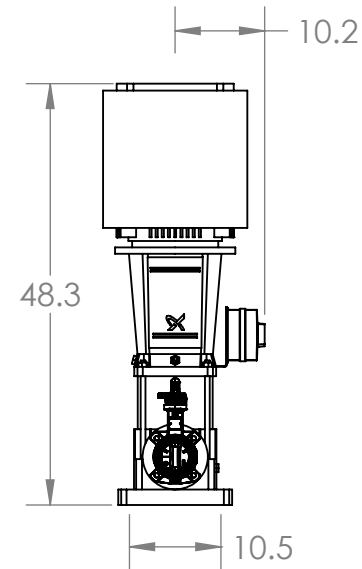
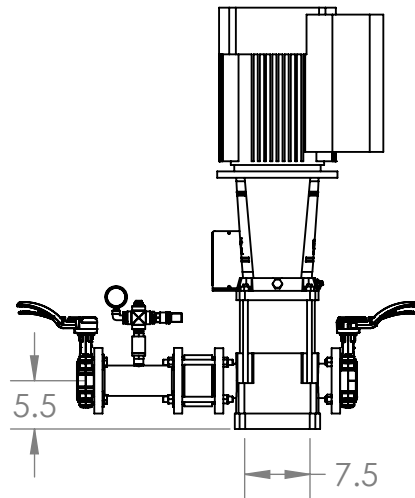
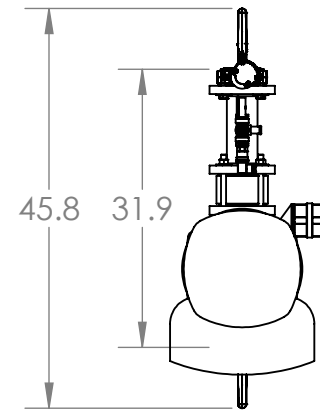
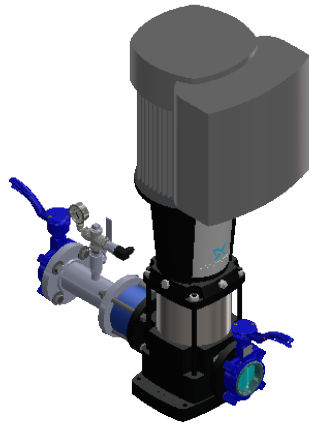


1. Manifolds connections 3" ANSI Class 150
2. 3" lug style ANSI 150# class butterfly valve



**GRUNDFOS**   
 FRESNO, CALIFORNIA 93727 USA

Note:  
 All dimensions are  $\pm 0.5"$   
 Not for Construction  
 All dimensions subject to  
 changewithout notice.

Model:		CRE-PLUS CRE45-2	
Power:		3x460	60HZ 1x15HP
Job:		Scale: 1:22	
Dwg No:	Rev:	Date:	Drawer:
91146105	0	11/26/2019	71999
Page:			1 of 1

PROJECT: _____	UNIT TAG: _____	QUANTITY: _____
REPRESENTATIVE: _____	TYPE OF SERVICE: _____	DATE: _____
ENGINEER: _____	SUBMITTED BY: _____	DATE: _____
CONTRACTOR: _____	APPROVED BY: _____	DATE: _____
	ORDER NO.: _____	DATE: _____

