

# PITOT TUBE FLOW SENSORS

## NFB SERIES

The NEW-FLOW BAR is used for flow measurement of large pipe size. Low permanent pressure loss for clean liquid or gas (vapor). There are many parallel holes that are located on upstream and downstream of this probe. When fluid through this probe generate high pressure in upstream and low pressure in downstream. The upstream read out average pressure is called total pressure(stagnation pressure). The downstream read out average pressure is called static pressure. This device insert into a flow pipe probe. Then detect out high/low pressure for  $\Delta P$  transmitter or  $\Delta P$  gauge to indicate the flow rate.

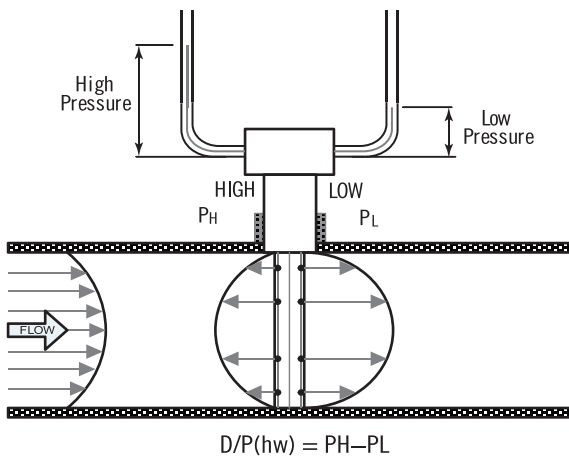
### Technical Data

1. NFB-Series is a flow element suitable for liquid steam and gases (vapor) flow measurement.
2. Accuracy  $\pm 1\%$  of flow rate.
3. Repeatability of measurement  $\pm 0.1\%$ .
4. Flow rate turndown typically 10:1
5. Max. temperature limit to 420°C, depended on model and material.
6. Max. pressure limit to 1500 psi depended on model and material.
7. Low permanent pressure loss.
8. Bi-directional flow sensing.
9. Energy save.

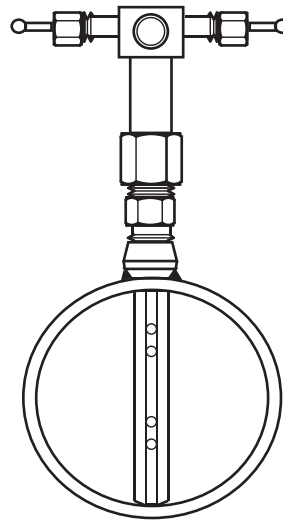
Approvals:



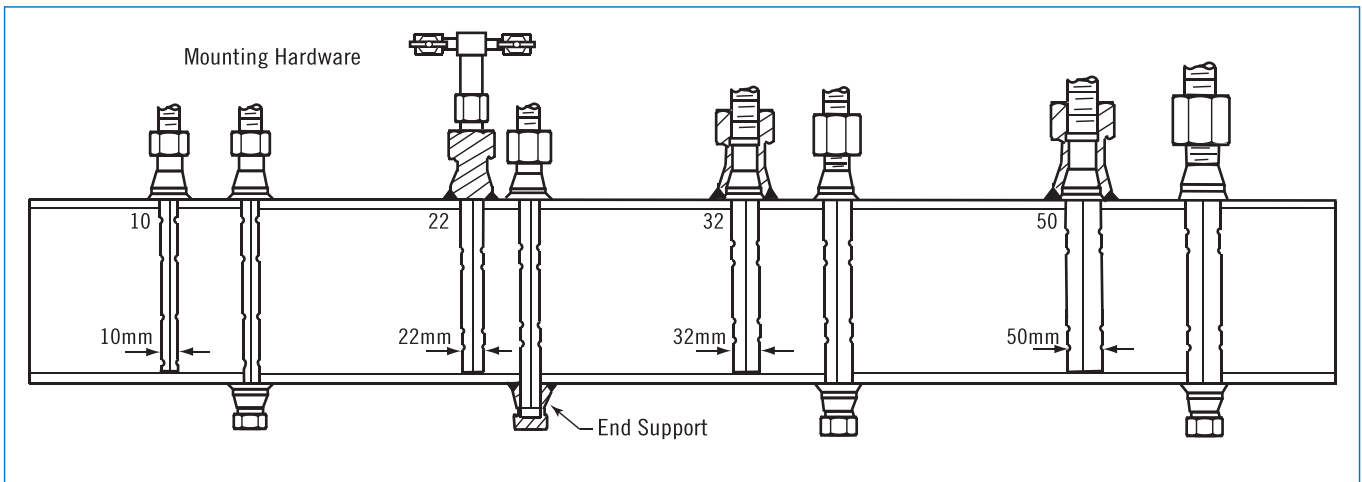
### Principle A









Figure



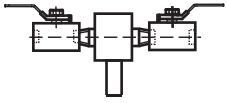
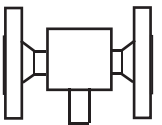
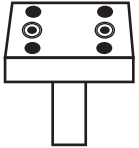
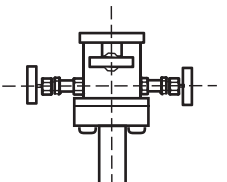
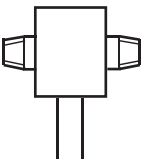
### Probe Size and Installation Method

