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MOTORIZED FLOW REGULATORS



Motorized Flow Regulator and Relief Valves

Flow Restrictors (Needle Valves)

	GPM	PSI	LPM	BAR	MODEL	PAGE
	12	3500	45	245	AE-NVA	46
	40	3500	150	245	AJ-NVA	48

2-way Pressure Compensated Flow Regulators

	GPM	PSI	LPM	BAR	MODEL	PAGE
	24	3500	90	245	AJ-FCA	50

3-way Pressure Compensated Flow Regulators

	GPM	PSI	LPM	BAR	MODEL	PAGE
	24	3500	90	245	AK-FCQ	52

Relief Valves

	GPM	PSI	LPM	BAR	MODEL	PAGE
	37	3500	140	245	AJ-RVR	54

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AE-NVA Motorized Needle Flow Control Valve

DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, motorized needle flow control valve.

OPERATION

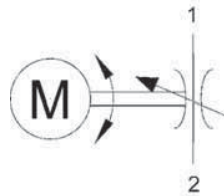
The AE-NVA can be adjusted to any position between fully open and fully closed applying electrical power to the motor.

The amount of valve opening does not change unless the electric motor is activated. When adjusted open, the valve allows flow from (1) to (2) and (2) to (1). When fully closed the valve blocks flow from (1) to (2) and (2) to (1).

FEATURES

- Hardened parts for long life.
- Industry common cavity.

HYDRAULIC SYMBOL



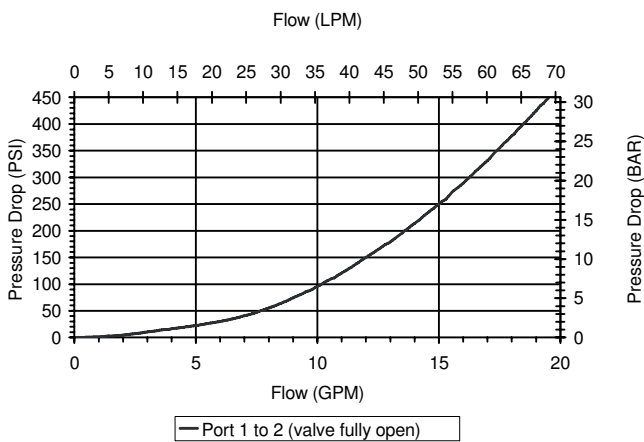
VALVE SPECIFICATIONS

Max Controlled Flow	12 GPM (45 LPM) @ 13 bar Delta P
Rated Operating Pressure	3500 PSI (245 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	1.68 lbs. (.76 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Current draw	300 mA (12 Vdc) / 150 mA (24Vdc)
Electrical connection	Double lead wire – Length : 60 – 70 cm
Cavity	DELTA 2W
Cavity tools kit (form tool, reamer, tap)	40500000
Seal Kit	21191200



Adjustable via 12 / 24 Vdc signal, no electronic driver required.
A built-in position transducer with an analog output is available on request.

PERFORMANCE



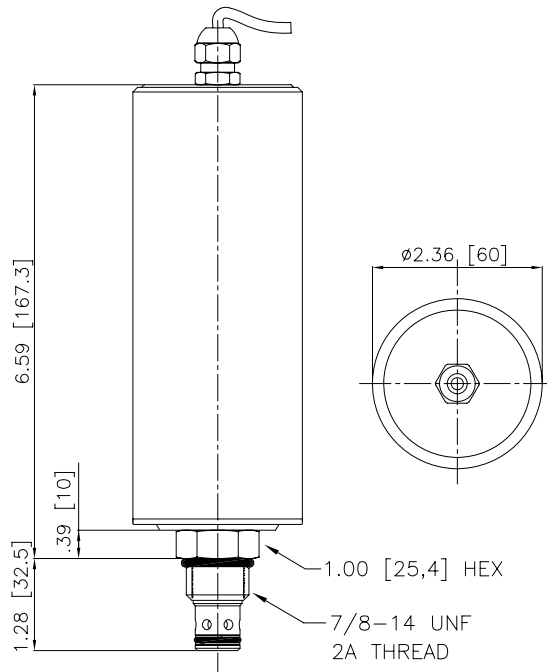
Gear ratio	Response time (full closed to full open)
100	7 sec
250	14 sec
500	28 sec

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MOTORIZED FLOW REGULATORS



DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

AE - NVA		-	-	-	-	-
OPTIONS						BODIES
Buna Standard	00					Without Body
						N 3/8 BSP Ports
						S # 6 SAE Ports
		GEAR RATIO				VOLTAGE
		R500	24			24 VDC
		R250	12			12 VDC
		R100				

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A Delta Power Company

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AJ-NVA Motorized Needle Flow Control Valve

DESCRIPTION

16 size, 1 5/16"-12 thread, "Super" series, motorized needle flow control valve.

