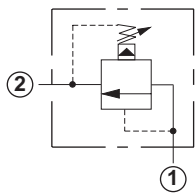


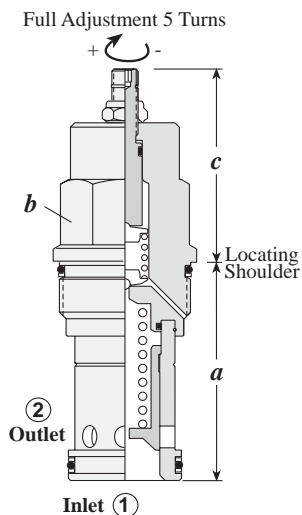
Relief Valves

PILOT OPERATED



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions					Installation Torque (lb. ft.)
			a	b	c			
					L	C	K	
12 GPM	RPCC - LAN	T - 162A	1.22	3/4"	2.11	2.17	2.31	25/30
25 GPM	RPEC - LAN	T - 10A	1.56	7/8"	2.00	2.06	2.25	30/35
50 GPM	RPGC - LAN	T - 3A	1.88	1 1/8"	2.12	2.18	2.38	45/50
100 GPM	RPIC - LAN	T - 16A	2.44	1 1/4"	2.44	2.47	2.69	150/160
200 GPM	RPKC - LAN	T - 18A	3.13	1 5/8"	2.81	2.94	3.06	350/375

OPTION ORDERING INFORMATION



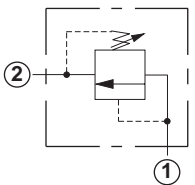
RP * C - * * *

Nominal Capacity	Base Price	Control**	Adjustment Range	Seal
C 12 GPM*		L Standard Screw	A 100 - 3000 psi	N Buna-N
E 25 GPM		C Tamper Resistant	W 150 - 4500 psi	V Viton
G 50 GPM		K Handknob	B 50 - 1500 psi	
I 100 GPM			C 150 - 6000 psi	
K 200 GPM			N 60 - 800 psi	
			Q 60 - 400 psi	

Adjustment Range Options:
 A, B, C, and W are standard set at 1000 psi.
 N Option is standard set at 400 psi.
 Q Option is standard set at 200 psi.
 * Minimum setting 75 psi on all ranges.
Customer may specify pressure setting.

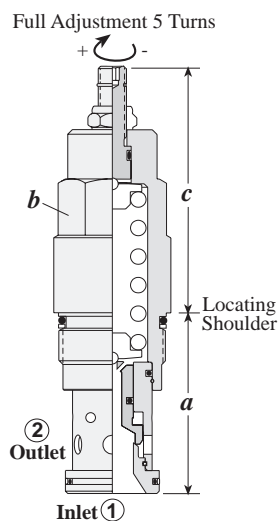
** See page 244 for information on Control Options

DIRECT ACTING



Capacity	Typical Cartridge Model Code	Cavity	Cartridge Dimensions				Installation Torque (lb. ft.)
			a	b	c		
					L	C	
12 GPM	RDBA - LAN	T - 162A	1.22	3/4"	2.11	2.17	25/30
25 GPM	RDDA - LAN	T - 10A	1.56	7/8"	2.38	2.44	30/35
50 GPM	RDFA - LAN	T - 3A	1.88	1 1/8"	2.50	2.56	45/50
100 GPM	RDHA - LAN	T - 16A	2.44	1 1/4"	3.25	3.31	150/160
200 GPM	RDJA - LAN	T - 18A	3.13	1 5/8"	3.94	4.07	350/375

OPTION ORDERING INFORMATION



RD * A - * * *

Nominal Capacity	Base Price	Control**	Adjustment Range	Seal
B 12 GPM		L Standard Screw	A 500 - 3000 psi	N Buna-N
D 25 GPM		C Tamper Resistant	W 1000 - 4500 psi	V Viton
F 50 GPM			B 300 - 1500 psi	
H 100 GPM			C 1000 - 6000 psi	
J 200 GPM			D 25 - 800 psi	
			E 100 - 400 psi	
			S 50 - 200 psi	

Adjustment Range Options:
 A, B, C, and W are standard set at 1000 psi.
 D Option is standard set at 400 psi.
 E Option is standard set at 200 psi.
 S Option is standard set at 100 psi.
Customer may specify pressure setting.

** See page 244 for information on Control Options

U.S. Patent #4,742,846
 European Patent Pending

TECHNICAL TIPS / PERFORMANCE CURVES

Relief Valves, Pilot Operated

Applications

These relief cartridges are normally closed, pressure control elements that are fully adjustable over a wide range of operating pressures up to 5000 psi. They are typically used when accurate pressure regulation is required and spool leakage is not critical.

