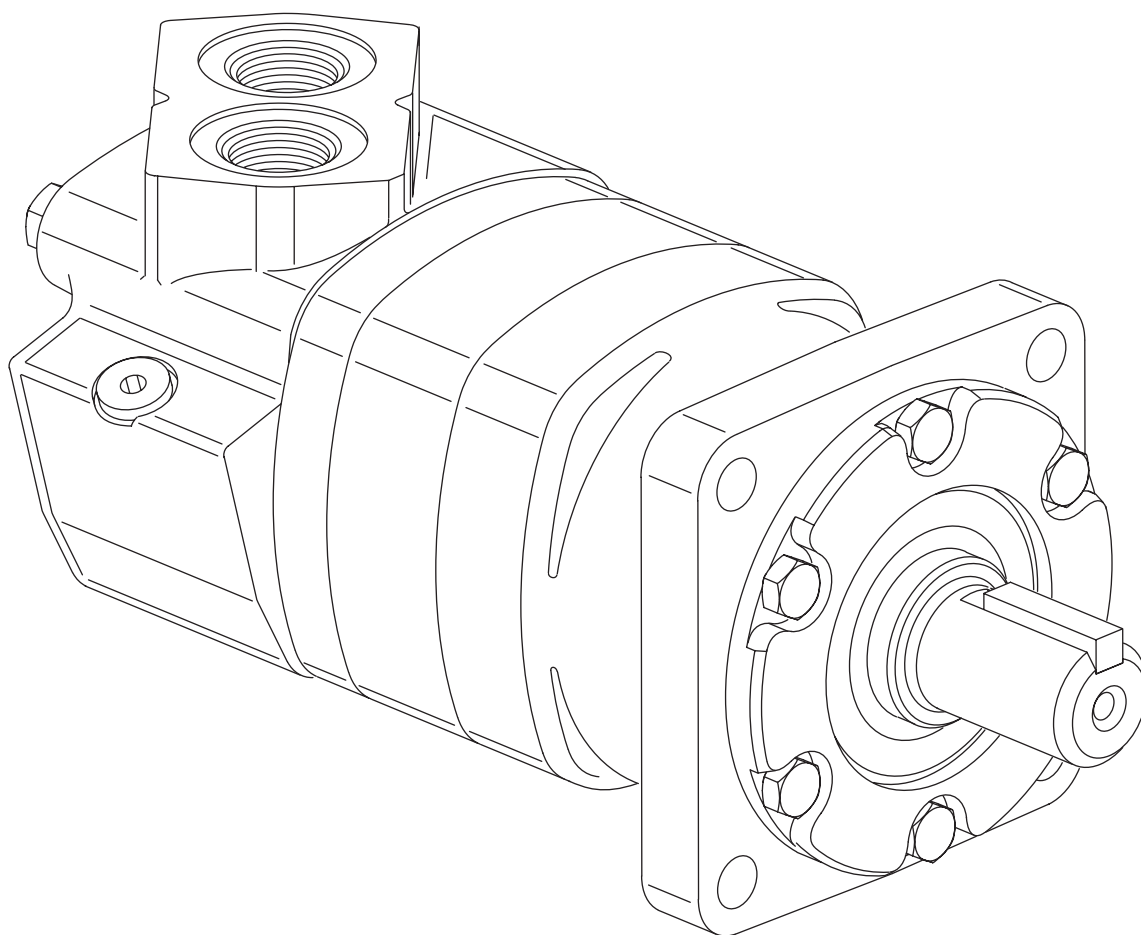


Danfoss

Char-Lynn Disc Valve Motors



Parts Manual



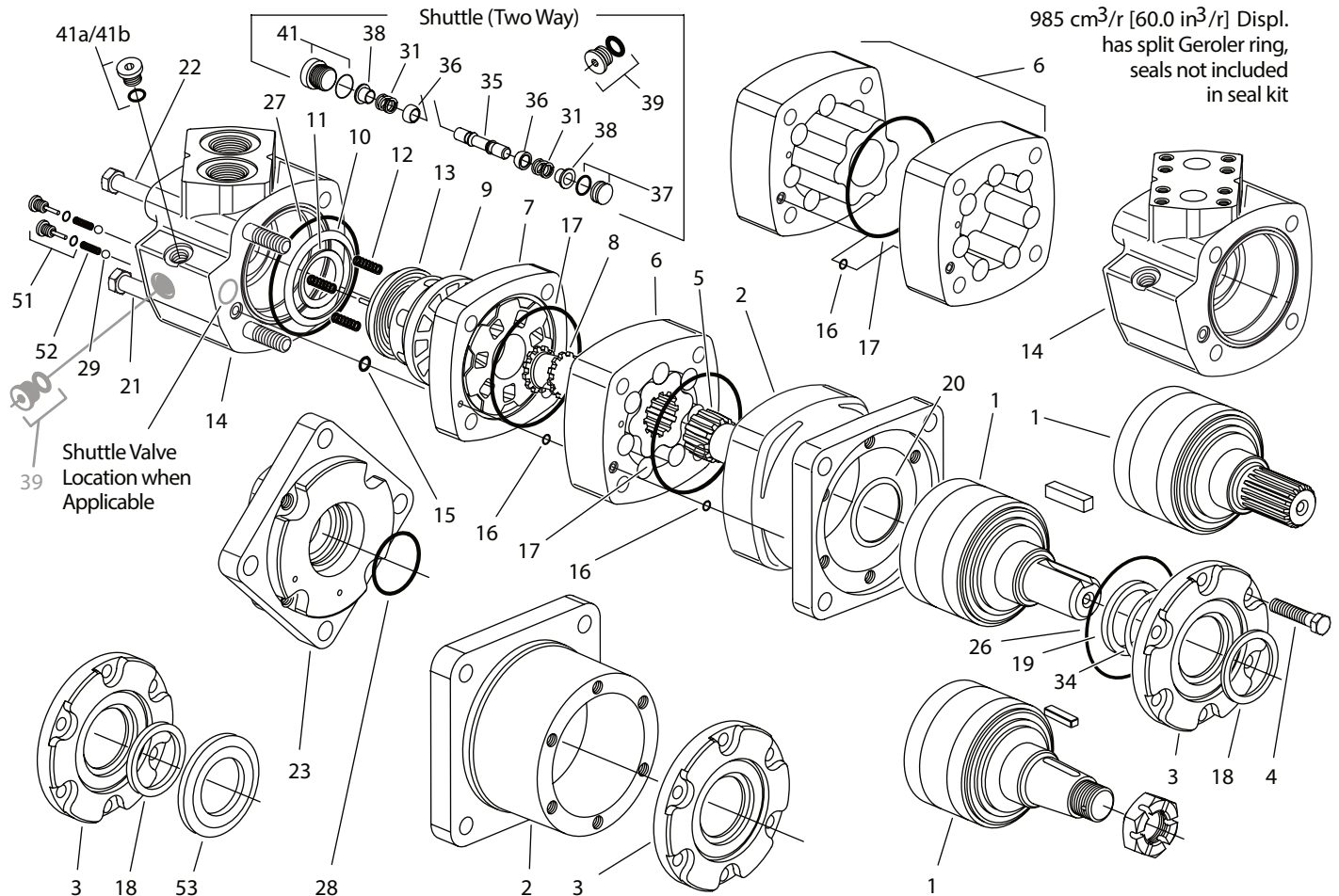
6000 Series (includes Big 6 see pages 4 and 5)

Geroler® Motors

-005 and -006

Disc Valve Motors — 6000 Series -005 and -006

| Displacement cm ³ /r [in ³ /r] | Drive, Main Item No. 5—Part No./Length | | Geroler® Item No. 6—Part No./Width | | Screw, Cap Item No. 21—Part No./Length | | Screw, Cap Item No. 22—Part No./Length | |
|---------------------------------------------------------|-------------------------------------------|--------------|---------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|
| | Part No. | mm [inch] | Part No. | mm [inch] | Part No. | mm [in.] | Part No. | mm [in.] |
