

PRESSURE TRANSDUCERS

BULLETIN DB-742R
PART #K796421

Model 742R Pressure Transducer

FEATURES

- ◆ 742R approved to MIL-T-24742 (SH)
- ◆ Non-interacting zero and span adjustments for quick calibration
- ◆ Pressure connections conform to MS16142
- ◆ Light weight, only 15 oz. (0.43 kg)

DESCRIPTION

The 742R Pressure Transducer has been specially designed to meet the needs of military and/or marine applications and conforms to military specification MIL-T-24742 (SH). The 742R accurately measures differential pressures and transmits a fully adjustable 4 to 20 mA or 0-5 VDC output signal for remote display, recording, or control.

The 742R is available in gauge, compound, vacuum and absolute ranges from 30"Hg vacuum to 0-10,000 psi.

DIRECT REPLACEABILITY:

The 742R transducer is directly interchangeable with existing pressure transducers designed to MIL-T-24742 (SH). The mounting is designed to match the footprint of existing transducers for quick and easy installation.

MINIMAL MAINTENANCE:

Calibration is quick and easy with the non-interacting zero and span adjustments.



**DESIGNED FOR DEPENDABLE PRESSURE
SERVICE IN MARINE AND MILITARY APPLICATIONS**

SPECIFICATIONS

FUNCTIONAL SPECIFICATIONS:
in accordance with MIL-T-24742 (SH)

APPLICATIONS: steam, sea water, flue gas, ammonia, oxygen, fresh water, condensate, nitrogen, inert gases and liquid hydrocarbons

OUTPUT: 4-20 mADC, 0-5 VDC

POWER SUPPLY: 28 VDC $\pm$ 4.5 VDC with reverse polarity protection

LOOP RESISTANCE: 0 to 250 ohms

ZERO/SPAN ADJUSTMENTS: $\pm$ 5% full scale output

TEMPERATURE LIMITS: Compensated: 0°C to 65°C (32°F to 149°F)

OVERPRESSURE: 200% of range up to maximum of 15,000 (whichever is less)

HUMIDITY: 0 to 100% RH

WEIGHT: 15 oz. (0.43 kg)

PERFORMANCE SPECIFICATIONS

ACCURACY: $\pm$ 1.0% of calibrated span including linearity, hysteresis, and temperature effects

