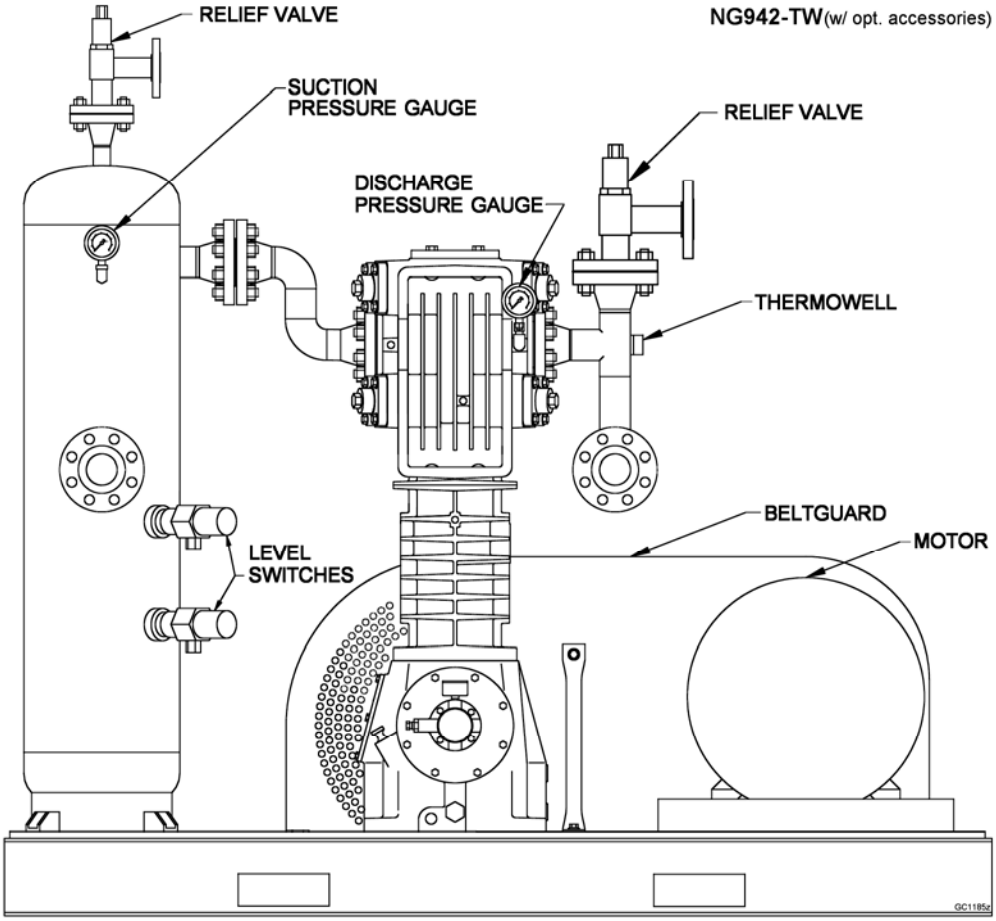
Natural Gas Vapor Recovery Compressors



NG162B
NG362C
NG602B
NG942B

- Vapor recovery
- Pressure boosting

- Natural gas
- Methane mix gases

- Well head
- Tank batteries

- 10 to 600 MSCFD
- 3 to 50 HP

- Ductile iron pressure parts
- Pressure lubricated crankcases
- Four frame sizes
- Single compartment distance pieces
- Non-lubricated cylinders

APPLICATIONS

Well Head Annulus Reduction

Many compressor applications are found at the wellhead where reducing the natural gas pressures around the annulus of the well increases the oil production Blackmer's unique ability to handle a wide range of suction pressure conditions make them ideal for many wellhead applications.

Tank Battery Vapor Recovery

Environmental regulations are now being enforced that limit the amount of methane gas emissions that can be vented to the atmosphere from crude storage tanks. Blackmer's wide range of small frame sizes are an ideal fit for the small to mid size tank batteries that need VR control.

In either case, Blackmer NG compressors are standard with a full distance piece design allowing users to maintain maximum control of any fugitive emissions of methane gas, and minimize the potential of condensate into the compressor crankcase.