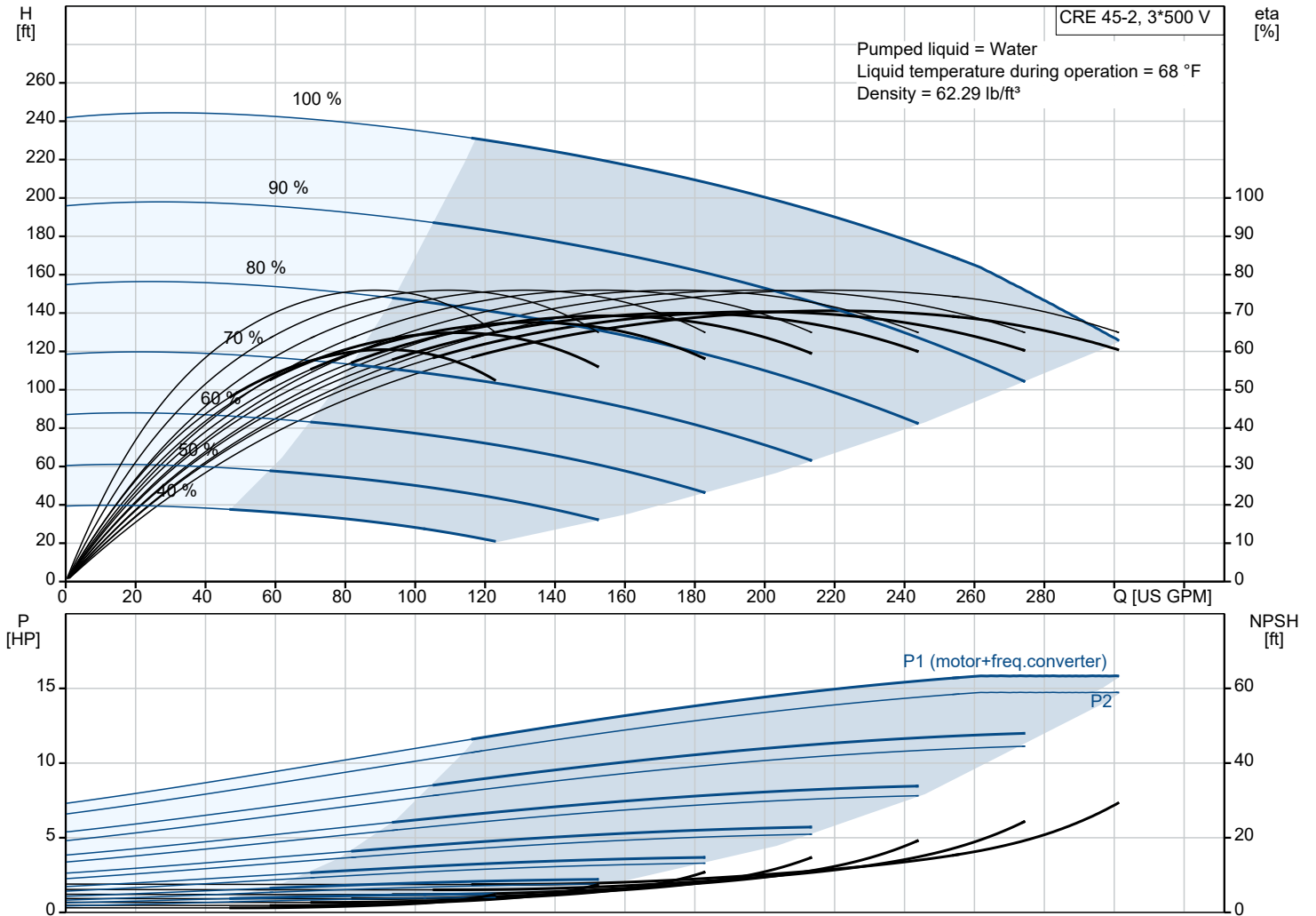


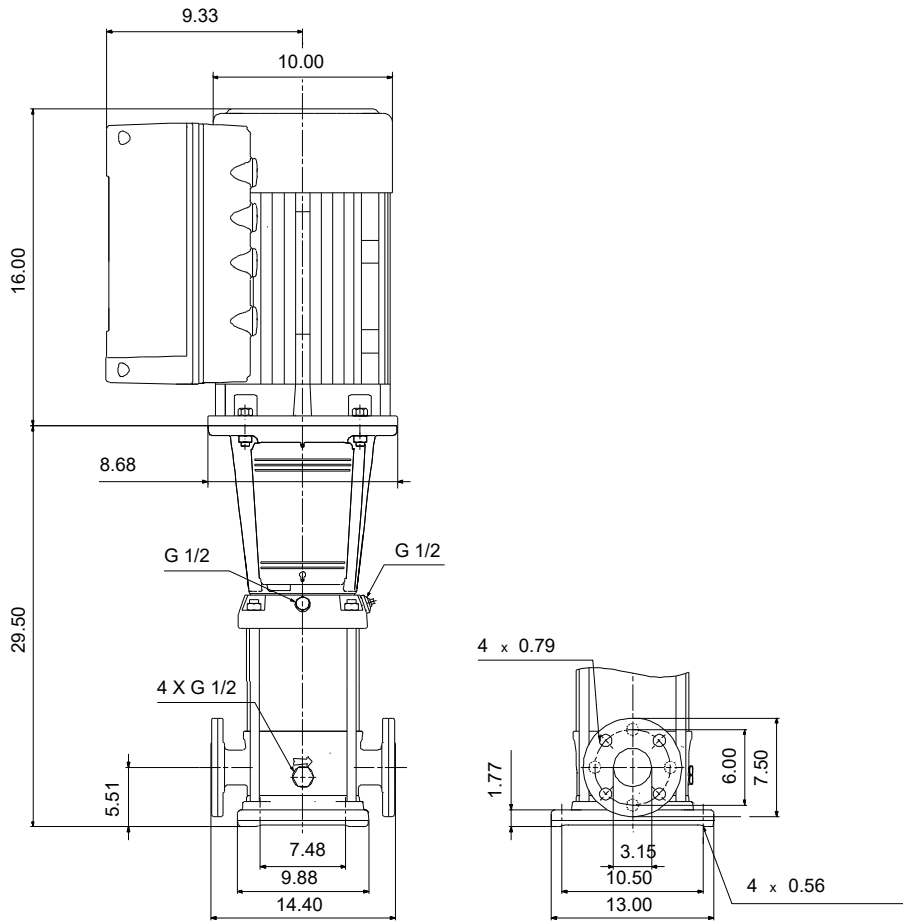
## CRE 45-2 N-G-A-E-HQQE

Vertical, multistage centrifugal pump with integrated frequency converter. The pump head and base are in cast iron - all other wetted parts are in stainless steel (EN 1.4301)

Note! Product picture may differ from actual product


Conditions of Service		Pump Data		Motor Data	
Liquid:	Water	Max pressure at stated temp:	232 psi / 250 °F	Rated power - P2:	15 HP
Temperature:	68 °F	Liquid temperature range:	-22 .. 248 °F	Rated voltage:	440-480 V
Specific Gravity:	1.000	Maximum ambient temperature:	122 °F	Mains frequency:	60 Hz
		Shaft seal:	HQQE	Enclosure class:	IP55
		Product number:	99249176	Insulation class:	F
				Motor protection:	ELEC
				Motor type:	160H
				Eta 1/1:	93.2 %





