# Dial Indicating Pressure Gauges Process



## 600/700 SERIES

- · Turret style dry or liquid-filled gauge
- · Vacuum and compound ranges through 0 psi to 60,000 psi
- 4-1/2" gauge sizes
- · Black phenolic safety case with solid front and blow-out back PBT
- · Phosphor bronze, 316 stainless steel and brass wetted parts

	SERIES	SPECIFICATIONS		
Pressure ranges	600/700 Series (all)	Vacuum and compound ranges through 0 psi to 60,000 psi		
Accuracy	45-640, 45-660	±0.5% full scale		
	45-740, 45-760	$\pm$ 0.5% full scale ±1.6% full scale for inH <sub>2</sub> O, 5 psi and 10 psi ±1% full scale for ≥20,000 psi		
Temperature ranges*	45-640	Media -4 °F to 150 °F (-20 °C to 65 °C) Ambient -40 °F to 150 °F (-40 °C to 65 °C)		
	45-740	Media -40 °F to 212 °F (-40 °C to 100 °C) 500 °F (260 °C) Maximum for short term/intermittent Ambient -40 °F to 150 °F (-40 °C to 65 °C)		
	45-660	Media -4 °F to 150 °F (-20 °C to 65 °C) Glycerine fill -40 °F to 150 °F (-40 °C to 65 °C) Special fill Ambient -4 °F to 150 °F (-20 °C to 65 °C) Glycerine fill -40 °F to 150 °F (-40 °C to 65 °C) Special fill		
	45-760	Media -4 °F to 212 °F (-20 °C to 100 °C) Glycerine fill -40 °F to 212 °F (-40 °C to 100 °C) Special fill 250 °F (130 °C) Maximum for short term/intermittent Ambient -4 °F to 150 °F (-20 °C to 65 °C) Glycerine fill -40 °F to 150 °F (-40 °C to 65 °C) Special fill		
Case	600/700 Series (all)	Turret style black phenolic case. Solid front, safety case with blow-out back PBT.		
Bayonet ring	600/700 Series (all)	Threaded black PBT		
Lens	600/700 Series (all)	Acrylic		
Measuring Element	45-640, 45-660 ( <b>≤ 600 psi</b> )	Copper alloy C-Type Bourdon tube		
	45-740, 45-760 <b>(≤ 600 psi)</b>	316 stainless steel C-Type Bourdon tube		
	600/700 Series (all) (>600 psi)	316 stainless steel coiled safety Bourdon tube		
	45-740 ( <b>≤ 10 psi</b> )	316 stainless steel capsule		
Connection	45-640, 45-660	1/4" NPT, brass		
	45-740, 45-760	1/4" NPT or 1/2" NPT, 316 stainless steel		
Movement	45-640, 45-660	Brass and nickel-silver with highly polished bearing surfaces. An internal zero stop is standard.		
	45-740, 45-760	Stainless steel with highly polished bearing surfaces. An internal zero stop is standard.		
Pointer	600/700 Series (all)	Balanced micro-adjustable aluminum, black finish		
Dial	600/700 Series (all)	Aluminum, white background with black scale. UV resistant.		
Fill liquid **	45-660, 45-760	Glycerine		

### **OPERATING SPECIFICATIONS**

- 1. Working Pressure Limitations
  - a. Dynamic Pressure The working pressure should be limited to 60% of the dial range.
  - b. Static Pressure The working pressure, where no sharp fluctuations occur, should be limited to 90% of the dial range

### **APPLICATIONS**

- Injection molding machines
- Laboratory & test equipment
- Power generation
- Oil field & offshore
- Utilities
- Water & wastewater
- \* For every 18 °F (10 °C) shift in temperature from which the gauge is calibrated, the user can experience up to ±0.4% additional error.
- \*\* See page 53 for gauge fill options.

For details on accuracy/standard dial configuration and dial layouts, see pages 54-59.

600/700 SERIES

ORDERING INFORMATION										
GAUGE SIZES	45	4-1/2"								
CASE TYPES	640	Brass, dry, bottom connection	660	Brass, liquid filled, bottom connection						
	740	SS, dry, bottom connection	760	SS, liquid filled, bottom connection						
PRESSURE	30 inH <sub>2</sub> O vac	-30 inH <sub>2</sub> O to 0 inH <sub>2</sub> O	30/30	-30 inHg to 0 to 30 psi	60	0 psi to 60 psi	2000	0 psi to 2,000 psi		
RANGES	60 inH <sub>2</sub> O vac	-60 in $H_2O$ to 0 in $H_2O$	30/60	-30 inHg to 0 to 60 psi	100	0 psi to 100 psi	3000	0 psi to 3,000 psi		
	60/60 inH <sub>2</sub> O	-60 inH <sub>2</sub> O to 60 inH <sub>2</sub> O	30/100	-30 inHg to 0 to 100 psi	160	0 psi to 160 psi	5000	0 psi to 5,000 psi		
	60 inH₂O	0 inH <sub>2</sub> O to 60 inH <sub>2</sub> O	30/160	-30 inHg to 0 to 160 psi	200	0 psi to 200 psi	6000	0 psi to 6,000 psi		
	100 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 100 inH <sub>2</sub> O	30/200	-30 inHg to 0 to 200 psi	300	0 psi to 300 psi	10000	0 psi to 10,000 psi		
	160 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 160 inH <sub>2</sub> O	30/300	-30 inHg to 0 to 300 psi	400	0 psi to 400 psi	15000	0 psi to 15,000 psi		
	200 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 200 inH <sub>2</sub> O	5	0 psi to 5 psi	600	0 psi to 600 psi	20000	0 psi to 20,000 psi		
	300 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 300 inH <sub>2</sub> O	10	0 psi to 10 psi	800	0 psi to 800 psi	30000	0 psi to 30,000 psi		
	30vac	-30 inHg to 0 psi	15	0 psi to 15 psi	1000	0 psi to 1,000 psi	40000	0 psi to 40,000 psi		
	30/15	-30 inHg to 0 to 15 psi	30	0 psi to 30 psi	1500	0 psi to 1,500 psi	60000	0 psi to 60,000 psi		
SCALE OPTIONS	inH <sub>2</sub> O	inH <sub>2</sub> O single scale	psi	psi single scale	psi/kg/cm <sup>2</sup>	psi/kg/cm2 dual scale	psi/bar	psi/bar dual scale		
CONNECTION SIZES	1/4	1/4" NPT	1/2	1/2" NPT	9/16-18	9/16-18 UNF 3B (above 30,000 psi standard)				
OPTIONS	SG	Safety Glass Lens	CPMR	Uninstalled Chrome Panel Mount Ring	BP3	Brass Press Fit Orifice 0.3 mm				
	GL	Glass Lens	OS	Overload Stop	BT3	Brass Threaded Orifice 0.3 mm				
	MIP	Maximum Indicating Pointer	LM	Laser Marking	ST8	316SS Threaded Orifice 0.8 mm				
	BPMR	Uninstalled Black Panel Mount Ring	ST	Stainless Steel Tagging						

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

NOTE: Refer to 600/700 Series Options & Accessories chart on page 52 for availability by part number.

#### EXAMPLE