PERFORMANCE

Model NG162

Suction \ Discharge	25	50	75	100	125	150	200	250
0	18 (3)	16 (3)						
10	33 (3)	30 (5)	28 (5)	26 (5)				
20	48 (2)	45 (5)	43 (5)	40 (5)	38 (5)	36 (7.5)		
30		60 (3)	57 (5)	55 (5)	53 (7.5)	50 (7.5)	46 (7.5)	
40		75 (3)	72 (5)	70 (5)	67 (7.5)	65 (7.5)	60 (7.5)	55 (7.5)
50			87 (5)	85 (5)	82 (7.5)	79 (7.5)	75 (7.5)	

Model NG362

Suction \ Discharge	25	50	75	100	125	150	200	250
0	39 (5)	34 (7.5)						
10	70 (5)	65 (7.5)	60 (7.5)	56 (10)				
20	102 (5)	96 (7.5)	91 (7.5)	86 (10)	82 (10)	77 (15)		
30		128 (5)	123 (7.5)	117 (10)	112 (10)	108 (15)	98 (15)	
40		160 (5)	154 (7.5)	149 (10)	144 (15)	139 (15)	129 (15)	119 (15)
50			186 (7.5)	181 (10)	175 (15)	170 (15)	160 (15)	

Model NG602

Suction \ Discharge	25	50	75	100	125	150	200	250
0	64 (10)	53 (10)						
10	122 (10)	109 (15)	96 (15)	85 (15)				
20	180 (7.5)	166 (15)	153 (15)	140 (15)	128 (20)	116 (20)		
30		224 (10)	210 (15)	197 (20)	184 (20)	172 (20)	147 (25)	
40		283 (10)	269 (15)	255 (20)	241 (20)	228 (20)	203 (25)	178 (25)
50			327 (15)	313 (15)	299 (20)	285 (25)	259 (25)	234 (30)

Model NG942

Suction \ Discharge	25	50	75	100	125	150	200	250
0	127 (15)	107 (15)						
10	236 (15)	214 (20)	193 (25)	173 (25)				
20	348 (10)	324 (20)	301 (25)	279 (30)	258 (30)	238 (30)		
30		435 (15)	411 (25)	388 (30)	366 (40)	344 (40)	302 (40)	
40		547 (15)	522 (25)	498 (30)	475 (40)	452 (40)	409 (50)	367 (50)
50			634 (20)	609 (30)	585 (40)	561 (40)	516 (50)	473 (50)

Sweet Gas (10 ppm max. H_2S) only. For sour gas applications; see CB-311 re 'HDS' Series.

Suction and Discharge pressures are PSIG.

Tables read in MSCFD (Motor H.P.) and are based on a compressor speed of 740 RPM.

Capacity and horsepower based on natural gas with an "N" value of 1.27 and a specific gravity of 0.65 at 70°F.

Use tables for estimating only.

Consult the Factory more detailed performance data or for applications beyond the tables.

SPECIFICATIONS

Double-Seal	NG162B	NG362C	NG602B	NG942B
No. of Cylinders	2	2	2	2 Double Acting
Bore x Stroke in. (mm)	3.0 x 2.5 (76.2 x 63.5)	4.0 x 3.0 (102 x 76)	4.625 x 4.0 (117 x 102)	4.625 x 4.0 (117 x 102)
MAWP, psia (Bar)	350 (24.1)	350 (24.1)	350 (24.1)	350 (24.1)
Speed, rpm	350 - 825	350 - 825	350 - 825	350 - 825
Piston Displacement, CFM (m^3/hr)				
@ Min rpm	7.16 (12.2)	15.3 (26.0)	27.2 (46.3)	52.46 (89.1)
@ Max rpm	16.9 (28.7)	36.0 (61.2)	64.2 (109.0)	125.2 (212)
Max. Discharge Temp.	350°F (176°C)	350°F (176°C)	350°F (176°C)	350°F (176°C)
Max. BHP (kw)	10 (7.5)	15 (11)	40 (30)	50 (37)
Weight, lb. (kg)	~225 (102)	~365 (166)	~705 (320)	~905 (410)
Inlet / Outlet Connections *	0.75" NPT	1.25", 1.50" NPT or Weld Flanges	2.00", 1.50" NPT or Weld Flanges	2" 300# ANSI

STANDARD FEATURES

Ductile Iron Head & Cylinder provide toughness & strength unmatched by cast iron.

O-Ring head gaskets provide positive sealing under all operating conditions.

Double-Seal with full size distance piece.

One piece steel pistons are attached to the piston rod via one positive locking nut.

Self-adjusting PTFE piston rod seals provide maximum sealing & minimum friction.

Ductile Iron crossheads feature special porting for maximum lubrication and wear resistance.

Pressure lubricated crankcase via a self-reversing oil pump directly driven by the crankshaft. Oil is fed to the crosshead and all bearing surfaces.

