



YCQC SERIES

PRESSURE SENSOR

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 4-20mA 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 SHIFT 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 SPECIFICATION

- Applicable for R32 and others HFC/HFO refrigerants
- Relative humidity: 0 to 95% RH
- Installation position: preferably with vertical axis and sensor upwards
- Certifications: UL/CSA and declaration according to EMC directive

ELECTRICAL SPECIFICATION

- 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 Resistance²: Min. 100 M Ω
- Protection Class: IP65/IP66



GENERAL CHARACTERISTICS

YCQC with 4-20mA signal output

Output signal = 4- 20mA							
Model Name	U11	Solder /Flare*	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
YCQC03L061)	10185009401		0-30	75	Packard	±0,5% FS	-40 / 80
YCQC03L11	10185014401		0-30	75	Packard	±0,8% FS	-40 / 80
YCQC05L09	10185015301			75	Packard	±0,8% FS	-40 / 80

*Flare = 7/16-20UNF-2B connector / Solder = ¼" connector

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

For flammable refrigerants, Sanhua recommend to use pressure transmitters with solder connection

YCQC with G 3/8A connector

Output signal = 4- 20mA						
Model Name	U11	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

Note: 1) Signal span: VFS=FS (Full Scale) = VA(pr) - VA0

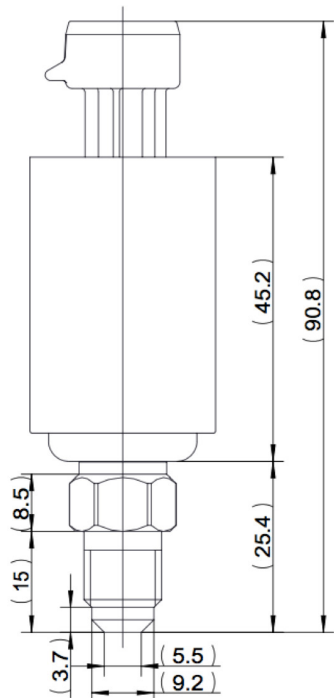
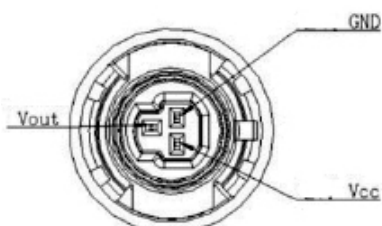
2) Insulation Resistance measured with rated voltage: 500 VDC

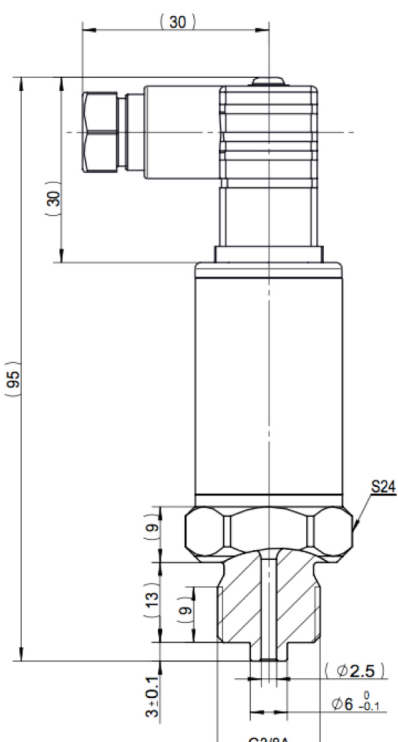
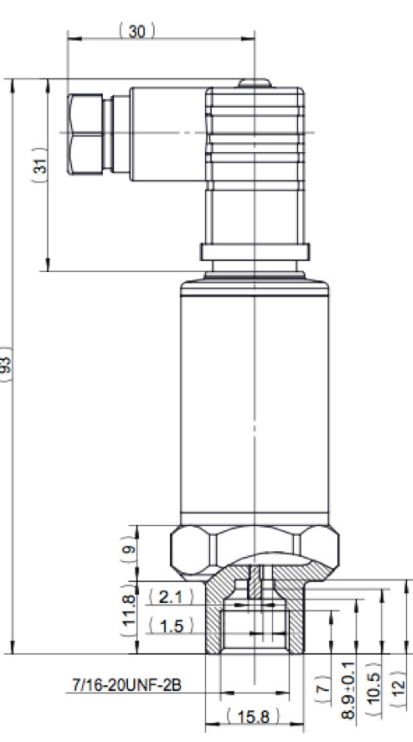


