

# INSTRUMENTS, SENDERS & ACCESSORIES

## RUGGED & PROVEN IN THE REAL WORLD



— **THE PRECISE MEASURE OF PERFORMANCE** —



## DATCON IS — THE PRECISE MEASURE OF PERFORMANCE!

Datcon is the gold standard for instrumentation designed to meet the rigors of the real world. At home in the most severe duty situations, Datcon products are ***The Precise Measure of Performance.***

Matched with genuine Datcon senders and accessories, our instruments give you a perfectly tuned “system solution.”

We remain committed to providing you with the accuracy and durability you’ve come to expect from genuine Datcon products.

On the following pages is our catalog, covering these topics:

- Analog Instruments
- Data Bus Instruments
- Instrument Clusters
- Senders & Sensors
- Specialty Products & Accessories
- Product Cross-Reference Information

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# ABOUT DATCON



**DATA-BUS INSTRUMENTS  
FOR SPECIALTY VEHICLE PANELS.**



**CUSTOM INSTRUMENTS  
FOR OEMS.**



**CUSTOMIZED GAUGES  
FOR SPECIFIC APPLICATIONS.**



**SENDING UNITS  
FOR "SEVERE-DUTY" SERVICE.**

## THE PRECISE MEASURE OF PERFORMANCE

**Datcon instruments and senders set the standard for OEMs from the beginning**, when the brand was created as a spin-off from the Hamilton Watch Company, the famous Lancaster, PA, USA-based watchmaker recognized for precision and accuracy. Over time, Datcon brand products earned the right to carry the logos of such well-known OEMs as Caterpillar, Case New Holland, Harley-Davidson, Textron and Volvo. As a result, Datcon became known for delivering, "The Precise Measure of Performance".



**Specializing in solutions for "severe-duty" off-highway, industrial and specialty vehicles** used in the most environmentally, mechanically and electrically challenging applications possible, Datcon is the ideal choice for OEMs who need platforms that can be readily customized. Whether looking for gauges, tachs, clusters, displays or senders, Datcon products work equally well in new OEM applications or service only, where the integrity of the products and long-term support are still mission-critical.



**maximatecc's manufacturing operations are located around the world**, with facilities in North and South America, Europe and Asia. As such, we offer a global footprint with local reach, serving OEMs and distribution partners alike. Our plants are dedicated to 6-Sigma quality execution, as required by our global customers, and we follow our parent company Actuant's "LEAD" process to assure continual improvements in everything we do.



**Datcon products are supported by a global network of "Super" distributors and systems integrators, as well as Class "A" distributors** who take care of smaller OEMs, with value-added services and integration capabilities that extend the value of their offerings. To this end, maximatecc is committed to being the distributors' "business partner" and "growth enabler".



**The Precise Measure of Performance.**

[www.maximatecc.com](http://www.maximatecc.com)



## HEAVY DUTY INDUSTRIAL

### METERS & GAUGES

Electrical and mechanical gauges, tachometers and speedometers with classic white-on-black dual-scale graphics (English/metric) and SAE symbols, standard perimeter lighting, white pointers, black or polished stainless steel, corrosion-resistant step bezels, and 12- or 24-volt light kits, optional.



## HEAVY DUTY AUTOMOTIVE

### METERS & GAUGES

Electrical and mechanical gauges, tachometers and speedometers with automotive-style white-on-black English scale graphics, standard perimeter lighting, white pointers, black or polished stainless steel, corrosion-resistant step bezels, and 12- or 24-volt light kits, standard.



## ENGLISH-METRIC

### METERS & GAUGES

Electrical and mechanical gauges, tachometers and speedometers with orange-on-black graphics – still a popular combination for OEMs – with SAE symbols, standard perimeter lighting, white pointers, black anodized or polished stainless steel step corrosion-resistant bezels, and optional 12- or 24-volt light kits.



## DDBI ANALOG

### GAUGES

Analog versions of the popular “DDBI” (Direct Data-Bus Instruments) line featuring white-on-black graphics with SAE or ISO symbols, English or metric scales, lighted pointers, black anodized or polished stainless steel step or low-profile type bezels, integral amber LED warning lights (covering high pressure, low temperature, low fuel or low volts) and sealed Deutsch connectors (one 6-pin connector for gauges, two for tachometers and speedometers). Units also feature stepper motors for precise and accurate measurement, as well as improved durability and reliability.



## ANALOG-II

### TACHOMETERS & SPEEDOMETERS

Standard tachometers and speedometers using the DDBI platform featuring stepper motors for improved reliability, durability and accuracy, plus 6-digit backlit LCD screens for the hourmeter and odometer that replace electro-mechanical counter-wheels. Units include lit pointers and an expanded input frequency range (up to 66k RPM).



## LCD TACHOMETERS

### 5 AND 4 DIGIT DISPLAYS

Standard LCD tachometers for Caterpillar engine applications with a variable update rate based on frequency input, plus they are self-powered (i.e. driven by the input signal, no additional power required using magnetic pick-up or pulse generator inputs). Units include backlit screens and black or polished bezels. Also available: Legacy LCD tachometers with black anodized or polished stainless steel bezels, using magnetic pick-up or pulse generator inputs, designed more for stationary engine applications where continuous updating is not required.



# ABOUT OUR PRODUCTS



## HOURLMETERS

### ELECTRONIC AND LCD

Traditional electronic hourmeters, round (52 mm), with U-bracket, 3-hole flange or 4-hole aircraft mounting configuration, plus mini hourmeters, rectangular, with 2-hole or clip mounting. Also available: LCD round and mini units rated at 9-56V, with digital read-outs and either spin-on or clip mounting hardware (based on the same platform developed for leading construction equipment OEM).



## DDBI ELECTRONIC (J1939)

### GAUGES & METERS

“DDBI” (Direct Data-Bus Instruments) provide a direct connection to the SAE J1939 bus network – no instrument controller or gateway required. Units feature white-on-black graphics with SAE or ISO symbols, English or metric scales, lighted pointers, black anodized or polished stainless steel step or low-profile type bezels, integral amber LED warning lights (covering high pressure, low temperature, low fuel or low volts) and sealed Deutsch connectors (one 6-pin connector for gauges, two for tachometers and speedometers). DDBI use stepper motors for precise and accurate measurement, as well as improved durability and reliability.



## INSTRUMENT CLUSTERS

### TRIFLEX & WORLD COMPATTINO

Standard clusters include the TriFlex model, a competitively priced unit derived from a proven OEM platform that is ideal for construction and agricultural equipment, and the World Compattino™ cluster also used by leading OEMs in construction equipment and specialty vehicles. TriFlex features two gauges, a full-size tachometer, LCD hourmeter and 12 indicators. World Compattino features two gauges and a tachometer with LCD display, plus 19 LED indicators, and it's available in either an analog or SAE J1939 format. Units may be customized, e.g. indicator arrays, instrument calibrations, electrical matches and graphics.



## SENDERS & SENSORS/INTELLISENSOR

### TRADITIONAL & STATE OF THE ART SOLUTIONS

Float-arm fuel-level, temperature and pressure senders designed to match Datcon gauges. Fuel senders are also available to cover other electrical matches, such as 10-180Ω, 0-90Ω and 10-73Ω. Speed sensors, i.e. magnetic pick-ups (MPUs) and pulse generators for tachs and speedometers. Fully electronic vertical level and volume sensor line called IntelliSensor® for hydrocarbon-based fuel measurement features no moving parts for best-in-class durability, reliability and accuracy.



## SPECIALTY PRODUCTS & ACCESSORIES

### GENUINE DATCON COMPONENTS

Specialty products include unique gauges, warning light clusters, gauge panels, hardware and mounting kits, hourmeter accessories, light kits, mechanical tubing, shunts, switches and adaptors.



## WHAT MAKES OUR GAUGES HEAVY DUTY?

At the heart of every traditional Datcon electrical instrument we make is the gauge motor – our patented Magna-Torque™ air-core movement.

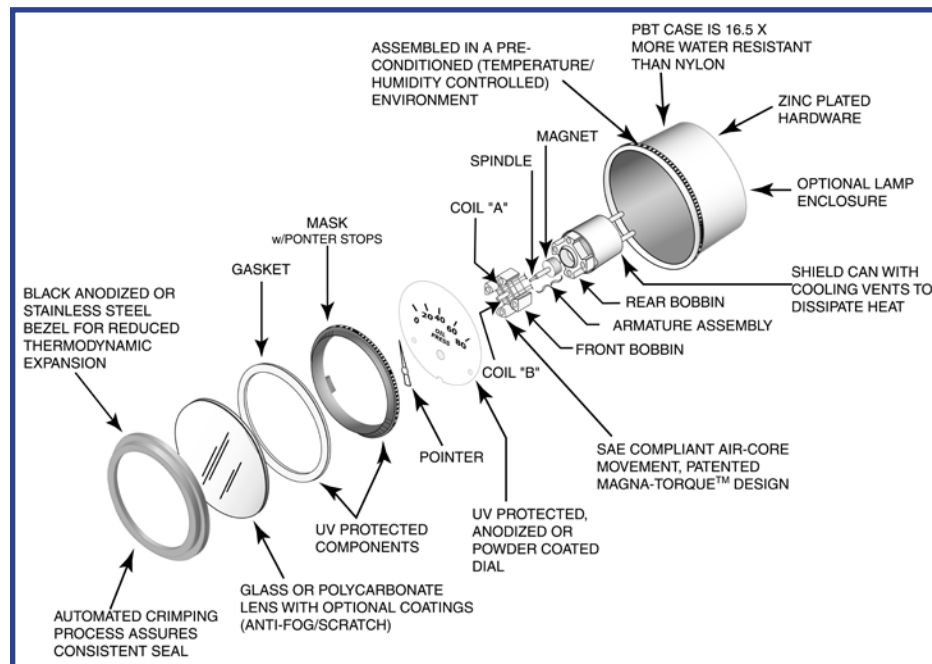
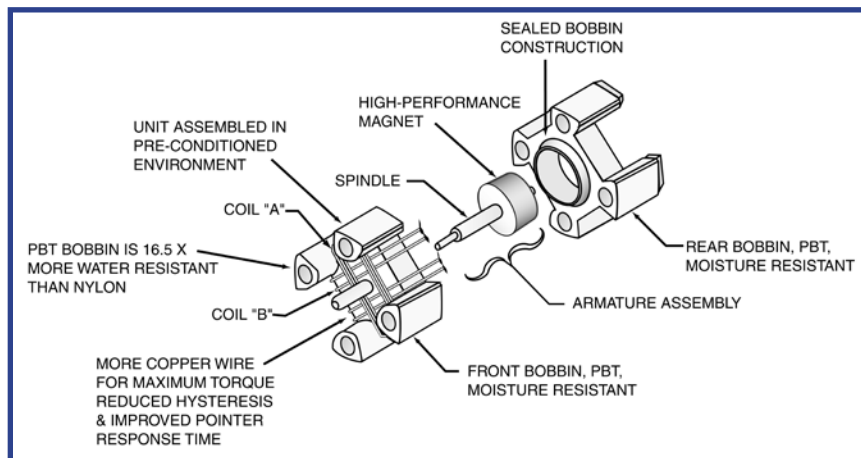
Packaged in a PBT (polyester) bobbin assembly that is 16.5 times more water resistant than nylon (a typical material used due to its low cost), the system features sealed bobbin construction, thereby preventing dampening fluid from leaking out (a problem that is fairly common to marginally constructed gauges).

Dampening fluid is injected into the assembly using an automated process to ensure the correct amount is distributed, thus optimizing the system's intended relationship between desired pointer response time and negligible "flutter" from heavy shock or vibration.

The design (in a Datcon match of 240-33.5 ohms) also accommodates more "turns" of copper wire around the coils, thus maximizing the system's torque output (compared to other systems). As a result, hysteresis is minimized (i.e. erratic pointer behavior or a floating pointer) while desired pointer response time is maintained (relative to real-time sender inputs).

A high-performance magnet augments the system's aim of obtaining maximum torque and response time.

Of particular note, the unit is assembled in a pre-conditioned environment – temperature and humidity-controlled – to ensure that no moisture is artificially introduced into the assembly.





# GLOSSARY

## ABBREVIATIONS & TERMS USED

- "A" = Heavy Duty Automotive instrument (used for Smart Instrument® reference)
- "A" = Amps if used next to a number (e.g. 40A)
- "AB" = Heavy Duty Automotive product line with black anodized metal bezel
- "AC" = Alternating current
- "AC" = AC (Rochester) electrical match (original)
- "AC1" = AC (Rochester) electrical match (revised)
- "AC2" = AC (Rochester) electrical match (revised for 12 or 24 VDC)
- "ALWH" = Allison World Transmission High (range) oil temperature gauge or sender
- "AWG" = American wire gauge
- "BAR" = Barometric pressure (where one bar = 14.50 PSI)
- "Black" = Black anodized metal bezel
- "C" = Centigrade
- "CE" = European Community standard
- "DAEH" = Datcon match, extra high range (> 330°F) temperature sender
- "DAH" = Datcon match, high range (up to 320°F) temperature sender
- "DAL" = Datcon match, low range (up to 240°F) temperature sender
- "DC" = Direct current
- "DD" = Deep draw bezel, either black anodized metal or polished stainless steel
- "E" = Electronic speedometer
- "F" = Fahrenheit
- "Hysteresis" = Failure of a property (e.g. a gauge pointer) that has been changed by an external agent to return to its original value when the cause of the change is removed
- "I" = Heavy Duty Industrial instrument (used for Smart Instrument® reference)
- "IB" = Heavy Duty Industrial product line with black anodized metal bezel
- "In Hg" = Inches mercury (for a turbo pressure gauge, for example)
- "IP" = Heavy Duty Industrial product line with polished stainless steel bezel
- "IP" = International Electrotechnical Commission's (IEC) requirement to "indicate (I) the degree of protection (P)."  
(For example, IP 67 for a fully sealed – water/dust intrusion – unit.)
- "ISO" = International Standards Organization
- "LCD" = Liquid crystal display
- "LED" = Light emitting diode
- "LS" = IllumaSeal® instrument (used for Smart Instrument® reference)
- "Ohm" ( $\Omega$ ) = Unit of electrical resistance equal to that of a conductor in which a current of one ampere is produced by a potential of one volt across its terminals
- "Match" = Reference to electrical match of system (ohms/resistance) between senders & gauge/meter
- "mm" = Millimeters
- "NPTF" = National Pipe Thread Fine (dry seal American standard taper pipe thread)
- "P" = Polished stainless steel bezel (used for DDBI/Smart Instrument® reference)
- "P-High" = Programmable speedometer, high range
- "P-Low" = Programmable speedometer, low range
- "Polished" = Polished stainless steel bezel
- "PPK" = Pulses per kilometer
- "PPM" = Pulses per mile
- "PSI" = Pounds per square inch
- "RPM" = Revolutions per minute
- "RTZ" = Return to zero feature for tachometer or speedometer (pointers)
- "SAE" = Society of Automotive Engineers
- "SMT" = Surface mount technology
- "SW2" = Stewart Warner electrical match
- "Trip Point" = Predetermined level (e.g. temperature or pressure) at which a switch function is triggered (tripped)
- "UL" = Underwriters Laboratory
- "UNF" = Unified National Fine thread (straight thread)
- "V" = Volts
- "VD3" = European match (custom)
- "VDC" = Volts, direct current

## DISTRIBUTOR WARRANTY POLICY

maximatecc shall warrant its products against defects in workmanship and materials for a period of twenty-four (24) months from the date of purchase, provided that these products are installed and operated according to the purpose for which they were intended, designed, and specified.

This warranty excludes items that are incorrectly installed, misused, or abused by the customer as would be uncovered upon examination. If a suspect product is returned to maximatecc for inspection, upon which it is determined that the product is in fact defective, maximatecc will replace the product free-of-charge or issue a credit for the customer. Customers are advised to consult with a maximatecc sales representative in regard to this matter.

maximatecc will not assume responsibility for labor costs associated with the removal of suspect product or the cost of equipment downtime, or any other costs associated with concerns that are not specifically related to workmanship or materials.

In order to qualify for warranty coverage, customers must use maximatecc's Returned Goods Authorization (RGA) process and provide proof of purchase (as verification of the start date of the warranty coverage period.)

Products which are returned to maximatecc that are determined to be OK shall not qualify for warranty coverage.

## RETURNED GOODS POLICY

***Any product to be returned to maximatecc for any reason must include a Returned Goods Authorization (RGA.)***

The RGA must be obtained in advance from a maximatecc quality representative who will determine whether to process the request.

maximatecc's quality personnel will assign an RGA number and the customer must identify this

information on the package(s) to be returned to maximatecc.

All returns must be shipped pre-paid with traceability to maximatecc.

Upon receipt of suspect material, maximatecc's quality personnel will provide appropriate disposition, in which case our warranty policy may or may not apply.



*Specifications and information contained in this catalog are subject to change without notice!*



## THE GOLD STANDARD BY WHICH ALL OTHERS ARE JUDGED

HDI (Heavy Duty Industrial) gauges set the standard in off-highway equipment and specialty vehicle markets for reliable performance especially in severe duty applications.

HDI features *best-in-class* performance for shock, vibration, moisture and contaminant resistance.

Serving as the platform for high quality, privately-labeled analog gauges for the world's best OEMs for over 25 years, HDI includes a full line of 2" electrical and mechanical gauges, as well as matching 3-3/8" tachometers and speedometers, fulfilling the instrumentation needs of OEMs and qualified distributors.

- Purpose-built platform designed for rugged off highway and heavy-duty applications
- Reinforced engineering resin cases, impact- and moisture-resistant
- Sealed bobbin construction – eliminates possibility of dampening fluid leaks
- High-torque electrical gauge movement ensures responsive pointer with minimal hysteresis
- Fully sealed with anti-fog option
- Compliant with stringent SAE and OEM performance standards
- Survive shock and vibration over 50 gs
- Wide operating temperature range
- Robust mechanical gauge movements



## GENERAL SPECIFICATIONS:

### PHYSICAL:

- Sizes: Gauges – 2-1/16" (52 mm) diameter; Tachometers/Speedometers – 3-3/8" (86 mm) diameter nominal
- Movement: High-torque air-core type, 90° for gauge and 270° tachometer/speedometer pointer sweep
- Bobbin: Sealed, reinforced PBT, internally dampened
- Case: Impact-resistant PBT, reinforced, light blue
- Dials: Metal, anodized, black
- Pointers: Metal, white, reinforced shaft
- Bezels: SAE step type, metal, anodized black or polished stainless steel
- Lens: Glass

### ELECTRICAL:

- System voltage: 12V (10-16 VDC) or 24V nominal (20-32 VDC)
- Ohms/resistance: Standard 240-33.5Ω for Datcon; plus 10-180, 78-10 and 0-90Ω
- Lighting: 12 or 24V 5/8" bulb or wedge-base light kit, perimeter lighting standard, optional translucent
- Connections: #6-32 studs, male

### PERFORMANCE:

- General specifications: Per SAE J1810 (gauges) and SAE J1399 and J1226 (tachometers/speedometers)
- Accuracy: Per SAE, +/- 1.5 angular degrees at primary calibration points and +/- 3 angular degrees at secondary calibration points based on nominal input

### ENVIRONMENTAL:

- Operating temperature: -40°C to +85°C
- Storage temperature: -55°C to +85°C
- Sealing: IP 66 front; optional anti-fog coating and IP 67 also available
- Compliant: SAE standards for vibration and salt spray

### INSTALLATION:

- Mounting kit: zinc-plated mounting bracket, nuts and lock washers
- Panel cut-outs: Gauges – 2.098" +/- .02"; Tachometers/Speedometers – 3.4" +/- .02"

### GRAPHICS:

- Color scheme: White-on-black; optional colors for certain gauges (e.g. voltmeter)
- Configuration: Dual-scale graphics, English dominant, with metric scales, SAE and ISO symbols

### ALSO AVAILABLE:

- Optional anti-fog lens coating if large-quantity custom P/Ns are required
- Matching fuel, temperature & pressure senders
- Speed sensors
- Accessories



## CUSTOMIZATION OPTIONS:

In addition to electrical matches, custom artwork, different bezels (deep-draw or polished stainless steel step type), pointer colors (orange) and case colors are available, depending on the OEM's volumes and timing. *Contact our sales team for a review of your requirements.*



(Custom dial artwork example)

## PART NUMBERS:



100158 shown



100160 shown



100176 shown



100177 shown

### AMMETER

P/N	Model	Scale (A)	Ø mm	Ω Ohms	Volts	Bezel	Shunt <sup>*1</sup>
102480	861	10-0-10	52	N/A	N/A	Black	N/A
102481	861	10-0-10	52	N/A	N/A	Polished	N/A
100158	863	30-0-30	52	N/A	N/A	Black	N/A
100159	863	30-0-30	52	N/A	N/A	Polished	N/A
100160	866	60-0-60	52	N/A	N/A	Black	N/A
100161	866	60-0-60	52	N/A	N/A	Polished	N/A
100162	860	100-0-100	52	N/A	N/A	Black	07598-00
100163	860	100-0-100	52	N/A	N/A	Polished	07598-00

#### NOTES:

\*1 = Shunts (e.g. 07598-00) are required with ammeters rated at 100 or more amperes.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

### FUEL LEVEL

P/N	Model	Scale	Ø mm	Ω Ohms	Volts	Bezel	Sender
100176	810	E-1/2-F	52	240-33.5	12	Black	100438 <sup>*1</sup> or 102535 <sup>*2</sup>
100177	810	E-1/2-F	52	240-33.5	12	Polished	100438 <sup>*1</sup> or 102535 <sup>*2</sup>
101584	810	E-1/2-F	52	240-33.5	24	Black	100438 <sup>*1</sup> or 102535 <sup>*2</sup>
101585	810	E-1/2-F	52	240-33.5	24	Polished	100438 <sup>*1</sup> or 102535 <sup>*2</sup>
100677	810	E-1/2-F	52	0-90	12	Black	100436 <sup>*1</sup>
100678	810	E-1/2-F	52	0-90	12	Polished	100436 <sup>*1</sup>
100726	810	E-1/2-F	52	10-180	12	Black	104739 <sup>*1</sup>

#### NOTES:

\*1 = Adjustable fuel sender flange positions 2 & 4 (see sender diagram in Fuel Sender section of this catalog.)

\*2 = Adjustable fuel sender flange positions 1 & 3 (see sender diagram in Fuel Sender section of this catalog.)

For other sending unit options, please see Fuel Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



## PART NUMBERS:

PRESSURE — AIR (MECHANICAL)						
P/N	Model	Scale (PSI)	Ø mm	Tube Kit	Bezel	Type
100190	389	0-150	52	07080-00	Black	Mechanical, Single-scale *1
100191	389	0-150	52	07080-00	Polished	Mechanical, Single-scale *1
100250	N/A	0-150	52	07080-00	Black	Mechanical, Dual *1
100251	N/A	0-150	52	07080-00	Polished	Mechanical, Dual *1

### NOTES:

\*1 = Use tube kit P/N 07080-00.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 210341 (12VDC) and 210342 (24VDC) for single and P/Ns 06215-00 (12VDC) and 06294-00 (24VDC) for dual units listed above. These single-lead light kits ground to the metal gauge case. Please note that 210341/210342 kits are not compatible with any Datcon electrical gauges.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

*Current Datcon mechanical pressure gauges (except dual air pressure) are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*

PRESSURE — OIL							
P/N	Model	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel	Type
100172	881	0-80	52	240-33.5	12	Black	Electrical
100173	881	0-80	52	240-33.5	12	Polished	Electrical
101574	881	0-80	52	240-33.5	24	Black	Electrical
101575	881	0-80	52	240-33.5	24	Polished	Electrical
100174	882	0-100	52	240-33.5	12	Black	Electrical
100175	882	0-100	52	240-33.5	12	Polished	Electrical
101576	882	0-100	52	240-33.5	24	Black	Electrical
101083	883	0-125	52	240-33.5	12	Black	Electrical
100186	381	0-80	52	N/A	N/A	Black	Mechanical *1
100187	381	0-80	52	N/A	N/A	Polished	Mechanical *1
100188	382	0-100	52	N/A	N/A	Black	Mechanical *1
100189	382	0-100	52	N/A	N/A	Polished	Mechanical *1
107009	389	0-150	52	N/A	N/A	Black	Mechanical *1
100197	387	0-300	52	N/A	N/A	Polished	Mechanical *1

### NOTES:

\*1 = Use tube kit P/N 07080-00 for any of the mechanical gauges listed above.

