
INSTRUCTION MANUAL

3arm®

HEADMEMBER ANNEX

SERIES 1

SERIES 2

TECNOSPIRO MACHINE TOOL, S.L.U.

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TECNOSPIRO
MACHINE TOOL SLU



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Date of revision: 29/04/2025

1. DESCRIPTION OF S1 - S2 HEADS

B - Vertical flat MV1005A4 0 kg	BA - Vertical flat + Flange MV1005A4 + M2Dxxx04 (Fixed) MV1005A4 + MV1PUxxx (Custom) 0 kg	C - Vertical V-block MV1006A4 0,5 kg	D - Articulated rotating MV1022A4 0,5 kg	E - Articulated flat rotating MV1007A4 0,5 kg
EA - Articulated flat rotary + flange MV1007A4 + M2Dxxx04 (Fixed) MV1007A4 + MV1PUxxx (Custom) 0,5 kg	F - Articulated rotary V-block MV1023A4 1 kg	GA - Multigyro MV1003B4 + MV3EExxx (Timco) MV1003B4 + MV3EFxxx (Timsand) MV1003B4 + MV3CUxxx (Custom) 0,7 kg	K - Adjustable strap M1200700 1,3 kg	KA - Adjustable steel cable M1203200 1,3 kg
L - Adjustable swivel head with vertical adjustment M12024A0 MV1DUxxx (Custom) 1,5 kg	LB - Adjustable horizontal ball joint M12026A0 MV1DUxxx (Custom) 1kg	NA - Multi-position with quick change M1106200 + MV3MAxxx (Timco) M1106200 + MV3PBxxx (Timsand) M1106200 + MV3MUxxx (Custom) 0,7 kg	TA - Multi-position with quick change M1106200 + MV3LAxxx (Timco) M1106200 + MV3QBxxx (Timsand) M1106200 + MV3LUxxx (Custom) 0,7 kg	Z - Fork MV1012A4 0 kg
ZA - Reinforced fork M1202800 0,25 kg				

2. TOOLS

2.1 SYMBOLS AND ICONS

Throughout this manual you will see various symbols indicating the most suitable tool for that type of head.

Their meanings are summarised below:

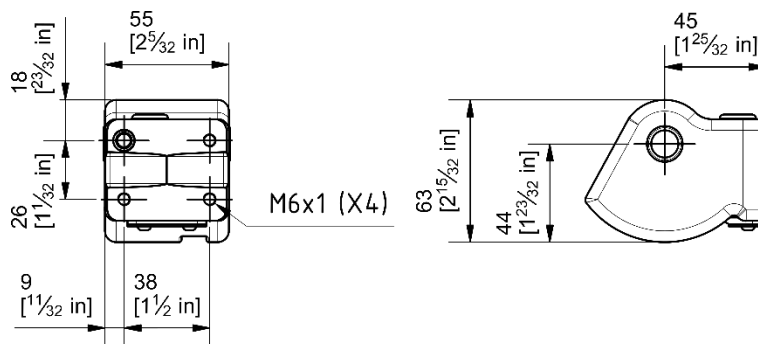
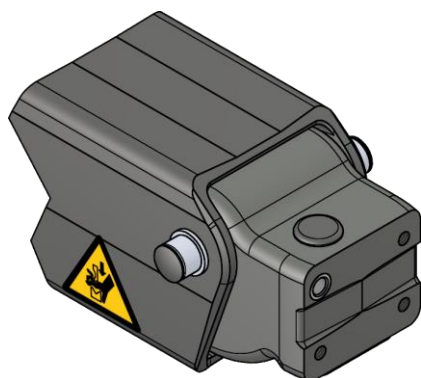
Torque screwdriver pistol		Manual scanner	
Impulse impact straight		Laser equipment	
Impulse/impact gun		Shearing machine	
Torque screwdriver, angled		Rivet gun	
Straight torque screwdriver		Spot welder	
High torque screwdriver with reaction bar		Stud welder	
Drill		Pneumatic hammer	
Straight grinder		Blower	
Radial grinder		Polishing machine	
Jigsaw		Personalised	
Saw			

2.2 RECOMMENDED TOOLS PER HEAD

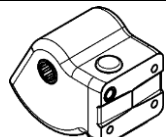
3ARM - HEADMEMBERS	TORQUE & SCREWDRIVERS						MACHINING					OPTICAL TOOLS		ASSEMBLY		Welding		OTHERS				
	Nutrunner Pistol	Straight impulse/ impact	Impulse/ impact pistol	Angled nutrunner	Straight nutrunner	Nutrunner with reaction bar	Drill	Straight grinder	Angular grinder	Keyhole saw	Sabre saw	Scanner	Laser equipment	Pliers	Rivet gun	Spot Welding	Stud Welding	Chipping hammer	Blower / Vacuum	Polisher	Custom	
																						
B																						
BA																						
C																						
D																						
E																						
EA																						
F																						
GA																						
K																						
KA																						
L																						
LB																						
NA																						
TA																						
Z																						
ZA																						

3. HEADS

3.1 FLAT VERTICAL - B MV1005A4



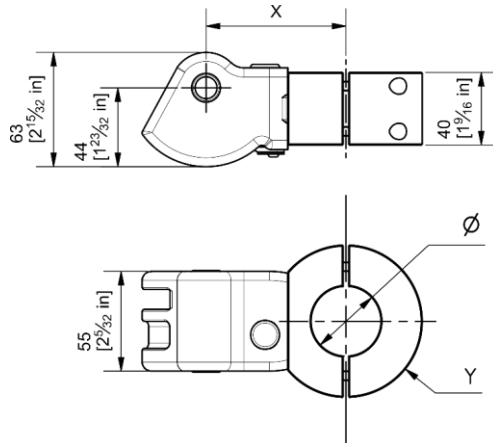
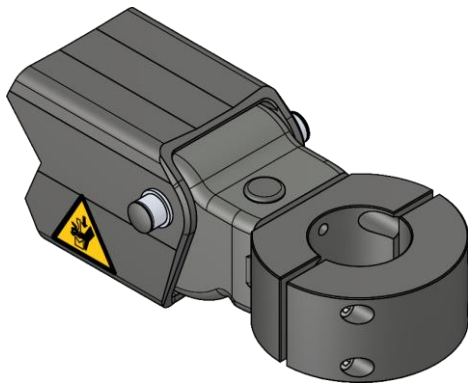
3.1.1 Spare parts

MV1005A4R	VERTICAL FLAT HEADMEMBER	
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3.2 FLAT VERTICAL - BA MV1005A4 + Flange



Fixed flange (M2Dxxx04)



Ø: Specific diameter on request. (Max. diameter 52mm).

Dimensions	Ømin (mm)	Ømax (mm)	X (mm)	Y (mm)
Fixed flange	15 (19/32")	52 (2 3/64")	77 (3 1/32")	Ø84 (3 5/16")

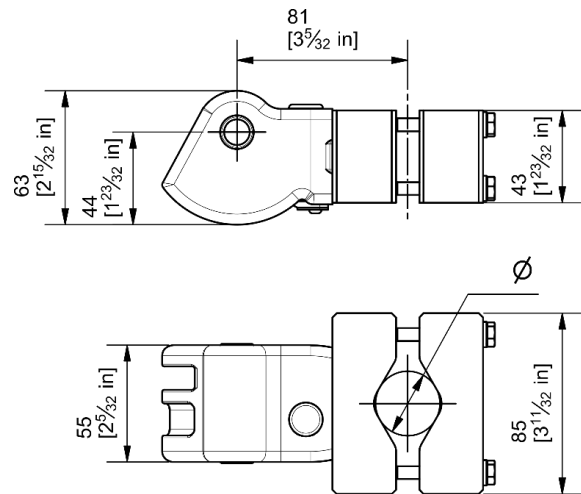
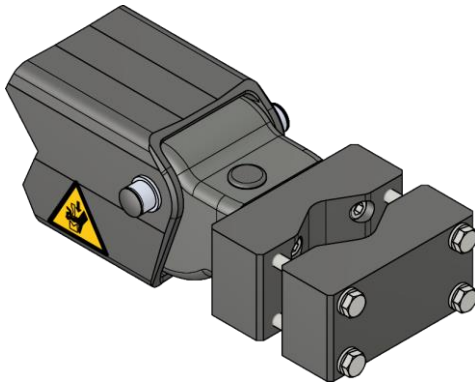
MAXIMUM TORQUE - Fixed flange (Nm)		
Arm	Vertical	Horizontal
S1	N/A	N/A
S2	120	90

3.2.1 Spare parts

MV1005A4R	VERTICAL FLAT HEADMEMBER	
M2DXXX04¹	RING ADAPTOR	

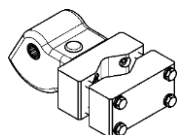
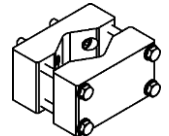
¹ XXX corresponds to the inner Ø in mm

3.3 VERTICAL V-BLOCK - C MV1006A4

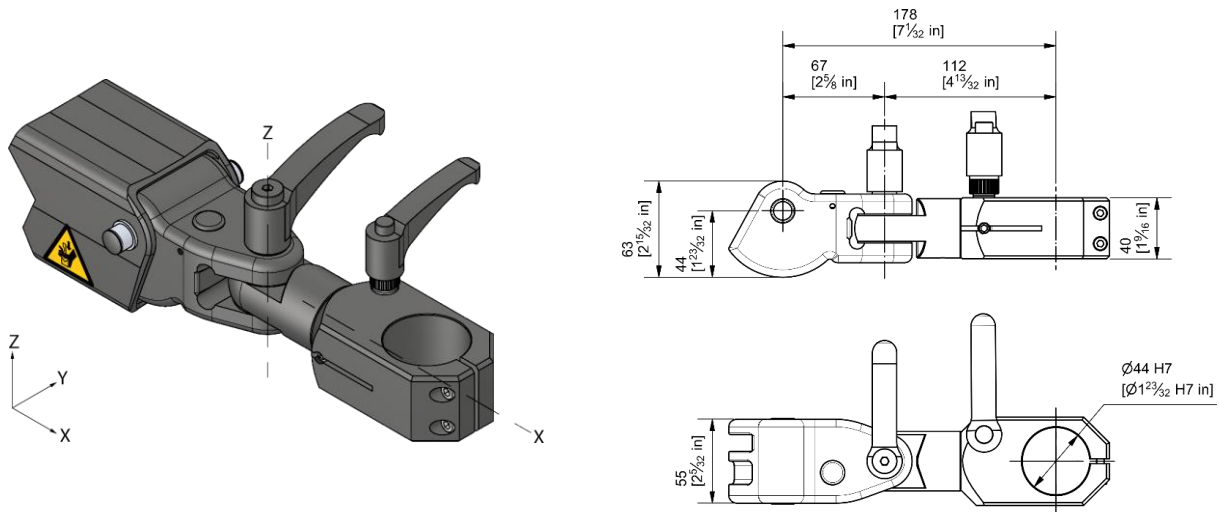


Not suitable for torque tools.
Cylindrical or irregularly shaped tools.
 $\varnothing_{\min}$: 25 mm/ $\varnothing_{\max}$: 62 mm.

3.3.1 Spare parts

MV1006A4R	VERTICAL HEADMEMBER - ADJUSTABLE DIAMETER	
M2204800R	CLAMPING VICES	

3.4 ROTARY ARTICULATED - D MV1022A4



Maximum torque: 60 Nm.

X: Rotates 360°. Manual locking in any position.

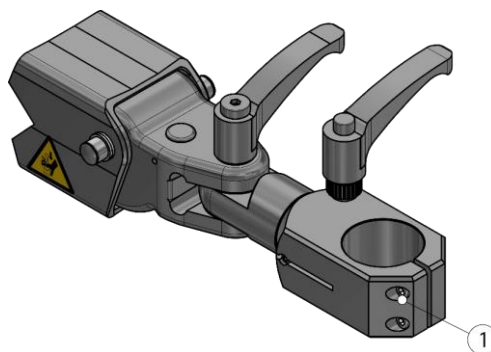
Z: Rotates $\pm 90^\circ$. Manual locking in any position.

Max. tool diameter: 44 mm (Adaptable bushing).