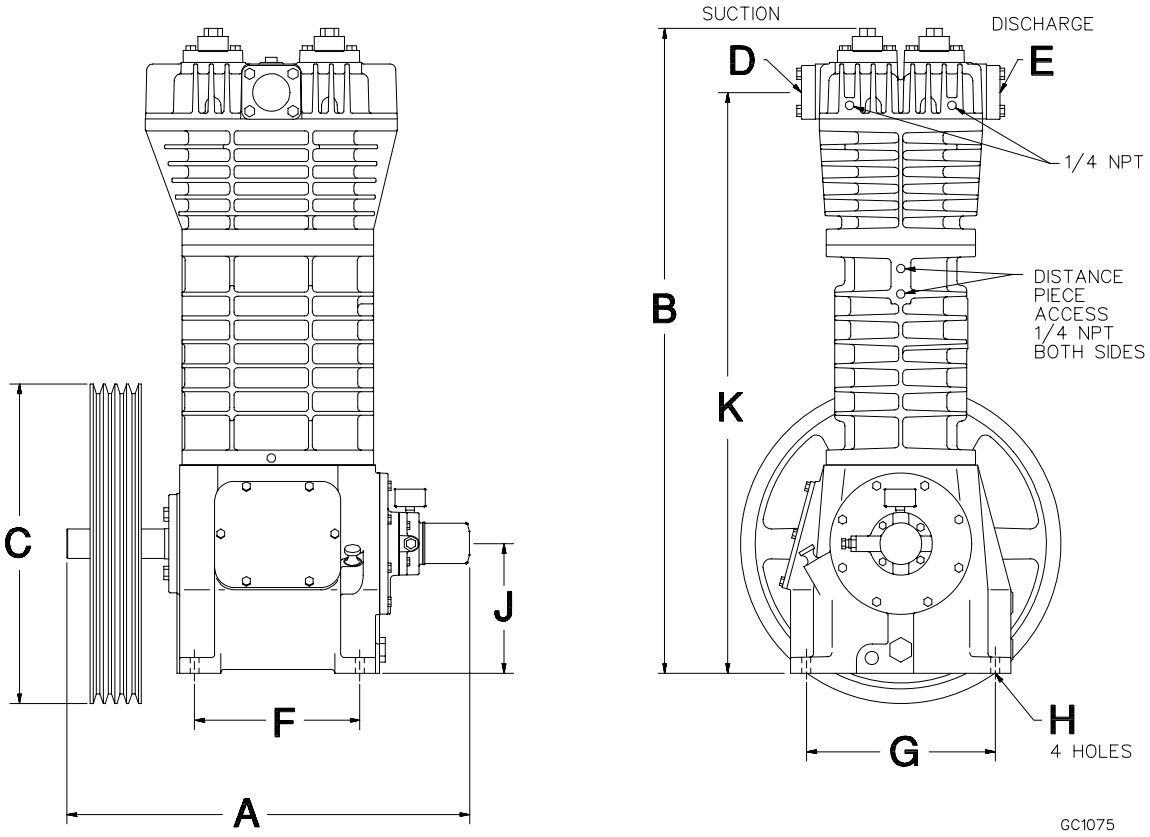
External Oil Filter.

Epoxy paint.

OPTIONS

Aluminum or Stainless Steel belt guards
Pressure Switches
Temperature switches
Temperature gauges & thermowells
Control panels and starters
Liquid traps
NPT or welded piping systems
Repair tool kits
Fabricated steel bases
Pressure gauges
Relief valves
Shutoff Valves - Manual or powered
Motor or engine drives
Level switches
Inlet strainers
Spare parts kits

DIMENSIONS



In. (mm)

Model	A	B *	C	D	E	F	G	H	J	K
NG162B	21.9 (556)	29.7 (754)	16.35 (415)	0.75" NPT [1]	0.75" NPT [1]	7.5 (190)	7.38 (187)	0.44 (11)	5.38 (137)	27.34 (694)
NG362C	23.4 (594)	34.39 (874)	16.35 (415)	1.25"NPT [2]	1.25"NPT [2]	9.12 (232)	9.37 (238)	0.5 (12.7)	5.88 (149)	30.81 (783)
NG602B	25.6 (650)	40.77 (1036)	19.5 (495)	2" NPT [3]	1.5" NPT [3]	10.5 (267)	12.0 (305)	0.56 (14.2)	8.25 (210)	36.99 (940)
NG942B	25.6 (650)	45.23 (1,149)	21.20 (538)	2" 300# ANSI	2" 300# ANSI	10.5 (267)	12.0 (305)	0.56 (14.2)	8.25 (210)	37.65 (956)

1. Tapped connections in head.
2. 1.5" NPT, 1.25" weld and 1.5" weld available.
3. 1.5" NPT, 2" NPT, 1.5" weld and 2" weld available.

TYPICAL MOUNTING STYLES

-CO Compressor with flywheel.

-B Compressor mounted on a baseplate with V-belt drive system with guard and motor slide base ready to accept but less motor.

-TU -B Unit plus a mechanical liquid trap and pressure gauges.

-TC Similar to -TU unit, but with an ASME code liquid trap.

-TW Similar to -TC unit, but with ANSI flanged trap and welded piping.