TURCK works

Industrial Automation

HIGH ACCURACY PRESSURE SENSORS

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A Pressure Sensor Designed with Customer Applications in Mind

- **High Accuracy**
  The PS400 and PS500 provide an accuracy rating of ±0.5 percent of full scale.
- **Flexible Mounting Options**
  Multiple threaded connections and a unique coupling (PS500) make them easy to mount in a variety of applications.
- **Easy to Operate**
  Push buttons and enter keys for quick and easy programming.
- **Robust Design**
  An environmental rating of IP 67 provide operational durability in harsh applications.

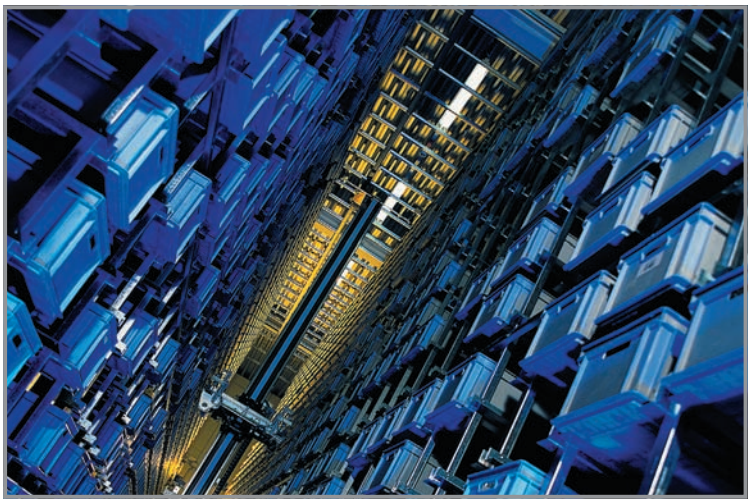
Simple Programming

The new high accuracy programmable pressure sensors combine high accuracy and performance with simple programming, resulting in an extremely user friendly sensor. The sensor is easily programmed via three controls: two push buttons for scrolling through programming features, and one recessed enter key. The push buttons are finger operated, and used to make value selections in the menu or to scroll through the various menu options. The recessed button is used to store selected values, and prevents programmed values from being inadvertently altered.

The menu is clear and concise to allow parameters such as set points, reset points, output functions, analog ranges, and a range of special options to be programmed with ease. The menu also includes an optional electronic lockout that disables the push buttons from functioning until the lockout is removed.

Stock Reduction

The PS400 and PS500 sensors are specified with an accuracy of 0.5 percent exceeding what is required by the machine engineering sector. The combination of high accuracy and flexible programming often allows a single sensor to replace several conventional sensors (with varying sensing ranges) resulting in a significant reduction in inventory. The LI2UPN8X output version allows the user to select current analog output with 1 set-point or 2 set-points. This allows 1 sensor to replace two part numbers.



Flexible Mounting Options

The high accuracy programable pressure sensors feature a large, bright, 4-digit, 7-segment LCD display with a constant indication of pressure in either psi (pounds per square inch), bar, kPa (kilopascals), or MPa (megapascals). This display is tilted at a 45° angle, and can be inverted electronically for easy reading in a variety of applications. User selectable units include: millibar, millimeters of mercury, inches of water, feet of water, inches of mercury, meters of water and kilograms per square centimeter.

The PS400 and PS500 pressure sensors are encased in a compact, 34 mm diameter housing with various threaded connections for simple, versatile installation. This allows several sensors to be mounted in close proximity to one another, and is advantageous when space is at a premium. The PS500 series also features a process connection that allows the housing to rotate 360 degrees for optimal viewing prior to locking the sensor in place. These features allow the PS400 and PS500 pressure sensors to be utilized in a wide variety of applications.

Robust Design

The innovative PS400 and PS500 pressure sensors were designed to tolerate tough applications. Stainless steel housing with an integrated stainless steel M12 ***eurofast*** ® connector enables fast and reliable installation. The sensors also offer a variety of stainless steel pressure connections including G1/4 and 1/4-18 NPT threads.

The sensors are highly resistant to overpressure and burst pressure, yet they also incorporate a patented medium stop system that prevents leakage when these levels are exceeded. The media stop system immediately seals the sensor if the pressure cell has been damaged, and can prevent liquid leakage if burst pressure is exceeded.

Noise Immune

The PS400 and PS500 programmable sensors offer a high level of protection against interference from sources that produce high levels of EMI (such as frequency converters and stepper motors) and other plant noise. These features were incorporated to create a pressure sensor ideal for use virtually anywhere.

