS

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 2 versions for flat or tapered handwheels: **FUA001** for flight or slightly tapered handwheels with spokes inclined up to 30 ° in relation to the wheel's plane; **FUA002** 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 11). They can also be used with **extension bars** using the interface **TTA** (see technical sheet 12).





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





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FUA002 FOR TAPERED HANDWHEELS (30° TO 40°)

	«A» mm <i>(in)</i>	Weight kg (lb)
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: 800 Nm (590 lb.ft)





Réfé KPA **KPA** KPA



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, 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:

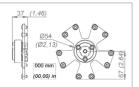
KPA003 for the SA003 adaptor

KPA004 for the SA004, SUA and FUA adaptors

KPA005 for the SA005 and SA007 adaptors

érence	Poids (kg)	Couple maxi (Nm)	e e	2 2 2 2
4003	0.6 <i>(1,3)</i>	350 <i>(260)</i>		
\004	0.8 <i>(1,8)</i>	800 <i>(590)</i>		000
1005	0.7 (1,5)	800 <i>(590)</i>		a a
			35 (1.38) (000 mm (00,00) in	37, (1.46) 198 (7.80)





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 SA107 for the SA007 adaptor



SA103

SA104

SA105

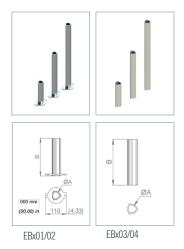
SA107



INTERFACES 2/3

12

EXTENSION BARS



EB001

Référence KHA001

KHA002

KHA003

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** with two maximum diameters: 30mm or 50mm.

The **EBX01** and **EBX02** extension bars fix directly on to the **CSA, CSB, FSA** and **FSB** adaptors by one or more screw.

The EBX03 and EBX04 extension bars fix on to the FUA adaptors using the TTA interface.

All the extension bars can be adapted for use on the actuators using the **TTA** interface **for the banjo heads** and the **KTA** interface **for straight and right angle heads** (See technical sheet 13).

The **EB001 telescopic extension bar** is specifically adapted for manipulating **underground / buried valves**. On one end it has a square ¾" male connector that connects to a standard socket. It can be activated either by a **straight or right angle actuator** (with the **KHA001** interface, see below), or by an actuator with a **banjo head** (using the **KHA002** interface, see below).

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	7,2 (15,9)	800 <i>(590)</i>	1020-1726 (40) (68)	37 (1,46)	N/A
EB201/EB203	1,0 <i>(2,2)</i>	800 <i>(590)</i>	200 <i>(7,9)</i>	32 <i>(1,26)</i>	30 (1,18)
EB401/EB403	1,9 <i>(4,2)</i>	800 <i>(590)</i>	400 (15,7)	32 <i>(1,26)</i>	30 (1,18)
EB601/EB603	2,8 <i>(6,2)</i>	800 <i>(590)</i>	600 <i>(23,6)</i>	32 <i>(1,26)</i>	30 (1,18)
EB202/EB204	1,3 <i>(2,9)</i>	800 <i>(590)</i>	200 <i>(7,9)</i>	52 <i>(2,05)</i>	50 <i>(1,97)</i>
EB402/EB404	2,5 <i>(5,5)</i>	800 <i>(590)</i>	400 (15,7)	52 <i>(2,05)</i>	50 <i>(1,97)</i>
EB602/EB604	3,7 <i>(8,2)</i>	800 <i>(590)</i>	600 <i>(23,6)</i>	52 <i>(2,05)</i>	50 <i>(1,97</i>)

Reference	Interface on actuator side	Interface on adaptor side	Adaptor
EB001	KHA001/002/003	Direct	CA30
EBX01	KTAOO1 ou TTAOO1	Direct	CSA / FSA
EBX02	KTA002 ou TTA002	Direct	CSB / FSB
EBX03	KTA001 ou TTA001	TTA001	FUA
EBX04	KTA002 ou TTA002	TTA002	FUA

INTERFACES FOR TELESCOPIC «TEE-KEY»

Max torque Nm (lb.ft)

800 (590)

800 (590)

800 (590)

Weight kg (lb)

0,9 (2,0)

09 (2,0)

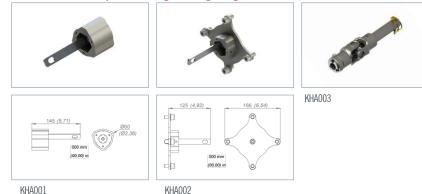
2.2 (4,9)

With the **KHA** interface, you can manipulate the EB001 extension bar (**telescopic «Tee-key»**). Please note, this configuration cannot be used for handwheels with a rising stem. The KHA interface is available in 3 versions:

KHA001 for straight and right angle actuators

KHA002 for actuators with a banjo head

KHA003 is a universal joint for straight and right angle actuators



IMPORTANT





INTERFACES FOR ADAPTORS FS, CS AND EXTENSION BARS

The KTA and TTA interfaces enable the actuators to drive the FSA, FSB, CSA 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.



KTA (for straight or right angle heads)



TTA (for banjo heads)

Reference	Weight kg <i>(lb)</i>	«A» mm <i>(in)</i>	Reference	Weight kg <i>(lb)</i>	«A» mm <i>(in)</i>	«B» mm <i>(in)</i>
KTA001 : Pour FSA, CSA, EBxx1-3	0,1 <i>(0,22)</i>	30 (1,18)	TTA001 : Pour FSA, CSA, EBxx1-3	0,1 (1,54)	32 (1,26)	76 <i>(2,99)</i>
KTA002 : Pour FSB, CSB, EBxx2-4	0,4 <i>(0,88)</i>	50 <i>(1,97)</i>	TTA002 : Pour FSB, CSB, EBxx2-4	0,4 (1,54)	52 <i>(2,05)</i>	95 <i>(3,74)</i>
Maximum allowed torque: 800 Nm (590 lb.ft)			Ma	aximum allowed t	orque: 800 N	lm <i>(590 lb.ft)</i>

SQUARE DRIVES

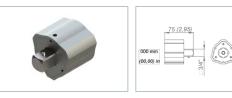
The KTA3/4 and TTA3/4 interfaces can take a ¾" square drive which connects to all types of socket thereby turning all kinds of screws and bolts - this makes it possible to use your actuator for various types of applications.

<u>Ø60</u> (Ø2.36)

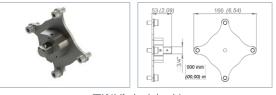
The KTA models should be used for actuators with a straight or right angle head.

The TTA models fix directly on to the banjo head.

Weight kg <i>(lb)</i>	Max torque Nm (lb.ft)	
1,1 <i>(2,43)</i>	800 <i>(590)</i>	
1,1 (2,43)	800 <i>(590)</i>	
	1,1 (2,43)	



KTA3/4 (for straight or right angle heads)



TTA3/4 (for banjo heads)

IMPORTANT