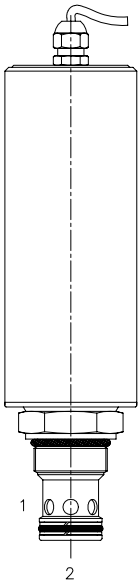
OPERATION

The AJ-NVA can be adjusted to any position between fully open and fully closed by applying electrical power to the motor.

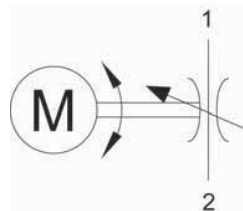
The amount of valve opening does not change unless the electric motor is activated. When adjusted open, the valve allows flow from (1) to (2) and (2) to (1). When fully closed the valve blocks flow from (1) to (2) and (2) to (1).

FEATURES

- Hardened parts for long life.
- Industry common cavity.



HYDRAULIC SYMBOL



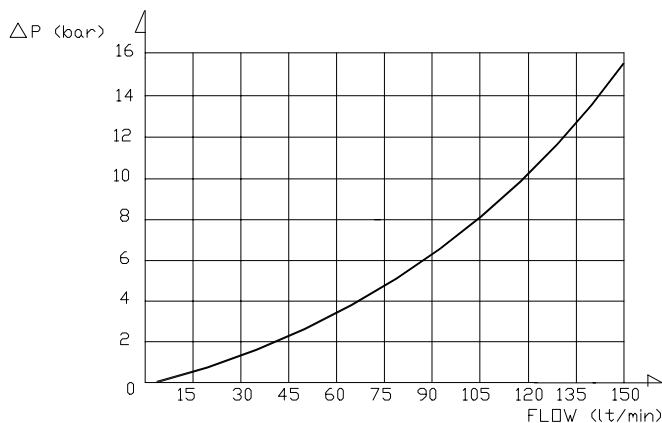
VALVE SPECIFICATIONS

Max Controlled Flow	40 GPM (150 LPM) @ 15 bar Delta P
Max Operating Pressure	3500 PSI (245 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	2.24 lbs. (1,02 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Current draw	300 mA (12 Vdc) / 150 mA (24Vdc)
Electrical connection	Double lead wire – Length : 50 – 60 cm
Cavity	SUPER 2W
Cavity tools kit (form tool, reamer, tap)	40500017
Seal Kit	21191401



Adjustable via 12 / 24 Vdc signal, no electronic driver required.
A built-in position transducer with an analog output is available on request.

PERFORMANCE



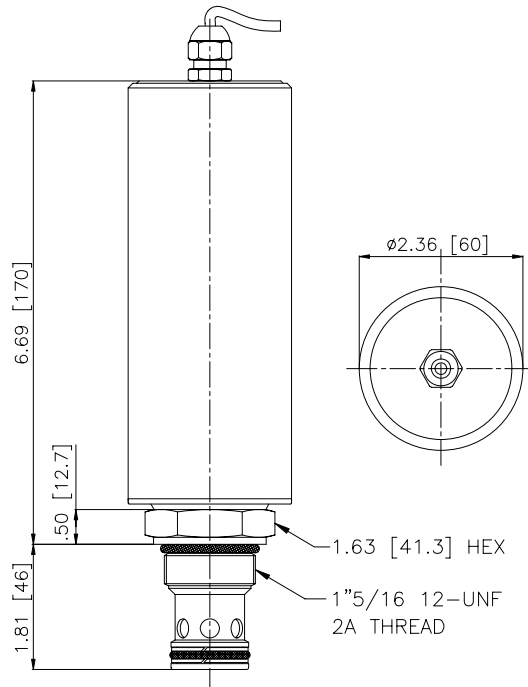
Gear ratio	Response time (full closed to full open)
100	12 sec
250	28 sec
500	55 sec

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MOTORIZED FLOW REGULATORS



DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

AJ - NVA - - - - -			
OPTIONS Buna Standard	00		
		GEAR RATIO	VOLTAGE
		R500 R250 R100	24 12 24 VDC 12 VDC
			BODIES Blank N S Without Body 3/4 BSP Ports # 12 SAE Ports

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AJ-FCA Motorized Adjustable Pressure Compensated Flow Control Valve

DESCRIPTION

16 size, 1 5/16 -12 thread, "Super" series, motorized adjustable pressure compensated flow control valve.

