

The **Air-conditioning**
and **Refrigeration**
Specialists

FLYNN
REFRIGERATION



REFRIGERATION
Product Guide



Flynn Refrigeration is an independent Refrigeration & Air Conditioning company with over 25 years experience supplying both Marine & Industrial compressor spares and related equipment.

We offer a competitive and quick alternative to your spares requirements. Being a totally independent spares supplier, Flynn Refrigeration are ideally situated to use our experience and contacts to source almost any item and deliver to most parts of the world.

We carry an extensive range of [Marine & Industrial refrigeration compressors](#) spares and we give our clients a highly focused level of customer service. Flynn Refrigeration can provide you with a cost effective solution to your needs with a fast, friendly efficient service. We understand that different customers have different requirements and needs.

We always recommend original compressor manufacturers spares however we recognise budget restrictions and ever increasing costs, so at Flynn Refrigeration we offer both [Original Manufacturers Spares](#) and [Quality Replacement Spares](#). We closely monitor the quality of the products that we supply and maintain quality control to ensure customer satisfaction.

Dear Colleagues

Welcome to Flynn Refrigeration Ltd and our Refrigeration Product Guide.

Flynn Refrigeration Ltd are dedicated to the supply of Refrigeration and Air Conditioning products to the marine market. Our key product range includes compressors for cargo, provisions and air conditioning systems, air conditioning units, spare parts, tools and the products that are used to control these systems.

Vessels are built in so many locations each with different equipment and systems. We have produced this product guide to enable the correct selection of standard refrigeration products to ensure that the systems can be well maintained and that staff on board vessels have the information that they need to enhance in the supply chain thus ensuring reduced costs.

We supply a vast range of refrigeration compressors and spares and we would be more than happy to quote for your specific requirements. For this type of product we feel that it is essential that you send us your enquiry to include make, model and serial number so that we can evaluate what is required and offer the latest replacements. Should you require a parts list for a specific model please let us know and we will do our best to assist.

We are passionate about the service that we provide. Centrally located in Birkenhead Docks on the Wirral adjacent to Liverpool our 7500 ft warehouse is stocked with an extensive range of spares, compressors and the products listed in this guide. We have ISO 9001 approval for our operating procedures and control of products also ISO 14001 to ensure that we are doing our part for the environment.

Customer service is our key focus. We have over 25 years experience in the industry . We are keen to provide our extensive range to your vessels.

When you think Refrigeration. Think Flynn Refrigeration.

Yours Sincerely



Alex Flynn Managing Director.

Explanation of model names and designation

T	AJ	T	4	5	19	Z	H	R
No letter = with valves or brazed Letter R = with receiver H = High inlet pressure (-15C +15C) B = Low inlet pressure (-40C to -10C) M = Medium and high inlet pressure (-25C to +15C) A, B, C or D = Refrigerant R12 C = Refrigerant R407C (Air Conditioning) E, F, G or H = Refrigerant R22 M = Refrigerant R600a T = Refrigerant R22 or R502 Y = Refrigerant R134a Z = Refrigerant R404A, R407B or R507 Corresponds to the first two figures of the refrigerating capacity expressed in BTU/h at 60Hz depending on test conditions. Number of figures composing the refrigerating capacity. Example: 19 000 BTU/h Applications 1 = Low back pressure. Motor with normal starting torque. 2 = Low back pressure. Motor with high starting torque. 3 = High back pressure. Motor with normal starting torque. 4 = High back pressure. Motor with high starting torque. 5 = Air conditioning. 9 = Medium and high back pressure. Motor with high starting torque. 0 = Medium and high back pressure. Motor with normal starting torque. T = HTA C = Compact L = Low profile S = Single fan condensing unit Families: THB/AZ/AEZ/AE/AJ/FH/AH/AG/HGA/RGA/RK The letter P designates compressors designed to be mounted in parallel. The letter D designates compressors intended for dual operation. C or no letter = single phase T = three phase								
Compressor designation Condensing unit designation								

L'Unite condensing units rating conditions

Applications	Ambient	Evaporator outlet and return gas superheated
Low temperature domestic and commercial refr. (LBP)	+32C 90F	+32C 90F
Other applications (M/HBP-AC)	+32C 90F	11k

Temperature of refrigerant at condenser outlet is sub-cooled within the condensing limits of the unit.

Expansion Device

- C = Capillary Tube
- V = Expansion Valve

For the conversion of refrigeration capacity from watts to:

- BTU/h at 50Hz, multiply by 3.41
- Kcal/h at 50Hz, multiply by 0.86
- To obtain refrigerant capacity at 60Hz multiply 50Hz value by 1.2

High Temp Range HBP R404A

Model	Nominal HP	Displacement cm3	Expansion Device	Cooling Capacity Watts @50HZ					
				Ambient 32Deg C Evaporating Temperature					
				-15C +5F	-10C +14F	-5C +23F	0C +32F	+7.2C +45F	+10C +50F
AEZ4440ZHR	1/3	7.55	C/V	448	552	663	783	970	1049
CAE4450ZHR	1/2	9.4	C/V	552	679	819	974	1222	1327
CAE9460ZMHR	1/2	11.3	C/V	659	803	956	1117	1368	1472
CAE9470ZMHR	1/2	13.3	C/V	847	1030	1228	1441	1775	1915
CAJ9480ZMHR	5/8	15.2	C/V	975	1176	1392	1624	1992	2146
CAJ9510ZMHR	3/4	18.3	C/V	1183	1427	1691	1973	2398	2584
CAJ9513ZMHR	1	24.2	C/V	1417	1718	2034	2365	2869	3079
CAJ4517ZHR	1 1/4	25.95	C/V	1757	2134	2565	3029	3677	3960
CAJ4519ZHR	1 1/2	34.45	C/V	2282	2731	3243	3803	4643	5008
FH4524ZHR	2	43.5	C/V	2397	2951	3538	4160	5127	5529
FH4531ZHR	2 1/2	56.65	C/V	3416	4233	5090	5990	7372	7939
FHS4531ZHR	2 1/2	56.65	C/V	3243	3989	4759	5559	6770	7263
FH4540ZHR	3	74.25	C/V	4108	5016	5980	7010	8609	9274
TFH4540ZHR	3	74.25	C/V	4108	5016	5980	7010	8609	9274
TAG4546ZHR	4	90.2	C/V	4757	6013	7381	8878	11256	12262
TAGS4546ZHR	4	90.2	C/V	4376	5663	7041	8517	10826	11785
TAG4553ZHR	4 1/2	100.7	C/V	5085	6357	7779	9338	11769	12815
TAG4561ZHR	5	112.5	C/V	5818	7351	9042	10883	13766	14992
TAG4568ZHR	6	124.4	C/V	6631	8506	10483	12540	15550	16790
TAG4573ZHR	6 1/2	134.8	C/V	7182	8881	10716	12698	15853	17178

Low Temp Range LBP R404A

Model	Nominal HP	Displacement cm3	Expansion Device	Cooling Capacity Watts @50HZ					
				Ambient 32Deg C Evaporating Temperature					
				-35C -31F	-30C -22F	-23.3C -10F	-20C -4F	-15C +5F	-10C +14F
AEZ2411ZBR	1/3	7.6	C/V	176	232	315	359	431	507
AEZ2415ZBR	1/3	8.1	C/V	204	267	358	407	484	567
CAE2417ZBR	1/2	11.3	C/V	238	321	436	495	587	682
CAE2420ZBR	1/2	12.54	C/V	294	394	533	605	716	832
CAJ2428ZBR	1/2	15.2	C/V	372	496	671	761	902	1049
CAE2424ZBR	1/2	15	C/V	404	518	684	772	910	1057
CAJ2432ZBR	5/8	18.3	C/V	449	594	796	898	1058	1222
CAJ2446ZBR	3/4	26.15	C/V	733	937	1247	1416	1690	1989
CAJ2464ZBR	1 1/2	34.45	C/V	876	1118	1471	1692	1995	2296
FH2480ZBR	2	53.2	C/V	1233	1628	2223	2519	2980	3417
FH2511ZBR	2 1/2	74.25	C/V	1520	2105	2892	3301	3895	4485
TAG2516ZBR	4	112.5	C/V	2354	3146	4317	4940	5941	7011
TAG2522ZBR	5	134.8	C/V	2997	4118	5442	6017	7291	8553

High Temp Range HBP R134a

Model	Nominal HP	Displacement cm3	Expansion Device	Cooling Capacity Watts @50HZ					
				Ambient 32Deg C Evaporating Temperature					
				-15C +5F	-10C +14F	-5C +23F	0C +32F	+7.2C +45F	+15C +59F
CAE4440YHR	1/3	12.05	C/V	410	519	638	768	969	1212
CAE4448YHR	3/8	14.15	C/V	486	627	778	937	1186	1482
CAE4456YHR	3/8	16	C/V	538	689	854	1034	1319	1669
CAJ4461YHR	1/2	18.3	C/V	620	764	968	1156	1469	1843
CAJ4476YHR	5/8	21.75	C/V	750	956	1188	1446	1867	2393
CAJ4492YHR	3/4	25.95	C/V	925	1179	1444	1742	2229	2776
CAJ4511YHR	1	32.7	C/V	1216	1478	1792	2138	2687	3370
FH4518YHR	1 1/2	53.2	C/V	1791	2250	2819	3463	4488	5848
FH4525YHR	2	74.25	C/V	2128	2759	3644	4154	5424	6945
TAG4528YHR	2 1/2	90.2	C/V	2302	3132	4052	5062	6687	8697

Voltage	Net Wt KG	PH	Code	Housing Code
220/240-1-50	26	1	AEZ4440ZHR	4581
220/240-1-50	27	1	CAE4450ZHR	4581
220/240-1-50	25	1	CAE9460ZMH	4581
220/240-1-50	24	1	CAE9470ZMH	4581
220/240-1-50	36	1	CAJ9480ZMH	4581
220/240-1-50	38	1	CAJ9510ZMH	4581
220/240-1-50	41	1	CAJ9513ZMH	4581
220/240-1-50	44	1	CAJ4517ZHR	4582
220/240-1-50	46	1	CAJ4519ZHR	4582
220/240-1-50	57	1	FH4524ZHR	4582
220/240-1-50	80	1	FH4531ZHR	4585
220/240-1-50	78	1	FHS4531ZHR	4583
220/240-1-50	92	1	FH4540ZHR	4585
400-3-50 or 440-3-60	89	3	TFH4540ZHR	4585
400-3-50 or 440-3-60	115	3	TAG4546ZHR	4585
400-3-50 or 440-3-60	97	3	TAGS4546ZH	4584
400-3-50 or 440-3-60	115	3	TAG4553ZHR	4585
400-3-50 or 440-3-60	122	3	TAG4561ZHR	4585
400-3-50 or 440-3-60	129	3	TAG4568ZHR	4585
400-3-50 or 440-3-60	127	3	TAG4573ZHR	4585



CAJ 4461 YHR Condensing Unit

Voltage	Net Wt KG	PH	Code	Housing Code
220/240-1-50	18	1	AEZ2411ZBR	4580
220/240-1-50	18	1	AEZ2415ZBR	4580
220/240-1-50	19	1	CAE2417ZBR	4580
220/240-1-50	21	1	CAE2420ZBR	4580
220/240-1-50	35	1	CAJ2428ZBR	4581
220/240-1-50	27	1	CAE2424ZBR	4581
220/240-1-50	33	1	CAJ2432ZBR	4581
220/240-1-50	39	1	CAJ2446ZBR	4581
220/240-1-50	42	1	CAJ2464ZBR	4581
220/240-1-50	57	1	FH2480ZBR	4582
220/240-1-50	60	1	FH2511ZBR	4582
400-3-50 or 440-3-60	106	3	TAG2516ZBR	4585
400-3-50 or 440-3-60	110	3	TAG2522ZBR	4585

Voltage	Net Wt KG	PH	Code	Housing Code
220/240-1-50	19	1	CAE4440YHR	4580
220/240-1-50	26	1	CAE4448YHR	4581
220/240-1-50	28	1	CAE4456YHR	4581
220/240-1-50	31	1	CAJ4461YHR	4581
220/240-1-50	32	1	CAJ4476YHR	4581
220/240-1-50	35	1	CAJ4492YHR	4581
220/240-1-50	36	1	CAJ4511YHR	4581
220/240-1-50	51	1	FH4518YHR	4582
220/240-1-50	56	1	FH4525YHR	4582
400-3-50 or 440-3-60	89	3	TAG4528YHR	4583

High Temp Range HBP R22

Model	Nominal HP	Displacement cm3	Expansion Device	Cooling Capacity Watts @50HZ							
				-25C	-20C	-15C	-10C	-5C	0C	+7.2C	+15C
CAE9460T	1/2	11.3	C/V	324	423	553	715	909	1134	1514	2000
CAJ9510T	3/4	18.3	C/V	545	728	956	1229	1547	1909	2510	3266
CAJ9513T	1	24.2	C/V	526	765	1074	1451	1896	241	3272	4366
CAJ4517E	1 1/4	25.95	C/V			1233	1673	2171	2727	3629	4743

High Temp Range HBP R404A

Model	Nominal HP	Displacement cm3	Expansion Device	Cooling Capacity Watts @50HZ							
				-25C	-20C	-15C	-10C	-5C	0C	+7.2C	+15C
CAE4450Z	3/7	9.4	C/V			434	567	731	927	1270	1729
CAE9460Z	1/2	11.3	C/V	297	409	546	711	908	1141	1545	2086
CAJ9480Z	5/8	15.2	C/V	393	571	774	1009	1284	1607	2172	2943
CAJ9510Z	1	18.3	C/V	527	732	970	1252	1583	1972	2650	3563
CAJ9513Z	1 1/8	24.2	C/V	497	783	1114	1501	1955	2485	3406	4646
CAJ4517Z	1 1/4	25.95	C/V			1364	1776	2273	2857	3860	5173
CAJ4519Z	1 1/2	34.45	C/V			1769	2353	3009	3756	5030	6735
FH4524Z	2	43.5	C/V			1964	2639	3395	4249	5682	7557
FH4540Z	3	74.25	C/V			3445	4486	5634	6912	9013	11696

High Temp Range HBP R134a

Model	Nominal HP	Displacement cm3	Expansion Device	Cooling Capacity Watts @50HZ						
				-15C	-10C	-5C	0C	+7.2C	+15C	
AEZ4430Y	1/4	8.85	C/V	245	328	432	558	777	1065	
CAE4440Y	1/3	12.05	C/V	310	421	561	731	1026	1413	
CAE4456Y	3/8	16.2	C/V	458	604	787	1009	1396	1904	
CAJ4452Y	3/8	15.2	C/V	370	528	724	957	1358	1879	
CAJ4461Y	1/2	18.3	C/V	475	642	856	1115	1569	2168	
CAJ4492Y	3/4	25.95	C/V	584	871	1215	1617	2295	3164	
CAJ4511Y	1	32.7	C/V	878	1227	1654	2160	3026	4148	
FH4518Y	1 1/2	53.2	C/V	1036	1650	2371	3200	4583	6333	
FH4525Y	2	74.25	C/V	1667	2343	3201	4239	6053	8442	

Low Temp Range LBP R404A

Model	Nominal HP	Displacement cm3	Expansion Device	Cooling Capacity Watts @50HZ					
				-35C	-30C	-23.3C	-20C	-15C	-10C
CAE2417Z	1/2	11.3	C/V	161	280	460	557	719	891
CAE2420Z	3/8	12.6	C/V	232	357	547	654	836	1047
CAJ2428Z	1/2	15.2	C/V	306	434	628	773	991	1246
TAJ2428Z	1/2	15.2	C/V	306	434	628	773	991	1246
CAJ2432Z	5/8	18.3	C/V	381	542	792	971	1247	1567
CAJ2446Z	3/4	26.15	C/V	624	855	1194	1443	1811	2234
CAJ2464Z	1 1/2	34.45	C/V	807	1096	1605	1844	2317	2864
FH2480Z	2	53.2	C/V	738	1319	2183	2662	3476	4419

Condensing Temp	Voltage	Net Wt KG	PH	Code
54.5 DegC	220/240-1-50	13	1	CAE9460T
54.5 DegC	220/240-1-50	23	1	CAJ9510T
54.5 DegC	220/240-1-50	23	1	CAJ9513T
54.5 DegC	220/240-1-50	22	1	CAJ4517E

Condensing Temp	Voltage	Net Wt KG	PH	Code
54.5 DegC	220/240-1-50	12.5	1	CAE4450Z
54.5 DegC	220/240-1-50	14	1	CAE9460Z
54.5 DegC	220/240-1-50	22	1	CAJ9480Z
54.5 DegC	220/240-1-50	23	1	CAJ9510Z
54.5 DegC	220/240-1-50	23	1	CAJ9513Z
54.5 DegC	220/240-1-50	24	1	CAJ4517Z
54.5 DegC	220/240-1-50	24	1	CAJ4519Z
54.5 DegC	220/240-1-50	34	1	FH4524Z
54.5 DegC	220/240-1-50	36	1	FH4540Z

Condensing Temp	Voltage	Net Wt KG	PH	Code
54.5 DegC	220/240-1-50	11	1	AEZ4430Y
54.5 DegC	220/240-1-50	11	1	CAE4440Y
54.5 DegC	220/240-1-50	12.7	1	CAE4456Y
54.5 DegC	220/240-1-50	20	1	CAJ4452Y
54.5 DegC	220/240-1-50	20	1	CAJ4461Y
54.5 DegC	220/240-1-50	22	1	CAJ4492Y
54.5 DegC	220/240-1-50	23	1	CAJ4511Y
54.5 DegC	220/240-1.50	32	1	FH4518Y
54.5 DegC	220/240-1-50	34	1	FH4525Y

Condensing Temp	Voltage	Net Wt KG	PH	Code
54.5 DegC	220/240-1-50	12.5	1	CAE2417Z
54.5 DegC	220/240-1-50	13	1	CAE2420Z
54.5 DegC	220/240-1-50	21.5	1	CAJ2428Z
54.5 DegC	400-3-50 or 440-3-60	21.5	3	TAJ2428Z
54.5 DegC	220/240-1-50	21.5	1	CAJ2432Z
54.5 DegC	220/240-1-50	23	1	CAJ2446Z
54.5 DegC	220/240-1.50	24	1	CAJ2464Z
54.5 DegC	220/240-1-50	37	1	FH2480Z



CAJ 2464 Z Compressor

Information



Model designation

TL2AK (example)

TL = compressor type

2 = nominal displacement in cm³

AK = R12 LBP, MBP capillary only (Low start torque)

Note:

AK = R12 LBP, MBP (Low start torque)

AX = R12 LBP, MBP (High start torque)

BK = R12 LBP, MBP, HBP (Low start torque)

BX = R12 LBP, MBP, HBP (High start torque)

CX = R22 & R502 LBP (High start torque)

CMX = R22 & R502 LBP (High start torque)

GK = R134a HBP (Low start torque)

GX = R134a HBP (High start torque)

SC Models Only

BX = R12 LBP, MBP, HBP & R502 LBP (High start torque)

BMX = R22 LBP R502 LBP (High start torque)

NB

WOC = with oil cooler

R12, R22 and R502

Model	Nominal H.P.	Refrigerant	Oil cooler	Code
TL2.5AK	1/10	R12		195B023000
TL3AK	1/10	R12		195B023100
TL3BK	1/8	R12		195B019000
TL3BX	1/8	R12		195B002000
TL4AK	1/8	R12		195B023200
TL4AX	1/8	R12		195B001600
TL4BK	1/6	R12		195B018800
TL4BX	1/6	R12		195B001800
TL5AK	1/6	R12		195B013300
TL5AX	1/6	R12		195B001700
FR6BK	1/5	R12		195B013400
FR6BX	1/5	R12		195B003000
FR7H	1/10	R12		195B028400
FR7.5AK	1/5	R12		195B013500
FR7.5AX	1/5	R12		195B016800
FR7.5AK	1/5	R12	WOC	195B013600
FR7.5AX	1/5	R12	WOC	195B003300
FR7.5BK	1/4	R12		195B019700
FR7.5BX	1/4	R12		195B003400
FR7.5BK	1/4	R12	WOC	103U2764EA
FR7.5BX	1/4	R12	WOC	195B003500
FR8.5AK	1/4	R12		195B013700
FR8.5AX	1/4	R12		195B017000
FR8.5AK	1/4	R12	WOC	195B013800
FR8.5BK	1/3	R12		195B019800
FR8.5BX	1/3	R12		195B003700
FR8.5BX	1/3	R12	WOC	195B017100
FR10AK	1/3	R12		195B013900

Model	Nominal H.P.	Refrigerant	Oil cooler	Code
FR10AX	1/3	R12		195B017200
FR10AK	1/3	R12	WOC	195B019900
FR10AX	1/3	R12	WOC	195B003900
FR10BK	1/3	R12		195B020000
FR10BX	1/3	R12		195B004000
FR10BK	1/3	R12	WOC	103U2964EA
FR10BX	1/3	R12	WOC	195B004100
FR11BK	1/3	R12		195B019600
FR11BX	1/3	R12		195B002900
SC10BK	1/3	R12		104L2510EA
SC10BX	1/3	R12, R502		195B007100
SC10BK	1/3	R12	WOC	104L2511EA
SC10BX	1/3	R12, R502	WOC	195B014900
SC10CX	3/8	R22, R502		195B007200
SC12AK	1/3	R12	WOC	195B014100
SC12AX	1/3	R12	WOC	195B008100
SC12BK	3/8	R12		195B020700
SC12BX	3/8	R12, R502		195B007800
SC12BK	3/8	R12	WOC	195B020800
SC12BX	3/8	R12, R502	WOC	195B007900
SC12CX	1/2	R22, R502		195B008000
SC15AK	3/8	R12		195B020900
SC15BX	1/2	R12, R502		195B008400
SC15BX	1/2	R12, R502	WOC	195B008500
SC15CX	2/3	R502		195B015400
SC15BMX	1/2	R22		195B015600
SC15CMX	2/3	R22		195B008700
SC18BX	2/3	R12, R502		195B006300
SC18CX	3/4	R502		195B006400
SC18BMX	1/2	R22		195B020400
SC21BX	3/4	R12, R502		195B006800

R134a

Model	Nominal H.P.	Oil cooler	Code
TL2.5FK	1/12		195B000400
TL3FK	1/10		195B000500
TL3GK	1/8		195B021400
TL3GX	1/8		195B000600
TL4FK	1/8		195B021500
TL4FX	1/8		195B000700
TL4GK	1/7		195B021700
TL4GX	1/7		195B000800
TL5FK	1/7		195B000900
TL5FX	1/7		195B024100
TL5GK	1/5		195B022200
TL5GX	1/5		195B001100
TL5FK	1/6		195B022100
TL5FX	1/6		195B001000
TL5FK	1/6		195B001200
TL5FX	1/6		195B023500
TL5FK	1/5		195B022400
NL6FK	1/6		195B009000
NL6FX	1/6		195B016500
NL7FK	1/5		195B009100
NL7FX	1/5		195B017600
NL9FK	1/4		195B009200
NL9FK	1/4	WOC	103G6812EA
NL9FX	1/4		195B017800
NL9FX	1/4	WOC	195B018000
NLE9FK	1/4		195B017900
NL11FK	1/3		195B009300
NL11FX	1/3		195B018200



New GS26MLS compressor

Model	Nominal H.P.	Oil cooler	Code
NL11FX	1/3	WOC	195B009500
FR6GX	1/5		195B002300
FR6GK	1/5		195B019100
FR7.5GK	1/4		195B019200
FR7.5GX	1/4		195B002400
FR8.5GK	1/3		195B019300
FR8.5GK	1/3	WOC	103G6790EA
FR8.5GX	1/3		195B002600
FR10GK	1/3		195B019400
FR10GK	1/3	WOC	103G6890EA
FR10GX	1/3		195B002700
FR11GK	1/3		195B019500
FR11GX	1/3		195B002800
SC10GX	1/3		195B004300
SC12GK	2/5		195B020100
SC12GK	1/3	WOC	104G8250EA
SC12GX	2/5		195B005000
SC15FK	2/5		195B020200
SC15FX	2/5		195B005200
SC15GX	1/2		195B005300
SC15GHX	1/2		195B014400
SC18FX	1/2		195B005700
SC18FX	1/2	WOC	195B005800
SC18GX	2/3		195B005900
SC21FX	2/3		195B004700
SC21FX	2/3	WOC	104G8110EW
SC21GX	3/4		195B004800
GS26GHX	1		195B043400
GS26MFX	1		195B043300
GS34MFX	1 1/2		195B043500

R404A

Model	Nominal H.P.	Code
TL4CLX	1/5	195B002100
TL4DLX	1/5	195B016600
FR6CLX	1/3	195B003100
FR6DLX	1/3	195B003200
FR8.5CLX	3/8	195B003800
SC10CLX	2/5	195B007400
SC10DLX	1/2	195B007500
SC12CLX	1/2	195B007600
SC12DLX	2/3	195B007700
SC15CLX	2/3	195B008800
SC15DLX	3/4	195B008900
SC18CLX	2/3	195B006600
SC21CLX	3/4	195B007000
GS21MLX	7/8	195B043600
GS26CLX	1	195B042700
GS26MLX	1	195B043700
GS34CLX	1 1/2	195B043900
GS34MLX	1 1/2	195B043800

Compressor Spares

Electronic Unit for 12/24V DC compressors only

Model	Code
BD35F/BD50F standard electrical unit	101N021000
BD35F/BD50F EMI electrical unit	101N022000

Compressor Accessories

Model	Code
SC Cord relief	103N100400
TL/FR Cord relief	103N100600
SC Basic Cover	103N200200
TL/FR Basic cover	103N201000
PL50F Electrical cover	103N049100
Discharge valve for TL5G	118U045200
Cable	118U120300
PTC Protection screen	103N047600

Starting Devices (Low Start Torque) 220 - 240V 50Hz

Model	Code
SC	103N000200
TL,FR,NL	103N001100

Starting Devices (High Start Torque) 220 - 240V 50Hz

Model	Code
TL Capacitor	117U501400
FR,NL Capacitor	117U501500
SC Capacitor	117U501700
FR8.5AX,FR6BX,TL57FX,TL5GX,TL4GHX,NL7FX,FR7.5FX,TL4CLX,NL7AX	117U600000
FR10AX,FR7.5BX,NL9FX,FR8.5FX,FR7.5GX,TL4DLX	117U600100
SC12AX,SC10BX, NL11FX,SC10GX,SC12GX,SC10GHX	117U600200
SC15AX,SC12BX,SC10CX,SC15FX,SC12GX,SC12GHX,SC10CLX	117U600300
TL5AX,TL4BX,FR7.5AX,TL5FX,TL56FX,TL4GX,NL6FX,NL6AX	117U600400
SC18AX,SC15BX,SC12CX,SC15BMX,SC10DX,SC18FX,SC15GX, SC10GHX, SC15GHX,SC12CLX,SC10DLX	117U600500
TL3AX,TL2.5BX,TL3FX	117U600700
TL4AX,TL3BX,TL4FX,TL3GX	117U600900
FR10BX,FR11BX,FR10GX,FR11GX,FR8.5CLX,FR6DLX	117U601000
SC21AX,SC18BX,SC15CX,SC12DX	117U601100
FR8.5BX,FR10FX,FR8.5GX,FR6CLX	117U601500
FR11AX,FR7GHX	117U601600
SC15CMX,SC21FX,SC18GX,SC18GHX,SC15CLX,SC12DLX	117U601900
PL50FX,PL35GX	117U602100
SC21BX,SC18CX,SC15DX,SC10GHHX	117-701100
SC18BMX,SC18CMX,SC21CMX,SC15GHHX,SC18CLX	117-701200
SC21BMX,SC21GX,SC15DLX (Standard)	117-702800
SC21BMX,SC21GX,SC15DLX (Long cable)	117-702900
SD Timer Delay, 50-60HZ (Twin Compressor)	117N000100

Starting Devices (High Start Torque) 115V 60Hz

Model	Code
FF8.5GX Capacitor	117U504100
FF810GX Capacitor	117U504000
TL,SC Capacitor	117U502300
TL54.5FX,TL4GX	117U600300
SC15AX,SC12BX	117U601200
SC12AX,SC10BX	117U601300
SC12GX,SC15GX	117U602000
FF8.5GX	117U406000
FF10GX	117U406100

Danfoss recommendation:

All new installations use DML drier.

Service work: Compressor change use DML drier

Other service work: Use DCL drier

DML Drier Core	DCL Drier Core
100% molecular sieve	80% molecular sieve
	20% activated alumina
Moisture removal	Moisture & acid removal

LTZ for R404A/R507

Maneurop LTZ low temperature compressors have now been replaced by the NTZ range of compressors. A cross reference is shown below. NTZ compressors are a direct fit on to older LGZ style condensing units.

