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Semi-hermetic compressors

- Terminal box IP65
- Crankcase heater mounting in housing pocket
- Centrifugal lubrication



Compressor model	Motor version (Temp.)	Displacement 1450 min ⁻¹	Price
2GC-2.2-40S	Medium + Low	7,58	44,500
2FC-2.2-40S	Low	9,54	46,500
2FC-3.2-40S	Medium		49,000



2EC-2.2-40S	Low	11,4	56,000
2EC-3.2-40S	Medium		60,500
2DC-2.2-40S	Low	13,4	58,000
2DC-3.2-40S	Medium		61,000
2CC-3.2-40S	Low	16,2	60,000
2CC-4.2-40S	Medium		62,500



4FC-3.2-40S	Low	18,1	65,000
4FC-5.2-40S	Medium		72,000
4EC-4.2-40S	Low	22,7	67,000
4EC-6.2-40S	Medium		76,500
4DC-5.2-40S	Low	26,8	84,000
4DC-7.2-40S	Medium		88,000
4CC-6.2-40S	Low	32,5	92,000
4CC-9.2-40S	Medium		95,500



- Standard Delivery : Compressor with crankcase heater
- This compressor model : Standard for R22 refrigerant
- More information please contact sales

Semi-hermetic compressors

- Terminal box IP65
- Crankcase heater mounting in housing pocket
- Centrifugal lubrication



Abb. ähnlich / Fig. similar, © Bitzer

Compressor model	Motor version (Temp.)	Displacement 1450 min ⁻¹	Price
4VCS-6.2-40P	Low	34,7	109,000
4VCS-10.2-40P	Medium		113,000
4TCS-8.2-40P	Low	41,3	112,000
4TCS-12.2-40P	Medium		116,400
4PCS-10.2-40P	Low	48,5	113,000
4PCS-15.2-40P	Medium		117,500
4NCS-12.2-40P	Low	56,2	127,000
4NCS-20.2-40P	Medium		134,000

•Standard Delivery : Compressor with crankcase heater

- Pump lubrication



Abb. ähnlich / Fig. similar, © Bitzer

Compressor model	Motor version (Temp.)	Displacement 1450 min ⁻¹	Price
4VC-6.2-40P	Low	34,7	114,000
4VC-10.2-40P	Medium		118,000
4TC-8.2-40P	Low	41,3	116,500
4TC-12.2-40P	Medium		121,500
4PC-10.2-40P	Low	48,5	117,400
4PC-15.2-40P	Medium		123,000
4NC-12.2-40P	Low	56,2	132,000
4NC-20.2-40P	Medium		140,000

- Standard Delivery : Compressor with crankcase heater
- This compressor model : Standard for R22 refrigerant
- More information please contact sales

Semi-hermetic compressors

- Terminal box IP54
- Crankcase heater mounting in housing pocket
- Pump lubrication



Compressor model	Motor version (Temp.)	Displacement 1450 min ⁻¹	Price
4J-13.2-40P	Low	63,5	163,000
4J-22.2-40P	Medium		184,400
4H-15.2-40P	Low	73,7	163,200
4H-25.2-40P	Medium		172,000
4G-20.2-40P	Low	84,6	197,000
4G-30.2-40P	Medium		191,000
6J-22.2-40P	Low	95,3	217,000
6J-33.2-40P	Medium		249,000
6H-25.2-40P	Low	110,5	207,500
6H-35.2-40P	Medium		238,000
6G-30.2-40P	Low	126,8	238,000
6G-40.2-40P	Medium		254,000
6F-40.2-40P	Low	151,6	288,000
6F-50.2-40P	Medium		296,000



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Oil Level Control

OLC-K1	Centrifugal Lubrication	6,000
MP54	Pump Lubrication	6,000

Additional Accessories

Fan	2GC ... 2CC	8,700
Fan	4FC ... 4NC	11,000
Fan	4J ... 6F	9,800
CIC	4VC ... 4NC	21,000
CIC	4J ... 4G	22,900
CIC	6J ... 6F	24,700

Semi-hermetic compressors 2-Stage

- Terminal box IP54
- Crankcase heater mounting in housing pocket
- Pump lubrication

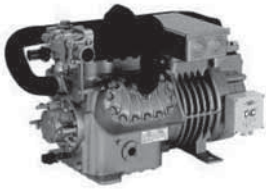


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Compressor model	Displacement 1450 min ⁻¹		Price
	LP	HP	
S4T-5.2-40P	19,7	12,6	162,000
S4N-8.2-40P	28,0	17,9	177,000
S4G-12.2-40P	42,3	27,0	231,000
S6J-16.2-40P	63,5	31,8	287,000
S6H-20.2-40P	73,6	36,9	273,000
S6G-25.2-40P	84,5	42,3	304,000
S6F-30.2-30P	101,1	50,5	355,000

- Standard Delivery : Compressor with crankcase heater, Liquid subcooler not mounted
- This compressor model : Standard for R22 refrigerant

Open drive compressors

- Fly wheel standard



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Compressor model	Motor (Hp.)		Price
	R22 , R404A	R134a	
II / L	1,5	1	24,700
III / L	3	2	29,800
IV / L	4	3	35,200
V / L	7,5	7,5	56,000
VI / W	15	10	97,000
VII / W	20	15	133,000

- Standard Delivery : Compressor with Pulley
- This compressor model : Standard for R22 refrigerant
- More information please contact sales

Open-drive compressors

Crankcase heater mounting in housing pocket

Pump lubrication

Compressor model	Displacement with direct coupling 1450 min ⁻¹	Price (-K) without pulley	Price (-S) with pulley
2T.2	19.7	70,500	74,000
2N.2	28.0	76,200	80,000
4T.2	39.4	90,500	95,000
4P.2	47.1	105,000	110,000
4N.2	56.1	109,200	114,000
4H.2	73.7	158,000	165,000
4G.2	84.6	161,000	168,000
6H.2	110.5	203,000	209,000
6G.2	126.8	208,000	214,000
6F.2	151.6	218,000	225,000



Abb. ähnlich / Fig. similar, © Bitzer



Abb. ähnlich / Fig. similar, © Bitzer

- Standard Delivery : Compressor with crankcase heater
- This compressor model : Standard for R22 refrigerant

Scroll compressors

Terminal Box Enclosure Class IP54

Low Sound and Vibration Levels

Compressor model	Displacement at 50Hz(2900 RPM) m ³ /h	Price
ESH 725-40S	25	Call
ESH 730-40S	30	Call
ESH 736-40S	36	Call
ESH 743-40S	43	Call



This compressor model : Standard for R22 refrigerant
More information please contact sales

□ Design at $T_e = -5\text{ }^{\circ}\text{C}$, $T_c = 45\text{ }^{\circ}\text{C}$, $T_a = 35\text{ }^{\circ}\text{C}$ R22

Condensing Unit Without Condenser (hi-temp. model)

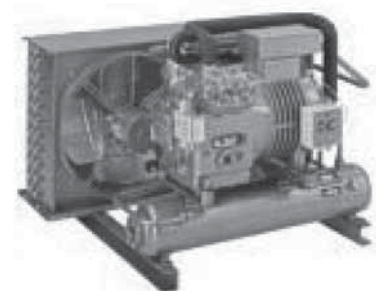
Model	Compressor model	Connection		Price
		Suction	Liquid	
w/oC-2GC2.2(Y)	2GC-2.2(Y)	5/8"	3/8"	77,000
w/oC-2FC3.2(Y)	2FC-3.2(Y)	5/8"	3/8"	81,000
w/oC-2EC3.2(Y)	2EC-3.2(Y)	7/8"	1/2"	92,000
w/oC-2DC3.2(Y)	2DC-3.2(Y)	7/8"	1/2"	92,000
w/oC-2CC4.2(Y)	2CC-4.2(Y)	7/8"	1/2"	95,000
w/oC-4FC5.2(Y)	4FC-5.2(Y)	7/8"	1/2"	102,000
w/oC-4EC6.2(Y)	4EC-6.2(Y)	1 -1/8"	1/2"	110,000
w/oC-4DC7.2(Y)	4DC-7.2(Y)	1 -1/8"	5/8"	125,000
w/oC-4CC9.2(Y)	4CC-9.2(Y)	1 -1/8"	5/8"	132,500
w/oC-4VCS10.2(Y)	4VCS-10.2(Y)	1 -1/8"	5/8"	151,000
w/oC-4TCS12.2(Y)	4TCS-12.2(Y)	1 -3/8"	3/4"	161,000
w/oC-4PCS15.2(Y)	4PCS-15.2(Y)	1 -3/8"	3/4"	164,000
w/oC-4NCS20.2(Y)	4NCS-20.2(Y)	1 -5/8"	7/8"	185,000
w/oC-4H25.2(Y)	4H-25.2(Y)	2 -1/8"	7/8"	230,000
w/oC-4G30.2(Y)	4G-30.2(Y)	2 -1/8"	7/8"	245,000
w/oC-6H35.2(Y)	6H-35.2(Y)	2 -1/8"	1 -1/8"	295,000
w/oC-6G40.2(Y)	6G-40.2(Y)	2 -1/8"	1 -1/8"	307,000
w/oC-6F50.2(Y)	6F-50.2(Y)	2 -1/8"	1 -1/8"	350,000

POE oil for HFC refrigerant

BSE 32	2GC-2.2...2CC-4.2	1,200
BSE 32	4FC-5.2...4NCS-20.2	1,500
BSE 32	4H-25.2...6F-50.2	2,600

Additional Fan

FAN	2GC-2.2...2CC-4.2	8,100
FAN	4FC-5.2...6F-50.2	9,900



□ Design at $T_e = -20\text{ }^\circ\text{C}$, $T_c = 45\text{ }^\circ\text{C}$, $T_a = 35\text{ }^\circ\text{C}$, R22

Condensing Unit Without Condenser (Low-temp. model)

Model	Compressor model	Connection		Price
		Suction	Liquid	
w/oC-2FC2.2(Y)	2FC-2.2(Y)	5/8"	3/8"	79,000
w/oC-2EC2.2(Y)	2EC-2.2(Y)	7/8"	1/2"	88,000
w/oC-2DC2.2(Y)	2DC-2.2(Y)	7/8"	1/2"	90,000
w/oC-2CC3.2(Y)	2CC-3.2(Y)	7/8"	1/2"	92,000
w/oC-4FC3.2(Y)	4FC-3.2(Y)	7/8"	1/2"	95,000
w/oC-4EC4.2(Y)	4EC-4.2(Y)	1 -1/8"	1/2"	101,000
w/oC-4DC5.2(Y)	4DC-5.2(Y)	1 -1/8"	5/8"	121,000
w/oC-4CC6.2(Y)	4CC-6.2(Y)	1 -1/8"	5/8"	129,000
w/oC-4VCS6.2(Y)	4VCS-6.2(Y)	1 -1/8"	5/8"	148,000
w/oC-4TCS8.2(Y)	4TCS-8.2(Y)	1 -3/8"	5/8"	155,000
w/oC-4PCS10.2(Y)	4PCS-10.2(Y)	1 -3/8"	5/8"	159,000
w/oC-4NCS12.2(Y)	4NCS-12.2(Y)	1 -3/8"	3/4"	172,000
w/oC-4H15.2(Y)	4H-15.2(Y)	1 -5/8"	7/8"	212,000
w/oC-4G20.2(Y)	4G-20.2(Y)	2 -1/8"	7/8"	251,000
w/oC-6H25.2(Y)	6H-25.2(Y)	2 -1/8"	1 -1/8"	271,000
w/oC-6G30.2(Y)	6G-30.2(Y)	2 -1/8"	1 -1/8"	295,000
w/oC-6F40.2(Y)	6F-40.2(Y)	2 -1/8"	1 -1/8"	343,000

POE oil for HFC refrigerant

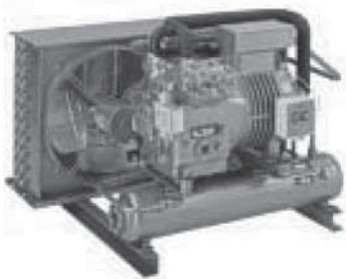
BSE 32	2FC-2.2...2CC-3.2	1,200
BSE 32	4FC-3.2...4NCS-12.2	1,500
BSE 32	4H-15.2...6F-40.2	2,600

Additional Fan

FAN	2FC-2.2...2CC-3.2	8,100
FAN	4FC-3.2...6F-40.2	9,900

CIC system

CIC	4VCS-6.2...4G-30.2	18,500
CIC	6H-25.2...6F-40.2	22,700



Heldon liquid line filter driers offer a high level of protection for refrigeration and air-conditioning systems.

