



Electrical Installation

Sensors

Heavy-Duty Pressure Transmitter



Revision history*Table of revisions*

Date	Changed	Rev
August 2015	Converted to Danfoss layout	BA
May 2006	Minor revision	AB
February 2006	First edition	AA

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Literature references**H-D pressure transmitter literature references**

Literature title	Description	Literature number
<i>Heavy-Duty Pressure Transmitter Data Sheet</i>	Complete product electrical and mechanical specifications	520L0801
<i>Heavy-Duty Pressure Transmitter Compliant Function Block User's Guide</i>	Compliant function block set-up information	11007103

Latest version of technical literature

Danfoss product literature is online at: <http://powersolutions.danfoss.com/literature/>

Electrical Installation H-D Pressure Transmitter

Product overview
Product image
H-D pressure transmitter

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

Product overview
Theory of operation

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[®] Compliant pressure transmitter function block requires that transmitter supply voltage be 5 Vdc regulated sensor power provided by a PLUS+1[®] Compliant control device.

A unique PLUS+1[®] Compliant pressure transmitter function block template is available for each transmitter range.

Be sure that the PLUS+1[®] Compliant function block template being used is appropriate for the range of the pressure transmitter installed in the system.

Electrical specifications
Pressure transmitter electrical specifications

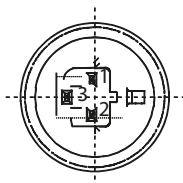
Nominal output signal	10 to 90% of Vs
Supply voltage (Vs) (polarity protected)	4.75 to 8 Vdc 5 Vdc (nominal)
Power consumption	< 5 mA at 5 Vdc
Output impedance	< 25Ω
Load resistance	RL > 5 kΩ at 5 Vdc
Accuracy (at reference conditions)	± 0.3% of full-scale (typical) ± 1% of full-scale (maximum)
Non-linearity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

Electrical Installation H-D Pressure Transmitter

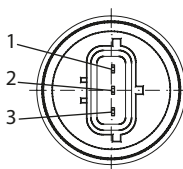
Electrical installation

Pinout

Packard connector



AMP connector



Pressure transmitter pinout

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

Pin compatibility

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

Pin	Function
1	Sensor power +
2	Sensor power -
3	AIN/CAN0 shield
3	AIN/CAN1 shield
3	DIN/AIN
3	DIN/AIN/FreqIN
3	AIN/Temp/Rheo

Mating connector

Packard connector parts list

Description	Quantity	Ordering number
Connector	1	Packard Metri-Pack 12078090
Terminal (16 to 18 gauge)	3	Packard Metri-Pack 150 Series
Mating connector kit	1	Danfoss 10105567

Electrical Installation H-D Pressure Transmitter

Electrical installation*AMP connector parts list*

Description	Quantity	Ordering number
Male plug Connector	1	AMP 173065
Mating connector kit	— —	Not available



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