

YCQC SERIES**PRESSURE SENSOR
YCQC**

Pressure sensors are widely used in Air Conditioning, Refrigeration and Heat Pump system. YCQC pressure sensor uses a DC 10-30V excitation input to provide a 4-20 mA signal output proportional to the pressure of the medium. This device requires no end user amplification. Pressure sensors permit to control and guarantee the system working under safe and stability condition.

**FEATURES**

- OVERALL FEATURES: APPLIED HIGH PERFORMANCE DIGITAL CIRCUIT WHICH HAS GOOD LINEAR, SMALL TEMPERATURE EXCURSION AND HIGH LEVEL OF ACCURACY OVER WIDE OPERATING RANGE
- SMALL SIZE AND SIMPLE INSTALLATION; MODELS AVAILABLE WITH PACKARD CONNECTOR OR WIRES
- STABILITY: APPLIED SUPERIOR PRESSURE CORE, GOOD STABILITY UNDER STRICT PROCESS CONTROL

GENERAL SPECIFICATIONS

- Applicable for R32 and others HFC/HFO refrigerants
- Relative humidity: 0 to 95% RH
- Installation position: preferably with vertical axis and sensor upwards
- Certifications: declarations according to EMC & PED directives

ELECTRICAL SPECIFICATIONS

- Supply voltage: from 10V to 30V DC
- Rated output signal: from 4 to 20 mA
- Voltage dependency : < 0,05% FS/10 V
- Current Limitation (linear output signal up to 1.5 x rated range) : 28 mA
- Signal Span (V_{FS}) : 16 V
- Insulation resistance: Min. 100 M Ω
- Protection class: IP65/IP66

PRESSURE SENSOR



GENERAL CHARACTERISTICS

YCQC with 4-20mA signal output

Model Name	Part Number	Solder/Flare*	Output signal = 4- 20mA				
			Pressure range	Max Working pressure	Electrical connection	Accuracy	Medium Temp.
			[bar]	[bar]	Type	%	°C
YCQC03L04	10185011001	Solder	0-30	75	Hirschmann	±0,8% FS	40 / 80
YCQC01L13	10185015201	Flare	-0.5-7	52.5	Packard	±0,8% FS	-40 / 80
YCQC02L18	10185017102		-1-12	52.5	Packard	±0,8% FS	-40 / 80
YCQC03L05	10185009301		0-30	75	Packard	±0,5% FS	-40 / 80
YCQC03L06 1	10185009401		0-30	75	Packard	±0,5% FS	-40 / 80
YCQC03L11	10185014401		0-30	75	Packard	±0,8% FS	-40 / 80
YCQC05L09	10185015301		0-44.8	75	Packard	±0,8% FS	-40 / 80
YCQC05L25	10185047001		0-50	75	Packard	±0,8% FS	-40/150

* **Flare** = 7/16-20UNF-2B connector / **Solder** = 1/4" connector

1 Model with 7/16-20 UNF-A (Male), others are 7/16UNF-B (Female)

YCQC with G 3/8A connector

Output signal = 4- 20mA						
Model Name	Part Number	Pressure range	Max Working pressure	Electrical connection	Accuracy	Medium Temp.
		[bar]	[bar]	Type	%	°C
YCQC02L04	10185009901	-1 - 12	52.5	Hirschmann	±0,8% FS	-40 / 80
YCQC02L05	10185009801	-1 - 20	52.5	Hirschmann	±0,8% FS	-40/80



YCQC for High pressure use

Output signal = 4- 20mA						
Model Name	Part Number	Mechanical connection	Pressure range	Max Working pressure	Electrical connection	Medium Temp.
			[bar]	[bar]	Type	°C
YCQC15L02	10185042302	G 1/4	0-150	225	Packard +10cm	-20/100
YCQC09L02*	10185042402	Flare	0-90	135	Packard +10cm	-20/100

*: suitable with Sanhua superheat controller SEC61.

YCQC for water use

Suitable with pure water and water + glycol till 50%.