MAXIMUM TORQUE (Nm)			
Arm	Vertical	Horizontal	Angle
S1	N/A	N/A	N/A
S2	60	60	60

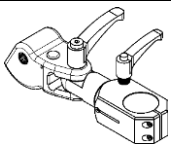
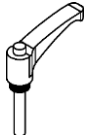
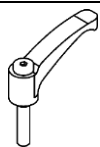
3.4.1 Installation and disassembly of the tool

1- Fit the tool (or the adapter sleeve) to the Ø44H7 and tighten the bolts (1) (Allen key 5mm)



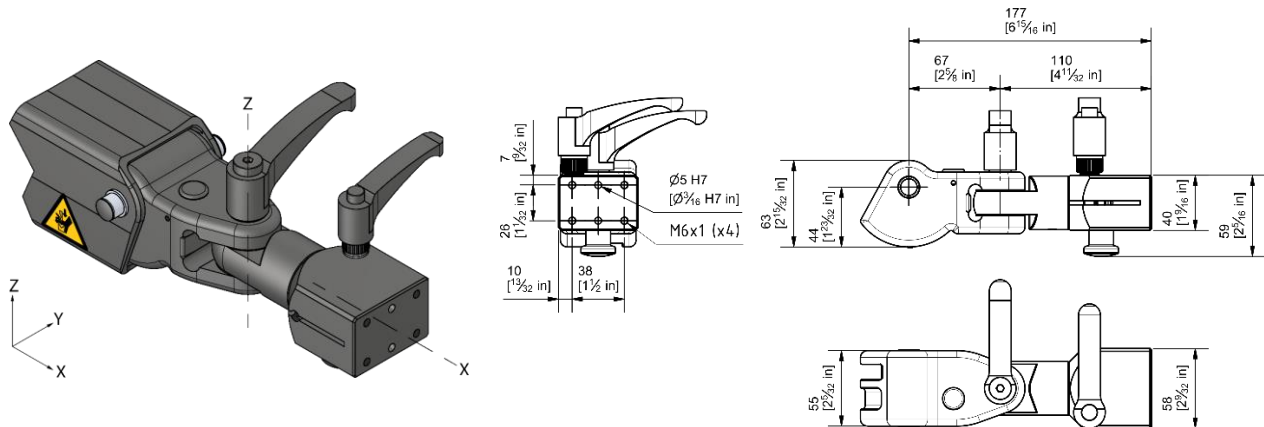
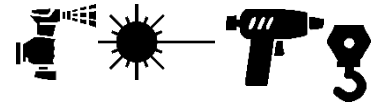
To disassemble the tool, remove the bolts (1) and screw them in on the other side (put a plate in the slot to release the tool). **Do not force, as it could damage the head.**

3.4.2 Spare parts

MV1022A4R	ORIENTABLE HEADMEMBER	
M2205100R	HANDLE M8 [Axis X]	
AC060546	HANDLE M10x40 [Axis Z]	

3.5 ARTICULATED FLAT ROTARY - E

MV1007A4



X: Rotates 360° (4x90°)². Manual locking in any position.

Z: Rotates ±90°. Manual locking in any position.

3.5.1 Spare parts

MV1007A4R	ARTICULATED ROTATIVE HEADMEMBER	
M2DXXX04³	RING ADAPTOR	
M2EXXX04	ROTATIVE FLANGE	
AC060546	HANDLE M8 [Axis X]	
AC060566	HANDLE M10x40 [Axis Z]	
CM175300	SMALL POSITIONER [Axis X]	

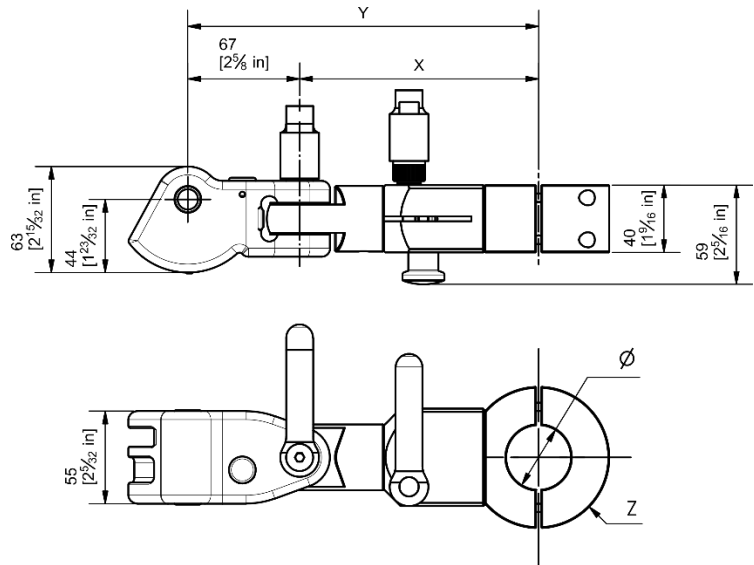
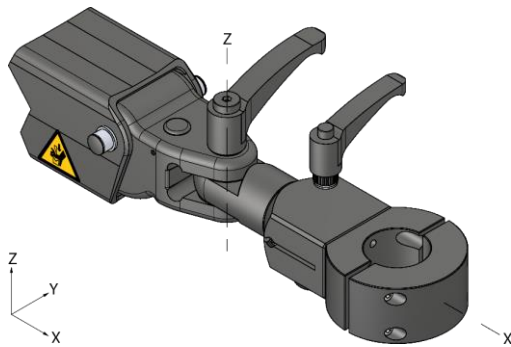
² The positioner only facilitates the 4x90° position, the X-axis handle must be locked.

³ XXX corresponds to the inner Ø in mm

3.6 ARTICULATED FLAT ROTARY - EA MV1007A4 + Flange



Fixed flange (M2Dxxx04)



Dimensions	Ømin (mm)	Ømax (mm)	X (mm)	Y (mm)	Z (mm)
Fixed flange	15 (19/32")	52 (2 3/64")	142 (5 19/32")	208.5 (8 13/64")	Ø84 (3 5/16")

Maximum torque: 60 Nm.

X: Rotates 360° (4x90°)⁴. Manual locking in any position.

Z: Rotates ±90°. Manual locking in any position.

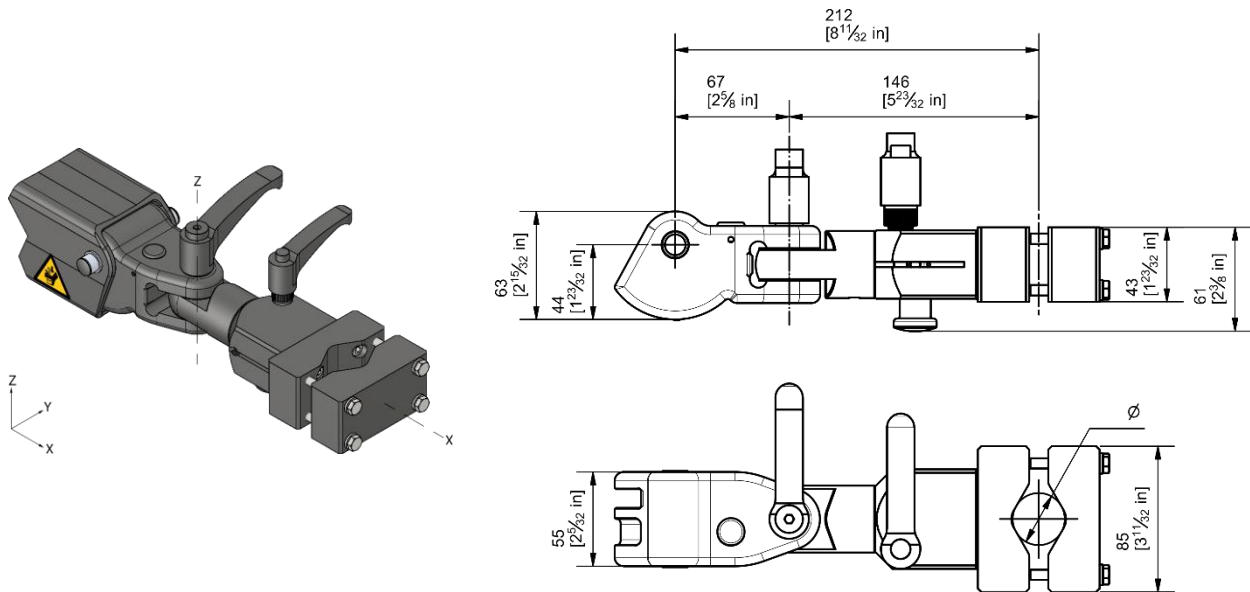
Ø: Specific diameter on request.

MAXIMUM TORQUE (Nm)			
Arm	Vertical	Horizontal	Angle
S1	N/A	N/A	N/A
S2	60	60	60

Spare parts [\[See Spare parts page 12\]](#).

⁴ The positioner only facilitates the 4x90° position, the X-axis handle must be locked.

3.7 ARTICULATED ROTARY V-BLOCK - F MV1023A4



Not suitable for torque tools.

Cylindrical or irregularly shaped tools.

Ø_{min}: 25 mm/ Ø_{max}: 62 mm.

X: Rotates 360° (4x90°)⁵. Manual locking in any position.

Z: Rotates ±90°. Manual locking in any position.

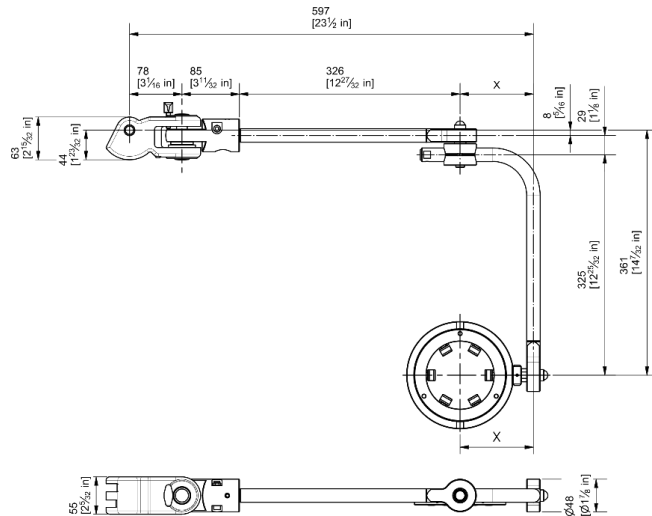
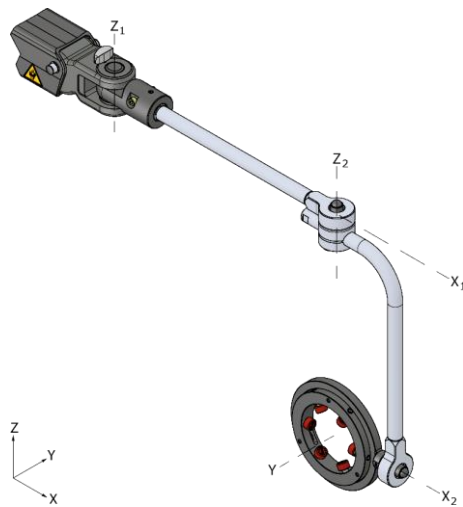
3.7.1 Spare parts

MV1023A4R	ORIENTABLE & ADJUSTABLE HEADMEMBER	
M2205100R	HANDLE M8 [Axis X]	
AC060546	HANDLE M10x40 [Axis Z]	
CM175300	SMALL POSITIONER [Axis X]	
M2204800R	CLAMPING VICES	

⁵ The positioner only facilitates the 4x90° position, the X-axis handle must be locked.

3.8 MULTIGIRO - GA

MV1003B4 + Handlebar



Requires L50 Locks

Z₁: Rotates $\pm 90^\circ$. Non-lockable.

Z₂: Rotates 360° . Non-lockable.

