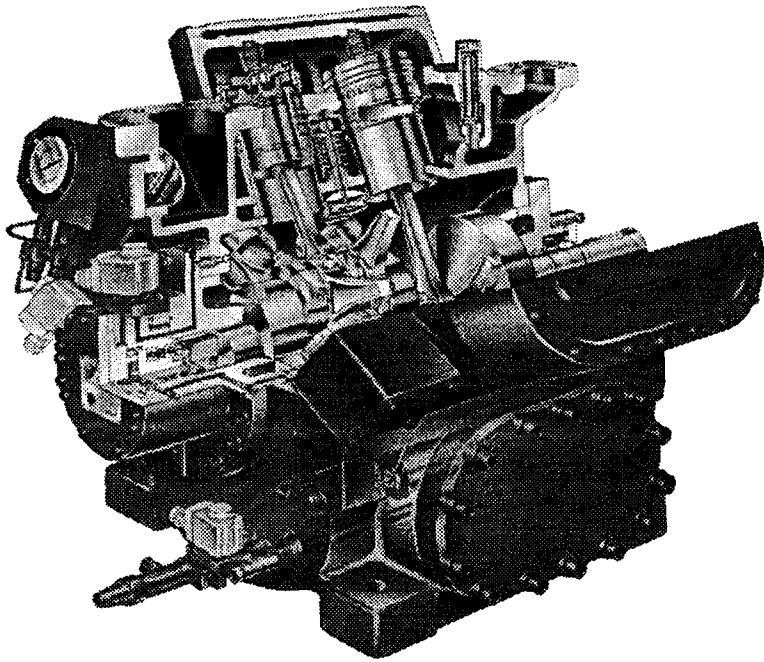


# Spare Parts List



**Reciprocating Compressor**

**Type HC/HCL/HCH 6100/8100**

**GB / 82-600-0053-00**

**Product**

 **Gram Refrigeration®**

YORK INTERNATIONAL A/S

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### Further documentation:

- Technical Data.
- Service Directions for HC 6100/8100.
- Installation Directions for HC 6100/8100.
- Operating and Maintenance Directions for HC 6100/8100.
- Design Data.

## Introduction

### **Application**

This manual is used when ordering spare parts.

Compressors of the HC type are intended for normal cold-storage rooms.

HCH compressors are intended for higher pressure and temperature conditions, e.g. air conditioning and heat pumps.

HCL compressors are used as low-pressure compressors at two-stage plants.

### **Identification**

The compressor is provided with a name plate showing manufacturing year, serial number, type, refrigerant etc.

### **Order for spare parts**

In case of inquiries and orders for spare parts, please always give model, serial number, refrigerant, and order number, if indicated.

**Spare Part List HC 6100/8100**

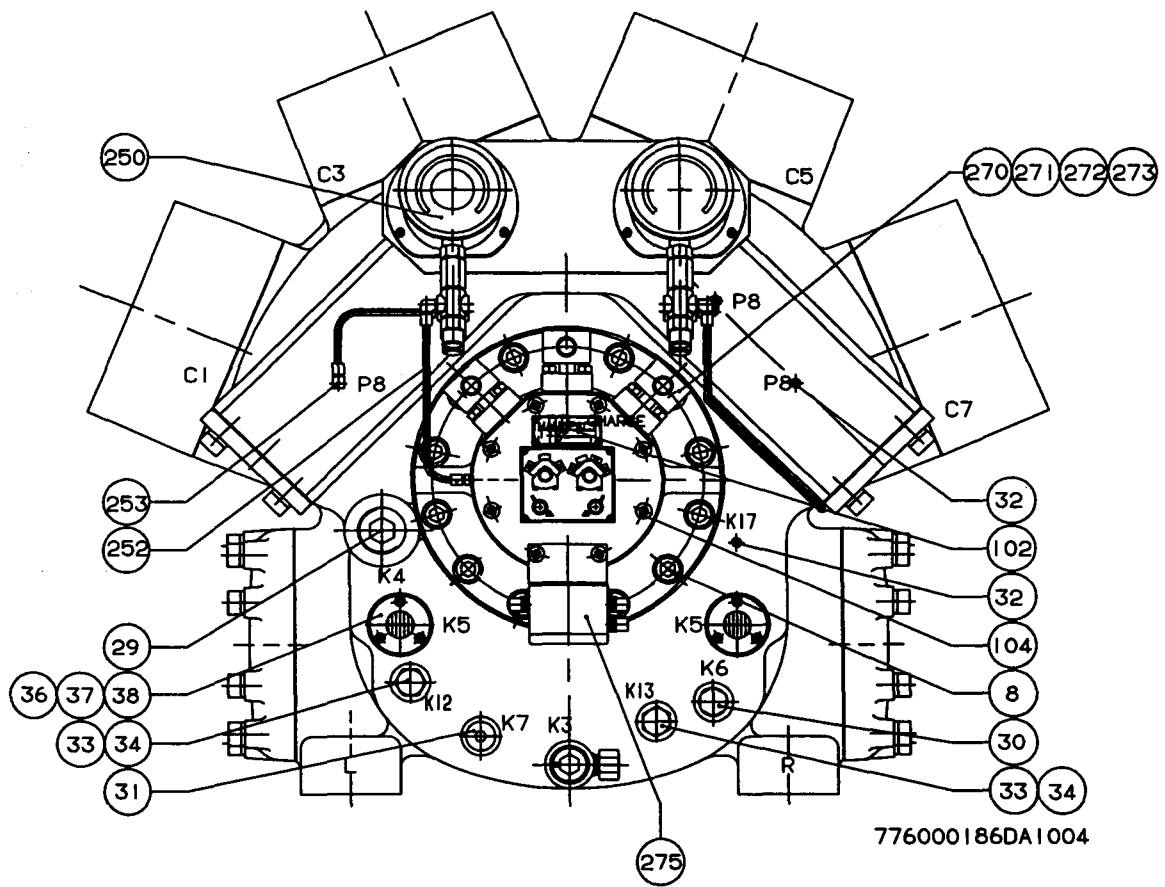
<b>Item</b>	<b>Designation</b>	<b>No.</b>	<b>Remark</b>
2	Compressor body. 6 cyl., 100mm	77 600 2003	
	Compressor body. 8 cyl., 100mm	77 600 2004	
3	Bearing cover. rear	77 600 2006	
4	Gasket for end cover at shaft seal	77 600 2039	
5	Inside hexagon screw. M16x50	42 078 1285	
6	Bearing cover, front	77 600 2005	
7	Gasket for bearing cover at shaft seal	77 600 2037	
8	Inside hexagon screw. M16x50	42 078 1285	
9	Top cover LT	77 600 2010	
10	Gasket for top cover	77 600 2035	
11	Inside hexagon screw. M16x140	42 078 1298	
12	Side cover	77 600 2007	
13	Gasket for side cover	77 600 2036	
14	Inside hexagon screw. M16x70	42 078 1288	
15	Cover for suction filter	77 600 2013	
16	Gasket for suction filter	77 600 2038	
17	Inside hexagon screw. M16x30	42 078 1281	
18	Cover for shaft seal	77 600 2008	
19	Gasket for shaft seal. 100S-T	77 600 0756	
20	Inside hexagon screw, M16x40	42 078 1283	
21	Cover for suction chamber	77 615 2015	
22	Gasket for suction chamber	77 615 1019	
23	Inside hexagon screw, M16x40	42 078 1283	
24	Cover for discharge chamber	77 600 2014	
25	Gasket for discharge chamber	77 600 2040	
26	Inside hexagon screw, M16x40	42 078 1283	
27	Blanking plug	77 600 2160	
28	O-ring 2347PRP223. 40,87x3,53	55 084 0114	
29	Plug, 1 1/2" RG	77 255 1272	
30	Plug M30	77 600 2165	
31	Allen plug, RC 1/2"	46 152 1012	
32	Allen plug, RC 1/8"	46 152 1003	
33	Plug, M20	77 600 2167	
34	Aluminium ring, 30 x 21 x 2	55 065 7044	
36	Sight glass, Ø60 x 7	47 040 0008	

