

MYCOM

W SERIES

New, Premium Industrial Reciprocating Compressors



***Greater
Reliability,
Higher Performance***

A MAJOR UPGRADE OF MYCOM'S A, B AND J SERIES COMPRESSORS.

For many years MYCOM has met diverse industrial needs with a family of high-quality, strong and easy-to-operate compressors. A, B and J Series Compressors have proved their superiority in countless applications, setting the standard in terms of performance and durability.

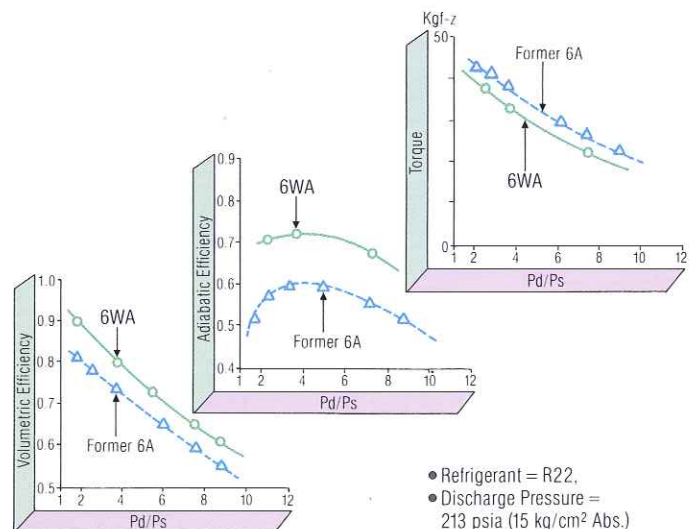
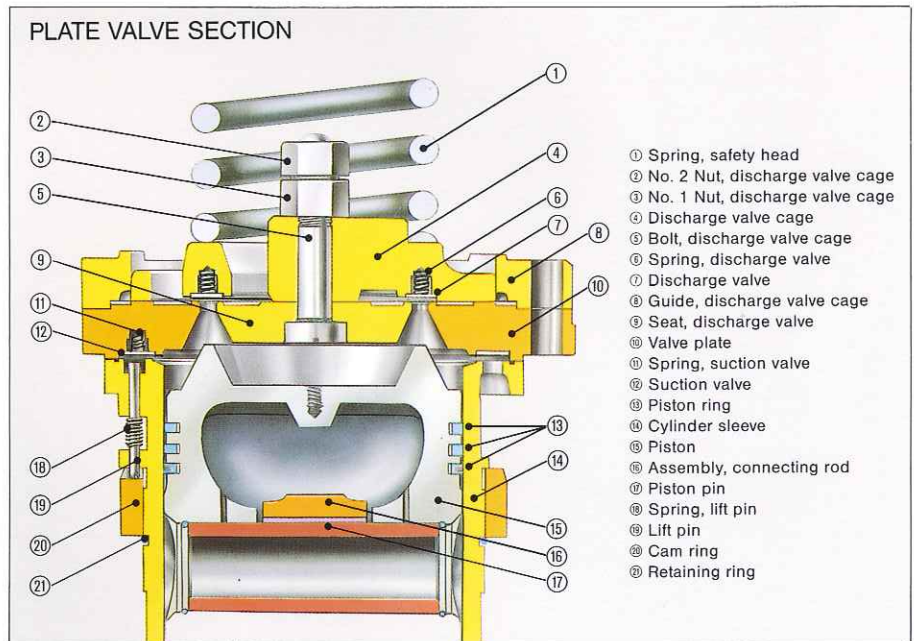
At MYCOM, the pursuit of advanced technology never ceases. And so, after extensive theoretical fluid equipment performance analysis and experimental testing in cooperation with experts at Trondheim University, Norway, MYCOM is proud to announce what may be the most sophisticated reciprocating compressors in the world today – the MYCOM W Series.

UPGRADED PERFORMANCE MAXIMIZES THE ENERGY SAVING.