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC) for electrical gauges. For mechanical pressure gauges, reference P/Ns 210341 (12VDC) and 210342 (24VDC). The 210341 and 210342 single-lead light kits ground to the metal gauge case and are unique to current production Datcon mechanical pressure gauges. Other Datcon light kits listed in this catalog are NOT compatible with these mechanical pressure gauges.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

*Current Datcon mechanical pressure gauges are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*



100250 shown



100251 shown



100174 shown



100175 shown



## PART NUMBERS:



105296 shown

### PRESSURE — TRANSMISSION OIL

P/N	Model	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel	Type
105296	888	0-400	52	0-90	12	Black	Electrical
100197	387	0-300	52	N/A	N/A	Polished	Mechanical *1
100198	388	0-400	52	N/A	N/A	Black	Mechanical *1
100199	388	0-400	52	N/A	N/A	Polished	Mechanical *1

#### NOTES:

\*1 = Use tube kit P/N 07080-00 for any of the mechanical gauges listed above.

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC) for electrical gauges. For mechanical pressure gauges, reference P/Ns 210341 (12VDC) and 210342 (24VDC). The 210341 and 210342 single-lead light kits ground to the metal gauge case and are unique to current production Datcon mechanical pressure gauges. Other Datcon light kits listed in this catalog are NOT compatible with these mechanical pressure gauges.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

*Current Datcon mechanical pressure gauges are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*



103721 shown

### SPEEDOMETER WITH ODOMETER (86mm/3.375")

P/N	Model *1	Scale (KM/H)	Ø mm	Volts	Bezel	Signal Source
103721	30LP113KM (P-LOW)	0-130 KM/H (15360-30660 ppk)	86	12	Polished	Tach Generator/Magnetic Sensor
103654	30LP113KM (P-LOW)	0-130 KM/H (15360-30660 ppk)	86	24	Black	Tach Generator/Magnetic Sensor
103655	30LP213KM (P-HIGH)	0-130 KM/H (30720-61320 ppk)	86	24	Black	Tach Generator/Magnetic Sensor

#### NOTES:

\*1 = "P-Low" refers to programmable speedometer low; "P-High" refers to programmable speedometer high.

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching tachometers & 2" gauges.

## PART NUMBERS:

TACHOMETER (86mm/3.375")						
P/N	Model	Scale (RPM)	Ø mm	Volts	Bezel <sup>*1</sup>	Signal Source
<b>100694</b> <sup>*2</sup>	27S30	0-3000	86	12/24	Black (DD)	Tach Generator 60-pole
<b>100818</b> <sup>*3</sup>	27A30	0-3000	86	12/24	Black (DD)	Alternator
<b>100820</b> <sup>*4</sup>	27M30	0-3000	86	12/24	Black (DD)	Magnetic Sensor
<b>100230</b>	27A40	0-4000	86	12/24	Black (DD)	Alternator

### NOTES:

\*1 = "DD" under "Bezel" indicates "deep draw" style bezel.

\*2 = 100694 will be superseded by P/N 103660.

\*3 = 100818 will be superseded by P/N 103656.

\*4 = 100820 will be superseded by P/N 103659.

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

All electrical tachometers listed in the table above (including those equipped with hourmeters) can be operated on either 12 volt or 24 volt systems by using an instrument light bulb of the appropriate voltage.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers & 2" gauges.



100230 shown

TACHOMETER (52mm/2.0625")						
P/N	Model	Scale (RPM)	Application	Volts	Bezel	Signal Source
<b>106477</b>	12B40	0-4000	4-cylinder	12	Polished	Battery Ignition
<b>106461</b>	12B40	0-4000	6-cylinder	12	Black	Battery Ignition
<b>106482</b>	12B60	0-6000	8-cylinder	12	Polished	Battery Ignition
<b>106468</b>	12B80	0-8000	8-cylinder	12	Black	Battery Ignition
<b>106471</b>	12G30	0-3000	0.5:1	12	Black	Tach Generator 16-pole
<b>106473</b>	12G30	0-3000	2.0:1	12	Black	Tach Generator 16-pole
<b>106476</b>	12G40	0-4000	2.0:1	12	Black	Tach Generator 16-pole
<b>106474</b>	12G30	0-3000	811-1900 Hz	12	Black	Alternator
<b>106912</b>	12M30	0-3000	120-180 teeth	12	Black	Magnetic Sensor
<b>106913</b>	12M40	0-4000	90-135 teeth	12	Black	Magnetic Sensor

### NOTES:

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

All electrical tachometers listed in the table above (including those equipped with hourmeters) can be operated on either 12 volt or 24 volt systems by using an instrument light bulb of the appropriate voltage.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers & 2" gauges.



106473 shown



102471 shown

## PART NUMBERS:

### TACHOMETER WITH HOURMETER (86mm/3.375")

P/N	Model	Scale (RPM)	Ø mm	Volts	Bezel <sup>*1</sup>	Signal Source
102471	24A30	0-3000	86	12/24	Black (DD)	Alternator
100238	24A40	0-4000	86	12/24	Black (DD)	Alternator

#### NOTES:

\*1 = "DD" under "Bezel" indicates "deep draw" style bezel.

Hourmeter maximum hour reading is 99,999.9.

For sending unit options, please see the Senders, Sensors & Tubing and Accessories sections.

All gauge kits above include gauge mounting hardware.

All electrical tachometers listed in the table above (including those equipped with hourmeters) can be operated on either 12 volt or 24 volt systems by using an instrument light bulb of the appropriate voltage.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers & 2" gauges.



106674 shown

### TEMPERATURE — HYDRAULIC OIL (ELECTRICAL)

P/N	Model	Scale (°F)	Ø mm	Match	Volts	Bezel	Sender <sup>*1</sup>
106674	825	100-240	52	DAL	12	Black	02017-00

#### NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



100681 shown

### TEMPERATURE — OIL (ELECTRICAL ONLY)

P/N	Model	Scale (°F)	Ø mm	Match	Volts	Bezel	Sender <sup>*1</sup>
100180	826	100-280	52	DAH	12	Black	02022-00
100681	825	100-240	52	DAL	12	Black	02017-00
100736	817	150-300	52	VD3	12	Black	N/A
101579	826	100-280	52	DAH	24	Polished	02022-00
101580	828	140-320	52	DAH	24	Black	02022-00

#### NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



## PART NUMBERS:

TEMPERATURE — WATER (ELECTRICAL ONLY)							
P/N	Model	Scale (°F)	Ø mm	Match	Volts	Bezel	Sender *1
100182	826	100-280	52	DAH	12	Black	02022-00
100183	826	100-280	52	DAH	12	Polished	02022-00
100683	825	100-240	52	DAL	12	Black	02017-00
100684	825	100-240	52	DAL	12	Polished	02017-00
100734	815	100-250	52	VD3	12	Black	N/A
101082	828	140-320	52	DAH	12	Polished	02022-00
101582	826	100-280	52	DAH	24	Black	02022-00
101583	826	100-280	52	DAH	24	Polished	02022-00
101586	825	100-240	52	DAL	24	Black	02017-00

### NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



100183 shown



100684 shown

VOLTMETER							
P/N	Model	Scale	Ø mm	Ω Ohms	Volts	Bezel	Colored Dial
100166	830	8-18	52	N/A	12	Black	Yes
100167	830	8-18	52	N/A	12	Polished	Yes
100184	831	16-36	52	N/A	24	Black	Yes
100185	831	16-36	52	N/A	24	Polished	Yes
100262	830	8-18	52	N/A	12	Black	No
100263	830	8-18	52	N/A	12	Polished	No
100264	831	16-36	52	N/A	24	Black	No
100265	831	16-36	52	N/A	24	Polished	No

### NOTES:

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

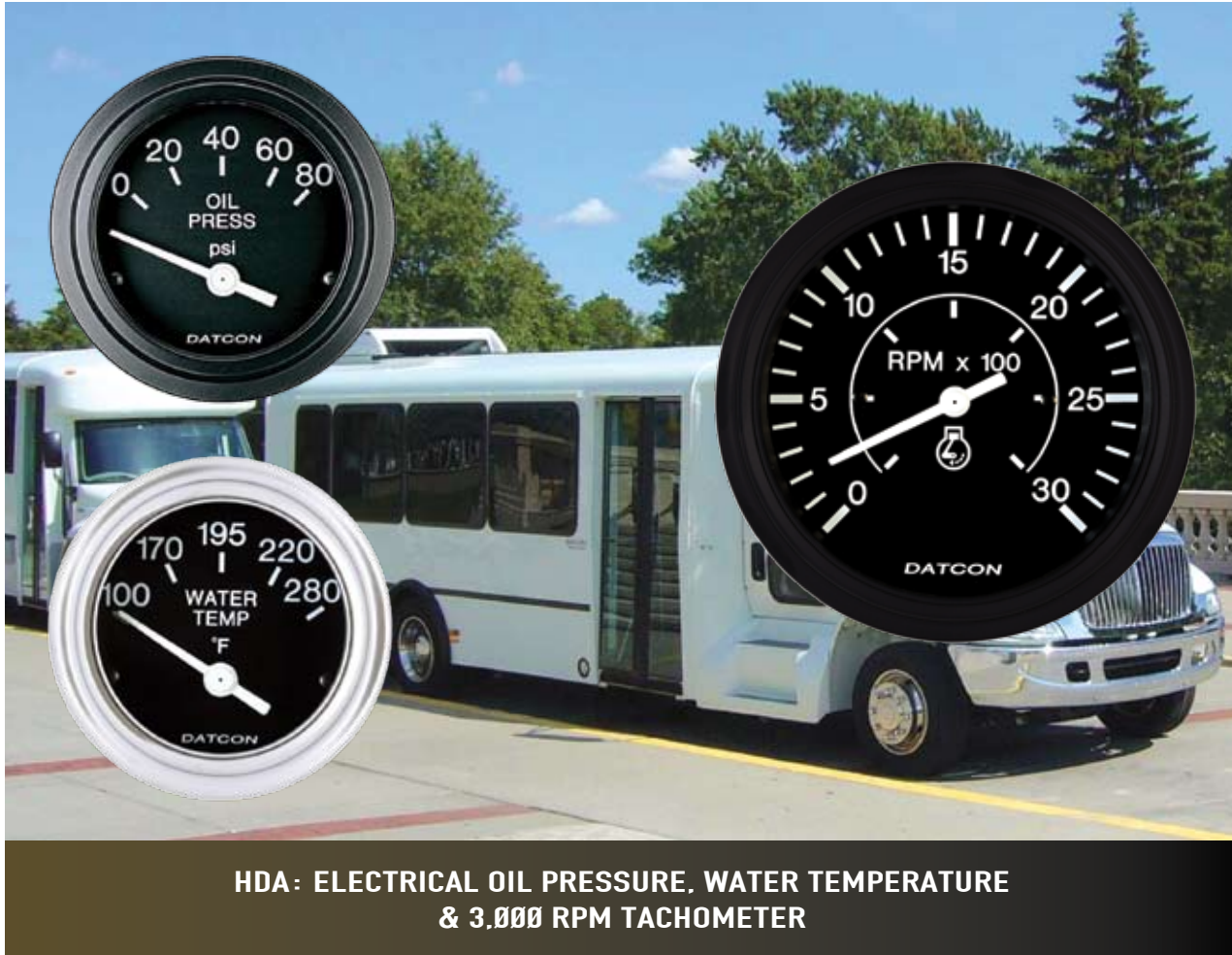


100167 shown



100184 shown

**NOTE:** When power to an electrical gauge is turned off, pointer may come to rest at any point on the dial. Some tachometers and speedometers do have a Return-To-Zero (RTZ) function.



HDA: ELECTRICAL OIL PRESSURE, WATER TEMPERATURE  
& 3,000 RPM TACHOMETER

## THE COUSIN OF HDI WITH THE SAME DATCON BLUE BLOOD

HDA (Heavy Duty Automotive) gauges share the same bloodline as our Heavy Duty Industrial line, which set the standard in off-highway equipment and specialty vehicle markets for reliable performance especially in severe duty applications.

Like HDI, HDA also features *best-in-class* performance for shock, vibration, moisture and contaminant resistance.

HDA also features automotive style graphics for a higher degree of at-a-glance readability and includes lighting with the gauge, standard.

HDA includes a full line of 2" electrical and mechanical gauges, as well as matching 3-3/8" tachometers and speedometers.

- Purpose-built platform designed for applications that require automotive styling
- Illumination *included* with the gauge
- Reinforced engineering resin cases, impact- and moisture-resistant
- Sealed bobbin construction – eliminates possibility of dampening fluid leaks
- High-torque electrical gauge movement ensures responsive pointer with minimal hysteresis
- Fully sealed with anti-fog option
- Compliant with stringent SAE and OEM performance standards
- Survive shock and vibration over 50 gs
- Wide operating temperature range
- Robust mechanical gauge movements

## GENERAL SPECIFICATIONS:

### PHYSICAL:

- Sizes: Gauges – 2-1/16" (52 mm) diameter; Tachometers/Speedometers – 3-3/8" (86 mm) diameter nominal
- Movement: High-torque air-core type, 90° for gauge and 270° tachometer/speedometer pointer sweep
- Bobbin: Sealed, reinforced PBT, internally dampened
- Case: Impact-resistant PBT, reinforced, light blue
- Dials: Metal, anodized, black
- Pointers: Metal, white, reinforced shaft
- Bezels: SAE step type, metal, anodized black or polished stainless steel
- Lens: Glass

### ELECTRICAL:

- System voltage: 12V (10-16 VDC) or 24V nominal (20-32 VDC)
- Ohms/resistance: Standard 240-33.5Ω for Datcon; plus 10-180, 78-10 and 0-90Ω
- Lighting: 12 or 24V 5/8" bulb or wedge-base light kit, perimeter lighting standard, optional translucent (lighting included with instruments)
- Connections: #6-32 studs, male

### PERFORMANCE:

- General specifications: Per SAE J1810 (gauges) and SAE J1399 and J1226 (tachometers/speedometers)
- Accuracy: Per SAE, +/- 1.5 angular degrees at primary calibration points and +/- 3 angular degrees at secondary calibration points based on nominal input

### ENVIRONMENTAL:

- Operating temperature: -40°C to +85°C
- Storage temperature: -55°C to +85°C
- Sealing: IP 66 front; optional anti-fog coating and IP 67 also available
- Compliant: SAE standards for vibration and salt spray

### INSTALLATION:

- Mounting kit: zinc-plated mounting bracket, nuts and lock washers
- Panel cut-outs: Gauges – 2.098" +/- .02"; Tachometers/Speedometers – 3.4" +/- .02"

### GRAPHICS:

- Color scheme: White-on-black; optional colors for certain gauges (e.g. voltmeter)
- Configuration: Single-scale English graphics (larger than average on 2" gauges for improved readability)

### ALSO AVAILABLE:

- Optional anti-fog lens coating if large-quantity custom P/Ns are required
- Matching fuel, temperature & pressure senders
- Speed sensors
- Accessories



## CUSTOMIZATION OPTIONS:

In addition to electrical matches, custom artwork, different bezels (deep-draw or polished stainless steel step type), pointer colors (orange) and case colors are available, depending on the OEM's volumes and timing. *Contact our sales team for a review of your requirements.*



(Custom dial artwork example)

## PART NUMBERS:



101352 shown



101347 shown



101897 shown

### AMMETER

P/N	Model	Scale (A)	Ø mm	Ω Ohms	Volts	Bezel	Shunt <sup>*1</sup>
101351	862	20-0-20	52	N/A	12	Black	N/A
101352	863	30-0-30	52	N/A	12	Black	N/A
101353	864	40-0-40	52	N/A	12	Black	N/A
101901	862	20-0-20	52	N/A	12	Polished	N/A
101904	866	60-0-60	52	N/A	12	Polished	N/A
101906	867	150-0-150	52	N/A	12	Polished	07599-00
102381	869	300-0-300	52	N/A	12	Black	07618-00

#### NOTES:

\*1 = Shunts (e.g. 07598-00) are required with ammeters rated at 100 or more amperes (and are external to ammeters.)

All gauge kits above include illumination and gauge mounting hardware.

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

### FUEL LEVEL

P/N	Model	Scale	Ø mm	Ω Ohms	Volts	Bezel	Sender
101347	810	E-1/2-F	52	240-33.5	12	Black	100438 <sup>*1</sup> or 102535 <sup>*2</sup>
101897	810	E-1/2-F	52	240-33.5	12	Polished	100438 <sup>*1</sup> or 102535 <sup>*2</sup>

#### NOTES:

\*1 = Adjustable fuel sender flange positions 2 & 4 (see sender diagram in Fuel Sender section of this catalog.)

\*2 = Adjustable fuel sender flange positions 1 & 3 (see sender diagram in Fuel Sender section of this catalog.)

For other sending unit options, please see Fuel Sender section of this catalog.

All gauge kits above include illumination and gauge mounting hardware.

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.





## PART NUMBERS:

PRESSURE — AIR (MECHANICAL)						
P/N	Model	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel
<b>101310</b>	389	0-150	52	N/A	12	Black
<b>101860</b>	389	0-150	52	N/A	12	Polished
<b>101311</b>	385	0-200	52	N/A	12	Black

### NOTES:

Use tube kit P/N 07080-00 for any of the above items.

All gauge kits above include illumination and gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 210341 (12VDC) and 210342 (24VDC). These single-lead light kits ground to the metal gauge case and are unique to current production Datcon mechanical pressure gauges. Other Datcon light kits listed in this catalog are NOT compatible with these mechanical pressure gauges.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

*Current Datcon mechanical pressure gauges are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*



101310 shown



101311 shown

PRESSURE — OIL							
P/N	Model	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel	Type
<b>101339</b>	883	0-125	52	240-33.5	12	Black	Electrical
<b>101883</b>	881	0-80	52	240-33.5	12	Polished	Electrical

### NOTES:

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

All gauge kits above include illumination and gauge mounting hardware.

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



101339 shown

SPEEDOMETER WITH ODOMETER (86mm/3.375")						
P/N	Model *1	Scale (KM/H)	Ø mm	Volts	Bezel	Signal Source
<b>103721</b>	30LP113KM (P-LOW)	0-130 KM/H (15360-30660 ppk)	86	12	Polished	Tach Generator/Magnetic Sensor
<b>103654</b>	30LP113KM (P-LOW)	0-130 KM/H (15360-30660 ppk)	86	24	Black	Tach Generator/Magnetic Sensor
<b>103655</b>	30LP213KM (P-HIGH)	0-130 KM/H (30720-61320 ppk)	86	24	Black	Tach Generator/Magnetic Sensor

### NOTES:

\*1 = "P-Low" refers to programmable speedometer low; "P-High" refers to programmable speedometer high.

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include illumination and gauge mounting hardware.

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching tachometers & 2" gauges.



103654 shown



103659 shown

## PART NUMBERS:

### TACHOMETER (86MM/3.375")

P/N	Model	Scale (RPM)	Ø in	Volts	Bezel	Signal Source
103656	27A30	0-3000	86	12	Black	Alternator
103659	27M30	0-3000	86	12	Black	Magnetic Sensor
103660	27S30	0-3000	86	12	Black	Tach Generator 60-pole
103665	27M40	0-4000	86	12	Black	Magnetic Sensor
103666	27S40	0-4000	86	12	Black	Tach Generator 60-pole
103733	27A40	0-4000	86	12	Polished	Alternator
103735	27B40	0-4000	86	12	Polished	Battery Ignition
103736	27M40	0-4000	86	12	Polished	Magnetic Sensor
103738	27C40	0-4000	86	12	Polished	Tach Generator 16-pole

#### NOTES:

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include illumination and gauge mounting hardware.

*All electrical tachometers listed in the table above (including those equipped with hourmeters) can be operated on either 12 volt or 24 volt systems by using an instrument light bulb of the appropriate voltage.*

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers & 2" gauges.

*NOTE: When power to an electrical gauge is turned off, pointer may come to rest at any point on the dial. Some tachometers and speedometers do have a Return-To-Zero (RTZ) function.*



103678 shown

### TACHOMETER WITH HOURMETER (86MM/3.375")

P/N	Model	Scale (RPM)	Ø in	Volts	Bezel	Signal Source
103662	27A40	0-4000	86	12/24	Black	Alternator
103678	24A30	0-3000	86	12	Black	Alternator
103680	24M30	0-3000	86	12	Black	Magnetic Sensor
103684	24A40	0-4000	86	12	Black	Alternator
103686	24M40	0-4000	86	12	Black	Magnetic Sensor
103749	24A30	0-3000	86	12	Polished	Alternator
103753	24S30	0-3000	86	12	Polished	Tach Generator 60-pole
103755	24A40	0-4000	86	12	Polished	Alternator
103756	24B40	0-4000	86	12	Polished	Battery Ignition
103757	24M40	0-4000	86	12	Polished	Magnetic Sensor

#### NOTES:

Hourmeter maximum hour reading is 99,999.9.

For sending unit options, please see the Senders & Sensors and Accessories sections.

All gauge kits above include illumination and gauge mounting hardware.

*All electrical tachometers listed in the table above (including those equipped with hourmeters) can be operated on either 12 volt or 24 volt systems by using an instrument light bulb of the appropriate voltage.*

12V or 24V light kits also sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers & 2" gauges.

## PART NUMBERS:

### TEMPERATURE — OIL

P/N	Model	Scale (°F)	Ø mm	Match *1	Volts	Bezel	Sender *1
101345	826	100-280	52	DAH	12	Black	02022-00

NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include illumination and gauge mounting hardware.

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



101345 shown

### TEMPERATURE — TRANSMISSION OIL

P/N	Model	Scale (°F)	Ø mm	Match *1	Volts	Bezel
102312	828	140-320	52	DAH	12	Black
102313	828	140-320	52	DAH	12	Polished

NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include illumination and gauge mounting hardware.

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



102312 shown

### TEMPERATURE — WATER

P/N	Model	Scale (°F)	Ø mm	Match *1	Volts	Bezel
101343	828	140-320	52	DAH	12	Black
101341	825	100-240	52	DAL	12	Black
101891	825	100-240	52	DAL	12	Polished
101893	828	140-320	52	DAH	12	Polished
102657	825	100-240	52	DAL	12 (Pos)	Black
105342	823	100-250	52	AC	12	Polished

NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include illumination and gauge mounting hardware.

12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



101341 shown

### VOLTMETER

P/N	Model	Scale (V)	Ø mm	Volts	Bezel	Colored Dial
101358	830	8-18	52	12	Black	No
101360	830	8-18	52	12	Black	Yes
101908	830	8-18	52	12	Polished	No
101909	831	16-36	52	24	Polished	No
101910	830	8-18	52	12	Polished	Yes
101911	831	16-36	52	24	Polished	Yes

NOTES:

All gauge kits above include illumination and gauge mounting hardware.

