

Refrigerant Pressure Transducer

Description

XDB307-1 series of pressure transmitters are purpose-built for refrigeration applications, utilizing ceramic piezoresistive sensing cores housed in stainless steel enclosures. With a compact and user-friendly design, and a specially engineered valve needle for the pressure port, these transmitters ensure excellent electrical performance and long-term stability. Designed to meet the demanding requirements of refrigeration compressors, they are compatible with various refrigerants. Widely used in the air conditioning and refrigeration industry, XDB307-1 series provides precise and reliable pressure measurements.

Features

- ◆ Small and compact size with good sealing
- ◆ Stainless steel shell
- ◆ Affordable price & economical solutions
- ◆ Complete surge voltage protection function
- ◆ Provide OEM, flexible customization

Typical applications

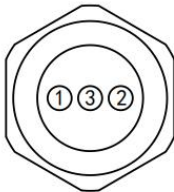
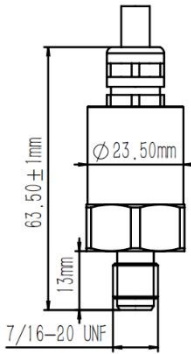
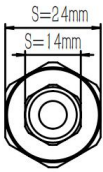
- ◆ Commercial air conditioner, Refrigeration
- ◆ HVAC system, Automobile air conditioner

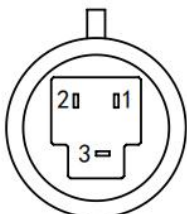
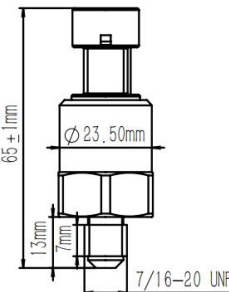



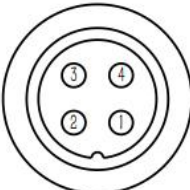
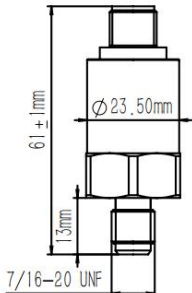

Parameters

Pressure range	-1~100 bar	Accuracy	±0.5%FS / ±1.0%FS
Input voltage	DC 9-36V, 5V, 12V, 3.3V	Long-term stability	≤±0.2% FS/year
Output signal	4-20mA / 0-10V / I ² C (Others)	Response time	≤4ms
Thread	7/16-20 UNF	Overload pressure	150% FS
Electrical connector	Packard/ Gland direct cable/ (Others)	Burst pressure	300% FS
Insulation resistance	>100 MΩ at 500V	Pressure medium	Non-corrosive liquid or gas
Operating temperature	-40 ~ 100 °C		
Compensation temperature	-20 ~ 80 °C	Housing material	304 stainless steel
Operating current	≤3mA	Protection class	IP67 / IP65
Temperature drift (zero&sensitivity)	≤±0.03%FS/ °C	Weight	≈0.1kg

Dimensions(mm) & electrical connection

Gland direct cable		XDB307-1-W1	
	4-20mA: Red: Supply+① Black: Output+②		
	0-10V: Red: Supply+① Black: GND② White: Output+③		


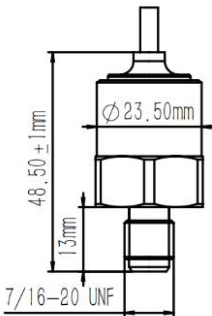
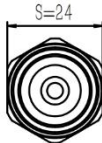
Packard		XDB307-1-W2	
	4-20mA: Red: Supply+① Black: Output+②		
	0-10V: Red: Supply+① Black: GND② Yellow: Output+③		

M12-4 pin		XDB307-1-W4	
	4-20mA: Brown: Supply+① Blue: Output+③		
	0-10V: Brown: Supply+① Black: GND③ Blue: Output+④		

