

DUAL HIGH TEMPERATURE PRESSURE TRANSDUCER

Model 7790

Designed for the tough challenges and environmental rigors of space propulsion and aviation pressure testing.

- High Vibration Environments
- Extreme or Harsh Environments
- Manifolds, Propulsion Systems
- Military and Defense Applications

FEATURES:

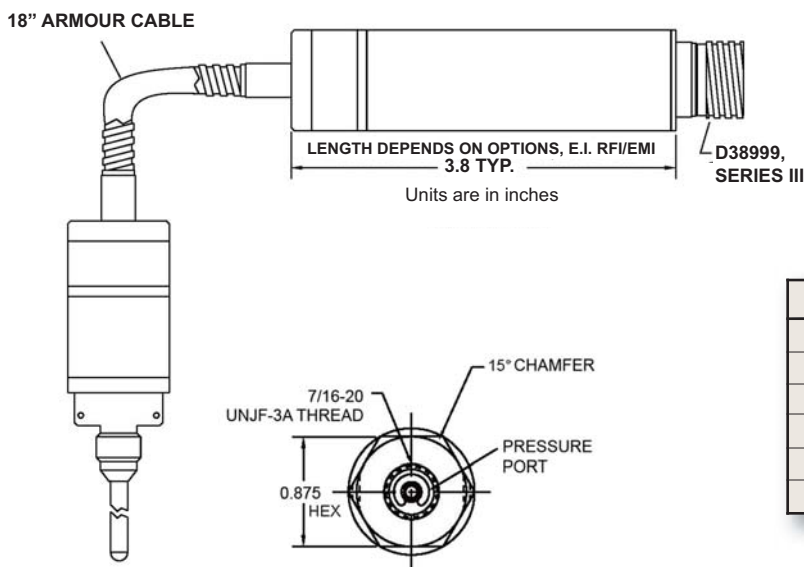
- High accuracy, 0.3% RSS standard (0.1% available) pressure
- High accuracy, 3% FSO standard (1% available) temperature
- +70°F to +400°F standard medium
- Lightweight, 8 ounces
- Hydrogen and LOX compatibility
- Custom probe lengths, 1.55" standard
- Designed to meet vibration and shock per MIL-STD-810
- 2 second time response for temperature, 0.5 sec optional
- 100 ohm platinum RTD standard



All GP:50 Aerospace pressure transducers are manufactured and tested to the following MIL-STD and MIL-Spec standards to insure the highest quality assurance:

- NIST Traceability and Calibration..... MIL-STD-45662A
- Workmanship J-001 / NASA 8739.3 standards
- Quality System ISO 9001:2000

Designed to: MIL-STD-810C&E
 MIL-STD-461/462D&E



	4-20 mA PIN OUT	Vdc PIN OUT
A	+ EXC./SIGNAL OUT	+ EXC.
B	NC	+SIGNAL OUT
C	NC	-SIGNAL OUT
D	- EXC./SIGNAL OUT	- EXC.
E	SHUNT OPTION	SHUNT OPTION
F	SHUNT OPTION	SHUNT OPTION

GP:50 reserves the right to make product improvements and amendments to the product specifications stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.

A5SL-7790.00 Rev A



Specifications reflect standard product, improved performance/mechanical options available. Modifications may alter specs, consult factory for more information.

Ranges	15 thru 15,000 PSIA, PSIG or PSISG options
FS Output at Rated Pressure	0-5 Vdc / 4-20 dcmA / Isolated options
Temperature Sensor	100 Ohm 2 wire platinum RTD standard, 1000 Ohm 2 wire platinum RTD optional
Excitation or Input Voltage Reverse Polarity Protected	18 to 36 Vdc
Non-Repeatability	<0.1% FSO
Non-Linearity	<0.2% FSO
Hysteresis	<0.2% FSO
Static Accuracy RSS (pressure)	<0.3% FSO RSS, 0.1% optional
Static Accuracy (temperature)	3% FSO, 1% optional
Pressure Medium (Wetted Materials)	316SS (Inconel, Hastelloy, Monel optional)
Operating/Environmental Temperature	+70°F to +400°F / +20°C to +200°C
Weight	8 oz. (approx.)
Electrical Connector	MIL PTIH-10-6P, D38999 series III optional
Response Time	Under 4 ms pressure, 2 seconds for temperature (0.5 sec optional)
Meets MIL-STD-461/462 EMI/RFI	Some options will affect EMI/RFI rating
Flex Tubing	18" Armored Capillary Tube

ORDERING GUIDE:

Some options will affect dimensions, consult factory if important.
 Use the following codes to identify desired item.

MODEL	OUTPUT	RANGE	PRESSURE TYPE	OPTIONS
●	-	●	-	●

Example: 7790-2-RH-G-CA/FD/GH

OUTPUT

2	0-5 Vdc 4 wire hookup
3	4-20 dcmA
4	0-5 Vdc Isolated
5	0-10 Vdc 4 wire hookup
6	0-10 Vdc Isolated
9	0-5 Vdc 3 wire hookup
10	0-10 Vdc 3 wire hookup

RANGE (PSI)

PP	0-15	RK	0-750
PR	0-20	RM	0-1000
PO	0-25	RO	0-1500
PV	0-50	RR	0-2000
PZ	0-100	RT	0-3,000
RB	0-150	RV	0-5,000
RD	0-200	RX	0-7,500
RF	0-300	RZ	0-10,000
RH	0-500	SB	0-15,000

Contact factory for non-standard pressure ranges

PRESSURE TYPE

A	Sealed Absolute, ref to vacuum
G	Gauge, ref to atmosphere
SG	Sealed Gauge, ref to 14.7 psia

OPTIONS

CONNECTORS

CA	PTIH-10-6P Bendix
CI	D38999/27YB98N
DB	D38999/27YA35PN

PORTS

FA	MS33649-4, 7/16-20 (F)
FD	MS33656-4, 7/16-20 (M)

MISC:

D	Improved Accuracy to 0.1% Pressure, and 1% Temperature
GB	Alternate Full Scale Outputs
GH	100% Internal Shunt
GK	Inconel Pressure Cavity
GL	Cleaning for oxygen service
GP	Hastelloy Pressure Cavity
GU	Monel Pressure Cavity
JB	1000 ohm 2 wire RTD
ME	Shunt Cal, 80% Internal
QV	Improved response time to 0.5 seconds

FLEX TUBING:

GT	30" Armored Capillary Tube
HS	9" Armored Capillary Tube
HV	24" Armored Capillary Tube
HY	12" Armored Capillary Tube
MT	Non-standard Armored Capillary Tube (50" max)