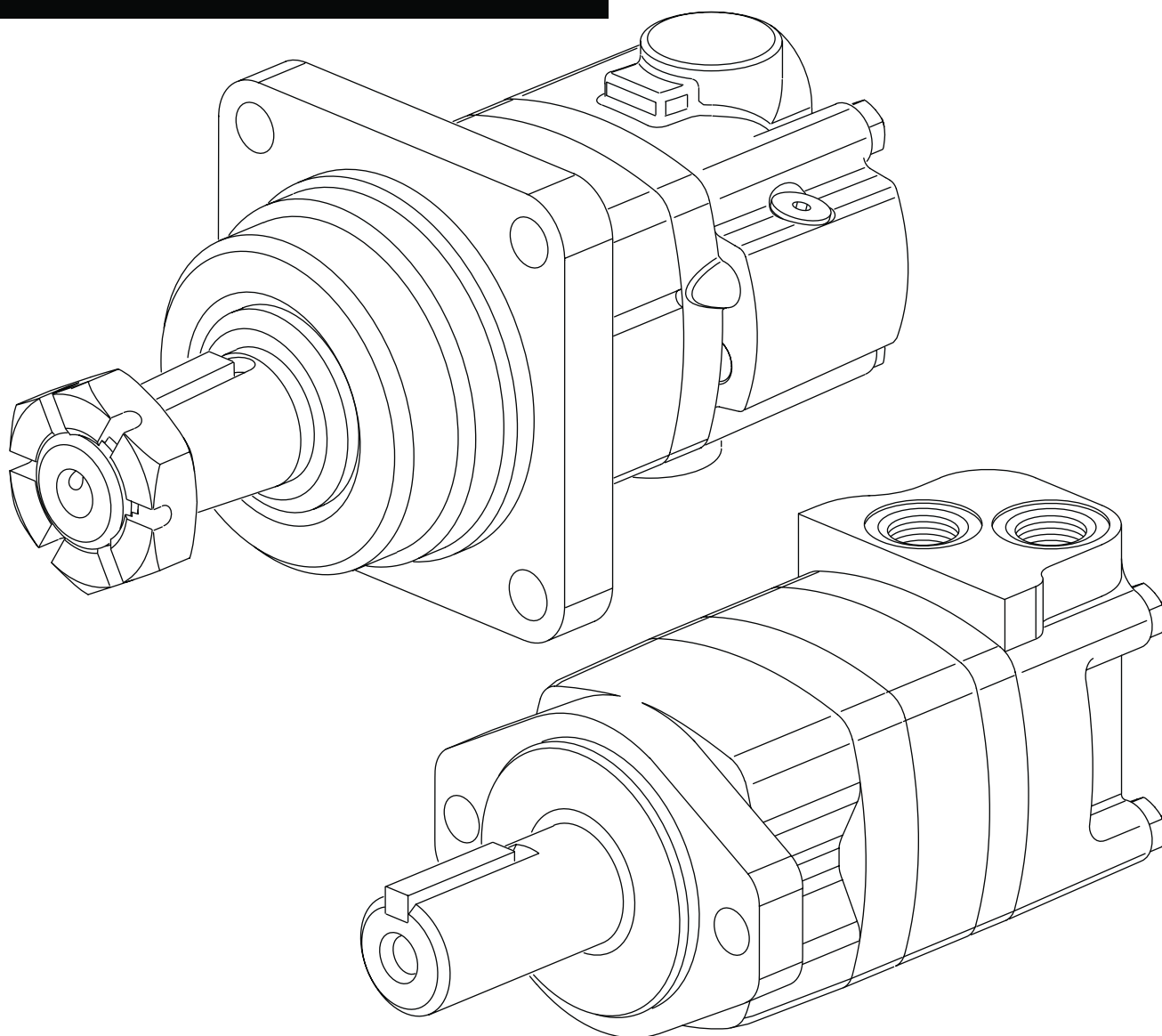


Danfoss Char-Lynn®

Disc Valve Motors



Parts Manual



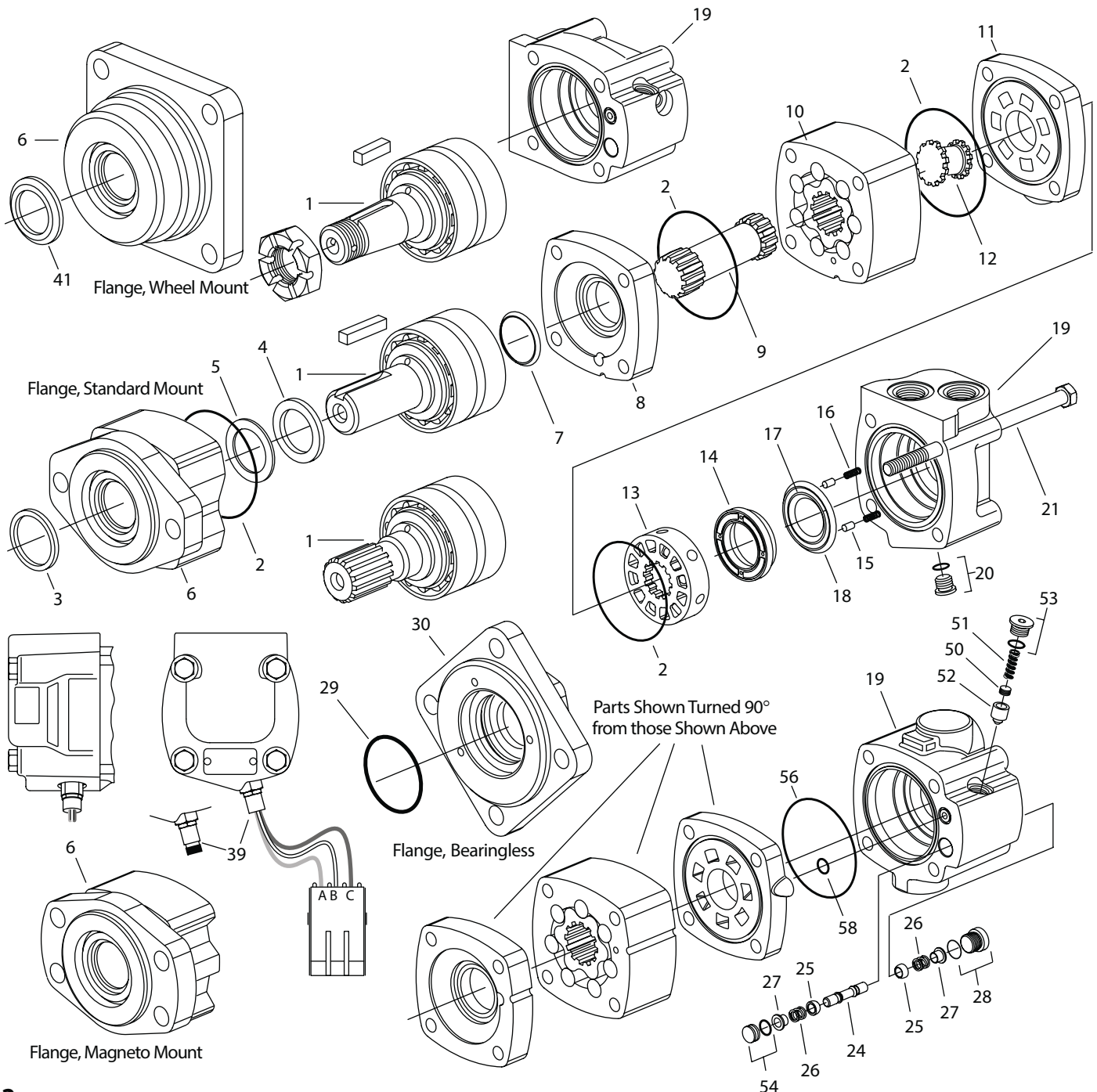
4000 Compact Series Geroler® Motors

001

4000 Compact Series Disc Valve Motors

Parts Drawing/List

Displacement cm ³ /r [in ³ /r]	Drive, Main Item No. 9 —Part No./Length		Geroler® Item No. 10 —Part No./Width		Screw, Cap (Standard/Wheel) Item No. 21 —Part No./Length		Screw, Cap (Bearingless) Item No. 21 —Part No./Length	
	Part No.	mm [inch]	Part No.	mm [inch]	Part No.	mm [in.]	Part No.	mm [in.]
160 [9 . 8]	202989-004	82,3 [3.24]	202871-004	35,6 [1.40]	14384-008	144,8 [5.70]	14384-004	127,3 [5.01]
200 [12.3]	202989-005	91,6 [3.60]	202871-005	44,7 [1.76]	14384-010	154,9 [6.10]	14384-007	138,4 [5.45]
250 [15.4]	202989-006	102,9 [4.05]	202871-006	56,0 [2.21]	14384-012	164,5 [6.48]	14384-008	144,8 [5.70]
305 [19.8]	202989-007	119,1 [4.69]	202871-007	72,0 [2.83]	14384-014	182,4 [7.18]	14384-012	164,5 [6.48]
395 [24.0]	112643-008	119,1 [4.69]	112644-008	72,0 [2.83]	14384-014	182,4 [7.18]	14384-012	164,5 [6.48]
