sensors

Sensors

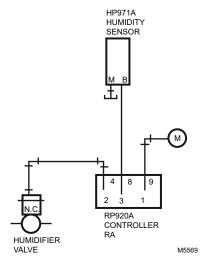
HP971 Pneumatic Humidity Sensor	46
LP914 Pneumatic Temperature Sensor	47
LP915 Pneumatic Temperature Sensor	48
TP974 Pneumatic Temperature Sensor	49
Pneumatic Sensor Accessories	49
Pneumatic Sensor Replacement Parts	49

Humidity Sensors

HP971 Pneumatic Humidity Sensor



HP971A One-Pipe Application



Application Type: Humidity Sensor

Dimensions, Approximate: 3 1/4 in. high x 2 in. wide x 1 5/8 in. deep

(88 mm high x 51 mm wide x 41 mm deep)

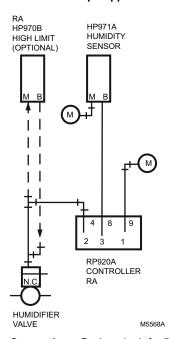
Action: Direct Acting

Airflow Usage: 0.022 scfm (10.4 mL/s)

One- or two-pipe, direct-acting humidity sensor used with RP908/RP920 Controllers to provide proportional control of pneumatic valve or damper actuators in systems requiring humidification or dehumidification control.

- · Corrosion resistant materials.
- · Simple plug-in air head connections.
- Factory calibrated.
- Continuous relative humidity indication available by using receiver gage
- gage.Integral or external restriction can be used.

HP971A Two-Pipe Application



Connections: Push-on barb for 5/32 in. (4 mm) O.D. tubing

Maximum Operating Temperature: 125 F (52 C)

Maximum Operating Pressure: 25 psi (172 kPa)
Output Pressure Range: 3 psi to 15 psi (21 kPa to 103 kPa)

Supply Pressure: 16-21 psi (110-145 kPa)

Product Number	Number of Pipes	Sensor Range	Mounting	Description	Comments
HP971A1008	1 or 2		Vertical or Horizontal Wall Mounting or Mounted in Duct Sampling Chamber	Pneumatic Humidity Sensor, 15 to 75% RH range	Order Cover Separately
HP971A1024	1 or 2	15 to 85% RH	Vertical or Horizontal Wall Mounting or Mounted in Duct Sampling Chamber	Pneumatic Humidity Sensor, 15 to 85% RH range	Order Cover Separately

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46

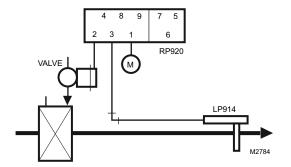
47

Temperature Sensors

LP914 Pneumatic Temperature Sensor



LP914 Typical Piping Duct-Mounted Applications



One-pipe, direct-acting temperature sensor used with RP908/RP920 Controllers to provide proportional control of pneumatic valve or damper actuators. Rod and tube insertion element for duct, well, or through-the-wall mounting.

- Corrosion resistant.
- Continuous temperature indication available by using receiver gage.

Application Type: Temperature Sensor

Dimensions, Approximate: Body: 2 in. high x 2 1/2 in. wide

(Body: 51 mm high x 64 mm wide)

Action: Direct Acting

Airflow Usage: 0.019 scfm (540 sccm)

Connections: Push-on barb for 5/32 in. (4 mm) and 1/4 in. (6 mm) O.D.

tubing

Maximum Operating Temperature: 265 F (129 C)
Maximum Operating Pressure: 25 psi (172 kPa)
Output Pressure Range: 3 psi to 15 psi (21 kPa to 103 kPa)
Supply Pressure: 18 psi (124 kPa)

Accessories:

315046A Well, 1/2 NPT Copper, 15 1/2 in. (392 mm) long 315046B Well, 1/2 NPT Copper, 7 1/2 in. (191 mm) long 315904A Well, 1/2 NPT Stainless Steel, 15 7/16 in., 394 mm 315904B 1/2 in. NPT stainless steel Well, 7 5/16 in. (186 mm) long

311085/0107 Sunshield for LP914A1011

Replacement Parts:

14004664-001 0.36 inch diameter Wool felt filter

315602 Inner Filter

	Number		Element Le	ngth	Temperature Ser	nsing Range	Mounting	
Product Number	Number of Pipes	Sensor Element	(in.)	(mm)	(F)	(C)		
LP914A1003	1	Rod and tube	15 in.	381 mm	-40 F to +160 F	-40 C to +71 C	Duct mount	
LP914A1011	1	Rod and tube	27 in.	686 mm	-40 F to +160 F	-40 C to +71 C	Wall	
LP914A1029	1	Rod and tube	15 in.	381 mm	40 F to 240 F	5 C to 115 C	Well	
LP914A1045	1	Rod and tube	7 in.	178 mm	-40 F to +160 F	-40 C to +71 C	Duct mount	
LP914A1052	1	Rod and tube	7 in.	178 mm	40 F to 240 F	5 C to 115 C	Well	
LP914A1060	1	Rod and tube	7 in.	178 mm	-40 F to +160 F	-40 C to +71 C	Well	
LP914A1144	1	Rod and tube	15 in.	381 mm	25 F to 125 F	-4 C to +52 C	Duct mount	
LP914A1151	1	Rod and tube	15 in.	381 mm	-40 F to +160 F	-40 C to +71 C	Duct mount	
LP914A1177	1	Rod and tube	15 in.	381 mm	40 F to 240 F	5 C to 115 C	Well	
LP914A1193	1	Rod and tube	6 1/2 in.	165 mm	-40 F to +160 F	-40 C to +71 C	Duct mount	
LP914A1201	1	Rod and tube	6 1/2 in.	165 mm	40 F to 240 F	5 C to 115 C	Well	
LP914A1235	1	Rod and tube	15 in.	381 mm	25 F to 125 F	-4 C to +52 C	Duct mount	
LP914A1268	1	Rod and tube	15 in.	381 mm	40 F to 240 F	5 C to 115 C	Duct or Well mount	

