

Liquid Filled & Fillable Gauges

USG Location: Clawson, MI

SOLFRUNT® 4" (63mm) & 4" (100mm) - 316L Stainless Steel Wetted Material

MODEL 659

Description:

CASE and RING: 304 Series stainless steel case and bayonet-style ring with pressure relieved back

WINDOW: 2-1/2" (63mm) - High Temperature Acrylic, Shatter-Resistant Glass optional¹
4" (100mm) - Laminated Shatter-Resistant Glass¹

POINTER: Black anodized aluminum, micro-adjustable (100mm only)

DIAL: Aluminum with white background and black marking, including material identifications for Bourdon Tube and Connection. Standard dial is single scale in PSI.

MOVEMENT: Geared movement with components of corrosion-resistant 304 Series stainless steel. Optional dampened

BOURDON TUBE: Seamless 316L stainless steel

CONNECTION: 2-1/2" (63mm) - 316L stainless steel, 1/4-18 NPT standard Low Mount

4" (100mm) - 316L stainless steel, 1/2-14 NPT standard (1/4-18 NPT optional) Low Mount

CONNECTION TYPE: Stem Mount (LM) and Front Flange Panel Mount (LBM), with Screw Check standard

ACCURACY: 2-1/2" (63mm) - ±1.6% of span (Grade B+)

4" (100mm) - ±1% of span (Grade 1A)

LIQUID FILLING: The standard gauge is dry and fill-ready. Standard factory fill fluid is Glycerin, with Silicone, Mineral Oil, and other fluids optional.

Figure 1: Model 659 Rear View



Figure 2: Model 659 with METEK M&G Type EW Diaphragm Seal



¹ USG does not offer a standard window with SOLFRUNT gauge an option due to safety concerns. Minimum order size of 10 units. Custom dials. Set-up charge only.

³ Add "NACE Cert" in a separate line item

Standard Model	List Price
2-1/2" (63mm) Dry Case, 1/4" NPT LM Connection with PSI scale	\$ 103.10
2-1/2" (63mm) Dry Case, 1/4" NPT LBM Connection with PSI scale Front Flange	\$ 115.50
4" (100mm) Dry Case, 1/2" NPT LM Connection with PSI scale	\$ 140.00
4" (100mm) Dry Case, 1/4" NPT LBM Connection with PSI scale Front Flange	\$ 158.65

Options:	List Adder
1/4" NPT Connection (100mm only)	\$0.00
Metric Dial (KPA, BAR, KG/CM ²)	\$0.00
Dual Scale Dial	\$0.00
Custom Dial (\$100 set-up charge) ²	\$0.00
Shatter-Resistant Window (63mm only)	\$3.25
Factory Glycerin Fill (2-1/2" or 63mm)	\$8.75
Factory Silicone Fill (2-1/2" or 63mm)	\$17.50
Factory Mineral Oil Fill (2-1/2" or 63mm)	\$17.50
Factory Glycerin Fill (4" or 100mm)	\$29.25
Factory Silicon Fill (4" or 100mm)	\$40.95
Factory Mineral Oil Fill (4" or 100mm)	\$40.95
Oxygen Service	\$45.00
Service Identification Tag	\$15.50
NIST Certification	\$160.00
NEW! NACE Certificate of Compliance ³	\$137.00

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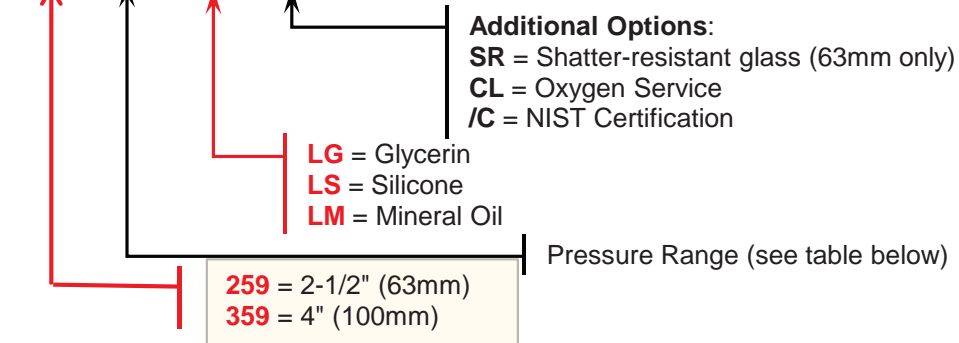
USG Location: Clawson, MI