LTZ022-5VI	1ph	NTZ048	120F008700
LTZ028-5VI	1ph	NTZ068	120F008800
LTZ022-4VI	3ph	NTZ048	120F000100
LTZ028-4VI	3ph	NTZ068	120F000200
LTZ040-4VI	3ph	NTZ096	120F000300
LTZ044-4VI	3ph	NTZ108	120F000400
LTZ050-4VI	3ph	NTZ136	120F000500
LTZ088-4VI	3ph	NTZ215	120F000600
LTZ100-4VI	3ph	NTZ271	120F000700

MT for R12, R22, R502

Model	Nominal H.P.	Code
MT18-5VI	1.5	400433
MT18-4VI	1.5	400434
MT22-5VI	1.8	400435
MT22-4VI	1.8	400436
MT28-5VI	2.3	400437
MT28-4VI	2.3	400438
MT32-5VI	2.7	400439
MT32-4VI	2.7	400440
MT36-5VI	3	400520
MT36-4VI	3	400441
MT40-4VI	3.3	400442
MT44-4VI	3.6	400443
MT50-4VI	4.2	400444
MT56-4VI	4.7	400445
MT64-4VI	5.3	400446
MT72-4VI	6	400447
MT80-4VI	6.7	400448
MT81-4VI	6.7	400521
MT100-4VI	8.3	400449
MT125-4VI	10.4	400450
MT144-4VI	12	400522
MT160-4VI	13.3	400451

Model designation

Example MTZ320T4SA

MT = Series

Z = Polyolester/HFC

M = Mineral/HCFC

320 = Motor size

T = Tandem

4 = Motor code (4 = 3 phase, 5 = 1 phase)

SA = Engineering code



Maneurop NTZ Compressor

NTZ for R404A/R507

Model	Code
Single Phase	
NTZ048	120F008700
NTZ068	120F008800
Three Phase	
NTZ048	120F000100
NTZ068	120F000200
NTZ096	120F000300
NTZ108	120F000400
NTZ136	120F000500
NTZ215	120F000600
NTZ271	120F000700

MTZ for R404A, R507, R134a and R407C

Model	Nominal H.P.	Code
MTZ18-5VI	1.5	400150
MTZ18-4VI	1.5	400151
MTZ22-5VI	1.8	400152
MTZ22-4VI	1.8	400153
MTZ28-5VI	2.3	400154
MTZ28-4VI	2.3	400155
MTZ32-5VI	2.7	400156
MTZ32-4VI	2.7	400157
MTZ36-5VI	3	400158
MTZ36-4VI	3	400159
MTZ40-4VI	3.3	400160
MTZ44-4VI	3.6	400161
MTZ50-4VI	4.2	400162
MTZ56-4VI	4.7	400163
MTZ64-4VI	5.3	400164
MTZ72-4VI	6	400165
MTZ80-4VI	6.7	400166
MTZ81-4VI	6.7	400524
MTZ100-4VI	8.3	400167
MTZ125-4VI	10.4	400168
MTZ144-4VI	12	400169
MTZ160-4VI	13.3	400170

All replacement single phase compressors require electrics. See 14.

Single Scrolls

Maneurop Scroll Compressors

R22

Factory charged with mineral oil. Rotolock connection with oil sight glass

Model	Code
SM115-4RI	401102
SM125-4RI	401103
SM160-4RI	401104
SM175-4RI	401105
SM185-4RI	401106

R407C

Factory charged with ester oil. Brazed connection with oil sight glass

Model	Code
SZ084-4VI	401130
SZ090-4VI	401131
SZ100-4VI	401126
SZ115-4CAI	401133
SZ120-4VI	401100
SZ125-4CAI	401134
SZ148-4CAI	TBA
SZ160-4CBI	401135
SZ175-4CAI	401136
SZ240	TBA
SZ300	TBA

Factory charged with ester oil. Rotolock connection with oil sight glass

Model	Code
SZ115-4RI	401115
SZ125-4RI	401116
SZ160-4RI	401117
SZ175-4RI	401118
SZ185-4RI	401119



Maneurop Scroll Units

Note: A full range of Performer and Performer ST scroll compressors is now available for use with R410a. Please contact your local Dean & Wood branch for details.

Tandem Scrolls



Maneurop Tandem Scroll Unit

R407C - Brazed Connections

Factory charged with ester oil. Brazed connection with oil sight glass

Model	Code
SZ180-4	401137
SZ200-4	401138
SZ230-4	401121
SZ250-4	401122
SZ290-4	401127
SZ310-4	401142
SZ320-4	401128
SZ350-4	401124
SZ370-4	401125

Scroll Accessories

Description	Code
Discharge Gas t/stat suitable for SZ compressors (excl. SZ240-300)	401141
Solder sleeve adapter set for SZ 084-100	7765005
Solder sleeve adapter set for SZ 110-161	7765006

Fan Blades

Description	Code
YAB (GM/GME18-36)	4550
C (GM/GME40-50)	4551
D/E (GM/GME80)	4553
F (GM/GME100)	4554
GJ (GM/GME125-160) ** (HGM/Z125-160)	8170016

* Note : Some GM125 units fitted with F type condenser block. Please check fan diameter F = 550mm : J = 600mm

Rotolock Compressor Valves

Rotolock service valves

Model	For use with:		Code
V01 1 x 3/8	MT/MTZ 018-028	Discharge	4456
V04 1 1/4 x 3/4	MT/MTZ 044-081, NTZ 096-271	Discharge	4459
V05 1 1/4 x 7/8	MT/MTZ 100-160	Discharge	4460
V06 1 x 1/2	MT/MTZ 032-40, NTZ 048-068	Discharge	4457
V07 1 3/4 x 7/8	LTZ 040-044	Suction	4461
V02 1 3/4 x 1 1/8	MT/MTZ 080-161, NTZ 136-271	Suction	4462
V06 1 x 1/2	MT/MTZ 018-028	Suction	4457
V07 1 3/4 x 7/8	MT/MTZ 044-073	Suction	4461
V08 2 1/4 x 1 3/8	SM/Z 160-185	Suction	4464
V09 1 1/4 x 5/8	MT/MTZ 032-040, NTZ 048-068	Suction	4458

Rotolock 90° angle adaptors

Model	Description	Code
C01 1 x 3/8	MT/MTZ 018-028	Discharge 4465
C04 1 1/4 x 3/4	MT/MTZ 044-080, NTZ 096-271	Discharge 4468
C06 1 x 1/2	MT/MTZ 032-040, NTZ 048-068	Discharge 4466
C02 1 3/4 x 1 1/8	MT/MTZ 080-160, NTZ 136-271	Suction 4470
C06 1 x 1/2	MT/MTZ 018-028	Suction 4466
C07 1 3/4 x 7/8	MT/MTZ 044-072,	Suction 4469
C09 1 1/4 x 5/8	MT/MTZ 032-40, NTZ 048-068	Suction 4467
G08 2 1/4	Gasket set SM-SZ 115, 125, 160, 175, 185	400515
1"	Rotolock gasket	4506
G04 1 1/4	Rotolock gasket	4507
G02 1 3/4	Rotolock gasket	4508

Adaptors

Description	For use with:	Code
Brazed to rotolock	SM/SZ 084-100	7765005
Brazed to rotolock	SM/SZ110-161	7765006

Compressor Spares

Starting kits single phase MT/MTZ, LTZ, NTZ & MPZ compressors

Description	Code
CSR 2/5 Start kit (loose components) for MT/MTZ 018-022-028, LTZ 022-028, NTZ 048-068	4482
CSR 28.5 Start kit (pre-wired in terminal box) for MT/MTZ 018-022-028, LTZ 022-028, NTZ-048-068	4484
CSR 3/5 Start kit (loose components) for MT/MTZ 032-036	4483
CSR 32 Start kit (pre-wired in terminal box) for MT/MTZ 032-036	4486
CSR Start kit (loose components) for MPZ038-054	120Z0028
CSR Start kit (pre-wired in terminal box) for MPZ038-054	120Z0029
CSR Start kit (loose components) for MPZ061-068	120Z0033
CSR Start kit (pre-wired in terminal box) for MPZ061-068	7701149
G.E.3 ARR3 Relay for MT/MTZ, LTZ, NTZ + MPZ	4487

Capacitors for MT/MTZ

Description	Code
100MF Capacitor	400488
135MF Capacitor	4489
25MF Capacitor	4490
20MF Capacitor	4491
15MF Capacitor	4492
10MF Capacitor	4493

Soft start kits for 3 phase compressors

Description	Code
SCR01 for MT/MTZ44-80	4471
SCR03 for MT/MTZ 100-160, S-110, 115, 120, 125	4472

Electronic soft start equipment

Type	Description	Code
MCI 15C	Nominal motor current max 15A - MTZ 018-081 + MPZ 038-068 + SZ 084-110	037N007600
MCI 25C	Nominal motor current max 25A - MTZ 100-160 + SZ 115-185	037N007700
MCI 50C	Nominal motor current max 50A - SZ 240-300	7705009

Crankcase heater

Type	For use with	Wattage	Code
PTC	MT/MTZ 018-160, LTZ, NTZ+MPZ	35W	4455
Insertion	MT/MTZ 200-320	100Wx2	4515
Belt	SM/SZ 175-185	100W 240v UL	7773007
Belt	SM/SZ 084-161, MT/MTZ 044-081	65W 230v CE	7773107
Belt	SM/SZ 175-185, MT/MTZ 100-160	75W 230v CE	7773108
Belt	SM/SZ 084-161, MT/MTZ 044-081	65W 110v CE	7773109
Belt	SM/SZ 175-185, MT/MTZ 100-160	75W 110v CE	7773110
Belt	SM/SZ 240-300	130W 230v CE	7773122

Universal belt type

Type	Min. length	Max. length	Wattage	Voltage	Code
CH-101	27"	34"	54W	240V AC	4350
CH-102	25"	32"	60W	240V AC	4351

Oil

This group of oils have been especially developed for use in Maneurop compressors to offer maximum protection and lubricant qualities during all types of operation. No other oil types should be used, failure to use these lubricants will invalidate the warranty on new compressors.

Mineral Oil (White Oil)

Type	Description	Code
7754001	160P 2L for use in MT/SM	400473
7754002	160P 5L for use in MT/SM	400474

ABM Oil (for compressors using transitional R22 based refrigerants)

Type	Description	Code
7754009	160ABM 2Litre for use in MT	400475

EsterOil

Type	Description	Code
7754019	160PZ 1L for use in MTZ	400498
7754020	160PZ 2L for use in MTZ	400499
7754024	160SZ 2L for use in SZ, LTZ, NTZ	401146
120Z0046	160MPZ for use in MPZ 038-068	120Z0046

Rubber mounting feet

Type	For use on	Code
Kit 1	MT/MTZ 16-80 LT/LTZ 22-50, NTZ 048-136	4509
Kit 2	MT/MTZ 100-160LT/LTZ 50-88-100, NTZ 215-271	4510
Kit 3	MT/MTZ 200-320	4511

Acoustic hoods

Type	For use on	Code
Size 1	MT/MTZ 18-40, NTZ 048-068	400430
Size 2	MT/MTZ 44-80, NTZ 096-136	400431
Size 3	MT/MTZ 100-160, NTZ 215-271	400432

Rod

Nylon Rod - Cooler Hanging

Size	Description	Code
M10	Nylon Studding 1m	1660
M10	Nylon Full Nut	1662
M10	Nylon Washer	1664
M10	Nylon Combination Nut/Washer	1666
M10	Nylon Domed Nut	1668

Nylon Rod - Cooler Hanging

Size	Description	Code
M12	Nylon Studding 1m	1661
M12	Nylon Full Nut	1663
M12	Nylon Washer	1665
M12	Nylon Combination Nut/Washer	1667
M12	Nylon Domed Nut	1669

Heater Tape

Self-regulating heater tape - braided

Type	Wattage	Voltage	Code
FSGTP/15-2	15W/m	230Va.c.	6889
FSGTP/15-2(30mroll)	15W/m	230Va.c.	6890
FSGTP15-1	15W/m	110Va.c.	6893

Self-regulating heater tape with tinned copper braid and outer thermoplastic anticorrosion sheath. Recommended for either internal or external use on plastic tube

Self-regulating heater tape - non braided

Type	Wattage	Voltage	Code
FSG15-2	15W/m	230Va.c.	6897
FSG15-2(30mroll)	15W/m	230Va.c.	6902
FSG15-1	15W/m	110Va.c.	6905
FSG25-2	25W/m	230Va.c.	6922
FSG25-2(30mroll)	25W/m	230Va.c.	6933

For external use only, can be used on plastic tube.

A fixed wattage heater tape for drain lines

Type	Length	Wattage	Voltage	Code
2JZ-40	1m	40W	230VAC	6897-1
2JZ-40	2m	80W	230VAC	6897-2
2JZ-40	3m	120W	230VAC	6897-3
2JZ-40	4m	160W	230VAC	6897-4
2JZ-40	5m	200W	230VAC	6897-5
2JZ-40	6m	240W	230VAC	6897-6

Termination kit for FSG braided and non- braided heater tapes

Description	Code
Termination Kit	6935

Binding tape for all heater tape

Description	Code
Glass cloth binding tape 12mm x 50m	6948



General Tools

Ratchet Spanner Kits

Ring Offset

Part No	Description	Code
606305	Set of 5 (sizes: 1/4"-7/8")	6147

Open Jaw

Part No	Description	Code
229-F	Set of 6 (sizes: 3/8", 1/2", 5/8", 3/4", 7/8", 1")	6050

Adjustable Spanners / Shifters

Part No	Size	Code
306C	6"	6299
308C	8"	6300
310C	10"	6301
312C	12"	6302
315C	15"	6303

Bi-hexagon Ring Spanner Sets

Part No	Description	Code
NC181R	1/8" - 9/16" W	6285
NC389N	6 - 27mm (10 set)	6305
NC381T	6 - 19mm (7 set)	6306

Torque Wrench Kit

The kit contains :

TCS 100 torque	29mm open end fitting
17mm open end fitting	36mm open end fitting
22mm open end fitting	Cipex case
26mm open end fitting	Torque/open end cross reference list

Part No	Description	Code
C24410v2	With 7 heads 1/4" to 3/4"	6017

Ratchet and Sockets

Part No	Description	Code
DB437	7/16" AF socket	6201
DB500	1/2" AF socket	6202
DBM10	10mm socket	6203
DBM13	13mm socket	6204
D1UBA	Bit Drive socket	6205

Service Ratchet Wrench / Fridge Key

Part No	Description	Code
RB01837S	Offset	6145
124-RW	1/4" & 3/16" sq. drive; 9/16" & 1/2" hex.	6144
125-C	1/4" sq. Ratchet; 3/16", 1/4", 5/16" sq. 9/16" hex	6149

Stillson Pipe Wrench

Part No	Description	Code
ST350	350mm	6233
ST450	450mm	6234



Adjustable spanner



NC381T spanner set



torque wrench kit



socket



ratchet wrench set



ST350 Stillson pipe wrench

General Tools

Open Jaw Wrench Sets

Part No	Description	Code
NB141C	1/8" - 3/4" W	6227
NB131R	1/8" - 9/16" W	6228
NB351G	6 - 32mm	6250
NB331T	6 - 19mm	6251
NB108T	BA Midget	6316

Open Jaw Wrench

Part No	Size	Code
2J4350	7/16" x 1/2" AF	6182

Combination Wrench

Part No	Size	Code
RJM1010	10mm	6229
RJM1313	13mm	6230
RJM1717	17mm	6231
RJM1919	19mm	6232

1/4" Square Drive Handles and Parts Converters

Part No	Description	Code
DSAP	1/4" socket to 3/8" plug	6135
DPAS	1/4" plug 3/8" socket	6136
D 70	Sliding offset handle	6139
D 91	Universal joint	6146
D 93	Flexible extension 6"	6148
D 97	Extension 5"	6150

Swivel Handle

Part No	Code
D79	6173

Hex Key Set / Allen Keys

Part No	Description	Code
HKMB9/C	Metric 9 pce	6217
HKB9/C	Imperial 9 pce	6248

Torx Key Wrench

Part No	Code
TK15	6219
TK20	6220
TK25	6221
TK40	6222

Torx Key Set

Part No	Description	Code
TPK6/S	6 piece set	6218



NB331T
open jaw wrench set



D93
flexible extension



D79 swivel handle



TPK6-S Torx Key set

General Tools

Screwdrivers

Part No	Description	Code
Engineers Flared Tip		
SM100/5.5	4"	6327
SM125/6.5	5"	6328
SM150/8	6"	6329
SM200/10	8"	6330

Engineers Pozidriv

SM100PZ1	4" No.1	6331
SM125PZ2	5" No.2	6332

Electricians Parallel Tip

SE50/2.5	2"	6337
SE75/3.5	3"	6338
SE150/5.5	6"	6340
SE175/6.5	7"	6343
SES100/3.5	4" (insulated)	6344

Electricians Phillips Insulated Screwdrivers

SES50PH00	2" No.00	6346
SES75PH0	3" No.0	6348
SES100PH1	4" No.1	6349
SES125PH2	5" No.2	6354
SES150PH3	6" No.3	6355

Insulated Screwdriver Set

SDS8/TC	8 pce set	6185
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Electricians Stubby

SES30/5.5	Parallel	6358
SES30/PH1	Phillips No.1	6359

Self Loading

TLSD1	6311
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Pliers/Cutters

Part No	Description	Code
PE200S	6 1/2" Short Snipe Nose Plier	6236
PE700	Wire Stripper	6237
PM800	9 1/2" Multigrip Plier	6238
PE501	5 1/2" Wire Cutter	6239

Knives

Part No	Description	Code
844.R	Retractable Knife	6429
844.L2	Spare blades for 844.R standard (pk10)	6271

Hacksaws

Part No	Description	Code
HS212	12" Hacksaw	6267
MHS6	6" Mini Hacksaw	6244
HSS	Replacement Blade 300mm (24tpi)	6430
MHS6	6" Mini Replacement Blade (pk 10)	6246



SM150-8
screwdriver



SDS8-TC scrwdriver set



PE 700 wire stripper



HS212 Hacksaw

General Tools



M-2 inspection mirror

Tape Measure

Part No	Description	Code
DELA 891.05	5m Chrome Tape Measure	6272

Inspection Mirror

Part No	Description	Code
M-2	2 1/4" Inspection Mirror	1407
M-2R	Replacement Mirror M-2 (new style)	1410

Electrical

Description	Code
Elec Terminal Strip 5 amp	621026
Elec Terminal Strip 15 amp	621027
Elec Terminal Strip 30 amp	621028
Electrical Kit Box	621029
10m heavy current extension lead	621046
15m cable reel extension lead	621024

Protective

Health and Safety

Description	Code
Safety Helmet - blue	621000
Dust Mask	621001
Goggles	621002
Ear Defenders	621003
Fire Extinguisher	621010
First Aid Kits	621009



safety helmet

Gloves

Description	Code
Latex Gloves, powderfree 100pk L	621043
Latex Gloves, powderfree 100pk M	621042
Latex Gloves, powdered 100pk S	621038
Latex Gloves, powdered 100pk L	621040
Latex Gloves, powdered 100pk M	621039
Work Gloves	621004

High Visibility Vests

Size	Code
Medium	621005
Large	621006
X-Large	621007
XX-Large	621008



first aid kit

Consumables

Tape

Part No	Description	Code
	Black insulation tape, 50mm x 25m	CRP1002
	PVC electric insulation tape, 1/2" x 33m	6891
M7	PVC electric insulation tape, 19mm x 20m	6892
M7	PVC electric insulation tape, 25mm x 20m	6888
M700WH	Pipe Thread Sealing Tape 12mm	6886

Gasketing Material

Part No	Description	Code
MG-1	Magnetic 5/8" (3 metre)	6885
NASB5	20" x 10" x 0.4mm permanite sheet	6982
NASB5	20" x 10" x 0.75mm permanite sheet	6983

Batteries

Description	Code
Zinc Chloride Battery 6v HiTech HD	621036
Alkaline Battery 9v	621035
Alkaline Battery D 4-Pack	621034
Alkaline Battery C 4-Pack	621033
Alkaline Battery AA 4-Pack	621032
Alkaline Battery AAA 4-Pack	621031



9v batteries

Loctite

Part No	Description	Code
44C2705	Loctite 270	621012
44C5775	Loctite 577 pipe sealant 50ml	621044

Part No	Description	Code
CLL-1	Pro-Tite 1 1/3 oz Sealant	1401
CAS-2712	Adhesive Sealant - 271	1433



loctite

Miscellaneous

Description	Code
Super Glue	621011
WD40 400ml	621013
Silicone Sealant	621014
Silicone Gun	621015

Description	Code
Abrasive Cloth 9.1m	1431
Grip-Cut sander strips (4.5m)	1738
Grip-Cut sander strips (10 strips)	1739
CP-2 Epox-A-Leak kit, all purpose	1398
Sealant laco heat seal stick	6911

Hand Cleaners

Big Wipes Industrial (80 per tub)	1499
Fast Orange Hand Cleaner 7.5 fl oz	1497



Grip-Cut sander strip

Imperial Eastman

Portable Hydraulic Tube Bender

Part no	O.D. Tube sizes (inches)	Code
HB-451	1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8	6076

Triple Header Benders

Part no	O.D. Tube sizes (inches)	Code
367-FH	1/8, 3/16, 1/4	6058
368-FH	1/4, 5/16, 3/8	6059

Gear Type Benders

Part no	O.D. Tube sizes (inches)	Code
270-F-06	3/8	6051
270-F-08	1/2	6052
270-F-10	5/8	6053
270-F-12	3/4	6054
270-F-14	7/8	6055
270-F-18	1 1/8	6056

Tube Spares for Gear Type Benders

Part no	Description	Code
62291	Pinion Shaft (3/4, 7/8, 1 1/8)	6061
62292	Lever (3/4, 7/8, 1 1/8)	6062
62255	Cotter Pin (all)	6063
62296	Spring Ring (3/4, 7/8, 1 1/8)	6064
62297	Spring Ring (3/4, 7/8, 1 1/8)	6112
62835	Fulcrum Pin (3/4, 7/8, 1 1/8)	6113
62306	Former Shoe (3/4)	6123
62303	Former Shoe (7/8)	6122
62289	Former Shoe (1 1/8)	6121

Wide Range Bending Kits

Part no	O.D. Tube sizes (inches)	Code
360-FHA	3/8 to 3/4	6057
260-FHA	1/4 to 7/8	6060

Spring Type Benders

Part no	O.D. Tube sizes (inches)	Code
102-F04	1/4	6389
102-F06	3/8	6390
102-F08	1/2	6391
102-F10	5/8	6392
102-F12	3/4	6393



368-FH Bender



spring bender

Imperial Eastman

Tube Cutters

Part no	Cuts OD tube	Code
TC1050	1/8" to 5/8"	6001
227FA	1/8" to 3/4"	6004
TC1000	1/8" to 1 1/8"	6005
TC1020	1/8" to 1 1/8" incl. constrictor	6049
174-F	3/8" to 1 1/8"	6002
206-FB	3/8" to 2 5/8"	6003
312-FC	1/4" to 1 5/8"	6006
406-FA	2" to 4 1/8"	6007

Spares

Part no	Cutting wheels for:	Code
75046	TC1000, 312-FB, TC1020, 274-FC, 374-FC, 174-F	6085
32633	TC1050, 227-FA	6088
74761	206-FB	6089
75015	TC1000, 312-FB, TC1020, 274-FC, 374-FC, 174-F	6090
74833	406-FA	6130

Part no	Screws for:	Code
26883	TC1050, 227-FA	6087
74762	TC1000, 312-FB, TC1020, 174-F, 274-FC	6097
77511	206-FB	6098
74834	406-FA	6131

Part no	Lock Nut for Wheel Screw:	Code
77507	206-FB	6099

Part no	Reamer Blade	Code
79318-01	TC1000, 312-FB, TC1020, 274-FC	6092

Part no	Reamer Screw	Code
82015-01	TC1000, 312-FB, TC1020, 274-FC	6086



TC1050 tube cutter



206-FB tube cutter

Rothenberger

Tube Cutters

Part no	Cuts OD tube	Code
70029	1/4" to 1 5/8"	661010

ROTHENBERGER



Rothenberger tube cutter



ITE

Tube Expanders

Part No	Description	Code
TEC-7	Set (3/8" to 1 3/8") Expanders	6664
TE-6-01	Expander only	6665
H-3/8	Head 3/8"	6666
H-1/2	Head 1/2"	6667
H-5/8	Head 5/8"	6668
H-3/4	Head 3/4"	6669
H-7/8	Head 7/8"	6670
H-1 1/8	Head 1 1/8"	6671
H-1 3/8	Head 1 3/8"	6672
H-1 5/8	Head 1 5/8"	6673



11078M tube expander



expander heads

Rothenberger

Tube Expanders

Part No	Description	Code
11078M	1 3/8" to 4 1/8" (w/o ratchet handle)	6608
2.7181	Ratchet handle for A1	6611
11224X	1/2" to 1 1/8" (3/4" not included)	6609
1.1000P	Arms only	6610

Heads

Size	Code
3/8"	6614
1/2"	6615
5/8"	6616
3/4"	6617
7/8"	6618
1 1/8"	6619
1 3/8"	6620
1 5/8"	6621

Imperial Eastman

Flaring Tools

Part No	Description	Cuts OD Tube	Code
195-FC	45° flaring tool	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"	6011
300-FB	High-duty flaring tool	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"	6013
500-FC	45° rol-air flaring tool	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"	6015
525-F	45° rol-air flaring tool grabber	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8"	6016
375-FS	45° wide range flaring kit	1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4"	6014
195-FB	45° double flaring tool	1/4", 5/16", 3/8", 1/2", 5/8", 3/4"	6010
103-FS	45° large size flaring kit	3/4", 7/8", 1"	6009

R410a Flaring Kit

FTE-800	For high strength flaring	1/8" to 3/4" eccentric cone	6172
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Flaring/Swaging Tools

Part No	Cuts OD Tube	Code
275-FS	1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8", 3/4"	6028
38767	Flaring bar for flaring tool 275-FS	6266

Spares

Swager heads

Part no	Description	Code
278FS/03/04/06	275FS 3/16", 1/4", 3/8"	6132
278FS/08	275FS 1/2"	6133
278FS/10	275FS 5/8"	6137
278FS/12	275FS 3/4"	6138

Flare Cone 45°

Part no	Description	Code
38600	275FS	6140
78858-01	Yoke Assy.	6091

Individual Swaging Punches

Part no	Cuts OD Tube	Code
93-S-03	3/16"	6038
93-S-04	1/4"	6039
93-S-05	5/16"	6040
93-S-06	3/8"	6041
93-S-08	1/2"	6042
93-S-10	5/8"	6043
93-S-12	3/4"	6044
93-S-14	7/8"	6045

Combination Swaging Punch

Part No	Cuts OD Tube	Code
94-S	1/2", 5/8", 7/8"	6046

Flaring and Cutting Tools

Part No	Cuts OD Tube	Code
121F	All purpose tubing kit incl. tube cutter, flaring tool, spring benders and ratchet wrench	6024
120F	1/8" - 3/8" OD*	6022
123FA	3/16" - 5/8" OD*	6023

* Flaring and cutting kits



275-FS
flaring / swaging
tool



105-FF pinch-off



208-F reamer



193-S
punch type
swaging tools



121F flaring and
cutting tool



Optimax JR Kit



Anti-Glo
dye remover



G2G Bubble+
Detection Spray

Kits

UV Leak Detection Kits

Spectrolite Optimax Junior Complete Starter Kit contains:

- Optimax Junior UV LED flash light
- Fluorescence enhancing glasses
- EZ-Ject dye injection kit
- Two cartridges of universal dye
- Storage/carry case
- UV dye cleaner/remover

Optimax Pro Kit contains:

- Cordless Optimax Pro Lamp
- AC Charger
- Fluorescence enhancing glasses
- Dye injection kit
- carry case

Part No	Description	Code
OPK-50EZ/E/FB	Optimax Junior kit	976244
020204	Optimax Pro kit	7407

Dye

UV Fluorescent Dye

BigEZ cartridges

Part No	Description	Code
BEZ-2/ECS	Small to medium systems: 1 cartridge treats up to 23L of lubricant. 1 graduation treats 720ml Ester/Universal	6472
BEZ-4/ECS	Medium to large systems. 1 cartridge treats up to 61 litres of lubricant. 1 graduation treats 1.9L Ester/Universal	6473
EZ-4/ECS	Replacement dye cartridge for optimax junior kit	976246

Bottled dye for very large systems

Part No	Description	Code
AR-GL04/EP	One 480ml bottle treats 242L of ester/univ oil	6458

Traditional Glo-Stick capsules (pack of 6)