490 [29.8]	112643-012	136,1 [5.36]	112644-010	89,4 [3.52]	14384-019	199,6 [7.86]	14384-014	182,4 [7.18]



4000 Compact Series Disc Valve Motors



Parts List 1 of 2

Ref No.	Part Number (per shaft size)	Part Number (per shaft size)	Description	Quantity per Unit		
				Std.	Whl.	Brgl.
1	202861-002		Shaft and Bearing Kit (1-1/4 inch Straight)	1	1	
	14392-008		Key (for 1-1/4 Straight Shaft)	1	1	
		202861-011	Shaft and Bearing Kit (1-1/2 inch Straight)	1	1	
		14393-015	Key (for 1-1/2 Straight Shaft)	1	1	
	202861-010		Shaft and Bearing Kit (32 mm Straight)	1	1	
	14460-005		Key (for 32mm Straight Shaft)	1	1	
		202861-008	Shaft and Bearing Kit (40 mm Straight)	1	1	
		14458-007	Key (for 40mm Straight Shaft)	1	1	
	202861-003		Shaft and Bearing Kit (1-1/4 in. Tapered)	1	1	
	14163-000		Nut, Hex (1-1/4 in. Tapered Shaft)	1	1	
	14392-006		Key (for 1-1/4 in. Tapered Shaft)	1	1	
		202861-098	Shaft and Bearing Kit (1-5/8 in. Tapered)	1	1	
		14230-000	Nut, Hex (1-5/8 in. Tapered Shaft)	1	1	
		14394-007	Key (for 1-5/8 in. Tapered Shaft)	1	1	
	202861-004		Shaft and Bearing Kit (1-1/4 in. Splined 14T)	1	1	