Optimizing the design of the plate valve section is the key to the new standard of performance.

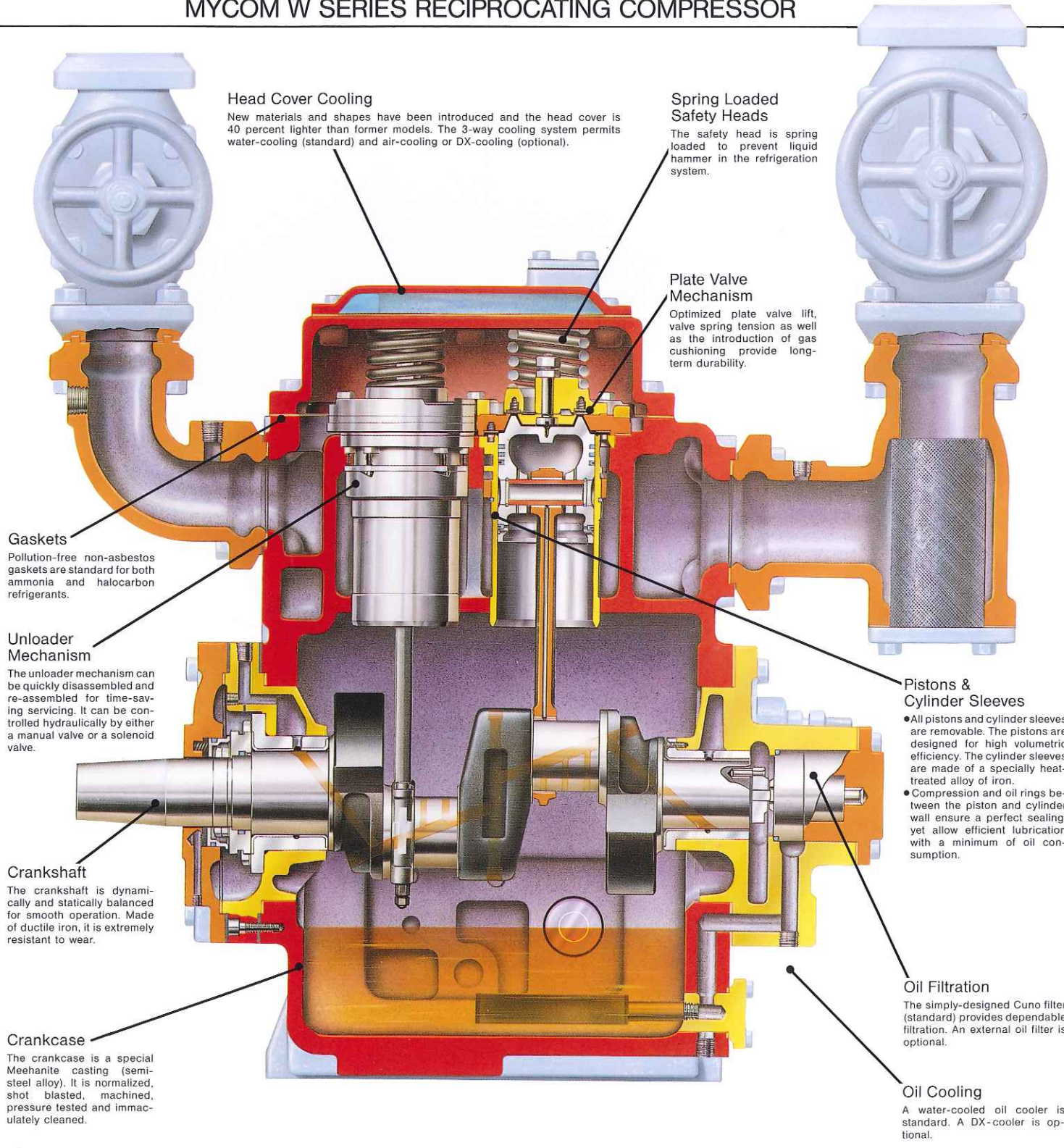
The W Series Compressor incorporates major changes in the plate valve lift, valve spring lift and gas cushioning based on the results of the Trondheim studies.

