

Data Sheet

DG25 General Purpose Digital Gauge

FEATURES

- 0.5% Accuracy (0.25% option)
- Min./Max. function feature records low and high pressure events
- Nine engineering units: one field (programmable)
- All Stainless steel, laser welded wetted parts
- Push-button menu navigation
- 20 segment bar graph display
- 5-Digit numeric display
- IP67 Enclosure

TYPICAL USES

- Hydraulics and pneumatics
- Test and measurement
- Specialized OEM equipment
- Material strength testing
- Torque measurement
- Weighing

SPECIFICATIONS

Accuracy:	±0.5% of span (ASME B40.7 Grade 2A), ±0.25% of span (ASME B40.7 Grade 3A) (OPT.)
Case Size:	2½"
Nominal Sizes:	2.73" (70 mm) dia., 1.61" (40.9 mm) deep, 2.64" (67 mm) centerline to end of ¼ NPT thread height
Character Height:	Upper line: 0.48", (12.19 mm), 5-digit Lower line: 0.24", (6.10 mm), 5-character alphanumeric
Ranges:	Vacuum, compound, 15 to 25,000 psi
Pressure Connection:	¼ NPT typical, see page 4 for all options
Process Connection Location:	Lower
Temperature Coefficient:	0.04% °F (-20 °F to 180 °F) zero and span Reference temperature 70 °F
Leak Integrity:	10 ⁻⁷ cc/sec
Update Rate:	1Hz, 2Hz, 4Hz
Vibration:	MIL-STD-202G, Method 201A
Shock:	MIL-STD-202G, Method 213B, Test Condition K
Serial Number:	Yes
View Angle:	12 o'clock
Battery:	Two AA alkaline batteries
Battery Life:	2,000 hours minimum
Battery Life Indicator:	4 levels
Cycle Life:	10 million cycles



DG25
2.73", 70 mm nominal case diameter



KEY BENEFITS

- Wide variety of pressure connection thread options
- Easily custom configured to meet unique requirements
- Ingress protection suitable for demanding applications

SPECIFICATIONS

LCD Display:	Five-digit numeric top line, five-character alphanumeric lower line, 20 segment vertical bar graph, four segment battery life indicator, dedicated icons for gauge timer, back light timer, tare, min. and max.
Keypad Functions:	Three key; with multi-press functionality
Hard Keys:	On/Off: Power Symbol and Enter Zero: Tare, and Up Arrow Menu: Access, Backlight, Down Arrow
Engineering Units:	psi, bar, in. Hg, cm Hg, mm Hg, kPa, MPa, kg/cm ² , ft. H ₂ O, and customer defined unit. (Some ranges may not include all units due to resolution limitations. See range chart on page 3.)
Enclosure Rating:	IP67
Approvals:	CE/UKCA, UL 61010-1, CUL

PRESSURE RATINGS

Overpressure:	Proof:	Burst:
15 to ≤2,000 psi	2X Range	8X Range
≥3,000 to ≤5,000 psi	1.5X Range	3X Range
≥7,500 to ≤20,000 psi	1.2X Range	1.5X Range

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WETTED COMPONENTS

Diaphragm	Socket	Joints
17-4 Stainless steel	316L Stainless steel	Laser welded

NON-WETTED COMPONENTS

Case	Keypad
Polycarbonate/ABS	Polycarbonate

MIN/MAX TEMPERATURE LIMITS

Version	Process	Storage
DG25	-4 °F to 140 °F (-20 °C to 60 °C)	-4 °F to 140 °F (-20 °C to 60 °C)
Batteries removed	—	-4 °F to 176 °F (-20 °C to 80 °C)

ORDERING CODE	Example:	DG	25	3	1	L	1	NA	M02	L	1000#	-XC4
Model		DG										
DG - DG25		DG										
Dial Size			25									
25 - 2.5"			25									
Accuracy				3								
3 - ±0.25% of span				3								
5 - ±0.5% of span												
Type					1							
1 - Battery					1							
Backlight						L						
L - Backlight						L						
N - No backlight												
Protective Boot												
0 - None												
1 - Black							1					
2 - Orange												
Electrical Connection								NA				
NA - Not Applicable								NA				
Process Connection Size									M02			
F09 - 9/16-18 UNF-2B internal thread, high pressure									M02			
M01 - 1/8 NPT Male												
M02 - 1/4 NPT Male									M02			
M04 - 1/2 NPT Male												
M75 - No thread for seal weld												
MD2 - 1/4 NPTF Male dry seal, high pressure												
MG2 - G1/4 B Male												
MGA - G1/4 A Male												
MKJ - 1/4-19 BSP Male with shaft												
MLF - 1/2 NPT Male with 7/16-20 UNJF-3B internal thread												
MR4 - R 1/4 Male												
MS2 - 1/4-19 BSP Male												
Process Connection Location										L		
L - Lower										L		
Range (coding example, see range table below for all standard ranges)											1000#	
1000# - 0-1,000 psi											1000#	
Options (if choosing an option(s), must include an "X")												X_
B3 - Gauge pouch with Ashcroft® logo												X_
C4 - Traceable calibration certificate												C4
NH - Metal tag wired to case												
OB - Generic non-branded key panel												
QX - Epoxy potted stem (10 unit minimum)												
6B - Cleaned for gaseous oxygen service												
6W - Cleaned to ASME B40.100 level IV, NOT marked for gaseous oxygen service												

