



# **Pressure Transmitter** Type AKS 33



#### **Technical leaflet**

### Pressure transmitters, type AKS 33

#### Introduction

Pressure transmitter type AKS 33 measures a pressure and converts the measured valve to a standard  $4 \rightarrow 20$  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



- ¼" 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)	±0.3% FS (typ.)/±0.8% FS (max.)
Non-linearity (Best fit straight line)	< ±0.2% FS
Hysteresis and repeatability	≤ ±0.1% FS
Thermal zero point shift	≤ ±0.1% FS/10K (typ.) ≤ ±0.2 %FS/10K (max.)
Thermal sensitivity (span) shift	≤ ±0.1% FS/10K (typ.) ≤ ±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 × rated range)	28 mA
Max. load, R∟	$R_L \le \frac{V_{supply} - 10 V}{0.02 A} [\Omega]$

#### **Environmental conditions**

Operating temperature range	ge		−40 to 185°F
Transport temperature rang	je		−58 to 185°F
EMC - Emission			EN 61000-6-3
Insulation resistance			$>$ 100 M $\Omega$ at 500 V d.c.
Mains frequency test 50		500 V, 50 Hz	SEN 361503
Vibration stability	Sinusoidal	20 g, 25 Hz - 2 kHz	IEC 68-2-6
	Random	7,5 g <sub>rms</sub> , 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

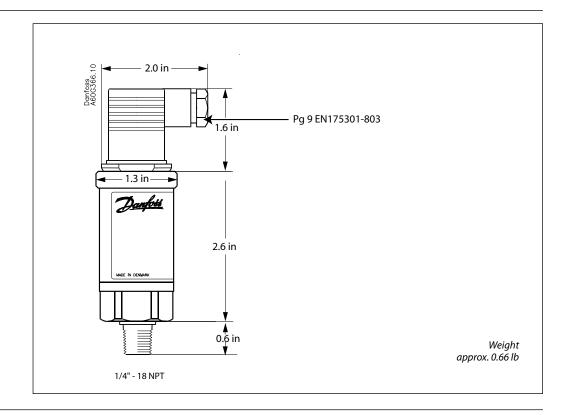
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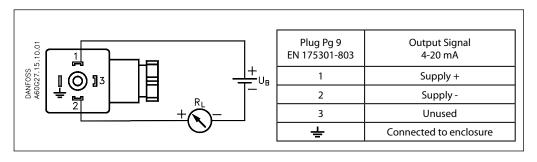
# Ordering

Туре	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

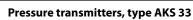
# **Dimensions and weights**



# **Electrical connections**



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