#### Gearbox



- Screw M14x40 (Q.ty 16) 190 Nm (140 lbf·ft) 1
- Oil breather plug M22x1.5 (Q.ty 2) 30÷40 Nm 2 (22÷29.5 lbf·ft)
- 3 - Washer (Q.ty 2)
- 4 Cover assembly
- 5 O-Ring
- 6 Pad
- 7 Sun gear
- 8 First reduction assembly
- 9 Sun gear
- 10 Second reduction assembly
- 11 Sun gear
- 12 Screw M30x2x150 (Q.ty 4) 1480 Nm (1091.5 lbf·ft)

- 13 Third reduction assembly
- 14 Bush (Q.ty 4)
- 15 Screw M24x65 (Q.ty 24) 950 Nm (700.6 lbf ft)
- 16 Sprocket17 Gearbox housing
- 18 Lifetime seal
- 19 Discs retainer
- 20 Hub
- 21 O-Ring
- 22 Hydraulic motor
- 23 Screw M18x60 (Q.ty 4) 295 Nm (218 lbf·ft)

# OUTLINE

### General view



### Specifications

High pressure ports A,B,C,D	Working pressure	34.3 MPa (4973.5 psi)	
	Max. impact pressure	51.5 MPa (7467.5 psi)	
	Rated flow	370 L/min (98 gal/min)	
	Working pressure	5 MPa (725 psi)	
	Rated flow	40 L/min (10.7 gal/min)	
	Working pressure	0.49 MPa (71 psi)	
Low pressure ports G	Rated flow	12 L/min (3.2 gal/min)	
Revolution	12 min <sup>-1</sup>		
Ports size	A,B,C,D (body)	PF 1	
	A,B,C,D (stem)	PF 1	
	E, F	PF 1/4	
	G	PF 3/4	
Length (height)		405.5 mm (16 in)	
Weight		53 kg (117 lbs)	

## CONSTRUCTION



- 1- Body
- 2- Stem
- 3- Cover
- 4- Thrust plate
- 5- Seal (Q.ty 6)
- 6- O-Ring (Q.ty 2)
- 7- O-Ring

8- Capscrew; M8x20 (Q.ty 2) 30.4 Nm (22.4 lbf·ft)
9- Capscrew; M8x30 (Q.ty 4) 30.4 Nm (22.4 lbf·ft)
10-Plug (Q.ty 4)
11-Plug
14-O-Ring (Q.ty 4)
16-Plug
17-O-Ring

### OPERATION

The swivel joint consists mainly of body (1) and stem (2) that rotate mutually, thrust plate (4) preventing both components from falling off, cover (3) closing one side of body (1), seal (5) that partitions off the circuits and O-ring (6) and (7) that prevent external leaks.

Four ports for the travel main circuits are provided on body (1) and stem (2). Further, four oil passing grooves are arranged in the inner surface of body (1), with seal (5) fixed above and below the circumferential groove.

The body (1) and the stem (2) rotate mutually. The oil flowing in from body (1) or stem (2) keeps on flowing to stem (2) or body (1) past the circumferential groove between body (1) and stem (2); the oil flow is never shut off because of rotation. Further, an oil groove for lubrication that connects with the drain port is provided, in order to prevent the body (1) from seizure with the stem (2).

This construction keeps on connecting the circuits between the swing bodies by means of a swivel joint.

NOTE:

### OUTLINE

#### General view



### Specifications

Use	Cylinder bore Rod Dia.	Stroke	Center distance of pins Full extend B / Full retract A	Cushion	Dry weight
	(mm)	(mm)	(mm)		(kg) (lbs)
Boom	Ø 170 / Ø 115	1589	3789 / 2200	With cushion on rod side	415 (915)
Arm	Ø 190 / Ø 130	1970	4600 / 2630	With cushion on both sides	584 (1288)
Bucket	Ø 170 / Ø 120	1300	3325 / 2025	With cushion on rod side	416 (917)