Item	Designation	No.	Remark
37	O-ring 2347 PRP 125, 32.99 x 2.62	55 084 0062	
38	Inside hexagon screw, M6x20	42 078 1101	
39	Ring screw DIN 580. M24	42 246 1105	
40	Insert pipe for heater, L2 = 260, 75/100/125-152 mm	77 580 1136	
41	Aluminium ring, 35 x 27 x 3	55 065 7021	
42	Aluminium ring, 36 x 31 x 2	55 065 7059	
44	Aluminium ring, 58 x 48 x 2	55 065 7056	
45	Allen plug, RC 1/4"	46 152 1006	
50	Oil screen	77 600 2072	
51	Inside hexagon screw, M8x30	42 078 1143	
52	Lock nut. M8	42 153 2006	
59	O-ring 2347 PRP 333, 62.87 x 5.33	55 084 0181	
60	Oil cylinder	77 600 2090	
61	Nut	42 122 2013	
62	Piston rod for capacity control	77 600 2091	
63	O-ring. 8,73x1,78	55 089 0008	
64	Piston plate for capacity control	77 600 2097	
65	U-sleeve	55 110 0850	
66	Spring guide for capacity control	77 600 2093	
67	Spring for capacity control	77 600 2096	
68	Crossbar for capacity control	77 600 2094	
69	Lifting arm for capacity control	77 600 2095	
70	Disc spring. 28x10,2x0,80	46 158 1062	
71	Lock nut, M10	42 148 2112	
73	Screwed connection, WE-8-LLRG	46 085 2006	
74	Spacer for capacity control	77 600 1167	
75	Main bearing	77 600 2020	
76	Thrust bearing	77 600 2021	
77	Screwed connection, A-8-RLL	46 097 2006	
80	Crankshaft. 6 cyl., 100mm	77 600 0725	
	Crankshaft. 8 cyl., 100mm	77 600 0510	
81	Driver for oil pump	77 600 2065	
82	Bush for driver	77 600 2057	
83	Countersunk hex. screw. M6x12	42 080 1047	
85	Key type A. 18x11x80	46 154 1145	
86	Locking plate/flywheel	77 600 1172	
87	External tab washer. ø21	42 184 1018	
88	Machine screw. M20x50	42 009 2281	
90	Spring holder for shaft seal	77 600 0750	

Item	Designation	No.	Remark
91	Spring for shaft seal	77 600 0751	
92	O-ring 2347PRP337. 75,57x5,33	55 084 0185	
93	Wearless ring	77 600 0752	
94	Carbon ring	77 600 0753	
95	O-ring 2346PRP338	55 084 0186	
100	Oil pump, complete	77 600 6610	See detail
101	O-ring 2347PRP255. 142,47x5,53	55 084 0149	
104	Inside hexagon screw. M10x120	42 078 1200	
105	Magnet for oil filter	52 200 0010	
111	Oilfilter, complete	77 600 6613	See detail
	Filter cartridge ø106. ST5-120	46 191 0013	
	O-ring 2347PRP2341. 88,27x5,33	55 084 0189	
116	Screwed connection, screw - in type. WE PLR-3/8" RC	46 085 2030	
120	Bypass valve. 25 bar ø23	72 300 0100	See detail
121	O-ring 2347PRP223. 40,87x3,53	55 084 0114	
125	Spindle for oil pressure valve, 125 mm	77 615 1094	
126	Spring for oil pressure valve, 8 cyl., 152 mm	77 630 1021	
127	Nipple for oil pressure control	77 600 2115	
128	Cylinder screw. M10x30	42 078 1184	
129	Guard for oil control valve	77 600 2117	
130	Disc. M6	42 164 1106	
140	Charge / drain valve, RC 1/2"	72 400 2071	See detail
145	Schrader valve, 1/8" RC	72 055 0021	
150	Connecting rod and piston with slide bearing. 100mm	77 600 6618	See detail
170	Cylinder complete with capacity control		See detail
171	Cylinder complete without capacity control		See detail
175	Valve lifting ring	77 600 2121	
176	Gasket for cylinder	77 600 0822	
178	Inside hexagon screw. M6x50	42 078 1108	
200	Discharge valve complete		See detail
220	Liquid slug-over spring	77 610 0350	See detail
240	Suction filter, complete, lowside	77 600 6646	See detail
250	Pressure gauge panel, complete. R717	77 600 6640	See detail
	Pressure gauge panel, complete. HCFC	77 600 6641	See detail
251	Disc. M12	42 168 2058	
252	Connecting pipe, 6 cylindr.	77 600 6665	
	Connecting pipe, 8 cylindr.	77 600 6666	

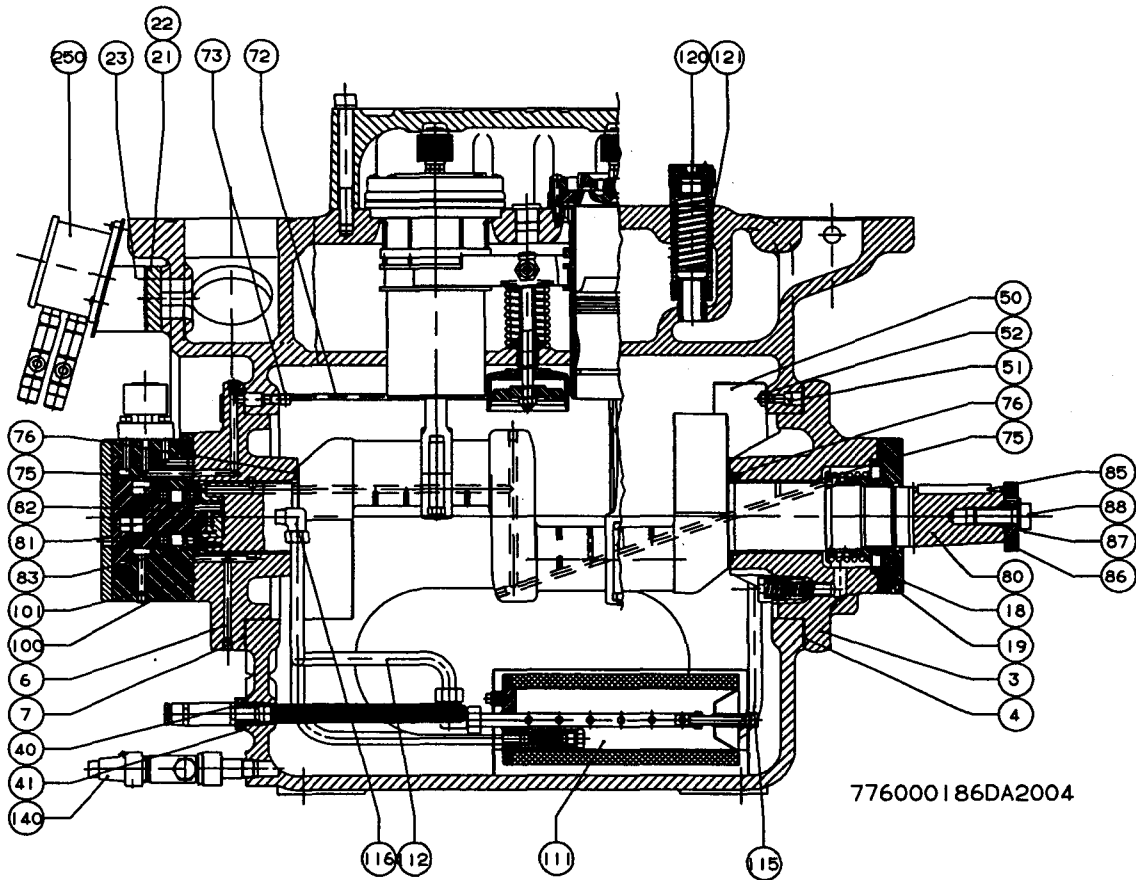
Item	Designation	No.	Remark
253	Screwed connection, WE-6-LLRG	46 085 2005	
254	Screwed connection, A-6-RLL	46 097 2005	
269	Coil for solenoid valve, 220-240V, 50/60Hz	41 361 5201	
	Coil for solenoid valve, 110-120V, 50/60Hz	41 361 5202	
	Coil for solenoid valve, 48V, 50/60Hz	41 361 5206	
	Coil for solenoid valve, 24V, 50/60Hz	41 361 5204	
270	Solenoid valve, bottom part, 3 way, BS-V401, NC	41 361 0176	
271	Gasket for solenoid valve. 100S-T	77 600 2041	
272	Inside hexagon screw, M8x30	42 078 1143	