High Accuracy Programmable Pressure Sensor Part Number Key

PS	010	R	-	4	01	-	2UP8X	-	H1141

Style

PS = Pressure Sensor

Pressure Range

01V = -1 to 0 bar (-14.5 to 0 psi) (vacuum)
001 = 0 to 1 bar (0 to 14.5 psi)
003 = 0 to 2.5 bar (0 to 36 psi)
010 = 0 to 10 bar (0 to 145 psi)
016 = 0 to 16 bar (0 to 232 psi)
025 = 0 to 25 bar (0 to 362.5 psi)
040 = 0 to 40 bar (0 to 580 psi)
100 = 0 to 100 bar (0 to 1450 psi)
250 = 0 to 250 bar (0 to 3625 psi)
400 = 0 to 400 bar (0 to 5800 psi)

Type of Pressure

R = Relative (Gauge)

Pressure Connection Style

4 = Fixed pressure connection
5 = Rotatable pressure connection

Fluid Connection

01 = G1/4 female thread 1/4 BSPP with DIN 3845 seal
03 = 1/4-18 NPT male threads

Output Circuitry

2UP8X = 15-30 VDC/(2) N.O./N.C. PNP
LIUP8X = 18-30 VDC/Analog Current and (1) N.O./N.C. PNP
LUUP8X = 18-30 VDC/Analog Voltage and (1) N.O./N.C. PNP
LI2UPN8X = 18-30 VDC/Analog Current and (1) N.O./N.C. PNP/NPN or (2) N.O./N.C. PNP/NPN programmable

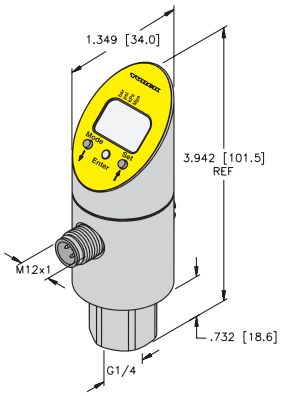
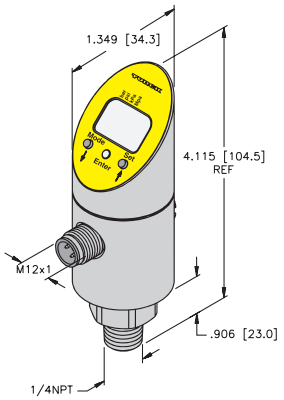
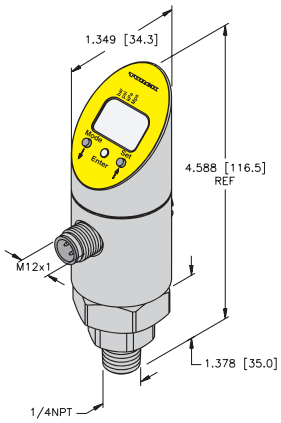
Electrical Connection

H1141 = 4-pin, M12x1, ***eurofast*** ®

High Accuracy Programmable Pressure Sensor Specifications

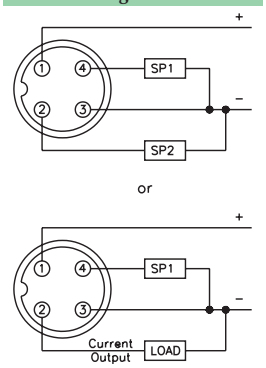
Current Consumption	≤50 mA
Switching Frequency (Discrete)	≤180 Hz
Minimum Hysteresis	±0.5%
Display Reaction Time:	
3 Selectable Modes	Slow 600 ms update Normal 200 ms update Fast 50 ms update
Wetted Parts	Stainless Steel, Viton Al_2O_3 Ceramic
Programmable Analog:	
Analog Start Point	Programmable from 0-75% of measuring range
Analog End Point	Programmable from 25-100% of measuring range
Time Delays:	
Switching Delay	Switch-on and switch-off delay adjustable from 0 to 50 seconds in steps of 0.1 second
Power-On Effect	Per IEC 947-5-2
Reverse Polarity Protection	Yes
Transient Protection	EN 60947-5-2
Short-Circuit Protection	Yes
Temperature Ranges:	
Ambient Temperature	-40° to +80°C (-40° to +176°F)
Medium Temperature	-25° to +85°C (-40° to +185°F)
Enclosure Rating	Meets NEMA 4, 6, 12, 13 and IP 67
Shock	50 g per IEC 68-2-27
Vibration	20 g (10-200 Hz) per IEC 68-2-6
Burst Protection	patented media stop
Accuracy:	
Repeatability	≤±0.5% of measuring range
Zero Shift/Span Shift	≤±0.15% of measuring range/°C
LED Function/Display:	
Measuring Value/Programming	4-digit 7-segment display
Status Display	LEDs indicate output status and selected measuring units
EMC Information:	
EN 61000-4-2	ESD: 4 KD CK/ 8 KV AD
EN 61000-4-3	HF irradiated: 15 V/m
EN 61000-4-4	Burst: 2 KV
EN 61000-4-5	Surge: 500 V, 12 Ω
EN 61000-4-6	HF conducted: 10 V