Designed to remove moisture, acids and solid particles that can lead to premature component failure and harmful chemical reactions.

Power coated shell rated to 4200 Kpa (600 psi) (R 410a)



Connection	Part numbers		R22	R134a	R404A	Price Baht
	Flare	Solder	R407C R410a kW	kW	R507 kW	
1/4	3000-032	3001-032S	7	7	5	225
3/8	3000-033	3001-033S	19	17	13	225
1/4	3000-052	3001-052S	8	7	5	260
3/8	3000-053	3001-053S	19	18	14	260
1/4	3000-082	3001-082S	8	7	5	300
3/8	3000-083	3001-083S	21	19	14	330
1/2	3000-084	3001-084S	29	26	20	350
1/4	3000-162	3001-162S	8	7	5	380
3/8	3000-163	3001-163S	24	22	16	380
1/2	3000-164	3001-164S	33	30	22	380
5/8	3000-165	3001-165S	47	43	30	460
1/2	3000-304	3001-304S	34	31	22	680
5/8	3000-305	3001-305S	49	45	33	690
3/4	3000-306	3001-306S	65	59	43	700
7/8	-	3001-307S	65	59	43	800
3/8	3000-413	3001-413S	27	25	18	1,050
1/2	3000-414	3001-414S	35	32	23	1,050
5/8	3000-415	3001-415S	55	53	37	1,050
3/4	3000-416	3001-416S	100	91	65	1,050
7/8	-	3001-417S	100	91	65	1,100
5/8	3000-755		95	93	96	1,550
3/4	3000-756		102	96	102	1,550

Given in accordance with ARI 710-86 for;
Pressure drop P = 7kpa (1 psi)

Evaporator temperature; $t_e = -15^{\circ}\text{C}$
Condensing temperature; $t_c = 30^{\circ}\text{C}$

Heldon's range of demountable filter drier shells are designed to be used in both the liquid and suction lines of refrigeration and air-conditioning systems using fluorinated refrigerants.

Shells are made from steel tube with solid copper connectors. Shells have a corrosion resistant powder coat finish.

Safe Working Pressure 3,600 Kpa



Connection	Core	Part numbers	Liquid Line			Suction Line			Price Baht
			R22	R134a	R404A	R22	R134a	R404A	
7/8	1	3017-1401	157	139	99	38	10	13	3,600
7/8	2	3017-1402	175	162	121	44	16	21	4,200
7/8	3	3017-1403	394	356	255	92	23	31	5,700
7/8	4	3017-1404	411	372	266	122	35	44	6,500
1-1/8	1	3017-1801	206	186	133	51	13	17	3,650
1-1/8	2	3017-1802	240	217	155	58	15	20	4,200
1-1/8	3	3017-1803	394	356	255	92	23	31	5,700
1-1/8	4	3017-1804	411	372	266	122	35	44	6,500
1-3/8	1	3017-2201	259	227	162	63	17	22	3,700
1-3/8	2	3017-2202	326	295	211	79	20	27	4,500
1-3/8	3	3017-2203	400	365	261	92	23	31	5,750
1-3/8	4	3017-2204	415	377	271	122	35	44	6,600
1-5/8	1	3017-2601	259	227	162	63	17	22	3,900
1-5/8	2	3017-2602	326	259	211	79	20	27	4,550
1-5/8	3	3017-2603	400	365	261	92	23	31	6,900
1-5/8	4	3017-2604	415	377	271	122	35	44	7,000
2-1/8	1	3017-3401	259	227	162	63	17	22	3,950
2-1/8	2	3017-3402	396	358	256	79	20	27	4,550
2-1/8	3	3017-3403	424	389	277	92	23	31	6,950
2-1/8	4	3017-3404	509	460	329	122	35	44	8,000
2-5/8	2	3017-4202	396	358	256	79	20	27	5,700

Liquid capacities based on; Evap. temp: -15°C , Cond. temp: 30°C , pd=.07 bar

Suction capacities based on; Evap. temp: 4.4°C , Cond. temp: 32.2°C

Drier Core

Heldon ' range of drier cores are manufactured from 3A Molecular Sieves , Activated Alumina and Activated Carbon in varying amounts to optimise the cores performance in its intended position within the refrigeration or air conditioning system.



Part	Description	Replaces	Price (Baht)
3050-1	ULTRA-DRY CORE Super high moisture	Z-48, 48DU, VS-48XH, RCW-48 & UK-48 100% MS Ideal for POE Oil	500
3049-1	STANDARD CORE General clean	PCK-48, 48DN, VS48H, RC-4864 & D48 80% / 20% MS/AL Not recommended for POE Oil	500
3051-1	BURN-OUT CORE Complete clean-up	PCK-48HH, 48DA, RC-4864-HH, W-48 & VS-48SC 60% /35% /5% MS/AL/AC	900
3050-100	HI CAPACITY CORE Suit 150mm Shells	H-100, VS-100H, PCK-100 100% MS Ideal for POE Oil	1,400
3050-32	SUCTION CORE Low pressure drop, high flow rate	RPE48BD 100% MS Ideal for POE Oil	450
3052-2	FILTER ELEMENT Low pressure drop	PRE48BD, F48R, VS48F, PFE-48BF, 48-F	480

Oil Level Control

The function of a mechanical oil level regulator is to control the level of the oil in the compressor crankcase with a float operated valve.

Oil level regulators are designed to attach directly to the sight glass housing of the compressor crankcase. The oil regulator has a three bolt multi application B C flange and will fit many common compressors. Adaptors are available to suit other applications.



Part Number	Type	Sight Glass	Oil Pressure Diff	Price (Baht)
S-9530	Adjustable	1/4-5/8	0.35 – 6.2 bar	6,000

Oil separators are used in refrigeration systems that require the compressor lubricating oil to be returned directly to the compressor crankcase under all operating conditions. Using an oil separator will prevent lubricating oil from circulating throughout the system with the refrigerant making the condenser and evaporator more efficient.

Heldon Oil separators are designed for maximum flow with minimal pressure drop while efficiently removing oil from suspension in the refrigerant. Oil removal is achieved using stainless steel membranes that have been optimised for both flow and oil removal.



Connection	Part number	Price (Baht)
3/8	3210-6406	2,400
1/2	3210-6408	2,400
5/8	3210-6410	2,500
7/8	3210-6414	2,750
1-1/8	3210-6418	3,000
1-3/8	3210-6422	3,400
1-5/8	3210-9626	5,400
2-1/8	3210-9634	7,000

Manufacturing Standards

Manufactured in accordance with AS 2971, Safe Working Pressure: 3,200 kPa

The main function of the suction accumulator in a refrigeration or heat pump system is to protect the compressor from liquid refrigerant. Liquid refrigerant can dilute the oil, wash out the bearings, and damage valve reeds. The un-evaporated portion of refrigerant returning in the suction line is trapped in the accumulator, allowing only vapour refrigerant and oil to leave and return to the compressor.

Heldon suction accumulators comprise of a sufficiently sized vessel with an optimised “U” shaped internal tube to minimise pressure drop and maximise flow through the vessel. Positive oil return is accomplished through a strainer protected injection orifice. The inlet to the U tube is located above and behind the vessel inlet to eliminate any possibility of high velocity liquid carryover.



Connector	Volume (L)	Part number	Price (Baht)
5/8	1.6	3100-104016P	1,500
3/4	2.6	3100-125029P	1,800
7/8	4	3100-145040	2,200
1-1/8	5.9	3100-185559	2,800
1-3/8	7.1	3100-226071P	3,200
1-5/8	10.5	3100-266510	4,800
2-1/8	15	3100-348615	9,500

Approvals

Manufactured in accordance with AS 2971. :Safe Working Pressure: 2,500 kPa

Liquid receivers are used in refrigeration systems for the purpose of allowing the system to adjust to varying loads, additionally they should be able to store the systems refrigerant charge during a pump down and to ensure only liquid refrigerant enters the liquid line.

Heldon manufacture a wide range of Liquid Receivers, in both Horizontal and Vertical configuration. Our standard range is Vertical from 1.4 litre to 14.5 litre, other sizes and Horizontal orientation can be made to suit individual customer needs based on volume.

Standard tube body sizes are 100mm, 120mm, 180mm and 220mm and up to 2000mm in length. Made to order receivers can be fitted with sweat or rotalock connectors, sight glasses with or without indicator balls, electronic level sensors and relief valve access.



Outlet / Inlet	Volume (L)	Part number	Price (Baht)
3/4 R/L x 3/8 ID	1.4	3310-064014	1,250
3/4 R/L x 3/8 ID	2.4	3310-064724	1,300
3/4 R/L x 1/2 ID	4.4	3310-085544	2,400
1 R/L x 1 R/L	8.2	3310-167082	3,000
1 R/L x 1 R/L	10.9	3310-1670109	3,500
1 R/L x 1 R/L	14.5	3310-1686145	4,200

Manufacturing Standards

Manufactured in accordance with AS 2971. :Safe Working Pressure: 3,000 kPa or higher on request (Qty depending)

Rotalock Valve

Rotalock valves are widely used through out the refrigeration and air conditioning industry as a removable connection point and service valve in one. The Rotalock connection consists of male and female components that when joined compress a sacrificial Teflon washer. By compressing a teflon washer a seal is created that can maintain its integrity with both large changes in temperature and constant vibration.

Connection	Part number	Price (Baht)
3/8 ID x 3/4 R/L	2600-061220	350
1/2 ID x 3/4 R/L	2600-081220	400
3/8 ID x 1 R/L	2600-061620	480
1/2 ID x 1 R/L	2600-081620	520
5/8 ID x 1 R/L	2600-101620	520
7/8 ID x 1-1/4 R/L	2600-142030-1LC	800
1-1/8 ID x 1-1/4 R/L	2600-182030-1LC	1,500
1-3/8 ID x 1-3/4 R/L	2600-222835-1LC	2,800
1-5/8 ID x 1-3/4 R/L	2600-262835	3,500



Sight Glasses

Liquid and moisture indicating sight glasses are used in refrigeration and air conditioning systems as a means of visually checking refrigerant quality and quantity.