Part No	Oil Type	Oil Quantity	Code
GS 101	Mineral	up to 0.4L	6442
GS 1	Mineral	0.4-1.5L	6443
GS 2	Mineral	1.6-3L	6444
GS 3	Mineral	3.1-7.6L	6445
GS 101/E	Ester/univ	up to 0.4L	6446
GS 1/E	Ester/univ	0.4-1.5L	6447
GS 2/E	Ester/univ	1.6-3L	6448
GS 3/E	Ester/univ	3.1-7.6L	6449

Accessories & Spares

Part No	Description	Code
AI01201	Anti-Glo dye remover 250 ml	6462
OPK-500CS	Replacement lamp for optimax for JR kit	976247

Hand Held Leak Detectors

Electronic

Part No	Description	Code
CPS LS3000	CPS Leak Detector w. batteries	6277
CPS LSXS3	Complete sensor assembly for LS3000	6278
LS780B	CPS Leak Seeker	6706
LSXS	Sensing Element L780a/L790 S-131	6696
LSXMK	Maintenance kit L-780a/L-790a	6811
Finder 5	ITE detector with case	600680
705-202-G6	Tek-Mate leak detector	6847
XP-1A	Tif leak detector	600670

Liquids

Part No	Description	Code
800-002	True Blue Leak Detector 1 qt	580010
RTBU0801	Bubble Up leak detector 1L	976222
G2GBubble+	Leak detector 1L	976800

Flame Type

Part No	Description	Code
PLD	33V Propane leak detector	6740UW
PDC	Propane disp cylinder 14oz	6713UW

Manifolds

2 Valve Models

Make	Part No	Description	Code
ITE	2812BPC	R22, 12 & 502 Calibrated in Bar/psi/°C, incl. charging lines	6065
	2812-BC447	R134a, 404A, 507 & 407C calibrated in Bar/°C, incl. charging lines	6074
	1822BPC410	Manifold assy R410A c/w 3 hd lines	6095
Imperial	495CB	R12/22/502 - brass	600100
	520CB	R12/22/502 - aluminium	600101
	560CB	R134a/404A/407C - aluminium	600103
	540CB	R410A - aluminium	600105
Uniweld	QAL3M-5	R22, 12 & 502. Calibrated in psi/°F	6068
Autoclimate	2506-026	Calibrated in psi only, press/temp chart supplied. R22/134A/404A/R407C	6432
Javac	9884707	Manifold assy R410A c/w 3 R410A lines 36" and case	6030

4 Valve Models

Make	Part No	Description	Code
ITE	2814BPC	R22, 12 & 502 calibrated in Bar/psi/°C, incl. charging lines	6066
	2814-BC447	R134a, 404A, 507 & 407C calibrated in Bar/°C, , incl. charging lines	6075
Imperial	620CB	R12/22/502 - aluminium	600102
	660CB	R134a/404A/407C - aluminium	600104
	640CB	R410A - aluminium	600106
Javac	BM4-3-DS	R410A Manifold assy c/w 36" charging lines and case	6020

5 Valve Models

Make	Part No	Description	Code
ITE	2805BPC	R22, 12 & 502 calibrated Bar/psi/°C	6067

Kwik - Charger

Make	Part No	Description	Code
Imperial	740CB	R134a/404A/407C, bar/PSI/°C, up to 8x faster charging	600107

Digital Manifold Set

Refco Digimon digital manifold set	600132
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Spare gauges/accessories

Make	Part No	For manifold	Description	Code
ITE	623BPC	BPC	63mm pressure gauge R22,12 & 502 bar/psi/°C	6078
	425BPC	BPC	63mm compound gauge R22, 12 & 502 Bar/psi/°C	6079
	823BPC	BPC	80mm pressure gauge R22, 12 & 502 Bar/psi/°C	6114
	825BPC	BPC	80mm compound gauge R22,12 & 502 Bar/psi/°C	6115
	823BC447	BC/477	80mm pressure gauge R134a, 404A, 507 & 407C Bar/°C	6769
	825BC447	BC/477	80mm compound gauge R134a, 404A, 507 & 407C Bar/°C	6770
	823-BC/4	BC/4	80mm pressure gauge R134a, 404A, Bar/°C	6169
	825-BC/4	BC/4	80mm compound gauge R134a, 404A, Bar/°C	6170
	MB-EP	All ITE manifolds	External spare parts kit	6158
	MB-1P	All ITE manifolds	Internal spare parts kit	6094
	84617-E	All	Carrying case with padding	6071
Imperial	407CR	495CB	Pressure gauge R134a,404A,407C	600110
	407CB	620CB	Compound gauge R134a,404A,407C	600111
	405CR	520CB	Pressure gauge R12,22,502	600112
	405CB	660CB	Compound gauge R12,22,502	600113
	408CR	560CB	Pressure gauge R410A	600114
	408CB	640CB	Compound gauge R410A	600115
	800MBS	800MBS	6" Ball valve adapter hose set of 3RBY	600122
	64108	64108	Valve retaining ring	6096
	8921626-E	8921626-E	Core depressor brass	6100

R410a Adaptor

ITE	QCS 5/16x1/4	Standard hoses	Adaptor 5/16 x 1/4 for R410A gauge lines	6180
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Charging Hoses

Standard Hoses

Part No	Description	Length	Connection	Colour	Code
E336-FTR	Single standard hose	36"	1/4" SAE flare	Red	6155
E336-FTY	Single standard hose	36"	1/4" SAE flare	Yellow	6081
E336-FTB	Single standard hose	36"	1/4" SAE flare	Blue	6156
E348-FTY	Single standard hose	48"	1/4" SAE flare	Yellow	6082
E372-FTY	Single standard hose	72"	1/4" SAE flare	Yellow	6083

Manifold Hose Sets

E303-FT036	Set of 3 standard hoses	36"	1/4" SAE flare	R/Y/B	6084
3-PAK HA-72RYB	Set of 3 standard hoses	72"	1/4" SAE flare	R/Y/B	6105
803MRS	Set of 3 Imperial charging lines	36"	1/4" x 1/4"	R/Y/B	600116
804MRS	Set of 3 Imperial charging lines	48"	1/4" x 1/4"	R/Y/B	600117
806MRS	Set of 3 Imperial charging lines	72"	1/4" x 1/4"	R/Y/B	600118

Heavy duty hoses

Part No	Description	Length	Connection	Colour	Code
15848	Single hose	48"	1/2" SAE flare	Black	6151
15872	Single hose	72"	1/2" SAE flare	Black	6152
HDS-36-B/V	Single hose with ball valve	36"	1/4" SAE flare	Blue	6190
HDS-36-R/V	Single hose with ball valve	36"	1/4" SAE flare	Red	6191
HDS-36-Y/V	Single hose with ball valve	36"	1/4" SAE flare	Yellow	6192
HDS-72-B/V	Single hose with ball valve	72"	1/4" SAE flare	Blue	6193
HDS-72-R/V	Single hose with ball valve	72"	1/4" SAE flare	Red	6194
HDS-72-Y/V	Single hose with ball valve	72"	1/4" SAE flare	Yellow	6195

R410A Manifold Hose Sets

853MRS	R410A Set 3 Imperial charging lines	36"	1/4" x 5/16"	R/Y/B	600119
854MRS	R410A Set 3 Imperial charging lines	48"	1/4" x 5/16"	R/Y/B	600120
856MRS	R410A Set 3 Imperial charging lines	72"	1/4" x 5/16"	R/Y/B	600121

Vacuum Hoses

Part No	Description	Length	Connection	Colour	Code
E560FTY	Single standard hose	60"	3/8" x 3/8" SAE flare	Yellow	6080
16272	Single standard hose	72"	1/4" x 3/8" SAE flare	Yellow	6106
16296	Single standard hose	96"	1/4" x 3/8" SAE flare	Yellow	6107

Spares

Part No	Description	Fits hose	Code
79583-01	1/4" rubber gasket standard hose	E336/348/372/303	6093
79583-02	3/8" rubber gasket standard hose	E560	6108

Vacuum Gauges

Analogue Gauges

Part No	Description	Connection	Code
100LAA242F	100mm gauge, Absolute Vacuum (0 to 40 Torr) surface mount, bottom entry	1/4" Flare	6834
827-VRP	80mm Vacuum gauge (relative vacuum)	1/8" NPT	6008

Electronic Gauges

Part No	Description	Connection	Code
VG-64	Electronic Vacuum gauge, LED display, (0 to 12000 Microns)	1/4" Flare	6546

Digital Gauges

Part No	Description	Connection	Code
DV-24	LCD display, (50 to 5000 Microns), protective carry case	1/4" Flare	6539
D10244	DV Coupler for direct mount to 1/4" Male Flare	1/4" Flare	1976

Couplers

Quick Couplers

Part No	Description	Code
QC-S4	1/4" female x 1/4" male	1427

Snap-On

Part No	Description	Code
16C	Kwik coupler straight 1/4" female x 1/4" male	1428
17C	Kwik coupler elbow 1/4" female x 1/4" male	1429
4666336	Kwik coupler straight for R410A	1313
4666344	Kwik coupler elbow for R410A	1314
8920073	Gasket 16/17C Coupler	1436
8920077	'O' Ring 16/17C Coupler	1437

Charging Valve

Part No	Description	Code
7701	Vizi-Vapr Charger	6648

Eliminates the problem of slow vapour charging by removing the refrigerant from the cylinder as a liquid and injecting it into the system as a saturated vapour.

Service Couplers for vehicle air conditioning

Part No	Description	Code
RC01-B	Low side coupler	6274
RC01-R	High side coupler	6275
2600-007	Adaptor 14mm x 1/4m fl (UK30428)	6273



Kwik Coupler straight

Standard Gauges

Oil gauges

Part No	Description	Connection	Code
63AAB342	63mm surface mount, bottom entry, Glycerine filled, 0 to 160 psi	1/4" Flare	6832
100AAB342	100mm surface mount, bottom entry, Glycerine filled, 0 to 160 psi	1/4" Flare	6833

Gauges

Part No	Description	Connection	Code
100TAB682F	Pressure gauge, 100mm surface mount, bottom entry, 0 to 360psi, R22, R12, R502	1/4" Flare	6755
100TAE682F	Pressure gauge, 100mm flush mount (clamp fixing) rear entry, 0 to 360psi, R22,R12,R502	1/4" Flare	6751
100TAB682F	Compound gauge, 100mm surface mount, bottom entry, 30"Hg-160psi, R22, R12, R502	1/4" Flare	6756
100TAE682F	Compound gauge, 100mm flush mount (clamp fixing) rear entry, 30"Hg-160psi, R22, R12, R502	1/4" Flare	6752

Glycerine Filled Gauges

Part No	Description	Connection	Code
100TAB642	Pressure gauge, 100mm surface mount, bottom entry, 0 to 360psi, R22, R12, R502	1/4" Flare	6830
100TAB642	Compound gauge, 100mm surface mount, bottom entry, 30"Hg-160psi, R22, R12, R502	1/4" Flare	6831
100TAB642	Compound gauge, 100mm surface mount, bottom entry, -1 to +9 Bar, R22, R12, R502	1/4" Flare	6767
100TAB642	Compound gauge, 100mm surface mount, bottom entry, -1 to +24Bar, R22, R12, R502	1/4" Flare	6766
100TAB642	Compound gauge, 100mm surface mount, bottom entry, -1 to +9 Bar, R134a, R404A	1/4" Flare	6746
100TAB642	Compound gauge, 100mm surface mount, bottom entry, -1 to +25 Bar, R134a, R404A	1/4" Flare	6747

Thermometers

Pocket Thermometers

Type	Make	Description	Code
PT4	Brannon	Mercury - 30°C to 50°C	6764
R4	Brannon	PT4 Refill - 30°C to 50°C	6771
TD2		Dial	6765
IRO/LS3		Infrared w. LED flashlight	6403

Digital Thermometers

Type	Make	Description	Code
DDT2	Supco	Dual Probe + case -40°C to 649°C	6543
SP-120	ITE	3m probe solar/battery	6835
DT-1620	ITE	-50°C to 150°C	6688
TPI373	TPI	Infrared Thermometer 14° to 950°F	600697
TPI342	TPI	Differential Thermometer	600692
TPI376	TPI	Infrared Thermometer contact and non-contact	600696

Hand Held Thermometers

			Code
2000K	TME	-30°C to +50°C	6520
2010K	TME	-200°C to +1372°C	6521
2020K	TME	Diff thermocouple thermometer	6522

Sensors/Probes for Hand Held

Type	Make	Description	Code
KM01 Probe	TME	Mineral insulated	6523
KP05 Probe	TME	Std needle	6524
KPS10 Probe	TME	Pipe clamp	6525
KA03 Probe	TME	Air moving	6526
KB01 Probe	TME	Binder	6527
KS01Probe	TME	Surface	6528
KA01	TME	Thermocouple sensor	6529

Temperature Kits

Type	Make	Description	Code
GP1	TME	General purpose kit no.1 *	6532
GP2	TME	General purpose kit no.2 **	6531
HVC01	TME	Carrying case kit 2	6530
HVK1	TME	Heating & vent kit ***	6533

* includes Universal, Funnel air, Needle, Ribbon surface, Mineral insulated probes, thermometer and case

** includes Funnel air, Needle, Ribbon surface, Mineral insulated probes, 2000K thermometer and case

*** includes Differential thermometer, Universal, Funnel air, Needle, Surface. Binder probes, 2 x K pipe clamps 1.5m cable and case

4" Dial Thermometer

Type	Capillary length	Description	Code
1FC01100KW	1.5m	-40 to 40°C	6823
DT45	4.5m	-40 to 40°C	6824
DT75	7.5m	-40 to 40°C	6825
V9/169		Phial Guard & Grommet	6818

Cabinet/Coldroom

Part No	Type	Range	Code
79/108	Fridge/Freezer	-40 to 40°C	6776
22/365/3	Coldroom	-30° to 45°C	6777
79/109/0	Self adhesive dial	-10° to 50°C	6821



infrared thermometer

Other Test Instruments

Megohmmeter

Part No	Make	Description	Code
M-500	Supco	20-1000 megohms	6542

Air Velocity and Temperature Meter

Part No	Make	Description	Code
AM50	CPS	Anemometer	6680

Capacitor Checker

Part No	Make	Description	Code
MFD 10	Supco	Digital c/w with carrycase •01 to 10,000MFD	6540

Digital Multi-meters

Part No	Make	Description	Code
6875	DMM	Autorange	600686
TPI 133	TPI	2000 count display	600693
TPI 153	TPI	4000 count display	600694

Clamp Meters

Part No	Make	Description	Code
AC-610	CPS	Digital Clamp on Meter	6692
TPI255	TPI	Digital Clamp Meter	600695
TPI255	TPI	Digital Clamp Meter	600699
801-600		Fluke Clamp AC Probe - C23	6686

Commissioning Tools

Controls Pump

Part No	Description	Code
40200	Hydraulic pump for pressure switch commissioning without refrigerant pressure.	6633

Control Monitor and Indicator

Part No	Description	Code
TT240	Tattle Tale Control Monitor	1394

Manual operating magnet for solenoid valves

Part No	Description	Code
Magnet	Solenoid Valve Operating Magnet	6187

Comparator

Description	Code
For R134a, R22, R404A, R410A, R407C, R507 & R717	RTOXA500



JB vacuum pump



Robinair vacuum pump



All pumps are supplied "dry". Please ensure that the pump is charged with the oil supplied before use.

J/B

Part No	Capacity	Stage	Voltage	Code
DV42N-250	1.25 CFM	1	230v/50/60Hz 115v/50/60Hz	610001
DV85N-250	2.5 CFM	2	230v/50/60Hz 115v/50/60Hz	610002
DV142N-250	5 CFM	2	230v/50/60Hz 115v/50/60Hz	610003
DV200N-250	5.8CFM	2	230v/50/60Hz 115v/50/60Hz	610004
DV285N-250	8.3CFM	2	230v/50/60Hz 115v/50/60Hz	610005

Robinair

Part No	Capacity	Stage	Voltage	Code
15401	3 CFM	2	110/230v 50Hz	6547
15601	5 CFM	2	110/230v 50Hz	6549

Dual voltage is achieved by making an internal wiring alteration. Instructions are supplied in the accompanying literature.

Spares/Accessories

Part No	Description	Pump Series	Code
PR45	Pump repair kit	J/B DV series	610020

General Purpose Oil

Part No	Description	Code
CO-1	4 US fl.oz 'Pull-a-Spout'	1432

Vacuum Pump Oil

Part No	Description	Code
T46	4L Edwards No. 19 Hyvac Oil	6418
DVO-24	3.78L J/B Vac Pump Oil	7061

Test Kits

Part No	Description	Code
CAN-4	Acid neutralizer 4oz All Oils	580022
ATK-1	Refrigerant acid test kit, mineral/alkylben.	580027
ATK-1P	Refrigerant acid test kit, polyolester	580028
ETK	Acid Test Kit Polyolester	6743
RTK	Emkarate RL Lubricant TestRetrofit Kit	6867

Reclaim Units

Promax

Capacity: Liquid 80kg/hr, vapour 33kg/hr, push/pull 380kg/hr

Part No	Description	Code
RG5410A	H343 x W229 x L483mm 240V version	9062
RG5410A	110V version	9061

MiniMax

Capacity: Liquid 50kg/hr, vapour 17kg/hr, push/pull 240kg/hr

Part No	Description	Code
Minimax	Oil less recovery machine	9060

EcoBuddy

Capacity: Liquid upto 80kgs/hr, vapour rec. rate: upto 30kgs/hr

Part No	Description	Code
EcoBuddy	240V	9064
EcoBuddy	110V	9069

EcoWarrior

Capacity: Liquid upto 80kgs/hr, vapour rec. rate: upto 30kgs/hr

Part No	Description	Code
EcoWarrior	240V	9070
EcoWarrior	110V	9071

CPS

Portable for commercial recovery, suitable for most refrigerants including R410A.

Type:	CR400ECH	CR600ECH	CR700ECH	CR700JUK
Compressor	1/6hp hermetic	1/2hp hermetic	1hp hermetic	1hp hermetic
Voltage	230V AC 50hz	230V AC 50hz	230V AC 50hz	115V AC 50Hz
Weight	12.6kg	13.1kg	15.3kg	15.3kg
Capacity: vapour	17kg/hr	27kg/hr	37kg/hr	37kg/hr
: liquid	23kg/hr	68kg/hr	230kg/hr	230kg/hr
: push/pull	190kg/hr	272kg/hr	460kg/hr	460kg/hr
Code	9065	9066	9067	9068

Scales

ITE - Electronic Charging Meter

Part No	Description	Capacity	Code
WS-055	Compute Charging/Recovery scale	Up to 55kg	7405
WS-120	High Capacity Compute charging scale	Up to 120kg	6796

CPS - Electronic Charging System

Part No	Description	Capacity	Code
CC220	Compact Refrigerant Scale	Up to 100kg	6308
CC800A	Programmable Charging Scale	Up to 100kg	6309



Promax reclaim unit



MiniMax reclaim unit

Features

- > Large temperature range from -60° to + 50° C and are applicable to freezing, refrigeration and air conditioning plant
- > Interchangeable orifice assembly for ease of stocking
- > Large capacity range. Rated capacities from 0.5kw to 1890kw for R22
- > Can be supplied with MOP charge to protect the compressor motor against excessive evaporating pressure

T2 Thermostatic Expansion Valves

Expansion valve with eight interchangeable orifices. The valve is manufactured in two configurations:-

- with flare inlet and outlet connections
- with flare inlet and solder outlet connections

The latter design is generally used with a flare/solder adaptor on the inlet. In this case an orifice specifically designed for the flare/solder adaptor is required

T 2/TE 2 Thermostatic expansion valve body

Flare Connections

T2/TE2 Valve Bodies are supplied without orifice and flare nuts

R22

Type	Connection	Cap. tube length	Range		Code
TX2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z320600
TX2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	-	068Z320700
TX2	3/8" x 1/2" flare	1.5m	NM -40 to -5°C	MOP	068Z322400
TX2	3/8" x 1/2" flare	1.5m	NL -40 to -15°C	MOP	068Z322600
TX2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	MOP	068Z322800
TEX2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z320900
TEX2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	-	068Z321000
TEX2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	MOP	068Z321100
TEX2	3/8" x 1/2" flare	1.5m	NM -40 to -5°C	MOP	068Z322500
TEX2	3/8" x 1/2" flare	1.5m	NL -40 to -15°C	MOP	068Z322700
TEX2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	MOP	068Z322900

R134a

Type	Connection	Cap. tube length	Range		Code
TN2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z334600
TN2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	MOP	068Z334700
TN2	3/8" x 1/2" flare	1.5m	NL -40 to -15°C	-	068Z336900
TEN2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z334800
TEN2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	MOP	068Z334900
TEN2	3/8" x 1/2" flare	1.5m	NL -40 to -15°C	MOP	068Z337000
TEN2	3/8" x 1/2" flare	1.5m	NM -40 to -5°C	MOP	068Z339200

R404A

Type	Connection	Cap. tube length	Range		Code
TS2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z340000
TS2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	-	068Z340100
TS2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	MOP	068Z340200
TS2	3/8" x 1/2" flare	1.5m	NM -40 to -5°C	MOP	068Z340600
TS2	3/8" x 1/2" flare	1.5m	NL -40 to -15°C	MOP	068Z340800
TS2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	MOP	068Z341000
TES2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z340300
TES2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	-	068Z340400
TES2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	MOP	068Z340500
TES2	3/8" x 1/2" flare	1.5m	NM -40 to -5°C	MOP	068Z340700
TES2	3/8" x 1/2" flare	1.5m	NL -40 to -15°C	MOP	068Z340900
TES2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	MOP	068Z341100

R407C

Type	Connection	Cap. tube length	Range		Code
TZ2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z349600
TEZ2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z350100

R12

Type	Connection	Cap. tube length	Range		Code
TF2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z320200
TEF2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z320400

R502

Type	Connection	Cap. tube length	Range		Code
TY2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z321200
TEY2	3/8" x 1/2" flare	1.5m	N -40 to +10°C	-	068Z321500
TEY2	3/8" x 1/2" flare	1.5m	NM -40 to -5°C	MOP	068Z323100
TEY2	3/8" x 1/2" flare	1.5m	NL -40 to -15°C	MOP	068Z323300
TEY2	3/8" x 1/2" flare	1.5m	B -60 to -25°C	MOP	068Z323500

T 2/TE 2 Orifice assembly with filter for flare valves

The rated capacity is based on:

Evaporating temperature t_e +5°C for range N and t_e = -30°C for range B

Condensing temperature t_c = +32°C

Refrigerant temperature ahead of valve t_l = +28°C

Range N: -40 to +10°C

Orifice no.	R22	R134a	R404A	R12	R502	R22	R134a	R404A	R12	R502	Code
0X	0.15	0.11	0.11			0.5	0.4	0.38			068-200200
00	0.3	0.25	0.21	0.2	0.2	1	0.9	0.7	0.7	0.7	068-200300
01	0.7	0.5	0.45	0.3	0.3	2.5	1.8	1.6	1	1	068-201000
02	1	0.8	0.6	0.5	0.5	3.5	2.6	2.1	1.7	2.1	068-201500
03	1.5	1.3	1.2	1	1	5.2	4.6	4.2	3.5	3.5	068-200600
04	2.3	1.9	1.7	1.5	1.5	8	6.7	6	5.2	5.2	068-200700
05	3	2.5	2.2	2	2	10.5	8.6	7.7	7	7	068-200800
06	4.5	3	2.6	3	3	15.5	10.5	9.1	10.5	10.5	068-200900

Range B: -60 to -25°C

Orifice no.	R22	R404A	R502	R22	R404A	R502	Code
0X	0.15	0.11		0.5	0.38		068-200200
00	0.2	0.21	0.2	0.7	0.7	0.7	068-200300
01	0.3	0.45	0.3	1	1.6	1	068-201000
02	0.6	0.6	0.5	2.1	2.1	1.7	068-201500
03	0.8	1	0.8	2.8	3.5	2.8	068-200600
04	1.2	1.4	1.2	4.2	4.9	4.2	068-200700
05	1.5	1.7	1.5	5.2	6	5.2	068-200800
06	2	1.9	2	7	6.6	7	068-200900

A complete valve is assembled from:- valve body + orifice + flare nuts

Thermostatic Expansion Valves - Components (Parts Program)
TE 5,12,20 and 55 Thermostatic element

Example:
A thermostatic expansion valve type TE consists of three parts:
1 thermostatic element
1 orifice assembly
1 valve body

R22				
Type	Cap. tube length	Range		Code
TEX 5	3m	N -40 to +10°C	-	067B325000
TEX 5	3m	N -40 to +10°C	MOP	067B326700
TEX 5	3m	NM -40 to -5°C	MOP	067B324900
TEX 5	3m	NL -40 to -15°C	MOP	067B325300
TEX 5	3m	B -60 to -25°C	-	067B326300
TEX 5	3m	B -60 to -25°C	MOP	067B325100
TEX12	3m	N -40 to +10°C	-	067B321000
TEX12	3m	N -40 to +10°C	MOP	067B322700
TEX12	3m	NM -40 to -5°C	MOP	067B320700
TEX12	3m	NL -40 to -15°C	MOP	067B321300
TEX12	3m	B -60 to -25°C	MOP	067B321100
TEX12	5m	N -40 to +10°C	-	067B320900
TEX12	5m	B -60 to -25°C	MOP	067B321200
TEX20	3m	N -40 to +10°C	-	067B327400
TEX20	3m	N -40 to +10°C	MOP	067B328600
TEX20	3m	NM -40 to -5°C	MOP	067B327300
TEX20	3m	NL -40 to -15°C	MOP	067B327500
TEX20	3m	B -60 to -25°C	MOP	067B327600
TEX20	5m	N -40 to +10°C	-	067B329000
TEX20	5m	B -60 to -25°C	MOP	067B328700
TEX55	3m	N -40 to +10°C	-	067G320500
TEX55	3m	N -40 to +10°C	MOP	067G322000
TEX55	3m	B -60 to -25°C	MOP	067G320700
TEX55	5m	N -40 to +10°C	-	067G320900
TEX55	5m	B -60 to -25°C	MOP	067G321700

R134a				
Type	Cap. tube length	Range		Code
TEN5	3m	N -40 to +10°C	-	067B329700
TEN5	3m	N -40 to +10°C	MOP	067B329800
TEN12	3m	N -40 to +10°C	-	067B323200
TEN12	3m	N -40 to +10°C	MOP	067B323300
TEN20	3m	N -40 to +10°C	-	067B329200
TEN20	3m	N -40 to +10°C	MOP	067B329300
TEN55	3m	N -40 to +10°C	-	067G322200

R404A				
Type	Cap. tube length	Range		Code
TES5	3m	N -40 to +10°C	-	067B334200
TES5	3m	B -60 to -25°C	MOP	067B334300
TES5	3m	NM -40 to -5°C	MOP	067B335700
TES5	3m	NL -40 to -15°C	MOP	067B335800
TES12	3m	N -40 to +10°C	-	067B334700
TES12	3m	B -60 to -25°C	MOP	067B334900
TES12	5m	N -40 to +10°C	-	067B334600
TES20	3m	N -40 to +10°C	-	067B335200
TES20	3m	NL -40 to -15°C	MOP	067B335300
TES20	5m	N -40 to +10°C	-	067B335600
TES20	5m	B -55 to -25°C	MOP	067B335500
TES55	3m	N -40 to +10°C	-	067G330200

R407C				
Type	Cap. tube length	Range		Code
TEZ5	3m	N -40 to +10°C	-	067B327800
TEZ12	3m	N -40 to +10°C	-	067B336600
TEZ20	3m	N -40 to +10°C	-	067B337100
TEZ55	5m	N -40 to +10°C	-	067G324000

TE 5,12,20 and 55 Orifice assembly

Type	Orifice no.	Nominal Capacity in TR			Code
		R134a	R404A	R22	
TE 5	01	3.7	3.7	3	067B208900
TE 5	02	5.4	5	4.5	067B209000
TE 5	03	8.3	7.2	7.5	067B209100
TE 5	04	11.2	10.3	12	067B209200
TE 12	01	4.7	4.2	4.5	067B200500
TE 12	02	7.7	6.8	7.5	067B200600
TE 12	03	11.4	10	12	067B200700
TE 12	04	15	13.4	18	067B200800
TEX 20	01	-	-	30	067B217200
TEF 20	01	18	-	-	067B217000
TES/TEY 20	01	-	16.7	-	067B217500
TEX 55	01	-	-	50	067G200500
TEX 55	02	-	-	85	067G200600
TEF 55	01	41	-	-	067G200100
TEF 55	02	62	-	-	067G200200
TES/TEY 55	01	-	37	-	067G201100
TES/TEY 55	02	-	56	-	067G201200

TE 5,12,20 and 55 Valve body

Type	Connection	Orifice no.	Code
TE 5	1/2" x 5/8" Flare angleway	01 - 03	067B401300
TE 5	1/2" x 5/8" Solder angleway	01 - 03	067B400900
TE 5	1/2" x 5/8" Solder straightway	01 - 03	067B400700
TE 5	1/2" x 7/8" Solder angleway	03	067B401000
TE 5	1/2" x 7/8" Solder straightway	03	067B400800
TE 5	5/8" x 7/8" Solder angleway	04	067B401100
TE 12	5/8" x 7/8" Solder angleway	01 - 02	067B402200
TE 12	5/8" x 7/8" Solder straightway	01 - 02	067B402000
TEX 20	5/8" x 7/8" Solder flanges	01 - 02	067B402500
TEF 20	7/8" x 1" Solder flanges	03 - 04	067B402600
TES/TEY 20	7/8" x 1 1/8" Solder angleway	03 - 04	067B402300
TEX 55	7/8" x 1 1/8" Solder straightway	03 - 04	067B402100
TEX 55	7/8" x 1 1/8" Solder angleway	01	067B402300
TEF 55	7/8" x 1 1/8" Solder straightway	01	067B402100
TEF 55	28mm x 35mm Solder angleway	01 - 02	067G400200
TES/TEY 55	1 1/8" x 1 3/8" Solder straightway	01 - 02	067G400300
TES/TEY 55	1 1/8" x 1 3/8" Solder angleway	01 - 02	067G400400

PHT* Valve bodies

incl. flange gaskets, flange bolts and screws for the pilot valves

Type	Code
PHT85-1	026H116000
PHT85-2	026H116100
PHT85-3	026H116200
PHT85-4	026H116300
PHT125	026H116400
PHT300-1	026H016500
PHT300-2	026H016600

* With standard spring for R22.