Pressure Instrumentation

Housing	Part Number	ID Number	Pressure Range (psig)	Allowable Over Pressure (psig)	Output
4-Wire DC, G1/4 Female Connection 	PS01VR-401-LI2UPN8X-H1141	M6832100	-14.5 to 0	43.5	**Programmable Current: 4-20 mA, 20-4 mA, 0-20 mA, 20 mA and 1 PNP/NPN N.O./N.C. or 2 PNP/NPN N.O./N.C.**
	PS001R-401-LI2UPN8X-H1141	M6832101	0 to 14.5	43.5	
	PS003R-401-LI2UPN8X-H1141	M6832102	0 to 36	101	
	PS010R-401-LI2UPN8X-H1141	M6832103	0 to 145	362.5	
	PS016R-401-LI2UPN8X-H1141	M6832104	0 to 232	580	
	PS025R-401-LI2UPN8X-H1141	M6832105	0 to 362	942	
	PS040R-401-LI2UPN8X-H1141	M6832106	0 to 580	1450	
	PS100R-401-LI2UPN8X-H1141	M6832107	0 to 1450	3625	
	PS250R-401-LI2UPN8X-H1141	M6832108	0 to 3625	9064	
	PS400R-401-LI2UPN8X-H1141	M6832109	0 to 5800	13,053	
4-Wire DC, 1/4-18 NPT Male Connection 	PS01VR-403-LI2UPN8X-H1141	M6832180	-14.5 to 0	43.5	**Programmable Current: 4-20 mA, 20-4 mA, 0-20 mA, 20 mA and 1 PNP/NPN N.O./N.C. or 2 PNP/NPN N.O./N.C.**
	PS001R-403-LI2UPN8X-H1141	M6832181	0 to 14.5	43.5	
	PS003R-403-LI2UPN8X-H1141	M6832182	0 to 36	101	
	PS010R-403-LI2UPN8X-H1141	M6832183	0 to 145	362.5	
	PS016R-403-LI2UPN8X-H1141	M6832184	0 to 232	580	
	PS025R-403-LI2UPN8X-H1141	M6832185	0 to 362	942	
	PS040R-403-LI2UPN8X-H1141	M6832186	0 to 580	1450	
	PS100R-403-LI2UPN8X-H1141	M6832187	0 to 1450	3625	
	PS250R-403-LI2UPN8X-H1141	M6832188	0 to 3625	9064	
	PS400R-403-LI2UPN8X-H1141	M6832189	0 to 5800	13,053	
4-Wire DC, 1/4-18 NPT Male Connection, Rotatable Housing 	PS01VR-503-LI2UPN8X-H1141	M6832280	-14.5 to 0	43.5	**Programmable Current: 4-20 mA, 20-4 mA, 0-20 mA, 20 mA and 1 PNP/NPN N.O./N.C. or 2 PNP/NPN N.O./N.C.**
	PS001R-503-LI2UPN8X-H1141	M6832281	0 to 14.5	43.5	
	PS003R-503-LI2UPN8X-H1141	M6832282	0 to 36	101	
	PS010R-503-LI2UPN8X-H1141	M6832283	0 to 145	362.5	
	PS016R-503-LI2UPN8X-H1141	M6832284	0 to 232	580	
	PS025R-503-LI2UPN8X-H1141	M6832285	0 to 362	942	
	PS040R-503-LI2UPN8X-H1141	M6832286	0 to 580	1450	
	PS100R-503-LI2UPN8X-H1141	M6832287	0 to 1450	3625	
	PS250R-503-LI2UPN8X-H1141	M6832288	0 to 3625	9064	
	PS400R-503-LI2UPN8X-H1141	M6832289	0 to 5800	13,053	

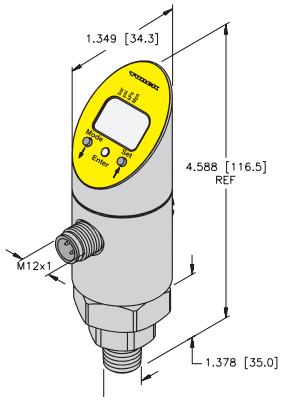
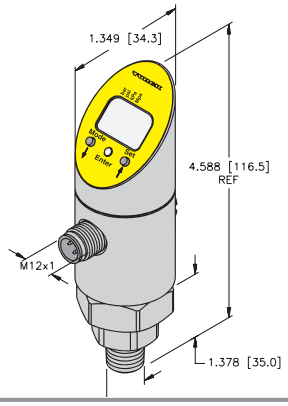
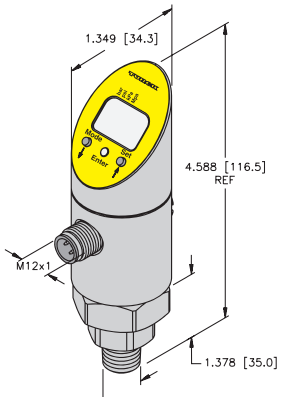
Accessories on page 13.