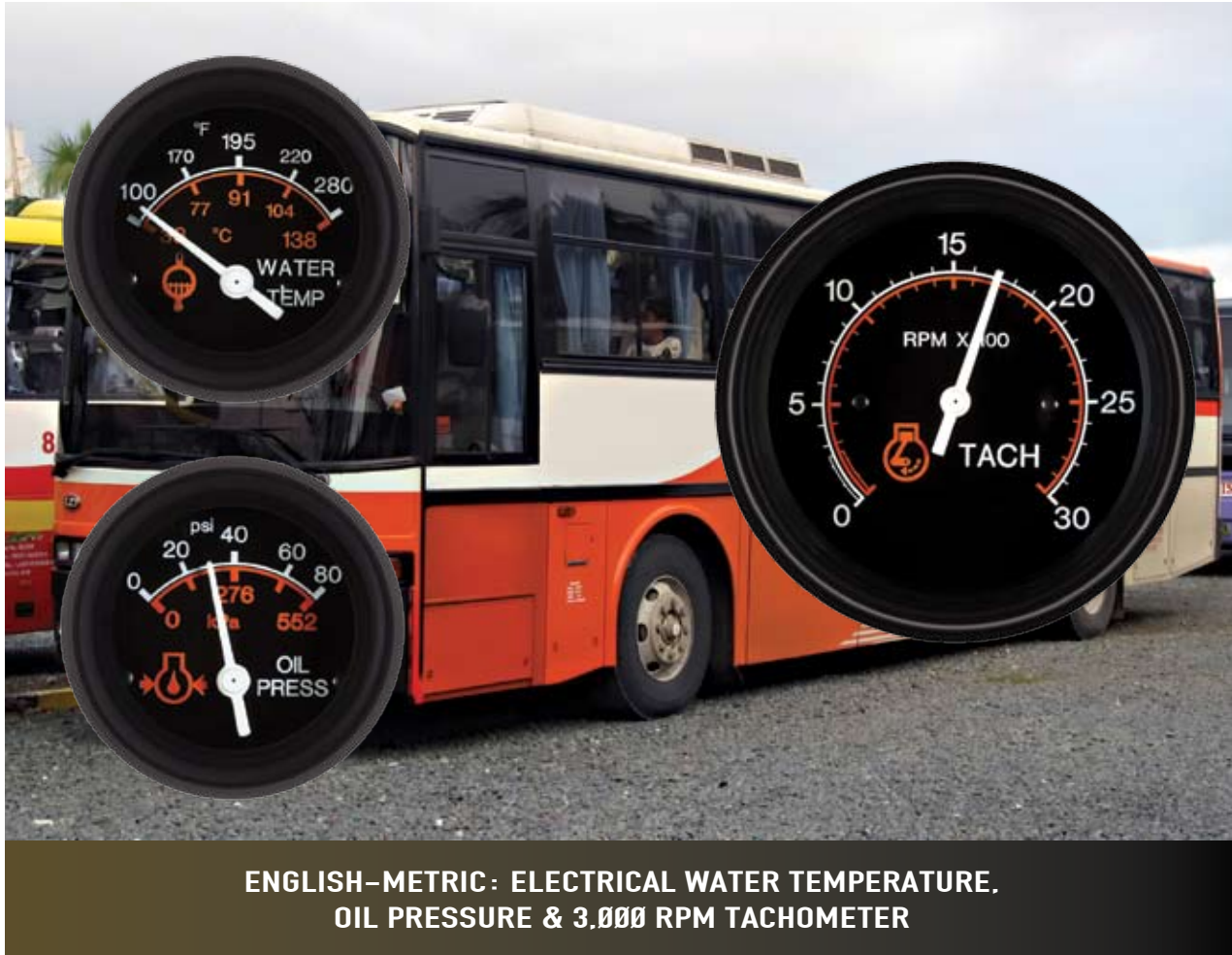
12V light kits are also sold separately, reference P/N 06215-00.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



101908 shown



ENGLISH-METRIC: ELECTRICAL WATER TEMPERATURE,  
OIL PRESSURE & 3,000 RPM TACHOMETER

## EXCELLENCE IN ORANGE — THE BROTHER OF HDI

English-Metric gauges use the same rugged platform as our HDI (Heavy Duty Industrial) line, and feature well-known orange-white graphics for an improved operator interface.

These gauges incorporate *best-in-class* performance for shock, vibration, moisture and contaminant resistance.

This line comprises a full complement of 2" electrical and mechanical gauges, as well as matching 3-3/8" tachometers and speedometers in support of OEMs and qualified distributors alike.

- Purpose-built platform designed to severe-duty use, with eye-catching orange/white graphics
- Reinforced engineering resin cases, impact- and moisture-resistant
- Sealed bobbin construction – no chance of dampening fluid leaks
- High-torque gauge movement ensures responsive pointer while minimizing hysteresis
- Fully sealed with anti-fog option
- Compliant with stringent SAE and OEM performance standards
- Survive shock and vibration over 50 gs
- Wide operating temperature range
- Robust mechanical gauge movements



## GENERAL SPECIFICATIONS:

### PHYSICAL:

- Sizes: Gauges – 2-1/16" (52 mm) diameter; Tachometers/Speedometers – 3-3/8" (86 mm) diameter nominal
- Movement: High-torque air-core type, 90° for gauge and 270° tachometer/speedometer pointer sweep
- Bobbin: Sealed, reinforced PBT, internally dampened
- Case: Impact-resistant PBT, reinforced, light blue
- Dials: Metal, anodized, black
- Pointers: Metal, white, reinforced shaft
- Bezels: SAE step type, metal, anodized black
- Lens: Glass

### ELECTRICAL:

- System voltage: 12V (10-16 VDC) or 24V nominal (20-32 VDC)
- Ohms/resistance: Standard 240-33.5Ω for Datcon and 0-90Ω
- Lighting: 12 or 24V 5/8" bulb or wedge-base light kit, perimeter lighting standard, optional translucent
- Connections: #6-32 studs, male

### PERFORMANCE:

- General specifications: Per SAE J1810 (gauges) and SAE J1399 and J1226 (tachometers/speedometers)
- Accuracy: Per SAE, +/- 1.5 angular degrees at primary calibration points and +/- 3 angular degrees at secondary calibration points based on nominal input

### ENVIRONMENTAL:

- Operating temperature: -40°C to +85°C
- Storage temperature: -55°C to +85°C
- Sealing: IP 66 front; optional anti-fog coating and IP 67 also available
- Compliant: SAE standards for vibration and salt spray

### INSTALLATION:

- Mounting kit: zinc-plated mounting bracket, nuts and lock washers
- Panel cut-outs: Gauges – 2.098" +/- .02"; Tachometers/Speedometers – 3.4" +/- .02"

### GRAPHICS:

- Color scheme: Distinctive white-and-orange-on-black; optional colors for certain gauges (e.g. voltmeter)
- Configuration: Dual-scale graphics, English dominant, with metric scales, SAE and ISO symbols

### ALSO AVAILABLE:

- Optional anti-fog lens coating if large-quantity custom P/Ns are required
- Matching fuel, temperature & pressure senders
- Speed sensors
- Accessories



## CUSTOMIZATION OPTIONS:

In addition to electrical matches, custom artwork, different bezels (deep-draw or polished stainless steel step type), pointer colors (orange) and case colors are available, depending on the OEM's volumes and timing. *Contact our sales team for a review of your requirements.*



(Custom dial artwork example)



06353-01 shown



06339-01 shown



07253-00 shown

## PART NUMBERS:

### AMMETER

P/N	Model	Scale (A)	Ø mm	Ω Ohms	Volts	Bezel	Shunt <sup>*1</sup>
06353-01	864	40-0-40	52	N/A	N/A	Black	N/A

#### NOTES:

\*1 = Shunts (e.g. 07598-00) are required with ammeters rated at 100 or more amperes.

Gauge kit above includes gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

### FUEL LEVEL

P/N	Model	Scale	Ø mm	Ω Ohms	Volts	Bezel	Sender
06339-01	810	E-1/2-F	52	240-33.5	12	Black	100438 <sup>*1</sup> or 102535 <sup>*2</sup>

#### NOTES:

\*1 = Adjustable fuel sender flange positions 2 & 4 (see sender diagram in Fuel Sender section of this catalog.)

\*2 = Adjustable fuel sender flange positions 1 & 3 (see sender diagram in Fuel Sender section of this catalog.)

For other sending unit options, please see Fuel Sender section of this catalog.

Gauge kit above includes gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

### PRESSURE — AIR (MECHANICAL)

P/N	Model	Scale (PSI/kPa)	Ø mm	Volts	Bezel	Type
07253-00	389	0-150 PSI/0-1000 kPa	52	N/A	Black	Mechanical, Dual <sup>*1</sup>

#### NOTES:

\*1 = Use tube kit P/N 07080-00.

Gauge kit above includes gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC). These single-lead light kits ground to the metal gauge case.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

*Current Datcon mechanical pressure gauges (except dual air pressure) are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*



### PART NUMBERS:

#### PRESSURE — AIR BRAKE (MECHANICAL)

P/N	Model	Scale (PSI/kPa)	Ø mm	Volts	Bezel	Type
07058-00	389	0-150 psi/0-1000 kPa	52	N/A	Black	Mechanical, Dual <sup>*1</sup>

**NOTES:**

\*1 = Use tube kit P/N 07080-00.

Gauge kit above includes gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 210341 (12VDC) and 210342 (24VDC). These single-lead light kits ground to the metal gauge case and are unique to current production Datcon mechanical pressure gauges. Other Datcon light kits listed in this catalog are NOT compatible with these mechanical pressure gauges.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

*Current Datcon mechanical pressure gauges are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*



07058-00 shown

#### PRESSURE — OIL

P/N	Model	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel	Type
06341-01	882	0-100 psi	52	240-33.5	12	Black	Electrical
06395-01	883	0-125 psi	52	240-33.5	12	Black	Electrical
06395-05	883	0-125 psi	52	240-33.5	24	Black	Electrical
06910-01	881	0-80 psi	52	0-90	12	Black	Electrical

**NOTES:**

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



06910-01 shown

#### PRESSURE — TRANSMISSION OIL (MECHANICAL)

P/N	Model	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel	Type
07064-00	388	0-400	52	N/A	12	Black	Mechanical <sup>*1</sup>

**NOTES:**

\*1 = Use tube kit P/N 07080-00.

Gauge kit above includes gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 210341 (12VDC) and 210342 (24VDC). The 210341 and 210342 single-lead light kits ground to the metal gauge case and are unique to current production Datcon mechanical pressure gauges. Other Datcon light kits listed in this catalog are NOT compatible with these mechanical pressure gauges.

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.

*Current Datcon mechanical pressure gauges are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*



07064-00 shown



112069 shown

## PART NUMBERS:

### SPEEDOMETER WITH ODOMETER (86mm/3.375")

P/N	Model	Scale (KM/H)	Ø mm	Volts	Bezel	Signal Source
112069	DLX2	0-180 KM/H	86	12	Black	Tach Generator/Mag. Sensor

#### NOTES:

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

Gauge kit above includes gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching tachometers & 2" gauges.

**NOTE:** When power to an electrical gauge is turned off, pointer may come to rest at any point on the dial. Some tachometers and speedometers do have a Return-To-Zero (RTZ) function.



71636-00 shown

### TACHOMETER (86mm/3.375")

P/N	Model	Scale (RPM)	Ø in	Volts	Bezel	Signal Source
71076-00	27A40	0-4000	86	12/24	Black	Alternator
71620-00	27M40	0-4000	86	12/24	Black	Magnetic Sensor
71632-00	27A30	0-3000	86	12/24	Black	Alternator
71636-00	27M30	0-3000	86	12/24	Black	Magnetic Sensor

#### NOTES:

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

*All electrical tachometers listed in the table above (including those equipped with hourmeters) can be operated on either 12 volt or 24 volt systems by using an instrument light bulb of the appropriate voltage.*

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers & 2" gauges.



71723-00 shown

### TACHOMETER WITH HOURMETER (86mm/3.375")

P/N	Model	Scale (RPM)	Ø in	Volts	Bezel	Signal Source
71723-00	24A30	0-3000	86	12/24	Black	Alternator
71725-00	24A40	0-4000	86	12/24	Black	Alternator
71735-00	24M30	0-3000	86	12/24	Black	Magnetic Sensor
71737-00	24M40	0-4000	86	12/24	Black	Magnetic Sensor

#### NOTES:

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

*All electrical tachometers listed in the table above (including those equipped with hourmeters) can be operated on either 12 volt or 24 volt systems by using an instrument light bulb of the appropriate voltage.*

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers & 2" gauges.



### PART NUMBERS:

TEMPERATURE — OIL							
P/N	Model	Scale (°F)	Ø mm	Match	Volts	Bezel	Sender *1
06344-01	825	100-240	52	DAL	12	Black	02017-00
06346-01	826	100-280	52	DAH	12	Black	02022-00

#### NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



06344-01 shown

TEMPERATURE — TRANSMISSION OIL							
P/N	Model	Scale (°F)	Ø mm	Ω Ohms	Volts	Bezel	Sender *1
06392-01	828	140-320	52	DAH	12	Black	02022-0

#### NOTES:

\*1 For other sending units, see Temperature Sender section of this catalog.

Gauge kit above includes gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



06392-01 shown

TEMPERATURE — WATER							
P/N	Model	Scale (°F)	Ø mm	Match	Volts	Bezel	Sender *1
06343-05	825	100-240	52	DAL	24	Black	02017-00
06347-01	826	100-280	52	DAH	12	Black	02022-00
06347-05	826	100-280	52	DAH	24	Black	02022-00

#### NOTES:

\*1 = For other sending units, see Temperature Sender section of this catalog.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



06347-01 shown

VOLTMETER							
P/N	Model	Scale (V)	Ø mm	Volts	Bezel	Color Banded Dial	
106853	830	8-18	52	12	Black	Yes	
06351-01	830	8-18	52	12	Black	No	
06352-01	831	16-36	52	24	Black	No	

#### NOTES:

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC).

For panel kits and other options, please see Accessories section of this catalog.

See other pages in this section for matching speedometers and tachometers.



06351-01 shown



**DDBI ANALOG: OIL PRESSURE AND FUEL LEVEL GAUGES WITH LOW PROFILE BEZELS. WATER TEMPERATURE GAUGE WITH SAE STEP BEZEL**

## DATA BUS STYLING WITH ANALOG ARCHITECTURE

DDBI Analog gauges are styled to match our DDBI™ (Direct Data-Bus Instruments.) They provide a high-quality and reliable solution for monitoring potentially hazardous vehicle operating conditions such as high temperature, low pressure, low fuel and low volts.

Gauges include built-in LED indicators and switched output functions to drive an external accessory, such as a buzzer.

DDBI Analog provides an ideal *analog* solution for replacing dated electromechanical and mechanical warning/switch gauges – and reliably protecting valuable assets.

- Built-in ultra-bright red LED indicators
- Based on proven DDBI™ data-bus gauge platform
- Reliable and accurate stepper motor movements
- Reinforced engineering resin case, with integral connector
- LED backlighting and lighted pointers
- Totally sealed for all-weather use; anti-fog protection
- Matching analog units for non-bus functions

## GENERAL SPECIFICATIONS:

### PHYSICAL:

- Sizes: Gauges – 2-1/16" (52 mm) diameter
- Movement: Stepper motor
- Case: Impact-resistant PBT, reinforced, white
- Dials: PC, black, UV-resistant
- Pointers: PC, clear with orange back, lighted
- Bezels: SAE step type, metal, anodized, black or polished stainless steel, low-profile type
- Lens: Safety glass, flat or domed; anti-fog coated

### ELECTRICAL:

- System voltage: 12 or 24 VDC (8-18 or 18-36V)
- Electrical protection: Reverse polarity, transients including load-dump, over-voltage and ESD
- Factory-calibrated warning light thresholds
- EMC per ISO 13766
- Connection: Deutsch® DT Series 6-pin connectors, sealed

### PERFORMANCE:

- General specifications: Per SAE J1810
- Accuracy: Per SAE, +/- 1.5 angular degrees at primary calibration points and +/- 3 angular degrees at secondary calibration points based on nominal input

### ENVIRONMENTAL:

- Operating temperature: -40°C to +85°C
- Storage temperature: -55°C to +85°C
- Sealing: IP 67 with anti-fog coating
- Exceed: SAE salt spray & vibration standards

### INSTALLATION:

- Mounting kit: zinc-plated mounting bracket, nuts and lock washers
- Panel cut-out: Gauges – 2.098" +/- .02"

### GRAPHICS:

- Color scheme: White-on-black graphics, automotive style font; English/metric with SAE/ISO symbols

### ALSO AVAILABLE:

- DDBI™ (Direct Data-Bus Instruments) provide a direct connection to a J1939 bus network – no instrument controller or gateway required (See DDBI section in this catalog and spec. sheets.)
- Matching fuel, temperature & pressure senders
- Accessories



## CUSTOMIZATION OPTIONS:

Modifications can be supported for dial artwork, ranges and warning light set points.

*Contact our sales team for a review of your requirements.*



(Custom dial artwork example)

## PART NUMBERS:



112739 shown



113505 shown



115218 shown



117739 shown

### FUEL LEVEL

P/N	Scale	Ø mm	Ω Ohms/ V Ohms	Volts	Bezel	ON Setpoint	OFF Setpoint
112739	0-4/4	52	240-33.5	12	SAE Black	1/8 Dec	1/4 Asc
112740	0-4/4	52	240-33.5	24	SAE Black	1/8 Dec	1/4 Asc
113505	0-4/4	52	240-33.5	12	SAE Polished	1/8 Dec	1/4 Asc
113506	0-4/4	52	240-33.5	24	SAE Polished	1/8 Dec	1/4 Asc
115017	0-4/4	52	0-90	12	SAE Black	1/8 Dec	1/4 Asc
115018	0-4/4	52	0-90	24	SAE Black	1/8 Dec	1/4 Asc
115019	0-4/4	52	0-90	12	SAE Polished	1/8 Dec	1/4 Asc
115020	0-4/4	52	0-90	24	SAE Polished	1/8 Dec	1/4 Asc
115218	0-4/4	52	240-33.5	12	LP Polished	1/8 Dec	1/4 Asc
115219	0-4/4	52	240-33.5	24	LP Polished	1/8 Dec	1/4 Asc
115220	0-4/4	52	0-90	12	LP Polished	1/8 Dec	1/4 Asc
115221	0-4/4	52	0-90	24	LP Polished	1/8 Dec	1/4 Asc
115745	0-4/4	52	1-4V	12	SAE Black	1/8 Dec	1/4 Asc
115746	0-4/4	52	1-4V	24	SAE Black	1/8 Dec	1/4 Asc
115747	0-4/4	52	1-4V	12	SAE Polished	1/8 Dec	1/4 Asc
115748	0-4/4	52	1-4V	24	SAE Polished	1/8 Dec	1/4 Asc
115749	0-4/4	52	1-4V	12	SAE Black	1/8 Dec	1/4 Asc
115750	0-4/4	52	1-4V	24	LP Polished	1/8 Dec	1/4 Asc
117739	0-4/4	52	240-33.5	12	LP Black	1/8 Dec	1/4 Asc
117741	0-4/4	52	240-33.5	24	LP Black	1/8 Dec	1/4 Asc
117742	0-4/4	52	0-90	12	LP Black	1/8 Dec	1/4 Asc
117743	0-4/4	52	0-90	24	LP Black	1/8 Dec	1/4 Asc
119689	0-4/4	52	240-33.5	12	SAE Black	1/8 Dec	1/4 Asc
120979	0-4/4	52	1-4V	12	LP Black	1/8 Dec	1/4 Asc
122896	0-4/4	52	240-33.5	12	SAE Black	1/8 Dec	1/4 Asc

#### NOTES:

For sending unit options, please see Fuel Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.



## PART NUMBERS:

PRESSURE — AIR							
P/N	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel	Type	ON/OFF Setpoints
113499	0-150	52	240-33.5	12	SAE Polished	Front	60 Dec / 65 Asc
115206	0-150	52	240-33.5	12	LP Polished	Front	60 Dec / 65 Asc
117727	0-150	52	240-33.5	12	LP Black	Front	60 Dec / 65 Asc
113501	0-150	52	240-33.5	24	SAE Polished	Front	60 Dec / 65 Asc
115208	0-150	52	240-33.5	24	LP Polished	Front	60 Dec / 65 Asc
117729	0-150	52	240-33.5	24	LP Black	Front	60 Dec / 65 Asc
113500	0-150	52	240-33.5	12	SAE Polished	Rear	60 Dec / 65 Asc
115207	0-150	52	240-33.5	12	LP Polished	Rear	60 Dec / 65 Asc
117728	0-150	52	240-33.5	12	LP Black	Rear	60 Dec / 65 Asc
113502	0-150	52	240-33.5	24	SAE Polished	Rear	60 Dec / 65 Asc
115209	0-150	52	240-33.5	24	LP Polished	Rear	60 Dec / 65 Asc
117730	0-150	52	240-33.5	24	LP Black	Rear	60 Dec / 65 Asc

### NOTES:

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.



113499 shown



115206 shown



117727 shown



## PART NUMBERS:



120693 shown

### PRESSURE — OIL

P/N	Scale (PSI)	Ø mm	Ω Ohms	Volts	Bezel	ON Setpoints	OFF Setpoints
119691	0-100	52	240-33.5	12	SAE Black	10 Dec	15 Asc
120479	0-400	52	0-90	12	LP Polished	160 Dec/300 Asc	170 Dec/290 Asc
120693	0-400	52	0-90	12	LP Black	160 Dec/300 Asc	170 Dec/290 Asc

#### NOTES:

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.



119690 shown

### TEMPERATURE — WATER

P/N	Scale (°F)	Ø mm	Match	Volts	Bezel	ON/OFF Setpoints
119690	100-280	52	DAH	12	SAE Black	215 F Asc / 205 Dec
123412	100-280	52	DAH	12	SAE Black	N/A
123413	100-240	52	DAL	12	SAE Black	N/A

#### NOTES:

For available sending units, see Temperature Sender section of this catalog.

Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.

## PART NUMBERS:

VOLTMETER						
P/N	Scale	Ø mm	Volts	Bezel	ON Setpoints	OFF Setpoints
112737	8-18	52	12	SAE Black	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
112738	16-36	52	24	SAE Black	21 Dec / 31 Asc	22 Asc / 30 Dec
113503	8-18	52	12	SAE Polished	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
113504	8-18	52	24	SAE Polished	21 Dec / 31 Asc	22 Asc / 30 Dec
115200	8-18	52	12	LP Polished	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
115201	16-36	52	24	LP Polished	21 Dec / 31 Asc	22 Asc / 30 Dec
117721	8-18	52	12	LP Black	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
117722	16-36	52	24	LP Black	21 Dec / 31 Asc	22 Asc / 30 Dec
119692	8-18	52	12	SAE Black	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec

### NOTES:

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.



112737 shown



112738 shown



115200 shown



115201 shown

**NOTE:** When power to an electrical gauge is turned off, pointer may come to rest at any point on the dial. Some tachometers and speedometers do have a Return-To-Zero (RTZ) function.



## PROVEN DDBI™ PLATFORM — SEAMLESS TOTAL SYSTEM SOLUTION

Our rugged new Analog-II speedometers and tachometers are derived from our proven DDBI™ (Direct Data-Bus Instrument) platform featuring stepper motors, LCDs, LED backlighting and lighted pointers.

These units meet stringent OEM and CNS performance standards and offer competitive pricing for a significantly better-value solution.

Styling matches Datcon product lines for a seamless total system solution.

Standard Units include illuminated pointers.

- Direct, easy replacement for other current Datcon tachs & speedos (same footprint)
- Rugged proven platform with stepper motor for improved reliability and accuracy
- LCD hourmeter/odometer with 6-digits
- LED backlighting for instrument, LCD and pointer
- Wider frequency range, covers more applications
- Electrically and environmentally protected
- Meets SAE, OEM, and CNS standards.



## GENERAL SPECIFICATIONS:

### PHYSICAL:

- Size: 3-3/8" (86 mm) diameter
- Movement: Stepper motor
- Case: Impact-resistant engineering resin, white
- Dial: PC, UV-resistant, black, with backlighting
- Pointer: PC, white, black hub, lighted
- Bezels: SAE step type, metal, anodized, black or polished stainless steel, or black deep draw type
- Lens: Glass
- LCD: Odometer/speedometer, 6-digits, LED backlit

### ELECTRICAL:

- System voltage: 12V (10-16 VDC) or 24V (20-32 VDC)
- Signal inputs: Magnetic pick-up, pulse generator, alternator, battery/ignition or digital
- Electrical protection: Reverse polarity, transients including load-dump, over-voltage and ESD
- Electrical connections: #6-32 studs, male

### CONFIGURATION:

- Input frequencies – tachs: 2-6 PPR for digital, battery/ignition; 0.5:1, 1:1, 2:1 for 8-pulse tach generator; 40-200 PPR for magnetic sensor; 10.7-21.3 PR/2 (alternator)
- Input frequencies – speedometers: 7,680 PPU-61,320 PPU (miles or kilometers)
- Ranges: -0-3k/4k RPM (diesel)
- Calibrations: DIP-switch, 8-position for tachometers, 10-position for speedometers

*Use Datcon speed sensors with Analog-II products.*

### PERFORMANCE:

- General specifications: Per SAE J1810
- Accuracy: Per SAE, +/- 1.5 angular degrees at primary calibration points and +/- 3 angular degrees at secondary calibration points based on nominal input

### ENVIRONMENTAL:

- Operating temperature: -40°C to +85°C
- Storage temperature: -55°C to +85°C
- Sealing: IP 66 front
- Compliant: SAE standards for vibration and salt spray

### INSTALLATION:

- Mounting kit: zinc-plated mounting bracket, nuts and lock washers
- Panel cut-out: 3.4" +/- .02"

### GRAPHICS:

- Color scheme: White-on-black graphics, match Heavy Duty Industrial (HDI) gauge styling
- Configuration: English or metric, SAE or ISO symbols

### ALSO AVAILABLE:

- Optional anti-fog lens coating if large-quantity custom P/Ns are required
- Speed sensors
- Accessories

## CUSTOMIZATION OPTIONS:

Options include custom artwork on dials, pointer, and case colors, depending on the OEM's volumes and timing. PPR modifications possible.