**100 mm Compressor, Front View**

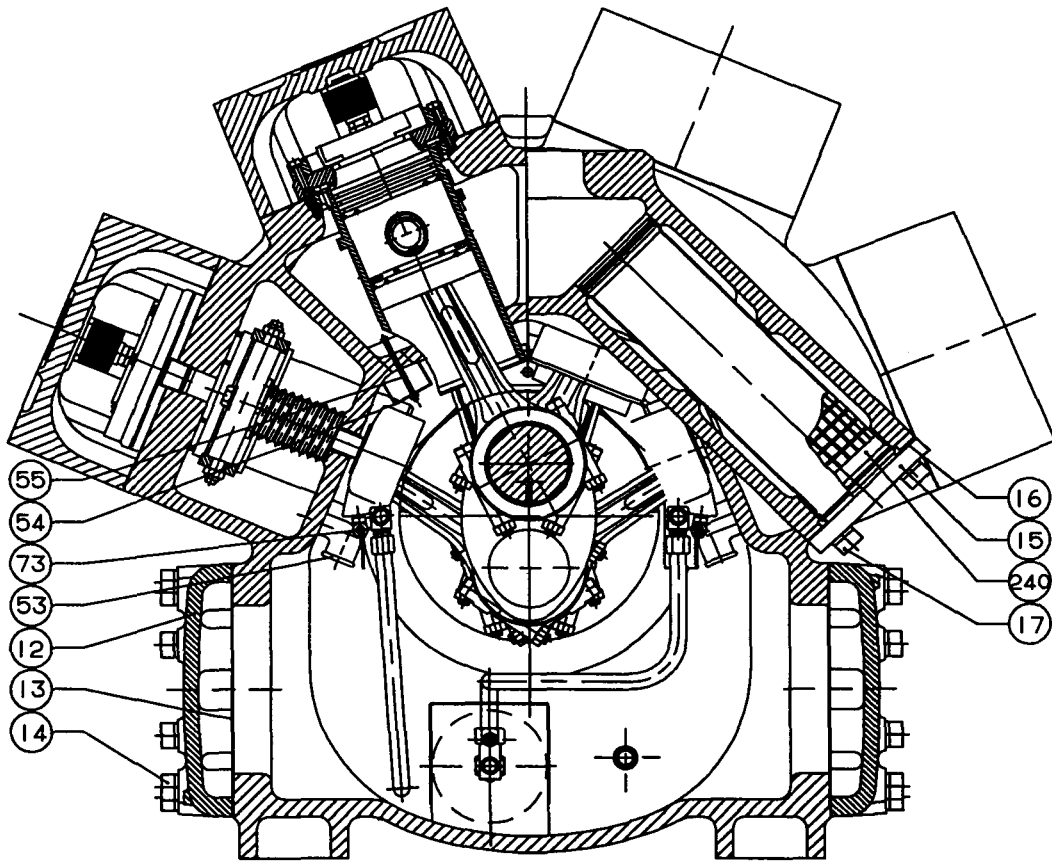




**Longitudinal Section, 100 mm Compressor**

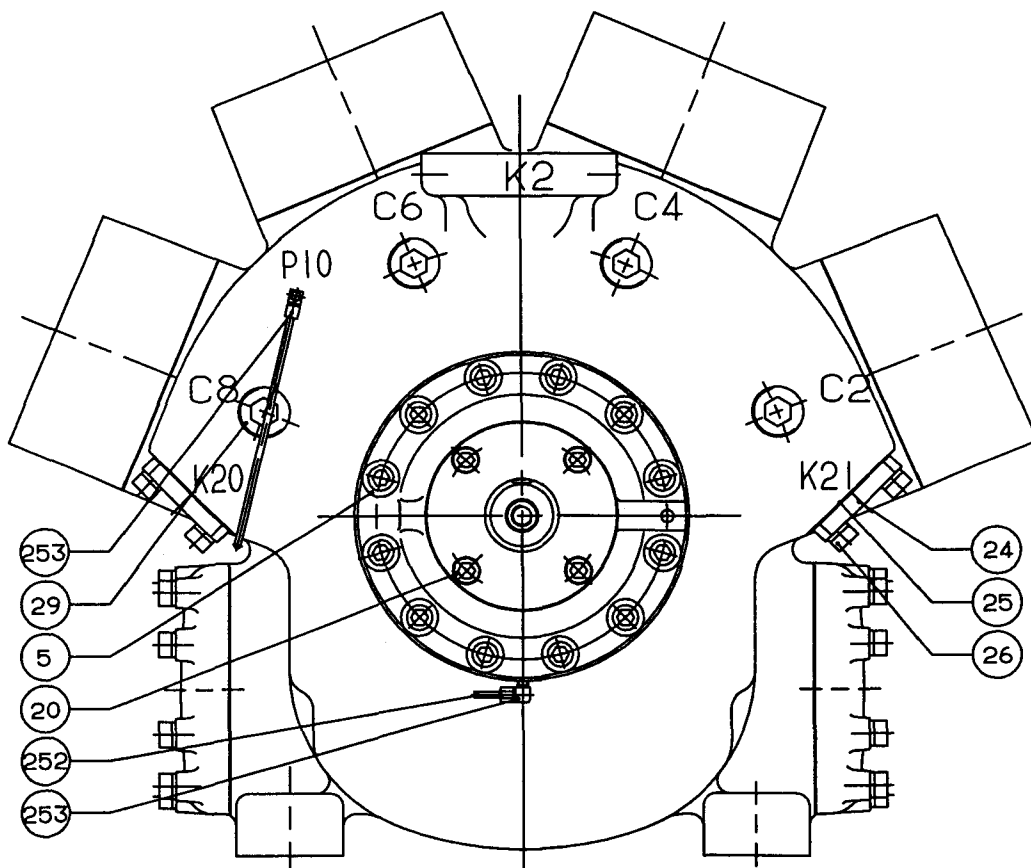


**Sectional View, 100 mm Compressor**



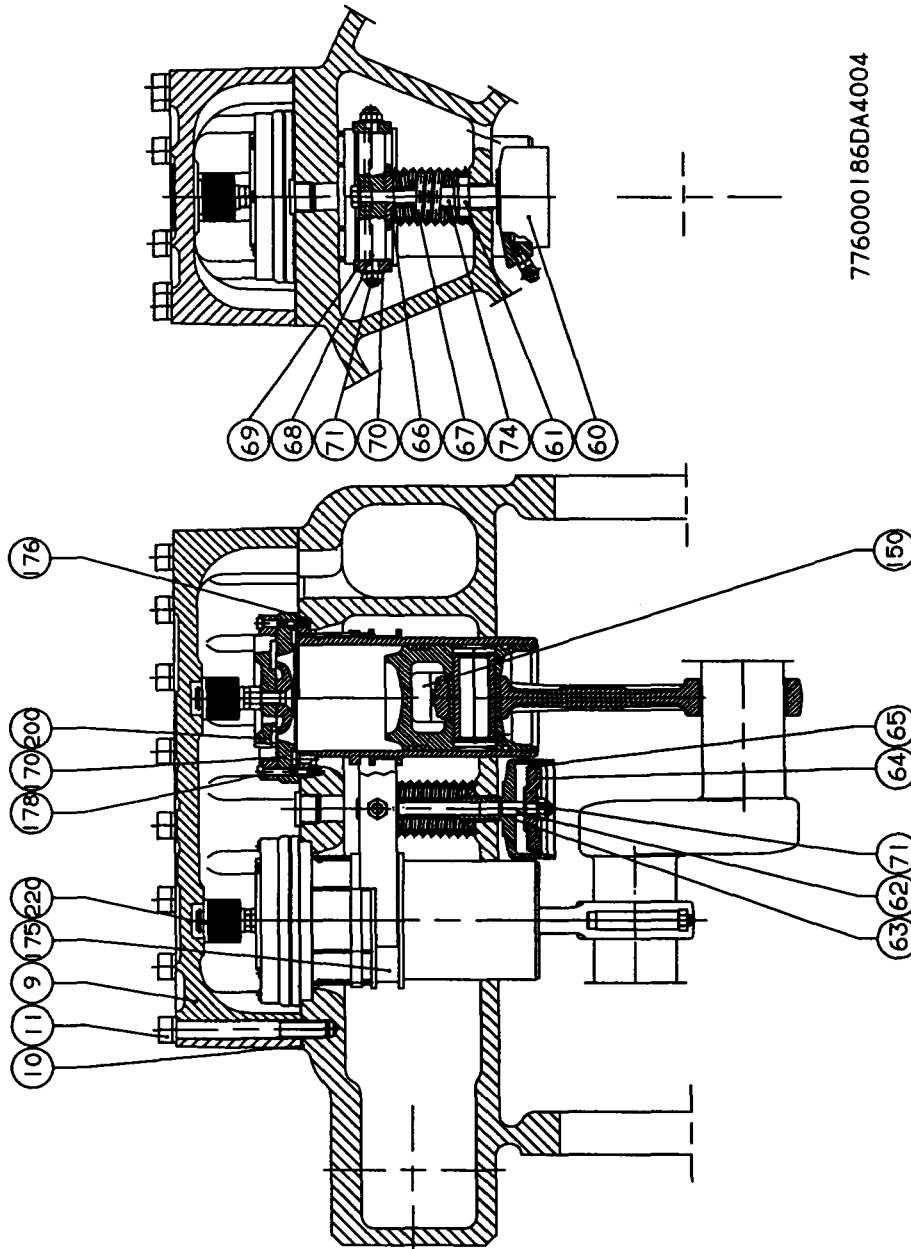