| 195 [11.9] | 21373-001 | 105,1 [4.14] | 8507-001 | 21,7 [.85] | 14409-001 | 125,7 [4.95] | 14409-005 | 159,7 [6.29] |
| 245 [15.0] | 21373-002 | 110,7 [4.36] | 8507-002 | 27,3 [1.07] | 14409-002 | 132,1 [5.20] | 14409-006 | 166,1 [6.54] |
| 310 [19.0] | 21373-003 | 118,1 [4.65] | 8507-003 | 34,6 [1.36] | 14409-003 | 138,4 [5.45] | 14409-007 | 172,4 [6.79] |
| 390 [23.9] | 21373-004 | 127,0 [5.00] | 8507-004 | 43,4 [1.71] | 14409-004 | 148,1 [5.83] | 14409-008 | 181,8 [7.16] |
| 490 [30.0] | 21373-005 | 138,2 [5.44] | 8507-005 | 54,4 [2.14] | 14409-005 | 159,7 [6.29] | 14409-010 | 193,3 [7.61] |
| 625 [38.0] | 21373-007 | 152,8 [6.02] | 8507-007 | 69,1 [2.72] | 14409-007 | 172,4 [6.79] | 14409-014 | 208,5 [8.21] |
| 985 [60.0] | 21373-006 | 192,8 [7.59] | 8507-006 | 108,9 [4.29] | 14409-012 | 213,6 [8.41] | 14409-013 | 245,4 [9.66] |