Voltage	Set-point Range (psig)	Reset-point Range (psig)	Switching Current	Analog Load	Set-point Accuracy (of full scale)	Analog Accuracy ** (of full scale)	Mating Cordset	Wiring Diagram #	Wiring Diagram
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	Diagram 1
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	0.36 to 36	0.18 to 35.8	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	1.45 to 145	0.73 to 144	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	2.32 to 232	1.16 to 230	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	3.6 to 362.5	1.8 to 360	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	5.8 to 580	2.9 to 577	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	14.5 to 1450	7.3 to 1442	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	36 to 3625	18 to 3606	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	58 to 5800	29 to 5771	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	0.36 to 36	0.18 to 35.8	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	1.45 to 145	0.73 to 144	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	2.32 to 232	1.16 to 230	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	3.6 to 362.5	1.8 to 360	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	5.8 to 580	2.9 to 577	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	14.5 to 1450	7.3 to 1442	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	36 to 3625	18 to 3606	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	58 to 5800	29 to 5771	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	0.36 to 36	0.18 to 35.8	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	1.45 to 145	0.73 to 144	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	2.32 to 232	1.16 to 230	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	3.6 to 362.5	1.8 to 360	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	5.8 to 580	2.9 to 577	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	14.5 to 1450	7.3 to 1442	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	36 to 3625	18 to 3606	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	
	58 to 5800	29 to 5771	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	1	



* Length in meters.
** Accuracy includes linearity, repeatability and hysteresis.

Pressure Instrumentation

Housing	Part Number	ID Number	Pressure Range (psig)	Allowable Over Pressure (psig)	Output
4-Wire DC, 1/4-18 NPT Male Connection, Rotatable Housing 	PS01VR-503-2UP8X-H1141	M6831202	-14.5 to 0	43.5	**Dual PNP N.O. or N.C.**
	PS001R-503-2UP8X-H1141	M6831205	0 to 14.5	43.5	
	PS003R-503-2UP8X-H1141	M6831208	0 to 36	101	
	PS010R-503-2UP8X-H1141	M6831211	0 to 145	362.5	
	PS016R-503-2UP8X-H1141	M6831900	0 to 232	580	
	PS025R-503-2UP8X-H1141	M6831901	0 to 362	942	
	PS040R-503-2UP8X-H1141	M6831902	0 to 580	1450	
	PS100R-503-2UP8X-H1141	M6831220	0 to 1450	3625	
	PS250R-503-2UP8X-H1141	M6831223	0 to 3625	9064	
	PS400R-503-2UP8X-H1141	M6831903	0 to 5800	13,053	
4-Wire DC, 1/4-18 NPT Male Connection, Rotatable Housing 	PS01VR-503-LIUP8X-H1141	M6831246	-14.5 to 0	43.5	**PNP N.O. or N.C. and Programmable Current: 0-20 mA, 4-20 mA, 20-0 mA, 20-4 mA**
	PS001R-503-LIUP8X-H1141	M6831228	0 to 14.5	43.5	
	PS003R-503-LIUP8X-H1141	M6831233	0 to 36	101	
	PS010R-503-LIUP8X-H1141	M6831239	0 to 145	362.5	
	PS016R-503-LIUP8X-H1141	M6831914	0 to 232	580	
	PS025R-503-LIUP8X-H1141	M6831915	0 to 362	942	
	PS040R-503-LIUP8X-H1141	M6831916	0 to 580	1450	
	PS100R-503-LIUP8X-H1141	M6831255	0 to 1450	3625	
	PS250R-503-LIUP8X-H1141	M6831260	0 to 3625	9064	
	PS400R-503-LIUP8X-H1141	M6831917	0 to 5800	13,053	
4-Wire DC, 1/4-18 NPT Male Connection, Rotatable Housing 	PS01VR-503-LUUP8X-H1141	M6831247	-14.5 to 0	43.5	**PNP N.O. or N.C. and Programmable: 0-10 V, 0-5 V, 1-6 V, 10-0 V, 5-0 V, 6-1 V**
	PS001R-503-LUUP8X-H1141	M6831229	0 to 14.5	43.5	
	PS003R-503-LUUP8X-H1141	M6831234	0 to 36	101	
	PS010R-503-LUUP8X-H1141	M6831240	0 to 145	362.5	
	PS016R-503-LUUP8X-H1141	M6831928	0 to 232	580	
	PS025R-503-LUUP8X-H1141	M6831929	0 to 362	942	
	PS040R-503-LUUP8X-H1141	M6831930	0 to 580	1450	
	PS100R-503-LUUP8X-H1141	M6831256	0 to 1450	3625	
	PS250R-503-LUUP8X-H1141	M6831261	0 to 3625	9064	
	PS400R-503-LUUP8X-H1141	M6831931	0 to 5800	13,053	

Accessories on page 13.