*Contact our sales team for a review of your requirements.*



(Custom dial Artwork example)



122475 shown



122476 shown



122728 shown



122710 shown

## PART NUMBERS:

### SPEEDOMETER WITH ODOMETER

P/N	Model	Scale *1	Ø mm	Volts	Bezel
122475	Analog II	80 MPH	86	12	Black
122476	Analog II	80 MPH	86	12	Polished
122477	Analog II	130 MPH	86	12	Black
122478	Analog II	130 MPH	86	12	Polished
122479	Analog II	80 MPH	86	24	Black
122480	Analog II	80 MPH	86	24	Polished
122481	Analog II	130 MPH	86	24	Black
122482	Analog II	130 MPH	86	24	Polished
123445	Analog II	130 KMH/80 MPH	86	12	Polished

#### NOTES:

\*1 = Scales are English-dominant, odometers read in MI, except for P/N 123445, which is Metric-dominant, odometer reads in KM.

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.

See other sections of this catalog for cosmetically matching 2" gauges.

### TACHOMETER

P/N	Model	Scale (RPM)	Ø mm	Volts	Bezel *1	Signal Source
122728	Analog II	0-3000	86	12	Polished (SAE)	Alternator
122710	Analog II	0-3000	86	12	Black (SAE)	Alternator
122711	Analog II	0-3000	86	12	Black (DD)	Alternator
123343	Analog II	0-3000	86	12/24	Polished (SAE)	Alternator/Magnetic Pickup
123062	Analog II	0-3000	86	12/24	Black (SAE)	Alternator/Magnetic Pickup
122729	Analog II	0-3000	86	12	Polished (SAE)	Magnetic Pickup Unit
122709	Analog II	0-3000	86	12	Black (DD)	Magnetic Pickup Unit
122712	Analog II	0-3000	86	12	Black (DD)	Magnetic Pickup Unit
122706	Analog II	0-4000	86	12	Black (DD)	Alternator
122718	Analog II	0-4000	86	12	Black (DD)	Alternator
123344	Analog II	0-4000	86	12/24	Polished (SAE)	Alternator/Magnetic Pickup
123061	Analog II	0-4000	86	12/24	Black (SAE)	Alternator/Magnetic Pickup
123063	Analog II	0-4000	86	12/24	Black (SAE)	Alternator/Magnetic Pickup
122716	Analog II	0-4000	86	12	Polished (SAE)	Magnetic Pickup Unit

#### NOTES:

\*1 = SAE = SAE Step Bezel, DD = Deep Draw bezel.

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.

See other sections of this catalog for cosmetically matching 2" gauges.

## PART NUMBERS:

TACHOMETER WITH HOURMETER						
P/N	Model	Scale (RPM)	Ø in	Volts	Bezel <sup>*1</sup>	Signal Source
122717	Analog II	0-3000	86	12	Polished (SAE)	Alternator
122707	Analog II	0-3000	86	12	Black (DD)	Alternator
123345	Analog II	0-3000	86	12/24	Polished (SAE)	Alternator/Magnetic Pickup
123059	Analog II	0-3000	86	12/24	Black (SAE)	Alternator/Magnetic Pickup
122725	Analog II	0-3000	86	12	Polished (SAE)	Magnetic Pickup Unit
122722	Analog II	0-3000	86	12	Black (SAE)	Magnetic Pickup Unit
122714	Analog II	0-4000	86	12	Polished (SAE)	Alternator
122735	Analog II	0-4000	86	12	Black (SAE)	Alternator
122708	Analog II	0-4000	86	12	Black (DD)	Alternator
122721	Analog II	0-4000	86	24	Black (SAE)	Alternator
122720	Analog II	0-4000	86	12	Polished (SAE)	Battery
122726	Analog II	0-4000	86	12	Black (SAE)	Battery
123058	Analog II	0-4000	86	12	Black (SAE)	Alternator/Magnetic Pickup
123346	Analog II	0-4000	86	12/24	Polished (SAE)	Alternator/Magnetic Pickup
123060	Analog II	0-4000	86	12/24	Black (DD)	Alternator/Magnetic Pickup
122719	Analog II	0-4000	86	12	Polished (SAE)	Magnetic Pickup Unit

### NOTES:

\*1 = SAE = SAE Step Bezel, DD = Deep Draw bezel.

Hourmeter maximum hour reading is 99,999.9.

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

For pulse generators and drive tangs, please see Accessories section of this catalog.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

For panel kits and other options, please see Accessories section of this catalog.

See other sections of this catalog for cosmetically matching 2" gauges.

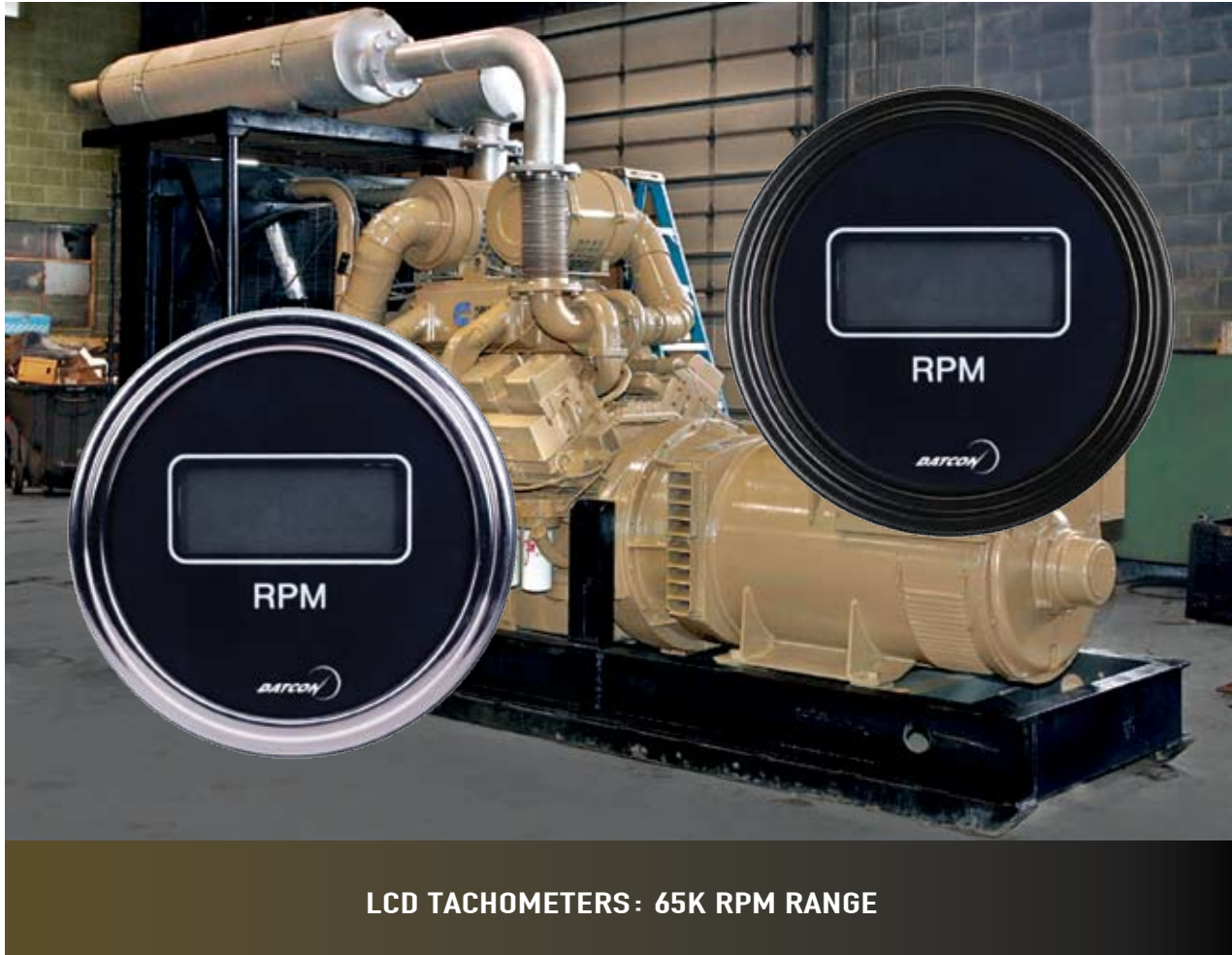


122717 shown



123059 shown





LCD TACHOMETERS: 65K RPM RANGE

## DATCON LCD TACHOMETERS — ALWAYS RUGGED & DEPENDABLE

**Featured unit:** LCD 3-3/8" diameter tachometer designed for a leading global construction equipment OEM, now released as a line of standard Datcon products. These are ideal for construction equipment, gen-sets and specialty vehicle applications in harsh environments. RPM range: 0-65,535.

**Also available:** Self-powered LCD tachometer for stationary applications, offering a potentiometer for calibration. RPM range: 0-9,999.

Specifications at right and on the next page are for the featured unit only.

- Extremely accurate, variable update rate based on frequency input for optimal response time
- Fully sealed – ideal for severe-duty environments
- Self-powered, driven by input signal, no additional power required
- Large LCD display, easy-to-read, with LED backlighting
- Reliable performance under high shock and vibration
- Electrically protected from EMC
- Proven platform – thousands of units in service
- Configured for popular engines, e.g. Caterpillar



## GENERAL SPECIFICATIONS (featured units):

### PHYSICAL:

- Case: Impact-resistant, reinforced, moisture-resistant polyester, black for featured unit, blue for older model (related to lighting scheme)
- Bezel: SAE step, black, anodized or polished stainless steel
- Lens: PC, reinforced, anti-scratch and anti-fog coated
- 3-3/8" (86 mm) diameter, 2.8" deep

### DISPLAY:

- Type: LCD, black numbers
- Dimensions: 1.83" x 0.72"
- Digits: 5-digits, 0.4" high
- Resolution: +/- 1 rpm except at switch 11 (+/- 4 RPM)
- Accuracy: +/- 0.5%
- Lighting: LED backlighting, amber (or non-lit)

### CONFIGURATION:

- Input frequency range: 50 Hz-10 kHz
- Range: 0-65,535 RPM
- Calibration: Rotary switch, 14 positions (2 spares)
- Signal inputs: Magnetic pick-up or pulse generator

### ELECTRICAL:

- System voltage: 12, 24 or 32 VDC (lighting only)
- Signal inputs: Magnetic pick-up or pulse generator
- Electrical protection: Reverse polarity, transients including load-dump, over-voltage and ESD
- Radiated immunity: 55 V/m
- Connector: Deutsch DT Series 6-pin, sealed

### ENVIRONMENTAL:

- Operating temperature: -40°C to +85°C
- Storage temperature: -55°C to +85°C
- Sealing: IP 67 with anti-fog coating
- Compliant: SAE standards for vibration and salt spray

### INSTALLATION:

- Mounting: #8-32 studs, brass, male
- Panel cut-out 3.4" +/- .02"

### GRAPHICS:

- Color scheme: White-on-black
- Graphics can be customized
- Configuration: 5-digit Liquid Crystal Display

### CALIBRATION SETTINGS

Position ID	# of Flywheel Teeth
0	(spare position)
1	136
2	151
3	156
4	183
5	113
6	134
7	132
8	126
9	84
A	255
B	30
C	130
D	140
E	208
F	(spare position)

## CUSTOMIZATION OPTIONS:

Customized dial graphics are available. *Contact our sales team for a review of your requirements.*



## PART NUMBERS:



111566



111567



103676 shown



103747 shown

### 3-3/8" TACHOMETER — LCD 5 DIGIT

P/N	Ø mm	Scale (RPM)	Lighting Voltage	Volts	Bezel	Sender Type	Notes
111566	86	0-65,535	9-32VDC	Self-powered 12/24 lighting	Black	Mag Sensor or Pulse Gen.	lighted, 5 Digit Display
111567	86	0-65,535	9-32VDC	Self-powered 12/24 lighting	Polished	Mag Sensor or Pulse Gen.	lighted, 5 Digit Display

#### NOTES:

"Self-powered" means that units are energized by either a magnetic sensor or signal generator.

Consult with factory representatives or your distributor concerning options for programmable speedometer and tachometers with LCD odometers and hourmeters.



### 3-3/8" TACHOMETER — LCD 4 DIGIT

P/N	Ø mm	Scale (RPM)	Lighting Voltage	Volts	Bezel	Sender Type	Notes
103676	86	0-9,999	10-16 VDC	Self-powered 12 VDC lighting	Black	Mag Sensor or Pulse Gen.	lighted, 4 Digit Display
103747	86	0-9,999	10-16 VDC	Self-powered 12 VDC lighting	Polished	Mag Sensor or Pulse Gen.	lighted, 4 Digit Display
104928	86	0-9,999	20-32 VDC	Self-powered 24 VDC lighting	Polished	Mag Sensor or Pulse Gen.	lighted, 4 Digit Display

#### NOTES:

"Self-powered" means that units are energized by either a magnetic sensor or signal generator.

These units are recommended for stationary applications.

Consult with factory representatives or your distributor concerning options for programmable speedometer and tachometers with LCD odometers and hourmeters.



ROUND & RECTANGULAR LCD HOURMETERS

## BEST-IN-CLASS SEALED LCD HOURMETER SOLUTIONS

Our sealed 2" diameter round and mini rectangular LCD hourmeters with digital indices offer an excellent combination of accuracy, ruggedness and all around performance.

Designed originally for a leading global construction equipment OEM, these are available as standard Datcon products. The units are ideal for applications in harsh environments.

Features at right and general specifications on following page are for our featured LCD units.

Datcon also offers traditional counter wheel type hourmeters, listed in the table on the next page.

- Robust automotive grade LCD, 6-digits
- High-quality 4-layer PCB; protected from over-voltage, reverse polarity and transients
- IP 67 sealing – exceptional all-weather use
- Rugged platform – survives 50+ Gs shock & vibration
- Extremely accurate: +/- .01%
- Wide operating temperature and voltage ranges
- Inhibited or non-inhibited – "one-size-fits-all"
- Spin-on fastener for 2" unit
- 2-hole mounting for mini
- Heavy-duty terminals for severe-duty
- Automated assembly line with error-proofing

## GENERAL SPECIFICATIONS (featured product):

### PHYSICAL:

- Lightweight materials – round unit is only 5 oz.
- Spin-on fastener for round unit, 2-hole mounting via customer-supplied screws for mini
- Engineering resin enclosure, reinforced, UV resistant

### ELECTRICAL:

- System voltage: 7-56 VDC range
- Electrical protection: Reverse polarity, transients including load-dump, over-voltage and ESD

### WIRING:

- Positive and negative connections through battery for ignition switch (uninhibited set up), signal source alternator or DC voltage
- 3-wire connection to alternator for inhibited operation (i.e. true engine operating hours)

### APPLICATIONS:

- Off-highway equipment
- Heavy trucks & buses
- Industrial vehicles
- Specialty vehicles including military

### INSTALLATION:

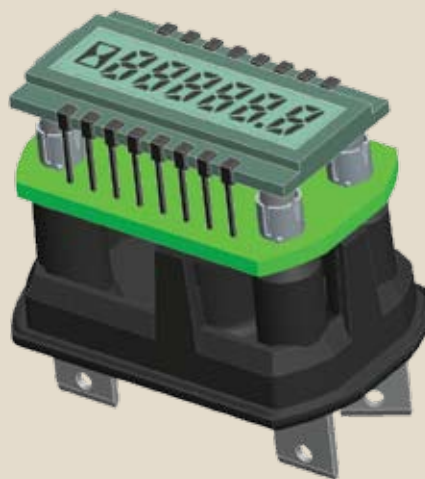
- Several options available, depending on form factor of unit selected

### ALSO AVAILABLE:

- Traditional counter-wheel hourmeters in all popular form factors
- Accessories

### KEY FEATURE — AUTOMOTIVE GRADE LCD:

- Datcon LCD hourmeters feature a reliable automotive grade LCD along with a robust 4-layer PCB for maximum performance even in severe-duty environments – the ideal solution for OHE



## CUSTOMIZATION OPTIONS:

Customer logos and custom artwork may be applied to either unit for a small investment.

*Contact our sales team for a review of your requirements.*



(Custom dial artwork example)



## PART NUMBERS:

HOURMETERS (ELECTRONIC)						
P/N	Model	Volts	Bezel	Range (Hours)	Mounting	Feature
120491	LCD *1	7-56 VDC	Black	99,999.9	Spin-on Fastener	Inhibited/Uninhibited
121304	LCD *2	7-56 VDC	Black	99,999.9	Spin-on Fastener	Inhibited/Uninhibited
120492	LCD *1	7-56 VDC	Black	99,999.9	2-hole	Inhibited/Uninhibited
121305	LCD *2	7-56 VDC	Black	99,999.9	2-hole	Inhibited/Uninhibited
100222	876	10-32 VDC	Black	9,999.9	U-bracket	No
100223	876	10-32 VDC	Polished	9,999.9	U-bracket	No
100224	876	10-32 VDC	Black	9,999.9	U-bracket	Inhibited
100225	876	10-32 VDC	Polished	9,999.9	U-bracket	Inhibited
100689	871	10-32 VDC	Black	9,999.9	3-hole flange	No
100690	873	10-32 VDC	Black	9,999.9	4-hole aircraft	No
100843	871	10-32 VDC	Black	9,999.9	3-hole flange	Inhibited
100844	873	10-32 VDC	Black	9,999.9	4-hole aircraft	Inhibited
102033	Mini	10-80 VDC	Black	99,999.9	2-hole	No
102035	Mini	10-80 VDC	Black	99,999.9	Clip	No
102162	876	10-32 VDC	Black	99999	U-bracket	No
102163	876	10-32 VDC	Polished	99999	U-bracket	No
105753	876	10-50 VDC	Black	9,999.9	U-bracket	No
105591	876	10-50 VDC	Polished	9,999.9	U-bracket	No
105592	871	10-50 VDC	Black	9,999.9	3 hole flange	No
102164	871	30-90 VDC	Black	9,999.9	3 hole flange	No
102165	873	30-90 VDC	Black	9,999.9	4-hole aircraft	No
102166	876	30-90 VDC	Black	9,999.9	U-bracket	No
102167	876	30-90 VDC	Polished	9,999.9	U-bracket	No
102169	871	10-32 VDC	Black	99999	3-hole flange	No
115851	876	10-16 VDC	Black	9,999.9	U-bracket	Amber lighting
115852	876	10-16 VDC	Polished	9,999.9	U-bracket	Amber lighting
117533	873	10-16 VDC	Black	9,999.9	4-hole aircraft	Amber lighting
115853	876	20-32 VDC	Black	9,999.9	U-bracket	Amber lighting
115854	876	20-32 VDC	Polished	9,999.9	U-bracket	Amber lighting
117536	873	20-32 VDC	Black	9,999.9	4-hole aircraft	Amber lighting

### NOTES:

\*1 = bulk-packed product; \*2 = kitted (individually packaged) product

"Inhibited" hourmeters accumulate hours only when the engine is running and a signal is being applied to the unit. "Uninhibited" hourmeters accumulate hours whenever power is applied to them.

Hourmeter kits above include mounting hardware. (Surface mount units do not include panel screws.)

For panel kits and other options, please see Accessories section of this catalog.



120491



120492



100222



100689



100690



102035



102033



**DDBI: VOLTMETER , OIL PRESSURE  
& DIESEL EXHAUST FLUID (DEF) GAUGES**

## STAND-ALONE OR IN SERIES — DDBI™ IS READY FOR YOUR BUS

DDBI™ (Direct Data-Bus Instruments) are J1939 gauges that can be connected directly to the vehicle bus network – no instrument controller or “gateway” is required. DDBI’s electronics architecture enables either a stand-alone solution – an individual gauge connected directly to J1939 bus network – or several configured in “series”.

*The line includes a Diesel Exhaust Fluid (DEF) gauge measures fluid levels in the SCR converter, tapping input broadcast over the J1939 CAN network via PGN 65110 – “Aftertreatment 1 SCR Reagent Tank 1 Information” and SPN 1761 – “Aftertreatment 1 SCR Catalyst Tank Level”. Our DEF gauge provides a direct connection to a J1939 bus network. 3 “trim” levels for fluid level management ensure optimal, real-time operator awareness and response.*

- Can be stand-alone or in series; no controller or gateway required
- Reliable and accurate, use stepper motors
- Reinforced engineering resin case, integral connector
- LED backlighting and lighted pointers
- Integrated warning light
- Speedometers and Tachometers with LCD Display capable of displaying DTC’s, Fuel Level, and Front and Rear Brake Pressure
- Totally sealed for all-weather use; anti-fog protection
- Matching analog units for non-bus functions

## GENERAL SPECIFICATIONS:

### PHYSICAL:

- Sizes: Gauges – 2-1/16" (52 mm) diameter; Tachometers/Speedometers – 3-3/8" (86 mm) diameter nominal
- Movement: Stepper motor
- Case: Impact-resistant PBT, reinforced, white
- Dials: PC, black, UV-resistant
- Pointers: PC, clear with orange back, lighted
- Bezels: SAE step type, metal, anodized, black or polished stainless steel, low-profile type
- Lens: Safety glass, flat or domed; anti-fog coated

### ELECTRICAL:

- System voltage: 12 or 24VDC (8-18 or 18-36V)
- Electrical protection: Reverse polarity, transients including load-dump, over-voltage and ESD
- Factory-calibrated warning light thresholds
- EMC per ISO 13766
- Connection: Deutsch DT Series 6-pin connectors, sealed (1 per gauge, 2 per tachometer or speedometer) and integral to case

### PERFORMANCE:

- General specifications: Per SAE J1810 (gauges) and SAE J1399 and J1226 (tachometers/speedometers)
- Accuracy: Per SAE, +/- 1.5 angular degrees at primary calibration points and +/- 3 angular degrees at secondary calibration points based on nominal input

### ENVIRONMENTAL:

- Operating temperature: -40°C to +85°C
- Storage temperature: -55°C to +85°C
- Sealing: IP 67 with anti-fog coating
- Exceed: SAE salt spray & vibration standards

### INSTALLATION:

- Mounting kit: zinc-plated mounting bracket, nuts and lock washers
- Panel cut-outs: Gauges – 2.098" +/- .02"; Tachometers/Speedometers – 3.4" +/- .02"

### GRAPHICS:

- Color scheme: White-on-black graphics, automotive style font; English/metric with SAE/ISO symbols

### ALSO AVAILABLE:

- Matching DDBI™ analog style switched output/warning gauges.
- Accessories



## CUSTOMIZATION OPTIONS:

Modifications can be supported for dial artwork, ranges and warning light set points.

*Contact our sales team for a review of your requirements.*



(Custom dial artwork example)



113498 shown

## PART NUMBERS:

### BOOST PRESSURE — AIR

P/N	Scale (PSI)	Ø mm	Volts	Bezel	English/Metric	ON/OFF Setpoints
112730	0-30	52	12	SAE Black	English	30 Asc / 25-Dec
112732	0-30	52	24	SAE Black	English	30 Asc / 25-Dec
113496	0-30	52	12	SAE Polished	English	30 Asc / 25-Dec
113498	0-30	52	24	SAE Polished	English	30 Asc / 25-Dec
115203	0-30	52	12	LP Polished	English	30 Asc / 25-Dec
115205	0-30	52	24	LP Polished	English	30 Asc / 25-Dec
117724	0-30	52	12	LP Black	English	30 Asc / 25-Dec
117726	0-30	52	24	LP Black	English	30 Asc / 25-Dec
123103	0-60	52	12	SAE Black	English	60 Asc / 55-Dec
123110	0-60	52	12	LP Polished	English	60 Asc / 55-Dec

#### NOTES:

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard except as noted above; other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.