OPERATION

The AJ-FCA maintains a constant flow rate out of (1) regardless of load pressure changes in the circuit downstream of (1).

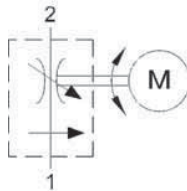
The valve begins to respond to load changes when the flow through the valve creates a pressure differential across the control orifice greater than 100 PSI (6.9 bar), with accurate flow maintenance from 100 to 3500 PSI (6.9 to 240 bar).

Reverse flow (1) to (2) returns through the control orifice and is non-compensated.

FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.

HYDRAULIC SYMBOL



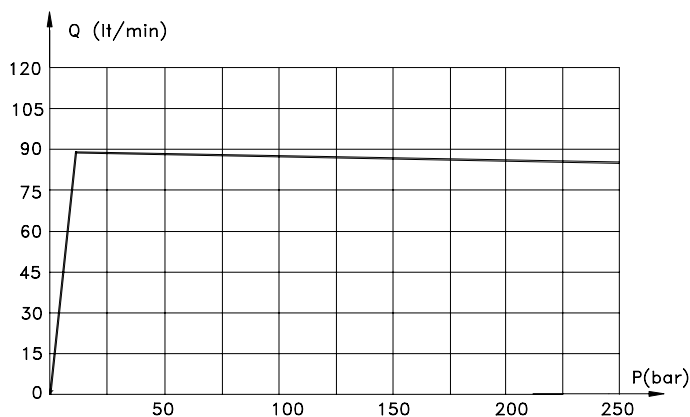
VALVE SPECIFICATIONS

Max Controlled Flow	24 GPM (90 LPM)
Max Operating Pressure	3500 PSI (245 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	2.24 lbs. (1,02 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Current draw	300 mA (12 Vdc) / 150 mA (24Vdc)
Electrical connection	Double lead wire – Length : 50 – 60 cm
Cavity	SUPER 2W
Cavity tools kit (form tool, reamer, tap)	40500017
Seal Kit	21191400



Adjustable via 12 / 24 Vdc signal, no electronic driver required.
A built-in position transducer with an analog output is available on request.

PERFORMANCE



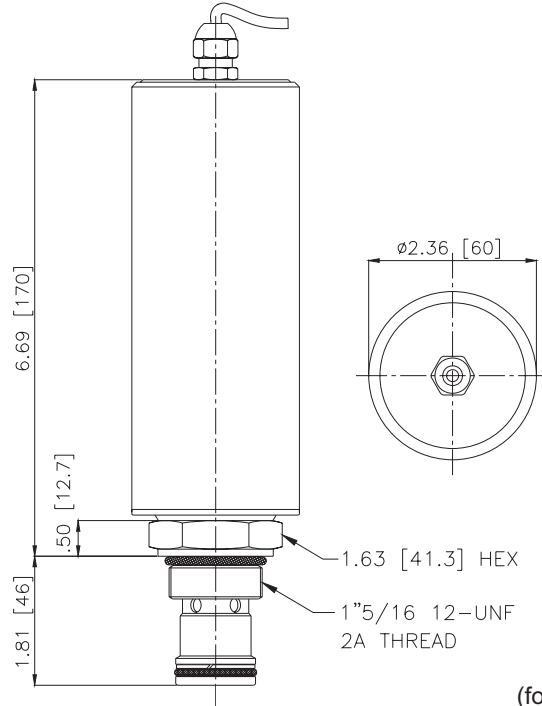
Gear ratio options (see Ordering Code)	Response time (full closed to full open)
100	9 sec
250	22 sec
500	45 sec

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MOTORIZED FLOW REGULATORS

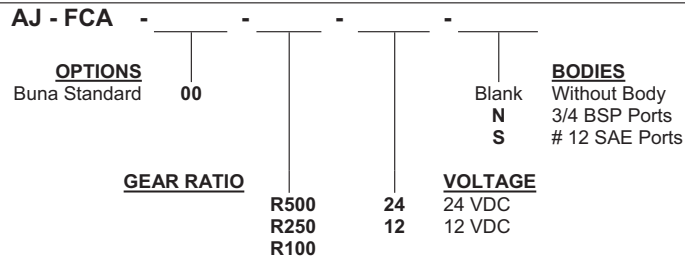


DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION



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AK-FCQ Motorized Adjustable Priority Flow Control Valve

DESCRIPTION

16 size, 1 5/16-12 thread, "Super" series, motorized adjustable priority flow control valve.