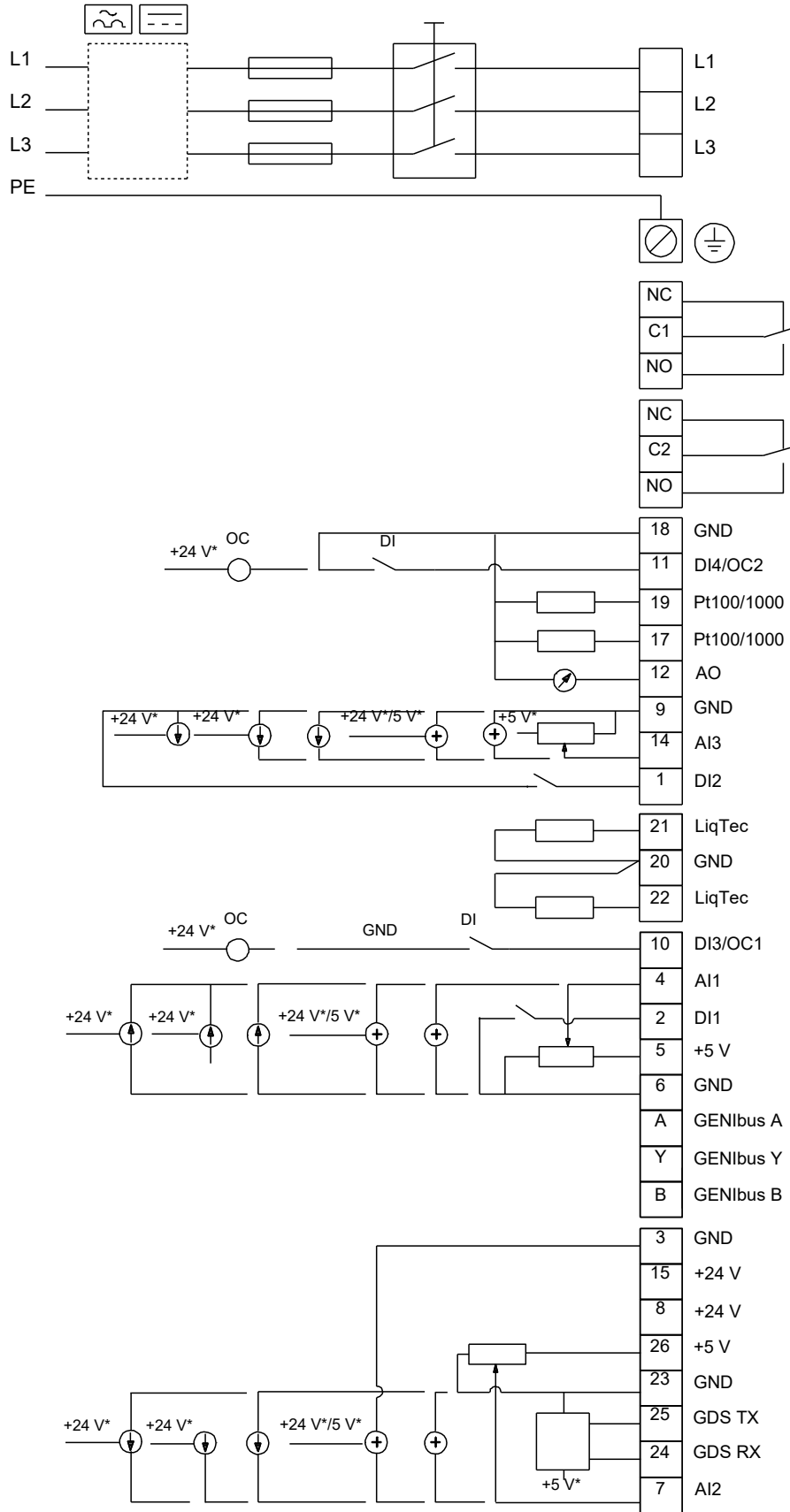
**Materials:**

- Base: Cast iron
- Base: EN 1563 EN-GJS-500-7
- Base: ASTM A536 80-55-06
- Impeller: Stainless steel
- Impeller: AISI 304
- Impeller: EN 1.4301
- Material code: A
- Code for rubber: E

Qty.	Description
1	<p data-bbox="124 85 414 116"><b>CRE 45-2 N-G-A-E-HQQE</b></p>  <p data-bbox="518 436 989 459"><b>Note! Product picture may differ from actual product</b></p> <p data-bbox="124 465 391 497">Product No.: <a href="#">99249176</a></p> <p data-bbox="124 526 1524 600">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via ANSI flanges.</p> <p data-bbox="124 611 1053 642">The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor.</p> <p data-bbox="124 642 941 674">The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="124 674 1524 725">The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.</p> <p data-bbox="124 725 1476 757">The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.</p> <p data-bbox="124 786 885 817">The display gives an intuitive and user-friendly interface to all functions.</p> <p data-bbox="124 817 1460 869">The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".</p> <p data-bbox="124 936 1524 1010">Communication with the pump is also possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".</p> <p data-bbox="124 1048 1117 1079">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="167 1079 1436 1167" style="list-style-type: none"> <li>• "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights)</li> <li>• "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)</li> <li>• "Alarm": Motor has stopped (flashing red indicator lights).</li> </ul> <p data-bbox="124 1167 1508 1218">The terminal box has a number of inputs and outputs enabling the motor to be used in advanced applications where many inputs and outputs are required:</p> <ul data-bbox="167 1218 1508 1608" style="list-style-type: none"> <li>• two dedicated digital inputs</li> <li>• three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the factory-fitted pressure sensor is connected to one of these inputs</li> <li>• 5 V voltage supply to potentiometer and sensor</li> <li>• one analog output, 0-10 V, 0(4)-20 mA</li> <li>• two configurable digital inputs or open-collector outputs</li> <li>• two Pt100/Pt1000 inputs</li> <li>• LiqTec, dry-running protection sensor input</li> <li>• Grundfos Digital Sensor input and output</li> <li>• 24 V voltage supply for sensors</li> <li>• two signal-relay outputs (potential-free contacts)</li> <li>• GENIbus connection</li> <li>• interface for Grundfos CIM fieldbus module.</li> </ul> <p data-bbox="124 1637 199 1668">Liquid:</p> <p data-bbox="124 1668 558 1700">Pumped liquid: Water</p> <p data-bbox="124 1700 622 1731">Liquid temperature range: -22 .. 248 °F</p> <p data-bbox="124 1731 550 1762">Selected liquid temperature: 68 °F</p> <p data-bbox="124 1762 606 1794">Density: 62.29 lb/ft<sup>3</sup></p> <p data-bbox="124 1816 239 1848">Technical:</p> <p data-bbox="124 1848 742 1879">Pump speed on which pump data are based: 3444 rpm</p> <p data-bbox="124 1879 630 1910">Rated flow: 238 US GPM</p> <p data-bbox="124 1910 574 1942">Rated head: 177.8 ft</p> <p data-bbox="124 1942 566 1973">Actual impeller diameter: 5.37 in</p> <p data-bbox="124 1973 574 2004">Pump orientation: Vertical</p> <p data-bbox="124 2004 550 2036">Shaft seal arrangement: Single</p> <p data-bbox="124 2036 566 2067">Code for shaft seal: HQQE</p> <p data-bbox="124 2067 582 2098">Approvals: CURUS</p> <p data-bbox="124 2098 630 2130">Approvals for drinking water: NSF/ANSI 61</p> <p data-bbox="124 2130 686 2161">Curve tolerance: ISO9906:2012 3B</p>

Qty.	Description
	<p><b>Materials:</b></p> <p>Base: Cast iron EN 1563 EN-GJS-500-7 ASTM A536 80-55-06</p> <p>Impeller: Stainless steel EN 1.4301 AISI 304</p> <p>Bearing: SIC</p> <p>Support bearing: Graflon</p> <p>Installation:</p> <p>t max amb: 122 °F</p> <p>Maximum operating pressure: 232.06 psi</p> <p>Max pressure at stated temp: 232 psi / 250 °F 232 psi / -22 °F</p> <p>Type of connection: ANSI</p> <p>Size of inlet connection: 3 inch</p> <p>Size of outlet connection: 3 inch</p> <p>Pressure rating for connection: PN 16</p> <p>Flange rating inlet: 150 lb</p> <p>Flange size for motor: 254TC</p> <p>Electrical data:</p> <p>Motor standard: NEMA</p> <p>Motor type: 160H</p> <p>IE Efficiency class: IE5</p> <p>Rated power - P2: 15 HP</p> <p>Power (P2) required by pump: 15 HP</p> <p>Mains frequency: 60 Hz</p> <p>Rated voltage: 3 x 440-480 V</p> <p>Service factor: 1.15</p> <p>Rated current: 17.9-16.6 A</p> <p>Cos phi - power factor: 0.92-0.91</p> <p>Rated speed: 360-4000 rpm</p> <p>Efficiency: 93.2%</p> <p>Motor efficiency at full load: 93.2 %</p> <p>Enclosure class (IEC 34-5): IP55</p> <p>Insulation class (IEC 85): F</p> <p>Motor No: 99256777</p> <p>Controls:</p> <p>Frequency converter: Built-in</p> <p>Pressure sensor: Y</p> <p>Others:</p> <p>DOE Pump Energy Index VL: 0.40</p> <p>Net weight: 279 lb</p> <p>Gross weight: 297 lb</p> <p>Shipping volume: 17.5 ft³</p>

# 99249176 CRE 45-2 N-G-A-E-HQQE 60 Hz



Note! All units are in [in] unless others are stated.