		202861-099	Shaft and Bearing Kit (1-1/2 in. Splined 17T)	1	1	
† O Δ 3	9121-001	9031-001	Seal, Exclusion	1	1	
† O Δ 4	9057-009	9057-012	Seal, Shaft	1	1	
	14857-001		Seal, Shaft — High Pressure (no Back-up Ring required)	1	1	
† O 5	7382-000	6943-000	Ring, Back-up	1	1	
6	202442-004	202442-098	Housing, Bearing, SAE A (Two Bolt)	1		
	202442-003	202442-099	Housing, Bearing, Wheel Mount (Four Bolt)		1	
	202442-015		Housing, Bearing, Wheel Mount (Four Bolt) — Compatible for HAYES Brake		1	
	202442-001		Housing, Bearing, SAE B (Two Bolt)	1		
	202442-005		Housing, Bearing, Diagonal (Four Bolt)	1		
	202442-008		Housing, Bearing, Magneto (Four Bolt)	1		
Δ 41	14628-006	14628-004	Seal Guard	1	1	
	61333-000	61353-000	Seal Kit (Std. and Whl. Motors with back pressure relief valve)—Contains Parts Indicated by †			
	61334-000	61352-000	Seal Kit (Std. and Whl. Motors without back pressure relief valve)—Contains Parts Indicated by O			
	61337-000	N/A	Seal Kit (Std. and Whl. Motors with high pressure shaft seal)—Contains Parts Indicated by Δ			