These changes dramatically enhance performance and provide more refrigeration per BHP.



WHAT MAKES W SERIES RECIPROCATING COMPRESSORS THE PRIDE OF MYCOM?

MYCOM W SERIES RECIPROCATING COMPRESSOR



Head Cover Cooling
New materials and shapes have been introduced and the head cover is 40 percent lighter than former models. The 3-way cooling system permits water-cooling (standard) and air-cooling or DX-cooling (optional).

Spring Loaded Safety Heads
The safety head is spring loaded to prevent liquid hammer in the refrigeration system.

Plate Valve Mechanism
Optimized plate valve lift, valve spring tension as well as the introduction of gas cushioning provide long-term durability.

Gaskets
Pollution-free non-asbestos gaskets are standard for both ammonia and halocarbon refrigerants.

Unloader Mechanism
The unloader mechanism can be quickly disassembled and re-assembled for time-saving servicing. It can be controlled hydraulically by either a manual valve or a solenoid valve.

Crankshaft
The crankshaft is dynamically and statically balanced for smooth operation. Made of ductile iron, it is extremely resistant to wear.

Crankcase
The crankcase is a special Meehanite casting (semi-steel alloy). It is normalized, shot blasted, machined, pressure tested and immaculately cleaned.

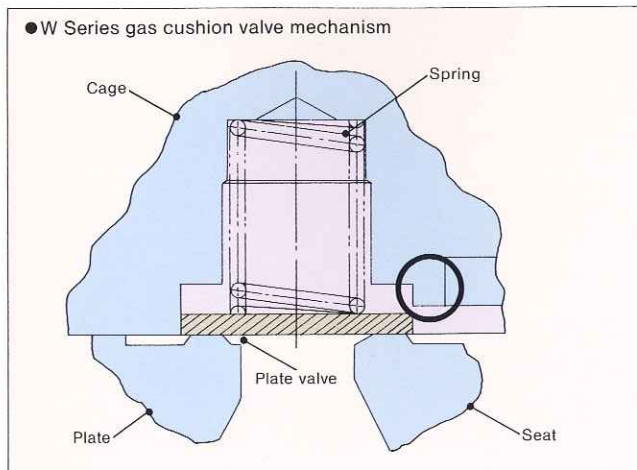
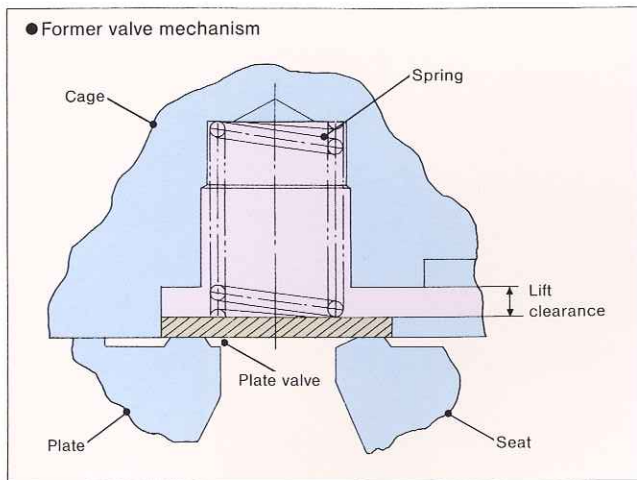
Pistons & Cylinder Sleeves
• All pistons and cylinder sleeves are removable. The pistons are designed for high volumetric efficiency. The cylinder sleeves are made of a specially heat-treated alloy of iron.
• Compression and oil rings between the piston and cylinder wall ensure a perfect sealing, yet allow efficient lubrication with a minimum of oil consumption.

Oil Filtration
The simply-designed Cuno filter (standard) provides dependable filtration. An external oil filter is optional.