EVR 2 - 40 Valve bodies (normally closed)

Mix - Match programme valve bodies and coils are stocked separately. Any

EVR/EVRA valve body can be combined with any 18F - coil.

Both a.c. and d.c. service unless stated otherwise

Type	Connection	Code
EVR 2	1/4" flare	032F805600
EVR 2	1/4" solder	032F120100
EVR 3	1/4" flare	032F810700
EVR 3	1/4" solder	032F120600
EVR 3	3/8" flare	032F811600
EVR 3	3/8" solder	032F120400
EVR 6	3/8" flare	032F807200
EVR 6	1/2" flare	032F807900
EVR 6	1/2" solder	032F120900
EVR 6	3/8" solder	032F121200
EVR 10	1/2" flare	032F809500
EVR 10	5/8" flare	032F809800
EVR 10	5/8" solder	032F121400
EVR 10	1/2" solder	032F121700
EVR 15	5/8" flare	032F810100
EVR 15	5/8" flare with manual operation	032F810000
EVR 15	7/8" solder	032F122500
EVR 15	5/8" solder	032F122800
EVR 15	5/8" solder manual operation	032F122700
EVR 15	Without flanges with gaskets and bolts. Flange group 11	032F122400
EVR 15	Without flanges with gaskets, bolts and manual operation. Flange group 11	032F123400
EVR 20*	7/8" solder manual operation	032F125400
EVR 20*	Without flanges with gaskets and bolts. Flange group 12	032F124300
EVR 20*	Without flanges with gaskets bolts and manual operation. Flange group 12	032F125300
EVR 20*	7/8" solder	032F124000
EVR 20*	1 1/8" solder	032F124400
EVR 22*	1 3/8" solder	032F326700
EVR 20**	7/8" solder	032F126400
EVR 20**	7/8" solder manual operation	032F127400
EVR 20**	Without flanges with gaskets and bolts. Flange group 12	032F126300
EVR 20**	Without flanges with gaskets, bolts and manual operation. Flange group 12	032F127300
EVR 25	1 1/8" solder, w. manual opening, excl. coil	032F220000
EVR 25	1 3/8" solder, w. manual opening, excl. coil	032F220700
EVR 25	1 1/8" solder w/o manual opening excl. coil	032F220100
EVR 25	1 3/8" solder w/o manual opening excl. coil	032F220800
EVR 32	1 3/8" solder, manual opening, excl. coil	042H110500
EVR 32	1 5/8" solder, manual opening, excl. coil	042H110300
EVR 32	1 3/8" solder w/o manual opening excl. coil	042H110600
EVR 32	1 5/8" solder w/o manual opening excl. coil	042H110400
EVR 40	1 5/8" solder w manual opening excl. coil	042H110900
EVR 40	2 1/8" solder, w. manual opening, excl. coil	042H111100
EVR 40	1 5/8" solder w/o manual opening excl. coil	042H111000
EVR 40	2 1/8" solder w/o manual opening excl. coil	042H111200

* ac service only

** dc service only

Flare nuts see page 90. Flanges see page 39

Note: EVR normally closed solenoid valves are used with 10W coils

Typically: 240V 50Hz 018F670200, 110V 50Hz 018F680200

EVR 6 - 22 Valve bodies (normally open)

Type	Connection	Code
EVR 6 NO	3/8" flare	032F808500
EVR 6 NO	3/8" solder	032F129000
EVR 10 NO	1/2" flare	032F809000
EVR 10 NO	1/2" solder	032F129100
EVR 15 NO	5/8" solder	032F129900
EVR 15 NO	7/8" solder	032F327000
EVR 20 NO	7/8" solder	032F126000
EVR 20 NO	1 1/8" solder	032F126900
EVR 22 NO	1 3/8" solder	032F326800

Note: EVR normally open solenoid valves are used with 12w coils

Typically:- 240V 50Hz 018Z680200, 110V 50Hz 018Z681100

EVRC 10 - 20 Valve bodies (normally closed)

Solenoid valves allowing reverse flow

Type	Connection	Code
EVRC 10 NC	1/2" solder	032F121600
EVRC 15 NC	5/8" solder	032F125500
EVRC 20 NC	7/8" solder	032F125800

EVR 15 - 20 Flange sets

Flange set consisting of an inlet and an outlet flange

Type	Connection	Code
Group. 11	5/8" solder flanges	027L111700
Group. 11	7/8" solder flanges	027L112300
Group. 11	3/8" weld flanges	027N111200
Group. 11	1/2" weld flanges	027N111500
Group. 11	3/4" weld flanges	027N112000
Group. 12	7/8" solder flanges	027L122300
Group. 12	1 1/8" solder flanges	027L122900
Group. 12	3/4" weld flanges	027N122000
Group. 12	1" weld flanges	027N122500

Fridgegenius

Manual operating magnet for solenoid valves

Description	Code
Solenoid Valve Operating Magnet	6187

Please refer to the Industrial Refrigeration control section for further solenoid valves.



EVR Valves

EV 210B / EV 220B / EV 250b Valve bodies

Key

NC: Normally closed

NO: Normally open

W: Water (EPDM seal)

L: Air (FKM seal)

O: Oil (FKM seal)

Type	Connection	Code
EV 210B NC	0-30 BAR, 1/4" BSP int O,L,W	032U570800
EV 210B NO	0-30 BAR, 1/8" BSP int O,L,W	032U363100
EV 210B NO	0-10 BAR, 1/4" O,L,W	032U122900

EV210B 3.0B NC	0-30 BAR, 1/4" BSP int O,L,W	032U571000
EV210B 3.0B NO	0-5 BAR, 1/8" BSP int O,L,W	032U363900
EV220B 40B NO	0.3-10 BAR, 1 1/2" BSP int O,L,W	032U714300

EV220B 6B NC	0.1-20 BAR, 1/4" BSP W	032U123600
EV220B 6B NC	0.1-20 BAR, 3/8" BSP int W	032U124100
EV220B 10B NC	1-20 BAR, 3/8" BSP int W	032U124600
EV220B 12B NC	0.3-10 BAR, 1/2" W	032U125600
EV220B 15B NC	0.3-16 BAR, 1/2" BSP int W	032U711500
EV220B 18B NC	0.3-10 BAR, 3/4" O,L,W	032U126000
EV220B 20B NC	0.3-10 BAR, 3/4" W	032U712000
EV220B 25B NC	0.3-16 BAR, 1" BSP int W	032U712500
EV220B 25B NC	0.3-10 BAR, 1" BSP int O,L,W	032U712600
EV220B 32B NC	0.3-16 BAR, 1 1/4" BSP int W	032U713200
EV220B 32B NO	0.3-16 BAR, 1 1/4" W	032U713400
EV220B 40B NC	0.3-16 BAR, 1 1/2" BSP int W	032U714000
EV220B 40B NC	0.3-10 BAR, 1 1/2" BSP int O,L,W	032U714100
EV220B 50G NC	0.3-16 BAR, 2" BSP int W	032U715000
EV220B 50G NC	0.3-10 BAR, 2" BSP int O,L,W	032U715100
EV220B 65CI NC	0.25-10 BAR, 2 1/2" flange W	016D606500
EV220B 80CI NC	0.25-10 BAR, 3" flange W	016D608000
EV220B 100CI NC	0.25-10 BAR, 4" flange W	016D610000

EV250B 12BD NC	0-10 BAR, 1/2"	032U525200
EV250B 12BD NC	0-10 BAR, 1/2"	032U525300
EV250B 18BD NC	0-10 BAR, 3/4"	032U525400
EV250B 18BD NC	0-10 BAR, 3/4"	032U525500
EV250B 22BD NC	0-10 BAR, 1"	032U525600
EV250B 22BD NC	0-10 BAR, 1"	032U525700

Repair kits and accessories

Type	Description	Code
EV220B 6B	spares kit O,L,W	032U106300
EV220B 10B	spares kit W	032U106500
EV220B 12B	spares kit O,L,W	032U106700
EV220B 15	spares kit W	032U107100
EV220B 18B	spares kit W	032U107000
EV220B 25	spares kit W	032U107500
EV220B 40	spares kit O,L,W	032U108000
EV210B 1.5-3B	mounting kit	032U104000
EVSI 15-50 NO	armature assy W	032U029600
EVSI 15-50 NO	armature assy	032U029500

When ordering please state voltage and frequency

Coils for EV, EVR, EVRA, EVRAT, EVM and PML

Key:

O = Oil L = Air

W = Water B = Brine

D = Steam

Standard ac coils for EVR, EVRA, EVM (NC) and EV

(10 Watt, Holding 21 VA in rush 44 VA)

Type	Description	Code
With 1m cable	220 V 50 Hz	018F625100
	230/250 V 50 Hz	018F625200
	380 V 50 Hz	018F625300
	12 V 60 Hz	018F625600
	24 V 50 Hz	018F625700
	48 V 50 Hz	018F625900
	115 V 60 Hz	018F626000
	110/120 V 50 Hz	018F626100
	220 V 60 Hz	018F626400
	220 V 50/60 Hz	018F628200
With terminal box	220 V 50 Hz	018F670100
	230/250 V 50 Hz	018F670200
	380 V 50 Hz	018F670300
	420 V 50 Hz	018F670400
	12 V 50 Hz	018F670600
	24 V 50 Hz	018F670700
	42 V 50 Hz	018F670800
	48 V 50 Hz	018F670900
	100 V 50 Hz/110/120 V 60 Hz	018F671000
	110/120 V 50 Hz	018F671100
With DIN connectors and protective cap (excl. DIN plug)	200 V 50 Hz/230/250 V 60 Hz	018F671300
	220 V 60 Hz	018F671400
	24 V 60 Hz	018F671500
	110 V 50/60 Hz	018F673000
	220 V 50/60 Hz	018F673200
	220 V 50 Hz	018F617600
	230/250 V 50 Hz	018F617700
	380 V 50 Hz	018F617800
	420 V 50 Hz	018F617900
	24 V 50 Hz	018F618200
	48 V 50 Hz	018F618400
	115 V 60 Hz	018F618500
	110/120 V 50 Hz	018F618600
	240 V 60 Hz	018F618800
	220 V 60 Hz	018F618900
	110 V 50/60 Hz	018F619200
	220 V 50/60 Hz	018F619300

DIN Socket

Description	Code
DIN Socket	042N015600

Standard d.c. coils for EVR, EVRA 3- 25 EVM (NC/NO) and EV (20 watt)

Type	Description	Code
With terminal box	220 V	018F685100
	12 V	018F685600
	24 V	018F685700
	48 V	018F685900
	110 V	018F686000
	115 V	018F686100

Standard d.c. coils for EVR 20 and EVRA 20

Type	Description	Code
With terminal box	220 V	018F688100
	12 V	018F688600
	24 V	018F688700
	110 V	018F689000



Standard a.c. coils for EVRAT and EVM (NO)

(12 watt. terminal box, 26 VA, in rush 55 VA)

Description	Code
220 V 50 Hz	018F680100
240 V 50 Hz	018F680200
380 V 50 Hz	018F680300
24 V 50 Hz	018F680700
110 V 50 Hz	018F681100
110 V 60 Hz	018F681300
220 V 60 Hz	018F681400
24 V 60 Hz	018F681500

Valvex

Explosion proof coils

Suitable for EVR, EVRA, EV and EVM

Voltage	Code
240/50/1	1590
110/50/1	1591
24v AC/DC	1587

General Filter

Copper, spun molecular sieve for R22

Model	Charge	Code
1/4" single	10g	1457
1/4" single	15g	1458
1/4" single	20g	1459

For R22

Model	OD Tube	Nom. capacity (TR)	Code
DX3	1/4"	1/3	1450
DX4	Cap to 3/8"	3/4	1451

For R134a and R404a

Model	Charge	Code
1/4 x 1/4	10g	1478
1/4 x cap (0.090)	15g	1479
1/4 x 1/4	30g	TBC



Mueller

Liquid line drier

OD	Type	Code
7/8"	SD417	1735

2 Way Heat Pump Driers

OD	Type	Code
3/8" flange	V2A-083	1750
1/2" flange	V2A-084	1752

Suction Line - (Burn Out)

Model	OD tube	Part	Code
FDS-5211T	1 3/8"	A-17232	1730
FDS-5213T	1 5/8"	A-17233	1731

Danfoss

DML filter driers

Danfoss recommendation

New installations: use DML drier.

Service work: Compressor change use DML drier

Other service work: Use DCL drier

DML Drier Core
100% molecular sieve

Moisture removal

DCL Drier Core
80% molecular sieve
20% activated alumina
Moisture & acid removal

Type	Connection	Code
DML 032	1/4" flare	023Z503500
DML 033	3/8" flare	023Z503600
DML 052	1/4" flare	023Z503700
DML 053	3/8" flare	023Z503800
DML 082	1/4" flare	023Z503900
DML 083	3/8" flare	023Z504000
DML 084	1/2" flare	023Z504100
DML 162	1/4" flare	023Z504200
DML 163	3/8" flare	023Z504300
DML 164	1/2" flare	023Z504400
DML 165	5/8" flare	023Z504500
DML 166	3/4" flare	023Z504600
DML 303	3/8" flare	023Z004900
DML 304	1/2" flare	023Z005000
DML 305	5/8" flare	023Z005100
DML 306	3/4" flare	023Z019300
DML 414	1/2" flare	023Z010900
DML 415	5/8" flare	023Z011000

Type	Connection	Code
DML032S	1/4" solder	023Z455200
DML052S	1/4" solder	023Z455900
DML053S	3/8" solder	023Z456200
DML082S	1/4" solder	023Z456700
DML083S	3/8" solder	023Z457000
DML084S	1/2" solder	023Z457200
DML162S	1/4" solder	023Z457500
DML163S	3/8" solder	023Z457800
DML164S	1/2" solder	023Z458000
DML165S	5/8" solder	023Z458100
DML166S	3/4" solder	023Z458200
DML303S	3/8" solder	023Z458500
DML304S	1/2" solder	023Z458700
DML305S	5/8" solder	023Z458800
DML307S	7/8" solder	023Z459000
DML415S	5/8" solder	023Z459500
DML417S	7/8" solder	023Z459600
DML757S	7/8" solder	023Z460500
DML759S	1 1/8" solder	023Z460700

DCL Solid core filter driers

Type	Connection	Volume	Code
DCL 032	1/4" flare	41cm3	023Z500000
DCL 033	3/8" flare	41cm3	023Z500100
DCL 052	1/4" flare	65cm3	023Z500200
DCL 053	3/8" flare	65cm3	023Z500300
DCL 082	1/4" flare	100cm3	023Z500400
DCL 083	3/8" flare	100cm3	023Z500500
DCL 084	1/2" flare	100cm3	023Z500600
DCL 162	1/4" flare	225cm3	023Z500700
DCL 163	3/8" flare	225cm3	023Z500800
DCL 164	1/2" flare	225cm3	023Z500900
DCL 165	5/8" flare	225cm3	023Z501000
DCL 166	3/4" flare	225cm3	023Z501100
DCL 303	3/8" flare	480cm3	023Z001200
DCL 304	1/2" flare	480cm3	023Z001300
DCL 305	5/8" flare	480cm3	023Z001400
DCL 306	3/4" flare	480cm3	023Z015600

Type	Connection	Volume	Code
DCL 032 S	1/4" solder	41cm3	023Z450100
DCL 033 S	3/8" solder	41cm3	023Z450400
DCL 052 S	1/4" solder	65cm3	023Z450600
DCL 053 S	3/8" solder	65cm3	023Z450900
DCL 082 S	1/4" solder	100cm3	023Z451100
DCL 083 S	10 mm solder	100cm3	023Z451300
DCL 083 S	3/8" solder	100cm3	023Z451400
DCL 084 S	1/2" solder	100cm3	023Z451600
DCL 162 S	1/4" solder	225cm3	023Z451800
DCL 163 S	3/8" solder	225cm3	023Z452100
DCL 164 S	1/2" solder	225cm3	023Z452300
DCL 165 S	5/8" solder	225cm3	023Z452400
DCL 166 S	3/4" solder	225cm4	023Z452500
DCL 303 S	3/8" solder	480cm3	023Z452800
DCL 304 S	1/2" solder	480cm3	023Z453000
DCL 305 S	5/8" solder	480cm4	023Z453100
DCL 306 S	3/4" solder	480cm5	023Z453300
DCL 307 S	7/8" solder	480cm3	023Z453400

DCB Biflow filter driers

Type	Connection	Code
DCB 162	1/4" flare	023Z140600
DCB 163	3/8" flare	023Z140500
DCB 164	1/2" flare	023Z140400
DCB 165	5/8" flare	023Z140300
DCB 303	3/8" flare	023Z140900
DCB 304	1/2" flare	023Z140800
DCB 305	5/8" flare	023Z140700

DCB 082S	1/4" solder	023Z146400
DCB 163S	3/8" solder	023Z146700
DCB 164S	1/2" solder	023Z146600
DCB 165S	5/8" solder	023Z146500
DCB 304S	1/2" solder	023Z147000
DCB 305S	5/8" solder	023Z146900

DB driers are for use in liquid lines on reversible A/C units, heat pumps and refrigeration systems. Fitted with built in check valve to ensure dirt particles are returned in drier irrespective of flow direction.

DCR Filter drier shell with interchangeable solid core (cont'd)

Type	Connection (copper)	No. of cores	Code
DCR 0485s	5/8" solder	1	023U725000
DCR 0487s	7/8" solder	1	023U725100
DCR 0489s	1 1/8" solder	1	023U725300
DCR 4811s	1 3/8" solder	1	023U725400
DCR 4813s	1 5/8" solder	1	023U725500
DCR 4817s	2 1/8" solder	1	023U725700
DCR 4821s	2 5/8" solder	1	023U727600
DCR 0967s	7/8" solder	2	023U725800
DCR 0969s	1 1/8" solder	2	023U726000
DCR 9611s	1 3/8" solder	2	023U726100
DCR 9613s	1 5/8" solder	2	023U726200
DCR 9617s	2 1/8" solder	2	023U726400
DCR 14411s	1 3/8" solder	3	023U726700
DCR 14417s	2 1/8" solder	3	023U727000
DCR 19213s	1 5/8" solder	4	023U727200
DCR 19217s	2 1/8" solder	4	023U727400

DCR Filter drier cores

DCR Shells with weld connections can be used for ammonia, but the end cover gasket and core gasket must be changed. Use DU/DM cores and ammonia end cover gasket 023U0058 and ammonia core gasket 023U2024.

Type	Description	Code
48-DN/DC	Solid core consisting of 3A molecular sieves and activated aluminium oxide for acid removal.	023U438100
	Solid core with 100% 3A molecular sieves	023U139100
48-DA (burnout)	Solid core with high acid adsorption and standard water absorption	023U538100
48-F Strainer	For use in suction or liquid lines, retains dirt particles larger than 15um. All fluorinated refrigerants.	023U192100

Accessories

Description	Code
Standard end cover gasket	023U005500
Standard core gasket	023U201800
Ammonia end cover gasket	023U005800
Ammonia core gasket	023U202400

FSA Flare solder adaptor

Type	Connection	Code
FSA22	1/4" filter adaptor	023U800266
FSA33	3/8" filter adaptor	023U800466
FSA44	1/2" filter adaptor	023U800666
FSA51	5/8" filter adaptor	023U800766
FSA66	3/4" filter adaptor	023U801066



DCR drier

SGN for HFC refrigerants

Type	Connection	Code
male x male SGN 6	1/4" x 1/4" flare	014-016100
SGN 10	3/8" x 3/8" flare	014-016200
SGN 12	1/2" x 1/2" flare	014-016300
SGN 16	5/8" x 5/8" flare	014-016500
male x female SGN 6	1/4" flare	014-017100
SGN 10	3/8" flare	014-017200
SGN 12	1/2" flare	014-017300
SGN 16	5/8" flare	014-017400
SGN 19	3/4" x 3/4" int.ext flare	014-017500

Type	Connection	Code
SGN 6S	1/4" x 1/4" solder	014-018100
SGN 6S	6 x 6mm solder	014-019100
SGN 10S	3/8" x 3/8" solder	014-018200
SGN 10S	10 x 10mm solder	014-019200
SGN 12S	1/2" x 1/2" solder	014-018300
SGN 16S	5/8" x 5/8" solder	014-018400
SGN 19S	3/4" x 3/4" ODF x ODF solder	014-018500
SGN 22S	7/8" x 7/8" solder	014-018600

SGI for CFC and HCFC refrigerants

Type	Connection	Code
male x male SGI 6	1/4" x 1/4" flare	014-000700
SGI 10	3/8" x 3/8" flare	014-000800
SGI 12	1/2" x 1/2" flare	014-000900
SGI 19	3/4" x 3/4" flare	014-002800
male x female SGI 6	1/4" flare	014-002100
SGI 10	3/8" flare	014-002200
SG 12	1/2" flare	014-002500
SG 15	5/8" flare	014-002600

Type	Connection	Code
SGI 6S	1/4" x 1/4" solder	014-003400
SGI 10S	3/8" x 3/8" solder	014-003500
SGI 12S	1/2" x 1/2" solder	014-003600
SGI 16S	16 x 16 mm/5/8 x 5/8 solder	014-004400
SGI 19S	3/4" x 3/4" solder	014-004700
SGI 22S	7/8" x 7/8" solder	014-003900
SGI 22S	7/8" x 7/8" solder	014-013000
SGI 12S	1/2" ODF	014-008600
SGI 16S	5/8" ODF	014-008700

SGR for CFC and HCFC refrigerants

Type	Connection	Code
SGR	1/2" NPT	014-000200
SGR	3/4" BSP	014-000400
SGR	3/4" NPT	014-000500

SG sight glass without moisture indicator

Type	Connection	Code
SG12S	1/2" solder	014-008600
SG16S	5/8" solder	014-008700

Danfoss

BML, BMSL Shut-off valves flare without flare nuts

Type	Connection	Code
BML 6	1/4" flare straightway	009G010100
BML 10	3/8" flare straightway	009G012700
BML 12	1/2" flare straightway	009G014100
BML 15	5/8" flare straightway	009G016800
BMT 6	1/4" flare three-way	009G010500

BML, BMSL Shut-off valves solder

Type	Connection	Code
BML 6 S	1/4" solder straightway	009G010200
BML 6 S	6mm solder straightway	009G010800
BML 10 S	3/8" solder straightway	009G012200
BML 10 S	10mm solder straightway	009G012800
BML 12 S	1/2" solder straightway	009G014200
BML 15 S	5/8" solder straightway	009G016200
BML 18 S	1/4" solder three-way	009G018100
BML 22 S	7/8" solder straightway	009G019100
BML 22 S	22mm solder straightway	009G019400

BML Shut-off valves with extended tails

Type	Connection	Code
BML 6	1/4"	009G020200
BML 10	3/8"	009G022200
BML 12	1/2"	009G024200
BML 15	5/8"	009G026200
BML 22	7/8"	009G029100

BML Shut-off valves with seal cap

Type	Connection	Code
BML 6	1/4" flare	009G011500

GVC Shut-off valves solder

Type	Connection	Code
GVC 18S	3/4"	009G222100
GVC 22S	7/8"	009G222300
GVC 28S	1 1/8"	009G222500
GVC 35S	1 3/8"	009G222600
GVC 42S	1 5/8"	009G222700
GVC 54S	2 1/8"	009G222900
GVC 67S	2 5/8"	009G223000

Complete insert

Description	Code
For GVC 18S, 22S, 28S	009G213600
For GVC 35S, 42S	009G213700
For GVC 54S, 67S	009G213800

Bracket

Description	Code
For GVC 18S, 22S, 28S	009G215000
For GVC 54S, 67S	009G215200

Seal kits

Description	Code
For GVC 18S, 22S, 28S	009G215500
For GVC 35S, 42S	009G215600
For GVC 54S, 67S	009G215700



BML shut-off valve



GBC ball valves

GBC Ball Valves			Standard Valve	Valve with access port
Type	Connection	Code	Code	Code
GBC 6S	1/4"	009G702000		-
GBC 10S	3/8"	009G702100		009G705100
GBC 12S	1/2"	009G702200		009G705200
GBC 16S	5/8"	009G702300		009G705300
GBC 18S	3/4"	009G702400		009G705400
GBC 22S	7/8"	009G702500		009G705500
GBC 28S	1 1/8"	009G702600		009G705600
GBC 35S	1 3/8"	009G702700		009G705700
GBC 42S	1 5/8"	009G702800		009G705800
GBC 54S	2 1/8"	009G702900		009G705900
GBC 67	2 5/8"	009G703600		009G706600
GBC 79	3 1/8"	009G703700		009G706700

Other

Service Valves/Receiver Valves

Capped Angle Valve Backseating

Type	Fits NPTE	x	Flare	Code
GJ1-B4	1/4"	x	1/4"	1510
GJ1-C4	3/8"	x	1/4"	1511
GJ1-C6	3/8"	x	3/8"	1512
GJ1-D8	1/2"	x	1/2"	1513
GJ1-E12	3/4"	x	3/4"	1514

Primore

Angle Valves

Type	Size	Code
48321	3/8"	1532
48331	1/2"	1533
48320	5/8"	1534
44501	7/8"	1535

Base Valves

Type	Size	Code
22220-P	3/8" flare	1564
29039-P	3/8" NPTF	1566
22214-P	1/4" flare	1565
22452-P	1/4" M-F NPT	1567
48319-P	1/4" fl x 1/4" sw	1573
48317-P	3/8" fl x 3/8" sw	1574
48545-P	1/4" MFL x 1/4" MFL x 1/4" GP	1575

Seal Cap – Shut Off Valve

Type	Size	Code
27364-P	1/4" fl.	1536
27325-P	3/8" fl	1537
16642-P	1/2" fl.	1538
44724-P	5/8" fl.	1539
44599-P	1/4" sw.	1569
15596-P	3/8" sw.	1570
15595-P	1/2" sw.	1571
28249-P	5/8" sw.	1572

Evaporating Pressure Regulators

KVP without flare nuts

Type	Connection	Range (bar)	Code
KVP 12	1/2" flare	0 to 5.5	034L002100
KVP 12	1/2" solder	0 to 5.5	034L002300
KVP 15	5/8" flare	0 to 5.5	034L002200
KVP 15	5/8" solder	0 to 5.5	034L002900
KVP 22	7/8" solder	0 to 5.5	034L002500
KVP 28	1 1/8" solder	0 to 5.5	034L002600
KVP 35	1 3/8" solder	0 to 5.5	034L003200

Crankcase Pressure Regulators

KVL

Type	Connection	Range (bar)	Code
KVL 12	1/2" flare	0.2 to 6	034L004100
KVL 12	1/2" solder	0.2 to 6	034L004300
KVL 15	5/8" flare	0.2 to 6	034L004200
KVL 15	5/8" solder	0.2 to 6	034L004900
KVL 22	7/8" solder	0.2 to 6	034L004500
KVL 28	1 1/8" solder	0.2 to 6	034L004600
KVL 35	1 3/8" solder	0.2 to 6	034L005200

Condensing Pressure Regulators

KVR

Type	Connection	Range (bar)	Code
KVR 12	1/2" flare	1 to 20	034L009100
KVR 12	1/2" solder	1 to 20	034L009300
KVR 15	5/8" flare	1 to 20	034L009200
KVR 15	5/8" solder	1 to 20	034L009700
KVR 22	7/8" solder	1 to 20	034L009400
KVR 28	1 1/8" solder	5 to 17.5	034L009500
KVR 35	1 3/8" solder	5 to 17.5	034L010000

