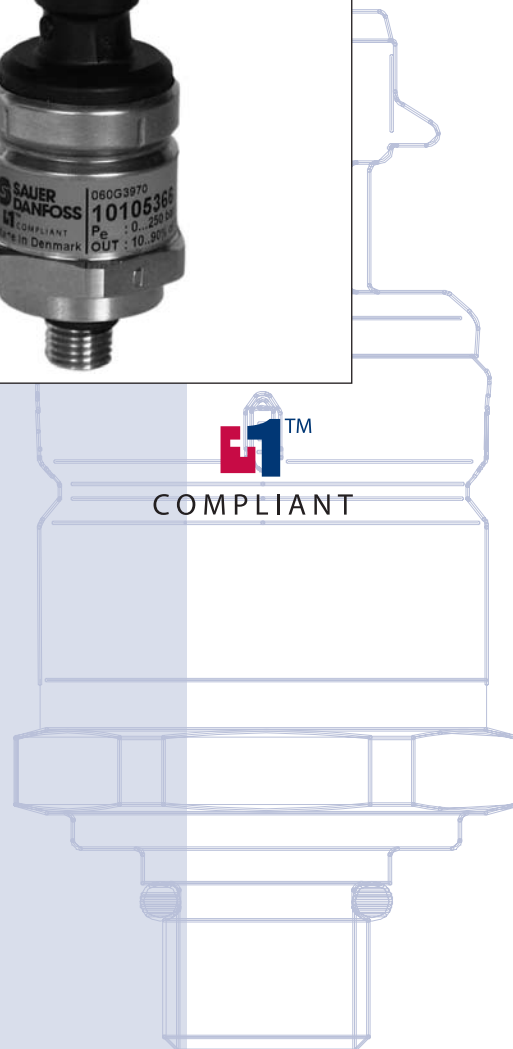




# Heavy-Duty Pressure Transmitter

## Product Electrical Installation

### Tech Note



COMPLIANT



# Heavy-Duty Pressure Transmitter

## Product Electrical Installation Tech Note

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**LITERATURE REFERENCES** Refer to *Heavy-Duty Pressure Transmitter Data Sheet 520L0801* for complete product electrical and mechanical specifications.

Refer to *Heavy-Duty Pressure Transmitter Compliant Function Block User's Guide 11007103* for compliant function block set-up information.

Technical literature is available at: [www.sauer-danfoss.com](http://www.sauer-danfoss.com)

#### Revision history

Revision date	Page	Change	Remarks
02/28/2006			Initial
05/22/2006		Content change on various pages	Rev-A

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Front cover illustrations: 2382,2389

**PRODUCT IMAGE**



**PART NUMBERS**

*Pressure transmitter ranges/part numbers*

Pressure transmitter range	Packard® connector part number	AMP® connector part number
0 to 2.5 bar (36 psi)	10105363	162U9901
0 to 40 bar (580 psi)	10105364	162U9902
0 to 160 bar (2320 psi)	10105365	162U9903
0 to 250 bar (3626 psi)	10105366	162U9904
0 to 400 bar (5800 psi)	10105367	162U9905
0 to 500 bar (7250 psi)	10105368	162U9906
0 to 600 bar (8700 psi)	10105369	162U9907

**DESCRIPTION/THEORY OF OPERATION**

Sauer-Danfoss Heavy-Duty Pressure Transmitters convert measured pressure into a linear, temperature-compensated, output signal with a range of 10% to 90% of transmitter supply voltage. The *PLUS+1™ GUIDE pressure transmitter compliant function block* requires that transmitter supply voltage be 5 Vdc regulated sensor power provided by a PLUS+1 control device.

A unique *PLUS+1 GUIDE pressure transmitter compliant function block* template is available for each transmitter range.

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Be sure that the *PLUS+1 GUIDE compliant function block* template being used is appropriate for the range of the pressure transmitter installed in the system.

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**ELECTRICAL  
 SPECIFICATIONS**

*Pressure transmitter electrical specifications*

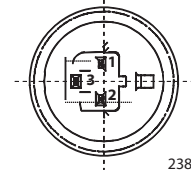
<b>Nominal output signal</b>	10 to 90% of Vs
<b>Supply voltage (Vs) (polarity protected)</b>	4.75 to 8 Vdc 5 Vdc (nominal)
<b>Power consumption</b>	< 5 mA at 5 Vdc
<b>Output impedance</b>	< 25Ω
<b>Load resistance</b>	$R_L > 5 \text{ k}\Omega$ at 5 Vdc
<b>Accuracy (at reference conditions)</b>	± 0.3% of full-scale (typical) ± 1% of full-scale (maximum)
<b>Non-linearity (best fit straight line)</b>	< ± 0.2% of full-scale
<b>Hysteresis and repeatability</b>	≤ ± 0.1% of full-scale
<b>Thermal zero point shift</b>	≤ ± 0.1% of full-scale/10k (typical) ≤ ± 0.2% of full-scale/10k (maximum)
<b>Thermal sensitivity (span) shift</b>	≤ ± 0.1% of full-scale/10k (typical) ≤ ± 0.2% of full-scale/10k (maximum)
<b>Response time (liquids)</b>	< 4 ms
<b>Response time (air and gases)</b>	< 35 ms

**PINOUT**

*Pressure transmitter pinout*

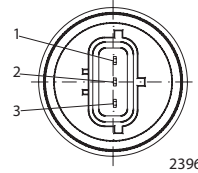
Pin	Description
Pin 1	5 Vdc Power supply +
Pin 2	Ground
Pin 3	Signal output

*Packard connector*



2381

*AMP connector*



2396

**PIN COMPATIBILITY**

*PLUS+1 module pin type/pressure transmitter pin compatibility*

PLUS+1 module pin type	Acceptable use: device pin number
Sensor power +	1
Sensor power -	2
AIN/CAN0 shield	3
AIN/CAN1 shield	3
DIN/AIN	3
DIN/AIN/FreqIN	3
AIN/Temp/Rheo	3

**MATING CONNECTOR**

*Pressure transmitter mating connector parts list*

Packard connector	Quantity	Ordering information
Connector	1	Packard Metri-Pack™ 12078090
Terminal (16 to 18 gauge)	3	Packard Metri-Pack 150 Series
Sauer-Danfoss mating connector kit	1	10105567
AMP connector	Quantity	Ordering information
Male plug	1	AMP, 173065
Sauer-Danfoss mating connector kit	-	Not available



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Transit mixer drives  
Planetary compact gears  
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