SOLFRUNT® 63mm & 100mm - 316L Stainless Steel Wetted Material

MODEL 659

Sample USG Spec:

259025 LG SR



Note: This table is not intended to be all inclusive of all possible configurations

Model:		6592					
Gauge Size:		2-1/2" (63mm)			2-1/2" (63mm)		
Connection Size:		1/4" NPT			1/4" NPT		
Connection Type:		Low Mount			Low Back Mount		
Mounting Type:		Stem Mount			Front Flange, Panel Mount		
Dial Scale:		PSI			PSI		
Fill Fluid Type:		N/A	Silicone	Glycerin	N/A	Silicone	Glycerin
Pressure Range:		Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.
VAC 0 - 30" Hg	259000	259000LS	259000LG	259025	259025LS	259025LG	
30" - 0 - 15 PSI	259001	259001LS	259001LG	259026	259026LS	259026LG	
30" - 0 - 30 PSI	259002	259002LS	259002LG	259027	259027LS	259027LG	
30" - 0 - 60 PSI	259003	259003LS	259003LG	259028	259028LS	259028LG	
30" - 0 - 100 PSI	259004	259004LS	259004LG	259029	259029LS	259029LG	
30" - 0 - 150 PSI	259005	259005LS	259005LG	259030	259030LS	259030LG	
30" - 0 - 200 PSI	259006	259006LS	259006LG	259031	259031LS	259031LG	
0 - 15 PSI	259007	259007LS	259007LG	259032	259032LS	259032LG	
0 - 30 PSI	259008	259008LS	259008LG	259033	259033LS	259033LG	
0 - 60 PSI	259009	259009LS	259009LG	259034	259034LS	259034LG	
0 - 100 PSI	259010	259010LS	259010LG	259035	259035LS	259035LG	
0 - 160 PSI	259011	259011LS	259011LG	259036	259036LS	259036LG	
0 - 200 PSI	259012	259012LS	259012LG	259037	259037LS	259037LG	
0 - 300 PSI	259013	259013LS	259013LG	259038	259038LS	259038LG	
0 - 400 PSI	259014	259014LS	259014LG	259039	259039LS	259039LG	
0 - 600 PSI	259015	259015LS	259015LG	259040	259040LS	259040LG	
0 - 1,000 PSI	259016	259016LS	259016LG	259041	259041LS	259041LG	
0 - 1,500 PSI	259017	259017LS	259017LG	259042	259042LS	259042LG	
0 - 2,000 PSI	259018	259018LS	259018LG	259043	259043LS	259043LG	
0 - 3,000 PSI	259019	259019LS	259019LG	259044	259044LS	259044LG	
0 - 3,500 PSI	259020	259020LS	259020LG	259045	259045LS	259045LG	
0 - 5,000 PSI	259021	259021LS	259021LG	259046	259046LS	259046LG	
0 - 6,000 PSI	259022	259022LS	259022LG	259047	259047LS	259047LG	
0 - 10,000 PSI	259023	259023LS	259023LG	259048	259048LS	259048LG	
0 - 15,000 PSI	259024	259024LS	259024LG	259049	259049LS	259049LG	

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MODEL 659

Note: This table is not intended to be all inclusive of all possible configurations