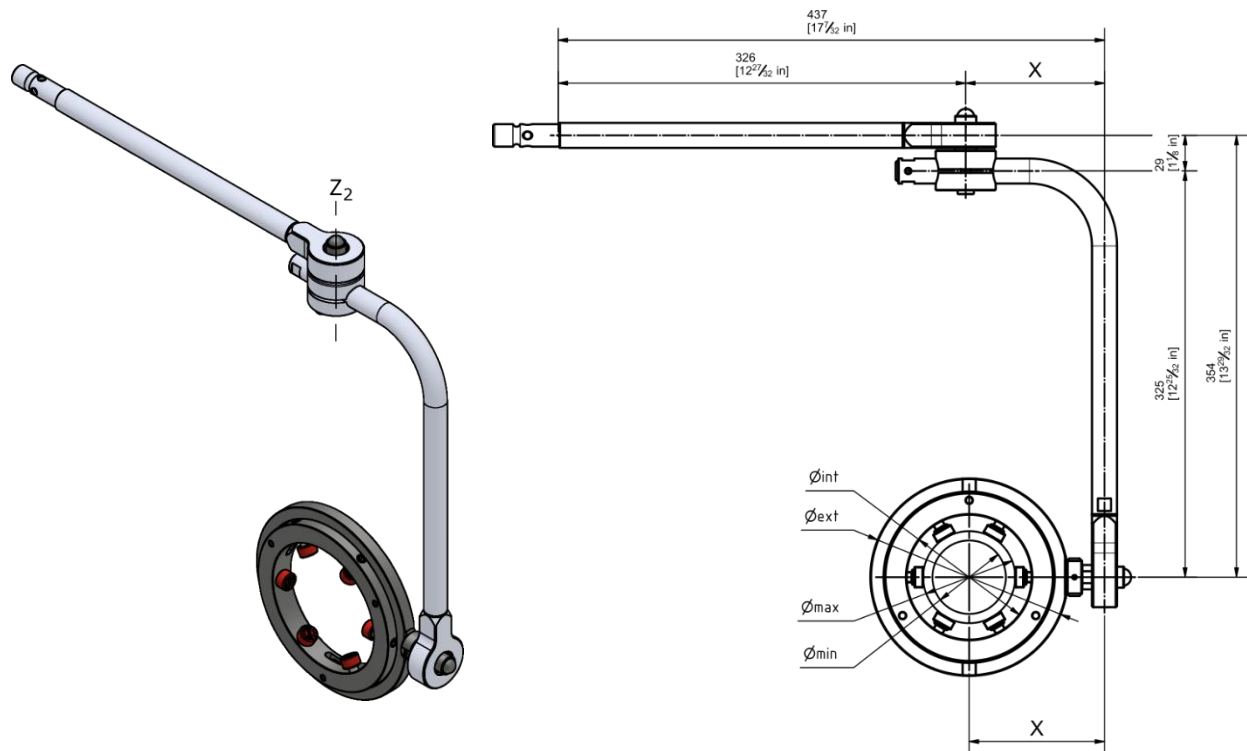
X₁: Rotates 360° . Manual locking in 4 positions (4x90°).

X₂: Rotate 360° . Manual locking in any position (Optional).

Y: Rotates 360° . Non-lockable.

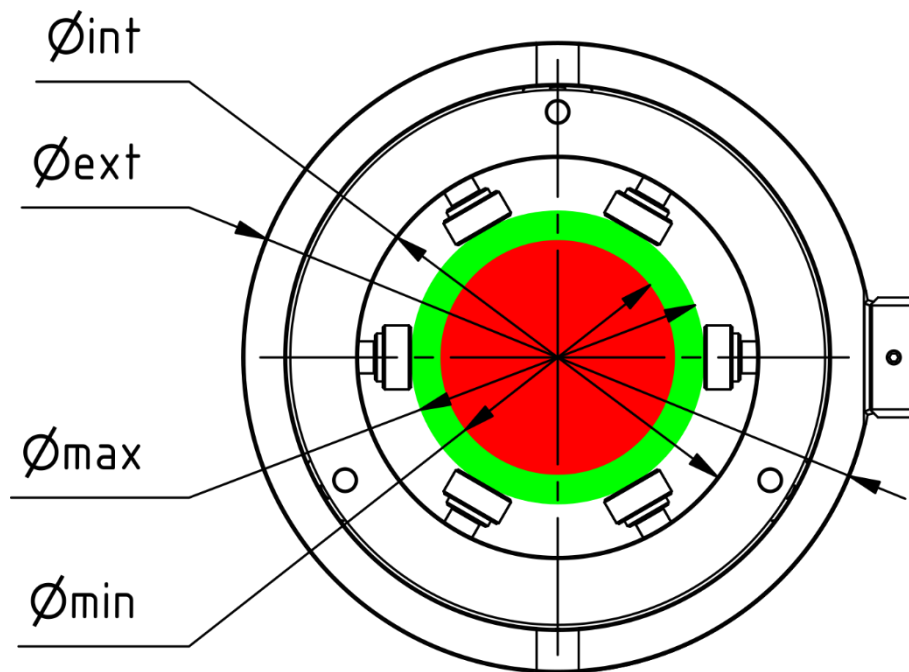
3.8.1 Handlebar Type A: TIMCO

Suitable for any type of tool.
Ref: MV3EE~~xxx~~ (~~xxx~~ = internal diameter in mm)



- The X coordinate shall be as close as possible to the Z_2 axis of rotation to ensure good tool balancing. $X_{min} = 110\text{mm}$

3.8.1.1 TIMCO Dimensions

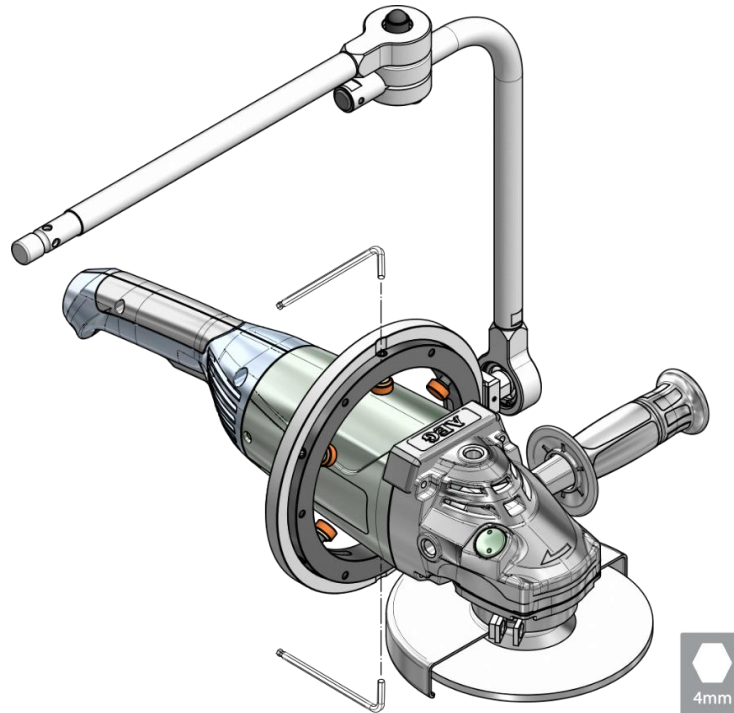


Øint		Øext		Ømin - Ømax tool	
mm	Inches	mm	Inches	mm	Inches
70	2 3/4"	128	5 3/64"	27 - 57	1 1/16" - 2 1/4"
80	3 5/32"	138	5 7/16"	35 - 67	1 3/8" - 2 41/64"
90	3 35/64"	148	5 53/64"	45 - 77	1 49/64" - 3 1/32"
100	3 15/16"	158	6 7/32"	55 - 87	2 11/64" - 3 27/64"
110	4 21/64"	168	6 39/64"	65 - 97	2 9/16" - 3 13/16"
120	4 23/32"	178	7 1/64"	75 - 107	2 61/64" - 4 7/32"
130	5 1/8"	188	7 13/32"	85 - 117	3 11/32" - 4 39/64"
140	5 33/64"	198	7 51/64"	95 - 127	3 47/64" - 5"
150	5 29/32"	208	8 3/13"	105 - 137	4 9/64" - 5 25/64"
160	6 19/64"	218	8 37/64"	115 - 147	4 17/32" - 5 25/32"
170	6 11/16"	228	8 31/32"	125 - 157	4 59/64" - 6 3/16"
180	7 3/32"	238	9 3/8"	135 - 167	5 5/16" - 6 37/64"

- The tool diameter must be in the green zone (between Ømin and Ømax).
- Maximum load 6 kg for applications with vibrating tools (impact, impulse, etc.)
- For all other applications consider a maximum load of 10 kg.
- Other dimensions on request

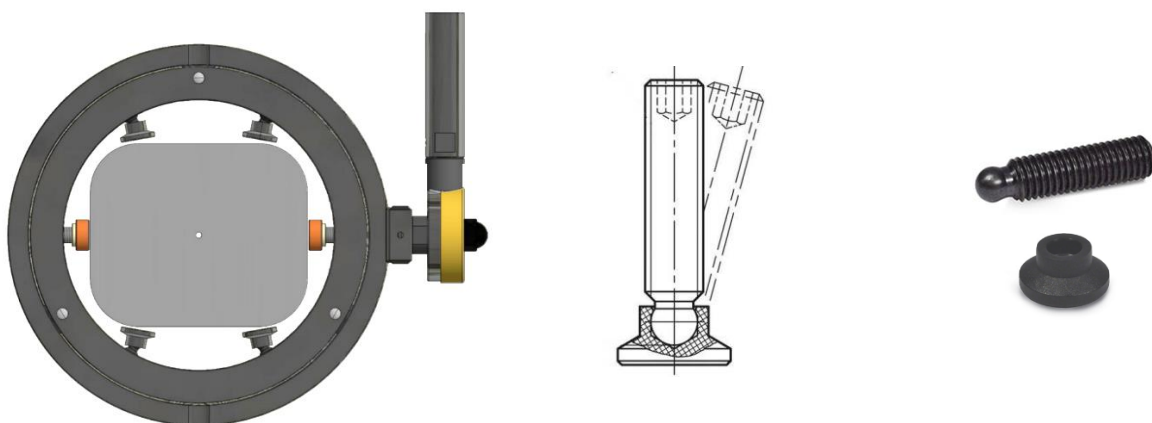
3.8.1.2 Assembly of the tool

- 1- Place the tool in the swivel support so that the weight is balanced on both sides of the support.
- 2- Once you have the tool in place, you must match the notches on the outer ring with the head of the Allen bolt. The tool must be tightened progressively, tightening using an "X" pattern.



In order to hold the tool in the correct way⁶, Tecnospiro recommends the use of headless Allen studs with ball tip for thrust pads. This component allows the tool to be held from all sides, with the pads adapting to the surface of the tool.

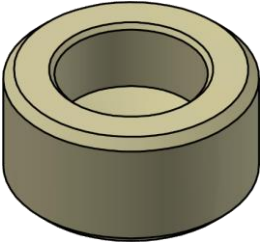
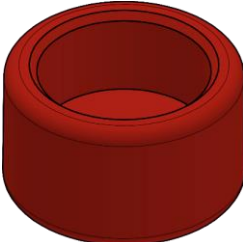
Clamping foot kit with stud bolts (**M3297600**)



⁶ Optionally, a tailor-made adapter can be manufactured to obtain an optimum fit.

3.8.1.3 Included accessories

In addition to type A drums (TIMCO), two types of **end caps (nylon and rubber)** and **studs (DIN-913 M8x25 and DIN-913 M8x20)** are included. (By default it is supplied assembled with Nylon cap and DIN-913 M8x20 stud bolt).

Nylon Cap MV31B803	Rubber Cap MV31F303
Material: Nylon Identifying colour: Translucent white Tightening level: High Level of Adaptation: Medium 	Material: Polyurethane Identifying colour: Red Tightening level: Medium Level of Adaptation: High 

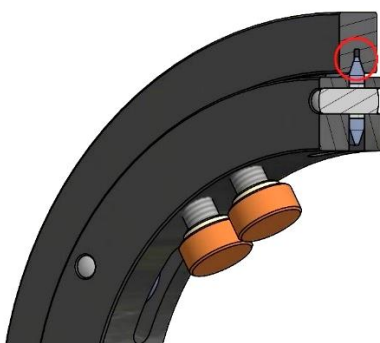
i Rubber caps (Polyurethane):

- They should be used for applications with vibrations (impact tools), or with fragile tools (plastic housings).
- The rubber caps must be fitted in conjunction with the Nylon caps, so the clearance for the tool will be reduced.

