

CAT. # 0108-2

Relief Valves Series RA101

Pilot Operated, Spool-Type Relief Valve

Application

The RA101 Series Relief Valves are suited for continuous duty applications and are primarily used to limit main system pressure.

Operation

When inlet pressure exceeds the valve setting the pilot section opens. This pilot flow creates a pressure imbalance across the main section causing the valve to open, permitting relief flow to tank.

Features

- Low override curve
- "Dart" type pilot for added stability
- High accuracy – pilot operated design
- Long life – hardened working parts
- Cartridge design

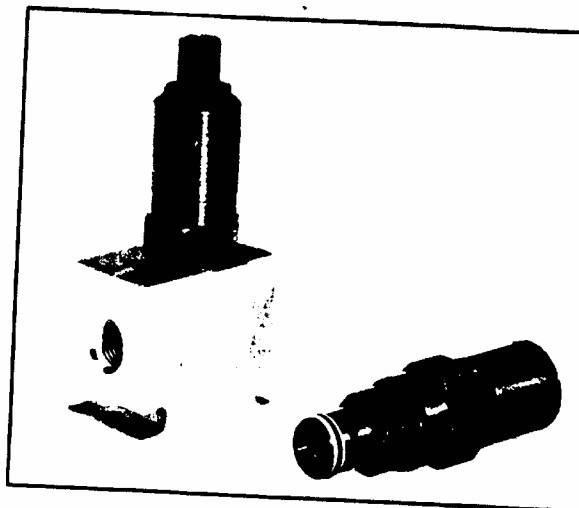
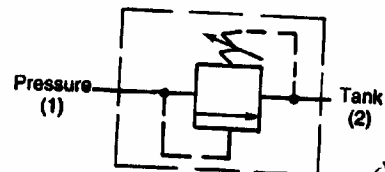
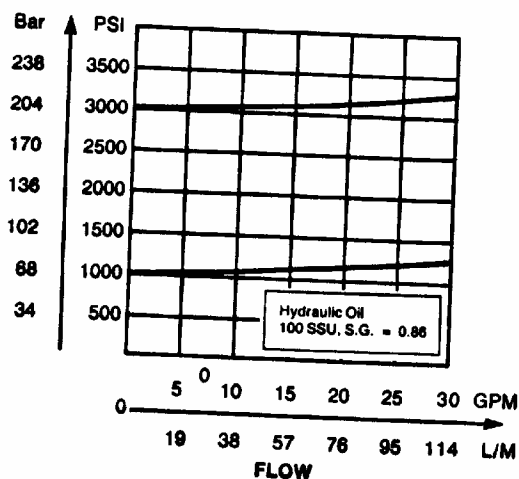
Installation Data

See the Installation Information section of this catalog for specific recommendations pertaining to system cleanliness, fluids, seals and other important factors relative to the proper installation and use of these products.

Performance Curve

Flow vs. Inlet Pressure
(Pressure Override Curve)

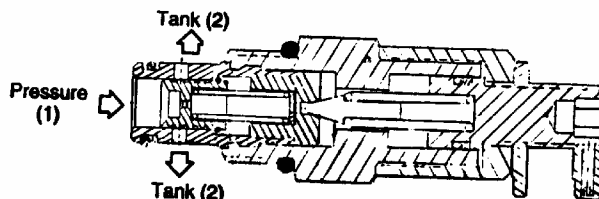
(Through cartridge only. For performance of bodies, see section MV).



Cartridge Valve Specifications

Rated Flow	30 GPM (112.5 L/M)
Max. Inlet Pressure	3500 PSI (245 Bar)
Max. Setting Press.	3000 PSI (210 Bar)
Reseat Pressure (Valve returns to non-relieving mode)	80% of set pressure
Operating Temp. Range (Ambient)	-40°F to + 200°F (Nitrile) -25°F to + 250°F (Viton)
Leakage	82 cc/min. at 25% of set pressure
Cartridge Material	All parts steel. All operating parts hardened steel.
Body Material	All parts steel
Filtration	ISO Code 16/13, SAE Class 4 or better
Mounting	No Restrictions
Cavity	Common Cavity No. C10-2 (See Cavity Details section)