| Item No. | Part Number -005 | Part Number -006 | Description | Quantity per Unit | | |
|----------|------------------|------------------|--------------------------------------------------------------------------|-------------------|------|-------|
| | | | | Std. | Whl. | Brgl. |
| 1 | 8 7 1 1 - 0 0 1 | 201837-001 | Shaft and Bearing Kit (1-1/2 inch Straight) | 1 | 1 | |
| | 14393-010 | 14393-010 | Key (for 1-1/2 Straight Shaft) | 1 | 1 | |
| | 8711-002 | 201837-002 | Shaft and Bearing Kit (1-3/4 in. Tapered) | 1 | 1 | |
| | 8711-013 | N/A | Shaft and Bearing Kit (1-3/4 in. Tapered — Special Shaft for Seal Guard) | | 1 | |
| | 14230-000 | 14230-000 | Nut, Hex (1-3/4 in. Tapered Shaft) | 1 | 1 | |
| | 14394-007 | 14394-007 | Key (for 1-3/4 in. Tapered Shaft) | 1 | 1 | |
| | 8711-003 | 201837-003 | Shaft and Bearing Kit (1-1/2 in. Splined 17T) | 1 | 1 | |
| | 8711-010 | 201837-010 | Shaft and Bearing Kit (40 mm Straight) | 1 | 1 | |
| | 14458-006 | 14458-006 | Key (for 40mm Straight Shaft) | 1 | 1 | |
| 2 | 8490-000 | 201839-001 | Housing, Bearing (SAE CC) (Standard) | 1 | | |
| | 8494-000 | 201839-002 | Housing, Bearing (Wheel Mount) | | 1 | |
| 3 | 7547-000 | 201840-001 | Retainer, Front | 1 | 1 | |
| 4 | 14253-000 | 14253-000 | Screw, Cap | 6 | 6 | |