This is particularly important with HFC refrigerations using polyester oil due to its hydroscopic ability as this combination will react with moisture creating both acids and alcohol. They are also ideally suited for installation in the returning oil line from an oil separator to the compressor.

Connection	Part number	Price (Baht)
1/4 ID x 1/4 ID	665-0404HB	340
3/8 ID x 3/8 ID	665-0606HB	380
1/2 ID x 1/2 ID	665-0808HB	460
5/8 ID x 5/8 ID	665-1010HB	480
3/4 ID x 3/4 ID	665-1212HB	600
7/8 ID Solder	670-1414	700
1-1/8 ID Solder	670-1818	800



Manufactured in accordance with AS / NZ 1677.2
Safe Working Pressure of 4200 KPa (R 410a Compatible)

Heldon's magnetic check valve uses magnetic attraction to return the valve plate to its seat rather than spring pressure. A conventional check valve requires an increase in pressure to force the valve plate off its seat leading to an increase in pressure drop. Heldon's magnetic check valve has a decreasing force to move it away from its seat. The further it travels the magnetic attraction diminishes leading to a decrease in pressure drop. Magnetic check valves are therefore a more efficient option to conventional check valves.

Suitable for Liquid, Suction and Hot Gas lines with all fluorinated refrigerants these valves are ideal in a new installation or as a replacement for of a conventional check valve .



Connection	Part number	Price (Baht)
1/4 ID	2026-0404	490
3/8 ID	2026-0606	520
1/2 ID	2026-0808	580
5/8 ID	2026-1010	700
3/4 ID	2026-1212	850
7/8 ID	2026-1414	1,550
1-1/8 ID	2026-1818	1,800
1-3/8 ID	2026-2222	2,900
1-5/8 ID	2026-2626	4,700
2-1/8 ID	2026-3434	7,500
2-5/8 ID	2026-4242	12,500
3-1/8 ID	2026-5050	15,000

Manufactured in accordance with AS / NZ 1677.2 , Safe Working Pressure: 4,200 kPa

Heldon packless line valves (Diaphragm Valves) are used to isolate an individual line , component or part of refrigeration or air- conditioning system. They are engineered to offer both long life and precise sealing making them the ideal choices as a long term positive isolation valve.

Suitable for all fluorinated refrigerants they are available in two distinct designs. Standard for medium duty , and Heavy Duty for application



Connection	Part number	Price (Baht)
1/4	2100B-0404	360
3/8	2100B-0606	450
1/2	2100B-0808	580
5/8	2100B-1010	700
3/4	2100B-1212	960



Connection	Part number	Price (Baht)
1/4	2111B-0404	360
3/8	2111B-0606	450
1/2	2111B-0808	580
5/8	2111B-1010	700
3/4	2111B-1212	960

Manufactured in accordance with AS / NZ 1677.2

Safe Working Pressure: 4,200 kPa (R-410a Compatible)

- Maximum working pressure 700 psi , 48 bar
- Working temperature range -40 C / 149 C
- Patented live loaded stem seal
- Double O ring for greater seating surface
- Body is hermetically sealed
- Forged brass body , brass cap and adapter , plated steel stem , Teflon ball seals and gasket
- Extended copper connections for easy brazing
- Quick flow operation valves fully opened or closed with quarter turn of valve stem



Connection	Part number	Price (Baht)
3/8 ID x 3/8 ID	937203	870
1/2 ID x 1/2 ID	937204	870
5/8 ID x 5/8 ID	937205	870
3/4 ID x 3/4 ID	937306	1,300
7/8 ID x 7/8 ID	937307	1,300
1-1/8 ID x 1-1/8 ID	937409	2,000
1-3/8 ID x 1-3/8 ID	937511	3,300
1-5/8 ID x 1-5/8 ID	937613	3,700
2-1/8 ID x 2-1/8 ID	937617	6,000

3 way Dual Shut off Valves

- Maximum working pressure 450 psi , 31 Bar
- Temperature rating -29 C / 149 C
- Recommended for used with relief valve types
- Suitable for refrigerants including ammonia and other industrial fluids non corrosive to steel
- Forged Steel , painted



Part number	Connection	Price
8021 A	1/2 FPT	5,800
8022 A	3/4 FPT	5,800

Angle Pressure Relief Valve

- Bodies : Ductile Iron
- Seat inserts : Seat discs and main guides , piston stainless steel
- Seat material : Teflon or Neo prene
- Connections : (NPTF) pipe threaded
- Temperature rating : -28 C / 71 C
- Suitable for ammonia , HFC and CFC refrigerants and other industrial fluids non corrosive
- Standard pressure setting : 150 , 200 , 250 , 275 , 300 psi



Part number	Inlet	Outlet	Price
5601	1/2 FPT	1 FPT	6,000
5602	3/4 FPT	1 FPT	6,000

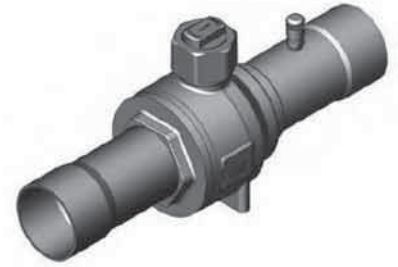
Angle and Straight Pressure Relief Valve

- Brass construction set and sealed at the factory
- Valve are stamped with catalog number
- All N.P.T.F connections are American standard dry seal tapered pipe threads
- Connections : (NPTF) pipe threaded
- Temperature rating : -40 C / 149 C
- Suitable for refrigerants R22 , R134a , R404a , R410a and other industrial fluids non corrosive to brass , steel , Neoprene and Teflon
- Standard pressure setting : 150 , 235 , 300 , 400 , 450 psi



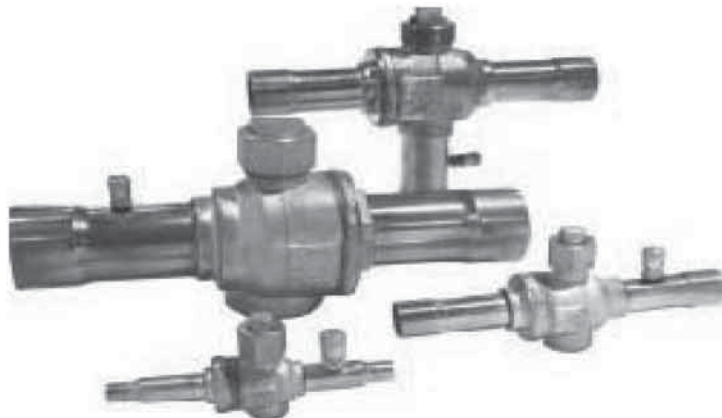
Part number	Inlet	Outlet	Price
5230	1/4 MPT	3/8 Flare	CALL
5231	3/8 MPT	3/8 Flare	CALL
5232	1/2 MPT	5/8 Flare	CALL
5240N1/2	1/2 MPT	1/2 FPT	CALL
5244-1	3/4 MPT	1 FPT	CALL
5233A	3/8 MPT	7/8 Flare	CALL
5235A	1/2 MPT	3/4 MPT	CALL

- Maximum working pressure 700 psi , 48 bar
- Working temperature range -40 C / 149 C
- Compatible with all CFC , HCFC , HFC refrigerants and oils
- UL/cUL Listed , CE Certified
- RoHS Compliant
- Full port construction to match line size ID
- Internally equalized ball design



Connection	Part number	Price (Baht)
1/4 ID x 1/4 ID	A 17859	870
3/8 ID x 3/8 ID	A 17860	870
1/2 ID x 1/2 ID	A 17861	870
5/8 ID x 5/8 ID	A 17862	870
3/4 ID x 3/4 ID	A 17863	1,300
7/8 ID x 7/8 ID	A 17864	1,300
1-1/8 ID x 1-1/8 ID	A 17865	2,000
1-3/8 ID x 1-3/8 ID	A 17866	3,300
1-5/8 ID x 1-5/8 ID	A 17867	3,700
2-1/8 ID x 2-1/8 ID	A 17868	6,000
2-5/8 ID x 2-5/8 ID	A 17869	10,000
3-1/8 ID x 3-1/8 ID	A 17870	18,000

UL / cUL listed and CE certified
Safe Working Pressure: 4,800 kPa

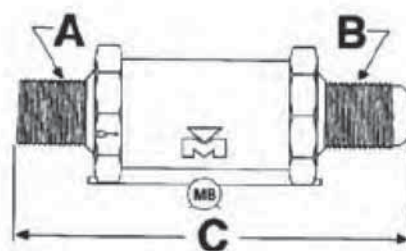
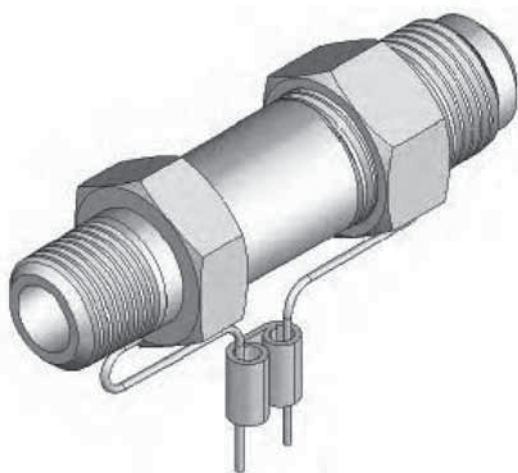


Pressure Relief Valves

- Working Temperature Range -40C / 149 C
- Compatible with all CFC , HCFC , and HFC refrigerants and oils
- CE Certified
- RoHSCompliant
- Designed primarily for use on liquid receiver applications above the liquid refrigerant level
- Satisfy ASHRAE Standard 15 code requirements for a refrigerant vessel safety device
- Comply with ASME code for unfired pressure vessels

Straight Thru – NPTFE Inlet to Flare Outlet

Part number	Inlet A	Outlet B	Price
A 15501	1/4	3/8	CALL
A 15502	3/8	3/8	CALL
A 15503	3/8	1/2	CALL
A 15504	1/2	5/8	CALL
B 33752	1/4	3/8	CALL
B 33753	1/4	1/2	CALL





ACB , LCB



LTB,ETB,HTB,FTB



SNS , DNS



DNS

Model	Type	Range psi	Setting (psi) ON OFF		Connection	Reset Type	Price
ACB-IB 21	High Pressure	295-395	295	395	Flare 1/4	Automatic	480
ACB-IB39	High Pressure	280-350	280	350	Flare 1/4	Automatic	400
LCB-PA26	Low Pressure	27-45.5	45.5	27	Flare 1/4	Automatic	420
LCB-PA55	Low Pressure	8-22	22	8	Flare 1/4	Automatic	480
LTB-A301	Low Pressure	0-57	43	28	Solder	Automatic	490
ETB-A301	Low Pressure	14-36	Manual	14	Solder	Manual	800
HTB-A301	High Pressure	284-427	284	356	Solder	Automatic	480
FTB-A301	High Pressure	284-427	Manual	356	Solder	Manual	650
SNS-C106X	Low Pressure	8-85	43	28	Flare 1/4	Automatic	1,200
SNS-C110X	Low Pressure	14.2-142	85	57	Flare 1/4	Automatic	1,200
SNS-C106XM2	Low Pressure	8-85	Manual	28	Flare 1/4	Manual	1,200
SNS-2C106Y	Low Pressure	14-55	14	55	Flare 1/4	Automatic	1,200
HNS-C130X	High Pressure	114-426	228	284	Flare 1/4	Automatic	1,200
HNS-C130XM1	High Pressure	114-426	Manual	284	Flare 1/4	Manual	1,200
DNS-D306X	High – Low	Low 8-85 High 114-427	43 228	28 284	Flare 1/4	Automatic	1,550
DNS-D306XM	High – Low	Low 8-85 High 114-427	43 Manual	28 284	Flare 1/4	Automatic Manual	1,600



