NPRC

Self-regulating pump for open circuit operation







Design Characteristics

- >> Design specifically tailored to tractor applications
- >> High permissible speed
- >> Utilisation of the existing oil circuit (gearbox)
- >> Interfaces meet common understanding of global market standards (mechanical, hydraulic, electric)

Advantages

- >> Extremely compact dimensions & high power density
- >> Versatile system control and system safety
- >> No need of add. Components/hosing/hydraulic circuit
- >> No need of adaptors

Nominal size					
Displacement	Max. Displacement	cc/rev			
Flow	Max. flow	l/min			
Direction of rotation					
Speed	Minimum speed	rpm			
	Nominal speed				
Droccuro	Nominal pressure	bar			
Pressure	Maximum pressure ²				
Torque	Max. perm. Torque (A p=Nom. pressure/210 bar)	Nm			
Power	Corner Power (at $\Delta p=210 \text{ bar/Vgmax/nnom})^1$	kW			
Weight	approx. (without oil)	kg			

45	60	85			
45	60	85			
123	164	244			
Clockwise					
800	800	900			
2738	2738	2875			
	210				
	250				
150	201	284			
43	57	86			
29	29	50			

¹ theoretical data of a single unit without efficiency effects

 $^{^{\}rm 2}$ highest transient pressure, that can temporarily occur

³ highest transient speed, that can temporarily occur

^{*} These data correspond to the current development status and may deviate in the case of the series-ready product

Self-regulating pump for open circuit operation



Control options

NPRC

		Pressure cut-off		45	60	85
Hydraulic	Load Sensing	\checkmark		\checkmark	\checkmark	\checkmark
Electric	Load Sensing	\checkmark		✓	\checkmark	\checkmark

Mechanic Interfaces

			45	60	85
Mounting flange	SAE J744/ SAE (101-2)	B (101-2)	\checkmark	~	\checkmark
Shaft		S4 22-4 (16/32-13T)	\checkmark	\checkmark	
	SAE J744/ANSI B92.1	S7 32-4 (12/24-14T)			\checkmark

Hydraulic Interfaces

			45	60	85
Pressure port	SAE J518-1 (ISO 6162-1)	1 inch	\checkmark	~	\checkmark
Suction port	Customized	1 3/4 inch	\checkmark	✓	
		2 1/2 inch			\checkmark

Application example