OPERATION

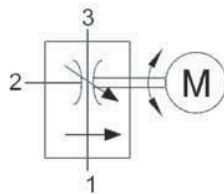
The AK-FCQ allows pressure compensated flow from (3) to (1) regulated the pressure present at (3). Excess flow passes out (2).

The spring chamber is constantly vented at (1).

FEATURES

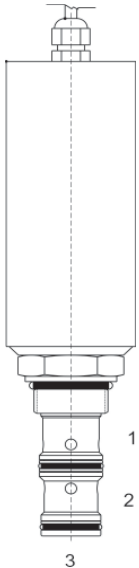
- Hardened parts for long life.
- Industry common cavity.

HYDRAULIC SYMBOL



VALVE SPECIFICATIONS

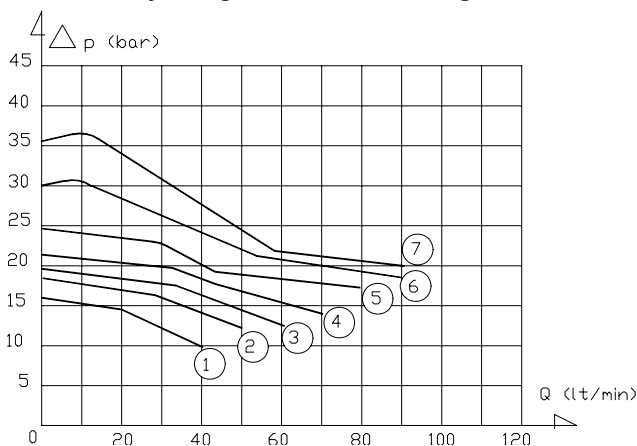
Max Regulated Flow	24 GPM (90 LPM)
Rated Operating Pressure	3500 PSI (245 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	2.34 lbs. (1.06 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Current draw	300 mA (12 Vdc) / 150 mA (24Vdc)
Electrical connection	Double lead wire – Length : 50 – 60 cm
Cavity	SUPER 3W
Cavity Tools Kit (form tool, reamer, tap)	40500018
Seal Kit	21191404



Adjustable via 12 / 24 Vdc signal, no electronic driver required.
A built-in position transducer with an analog output is available on request.

PERFORMANCE

Pressure drop vs. Flow for various Priority / Regulated Flow settings



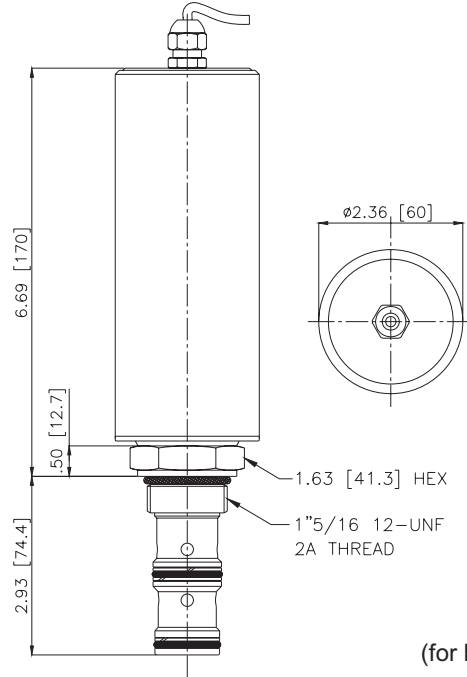
Gear ratio options (see Ordering Code)	Response time (full closed to full open)
100	9 sec
250	22 sec
500	45 sec

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MOTORIZED FLOW REGULATORS

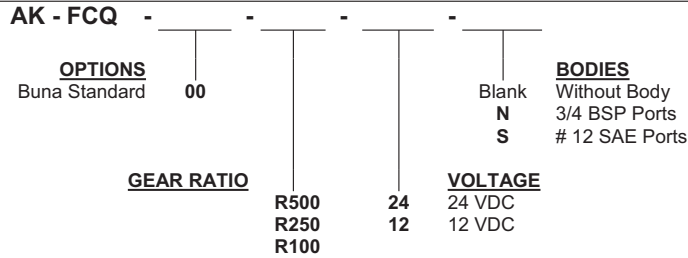


DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION



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AJ-RVR Pilot Operated Relief Valve

DESCRIPTION

16 size, 1 5/16 -12 thread, "Super" series, motorized adjustable pilot-operated pressure relief valve.