Model:							6592		
Gauge Size:		2-1/2" (63mm)			2-1/2" (63mm)				
Connection Size:		1/4" NPT			1/4" NPT				
Connection Type:		Low Mount			Low Back Mount				
Mounting Type:		Stem Mount			Front Flange, Panel Mount				
Dial Scale⁴:		PSI & KPA			PSI & KPA				
Fill Fluid Type:		N/A	Silicone	Glycerin	N/A	Silicone	Glycerin		
Pressure Range:		Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.		
VAC	0 - 30" Hg	259050	259050LS	259050LG	259077	259077LS	259077LG		
30" - 0 - 15 PSI		259051	259051LS	259051LG	259078	259078LS	259078LG		
30" - 0 - 30 PSI		259052	259052LS	259052LG	259079	259079LS	259079LG		
30" - 0 - 60 PSI		259053	259053LS	259053LG	259080	259080LS	259080LG		
30" - 0 - 100 PSI		259054	259054LS	259054LG	259081	259081LS	259081LG		
30" - 0 - 150 PSI		259055	259055LS	259055LG	259082	259082LS	259082LG		
30" - 0 - 200 PSI		259056	259056LS	259056LG	259083	259083LS	259083LG		
0 - 15 PSI		259058	259058LS	259058LG	259085	259085LS	259085LG		
0 - 30 PSI		259059	259059LS	259059LG	259086	259086LS	259086LG		
0 - 60 PSI		259060	259060LS	259060LG	259087	259087LS	259087LG		
0 - 100 PSI		259061	259061LS	259061LG	259088	259088LS	259088LG		
0 - 160 PSI		259062	259062LS	259062LG	259089	259089LS	259089LG		
0 - 200 PSI		259063	259063LS	259063LG	259090	259090LS	259090LG		
0 - 300 PSI		259064	259064LS	259064LG	259091	259091LS	259091LG		
0 - 400 PSI		259065	259065LS	259065LG	259092	259092LS	259092LG		
0 - 600 PSI		259066	259066LS	259066LG	259093	259093LS	259093LG		
0 - 1,000 PSI		259068	259068LS	259068LG	259095	259095LS	259095LG		
0 - 1,500 PSI		259069	259069LS	259069LG	259096	259096LS	259096LG		
0 - 2,000 PSI		259070	259070LS	259070LG	259097	259097LS	259097LG		
0 - 3,000 PSI		259071	259071LS	259071LG	259098	259098LS	259098LG		
0 - 3,500 PSI		259072	259072LS	259072LG	259099	259099LS	259099LG		
0 - 5,000 PSI		259073	259073LS	259073LG	259100	259100LS	259100LG		
0 - 6,000 PSI		259074	259074LS	259074LG	259101	259101LS	259101LG		
0 - 10,000 PSI		259075	259075LS	259075LG	259102	259102LS	259102LG		
0 - 15,000 PSI		259076	259076LS	259076LG	259103	259103LS	259103LG		

⁴ Contact USG Sales for other dual scale and metric single scale dials.

Notes:



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USG Location: Clawson, MI

SOLFRUNT® 63mm & 100mm - 316L Stainless Steel Wetted Material

MODEL 659

Note: This table is not intended to be all inclusive of all possible configurations

Model:		6596					
Gauge Size:	4" (100mm)		4" (100mm)		4" (100mm)		
Connection Size:	1/4" NPT		1/2" NPT		1/4" NPT		
Connection Type:	Low Mount		Low Mount		Low Back Mount		
Mounting Type:	Stem Mount		Stem Mount		Front Flange, Panel Mount		
Dial Scale:	PSI	PSI	PSI	PSI	PSI	PSI	
Fill Fluid Type ⁵ :	N/A	See Note	N/A	See Note	N/A	See Note	
Pressure Range:	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	
VAC 0 - 30" Hg	359000	359000LX	359029	359029LX	359058	359058LX	
30" - 0 - 15 PSI	359001	359001LX	359030	359030LX	359059	359059LX	
30" - 0 - 30 PSI	359002	359002LX	359031	359031LX	359060	359060LX	
30" - 0 - 60 PSI	359003	359003LX	359032	359032LX	359061	359061LX	
30" - 0 - 100 PSI	359004	359004LX	359033	359033LX	359062	359062LX	
30" - 0 - 150 PSI	359005	359005LX	359034	359034LX	359063	359063LX	
30" - 0 - 200 PSI	359006	359006LX	359035	359035LX	359064	359064LX	
0 - 15 PSI	359008	359008LX	359037	359037LX	359066	359066LX	
0 - 30 PSI	359009	359009LX	359038	359038LX	359067	359067LX	
0 - 60 PSI	359010	359010LX	359039	359039LX	359068	359068LX	
0 - 100 PSI	359011	359011LX	359040	359040LX	359069	359069LX	
0 - 160 PSI	359012	359012LX	359041	359041LX	359070	359070LX	
0 - 200 PSI	359013	359013LX	359042	359042LX	359071	359071LX	
0 - 300 PSI	359014	359014LX	359043	359043LX	359072	359072LX	
0 - 400 PSI	359015	359015LX	359044	359044LX	359073	359073LX	
0 - 600 PSI	359016	359016LX	359045	359045LX	359074	359074LX	
0 - 1,000 PSI	359018	359018LX	359047	359047LX	359076	359076LX	
0 - 1,500 PSI	359019	359019LX	359048	359048LX	359077	359077LX	
0 - 2,000 PSI	359020	359020LX	359049	359049LX	359078	359078LX	
0 - 3,000 PSI	359021	359021LX	359050	359050LX	359079	359079LX	
0 - 5,000 PSI	359023	359023LX	359052	359052LX	359081	359081LX	
0 - 10,000 PSI	359025	359025LX	359054	359054LX	359083	359083LX	
0 - 15,000 PSI	359027	359027LX	359056	359056LX	359085	359085LX	
0 - 23,000 PSI	359028	359028LX	359057	359057LX	359086	359086LX	