WVFM, WVFX, WVS Pressure Controlled Water Valves

Excl. flare nuts

Type	Connection	Range (bar)	Code
WVFM 10	3/8" BSP int.	1/4" flare	003D000100
WVFM 16	1/2" BSP int.	1/4" flare	003D000200
WVFX 10	3/8" BSP int.	1/4" flare	003N110000
WVFX 15	1/2" BSP int.	1/4" flare	003N210000
WVFX 20	3/4" BSP int.	1/4" flare	003N310000
WVFX 25	1" BSP int.	1/4" flare	003N410000
WVFX 32	1 1/4" BSP int.	1/4" flare	003F123200
WVFX 40	1 1/2" BSP int.	1/4" flare	003F124000

Stainless steel water valves

WVFX

Type	Connection	Code
WVFX 15	G 1/2"	003N210100
WVFX 20	G 3/4"	003N310100
WVFX 25	G 1"	003N410100

Water valves, parts programme



KVL regulators



KVP regulator



KVR regulator



WVFX valves



KP pressure controls

KP without flare nuts

Type	Connection	Range (bar)	Differential (bar)	Code
Low	KP 1 1/4" flare	-0.2 - +7.5	0.7 - 4	Auto. 060-110166
	KP 1 1/4" flare	-0.9 - +7	0.7 fixed	Man. 060-110366
	KP 1 1/4" solder ODF	-0.9 - +7	0.7 fixed	Man. 060-111166
	KP 1 1/4" solder ODF	-0.2 - +7.5	0.7 - 4	Auto 060-111266
	KP 1 1/4" flare	-0.2 - +7.5	0.7 - 4	060-114166
	KP 1 1/4" flare	0.4 - +7.6	0.7 - 4	060-200166
	KP 2 1/4" flare	-0.2 - +5	0.4 - 1.5	Auto 060-112066
High	KP 2 1/4" solder ODF	-0.2 - +5	0.4 - 5	Auto 060-112466
	KP 5 1/4" flare	8 - 28	1.8-6	Auto. 060-114266
	KP 5 1/4" flare	8 - 28	1.8-6	Auto. 060-117166
	KP 5 1/4" flare	8 - 28	3 fixed	Man. 060-117366
	KP 5 1/4" solder ODF	8 - 28	1.8-6	Auto. 060-117966
	KP 5 1/4" solder ODF	8 - 28	3 fixed	Man. 060-118066
	KP 5 1/4" flare	6 - 21	3 fixed	060-201566
Dual	KP 15 1/4" flare	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Auto 060-124166
	KP 15 1/4" flare	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Man. 060-124366
	KP 15 1/4" flare	L.P. -0.9 - +7	H.P. 8 - 28	Man./Man. 060-124566
	KP 15 1/4" flare	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Man. 060-126466
	KP 15 1/4" flare	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Auto 060-126566
	KP 15 1/4" flare	L.P. -0.9 - +7	H.P. 8 - 28	Conv. 060-126166
	KP 15 1/4" solder ODF	L.P. -0.9 - +7	H.P. 8 - 28	Conv. 060-126366
	KP 15 1/4" solder ODF	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Auto 060-125466
	KP 15 1/4" solder ODF	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Man. 060-125566
	KP 15 1/4" solder ODF	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Man. 060-128466
	KP 15 1/4" solder ODF	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Auto 060-129966
	KP 15 1/4" solder ODF	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Man. 060-129966
	KP 15 1/4" solder ODF	L.P. -0.2 - +7.5	H.P. 8 - 28	Auto/Man. 060-129966

TÜV & PED approved KP without flare nuts

Type	Connection	Range (bar)	Differential (bar)	Code
High	KP 7W 1/4" flare	8 - 28	4 - 10	Auto. 060-119066
	KP 7W 6mm solder ODF	8 - 32	4 - 10	Auto 060-120366
	KP 7W 1/4" flare	5.9 - 27.5		Auto. 060-200366
	KP 7B 1/4" flare	8 - 28	4 fixed	Man. 060-119166
	KP 7S 6 mm ODF solder	8 - 28	4 fixed	Man. 060-121366

KPS 35	3/8" BSP ext.	0 - 8	0.4 - 1.5	060-310066
KPS 37	1/4" BSP int.	6 - 18	0.75 - 2.5	060-310666
KPS 39	3/8" BSP ext.	10 - 35	1.8 - 6.0	060-310266
KPS 39	1/4" BSP int.	10 - 35	1.8 - 6.0	060-310766
KPS 45	1/4" BSP int.	4 - 40	2.2 - 11	060-312166

RT

Type	Connection	Range (bar)	Differential (bar)	Code
Low	RT 1 1/4" flare	-0.8 - +5	0.5 - 1.6	017-524566
	RT 1 MIN 1/4" flare	-0.8 - +5	0.5 - 1.6	017-524666
High	RT 5 1/4" flare	4 - 17	1.2-4	017-525066
	RT 5 MAX 1/4" flare	4 - 17	1.2 fixed	017-525166
	RT 5 3/8" RG ext.	4 - 17	1 - 4	017-525366
	RT 5 3/8" RG ext.	4 - 17	1 - 4	017-525566

RT Pressure Controls for General Application

Type	Connection	Range (bar)	Differential (bar)	Code
RT 112	3/8" BSP ext.	0.1 - 1.1	0.07 - 0.16	017-519166
RT 112	3/8" BSP ext.	0.1 - 1.1	0.07	017-519266
RT 113	3/8" BSP ext.	0 - 0.3	0.01 - 0.05	017-519666
RT 121	3/8" BSP ext.	-1 - 0	0.08 - 0.4	017-521566
RT 117	3/8" BSP ext.	10 - 30	1 - 4	017-529566
RT 117	3/8" BSP ext.	10 - 30	1 - 4	017-529666
RT 116	3/8" BSP ext.	1 - 10	0.2 - 1.3	017-520366
RT 116	3/8" BSP ext.	1 - 10	0.2 fixed	017-520466
RT 110	3/8" BSP ext.	0.2-3	0.05 - 0.25	017-529166

RT Pressure Controls with Adjustable Neutral Zone

Type	Connection	Range (bar)	Differential (bar)	Code
RT 1AL	6mm cutting ring	-0.8 - +5	0.2 - 0.9	017L001666
RT 5AL	6mm cutting ring	4 - 17	0.35 - 1.4	017L001766
RT 200L	3/8" BSP ext.	0.2 - 6	0.25 - 0.7	017L003266
RT 1AL	3/8" BSP ext.	-0.8 - +5	0.2 - 0.9	017L003366
RT 5AL	3/8" BSP ext.	4 - 17	0.35 - 1.4	017L004066
RT 117L	3/8" BSP ext.	10 - 30	1.5 - 3.5	017L004266
RT 110	3/8" BSP ext.	0.2 - 3	0.08 - 0.25	017-529266
RT 112	3/8" BSP ext.	0.1 - 1	0.07 - 0.16	017-519366

KP and MP Accessories

Type	Description	Code
KP	wall bracket	060-105566
KP	angle bracket	060-105666
KP-RT	0.5 m cap. tube with 1/4" flare, 50 mm flare collar	060-007066
	1.0 m cap. tube with 1/4" flare, 50 mm flare collar	060-007166
	1.5 m cap. tube with 1/4" flare, 50 mm flare collar	060-007200
	1.0 m cap. tube with 1/4" flare	060-007866
	0.75 m cap. tube with 1/4" flare, 21 mm flare collar	060-007566
	0.5 m cap. tube with 1/4" flare, 21 mm flare collar	060-019066
	1.0 m cap. tube with 1/4" flare, 21 mm flare collar	060-019166
	1.5 m cap. tube with 1/4" flare, 21 mm flare collar	060-019266
	2.0 m cap. tube with 1/4" flare, 21 mm flare collar	060-019366
	protective cap for single KP	060-003166
	protective cap for double KP	060-003266
	0.5 m cap. tube with Schraeder valve depressor with 1/4" flare	060-000466
	1.0 m cap. tube with Schraeder valve depressor with 1/4" flare	060-000566
	1.5 m cap. tube with Schraeder valve depressor with 1/4" flare	060-000666

IP54 Version

Separate enclosures

Type	Description	Code
ENC, IP54	Single press controls	060-033066
ENC, IP54	Dual press controls	060-035066

Service Thermostats

Kit	Code
No 1 Refrigerator	077B700100
No 2 Refrigerator with push defrost	077B700200
No 3 Refrigerator and fridge freezer with auto defrost	077B700300
No 4 Absorption refrigerators	077B700400
No 5 Freezers without signal	077B700500
No 6 Freezers with active signal	077B700600
No 7 Freezers with passive signal	077B700700
No 8 Bottle and liquid coolers	077B700800
Changeover thermostat	077B705900
Thermostat 2.8m Capillary	077B624500

KP

KP

Vapour charge

Type	Range	Differential	Cap. tube	Bulb type	Code
KP61	-30 to +15°C	4 - 15/1.5 - 7°C	2m	A	060L110066
KP61	-30 to +15°C	4 - 15/1.5 - 7°C	5m	A	060L110166
KP61	-30 to +15°C	3.5 - 14/1.2 - 6°C	2m	B	060L110266
KP61	-30 to +15°C	4 - 15/1.5 - 7°C	2m	B	060L110366
KP61*	-30 to +15°C	3°C fixed	5m	A	060L110466
KP61*	-30 to +15°C	3°C fixed	2m	B	060L110566
KP61	-30 to +15°C	4 - 15/1.5 - 7°C	2m	B	060L112866
KP62	-30 to +15°C	4 - 15/1.5 - 7°C	room sensor	C1	060L110666
KP63	-50 to -10°C	5 - 15/2 - 9°C	2m	A	060L110766
KP63	-50 to -10°C	5 - 15/2 - 9°C	2m	B	060L110866
KP68	-5 to +35°C	4 - 15/2 - 8°C	room sensor	C1	060L111166
KP69	-5 to +35°C	4 - 15/2 - 8°C	2m	B	060L111266

* Manual reset on min.

Adsorption charge

Type	Range	Differential	Cap. tube	Bulb type	Code
KP62	-30 to +15°C	4 - 12/2 - 7°C	room sensor	C2	060L111066
KP71	-5 to +20°C	2 - 20°C	2m	E2	060L111366
KP71*	-5 to +20°C	3°C fixed	2m	E2	060L111566
KP73	-25 to +15°C	2.5 - 20°C	2m	D1	060L114366
KP73	-25 to +15°C	15 - 35°C	2m	E1	060L111766
KP73	-25 to +15°C	2.5 - 8°C	2m	D1	060L111866
KP73*	-25 to +15°C	3.5°C fixed	2m	D1	060L113866
KP73	-25 to +15°C	2 - 8°C	3m	D2	060L114066
KP73	-25 to +15°C	3.5 - 20°C	2m	D1	060L117966
KP73	-25 to +15°C	2.5 - 10°C	5m	E2	060L113066
KP75	0 to +35°C	2.5 - 10°C	2m	F	060L112066
KP77	+20 to +60°C	3.5 - 10°C	2m	E3	060L112166
KP77	+20 to +60°C	3.5 - 10°C	3m	E3	060L112266
KP77	+20 to +60°C	3.5 - 10°C	5m	E2	060L116866
KP79	+50 to +100°C	5 - 15°C	2m	E3	060L112666
KP81	+80 to +150°C	7 - 20°C	2m	E3	060L112566
KP81**	+80 to +150°C	8°C fixed	2m	E3	060L115566

* Trips on fall in temp.

** Trips on rise in temp.

Dual thermostats

Type	Range	Cap. tube	Bulb type	Code
KP98**	Oil: +60 - +120°C, ht: +100 - +180°C	1m	D/D E2	060L113166

** Trips on rise in temp.



KP 62 thermostat

KPS

Type	Range	Differential	Cap. tube	Code
KPS 77	+20 to +60°C	3 - 14°C	Short rigid	060L310066
KPS 77	+20 to +60°C	3 - 14°C	2m plain	060L310166
KPS 77	+20 to +60°C	3 - 14°C	2m plain	060L310266
KPS 77	+20 to +60°C	3 - 14°C	Short rigid	060L311866
KPS 77	+20 to +60°C	3 - 14°C	5m plain	060L312066
KPS 79	+50 to +100°C	4 - 16°C	Short rigid	060L310366
KPS 79	+50 to +100°C	4 - 16°C	2m armoured	060L310466
KPS 79	+50 to +100°C	4 - 16°C	2m plain	060L310566
KPS 79	+50 to +100°C	4 - 16°C	Short rigid	060L312166
KPS 79	+50 to +100°C	4 - 16°C	5m armoured	060L312266
KPS 79	+50 to +100°C	4 - 16°C	5m plain	060L312300
KPS 79	+50 to +100°C	4 - 16°C	8m armoured	060L312400
KPS 79	+50 to +100°C	4 - 16°C	Short rigid	060L313766
KPS 80	+70 to +120°C	4.5 - 18°C	Short rigid	060L312666
KPS 80	+70 to +120°C	4.5 - 18°C	2m armoured	060L312866
KPS 80	+70 to +120°C	4.5 - 18°C	5m armoured	060L313066
KPS 80	+70 to +120°C	4.5 - 18°C	5m plain	060L313100

Sensor pockets

Description	Code
75mm brass 1/2" BSP	060L332666
160mm brass 1/2" BSP	060L332766
110mm brass 1/2" BSP	060L333066
75mm stainless steel 1/2" BSP	060L332866
160mm stainless steel 1/2" BSP	060L332966
110mm stainless steel 1/2" BSP	060L333166
1/2" NPT	060L326500

Universal Thermostats

Universal Thermostats

Type	Description	Code
UT72	General purpose thermostat	060H110100
UT73	General purpose thermostat	060H110200

RT

Brine, surface or room thermostats

Type	Range	Differential	Diff. Sensor	Code
RT 2	-25 to +15°C	5-18 / 6-20°C	2m cap. tube	017-500866
RT 3	-25 to +15°C	1.5-7.5 / 0.8-3°C	2m cap. tube	017-501466
RT 3	-25 to +15°C	1.5-7.5 / 0.8-3°C	3m cap. tube	017-501566
RT 3	-25 to +15°C	1.5-7.5 / 0.8-3°C	5m cap. tube	017-501666
RT 3	-25 to +15°C	1.5-7.5 / 0.8-3°C	8m cap. tube	017-501766
RT 3	-25 to +15°C	1.5-7.5 / 0.8-3°C	10m cap. tube	017-501866
RT 3	-25 to +15°C	1.5-7.5 / 0.8-3°C	2m cap. tube	017-502866
RT 7	-25 to +15°C	2-7 / 2-9.5°C	2m cap. tube	017-505366
RT 7	-25 to +15°C	2-7 / 2-9.5°C	3m cap. tube	017-505466
RT 7	-25 to +15°C	2-7 / 2-9.5°C	5m cap. tube	017-505566
RT 7	-25 to +15°C	2-7 / 2-9.5°C	8m cap. tube	017-505666
RT 9	-45 to -15°C	2-10 / 1-13°C	2m cap. tube	017-506666
RT 9	-45 to -15°C	2-10 / 1-13°C	5m cap. tube	017-506866
RT 10	-60 to -30°C	1.5-11 / 1-4°C	2m cap. tube	017-507766
RT 10	-60 to -30°C	1.5-11 / 1-4°C	5m cap. tube	017-507966
RT 12	-5 to +10°C	1-3°C	8m cap. tube	017-509266
RT 13	-30 to +0°C	1-6 / 0.8-2°C	2m cap. tube	017-509766
RT 14	-5 to +30°C	1.5-7 / 1.5-8°C	2m cap. tube	017-509966
RT 14	-5 to +30°C	1.5-7 / 1.5-8°C	3m cap. tube	017-510066
RT 14	-5 to +30°C	1.5-7 / 1.5-8°C	5m cap. tube	017-510166
RT 14	-5 to +30°C	1.5-7 / 1.5-8°C	8m cap. tube	017-510266
RT 14	-5 to +30°C	1.5-7 / 1.5-8°C	10m cap. tube	017-510366
RT 15	+8 to +32°C	1.5-7 / 1.5-8°C	2m cap. tube	017-511566
RT 23	+5 to +22°C	1-3.5 / 1-3°C	2m cap. tube	017-527866
RT 24	+15 to +34°C	1-4 / 1-3.5°C	2m cap. tube	017-528566
RT 26	-5 to +50°C	2-9 / 3-19°C	2m cap. tube	017-518066

Room thermostats

Type	Range	Differential	Sensor	Code
RT 4	-5 to +30°C	1-7 / 0.6-3°C	Room sensor	017-503666
RT 4 *	-5 to +30°C	1-7 / 0.6-3°C	Room sensor	017-503766
RT 11	-30 to 0°C	1-6 / 0.8-2.5°C	Room sensor	017-508366
RT 17	-45 to -15°C	1-5 / 0.8-2°C	Room sensor	017-511766
RT 34	-25 to +15°C	1.4-8.5 / 1.4-10°C	Room sensor	017-511866
RT 103	+10 to +45°C	1.5-5 / 1-3°C	Room sensor	017-515566

* 017-4034 2 circuit contact system fitted

RT

Discharge line thermostats

Type	Range	Differential	Sensor	Code
RT 101	+25 to +90°C	2-10 / 3-20°C	2m cap. tube	017-500366
RT 101	+25 to +90°C	2-10 / 3-20°C	3m cap. tube	017-500666
RT 101	+25 to +90°C	2-10 / 3-20°C	5m cap. tube	017-502266
RT 101	+25 to +90°C	2-10 / 3-20°C	8m cap. tube	017-502466
RT 101**	+25 to +90°C	2-10 / 3-20°C	2m cap. tube	017-500466
RT 102	+25 to +90°C	2-10 / 3-20°C	2m cap. tube	017-514766
RT 106	+20 to +90°C	4-20 / 2-7°C	2m cap. tube	017-504966
RT 106	+20 to +90°C	4-20 / 2-7°C	5m cap. tube	017-505066
RT 107	+70 to +150°C	6-25 / 1.8-8°C	2m cap. tube	017-513566
RT 107	+70 to +150°C	6-25 / 1.8-8°C	5m cap. tube	017-514066
RT 107	+70 to +150°C	6-25 / 1.8-8°C	8m cap. tube	017-514466
RT 107	+70 to +150°C	6-25 / 1.8-8°C	3m cap. tube	017-513966
RT 107**	+70 to +150°C	6-25 / 1.8-8°C	2m cap. tube	017-513666
RT 107**	+70 to +150°C	6-25 / 1.8-8°C	5m cap. tube	017-514166
RT 120	+120 to +215°C	7-30 / 1.8-8°C	5m cap. tube	017-520600
RT 120	+120 to +215°C	7-30 / 1.8-8°C	5m cap. tube	017-520800
RT 120**	+120 to +215°C	7-30 / 1.8-9°C	2m cap. tube	017-521200
RT 120**	+120 to +215°C	7-30 / 1.8-9°C	2m cap. tube	017-521466
RT 123	+150 to +250°C	6.5-30 / 1.8-9°C	5m cap. tube	017-522266
RT 124	+200 to +300°C	5-25 / 2.5-10°C	2m cap. tube	017-522766
RT 124**	+200 to +300°C	5-25 / 2.5-10°C	2m cap. tube	017-523166

** Trips on rise in temp.



RT 4 thermostat

Air duct thermostat

Type	Range	Differential	Sensor	Code
RT 140	+15 to +45°C	1.8-8 / 2.5-11°C	2m cap. tube	017-523666

Differential thermostat

Type	Range	Differential	Sensor	Code
RT 270	0 - 15°C	fixed 2°C	2m x 5m cap.tubes	017D003166

Thermostats with adjustable dead zone

Type	Range	Differential	Sensor	Code
RT 8L	-20 to +12°C	1°C	2 cap. tube	017L003066
RT 14L	-5 to +30°C	1.5°C	2 cap. tube	017L003466
RT 16L	0 to +38°C	1°C	room sensor	017L002466
RT 140L	+15 to 45°C	1.2°C	2 cap. tube	017L003166

Accessories

Type	Description	Code
RT-KP	Phial pockets for RT series, brass 112mm long	017-437066
KPS	Phial pockets for RT series, brass 110mm long	060L333066
RT	Phial pockets for RT series, brass 468mm long	017-421666
RT	RT contact system, SPDT changeover switch	017-403066
KP	Heat conducting compound 8G	041E011000

Check Valves

Magni-Check with Strainer

Type	OD tube	Code
MS-6	3/8"	1441
MS-8	1/2"	1442
MS-10	5/8"	1443
MS-12	3/4"	1444
MS-14	7/8"	1445
MS-18	1 1/8"	1446
MS-22	1 3/8"	1447
MS-26	1 5/8"	1449

NRV, NRVH

Type	Connection	Minimum Opening Pressure Bar	Code
NRV 6	1/4" flare	0.07	020-104000
NRV 10	3/8" flare	0.07	020-104100
NRV 12	1/2" flare	0.05	020-104200
NRV 16	5/8" flare	0.05	020-104300
NRV 6S	1/4" solder straightway	0.07	020-101000
NRV 6S*	3/8" solder straightway	0.07	020-105700
NRV 10S	3/8" solder straightway	0.07	020-101100
NRV 10S*	1/2" solder straightway	0.07	020-105800
NRV 12S	1/2" solder straightway	0.05	020-101200
NRV 12S*	5/8" solder straightway	0.05	020-105200
NRV 16S	5/8" solder straightway	0.05	020-101800
NRV 16S*	3/4" solder straightway	0.05	020-105900
NRV 19S	3/4" solder straightway	0.05	020-101900
NRV 19S*	7/8" solder straightway	0.05	020-105400
NRV 22S	7/8" solder angleway	0.04	020-102000
NRV 22S*	1 1/8" solder angleway	0.04	020-106000
NRV 28S	1 1/8" solder angleway	0.04	020-102100
NRV 28S*	1 3/8" solder angleway	0.04	020-105600
NRV 35S	1 3/8" solder angleway	0.04	020-102600
NRV 35S*	1 5/8" solder angleway	0.04	020-106100
NRVH 6S*	3/8" solder straightway	0.30	020-106900
NRVH 10S	3/8" solder straightway	0.30	020-104600
NRVH 10S*	1/2" solder straightway	0.30	020-107000
NRVH 12S	1/2" solder straightway	0.30	020-103900
NRVH 12S*	5/8" solder straightway	0.30	020-106400
NRVH 16S	5/8" solder straightway	0.30	020-103800
NRVH 16S*	3/4" solder straightway	0.30	020-107100
NRVH 19S*	7/8" solder straightway	0.30	020-106600
NRVH 22S	7/8" solder angleway	0.30	020-103200
NRVH 22S*	1 1/8" solder angleway	0.30	020-107200
NRVH 28S	1 1/8" solder angleway	0.30	020-102900
NRVH 28S*	1 3/8" solder angleway	0.30	020-106800
NRVH 35S	1 3/8" solder angleway	0.30	020-103400
NRVH 35S*	1 3/8" solder angleway	0.30	020-107300

*Fitted with oversize connections



NRV valves



Mueller

Straight, NPTE to Male Flare

NPTE	OD	PSIG	Code
3/8"	3/8"	300	1765CE
3/8"	3/8"	350	1766CE
3/8"	3/8"	400	1767CE
1/2"	5/8"	235	1768CE
1/2"	5/8"	300	1769CE
1/2"	5/8"	350	1770CE
1/2"	5/8"	400	1732CE

Angle, NPTE to male flare

NPTE	OD	PSIG	Code
3/8"	3/8"	350	1773CE
3/8"	3/8"	400	1774CE

Atmospheric NPTE inlet

NPTE	PSIG	Code
1/4"	235	1775CE
1/4"	300	1776CE
1/4"	350	1777CE
1/4"	400	1778CE



Angle NPTE to male flare

Henry

3 Way dual S.O.V.

Type	OD	Code
925	1/2" F.P.T.	1780
8024	1" F.P.T.	1781



Straight through

Model	Inlet MPT	Outlet flare	Bar	PSI	Code
5230A-14.0 BAR-CE	1/4"	1/2"	14.0	203	174000
5230A-16.2 BAR-CE	1/4"	1/2"	16.2	235	174001
5230A-20.7 BAR-CE	1/4"	1/2"	20.7	300	174002
5230A-24.1 BAR-CE	1/4"	1/2"	24.1	350	174003
5230A-24.8 BAR-CE	1/4"	1/2"	24.8	360	174004
5230A-27.6 BAR-CE	1/4"	1/2"	27.6	400	174005
5230A-31.0 BAR-CE	1/4"	1/2"	31.0	450	174006
5231A-14.0 BAR-CE	3/8"	1/2"	14.0	203	174007
5231A-16.2 BAR-CE	3/8"	1/2"	16.2	235	174008
5231A-20.7 BAR-CE	3/8"	1/2"	20.7	300	174009
5231A-24.1 BAR-CE	3/8"	1/2"	24.1	350	174010
5231A-24.8 BAR-CE	3/8"	1/2"	24.8	360	174011
5231A-27.6 BAR-CE	3/8"	1/2"	27.6	400	174012
5231A-31.0 BAR-CE	3/8"	1/2"	31.0	450	174013
5231B-14.0 BAR-CE	1/2"	5/8"	14.0	203	174014
5231B-16.2 BAR-CE	1/2"	5/8"	16.2	235	174015
5231B-20.7 BAR-CE	1/2"	5/8"	20.7	300	174016
5231B-24.1 BAR-CE	1/2"	5/8"	24.1	350	174017
5231B-24.8 BAR-CE	1/2"	5/8"	24.8	360	174018
5231B-27.6 BAR-CE	1/2"	5/8"	27.6	400	174019
5231B-31.0 BAR-CE	1/2"	5/8"	31.0	450	174020
5232A-14.0 BAR-CE	1/2"	3/4"	14.0	203	174021
5232A-16.2 BAR-CE	1/2"	3/4"	16.2	235	174022
5232A-20.7 BAR-CE	1/2"	3/4"	20.7	300	174023
5232A-24.1 BAR-CE	1/2"	3/4"	24.1	350	174024
5232A-24.8 BAR-CE	1/2"	3/4"	24.8	360	174025
5232A-27.6 BAR-CE	1/2"	3/4"	27.6	400	174026
5232A-31.0 BAR-CE	1/2"	3/4"	31.0	450	174027

Rupture Discs

Model	Inlet MPT	Outlet flare	Bar	PSI	Code
5525-16.2 BAR-CE	3/8	3/8	16.2	235	174029
5525-20.7 BAR-CE	3/8	3/8	20.7	300	174030
5525-24.1 BAR-CE	3/8	3/8	24.1	350	174031
5525-27.6 BAR-CE	3/8	3/8	27.6	400	174033
5525-31.0 BAR-CE	3/8	3/8	31.0	450	174034
5526-14.0 BAR-CE	1/2	1/2	14.0	203	174035
5526-16.2 BAR-CE	1/2	1/2	16.2	235	174036
5526-20.7 BAR-CE	1/2	1/2	20.7	300	174037
5526-24.1 BAR-CE	1/2	1/2	24.1	350	174038
5526-24.8 BAR-CE	1/2	1/2	24.8	360	174039
5526-27.6 BAR-CE	1/2	1/2	27.6	400	174040
5526-31.0 BAR-CE	1/2	1/2	31.0	450	174041

Relief Valve Pressure Test Certificate

Description	Code
Test Certificate	174050

Accessories

Model	Description	Code
G15	Indicator gauge	174042

SNV-ST Stop Needle Valve

SNV-ST Stop Needle Valves

Type	Description	Code
SNV-ST	10 mm Cutting Ring Side Branch x 1/4" Male NPT ANSI Bottom Branch	148B374100
SNV-ST	6 mm Cutting Ring Side Branch x 1/4" Male NPT ANSI Bottom Branch	148B374200
SNV-ST	1/4" Female NPT ANSI Side Branch x 1/4" NPT ANSI Bottom Branch	148B374600
SNV-ST	10 mm Cutting Ring Side Branch x 1/2" Weld Extended Tube Bottom Branch	148B376800
SNV-ST	G1/2" Side Branch x G1/2" Bottom Branches	148B374500

Other variants are available to order. Price and delivery on request.