**Ball Valves**

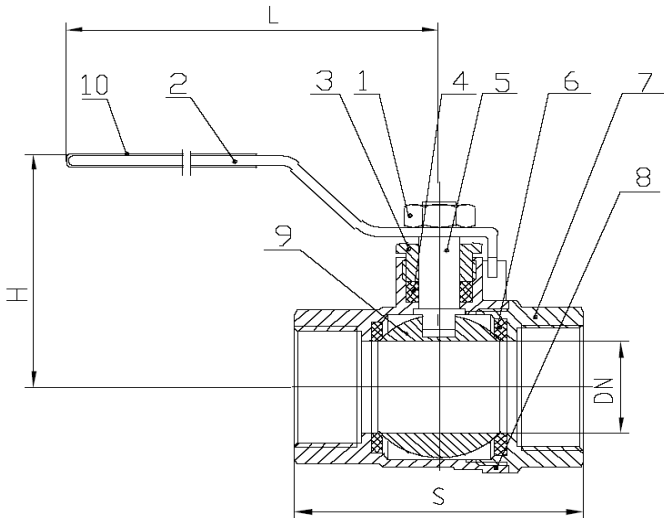


**General**

- Threaded Ends
- Blow Out Proof Stem
- 600 WOG
- 2-Piece Body
- Teflon Seats
- Teflon Packing

**Dimensions & Weights**

Size	DN (in)	S (in)	H (in)	L (in)	WT. (lb)
1/4"	0.39	1.76	1.75	3.54	0.35
3/4"	0.75	2.50	2.18	3.94	0.79
1-1/4"	1.26	3.42	2.87	4.80	1.75
1-1/2"	1.57	3.76	3.48	5.91	2.47
2"	1.97	4.25	3.82	5.91	3.46

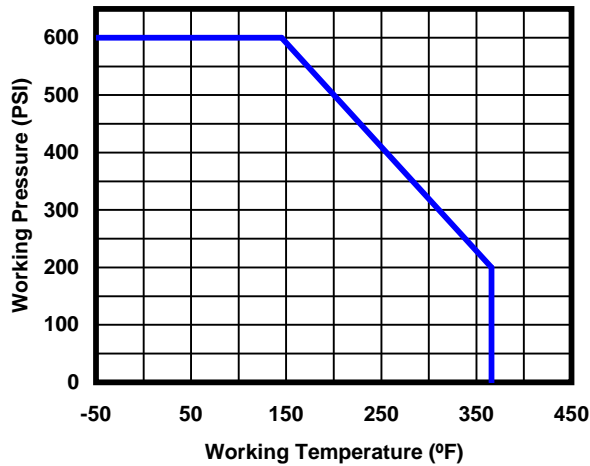


**MATERIAL SPECIFICATIONS**

NO.	PART	MATERIAL (ASTM)
1	NUT	ZINC PLATED STEEL
2	HANDLE	ZINC PLATED STEEL
3	BONNET	BRASS (C37000)
4	PACKING	TEFLON
5	STEM	BRASS (C37000)
6	BALL SEAT	TEFLON
7	END PIECE	LOW LEAD BRASS (LTN60-6)
8	BODY	LOW LEAD BRASS (LTN60-6)
9	BALL	LOW LEAD BRASS (LTN60-6)
10	SLEEVE	PVC

**APPROVALS**

- NSF 61, IAPMO - N4359
- AB1953, IAPMO - 5653



# Wafer Check Valve    Silent Check    Model 888

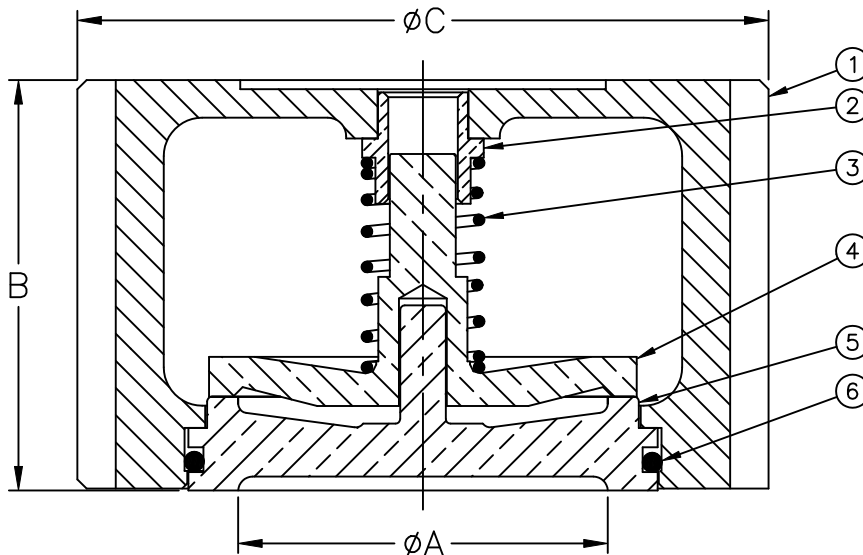
Sizes 2" Thru 6" / 50 mm & 150 mm



Flomatic Corporation



## Materials



Item #	Qty	Description	Material	ASTM
1	1	Body (Epoxy Coated)	Cast Iron	A126, Class B
2	1	Bushing	Bronze	C95400
3	1	Spring	Stainless Steel	302
4	1	Poppet	Silicon Brass	C87800
5	1	Seat Ring*	Silicon Brass	C87800
6	1	O'Ring	Buna-n	-----

\*OPTIONAL RESILIENT SEAT AVAILABLE, ADD "R" TO THE PART NUMBER 5" AND THE RESILIENT SEATED VALVES ARE NOT NSF61 APPROVED

Max Temp 180°F (82°C)

Max Inlet Pressure (125#) 200 psi (14bar)

Max Inlet Pressure (250#) 400 psi (27bar)

PATENT # 6,024,121

## Dimensions

Size		Part #	A		B		C		Weight		# of Bolts		Bolt Size by Flange	
inch	mm		inch	mm	inch	mm	inch	mm	lbs	kg	125#	250#	125#	250#
2	50	2434	2-13/32	61	2-5/8	67	4-1/4	108	5	2.5	4	8	5/8 x 5-1/4	5/8 x 5-1/2
2-1/2	65	2432	2-9/16	65	2-7/8	73	5	127	7	3	4	8	5/8 x 5-1/4	3/4 x 6-1/2
3	80	2435	3-1/4	83	3-1/8	79	5-3/4	146	11	5	4	8	5/8 x 6-1/4	3/4 x 7
4	100	2436	4-3/8	111	4	102	7	178	18	8	8	8	5/8 x 7	3/4 x 8
5	125	2433	5-1/4	133	4-3/4	121	8-3/8	213	25	11.5	8	8	3/4 x 7-3/4	3/4 x 9
6	150	2437	5-29/32	150	5-1/2	140	9-3/4	248	36	16.5	8	12	3/4 x 8-3/4	3/4 x 10