⁵For factory liquid filling, substitute LG for Glycerin and LS for Silicone for LX suffix. Contact USG Sales for other case fill options.

Notes:



Figure 3: Model 659 Family

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Note: This table is not intended to be all inclusive of all possible configurations

Model:		6596					
Gauge Size:	4" (100mm)		4" (100mm)		4" (100mm)		
Connection Size:	1/4" NPT		1/2" NPT		1/4" NPT		
Connection Type:	Low Mount		Low Mount		Low Back Mount		
Mounting Type:	Stem Mount		Stem Mount		Front Flange, Panel Mount		
Dial Scale ⁴ :	PSI & KPA		PSI & KPA		PSI & KPA		
Fill Fluid Type ⁵ :	N/A	See Note	N/A	See Note	N/A	See Note	
Pressure Range:	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	Spec No.	
VAC 0 - 30" Hg	359087	359087LX	359116	359116LX	359145	359145LX	
30" - 0 - 15 PSI	359088	359088LX	359117	359117LX	359146	359146LX	
30" - 0 - 30 PSI	359089	359089LX	359118	359118LX	359147	359147LX	
30" - 0 - 60 PSI	359090	359090LX	359119	359119LX	359148	359148LX	
30" - 0 - 100 PSI	359091	359091LX	359120	359120LX	359149	359149LX	
30" - 0 - 150 PSI	359092	359092LX	359121	359121LX	359150	359150LX	
30" - 0 - 200 PSI	359093	359093LX	359122	359122LX	359151	359151LX	
0 - 15 PSI	359095	359095LX	359124	359124LX	359153	359153LX	
0 - 30 PSI	359096	359096LX	359125	359125LX	359154	359154LX	
0 - 60 PSI	359097	359097LX	359126	359126LX	359155	359155LX	
0 - 100 PSI	359098	359098LX	359127	359127LX	359156	359156LX	
0 - 160 PSI	359099	359099LX	359128	359128LX	359157	359157LX	
0 - 200 PSI	359100	359100LX	359129	359129LX	359158	359158LX	
0 - 300 PSI	359101	359101LX	359130	359130LX	359159	359159LX	
0 - 400 PSI	359102	359102LX	359131	359131LX	359160	359160LX	
0 - 600 PSI	359103	359103LX	359132	359132LX	359161	359161LX	
0 - 1,000 PSI	359105	359105LX	359134	359134LX	359163	359163LX	
0 - 1,500 PSI	359106	359106LX	359135	359135LX	359164	359164LX	
0 - 2,000 PSI	359107	359107LX	359136	359136LX	359165	359165LX	
0 - 3,000 PSI	359108	359108LX	359137	359137LX	359166	359166LX	
0 - 5,000 PSI	359110	359110LX	359139	359139LX	359168	359168LX	
0 - 10,000 PSI	359112	359112LX	-	-	359170	359170LX	
0 - 15,000 PSI	359114	359114LX	359143	359143LX	359172	359172LX	
0 - 23,000 PSI	359115	359115LX	359144	359144LX	359173	359173LX	

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⁵For factory liquid filling, substitute LG for Glycerin and LS for Silicone for LX suffix. Contact USG Sales for other case fill options.

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