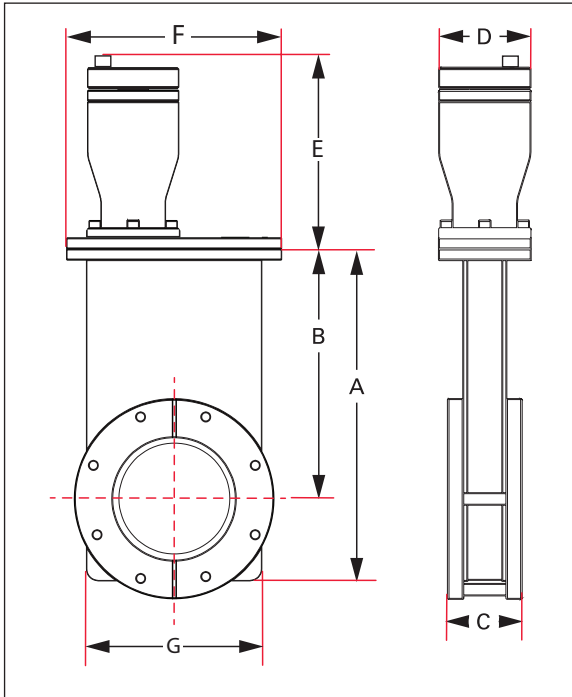


# GVM series manual isolation linear gate valve

## DN 16 CF to DN 63 CF



- Isolation valve intended for use in UHV applications
- Copper bonnet seal
- Ultra-slim profile
- Smaller volume results in lower outgassing and faster pumpdown
- Larger sizes have a unique feature in the actuator, which dampens vibration at opening
- 304SS bodies are vacuum furnace brazed to 1100 °C at 10<sup>-6</sup> mbar prior to being electropolished inside and out
- Welded AM-350 bellows with short stroke for longer cycle life
- Can be installed and operated in any orientation
- Conflat flanges with metric top bolt holes
- Bolt length 6.4mm shorter than the thickness of both mating flanges, is recommended to prevent damaging the body and compromising the gate seal.
- Carriage assembly and actuator can be removed for inspection and maintenance without disassembling the system
- Service life of 100,000 operating cycles
- Additional o-ring compounds available
- Heaters and insulators available

Dimensions Key	DN 16 CF	DN 40 CF	DN 63 CF
A	61 mm	119 mm	165 mm
B	44 mm	86 mm	122 mm
C	40 mm	52 mm	61 mm
D	38 mm	50 mm	50 mm
E	46 mm	91 mm	92 mm
F	48 mm	84 mm	111 mm
G	33 mm	62 mm	89 mm



### Order number valves

Description	DN 16 CF	DN 40 CF	DN 63 CF
Isolation gate valve	GVM-S02500	GVM-S04500	GVM-S06500

### O-ring compound options

Compound	Min./Max temp. range
FKM (standard)	-29°C to 204°C
Kalrez	-50°C to 316°C
Chemraz	-30°C to 210°C
Silicone	-50°C to 232°C

# GVM series manual isolation linear gate valve

Technical data	DN 16 CF	DN 40 CF	DN 63 CF
Maximum pressure at opening:	20 mbar	20 mbar	20 mbar
Differential pressure:	1000 mbar	1000 mbar	1000 mbar
Vacuum range:	1000 - 10 <sup>-10</sup> mbar	1000 - 10 <sup>-10</sup> mbar	1000 - 10 <sup>-10</sup> mbar
Helium leak rate	≤ 2 · 10 <sup>-9</sup> mbar	≤ 2 · 10 <sup>-9</sup> mbar	≤ 2 · 10 <sup>-9</sup> mbar
Conductance for molecular flow:	12 l/s	130 l/s	520 l/s
Weight:	1 kg	5 kg	5 kg
<b>Maximum temp with FKM seals*</b>			
Sustained:	≤200 °C	≤200 °C	≤200 °C
<b>Bakeout temperature*</b>			
Actuator:	60 °C	60 °C	60 °C
Housing:	200 °C	200 °C	200 °C
<b>Seal*</b>			
Gate seal:	FKM	FKM	FKM
Bonnet seal:	copper	copper	copper

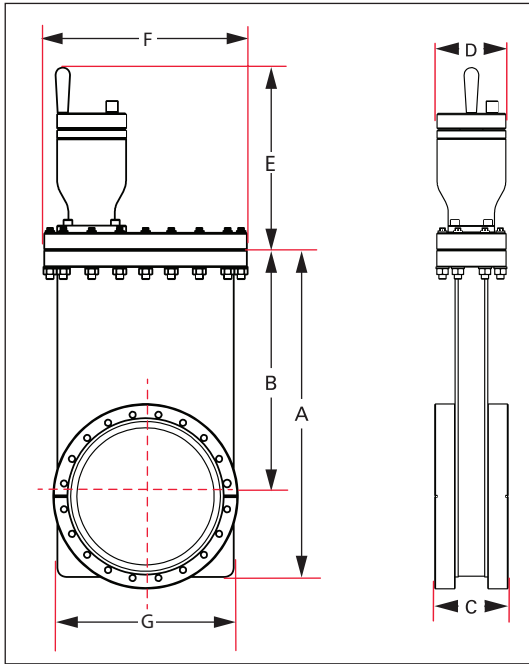
\*FKM o-rings standard. See o-ring compound options