Oil Cooling
A water-cooled oil cooler is standard. A DX-cooler is optional.

UPGRADED DURABILITY CUTS YOUR UPKEEP COSTS.

One of the major service requirements of a reciprocating compressor is replacement of the plate valve. The design of the plate valve of the W Series Compressor improves durability and ensures a long service life and less maintenance.



ABUNDANT OPTIONS LET YOU CUSTOMIZE W SERIES COMPRESSORS TO DIFFERENT OPERATING CONDITIONS.

A prospective user can choose from among an air-cooled, water-cooled or refrigerant-cooled head cover(s). The user has a choice of a water-cooled or refrigerant-cooled oil cooler, and can specify either an internal, external or combination internal/external oil filter.

Control options include a mechanical or microprocessor-based system. Options are available for the pressure gauge board and control switch arrangement, and the user has a choice of a belt drive or direct drive system.

COMMON PARTS FOR AMMONIA AND HALO-CARBON REFRIGERANT APPLICATIONS SLASH YOUR INVENTORY.

The W Series Compressor uses many parts in common to both ammonia and halocarbon refrigerant applications. This major reduction in the range of parts will appeal to contractors who have had to maintain a large inventory of parts to satisfy the customers using both refrigerants.

POLLUTION-FREE GASKETS

MYCOM considers the future. Pollution-free non-asbestos gaskets are standard. Asbestos gaskets are available if preferred.

N6WA



F6WB



N8WB



PERFORMANCE

Refrigerant	Model	*Displacement at 1,200 r.p.m. CFM	*Refrigeration Capacity at 95°F Condensing Temperature						Brake Horsepower at 95°F Condensing Temperature					
			Suction Temperature °F						Suction Temperature °F					
			-20	-10	0	10	20	30	-20	-10	0	10	20	30
			*U.S. TR						BHP					
R717	N2WA*	41.8	3.9	5.6	7.7	10.3	13.4	17.1	9.8	11.3	12.7	13.9	14.9	15.5
	N4WA	91.2	8.4	12.2	16.8	22.5	29.2	37.2	21.4	24.7	27.7	30.4	32.5	33.7
	N6WA	136.8	12.6	18.3	25.2	33.7	43.8	55.8	32.1	37.0	41.6	45.6	48.7	50.6
	N8WA	182.4	16.9	24.4	33.7	44.9	58.4	74.4	42.9	49.4	55.5	60.8	65.0	67.5
	N4WB	224.4	20.8	30.1	41.5	55.3	72.0	91.7	52.8	60.8	68.4	74.9	80.1	83.1
	N6WB	337.2	31.2	45.1	62.2	83.0	108.0	137.6	79.2	91.3	102.6	112.4	120.1	124.7
	N8WB	450.0	41.6	60.1	82.9	110.7	143.8	183.4	105.6	121.7	136.7	149.9	160.1	166.3
	N12WB	674.4	62.3	90.2	124.4	166.0	215.9	275.1	158.4	182.5	205.1	224.8	240.2	249.4
R22	F2WA2*	41.8	4.4	6.2	8.4	10.9	13.9	17.4	10.1	11.7	13.1	14.3	15.2	15.8
	F4WA2	91.2	9.7	13.6	18.2	23.8	30.3	38.0	22.3	25.7	28.8	31.4	33.5	34.9
	F6WA2	136.8	14.5	20.3	27.3	35.7	45.5	57.1	33.4	38.5	43.1	47.2	50.3	52.4
	F8WA2	182.4	19.4	27.1	36.4	47.6	60.7	76.1	44.5	51.3	57.5	62.9	67.1	69.9
	F4WB2	224.4	25.2	34.6	45.9	59.3	75.2	93.9	53.0	62.5	71.3	79.2	85.9	90.9
	F6WB2	337.2	37.8	51.9	68.8	89.0	112.8	140.8	79.5	93.8	107.0	118.8	128.8	136.4
	F8WB2	450.0	50.5	69.2	91.8	118.7	150.5	187.7	106.0	125.0	142.7	158.4	171.7	181.9
	F12WB2	674.4	75.7	103.8	137.7	178.0	225.7	281.6	159.0	187.5	214.0	237.7	257.6	272.8
R502	F2WA5*	41.8	4.5	6.3	8.5	11.1	14.2	17.8	10.9	12.5	14.0	15.2	16.2	16.7
	F4WA5	91.2	9.9	13.8	18.6	24.2	30.9	38.8	24.0	27.6	30.8	33.6	35.7	37.0
	F6WA5	136.8	14.9	20.8	27.9	36.3	46.4	58.1	36.0	41.4	46.2	50.3	53.5	55.5
	F8WA5	182.4	19.8	27.7	37.2	48.4	61.8	77.5	48.0	55.2	61.6	67.1	71.3	74.0
	F4WB5	224.4	25.8	35.3	46.7	60.4	76.6	95.6	58.6	68.5	77.7	85.8	92.6	97.6
	F6WB5	337.2	38.7	52.9	70.1	90.6	114.9	143.4	87.9	102.8	116.6	128.7	138.9	146.4
	F8WB5	450.0	51.5	70.6	93.5	120.8	153.2	191.2	117.2	137.1	155.4	171.7	185.1	195.2
	F12WB5	674.4	77.3	105.9	140.2	181.3	229.8	286.7	175.8	205.6	233.1	257.5	277.7	292.8