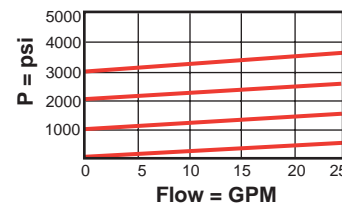
Design Concepts and Features

- Incorporates 150 micron stainless steel screen to protect the main stage control orifice.
- Low leakage, 2 to 5 in.³/min./1000 psi, dependent on frame size.
- Low hysteresis, less than $\pm 1\%$
- Selection of spring adjustment ranges with low adjustment effort.

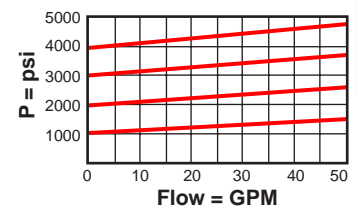
Performance Curves

Typical Pressure Rise

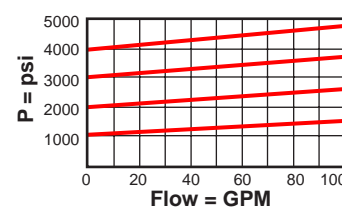
RPCC-L*N



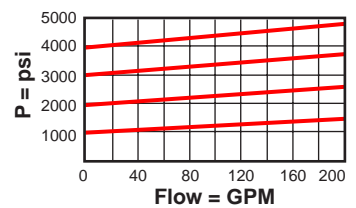
RPEC-L*N



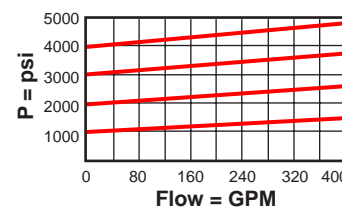
RPGC-L*N



RPIC-L*N



RPKC-L*N



Relief Valves, Direct Acting

Applications

This patented, direct acting, differential area valve with broad operating characteristics is adjustable to 5000 psi. Because of its exceptional performance, this relief cartridge should be considered for applications where fast response, dirt tolerance and leakage are critical. Examples of this type of application would include overshoot protection of fixed and variable volume pumps and shock protection of actuators (cylinders and motors).

Design Concepts and Features

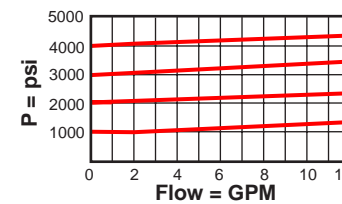
- Maximum leakage is 10 drops/min. at reseal.
- Reseat equals 90% of cracking pressure for all five frame sizes.
- Not recommended for repeated adjustment because of high adjustment effort.

Note: For both types of relief cartridge, any pressure at port 2 is directly additive to the valve settings. In situations where absolute pressure at port 1 is required; use **RS*C-***** sequence cartridge or **RV*D**, four port relief cartridge.

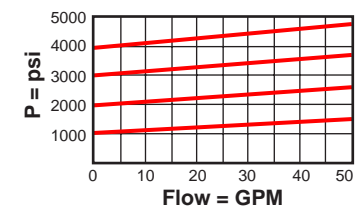
Performance Curves

Typical Pressure Rise

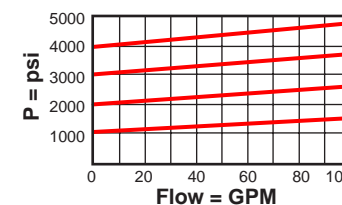
RDBA-L*N



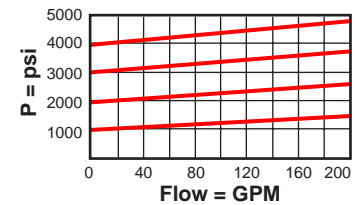
RDDA-L*N



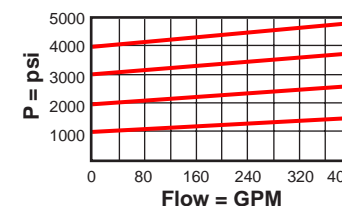
RDFA-L*N



RDHA-L*N



RDJA-L*N



General Application Requirements

- Operating Temperature Range: Buna-N seals -50° F to 200° F, Viton seals 0° F to 250° F.
- Viscosity Range: 60-3000 SUS.
- Fluid Contamination Level: ISO 4406 18/15 or better; Recommend $\beta_{10} \geq 75$ to achieve ISO 18/15 or better in most systems.
- Factory Pressure Setting for cartridge is established at a 4 GPM flow rate.