## Order number kits

Description	DN 16 CF	DN 40 CF	DN 63 CF
Seal kit	<b>GVM-062-95</b>	<b>GVM-150-95</b>	<b>GVM-250-95</b>
Bellows kit	<b>GVM-062-16</b>	<b>GVM-150-16</b>	<b>GVM-250-16</b>

# GVM series manual isolation linear gate valve

## DN 100 CF to DN 320 CF



- Isolation valve intended for use in UHV applications
- Copper bonnet seal
- Ultra-slim profile
- Smaller volume results in lower outgassing and faster pumpdown
- Larger sizes have a unique feature in the actuator, which dampens vibration at opening
- 304SS bodies are vacuum furnace brazed to 1100 °C at 10<sup>-6</sup> mbar prior to being electropolished inside and out
- Welded AM-350 bellows with short stroke for longer cycle life
- Can be installed and operated in any orientation
- Conflat flanges with metric top bolt holes
- Bolt length 6.4mm shorter than the thickness of both mating flanges, is recommended to prevent damaging the body and compromising the gate seal.
- Carriage assembly and actuator can be removed for inspection and maintenance without disassembling the system
- Service life of 100,000 operating cycles
- Additional o-ring compounds available
- Heaters and insulators available

Dimensions Key	DN 100 CF	DN 160 CF	DN 200 CF	DN 250 CF	DN 320 CF
A	273 mm	357 mm	468 mm	611 mm	734 mm
B	207 mm	207 mm	354 mm	465 mm	560 mm
C	75 mm	80 mm	85 mm	93 mm	99 mm
D	79 mm	79 mm	79 mm	228 mm	228 mm
E	201 mm	201 mm	201 mm	308 mm	308 mm
F	178 mm	222 mm	286 mm	341 mm	404 mm
G	144 mm	192 mm	255 mm	305 mm	363 mm



### Order number valves

Description	DN 100 CF	DN 160 CF	DN 200 CF	DN 250 CF	DN 320 CF
Isolation gate valve	GVM-S08500	GVM-S10500	GVM-S11500	GVM-S12500	GVM-S13500

### O-ring compound options

Compound	Min./Max temp. range
FKM (standard)	-29°C to 204°C
Kalrez	-50°C to 316°C
Chemraz	-30°C to 210°C
Silicone	-50°C to 232°C

# GVM series manual isolation linear gate valve

## DN 100 CF to DN 320 CF

Technical data	DN 100 CF	DN 160 CF	DN 200 CF	DN 250 CF	DN 320 CF
Maximum pressure at opening:	20 mbar	20 mbar	20 mbar	20 mbar	20 mbar
Differential pressure:	1000 mbar	1000 mbar	1000 mbar	1000 mbar	1000 mbar
Vacuum range:	1000 - 10 <sup>-10</sup> mbar	1000 - 10 <sup>-10</sup> mbar	1000 - 10 <sup>-10</sup> mbar	1000 - 10 <sup>-10</sup> mbar	1000 - 10 <sup>-10</sup> mbar
Helium leak rate	≤ 2 · 10 <sup>-9</sup> mbar	≤ 2 · 10 <sup>-9</sup> mbar	≤ 2 · 10 <sup>-9</sup> mbar	≤ 2 · 10 <sup>-9</sup> mbar	≤ 2 · 10 <sup>-9</sup> mbar
Conductance for molecular flow:	1,700 l/s	5,400 l/s	12,200 l/s	24,900 l/s	34,600 l/s
Weight:	15 kg	23 kg	34 kg	67 kg	77 kg
<b>Maximum temp with FKM seals*</b>					
Sustained:	≤200 °C	≤200 °C	≤200 °C	≤200 °C	≤200 °C
<b>Bakeout temperature*</b>					
Actuator:	60 °C	60 °C	60 °C	60 °C	60 °C
Housing:	200 °C	200 °C	200 °C	200 °C	200 °C
<b>Seal*</b>					
Gate seal:	FKM	FKM	FKM	FKM	FKM
Bonnet seal:	copper	copper	copper	copper	copper

\*FKM o-rings standard. See o-ring compound options

### Order number kits

Description	DN 100 CF	DN 160 CF	DN 200 CF	DN 250 CF	DN 320 CF
Seal kit	<b>GVM-400-95</b>	<b>GVM-600-95</b>	<b>GVM-800-95</b>	<b>GVM-1000-95</b>	<b>GVM1200-95</b>
Bellows kit	<b>GVM-400-16</b>	<b>GVM-600-16</b>	<b>GVM-800-16</b>	<b>GVM-1000-16</b>	<b>GVM-1200-16</b>