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**100 mm Compressor, Back View**

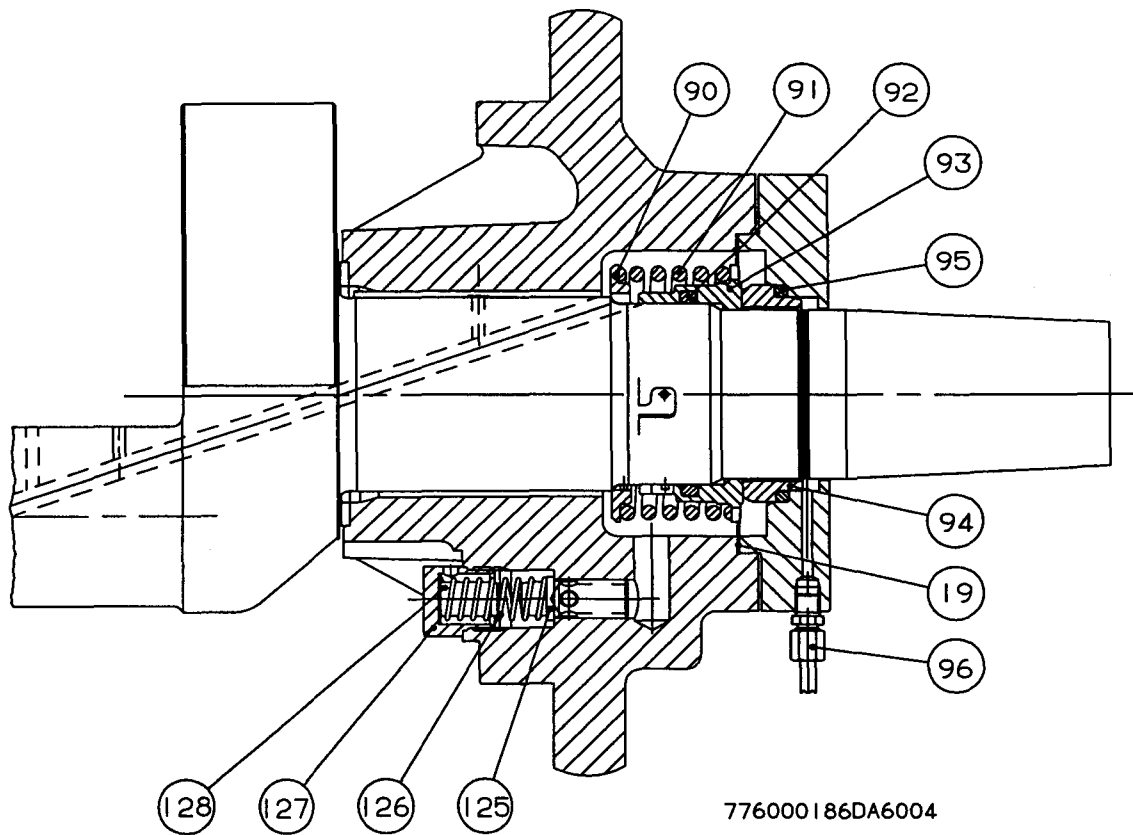


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**100 mm Compressor, Sectional View, Cylinder**