SNV Valve

SVA-ST Stop Valves - Angle

Weld branch with handwheel

Type	Nominal size		Code
SVA-ST 15 SOC	15mm	1/2"	148B338100
SVA-ST 20 SOC	20mm	3/4"	148B346100
SVA-ST 25 SOC	25mm	1"	148B354100
SVA-ST 32 A40	32mm	1 1/4"	148B375500
SVA-ST 40 A40	40mm	1 1/2"	148B375700
SVA-ST 50 A	50mm	2"	148B303400
SVA-ST 65 A	65mm	2 1/2"	148B304600
SVA-ST 80 A	80mm	3"	148B307100
SVA-ST 100 A	100mm	4"	148B311100
SVA-ST 125 A	125mm	5"	148B315100
SVA-ST 150 A	150mm	6"	148B319100
SVA-ST 200 A	200mm	8"	148B323100
SVA-DL 250 A	250mm	10"	148B376300
SVA-DH 250 A	250mm	10"	148B376700
SVA-DL 300 A	300mm	12"	148B377300
SVA-DH 300 A	300mm	12"	148B377700



SVA Valve

SVA-ST Stop Valves - Angle continued

Weld branch with seal cap

Type	Nominal size	Code
SVA-ST 15 SOC	15mm 1/2"	148B338200
SVA-ST 20 SOC	20mm 3/4"	148B346200
SVA-ST 25 SOC	25mm 1"	148B354200
SVA-ST 32 A40	32mm 1 1/4"	148B375600
SVA-ST 40 A40	40mm 1 1/2"	148B375800
SVA-ST 50 A	50mm 2"	148B303500
SVA-ST 65 A	65mm 2 1/2"	148B304700
SVA-ST 80 A	80mm 3"	148B307200
SVA-ST 100 A	100mm 4"	148B311200
SVA-ST 125 A	125mm 5"	148B315200
SVA-ST 150 A	150mm 6"	148B319200
SVA-ST 200 A	200mm 8"	148B323200
SVA-DL 250 A	250mm 10"	148B376200
SVA-DH 250 A	250mm 10"	148B376600
SVA-DL 300 A	300mm 12"	148B377200
SVA-DH 300 A	300mm 12"	148B377600

SVA-ST Stop Valves - Straight

Weld branch with handwheel:

Type	Nominal size		Code
SVA-ST 15 SOC	15mm	1/2"	148B342100
SVA-ST 20 SOC	20mm	3/4"	148B350100
SVA-ST 25 SOC	25mm	1"	148B358100
SVA-ST 32 A40	32mm	1 1/4"	148B375100
SVA-ST 40 A40	40mm	1 1/2"	148B375300
SVA-ST 50 A	50mm	2"	148B304000
SVA-ST 65 A	65mm	2 1/2"	148B305200
SVA-ST 80 A	80mm	3"	148B309100
SVA-ST 100 A	100mm	4"	148B313100
SVA-ST 125 A	125mm	5"	148B317100
SVA-ST 150 A	150mm	6"	148B321100
SVA-ST 200 A	200mm	8"	148B325100

Weld branch with seal cap

Type	Nominal size		Code
SVA-ST 15 SOC	15 mm	1/2"	148B342200
SVA-ST 20 SOC	20 mm	3/4"	148B350200
SVA-ST 25 SOC	25 mm	1"	148B358200
SVA-ST 32 A40	32 mm	1 1/4"	148B375200
SVA-ST 40 A40	40 mm	1 1/2"	148B375400
SVA-ST 50 A	50 mm	2"	148B304100
SVA-ST 65 A	65 mm	2 1/2"	148B305300
SVA-ST 80 A	80 mm	3"	148B309200
SVA-ST 100 A	100 mm	4"	148B313200
SVA-ST 125 A	125 mm	5"	148B317200
SVA-ST 150 A	150 mm	6"	148B321200
SVA-ST 200 A	200 mm	8"	148B325200

SVA-HS (High Specification) Stop Valve variants are available to order.
Price and delivery on request.

QDV Quick Closing Oil Drain Valve



QDV Quick Closing Oil Drain Valve

Type	Description	Code
QDV 15	DN15 1/2" Oil Drain Valve	148H327200
2469+065	Set Of Hose Connection Fittings	8696
2469+066	Set of Weld Connection Fittings	8697

REG Hand Regulating Valves - Angle

Type	Cone no.	Nominal size	Code
REG 15 SOC	4	15mm 1/2"	148G331200
REG 15 SOC	5	15mm 1/2"	148G331300
REG 20 D	6	20mm 3/4"	148G324900
REG 25 D	7	25mm 1"	148G325800
REG 32 D	8	32mm 1 1/4"	148G326300
REG 40 D	9	40mm 1 1/2"	148G327000
REG 50 A	11	50mm 2"	148G348700

REG Hand Regulating Valves - Straight

Type	Cone no.	Nominal size	Code
REG 6 D	2	6mm 1/4"	8800
REG 6 D	3	6mm 1/4"	8801
REG 10 D	1	10mm 3/8"	8802
REG 10 D	2	10mm 3/8"	8803
REG 10 D	3	10mm 3/8"	8804
REG 15 SOC	5	15mm 1/2"	148G331700
REG 15 SA	1	15mm 1/2"	8805
REG 15 SA	2	15mm 1/2"	8806
REG 15 SA	3	15mm 1/2"	8807
REG 20 SOC	6	20mm 3/4"	148G332800
REG 25 D	7	25mm 1"	148G326200

Other connection variants are available to order. Price and delivery on request



REG Hand Regulating Valves

FA Strainers

For Direct Fitting in Pipelines with Flanges, Bolts, Nuts and Gaskets

Type	Description	Code
FA 15	1/4" Butt Weld - DIN (2448)	006-005000
FA 15	3/8" Butt Weld - DIN (2448)	006-005100
FA 15	1/2" Butt Weld - DIN (2448)	006-005200
FA 15	3/4" Butt Weld - DIN (2448)	006-005300
FA 20	1/2" Butt Weld - DIN (2448)	006-006500
FA 20	3/4" Butt Weld - DIN (2448)	006-006600
FA 20	1" Butt Weld - DIN (2448)	006-006700

FA 15	1/2" Solder - (ANSI B 16.22)	006-005700
FA 15	5/8" Solder - (ANSI B 16.22)	006-005800
FA 15	3/4" Solder - (ANSI B 16.22)	006-005900
FA 15	7/8" Solder - (ANSI B 16.22)	006-007500
FA 20	5/8" Solder - (ANSI B 16.22)	006-007100
FA 20	3/4" Solder - (ANSI B 16.22)	006-007200
FA 20	1 1/8" Solder - (ANSI B 16.22)	006-007400

For Direct Fitting to the Specified Valves c/w Bolts, Nuts & Gaskets but w/o Flanges:

Type	Description	Code
FA 15	For TEA 20,TEVA 20,TEAT 20	006-004200
FA 15	For EVRA/EVRAT 10 & 15	006-101200
FA 20	For TEA 85,TEVA 85,TEAT 85	006-004800
FA 20	For EVRA/EVRAT 20	006-101300

FIA Filters

FIA Filter Bodies

Type	Part no	Connection	Code
Straight	FIA 15 SOC STR	1/2"	148H310900
	FIA 20 SOC STR	3/4"	148H311000
	FIA 25 SOC STR	1"	148H311100
	FIA 32 A40 STR	1 1/4"	148H316300
Angle	FIA 40 A40 STR	1 1/2"	148H316400
	FIA 50 A STR	2"	148H310200
	FIA 50 A ANG	2"	148H306800
	FIA 65 A ANG	2 1/2"	148H306900
	FIA 80 A ANG	3"	148H307000
	FIA 100 A ANG	4"	148H307100
	FIA 125 A ANG	5"	148H307200
	FIA 150 A ANG	6"	148H307300
	FIA 200 A ANG	8"	148H307400
	FIA 250 A ANG	10"	148H317300
	FIA 300 A ANG	12"	148H317400



FA strainer





SPP start devices

Type	Description	Code
ICG 220	Replaces current type relays on 1/12-1/2 HP compressors. Can be used with or without a start capacitor.	1405
PO 230	Replaces current type relays on 1/12-1/2 HP compressors. Can be used with or without a start capacitor.	1406
PON 2A	Replaces relays on 1/12-1/2HP compressors from 1/12 to 1/2 HP which use a run capacitor. Pushes directly on to compressor terminal.	1438
PR 90	Replaces potential relays for single phase compressors from 1/2 to 5 HP. Can also be used to replace current type relays	1463
APR 5	Replaces potential relays for single phase 1/2-5 HP compressors. Pick up voltage is adjustable.	1488

Replacement Relay/Overload

Type	Description	Code
RO 82	Replaces relay & overload units on 1/12-1/8 HP compressors with or without a start capacitor.	1424
PRO 82	Same as the RO 82, pushes directly onto compressor term (1/12-1/8 HP).	1430
RO 62	Replaces relay and overload units on 1/6-1/5 HP compressors with or without a start capacitor.	1425
PRO 62	Same as the RO 62, pushes directly onto compressor term (1/6-1/5 HP).	1423
RO 42	Replaces relay & overload units on 1/4-1/3 HP compressors with or without a start capacitor.	1426
PRO 42	Same as the RO 42, pushes directly onto compressor term (1/4-1/3 HP).	1422

Replacement Relay/Capacitor

Type	Description	Code
RSC 20	Combined relay/capacitor. Replaces current type relays and capacitors on 1/12-1/2 HP compressors. Leads push directly on to compressor terminals.	1439

Replacement Relay/Overload and Capacitor

Type	Description	Code
RCO 820	Replaces relay, overload and start capacitors on all capillary type systems. For use on 1/12-1/8 HP compressors.	1485
RCO 620	Replaces relay, overload and start capacitors on all capillary type systems. For use on 1/6-1/5 HP compressors.	1486
RCO 420	Replaces relay, overload and start capacitors on all capillary type systems. for use on 1/4-1/3 HP compressors.	1487

PSC (Permanent Start Capacitor) Start Devices

Type	Description	Code
URSC20	Designed for PSC applications on modern refrigerators and freezers. For use on 1/12-1/2 HP compressors.	1435
SPP 5	Designed for PSC applications on A/C units. For use on single phase 1/2-10 HP compressors. Gives up to 3 times increase in starting torque. Useful for low voltage applications or hard starting compressors.	1464
SPP 6	Designed for PSC applications on A/C units. For use on single phase 1/2-10 HP compressors. Gives up to 5 times increase in starting torque. Useful for low voltage applications or hard starting compressors.	1476

Ebm-Ziehl

Standard Fan Motors

Q range motors rotate counter-clockwise when looking towards the shaft, and can be used to achieve a sucking or blowing effect dependant on the type of blade used

Part No	Description	Alt Code	Code
M4Q045-BD01-01	Q 5 watt 230V 50hz	5023	510100
M4Q045-CA01-01	Q 7 watt 230V 50hz		510101
M4Q045-CA03-51	Q 10 watt 230V 50hz	5026	510102
M4Q045-CF01-01	Q 16 watt 230V 50hz		510103
M4Q045-DA01-01	Q 18 watt 230V 50hz	5029	510104
M4Q045-DA05-01	Q 23 watt 230V 50hz		510105
M4Q045-EA01-01	Q 25 watt 230V 50hz	5035	510106
M4Q045-EF01-01	Q 34 watt 230V 50hz	5038	510107

Multi Fit Fan Motors

Part No	Description	Alt Code	Code
M4Q045-BD01-75	Q 5 watt 230V 50hz	5046	510110
M4Q045-CA01-75	Q 7 watt 230V 50hz		510111
M4Q045-CA03-75	Q 10 watt 230V 50hz	5047	510112
M4Q045-CF01-75	Q 16 watt 230V 50hz	5048	510113
M4Q045-DA01-75	Q 18 watt 230V 50hz		510114
M4Q045-DA05-75	Q 23 watt 230V 50hz		510115
M4Q045-EA01-75	Q 25 watt 230V 50hz	5049	510116
M4Q045-EF01-75	Q 34 watt 230V 50hz	5061	510117

Centrifugal Fans

Part No	Description	Code
R2E190-A026-05	Single inlet 190mm 230V 50hz	510225
R2S133-AF50-18	Single inlet 133mm 230V 50hz	510226
D2E133-DM47-64	Dual Inlet 133mm 230V 50hz	510227

Compact Fans

Part No	Description	Code
W2E200-HH38-01	225 x 225 x 80mm 230V 50hz	510230
4650N	119 x 119 x 38mm 230V 50hz	510231
4656Z	119 x 119 x 38mm 230V 50hz	510232
9956M	119 x 119 x 25mm 230V 50Hz	510233
6078ES	172mm dia x 51mm 230V 50Hz	510234
8556N	80 x 80 x 38mm 230V 50hz	510235

Tangential

Part No	Description	Code
55410-81051	60mm dia-180mm motor on right - 230v	510255
55410-91250	60mm dia-180mm motor on left - 230v	510256
55411-30240	60mm dia-240mm motor on left - 230v	510257
55411-20230	60mm dia-240mm motor on right - 230v	510258
55412-70240	60mm dia-300mm motor on left - 230v	510259
55412-60370	60mm dia-300mm motor on right - 230v	510260

40,45,60mm Ø models available to order

Spares

Part No	Description	Code
99282-4-7320	Capacitor 1.5mF	510240
99283-4-7320	Capacitor 2.0mF	510241
99284-4-7320	Capacitor 4.0mF	510242
99285-4-7320	Capacitor 6.0mF	510243
99286-4-7320	Capacitor 8.0mF	510244



standard fan motor



centrifugal fans



compact fan



tangential fan

All Elco fan motors are 4 pole, 240V 50Hz single phase, speed 1300rpm. Elco fan motors rotate anti or counter clockwise when looking at the motor shaft. In order to achieve a sucking or blowing effect, select the correct blade type A or AO on page 253/254. Max. blade diameter and pitch are shown for each motor. For mounting brackets see page 404-405.



Elco Fans Comparative Table

Old Motor Reference	New Motor Reference	Code
	NU6-20/1/2 115V 60Hz	5022
N7-20/152 4060.2051	VN5-20/1008 240V	5023
N10-20/603 4060.2652	NET4T0ZVN002	5026
N16-30/349 4060.2050	NET4T18PVN003	5029
N25-40/72	NKT25-40/6 25W 240V	5035
N34-45/99 4060.2055	NET4T34PVN004	5038
NA5-13-172/34 4062586	VN5-13/A1043 240V	5102
NA5-13-200/31 4062587	VN5-13/A1044 240V	5103
NA7-20-154/15 4062580	VN7-20/A1007	5104
NA7-20-230/28 4062588	VN7-20/A1009	5105
NA5-13-154/34 (1.5m)	VN5-13/A1042 (1.5m) 240V	5106
NA10-20-200/28	NA10-20-200-28/12	5108
NA10-20-200/34 4062595	VN10-20/A1025 240V	5109
NA10-20-254/28 4062590	VN10-20/A1027 240V	5110
NA16-30-300/ZZ 4062596	VNT18-30/A6	5113
NA5-13/33 4062584	VN5-13/A1041	5125
NA7-20/11 4062583	VN7-20/A1008	5126
	NA7-20/2	5127
NA5-13/35 4062599	VN5-13/A1045 240V	5128
NR7-20-230/28	NR7-20-230-28	5135
NR16-30-254-31 4063113	VNT18-30/R2 240V	5136
NR10-20/R1003	NR10-20-254-22 240V	5137

Shaded Pole Motors Series VN/N

Excluding brackets

Part No	Output watts	Max Impeller diameter (size/pitch)	Code
VN5-20/1008	7	230/28°	5023
NET4T0ZVN002	10	254/22°	5026
NET4T18PVN003	16	300/22°	5029
NKT25-40/6	25	300/28°	5035
NET4T34PVN004	34	300/34°	5038

Multi-fit Fan Motors

Part No	Output watts	Max Impeller diameter (size/pitch)	Code
NET5T05ZVN001	5	230/25°	5046
NET5T10ZVN001	10	254/28°	5047
NET5T18PVN001	18	300/28°	5048
NET5T25PVN001	25	300/31°	5049
NET5T34PVN001	34	300/34°	5061

Ring Mounted Fan Assembly Series NA

CCW Rotation-draw through airflow (OEM Products)

Part No	Output watts	Fan diameter	Pitch of blade fitted	Code
VN5-13/A1042 (1.5m)	5	154mm	34°	5106
VN5-13/A1043	5	172mm	34°	5102
VN5-13/A1044	5	200mm	31°	5103
VN7-20/A1007	7	154mm	15°	5104
VN7-20/A1009	7	230mm	28°	5105
NA10-20-200-28/12	10	200mm	28°	5108
VN10-20/A1025	10	200mm	34°	5109
VN10-20/A1027	10	254mm	28°	5110
VNT18-30/A6	16	300mm	22°	5113
3FBTA-20-30-230-34/2	30	230mm	34°	5080

Plastic

Part No	Output watts	Fan diameter	Pitch of blade fitted	Code
NA10-20-200/31	10	200mm	31°	5115

Without blade (OEM Products)

Part No	Output watts	Ring Size	Pitch of blade fitted	Code
VN5-13/A1041	5	154mm	154/34°	5125
R/MNT 13/A1045	5	172mm	172/34°	5128
NA7-20/20	7	200mm	200/28°	5127

Fan Motor Assy complete with guard - Series NR

Part No	Output watts	Fan diameter	Pitch of blade fitted	Code
NR7-20-230-28	7	230mm	28°	5135
NR10-20-254-22	10	254mm	22°	5137
VNT18-30/R2	16	254mm	31°	5136

Universal Electric

4 Pole, 240V 50Hz, single phase. Speed 1300rpm. Universal Electric fan motors rotate clockwise or counter clockwise as shown.

Motor type	Wattage	Rotation	Blade mounting	Code
AA2C6575	7	C/Clockwise	U.C.P.	5016
AA2P5334K	14	C/Clockwise	U.C.P.	5012
AA2P5365K	14	Clockwise	U.C.P.	5013
AA2R5568K	18	C/Clockwise	Shaft mount (8mm dia)	5014
AA2R5968K	18	Clockwise	Shaft mount (8mm dia)	5015
AA2B6745	7	C/Clockwise	U.C.P.	5010
AA2B6896	5	Clockwise	U.C.P.	5011



Fan Blades Series A

CCW-draw through airflow

Part No	Diameter	Pitch	Code
A154-22	154mm	22°	5164
A154-31	154mm	31°	5165
A172-22	172mm	22°	5166
A172-31	172mm	31°	5167
A200-22	200mm	22°	5168
A200-28	200mm	28°	5169
A200-31	200mm	31°	5170
A200-34	200mm	34°	5194
A230-22	230mm	22°	5171
A230-28	230mm	28°	5172
A230-31	230mm	31°	5173
A254-22	254mm	22°	5174
A254-31	254mm	31°	5175
A300-22	300mm	22°	5176
A300-31	300mm	31°	5177

Fan Blades Series AO

CCW blow-through airflow

Part No	Diameter	Pitch	Code
A0154-15	154mm	15°	5179
A0154-22	154mm	22°	5180
A0154-31	154mm	31°	5181
A0154-34	154mm	34°	5192
A0172-22	172mm	22°	5182
A0172-31	172mm	31°	5183
A0172-34	172mm	34°	5193
A0200-22	200mm	22°	5184
A0200-31	200mm	31°	5185
A0230-22	230mm	22°	5186
A0230-31	230mm	31°	5187
A0254-22	254mm	22°	5188
A0254-31	254mm	31°	5189

Fan Blades - Draw through airflow (5 blade)

Pressed aluminium blades suitable for both clockwise and counter-clockwise rotation fan motors with U.C.P. blade mounting. (Universal Centre Piercing)

Diameter	Rotation	Pitch	Code
152mm / 6"	CW	20°	5150
152mm / 6"	CCW	20°	5151
165mm / 6 1/2"	CW	31°	5152
165mm / 6 1/2"	CCW	31°	5153
178mm / 7"	CW	31°	5154
178mm / 7"	CCW	31°	5155
191mm / 7 1/2"	CW	31°	5156
191mm / 7 1/2"	CCW	31°	5157
203mm / 8"	CW	31°	5158
203mm / 8"	CCW	31°	5159
229mm / 9"	CW	31°	5160
229mm / 9"	CCW	31°	5161
254mm / 10"	CW	31°	5162
254mm / 10"	CCW	31°	5163

Maneurop

This group of oils have been especially developed for use in Maneurop compressors to offer maximum protection and lubricant qualities during all types of operation. No other oil types should be used, failure to use these lubricants will invalidate the warranty on new compressors.

Mineral Oil (White Oil)

Type	Description	Code
7754001	160P 2L for use in MT/MS	400473
7754002	160P 5L for use in MT/MS	400474

ABM Oil (for compressors using transitional R22 based refrigerants)

Type	Description	Code
7754009	160ABM 2Litre for use in MT	400475

Ester Oil

Type	Description	Code
7754019	160PZ 1L for use in MTZ	400498
7754020	160PZ 2L for use in MTZ	400499
7754024	160SZ 2L for use in SZ	401146

Shell - Mineral Oils

Shell Clavus Series

Description	Size	Code
Clavus 68	20 Litres	6783

Mobil - EAL Arctic Series

Ester Oil

Description	Size	Code
EAL Arc 22	5 Litres	7051-5
EAL Arc 22CC*	5 Litres	7052-5
EAL Arc 32	5 Litres	7054-5
EAL Arc 68	3.78 Litres	7057
EAL Arc 22	19 Litres	7050
EAL Arc 32	20 Litres	7053-20

* formulated for Copeland compressors

Mineral Oil

Description	Size	Code
Gargoyle Arc 155	20 Litres	7041-20
Gargoyle Arc 300	20 Litres	7043-20



ICI - Emkarate Series

Description	Size	Code
RL170H	1 Litre	65011
RL170H	5 Litres	65014
RL22H	1 Litre	6906
RL220H	1 Litre	6506
RL220H	5 Litres	6508
RL32H	1 Litre	69008
RL32H	5 Litres	69034
RL32H	20 Litres	69017
RL32-3MAF	1 Litre	6505-1
RL32-3MAF	5 Litres	6507-5
RL46S	1 Litre	6909
RL46S	5 Litres	6795
RL46H	1 Litre	6509
RL46H	5 Litres	6512
RL68H	1 Litre	6510
RL68H	5 Litres	6513
RL68H	20 Litres	69018

ESSO Oil

Description	Size	Code
M-Gargoyle Arc 300	20 Litres	7043-20
E-Zerice S 46 Drum-M	208 Litres	7076
E-Zerice S 46 Pail	20 Litres	7077
E-Zerice S 68 Drum-M	208 Litres	7078
E-Zerice S 68 Pail	20 Litres	7079
E-Zerice S 100 Drum-M	208 Litres	7080
E-Zerice S 100 Pail	20 Litres	7081

Virginia KMP - Suniso Series

Type	Description	Size	Code
L318	Suniso oil 3GS	4 Litres	6791-4
L321	Suniso oil 3GS I	20 Litres	6791-20
L319	Suniso oil 4GS	4 Litres	6792-4
L322	Suniso oil 4GS	20 Litres	6792-20
L320	Suniso oil 5GS	4 Litres	6793-4
L323	Suniso oil 5GS	20 Litres	6793-20

Semi-synthetic

Description	Size	Code
SD 2212 Oil	20 Litres	6782

Pumps

Part No	Description	Code
77930	Deluxe Oil Pump	6663
1702	Charge Oil Pump	6638

Danfoss - Oil Separators

Type	Description	Code
OUB 1	Without connections	040B001000
OUB 4	Without connections	040B004000



Connections for OUB 1

Two of the below codes required per OUB

Connection in	Code
3/8" flare straightway	040B013200
1/2" flare straightway	040B013400
5/8" flare straightway	040B013600
3/8" solder straightway	040B014000
1/2" solder straightway	040B014200
5/8" solder straightway	040B014400

Connections for OUB 4

Two of the below codes required per OUB

Connection in	Code
5/8" flare straightway	040B025600
3/4" flare straightway	040B025800
1" flare straightway	040B026000
5/8" solder straightway	040B026600
3/4" solder straightway	040B026800
7/8" solder straightway	040B027000
1" solder straightway	040B027200
1 1/8" solder straightway	040B027400



Oil Strainers

For fitting in pipe lines including flanges, bolts, nuts & gaskets

Type	Connection	Code
FA 15	1/4" weld flange	006-005000
FA 15	3/8" weld flange	006-005100
FA 15	1/2" weld flange	006-005200
FA 15	3/4" weld flange	006-005300
FA 15	1/2" solder flange	006-005700
FA 15	5/8" solder flange	006-005800
FA 15	3/4" solder flange	006-005900
FA 15	7/8" solder flange	006-007500
FA 20	1/2" weld flange	006-006500
FA 20	3/4" weld flange	006-006600
FA 20	1" weld flange	006-006700
FA 20	5/8" solder flange	006-007100
FA 20	3/4" solder flange	006-007200
FA 20	1 1/8" solder flange	006-007400
FA 25	1 1/8" solder flange	036B000100
FA 25	1" weld flange	036B000200

For direct fitting on valves including bolt, nuts & gaskets but no flanges

Type	For valves	Code
FA 15	EVR15, EVRA3	006-004300
FA 15	TEA 20, TEVA 20, TEAT 20	006-004200
FA 15	6F, TE 12, CVM	006-004000
FA 15	EVRA/T 10-15	006-101200
FA20	EVR20	006-004600
FA 20	TEA 85, TEVA 85, TEAT 85	006-004800
FA 20	EVRA/T 20	006-101300

Differential Oil Pressure Controls



Type	Time Relay	Connection	Range (bar)	Diff (bar)	Code
MP 54	45 sec.	1/4"/6 mm flare	-1 to +12	0.65 fixed	060B016666
MP 54	60 sec.	1/4"/6 mm flare	-1 to +12	0.9 fixed	060B016766
MP 54	90 sec.	1/4"/6 mm flare	-1 to +12	0.65 fixed	060B016866
MP 54	120 sec.	1/4"/6 mm flare	-1 to +12	0.65 fixed	060B016966
MP 55	45 sec.	1/4"/6 mm flare	-1 to +12	0.3-4.5	060B017066
MP 55	60 sec.	1/4"/6 mm flare	-1 to +12	0.3-4.5	060B017166
MP 55	60 sec./light	1/4"/6 mm flare	-1 to +12	0.3-4.5	060B017866
MP 55	90 sec.	1/4"/6 mm flare	-1 to +12	0.3-4.5	060B017266
MP 55	120 sec.	1/4"/6 mm flare	-1 to +12	0.3-4.5	060B017366
MP 55	No time relay	1/4"/6 mm flare	-1 to +12	0.3-4.5	060B029966

ESK - Oil Separators

Model	Conn size	Diameter	Code
OS-1/2"	1/2"	125 mm	7320
OS-16	5/8"	125 mm	7321
OS-22	7/8"	125 mm	7322
OS-28	1 1/8"	125 mm	7323
OS-35	1 3/8"	125 mm	7324
OS-42	1 5/8"	125 mm	7325
OS-28H	1 1/8"	195 mm	7326
OS-35H	1 3/8"	195 mm	7327
OS-42H	1 5/8"	195 mm	7328
OS-54H	2 1/8"	195 mm	7329
OS-22F	7/8"	125 mm	7330
OS-28F	1 1/8"	125 mm	7331
OS-35F	1 3/8"	125 mm	7332
OS-42F	1 5/8"	125 mm	7333
OS-54/42FM	1 5/8"	195 mm	7338
OS-54FM	2 1/8"	195 mm	7335
OS-54FH	2 1/8"	195 mm	7375
OS-67FH	2 5/8"	300 mm	7336
OS-80FH	3 1/8"	300 mm	7337
OS-80/67FX	2 5/8"	273 mm	7403
OS-80FX	3 1/8"	273 mm	7404

Further ESK separators are available. Please contact a Dean & Wood branch for more information

Replacement Float Assembly for above oil separator

Type	Fits separator	Code
SVF-10B	OS-F	7394
Gasket FD-108		7370

Mechanical Oil Regulator

Model	Code
OR-O Std	7360
ORE2-O BC	7361
ORE2-BC2	7395

Adaptor kits and stop valve for mechanical oil regulators

Description	For use with:	Code
P Adaptor Kit	Prestcold	7367
CR Adaptor Kit	Carrier	7368
BI Adaptor Kit	Bitzer	7369
MA Adaptor Kit	Maneurop	7387
R Adaptor Kit	Frascold (z/w)	7372
Oil regulator inlet stop valve set		7373





Advanced Engineering - Product Description



- Enviro - coil - Environmentally friendly evaporator and condenser coil cleaner. Odourless, biodegradable, non-flammable
- Hydro-coil - Heavy duty evaporator and chilled water coil cleaner
- Hydro-foam - Heavy duty foaming cleaner for aluminium finned air cooled condensers
- Hydrox -De- scaler for water cooling towers and water cooled condensers, colour coded for safety
- Hydro-Kleen - Foaming, acid free cleaner and degreaser for aluminium finned air cooled condensers and cellar coolers
- Conden-cide - Disinfects and cleans coils, condensate pans, ducts and air handling units or air conditioning systems,
- safe for food preparation areas
- HB30 - Cleans and descales ice machines. Metal safe, non-fuming, disinfectant action, kills bacteria, mould and fungus.