- Notes: • Refrigeration capacity ratings are based on 15°F liquid subcooling and 10°F suction superheat for R717 and R22. Suction superheat for R502 is 30°F.
 • Model 2WA ratings and displacement are based on 1,100 r.p.m.
 • One (1) U.S. TR = 12,000 BTU/h (3,024 Kcal/h)
 • For compound compressor capacities, contact the nearest MYCOM office.
 • For information on other refrigerants, speed and operating conditions, contact the nearest MYCOM office. MYCOM will provide engineering data for your specific requirements.

Refrigerant	Model	*Displacement m ³ /h	*Refrigeration Capacity at 35°C Condensing Temperature						Brake Kilowatt at 35°C Condensing Temperature					
			Suction Temperature (°C)						Suction Temperature (°C)					
			-25	-20	-15	-10	-5	0	-25	-20	-15	-10	-5	0
			*Kilowatt						BKW					
R717	N2WA	71.0	17.3	23.4	30.7	39.3	49.5	61.3	8.1	9.1	10.0	10.7	11.3	11.6
	N4WA	187.2	45.4	61.6	80.8	103.7	130.4	161.6	21.4	23.9	26.2	28.3	29.7	30.6
	N6WA	280.7	68.3	92.3	121.3	155.5	195.6	242.3	32.0	35.9	39.4	42.4	44.6	45.8
	N8WA	374.2	91.0	123.1	161.7	207.4	260.9	323.1	42.8	47.8	52.6	56.4	59.4	61.0
	N4WB	381.0	92.8	125.6	164.9	211.4	265.9	329.4	43.6	48.8	53.6	57.6	60.6	62.3
	N6WB	572.6	139.1	188.4	247.3	317.1	398.9	494.1	65.4	73.2	80.4	86.4	90.9	93.4
	N8WB	764.1	185.5	251.2	329.7	422.7	531.9	658.7	87.2	97.6	107.1	115.2	121.2	124.5
	N12WB	954.3	231.9	313.9	412.2	528.4	664.8	823.4	109.0	122.1	133.9	144.0	151.5	155.7
R22	F2WA2	71.0	19.3	25.4	32.6	41.1	50.9	62.1	8.4	9.3	10.2	10.9	11.5	11.9
	F4WA2	187.2	50.7	67.1	86.0	108.3	134.1	163.9	22.2	24.9	27.2	29.1	30.7	31.7
	F6WA2	280.7	76.1	100.5	129.1	162.6	201.2	245.8	33.4	37.2	40.7	43.7	46.0	47.5
	F8WA2	374.2	101.6	134.0	172.2	216.7	268.2	327.7	44.5	49.7	54.4	58.4	61.4	63.3
	F4WB2	381.0	107.8	140.3	178.5	223.1	274.7	334.2	44.6	50.7	56.3	61.2	65.3	68.4
	F6WB2	572.6	161.7	210.5	267.8	334.6	412.1	501.2	66.8	76.0	84.4	91.8	98.0	102.6
	F8WB2	764.1	215.6	280.6	357.1	446.2	549.4	668.3	89.1	101.3	112.5	122.4	130.7	136.8
	F12WB2	954.3	269.4	350.8	446.3	557.8	686.8	835.4	111.4	126.7	140.7	153.0	163.3	171.1
R502	F2WA5	71.0	19.5	25.7	33.1	41.6	51.6	63.1	9.0	10.0	10.9	11.7	12.2	12.5
	F4WA5	187.2	51.5	67.9	87.1	109.7	136.1	166.3	23.9	26.7	29.1	31.1	32.6	33.5
	F6WA5	280.7	77.2	101.7	130.7	164.7	204.0	249.4	35.9	40.0	43.6	46.6	48.9	50.3
	F8WA5	374.2	103.0	135.7	174.4	219.6	272.0	332.7	47.8	53.3	58.1	62.2	65.1	66.9
	F4WB5	381.0	109.1	142.0	180.7	225.9	278.5	339.1	49.0	55.3	61.1	66.2	70.3	73.4
	F6WB5	572.6	163.6	213.0	271.0	338.9	417.7	508.7	73.4	83.0	91.7	99.3	105.5	110.1
	F8WB5	764.1	218.2	284.0	361.4	451.9	557.0	678.3	97.9	110.6	122.2	132.4	140.7	146.8
	F12WB5	954.3	272.8	354.9	451.8	564.8	696.3	847.8	122.4	138.3	152.8	165.4	175.8	183.5