121702 shown



121705 shown

### DIESEL EXHAUST FLUID (DEF) LEVEL GAUGES

P/N	Scale	Ø mm	Volts	Bezel	ON/OFF Setpoint	Derate warning
121702	0-4/4	52	12	SAE Black	1/40 Dec / 1/20 Asc	y
121705	0-4/4	52	12	LP Polished	1/8 Dec / 1/4 Asc	
121814	0-4/4	52	12	SAE Polished	1/40 Dec / 1/20 Asc	y
121815	0-4/4	52	12	LP Black	1/8 Dec / 1/4 Asc	
122337	0-4/4	52	12	SAE Black	1/40 Dec / 1/20 Asc	y
122121	0-4/4	52	24	LP Polished	1/40 Dec / 1/20 Asc	y
122122	0-4/4	52	24	SAE Polished	1/8 Dec / 1/4 Asc	
122123	0-4/4	52	24	SAE Black	1/40 Dec / 1/20 Asc	y
122124	0-4/4	52	24	LP Black	1/8 Dec / 1/4 Asc	

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.



## PART NUMBERS:

FUEL LEVEL					
P/N	Scale	Ø mm	Volts	Bezel	ON/OFF Setpoint
115163	0-4/4	52	12	SAE Black	1/8 Dec / 1/4 Asc
115223	0-4/4	52	12	LP Polished	1/8 Dec / 1/4 Asc
115259	0-4/4	52	12	SAE Polished	1/8 Dec / 1/4 Asc
117745	0-4/4	52	12	LP Black	1/8 Dec / 1/4 Asc
117885	0-4/4	52	12	SAE Black	1/8 Dec / 1/4 Asc
115225	0-4/4	52	24	LP Polished	1/8 Dec / 1/4 Asc
115261	0-4/4	52	24	SAE Polished	1/8 Dec / 1/4 Asc
115310	0-4/4	52	24	SAE Black	1/8 Dec / 1/4 Asc
117747	0-4/4	52	24	LP Black	1/8 Dec / 1/4 Asc



115163 shown

### NOTES:

For sending unit options, please see Fuel Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

PRESSURE – AIR							
P/N	Scale (PSI/bar)	Ø mm	Volts	Bezel	English/Metric	ON/OFF Setpoints	Air Pressure
115159	0-150 PSI	52	12	SAE Black	English	60 Dec / 65 Asc	Front
115212	0-150 PSI	52	12	LP Polished	English	60 Dec / 65 Asc	Front
115252	0-150 PSI	52	12	SAE Polished	English	60 Dec / 65 Asc	Front
117733	0-150 PSI	52	12	LP Black	English	60 Dec / 65 Asc	Front
118118	0-10 bar	52	12	LP Black	Metric	4.13 Dec / 4.48 Asc	Front
115216	0-150 PSI	52	24	LP Polished	English	60 Dec / 65 Asc	Front
115256	0-150 PSI	52	24	SAE Polished	English	60 Dec / 65 Asc	Front
115307	0-150 PSI	52	24	SAE Black	English	60 Dec / 65 Asc	Front
117737	0-150 PSI	52	24	LP Black	English	60 Dec / 65 Asc	Front
115161	0-150 PSI	52	12	SAE Black	English	60 Dec / 65 Asc	Rear
115213	0-150 PSI	52	12	LP Polished	English	60 Dec / 65 Asc	Rear
115253	0-150 PSI	52	12	SAE Polished	English	60 Dec / 65 Asc	Rear
117734	0-150 PSI	52	12	LP Black	English	60 Dec / 65 Asc	Rear
118120	0-10 bar	52	12	LP Black	Metric	4.13 Dec / 4.48 Asc	Rear
115217	0-150 PSI	52	24	LP Polished	English	60 Dec / 65 Asc	Rear
115257	0-150 PSI	52	24	SAE Polished	English	60 Dec / 65 Asc	Rear
115308	0-150 PSI	52	24	SAE Black	English	60 Dec / 65 Asc	Rear
117738	0-150 PSI	52	24	LP Black	English	60 Dec / 65 Asc	Rear



115212 shown



115252 shown



117733 shown

### NOTES:

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard except as noted above; other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

## PART NUMBERS:



115177 shown



121294 shown



117697 shown



113480 shown



115181 shown

### PRESSURE — OIL

P/N	Scale (PSI/bar)	Ø mm	Volts	Bezel	English/Metric	ON/OFF Setpoints
115002	0-100 PSI	52	12	SAE Black	English	DM1 from ECM
115006	0-100 PSI	52	12	SAE Polished	English	DM1 from ECM
115177	0-100 PSI	52	12	LP Polished	English	DM1 from ECM
121294	0-100 PSI	52	12	SAE Black	English	DM1 from ECM
117697	0-100 PSI	52	12	LP Black	English	DM1 from ECM
115004	0-100 PSI	52	24	SAE Black	English	DM1 from ECM
115008	0-100 PSI	52	24	SAE Polished	English	DM1 from ECM
115179	0-100 PSI	52	24	LP Polished	English	DM1 from ECM
117699	0-100 PSI	52	24	LP Black	English	DM1 from ECM
112714	0-125 PSI	52	12	SAE Black	English	DM1 from ECM
113480	0-125 PSI	52	12	SAE Polished	English	DM1 from ECM
115181	0-125 PSI	52	12	LP Polished	English	DM1 from ECM
117701	0-125 PSI	52	12	LP Black	English	DM1 from ECM
120814	0-125 PSI	52	12	SAE Black	English	DM1 from ECM
112716	0-125 PSI	52	24	SAE Black	English	DM1 from ECM
113482	0-125 PSI	52	24	SAE Polished	English	DM1 from ECM
115183	0-125 PSI	52	24	LP Polished	English	DM1 from ECM
117703	0-125 PSI	52	24	LP Black	English	DM1 from ECM
119015	0-10 bar	52	12	LP Black	Metric	DM1 from ECM
121150	0-10 bar	52	12	LP Polished	Metric	DM1 from ECM
117654	0-10 bar	52	24	SAE Black	Metric	DM1 from ECM
119929	0-10 bar	52	24	LP Polished	Metric	DM1 from ECM

#### NOTES:

Regular-, heavy- and severe-duty sending units are available for electrical gauges listed above. Please see Pressure Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

## PART NUMBERS:

SPEEDOMETERS							
P/N	Scale (MPH/KPH)	Ø mm	Volts	Bezel	English/ Metric	Display	Analog Inputs
121617	45 MPH/70 KPH	86	12	SAE Black	Dual-English Dominant	Odometer	None
112742	85 MPH/130 KPH	86	12	SAE Black	Dual-English Dominant	Odometer	None
113508	85 MPH/130 KPH	86	12	SAE Polished	Dual-English Dominant	Odometer	Yes
115227	85 MPH/130 KPH	86	12	LP Polished	Dual-English Dominant	Odometer	None
115604	85 MPH/130 KPH	86	12	SAE Black	Dual-English Dominant	Odometer	Yes
117749	85 MPH/130 KPH	86	12	LP Black	Dual-English Dominant	Odometer	None
117973	85 MPH/130 KPH	86	12	SAE Black	Dual-English Dominant	None	None
118694	85 MPH/130 KPH	86	12	SAE Polished	Dual-English Dominant	Odometer	Yes
118695	85 MPH/130 KPH	86	12	LP Polished	Dual-English Dominant	Odometer	Yes
118696	85 MPH/130 KPH	86	12	LP Black	Dual-English Dominant	Odometer	Yes
121293	85 MPH/130 KPH	86	12	SAE Black	Dual-English Dominant	Odometer	None
119458	85 MPH/130 KPH	86	12	SAE Black	Dual-English Dominant	Odometer	None
112744	85 MPH/130 KPH	86	24	SAE Black	Dual-English Dominant	Odometer	None
115229	85 MPH/130 KPH	86	24	LP Polished	Dual-English Dominant	Odometer	None
117751	85 MPH/130 KPH	86	24	LP Black	Dual-English Dominant	Odometer	None
118697	85 MPH/130 KPH	86	24	SAE Polished	Dual-English Dominant	Odometer	Yes
118698	85 MPH/130 KPH	86	24	SAE Polished	Dual-English Dominant	Odometer	Yes
118699	85 MPH/130 KPH	86	24	LP Black	Dual-English Dominant	Odometer	Yes
118114	130 KPH/85 MPH	86	12	LP Black	Dual-Metric Dominant	Odometer	None
120166	130 KPH/85 MPH	86	12	LP Polished	Dual-Metric Dominant	Odometer	None
122245	130 KPH/85 MPH	86	12	SAE Black	Dual-Metric Dominant	Odometer	None
122910	130 KPH/85 MPH	86	24	SAE Black	Dual-Metric Dominant	Odometer	None

### NOTES:

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson. For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.



115227 shown



118696 shown



117753 shown



118702 shown

## PART NUMBERS:

TACHOMETERS						
P/N	Scale (RPM)	Ø mm	Volts	Bezel	Display	Analog Inputs
122916	2500	86	24	SAE Black	Hourmeter	None
112746	3500	86	12	SAE Black	None	None
112750	3500	86	12	SAE Black	Hourmeter	None
113512	3500	86	12	SAE Polished	None	None
115233	3500	86	12	LP Polished	None	None
115237	3500	86	12	LP Polished	Hourmeter	None
115603	3500	86	12	LP Polished	Hourmeter	Yes
117527	3500	86	12	SAE Black	Hourmeter	None
117662	3500	86	12	SAE Black	Hourmeter	Yes
117753	3500	86	12	LP Black	None	None
117757	3500	86	12	LP Black	None	None
117901	3500	86	12	SAE Black	Hourmeter	None
118700	3500	86	12	SAE Polished	Hourmeter	Yes
118701	3500	86	12	LP Polished	Hourmeter	Yes
118702	3500	86	12	LP Black	Hourmeter	Yes
122241	3500	86	12	SAE Black	Hourmeter	None
122895	3500	86	12	SAE Black	Hourmeter	Yes
112748	3500	86	24	SAE Black	None	None
112752	3500	86	24	SAE Black	Hourmeter	None
113514	3500	86	24	SAE Polished	None	None
115235	3500	86	24	LP Polished	None	None
115239	3500	86	24	LP Polished	Hourmeter	None
115605	3500	86	24	SAE Black	Hourmeter	Yes
117663	3500	86	24	SAE Black	Hourmeter	None
117759	3500	86	24	LP Black	Hourmeter	None
118703	3500	86	24	SAE Polished	Hourmeter	Yes
118704	3500	86	24	LP Polished	Hourmeter	Yes
118705	3500	86	24	LP Black	Hourmeter	Yes
121737	4500	86	12	SAE Black	None	None

### NOTES:

For appropriate speed sensor, please see the Senders & Sensors section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

*NOTE: When power to an electrical gauge is turned off, pointer may come to rest at any point on the dial. Some tachometers and speedometers do have a Return-To-Zero (RTZ) function.*



## PART NUMBERS:

TEMPERATURE — COOLANT						
P/N	Scale (°F/°C)	Ø mm	Volts	Bezel	English/Metric	ON/OFF Setpoints
112718	100-280° F	52	12	SAE Black	English	DM1 from ECM
112720	100-280° F	52	12	SAE Polished	English	DM1 from ECM
113434	100-280° F	52	12	LP Polished	English	DM1 from ECM
113486	100-280° F	52	12	LP Black	English	DM1 from ECM
115185	100-280° F	52	12	LP Black	English	235 Asc / 225 Des
115187	100-280° F	52	12	SAE Black	English	DM1 from ECM
117651	100-280° F	52	12	SAE Black	English	DM1 from ECM
117652	100-280° F	52	24	SAE Black	English	DM1 from ECM
117705	100-280° F	52	24	SAE Polished	English	DM1 from ECM
117707	100-280° F	52	24	LP Polished	English	DM1 from ECM
118132	100-280° F	52	24	LP Black	English	DM1 from ECM
118750	10-130° C	52	12	LP Black	Metric	DM1 from ECM
118806	10-130° C	52	24	SAE Black	Metric	DM1 from ECM
119928	40-130° C	52	12	SAE Black	Metric	104 Asc / 98.8 Des
120813	40-130° C	52	12	LP Black	Metric	104 Asc / 98.8 Des
121149	40-130° C	52	12	LP Polished	Metric	DM1 from ECM
121290	40-130° C	52	24	LP Polished	Metric	DM1 from ECM

### NOTES:

For available sending units, see Temperature Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.



112718 shown



113486 shown

TEMPERATURE — ENGINE OIL					
P/N	Scale (°F)	Ø mm	Volts	Bezel	ON/OFF Setpoints
115010	130-350	52	12	SAE Black	DM1 from ECM
115014	130-350	52	12	SAE Polished	DM1 from ECM
115193	130-350	52	12	LP Polished	DM1 from ECM
117713	130-350	52	12	LP Black	DM1 from ECM
121295	130-350	52	12	SAE Black	DM1 from ECM
115012	130-350	52	24	SAE Black	DM1 from ECM
115016	130-350	52	24	SAE Polished	DM1 from ECM
115195	130-350	52	24	LP Polished	DM1 from ECM
117715	130-350	52	24	LP Black	DM1 from ECM

### NOTES:

For available sending units, see Temperature Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.



115010 shown



115193 shown

## PART NUMBERS:



112724 shown



115189 shown



113492 shown



117717 shown

## TEMPERATURE — TRANSMISSION OIL

P/N	Scale (°F)	Ø mm	Volts	Bezel	ON/OFF Setpoints
<b>112724</b>	130-340	52	24	SAE Black	DM1 from ECM
<b>113488</b>	130-340	52	12	SAE Polished	DM1 from ECM
<b>113490</b>	130-340	52	24	LP Polished	DM1 from ECM
<b>115189</b>	130-340	52	12	LP Polished	DM1 from ECM
<b>117709</b>	130-340	52	12	LP Black	DM1 from ECM
<b>121291</b>	130-340	52	12	SAE Black	DM1 from ECM
<b>115191</b>	130-340	52	24	LP Polished	DM1 from ECM
<b>117711</b>	130-340	52	24	LP Black	DM1 from ECM

## NOTES:

For available sending units, see Temperature Sender section of this catalog.

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.

## VOLTMETER

P/N	Scale (VDC)	Ø mm	Volts	Bezel	ON Setpoints	OFF Setpoints
<b>112726</b>	8-18	52	12	SAE Black	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
<b>113492</b>	8-18	52	12	SAE Polished	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
<b>113494</b>	16-32	52	12	SAE Polished	21 Dec / 31 Asc	22 Asc / 30 Dec
<b>115197</b>	8-18	52	12	LP Polished	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
<b>117717</b>	8-18	52	12	LP Black	10.5 Dec / 15.5 Asc	11.0 Asc / 15.0 Dec
<b>112728</b>	16-32	52	24	SAE Black	21 Dec / 31 Asc	22 Asc / 30 Dec
<b>115199</b>	26-36	52	24	LP Polished	21 Dec / 31 Asc	22 Asc / 30 Dec
<b>117720</b>	16-36	52	24	LP Black	21 Dec / 31 Asc	22 Asc / 30 Dec
<b>121296</b>	16-36	52	24	LP Black	21 Dec / 31 Asc	22 Asc / 30 Dec

## NOTES:

SAE = SAE Step Bezel, LP = Low Profile bezel. Red warning LED included. Amber backlight color standard, other backlight colors available – please consult your maximatecc salesperson.

For information regarding specifications not listed in the table above, please consult with your maximatecc salesperson.

All gauge kits above include gauge mounting hardware.

Instruments listed above are internally illuminated by LEDs on the circuit. No light kit options are available.



## TWO VALUE-PACKED CLUSTER SOLUTIONS FROM DATCON

Datcon offers two economical system information/monitoring packages:

**TriFlex** is a competitively-priced 3-instrument cluster derived from a proven OEM platform that is ideal for construction and agricultural equipment. Unit provides two gauges: a full-size tachometer, LCD hourmeter, and 12 indicators.

As a standard platform, it can be readily adapted to myriad applications. And, it's produced on a line featuring extensive error-proofing to ensure a high-quality result.

**World Compattino™** is a compact, front-sealed instrument cluster that replaces conventional gauge panel assemblies. Optimizing performance, visibility, reliability and all-weather durability, it's a rugged, cost-effective solution for a range of severe-duty applications.

2 models are offered: Base, 7-segment LCD and Deluxe, 128x96 dot-matrix LCD. Units feature stepper motors and LED lighting for improved reliability and user functionality.





## COMPETITIVELY PRICED CLUSTER FROM A PROVEN OEM PLATFORM

TriFlex is a competitively-priced instrument cluster derived from a proven OEM platform that is ideal for construction and agricultural equipment. Unit provides two gauges: a full-size tachometer, LCD hourmeter, and 12 indicators.

As a standard platform, it can be readily adapted to myriad applications. And, it's produced on a line featuring extensive error-proofing to ensure a high-quality result.

- Fuel and temperature gauges, full-size tachometer, stepper motors (speedometer optional; magnetic pick-up or pulse generator input)
- LCD hourmeter with 6 digits, transfective, backlit
- 12 LED status indicators; red, amber, green, blue
- LED backlighting for gauges and LCD hourmeter
- UV-resistant anti-glare PC overlay – tough and good-looking
- Capable of withstanding high-pressure wash at front surface
- Electrically and environmentally protected
- Static hours display
- Compact design allows for packaging in small space
- Lightweight – weighs less than one pound



## GENERAL SPECIFICATIONS:

### PHYSICAL:

- 282 mm (11.1") x 113 mm (4.4") x 42 mm (1.7")
- Weight: 0.6 lbs (0.27 kg)
- Mounting via panel installation, 3 screws (5mm/#10) or 2 brackets
- Engineering resin enclosure, reinforced

### INPUTS/OUTPUTS:

- Fuel gauge input based on resistive type sender with ohms resistance 240-33.5Ω or Datcon IntelliSensor® fuel sensor using 1-4V input
- Temperature gauge based on resistive input
- Tachometer input via magnetic pick-up or alternator
- All 12 indicators STG or STB (ref. pins 6-17)
- Lighting control via pin 20 (positive power supply)

### ELECTRICAL:

- System voltage: 12 or 24V nominal (9-16/18-32V)
- Electrical protection: Reverse polarity, transients including load-dump, over-voltage and ESD
- Current: Standby current draw <5 mA
- Connector: 20-pin Molex Connector
- EMC Conformity: ISO 13766

### ENVIRONMENTAL:

- Operating temperature: -30°C to +70°C
- Storage temperature: -40° to +85°C
- Sealing: IP 67 front; IP 55 rear
- Compliant: SAE standards for vibration and salt spray

### PIN ASSIGNMENTS:

Pin #	Pin Type	Pin Function
1	Ground	Ground Supply
2	12V	Ignition (+ Supply)
3	Analog Input	Fuel Level
4	Analog Input	Temperature
5	Frequency Input	Tachometer
6	STB-STG	Status Indicator
7	STB-STG	Status Indicator
8	STB-STG	Status Indicator
9	STB-STG	Status Indicator
10	STB-STG	Status Indicator
11	STB-STG	Status Indicator
12	STB-STG	Status Indicator
13	STB-STG	Status Indicator
14	STB-STG	Status Indicator
15	STB-STG	Status Indicator
16	STB-STG	Status Indicator
17	STB-STG	Status Indicator
18	STB	Keyswitch
19	STB-STG/Digital Input	(reserved)
20	STB	Backlight

#### NOTES:

"STB" = switch-to-battery; "STG" = switch-to-ground.



## CUSTOMIZATION OPTIONS:

The TriFlex platform allows for customization of LED status indicators as well as changes to the overlay and dials. Additionally, it is possible to change gauge functions.

*Contact our sales team for a review of your requirements.*





WORLD COMPATTINO INSTRUMENT CLUSTER

## SEVERE DUTY PERFORMANCE — YET STYLISH, VERSATILE & AFFORDABLE

World Compattino™ is a compact, front-sealed instrument cluster that replaces conventional gauge panel assemblies. Optimizing performance, visibility, reliability and all-weather durability, it's a rugged, cost-effective solution for a range of severe-duty applications.

2 models are offered: Base, 7-segment LCD and Deluxe, 128x96 dot-matrix LCD. Units feature stepper motors and LED lighting for improved reliability and user functionality.

- Rugged, compact designs are ideal for O.E.M off-highway, industrial & specialty vehicle applications
- Unit consolidates multiple functions for vehicle and engine monitoring into one package
- Ideal for customers who are budget conscious
- Front sealed & dust-proof
- 26-pin connector & side mounting tabs allow for easy installation
- Immune to voltage variations & external transients; reverse polarity protected
- Provisions for up to 19 LED warning lights

## GENERAL SPECIFICATIONS:

### PHYSICAL:

- 230 mm (9.1") x 120 mm (4.7") x 47.5 mm (1.9")
- Weight: 0.66 lbs (0.44 kg)
- Engineering resin enclosure, reinforced
- Overlay: UV-resistant, anti-glare PC
- Mounting: Panel installation via 4 tabs

### DISPLAY:

- Type: LCD hourmeter with 6 digits, 128x96 dot matrix with LED backlight
- Indicators: 19 LED status indicators; red, amber, green, blue

### INPUTS/OUTPUTS:

- Fuel gauge input based on resistive type sender with ohms resistance 240-33.5Ω or Datcon IntelliSensor® fuel sensor using 1-4V input
- Temperature gauge based on resistive input
- Tachometer input via magnetic pick-up or alternator connected
- All 19 indicators can be triggered by digital inputs, analog inputs, CAN messages, or logic based on multiple inputs
- 1 switched output
- 1 CAN channel
- 14 digital inputs

### ELECTRICAL:

- Supply/operating voltage: 12/24 VDC (9-16 or 18-32V)
- Electrical Protection: Reverse polarity, transients including load-dump, over-voltage, and ESD
- Current: Standby current draw <7 mA
- Connector: 26-pin Amp connector
- EMC Conformity: ISO 13766

### ENVIRONMENTAL:

- Operating/storage temperature: -30°C to +85°C
- Sealing: IP 67 front; IP 65 rear
- Shock & vibration: Per SAE J1810
- SAE Compliant: Moisture, shock, & vibration resistant

### PIN ASSIGNMENTS:

Pin #	Pin Type	Pin Function
1	STB-STG	Config_IN3
2	STB-STG	Config_IN4
3	STB-STG	Config_IN5
4	STB-STG	Config_IN6
5	STB-STG	Config_IN7
6	STB-STG	Config_IN8
7	STB-STG	Config_IN9
8	STB-STG	Config_IN10
9	STB-STG	Config_IN11
10	STB-STG	Config_IN1
11	Power Input	Battery +
12	STB-STG	Config_IN12
13	Ground	Groundr
14	HS/LS Driver	S.O.
15	CAN High	Config_IN14_C-
16	CAN Low	Config_IN13_C+
17	Frequency	Freq_Input
18	Analog-RES/Voltage	Analog 1
19	Analog-RES/Voltage	Analog 2
20	Analog-RES/Voltage	Analog 3
21	STG	STG1
22	STG	STG2
23	STG	STG3
24	STG	STG4
25	STB/Power	Ignition
26	STB-STG	Config_IN2

#### NOTES:

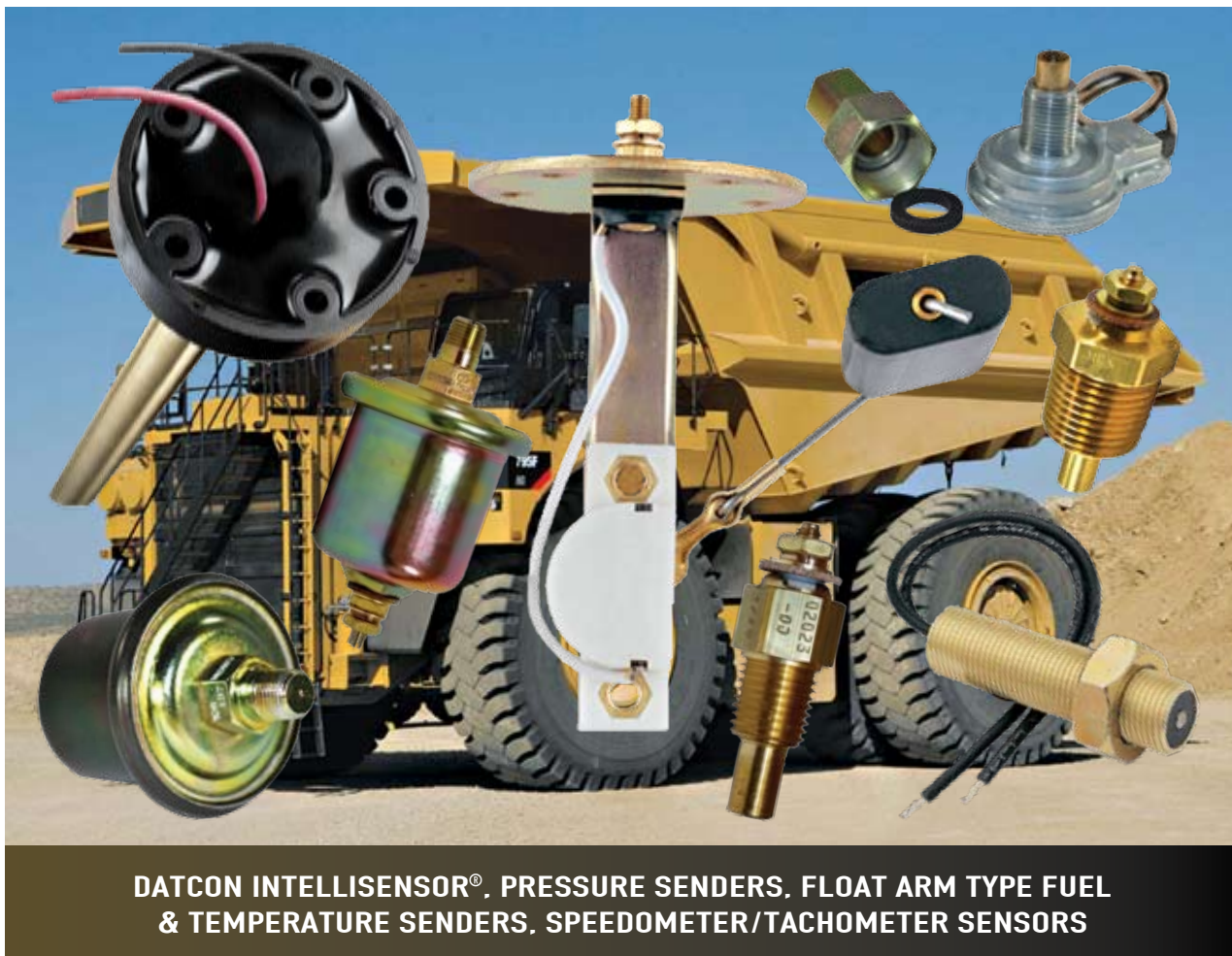
"STB" = switch-to-battery; "STG" = switch-to-ground; "HS" = high side; "LS" = low side; "S.O." = switched output; "RES" = resistive type input.