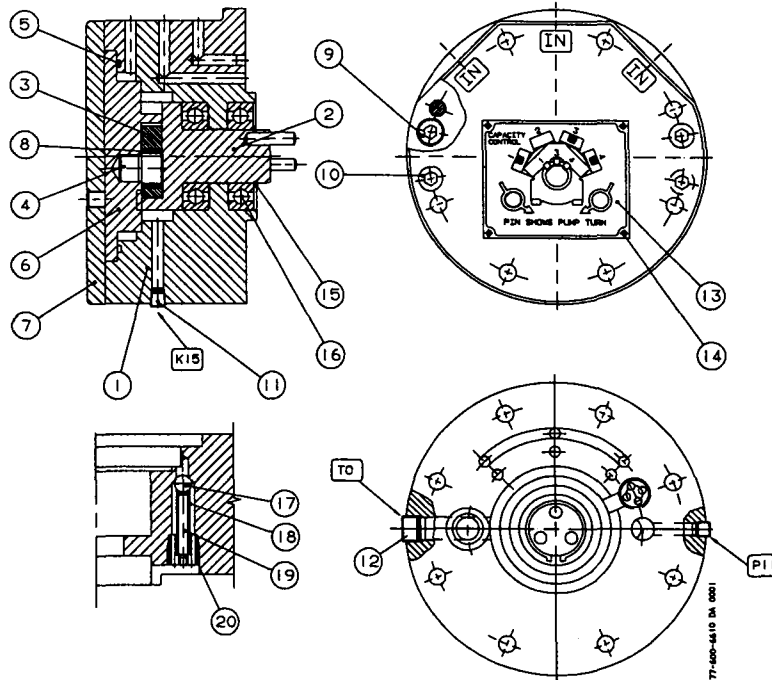


**100 mm Compressor, Longitudinal Section, mech. seal**



## Oil Pump for 100 mm Compressor

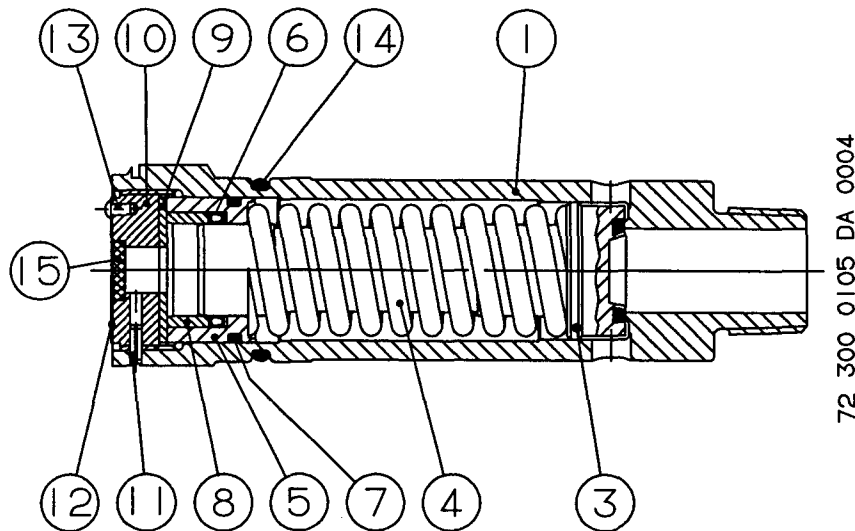
Part. No. 77-600-6610



Item	Designation	No.	Remarks
1	Housing for oil pump. 100mm	77 600 2050	
2	Rotor for oil pump. 100mm	77 600 2051	
3	Gearwheel for oil pump. 100mm	77 600 2052	
4	Shaft pin for oil pump. 100mm	77 600 2053	
5	O-ring 2347PRP248. 120,24x3,53	55 084 5248	
6	Pump cover, inside. 100mm	77 600 2054	
7	Cover for oil pump. 100mm	77 600 2055	
8	O-ring 2347 PRP 211 20,22x3,53	55 084 0102	
9	Cylinder screw. M10x80	42 078 1194	
10	Cylinder screw. M10x30	42 078 1184	
11	Allen plug, RC 1/8"	46 152 1003	
12	Pipe plug. RC 3/8"	46 152 1009	
13	Name plate for oil pump. 100mm	72 005 0077	
14	Drive rivet RH RF, No. 4x6	42 291 8029	
15	Steel retaining ring. U 35	42 313 1032	
16	Ball bearing. NO 6207	51 007 0008	
17	Ball, steel, 7/16"	51 041 1012	
18	Spring for oil circulation, 100 mm	77 600 2067	
19	Spring guide for compr. 100-125 mm	77 600 2063	
20	Holder for spring guide	77 600 2064	

**By-pass Valve ø23 mm, 25 and 12 bar**

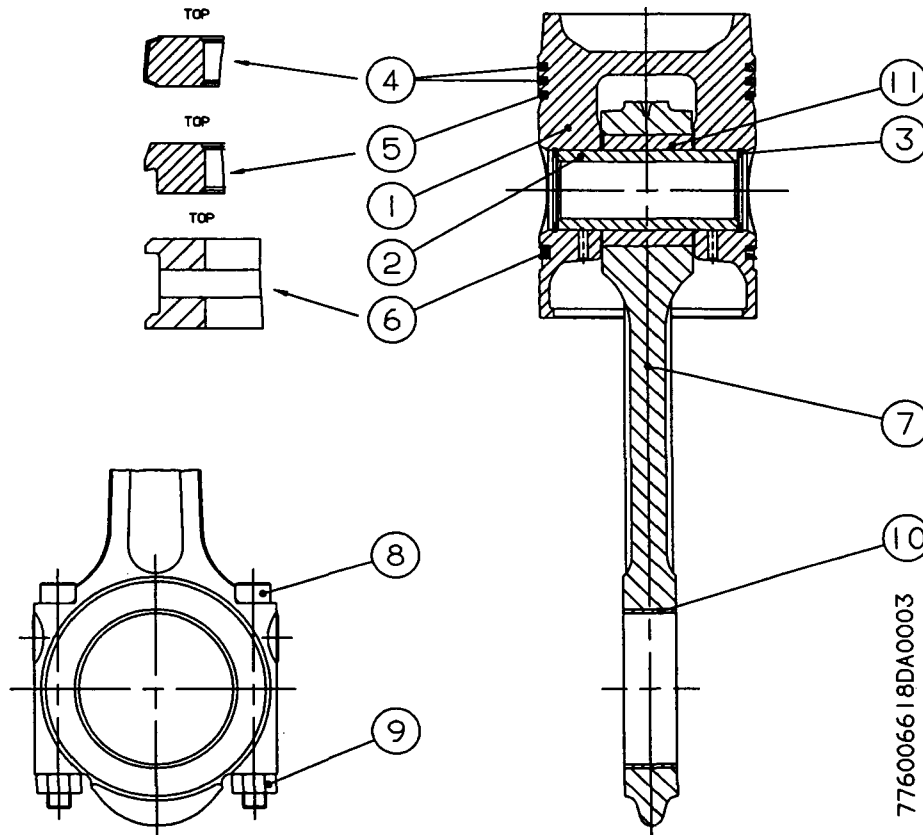
Part No. 25 bar : 72 300 0100/12 bar : 72 300 0105



Item	Designation	No.	Remarks
1	Housing for by-pass valve	72 300 0735	
3	Valve cone	72 300 0740	
4	Spring for by-pass valve. 12 bar	72 300 0753	
	Spring for by-pass valve. 25 bar	72 300 0757	
5	Guide for valve cone	72 300 0755	
6	U-sleeve H. S59545-0240-5-S	55 094 0212	
7	O-ring 2347 PRP 125, 32.99 x 2.62	55 084 0062	
8	Bushing for guide	72 300 0775	
9	Pressure washer for by-pass valve	72 300 0760	
10	Nut 1 ¼"	72 300 0765	
11	Tension pins, Ø3.0x10	42 199 0304	
12	Name plate	72 005 0084	
13	Drive rivet RH RF, No. 4x6	42 291 8029	
15	Bronze filter, Ø15x3 40 MY	46 190 0500	
20	Adjustment washer	72 300 0770	