- Notes: • Refrigeration capacity ratings are based on 5°C liquid subcooling and 10°C suction superheat for R717 and R22. Suction superheat for R502 is 15°C.
 • Model 2WA ratings and displacement are based on 1,100 r.p.m., Model 4WA, 6WA, 8WA on 1,450 r.p.m., Model 4WB, 6WB, 8WB on 1,200 r.p.m. and Model 12WB on 1,000 r.p.m.
 • One (1) kilowatt = 860 Kcal/h.

SPECIFICATIONS (BARE COMPRESSOR)

Item	Single-stage compressor									Compound compressor						
	2WA	4WA(J)	6WA(J)	8WA(J)	4WB	6WB	8WB	12WB	42WA	62WA	42WB	62WB	12.4WB			
Refrigerant	R717, R22, R502, R12, Propane															
Type	Reciprocating, open type															
No. of cylinders	2	4	6	8	4	6	8	12	L-4/H-2	L-6/H-2	L-4/H-2	L-6/H-2	L-12/H-4			
Bore	in. (mm) 3-3/4 (95)				5-1/8 (130)				3-3/4 (95)		5-1/8 (130)					
Stroke	in. (mm) 3 (76)				3-15/16 (100)				3 (76)		3-15/16 (100)					
Max. speed	r.p.m. 1,100	1,450			1,200				1,450		1,200					
Displacement at max. speed	CFM (m ³ /h)	42 (71)	110 (187)	165 (281)	220 (374)	224 (381)	337 (573)	450 (764)	674 (1,145)	L-110 (187)	L-165 (281)	L-224 (381)	L-337 (573)	L-674 (1,145)		
		H-55 (94)	H-55 (94)	H-112 (191)	H-112 (191)	H-224 (381)										
Driving method*	Belt drive or direct drive															
Capacity control steps	%	100	100, 50	100, 66, 33	100, 75, 50, 25	100, 50	100, 66, 33	100, 75, 50, 25	100, 66, 33	100, 50	100, 66, 33	100, 50	100, 66, 33	100, 66, 33		
Refrigeration oil	ISO VG68 or equivalent															
Oil charge quantity	U.S. gal. (l)	1.32 (5)	3.17 (12)	3.70 (14)	4.49 (17)	5.29 (20)	6.61 (25)	6.87 (26)	13.74 (52)	3.70 (14)	4.49 (17)	6.61 (25)	7.00 (26.5)	14.53 (55)		
Connections	Suction	R717	1-1/2"(40A)	2"(50A)	2-1/2"(65A)	3"(80A)	3-1/2"(90A)	3-1/2"(90A)	4"(100A)	5"(125A)	L2"(50A)	L2-1/2"(65A)	L3"(80A)	L4"(100A)	L5"(125A)	