Consult factory for: Custom configurations, OEM requirements, traceable calibration certificate, cleaned for gaseous oxygen service, gauge pouch with Ashcroft® logo, other ranges and mounting options

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Standard psi ranges

RANGE CODE	psi		bar		in. Hg		cm Hg		mm Hg		kPa		MPa		kg/cm ²		ft. H ₂ O	
	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range
Vacuum																		
0#&V*	-14.500	0	-0.9998	0	-29.52	0	-74.99	0	-749.99	0	-99.97	0	-0.1000	0	-1.0195	0	-33.46	0
Compound																		
15#&V*	-14.500	15.00	-0.9998	1.0342	-29.52	30.54	-74.99	77.57	-749.9	775.5	-100.0	103.4	-0.1000	0.1034	-1.0195	1.0546	-33.46	34.62
30#&V*	-14.500	30.00	-1.000	2.068	-29.52	61.08	-74.99	155.15	-749.9	1551.5	-100.0	206.8	-0.1000	0.2068	-1.019	2.109	-33.46	69.23
60#&V	-14.500	60.00	-1.000	4.137	-29.52	122.16	-75.0	310.3	-750	3103	-100.0	413.7	-0.1000	0.4137	-1.019	4.219	-33.46	138.46
100#&V	-14.500	100.00	-1.000	6.895	-29.5	203.6	-75.0	517.2	-750	5172	-100.0	689.5	-0.1000	0.6895	-1.019	7.031	-33.46	230.8
300#&V	-14.500	300.00	-1.000	20.685	-29.5	610.8	-75.0	1551.5	-750	1551	-100.0	2068.4	-0.1000	2.0684	-1.019	21.093	-33.46	692.3
Pressure																		
15#*	0	15.000	0	1.0342	0	30.54	0	77.57	0.0	775.5	0	103.2	0	0.1034	0	1.0546	0	34.62
30#	0	30.00	0	2.0685	0	61.08	0	155.15	0.0	1551.5	0	206.4	0	0.2068	0	2.1093	0	69.23
60#	0	60.00	0	4.137	0	122.16	0	310.3	0	3103	0	413.7	0	0.4137	0	4.219	0	138.46
100#	0	100.00	0	6.895	0	203.60	0	517.2	0	5172	0	689.5	0	0.6895	0	7.031	0	230.77
200#	0	200.00	0	13.790	0	407.2	0	1034.3	0	10343	0	1378.9	0	1.3789	0	14.062	0	461.5
300#	0	300.0	0	20.685	0	610.8	0	1551.5	0	15515	0	2068.4	0	2.0684	0	21.093	0	692.3
500#	0	500.0	0	34.47	0	1018.0	0	2586	-	-	0	3447	0	3.447	0	35.15	0	1153.8
1000#	0	1000.0	0	68.95	0	2036.0	0	5172	-	-	0	6895	0	6.895	0	70.31	0	2307.7
1500#	0	1500.0	0	103.42	0	3054	0	7757	-	-	0	10342	0	10.342	0	105.46	0	3462
2000#	0	2000.0	0	137.90	0	4072	0	10343	-	-	0	13789	0	13.789	0	140.62	0	4615
3000#	0	3000	0	206.8	0	6108	0	15515	-	-	-	-	0	20.684	0	210.93	0	6923
5000#	0	5000	0	344.7	0	10180	-	-	-	-	-	-	0	34.47	0	351.5	0	11538
10000#	0	10000	0	689.5	0	20360	-	-	-	-	-	-	0	68.95	0	703.1	0	23077
15000# ⁽¹⁾	0	15000	0	1034.2	-	-	-	-	-	-	-	-	0	103.42	0	1054.6	-	-
20000# ⁽¹⁾	0	20000	0	1379.0	-	-	-	-	-	-	-	-	0	137.89	0	1406.2	-	-
25000# ⁽¹⁾	0	25000	0	1723.7	-	-	-	-	-	-	-	-	0	172.37	0	1757.7	-	-