## Connecting Rod + Piston, complete, for 100 mm Compressor

Part No.: 77 600 6618



Item	Designation	No.	Remark
	Piston, complete	77 600 6660	
1	Piston	77 600 0540	
2	Piston pin $\varnothing 100$	77 600 0541	
3	Retaining ring ST TP I $\varnothing 38$	42 314 1029	
4	Piston ring	77 036 0245	
5	Scraper ring	77 037 0125	
6	Lantern $\varnothing 75$	77 038 0125	
7	Connecting rod with plain bearing, complete	77 600 0512	
8	Connecting rod bolt	77 600 0543	
9	Nut self-lock steel 8.8, M10x1.25	42 153 3010	
10	Connecting rod bearing 1 set	77 600 0545	
11	Piston pin bearing	77 600 0544	



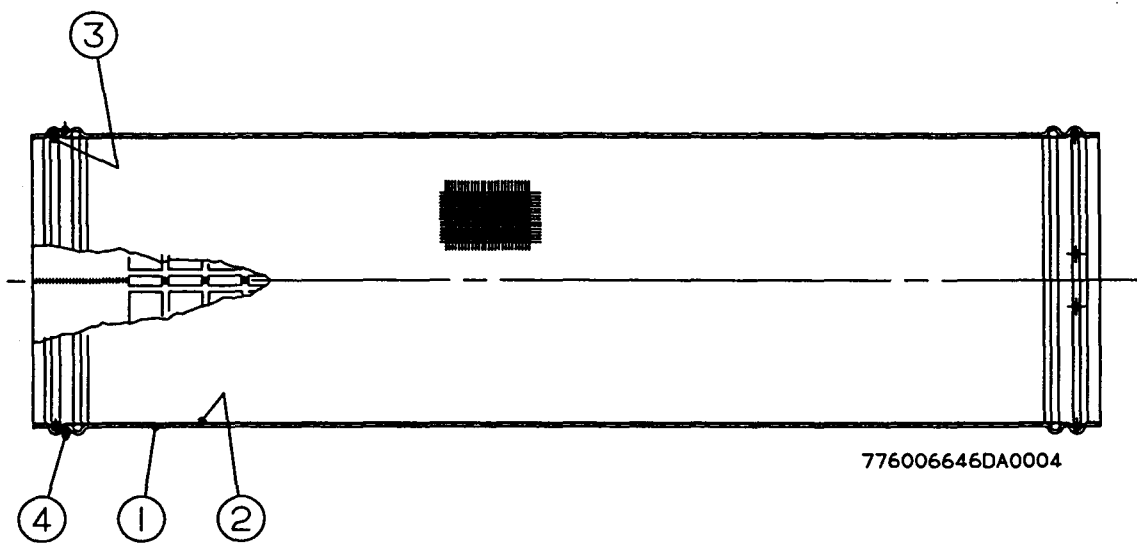






**Suction Filter Complete for 100 mm Compressor**

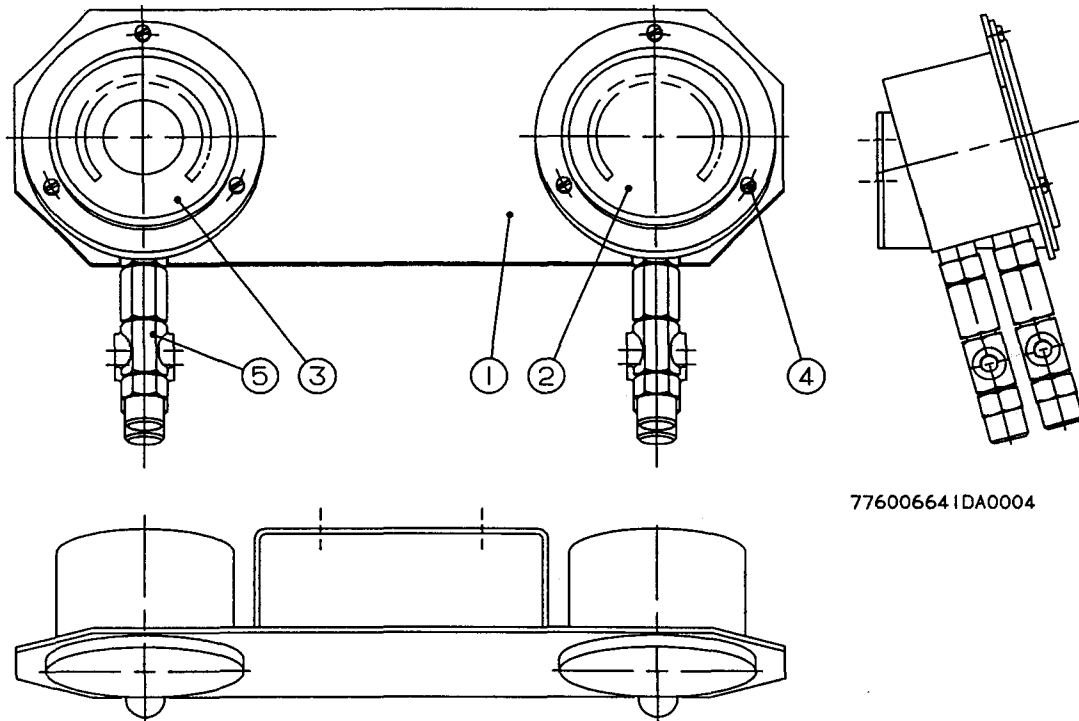
Part No. 77 600 6646



Item	Designation	No.	Remarks
1	Shell, perforated for suction filter	77 600 2105	
2	Filter for suction filter	77 600 2107	
3	Spring for suction filter	77 600 2108	
4	O-ring 2347 PRP 153 88,57x2,62	55 084 0089	

**Pressure Gauge Panel for 100 mm Compressor**

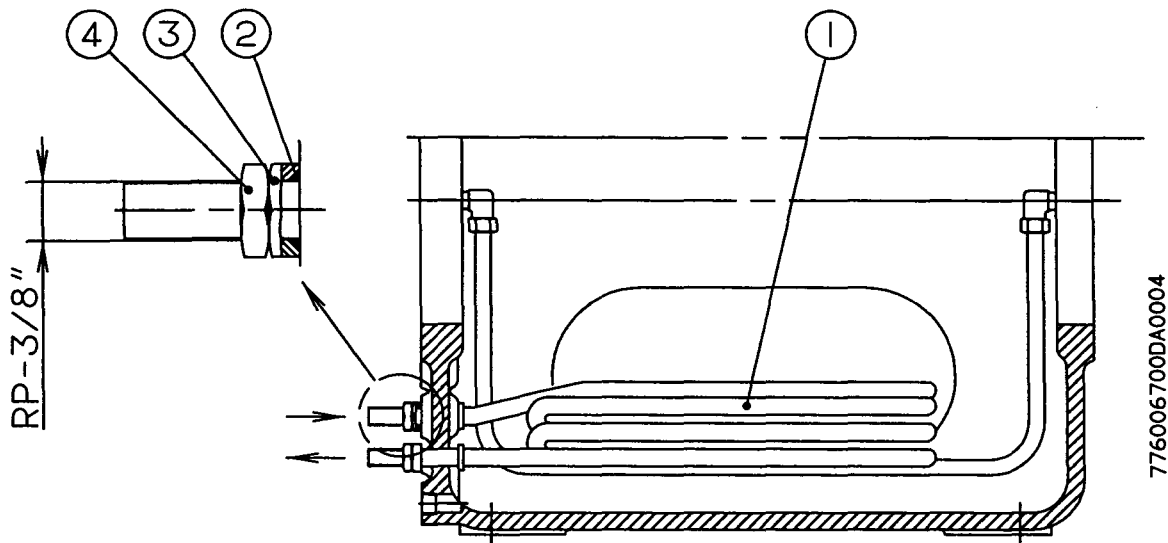
Part No. R717: 77 600 6640/HCFC: 77 600 6641