3.8.1.4 Maintenance and cleaning of drums

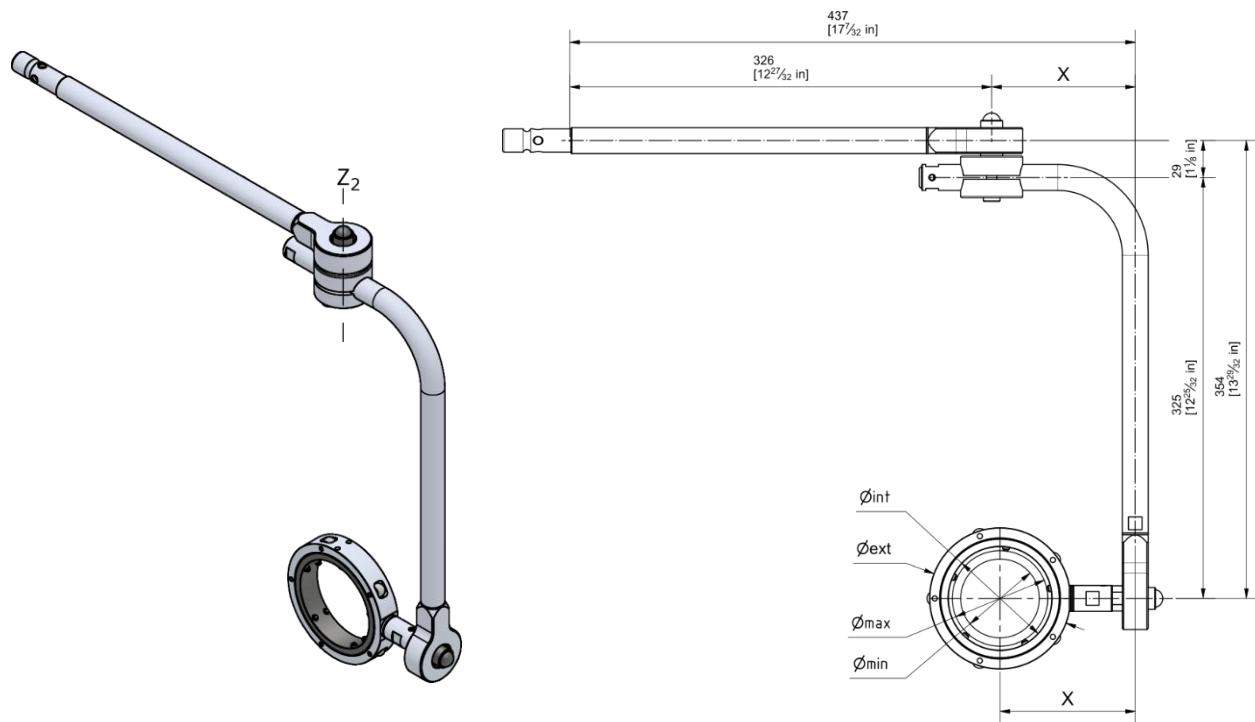
To keep the rotating drums clean, Tecnospiro recommends periodically blowing air into the drum while rotating the inner ring.

The way air is blown into the drums is important for the removal of dust accumulated in the groove. Dust and abrasive material could accumulate inside the groove and wear the drum tracks. To clean, blow air into the drum as shown in the picture. The inner ring should be rotated while blowing the air.



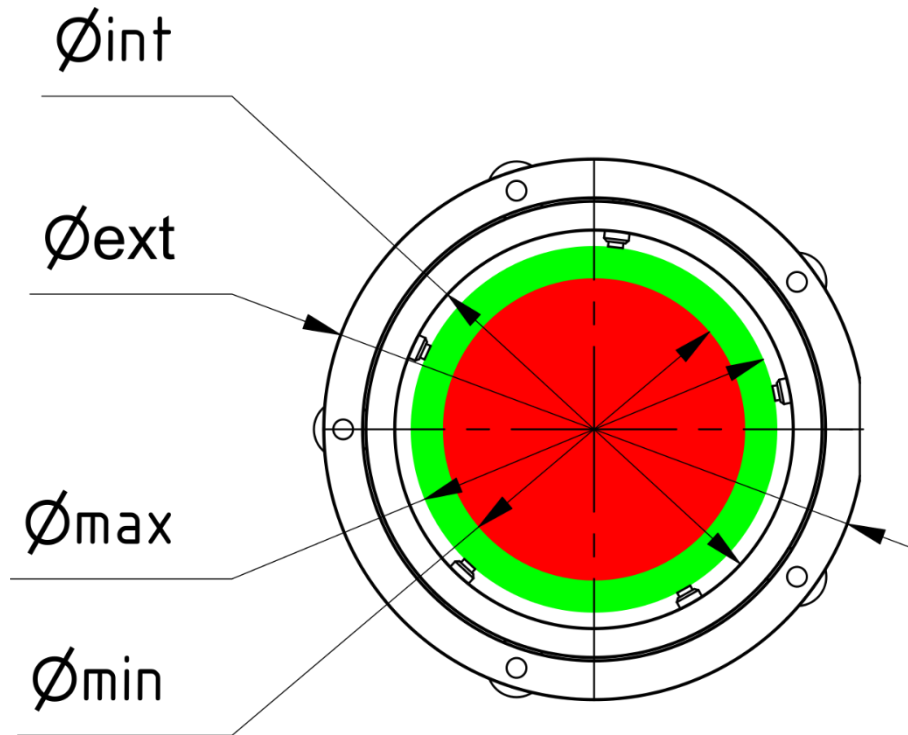
3.8.2 Handlebars Type B: TIMSAND

Suitable for tools with cylindrical clamping area.
Ref: MV3EFxxx (xxx = inside diameter in mm)



- The X coordinate shall be as close as possible to the Z_2 axis of rotation to ensure good tool balancing. $X_{min} = 110 \text{ mm}$.

3.8.2.1 TIMSAND dimensions



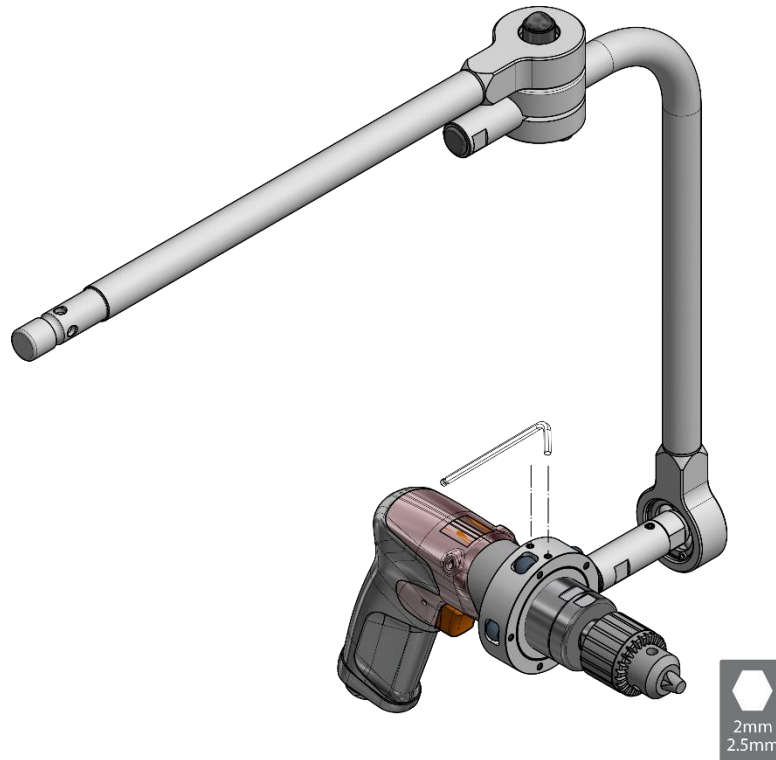
$\varnothing_{int}$.		$\varnothing_{ext}$.		$\varnothing_{min} - \varnothing_{max}$ tool	
mm	Inches	mm	Inches	mm	Inches
40	1 37/64"	69	2 23/32"	30 - 40	1 3/16" - 1 37/64"
50	1 31/32"	79	3 7/64"	40 - 50	1 37/64" - 1 31/32"
60	2 23/64"	89	3 1/2"	50 - 60	1 31/32" - 2 23/64"
70	2 3/4"	99	3 57/64"	60 - 70	2 23/64" - 2 3/4"
80	3 5/32"	109	4 19/64"	70 - 80	2 3/4" - 3 5/32"
90	3 35/64"	119	4 11/16"	80 - 90	3 5/32" - 3 35/64"
100	3 15/16"	129	5 5/64"	90 - 100	3 35/64" - 3 15/16"
110	4 21/64"	139	5 15/32"	100 - 110	3 15/16" - 4 21/64"
120	4 23/32"	149	5 55/64"	110 - 120	4 21/64" - 4 23/32"
130	5 1/8"	159	6 17/64"	120 - 130	4 23/32" - 5 1/8"

- The tool diameter must be in the green zone (between $\varnothing_{min}$ and $\varnothing_{max}$).
- The use of a customised adapter bushing is recommended to ensure concentric fitting.
- Maximum load 6 kg for applications with vibrating tools (impact, impulse, etc.)
- For all other applications consider a maximum load of 10 kg.
- Other dimensions on request

3.8.2.2 Assembly of the tool

For the **installation of the tool on Drum type B** follow the guidelines below.

- 1-** Insert the tool into the drum. Align the holes on the outer face of the outer ring with the studs holding the tool. Screw / unscrew these studs to achieve the correct grip on the tool (Allen key 2.5mm).
- 2-** Repeat the previous step to ensure that the tool is properly adjusted around its perimeter. Secure the stud bolts with medium-strength Loctite to prevent loosening.



3.8.2.3 Included accessories

In addition to type B drums (TIMSAND), **nylon tipped studs (M5x8)** are included.

Depending on the type of tool, the Nylon studs may be replaced by metal studs to achieve a closer fit for the diameter of the Drum in relation to the tool.

For maintenance and cleaning [\[See Maintenance and cleaning of drums page. 19\].](#)

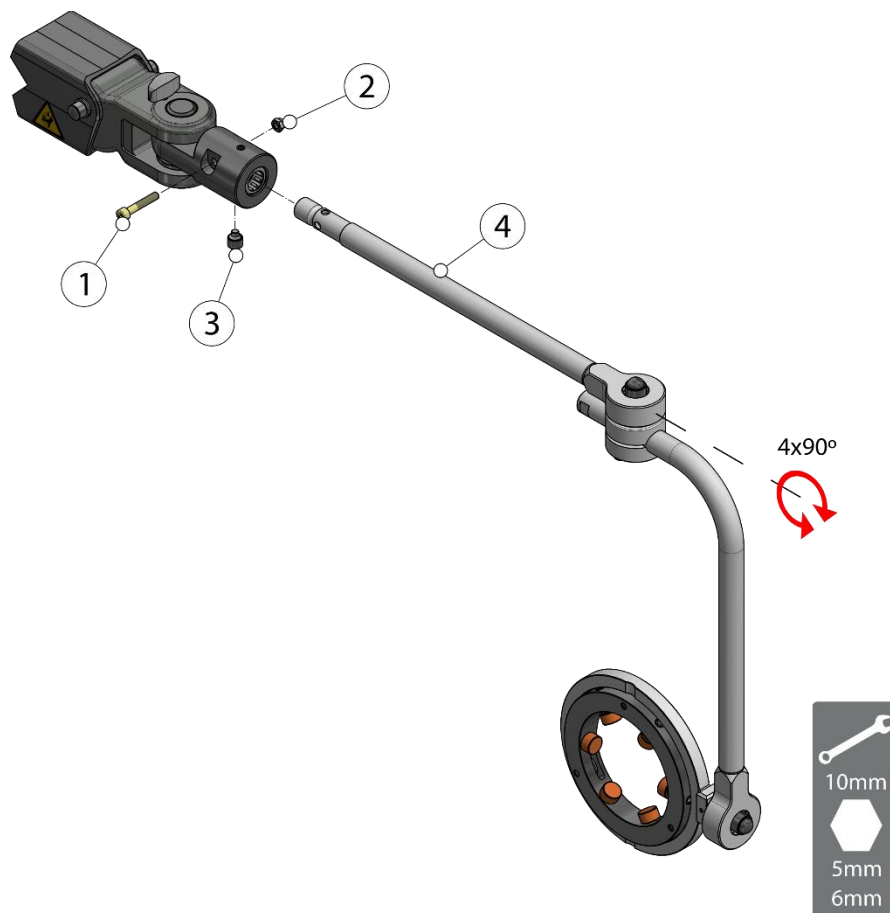
3.8.3 Handlebar installation and working positions

The head has 2 working modes:

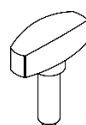
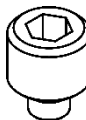
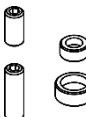
- 360° handlebar free rotation
- Handlebar locking in one of the four positions (4x90°).