## CUSTOMIZATION OPTIONS:

Customization is possible, e.g. overlay and dials' colors and graphics, LED configurations, electrical matches, tachometer inputs, LCD functions, graphics and DTCs.

Contact our sales team for a review of your requirements.





## THE GOLD STANDARD BY WHICH ALL OTHERS ARE JUDGED

High-quality Datcon brand resistive type fuel, temperature and pressure (F/T/P) senders provide ideal solutions for OEM analog systems.

Match with Datcon gauges for a tuned system.

Also available: Speed sensors (magnetic pick-up or pulse generator) and non-mechanical/electronic fuel sensors.

Please review this section of the catalog and our Specification Sheets for available options and additional details.

- Robust units are designed for rugged off highway and heavy-duty applications
- Engineered to match resistance ranges of Datcon instruments to ensure optimum precision
- Constructed from premium materials for maximum repeatability and lifespan
- Compliant with stringent SAE and OEM performance standards
- Survive shock and vibration over 50 gs
- Wide operating temperature ranges
- Millions of units produced – we are a preferred OEM global sender supplier



## GENERAL SPECIFICATIONS:

### INTELLISENSOR® (non-contact):

- Sealed SMT electronics with no moving parts
- Level or volumetric measurement – accurate and flexible (supports round or non-round tanks)
- Can be installed on an angle up to 30° (ideal for saddle tanks wrapped around vehicle fender)
- Corrosion resistant aluminum flange and tubes
- Slosh-proof and extremely rugged
- Electrically and environmentally protected
- Wide operating temperature range
- Drop-in replacement for any sender using SAE 5-hole mounting pattern; easy to install
- Custom harness configurations where required

### FUEL SENDERS (float arm type):

- Full line of heavy-duty and “slim line” float-arm style fuel-level senders for OEM applications.
- Fixed or adjustable (6-24” extension)
- Standard Datcon electrical match 240-33.5Ω plus 10-180, 0-90 and 76-10Ω
- Common flange ground #10-32 terminal studs or 1/4” blade terminals; isolated ground options; flying leads or connectors (e.g. Packard)
- Fits SAE 5-hole flange opening
- Custom lengths and flanges; integral tubing for fuel pick-up and return; custom calibrations possible

### TEMPERATURE SENDERS:

- Full line of high-quality, economically priced temperature senders available for OEM applications.
- Datcon “low”, “high” and “extra high”, AC1 and AC2 matches
- Temperature ranges: 100-240°, 100-280°, 140-320°, 130-330° and 150-350°
- Threads: 1/8”-27 NPTF, 1/4”-18 NPTF, 3/8”-18 NPTF, 1/2”-14 NPTF & 5/8”-18 NPTF; 9/16-18 UNF, 5/8-18 UNF & 3/4-16 UNF; M10 x 1.0, M14 x 1.5, M16 x 1.5 & M18 x 1.5
- Datcon “universal” sender kit includes 1/4”-27 NPTF sender and 1/4”, 3/8” and 1/2” adaptors
- #10-32 studs or isolated ground units, 1/2”-14 NPTF and 9/16”-18 NPTF
- Dual-station units available (drives 2 gauges)

### PRESSURE SENDERS:

- Full line of regular-, heavy- and severe-duty oil pressure senders for OEM applications
- Standard pressure ranges 40-400 PSI
- 1/8”-27 NPTF threads
- #10-32 stud connections with common ground
- Sourced-approved military oil pressure senders
- Can be mounted in any orientation desired

### MAGNETIC SENSORS:

- Non-contact design: variable reluctance technology
- Sealed bobbin construction; anodized aluminum body; stainless steel body optional
- Wide operating temperature range: -40°C to 130°C
- Numerous connections available, including flying leads and popular male/female connectors
- Dual output versions for driving 2 gauges
- Mechanically sound locking screw mechanism survives high shock & vibration
- Tested tough – ideal for off-highway applications

### PULSE GENERATORS:

- 16- and 60-pole, 7/8” x 18 UNS threads
- Direct connection to mating port on most engines
- Pulse output with isolated ground connections
- Wide range of drive tangs – fit most applications

### HALL-EFFECT SENSORS:

- Provide electronic connection to the mechanical take-off shaft
- Digital output – signal amplitude is fixed, independent of speed
- Pulse output with isolated ground electrical connections
- Ideal for use in low RPM (pulse rate) applications
- Special “clutch” extensions are available



## THE PROVEN OEM SOLUTION FOR FUEL LEVEL MEASUREMENT

Gen-2 IntelliSensor® is our patented 2nd-generation electronic sensor delivering a proven OEM solution for fuel level and volume measurement.

The unit features no moving parts and is designed to last as long as the vehicle, even when used in the harshest conditions possible.

Available models can provide either Voltage Out (VOUT) or simulated-resistance signals.

IntelliSensor is the ideal solution for construction, agriculture, military and heavy-truck applications.

Customers include CNH, Caterpillar and John Deere.

- Sealed SMT electronics with no moving parts
- Level or volumetric measurement – accurate and flexible (supports round or non-round tanks)
- Can be installed on an angle up to 30° (ideal for saddle tanks wrapped around vehicle fenders)
- Corrosion resistant aluminum tubing, high impact resistant glass-filled resin flange
- Slosh-proof and extremely rugged
- Electrically and environmentally protected
- Wide operating temperature range
- Drop-in replacement for any sender using SAE 5-hole mounting pattern; easy to install
- Custom harness configurations where required

## GENERAL SPECIFICATIONS:

### PHYSICAL:

- Length: 6" (15.2 cm) to 36" (91.44 cm)
- Weight: 24" units weighs <2 lbs.
- Mounting: SAE standard 5-hole pattern
- Materials: Corrosion resistant aluminum tubing, high impact resistant glass-filled resin flange

### TECHNOLOGY:

- Core technology is variable capacitance – units measure the change in capacitance caused by fuel displacing air and translate this change in capacitance into a linear voltage output or simulated resistance (240-33.5Ω range)

### ELECTRICAL:

- System voltage: 12VDC or 24VDC
- Power consumption: 15mA maximum, no load
- Electrical protection: Reverse polarity, over voltage, short circuit, and ESD
- EMC compliance: Per SAE/OEM standards

### OUTPUT:

- Standard voltage output (VOUT): 1-4V
- Simulated resistance: 240-33.5Ω
- Future: J1939/CAN interface

### WIRING:

- Three (3) 6 inch wire leads standard
- Connectors (Packard, Deutsch, etc.) optional

### PERFORMANCE:

- VOUT: +/-0.1V at empty and +/-0.2V full

### ENVIRONMENTAL:

- Operating/storage temperature: -40°C to +85°C
- Sealing: 6 PSI (mounted to tank)
- Standards Compliance: SAE vibration and salt spray

### INSTALLATION:

- Mounting kit: Gasket and 5 (five) #10-32 sealing screws

### ALSO AVAILABLE:

- Datcon "DDBI" (Direct Data-Bus Instruments) fuel gauges
- Custom connectors



## CUSTOMIZATION OPTIONS:

Various lengths, wire lengths, output configurations, and wiring with connectors are available. *Contact our sales team for a review of your requirements.*



## PART NUMBERS:



### INTELLISENSOR – VOLTAGE OUTPUT

P/N	Tank Depth	Sender Length	Input Voltage	VOUT	Termination	Mating Connector
119059	12"	11.7"	12 VDC	1-4 VDC	Wires	
115873	16.7"	16.4"	12 VDC	1-4 VDC	Wires	
121602	17.7"	17.4"	12 VDC	1-4 VDC	Wires	
120302	18.2"	17.9"	24 VDC	1-4 VDC	Packard Weather Pak	12015793
118932	18.2"	17.9"	12 VDC	1-4 VDC	Wires	
122346	19.2"	18.9"	24 VDC	1-4 VDC	Deutsch Connector	
117976	20.2"	19.9"	24 VDC	1-4 VDC	Deutsch Connector	
117858	20.7"	20.4"	12 VDC	1-4 VDC	Wires	
118867	23.7"	23.4"	24 VDC	1-4 VDC	Packard Weather Pak	12015793
121839	25.7"	25.4"	12 VDC	1-4 VDC	Wires	
123495	25.7"	25.4"	24 VDC	1-4 VDC	Wires	
118847	30.2"	29.9"	24 VDC	1-4 VDC	Packard Weather Pak	12015793
117310	35.7"	35.4"	12 VDC	1-4 VDC	Wires	
118401	36.2"	35.9"	12 VDC	1-4 VDC	Wires	
115079	42.8"	42.5"	12 VDC	1-4 VDC	Wires	
119781	45.3"	45.0"	12 VDC	1-4 VDC	Deutsch Connector	

#### NOTES:

Mounting gasket and five #10-32 sealing screws included with sender.

For lengths not shown, please consult with your maximatecc salesperson.

Tank depths are for reference only. Sender length (bottom of flange to bottom of sender) is .3" less than tank depth listed.





## PART NUMBERS:

INTELLISENSOR – SIMULATED RESISTANCE 2-STUD CONNECTION (DIESEL FUEL)		
P/N	Tank Depth	Ω Ohms
02700-01	6"	240-33.5
02700-02	6.5"	240-33.5
02700-03	7"	240-33.5
02700-04	7.5"	240-33.5
02700-05	8"	240-33.5
02700-06	8.5"	240-33.5
02700-07	9"	240-33.5
02700-08	9.5"	240-33.5
02700-09	10"	240-33.5
02700-10	10.5"	240-33.5
02700-11	11"	240-33.5
02700-12	11.5"	240-33.5
02700-13	12"	240-33.5
02700-14	12.5"	240-33.5
02700-15	13"	240-33.5
02700-16	13.5"	240-33.5
02700-17	14"	240-33.5
02700-18	14.5"	240-33.5
02700-19	15"	240-33.5
02700-20	15.5"	240-33.5
02700-21	16"	240-33.5
02700-22	16.5"	240-33.5
02700-23	17"	240-33.5
02700-24	17.5"	240-33.5
02700-25	18"	240-33.5
02700-26	18.5"	240-33.5
02700-27	19"	240-33.5
02700-28	19.5"	240-33.5
02700-29	20"	240-33.5
02700-30	20.5"	240-33.5
02700-31	21"	240-33.5
02700-32	21.5"	240-33.5
02700-33	22"	240-33.5
02700-34	22.5"	240-33.5
02700-35	23"	240-33.5
02700-36	23.5"	240-33.5
02700-37	24"	240-33.5
02700-38	24.5"	240-33.5
02700-39	25"	240-33.5
02700-40	25.5"	240-33.5
02700-41	26"	240-33.5
02700-42	26.5"	240-33.5
02700-43	27"	240-33.5
02700-44	27.5"	240-33.5

INTELLISENSOR – SIMULATED RESISTANCE 2-STUD CONNECTION (DIESEL FUEL)		
P/N	Tank Depth	Ω Ohms
02700-45	28"	240-33.5
02700-46	28.5"	240-33.5
02700-47	29"	240-33.5
02700-48	29.5"	240-33.5
02700-49	30"	240-33.5
02700-50	30.5"	240-33.5
02700-51	31"	240-33.5
02700-52	31.5"	240-33.5
02700-53	32"	240-33.5
02700-54	32.5"	240-33.5
02700-55	33"	240-33.5
02700-56	33.5"	240-33.5
02700-57	34"	240-33.5
02700-58	34.5"	240-33.5
02700-59	35"	240-33.5
02700-60	35.5"	240-33.5
02700-61	36"	240-33.5

### NOTES:

Mounting gasket and five #10-32 sealing screws included with sender.  
Ohms resistance range of 240-33.5 is a simulated resistance.

Tank depths are for reference only. Sender length (bottom of flange to bottom of sender) is .3" less than tank depth listed.



## PART NUMBERS:

### INTELLISENSOR – SIMULATED RESISTANCE 3 STUD W/SWITCH OUTPUT (DIESEL)

P/N	Tank Depth	Ω Ohms
02703-01	6"	240-33.5
02703-02	6.5"	240-33.5
02703-03	7"	240-33.5
02703-04	7.5"	240-33.5
02703-05	8"	240-33.5
02703-06	8.5"	240-33.5
02703-07	9"	240-33.5
02703-08	9.5"	240-33.5
02703-09	10"	240-33.5
02703-10	10.5"	240-33.5
02703-11	11"	240-33.5
02703-12	11.5"	240-33.5
02703-13	12"	240-33.5
02703-14	12.5"	240-33.5
02703-15	13"	240-33.5
02703-16	13.5"	240-33.5
02703-17	14"	240-33.5
02703-18	14.5"	240-33.5
02703-19	15"	240-33.5
02703-20	15.5"	240-33.5
02703-21	16"	240-33.5
02703-22	16.5"	240-33.5
02703-23	17"	240-33.5
02703-24	17.5"	240-33.5
02703-25	18"	240-33.5
02703-26	18.5"	240-33.5
02703-27	19"	240-33.5
02703-28	19.5"	240-33.5
02703-30	20.5"	240-33.5
02703-31	21"	240-33.5
02703-32	21.5"	240-33.5
02703-33	22"	240-33.5
02703-34	22.5"	240-33.5
02703-35	23"	240-33.5
02703-36	23.5"	240-33.5
02703-37	24"	240-33.5
02703-39	25"	240-33.5
02703-40	25.5"	240-33.5
02703-41	26"	240-33.5
02703-42	26.5"	240-33.5
02703-43	27"	240-33.5
02703-44	27.5"	240-33.5
02703-45	28"	240-33.5
02703-46	28.5"	240-33.5
02703-47	29"	240-33.5

### INTELLISENSOR – SIMULATED RESISTANCE 3 STUD W/SWITCH OUTPUT (DIESEL)

P/N	Tank Depth	Ω Ohms
02703-48	29.5"	240-33.5
02703-49	30"	240-33.5
02703-50	30.5"	240-33.5
02703-51	31"	240-33.5
02703-52	31.5"	240-33.5
02703-53	32"	240-33.5
02703-54	32.5"	240-33.5
02703-55	33"	240-33.5
02703-56	33.5"	240-33.5
02703-57	34"	240-33.5
02703-58	34.5"	240-33.5
02703-59	35"	240-33.5
02703-60	35.5"	240-33.5
02703-61	36"	240-33.5

#### NOTES:

Mounting gasket and five #10-32 sealing screws included with sender.

Ohms resistance range of 240-33.5 is a simulated resistance.

Tank depths are for reference only. Sender length (bottom of flange to bottom of sender) is .3" less than tank depth listed.

### INTELLISENSOR – SIMULATED RESISTANCE 2-LEAD WIRES (DIESEL FUEL)

P/N	Tank Depth	Ω Ohms
02704-01	6"	240-33.5
02704-02	6.5"	240-33.5
02704-03	7"	240-33.5
02704-04	7.5"	240-33.5
02704-05	8"	240-33.5
02704-06	8.5"	240-33.5
02704-07	9"	240-33.5
02704-08	9.5"	240-33.5
02704-09	10"	240-33.5
02704-10	10.5"	240-33.5
02704-11	11"	240-33.5
02704-12	11.5"	240-33.5
02704-13	12"	240-33.5
02704-14	12.5"	240-33.5
02704-15	13"	240-33.5
02704-16	13.5"	240-33.5
02704-17	14"	240-33.5
02704-18	14.5"	240-33.5
02704-19	15"	240-33.5
02704-20	15.5"	240-33.5

## PART NUMBERS:

INTELLISENSOR – SIMULATED RESISTANCE 2-LEAD WIRES (DIESEL FUEL)		
P/N	Tank Depth	Ω Ohms
02704-21	16"	240-33.5
02704-22	16.5"	240-33.5
02704-23	17"	240-33.5
02704-24	17.5"	240-33.5
02704-25	18"	240-33.5
02704-26	18.5"	240-33.5
02704-27	19"	240-33.5
02704-28	19.5"	240-33.5
02704-29	20"	240-33.5
02704-30	20.5"	240-33.5
02704-31	21"	240-33.5
02704-32	21.5"	240-33.5
02704-33	22"	240-33.5
02704-34	22.5"	240-33.5
02704-35	23"	240-33.5
02704-36	23.5"	240-33.5
02704-37	24"	240-33.5
02704-38	24.5"	240-33.5
02704-39	25"	240-33.5
02704-40	25.5"	240-33.5
02704-41	26"	240-33.5
02704-42	26.5"	240-33.5
02704-43	27"	240-33.5
02704-44	27.5"	240-33.5
02704-45	28"	240-33.5
02704-46	28.5"	240-33.5
02704-47	29"	240-33.5
02704-48	29.5"	240-33.5
02704-49	30"	240-33.5
02704-50	30.5"	240-33.5
02704-51	31"	240-33.5
02704-52	31.5"	240-33.5
02704-53	32"	240-33.5
02704-54	32.5"	240-33.5
02704-55	33"	240-33.5
02704-56	33.5"	240-33.5
02704-57	34"	240-33.5
02704-58	34.5"	240-33.5
02704-59	35"	240-33.5
02704-60	35.5"	240-33.5
02704-61	36"	240-33.5

### NOTES:

Mounting gasket and five #10-32 sealing screws included with sender.  
Ohms resistance range of 240-33.5 is a simulated resistance.  
Tank depths are for reference only. Sender length (bottom of flange to bottom of sender) is .3" less than tank depth listed.



INTELLISENSOR – SIMULATED RESISTANCE 2-LEAD WIRES (GASOLINE)		
P/N	Tank Depth	Ω Ohms
02705-06	6"	240-33.5
02705-07	7"	240-33.5
02705-08	8"	240-33.5
02705-09	9"	240-33.5
02705-10	10"	240-33.5
02705-11	11"	240-33.5
02705-12	12"	240-33.5
02705-13	13"	240-33.5
02705-14	14"	240-33.5
02705-15	15"	240-33.5
02705-16	16"	240-33.5
02705-17	17"	240-33.5
02705-18	18"	240-33.5
02705-19	19"	240-33.5
02705-20	20"	240-33.5
02705-21	21"	240-33.5
02705-22	22"	240-33.5
02705-23	23"	240-33.5
02705-24	24"	240-33.5

### NOTES:

Mounting gasket and five #10-32 sealing screws included with sender.  
Ohms resistance range of 240-33.5 is a simulated resistance.  
Tank depths are for reference only. Sender length (bottom of flange to bottom of sender) is .3" less than tank depth listed.

## PART NUMBERS:

### FUEL SENDER (FIXED)

P/N	Ground	Position	Terminal	$\Omega$ Ohms	Tank Depth
02300-16	Common	2	10-32 Stud	240-33.5	13.5"

### FUEL SENDER (HEAVY DUTY ADJUSTABLE)

P/N	Ground	Position	Terminal	$\Omega$ Ohms	Tank Depth
100436	Common	2&4	10-32 Stud	0-90	6-24"
100437	Common	2&4	10-32 Stud	76-10	6-24"
100438	Common	2&4	10-32 Stud	240-33.5	6-24"
102535	Common	1&3	10-32 Stud	240-33.5	6-24"
104739	Common	2&4	10-32 Stud	10-180	6-24"

#### NOTES:

Adjustable fuel sender flange positions are shown below. Positions 2 & 4 are for left & right configuration; 1 & 3 are for up & down. Fixed arm senders may be available for a custom solution.

For other options, consult with your maximatecc salesperson.

### FUEL SENDER (ISOLATED GROUND ADJUSTABLE)

P/N	Ground	Position	Terminal	$\Omega$ Ohms	Tank Depth
100969	Isolated	2&4	10-32 Stud	240-33.5	6-24"

#### NOTES:

Adjustable fuel sender flange positions are shown below. Positions 2 & 4 are for left & right configuration; 1 & 3 are for up & down. Fixed arm senders may be available for a custom solution.

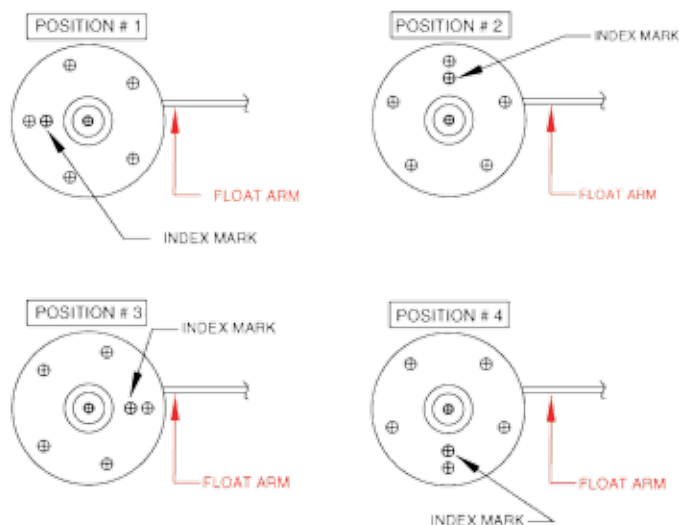
For other options, consult with your maximatecc salesperson.