		R22, R502		2-1/2"(65A)	3"(80A)	3-1/2"(90A)		4"(100A)	5"(125A)		H-1-1/2"(40A)	H-1-1/2"(40A)	H-2-1/2"(65A)	H-2-1/2"(65A)	H-3"(80A)	H-3"(80A)
	Discharge	R717	1-1/2"(40A)	2"(50A)	2-1/2"(65A)	3"(80A)	3"(80A)	3"(80A)	3-1/2"(90A)	3"(80A) x 2	L2"(50A)	L2"(50A)	L2-1/2"(65A)	L2-1/2"(65A)	L3"(80A)x2	L3"(80A)x2
		R22, R502		2-1/2"(65A)	3"(80A)	3-1/2"(90A)		4"(100A)	H-1-1/2"(40A)		H-1-1/2"(40A)	H-2"(50A)	H-2"(50A)	H-2"(50A)x2	H-2"(50A)x2	
Net weight	lb. (kg)	810 (370)	(A) 1,280 (580)	(A) 1,540 (700)	(A) 1,800 (820)	2,420 (1,100)	3,100 (1,410)	3,410 (1,150)	5,500 (2,500)	1,580 (720)	1,850 (840)	3,170 (1,440)	3,430 (1,560)	6,820 (3,100)		
		(J) 1,100 (500)	(J) 1,230 (560)	(J) 1,430 (650)												

Note: ● "L": Low stage, "H": High stage. ● Model 12.4WB - Direct drive only.

ITEMS INCLUDED

- Suction shut-off valve 1 pc. (Single-stage), 2 pcs. (Compound)
- Discharge shut-off valve 1 pc. (Single-stage), 2 pcs. (Compound)
- Oil cooler 1 pc.
- Flywheel 1 pc.
- Safety valve 1 pc. (Single-stage), 2 pcs. (Compound)
- Capacity control solenoid valve* 1 pc.**
- * Excludes compressors for chemical plants. ** Excludes Model 2WA.
- Discharge side thermometer 1 pc. (Single-stage), 2 pcs. (Compound)
- Suction side thermometer 1 pc. (Single-stage), 2 pcs. (Compound)
- Service tools 1 set

PRIMARY CHOICES

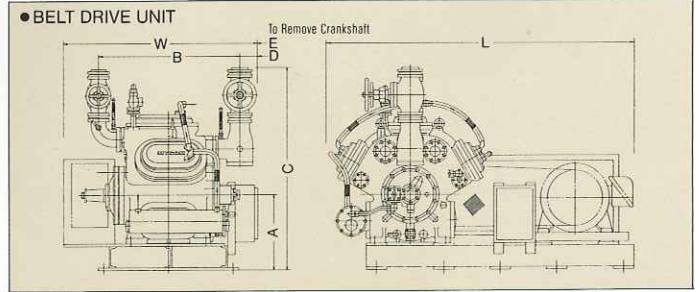
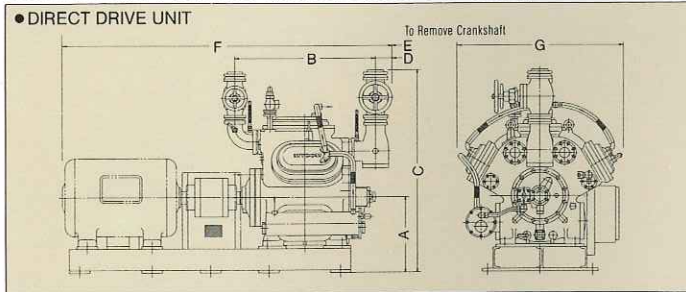
- Driving method (Belt drive, Direct drive)
- Control panel (Mechanical type, Microprocessor type)
- Head cover (Air-cooled, Water-cooled, DX-cooling)
- Oil cooler (Water-cooled, DX-cooling)
- Oil filter (Cuno-filter, External filter, Both)
- Gasket (Non-asbestos, Asbestos)