CNS, TNS



BLS



LWS

Model	Range (C)	Cap Tube meter.	Type	Volt	Price
CNS-C115X	(-35) – (-15)	1	Automatic	220 V	1,200
TNS-C100X	(-25) – 0	1	Automatic	220 V	1,200
TNS-C114X	(-15) - 15	1	Automatic	220 V	1,800
TNS-C134X	0 – 35	1	Automatic	220 V	1,800
TNS-C1010XC	(-45) – 10	1	Automatic	220 V	1,800
TNS-C1034XC	(-20) – 35	1	Automatic	220 V	1,800
BLS-C1020L1	(20) – 20	1	Automatic	220 V	1,900
LWS-C1030AGL2	(-35) – 30	2	Automatic	220 V	1,900
LWS-C1060AGL2	(-5) – 60	2	Automatic	220 V	1,900
LWS-C1074AGL2	30 – 75	2	Automatic	220 V	1,900
EWS-C1080AG	0 - 80		Automatic	220 V	2,400
DSE-4040A24	0 – 40	Temp Sensing	2 steps	220 V	7,000
FSE-4040A22	0 – 40	Temp Sensing	4 steps	220 V	7,200



EWS



DSE



FSE



SEV



REV

Model	Connection	Port Size (mm.)	Capacity (Tons)		Price (Baht)
			R 22	R 134a	
SEV 502 BXF	1/4 Flare	5	2.3	2.1	1,200
SEV 603 BXF	3/8 Flare	6	3.6	3.3	1,200
REV 1004 BXF	1/2 Flare	10	8.8	7.3	3,400
REV 1004 DXF	1/2 ODF	10	8.8	7.3	3,000
REV 1205 BXF	5/8 Flare	12	15.6	14.6	3,500
REV 1205 DXF	5/8 ODF	12	15.6	14.6	3,500
REV 1506 BXF	3/4 Flare	15	23.7	22.1	3,800
REV 1506 DXF	3/4 ODF	15	23.7	22.1	3,800
REV 2007 DXF	7/8 ODF	20	40	-	5,490
REV 2511 DXF	1-1/8 ODF	25	61	-	6,800
REV 3213 DXF	1-3/8 ODF	32	85.8	-	6,500

- Pilot Operated , 2 way , Normally closed Valve
- Can Install Horizontally and Vertically (Coil should be located above the axis of pipe line)
- For non-corrosive refrigerant (liquid or gas) in refrigeration , cooling , air conditioning systems
- Capacity based on , Condensing Temp 38 C , Evaporating Temp -5 C
- Including Coil

FLOW SWITCH



Model	Max Pressure Working (psi)	Max Temp (C)	Paddle Size	Connection	Type	Price
FQS-U30G	142	80	3"	1"	-	2,500
BQS-C130PW	142	80	3"	1"	Water Proof	5,400

OIL PRESSURE CONTROL



Model	Range (psi)	Diff (psi)	Time Delay (Sec)	Reset Type	Price
ONS-C106XQ5	7-50	7	90	Manual	3,800
ENS-1C106YQ11	Fixed	Adjustable	120	Manual	3,800

CONDENSER FAN SPEED CONTROLLER (220 V)

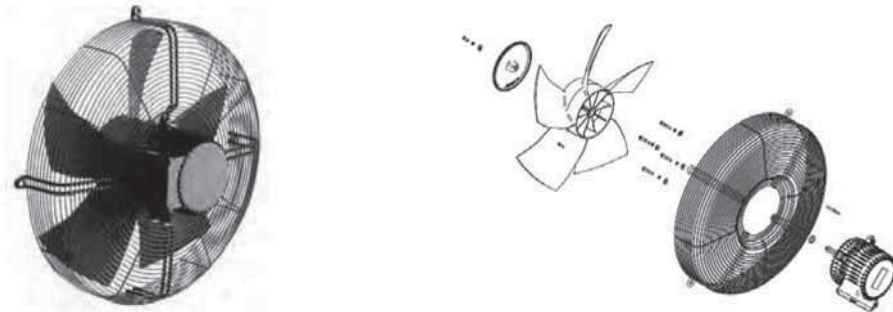


Model	Range (psi)	Range of Speed	Cut Off Speed	Amp.	Connection	Price
RGE-Z1N4-7	116-406	35-95%	35%	0.2-4	1/4 Flare	5,000
RGE-Z1Q4-7	116-406	35-95%	35%	0.2-8	1/4 Flare	6,200

The idea of SFC is to accomplish a flexible system of powerful fans by newly developed low pressure axial fans which will stand out due to a very good cost / performance ratio as well as a prompt availability besides the performance data and high efficiency.

All products fans , motors as well as accessories are developed and based upon own ideas and requirements. For the time being it is the objective to develop a complete range of fans which are designed and optimized especially according to the requirements of refrigeration and air conditioning systems operating in evaporators , condensers and dry cooler.

SFC used a modular system with voltage adjustable internal rotor motors and fan rotors of synthetic material. This system offers a great flexibility at the design of powerful fans to be able to response promptly to customer requirements



250mm to 400mm diameter with single-phase The protection class is IP44. The rotors (fan blades) are manufactured of a composite material, which is Acrylnitril-Styrol (AS) strengthened with 20% glass fibre or Polyamide 6 (PA 6) strengthened with 20% glass fibre.

450mm to 1000mm diameter with three-phase or single-phase motors. The protection class is IP66. The rotors (fan blades) are manufactured of a composite material, which is Polyamide 6 (PA 6) strengthened with 20% or 30% glass fibre.

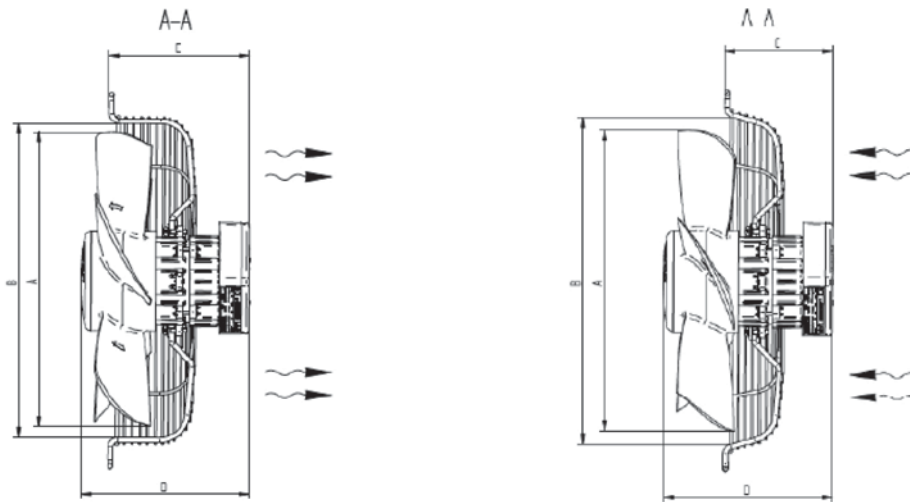
- All rotors are turn able and can be used for
both air flow directions (Clockwise & Counter-Clockwise)

- Operating Condition

The limits regarding the medium temperatures are

$t_{\min} = -40/-30 \text{ }^{\circ}\text{C}$ and $t_{\max} = +45/60 \text{ }^{\circ}\text{C}$

Approval : ULC , CCC , CE



Fan diameter	Model	Supply	Motor (50Hz)			Price (Baht)
			W	(A)	rpm	
250	SF01-025-A020E4NL-	1~230V, 50 Hz	63	0.28	1360	5,040
300	SF01-030-A030E4ML-	1~230V, 50 Hz	89	0.4	1340	5,500
315	SF01-031-A030E4NL-	1~230V, 50 Hz	98	0.43	1300	5,900
350	SF01-035-A050E4ML-	1~230V, 50 Hz	140	0.63	1365	7,500
350	SF01-035-A050E4NL-	1~230V, 50 Hz	150	0.67	1330	7,700
400	SF01-040-A065E4ML-	1~230V, 50 Hz	190	0.85	1300	9,500
450	SF02-045-E025D4NH-	1~230V, 50 Hz	410	1.85	1340	12,500
450	SF02-045-C025E6NH-	1~230V, 50 Hz	210	0.94	930	12,500
450	SF02-045-C035D4NH-	3~380V, 50 Hz	460	0.92	1385	12,500
500	SF02-050-C045E4NH-	1~230V, 50 Hz	615	2.7	1400	14,500
500	SF02-050-C035E6NH-	1~230V, 50 Hz	275	1.2	910	14,500
500	SF02-050-C045D4NH-	3~380V, 50 Hz	700	1.28	1365	14,500
560	SF03-056-C055D4NH-	3~380V, 50 Hz	1075	2.2	1310	15,500
630	SF03-063-C085D4NH-	3~380V, 50 Hz	1675	3.5	1375	19,000
630	SF03-063-C065DSNH-	3~380V, 50 Hz	560	1.4	900	17,000
800	SF06-080-D085D6NH-	3~380V, 50 Hz	2100	4.45	940	39,000
900	SF06-090-D160D6NH-	3~380V, 50 Hz	3450	6.3	910	47,000
1000	SF05-100-D160DANH-	3~380V, 50 Hz	2375	5.3	665	50,000

อุปกรณ์ท่อทองแดงและข้อต่อชนิดต่างๆ

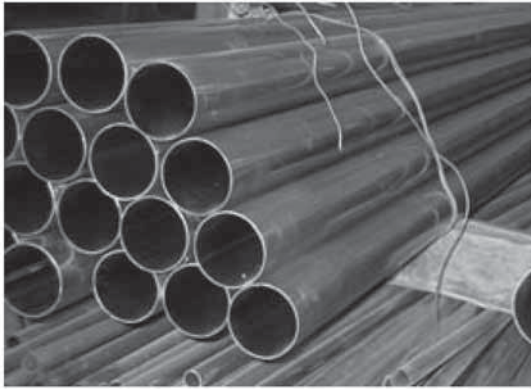
ท่อทองแดงแบบม้วน



ท่อทองแดงชนิดม้วนอย่างบาง (ASTM-B280)				
OD		thickness mm.	Weight kg.	Price
inch	mm.			
1/4	6.35	0.4	1	650
5/16	7.93	0.4	1.3	845
3/8	9.53	0.47	1.6	1,040
1/2	12.7	0.49	2.5	1,625
5/8	15.88	0.55	3.5	2,300
3/4	19.05	0.6	4.66	3,030

ท่อทองแดงชนิดม้วนอย่างหนา (ASTM-B280)				
OD		thickness mm.	Weight kg.	Price
inch	mm.			
1/4	6.35	0.7	1.66	1,080
5/16	7.93	0.7	2.13	1,385
3/8	9.53	0.7	2.6	1,690
1/2	12.7	0.7	3.54	2,300
5/8	15.88	0.7	4.47	2,900
3/4	19.05	0.7	5.4	3,500

