"SNORKEL" Pressure & Level Transmitter ✓♣ ८ €







APPLICATIONS

- Tank level measurement
- Food & beverage
- Dairy
- Breweries
- Chemical processing
- Pharmaceutical

FEATURES & BENEFITS

300/301 Series

- Cable connection only (no housing)
- Active temperature compensation
- Fixed range (300 Series)
- Range adjustment with Hart® (301 Series)
- 10:1 Turn down (301 Series)

302 Series

- All polished Stainless Steel housing
- Active temperature compensation
- Zero/span adjustable
- 4:1 Turn down

304 Series

- All polished Stainless Steel housing
- Active temperature compensation
- Accuracy 0.1% of adjusted span
- 10:1 Turn down
- Easy programming and range adjustment without test pressure via on-board display
- Hart® protocol available

30 SERIES

- 300 Series: ranges from 40 inH2O to 60 psig 301 Series: adjustable ranges from 16 inH₂O to 1,450 psig via Hart® 302 Series: adjustable ranges from 40 inH₂O to 1,160 psig 304 Series: adjustable ranges from 16 inH₂O to 1,450 psig
- Hart® signal output available on 301 & 304 Series Transmitters
- · 316 Stainless Steel wetted parts
- Strong flush diaphragm with minimal fill volume
- Can be cleaned-in-place (CIP) or steamed-in-place (SIP)
- Meets the requirements of 3-A



	SERIES	SPECIFICATIONS		
Output signals	All	4 mA to 20 mA 2-wire, 4 mA to 20 mA 2-wire and Hart® signal (301 & 304 Series only)		
Pressure ranges	300 Series	Ranges from 40 inH ₂ O to 60 psig		
	302 Series	Adjustable ranges from 40 inH ₂ 0 to 1,160 psig		
	301/304 Series	Adjustable ranges from 16 inH ₂ 0 to 1,450 psig		
Accuracy	300//302 Series	0.2% of adjusted span		
	301/304 Series	0.1% of adjusted span		
Stability	All	<0.1%/year		
Adjustment	301 Series	Hart® signal		
	302 Series	Zero and span internally		
	304 Series	By 3 push buttons on display or optional Hart® signal		
Response time	All	<150 ms		
Service life	All	>10 years		
Temperature ranges	300/301 Series	14 °F to 158 °F (-10 °C to 70 °C)		
	302/304 Series	-4 °F to 212 °F (-20 °C to 100 °C) ; 293 °F (145 °C) for 45 min		
Power requirement*	All	12 Vdc to 36 Vdc		
Measuring element	All	316L Stainless Steel (Hastelloy C, Tantalum or Gold plated optional)		
Connection	All	316 Stainless Steel		
Housing material	All	304 Stainless Steel (316 Stainless Steel optional)		
Environmental rating	300/301 Series	IP68		
	302/304 Series	IP66 (IP68 optional)		
Electrical protection	All	IP66 (NEMA 4X), IP68 (NEMA 6) optional		
Weight		Weight is dependent on model and cable length		

