Data sheet



Pressure transmitter

DST P070

Description

The Danfoss DST P070 series pressure transmitter is designed for demanding air conditioning and heat pump applications. Drawn from over 30 years of experience with MEMS pressure sensing, the DST P070 offers reliable performance in a compact design.

Features & benefits

- Hermetically sealed media interface
- Compatible with R290, R32 and other HFC/HFO refrigerants
- Reliable performance
- Small and compact design
- Low heat conduction Bi-metal solder tube (Copper/Stainless Steel)

Ordering

Product code numbers

Standard ordering type

Type	Operating range [bar]	Units	Color code electrical connector	Output signal	Focus temperature range (1% TEB) [°C]	Pressure port	Code no. I-Pack
DST P070	0 –10	bar sg (Pe)	Green	Ratiometric	-30 – 60	Solder tube	074G4001
DST P070	0 – 15	bar sg (Pe)	Green	Ratiometric	-30 – 60	Solder tube	074G4022
DST P070	0 – 19	bar sg (Pe)	Green	Ratiometric	-30 – 60	Solder tube	074G4002
DST P070	0 – 19	bar sg (Pe)	Green	Ratiometric	-30 – 60	Female flare(1)	074G4003
DST P070	0 – 34	bar sg (Pe)	Black	Ratiometric	20 – 100	Solder tube	074G4004
DST P070	0 – 34	bar sg (Pe)	Black	Ratiometric	20 – 100	Female flare(1)	074G4005
DST P070	0 – 35	bar sg (Pe)	Black	Ratiometric	20 – 100	Solder tube	074G4015
DST P070	0 – 40	bar sg (Pe)	Black	Ratiometric	20 – 100	Solder tube	074G4017

(1) ¼" are with a deflator pin

Accessories code numbers

Cable accessories

Type	Description	Qty/Box [pcs]	Code no. I-Pack
Cable with Metri-Pack 150 (Round) mating connector	1.0 m with PVC tube	100	060G8195
Cable with Metri-Pack 150 (Round) mating connector	0.8 m with PVC tube	60	060G8085
Cable with Metri-Pack 150 (Round) mating connector	1.3 m with PVC tube	60	060G8086
Cable with Metri-Pack 150 (Round) mating connector	1.7 m with PVC tube	100	060G8193
Cable with Metri-Pack 150 (Round) mating connector	1.5 m with jacket and molded connector	20	060G8328
Cable with Metri-Pack 150 (Round) mating connector	2.0 m with jacket and molded connector	20	060G8329

For more option and info, Please go to https://store.danfoss.com

Product details

General data

Technical data

Total error band[3]	Typical total error band Low pressure ±1% FS (-30 – 60 °C) High pressure ±1% FS (20 – 100 °C)
Durability, P: 10 – 110%	10 x 10^6 cycles

Overload and burst pressure

Overload pressure[3]	Low pressure: 3 x FS (up to 60 bar) High pressure: 3 x FS (up to 150 bar)
Burst pressure[3]	Low pressure: 5 x FS (up to 100 bar) High pressure: 4 x FS (up to 190 bar)
Response time	< 2 ms

Environmental conditions

Media temperature range		-40 – 135 °C[1]
Ambient temperature range		-40 – 85 °C
Storage temperature range		-40 – 125 °C
Voltage supply		5 V ± 10% DC
Load [RL] (load connected to ground)		RL ≥ 2 kΩ at 5 V DC
Output modes		Ratiometric (10 – 90% Vs)[2]
Over and reverse voltage		Protected to 16 V
Short circuit		Protected to 16 V
Miswiring		Protected
EMC compatibility		EN 61000-6-3 EN 61000-6-2
ESD		IEC 61000-4-2 8 kV contact, 15 kV air
Insulation resistance		>100 MΩ at 500 V DC
Vibration resistance	**11 g (50 – 2000 Hz)**	EN 60068-2-64
Shock resistance	**500 g (half sinus, 1 ms)**	EN 60068-2-27
Enclosure material		AISI 304L Stainless steel and PBT (30% glass reinforced). Copper on solder tube
Material with media contact		AISI 304L Stainless steel, epoxy, Al2O3 (ceramic), Boro float (glass), Silicon, not copper on inside solder tube
Refrigerants		R290, R32, R1234yf, R1234ze, R410A, R454B, R454C, R452B, R466A
Weight		Approx. 20 g for solder tube and 25 g for female flare
Enclosure with mating connector		IP67