Follow the guidelines below for the **attachment and adjustment of the handlebars** (whether type A or B).

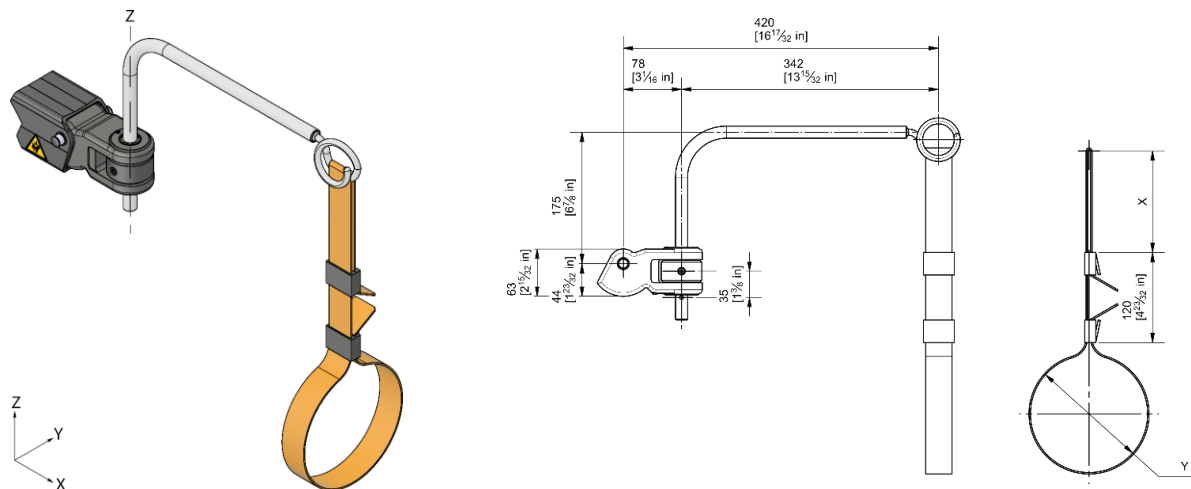
- 1-** Remove the bolt (1) (Allen key 5mm) and the nut (2) (open-end spanner 10mm).
- 2-** Remove the stud (3) (6mm Allen key).
- 3-** Insert the handlebar (4) and fit the bolt (1) (Allen key 5mm) and the nut (2) (spanner 10mm) to fix the handlebar in place.
- 4-** Screw in the threaded bolt (3) (6mm Allen key) to set the handlebar in one of the 4 positions (4x90°). If not, the handlebar will move freely on the X₁ axis (360°).



3.8.4 Spare parts

M3103300R	SECURING LEVER M8x24	
M3304100	POSITIONER	
MV331104	REPLACEMENT STUDS AND CAPS KIT	

3.9 ADJUSTABLE STRAP - K M1200700



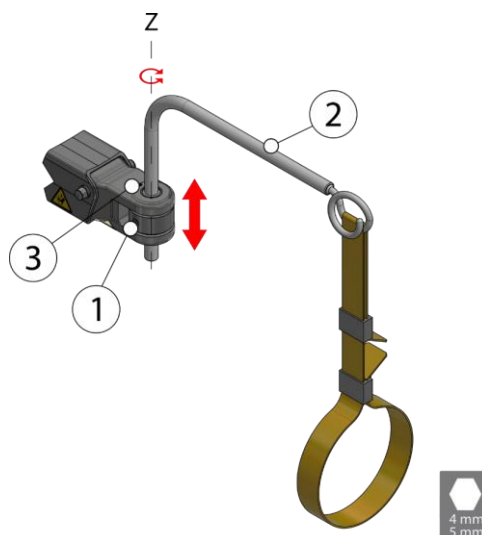
Z: 360° Turn

	X (mm)	Y (mm)
Dimensions	0 - 300 (0 - 11 13/16")	Ø0 - Ø225 (Ø0 - Ø8 55/64")

3.9.1 Height and rotational friction adjustment

The bar has 2 points for working height adjustment set 35mm (1 3/8") apart. To set:

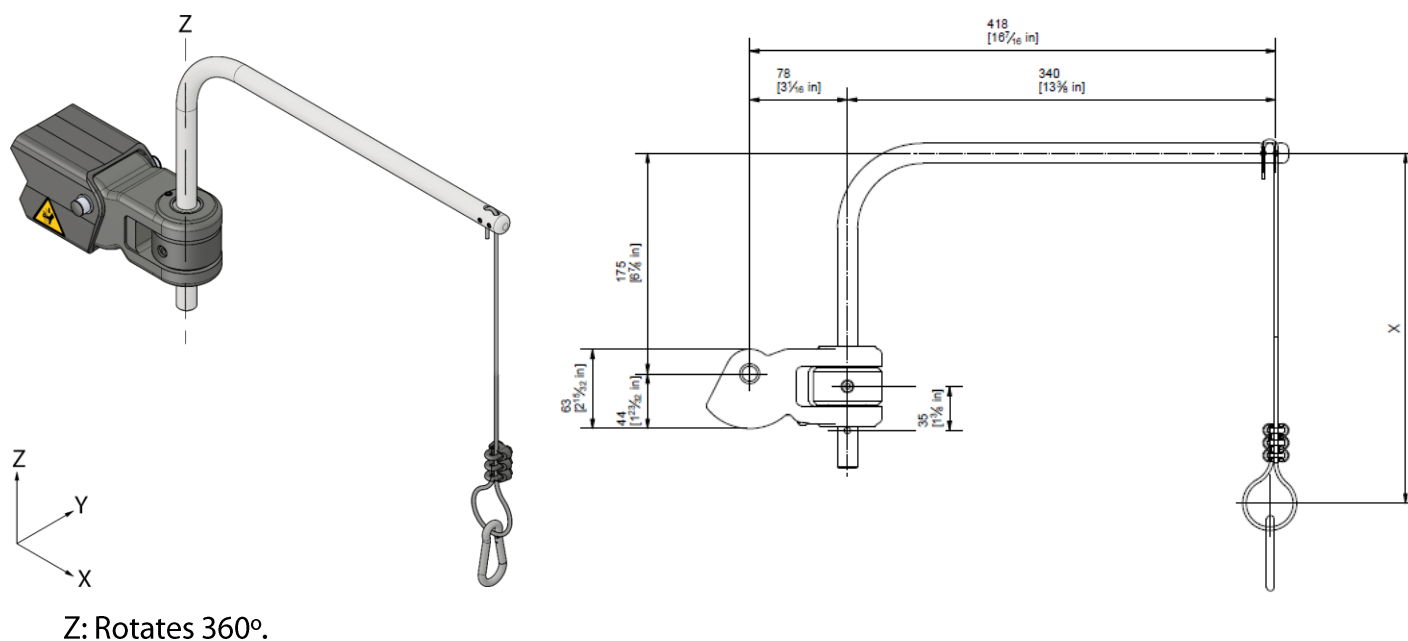
- 1- Remove the bolt (1) (4mm Allen key).
- 2- Move the bar (2) to the desired adjustment point and tighten the bolt (1) (4mm Allen key).
- 3- To regulate the friction of the Z-axis rotation, tighten or loosen the bolt (3) (3 mm Allen key).



3.9.2 Spare parts

M3146400	FASTENING STRAP	
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3.10 ADJUSTABLE STEEL CABLE – KA M1203200

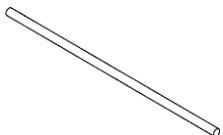


Z: Rotates 360°.

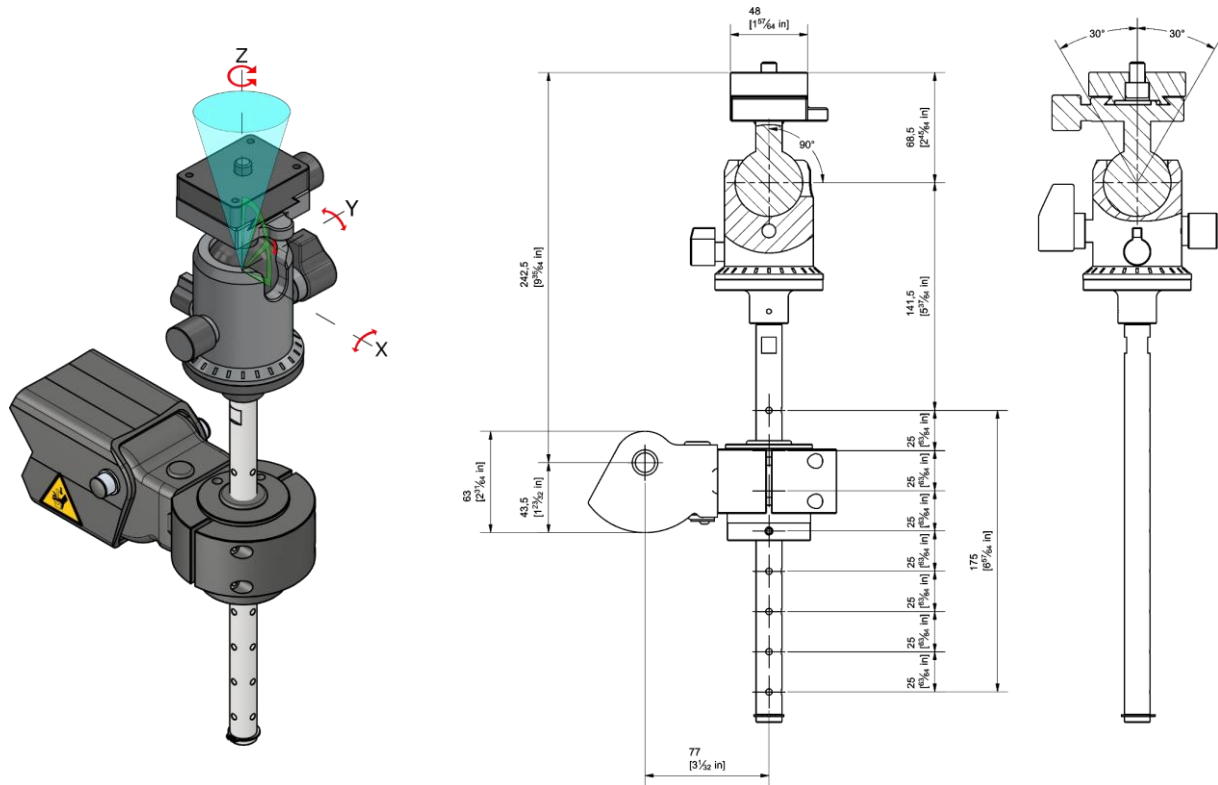
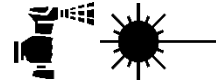
	X (mm)
Dimensions	0 - 200 (0 - 7 27/32")

To adjust the working height [\[See Height and rotational friction adjustment pág. 25\]](#).

3.10.1 Spare parts

AC006116	STEEL WIRE Ø3	
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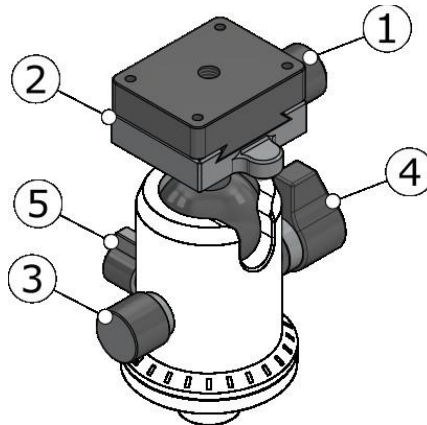
3.11 ADJUSTABLE BALL JOINT WITH VERTICAL ADJUSTMENT - L M12024A0



Z: Rotates 360°. Manual locking in any position.
 Plane XZ: $\pm 90^\circ$. Manual locking in any position.
 Plane YZ: $\pm 30^\circ$. Manual locking in any position.
 Stroke adjustable up to 175mm in Z-axis.