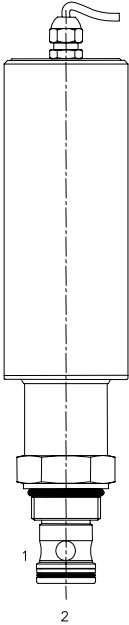
OPERATION

The AJ-RVR blocks flow from (2) to (1) until sufficient pressure is present at (2). The setting of the AJ-RVR can be adjusted to any value between 14 and 245 bar (200 – 3500 PSI) applying electrical power to the motor. The setting does not change unless the electrical motor is activated.

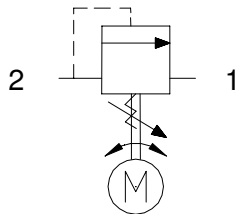
Reverse flow (1) to (2) occurs when the pressure at (1) is at least 2,1 bar (30 PSI) higher then at port (2).

FEATURES

- Hardened parts for long life.
- Industry common cavity.
- Fine low-torque adjustment.



HYDRAULIC SYMBOL



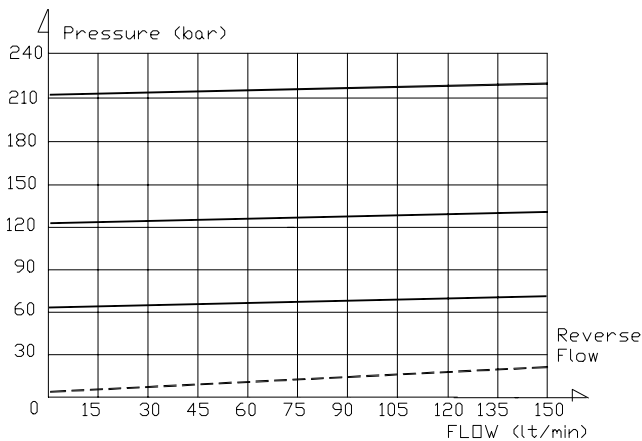
VALVE SPECIFICATIONS

Max Controlled Flow	37 GPM (140 LPM)
Max Operating Pressure	3500 PSI (245 bar)
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	2.24 lbs. (1,02 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	90 ft-lbs (122 Nm)
Current draw	300 mA (12 Vdc) / 150 mA (24Vdc)
Electrical connection	Double lead wire – Length : 50 – 60 cm
Cavity	SUPER 2W
Cavity tools kit (form tool, reamer, tap)	40500017
Seal Kit	21191400



Adjustable via 12 / 24 Vdc signal, no electronic driver required.
A built-in position transducer with an analog output is available on request.

PERFORMANCE



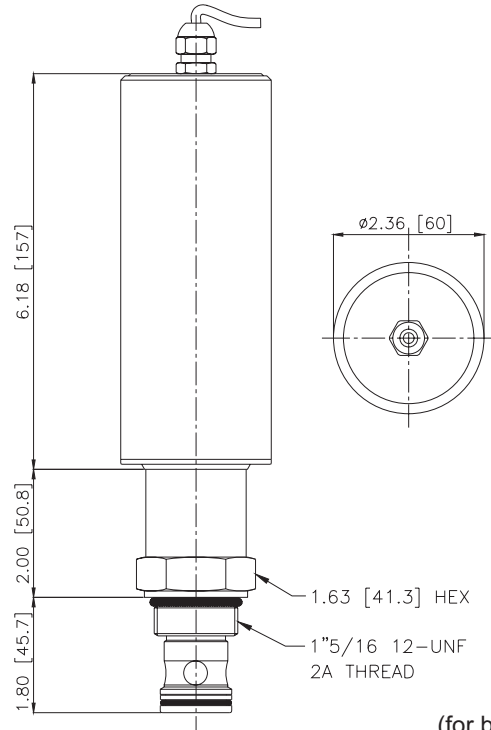
Gear ratio options (see Ordering Code)	Response time (full closed to full open)
250	12 sec
500	27 sec

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MOTORIZED FLOW REGULATORS



DIMENSIONS



(for bodies style and sizes see section "Accessories")

ORDERING INFORMATION

AJ - RVR		-	-	-	-	-
OPTIONS						BODIES
Buna Standard	00					Blank
						N
						3/4 BSP Ports
						S
						# 12 SAE Ports
		GEAR RATIO				VOLTAGE
		R250	24	24	24	24 VDC
		R100	12	12	12	12 VDC

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