Voltage	Set-point Range (psig)	Reset-point Range (psig)	Switching Current	Analog Load	Set-point Accuracy (of full scale)	Analog Accuracy ** (of full scale)	Mating Cordset	Wiring Diagram #
15-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	0.15 to 14.5	0.07 to 14.4	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	0.36 to 36	0.18 to 35.8	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	1.45 to 145	0.73 to 144	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	2.32 to 232	1.16 to 230	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	3.6 to 362.5	1.8 to 360	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	5.8 to 580	2.9 to 577	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	14.5 to 1450	7.3 to 1442	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	36 to 3625	18 to 3606	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	58 to 5800	29 to 5771	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	0.36 to 36	0.18 to 35.8	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	1.45 to 145	0.73 to 144	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	2.32 to 232	1.16 to 230	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	3.6 to 362.5	1.8 to 360	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	5.8 to 580	2.9 to 577	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	14.5 to 1450	7.3 to 1442	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	36 to 3625	18 to 3606	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	58 to 5800	29 to 5771	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≥2KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	0.36 to 36	0.18 to 35.8	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	1.45 to 145	0.73 to 144	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	2.32 to 232	1.16 to 230	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	3.6 to 362.5	1.8 to 360	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	5.8 to 580	2.9 to 577	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	14.5 to 1450	7.3 to 1442	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	36 to 3625	18 to 3606	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	58 to 5800	29 to 5771	≤200 mA	≥2 KΩ	±0.5%	≤±0.5%	RK 4.4T-*	3

Wiring Diagrams

Diagram 1

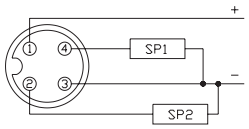


Diagram 2

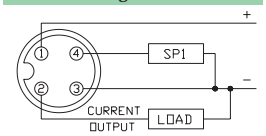
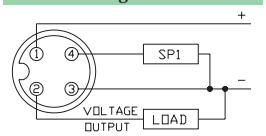
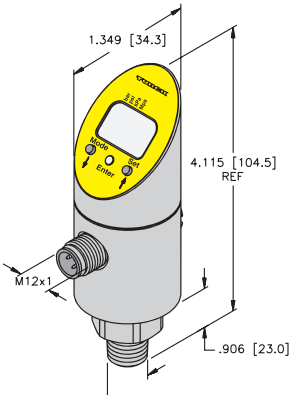
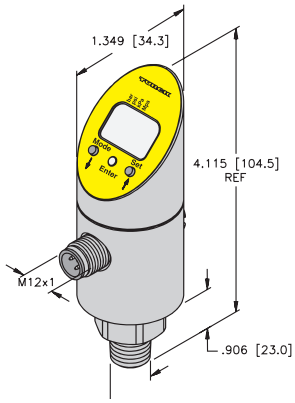
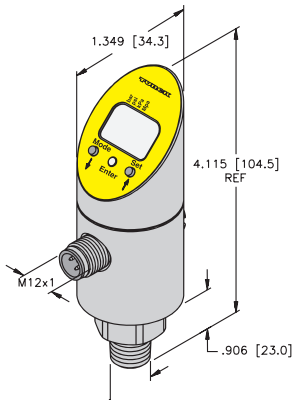


Diagram 3



* Length in meters.
** Accuracy includes linearity, repeatability and hysteresis.

Pressure Instrumentation

Housing	Part Number	ID Number	Pressure Range (psig)	Allowable Over Pressure (psig)	Output
4-Wire DC, 1/4-18 NPT Male Connection 	PS01VR-403-2UP8X-H1141	M6831962	-14.5 to 0	43.5	**Dual PNP N.O. or N.C.**
	PS001R-403-2UP8X-H1141	M6831963	0 to 14.5	43.5	
	PS003R-403-2UP8X-H1141	M6831964	0 to 36	101	
	PS010R-403-2UP8X-H1141	M6831965	0 to 145	362.5	
	PS016R-403-2UP8X-H1141	M6831966	0 to 232	580	
	PS025R-403-2UP8X-H1141	M6831967	0 to 362	942	
	PS040R-403-2UP8X-H1141	M6831968	0 to 580	1450	
	PS100R-403-2UP8X-H1141	M6831969	0 to 1450	3625	
	PS250R-403-2UP8X-H1141	M6831970	0 to 3625	9064	
	PS400R-403-2UP8X-H1141	M6831971	0 to 5800	13,053	
4-Wire DC, 1/4-18 NPT Male Connection 	PS01VR-403-LIUP8X-H1141	M6831942	-14.5 to 0	43.5	**PNP N.O. or N.C. and Programmable Current: 0-20 mA, 4-20 mA, 20-0 mA, 20-4 mA**
	PS001R-403-LIUP8X-H1141	M6831943	0 to 14.5	43.5	
	PS003R-403-LIUP8X-H1141	M6831944	0 to 36	101	
	PS010R-403-LIUP8X-H1141	M6831945	0 to 145	362.5	
	PS016R-403-LIUP8X-H1141	M6831946	0 to 232	580	
	PS025R-403-LIUP8X-H1141	M6831947	0 to 362	942	
	PS040R-403-LIUP8X-H1141	M6831948	0 to 580	1450	
	PS100R-403-LIUP8X-H1141	M6831949	0 to 1450	3625	
	PS250R-403-LIUP8X-H1141	M6831950	0 to 3625	9064	
	PS400R-403-LIUP8X-H1141	M6831951	0 to 5800	13,053	
4-Wire DC, 1/4-18 NPT Male Connection 	PS01VR-403-LUUP8X-H1141	M6831952	-14.5 to 0	43.5	**PNP N.O. or N.C. and Programmable Voltage: 0-10 V, 0-5 V, 1-6 V, 10-0 V, 5-0 V, 6-1 V**
	PS001R-403-LUUP8X-H1141	M6831953	0 to 14.5	43.5	
	PS003R-403-LUUP8X-H1141	M6831954	0 to 36	101	
	PS010R-403-LUUP8X-H1141	M6831955	0 to 145	362.5	
	PS016R-403-LUUP8X-H1141	M6831956	0 to 232	580	
	PS025R-403-LUUP8X-H1141	M6831957	0 to 362	942	
	PS040R-403-LUUP8X-H1141	M6831958	0 to 580	1450	
	PS100R-403-LUUP8X-H1141	M6831959	0 to 1450	3625	
	PS250R-403-LUUP8X-H1141	M6831960	0 to 3625	9064	
	PS400R-403-LUUP8X-H1141	M6831961	0 to 5800	13,053	