3.11.1 Operation

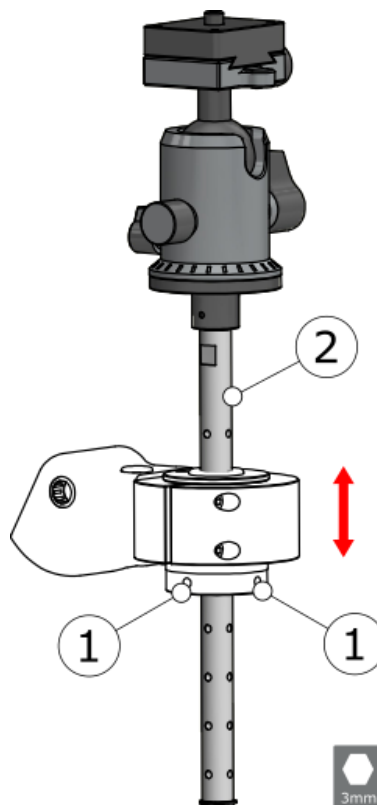
Turning the knob (1) will lock the movement of the support (2).
 Turning the knob (3) will regulate the friction on the base (2) to adapt the smoothness of movement.
 Turning the lever (4) will lock the rotation of the whole assembly.
 Turning the lever (5) will lock the 360° regulation of the base.



3.11.2 Height adjustment

To adapt the vertical stroke of the assembly:

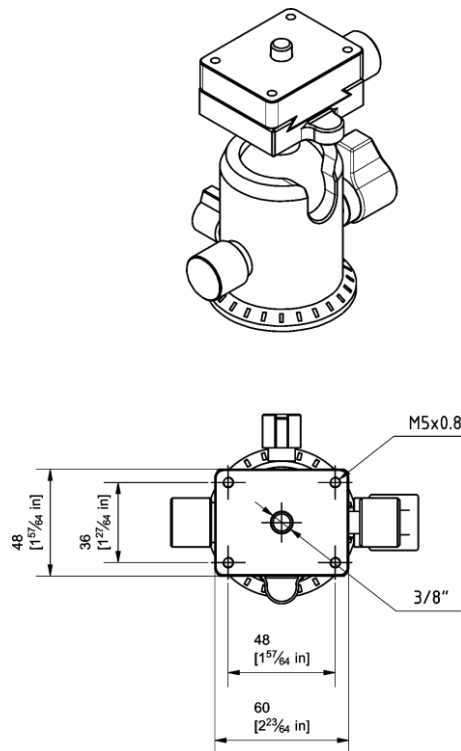
- 1-** Loosen the stud bolts (1) (3mm Allen key).
- 2-** Move the rod (2) to the desired position and re-tighten the studs (1).



3.11.3 Grip ends

All variants of the L-head provide two ends for the attachment of the tool

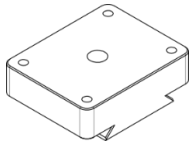
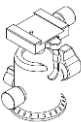
- End with four external anchor points (M5) for customized use.
- End with a single anchor point in the centre (3/8") for photography and other equipment.



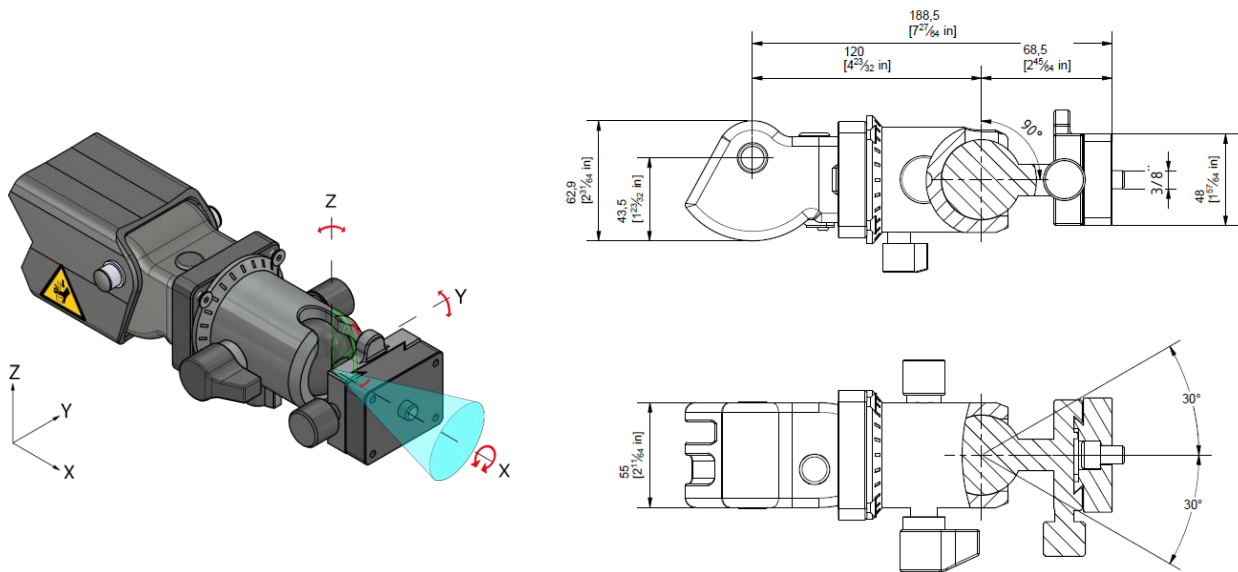
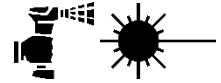
3.11.4 Adding oil

SAE 5-10 hydraulic oil should be added in cases where the system still does not function properly (does not lock) after the friction and dipstick adjustment has been carried out.

3.11.5 Spare parts

M3338500	UNION PLATE	
CM178800	HYDROSTATIC BALL JOINT	

3.12 HORIZONTAL ADJUSTABLE BALL JOINT - LB M12026A0



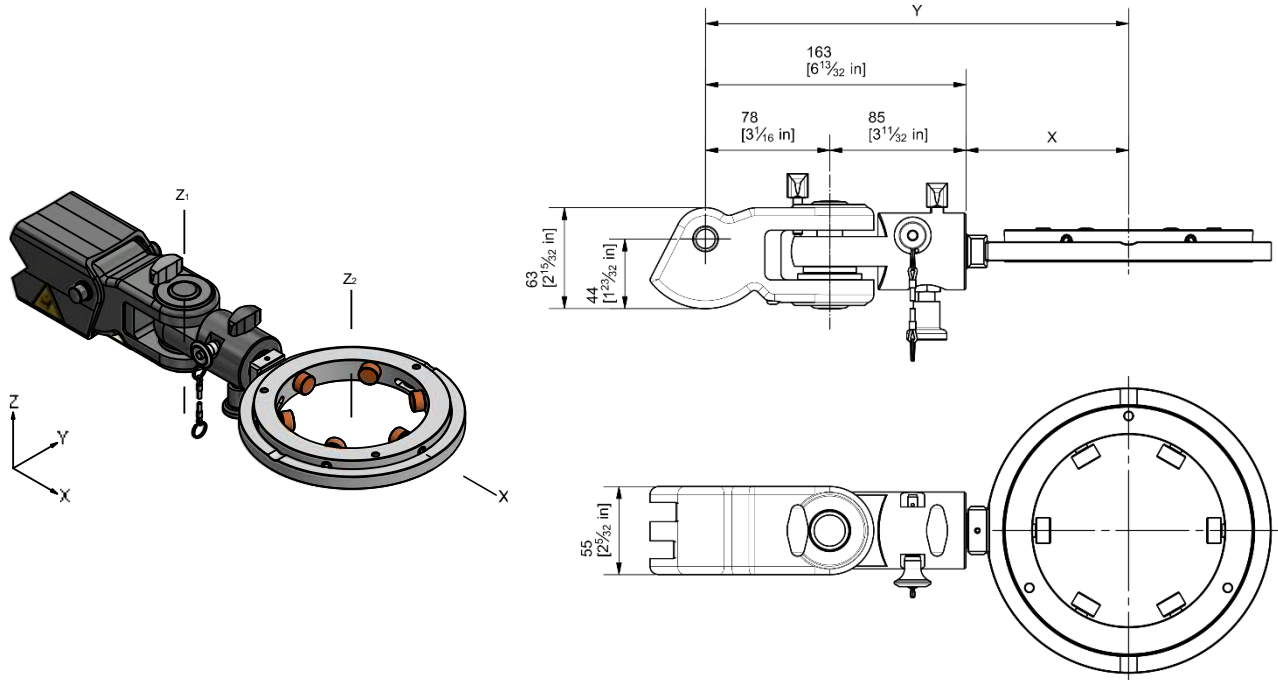
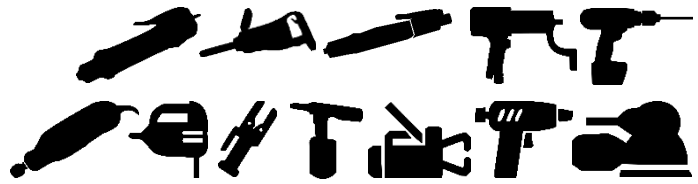
Maximum torque: 25 Nm.
Manual locking.

X: Rotates 360°. Manual locking in any position.
Plane XZ: $\pm 90^\circ$. Manual locking in any position.
Plane XY: $\pm 30^\circ$. Manual locking in any position.

For operation [\[See Operation page 28\]](#).
Different grip endings [\[See Grip ends page 29\]](#).
Adding oil [\[See Adding oil page 29\]](#).
Spare parts [\[See Spare parts page 29\]](#).

3.13 MULTI-POSITION WITH QUICK CHANGE - NA

M1106200 + Handlebar



Z₁: Rotates $\pm 90^\circ$. Non-lockable.

Z₂: Rotates 360° . Non-lockable.

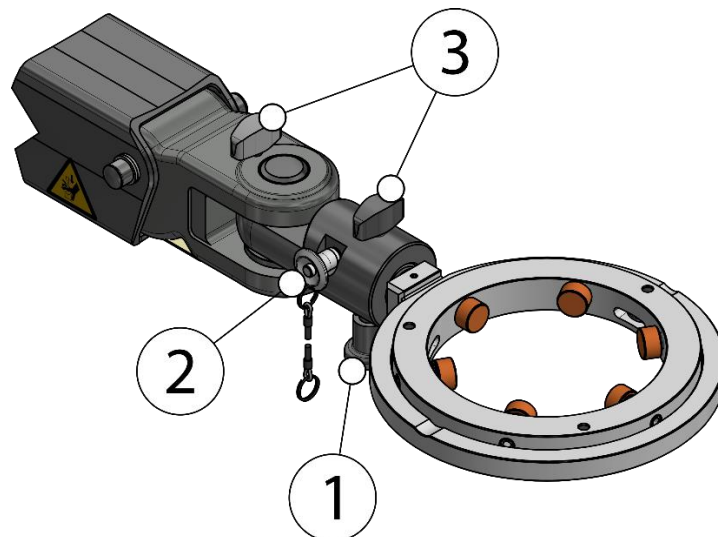
X: Rotates 360° . Manual locking in 4 positions ($4 \times 90^\circ$).

3.13.1 Movement and locking

The positioner (1) releases/locks the X movement (360° , $4 \times 90^\circ$)

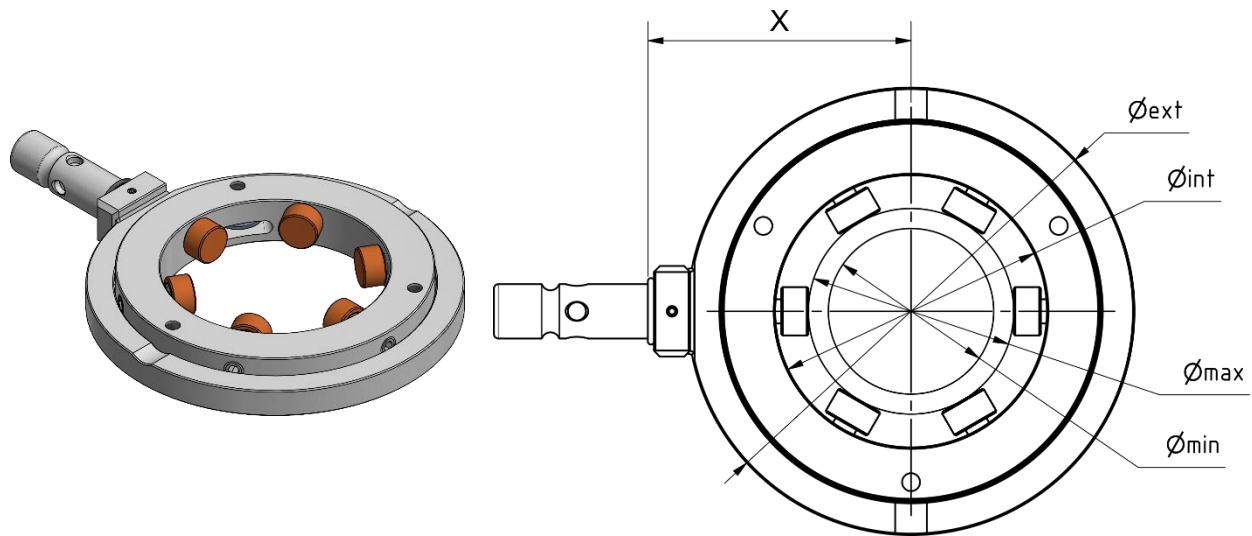
To remove the rod, release the positioner (1) and remove the pin (2).

