



5.3

# 35C10-28 TYPE

## Check Valve

Rated pressure (bar / psi)	240 / 3500
Peak flow (L/min / gpm)	See performance chart

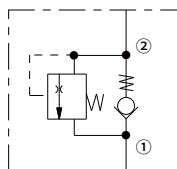
### Features

- Hardened parts for long life and low leakage
- Optional bias springs for back-pressure application flexibility
- Fully guided check assembly
- Compact size
- Fast closing and seating

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### Symbol

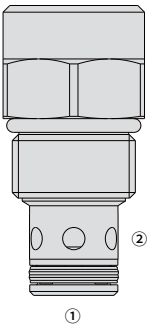


## Description

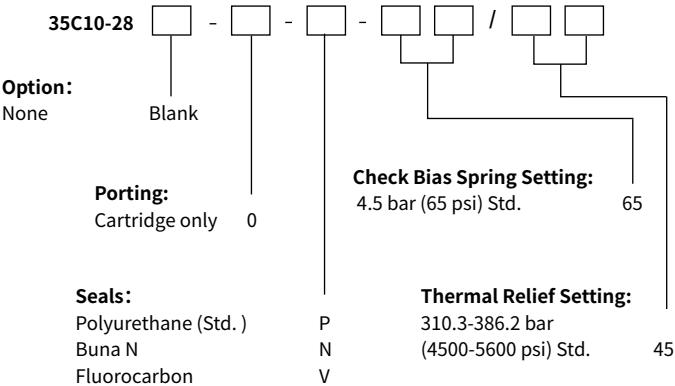
A screw-in, cartridge-style, hydraulic check valve for use as a blocking or load-holding device. The cartridge incorporates a low flow thermal relief valve intended to prevent cylinder damage resulting from temperature-induced pressure intensification.

## Operation

The valve allows flow from ① to ② , while blocking oil flow in the opposite direction.  
If the pressure at ② exceeds the thermal relief valve setting, a small amount of oil will be allowed to pass from ② to ① , preventing cylinder damage from pressure intensification.  
Note: The relief valve feature is not intended for use in dynamic pressure limiting applications. Consult factory.



## Ordering Code



## Materials

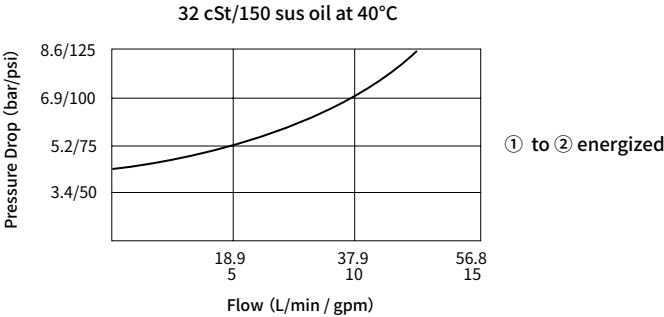
**Cartridge:**  
Weight: 0.1 kg; Steel with hardened work surfaces. Zinc-plated exposed surfaces; Buna N (Std. ) seal.

**Standard Ported Body:**  
Anodized high-strength aluminum alloy, rated to 240 bar; Ductile iron and steel bodies available; Dimensions may differ, consult factory.

# Technical Data

Rated pressure	240 bar (3500 psi)
Formula for thermal expansion	$\Delta P = 57.7 \times \Delta T$ (where $\Delta P$ is in psi; T is in ° F)
Peak flow	See performance chart
Standard bias springs at crack	4.5 bar
Check ① to ② crack pressure defined	Gauge bar (psi) evident at ① at 16.4 cc/minute (1 cu. in./minute) attained at ②
Cavity	VC10-2 (See technical reference)
Internal leakage	≤ 0.25 mL/min (5 drops/min) @ 240 bar
Fluid	Mineral-based or synthetics with lubricating properties
Viscosity range	7.4 to 420 mm <sup>2</sup> /s
Temperature range	-54 to 107 °C (Polyurethane seals)
	-40 to 100 °C (Buna N seals)
	-26 to 204 °C (Fluorocarbon seals)
Degree of fluid contamination	The minimum pollution level is ISO4406 level 20/18/14, and level 17/15/13 is recommended to prolong the service life

## Performance (Cartridge Only)



Dimensions