02300-XX shown

100438 shown

## FUEL SENDER FLANGE POSITIONS 1, 2, 3 & 4:

### TOP VIEW: FUEL SENDER FLANGE





## PART NUMBERS:

TEMPERATURE SENDERS (LOW RANGE)					
P/N	Ground	Scale (F)	Terminal	Thread	Match
02017-00	Common	100-240	10-32 Stud	1/8"-27 NPTF	DAL
02018-00	Common	100-240	10-32 Stud	1/4"-18 NPTF	DAL
02019-00	Common	100-240	10-32 Stud	3/8"-18 NPTF	DAL
02020-00	Common	100-240	10-32 Stud	1/2"-14 NPTF	DAL
02037-00	Common	100-240	10-32 Stud	5/8"-18 UNF	DAL
107097	Common	100-240	10-32 Stud	3/4"-16 UNF	DAL
02088-00	Common	100-240	10-32 Stud	M14 x 1.5	DAL
02094-00	Common	100-240	10-32 Stud	M16 x 1.5	DAL
02062-00	Common	100-240	10-32 Stud	M18 x 1.5	DAL

NOTE: All straight threads require a sealing washer.



02020-00 shown

TEMPERATURE SENDERS (HIGH RANGE)					
P/N	Ground	Scale (F)	Terminal	Thread	Match (V)
02022-00	Common	100-280 & 140-320	10-32 Stud	1/8"-27 NPTF	DAH
02023-00	Common	100-280 & 140-320	10-32 Stud	1/4"-18 NPTF	DAH
02024-00	Common	100-280 & 140-320	10-32 Stud	3/8"-18 NPTF	DAH
02025-00	Common	100-280 & 140-320	10-32 Stud	1/2"-14 NPTF	DAH
02092-13	Common	100-280 & 140-320	10-32 Stud	1/2"-14 NPTF	AC2 (24)
02092-17	Common	100-280 & 140-320	10-32 Stud	9/16"-18 NPTF	AC2 (24)
02092-24	Common	100-280 & 140-320	10-32 Stud	1/4"-18 NPTF	AC2 (12)
02075-02	Common	100-280 & 140-320	10-32 Stud	3/8"-18 NPTF	AC2 (12)
02081-02	Common	100-280 & 140-320	10-32 Stud	3/8"-18 NPTF	AC2 (24)
02092-16	Common	100-280 & 140-320	10-32 Stud	1/2"-14 NPTF	AC2 (12)
107602	Common	100-280 & 140-320	10-32 Stud	9/16"-18 UNF	AC2 (24)
02092-10	Common	100-280 & 140-320	10-32 Stud	3/4"-16 UNF	AC2 (12)
02092-21	Common	100-280 & 140-320	10-32 Stud	5/8"-18 UNF	AC2 (12)
02089-00	Common	100-280 & 140-320	10-32 Stud	M14 x 1.5	DAH
02092-20	Common	100-280 & 140-320	10-32 Stud	M14 x 1.25	AC2 (12)
102438	Common	100-280 & 140-320	10-32 Stud	M14 x 1.25	DAH
02067-00	Common	100-280 & 140-320	10-32 Stud	M16 x 1.5	DAH
106394	Common	100-280 & 140-320	10-32 Stud	M16 x 1.5	AC2 (24)
02069-00	Common	100-280 & 140-320	10-32 Stud	M18 x 1.5	DAH
02092-09	Common	100-280 & 140-320	10-32 Stud	M18 x 1.5	AC2 (12)
109352	Common	100-280 & 140-320	10-32 Stud	M22 x 1.5	DAH

NOTE: All straight threads require a sealing washer.



02023-00 shown



02025-00 shown

TEMPERATURE SENDERS (EXTRA HIGH RANGE)					
P/N	Ground	Scale	Terminal	Thread	Match (V)
02092-51	Common	130-330 F	10-32 Stud	1/2"-14 NPTF	DAEH
100064	Common	130-330 F	10-32 Stud	9/16"-18 UNF	DAEH
106951	Common	150-350 F	10-32 Stud	1/8"-27 NPTF	ALWH
106953	Common	150-350 F	10-32 Stud	3/8"-18 NPTF	ALWH
106954	Common	150-350 F	10-32 Stud	1/2"-14 NPTF	ALWH

NOTE: All straight threads require a sealing washer.



02092-51 shown

## PART NUMBERS:



02505-00 shown

### OIL PRESSURE SENDERS (STANDARD DUTY)

P/N	Ground	Scale (PSI/bar)	Terminal	Thread	Ω Ohms
02502-00	Common	0-40 PSI	10-32 Stud	1/8"-27	240-33.5
02502-02	Common	0-40 PSI	10-32 Stud	1/8"-27	0-90
02504-00	Common	0-80 PSI/ 0-5 bar	10-32 Stud	1/8"-27	240-33.5
02504-02	Common	0-80 PSI/ 0-5 bar	10-32 Stud	1/8"-27	0-90
02505-00	Common	0-100 PSI/ 0-7 bar	10-32 Stud	1/8"-27	240-33.5
02505-04	Common	0-100 PSI/0-7 bar	10-32 Stud	1/8"-27	76-10
02506-00	Common	0-125 PSI	10-32 Stud	1/8"-27	240-33.5
02506-02	Common	0-125 PSI	10-32 Stud	1/8"-27	0-90
02507-00	Common	0-150 PSI/ 0-10 bar	10-32 Stud	1/8"-27	240-33.5
02510-02	Common	0-400 PSI	10-32 Stud	1/8"-27	0-90

NOTE: All straight threads require a sealing washer.



102225 shown

### OIL PRESSURE SENDERS (HEAVY DUTY)

P/N	Ground	Scale (PSI/bar)	Terminal	Thread	Ω Ohms
102224	Common	0-80 PSI/0-5 bar	10-32 Stud	1/8"-27	240-33.5
102225	Common	0-100 PSI/0-7 bar	10-32 Stud	1/8"-27	240-33.5
102226	Common	0-125 PSI	10-32 Stud	1/8"-27	240-33.5
102227	Common	0-150 PSI/ 0-10 bar	10-32 Stud	1/8"-27	240-33.5

NOTE: All straight threads require a sealing washer.



108497 shown

### OIL PRESSURE SENDERS (SEVERE DUTY)

P/N	Ground	Scale (PSI/bar)	Terminal	Thread	Ω Ohms
108496	Common	0-80 PSI/0-5 bar	10-32 Stud	1/8"-27	240-33.5
108497	Common	0-100 PSI/0-7 bar	10-32 Stud	1/8"-27	240-33.5
108882	Common	0-125 PSI	10-32 Stud	1/8"-27	240-33.5
109491	Common	0-150 PSI/0-10 bar	10-32 Stud	1/8"-27	240-33.5

NOTE: All straight threads require a sealing washer.

## PART NUMBERS:

SPEED SENSORS – MAGNETIC SENSORS (HEAVY DUTY)				
P/N	Connection	Thread	Length	Wire
118354	Deutsch	5/8" x 18 UNF	1.9"	4.5"
118353	Deutsch	5/8" x 18 UNF	1.9"	6.5"
71544-00	Lead wires (2)	5/8" x 18 UNF	1.9"	6.5"
72000-00	Amp terminals	5/8" x 18 UNF	1.9"	6.5"
110799	Packard	5/8" x 18 UNF	1.9"	7.2"
101493	Lead wires (2)	5/8" x 18 UNF	3.4"	24"
71545-00	Lead wires (2)	5/8" x 18 UNF	3.4"	5"
103617	Lead wires (2)	5/8" X 18 UNF	3.4"	5"
110800	Packard	5/8" x 18 UNF	3.4"	7.2"
71255-00	Lead wires (2)	3/4" x 16 UNF	1.9"	6.5"
110797	Packard	3/4" x 16 UNF	1.9"	7.2"
110798	Packard	3/4" x 16 UNF	3.4"	7.2"
71256-00	Lead wires (2)	3/4" x 16 UNF	3.4"	5"
102446	Lead wires (2)	3/4" x 16 UNF	1.9"	40"
110177	Lead wires (2)	3/4" X 16 UNF	1.9"	6.5"
112800	Packard	3/4 x 16" UNF	1.9"	5.5"
102447	Lead wires (2)	3/4" X 16 UNF	3.4"	20"
109195	Packard	3/4" x 16 UNF	3.4"	29.5"
107824	ITT Cannon	3/4" x 16 UNF	2.4"	5.5"
110239	Packard	M22 x 1.5	2.4"	5.5"
109046	Packard	13/16" x 20	3.4"	29.5"



71544-00 shown



71545-00 shown



71266-00 shown



71267-00 shown

SPEED SENSORS – PULSE GENERATORS (HEAVY DUTY)		
P/N	Thread/Size	Description/Configuration
71266-00	7/8" x 18 UNS	Pulse Generator, 60-pole
71267-00	7/8" x 18 UNS	Pulse Generator, 16-pole
102862	M22 x 1.5	Pulse Generator, 60-pole
71272-00	7/8" x 18 UNS	Pulse Generator, 16-pole

DRIVE TANGS (HEAVY DUTY)				
P/N	Tang Dimensions	Pulse Generator P/N	Pulse Gen. Thread	No. Poles
71274-00	.152" X 1.06"	71266-00	7/8" x 18 UNS	60
71275-00	.187" x 1.06"	71266-00	7/8" x 18 UNS	60
71276-00	.203" x 1.06"	71266-00	7/8" x 18 UNS	60
71550-01	.104" x 1.06"	71266-00	7/8" x 18 UNS	60
71268-00	.152" X 2.30"	71267-00	7/8" x 18 UNS	16
71269-00	.187" x 2.30"	71267-00	7/8" x 18 UNS	16
71270-00	.203" x 2.30"	71267-00	7/8" x 18 UNS	16
71889-01	.104" x 2.30"	71267-00	7/8" x 18 UNS	16



71275-00 shown



71269-00 shown



HDI DUAL AIR PRESSURE GAUGE. MECHANICAL TUBING KIT. VOLTAGE ADAPTOR. GAUGE LIGHT KIT. LOW LEVEL SWITCH. WARNING LIGHT CLUSTER

## GENUINE DATCON PRODUCTS — QUALITY YOU CAN TRUST

**Dual Air Pressure Gauges:** bold graphics and rugged mechanical gauge movements make these gauges ideal for trucks.

**Warning Light Clusters:** 4 warning light functions packed into the size of a standard 2-1/16" gauge.

**Hardware/Gasket Kits:** Wide range of kits for gauges, tachometers/speedometers, ammeters, hourmeters, light clusters & fuel senders.

**Hourmeter Accessories:** Vibration dampener & lead wires.

**Light Kits:** coverage for most Datcon gauges, tachometers and speedometers including legacy products.

**Mechanical Tube Kits:** 6' & 16' with connectors.

**Mounting Kits:** 2-hole panel kit and bezel overlay kit for 2-1/6" gauges and 2-1/6" tachometers.

**Shunts for Ammeters:** 100A, 150A, 200A & 300A models (100 mV applications only) for Datcon units.

**Switches:** 835 Series pressure switches. 8-amp: N/O, N/C & dual circuit; 5-amp: Dual circuit. Range includes 4, 15, 60 & 100 PSI.

**Terminal/Voltage Adaptors/Connectors:** Voltage Adaptor, European blade adaptor kit, tach & speedo interfaces, and 6-wire DDBI interface harness.

**Thread Adaptors:** 1/4", 1/2" & 3/8" for temp. senders.



## DUAL AIR PRESSURE GAUGES:

- Dual-scale 0-150 PSI gauges measure air pressure from two input sources
- Single hub, dual pointer design for easy readability; SAE symbol included
- Rugged design assures desired performance in high shock & vibration environments
- Available in both Heavy Duty Industrial (SAE polished and black bezel versions) and English-Metric (SAE black bezel)

DUAL PRESSURE — AIR (MECHANICAL)							
P/N	Style	Scale	Ø mm	Tube Kit	Bezel	Type*1	
100250	HD Industrial	0-150 PSI	52	07080-00	Black	Mech, Dual	
100251	HD Industrial	0-150 PSI	52	07080-00	Polished	Mech, Dual	
07253-00	English-Metric	0-150 PSI/0-1000 kPa	52	07080-00	Black	Mech, Dual	

### NOTES:

\*1 = Use tube kit P/N 07080-00.

All gauge kits above include gauge mounting hardware.

12V or 24V light kits sold separately, reference P/Ns 06215-00 (12VDC) and 06294-00 (24VDC). These single-lead light kits ground to the metal gauge case.

For panel kits and other options, please see other pages in this section of this catalog.

For matching speedometers, tachometers, gauges and general specifications, please see the Heavy Duty Industrial and English-Metric sections of this catalog.

*Current Datcon mechanical pressure gauges (except dual air pressure) are now produced by our Turotest business unit. They are functional replacements for the original Datcon line. While cosmetically and dimensionally similar, please note they are NOT identical. For further details, refer to the comparison overview located in the Technical Information section of this catalog.*



100250 shown



100251 shown



07253-00 shown

## WARNING LIGHT CLUSTERS:

- Light clusters are configured in a 4-in-one combination contained inside a standard sized 2-1/16" diameter gauge
- Symbols can be either SAE or ISO for either on- or off-highway use
- Consult with your maximatecc salesperson for OTHER light cluster options

WARNING LIGHT CLUSTERS		
P/N	Functions	Voltage
06800-80	Oil Pressure, Water Temperature, Fuel, Electrical Power	12
104782	Oil Pressure, Water Temperature, Battery, Glow-Plug	12
107100	High Beam, Turn Signal, Battery, Hazard	12

### NOTE:

See the DDBI and Instrument Clusters sections of this catalog for other indicator system options.



06800-80 shown

## PART NUMBERS:



06215-00 shown



06294-XX shown



71224-XX shown



210341 shown

### NOTES:

Use P/N 06215-00 (5/8" light kit) for 12-volt 2" gauges and P/N 06294-00 (5/8" light kit) for 24-volt 2" gauges.

For 2" tachometer replacement light kits, please consult with your maximatecc salesperson.

Use P/N 210341 & 210342 for new generation (Turotest-built mechanical pressure gauges.) These light kits are NOT compatible with the older-generation Datcon gauges.

Note that lamp filters, while changing dial color, will REDUCE brightness.

Wedge-base lamp assemblies are recommended for optimal sealing performance.

### HARDWARE/GASKET KITS

P/N	Description
02342-00	Fuel Sender Hardware Mounting Kit with 5-screws (Sealing # 10-32 x 15/32")
02343-02	Fuel Sender Gasket (Material: CK-NPRN with Staple)
02343-03	Fuel Sender Gasket (Material: CK-NPRN)
02343-04	Fuel Sender Gasket (Material: BUNA-N)
06282-08	Ammeter & Gauge Hardware (Wedge-base Lamp Configuration Excluded)
105309	Mini-Hourmeter Hardware, 2-hole
105665	Fuel Sender Hardware Mounting Kit with 5-screws (Sealing # 10-32 x 1")
56433-00	Hourmeter & Light Cluster Hardware
71208-00	Tachometer/Speedometer Gasket (Material: NPRN)
71281-00	Speedometer & Tachometer Hardware, Wedge-base Lamp Configuration
71281-01	Speedometer & Tachometer with Blades Hardware
112323	IntelliSensor Hardware Kit for 2 studs out (1.5" screws)
115505	IntelliSensor Hardware Kit for wires out (1.5" screws)
115556	IntelliSensor w/switch Hardware Kit for 3 studs out (1.5" screws)
118018	IntelliSensor Hardware Kit for wires out (1.25" screws)

### HOURLMETER ACCESSORIES (PROGRAMMABLE)

P/N	Description
41787-00	Hourmeter Vibration Dampener, 3-hole Flange
49730-00	Hourmeter Lead, 20" with 1/4" Female Terminal (2-required)

### LIGHTING PRODUCTS – (KITS/ACCESSORIES)

P/N	Description	Voltage	Candlepower
01072-00	Miniature Bayonet Lamp	14	1.0
06295-00	Miniature Bayonet Lamp	28	1.0
102125	Lamp Filter, Green	N/A	N/A
105359	Lamp Filter, Amber	N/A	N/A
56307-00	5/8" Lamp Socket	N/A	N/A
06215-00	5/8" Light Kit	12	1.0
06871-01	5/8" Light Kit, w/ Ring Terminal, 5" Lg	12	1.0
105857	5/8" Light Kit, w/ Terminal	12	1.0
105715	5/8" Light Kit, 2-Wire	12	2.0
06215-01	5/8" Light Kit	12	2.0
06294-00	5/8" Light Kit	24	1.0
06294-01	5/8" Light Kit	24	1.6
102078	5/8" Light Kit, w/ Terminal	24	1.6
71224-03	Wedge Base Light Kit	12	0.3
03123-00	Wedge Base Light Kit	12	1.0
71224-00	Wedge Base Light Kit	12	2.0
71224-04	Wedge Base Light Kit	24	0.3
71224-01	Wedge Base Light Kit	24	1.6
106683	.410" Light Kit, 2-Wire, 2.38" Lg	24	0.65
210341	Mechanical Gauge Light Kit (Turotest units)	12	1.0
210342	Mechanical Gauge Light Kit (Turotest units)	24	1.5

## PART NUMBERS:

### MECHANICAL TUBE KITS

P/N	Description
07079-00	Mechanical Gauge Tube Kit, 6', with Connectors
07080-00	Mechanical Gauge Tube Kit, 16', with Connectors



07079-00 shown

### MOUNTING PANELS/KITS — 2" INSTRUMENTS

P/N	Description
03357-00	2-hole, Black
06372-02	Bezel Overlay Kit



03357-00 shown

### SHUNTS FOR AMMETERS

P/N	Amperes
07598-00	100
07599-00	150
07600-00	200
07618-00	300

NOTE: Electrical connections and 2 mounting screws included.



07598-00 shown

### SWITCHES

P/N	Model	Setting (PSI)	Amps	Circuitry
100450	N/A	4	5	N.O./N.C. (Dual)
100451	N/A	15	5	N.O./N.C. (Dual)
100452	N/A	60	5	N.O./N.C. (Dual)
109747	835	4	8	N.C.
109748	835	15	8	N.O.
109749	835	15	8	N.C.
109755	835	15	8	N.O./N.C. (Dual)
109750	835	60	8	N.O.
109751	835	60	8	N.C.
109756	835	60	8	N.O./N.C. (Dual)
109753	835	100	8	N.C.

NOTE: 835 model pressure switches should not be used in applications exposed to extreme heat (200°F+). Units are not recommended for use with water or Freon. Compatibility of steel base and actuating media should be verified by user.



100450 shown

### TERMINAL/VOLTAGE ADAPTORS/CONNECTORS

P/N	Description	Function
06290-00	Voltage Adaptor Kit-Datcon Match Gauges	24 VDC to 12 VDC
104220	Terminal Adaptor Kit-European Blade Pattern	#6 Stud to 1/4"
06370-06	Molded Socket	Tachometer Interface
06370-07	Molded Socket	Speedometer Interface
115022	DDBI (Deutsch Connector) Harness	DDBI Gauge Interface

NOTE: Adaptors are not compatible with DDBI & Analog II instruments.



06290-00 shown

### NPT THREAD ADAPTORS — TEMPERATURE SENDERS

P/N	Description
102086	Temperature Sender 1/4", 3/8", & 1/2" NPT Adaptors Kit

## COMPARISON OVERVIEW — NEW VS. OLD DESIGNS:

### NEW MECHANICAL GAUGE FEATURES:

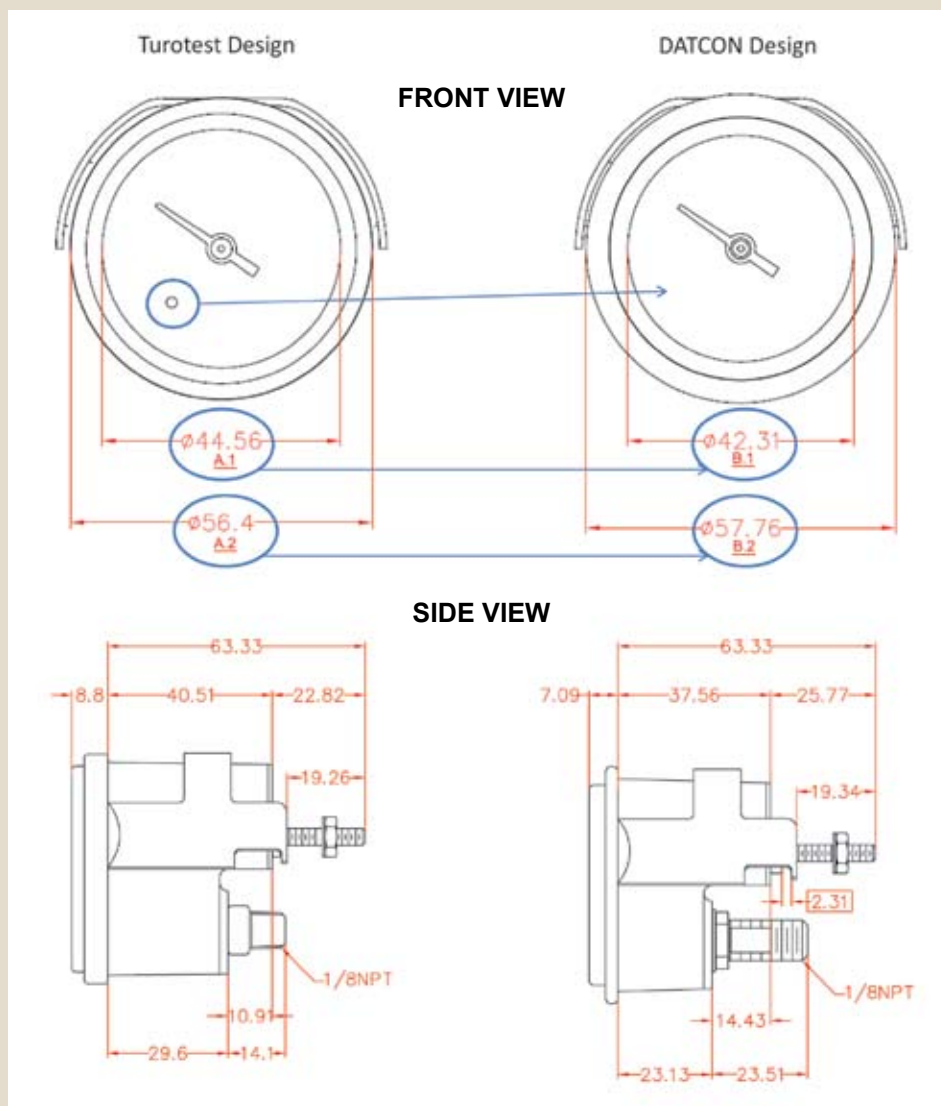
- **Robust Movement:** designed to work especially well in severe-duty applications (e.g. AG and CE), in line with the original Datcon value proposition
- **Improved Lighting:** high output push-in type light kits, available in 12 or 24V
- **Better Value:** High-Quality Construction and Competitive Pricing

### NEW CONSTRUCTION HIGHLIGHTS:

Current Datcon mechanical pressure gauges now produced by our Turotest business unit are functional replacements for the original Datcon line and while they are cosmetically and dimensionally similar, please note they are NOT identical.

- **Bezels and Faces:** similar to original units; new bezel diameters are slightly narrower and deeper than original Datcon units, pointers are larger
- **Protrusion Behind Panel:** new cases are slightly deeper than original units, but distance from rear contact surface of bezel to end of bracket studs remains the same at 63.33 mm (2.5")
- **Mounting Brackets:** somewhat different than the original Datcon units, but the original Datcon brackets are functionally interchangeable
- **Cases:** injection molded with similar materials and visual appearance to original Datcon units
- **Illumination:** dedicated light kits that are not interchangeable with other Datcon products

**Please refer to the drawings below.** (Evaluation prototypes sent to the field did not completely reflect production details.)