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April 4, 1995  
Dwg No: S888-1 Rev S (3/15)

FLOMATIC CORPORATION  
GLENS FALLS, N.Y. 12801  
PHONE (518) 761-9797  
FAX (518) 761-9798



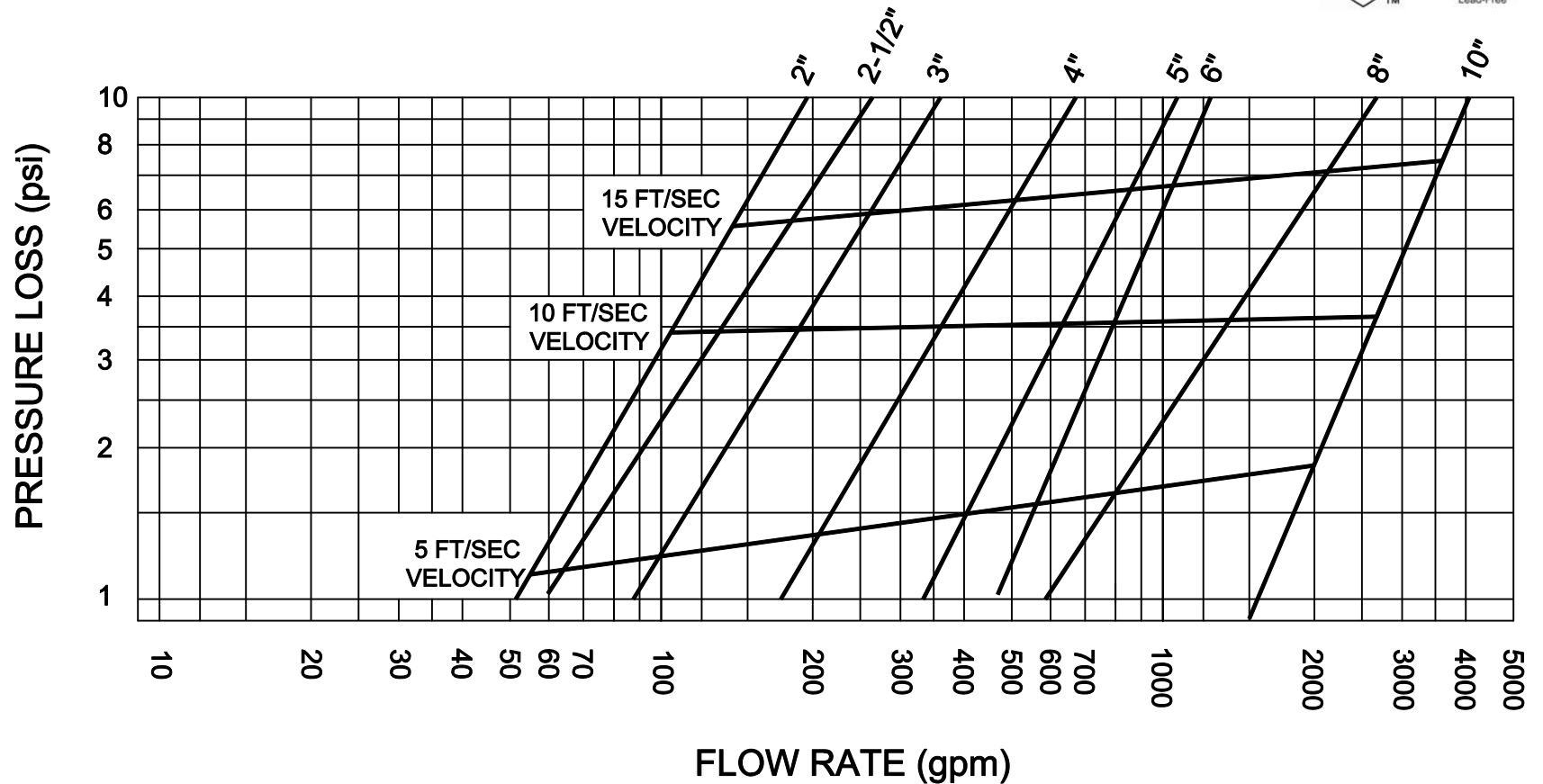
# Wafer Check Valve

# Headloss Chart

# Model 888/888R



Sizes 2" thru 10"/ 50 mm thru 250 mm



PATENT # 6,024,121

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December 28, 1994  
Dwg No: S888HL Rev: E (6/13)

FLOMATIC CORPORATION  
GLENS FALLS, N.Y. 12801  
PHONE (518) 761-9797  
FAX (518) 761-9798

# D80 Series

Dry or Liquid Filled • Stainless Steel Case

UTILITY GAUGES



D82LFB shown



- ▶ 1 1/2", 2", 2 1/2", 4" Dial Sizes
- ▶ ±1.6% Accuracy (1% Optional)
- ▶ Stainless Steel Case
- ▶ Glycerine Fill Standard

The Trerice **D80 Series** Industrial Gauge is designed for rugged performance requirements at an economical cost. This liquid filled gauge is furnished with a stainless steel case and crimped ring. Wetted parts are either bronze tube with Lead-Free (PBF) brass socket or stainless steel.

- **Optional features and case style variations available: Please consult the Options & Accessories Section for details.**
- **For correct use and application of all pressure gauges, please refer to: Pressure Gauge Standard ASME B40.100.**

## Specifications

Models	Wetted Parts	
<b>D82B</b>	(dry)	Bronze tube, brass socket
<b>D82LFB</b>	(liquid filled)	Lead-Free (PBF) Meets NSF/ANSI Standards 372 and 61
<b>D83SS</b>	(dry)	316 Stainless steel tube & socket
<b>D83LFSS</b>	(liquid filled)	
<b>Dial Sizes</b>	1 1/2", 2", 2 1/2", 4"	
<b>Fill</b>	Glycerine, other fills available See Optional Features Section	
<b>Movement</b>	<b>D82:</b> Brass <b>D83:</b> 316 Stainless steel	
<b>Connection</b>	Lower male or center back male, (Lower back male 4" Dial only)	
<b>Case</b>	304 stainless steel, stem-mounted flangeless	
<b>Ring</b>	Crimped 304 stainless steel	
<b>Window</b>	Acrylic	
<b>Pointer</b>	Plain, black finished	
<b>Dial Face</b>	Aluminum, white background with black graduations and markings	
<b>Accuracy</b>	±1.6% Full Scale (1% available as an option)	
<b>Maximum Temperature</b>	<b>150°F (65°C)</b>	