อุปกรณ์ท่อทองแดงและข้อต่อชนิดต่างๆ



ท่อทองแดงชนิดเส้น Type M ASTM-B88 (ความยาว 6 เมตร)			
OD. Size	thickness mm.	Weight (kg.)	Price
3/8	0.56	0.9	550
1/2	0.64	1.225	845
5/8	0.71	1.71	1,177
3/4	0.76	2.3	1,520
7/8	0.81	2.752	1,900
1-1/8	0.89	3.912	2,700
1-3/8	1.07	5.75	3,960
1-5/8	1.24	7.88	5,430
2-1/8	1.47	12.98	8,450
2-5/8	1.65	-	-
3-1/8	1.83	-	-
3-5/8	1.65	-	-
4-1/8	1.83	-	-
5-1/8	-	-	-
6-1/8	-	-	-
8-1/8	-	-	-

ท่อทองแดงชนิดเส้น Type L ASTM-B88 (ความยาว 6 เมตร)			
OD. Size	thickness mm.	Weight (kg.)	Price
3/8	0.76	1.123	730
1/2	0.89	1.78	1,155
5/8	1.02	2.55	1,650
3/4	1.07	3.24	2,100
7/8	1.14	4.13	2,630
1-1/8	1.27	5.9	3,850
1-3/8	1.40	7.78	5,150
1-5/8	1.52	10.23	6,600
2-1/8	1.78	15.54	10,180
2-5/8	2.03	22.03	14,400
3-1/8	2.29	29.7	19,300
3-5/8	2.54	38.3	23,400
4-1/8	2.79	48	31,200
5-1/8	3.18	67.87	45,000
6-1/8	3.56	91.08	60,000
8-1/8	5.08	172.13	112,000

อุปกรณ์ท่อทองแดงและข้อต่อชนิดต่างๆ



ข้องอทองแดง 90°

Size OD.	Price
1/4	35
3/8	35
1/2	35
5/8	25
3/4	46
7/8	35
1-1/8	75
1-3/8	110
1-5/8	160
2-1/8	300
2-5/8	600
3-1/8	920
4-1/8	2,500



ข้องอทองแดง 45°

Size OD.	Price
3/8	50
1/2	50
5/8	25
3/4	70
7/8	40
1-1/8	77
1-3/8	110
1-5/8	160
2-1/8	320
2-5/8	600
3-1/8	920



ข้อต่อตรงทองแดง

Size OD.	Price
3/8	15
1/2	15
5/8	15
3/4	24
7/8	20
1-1/8	50
1-3/8	60
1-5/8	90
2-1/8	140
2-5/8	240
3-1/8	400
3-5/8	1,300
4-1/8	1,900



สามทางทองแดง

Size OD.	Price
3/8	50
1/2	50
5/8	50
3/4	90
7/8	60
1-1/8	120
1-3/8	180
1-5/8	280
2-1/8	480
2-5/8	880
3-1/8	1,600
4-1/8	3,000

อุปกรณ์ท่อทองแดงและข้อต่อชนิดต่างๆ



ข้อลดทองแดง

Size OD.	Price
3/8 x 1/4	35
1/2 x 1/4	19
1/2 x 3/8	19
5/8 x 1/4	25
5/8 x 3/8	25
5/8 x 1/2	25
3/4 x 3/8	30
3/4 x 1/2	30
3/4 x 5/8	30
7/8 x 3/8	35
7/8 x 1/2	35
7/8 x 5/8	35
7/8 x 3/4	35
1-1/8 x 1/2	50
1-1/8 x 5/8	50
1-1/8 x 3/4	50
1-1/8 x 7/8	50
1-3/8 x 1/2	85
1-3/8 x 5/8	85

Size OD.	Price
1-3/8 x 7/8	85
1-3/8 x 1-1/8	85
1-5/8 x 5/8	120
1-5/8 x 7/8	120
1-5/8 x 1-1/8	120
1-5/8 x 1-3/8	120
2-1/8 x 5/8	200
2-1/8 x 7/8	200
2-1/8 x 1-1/8	200
2-1/8 x 1-3/8	200
2-1/8 x 1-5/8	200
2-5/8 x 1-1/8	480
2-5/8 x 1-3/8	480
2-5/8 x 1-5/8	480
2-5/8 x 2-1/8	480
3-1/8 x 2-1/8	600
3-1/8 x 2-5/8	600
3-5/8 x 3-1/8	1,450
4-1/8 x 2-5/8	1,500



ข้อโค้งทองแดง180°

Size OD.	Price
3/8	45
1/2	60
5/8	90
3/4	220
7/8	160
1-1/8	340
1-3/8	525
1-5/8	700
2-1/8	1,440



พี-แทรป

Size OD.	Price
5/8	360
3/4	395
7/8	500
1-1/8	600
1-3/8	950
1-5/8	1,330
2-1/8	3,200

อุปกรณ์ท่อทองแดงและข้อต่อชนิดต่างๆ



สามทางลดทองแดง

Size OD.	Size OD.	Size OD.	PRICE
1	2	3	
3/8"	3/8"	1/4"	60
1/2"	1/2"	1/4"	75
1/2"	1/2"	3/8"	75
5/8"	5/8"	1/4"	100
5/8"	5/8"	3/8"	100
5/8"	5/8"	1/2"	100
3/4"	3/4"	3/8"	110
3/4"	3/4"	1/2"	110
3/4"	3/4"	5/8"	110
7/8"	7/8"	3/8"	60
7/8"	7/8"	1/2"	60
7/8"	7/8"	5/8"	60
7/8"	7/8"	3/4"	60
1-1/8"	1-1/8"	1/2"	150
1-1/8"	1-1/8"	5/8"	150
1-1/8"	1-1/8"	3/4"	150
1-1/8"	1-1/8"	7/8"	150
1-3/8"	1-3/8"	5/8"	220
1-3/8"	1-3/8"	3/4"	220
1-3/8"	1-3/8"	7/8"	220
1-3/8"	1-3/8"	1-1/8"	220
1-5/8"	1-5/8"	5/8"	300
1-5/8"	1-5/8"	3/4"	300
1-5/8"	1-5/8"	7/8"	300
1-5/8"	1-5/8"	1-1/8"	300
1-5/8"	1-5/8"	1-3/8"	300
2-1/8"	2-1/8"	5/8"	550
2-1/8"	2-1/8"	7/8"	550
2-1/8"	2-1/8"	1-1/8"	550
2-1/8"	2-1/8"	1-3/8"	550
2-1/8"	2-1/8"	1-5/8"	550
2-5/8"	2-5/8"	7/8"	925
2-5/8"	2-5/8"	1-1/8"	925
2-5/8"	2-5/8"	1-3/8"	925
2-5/8"	2-5/8"	1-5/8"	925
2-5/8"	2-5/8"	2-1/8"	925
3-1/8"	3-1/8"	1-5/8"	1,750
3-1/8"	3-1/8"	2-1/8"	1,750
3-1/8"	3-1/8"	2-5/8"	1,750

อุปกรณ์ท่อทองแดงและข้อต่อชนิดต่างๆ



ข้อต่อเกลียวนอก

Size OD.	Price
1/2 x 3/8	85
3/8 x 1/2	85
1/2 x 1/2	85
5/8 x 1/2	50
3/4 x 1/2	125
5/8 x 3/4	130
3/4 x 3/4	130
7/8 x 3/4	130
7/8 x 1	220
1-1/8 x 3/4	220
1-1/8 x 1	150
1-3/8 x 1	280
1-1/8 x 1-1/4	300
1-3/8 x 1-1/4	280
1-3/8 x 1-1/2	395
1-5/8 x 1-1/2	320
1-5/8 x 2	580
2-1/8 x 2	580
2-5/8 x 2	1,250
2-5/8 x 2-1/2	1,250
3-1/8 x 3	1,400
4-1/8 x 4	3,300



ข้อต่อเกลียวใน

Size OD.	Price
1/2 x 3/8	85
1/2 x 1/2	85
5/8 x 3/8	85
5/8 x 1/2	65
5/8 x 3/4	130
3/4 x 1/2	130
3/4 x 3/4	130
7/8 x 3/4	130
7/8 x 1	175
1-1/8 x 1	175
1-3/8 x 1	260
1-3/8 x 1-1/4	285
1-5/8 x 1-1/2	310
2-1/8 x 2	580
2-5/8 x 2-1/2	1,200



น้ำยาประสานเงินเชื่อม

4 OZ	130
8 OZ	225



ลวดเชื่อม	ราคา
0%	620/kg.
2%	1,950/kg.
5%	1,970/lb.
15%	4,950/lb.
35%	7,850/lb.

อุปกรณ์ท่อทองแดงและข้อต่อชนิดต่างๆ



แฟร์นัททองเหลือง

OD.	Price
1/4	25
5/16	17
3/8	37
1/2	45
5/8	60
3/4	135



ยูเนียนทองเหลือง

OD.	Price
1/4	30
5/16	22
3/8	40
1/2	70
5/8	115
3/4	225



แฟร์นัททองเหลืองแบบสัน

OD.	Price
1/4	16
5/16	22
3/8	32
1/2	50
5/8	60
3/4	90



ฮาร์ฟยูเนียนทองเหลือง

OD.	Price
1/4 X 1/8	25
1/4 X 1/4	35
1/4 X 3/8	50
1/2 X 3/8	70
1/2 X 1/2	75
5/8 X 1/2	90
5/8 X 3/4	180
3/4 X 1/2	180



ยูเนียนงอฉาก

OD.	Price
1/4	50
5/16	80
3/8	80
1/2	105



ฮาร์ฟยูเนียนงอฉาก

OD.	Price
1/4 X 1/8	80
1/4 X 1/4	110
3/8 X 1/4	120



หมวกอุด

OD.	Price
1/4	15
3/8	20
1/2	30
5/8	50



วาล์วลูกศร

OD.	Price
1/4	40
1/4 มีหาง	60

ฉนวนยางหุ้มท่อ



ID.	IPS	หนา 3/8"			หนา 1/2"			หนา 3/4"				
		Inch	Inch	No.	เส้น/กิโลกรัม	ราคา	No.	เส้น/กิโลกรัม	ราคา	No.	เส้น/กิโลกรัม	ราคา
1/4				3814	120	40	1214	80	65	3414	32	110
3/8				3838	100	42	1238	70	70	3438	32	120
1/2	1/4			3812	80	48	1212	60	75	3412	32	130
5/8	3/8			3858	60	55	1258	50	85	3458	28	140
3/4				3834	50	60	1234	40	90	3434	24	150
7/8	1/2			3878	50	66	1278	32	100	3478	20	160
1	3/4			3810	40	72	1210	30	105	3410	18	180
1-1/8				38118	32	74	12118	28	110	34118	18	190
1-1/4				38114	32	80	12114	24	115	34114	18	200
1-3/8	1			38138	30	84	12138	20	120	34138	16	210
1-1/2				38112	28	100	12112	18	130	34112	12	250
1-5/8	1-1/4			38158	24	110	12158	18	140	34158	12	280
1-7/8	1-1/2			38178	20	120	12178	16	150	34178	10	320
2				38200	18	130	12200	14	165	34200	8	340
2-1/8				38218	18	140	12218	14	175	34218	8	350
2-3/8	2			38238	16	160	12238	12	210	34238	8	380
2-1/2	-			-	-	-	12212	10	240	34212	8	400
2-5/8				38258	14	180	12258	10	260	34258	8	420
2-7/8	2-1/2			38278	10	200	12278	10	290	34278	6	470
3				38300	10	210	12300	8	300	34300	6	500
3-1/8				38318	10	220	12318	3	310	34318	6	520
3-1/4				38314	8	240	-	-	-	-	-	-
3-1/2	3			-	-	-	12312	8	340	34312	6	570
3-5/8				-	-	-	12358	8	360	34358	6	600
4-1/8				-	-	-	12418	6	380	34418	4	630
4-1/2	4			-	-	-	12412	6	420	34412	4	700
5-1/2	5			-	-	-	12512	4	480	34512	4	790