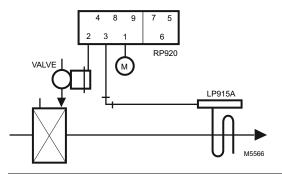
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Temperature Sensors

LP915 Pneumatic Temperature Sensor



LP915A Typical Piping Duct-Mounted Application



One-pipe, direct-acting temperature sensor used with RP908/ RP920 Controllers to provide proportional control of pneumatic valve or damper actuators. Averaging, liquid-filled element for duct mounting.

- Easily formed into variety of configurations to assure sensing of average temperatures.
- Continuous temperature indication available by using receiver gage.

Application Type: Temperature Sensor

Dimensions, Approximate: 3 in. high x 1 7/8 in. wide x 1 1/2 in. deep

(76 mm high x 44 mm wide x 33 mm deep)

Action: Direct Acting

Airflow Usage: 0.019 scfm (540 sccm)

Connections: Push-on barb for 5/32 in. (4 mm) and 1/4 in. (6 mm) O.D.

Maximum Operating Temperature: 225 F (118 C) Maximum Operating Pressure: 25 psi (172 kPa)
Output Pressure Range: 3 psi to 15 psi (21 kPa to 103 kPa)

Supply Pressure: 18 psi (124 kPa)

Accessories:

314439 Duct Mounting Clip for Averaging capillary

	Number of		Element Length		Temperature Sensing Range		
		Sensor Element	(ft)	(m)	(F)	(C)	Mounting
LP915A1044	1	Liquid-filled	18 1/2 ft	5.6m	0 F to 200 F	-18 C to +93 C	Duct mount
LP915A1051	1	Liquid-filled	8 7/8 ft	2.7m	0 F to 200 F	-18 C to +93 C	Duct mount
LP915A1077	1	Liquid-filled	18 1/2 ft	5.6m	25 F to 125 F	-4 C to +52 C	Duct mount

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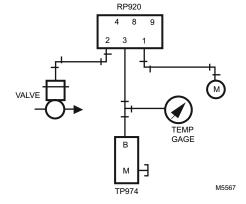
49

Temperature Sensors

TP974 Pneumatic Temperature Sensor



TP974A Typical Piping



One- or two-pipe direct-acting temperature sensor used with RP908/RP920 Controllers to provide proportional control of pneumatic valve and damper actuators.

- Plug-in air connections.
- High efficiency air filter.
- Bimetal element.
- · Continuous temperature indication available by using receiver gage.

Application Type: Temperature Sensor

Dimensions, Approximate: 3 1/4 in. high x 2 in. wide x 1 5/8 in. deep

(83 mm high x 51 mm wide x 41 mm deep)

Action: Direct Acting

Airflow Usage: 0.019 scfm (9 mL/s)

Maximum Operating Temperature: 110 F (43 C)
Maximum Operating Pressure: 25 psi (170 kPa)

Output Pressure Range: 3 psi to 15 psi (21 kPa to 103 kPa)

Supply Pressure: 16 to 25 psi (110 to 172 kPa)

	Number	Sensor	Temperature Sensing Range				
	of Pipes	Element	(F)	(C)	Mounting	Description	Comments
TP974A2000	1 or 2	Bimetal	50 F to 100 F	10 C to 38 C	Vertical or Horizontal Wall Mounting	Pneumatic Temperature Sensor Direct Acting	Order Cover Separately

Pneumatic Sensor Accessories

Product Number	Description	Used With
309379	Screen for LP914	LP914
311085/0107	Sunshield for LP914A1011	LP914A1011
314439	Duct Mounting Clip for Averaging capillary	LP915
315046A	Well, 1/2 NPT Copper, 15 1/2 in. (392 mm) long	LP914
315046B	Well, 1/2 NPT Copper, 7 1/2 in. (191 mm) long	LP914
315602	Inner Filter	LP914, LP915; LP907
315904A	Well, 1/2 NPT Stainless Steel, 15 7/16 in., 394 mm	LP914
315904B	1/2 in. NPT stainless steel Well, 7 5/16 in. (186 mm) long	LP914

Pneumatic Sensor Replacement Parts

Product Number	Description	Used With
14002374-006	Restrictor Block Assembly, 0.007 in, 2 pipe for TP974A	TP974A
14004664-001	0.36 inch diameter Wool felt filter	LP915A

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