

140 Cascade Boulevard, Milford, Connecticut 06460 203 877-5657 800 989-5657 Fax: 203 783-9546 www.orangeresearch.com

Product specifications for model 1303

Product Specifications (switch, relay)

sensor type	piston		
functions	gauge/switch		
min. range	0-100 psid		
max. range	0-1000 psid		
max. line pressure	5000 psig		
min. burst pressure	15000 psig		
standard maximum	gauge: 200°F standard, 150°F (plastic lens)		
temperature	gauge/switch: 176°F standard, 150°F (plastic lens)		
high temp. construction	N/A		
minimum temperature*	*Consult factory for low-temperature application		
calibration accuracy**	±2% of full scale ascending after rap at room temperature		
	**Calibration accuracy is affected by temperature, and also by liquid-filling and follower-pointer options.		
repeatability	±2% of full scale		
switches/relay	1 or 2 hermetically sealed reed switches or 1 relay in weatherproof enclosure		
switch adjustability	upper 80% of full scale ascending (70% for B & C form switches in SST)		
switch dead band	5-20% full scale		
certification	CSA Class I,DIV. 2,Groups A,B,C & D;		
	Class II,DIV. 2,Groups F & G (File 152872)		
	NEMA 4X,IP65 *Consult Factory for CE equivalent.		

Standard configuration options (switch, relay)

configuration	unless otherwise specified	standard options available
porting size	1/4" NPT	1/2" NPT and MS ports
porting orientation	in-line	N/A
direction of pressure	left to right	right to left (upside-down orientation with arc on bottom)
calibration medium	alum or SS: hydraulic oil brass: water	N/A
switches & relays	(must be specified)	-A SPST N/O (120VAC,0.7A,70VA;200VDC,1.0A,50W) -B SPST N/C (120VAC,0.25A,5VA;175VDC,0.25A,5W) -C SPDT (120VAC,0.25A,5VA;175VDC,0.25A,5W) -R2 DPDT relay (contacts:120VAC,28VDC,10A coil:6 to 240VAC,6 to 110VDC)
switch/relay setting	set at top of range ascending	other set points within adjustability ascending or descending
primary wetted parts	(must be specified)	aluminum, 316SS, naval brass
secondary wetted parts	range spring: 302SS magnet: ceramic piston seal: Teflon	Teflon-coated spring and magnet
static seals	buna-N	Viton, Teflon, neoprene, fluorosilicone
lens	glass	plastic
dial sizes	(must be specified)	2.5", 3.5", 4.5", 6"
dial case styles	(must be specified)	"B" Basic Case (c-clamp not available) "F" Flanged Case (w/holes for panel mounting)
starting mark on dial	approximately 10% of full scale	N/A

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Product specifications for model 1303

Product Specifications (transmitter)

sensor type	piston		
functions	gauge/transmitter, transmitter (Loop powered)		
min. range	0-100 psid		
max. range	0-1000 psid		
max. line pressure	5000 psig		
min. burst pressure	15000 psig		
standard maximum	gauge/transmitter: 200°F (glass lens), 150°F (plastic lens)		
temperature	transmitter: 200°F		
high temp. construction	N/A		
minimum temperature	-20°F		
calibration accuracy**	±2% of full scale ascending after rap at room temperature		
	**Calibration accuracy is compensated for temperature effects between -20°F - 200°F		
repeatability	±2% of full scale		
transducer enclosure	weatherproof		
certification	CSA Class I,DIV. 2,Groups A,B,C & D;		
	Class II,DIV. 2,Groups F & G (File 152872)		
	NEMA 4X,IP65 *Consult Factory for CE equivalent.		

Standard configuration options (transmitter)

configuration	unless otherwise specified	standard options available
porting size	1/4" NPT	1/2" NPT, AND and MS ports
porting orientation	in-line	N/A
direction of pressure	left to right	right to left (upside down orientation with arc on bottom)
calibration medium	all units with EPDM seals: water all others: alum or SS: hydraulic oil brass: water	N/A
electronic outputs	analog outputs: 4-20 mA (2 wire) 0-5 VDC (3 or 4 wire)	
supply voltage	9-35 VDC (reverse polarity protected)	
loop resistance	1300 ohms max. R=((Vs-9)*1000)/2	20 (ohms at Vs)
board connection	1: + (EXC) 2: - 3: 0-5 V 4: COM	20-26 AWG wire
conduit connection	½" trade size	
primary wetted parts	(must be specified)	aluminum, 316SS, naval brass
secondary wetted parts	range spring: 302SS magnet: ceramic piston seal: Teflon	Teflon-coated spring and magnet
static seals	buna-N	Viton, Teflon, neoprene, fluorosilicone
lens	glass	plastic
dial sizes	(must be specified)	2.5", 3.5", 4.5", 6"
dial case styles	(must be specified)	"B" Basic Case (<i>C-clamp not available</i>) "F" Flanged Case (w/holes for panel mounting)
starting mark on dial	approximately 10% of full scale	N/A

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