The friction can be adjusted using the adjustment knobs (3).



3.13.2 Type A drums: TIMCO

Suitable for any type of tool.
Ref: MV3MAxxx (xxx = internal diameter in mm)

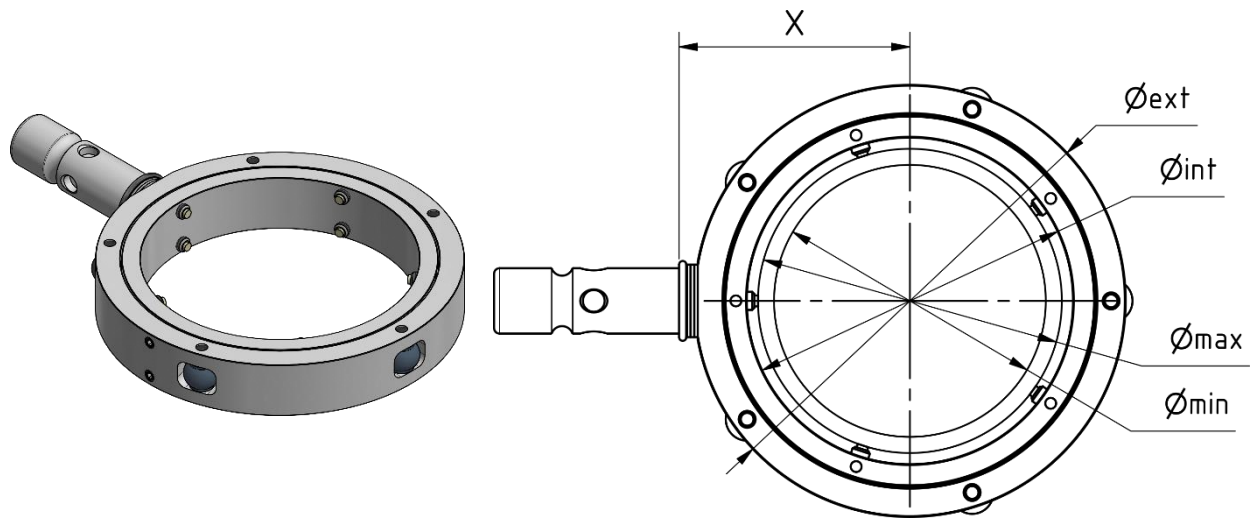


- Dimension X is approximately the outer radius plus 12mm ($X = \frac{\varnothing_{ext}}{2} + 12$)
- Maximum load 6 kg for applications with vibrating tools (impact, impulse, etc.)
- For all other applications or for applications with B Handlebar type B (TIMSAND), consider 10 kg maximum load.
- Other dimensions on request

- ✓ TIMCO dimensions [\[See TIMCO Dimensions page 17\]](#).
- ✓ For tool assembly [\[See Assembly of the tool page 18\]](#).
- ✓ Included accessories [\[See Included accessories page 19\]](#).
- ✓ For maintenance and cleaning [\[See Maintenance and cleaning of drums page. 19\]](#).

3.13.3 Type B drums: TIMSAND

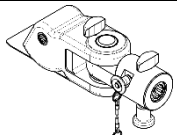
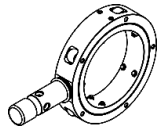
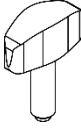
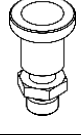
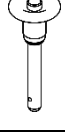
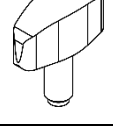
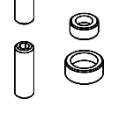
Suitable for tools with cylindrical clamping area.
Ref: MV3PBxxx (xxx = interior diameter in mm)



- Dimension X is approximately the outer radius plus 3mm ($X = \frac{\phi_{ext}}{2} + 3$)
- Maximum load 6 kg for applications with vibrating tools (impact, impulse, etc.)
- For all other applications or for applications with B Handlebar type B (TIMSAND), consider 10 kg maximum load.
- Other dimensions on request

- ✓ TIMSAND dimensions [\[See TIMSAND dimensions page. 21\]](#).
- ✓ For tool assembly [\[See Assembly of the tool page 22\]](#).
- ✓ Included accessories [\[See Included accessories page 22\]](#).
- ✓ For maintenance and cleaning [\[See Maintenance and cleaning of drums page. 19\]](#).

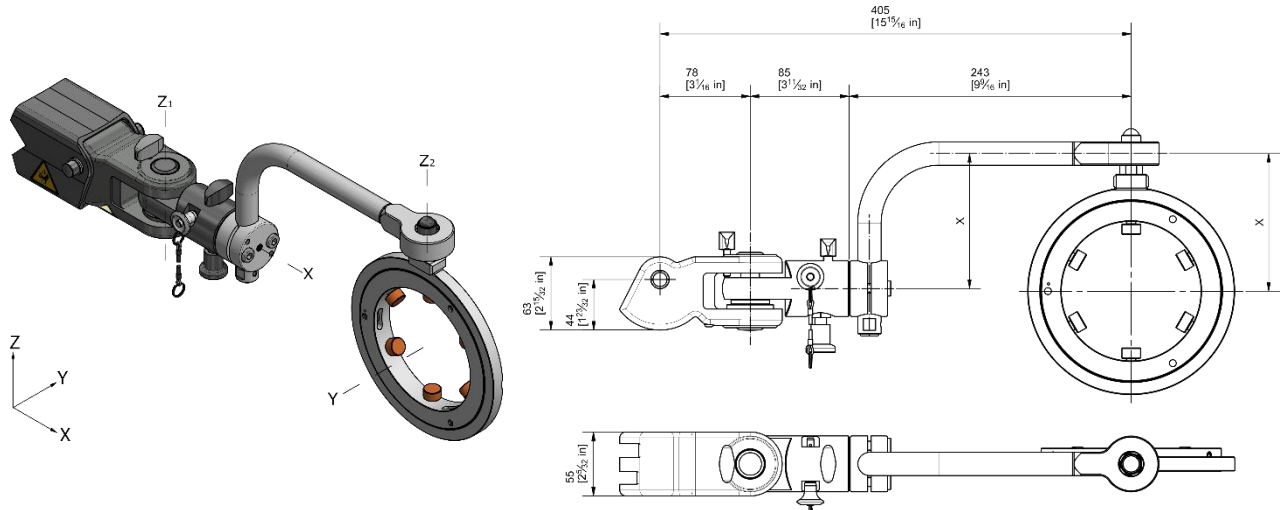
3.13.4 Spare parts

M1106200R	HEADMEMBER	
MV3MAXXX⁷	TIMCO GIMBAL	
MV3PBXXX	TIMSAND GIMBAL	
M1102200R	SECURING LEVER M8x24 [Axis Z₁]	
AC004046	POSITIONER	
CM125100	POSITIONER	
MV31K703R	SECURING LEVER M8x18.5	
MV331104	REPLACEMENT STUDS AND CAPS KIT	

⁷ XXX corresponds to the $\varnothing_{int}$ in mm

3.14 MULTI-POSITION WITH QUICK-CHANGE- TA

M1106200 + Handlebar



Requires L50 Locks.

Z₁: Rotates $\pm 90^\circ$. Non-lockable.

Z₂: Rotates 360° . Non-lockable.

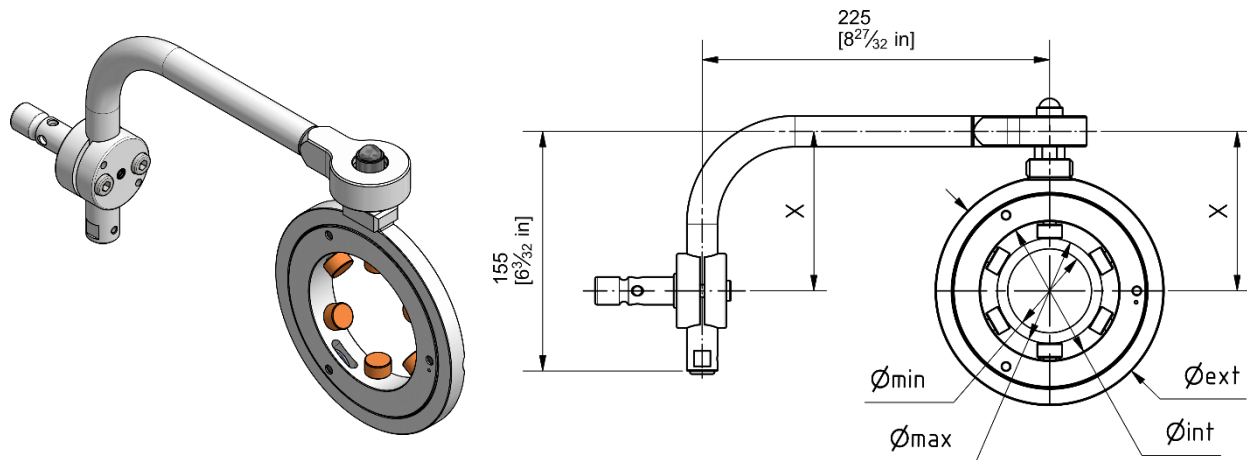
X: Rotates 360° . Manual locking in 4 positions (4x 90°).

Y: Rotates 360° . Non-Lockable.

To view movements [\[See Movement and locking page 31\]](#).

3.14.1 Type A drums: TIMCO

Suitable for any type of tool.
Ref: MV3LA~~xxx~~ (~~xxx~~ = internal diameter in mm)

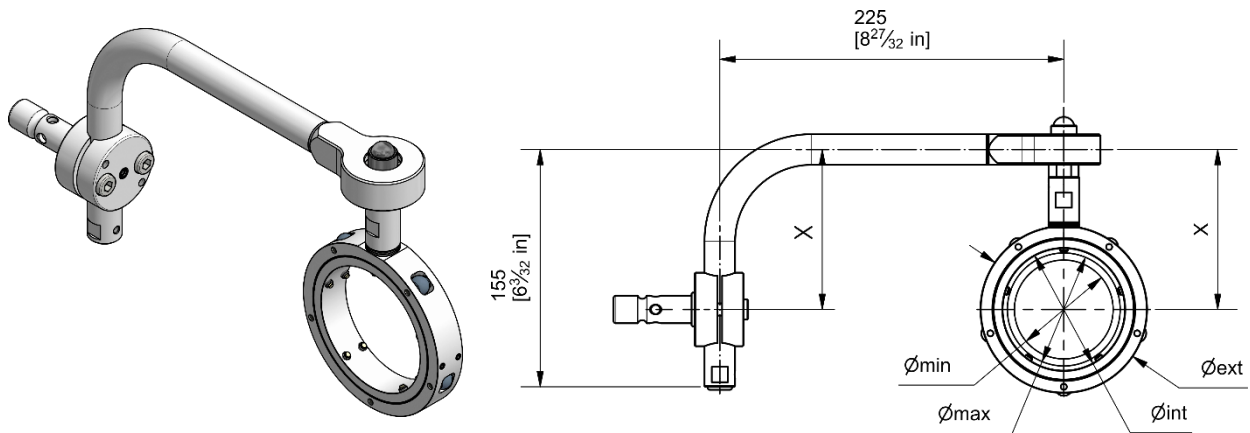


- The X dimension shall be as close as possible to the X axis of rotation to ensure good balancing of the tool.
- Maximum load 6 kg for applications with vibrating tools (impact, impulse, etc.).
- For all other applications or for applications with B Handlebar type B (TIMSAND), consider 10 kg maximum load.
- Other dimensions on request.