OPTIONAL ACCESSORIES

- High pressure cut-out switch
- Low pressure control switch
- Oil pressure failure protection switch
- High pressure side pressure gauge
- Low pressure side pressure gauge
- Oil pressure gauge
- Gauge board
- Oil heater with thermo-switch
- Oil separator
- Capacity control solenoid valve

OUTER DIMENSIONS (COMPRESSOR UNIT)

Unit: in.(mm)



Model	Dimensions									Flywheel		Weight less motor lb. (kg)		
	A	B	C	D		E	F	G	L*	W	Pitch dia.		No. of grooves	
				B.D.*	D.D.*									
2WA	12-5/8(321)	—	37-1/2(955)	17(432)	—	21(533)	—	—	58(1,475)	34(865)	13-1/4(336)	C x 4	975(442)	
4WA	17-3/4(451)	12-1/16(306)	45-7/8(1,165)	15(381)	11(279)	25(635)	66-1/2(1,690)	38(965)	67(1,705)	42(1,070)	15-7/16(392)	C x 4	2,005(909)	
6WA	17-3/4(451)	32-1/16(814)	47-7/8(1,220)	4(102)	4(102)	25(635)	73-3/4(1,875)	41(1,045)	69-1/2(1,765)	43-1/2(1,105)	15-7/16(392)	C x 6	2,280(1,034)	
8WA	18-15/16(481)	32-7/16(824)	50-11/16(1,290)	4-1/2(114)	4-1/2(114)	25(635)	78(1,985)	41-1/2(1,055)	71(1,805)	44-1/8(1,125)	15-7/16(392)	C x 8	2,605(1,181)	
4WB	20-1/2(521)	15-13/16(402)	55-1/2(1,410)	20(508)	12-1/2(318)	27(686)	82(2,085)	44-1/2(1,130)	81(2,060)	55(1,400)	17-9/16(446)	C x 8	3,430(1,558)	
6WB	21-5/16(541)	40-3/8(1,026)	58-5/16(1,485)	5(127)	5(127)	28(711)	92(2,340)	50(1,270)	82-3/4(2,105)	55(1,400)	17-9/16(446)	C x 10	3,980(1,805)	
8WB	21-1/4(540)	39-11/16(1,008)	60-13/16(1,545)	6-1/2(165)	5-1/2(140)	30(762)	95(2,415)	48-1/2(1,235)	83-3/4(2,130)	55-1/4(1,405)	17-9/16(446)	C x 10, C x 12*	4,420(2,005)	
12WB	B.D.	23-1/4(591)	63-1/2(1,613)	61-1/2(1,565)	5(127)	5(127)	72(1,829)	122-1/4(3,120)	53-3/16(1,355)	88(2,235)	79(2,010)	17-9/16(446)	C x 12	7,740(3,510)
	D.D.	25-1/4(641)		63-1/2(1,615)								—	—	7,150(3,243)

Note: ● "B.D.": Belt drive. "D.D.": Direct drive.
 ● Dimension L given is less motor. Motor junction box may extend beyond frame especially on larger motor sizes.
 ● Figure in bracket []: Compressors for Canada only.

● Design and specifications subject to change without notice.

For further information, contact:

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