

Specifications

Thread size:	M4 - M22 M22 – M27 Special	
Torque:	8 – 16 – 24 – 32 N/cm.	
Maximum Depth:	55 mm.	
Rotation Speed:	30 - 450 rpm.	
Weight:	750g (depends on size)	
Digital Inductive measure system:	Sylvac (ready for OPTO RS 232 wired /wireless)	
Display resolution:	0.01 mm / 0.0005 inch.	
Accuracy:	+ /- 0.025 mm	
Battery:	Battery type: Rechargeable Protected 18650 Li-ion 3.7v 3500 mAh. 12.95Wh. Leitech recommends - Keeppower P1835J.	
Useable time on battery:	1 to 6 Hours depending on load.	
Battery for Display:	Cell 3V CR 2032 (non-rechargeable)	
Display type:	DMG with SYLVAC display – two buttons on left side.	
Note:	<ul style="list-style-type: none">• The DMG is not IP rated and is not splash resistant.• The unauthorized opening of the DMG will cancel the warranty.• Oil or other liquid on the encoder can cause an inaccurate measurement. Use a clean dry cloth, to remove any contamination. Do not use any chemicals, as this can damage the surface of the gage.	

Changing Battery for the Sylvac Display

The Sylvac Display is equipped with a back up battery. Replacing the battery will not affect any saved settings.

1. Remove the cover for the computer port and battery.
2. Remove the battery with a small screwdriver. Install the new battery with + polarity upwards.
3. Put the cover back on.
4. If the display is not in function, press the contact in the little hole on the right side of the handle with a non-conducting tool - e.g. a toothpick.
5. The display will now function properly.
6. Battery life is app. 3000 hours. The display will show "B" when the battery needs to be changed.

Removing a Thread Plug /Adapter From the DMG

Turn the torque knob to "Off".

Unscrew the nose piece from the end of the black cylindrical sleeve.

Push the black cylindrical sleeve into the handle until the screw hole in the adapter can be seen through the hole in the sleeve.

Insert the supplied Cento tool (green handle) into the hole and loosen the screw in the adapter.

Pull the adapter off of the gearbox shaft.

Removing the Thread Member From Adapter

Place the thread member (still attached to the adapter) SHANK into a vice grip at a 45 deg. angle. It is preferable to use a soft metal or plastic material between the member shank and the vice grip, but it is not required.

Using a soft-metal piece or wooden dowel, place one end on the edge of adapter (as seen in the photo).

Give a quick, hard rap against the top of the metal / wood piece.

This will dislodge the member from the DMG adapter.



Installing a New Thread Member

Install the new gage plug into the adapter with a light blow from a plastic hammer.

Tighten the adapter set screw with the supplied Cento tool (black & green handle) – then back off slightly so it is loose.

Install the Member / Adapter into the DMG

Push the black cylindrical sleeve to expose the gearbox shaft.

Placing the adapter over gearbox shaft, align the small mark on the adapter shaft with the flat part of the gearbox shaft. Press to fit.

Note where the hole in the black sleeve is. Turn the adapter so that the small mark on the adapter is OPPOSITE to the hole in the black sleeve.

Push the black cylindrical sleeve into the handle until the screw hole in the adapter can be seen through the hole in the sleeve.

Insert the supplied Cento tool (black & green handle) into the hole and tighten the screw in the adapter.

Screw on the nose piece.

Calibration of the Gage

After mounting the gauge adapter in the DMG handle, the DMG must be calibrated, so that the correct thread depth is displayed.

The procedure for using the adjusting piece is following.

1. Choose the adjusting piece which fit the plug pitch in the DMG. See the pitch size at the bottom of the adjusting piece.
2. Turn on the display by using the on/off button.
3. Press the adjusting piece towards the plug, so that the plug is inside the recess of the adjusting piece.
4. Zero the display by pressing the on/off button shortly.
5. Now the handle is calibrated for the actual pitch, and will show the distance from the middle of the deepest full thread profile to the edge of the wear bushing
6. The display will hold its setting until the on/off button is pressed.
7. It is possible to lock the calibration of the thread gauge, by pre-set the display.

If the DMG is mounted with extended plug, or point 7 is needed, please follow the document with instruction for pre-set value in display.

Installing the Battery

1. Turn the back cover and place the battery inside the hole. + is outside.
2. If the battery is installed backwards, the motor will not start. Nothing is damaged if the battery is installed incorrectly.

Charging the Battery

See the charger documentation included with the charger. Put the batteries in the charger. Note the polarity.

Setting the Torque

The torque is set with the knob on the rear of the handle.

Leitech suggest following torques:

Thread Size	Torque N/cm	Handle Size
M4 – M6	8	300
M7 – M12	16	400
M14 – M16	24	500
M18 – M22	32	600

The thread must be cleaned before use.

Maximum torque and speed is always used when reversing the thread out of the part.

When the DMG is not in use, it is recommended to turn the Torque knob to “off” position.

Mounting of the RS 232 Opto data port.

(Only for Sylvac display)

The DMG can be connected to a computer for data collection.

1. Move the cap on the side of the display, horizontal. The OPTO RS 232 can be mounted by pushing the Opto sleeve into the hole in the display until a “click” can be felt. Connect the other end to the computer. Or if it’s a wireless, connect by reading the manual for the Opto.
2. The handle can now transfer data to the computer.

Measuring Thread Depth.

When the handle is calibrated, the thread depth of a threaded hole can be measured.

1. Push the measuring sleeve backwards via the button on the side, so the end of the thread plug is free.
2. Activate the start start/stop button on the top, so the plug starts turning into the thread. Due to the sleeve, there is no movable joint between motor and thread plug, and the handle must be positioned so the axis of the thread plug, and the axis of the thread hole correspond. This can be a little difficult in the beginning, but will soon be learned.
3. As the thread enters the hole the sleeve will move, and the display will show the depth of the thread.
4. When the plug is at the bottom of the thread, the DMG motor will stop. The operator can now read the thread depth.
 - a. **For the Sylvac display:** If the depth is difficult to read due to the position in the work-piece, the display can hold the measurement. Press REF to show the REF I in the display. Then you can press the SET quickly when the plug is in the bottom of the thread hole. The depth reading will be held, until SET is pressed again.
 - b. **For the Mahr display:** If the wireless is on, the HOLD is not an option. If the wireless is not active, the wireless button serves as a HOLD button.

Pos. Description

- 1 Torque set knob (also "Off" position)
- 2 Back cover for battery
- 3 Display
- 4 Encoder (flat surface)
- 5 Nose
- 6 Button for moving black cylindrical shaft
- 7 Sliding Button for engaging motor in / out of threaded hole
- 8 Black Cylindrical Sleeve ("measuring sleeve")
- 9 Hole for loosening / tightening adapter onto gear shaft