^{*} Unregulated



ORDERING INFORMATION										
SERIES 30		Fixed range transmitter	302	Adjustable transmitter						
	301	Adjustable transmitter with Hart® signal	Intelligent transmitter							
TRI-CLAMP SIZE	12	1-1/2"	24	3"						
	16	2"								
300 SERIES	40 inH ₂ O	0 inH ₂ O to 40 inH ₂ O	120 inH ₂ O	0 inH ₂ O to 120 InH2O	15	0 psig to 15 psig				
PRESSURE RANGES (Fixed)	60 inH ₂ O	0 inH ₂ O to 60 inH ₂ O	5	0 psig to 5 psig	30	0 psig to 30 psig				
(Fixeu)	80 inH ₂ O	0 inH ₂ O to 80 inH ₂ O	10	0 psig to 10 psig	60	0 psig to 60 psig				
301 SERIES PRESSURE RANGES	16/160 inH ₂ O	0 in $\rm H_2O$ to 16 in $\rm H_2O$ to 0 in $\rm H_2O$ to 160 in $\rm H_2O$	14.5/145	0 psig to 14.5 to 0 psig to 145 psig	290/1450	0 psig to 290 psig to 0 psig to 1,450 psig				
(Adjustable with Hart®)	47/470 inH ₂ O	0 inH ₂ O to 47 inH ₂ O to 0 inH ₂ O to 470 inH ₂ O	72.5/435	0 psig to 72.5 psig to 0 psig to 435 psig						
302 SERIES PRESSURE RANGES	40/160 inH ₂ O	0 in $\mathrm{H_2O}$ to 40 in $\mathrm{H_2O}$ to 0 in $\mathrm{H_2O}$ to 160 in $\mathrm{H_2O}$	14.5/58	0 psig to 14.5 to 0 to 58 psig	232/725	0 psig to 232 psig to 0 psig to 725 psig				
(Adjustable)	160/277 inH ₂ O	0 in $\rm H_2O$ to 160 in $\rm H_2O$ to 0 in $\rm H_2O$ to 277 in $\rm H_2O$	36/145	0 psig to 36 psig to 0 psig to 145 psig	580/1160	0 psig to 580 psig to 0 psig to 1,160 psig				
	277/609 inH ₂ O	0 inH ₂ O to 277 to 0 inH ₂ O to 609 inH ₂ O	100/232	0 psig to 100 psig to 0 psig to 232 psig						
304 SERIES PRESSURE RANGES	16/160 inH ₂ O	0 inH ₂ O to 16 inH ₂ O to 0 inH ₂ O to 160 inH ₂ O	14.5/145	0 psig to 14.5 to 0 psig to 145 psig	290/1450	0 psig to 290 psig to 0 psig to 1,450 psig				
(Intelligent)	47/470 inH ₂ O	0 inH ₂ O to 47 inH ₂ O to 0 inH ₂ O to 470 inH ₂ O	72.5/435	0 psig to 72.5 psig to 0 psig to 435 psig						
ACCURACIES	1	0.2% of adjusted span*								
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire	43	4 mA to 20 mA, 2-wire and Hart® signal**						
ELECTRICAL	25	M12 x 1 (4-pin)	71	PG9 Cable Gland						
CONNECTIONS T	28	1/2" NPT Female								
CABLE LENGTHS † †	15P	15' Polyurethane cable	30P	30' Polyurethane cable						
OPTIONS	JB	Cable Junction Box	TC	Transparent Cover (for display)***						

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

- Standard accuracy on the 304 Series is $\pm 0.1\%$ of adjusted span Required for the 301 Series, optional for the 304 Series

- *** Available for the 304 Series only † Available for the 302 and 304 Series only
- †† Additional cable lengths available, consult factory

EXAMPL	.E			<u>301</u> -	<u>12</u> –	$\frac{14.5/145}{1} - \frac{1}{1} - \frac{43}{1} - \frac{15P}{1}$
Series			30	11 Series	/	
Tri-Clam	p size			1-1/2" —		
Pressure	e range	0 psi	g to 14.5 to 0 psig to	145 psig ————		////
Accurac	y		0.2% of adjus	ted span ————		
				rt® signal ————		
Cable le	ngth		15' Polyuretha	ne cable		
EXAMPL	.E			304 -	16 –	72.5/435 - 1 - 43 - 28 - 15P - TC
Series			30	04 Series)	
Tri-Clam	p size			2" —		
Pressure	e range	0 psig to	72.5 psig to 0 psig to	435 psig ———		////////
				ted span ———		
Output s	signal	4 n	nA to 20 mA, 2-wire a	nd Hart® ————		
Electrica	al connection		1/2" NP1	Female ———		
				ne cable ————		
Option			Transpare	nt Cover		
	M12 x 1 (4-PIN)	WIRING	2-White	1-Brown		
1	Brown	V+				
2	White	V-				
3	Blue	Not used				
4	Black	Not used	3-Riua	A-Black		

4-Black

3-Blue

Dimensions



300/301 Series



* 300 Series fixed range is 6.22" (158 mm)

302 Series



*1-1/2", 2" and 3" Tri-Clamp connections available





304 Series





*1-1/2", 2" and 3" Tri-Clamp connections available