Coil Cleaners

Part No	Description	Code
ENCO0405	Enviro-coil 5L (yellow)	976237
HYCO0405	Hydro-coil 5L (blue)	976202
HYDX0405	Hydrox 5L (red)	976206
HYFO0405	Hydro-foam 5L (yellow)	976205
HYKL0405	Hydro-Kleen 5L (green)	976238
SUCL0405	Superclean Heavy Duty 5L	976240
SCSM6PK	Stay Clean Strips (small)	976219
SUHD0405	Super HD cleaner 5L	976204
ENFLO405	Endoflush cleaner 5L	976241
010107	Low pressure sprayer 8L	976242



Ready to Use Bottles

Ready mixed 1 litre bottles, ready to use no diluting needed

Part No	Description	Code
RTEC0801	Evaporator cleaner 1L	976223
RTBU0801	Bubble Up leak detector 1L	976222
RTCC0801	Condenser cleaner 1L	976224
RTCD0801	Evap cleaner/disinfectant 1L	976221
SCSPRAY	Stayclean 0.5L	976220



Aerosol Cleaners

Part No	Description	Code
EYCN1201	Easy Clean-evaporator and condenser 500ml	976228
EYCE1201	Easy Care - evaporator cleaner with disinfectant 500ml	976227
GRGO0012	Grease Gobbler Solvent Cond. Cleaner	976201
EYFD1201	Easy Find bubble up leak detector	976225
EYFM1201	Easy Foam-non acid condenser cleaner 500ml	976229
EYFH1201	Easy Finish-suitable for external surfaces (diffusers) 500ml	976226



Condensate Tray/Drain Cleaner

Controlled release for continuous cleaning

Part No	Description	Code
COC10405	Conden-cide 5L	976203

TR Self Contained Marine Air Conditioning Unit

- Nominal cooling loads 7.0kW to 70.0kW
- Sea water cooled through shell and tube condenser
- Refrigerant R404a as standard
- Plenum and grille discharge
- Zintec coated mild steel casing with powder coated paint finish RAL 9018 (Grey)
- Removable panels for access and maintenance
- Quick release grille for air filter cleaning and replacement
- Units supplied factory precharged only requiring suitable water and electrical connections
- Electric supply 380v 3ph 50Hz or 440v 3ph 60Hz
- Other options available
 - Fresh water cooled through plate heat exchanger
 - Sea/fresh water cooled through coaxial condenser
 - Spigoted duct connection
 - Colour to suit operating environment
 - Fresh air connection
 - Alternative fan pressures
 - Electric heating
 - 690v/3ph/60Hz electric supply
- See separate data sheet for air cooled condenser



Illustration depicts unit with optional plenum and grille discharge.

PRODUCT CODE	TR02	TR03	TR05	TR08	TR10	TR15	TR20
Nominal cooling load (kW)	7.0	10.5	17.5	28.0	35.0	52.5	70.0
Nominal air flow (m³/h)	1080	1530	2550	4075	5100	7725	10200
External pressure (Pa)	300	500	500	500	500	1000	1000
Fan motor rating (kW)	0.18	0.37	0.55	1.10	1.50	4.00	5.50
Comp. motor power (kW)	2.89	3.55	5.48	9.79	10.94	19.58	21.88
Nominal water quantity (m³/h)	1.34	1.43	2.51	4.14	6.89	7.12	12.13
Unit dimensions H (mm)	1200	1490	1610	1800	1800	1900	1900
W (mm)	900	900	1050	1250	1250	1700	1700
D (mm)	425	450	550	650	650	850	850
P (mm)	130	200	230	250	300	300	350
Unit weight (kg)	186	225	285	373	412	637	721
Electric Heating (optional) (kW)	1 x 3.0	1 x 4.5	2 x 4.5	2 x 9.0	2 x 9.0	3 x 9.0	4 x 9.0

Nominal duties are based on air entering at 25°Cdb@ 50% RH utilising R404a with sea water @ 32°C



data sheet



Smelly Jelly

Part No	Description	Code
SMJE2001C	Citrus	976233
SMJE2001H	Herbal	976232
SMJE2001M	Mountain Fresh	976207
SMJE2001F	Floral	976231
SMJE2001A	Morning	976234

Other Cleaners

Part No	Description	Code
HB30 1201	1L ice machine cleaner	976200
010106	DrainKleen OneShot 250ml	976243



Pro Range - 5L Concentrates

Type	Description	Code
Pro-Clean	Condenser and evaporator coil cleaner	976820
Pro-Coil+	Evaporator coil cleaner	976821
Pro-Cool	Ice machine cleaner	976822
Pro-Foam+	Condenser coil cleaner (non-acid)	976823
Pro-Shine	Condenser coil cleaner (acid)	976824
Pro-Universal	Premium condenser and evaporator coil cleaner	976826
Gran Univ	Pro Universal Granular Coil Cleaner	976827

Good to Go range - 1 litre pre-diluted

Type	Description	Code
G2GBubble+	Leak detector	976800
G2GCare	Evaporator coil cleaner and disinfectant	976801
G2GCoil+	Evaporator coil cleaner	976802
G2GFoam+	Condenser coil cleaner (non-acid)	976803
G2GUniversal	Premium condenser and evaporator coil cleaner	976804
GSG Pack	GSG Maintenance Kit	976805
GRAN-UNI	Granular coil cleaner - 480 gram bottle (makes 8 litres)	976827

Zap range - aerosols

Type	Description	Code
Zap-Power	Solvent based aerosol cleaner	976811
Zap-Foam	Non-acid foaming coil cleaner	976810

Fragrancing gel and drain pan tablets

Type	Description	Code
Gel-Fresh-F	Fruit zest fragrancing gel (yellow)	976815
Gel-Fresh-V	Violet haze fragrancing gel (blue)	976816
Pro-Treat	Drain pan tablets (12 tablets)	976825
PT-151	Pro-treat 151 (100 tablets)	580019

Expanding Foam

Part No	Description	Code
1714	12oz aerosol	580026
Can-4	Acid neutralizer 4oz all oils	580022

Accessories

Part No	Description	Code
GG-1	Gallo gun	4523
GGC-6	Pack of 6 CO2 cartridges for Gallo gun	4524
GG-1A	Adapter kit for Gallo gun	4525



Gallo gun

Fin Tools

Part No	Description	Code
T-100	Complete Kit (handle and 6 heads)	1412
T-1	Handle only	1413
T-8	Head 4 & 8 F.P.I.	1414
T-9	Head 9 F.P.I.	1415
T-10	Head 5 & 10 F.P.I.	1416
T-11	Head 11 F.P.I.	1417
T-12	Head 6 & 12 F.P.I.	1418
T-14	Head 7 & 14 F.P.I.	1419
T-200	Fin-Tool	1420



Fin tool

Tube Cleaners

Part No	Description	Code
E-5	Head 5/16 to 3/8" ID Tubes	1466
E-6	Head 3/8 to 1/2" ID Tubes	1467
E-8	Head 1/2 to 5/8" ID Tubes	1468
E-10	Head 5/8 to 1in ID Tubes	1469
EE-30	Rod, 0.76m	1471
EE-48	Rod, 1.22m	
EH-1	Handle	1473
EC-56	Coupling for E5 & E6	1474
EC-810	Rod Coupling, also for E8 & E10	1475

Straight Lengths

Copper size	SWG	Copper wall thickness (mm)	Max. working pressure bar (BS1306)	3 m code	6 m code
3/8	20 SWG	0.91	75.1	1859	1832
1/2	20 SWG	0.91	55.0	1833	1834
5/8	20 SWG	0.91	43.5	1835	1836
5/8	19 SWG	1.01	43.5		1872
3/4	19 SWG	1.01	40.0	1837	1838
3/4	18 SWG	1.22	45.9		1873
7/8	18 SWG	1.22	41.5	1839	1840
1 1/8	14 SWG	2.03	54.6		1874
1 1/8	16 SWG	1.62	43.3		1868
1 1/8	18 SWG	1.22	32.0	1841	1842
1 3/8	14 SWG	2.03	41.5	1888	1876
1 3/8	12 SWG	2.64	54.8	1880	
1 3/8	16 SWG	1.62	35.1	1858-3	1858
1 3/8	18 SWG	1.22	26.0	1843	1844
1 5/8	14 SWG	2.03	38.7	1886	1877
1 5/8	12 SWG	2.64	51.1	1890	
1 5/8	16 SWG	1.62	29.5	1860-3	1860
1 5/8	18 SWG	1.22	21.9	1845	1846
2 1/8	14 SWG	2.03	28.0	1884-3	1884
2 1/8	16 SWG	1.62	22.4	1881	1882
2 1/8	18 SWG	1.22	16.6	1847	1848
2 5/8	12 SWG	2.64	29.6	1892-3	1892
2 5/8	14 SWG	2.03	22.6		1885
2 5/8	16 SWG	1.62	18.0	1851	1883
2 5/8	18 SWG	1.22	13.4	1849	1850
3 1/8	12 SWG	2.64	24.7		1896
3 1/8	14 SWG	2.03	18.9		1887
3 1/8	16 SWG	1.62	15.1	1852	1853
3 5/8	12 SWG	2.64	21.2		1898
3 5/8	14 SWG	2.03	16.2		1889
3 5/8	16 SWG	1.62	13.0	1854	1855
4 1/8	12 SWG	2.64	18.6	1899-3	1899
4 1/8	14 SWG	2.03	14.2		1891
4 1/8	16 SWG	1.62	11.4	1856	1857

Coils

Copper size	SWG	Copper wall thickness (mm)	Max. working pressure bar (BS1306)	6 m code	15m code	30m code
1/8	0.03"					1802
3/16	22 SWG	0.71	123.1	1803	1804	1805
1/4	22 SWG	0.71	89.0		1807	1808
5/16	21 SWG	0.81	79.3		1813	1814
5/16	22 SWG	0.71	69.8			1862
3/8	21 SWG	0.81	65.2	1815	1816	1817
3/8	22 SWG	0.71	56.4			1864
1/2	21 SWG	0.81	51.1	1821	1822	1823
5/8	20 SWG	0.91	43.5	1824	1825	1826
3/4	19 SWG	1.02	40.0	1827	1828	1829
7/8	19 SWG	1.02	34.1	1830	1831	1869

Capillary tube soft annealed

OD	ID	Length	Code
0.085"	0.031"	15m	1861
0.087"	0.036"	30m	1866
0.093"	0.042"	30m	1867
0.106"	0.054"	30m	1870

Pre-insulated Tube



Pre-insulated copper tube

Inaba Denko

20m rolls insulated (AF) liquid/suction lines.

Type	Description	Applicable for use with	Code
PC-2320-ER	1/4" x 3/8"	R22, R407C, R404A, R410A	976613ER
PC-2420-ER	1/4" x 1/2"	R22, R407C, R404A, R410A	976614ER
PC-3620	3/8" x 3/4"	R22, R407C, R404A	976617

* while stocks last.

Armaflex Duosplit

20m rolls insulated (AF) liquid/suction lines.

Type	Description	Applicable for use with	Code
SPZ-09X0610/E20	1/4" x 3/8"	R22, R407C, R404A, R410A	976710
SPZ-09X0612/E20	1/4" x 1/2"	R22, R407C, R404A, R410A	976711
SPZ-09X0616/E20	1/4" x 5/8"	R22, R407C, R404A, R410A	976712
SPZ-09X1012/E20	3/8" x 1/2"	R22, R407C, R404A, R410A	976713
SPZ-09X1016/E20	3/8" x 5/8"	R22, R407C, R404A	976714
SPZ-09X1019/E20	3/8" x 3/4"	R22, R407C, R404A	976715

Insulation - Technical

Armaflex tube and Armaflex sheet Class 0

Temperature Range -40°C to +116°C

Thermal conductivity to DIN 52613 at mean temperatures indicated:
0.035 W/m²K at 0°C
0.037 W/m²K at 20°C
0.040 W/m²K at 50°C

Fire Performance:
Fire Propagation BS476: Part 6 1<12.0
Class 0: 1989
Surface spread of flame BS476: Part 7 1<8.0
Class 1: 1997

Water Vapour Permeability
BS4370 Part 2 1973 Method 8
0.25mgm/Nm

Water Absorption after 28 days:
DIN 53496 By volume 0.35%

Sound Reduction:
DIN 4109 Up to 32dB(A)

Application Temperature:
+5°C to +25°C

Class 0 tube - black

6mm (1/4") nominal thickness

O.D.Tube				
Inch	mm	Ref	2m lengths per carton	Code
1/4	6	6006	272	6925
3/8	10	6010	200	6926
1/2	12	6012	168	6927
5/8	15	6015	133	6928
3/4	19	6020	105	6929
7/8	22	6022	86	6930
1 1/8	28	6028	62	6931

9mm (3/8") nominal thickness

O.D.Tube				
Inch	mm	Ref	2m lengths per carton	Code
1/4	6	9006	176	6937
3/8	10	9010	140	6938
1/2	12	9012	120	6939
5/8	15	9015	96	6940
3/4	19	9020	78	6941
7/8	22	9022	70	6942
1 1/8	28	9028	49	6943
1 3/8	35	9035	42	6944
1 5/8	42	9042	30	6945
2 1/8	54	9054	27	6946

13mm (1/2") nominal thickness

O.D.Tube				
Inch	mm	Ref	2m lengths per carton	Code
1/4	6	13006	113	6949
3/8	10	13010	94	6950
1/2	12	13012	81	6951
5/8	15	13015	68	6952
3/4	19	13020	56	6953
7/8	22	13022	52	6954
1 1/8	28	13028	39	6955
1 3/8	35	13035	30	6956
1 5/8	42	13042	28	6957
2 1/8	54	13054	21	6958
2 5/8	67	13067	17	6959
3 1/8	80	13080	13	6960
4 1/4	108	13108	8	6962

19mm (3/4") nominal thickness

O.D.Tube				
Inch	mm	Ref	2m lengths per carton	Code
3/8	10	19010	52	6963
1/2	12	19012	46	6964
5/8	15	19015	39	6965
3/4	19	19020	35	6966
7/8	22	19022	32	6967
1 1/8	28	19028	25	6968
1 3/8	35	19035	20	6969
1 5/8	42	19042	16	6970
2 1/8	54	19054	12	6971
2 5/8	67	19067	10	6972
3 1/8	80	19080	8	6973
3 5/8	93	19093	8	7004
4 1/4	108	19108	6	6990

25mm (1") nominal thickness

O.D.Tube				
Inch	mm	Ref	2m lengths per carton	Code
1/2	12	25012	25	6974
5/8	15	25015	24	6975
3/4	19	25020	20	6984
7/8	22	25022	20	6976
1 1/8	28	25028	16	6977
1 3/8	35	25035	12	6978
1 5/8	42	25042	12	6979
2 1/8	54	25054	9	6980
2 5/8	67	25067	8	7010
3 1/8	80	25080	6	7011
3 1/2	89	25089	6	6985
3 2/3	93	25093	6	7006
4 1/4	108	25108	4	6947

Class 0 sheet - black

2m x 0.5m for tanks, ductwork and large tubes

Nominal thickness			
in	mm	Sheets per carton	Code
3/8	9	13	6991
1/2	13	9	6992
3/4	19	7	6993
1	25	5	6994

Class 0 rolls - black

Continuous tube in a box for a more economical installation.

6mm (1/4") nominal wall thickness

O.D.Tube			
Inch	mm	Coil length per carton	Code
1/4	6	95m	7220
3/8	10	75m	7221
1/2	12	65m	7222
5/8	15	55m	7223

9mm (3/8") nominal wall thickness

O.D.Tube

Inch	mm	Coil length per carton	Code
1/4	6	70m	7230
3/8	10	50m	7231
1/2	12	45m	7232
5/8	15	40m	7233
3/4	20	34m	7234
7/8	22	30m	7235
1 1/8	28	26m	7236

13mm (1/2") nominal wall thickness

O.D.Tube

Inch	mm	Coil length per carton	Code
1/4	6	45m	7240
3/8	10	35m	7241
1/2	12	32m	7242
5/8	15	32m	7243
3/4	20	28m	7244
7/8	22	26m	7245
1 1/8	28	20m	7246

Miscellaneous

Armaflex Pipe supports

Type	Description	Code
PH-M-15/18	15-18 mm	7139
PH-M-22/25	22-25 mm	7140
PH-M-28/30	28-30 mm	7141
PH-M-35/38	35-38 mm	7142
PH-M-42/45	42-45 mm	7143
PH-M-48	48 mm	7144
PH-M-54/57	54-57 mm	7145
PH-M-60/64	60-64 mm	7146
PH-M-70	70 mm	7147
PH-M-76/80	76-80 mm	7148
PH-M-89	89 mm	7150
PH-M-102/108	102/108 mm	7152

Note: See page 208 for Insulation tape

Armaload

Armaload is used as a load bearing insulating insert between insulated pipes and their supports

Description	Code
1m half round	7020

Anti-condensate tape

Description	Code
15m Class 0 - Black 2" wide x 1/8"	7000

Adhesive

Volume	Code
1/4L	7196
1/2L	6995
1L	6996

Paint

Developed to protect insul tube thermal insulation products against sunlight, U.V. and chemical attack.

Colour	Volume	Code
Grey	2.5L	6986GY
White	2.5L	6986WH
Black	2.5L	6986BK

Armaflex cleaner

Description	Code
1 litre can	6989

Slitting knife

Description	Code
Knife c/w blade	6923
10 spare blades	6924

Couplings

Copper to copper with stop

OD Tube	Code
3/16"	2001
1/4"	2002
3/8"	2004
1/2"	2005
5/8"	2006
3/4"	2007
7/8"	2008
1"	2009
1 1/8"	2010
1 3/8"	2011
1 5/8"	2012
2 1/8"	2013
2 5/8"	2014
3 1/8"	2015
3 5/8"	2016
4 1/8"	2017

Copper to copper without stop

OD Tube	Code
1/4"	2068
3/8"	2070
1/2"	2071
5/8"	2072
7/8"	2074
1 1/8"	2075
1 3/8"	2076
1 5/8"	2077
2 1/8"	2078
2 5/8"	2079
3 1/8"	2080



Reducers



Copper to copper

OD Tube			
1	x	2	Code
1/4"		3/16"	2020
5/16"		1/4"	2021
3/8"		5/16"	2022
3/8"		1/4"	2023
1/2"		3/8"	2024
1/2"		1/4"	2025
5/8"		1/2"	2026
5/8"		3/8"	2027
3/4"		5/8"	2028
3/4"		1/2"	2029
3/4"		3/8"	2030
7/8"		3/4"	2031
7/8"		5/8"	2032
7/8"		1/2"	2033
7/8"		3/8"	2034
1 1/8"		7/8"	2036
1 1/8"		3/4"	2037
1 1/8"		5/8"	2038
1 1/8"		1/2"	2039
1 3/8"		1 1/8"	2040
1 3/8"		7/8"	2041
1 3/8"		3/4"	2042
1 3/8"		5/8"	2043
1 5/8"		1 3/8"	2044
1 5/8"		1 1/8"	2045
1 5/8"		7/8"	2046
1 5/8"		5/8"	2047
2 1/8"		1 5/8"	2048
2 1/8"		1 3/8"	2049
2 1/8"		1 1/8"	2050
2 1/8"		7/8"	2051
2 1/8"		5/8"	2052
2 5/8"		2 1/8"	2053
2 5/8"		1 5/8"	2054
2 5/8"		1 3/8"	2055
2 5/8"		1 1/8"	2056
3 1/8"		2 5/8"	2057
3 1/8"		2 1/8"	2058
3 1/8"		1 5/8"	2059
3 5/8"		3 1/8"	2060
4 1/8"		3 5/8"	2061
4 1/8"		3 1/8"	2062
4 1/8"		2 5/8"	2063
4 1/8"		2 1/8"	2064



Fitting to Copper

OD Tube			
1	x	2	Code
3/8"		1/4"	2088
1/2"		3/8"	2089
1/2"		1/4"	2090
5/8"		1/2"	2091
5/8"		3/8"	2092
3/4"		5/8"	2093
3/4"		1/2"	2096
3/4"		3/8"	2097
7/8"		3/4"	2098
7/8"		5/8"	2099
7/8"		1/2"	2100
7/8"		3/8"	2101
1 1/8"		7/8"	2102
1 1/8"		3/4"	2103
1 1/8"		5/8"	2104
1 1/8"		1/2"	2105
1 3/8"		1 1/8"	2106
1 3/8"		7/8"	2107
1 3/8"		5/8"	2108
1 5/8"		1 3/8"	2109
1 5/8"		1 1/8"	2110
1 5/8"		7/8"	2111
1 5/8"		5/8"	2112
2 1/8"		1 5/8"	2113
2 1/8"		1 3/8"	2114
2 1/8"		1 1/8"	2115
2 1/8"		7/8"	2116
2 1/8"		5/8"	2117
2 5/8"		2 1/8"	2118
2 5/8"		1 5/8"	2119
2 5/8"		1 3/8"	2120
2 5/8"		1 1/8"	2121
3 1/8"		2 5/8"	2122
3 1/8"		2 1/8"	2123
3 1/8"		1 5/8"	2124
3 1/8"		1 3/8"	2125
3 5/8"		3 1/8"	2126
4 1/8"		3 5/8"	2127
4 1/8"		3 1/8"	2128
4 1/8"		2 5/8"	2129
4 1/8"		2 1/8"	2130

45° Elbows

Copper to Copper

OD Tube	Code
1/4"	2238
3/8"	2239
1/2"	2240
5/8"	2241
3/4"	2242
7/8"	2243
1 1/8"	2244
1 3/8"	2245
1 5/8"	2246
2 1/8"	2247
2 5/8"	2248
3 1/8"	2249
3 5/8"	2251
4 1/8"	2250



Copper to fitting

OD Tube	Code
3/8"	2265
1/2"	2266
5/8"	2267
3/4"	2268
7/8"	2269
1 1/8"	2270
1 3/8"	2271
1 5/8"	2272
2 1/8"	2273
2 5/8"	2274
3 1/8"	2275

Fitting to fitting

OD Tube	Code
1/2"	2259
5/8"	2260
7/8"	2262
1 1/8"	2263

90° Elbows

Short radius, copper to copper

OD Tube	Code
3/8"	2281
1/2"	2282
5/8"	2283
3/4"	2284
7/8"	2285
1 1/8"	2286
1 3/8"	2287
1 5/8"	2288
2 1/8"	2289
2 5/8"	2290
3 1/8"	2291
3 5/8"	2292
4 1/8"	2293



Short radius, copper to copper reducing

OD Tube	Code
1 5/8" x 1 3/8"	2299
2 1/8" x 1 5/8"	2300

Short radius, copper to fitting

OD Tube	Code
1/2"	2448
5/8"	2449
7/8"	2451
1 1/8"	2452
1 3/8"	2453
1 5/8"	2454
2 1/8"	2455
2 5/8"	2456
3 1/8"	2457
3 5/8"	2459
4 1/8"	2458

Long radius, copper to copper (bends)

OD Tube	Code
3/16"	2305
1/4"	2306
5/16"	2307
3/8"	2308
1/2"	2309
5/8"	2310
3/4"	2311
7/8"	2312
1"	2313
1 1/8"	2314
1 3/8"	2315
1 5/8"	2316
2 1/8"	2317
2 5/8"	2318
3 1/8"	2319
3 5/8"	2320
4 1/8"	2321



Long radius, copper to copper reducing

OD Tube			
1	x	2	Code
3/8"		1/4"	2327
1/2"		3/8"	2328
5/8"		1/2"	2329
7/8"		3/4"	2331
7/8"		5/8"	2332
1 1/8"		7/8"	2334
1 1/8"		5/8"	2335
1 1/8"		3/4"	2336
1 3/8"		1 1/8"	2337
1 5/8"		1 3/8"	2338
2 1/8"		1 5/8"	2339
2 1/8"		1 3/8"	2340

Long radius, copper to fitting

OD Tube	Code
1/4"	2478
3/8"	2479
1/2"	2480
5/8"	2481
3/4"	2482
7/8"	2483
1 1/8"	2484
1 3/8"	2485
1 5/8"	2486
2 1/8"	2487
2 5/8"	2488
3 1/8"	2489
3 5/8"	2490

Short radius elbow, fitting to fitting

OD Tube	Code
5/8"	2475
7/8"	2464
1 1/8"	2465
1 3/8"	2466
1 5/8"	2467
2 1/8"	2468
2 5/8"	2469
3 1/8"	2470



Tees

Equal, copper to copper to copper

OD Tube	Code
3/16"	2499
1/4"	2500
5/16"	2501
3/8"	2502
1/2"	2503
5/8"	2504
3/4"	2505
7/8"	2506
1 1/8"	2507
1 3/8"	2508
1 5/8"	2509
2 1/8"	2510
2 5/8"	2511
3 1/8"	2512
3 5/8"	2513
4 1/8"	2514



Reducing, (last size on branch) copper to copper to copper

OD Tube				
1	x	2	x	3
1/4"		1/4"		3/8"
5/16"		5/16"		1/4"
5/16"		5/16"		3/8"
5/16"		1/4"		1/4"
3/8"		3/8"		5/8"
3/8"		1/4"		3/8"
3/8"		3/8"		1/2"
3/8"		3/8"		1/4"
3/8"		1/4"		1/4"
1/2"		1/2"		5/8"
1/2"		1/2"		3/8"
1/2"		1/2"		1/4"
1/2"		3/8"		1/2"
1/2"		3/8"		3/8"
1/2"		1/4"		3/8"
1/2"		1/4"		1/4"
5/8"		5/8"		1 1/8"
5/8"		5/8"		7/8"
5/8"		5/8"		3/4"
5/8"		5/8"		1/2"
5/8"		5/8"		3/8"
5/8"		3/8"		1/2"
5/8"		1/2"		5/8"
5/8"		1/2"		1/2"
5/8"		1/2"		3/8"
5/8"		3/8"		5/8"
5/8"		3/8"		3/8"
3/4"		3/4"		7/8"

Reducing, (last size on branch) copper to copper to copper

OD Tube				
a1	x	2	x	3
3/4"		3/4"		5/8"
3/4"		3/4"		1/2"
3/4"		5/8"		5/8"
3/4"		3/4"		3/8"
7/8"		7/8"		1 1/8"
7/8"		5/8"		7/8"
7/8"		5/8"		5/8"
7/8"		5/8"		1/2"
7/8"		7/8"		3/4"
7/8"		7/8"		5/8"
7/8"		7/8"		1/2"
7/8"		7/8"		3/8"
7/8"		7/8"		1/4"
7/8"		1/2"		7/8"
7/8"		1/2"		5/8"
7/8"		1/2"		1/2"
1 1/8"		1 1/8"		1 5/8"
1 1/8"		1 1/8"		1 3/8"
1 1/8"		1 1/8"		7/8"
1 1/8"		1 1/8"		3/4"
1 1/8"		1 1/8"		5/8"
1 1/8"		1 1/8"		1/2"
1 1/8"		1 1/8"		3/8"
1 1/8"		7/8"		1 1/8"
1 1/8"		7/8"		7/8"
1 1/8"		7/8"		5/8"
1 1/8"		7/8"		1/2"
1 1/8"		5/8"		7/8"
1 1/8"		5/8"		1 1/8"
1 1/8"		5/8"		5/8"
1 3/8"		1 3/8"		2 1/8"
1 3/8"		1 3/8"		1 5/8"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		7/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1/8"
1 3/8"		1 3/8"		5/8"
1 3/8"		1 3/8"		3/8"
1 3/8"		1 3/8"		1/2"
1 3/8"		1 3/8"		1 1

Reducing, (last size on branch) copper to copper to copper

OD Tube				
1	x	2	x	3 Code
2 1/8"		1 3/8"		2 1/8" 2612
2 1/8"		1 3/8"		1 3/8" 2613
2 1/8"		1 3/8"		1 1/8" 2614
2 1/8"		1 1/8"		1 1/8" 2636
2 5/8"		2 5/8"		2 1/8" 2615
2 5/8"		2 5/8"		1 5/8" 2616
2 5/8"		2 5/8"		1 3/8" 2617
2 5/8"		2 5/8"		1 1/8" 2618
2 5/8"		2 5/8"	7/8"	2619
2 5/8"		2 5/8"	5/8"	2620
2 5/8"		2 1/8"	2 1/8"	2621
3 1/8"		3 1/8"	2 5/8"	2624
3 1/8"		3 1/8"	2 1/8"	2625
3 1/8"		3 1/8"	1 5/8"	2628
4 1/8"		4 1/8"	3 1/8"	2629
4 1/8"		4 1/8"	2 5/8"	2630
4 1/8"		4 1/8"	2 1/8"	2631

Caps

OD Tube	Code
1/4"	2644
3/8"	2645
1/2"	2646
5/8"	2647
3/4"	2648
7/8"	2649
1 1/8"	2650
1 3/8"	2651
1 5/8"	2652
2 1/8"	2653
2 5/8"	2654
3 1/8"	2655
3 5/8"	2656
4 1/8"	2657

