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# Relief, Direct-Acting, Poppet Type, Hydraulic Cartridge Valve

#### **Functional Symbol**

## **Description:**

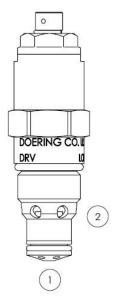
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A screw-in, poppet type, direct-acting, cartridge-style hydraulic relief valve. For use as a pressure limiting device for common hydraulic circuit protection.

#### Operation:

The DRV blocks flow from 1 to 2 until sufficient pressure at 1 to force the poppet from its seat. The cartridge offers fast response to load changes in typical hydraulic circuits requiring low hysteresis, low pressure rise and low internal leakage.

**For cross–over applications**, maximum recommended flow is 10 GPM (37.9 lpm) and maximum pressure is 3,000 PSI (207 bar).



#### Features:

- Hardened poppet and seat for long life and low leakage.
- Adjustable, fixed or tamper-resistant adjuster available.
- Compact size for minimal space requirements.
- Optional spring ranges.
- Industry standard cavity.

#### Ratings:

Rated Flow: Port 1 to 2: 30 GPM (113.6 lpm)
Operating Pressure: 6,000 PSI (415 bar)

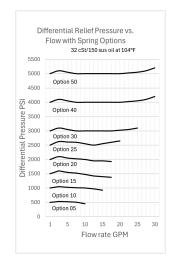
Operating Temperature: -31° to 250°f (-35° to 121°c)

Crack (Set) Pressure Defined: PSI (bar) evident at 0.25 GPM (.95 lpm)

Reseat Pressure: Nominal 85% of crack pressure

Leak Rate: Less than 5 drops per minute

Approx. Weight: .5 lbs. (0.23 kg)



| Seal Replacement Kits, External:                      |                     |  |  |  |
|---|---------------------|--|--|--|
| SRK-10-2N   | Buna-N              |  |  |  |
| SRK-10-2V   | Flurocarbon (Viton) |  |  |  |
| Note: Alternate materials available, contact Doering. |                     |  |  |  |

### **Ordering Information:**

| DRVA  |                | SS  |  |                      |  |                      |                                |
|-------|----------------|---|--|----------------------|--|----------------------|--------------------------------|
| Model | Cavity         | Control   | Adjustment Range   |                      | Seal Material                              | Mater                | al / Coating                   |
| DRVA  | 10 10-2 Cavity | Blank Standard Screw Adjustment T Tamper Resistant- Factory Set K Hand Knob | A 500-3000 psi (35-210 bar) B 3000-5500 psi (210-380 bar) 05 Factory Set to 500 psi 34.5 bar 10 Factory Set to 1000 psi 69 bar 15 Factory Set to 1500 psi 104 bar 20 Factory Set to 2000 psi 138 bar 25 Factory Set to 2500 psi 173 bar 30 Factory Set to 3000 psi 207 bar | Blank<br>V<br>R<br>W | Buna-N<br>Viton<br>EPDM<br>Low Temp Buna-N | Blank<br>SS<br>SS316 | Piated Steel<br>SST<br>316 SST |