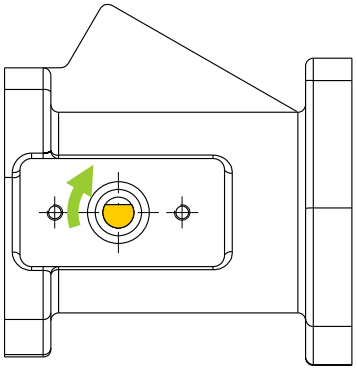
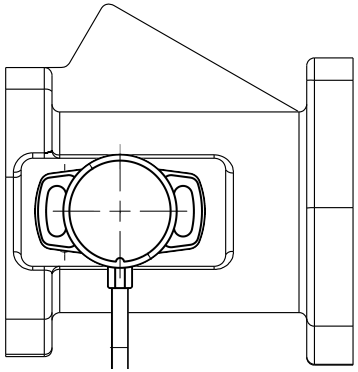
Contactless TPS - CW & CCW
Part # H-TPS-MS-V-TIL
Technical Diagram - Page 1 of 3

Drawing Revision 1 - 19/11/24

www.youtube.com/efihardware
info@efihardware.com
www.facebook.com/efihardware
(03) 9873 5400
+613 9873 5400
www.efihardware.com
(03) 9873 5955
+613 9873 5955



D-SHAFT ORIENTATION AT CLOSED THROTTLE (FLAT AT TOP OF SHAFT)
SHAFT TURNS CLOCKWISE AS THROTTLE OPENS



TPS MOUNTING ORIENTATION

THROTTLE SHAFT ROTATES CLOCKWISE **FROM CLOSED** TO OPEN

PTO FOR COUNTER-CLOCKWISE

WIRING FOR CLOCKWISE-TO-OPEN ROTATION

Green		+5V
Yellow		Signal
Blue		Ground
Red		Not Used
White		Not Used
Black		Not Used

SENSOR SPECIFICATIONS

Closed Throttle -	1.2V Nominal
Open Throttle -	4.2V Nominal
IP Rating -	IP68 (minimum)
Operating Voltage -	5V +/-0.5V
Typical Life Cycle -	>50 million movements
Electrical Cable -	Raychem Spec 55, 24 AWG
Electrical Cable Sleeving -	Raychem DR25

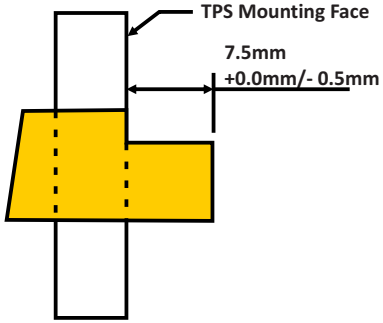
BEST SUITED TO TILTON THROTTLE PEDALS

D-SHAFT SPECIFICATIONS

It's extremely important for reliable operation of this TPS that the D drive is a firm fit into the D receptacle in the Throttle Position Sensor.

D-Shaft Detail End View:

D-Shaft Detail Side View:



D-SHAFT WEDGE

If the D on your shaft is less than 6.0mm, you must use the supplied 0.2mm shim to pack the flat of the D for positive shaft to sensor engagement.

If required, put a kink in the shim to increase engagement

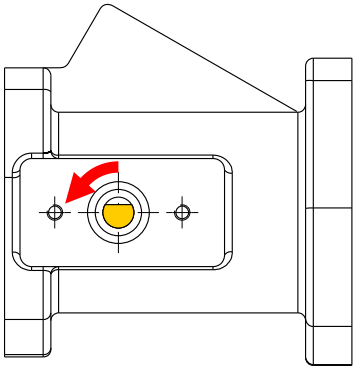
Contactless TPS - CW & CCW
Part # H-TPS-MS-V-TIL
Technical Diagram - Page 2 of 3

Drawing Revision 1 - 19/11/24

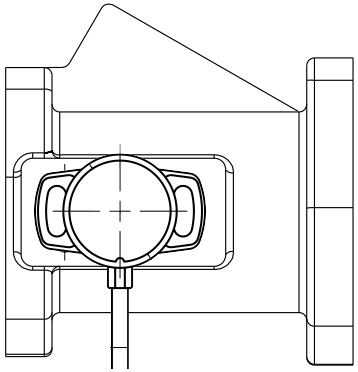
www.youtube.com/efihardware
info@efihardware.com
www.facebook.com/efihardware
(03) 9873 5400
+613 9873 5400
www.efihardware.com
(03) 9873 5955
+613 9873 5955

THROTTLE SHAFT ROTATES **COUNTER-CLOCKWISE**
FROM CLOSED TO OPEN

PTO FOR CLOCKWISE



D-SHAFT ORIENTATION AT CLOSED THROTTLE (FLAT AT TOP OF SHAFT)
SHAFT TURNS COUNTER-CLOCKWISE AS THROTTLE OPENS



TPS MOUNTING ORIENTATION

Green		Not Used
Yellow		Not Used
Blue		Not Used
Red		+5V
White		Signal
Black		Ground