- ✓ TIMCO dimensions [\[See TIMCO Dimensions page 17\]](#).
- ✓ For tool assembly [\[See Assembly of the tool page 18\]](#).
- ✓ Included accessories [\[See Included accessories page 19\]](#).
- ✓ For maintenance and cleaning [\[See Maintenance and cleaning of drums page. 19\]](#).

3.14.2 Type B drums: TIMSAND

Suitable for tools with cylindrical clamping area.
Ref: MV3QBxxx (xxx = interior diameter in mm)



- The X dimension shall be as close as possible to the X axis of rotation to ensure good balancing of the tool.
- Maximum load 6 kg for applications with vibrating tools (impact, impulse, etc.).
- For all other applications or for applications with B Handlebar type B (TIMSAND), consider 10 kg maximum load.
- Other dimensions on request.

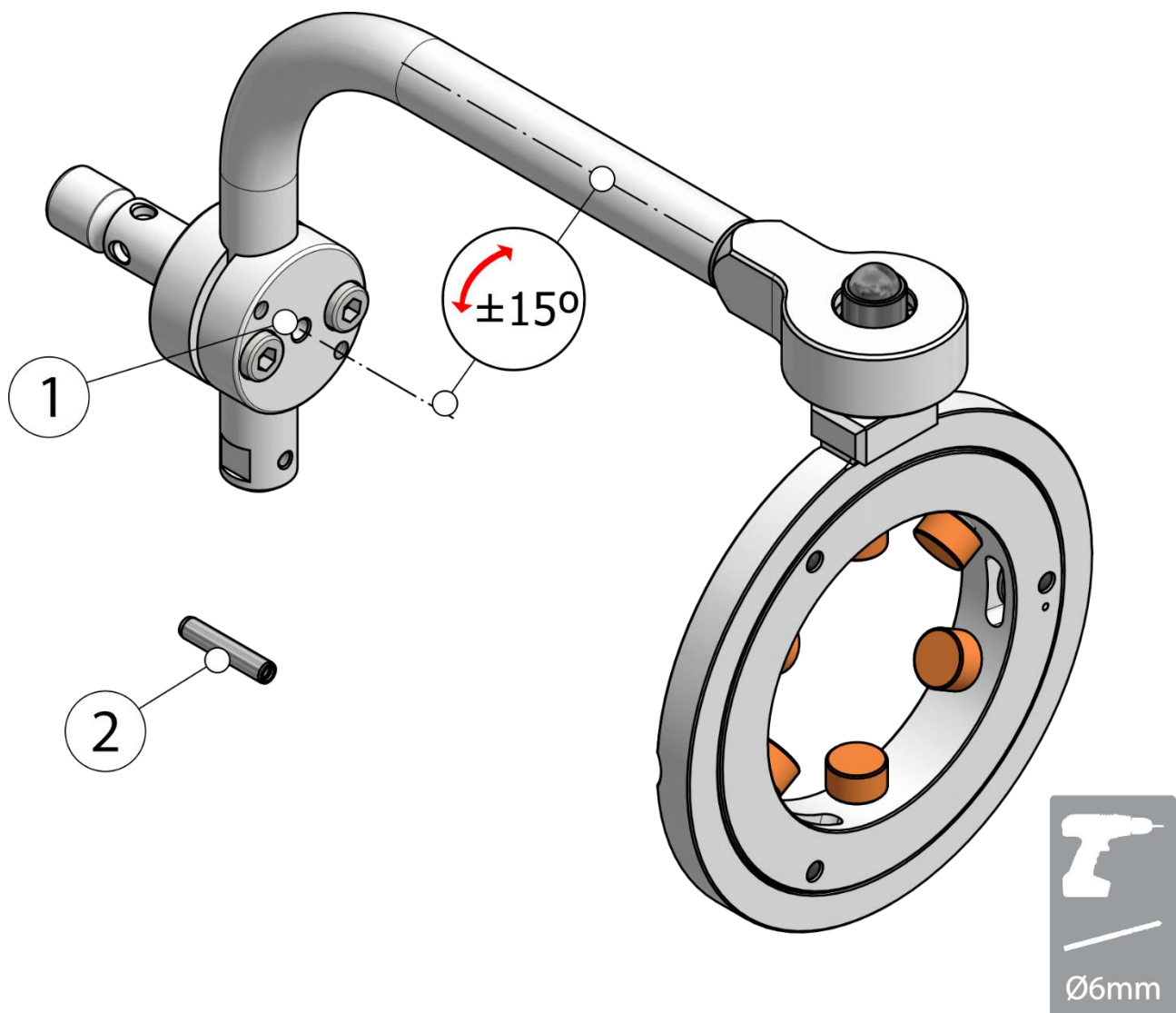
- ✓ TIMSAND dimensions [\[See TIMSAND dimensions page. 21\]](#).
- ✓ For tool assembly [\[See Assembly of the tool page 22\]](#).
- ✓ Included accessories [\[See Included accessories page 22\]](#).
- ✓ For maintenance and cleaning [\[See Maintenance and cleaning of drums page. 19\]](#).

3.14.3 Handlebar adjustment and reinforcement

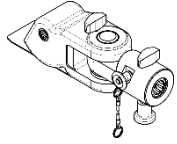
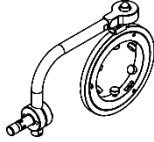
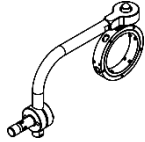
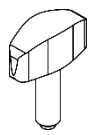
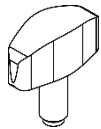
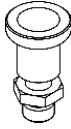
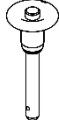
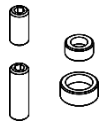
Once the handlebar adjustment has been completed, it can be secured by using a **DIN 7979 Ø6x30** dowel pin to reinforce the crankpin. To set:

Ensure that the parallelism between the crankpin and the rod does not exceed $\pm 15^\circ$.

- 1- Drill the handle bar using as a guide the existing hole in the crankpin (1) (Drill bit Ø6mm). The hole should be approximately 30mm deep (drill through the entire bar).
- 2- Insert the pin (2) into the drilled hole.

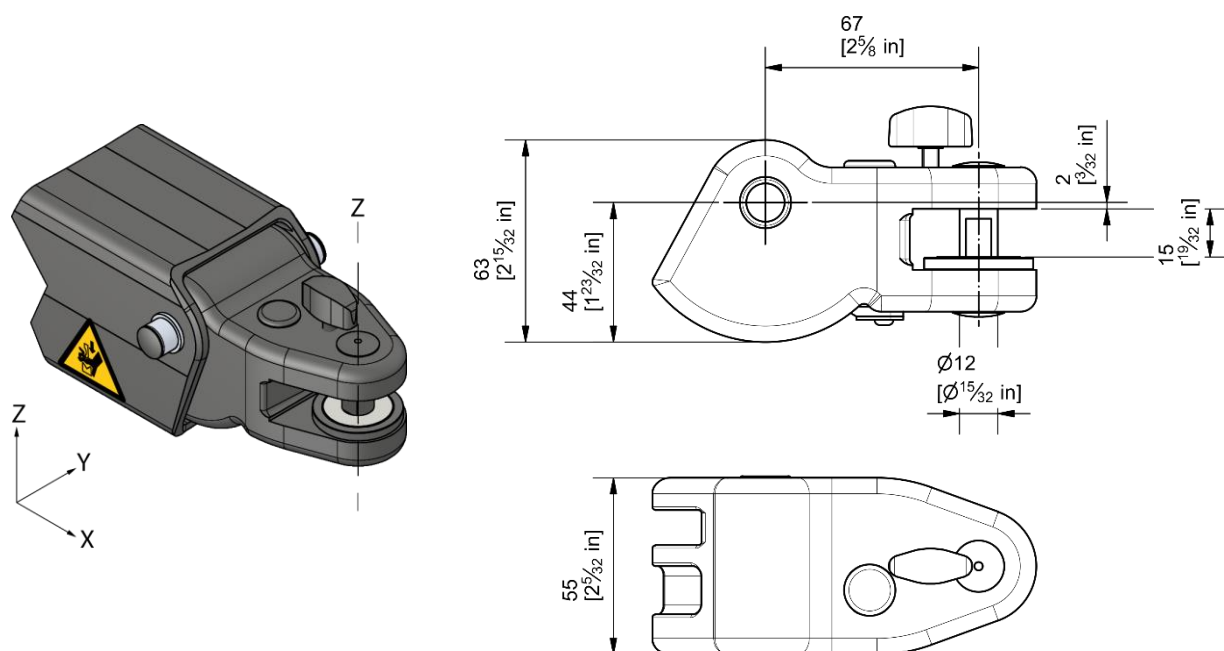


3.14.4 Spare parts

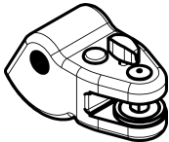
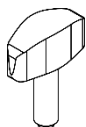
M1106200R	HEADMEMBER	
MV3LAXXX⁸	TIMCO GIMBAL	
MV3QBXXX	TIMSAND GIMBAL	
M1102200R	SECURING LEVER M8x24 [Axis_{Z1}] [Axis Z1]	
MV31K703R	SECURING LEVER M8x18.5	
AC004046	POSITIONER	
CM125100	POSITIONER Ø6x30	
MV331104	REPLACEMENT STUDS AND CAPS KIT	

⁸ XXX corresponds to Ø in mm

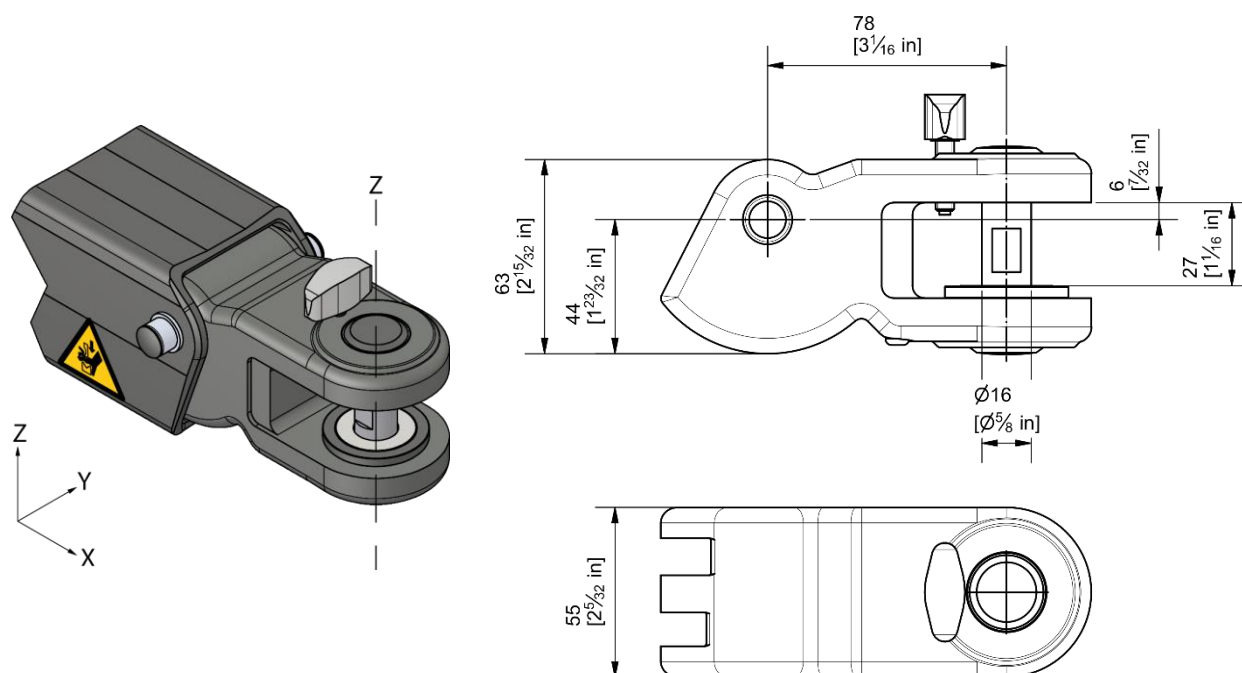
3.15 FORK - Z MV1012A4



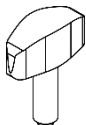
3.15.1 Spare parts

MV1012A4R	HEADMEMBER	
MV101503R	SECURING HANDLE M5	

3.16 REINFORCED FORK - ZA M1202800



3.16.1 Spare parts

M1102200R	SECURING LEVER M6	
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