DIMENSIONS

Brazed copper tube	7/16-20UNF-2B	Electrical connector
		<p>XHP CONNECTOR</p> <p>Cable Number 1: Vcc - RED Cable Number 2: V_A(p_r) - WHITE Cable Number 3: GND - BLACK</p>
		<p>PACKARD CONNECTOR</p>

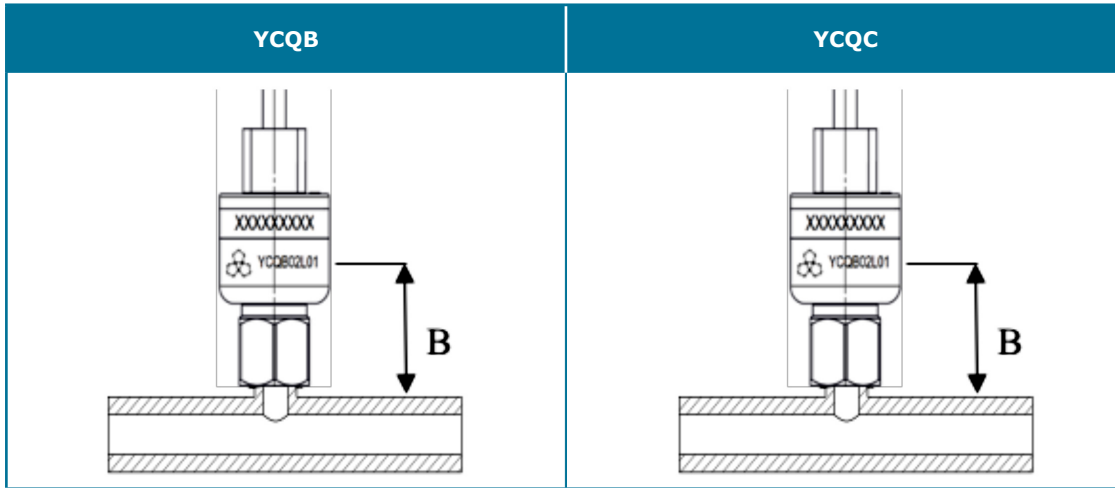


7/16-20UNF-2A (Male)	Electrical connector
	<p data-bbox="1101 616 1412 649">PACKARD CONNECTOR</p> 

G 3/8A	7/16-20UNF-2B (Female)	HIRSCHMANN
		

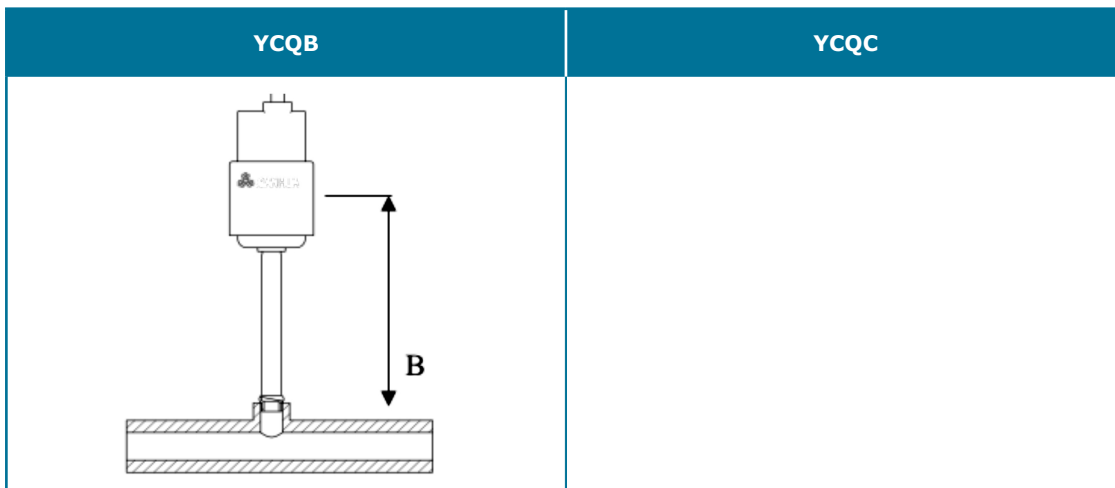


OPERATING TEMPERATURES



FLARE

Medium Temperature	Ambient Temperature	Distance "B"	Max. Operational Temperature
[°C]	[°C]	[mm]	[°C]
120	79	40	90
130	60	40	90