Disc Valve Motors — 6000 Series -005 and -006

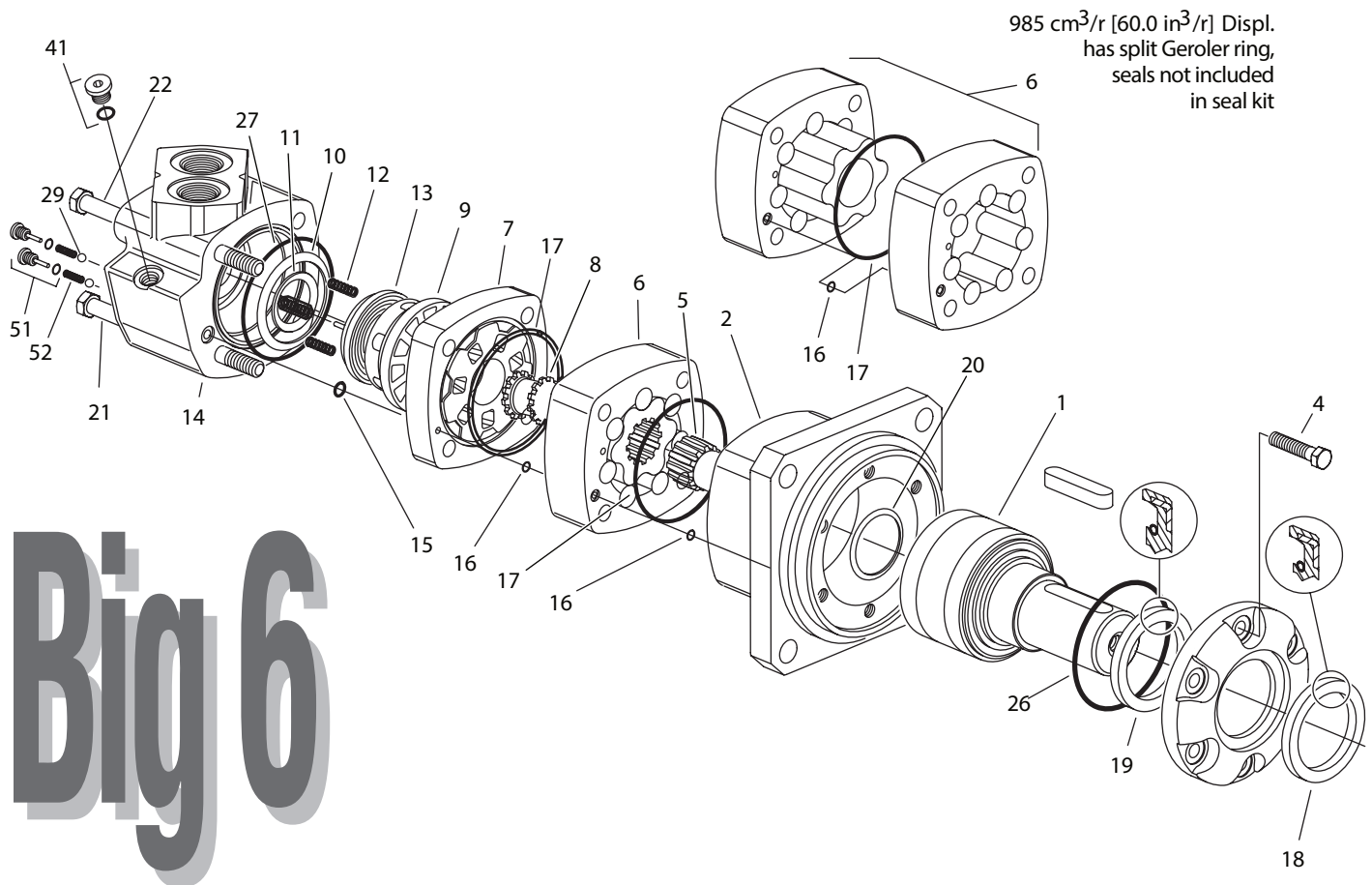
| Item No. | Part No. -005 | Part No. -006 | Description | Quantity per Unit | | |
|----------|------------------|---------------|--------------------------------------------------------------------------------------------------------------|-------------------|------|-------|
| | | | | Std. | Whl. | Brgl. |
| 5 | * | * | Drive, Main | 1 | 1 | 1 |
| 6 | * | * | Geroler® | 1 | 1 | 1 |
| 7 | 21666-000 | 21666-000 | Plate, Valve | 1 | 1 | 1 |
| 8 | 8508-000 | 8508-000 | Drive, Valve | 1 | 1 | 1 |
| 9 | 8497-000 | 8497-000 | Valve | 1 | 1 | 1 |
| OX 10 | 6992-000 | 6992-000 | Seal, Face, Outer | 1 | 1 | 1 |
| OX 11 | 6 9 9 3 -000 | 6993-000 | Seal, Face, Inner | 1 | 1 | 1 |
| 12 | 6203-000 | 6203-000 | Spring, Compression | 3 | 3 | 3 |
| 13 | 21317 -000 | 21317 -000 | Balance Ring w/ Pins | 1 | 1 | 1 |
| 14 | 8502-004 | 8502-004 | Housing, Valve (1-5/16 Str. Thrd. O-ring Ports — 7/16-20 Case Drain Port) | 1 | 1 | 1 |
| | 23980-001 | 23980-001 | Housing, Valve - Shuttle Valve Type (1-5/16 Str. Thrd. O-ring Ports — 9/16-18 Case Drain Port) | 1 | 1 | 1 |
| | 8502-002 | 8502-002 | Housing, Valve 3/4 in. Split Flange Ports — 7/16-20 Case Drain Port) | 1 | 1 | 1 |
| | 8502-006 | 8502-006 | Housing, Valve (G 1 (BSP) Ports — G 1/4 (BSP) Case Drain Port) | 1 | 1 | 1 |
| OX 15 | 15006-000 | 15006-000 | Seal | 1 | 1 | 1 |
| OX 16 | 8765-010 | 8765-010 | Seal | 2 | 2 | 2 |
| X† 17 | 250052-044 | 250052-044 | Seal | 2 | 2 | 2 |
| † 18 | 9039-001 | 9039-001 | Dust Seal | 1 | 1 | |
| † 19 | 9057-013 | 9057-013 | Seal, Shaft | 1 | 1 | |
| † 20 | 9080-001 | 9080-001 | Seal, Shaft Face | 1 | 1 | |
| 21 | * | * | Screw, Cap | 2 | 2 | 2 |
| 22 | * | * | Screw, Cap | 2 | 2 | 2 |
| 23 | 8492-000 | 8492-000 | Flange, Mounting, SAE C | | | 1 |
| OX 26 | 1 5 0 3 9 -000 | 15039-000 | Seal | 1 | 1 | |
| OX 27 | 15062-000 | 15062-000 | Seal | 1 | 1 | 1 |
| 28 | 15128-000 | 15128-000 | Seal | | | 1 |