Accessories on page 13.

Voltage	Set-point Range (psig)	Reset-point Range (psig)	Switching Current	Analog Load	Set-point Accuracy (of full scale)	Analog Accuracy ** (of full scale)	Mating Cordset	Wiring Diagram #
15-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	0.15 to 14.5	0.07 to 14.4	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	0.36 to 36	0.18 to 35.8	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	1.45 to 145	0.73 to 144	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	2.32 to 232	1.16 to 230	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	3.6 to 362.5	1.8 to 360	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	5.8 to 580	2.9 to 577	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	14.5 to 1450	7.3 to 1442	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	36 to 3625	18 to 3606	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	58 to 5800	29 to 5771	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	0.36 to 36	0.18 to 35.8	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	1.45 to 145	0.73 to 144	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	2.32 to 232	1.16 to 230	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	3.6 to 362.5	1.8 to 360	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	5.8 to 580	2.9 to 577	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	14.5 to 1450	7.3 to 1442	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	36 to 3625	18 to 3606	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	58 to 5800	29 to 5771	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	0.36 to 36	0.18 to 35.8	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	1.45 to 145	0.73 to 144	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	2.32 to 232	1.16 to 230	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	3.6 to 362.5	1.8 to 360	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	5.8 to 580	2.9 to 577	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	14.5 to 1450	7.3 to 1442	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	36 to 3625	18 to 3606	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	58 to 5800	29 to 5771	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3

Wiring Diagrams

Diagram 1

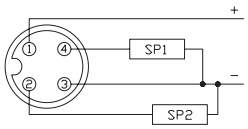


Diagram 2

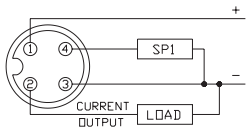
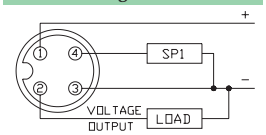
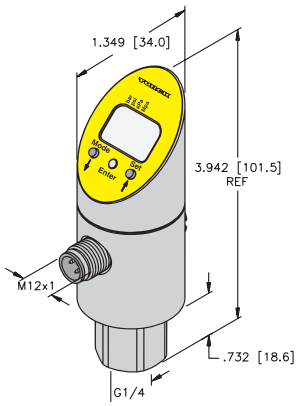
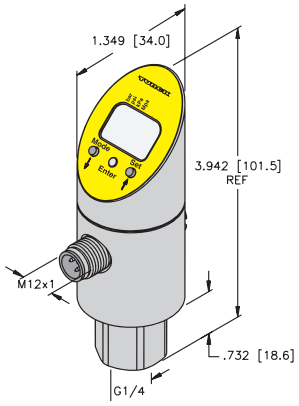
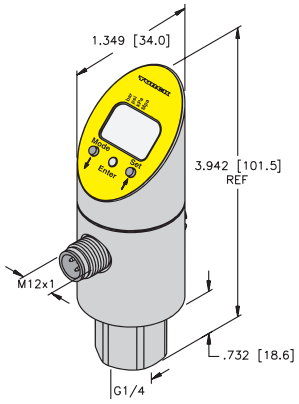


Diagram 3



* Length in meters.
** Accuracy includes linearity, repeatability and hysteresis.