### Approximate Shipping Weight

- 1 1/2" Dial Size: 0.4 lbs [0.18 kg]
- 2" Dial Size: 0.4 lbs [0.18 kg]
- 2 1/2" Dial Size: 0.5 lbs [0.23 kg]
- 4" Dial Size: 1.0 lbs [0.45 kg]

## HOW TO ORDER

Sample Order Number: **D82LFB 25 02 L A 110**

Model	Dial Size	Connection Size	Connection Location	Units of Measure	Range Code
<b>D82LFB</b>	15 1 1/2"	01 1/8 NPT*	L Lower	A psi	See Standard Ranges
<b>D83LFSS</b>	20 2"	02 1/4 NPT**	B Back	D psi/kPa	
<b>D82B</b>	25 2 1/2"	04 1/2 NPT***			
<b>D83SS</b>	40 4"				

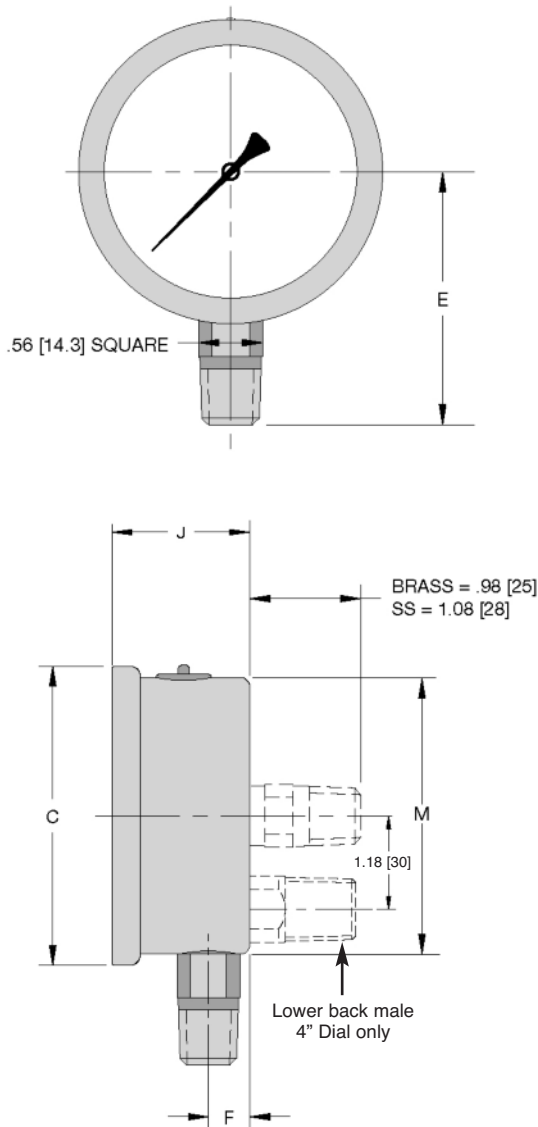
- \* 1/8 NPT connection size not available with 4" dial size.
- \*\* 1/4 NPT connection size not available with 1 1/2" dial size.
- \*\*\* 1/2 NPT connection size only available with 4" dial size.

# D80 Series

## Dry or Liquid Filled • Stainless Steel Case

All dimensions are nominal. Dimensions in [ ] are in millimeters.

UTILITY GAUGES



### Standard Ranges

psi Ranges (A)		D82		D83	
Range Code	Specific Range (psi)	Figure Intervals	Minor Divisions	Figure Intervals	Minor Divisions
010	30" Hg to 0	5	0.5	5	0.5
020	30" Hg to 15 psi	10/5	1/0.5	10/5	1/0.5
030	30" Hg to 30 psi	10/5	1/1	10/5	1/1
040	30" Hg to 60 psi	10/10	2/1	10/10	2/1
050	30" Hg to 100 psi	30/20	2/2	30/20	2/2
060	30" Hg to 150 psi	30/30	5/2	30/30	5/2
070	30" Hg to 300 psi	30/50	5/5	30/50	5/5
080	0 to 15 psi	3	0.2	3	0.2
090	0 to 30 psi	5	0.5	5	0.5
100	0 to 60 psi	10	1	10	1
110	0 to 100 psi	10	1	10	1
120	0 to 160 psi	20	2	20	2
130	0 to 200 psi	20	2	20	2
140	0 to 300 psi	50	5	50	5
150	0 to 400 psi	50	5	50	5
160	0 to 600 psi	100	10	100	10
180	0 to 1000 psi	100	20	100	20
190	0 to 1500 psi	300	20	300	20
200	0 to 2000 psi	200	20	200	20
210	0 to 3000 psi	500	50	500	50
220	0 to 5000 psi	1000	100	1000	100

Ranges over 5000 PSI are not available on D82LFB.

230	0 to 10000 psi	N/A	N/A	2000	200
240	0 to 15000 psi	N/A	N/A	3000	200

For dual scale ranges specify the appropriate **Units of Measure: D** (psi/kPa) followed by the corresponding **A** (psi) **Range Code**

Dial Size	C	E	F	J	M
1 1/2" D82	1.85 [47]	1.50 [38]	0.32 [8]	1.06 [27]	1.61 [41]
1 1/2" D83	1.85 [47]	1.50 [38]	0.32 [8]	1.06 [27]	1.61 [41]
2" D82	2.28 [58]	1.89 [48]	0.39 [10]	1.14 [29]	2.05 [52]
2" D83	2.28 [58]	2.05 [52]	0.35 [9]	1.18 [30]	2.05 [52]
2 1/2" D82	2.68 [68]	2.24 [57]	0.39 [10]	1.18 [30]	2.44 [62]
2 1/2" D83	2.68 [68]	2.32 [59]	0.51 [13]	1.38 [35]	2.44 [62]
4" D82	4.29 [109]	3.07 [78]	0.47 [12]	1.42 [36]	3.90 [99]
4" D83	4.29 [109]	3.94 [100]	0.75 [19]	1.93 [49]	3.94 [100]