Ref No.	Part Number	Description	Quantity per Unit		
			Std.	Whl.	Brgl.
† O # X Δ 2	112530-040	Seal	4	4	
† O X Δ 7	202877-001	Seal, Shaft Face	1	1	
8	202862-003	Plate, Wear (no leakage slots)	1	1	
	202862-004	Plate, Wear (with leakage slots)	1	1	
9	*	Drive, Main	1	1	1
10	*	Geroler*	1	1	1
11	203330-001	Plate, Valve (for motor without Shuttle)	1	1	1
	203330-002	Plate, Valve (for motor with Shuttle)	1	1	1
12	202827-001	Drive, Valve	1	1	1
13	21466-000	Valve	1	1	1
	201307-002	Valve — Speed Sensor Valve	1	1	1
	201307-003	Valve — Speed Sensor Valve – Quadrature	1	1	1
14	8915-000	Balance Ring	1	1	1
15	14351-000	Pin, Balance Ring	2	2	2
16	7383-000	Spring, Compression	2	2	2
† O # X Δ 17	9049-001	Seal, Face, Inner	1	1	1
† O # X Δ 18	9135-002	Seal, Face, Outer	1	1	1

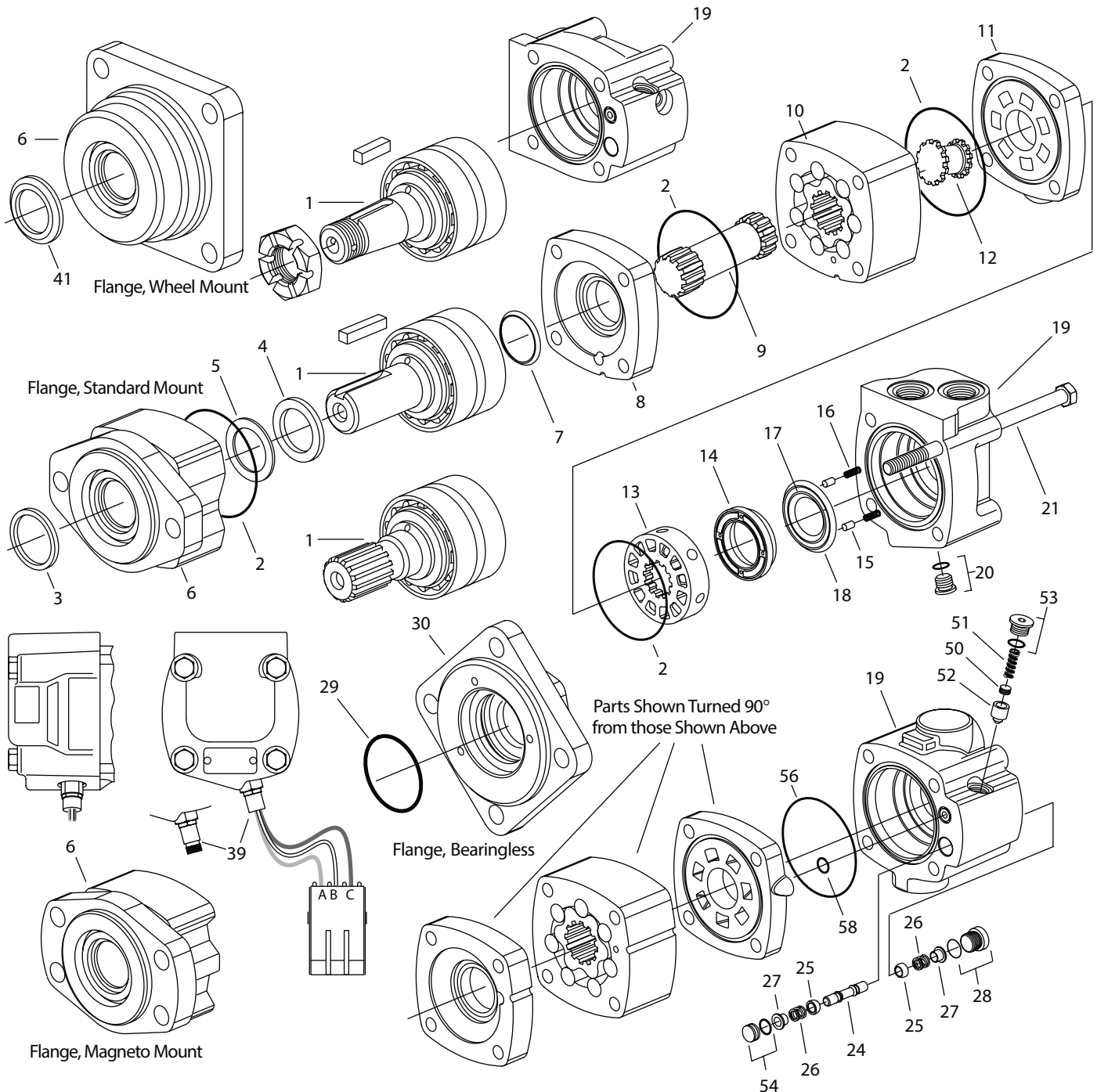
Continued on Page 5

*—See Chart on Opposite Page.

4000 Compact Series Disc Valve Motors

Page 2 (Duplicated)

Displacement cm ³ /r [in ³ /r]	Drive, Main Item No. 9 —Part No./Length		Geroler® Item No. 10 —Part No./Width		Screw, Cap (Standard/Wheel) Item No. 21 —Part No./Length		Screw, Cap (Bearingless) Item No. 21 —Part No./Length	
	Part No.	mm [inch]	Part No.	mm [inch]	Part No.	mm [in.]	Part No.	mm [in.]
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395 [24.0]	112643-008	119,1 [4.69]	112644-008	72,0 [2.83]	14384-014	182,4 [7.18]	14384-012	164,5 [6.48]
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4000 Compact Series Disc Valve Motors



Parts List — 2 of 2

Continued from Page 3

Ref No.	Part Number	Description	Quantity per Unit		
			Std.	Whl.	Brgl.
19	21564-001	Housing, Valve (7/8-14 Str. Thrd. O-ring (Staggard Ports) — 7/16-20 Case Drain Port)	1	1	1
	21564-007	Housing, Valve (G 1/2 (BSP) (Staggard Ports) — G 1/4 (BSP) Case Drain Port)	1	1	1
	204113-004	Housing, Valve (7/8-14 Str. Thrd. O-ring (End Ports) — 7/16-20 Case Drain Port Shuttle and Low Press. Relief)	1	1	1
	21564-012	Housing, Valve (7/8-14 Str. Thrd. O-ring (Staggard Ports) — 7/16-20 Case Drain Port) — for Speed Sensor (201137-001 Ref. 39)	1	1	1