AGCO		
OEM P/N	Detailed Description	Datcon Replacement P/N
20187	GA,TEMP,WATER,826EM DAH12NEG5/8	06347-01
24914	VM,830EM 12NEG5/8	06351-01
25503	TACH-HM,124A30EM,00533-01067	71723-00
25504	LIGHT KIT,WGB,12,1CP	03123-00
34863	GA,PRESS,882EM DA12NEG5/8	06341-01
34884	HRMTR,876IB 12/24 ALTNTR	100224
35101	SDR,TEMP,DAH,M14X1.5,05	02089-00
35102	SDR,PRESS,100DA,1/8,EGND,#10ST	02505-00
6662802	GA,PRESS,881EM AC12NEG5/8	06910-01
71398110	GASKET,FUEL SDR,BUNA-N [837256]	02343-04
71407293	SDR,FUEL,INTELLISENSOR,VOUT,W/PACKARD CONN,30.5"TK	122425
71448091	SDR,FUEL,INTELLISENSOR,VOUT,W/PACKARD CONN,30.5"TK	122425
700705648	HRMTR,MINI,2-HOLE	102033
700724959	SDR,TEMP,DAH,M18X1.5,05	02069-00
0008022022	GA,FUEL,810EM DA12NEG5/8	06339-01
0008025025	SDR,FUEL,FXD,0136361200	02381-90
0700708877 or 2754246M1	SDR,PRESS,80DA,1/8,EGND,#10STU REV J	02504-00
1074335V91	GA,FUEL,810IP DA12NEG5/8	100177
1787610W91	SDR,PRESS,100AC,1/8,EGND,#10ST	02505-02
18171 or 6005262	SDR,TEMP,DAH,1/2NPTF 05	02025-00
189160M91	SDR,FUEL,FXD,0141990100	102181
189201M91	SDR,FUEL,FXD,0141990100	102185
24913 or 6634273	GA,FUEL,810EM DA12NEG5/8	06339-01
285296M1	SDR,FUEL,FXD,THKFLM,21.0DA2(RAW) WITH GASKET & SCR	02300-31C
3609798M1	SDR,FUEL,FXD,0109090399 (SPPR) REV. B	102182
3609841M1	SDR,FUEL,FXD,0113130399	102184
3609986M91	VM,830IP 12NEG5/8	100263
506902M92	GA,PRESS,M,OIL,384IP 5/8	102252
528418V92	AMM,864AB 40,5/8 12NEG	101353
530558M1	GA,PRESS,M,OIL,381IB 5/8	100186
71311647V	VM,830AB 12NEG5/8,COLOR CODED	101360
WR24911	SDR,FUEL,FXD,THK FLM,13.0DA2 (RAW)	02300-15
WR25503	TACH-HM,124A30EM,00533-01067	71723-00
WR30942	GA,TEMP,WATER,826CU DAH12NEG5/8 (NO LOGO)	106325
WR34884	HRMTR,876IB 12/24 ALTNTR	100224
WR35102	SDR,PRESS,100DA,1/8,EGND,#10ST	02505-00
-	SDR,TEMP,DAH,1/2NPTF 05	02025-00
-	SDR,PRESS,HD,100DA,1/8,#10STUD	102225
-	GA,TEMP,WATER,825IB DAL12NEG5/8	100683
-	GA,FUEL,810 0599011301 12NEG	06121-11

BLUE BIRD BUS		
OEM P/N	Detailed Description	Datcon Replacement P/N
1340777	SDR,PRESS,125AC,1/8,EGND,#10ST REV I	02506-02

BOBCAT COMPANY		
OEM P/N	Detailed Description	Datcon Replacement P/N
6634273	GA,FUEL,810EM DA12NEG5/8	06339-01
6664894	SDR,TEMP,DAL,1/8NPTF,05	02017-00
7011902	SDR,FUEL,ADJ,HD,DA2,THK FLM REV. D	100438P
-	SDR,FUEL,FXD,THK,FLM,20.5DA4	02301-30A
-	GASKET,FUEL SDR,CK-NPRN,W/STPL	02343-02

# OEM CROSS REFERENCE



## CATERPILLAR (CAT)

OEM P/N	Detailed Description	Datcon Replacement P/N	Alternative P/N
030-0201	SDR,FUEL,ADJ,HD,DA2,THK FLM, W/O HARDWARE	02350-00	
030-0461	SDR,PRESS,80DA,1/8,EGND,#10STU	02504-00	
030-2010	SDR,PRESS,80AC,1/8,EGND,#10STU	02504-02	
103-5825	GA,PRESS,M,DUAL,AIR,IB	100250	
104-5687	VM,830 9999999999 12NEG (CAT)	101546	101910
110-2783	HRMTR,MINI,2-HOLE	102033	
110-8468	TACH,127M30CU,06500 (CAT)	102377	103659
116-4684	GA,FUEL,810CU DA24NEG5/8 (CAT)	103235	101584
120-8970	TACH,27A35CU,00788 (CAT)	104571	100230
124-4266	TACH,127M35CU,06592 (CAT)	105372	103665
132-9689	TACH,27M35CU,07933 (CAT)	106662	103665
137-8745	SDR,FUEL,FXD,0520172199,PAL 6	107031	102535
141-2631	SDR,FUEL,FXD,HD,PAL 6	107371	102535
144-9420	SDR,FUEL,FXD,HD,PAL 6 REV. C	107383	100438
161-3932	HRMTR,DIGITAL,2" (Same as 120159 W/NEW LABEL)	121648	120491
171-027	TACH-HM,28A30CU,00533-01067	71784-51	108009
173-6519	SDR,PRESS,HD,100DA,1/8,PINNED	108497	
175-3088	TACH,DGTL,26CU,INTEGRAL CONNECTOR,LIGHTED	111073	111567
197-7347	TACH,DGTL,26CU,INTEGRAL CONNECTOR,LIGHTED	111073	111567
197-7348	TACH,DGTL,26CU,INTEGRAL CONNECTOR,NON-LIGHTED	111074	111567
197-8832	HRMTR,DIGITAL,2" (Same as 120159 W/NEW LABEL)	121357	120491
225-0282	TACH-HM,128M35CU,07583 (CAT)	112579	103686
225-0283	TACH-HM,128M35CU,06591 (CAT)	112580	103686
225-0284	TACH-HM,128M35CU,07933 (CAT)	112581	103686
230-5813	SDR,FUEL,FXD,HD,PAL 6,12" TK REV. B	115104	102535
285-9075	HRMTR,DIGITAL,9/32,6-DIGIT,2",CAT REV. D	120159	120491
2W-5111	AMM,866 9999999999 (CAT)	06864-19	100160
300-1302	HRMTR,DIGITAL,RECT,9/32,6-DIGIT,CAT	120160	120491
301-7293	KIT,DIGITAL HRMTR,RECT,301-7293,CAT (JEP) REV. B	121015	120492
361-7150	HRMTR,DIGITAL,9/32,6-DIGIT,2",CAT REV.A	122310	120491
361-7151	HRMTR,DIGITAL,RECT,9/32,6-DIGIT,CAT REV. A	122311	120492
362-0288	KIT,DIGITAL HRMTR,2",362-0288,CAT (JEP) REV. A	122313	120491
362-0289	KIT,DIGITAL HRMTR,RECT,362-0289,CAT (JEP) REV. B	122314	120492
366-0367	HRMTR,DIGITAL,2",CAT 366-0367 REV.A (RAW)	122501	120491
366-4622	KIT,DIGITAL HRMTR,2",366-4622,CAT (JEP) REV. B(RAW)	122504	120491
3E-5092	TACH,27M30CU,07800 (CAT)	72036-51	103659
3E-7128	SDR,FUEL,FXD,9914142499 REV. D	100459	100438
3E-7259	SDR,TEMP,DAEH,1/2NPTF,02	02092-51	
3E-7262	SDR,TEMP,DAEH,9/16-18,02	100064	
3E-7318	TACH-HM,24M30CU,03224-06500/12 (CAT)	101059	103680
3E-7391	TACH,127A35CU,00576 (CAT)	100070	100230
3E-8532	GA,FUEL,810 9999999999 12NEG (CAT)	100129	100176
4W-2620	GA,FUEL,810 9999999999 12NEG (CAT)	06865-66	100176
4W-6354	GA,FUEL,810 9999999999 12NEG (CAT)	06886-32	100678
6N-5926	SDR,TEMP,AC2(24),1/2NPTF,02	02092-13	
6R-5491	GA,FUEL,AC12NEG (TOWMOTOR)	101266	100677
7N-8532	SDR,TEMP,AC2(12),1/2NPTF,02	02092-16	
7R-9920	SDR,FUEL,FXD,17.5DA2 REV. D	106337	100438
7W-2061	GA,TEMP,823 9999999999 12NEG (CAT)	06972-97	100683
7W-2936	GA,PRESS,881 9999999999 12NEG (CAT)	06972-94	06340-01
7W-2937	GA,PRESS,881 9999999999 24NEG (CAT)	06972-95	06340-05
7W-9943	SDR,TEMP,AC2(12),3/4-16,02	02092-10	
8C-5469	TACH,127M30CU,05650 (CAT)	71767-88	103659

## CATERPILLAR (CAT)

OEM P/N	Detailed Description	Datcon Replacement P/N	Alternative P/N
8C-5471	TACH,127M27CU,06795 (CAT)	71767-89	103659
8C-9839	TACH,27L30CU,00750 (CAT)	100814	103660
8I-3814	SDR,FUEL,FXD,11.5DA2	106338	
8N-3844	SDR,TEMP,AC2(24),9/16-18,02	02092-17	
9W-1494	KIT,DIGITAL HRMTR,2",CAT REV.A	121012	120491
9X-0265	SDR,FUEL,FXD,0520152100 REV. C	107104	102535
9X-1124	SDR,PRESS,80DA,1/8,EGND,#10STU	02582-17	02504-00
9X-5627	SDR,FUEL,FXD,0509082100 REV. C	107103	102535

## CASE NEW HOLLAND (CNH)

OEM P/N	Detailed Description	Datcon Replacement P/N	Alternative P/N
103161A1	SDR,FUEL,FXD,9999991200 REV. D (SPPR)	100335	
139475	SDR,FUEL,FXD,THK FLM,18.5DA4	02301-26	
2394968	SDR,FUEL,ADJ,HD,DA2,THK FLM	100438	
251103	SDR,FUEL,FXD,THK FLM,10.0DA2	02300-09	
251109	SDR,FUEL,FXD,THK FLM,20.0DA2 SEE OPTION (C)	02300-29	
251119	SDR,FUEL,FXD,0102022200 REV. H (SPPR)	02476-32	
251127	SDR,FUEL,FXD,THK FLM,14.0DA2	02300-17	
251133	SDR,FUEL,FXD,THK FLM,11.0DA2	02300-11	
251134	SDR,FUEL,FXD,0132322200 REV. K	02380-17	
251152	SDR,FUEL,ADJ,HD,DA2,THK FLM,W/O HARDWARE REV. J	02350-00	
251209	SDR,FUEL,FXD,0136362200 (SPPR) REV. H	04045-76	
251221	SDR,FUEL,FXD,30.0DA2 REV. H	02300-44	
284431A1	SDR,FUEL,FXD,HD,0799127900 REV. F	107621	
326346A2	SDR,PRESS,HD,100DA,1/8,PINNED,CU	110707	102225
388053A2	LAMP,SUBMINTR,14V,.30CP,BRN	101102	
390546A1	SDR,FUEL,FXD,THK FLM, REV DATCON(RAW)	110796	
613631	SDR,TEMP,SW2,1/2NPTF,05 (RAW)	02055-03	
646628	SDR,FUEL,FXD,0132322200 REV. K	02380-17	
700706468	SDR,FUEL,FXD,0117172200 REV. H	02380-45	
700708219	SDR,TEMP,DAH,1/2NPTF 05	02025-00	
7118222	SDR,FUEL,FXD,HD,DA3,CU REV. E	107497	
827153C1	SDR,TEMP,DAL,1/8NPTF,05	02017-00	
87537695	GASKET,FUEL SDR,BUNA-N [837256]	02343-04	
939262R91	GA,TEMP,825UT DAL12NEG5/8(SUP BY 101891)	06104-01	101891
9801324	SDR,FUEL,FXD,24.0AC4 REV. J (SPPR)	02356-37	
9801326	GA,PRESS&TERM KIT,882CU 12NEG (NO LOGO)	07556-56	
9801330	GA,PRESS,882 9999010502 12NEG	07556-11	
A39804	GA,TEMP,WATER,825EM DAL12NEG5/8	06343-01	
BN2296754	GA,PRESS,OIL,882SAB,10,DA,5/8	103115	
BN2401945	SNSR,MAG,3/4-16X1.9,6.5"	71255-00	
D123592	LT CLST,1,12P,28,F,RYRNRNRN,A	06800-06	
D5NN10884B	SDR,TEMP,AC2(12),3/8NPTF,05	02075-02	
D9NN10951AA	HRMTR,871IB 12/24	100689	
H142794	GA,FUEL,810UT DA12NEG5/8(SUP BY 101897)	06101-01	101897
H437690	LT CLST,1,12P,28,U,RYRNRNRN,A	06800-74	
NX83121015	TACH,127M40IP,07200-09267	102074	
V35180	VM,830AP 12NEG5/8,COLOR CODED	101910	
-	SDR,TEMP,DAH,3/4-16UNF,W/O-RING	117614	
-	SDR,TEMP,DAL,M18X1.5,05	02062-00	
-	SDR,FUEL,FXD, THK FLM,08.5DA2 (SPPR)	02300-06	

# OEM CROSS REFERENCE



## CASE NEW HOLLAND (CNH)

OEM P/N	Detailed Description	Datcon Replacement P/N	Alternative P/N
—	SDR,PRESS,100DA,1/8,EGND,#10ST	02505-00	
—	SDR,PRESS,HD,125AC,1/8,#10STUD	103581	
—	GASKET,FUEL SDR,CK-NPRN,W/STPL	02343-02	
—	SDR,FUEL,FXD,0106060299 REV. C	105141	
—	PLUG,SERVICE,CIRCUIT ASSEMBLY,SKIDSTEER,CNH	119987	
—	KIT,REPLACE,GA & SDR,TEMP,DAL	106997	
—	GA,FUEL,810IB DA12NEG5/8	100176	
—	SNSR,TEMP,AC2(12),9/16-18,ISO,DEUTSCH	110173	

## CUMMINS

OEM P/N	Detailed Description	Datcon Replacement P/N	Alternative P/N
0155-056-00	SDR,PRESS,HD,80DAD,1/8,#10STUD	103574	
10000014	TACH-HM,24M40HDP,06000-1200012	103757	
10000015	VM,830IP 12NEG5/8,COLOR CODED(CUMMI	112797	101910
10000391	GA,TEMP,WATER,826S1.5IP,220,DAH(CUM	112801	110434
3015232	GA,PRESS,883 0328010105 24NEG	06430-00	06395-05
3015233	GA,TEMP,T OIL,828CU DAH24NEG5/8 (NO	06432-00	
3015234	GA,TEMP,WATER,823CU DAH24NEGNTL (NO	06431-00	101582
3015235	VM,831 0322010105 24NEG	06434-00	
3015236	HRMTR,776CU 4/40 (NO LOGO)	56478-00	100218
3015237	SDR,PRESS,125DA,1/8,EGND,#10ST,SEAL	02582-21	
3015238	SDR,TEMP,DAH,1/2NPTF,03,SEAL	02092-28	02025-00
3019795	TACH,27S30CU,00750-01500/24-32 (DAT	71040-00	103660
3031734	TACH,27M30CU,05150-08400 (DATCON)	71756-00	103659
3033527	GA,TEMP,M,WATER,326IB 096035/8	100202	
3033528	GA,PRESS,M,OIL,389IB 5/8	107009	
3035766	HRMTR,876CU 12/24 100K #8SCR (NO LO	56543-00	102162
3049555	TACH-HM,28M30CU,5150-8400/24 (DATCO	109557	102473
3625502	TACH,27A40EP,00711-01422	72294-00	100230
3625504	LIGHT KIT,5/8,24,1CP	06294-00	
3866218	SDR,PRESS,HD,100DAD,1/8,#10STU	103577	
3897170	SDR,PRESS,HD,100DA,1/8,#10STUD	102225	
90000095	SDR,PRESS,HD,125DA,1/8,PINNED(CUMMI	112803	108882
90000132	SDR,TEMP,DAH,1/2NPTF,03,SEAL(CUMMIN	112804	02025-00

## DAIMLER TRUCK NORTH AMERICA

OEM P/N	Detailed Description	Datcon Replacement P/N
1476110	SDR,TEMP,DAH,1/2NPTF,03	02090-13
61130700	GA, PRESS, M, DUAL, AIR, IB	100250
06-31264-000	SDR,PRESS,HD,150DA,1/8,PINNED	109491
61-200120	GA,FUEL,810 12 NEG	06339-13
61-200193	TACH-HM,124A40CU,00868	71768-17
61-200218	GA,PRESS,882 12 NEG	06341-11
61-200548	SNSR,MAG,3/4-16X2.4,W/CANNON	107824
61-270101	SDR,FUEL,FXD,0125250300	04045-40
DTC 02300 14	SDR,FUEL,FXD,THK FLM,12.5 DA2	02300-14
DTC 02301 33	SDR,FUEL,FXD,THK FLM,22.0DA4	02301-33
DTC 02505 00	SDR,PRESS,100DA,1/8,EGND,#10ST	02505-00
GAF 10981GX	SDR, TEMP, DAH, 1/2NPTF 05	02025-00



## DAIMLER TRUCK NORTH AMERICA

OEM P/N	Detailed Description	Datcon Replacement P/N
SW 100438	SDR,FUEL,ADJ,HD,DA2,THK FLM	100438P
-	SDR,FUEL,ADJ,HD,DA2,THK FLM	100438
-	SDR,FUEL,ADJ,HD,IN2	104743
-	SDR,PRESS,100DAD,1/8,EGND,#10S	02505-01
-	SDR,FUEL, ADJ,FO2 REV. E	04126-00

## INTERNATIONAL TRUCK

OEM P/N	Detailed Description	Datcon Replacement P/N
1680670C1	SDR,PRESS,HD,100DA,1/8,#10STUD	102225

## JOHN DEERE

OEM P/N	Detailed Description	Datcon Replacement P/N
811136400	HRMTR,871UT 12/24	56456-03
600008541	AMM,866EM 60,5/8	06354-01
600018086	HRMTR,876EM 12/24	56458-10
600035801	SDR,TEMP,DAH,1/2NPTF 05	02025-00
600036051	TACH-HM,128M30EM,04500-09000	71784-12
600036374	GASKET,FUEL SDR,CK-NPRN,W/STPL	02343-02
601303474	SNSR,MAG,3/4-16X1.9,6.5"	71255-00
6036564	VM,831EM 24NEG5/8	06352-01
AET10144	LT CLST,3,12P,28,U,RYNRYRN,B	06800-69
AMT1188	VM,830EM 12NEG5/8	06351-01
AT183857	SDR,FUEL,FXD,13.0DA2,HD,THK FLM	106185
AT188700	LIGHT KIT,5/8,12,1CP	06215-00
CB11485388	HDW,INTELLISENSOR,WIRES OUT	115505
F071209	SDR,FUEL,INTELLISENSOR,21"TK,VOUT,W/9" DEUTSCH	120495
F120280	SDR,TEMP,DAH,3/8NPTF,05	02024-00
F120282	SWITCH,PRESS,15PSI,DA CD	100451
F120516	GA,PRESS,882EM DA24NEG5/8	107071
F121019	HRMTR,MINI,W/BACKET	102035
F124135	SDR,PRESS,HD,80DA,1/8,PINNED	108496
-	TACH-HM,124A40HDB,00711-0142212	103684
-	TACH-HM,124A40HDP,00711-0142212	103755

## PACCAR TRUCK

OEM P/N	Detailed Description	Datcon Replacement P/N
100222	HRMTR,876IB 12/24, 4 DGT	100222
100689	HRMTR, 871 IB 12/24 REV C	100689
103757	TACH-HM,124M40HDP,06000-1200012	103757
02025-00	SDR,TEMP,DAH,1/2NPTF 05 REV H	02025-00
SW391	SDR,FUEL,ADJ,HD,DA2,THK FLM REV D	100438

## PREVOST CAR, INC.

OEM P/N	Detailed Description	Datcon Replacement P/N
561097	SDR,TEMP,DAH,1/2NPTF 05	02025-00
56-2213	GA,TEMP,828 9999990505 24NEG	07718-39
56-2213	GA,PRESS,M,AIR,389IB 5/8	100190
56-2377	GA,FUEL,810 9904030505 24NEG	102605

# OEM CROSS REFERENCE



## VOLVO PENTA OF THE AMERICAS

OEM P/N	Detailed Description	Datcon Replacement P/N
3852029	SDR,TEMP,DAL,1/2NPTF,05	02020-00
-	SDR,PRESS,HD,80DA,1/8,#10STUD	102224

## VOLVO CONSTRUCTION

OEM P/N	Detailed Description	Datcon Replacement P/N
36733	VM,830IB 12NEG5/8	100262
52881	SDR,TEMP,DAH,1/2NPTF 05	02025-00
57346	GA,PRESS,88X 9999019901 12NEG	07718-33
93894	VM,831CU 24NEG5/8 (NO LOGO)	108435
13275078	SDR,PRESS,HD,150DA,1/8,#10STUD REV. D	102227
20186607	HRMTR,876IB 12/24 ALTNTR	100224
20289138	SDR,PRESS,HD,80DA,1/8,#10STUD	102224
20289146	SDR,PRESS,HD,80DAD,1/8,#10STUD REV C	103574
43839299	SDR,TEMP,DADL,1/2NPTF,05.3	02032-00
43931971	SDR,FUEL,INTELLISENSOR,VOUT,W/DEUTSCH CONN	118124
46636684	INST,DDB,54ALBWB,100PSI(EM),OIL,J1939,12V	121549
46636692	INST,DDB,54ALBWB,100-280F(EM),TEMP,J1939,12V	121550
58943796	SDR,TEMP,DAH,M18X1.5,05	02069-00
59104000	LT CLST,3,12P,28,U,RYYRYRY,A	107508
59128991	GA-ECS,TEMP,823CU,250DAH12NEG (NO LOGO)	106075
59170001	SPDOM,51NO1MICU,01006-01131 (NO LOGO)	109012
59196931	SPDOM,51NX4VBCU,03067 (NO LOGO)	109742
59302554	SDR,TEMP,DAH,1/4NPTF,05	02023-00
59816728	GA,TEMP,WATER,826EM DAH12NEG5/8	06347-01
-	SDR,FUEL,FXD,30.0DA2 REV. H	02300-44
-	HDW,AMM&VM,NON-WGB,2 TERM,NLTG	06282-10

## VOLVO ROAD MACHINERY

OEM P/N	Detailed Description	Datcon Replacement P/N
RM19285584	SDR,TEMP,DAH,M16X1.5,05 Rev. K	02067-00
RM20258992	SDR,FUEL,ADJ,HD,DA2,THK FLM,W/O HARDWARE REV. J	02350-00
RM58913856	SDR,TEMP,DAH,1/8NPTF,05	02022-00
RM58943796	SDR,TEMP,DAH,M18X1.5,05	02069-00
RM59166942	SPDOM,51NX3VBCU,01006-0113 (NO LOGO)	109018
RM59371807	GA,TEMP,825 0199010501 12NEG	06972-30
RM59602987	SDR,TEMP,DAL,1/2NPTF,05	02020-00
RM59816728	GA,TEMP,WATER,826EM DAH12NEG5/8	06347-01
RM59816736	VM,830EM 12NEG5/8	06351-01
12962056	HDW,MTG KIT,5 SEALING SCREWS,#10-32X15/32"LG	02342-00
-	SDR,TEMP,DAH,1/2NPTF 05	02025-00

**Please Note:** Pricing and availability for service and legacy parts cross-referenced to OEM items is subject to change without notice. maximatecc will endeavor to supply these parts, but certain items could become obsolete due to component availability and/or low or no demand and we make no declarations as to their continued availability. Consult with maximatecc's customer service or sales team as required.



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On the preceding pages is OEM part number cross-reference information. More technical information will be available in future editions of this catalog.

The following information is available from our team and will be coming to this catalog soon!

- Application Guidelines
- Product Specifications
- Installation and Troubleshooting Help
- Dimensions and Mounting Details
- Wiring Configurations
- And Much More!

