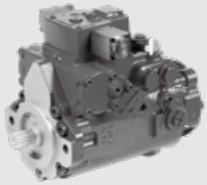
2.1

HP3G SERIES

Swash-plate Type
Axial Piston Variable Displacement Pump

HP3G series variable axial piston pump with swashplate design for hydrostatic drives in closed circuit, high pressure, high speed, high reliability, low noise, can be applied in Aerial work platform.

Applied in medium pressure closed circuit
Size: 46
Rated pressure (bar): 345
Max. pressure (bar): 385



Contents

Features

·Variable axial piston pump of swashplate design for hydrostatic drives in closed circuit.
·The fow is proportional to the drive speed and displacement. The fow increases as the angle of the swashplate is adjusted from zero to its maximum value.
·Flow direction changesU' l' eliability, long workin
·Compact structure, high power density.

Technical data

Permissible input and through-drive torques			
Size			PM o g q
e			

Type introduction

Product series

	Variable piston pump of swashplate in closed circuit	HP3

Size

	Size	46

02

Control mode

Displacement Limiters

Rotation

	Right hand (clockwise)	R
	Left hand (counter-clockwise)	L

Type introduction

	Standard rotary group, without boost pump	K
	Standard rotary group, boost pump integrated	

Through drive option

High-pressure relief valve

Remark: PleRar

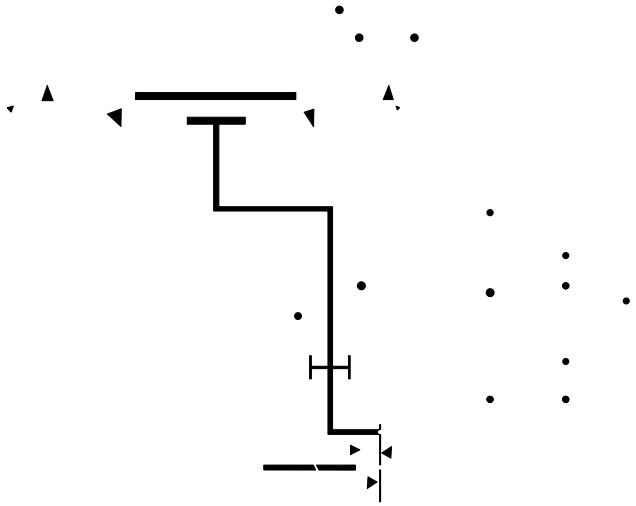
Setting pressure of the low pressure relief valve

Electrical displacement control (EDC)

The High Current Electrical Displacement Control (HC EDC) consists of a pair of proportional solenoids on each side of a three-position, four-way porting spool. The proportional solenoid applies a force input to the spool, which ports hydraulic pressure to either side of a double acting servo piston. Di f erential pressure across the servo piston rotates the swashplate, changing the pump's displacement from full displacement in one direction to full displacement in the opposite direction.

A serviceable 125 µm screen is located in the supply line immediately before the control porting spool.

· **Pump displacement — control current**



Installation size

HP3G46 installation size

Installation size

· HP3G46 Port details

	Port Name	Port Size and Description	Tightening Torque(N.m)	Maximum pressure (bar)
S	Suction port	SAE J1926/1 (1 5/16-12UN-2B)	134	6
A, B	Working port	SAE J1926/1 (1 5/16-12UN-2B)	134	385
L1, L2	Drain port	SAE J1926/1 (1 1/16-12UN-2B)	101	2
M1, M2	Port "A" and "B" gage port	SAE J1926/1 (9/16-18UNF-2B)	25	385
M3	Gauge port of charge pump	SAE J1926/1(9/16-18UNF-2B)	25	27
M4, M5	Servo gage port	SAE J1926/1 (9/16-18UNF-2B)	25	27
D	Charge filtration port D (To remote filter ISO 11926-1 7/8-14 Charge filtration port D charge gauge port for remote filtration with charge pump option)	SAE J1926/1 (7/8-14UNF-2B)	73	27
E	Charge filtration port E (From remote filter charge gauge port for remote filtration with or w/o charge pump option)	SAE J1926/1 (7/8-14UNF-2B)	73	27
F	Air bleed port	SAE J1926/1(7/16-20UNF-2B)	15	2