Item	Designation	No.	Remarks
1	Pressure gauge panel	77 600 2168	
2	Double Mano., with rim, 2x3/8" RG, -1-30 bar, R717	77 035 0516	
	Double Mano., with rim, 2x3/8" RG, -1-30 bar, HCFC	77 035 0560	
3	Differential Mano.,with rim, 2x3/8"RG,-1-12 bar/1-6bar,R717	77 035 0517	
	Differential Mano.,with rim,2x3/8" RG,-1-12 bar/0-5bar,HCFC	77 035 0561	
4	Cutting screw NSF, cylindrical head M5x15	42 281 1058	
5	Pressure gauge valve, steel tube, TN 25-I	72 400 0048	

**Oil Cooler for 100 mm Compressor**

Part No.: 77 600 6700

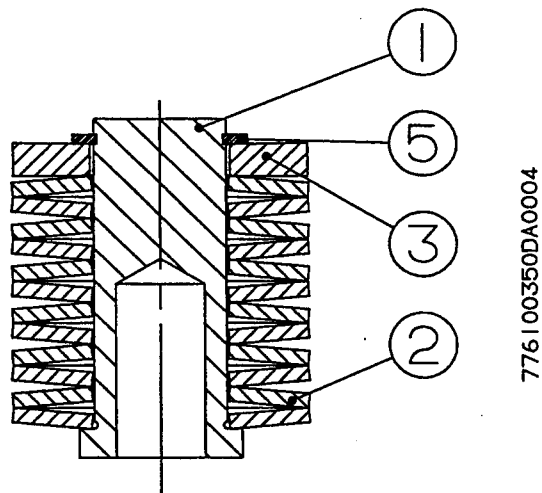


776006700DA0004

Item	Designation	No.	Remark
1	Hose for oil cooler	77 600 2175	
2	O-ring 2677 PRP 208, 15.47 x 3.53	55 084 5208	
3	Sealing for O-ring	77 610 1141	
5	Lock-nut, 3/8W RG	77 580 1207	

**Liquid spring for 100 mm Compressor**

Part No.: 77 610 0350



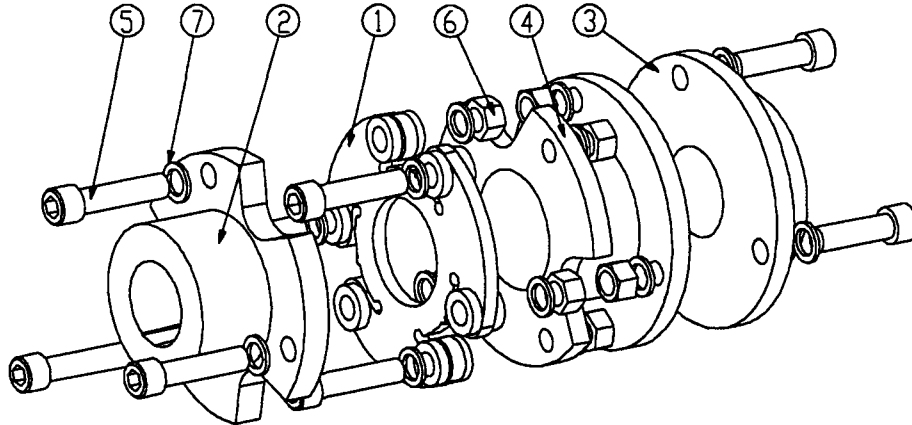
Item	Designation	No.	Remark
1	Spring holder	77 600 0536	
2	Discharge spring, 40x18.3x2.00	46 158 1085	
3	Retaining ring, U18	42 313 1015	
5	Washer for liquid spring	77 600 0537	

**Coupling for 100 mm Compressor**

**Part No.:**

ZM67G: 50-033-0052

ZM90G: 50-033-0053



**Coupling type ZM67G**

Item	Description	Serial number	Comment
1	1 Coupling element	50-033-0102	
2	Coupling hub for compressor	50-033-0124	
3	Coupling hub for motor	50-033-0152	
4	Spacer element	50-033-0172	
5-7	Bolt set	50-033-0192	
	Split bushing f. motor shaft type 3020, shaft diameter 48	57 103 2705	
	Split bushing f. motor shaft type 3020, shaft diameter 55	57 103 2107	
	Split bushing f. motor shaft type 3020, shaft diameter 60	57 103 2108	
	Split bushing f. motor shaft type 3020, shaft diameter 65	57 103 2109	
	Split bushing f. motor shaft type 3020, shaft diameter 75	57 103 2111	

**Coupling type ZM90G**

Item	Description	Serial number	Comment
1	Coupling element	50-033-0104	
2	Coupling hub for compressor	50-033-0126	
3	Coupling hub for motor	50-033-0154	
4	Spacer element	50-033-0174	
5-7	Bolt set	50-033-0194	
	Split bushing f. motor shaft type 3525, shaft diameter 55	57 103 3041	
	Split bushing f. motor shaft type 3525, shaft diameter 60	57 103 3042	
	Split bushing f. motor shaft type 3525, shaft diameter 65	57 103 3043	
	Split bushing f. motor shaft type 3525, shaft diameter 75	57 103 3045	
	Split bushing f. motor shaft type 3525, shaft diameter 80	57 103 3046	
	Split bushing f. motor shaft type 3525, shaft diameter 90	57 103 3048	



## Manometers

### Manometers R717

Designation	No.	Remarks
Singel Mano. direct installed, 1/2 RG, -1-12 bar	77 035 0510	
Singel Mano. direct installed, 1/2 RG, -1-30 bar	77 035 0511	
Singel mano., with rim, 3/8" RG, -1-12 bar	77 035 0514	
Singel Mano., with rim, 3/8" RG, -1-30 bar	77 035 0515	
Double Mano., with rim, 2x3/8" RG, -1-30 bar	77 035 0516	
Differential Mano., with rim, 2x3/8" RG, -1-12 bar/1-6 bar	77 035 0517	

### Manometers R12/22/502

Designation	No.	Remarks
Double Mano., with rim, 2x3/8" RG, -1-30 bar	77 035 0560	
Differential Mano., with rim, 2x3/8" RG, -1-12 bar/0-5 bar	77 035 0561	
Singel Mano., with rim, 3/8" RG, -1-12 bar	77 035 0562	
Singel Mano., with rim, 3/8" RG, -1-25 bar	77 035 0563	
Singel Mano., with rim, 3/8" RG, -1-25 bar	77 035 0564	