WIRING FOR COUNTER-CLOCKWISE-TO-OPEN ROTATION

SENSOR SPECIFICATIONS

Closed Throttle -	1.2V Nominal
Open Throttle -	4.2V Nominal
IP Rating -	IP68 (minimum)
Operating Voltage -	5V +/-0.5V
Typical Life Cycle -	>50 million movements
Electrical Cable -	Raychem Spec 55, 24 AWG
Electrical Cable Sleeving -	Raychem DR25

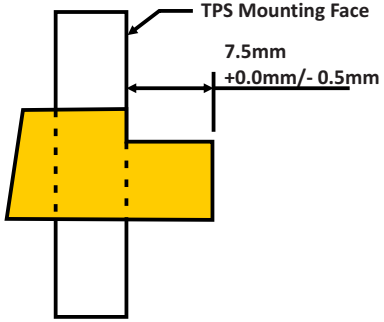
BEST SUITED TO TILTON THROTTLE PEDALS

D-SHAFT SPECIFICATIONS

It's extremely important for reliable operation of this TPS that the D drive is a firm fit into the D receptacle in the Throttle Position Sensor.

D-Shaft Detail End View:

D-Shaft Detail Side View:



D-SHAFT WEDGE

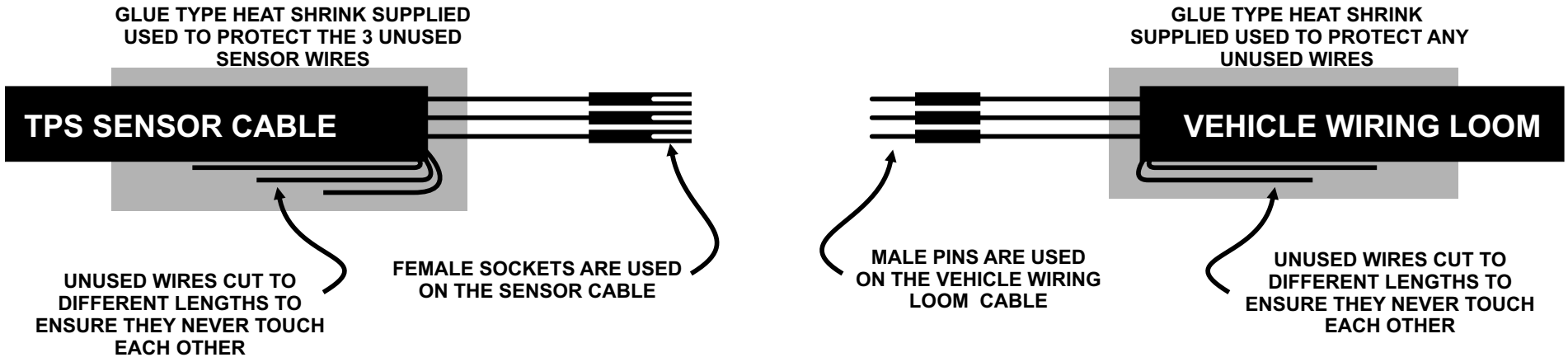
If the D on your shaft is less than 6.0mm, you must use the supplied 0.2mm shim to pack the flat of the D for positive shaft to sensor engagement.

If required, put a kink in the shim to increase engagement

Contactless TPS - CW & CCW
Part # H-TPS-MS-V-DTM-F
and H-TPS-MS-V-DTM-G
Wiring Diagram - Page 3 of 3

Drawing Revision 1 - 19/11/24

www.youtube.com/efihardware
info@efihardware.com
www.facebook.com/efihardware
(03) 9873 5400
+613 9873 5400
www.efihardware.com
(03) 9873 5955
+613 9873 5955



NOTE: Before you begin any wiring, fit the rubber boot onto the TPS Sensor Cable, and push it back out of the way while you are cutting wires and crimping on terminals.

Sample Female F-Crimp Terminal

Deutsch DTM 3 Way Connector with Rubber Boot and F-Crimp Terminals and Glue Lined Heat Shrink

H-TPS-MS-V-DTM-F

This kit is supplied with F-Crimp Type Terminals.

It is far more common for people to have tools to crimp F-Crimp terminals than for them to have tools for Deutsch "Solid" terminals.

The part number for the F-Crimp Tool is D-HT-F0220

vs

H-TPS-MS-V-DTM-G

This kit is supplied with Deutsch "Solid" type gold plated terminals.

Gold plated terminals offer the best conductivity and lower rates of corrosion than nickel plated terminals.

You will need a specific Deutsch crimp tool for this kit.
The part number for the tool is D-DET20

Sample Solid Type Gold Plated Male Terminal

Deutsch DTM 3 Way Connector with Rubber Boot and "Solid" Gold Plated Terminals and Glue Lined Heat Shrink