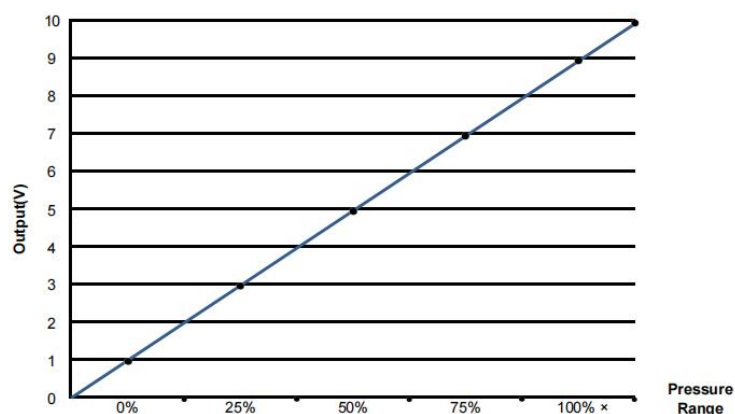
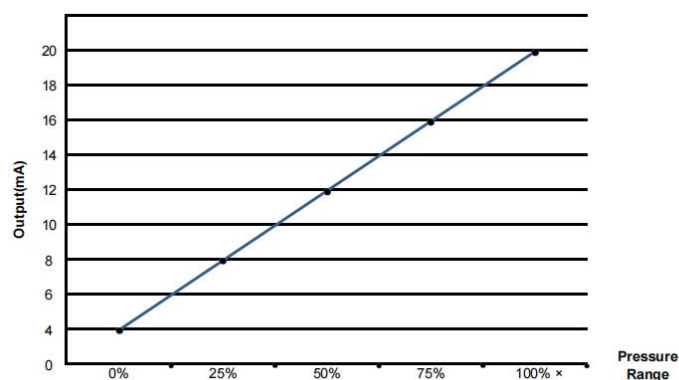
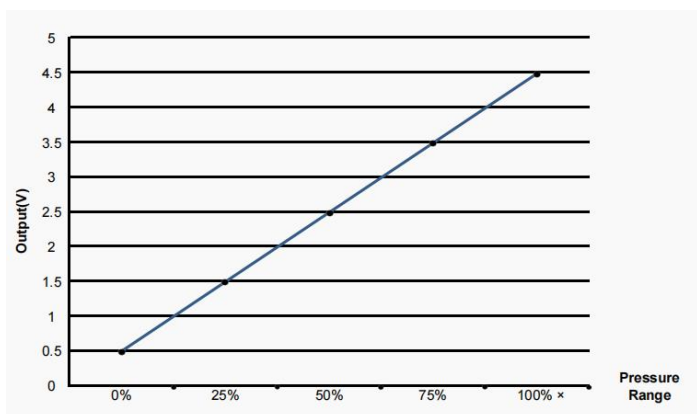
Hirschmann DIN43650C		XDB307-1-W5	
	4-20mA: Red: Supply+ ① Black: Output+ ②		
	0-10V: Red: Supply+ ① Black: GND ② White: Output+ ③		

Hirschmann DIN43650A		XDB307-1-W6	
	4-20mA: Red: Supply+ ① Black: Output+ ②		
	0-10V: Red: Supply+ ① Black: GND ② White: Output+ ③		

Direct plastic cable		XDB307-1-W7	
	4-20mA: Red: Supply+ ① Black: Output+ ②		

Direct plastic cable		XDB307-1-W7	
	0-10V: Red: Supply+① Black: GND② Yellow: Output+③		

Output Curve



How to order

E.g. **XDB307-1-10B - 02 - 2 - A - B1 - W2 - b - 03 - R134a**

1	Pressure range	10B
	M(Mpa) B(Bar) P(Psi) X(Others on request)	
2	Pressure type	02
	01(Gauge) 02(Absolute)	
3	Supply voltage	2
	0(5VDC) 1(12VDC) 2(9~36(24)VDC) 3(3.3VDC) X(Others on request)	
4	Output signal	A
	A(4-20mA) B(0-5V) C(0.5-4.5V) D(0-10V) E(0.4-2.4V) F(1-5V) G(I ² C) X(Others on request)	
5	Pressure connection	B1
	B1(7/16-20UNF male) X(Others on request)	
6	Electrical connection	W2
	W1(Gland direct cable) W2(Packard) W4(M12-4Pin) W5(Hirschmann DIN43650C) W6(Hirschmann DIN43650A) W7(direct plastic cable) X(Others on request)	
7	Accuracy	b
	b(0.5% FS) c(1.0% FS) X(Others on request)	
8	Paired cable	03
	01(0.3m) 02(0.5m) 03(1m) X(Others on request)	
9	Pressure medium	R134a
	X(Please note)	


Notes:


1) Please connect the pressure transmitter to the opposite connection for different electric connector.


If the pressure transmitters come with cable, please refer to the right color.

2) If you have other requirements, please contact us and make notes in the order

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