### Manometers R717 °F-lb/in°

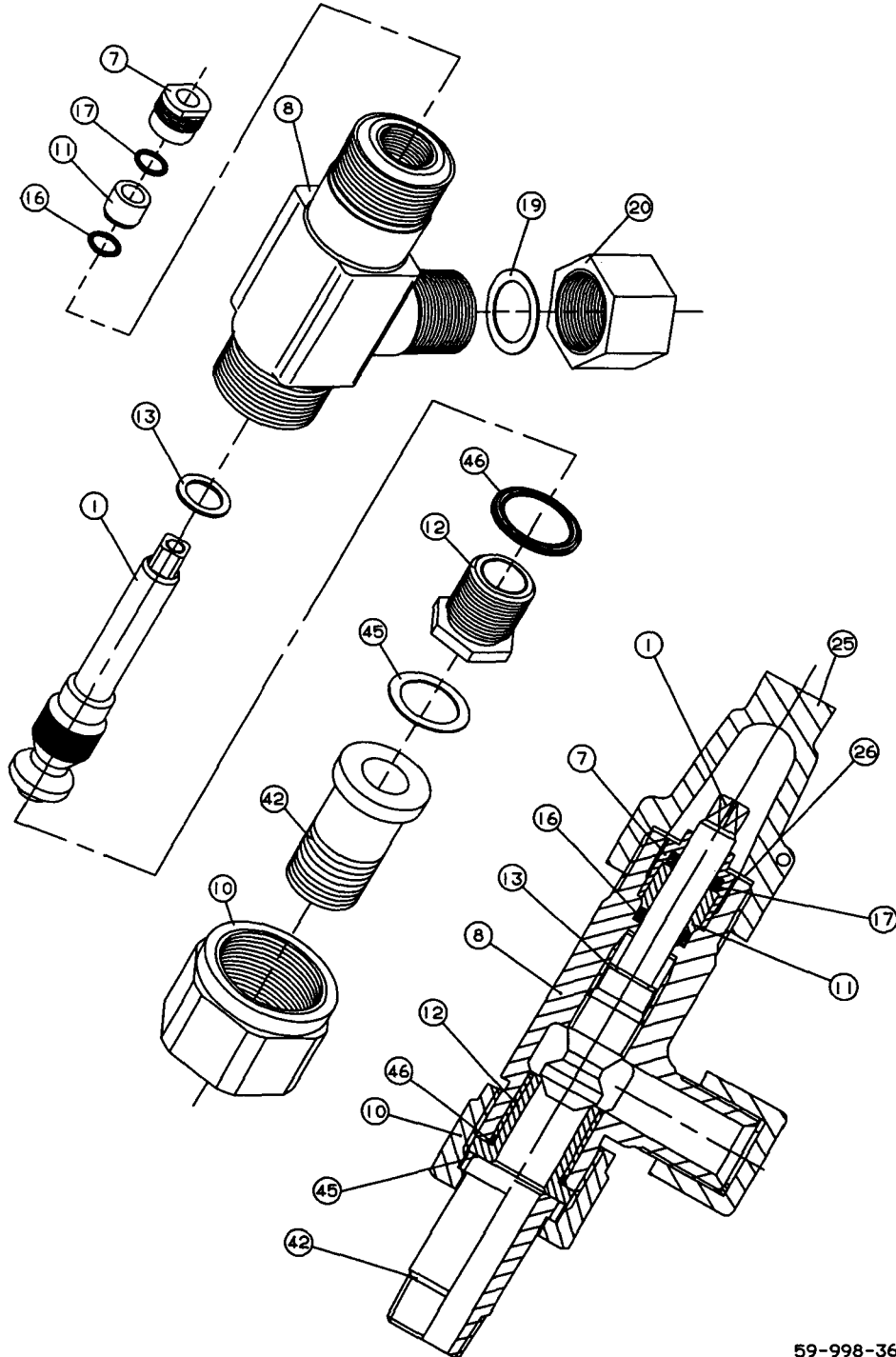
Designation	No.	Remarks
Double Mano., with rim, 2x3/8" RG, -30-400 lb/in <sup>2</sup>	77 035 0525	
Differential Mano., with rim, 2x3/8" RG, -30-170/0-80 lb/in <sup>2</sup>	77 035 0526	

### Manometers R12/22/502 °F-lb/in<sup>2</sup>

Designation	No.	Remarks
Double Mano., with rim, 2x3/8" RG, -30-350 lb/in <sup>2</sup>	77 035 0527	
Differential Mano., with rim, 2x3/8" RG, -30-170/0-80 lb/in <sup>2</sup>	77 035 0528	

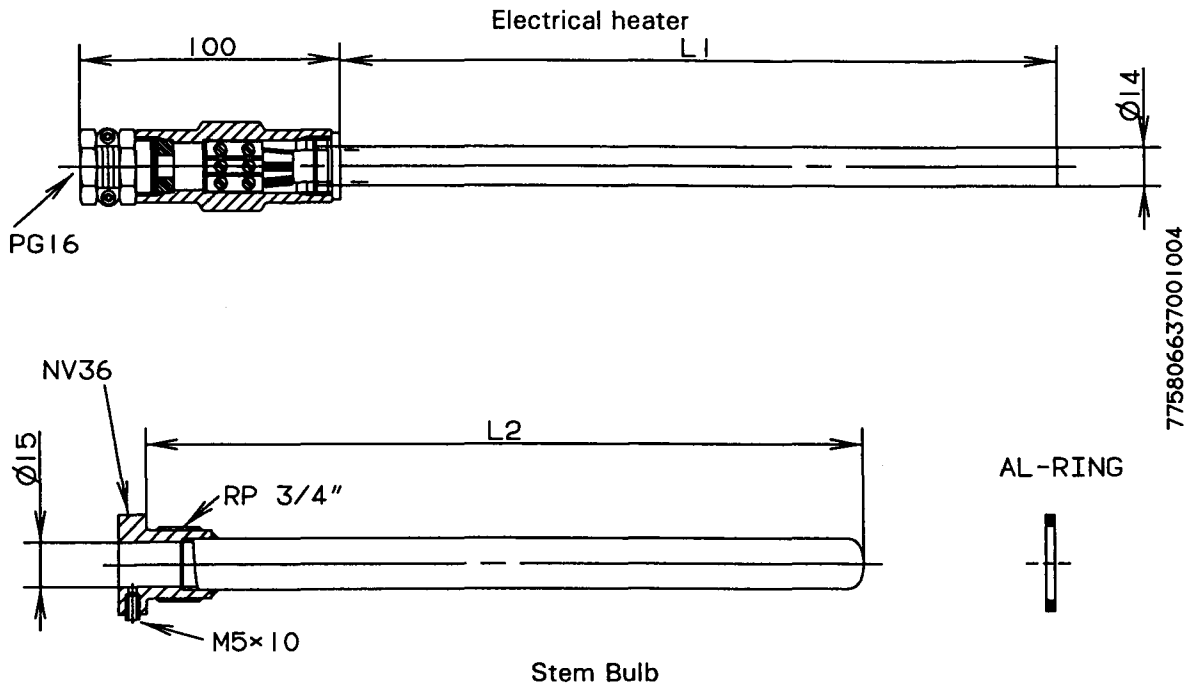
**Oil Filling Valve GVAC**

Part No.: 72 400 2071



Item	Designation	No.	Remarks
1	Short spindle	72 400 3166	
2	Long Spindle	72 400 3167	
3	Packing screw	72 400 3452	
10	Union nut	72 400 3200	
11	Bush	72 400 3475	
12	Valve seat	72 400 3320	
13	Seal	55 070 0012	
16	U-sleeve	55 094 0218	
17	O-ring	55 084 5111	
19	Gasket	55 070 0018	
25	Cap	72 400 3605	
26	Gasket	72 400 3655	
45	Gasket	72 400 3423	
46	O-ring	55 084 5018	

**Electrical Heater and Stem Bulb**



	Volt	Watt	Electrical Heater	Stem Bulb	L1	L2	Compressor type
Refrigerant Compressor	230	82	77 580 1139	77 580 1136	255	260	75 mm
		218	77 600 0905	77 580 1136	255	260	100 mm
		300	77 630 1284	77 630 1285	335	340	125 mm
	254	100	77 580 1139	77 580 1136	255	260	75 mm
		190	77 600 1162	77 580 1136	255	260	100 mm
		270	77 600 0905	77 580 1136	255	260	125 mm
Heat Pump	230	218	77 600 0905	77 580 1136	255	260	75 mm
		382	77 580 1352	77 580 1136	255	260	75 mm
		546	77 600 1194	77 600 1195	400	405	100 mm
		765	77 630 1515	77 630 1516	560	565	125 mm