Output signal = 4- 20mA						
Model Name	Part Number	Solder / Flare*	Pressure range	Max Working pressure	Electrical connection	Medium Temp.
			[bar]	[bar]	Type	°C
YCQC01L501	10185036001	Flare	-0.8 -7	52.5	Packard	-40/80

***Flare** = 7/16-20UNF-2B connector

Note: 1) Signal span: $V_{FS}=FS$ (Full Scale) = $V_A(p_r) - V_{A0}$

2) Insulation Resistance measured with rated voltage: 500 VDC



DIMENSIONS

Brazed copper tube	7/16-20UNF-2B	Electrical connector
Front view of the XHP Connector. Dimensions: Total height 108.9, Body height 49.4, Base diameter 27.5.	Side view of the XHP Connector. Dimensions: Total height 108.9, Body height 49.4, Base diameter 27.5, and a dimension of 20.1.	XHP Connector
Front view of the Packard connector. Dimensions: Total height 118.9, Body diameter 27.5.	Side view of the Packard connector. Dimensions: Total height 118.9, Body diameter 27.5, and Base diameter 27.5.	



G 1/4	7/16-20UNF-2A (Male)	Electrical connector
		Packard Connector
G 3/8A	7/16-20UNF-2B (Female)	Electrical connector
		Hirschmann

YCQ SERIES

PRESSURE SENSOR



OPERATING TEMPERATURES

YCQB or YCQC
Flare and Brazed

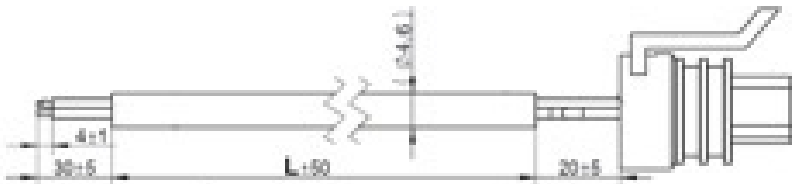
Maxi Medium Temperature	Ambient Temperature	Distance "A"	Distance "B" Flare	Distance "B" Brazed
[°C]	[°C]	[mm]	[mm]	[mm]
150	60	>30	40	70

ACCESSORIES

Packard Cables IP 55 with 3 wires

Model Name	Part Number	Connector Type	Total Cable Length	Terminal
YCQB02-013051	20185014302	Packard	1500 mm	Lead Wires
YCQB02-013052	20185013102	Packard	5000 mm	Lead Wires

Note: For usage with YCQC models, don't connect the white wire.

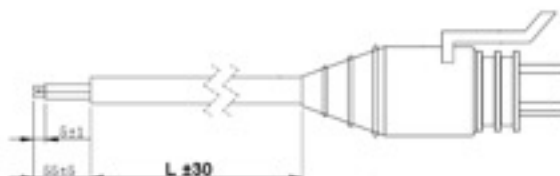


PRESSURE SENSOR



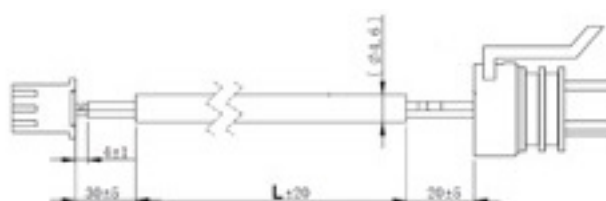
Packard Cables IP **67** with 3 wires

Model Name	Part Number	Connector Type	Total Cable Length	Terminal
YCQB02-013050	20185034002	Packard	1500 mm	Lead Wires
YCQB02-013056	20185034102	Packard	5000 mm	Lead Wires



Packard Cables IP **55** + XHP connector with 3 wires

Model Name	Part Number	Connector Type	Total Cable Length	Terminal
YCQB02-013054	20185016702	Packard	6000 mm	XHP-3
YCQB02-013055	20185016802	Packard	9000 mm	XHP-3



Packard Cables IP **67** + XHP connector with 3 wires

Model Name	Part Number	Connector Type	Total Cable Length	Terminal
YCQC02-013037	20185051102	Packard	2000 mm	XHP-3
YCQC02-013038	20185051202	Packard	5000 mm	XHP-3
YCQC02-013039	20185051202	Packard	9000 mm	XHP-3



Packard Cables IP **67** with 2 wires

Model Name	Part Number	Connector Type	Total Cable Length	Terminal
YCQC02-013034	20185046602	Packard	2000 mm	Lead Wires
YCQC02-013036	20185051002	Packard	4000 mm	Lead Wires