Pressure Instrumentation

Housing	Part Number	ID Number	Pressure Range (psig)	Allowable Over Pressure (psig)	Output
4-Wire DC, G1/4 Female Connection 	PS01VR-401-2UP8X-H1141	M6831201	-14.5 to 0	43.5	**Dual PNP N.O. or N.C.**
	PS001R-401-2UP8X-H1141	M6831204	0 to 14.5	43.5	
	PS003R-401-2UP8X-H1141	M6831207	0 to 36	101	
	PS010R-401-2UP8X-H1141	M6831210	0 to 145	362.5	
	PS016R-401-2UP8X-H1141	M6831213	0 to 232	580	
	PS025R-401-2UP8X-H1141	M6831215	0 to 362	942	
	PS040R-401-2UP8X-H1141	M6831217	0 to 580	1450	
	PS100R-401-2UP8X-H1141	M6831219	0 to 1450	3625	
	PS250R-401-2UP8X-H1141	M6831222	0 to 3625	9064	
	PS400R-401-2UP8X-H1141	M6831225	0 to 5800	13,053	
4-Wire DC, G1/4 Female Connection 	PS01VR-401-LIUP8X-H1141	M6831245	-14.5 to 0	43.5	**PNP N.O. or N.C. and Programmable Current: 0-20 mA, 4-20 mA, 20-0 mA, 20-4 mA**
	PS001R-401-LIUP8X-H1141	M6831227	0 to 14.5	43.5	
	PS003R-401-LIUP8X-H1141	M6831231	0 to 36	101	
	PS010R-401-LIUP8X-H1141	M6831237	0 to 145	362.5	
	PS016R-401-LIUP8X-H1141	M6831243	0 to 232	580	
	PS025R-401-LIUP8X-H1141	M6831249	0 to 362	942	
	PS040R-401-LIUP8X-H1141	M6831251	0 to 580	1450	
	PS100R-401-LIUP8X-H1141	M6831253	0 to 1450	3625	
	PS250R-401-LIUP8X-H1141	M6831259	0 to 3625	9064	
	PS400R-401-LIUP8X-H1141	M6831263	0 to 5800	13,053	
4-Wire DC, G1/4 Female Connection 	PS01VR-401-LUUP8X-H1141	M6831828	-14.5 to 0	43.5	**PNP N.O. or N.C. and Programmable Voltage: 0-10 V, 0-5 V, 1-6 V, 10-0 V, 5-0 V, 6-1 V**
	PS001R-401-LUUP8X-H1141	M6831800	0 to 14.5	43.5	
	PS003R-401-LUUP8X-H1141	M6831232	0 to 36	101	
	PS010R-401-LUUP8X-H1141	M6831238	0 to 145	362.5	
	PS016R-401-LUUP8X-H1141	M6831820	0 to 232	580	
	PS025R-401-LUUP8X-H1141	M6831836	0 to 362	942	
	PS040R-401-LUUP8X-H1141	M6831844	0 to 580	1450	
	PS100R-401-LUUP8X-H1141	M6831254	0 to 1450	3625	
	PS250R-401-LUUP8X-H1141	M6831858	0 to 3625	9064	
	PS400R-401-LUUP8X-H1141	M6831264	0 to 5800	13,053	

Accessories on page 13.

Voltage	Set-point Range (psig)	Reset-point Range (psig)	Switching Current	Analog Load	Set-point Accuracy (of full scale)	Analog Accuracy ** (of full scale)	Mating Cordset	Wiring Diagram #
15-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	0.15 to 14.5	0.07 to 14.4	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	0.36 to 36	0.18 to 35.8	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	1.45 to 145	0.73 to 144	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	2.32 to 232	1.16 to 230	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	3.6 to 362.5	1.8 to 360	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	5.8 to 580	2.9 to 577	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	14.5 to 1450	7.3 to 1442	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	36 to 3625	18 to 3606	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
	58 to 5800	29 to 5771	≤200 mA	N/A	±0.5%	N/A	RK 4.4T-*	1
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	0.36 to 36	0.18 to 35.8	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	1.45 to 145	0.73 to 144	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	2.32 to 232	1.16 to 230	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	3.6 to 362.5	1.8 to 360	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	5.8 to 580	2.9 to 577	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	14.5 to 1450	7.3 to 1442	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	36 to 3625	18 to 3606	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
	58 to 5800	29 to 5771	≤200 mA	≤500 Ω	±0.5%	≤±0.5%	RK 4.4T-*	2
18-30 VDC	-14.5 to 0.15	-14.4 to 0.07	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	0.15 to 14.5	0.07 to 14.4	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	0.36 to 36	0.18 to 35.8	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	1.45 to 145	0.73 to 144	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	2.32 to 232	1.16 to 230	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	3.6 to 362.5	1.8 to 360	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	5.8 to 580	2.9 to 577	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	14.5 to 1450	7.3 to 1442	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	36 to 3625	18 to 3606	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3
	58 to 5800	29 to 5771	≤200 mA	≥2 kΩ	±0.5%	≤±0.5%	RK 4.4T-*	3