ฉนวนยางหุ้มท่อ

ID.	IPS	หนา 1"			หนา 1-1/2"			หนา 2"				
		Inch	Inch	No.	เส้น/กล่อง	ราคา	No.	เส้น/กล่อง	ราคา	No.	เส้น/กล่อง	ราคา
1/4				1014	24	130	-	-	-	-	-	-
3/8				1038	24	140	-	-	-	-	-	-
1/2	1/4			1012	20	150	-	-	-	-	-	-
5/8	3/8			1058	18	160	11258	8	360	2058	4	590
3/4				1034	18	180	11234	8	380	2034	4	640
7/8	1/2			1078	16	190	11278	8	420	2078	4	680
1	3/4			1010	12	210	11210	8	460	2010	4	720
1-1/8				10118	12	230	112118	8	500	20118	4	750
1-1/4				10114	12	250	-	-	-	-	-	-
1-3/8	1			10138	10	260	112138	6	590	20138	4	810
1-1/2				10112	10	300	-	-	-	-	-	-
1-5/8	1-1/4			10158	8	330	112158	6	680	20158	4	920
1-7/8	1-1/2			10178	8	370	112178	6	730	20178	3	990
2				10200	8	400	-	-	-	-	-	-
2-1/8				10218	8	420	112218	4	800	20218	3	1,060
2-3/8	2			10238	6	450	112238	4	870	20238	3	1,100
2-5/8				10258	6	500	112258	4	930	20258	3	1,070
2-7/8	2-1/2			10278	6	570	112278	3	1,020	20278	2	1,250
3				10300	6	600	-	-	-	-	-	-
3-1/8				10318	6	620	112318	3	1,080	20318	2	1,300
3-1/4				10314	6	640	-	-	-	-	-	-
3-1/2	3			10312	4	670	12312	3	1,150	20312	2	1,360
3-5/8				10358	4	700	12358	3	1,200	-	-	-
3-7/8	3-1/2			10378	4	730	-	-	-	-	-	-
4-1/8				10418	4	760	12418	2	1,250	-	-	-
4-1/2	4			10412	4	790	12412	2	1,300	20412	2	1,780
5-1/2	5			10512	2	850	12512	2	1,500	20512	2	1,960
6-1/2	6			10612	2	1,040	112612	2	1,700	20612	1	2,330
8-1/2	8			10812	2	1,290	-	-	-	-	-	-

ฉนวนยางหุ้มท่อ

ฉนวนยางแผ่น



No.	W x L x T	จำนวน/กล่อง	ราคา/แผ่น
S1843	36" X 48" X 1/8" (32 mm.)	48	150
S1443	36" X 48" X 1/4" (6.5 mm.)	24	288
S3843	36" X 48" X 3/8" (10.00 mm.)	16	396
S1243	36" X 48" X 1/2" (13.00 mm.)	12	248
S5843	36" X 48" X 5/8" (16.00 mm.)	10	600
S3443	36" X 48" X 3/4" (20.00 mm.)	8	720
S1043	36" X 48" X 1" (25.00 mm.)	6	960
S11843	36" X 48" X 1-1/8" (28.00 mm.)	6	1,050
S11443	36" X 48" X 1-1/4" (32.00 mm.)	5	1,150
S11243	36" X 48" X 1-1/2" (38.00 mm.)	4	1,450
S2043	36" X 48" X 2" (50.00 mm.)	3	1,930

ฉนวนยางม้วน

No.	Thickness	Width (ft.)	Length (ft.)	FT ² /Roll	Price
SR18	1/8	4	150	600	7,500
SR14	1/4	4	72	288	6,920
SR38	3/8	4	50	200	6,600
SR12	1/2	4	36	144	5,760
SR58	5/8	4	32	128	6,400
SR34	3/4	4	23	92	5,520
SR10	1	4	18	72	5,760
SR114	1-1/4	4	13	52	4,980
SR112	1-1/2	4	10	40	4,840
SR20	2	4	8	32	5,150

ฉนวนยางหุ้มท่อ

ฉนวนรองท่อ (Aerofix)



ขนาดท่อ ID		ความหนา 1/2"			ความหนา 3/4"		
ทองแดง	เหล็ก	Code No.	ชั้น/กล่อง	ราคา/ชั้น	Code No.	ชั้น/กล่อง	ราคา/ชั้น
3/8					UXI0340038-112	300	36
5/8	3/8				UXI0340058-112	240	7
3/4					UXI0340034-112	240	38
7/8	1/2	UXI0120078-112	360	35	UXI0340078-112	240	42
1	3/4	UXI0120100-112	300	38	UXI0340100-112	180	45
1-3/8	1	UXI0120138-112	240	45	UXI0340138-112	120	50
1-5/8	1-1/4	UXI0120158-112	180	58	UXI0340158-112	114	60
1-7/8	1-1/2	UXI0120178-112	120	60	UXI0340178-112	108	65
2-1/8					UXI0340218-200	108	70
2-3/8	2	UXI0120238-200	108	65	UXI0340238-200	108	75
2-7/8	2-1/2	UXI0120278-200	108	75	UXI0340278-200	72	85
3-1/2	3	UXI0120312-200	60	80	UXI0340312-200	48	90
4-1/2	4	UXI0120412-200	48	90	UXI0340412-200	48	95
5-1/2	5				UXI0340512-212	24	110
6-5/8	6	UXI0120658-212	20	120	UXI0340658-212	15	125

ขนาดท่อ ID		ความหนา 1"			ความหนา 1-1/4"		
ทองแดง	เหล็ก	Code No.	ชั้น/กล่อง	ราคา/ชั้น	Code No.	ชั้น/กล่อง	ราคา/ชั้น
5/8	3/8	UXI1000058-112	180	50	-	-	-
7/8	1/2	UXI1000078-112	120	52	UXI1140078-112	108	60
1	3/4	UXI1000100-112	144	55	UXI1140100-112	108	63
1-3/8	1	UXI1000138-112	144	60	UXI1140138-112	108	68
1-5/8	1-1/4	UXI1000158-112	108	65	UXI1140158-112	84	78
1-7/8	1-1/2	UXI1000178-112	108	70	UXI1140178-112	72	83
2-1/8	-	UXI1000218-200	84	78	UXI1140218-200	72	88
2-3/8	2	UXI1000238-200	72	85	UXI1140238-200	60	93
2-5/8	-	UXI1000258-200	60	90	-	-	-
2-7/8	2-1/2	UXI1000278-200	60	95	UXI1140278-200	48	103
3-1/2	3	UXI1000312-200	48	100	UXI1140312-200	48	116
4-1/2	4	UXI1000412-200	36	105	UXI1140412-200	24	135
5-1/2	5	UXI1000512-212	24	120	UXI1140512-212	15	160
6-5/8	6	UXI1000658-212	15	135	UXI1140658-212	10	182
8-5/8	8	UXI1000858-213	10	170	UXI1140858-212	10	220

ฉนวนยางหุ้มท่อ

ฉนวนรองท่อ (Aerofix)

ขนาดท่อ ID		ความหนา 1-1/2"			ความหนา 2"		
ทองแดง	เหล็ก	Code No.	ชั้น/กล่อง	ราคา/ชั้น	Code No.	ชั้น/กล่อง	ราคา/ชั้น
7/8	1/2	UXI1120078-112	108	62	-	-	-
1	3/4	UXI1120100-112	108	65	-	-	-
1-1/8		UXI1120118-112	84	68	-	-	-
1-3/8	1	UXI1120138-112	72	70	UXI2000138-112	48	80
1-5/8	1-1/4	UXI1120158-112	72	80	UXI2000158-112	48	90
1-7/8	1-1/2	UXI1120178-112	60	85	UXI2000178-112	48	100
2-3/8	2	UXI1120238-200	48	95	UXI2000238-200	36	120
2-5/8	-	UXI1120258-200	48	100	-	-	-
2-7/8	2-1/2	UXI1120278-200	48	105	UXI2000278-200	36	140
3-1/2	3	UXI1120312-200	36	120	UXI2000312-200	24	160
4-1/2	4	UXI1120412-200	24	140	UXI2000412-200	18	180
5-1/2	5	UXI1120512-212	15	170	UXI2000512-212	10	210
6-5/8	6	UXI1120658-212	10	195	UXI2000658-212	10	240
8-5/8	8	UXI1120858-212	10	240	UXI2000858-212	10	310

อุปกรณ์อื่นๆ



กาวทาทายาง	
700 g	170
3.75 Liters	700



แอร์โรเทป	
2"x30"x1/8"	180



คอร์คเทป	
2"x30"x1/8"	120



ROTARY COMPRESSOR R -22



Model	BTU.	VOLT.	RUNN	CURRENT AMP.	PRICE
RH165VHAT	9,682	220/1/50	25/370	4.2/4.0	5,300
RH207VHET	12,301	220/1/50	30/370	6.2/5.9	5,600
PH28VNET	16,670	220/1/50	40/370	7.4/7.3	7,300
PH31VNET	18,530	220/1/50	45/370	8.0/7.7	7,500
PH33VPET	20,240	220/1/50	50/370	8.8/8.5	7,900
PH39VPET	23,250	220/1/50	60/400	10.3/10.4	9,000
NH41VNDT	24,800	220/1/50	45/400	11.3/10.6	9,200
NH47VNDT	28,966	220/1/50	50/420	13.2/12.5	9,700
NH52VNDT	32,220	220/1/50	60/400	14.1/13.3	10,000
NH56VNDT	35,117	220/1/50	60/420	16.1/17.2	11,000
NH41YDTT	24,802	380/3/50	-	3.2	9,200
NH47YDTT	28,572	380/3/50	-	4.6	9,700
NH52YDTT	32,223	380/3/50	-	5.3	10,000
NH56YDTT	35,120	380/3/50	-	5.9	11,000

KULTHORN HERMETIC COMPRESSOR



Model	HP.	BTU./50 Hz.	CODE.	RLA.	EER.	PRICE
AW5513EK	1	11300	C	-	-	5,190
AW5515EK	1-1/4	13900	C	6.7	9.51	5,250
AW5517EK	1-1/2	15000	C	7.3	9.62	6,010
AW5519EK	1-3/4	16500	C	8.1	9.65	6,260
AW5520EK	1-3/4	17600	C	9	9.78	6,390
AW5522EK	2	19300	C	9.4	9.74	6,650
AW5524EK	2	21000	C	9.7	10	6,870
AW5528EK	2-1/2	24200	C	11.3	9.71	7,150
AW5530EK	2-1/2	25000	C	13	9.8	7,610
AW5532EK	2-1/2	26800	C	13.6	9.81	7,990
AW5535EK	2-3/4	29600	C	16.6	9.57	8,640