Standard bar ranges

RANGE CODE	bar		psi		in. Hg		cm Hg		mm Hg		kPa		MPa		kg/cm ²		ft. H ₂ O	
	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range	Low Range	High Range
Vacuum																		
0BR&V	-1.000	0	-14.50	0	-29.53	0	-75.01	0	-750.1	0	-100.0	0	-0.10000	0	-1.0197	0	-33.52	0
Compound																		
1BR&V	-1.000	1.0000	-14.50	14.50	-29.53	29.53	-75.01	75.01	-750.1	750.1	-100.0	100.00	-0.1000	0.1000	-1.0197	1.0197	-33.52	33.52
1.6BR&V	-1.000	1.6000	-14.50	23.01	-29.53	47.25	-75.01	120.01	-750.1	1200.1	-100.0	160.00	-0.1000	0.1600	-1.020	1.632	-33.52	53.63
4BR&V	-1.000	4.000	-14.50	58.01	-29.53	118.12	-75.0	300.0	-750	3000	-100.0	400.0	-0.1000	0.4000	-1.020	4.079	-33.52	134.08
6BR&V	-1.000	6.000	-14.50	87.02	-29.5	177.18	-75.0	450.0	-750	4500	-100.0	600.0	-0.1000	0.6000	-1.020	6.118	-33.5	201.1
16BR&V	-1.000	16.000	-14.50	232.10	-29.5	472.5	-75.0	12001	-750	12001	-100.0	1600.0	-0.1000	1.600	-1.020	16.315	-33.5	536.3
Pressure																		
1BR*	0	1.0000	0	14.503	0	29.53	0	75.01	0.0	750.1	0	100.00	0	0.10000	0	1.0197	0	33.52
1.6BR*	0	1.6000	0	23.205	0	47.25	0	120.01	0.0	1200.1	0	160.00	0	0.16000	0	1.6315	0	53.63
2.5BR	0	2.500	0	36.25	0	73.83	0	187.52	0	1875	0	250.0	0	0.2500	0	2.549	0	83.80
4BR	0	4.000	0	58.01	0	118.12	0	300.0	0	3000	0	400.0	0	0.4000	0	4.079	0	134.08
6BR	0	6.000	0	87.02	0	177.18	0	450.0	0	4500	0	600.0	0	0.6000	0	6.118	0	201.12
10BR	0	10.000	0	145.03	0	295.3	0	750.1	0	7500	0	1000.0	0	1.0000	0	10.297	0	335.2
16BR	0	16.00	0	232.05	0	472.5	0	1200.1	0	12001	0	1600.0	0	1.6000	0	16.315	0	536.3
25BR	0	25.00	0	362.5	0	738	0	1875.2	0	18752	0	2500	0	2.5000	0	25.49	0	838.0
40BR	0	40.00	0	580.1	0	1181.2	0	3000	-	-	0	4000	0	4.000	0	40.79	0	1340.8
60BR	0	60.00	0	870.2	0	1771.8	0	4500	-	-	0	6000	0	6.000	0	61.18	0	2011.2
100BR	0	100.00	0	1450.3	0	2953	0	7500	-	-	-	10000	0	10.000	0	101.91	0	3352
160BR	0	160.00	0	2320.5	0	4725	0	12001	-	-	-	16000	0	16.000	0	163.15	0	5363
250BR	0	250.0	0	3626	0	7383	0	18752	-	-	-	-	0	25.00	0	254.9	0	8380
400BR	0	400.0	0	5801	0	11812	-	-	-	-	-	-	0	40.00	0	407.9	0	13408
600BR	0	600.0	0	8702	0	17718	-	-	-	-	-	-	0	60.00	0	611.8	0	20112
1000BR	0	1000.0	0	14503	-	-	-	-	-	-	-	-	0	100.00	0	1019.7	-	-
1600BR ⁽¹⁾	0	1600.0	0	23205	-	-	-	-	-	-	-	-	0	160.00	0	1631.5	-	-