Wiring Diagrams

Diagram 1

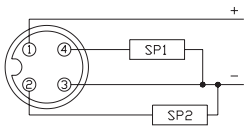


Diagram 2

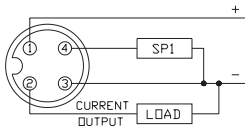
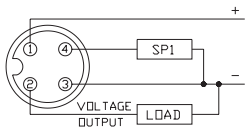


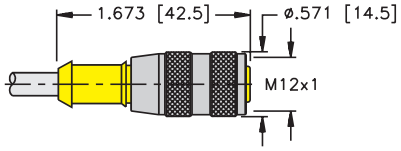
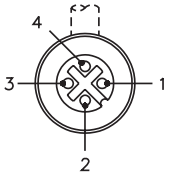
Diagram 3



* Length in meters.
** Accuracy includes linearity, repeatability and hysteresis.

4-Wire *eurofast*® Cordsets, Standard Plug Body

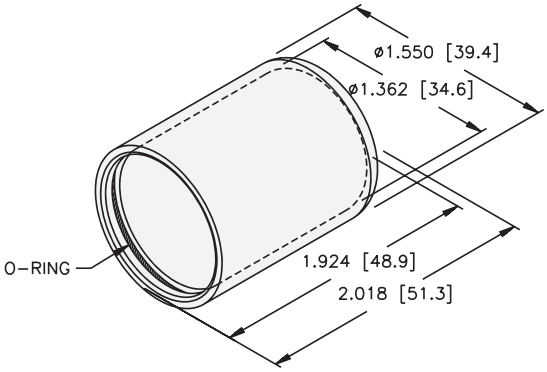
- **Straight Female Connector**
- **NEMA 1, 3, 4, 6P and IEC IP 68 Protection**
- **250 VAC/300 VDC, 4 A**

Housing Style	Part Number	Cable	Features	Pinout	
	RK 4.4T-*	AWM PVC Grey 4x22 AWG 105°C 5.2 mm OD Cable #RF50516-*M	***flexlife***	1. BN 2. WH 3. BU 4. BK	
	RK 4.4T-*/S90	AWM PUR Grey 4x22 AWG 105°C, 5.2 mm OD Cable #RF50532-*M	***Cut/Abrasion Immune***		

* Length in meters. Standard cable lengths are 2, 4, 6, 8 and 10 meters. Consult factory for other lengths.
** Standard coupling nut material is nickel plated brass "RK .."; "RKK .." indicates nylon and "RKV .." indicates 316 stainless steel.

Accessories

Clear Cap



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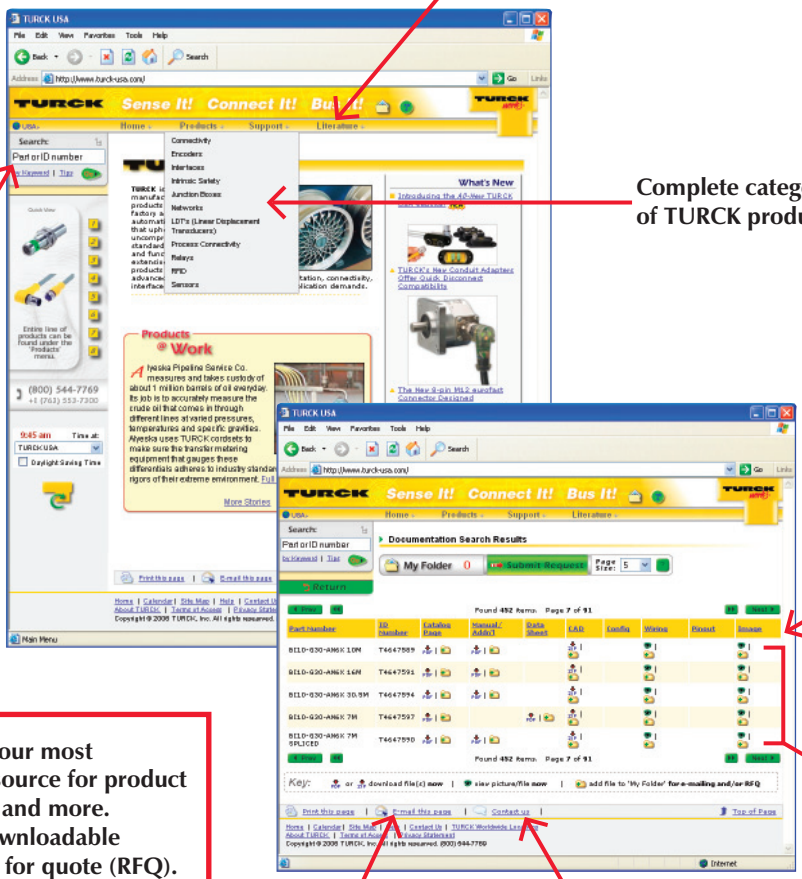

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