| 29 | 18026-000 | 18026-000 | Ball, Steel | 2 | 2 | 2 |
| 31 | 2 3 0 0 7 9 -000 | 230079-000 | Spring | 2 | 2 | 2 |
| † 34 | 6 9 9 1 -000 | 6991-000 | Ring, Back-up | 1 | 1 | |
| 35 | 8566-000 | 8566-000 | Piston Shuttle | 1 | 1 | 1 |
| 36 | 8567-000 | 8567-000 | Poppet | 2 | 2 | 2 |
| 37 | 201868-002 | 201868-002 | Plug Assembly | 1 | 1 | 1 |
| | 14502-012 | 14502-012 | O-ring | 1 | 1 | 1 |
| 38 | 8755-000 | 8755-000 | Sleeve, Dash Pot | 1 | 1 | 1 |
| 39 | 9072-002 | 9072-002 | Plug Assembly | 1 | 1 | 1 |
| | 250003-903 | 250003-903 | O-ring | 1 | | 1 |
| 41 | 9072-005 | 9266-006 | Plug Assembly (9/16-18 Shuttle Valve End) | 1 | 1 | 1 |
| | 250003-906 | 250003-906 | O-ring | 1 | 1 | 1 |
| 41a | 9072-003 | 9266-003 | Plug Assembly (7/16-20 Case Drain Plug) | 1 | 1 | 1 |
| | 250003-904 | 250003-904 | O-ring | 1 | 1 | 1 |
| 41b | 9072-002 | 9072-002 | Plug Assembly (G 1/4 (BSP) Case Drain Plug) | 1 | 1 | 1 |
| | 250003-904 | 250003-904 | O-ring | 1 | 1 | 1 |
| 51 | 8350-000 | 8350-000 | Check Plug Assembly | 2 | 2 | 2 |
| X | 250003-903 | 250003-903 | O-ring | 2 | 2 | 2 |
| 52 | 6464-000 | 6464-000 | Spring, Compression | 2 | 2 | 2 |
| 53 | 14628-003 | 14628-007 | Guard, Seal | 1 | 1 | |
| | 61238-000 | 61238-000 | Seal Kit, Rear (Std. and Whl. Motors) — Contains Parts Indicated by X | | | |
| | 61237-000 | 61237-000 | Seal Kit, Shaft (Std. and Whl. Motors) — Contains Parts Indicated by † | | | |
| | 61285-000 | 61285-000 | Seal Kit, Complete Buna N with Viton Shaft Seal (Std. and Whl. Motors) — Contains Parts Indicated by X and † | | | |
| | 61239-000 | 61239-000 | Seal Kit, (Bearingless Motor Only) — Contains Parts Indicated by X | | | |
| | 61250-000 | 61250-000 | Seal Kit, Viton*** (Bearingless Motor Only)— Contains Parts Indicated by O | | | |
| | 61246-000 | 61246-000 | Seal Kit, Viton**(Std. and Whl. Motors) — Contains Parts Indicated by X and † | | | |
| | 61291-000 | 61293-000 | Seal Kit, Shaft (Std. and Whl. Motors with special Tapered Shaft for Seal Guard — Shaft End Seals Only) | | | |