	21564-033	Housing, Valve (7/8-14 Str. Thrd. O-ring (Staggard Ports) — 7/16-20 Case Drain Port) — for Quadrature Speed Sensor (Ref. 39)	1	1	1
	21564-002	Housing, Valve (1-1/16-12 Str. Thrd. O-ring Ports (180° Apart) — 7/16-20 Case Drain Port)	1	1	1
	21564-009	Housing, Valve (7/8-14 Str. Thrd. O-ring (End Ports) — 7/16-20 Case Drain Port)	1	1	1
	204113-005	Housing, Valve (7/8-14 Str. Thrd. O-ring (Staggard Ports) — 7/16-20 Case Drain Port) — Shuttle and Low Press. Relief	1	1	1
†	20	9072-003 Plug/O-ring Assembly (7/16-20 Case Drain Plug)	1	1	1
	250003-904	O-ring	1	1	1
	9170-002	Plug/O-ring Assembly (G 1/4 (BSP) Case Drain Plug)	1	1	1
†	250003-904	O-ring	1	1	1
21	*	Screw, Cap	4	4	4
24	201494-002	Piston Shuttle	1	1	1
25	8567-000	Poppet	2	2	2
26	230079-000	Spring	2	2	2
27	8755-000	Sleeve, Dash Pot	2	2	2
28	9072-005	Plug/O-ring Assembly (9/16-18 Shuttle Valve End)	2	2	2
†	250003-906	O-ring	2	2	2
#	29	15128-000 Seal			1
30	203971-001	Flange, Mounting — with leakage slots			1
	203971-002	Flange, Mounting — without leakage slots			1
39	201137-001	Sensor, Speed — (127mm [5.0 in.] lead wire)	1	1	1
	202925-001	Sensor, Speed – Quadrature — Two speed signals in quadrature each providing one pulse per target tooth	1	1	1
	202925-002	Sensor, Speed – Quadrature — One speed signal providing two pulses per target tooth and one directional signal	1	1	1
	113003-001	Sensor, Speed – Quadrature — Two speed signals in quadrature each providing one pulse per target tooth**	1	1	1
	113003-002	Sensor, Speed – Quadrature — One speed signal providing two pulses per target tooth and one directional signal**	1	1	1
50	16048-500	Shim	A/R	A/R	A/R
51	17024-026	Spring	1	1	1
52	201495-004	Poppet	1	1	1
53	9072-004	Plug/O-ring S/A	1	1	1
†	250003-905	O-ring	1	1	1
54	201868-003	Plug/O-ring S/A	1	1	1
†	250002-012	O-ring	1	1	1
†	56	250002-039 Seal	1	1	1
†	58	250002-012 O-ring	1	1	1
	61335-000	Seal Kit (Bearingless Motors with mounting flange)—Contains Parts Indicated by #			
	61336-000	Seal Kit (Bearingless Motors without mounting flange)—Contains Parts Indicated by X			