Bushes

Bushes - Flush, fitting to copper

Fitting	x	OD	Code
3/8"		1/4"	2662
1/2"		3/8"	2663
5/8"		1/2"	2664
3/4"		5/8"	2665
7/8"		5/8"	2666
1 1/8"		7/8"	2667
1 3/8"		1 1/8"	2668
1 5/8"		1 3/8"	2669
2 1/8"		1 5/8"	2670

P Traps

P Traps - Copper to Copper

OD Tube	Code
5/8"	2700
3/4"	2701
7/8"	2702
1 1/8"	2703
1 3/8"	2704
1 5/8"	2705
2 1/8"	2706

Perforated Tube Strap

Width	Roll	Code
3/4"	25ft	2710

Saddles - single

OD Tube	Code
1/4"	1324
3/8"	1325
1/2"	1326
5/8"	1327
3/4"	1328
7/8"	1329
1 1/8"	1330
1 3/8"	1331
1 5/8"	1332
2 1/8"	1333

Return Bends

Return Bends - Copper to Copper

OD Tube	Fixing Centre	Code
1/4"	1"	2689
3/8"	1 1/4"	2690
1/2"	1 1/2"	2691
5/8"	2"	2692
3/4"	2 1/4"	2693
7/8"	2 1/2"	2694
1 1/8"	3"	2695
1 3/8"	4"	2696
1 5/8"	4 1/2"	2697
2 1/8"	5 1/2"	2698



Adaptors

Female, Copper to NPTI

OD Tube	x	NPTI	Code
3/8"		1/4"	2151
1/2"		1/2"	2152
1/2"		3/8"	2153
5/8"		3/4"	2154
5/8"		1/2"	2155
5/8"		3/8"	2156
5/8"		1/4"	2157
3/4"		3/4"	2158
3/4"		1/2"	2159
7/8"		1"	2160
7/8"		3/4"	2161
7/8"		1/2"	2162
1 1/8"		1 1/4"	2163
1 1/8"		1"	2164
1 1/8"		3/4"	2165
1 3/8"		1 1/2"	2166
1 3/8"		1 1/4"	2167
1 5/8"		1 1/2"	2168
2 1/8"		2"	2169

Female, fitting to NPTI

OD Tube	x	NPTI	Code
1/2"		3/8"	2180
5/8"		1/2"	2181
5/8"		3/8"	2182
7/8"		3/4"	2183
1 1/8"		1"	2184



Male, Copper to NPTE

OD Tube	x	NPTE	Code
1/4"		1/8"	2193
3/8"		1/4"	2194
3/8"		3/8"	2195
1/2"		3/4"	2196
1/2"		1/2"	2197
1/2"		3/8"	2198
5/8"		3/4"	2199
5/8"		1/2"	2200
5/8"		1"	2201
3/4"		3/4"	2202
3/4"		1/2"	2203
7/8"		1"	2204
7/8"		3/4"	2205
7/8"		1/2"	2206
1 1/8"		1 1/4"	2208
1 1/8"		1"	2209
1 1/8"		3/4"	2210
1 3/8"		1 1/2"	2211
1 3/8"		1 1/4"	2212
1 3/8"		1"	2213
1 5/8"		1 1/2"	2214
1 5/8"		1 1/4"	2215
1 5/8"		2"	2219
2 1/8"		2"	2216
2 5/8"		2 1/2"	2217
5/8"		3/8"	2218

Male, fitting to NPTE

	x	NPTE	Code
		3/8"	2230
		3/8"	2231
		1/2"	2232
		3/4"	2234
		1"	2235

Nuts

Long-Forged

OD Tube	Type	Code
1/4"	N4-4	1070
3/8"	N4-6	1072
1/2"	N4-8	1073
5/8"	N4-10	1074

Long Reducing-Forged

Thread	x	OD Tube	Type	Code
3/8"		1/4"	NR4-64	1081
1/2"		3/8"	NR4-86	1082
5/8"		1/2"	NR4-108	1083

Short Reducing-Forged

Thread	x	OD Tube	Type	Code
3/8"		1/4"	NRS4-64	1098
1/2"		3/8"	NRS4-86	1099
5/8"		1/2"	NRS4-108	1100
3/4"		5/8"	NRS4-1210	1101
7/8"		3/4"	NRS4-1412	1102

Bonnets

Bonnets

Copper Flare

OD Tube	Type	Code
1/4"	B1-4	1356
5/16"	B1-5	1357
3/8"	B1-6	1358
1/2"	B1-8	1359
5/8"	B1-10	1360
3/4"	B1-12	1361
7/8"	B1-14	1362

Gaskets

Copper Flare

OD Tube	Type	Code
1/4"	B2-4	1347
3/8"	B2-6	1348
1/2"	B2-8	1349
5/8"	B2-10	1350
3/4"	B2-12	1351
7/8"	B2-14	1352

Unions

Male Flare to Male Flare

OD Tube	Type	Code
1/4"	U2-4	1106
5/16"	U2-5	1107
3/8"	B2-6	1108
1/2"	B2-8	1109
5/8"	U2-10	1110
3/4"	U2-12	1111
7/8"	U2-14	1112

Short-Forged

OD Tube	Type	Code
1/4"	NS4-4	1088
5/16"	NS4-5	1089
3/8"	NS4-6	1090
1/2"	NS4-8	1091
5/8"	NS4-10	1092
3/4"	NS4-12	1093
7/8"	NS4-14	1094

Short-Light Pattern bar

OD Tube	Type	Code
1/4"	A-5051	1084
3/8"	NS4-6	1085

Swivel

OD Tube	Type	Code
1/4"	US4-4	1970
3/8"	US4-6	1972
1/2"	US4-8	1973
5/8"	US4-10	1974

Reducing, Male Flare to Male Flare

OD Tube	1	x	2	Type	Code
1/4"			3/16"	UR2-43	1139
3/8"			1/4"	UR2-64	1140
1/2"			1/4"	UR2-84	1141
1/2"			3/8"	UR2-86	1142
5/8"			1/4"	UR2-104	1143
5/8"			3/8"	UR2-106	1144
5/8"			1/2"	UR2-108	1145
3/4"			3/8"	UR2-126	1146
3/4"			1/2"	UR2-128	1147
3/4"			5/8"	UR2-1210	1148

Male Flare to NPTE

OD Tube	NPTE	Type	Code
1/4"	1/8"	U1-4A	1117
1/4"	1/4"	U1-4B	1118
1/4"	3/8"	U1-4C	1119
1/4"	1/2"	U1-4D	1120
5/16"	1/4"	U1-5B	1121
3/8"	1/4"	U1-6B	1122
3/8"	3/8"	U1-6C	1123
3/8"	1/2"	U1-6D	1124
1/2"	1/4"	U1-8B	1125
1/2"	3/8"	U1-8C	1126
1/2"	1/2"	U1-8D	1127
1/2"	3/4"	U1-8E	1128
5/8"	3/8"	U1-10C	1129
5/8"	1/2"	U1-10D	1130
5/8"	3/4"	U1-10E	1131
3/4"	1/2"	U1-12D	1132
3/4"	3/4"	U1-12E	1133
3/8"	1/8"	U1-6A	1135



Female Flare to Female Flare

OD Tube	Type	Code
1/4"	U4-4	1272
3/8"	U4-6	1273
1/2"	U4-8	1274
5/8"	U4-10	1275
3/4"	U4-12	1276

Reducing, Female Flare to Male Flare

OD Tube	F	M	Type	Code
1/4"		3/8"	UR3-46	1161
1/4"		1/2"	UR3-48	1162
5/16"		1/4"	UR3-54	1163
3/8"		1/4"	UR3-64	1164
3/8"		1/2"	UR3-68	1165
3/8"		5/8"	UR3-610	1166
1/2"		1/4"	UR3-84	1167
1/2"		3/8"	UR3-86	1168
1/2"		5/8"	UR3-810	1169
5/8"		1/4"	UR3-104	1170
5/8"		3/8"	UR3-106	1171
5/8"		1/2"	UR3-108	1172
5/8"		3/4"	UR3-1012	1173
3/4"		1/2"	UR3-128	1174
3/4"		5/8"	UR3-1010	1175



Elbows

Male Flare to Male Flare

OD Tube	Type	Code
1/4"	E2-4	1187
3/8"	E2-6	1188
1/2"	E2-8	1189
5/8"	E2-10	1190
3/4"	E2-12	1191

Reducing, Male Flare to Male Flare

OD Tube	x	Type	Code
1/2"	1/4"	ER2-84	1198



Male Flare to NPTI

OD Tube	NPTI	Type	Code
1/4"	1/8"	U3-4A	1900
1/4"	1/4"	U3-4B	1901
1/4"	3/8"	U3-4C	1902
1/4"	1/2"	U3-4D	1903
5/16"	1/8"	U3-5A	1904
5/16"	1/4"	U3-5B	1905
3/8"	1/4"	U3-6B	1907
3/8"	3/8"	U3-6C	1908
3/8"	1/2"	U3-6D	1909
1/2"	3/8"	U3-8C	1912
1/2"	1/2"	U3-8D	1913
5/8"	3/8"	U3-10C	1915
5/8"	1/2"	U3-10D	1916

Male Flare to Female Solder

OD Tube	Flare	x	Solder	Type	Code
1/4"			1/4"	US2-44	1925
3/8"			1/4"	US2-64	1927
3/8"			3/8"	US2-66	1928
1/2"			1/2"	US2-88	1931
5/8"			1/2"	US2-108	1932
5/8"			5/8"	US2-1010	1933
3/4"			3/4"	US2-1212	1934
7/8"			7/8"	US2-1414	1935



Male Flare to NPTE

NPTE	Type	Code
1/8"	E1-4A	1208
1/4"	E1-4B	1209
1/4"	E1-5B	1211
1/4"	E1-6B	1212
3/8"	E1-6C	1213
3/8"	E1-8C	1214
1/2"	E1-8D	1215
1/2"	E1-10D	1217
1/2"	E1-12D	1219

Male Flare to NPTI

NPTI	Type	Code
1/8"	E3-3A	1950
1/4"	E3-4B	1951
1/4"	E3-6B	1956

Tees

Male Flare Equal

OD Tube	Type	Code
1/4"	T2-4	1227
5/16"	T2-5	1228
3/8"	T2-6	1229
1/2"	T2-8	1230
5/8"	T2-10	1231

Male Flare Reducing

OD Tube	A	B	Type	Code
3/8"		1/4"	TR2-64	1237
1/2"		1/4"	TR2-84	1240

Male Flare on Runs, NPTE on Branch

OD Tube	x	NPTE	Type	Code
1/4"		1/8"	T1-4A	1250
1/4"		1/4"	T1-4B	1251
1/4"		3/8"	T1-4C	1252
5/16"		1/4"	T1-5B	1254

Male Flare on Runs, NPTI on Branch

OD Tube	x	NPTI	Type	Code
1/4"		1/8"	T5-4A	1290
3/8"		1/4"	T5-6B	1293
1/2"		3/8"	T5-8C	1295
5/8"		1/2"	T5-10D	1297

Plugs

Fusible, NPTE

NPTE	Melting temp.	Code
1/8"	139.4 °C	1300CE
1/4"	139.4 °C	1301CE
3/8"	139.4 °C	1302CE
1/8"	98.8 °C	1289CE
1/4"	98.8 °C	1292CE
3/8"	98.8 °C	1294CE
1/8"	75.5 °C	1303CE
1/4"	75.5 °C	1304CE
3/8"	75.5 °C	1305CE



Sealing, NPTE

NPTE	Type	Code
1/8"	P3-A	1541
1/4"	P3-B	1542
3/8"	P3-C	1543
1/2"	P3-D	1544

Sealing Flare

Fitting	Type	Code
1/4"	P2-4	1281
5/16"	P2-5	1282
3/8"	P2-6	1283
1/2"	P2-8	1284
5/8"	P2-10	1285
3/4"	P2-12	1286
7/8"	P2-14	1287



Nuts

Sealing, Flare

Fitting	Type	Code
1/4"	N5-4	1307
3/8"	N5-6	1308
1/2"	N5-8	1309
5/8"	N5-10	1310
3/4"	N5-12	1311



Danfoss

HE and SLHE type heat exchangers are used to promote heat transfer between the liquid and suction sides of the refrigeration plant. Suitable for use with all fluorinated refrigerants.



HE heat exchangers

Type	Connection	Code
HE 0.5	1/4" x 1/2" solder	015D000200
HE 1.0	3/8" x 5/8" solder	015D000400
HE 1.5	1/2" x 3/4" solder	015D000600
HE 4.0	1/2" x 1 1/8" solder	015D000800
HE 8.0	5/8" x 1 5/8" solder	015D001000

Doucette

Type	Connection	Code
SLHE-1/2	1/4" x 1/2"	3265
SLHE-3/4	3/8" x 3/8"	3266
SLHE-1/2	3/8" x 5/8"	3267
SLHE-1 1/2	3/8" x 7/8"	3268
SLHE-2	3/8" x 1 1/8"	3275
SLHE-3	1/2" x 1 1/8"	3269
SLHE-5	5/8" x 1 3/8"	3271
SLHE-7 1/2	5/8" x 1 5/8"	3270
SLHE-10	7/8" x 2 1/8"	3272
SLHE-15	7/8" x 2 1/8"	3273
SLHE-20	1 1/8" x 2 1/8"	3274



Vibration Eliminators

Packless VAF model vibration eliminators are designed for installation in the suction and discharge lines of air conditioning and refrigeration equipment to dampen the transmission of compressor induced vibration through the refrigerant piping.

Model	Actual O.D.	Nominal O.D.	Weight (lb)	Flex tubing ID	Flex tube length	Full length	Ferrule length	U.L. Style no.	Max. Working pressure (PSIG)	Burst pressure (PSIG)	Code
VAF-2	1/4"	1/8"	1/4	1/4	6 1/2	7 1/2	1/2	P-2	500	2500	100050
VAF-3	3/8"	1/4"	3/8	3/8	7	8 1/4	1/2	P-3	500	2500	100051
VAF-4	1/2"	3/8"	3/8	3/8	7 1/2	9	1/2	P-4	500	2500	100052
VAF-5	5/8"	1/2"	5/8	1/2	8	9 3/4	1/2	P-5	500	2500	100053
VAF-6	3/4"	5/8"	5/8	1/2	8	10	1/2	P-6	500	2500	100054
VAF-7	3/4"	5/8"	1 1/4	3/4	9	11 1/4	5/8	P-7A	500	2500	100055
VAF-8	7/8"	3/4"	1 1/4	3/4	9	11 1/2	5/8	P-8A	500	2500	100056
VAF-9	1 1/8"	1"	1 3/4	1	10	13	15/16	P-9A	500	2500	100057
VAF-10	1 3/8"	1 1/4"	2 1/2	1 1/4	11 1/2	14 3/4	1	P-10A	500	2500	100058
VAF-11	1 5/8"	1 1/2"	3 3/4	1 1/2	13	17	1 1/8	P-11A	500	2500	100059
VAF-82	2 1/8"	2"	5	2	14	20	1	P-82	390	1950	100060
VAF-83	2 5/8"	2 1/2"	8	2 1/2	18	24	2	P-83	340	1700	100061
VAF-84	3 1/8"	3"	11	3	20	27	2	P-84	300	1500	100065
VAF-87*	3 5/8"	3 1/2"	14	3 1/2	24	32 5/8	2	P-87	175*	525	100063
VAF-86*	4 1/8"	4"	16	4	24	33 3/8	2	P-86	175*	525	100064

* U.L. and C.S.A. approved for low side (suction side) use only.

Stainless Steel - FTL available on requests.
Contact a Dean & Wood branch for further details.

Metric To Imperial

Imperial To Metric

Weight

g	x 0.0353	=	oz	x 28.35	=	g
kg	x 2.205	=	lb	x 0.4536	=	kg
kg	x 0.00098	=	ton	x 1016	=	kg

Volume

cm ³	x 0.61	=	ins ³	x 16.39	=	cm ³
m ³	x 35.32	=	ft. ³	x 0.0283	=	m ³
m ³	x 1.308	=	yds ³	x 0.7645	=	m ³
litres	x 1.76	=	pints	x 0.568	=	litres
litres	x 0.2199	=	gallons	x 4.546	=	litres

Area

cm ²	x 0.155	=	ins ²	x 6.452	=	cm ²
m ²	x 10.76	=	ft. ³	x 0.0929	=	m ²
m ²	x 1.196	=	yds ²	x 0.8361	=	m ²
km ²	x 0.386	=	miles ²	x 2.5899	=	km ²

Velocity

m/s	x 196.85	=	ft./min	x 0.00508	=	m/s
km/h	x 0.6214	=	mph	x 1.609	=	km/h

Heat

kW	x 3412	=	Btu/h	x 0.000293	=	kW
J/kg	x 0.00043	=	Btu/h	x 2326	=	J/kg
kCal/h	x 3.968	=	Btu/h	x 0.252	=	kCal/h

Flow

m ³ /s	x 2119	=	cfm	x 0.000472	=	m ³ /s
m ³ /h	x 0.589	=	cfm	x 1.699	=	m ³ /h
m ³ /s	x 13210	=	gpm	x 0.0000758	=	m ³ /s
l/s	x 13.21	=	gpm	x 0.0758	=	l/s

Pressure

N/m ²	x 0.004	=	ins. wg.	x 249.1	=	N/m ²
Pa	x 0.004	=	ins. wg.	x 249.1	=	Pa
mbar	x 0.401	=	ins. wg.	x 2.491	=	mbar
kp/m ²	x 0.394	=	ins. wg.	x 25.4	=	kp/m ²
mbar	x 0.00099	=	atmos	x 1013	=	mbar
bar	x 14.51	=	p.s.i.	x 0.0689	=	bar

Length

mm	x 0.0394	=	ins.	x 25.4	=	mm
m	x 3.281	=	ft.	x 0.3048	=	m
m	x 1.094	=	yds.	x 0.9144	=	m
km	x 0.6214	=	miles	x 1.609	=	km

Various

kW	x 1.34	=	hp	x 0.746	=	kW
kg/m ³	x 0.06243	=	lb/ft ³	x 16.03	=	kg/m ³
°C	x 1.8 + 32	=	°F	-32 ÷ 1.8	=	°C

AIR CONDITIONER Device used to control temperature, humidity, cleanliness and movement of air in conditioned space

AIR-COOLED CONDENSER Heat of compression is transferred from condensing coils to surrounding air. This may be done either by convection or by a fan

ACCUMULATOR Storage vessel which receives liquid refrigerant from evaporator and prevents it from flowing into suction line

AIR COOLER Mechanism designed to lower temperature of air passing through it

ALTERNATING CURRENT (AC) Electric current in which direction of flow alternates or changes. In the UK this is 50 cycles /second (also known as Hertz — abbreviated to Hz)

AMBIENT TEMPERATURE Temperature of fluid (usually air) which surrounds object on all sides

BACK PRESSURE Pressure in low side of refrigerating system: also called suction pressure or low side pressure

BRINE Water saturated with chemical such as salt (to lower the freezing point of the solution)

CAPACITOR Type of electrical storage device used in starting and/or running circuits on many electric motors

CAPILLARY TUBE Small diameter tubing. A type of refrigerant control which usually consists of several feet of tubing with a small inside diameter. A capillary tube refrigerant control allows high side and low side pressures to balance during off cycle.

CHECK VALVE A device which permits fluid flow only in one direction (non return valve)

COMPOUND GAUGE Instrument for measuring pressures both above and below atmospheric pressure

COMPRESSOR The pump of a refrigerating mechanism which draws a vacuum or low pressure on cooling side of refrigerant cycle and compresses the gas into the high pressure or condensing side of the cycle

COMPRESSOR, HERMETIC Compressor in which driving motor is sealed in the same dome or housing that contains the compressor

COMPRESSOR, OPEN-TYPE Compressor in which the crankshaft extends through the crankcase and is driven by an outside motor

COMPRESSOR, RECIPROCATING Compressor which uses a piston and cylinder mechanism to provide pumping action

COMPRESSOR, ROTARY a compressor which uses vanes, eccentric mechanisms, or other rotating devices to provide pumping action

COMPRESSOR SEMI HERMETIC Compressor in which the motor forms part of the casing and can be stripped for maintenance. Compressor can be of reciprocating, rotary, or screw type

CONDENSATE Fluid which forms on an evaporator (normally water)

CONDENSATE PUMP Device used to remove fluid condensate that collects beneath an evaporator

CONDENSER FAN Fan used to move air through air-cooled condenser

CONDENSER, WATER-COOLED Heat exchanger which is designed to transfer heat from hot gaseous refrigerant to water

DEFROST CYCLE Refrigerating cycle in which evaporator frost and ice accumulation is melted

DEFROST TIMER Device connected into electrical circuit which shuts unit off long enough to permit ice and frost accumulation on evaporator to melt. May also switch on heaters or divert hot gas into coil

DEFROSTING Process of removing frost accumulation from evaporators

DEFROSTING TYPE EVAPORATOR An evaporator operating at such temperatures that ice and frost on surface melts during off part of operating cycle

DIFFERENTIAL As applied to refrigeration and heating; difference between cut-in" and 'cut-out" temperature or pressure of a control. Also applies to oil pressure controls. The actual oil pressure is normally the oil gauge pressure minus suction pressure

DIRECT CURRENT Electron flow which moves continuously in one direction in circuit se pressure dependant on type of compressor

DRIER A substance or device used to remove moisture from a refrigeration system

DRIP PAN Pan-shaped panel or trough used to collect condensate from evaporator coil

ELECTRIC DEFROSTING Use of electric resistance heating coils to melt ice and frost off evaporators during defrosting

EVAPORATION A term applied to the changing of a liquid to a gas. Heat is absorbed in this process

EXPANSION VALVE A device in refrigerating system which maintains a pressure difference between the high side and low side and is operated by pressure

FILTER Device for removing small particles from a fluid or air

FIN COMB Comb-like device, metal or plastic, which is used to straighten the metal fins on condensers or evaporators

FLARE Copper tubing is often connected to parts of refrigerating system by use of flared fittings. These fittings require that the end of tube be expanded at about 45° angle. This flare is firmly gripped by fittings to make a strong leak proof seal

FLARE NUT Fitting used to clamp tubing flare against another fitting

FLUX-BRAZING, SOLDERING Substance applied to surfaces to be joined by brazing or soldering to free them from oxides and facilitate good jointing

FUSIBLE PLUG A plug or fitting made with a metal of a known low melting temperature, used as safety device to release pressures in case of fire

GAUGE, COMPOUND Instrument for measuring pressure both below and above atmospheric pressure

GAUGE, HIGH PRESSURE Instrument for measuring pressures in range of 0 psig and 500 psig (0 bar to 35 bar)

GAUGE, LOW PRESSURE Instrument for measuring pressures in range of 30 Hg and 120 psig (—1 bar to 9 bar)

HEAT EXCHANGER Device used to transfer heat from a warm or hot surface to a cold or cooler surface. Evaporators and condensers are heat exchangers

HEAT LOAD Amount of heat measured in kW which is removed during a period of 24 hours

HEAT TRANSFER Movement of heat from one body or substance to another. Heat may be transferred by radiation. conduction, convection or a combination of these three methods

HERMETIC MOTOR Compressor drive motor sealed within same casing which contains compressor

HERMETIC SYSTEM Refrigeration system which has a compressor driven by a motor contained in compressor dome or housing

HUMIDITY Moisture; dampness. Relative humidity is ratio of quantity of vapour present in air to greatest amount possible at given temperature

KLIXON Current and/or temperature sensing device normally fitted into motor windings to protect against abnormal operating conditions

LINE TAP Device used to puncture or tap a line where there is no service valves available; sometimes called a saddle valve

LIQUID LINE The tube which carries liquid refrigerant from the condenser or liquid receiver to the refrigerant control mechanism

LRA Locked rotor amperes — current required to start a stopped motor (or point at which a motor stalls)

MANIFOLD SERVICE A device equipped with gauges and manual valves, used by servicemen to service refrigerating systems

MOISTURE INDICATOR Insert in a sight glass used to indicate the presence of moisture in a refrigerant

MOTOR, CAPACITOR A single-phase induction motor with an auxiliary start winding connected in series with a condenser (capacitor) for better starting characteristics

OFF CYCLE That part of a refrigeration cycle when the system is not operating

OIL SEPARATOR Device used to remove oil from gaseous refrigerant

ORIFICE Accurate size opening for controlling fluid flow

OVERLOAD Load greater than load for which system or mechanism was intended

OVERLOAD PROTECTOR A device, either temperature, pressure or current operated which will stop operation of unit if dangerous conditions arise

POUR POINT (OIL) Lowest temperature at which oil will pour or flow

POWER ELEMENT Sensitive element of a temperature operated control

PRESSURE SUCTION Pressure in low pressure side of a refrigerating system

PULL DOWN An expression indicating action of lowering of the room or medium temperature. Usually on initial start up

PUMP DOWN The act of using a compressor or a pump to reduce the pressure in a container or a system, often resulting in transferring the evaporator charge to the liquid receiver

REFRIGERANT Substance used in refrigerating mechanism to absorb heat in evaporator coil by change of state from a liquid to a gas, and to release its heat in a condenser as the substance returns from the gaseous state back to a liquid state

RELATIVE HUMIDITY Ratio of amount of water vapour present in air to greatest amount possible at same temperature

RELAY Electrical mechanism which uses small current in the control circuit to operate a switch in the operating circuit

RELIEF VALVE Safety device designed to open before dangerous pressure is reached. Designed to relieve excess pressure only

SCHRAEDER VALVE Spring loaded device which permits fluid flow in one direction when a centre pin is depressed; in other direction when a pressure difference exists

SECONDARY REFRIGERATING SYSTEM Refrigerating system in which condenser is cooled by evaporator of another or primary refrigerating system

SENSIBLE HEAT Heat which only causes a change in temperature of a substance

SEPARATOR, OIL A device used to separate refrigerant oil from refrigerant gas and return the oil to crankcase of compressor

SEMI HERMETIC COMPRESSOR Hermetic unit housing containing motor and compressor assembled using bolts or threads

SERVICE VALVE A device to be attached to system which provides opening for gauges and/or charging lines. Also provides means of shutting off or opening gauge and charging ports.

SHELL-AND-TUBE FLOODED EVAPORATOR Device which flows water through tubes built into cylindrical evaporator or vice-versa

SHELL AND TUBE TYPE CONDENSER Cylinder or receiver which contains condensing water coil or tubes

SHORT CYCLING Refrigerating system that starts and stops more frequently than It should

SIGHT GLASS Glass tube or glass window in refrigerating mechanism which shows amount of refrigerant, or oil in system; or, presence of gas bubbles in liquid line

PSYCHROMETER An instrument for measuring the relative humidity of atmospheric air

SINGLE-PHASE MOTOR Electric motor which operates on single-phase alternating current

SOLENOID VALVE Valve actuated by magnetic action by means of an electrically energised coil

SPLIT SYSTEM Refrigeration or air conditioning installation which places condensing unit outside or remote from evaporator. Also applicable to heat pump installations

STARTING RELAY An electrical device which connects and/or disconnects starting winding of electric motor

START WINDING Winding in electric motor used only during brief period when motor is starting

STRAINER Device such as a screen or filter used to retain solid particles while liquid passes through

SUCTION LINE Tube or pipe used to carry refrigerant gas from evaporator to compressor

SWAGING Enlarging one tube end so end of other tube of same size will fit within

SWEATING This term is used two different ways in refrigeration work: 1-Condensation of moisture from air on cold surface. 2-Method of soldering in which the parts to be joined are first coated with a thin layer of solder

THERMOMETER Device for measuring temperatures

THERMOSTAT Device responsive to ambient temperature conditions which has a set of electrical contacts opening (or closing) when a desired set point is reached

THERMOSTATIC EXPANSION VALVE Controls flow of refrigerant. Control bulb is attached to outlet of coil and responds to change in suction superheat (if superheat increases valve opens and vice-versa)

TORQUE WRENCH Wrench which may be used to measure torque or pressure applied to a nut or bolt

TRANSFORMER Device which transfers electrical energy from primary circuit, into variations of voltage in secondary circuit, by electromagnetic induction

VACUUM PUMP Special high efficiency compressor used for creating high vacuums for testing or drying purposes

VALVE, SERVICE Device used by service technicians to check pressures and charge refrigerating units

VALVE, SOLENOID Valve actuated by magnetic action by means of an electrically energised coil

VALVES, WATER Most water cooling units are supplied with water valves. These valves provide a flow of water to cool the system while it is running. Most water valves are controlled by solenoids

VISCOSITY Term used to describe resistance of flow of fluids

WATER-COOLER CONDENSER Condensing unit which is cooled through use of water

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We can supply a full range of chemicals to flush refrigeration systems, ice machines and evaporators and cleaning kits for shell and tube condensers to ensure that your systems are working to the optimum performance.

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Copeland	Mycom
Debica	Sabroe
Dorin	Stal
Drammens Jern	York
Dunham Bush	

Controls and Ancillaries including:

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