*— See chart on opposite page. Viton® is a registered trade name of Dupont Corporation.

**— Viton seal part numbers differ from part numbers shown above. Note: Back-up Ring (item 34) is not used with Viton shaft seal (item 19)

Disc Valve Motors — 6000 Series -005 and -006

| Displacement cm ³ /r [in ³ /r] | Drive, Main Item No. 5—Part No./Length | | Geroler® Item No. 6—Part No./Width | | Screw, Cap Item No. 21—Part No./Length | | Screw, Cap Item No. 22—Part No./Length | |
|---------------------------------------------------------|-------------------------------------------|--------------|---------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|
| | Part No. | mm [inch] | Part No. | mm [inch] | Part No. | mm [in.] | Part No. | mm [in.] |
| 195 [11.9] | 21373-001 | 105,1 [4.14] | 8507-001 | 21,7 [.85] | 14409-001 | 125,7 [4.95] | 14409-005 | 159,7 [6.29] |
| 390 [23.9] | 21373-004 | 127,0 [5.00] | 8507-004 | 43,4 [1.71] | 14409-004 | 148,1 [5.83] | 14409-008 | 181,8 [7.16] |
| 490 [30.0] | 21373-005 | 138,2 [5.44] | 8507-005 | 54,4 [2.14] | 14409-005 | 159,7 [6.29] | 14409-010 | 193,3 [7.61] |
| 625 [38.0] | 21373-007 | 152,8 [6.02] | 8507-007 | 69,1 [2.72] | 14409-007 | 172,4 [6.79] | 14409-014 | 208,5 [8.21] |
| 737 [45.0] | 21373-00X | 000,0 [0.00] | 8507-00X | 000,0 [0.00] | 14409-00X | 000,0 [0.00] | 14409-0XX | 000,0 [0.00] |
| 803 [49.0] | 21373-00X | 000,0 [0.00] | 8507-00X | 000,0 [0.00] | 14409-00X | 000,0 [0.00] | 14409-0XX | 000,0 [0.00] |
| 985 [60.0] | 21373-006 | 192,8 [7.59] | 8507-006 | 108,9 [4.29] | 14409-012 | 213,6 [8.41] | 14409-013 | 245,4 [9.66] |



| Item No. | Part Number -006 | Description | Quantity per Unit |
|----------|------------------|-----------------------------------------------------------|-------------------|
| | | | Std. |
| 1 | 201837-001 | Shaft and Bearing Kit (50mm Straight) | 1 |
| | 14393-010 | Key (for 50mm Straight Shaft) | 1 |
| 2 | 201839-001 | Housing, Bearing — Global Mount (Similar to ISO 3019 / 2) | 1 |
| 3 | 201840-001 | Retainer, Front | 1 |
| 4 | 14253-000 | Screw, Cap | 6 |

Big 6

| Item No. | Part No. - 006 | Description | Quantity per Unit |
|----------|----------------|---------------------------------------------------------------------------------|-------------------|
| | | | Std. |
| 5 | * | Drive, Main | 1 |
| 6 | * | Geroler* | 1 |
| 7 | 21666-000 | Plate, Valve | 1 |
| 8 | 8508-000 | Drive, Valve | 1 |
| 9 | 8497-000 | Valve | 1 |
| X 10 | 6992-000 | Seal, Face, Outer | 1 |
| X 11 | 6993-000 | Seal, Face, Inner | 1 |
| 12 | 6203-000 | Spring, Compression | 3 |
| 13 | 21317 -000 | Balance Ring w/ Pins | 1 |
| 14 | 8502-006 | Housing, Valve (G 1 (BSP) Ports — G 1/4 (BSP) Case Drain Port) | 1 |
| X 15 | 15006-000 | Seal | 1 |
| X 16 | 8765-010 | Seal | 2 |
| X 17 | 250052-044 | Seal | 2 |
| X 18 | 14850-001 | Dust Seal | 2 |
| X 19 | 14858-001 | Seal, Shaft | 1 |
| X 20 | 9080-001 | Seal, Shaft Face | 1 |
| 21 | * | Screw, Cap | 2 |
| 22 | * | Screw, Cap | 2 |
| X 26 | 15039-000 | Seal | 1 |
| X 27 | 15062-000 | Seal | 1 |
| 29 | 18026-000 | Ball, Steel | 2 |
| 41 | 9170-002 | Plug Assembly (G 1/4 (BSP) Case Drain Plug) | 1 |
| | 250003-904 | O-ring | 1 |
| 51 | 8350-000 | Check Plug Assembly | 2 |
| X | 250003-903 | O-ring | 2 |
| 52 | 6464-000 | Spring, Compression | 2 |
| | 61315-000 | Seal Kit, Complete Buna N with Viton Shaft Seal — Contains Parts Indicated by X | |

How to Order Replacement Parts

Each Order Must Include the Following:

- | | |
|-------------------|----------------------|
| 1. Product Number | 4. Part Number |
| 2. Date Code | 5. Quantity of Parts |
| 3. Part Name | |

For More Detailed Information Contact Danfoss.