# Data sheet

# MBS 3000 pressure transmitter for industrial applications

## Introduction

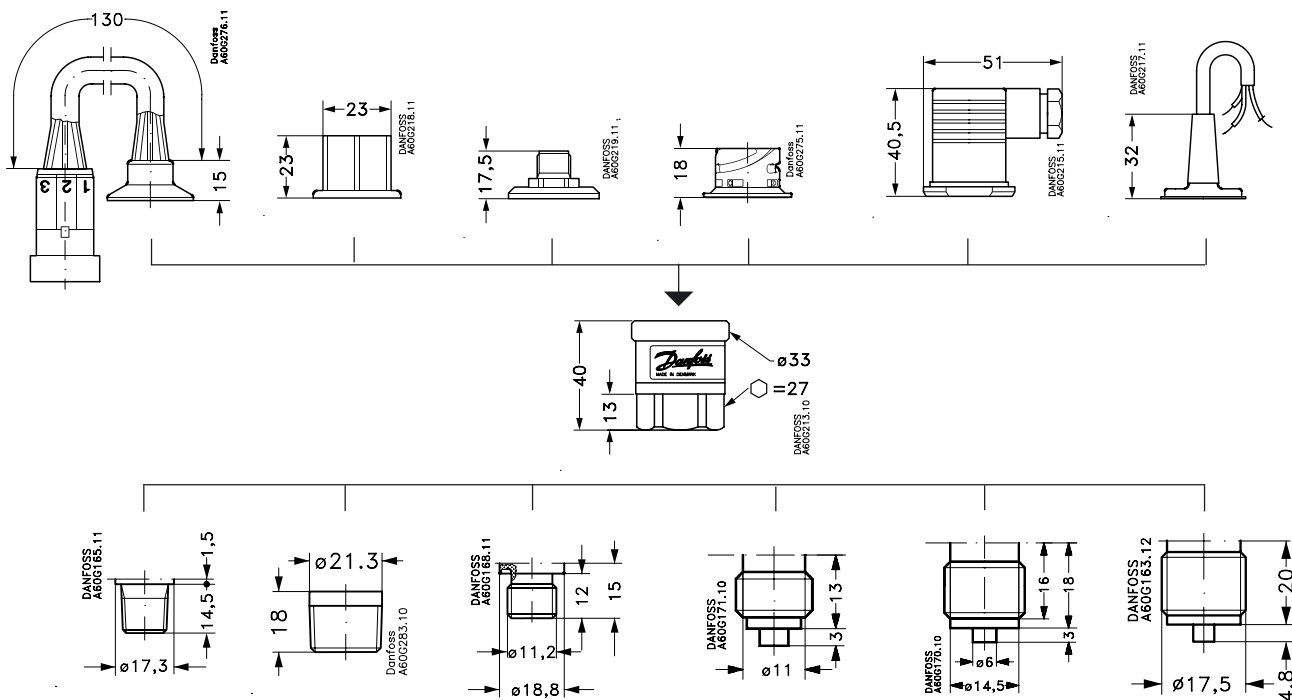


- Designed for use in severe industrial environments
- Enclosure and wetted parts of acid-resistant stainless steel (AISI 316L)
- All standard output signals: 4-20 mA, 0-5 V, 1-5 V, 1-6 V, 0-10 V
- A wide range of pressure and electrical connections
- Temperature compensated and laser calibrated
- Typical applications:
  - Pumps
  - Compressors
  - Pneumatics
  - Water treatment

## Dimensions

### Ordering

Type code Page 4	8	2	5	7	1	3
	AMP Superseal 1.5 series (male)	AMP Econoseal J series (male)	IEC 947-5-2 M12x1, 4-pin	ISO 15170-A1-3.2-Sn (Bayonet plug)	DIN 43650, Pg 9	2 m screened cable



### Ordering

	1/4 - 18 NPT	1/2 - 14 NPT	DIN 3852-E-G1/4 Gasket: DIN 3869-14	G 1/4 A (EN 837)	G 3/8 A (EN 837)	G 1/2 A (EN 837)
Type code page 4	AC04	AC08	GB04	AB04	AB06	AB08

Technical data

Main specifications

Pressure connections	see page 1							
Measuring ranges [bar]	0-1 0-25	0-1.6 0-40	0-2.5 0-60	0-4 0-100	0-6 0-160	0-10 0-250	0-16 0-400	0-600
Output signals	4-20 mA	0-5 V	1-5 V	1-6 V	0-10 V			
Electrical connections	see page 3							

Performance (IEC 770)

Accuracy	±0.5% FS (typ.) ±1% FS (max.)
Non-linearity (best fit straight line)	≤ ±0.5% FS
Hysteresis and repeatability	≤ ±0.1% FS
Thermal zero point shift	≤ ±0.1% FS/10K (typ.) ≤ ±0.2% FS/10K (max.)
Thermal sensitivity (span) shift	≤ ±0.1% FS/10K (typ.) ≤ ±0.2% FS/10K (max.)
Response time	< 4 ms
Overload pressure	6 × FS (max. 1500 bar)
Burst pressure	6 × FS (max. 2000 bar)
Durability, P: 10-90% FS	>10×10 <sup>6</sup> cycles

Electrical specifications

	Nom. output signal (short-circuit protected)		
	4 – 20 mA	0-5, 1-5, 1-6 V d.c.	0-10 V d.c.
Supply voltage [U <sub>B</sub> ], polarity protected	9 → 32 V d.c.	9 → 30 V d.c.	15 → 30 V d.c.
Supply - current consumption	-	≤ 5 mA	≤ 8 mA
Supply voltage dependency	≤ ±0.05% FS/10 V		
Current limitation (linear output up to 1.5x nom. range)	34 mA (typ.)	-	
Output impedance	-	≤ 25Ω	
Load [R <sub>L</sub> ] (load connected to 0V)	R <sub>L</sub> ≤ (U <sub>B</sub> -9V)/0.02	R <sub>L</sub> ≥ 10 kΩ	R <sub>L</sub> ≥ 15 kΩ

Environmental conditions

Medium temperature range	-40 → +85°C			
Ambient temperature range (depending on electrical connection)	see page 3			
Compensated temperature range	0 → +80°C			
Transport temperature range	-50 → +85°C			
EMC - Emission	EN 61000-6-3			
EMC - Immunity	Electrostatic discharge	Air mode	8 kV	EN 61000-6-2
		Contact mode	4 kV	EN 61000-6-2
	RF field	conducted	10 V/m, 26 MHz - 1 GHz	EN 61000-6-2
		radiated	10 V <sub>rms</sub> , 150 kHz - 30 MHz	EN 61000-6-2
	Transient	burst	4 kV (CM), Clamp	EN 61000-6-2
surge		1 kV (CM,DM), Rg = 42Ω	EN 61000-6-2	
Insulation resistance	> 100 MΩ at 100 V d.c.			
Mains frequency test	500 V, 50 Hz		SEN 361503	
Vibration stability	Sinusoidal	15.9 mm-pp, 5Hz-25Hz		IEC 60068-2-6
		20 g, 25 Hz - 2 kHz		
Shock resistance	Random	7.5 g <sub>rms</sub> , 5 Hz - 1 kHz		IEC 60068-2-34, IEC 60068-2-36
	Shock	500 g / 1 ms		
Enclosure (depending on electrical connection)	Shock	500 g / 1 ms		IEC 60068-2-27
	Free fall			IEC 60068-2-32

Mechanical characteristics

Materials	Wetted parts	DIN 17440-1.4404 (AISI 316 L)
	Enclosure	DIN 17440-1.4404 (AISI 316 L)
	Electrical connections	see page 3
Weight (depending on pressure connection and electrical connection)	0.2-0.3 kg	

