



Pressure Transmitter Type AKS 33

Introduction

Pressure transmitter type AKS 33 measures a pressure and converts the measured value to a standard 4 → 20 mA signal.

A robust design makes the AKS very suitable for application within a number of fields e.g.

- Air conditioning systems
- Refrigeration plant
- Process control
- Laboratories


Features

- 1/4" male NPT connection
- DIN connector
- Stainless steel body and material in contact with medium
- Suitable for all refrigerants, including ammonia
- UL recognized for Class I, Group A, B, C, and D, Division 2
- Built-in voltage stabilizer for varying voltage supply
- Setting is maintained independent of variations in ambient temperature and atmospheric pressure. This is very important when ensuring evaporating pressure control in air conditioning and refrigeration applications.
- Polarity protected inputs.

Technical data
Performance

Accuracy (3 σ)	$\pm 0.3\%$ FS (typ.)/ $\pm 0.8\%$ FS (max.)
Non-linearity (Best fit straight line)	$< \pm 0.2\%$ FS
Hysteresis and repeatability	$\leq \pm 0.1\%$ FS
Thermal zero point shift	$\leq \pm 0.1\%$ FS/10K (typ.) $\leq \pm 0.2\%$ FS/10K (max.)
Thermal sensitivity (span) shift	$\leq \pm 0.1\%$ FS/10K (typ.) $\leq \pm 0.2\%$ FS/10K (max.)
Response time	< 4 ms
Overload pressure (static)	600 psi
Burst pressure	> 4350 psi

Electrical specifications for 4 - 20 mA output signal

Nom. output signal (short-circuit protected)	4 to 20 mA
Supply voltage	10 to 30 V d.c.
Supply voltage dependency	$< 0.05\%$ FS/10 V
Current limitation (linear output signal up to 1.5 \times rated range)	28 mA
Max. load, R_L	$R_L \leq \frac{V_{\text{supply}} - 10 \text{ V}}{0.02 \text{ A}}$ [Ω]

Environmental conditions

Operating temperature range	-40 to 185°F
Transport temperature range	-58 to 185°F
EMC - Emission	EN 61000-6-3
Insulation resistance	$> 100 \text{ M}\Omega$ at 500 V d.c.
Mains frequency test	500 V, 50 Hz SEN 361503
Vibration stability	Sinusoidal 20 g, 25 Hz - 2 kHz IEC 68-2-6
	Random 7,5 g _{rms} , 5 Hz - 1 kHz IEC 68-2-34, IEC 68-2-36
Shock resistance	Shock 500 g / 1 ms IEC 68-2-27
	Free fall IEC 68-2-32
Enclosure	Plug version IP 65 - IEC 529

Approvals

UL recognized for sale in the USA and Canada	File no. E310 24
CSA certified for sale in Canada	File no. 027339_0_000

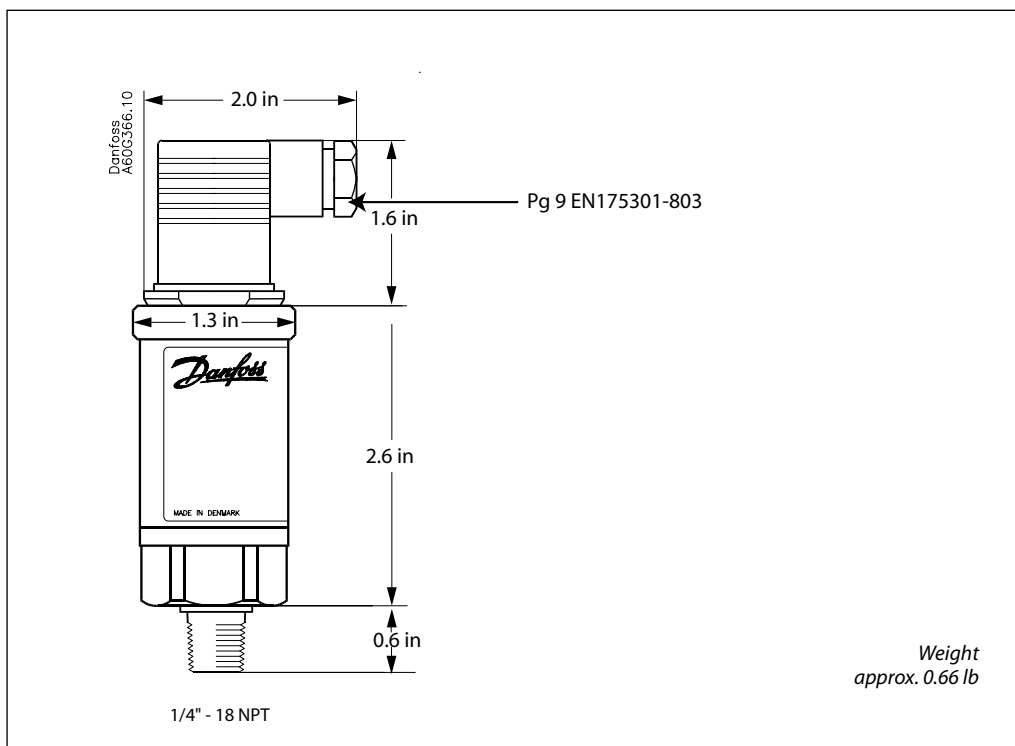
Mechanical characteristics

Housing material and material in contact with medium	DIN 17440-1.4404 (AISI 316L)
Weight	0.66 lb

Ordering

Type	Pressure Range	Output Signal	Code No.
AKS 33	0 to 100 psia	4 to 20 mA	060G3802
AKS 33	0 to 200 psia	4 to 20 mA	060G1711
AKS 33	0 to 500 psig	4 to 20 mA	060G1712

Dimensions and weights



Electrical connections