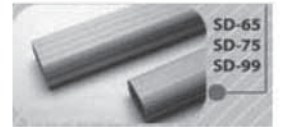
อุปกรณ์อื่นๆ



MODEL	BTU / HR	VOLTAGE	CAP RUN	FLA	LRA	EER	PRICE
ZR22K3-PFJ	18,700	220-1-50	40/370	8.30	47.00	10.80	8,100
ZR24K3-PFJ	20,700	220-1-50	40/370	9.10	58.00	11.10	8,800
ZR26K3-PFJ	22,200	220-1-50	40/370	11.40	60.00	10.90	8,900
ZR28K3-PFJ	24,200	220-1-50	45/370	10.20	61.00	11.30	9,000
ZR30KS-PFJ	25,900	220-1-50	45/370	10.90	70.00	11.30	9,400
ZR32K3-PFJ	27,200	220-1-50	45/370	11.40	74.00	11.30	9,500
ZR34K3-PFJ	28,800	220-1-50	50/370	12.10	76.00	11.40	9,600
ZR36K3-PFJ	30,800	220-1-50	50/370	13.00	82.00	11.40	9,800
ZR40K3-PFJ	33,900	220-1-50	55/370	14.20	100.00	11.40	10,200
ZR42K3-PFJ	35,500	220-1-50	60/370	14.90	97.00	11.40	10,400
ZR45K3-PFJ	38,900	220-1-50	60/370	16.40	114.00	11.00	11,100
ZR47K3-PFJ	39,300	220-1-50	60/370	19.30	114.00	11.20	12,700
ZR48K3-PFJ	40,800	220-1-50	60/370	19.30	114.00	11.30	13,000
ZR22KC-TFD	18,700	380-3-50	-	3.90	24.00	10.30	10,200
ZR24K3-TFD	20,700	380-3-50	-	4.30	26.00	10.60	11,100
ZR28K3-TFD	24,200	380-3-50	-	5.00	32.00	11.00	11,300
ZR32K3-TFD	27,200	380-3-50	-	5.00	35.00	11.00	11,400
ZR34K3-TFD	28,800	380-3-50	-	5.70	40.00	11.30	11,600
ZR36K3-TFD	30,800	380-3-50	-	5.70	40.00	11.30	12,000
ZR40K3-TFD	33,900	380-3-50	-	5.40	46.00	11.50	12,100
ZR42K3-TFD	35,500	380-3-50	-	5.70	46.00	11.40	12,300
ZR45KC-TFD	38,900	380-3-50	-	6.10	48.00	11.80	12,900
ZR47K3-TFD	39,300	380-3-50	-	6.40	48.00	11.80	13,800
ZR48K3-TFD	40,800	380-3-50	-	7.90	50.00	11.30	14,400
ZR54KS-TFD	45,200	380-3-50	-	8.60	61.80	11.80	13,800
ZR57KS-TFD	47,900	380-3-50	-	9.10	61.80	11.50	14,800
ZR61KS-TFD	51,000	380-3-50	-	9.50	65.50	11.50	15,700
ZR68KC-TFD	57,500	380-3-50	-	8.60	74.00	11.60	18,100
ZR72KC-TFD	60,900	380-3-50	-	9.20	74.00	11.60	19,100
ZR81KC-TFD	69,200	380-3-50	-	10.90	90.50	11.60	22,700
ZR94KC-TFD	80,400	380-3-50	-	13.60	95.00	11.80	34,700
ZR108KC-TFD	92,000	380-3-50	-	14.60	114.00	11.80	36,000
ZR125KC-TFD	107,000	380-3-50	-	16.90	125.00	11.80	37,400
ZR144KC-TFD	123,000	380-3-50	-	-	-	11.80	40,000

รางครอบท่อ

Model	จำนวน/กล่อง	ราคา
ใช้กับเครื่องปรับอากาศขนาด 9000 — 20000 บีทียู (ความยาว 2 เมตร)		
SD - 65 (รางครอบ)	5	330
SW - 65 (ข้อต่อติดผนัง)	40	80
SK - 65 (ข้องอ 90)	40	65
SC - 65 (ข้องอเข้ามุม 90)	40	65
SJ - 65 (ข้อต่อตรง)	40	35
SCC - 65	20	60
SFC - 65	40	80
ใช้กับเครื่องปรับอากาศขนาด 25000 — 38000 บีทียู (ความยาว 2 เมตร)		
SD - 75 MZ	5	430
ST - 75 MZ	20	100
SW - 75 MZ	40	100
SK - 75 MZ	40	80
SC - 75 MZ	40	80
SJ - 75 MZ	40	50
SCC-75 MZ	20	70
SRJ -75 MZ	20	60
SFC - 75 MZ	40	100
ใช้กับเครื่องปรับอากาศขนาด 40000 บีทียู ขึ้นไป (ความยาว 2 เมตร)		
SD - 99 MZ	5	610
ST - 99 MZ	20	130
SW - 99 MZ	20	130
SK - 99 MZ	40	110
SC - 99 MZ	20	110
SJ - 99 MZ	20	75
SCC- 99 MZ	20	85
SRJ - 99 MZ	20	75



DOUBLE SHAFT, 3 SPEED 220V. 50° C SHAFT 1/2"

FASCO



MODEL	HP.	RPM.	RUNN.	AMP.	PRICE
S2-1/20-B	1/20	1300/1050/850	2.5/400	0.50	1,190
S2-1/15-B	1/15	1250/1050/850	2.5/400	0.64	1,290
S2-1/10-B	1/10	1250/1050/850	3.0/400	0.81	1,340
S2-1/8-B	1/8	1200/1050/850	5.0/400	0.81	1,610

SINGLE SHAFT , 1 SPEED 220V. 50° C SHAFT 1/2"

YAMABISHI



MODEL	HP.	RPM.	RUNN.	AMP.	PRICE
B1-1/10-E	1/10	900	5.0/400	0.54	1,430
B1-1/8-KA	1/8	900	5.0/400	0.98	1,350
B1-1/6-B	1/6	900	5.0/400	1.44	1,790
B1-1/4B	1/4	900	3.0/400	1.30	1,480
B1-1/3-A	1/3	900	5.0/400	1.98	2,140
B1-1/2-A	1/2	900	7.5/400	3.08	2,640
B1-3/4-A	3/4	900	12.0/400	4.34	2,990
B1-3/4J(380V.)	3/4	916	16.0/350	2.15	3,500



ใบพัดลม 4 แฉก	พลาสติก	อลูมิเนียม
16"	300	450
18"	320	480
20"	450	670
24"	650	970



โบลเวอร์	
BLOWER WHEEL 5-3/4" X 7"	150
BLOWER WHEEL 5-3/4" X 8"	180
BLOWER WHEEL 5-3/4" X 9"	200

อุปกรณ์อื่นๆ

เทปพันท่อ	
2"	20
3"	30
4"	55
ดักเทป	
2" x 50	330
2-1/2" x 50	415
3" x 50	495
เทปอลูมิเนียม	
2" x 50	220
2-1/2" x 50	290



ขาแขวนแอร์	
ขาแขวนคอยล์ร้อน ยี่ห้อ SV 9000-25000 BTU.	240
ขาแขวนคอยล์ร้อน ยี่ห้อ SV 25000-40000 BTU.	330
ขาแขวนแฟนคอยล์	180



ขา ยางรองคอนเดนเซอร์	
ขา ยางรองคอนเดนเซอร์ ขนาด 3"	50
ขา ยางรองคอนเดนเซอร์ ขนาด 4"	60



น้ำยาทำความสะอาดเครื่องทำความเย็น DE-SCALER	
F2 สำหรับล้างภายนอก บรรจุ 20 ลิตร	600
CB สำหรับล้างภายในท่อ บรรจุ 20 ลิตร	900



อุปกรณ์อื่นๆ

น้ำมันสำหรับระบบทำความเย็น



น้ำมันแร่สำหรับคอมเพรสเซอร์ SUNISO	
ขนาด	ราคา
No.3GS (3.785 Liters.)	650
No.4GS (3.785 Liters.)	650
No.5GS (3.785 Liters.)	650



น้ำมัน POE สำหรับคอมเพรสเซอร์ Reniso	
ขนาด	ราคา
SEZ 32 (4 Liters.)	5,800
SEZ 46 (4 Liters.)	5,800
SEZ 68 (4 Liters.)	5,800

น้ำยาทำความเย็น



REFRIGERANT	CONTENT	PRICE
R-11	0.5 liter	90
R-11	45 Kg.	15,000
R-123	45 Kg.	12,500
R-123	90 Kg.	25,000
R-141b	30 Kg.	3,000
R-12	13.6 Kg.	3,500
R-12	65 Kg.	19,500
R-22	13.6 Kg.	1,300
R-22	22.7 Kg.	2,000
R-22	56.7 Kg.	5,200
R-23	8.5 Kg.	35,000
R-134a	13.6 Kg.	2,800
R-134a	56 Kg.	12,500
R-404A	10.9 Kg.	4,500
R-404A	48 Kg.	16,800
R-407C	11.3 Kg.	4,500
R-407C	52 Kg.	18,200
R-410A	11.3 Kg.	4,500
R-502	22.7 Kg.	19,000

อุปกรณ์อื่นๆ

เครื่องมือสำหรับระบบทำความเย็น



รุ่น	รายการ	ราคา
496-CD	เกจ์ทู้พร้อมสายยาว 36"	2,600
495-CD	เกจ์ทู้พร้อมสายยาว 72"	2,900
496-CKP	เกจ์ทู้พร้อมสายยาว 36" (R-134a)	2,600
425-CB	เกจ์ททางต่ำ	640
425-CR	เกจ์ททางสูง	640
	สายชาร์ทยาว 36" (เส้น)	500
	สายชาร์ทยาว 72" (เส้น)	690
127-FB	ที่ตัดแป้น 1/8"- 5/8"	630
274-FC	ที่ตัดแป้น 1/8"-1-1/8"	1,330
312-FC	ที่ตัดแป้น 1/4"-1-5/8"	1,780
206-FB	ที่ตัดแป้น 3/8" - 2-5/8"	2,400
32633	ไบมีคอะไหล่รุ่น 127-FB	170
74761	ไบมีคอะไหล่รุ่น 206-FB	360
75015	ไบมีคอะไหล่รุ่น 274-FC,312-FB	240
364-FHA	ที่ตัดแป้น 1/4"	2,000
364-FHA	ที่ตัดแป้น 5/16"	2,100
364-FHA	ที่ตัดแป้น 3/8"	2,220
364-FHA	ที่ตัดแป้น 1/2"	4,000
364-FHA	ที่ตัดแป้น 5/8"	4,900
364-FHA	ที่ตัดแป้น 3/4"	6,760
368-FH	ที่ตัดแป้น 3 อิน 1 (1/4",5/16",3/8")	900
195-FC	ที่บานแพน 3/16" -5/8"	7,000
203-FA	ที่บานแพน 5/8" - 1-1/8"	5,600
93-FB	ที่บานแพน 3/16"-1/2" (2ชั้น)	2,200
195-FB	ที่บานแพน 1/4" - 3/4" (2 ชั้น)	5,400
275-FS	ชุดบานแพน 1/8"- 3/4"+ แบ่งขยายแป้น 3/16"-3/4"	5,130
194-S	ชุดแบ่งขยายแป้น 1/2",5/8",3/4",7/8"	3,000
193-S	ชุดแบ่งขยายแป้น 1/4",3/8",1/2",5/8"	770
93-S	ตัวตอกแป้น 1/4"	190
93-S	ตัวตอกแป้น 5/16"	230
93-S	ตัวตอกแป้น 3/8"	250
93-S	ตัวตอกแป้น 1/2"	275
93-S	ตัวตอกแป้น 5/8"	340
93-S	ตัวตอกแป้น 3/4"	430