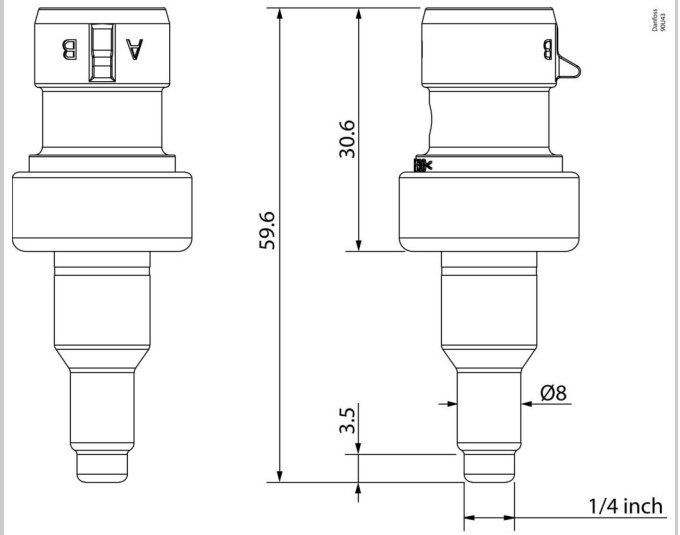
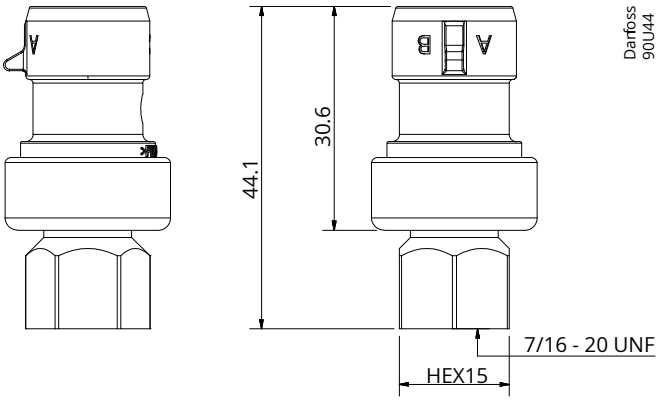
[1] For high media temperature over 135 °C please contact Danfoss

[2] 4 – 20 mA version available, please contact Danfoss

[3] Full Scale (FS), Low pressure: 0 ≤ 20 bar, High pressure: 20 < 50 bar

Dimensions

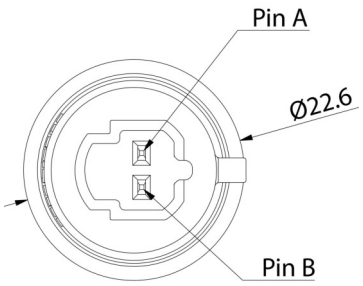
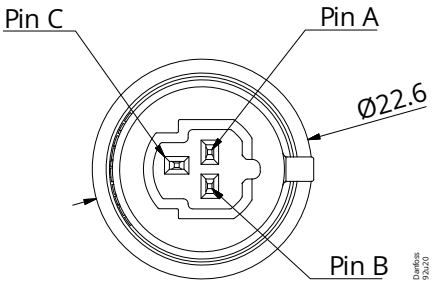
Dimensions

Solder tube	SAE Female Flare
	

Note: All dimensions are in mm if nothing else stated.

Connections

Electrical connection specifications

Output signal	4 – 20 mA	Output signal	Ratiometric
			
Pin-plating	Tin (Sn)	**Pin-plating**	Tin (Sn)
Pin configuration	Pin A: ÷ Supply Pin B: + Supply	**Pin configuration**	Pin A: ÷Supply Pin B: + Supply Pin C: Output

Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Issuer	Approval topic
UA Declaration	Danfoss UA 2023-01-10 Regulators PL01 PL04	Danfoss	Pressure, PED
EU Declaration	EU-declaration 074R0013.01	Danfoss	EMC, EU RoHS
Manufacturer's Declaration	Pressure Equipment Directive (PED)	Danfoss	Pressure, PED
Export Control Declaration	Pressure & Temperature Sensors	Danfoss	
Declaration of Incorporation	Statement of compliance ISO14903: 2025	KIWA	Compliance misc. Standards
Export Control Declaration	Refrigerant Leakage Sensor	Danfoss	
Manufacturer's Declaration	Source of Ignition	Danfoss	Functional Safety
Electrical Safety Certificate	UL 60730 Controllers, Refrigeration - Component	UL - Underwriters Laboratories inc.	
EU Declaration	PPWR_Packaging EU PL04	Danfoss	Packaging

Contact details

Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.

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