Open loop control method Euro-card type driver

Features

- Controls KSP valve of an open loop control system to optimum conditions.
- Owing to the constant-current characteristics, the variations of supply voltage and of output current by a solenoid temperature rise rarely happen.
- The output radio wave corrugation (dither frequency, amplitude) is set up so that hysteresis of a solenoid proportional control valve and a resolution power can get the best values.
- Since the current is controlled by PWM (pulse width modulation) method, heat generation from driver is restrained to be the smallest.
- As the function (response time adjusting function) to vary the output current slowly for the variation of step like command input is provided, it enables the oil output to vary in shock-less. (for either build-up or pull-down process, each process can be independently adjusted).

Specifications

Model code	EPD-02-10	EPK-02-10	EPD-03-10	EPK-03-10
Supply voltage	DC24V (2A or more)			
Permissible voltage variation	-10~+10%			
Applied load	Proportional solenoid (DC12V)			
Command input	DC0~±5V or DC0~±10V	DC0~5V or DC0~10V	DC0~±5V or DC0~±10V	DC0~5V or DC0~10V
Output current	0~1600mA		0~1800mA	
Power consumption	Max. 50VA			
Input impedance	Approx. 30 kΩ			Approx. 15 kΩ
Dither	Finished the adjusting at the delivery			
Response time	0.05~3 seconds or more (at the max. output)			
Surrounding temperature	0~50°C			
Surrounding humidity	20~90%RH			
Vibration resistant	1G (9.8m/sec²) Frequency: 11.7~100Hz 1 cycle: 15 min 3 directions: each 2h			
Weight	0.5 kg			0.3 kg

Miner loop control method Euro-card type driver

Features

- Controls LEM valve which detects the spool position by a differential transformer to carry out a feed back control (minor feed back).
- Owing to the constant-current characteristics, the variations of supply voltage and of output current by a solenoid temperature rise rarely happen.
- The output radio wave corrugation (dither frequency , amplitude) is set up so that hysteresis of a solenoid proportional control valve and a resolution power can get the best values.
- Since the current is controlled by PWM (pulse width modulation) method, heat generation from driver is restrained to be the smallest.
- As the function (response time adjusting function) to vary the output current slowly for the variation of step like command input is provided, it enables the oil output to vary in shock-less. (for either build-up or pull-down process, each process can be independently adjusted).

Specifications

Model code	EPKD-02-10	EPKF-02-10
Supply voltage	DC24V (2A or more)	
Permissible voltage variation	-10~+10%	
Applied load	Proportional solenoid (DC12V)	
Command input	DC0~±5V or DC0~±10V	DC0~5V or DC0~10V
Output current	0~1600mA	
Power consumption	Max. 50VA	Max. 45VA
Input impedance	Approx. 30 kΩ	
Dither	Finished the adjusting at the delivery	
Response time	0.05 ~ 3 seconds or more (at the max. output)	
Surrounding temperature	0~50°C	
Surrounding humidity	20~90%RH	
Vibration resistant	1G (9.8m/sec²) Frequency: 11.7~100Hz 1 cycle: 15 min 3 directions: each 2h	
Weight	0.5 kg	0.3 kg