Specifications and performance data, Catalog No. 11-878

- When servicing 6000 Series Motors refer to Repair Information No. 7-119. This repair manual lists tools required, and step by step disassembly and reassembly procedures.

Label identification:



Label information:

1. Country of origin
2. Brand name
3. Product number
4. Serial number
5. Date code

Product Numbers—6000 Series Motors

Use digit prefix —**112-**, **113-**, or **114-** plus four digit number from charts for complete product number—**Example 114-1047**.

| Mounting | Shaft | Ports | Displacement cm ³ /r [in ³ /r] and | | | | | | | Product Number |
|-------------|----------------------------|---------------|------------------------------------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|
| | | | 195 [11.9] | 245 [15.0] | 310 [19.0] | 390 [23.9] | 490 [30.0] | 625 [38.0] | 985 [60.0] | |
| Standard | 1-1/2 inch Straight | 1-5/16 O-ring | 112-1064 | -1065 | -1066 | -1067 | -1068 | -1107 | -1069 | |
| | 40 mm Straight | G 1 (BSP) | 112-1094 | -1095 | -1096 | -1097 | -1098 | — | -1099 | |
| | 1-1/2 Inch 17 T Splined | 1-5/16 O-ring | 112-1058 | -1059 | -1060 | -1061 | -1062 | -1109 | -1063 | |
| | | G 1 (BSP) | 112-1088 | -1089 | -1090 | -1091 | -1092 | — | -1093 | |
| Wheel Motor | 40 mm Straight | G 1 (BSP) | 113-1082 | -1083 | -1084 | -1085 | -1086 | -1100 | -1087 | |
| | 1-3/4 Inch Tapered | 1-5/16 O-ring | 113-1070 | -1071 | -1072 | -1073 | -1074 | -1093 | -1075 | |
| Bearingless | | 1-5/16 O-ring | 114-1031 | -1032 | -1033 | -1034 | -1035 | -1055 | -1036 | |
| | | G 1 (BSP) | 114-1043 | -1044 | -1045 | -1046 | -1047 | — | -1048 | |

114-1047

Big 6

How to Order Replacement Parts

Each Order Must Include the Following:

- | | |
|-------------------|----------------------|
| 1. Product Number | 4. Part Number |
| 2. Date Code | 5. Quantity of Parts |
| 3. Part Name | |

For More Detailed Information Contact Danfoss.

Specifications and performance data, Catalog No. 11-878

- When servicing 6000 Series Motors refer to Repair
- Information No. 7-119. This repair manual lists tools required, and step by step disassembly and reassembly procedures.

Label identification:



Label information:

1. Country of origin
2. Brand name
3. Product number
4. Serial number
5. Date code

Product Numbers – 6000 Series (Big 6)

Mounting Type - Standard (Code H), 4 Bolt:

- 160,0 [6.30] Pilot Dia.
- 18,01 [7.09] Dia. Mounting Holes
- 200,0 [7.87] Dia. Bolt Circle

Output Shaft - Straight (Code 21)

Ports - G1 (BSP) Staggered G 1/4 Case Drain (Code C)

Paint - Low Gloss Black

Use digit prefix — 112- plus four digit number from charts for complete product number—**Example 112-1215.**
Orders will not be accepted without three digit prefix.

| | | | Displacement cm ³ /r [in ³ /r] and Product Number | | | | | | |
|----------|----------------|-----------|---------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Mounting | Shaft | Ports | 310 [19.0] | 390 [23.9] | 490 [30.0] | 625 [38.0] | 737 [45.0] | 800 [49.0] | 985 [60.0] |
| Standard | 50 mm Straight | G 1 (BSP) | 112-1217 | -1218 | -1215 | -1216 | -1247 | -1219 | -1220 |

112-1215

Products we offer:

- Cartridge valves
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Gear motors
- Gear pumps
- Hydraulic integrated circuits (HICs)
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software
- PLUS+1® software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

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Danfoss Power Solutions – your strongest partner in mobile hydraulics and mobile electrification.

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We offer you expert worldwide support for ensuring the best possible solutions for outstanding performance. And with an extensive network of Global Service Partners, we also provide you with comprehensive global service for all of our components.

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www.hydro-gear.com

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