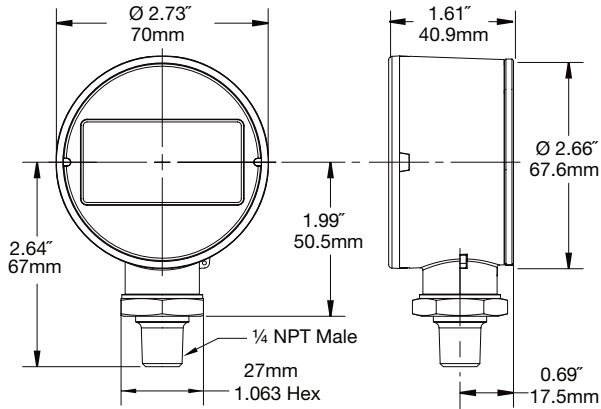
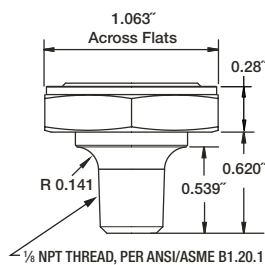
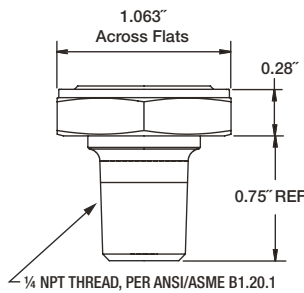
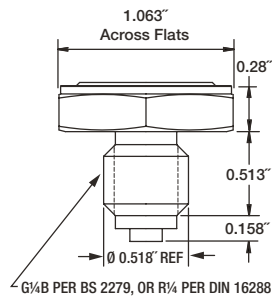
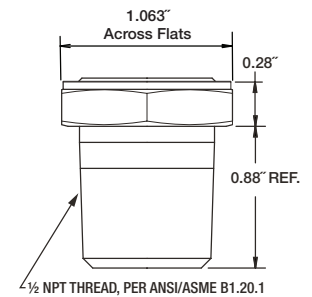
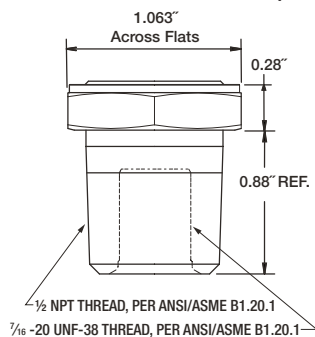
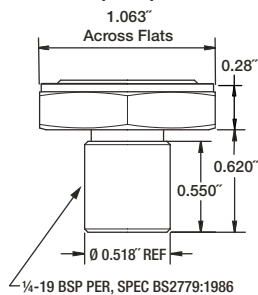
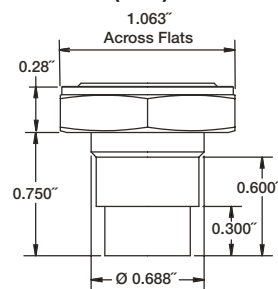
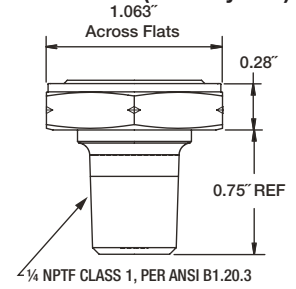
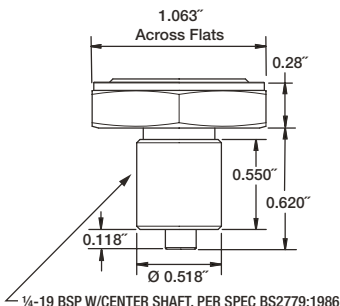
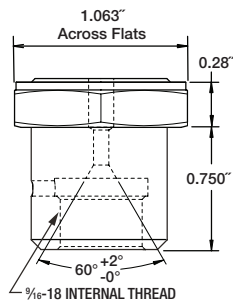
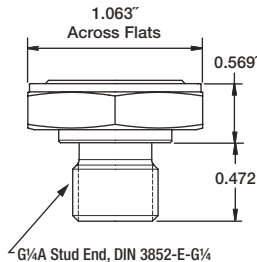
* 0.5% Accuracy only.

⁽¹⁾ Requires use of pressure connection F09 or MD2

Note "-" in range table indicates unit of pressure is not included in this pressure range

DG25 General Purpose Digital Gauge
DIMENSIONS

For reference only, consult Ashcroft for specific dimensional drawings.


1/8 NPT Male (M01)

1/4 NPT Male (M02)

G1/4B NPT Male (MG2)

1/2 NPT Male (M04)

1/2 NPT Male & 7/16-20 UNJF-3B (MLF)

1/4-19 BSP (MS2)

No Threads (M75)

1/4 NPTF Class 1 (male dry seal) (MD2)

1/4-19 BSP Male w /Center Shaft (MKS)

1/16-18 Internal Thread (F09)

G1/4A-19 Stud End (MGA)

R1/4 Thread (MR4)