BAHCO 80-SERIES



8069-8075



8072P-8073P

Product Code	Description	Price
8069	Adj. Wrench, 4" Ergo grip	625
8070	Adj. Wrench, 6" Ergo grip	695
8071	Adj. Wrench, 8" Ergo grip	750
8072	Adj. Wrench, 10" Ergo grip	940
8072 P	Adj. Wrench 8072 w pipe grip	1,343
8073	Adj. Wrench, 12" Ergo grip	1,350
8073 P	Adj. Wrench 8073 w pipe grip	1,975
8074	Adj. Wrench, 15" Ergo grip	2,240
8075	Adj. Wrench, 18" Ergo grip	3,450
86	Adj. Wrench, 24" Ergo grip	7,640
87	Adj. Wrench, 30" Ergo grip	13,860

BAHCO 90-SERIES



9070-9073



9070C-9073C

Product code	Description	Price
9070	Adj. Wrench, 6" Ergo grip	997
9070P	Adj. Wrench 9070 w/ pipe grip	1,231
9071	Adj. Wrench, 8" Ergo grip	1,084
9071P	Adj. Wrench 9071 w/ pipe grip	1,204
9072	Adj. Wrench, 10" Ergo grip	1,407
9072P	Adj. Wrench 9072 w/ pipe grip	1,561
9073	Adj. Wrench, 12" Ergo grip	2,046
9073P	Adj. Wrench 9073 w/ pipe grip	2,273

BAHCO 80-SERIES



8069C-8075C



8072PC-8073PC

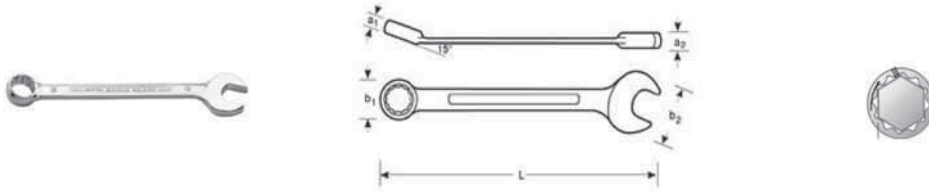
Product Code	Description	Price
8069 C	Adj. Wrench, 4" Ergo grip	890
8070 C	Adj. Wrench, 6" Ergo grip	952
8071 C	Adj. Wrench, 8" Ergo grip	1,019
8072 C	Adj. Wrench, 10" Ergo grip	1,314
8073 C	Adj. Wrench, 12" Ergo grip	1,920
8074 C	Adj. Wrench, 15" Ergo grip	3,127
8075 C	Adj. Wrench, 18" Ergo grip	4,881

2 HANDLE PIPE WRENCHES 140-147



Product code	Description	Price
140	2 Hand Pipe Wrench max O.D. 3/4"	CALL
141	2 Hand Pipe Wrench max O.D. 1"-1/2"	CALL
142	2 Hand Pipe Wrench max O.D. 2"	CALL
143	2 Hand Pipe Wrench max O.D. 3-1/8"	CALL
144	2 Hand Pipe Wrench max O.D. 4-3/8"	CALL
147	2 Hand Pipe Wrench max O.D. 6-3/8"	CALL

COMBINATION SPANNER 111M



Product Code	Description	Price
111M-5.5	Combination offset 105 mm	229
111M-6	Combination offset 105 mm	223
111M-7	Combination offset 110 mm	223
111M-8	Combination offset 110 mm	232
111M-9	Combination offset 120 mm	241
111M-10	Combination offset 135 mm	250
111M-11	Combination offset 135 mm	260
111M-12	Combination offset 150 mm	287
111M-13	Combination offset 160 mm	284
111M-14	Combination offset 168 mm	314
111M-15	Combination offset 170 mm	323
111M-16	Combination offset 178 mm	347
111M-17	Combination offset 190 mm	347
111M-18	Combination offset 210 mm	404
111M-19	Combination offset 220 mm	404
111M-20	Combination offset 232 mm	477
111M-21	Combination offset 250 mm	492
111M-22	Combination offset 255 mm	549
111M-23	Combination offset 255 mm	573
111M-24	Combination offset 280 mm	614
111M-25	Combination offset 280 mm	614
111M-26	Combination offset 280 mm	626
111M-27	Combination offset 310 mm	713
111M-28	Combination offset 310 mm	822
111M-29	Combination offset 310 mm	838
111M-30	Combination offset 355 mm	863
111M-32	Combination offset 360 mm	939
111M-34	Combination offset 380 mm	986

PIPE THREADING MACHINE



Product Code	Description		Price
NT 50A	Capacity (in.)	1/4"-2"	CALL
	Threading Capacity	1/4B~2B (15A~50A)	
	Voltage (50/60Hz)Ac (V)	220 or 230	
	Rotation Speed (rpm)	39 (unloaded)	
	Weight (kg)	48	
	Dimensions L x W x H (mm)	600 x 440 x 408	



Product Code	Description		Price
S 80 A	Capacity (in.)	1/4"-3"	CALL
	Threading Capacity	1/4B~2B (15A~80A)	
	Voltage (50/60Hz)Ac (V)	110 or 220	
	Rotation Speed (rpm)	33 (unloaded)	
	Weight (kg)	63	
	Dimensions L x W x H (mm)	770 x 480 x 405	



Product Code	Description		Price
CN 100 A	Capacity (in.)	1/2"-4"	CALL
	Threading Capacity	1/2B~2B (threading, cutting, reaming)	
	Voltage (50/60Hz)Ac (V)	220V 50HZ	
	Rotation Speed (rpm)	11,20,36 rpm	
	Weight (kg)	142	
	Dimensions L x W x H (mm)	893 x 635 x 558	

CONVERSION TABLE

หน่วยน้ำหนัก

1 kg	1000 grams	2.205 pounds
1 pound	16 ounces	453.6 grams
1 metric ton	1000 kilograms	2204.6 pounds
1 liter water	1 kg.	2.205 pounds

หน่วยพื้นที่

1 sq ft.	144 sq in.	0.929 sq m.
1 sq cm.	100 sq mm.	0.155 sq in.
1 sq m.	10000 sq cm.	10.764 sq ft.

หน่วยพลังงาน

1 joule	1 watt-second	0.000948 Btu
1 Btu	778.1 ft lb	0.252 kcal
1 kcal	3.968 Btu	1000 cal
1 hp	746 w	2544.7 Btu
1 Kw	1.341 hp	3412 Btu
1 R ton	12000 Btu	3.52 Kw

หน่วยความหนาแน่น

1 lb/cu in.	1728 lb/cu ft.	27.68 g/cu cm.
1 g/cu cm.	1000 kg/cu m.	62.43 lb/cu ft.

สูตรแปลงหน่วยอุณหภูมิ

$$C = 5/9 (F - 32) \quad F = 9/5 (C + 32)$$

$$C = \text{องศาเซลเซียส} \quad F = \text{องศาฟาเรนไฮต์}$$

หน่วยความยาว

1 inch	2.54 cms	25,400 microns
1 foot	12 inches	0.3048 m.
1 mile	5280 feet	1609 m.
1 m	100 cms	3.281 feet
1 km	1000 m	0.6241 mile

หน่วยปริมาตร

1 cu ft.	1728 cu in.	0.0238 cu m.
1 cu ft	16.39 cu cm.	7.85 gallon
1 cu cm.	0.061 cu in.	0.001 liter
1 cu m.	35.314 cu ft.	264.13 gallon
1 gallon	231 cu in.	3.785 liters
1 liter	1000 cu cm.	0.0353 gallon

หน่วยความดัน

1 lb/sq in.	144 lb/sq ft.	0.0703 kg/sq m.
1 lb/sq in.	2.036 in Hg.	2.307 ft water
1 kg/sq cm.	735.51 mm Hg.	14.22 lb/sq in.
1 kg/sq cm.	10 m water	0.968 atm
1 atm	14.7 lb/sq in.	29.92 in Hg.
1 atm	1.033 kg/sq cm.	760 mm Hg.
1 Bar	750 mm Hg.	14.5 lb/sq in.
1 Bar	100000 Pa	100000 N/sq m.

FOOD PRODUCT DATA

Product	Water Content	Average Freezing Point (C)	Specific Heat (kJ/kg K)		Latent Heat (kJ/kg)	Chilled Storage		
			Above Freezing	Below Freezing		Temp (C)	Life	RH %
Apple	84	-2.0	3.64	1.88	281.4	-1 - 4	3-8 M	90
Banana	75	-2.2	3.35	1.76	251.2	-	-	85-90
Lemon	89.50	-2.2	3.81	1.92	295.3	10-13	1-6 M	85-90
Mango	81.50	-1.4	3.56	1.84	272.1	13	2-3 W	85-90
Melon	92.5	-1.6	3.93	2.01	307	7-10	3-4 W	85-90
Orange	87	-2.2	3.77	1.92	288.4	0-9	3-12 W	85-90
Pineapple	82.5	-1.4	3.68	1.88	283.7	7	2-4 W	90-95
Strawbery	90	-1.2	3.85	1.76	300	-1-0	5-7 D	90-95
Beans	89	-1.0	3.81	1.97	297.7	4-7	7-10 D	90-95
Cabbage	92.5	-0.4	3.93	1.97	307	0	3-4 M	90-95
Corn	74	-0.7	3.31	1.76	246.5	0	4-8 D	90-95
Cucumber	96	-0.8	4.06	2.05	318.6	7-10	10-14 D	90-95
Mushroom	91	-1.0	3.89	1.97	302.3	0	3-4 D	90
Onion	87.5	-1.1	3.77	1.92	288.4	0	1-8 M	65-70
Potato	78	-1.7	3.43	1.8	258.1	3-10	4-8 M	90
Salmon	64	-2.2	2.97	1.63	214	0	5-15 D	ICE
Tuna	70	-2.2	3.18	1.72	234.9	0	5-14 D	ICE
Shrimp	83	-2.2	3.6	1.88	276.7	0	3-7 D	95+
Oyster	87	-2.2	3.77	1.92	288.4	0	3-7 D	95+
Bacon	13-29	-2	1.5	1.1	41-95	16-18	3-6 M	85
Beef fresh	62-77	-2	3	1.7	207	0-1	1-6 W	88-92
Ham fresh	47-54	-2	2.5	1.5	155	1	6-12 D	85-90
Pork fresh	32-34	-2	2.2	1.26-1.38	107-147	0-1	3-7 D	85-90
Chicken	73	-3	3.43	1.67	247	0	1 W	85-90
Sausage	60	-3	2.85	1.59	200	4-7	6 M	85-90
Butter	16	-1.1	1.4	1.0	53.5	0-4	2 M	80-85
Cheese	60	-8.3	2.7	1.5	183.7	-	-	-
Cream	55	-2.2	3.6	1.7	209.3	-	-	-
Ice Cream	62	-2.8	2.9	1.6	207	-9	-	60-70
Egg whole	74	-2.8	0	1.8	239.5	4	-	60-70
Beer	90.2	-2.2	3.8	1.4	107-123	2-4	3-10 W	60-70
Bread white	44-45	-2.2	2.7-2.9	1.4	107-123	2-4	3-10 W	60-70
Water	100	0	4.2	2.1	335	-	-	-