BRAZED

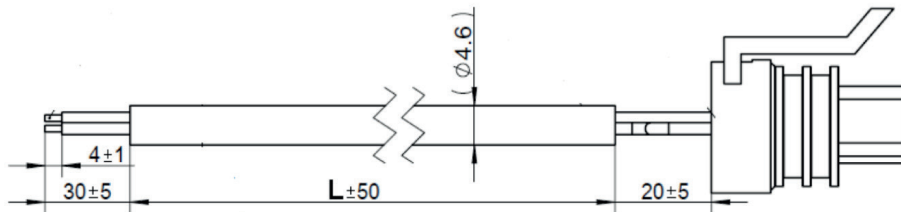
Medium Temperature	Ambient Temperature	Distance "B"	Max. Operational Temperature
[°C]	[°C]	[mm]	[°C]
120	96	70	90
130	80	70	90
140	60	70	90



ACCESSORIES

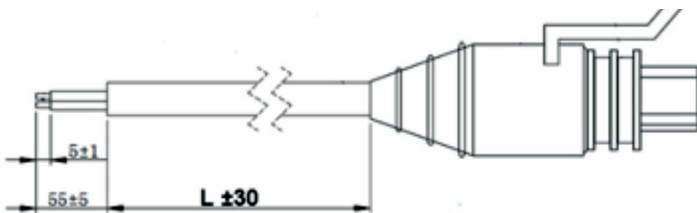
Packard Cables IP 55 with 3 wires

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



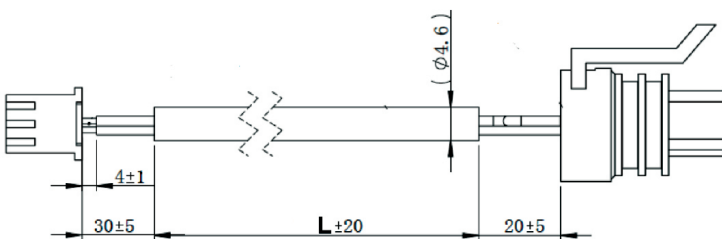
Packard Cables IP 67 with 3 wires

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

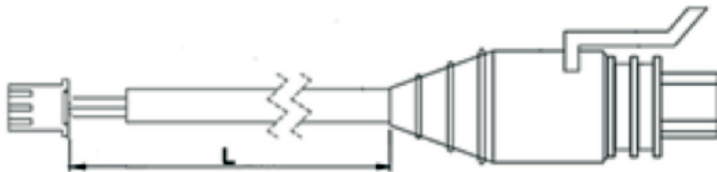




Packard Cables IP 67 + XHP connector with 3 wires

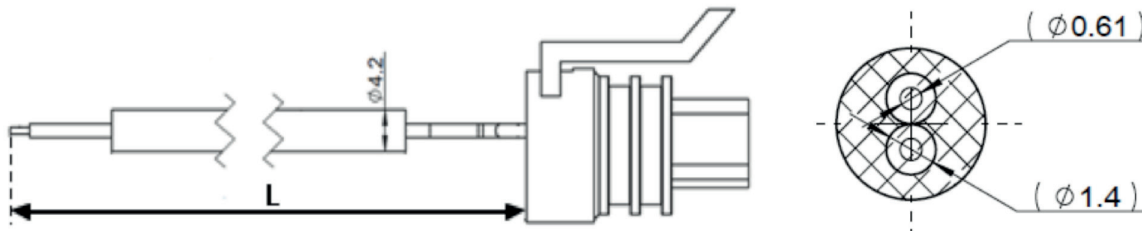
Model Name	Part Number	Connector Type	Total Cable Length	Terminal
YCQC02-013022	20185038202	Packard	2000 mm	XHP-3
YCQC02-013023	20185039602	Packard	5000 mm	XHP-3
YCQC02-013024	20185039702	Packard	9000 mm	XHP-3

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



Packard Cables IP 55 with 2 wires

Model Name	Part Number	Connector Type	Total Cable Length	Terminal
YCQC02-013017	20185029001	Packard	4040 mm	Lead Wires
YCQC02-013019	20185031201	Packard	2000 mm	Lead Wires



For complete product family information please visit us at www.sanhuaeurope.com and download the full range of datasheet at TECHNICAL INFORMATION LINK.