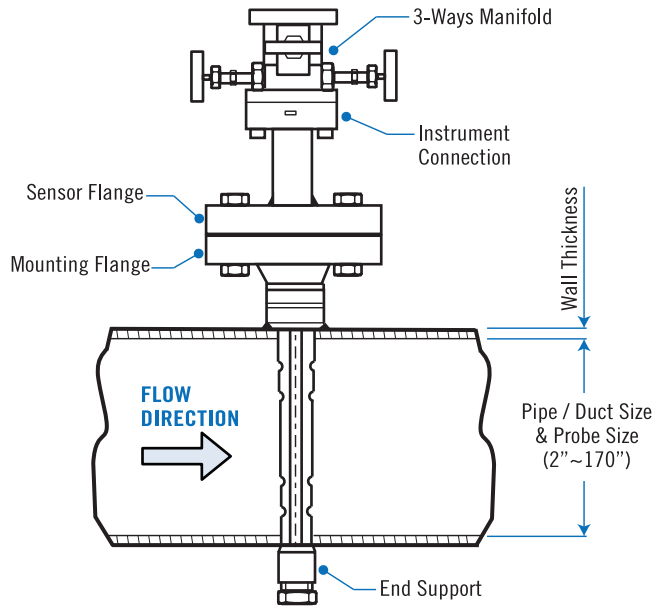
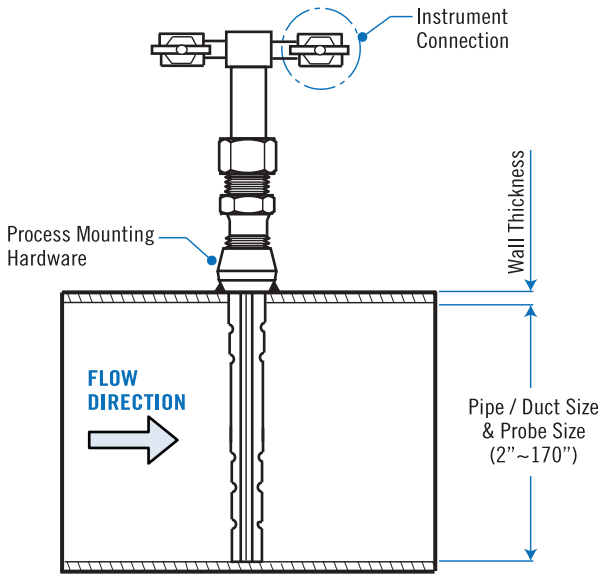


Model Selection Guide

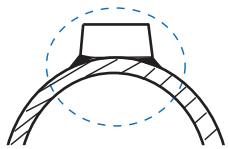
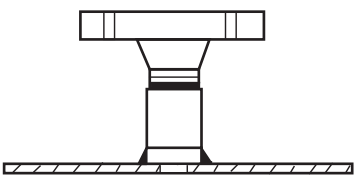
Model	NFB-100	NFB-150	NFB-200	NFB-300	NFB-400A	NFB-400B
Picture						
	Standard version	Standard version	Standard version	Standard version	Standard version	Standard version
Service Fluid	1. Liquid 2. Gas 3. Mixture Gases	1. Liquid 2. Gas 3. Mixture Gases	1. Liquid 2. Gas 3. Mixture Gases	1. Liquid 2. Gas 3. Mixture Gases	1. Liquid 2. Gas 3. Mixture Gases	1. Liquid 2. Gas 3. Mixture Gases
Working Pressure Limit	100 Bar/ 1500 psig	100 Bar/ 1500 psig	56 Bar/ 800 psig	56 Bar/ 800 psig	56 Bar/ 800 psig	100 Bar/ 1500 psig
Working Temperature Limit	250°C	250°C	250°C	250°C	250°C	300°C
For Pipe /Duct Size	2" ~ 170" ( >170", please consult with the manufacturer.)		6" ~ 170" ( >170", please consult with the manufacturer.)			
Sensor Size	10mm, 22mm or 32mm	10mm, 22mm or 32mm	10mm, 22mm or 32mm	10mm, 22mm or 32mm	22mm or 32mm	22mm, 32mm or 50mm

Instrument connection style

A.	B.	C.	D.	E.
Two Valve Type	Two Flange Type	Head Plate for 3-ways Manifold Direct-Mounting	With 3-ways Manifold valve	Thread Connection Only
				



### Process Mounting Hardware Style

B. Branch Outlet Fitting	F. Flange Fitting
	

### Ordering Information

NFB	Code	Model	Code	Instrument Connection	Material
		100 150 200 300 400A 400B	<b>A</b>	Carbon Steel	
		<b>Code</b> Body Material	<b>B</b>	SS316 Standard Steel	
		1 SS316 standard	<b>C</b>	Option	
		<b>Code</b> Pipe Size	<b>Code</b> Process Mounting Hardware Style		
		Please directly fill out the request size 2"~170"(option)	<b>B</b>	Branch Outlet Fitting	
		<b>Code</b> Instrument Connection Style	<b>F</b>	Flange Fitting	
		<b>A</b> Two Valve Type	<b>Code</b> Process Mounting Hardware Material		
		<b>B</b> Two Flange Type	<b>A</b>	Carbon Steel	
		<b>C</b> Head Plate for 3-ways Manifold Direct-Mounting	<b>B</b>	SS316 Stainless Steel	
		<b>D</b> With 3-ways Manifold Valve	<b>C</b>	Option	
		<b>E</b> Thread Connection Only	<b>Code</b> End Support		
			<b>D</b>	With	
			<b>N</b>	Without	
<b>NFB</b>			<b>+</b>		<b>Complete ordering code</b>