Construction

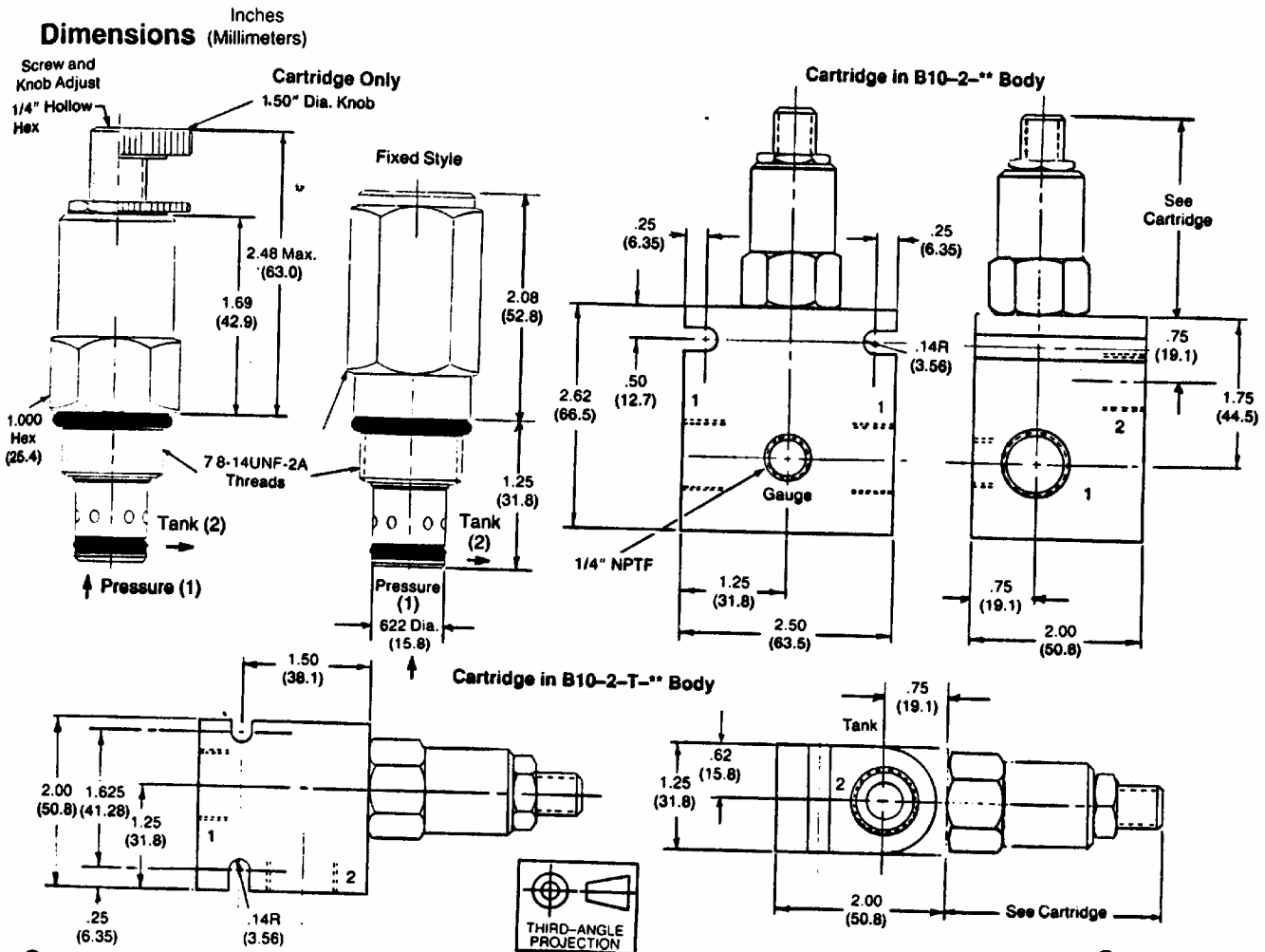


For additional information – call your local
Parker Fluidpower Motion & Control Distributor.

8017-189

Relief Valves Series RA101

Dimensions



Ordering Information

RA	10	1
PILOT OPERATED RELIEF VALVE	SIZE 7/8-14	STYLE
Code	Style	
1	Pilot Operated, Spool-Type	

Cartridge Only 0.5 lbs. (.23 kg)
 Cartridge in B10-2-- Body 2.2 lbs. (.99 kg)
 Cartridge in B10-2-T-- Body 3.5 lbs. (1.58 kg)

SERVICE PARTS

Knob Kit - 840208K (To convert screw adjust to knob adjust)
 Nitrile Seal Kit - SK10-2
 Viton Seal Kit - SK10-2V
 Panel Mount Kit - PMK101

Code	Type
F	Fixed style, preset at factory. Specify desired flow and pressure (i.e. 2500 PSI @ 12 GPM). Note: for any given valve setting, any change in flow will cause a change in pressure.
K	Knob Adjust
S	Screw Adjust

Code	Range
10	100-1000 PSI
20	100-2000 PSI
30	100-3000 PSI

Code	Type
Omit	Nitrile
V	Viton

Code	Port Size
Omit	Cartridge Only
4P	1/4" NPTF (B10-2-4P)
6P	3/8" NPTF (B10-2-6P)
8P	1/2" NPTF (B10-2-8P)
6T	SAE-6 (B10-2-6T)
8T	SAE-8 (B10-2-8T)
T6P	3/8" NPTF, Straight Thru Flow Path (B10-2-T6P)
T8P	1/2" NPTF, Straight Thru Flow Path (B10-2-T8P)
T6T	SAE-6, Straight Thru Flow Path (B10-2-T6T)
T8T	SAE-8, Straight Thru Flow Path (B10-2-T8T)

2500 PSI @ 4 GPM