*— See Chart on Opposite Page.

**—Mates with DC Micro Connectors or Equivalent:
 Turk Eurofast WKCV 4.4T Cable
 Brad Harrison Micro-Change Single Keyway Plugs
 Lumberg "Micro" Style 12mm DC Connector

A/R As Required

4000 Compact Series Disc Valve Motors

For additional literature, visit www.danfoss.com or contact your Danfoss representative.

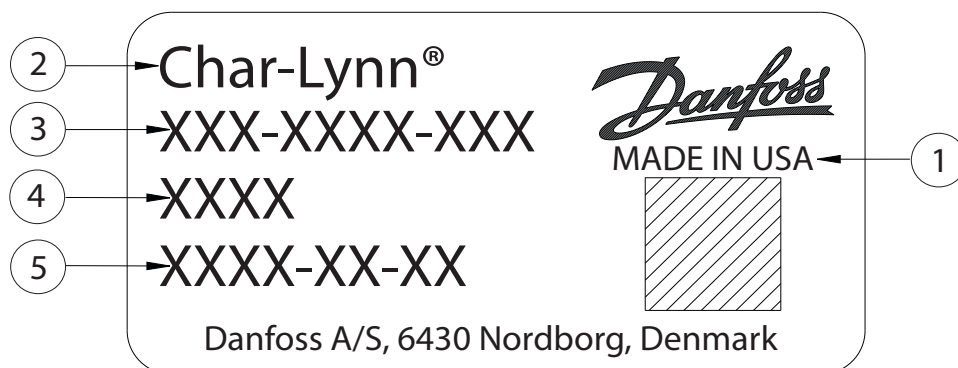
- Specifications and performance data, Catalog 11-01-113.
- When servicing 4000 Compact Series Motors refer to Repair Information 07-01-160. This repair manual lists tools required, and step by step disassembly and reassembly procedures.

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 | |

Label identification:



Label information:

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

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

Danfoss Power Solutions is a global manufacturer and supplier of high-quality hydraulic and electric components. We specialize in providing state-of-the-art technology and solutions that excel in the harsh operating conditions of the mobile off-highway market as well as the marine sector. Building on our extensive applications expertise, we work closely with you to ensure exceptional performance for a broad range of applications. We help you and other customers around the world speed up system development, reduce costs and bring vehicles and vessels to market faster.

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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