**Electrical connections**

Type code, page 4					
1	2	5	7	8	3
DIN 43650, Pg 9 	AMP Econoseal J series (male) 	IEC 947-5-2 M12x1 	ISO 15170-A1-3.2-Sn (Bayonet plug) 	AMP Superseal 1.5 series (male) 	2 m screened cable 
<i>Ambient temperature</i>					
-40 → + 85 °C	-40 → + 85 °C	-25 → +85 °C	-40 → +85 °C	-40 → +85 °C	-30 → +85 °C
<i>Enclosure</i>					
IP 65	IP 67	IP 67	IP 67 / IP 69K	IP 67	IP67
<i>Materials</i>					
Glass filled polyamid, PA 6.6	Glass filled polyamid, PA 6.6 <sup>1)</sup>	Nickel plated brass, CuZn/Ni	Glass filled polyester, PBT	Glass filled polyamid, PA 6.6 <sup>2)</sup>	Polyolifin cable with PE shrinkage tubing
<i>Electrical connection, 4-20 mA output (2 wire)</i>					
Pin 1: +supply Pin 2: ÷supply Pin 3: Not used Earth: Connected to MBS housing	Pin 1: +supply Pin 2: ÷supply Pin 3: Not used	Pin 1: +supply Pin 2: Not used Pin 3: Not used Pin 4: ÷supply	Pin 1: +supply Pin 2: ÷supply Pin 3: Ventilation Pin 4: Not used	Pin 1: +supply Pin 2: ÷supply Pin 3: Not used	Brown wire: +supply Black wire: ÷supply Red wire: Not used Orange: Not used Screen: Not connected to MBS housing
<i>Electrical connection, 0-5V, 1-5V, 1-6V, 0-10V output</i>					
Pin 1: +supply Pin 2: ÷supply Pin 3: Output Earth: Connected to MBS housing	Pin 1: +supply Pin 2: ÷supply Pin 3: Output	Pin 1: +supply Pin 2: not used Pin 3: Output Pin 4: ÷supply	Pin 1: +supply Pin 2: Output Pin 3: Ventilation Pin 4: ÷supply	Pin 1: +supply Pin 2: ÷supply Pin 3: Output	Brown wire: Output Black wire: ÷supply Red wire: + supply Orange: Not used Screen: Not connected to MBS housing

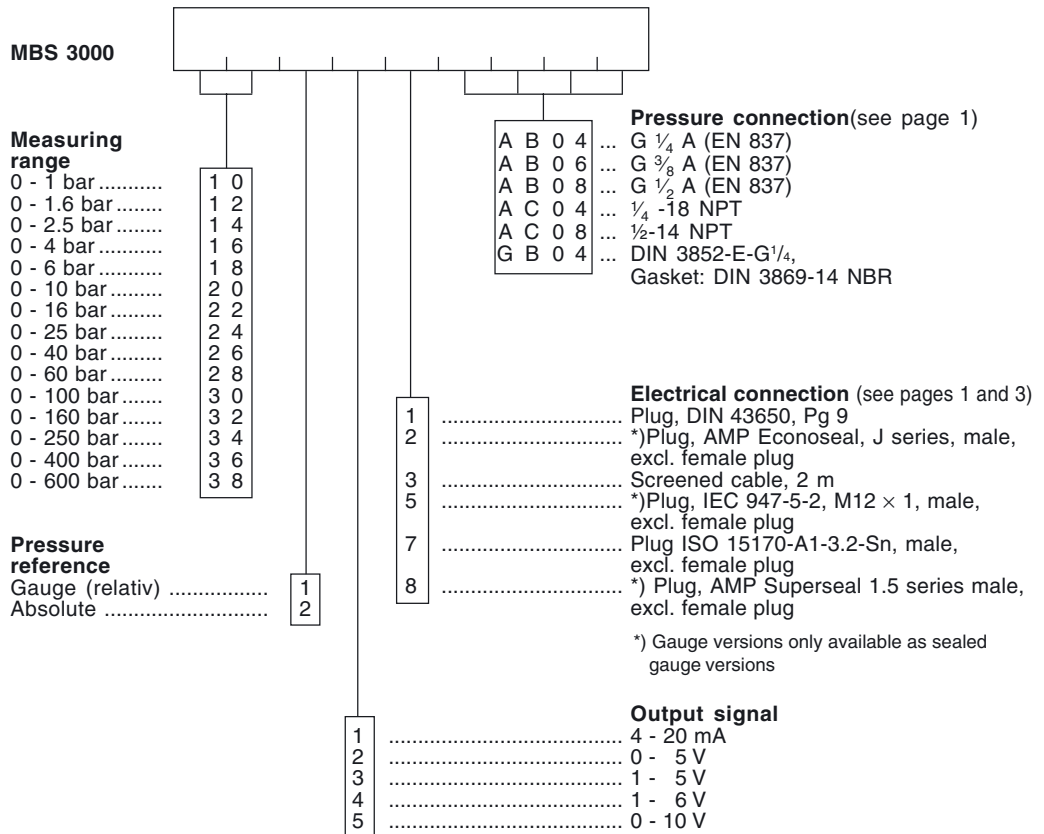
<sup>1)</sup> Female plug: Glass filled polyester, PBT

<sup>2)</sup> Wire: PETFE (teflon)  
Protection sleeve: PBT mesh (polyester)

**Ordering of standard MBS 3000 with DIN 43650 plug Pg 9**

Pressure connection	Pressure range Pe	Type	Code no.
G 1/4 A (EN 837)	0 - 1 bar	MBS 3000 1011-1 AB04	060G1113
	0 - 1.6 bar	MBS 3000 1211-1 AB04	060G1429
	0 - 2.5 bar	MBS 3000 1411-1 AB04	060G1122
	0 - 4 bar	MBS 3000 1611-1 AB04	060G1123
	0 - 6 bar	MBS 3000 1811-1 AB04	060G1124
	0 - 10 bar	MBS 3000 2011-1 AB04	060G1125
	0 - 16 bar	MBS 3000 2211-1 AB04	060G1133
	0 - 25 bar	MBS 3000 2411-1 AB04	060G1430
	0 - 40 bar	MBS 3000 2611-1 AB04	060G1105
	0 - 60 bar	MBS 3000 2811-1 AB04	060G1106
	0 - 100 bar	MBS 3000 3011-1 AB04	060G1107
	0 - 160 bar	MBS 3000 3211-1 AB04	060G1112
	0 - 250 bar	MBS 3000 3411-1 AB04	060G1111
	0 - 400 bar	MBS 3000 3611-1 AB04	060G1109
0 - 600 bar	MBS 3000 3811-1 AB04	060G1110	

**Ordering of special versions**



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