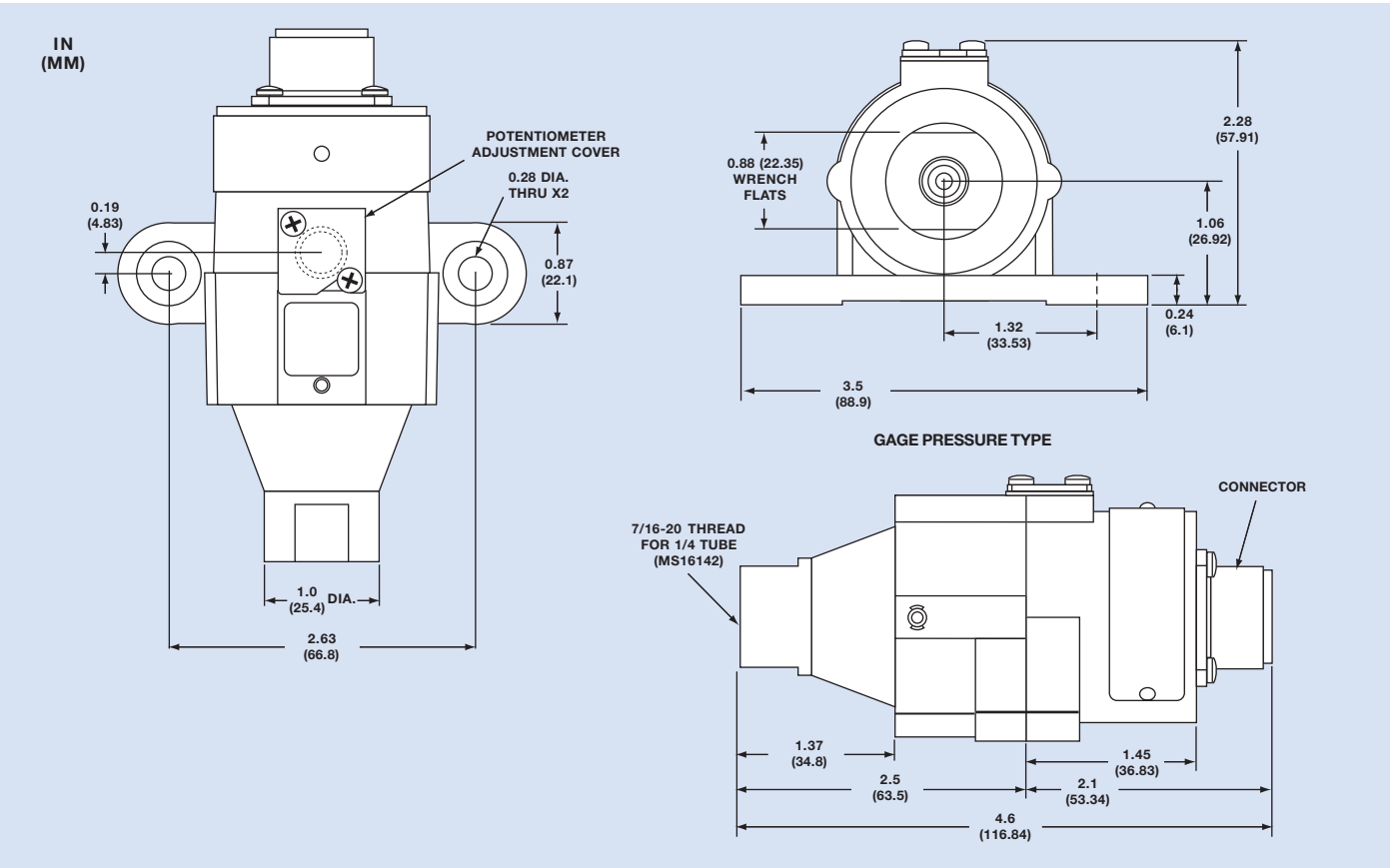
REPEATABILITY: within 0.5% of span

SHOCK TEST: in accordance with Grade-A, Class I, Type C of MIL-S-901

EMI: in accordance with test methods of MIL-STD-462 per MIL-T-24742

Model 742R Pressure Transducer

DIMENSIONS



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

AMETEK 742R F 0015 D X D A								RANGE		
MIL SPEC M24742R F 31 D X DC A								PRESSURE	AMETEK	MIL SPEC 1.2.1.3
TYPE								TYPE 742R		
								0-15 PSI	0015	31
								0-30 PSI	0030	32
								0-60 PSI	0060	33
								0-100 PSI	0100	34
								0-200 PSI	0200	35
								0-300 PSI	0300	36
								0-600 PSI	0600	37
								0-1000 PSI	1000	38
								0-1500 PSI	1500	39
								0-3000 PSI	3000	41
								0-6000 PSI	6000	42
								0-10000 PSI	010K	43
								NON-STD	XXXX	UNSPECIFIED**
								TYPE 742C		
								30" HG 0-15 PSI	0015	51
								30" HG 0-30 PSI	0030	52
								30" HG 0-100 PSI	0100	53
								30" HG 0-150 PSI	0150	54
								30" HG 0-300 PSI	0300	55
								30" HG 0-600 PSI	0600	56
								NON-STD	XXXX	UNSPECIFIED**
								TYPE 742V		
								30" HG VAC	0030	61
								NON-STD	XXXX	UNSPECIFIED**
								TYPE 742R		
								0-10" WC	0010	71
								0-60" WC	0060	72
								0-150" WC	0150	73
								0-300" WC	0300	74
								NON-STD	XXXX	UNSPECIFIED**

CONNECTOR

MS3452W14S-5P	BLANK
MS3456W14S-5S	
MS3452L14S-5P	L
MS3456L14S-5S	
MS3452LS14S-5P	LS
MS3456LS14S-5S	

OUTPUT

AMETEK	MIL SPEC 1.2.1.6	TYPE
A	A	MA
V*	V*	V*

* Optional: Consult factory for availability

INPUT POWER

AMETEK	MIL SPEC 1.2.1.5
D	DC

TYPE

AMETEK	MIL SPEC 1.2.1.1
742D	M24742D
742V	M24742V
742C	M24742C

APPLICATION

SENSOR MATERIAL	AMETEK	MIL SPEC 1.2.1.2
CRES	F	F
NI CU	M	S
CRES	C	G
NI CU	O	O
CRES	C	H

DESIGNATOR

AMETEK	MIL SPEC 1.2.1.3	UNITS
A	A	in Hg VAC
B	B	PSIA
D	D	PSIG
E	E	PSIS
F	F	WC