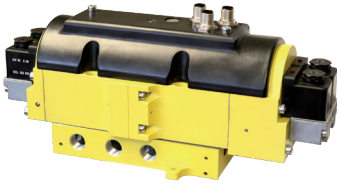


# CROSSCHECK™ CC4 SERIES DOUBLE VALVE

## Safety Directional Valve 4/3 - Closed Center

### CAT 4, PL e For Safe Cylinder Control and Load Holding

Port Size G 1/4 thru G 3/4



up to CAT 4, PL e  
(Certification pending)

ROSS' new CROSSCHECK™ CC4 Series Safety directional valve is a redundant, externally monitored 4-ported, 3-position (closed center) pneumatic valve for Category 4, PL e applications, where stopping and holding a cylinder is necessary for safe operator access during production-related tasks. The valve is constructed with tight-sealing, dirt-tolerant poppet-type valve internals.

#### FEATURES & BENEFITS:

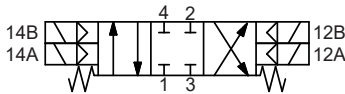
- Closed Center Valve Function – allows full control of double-acting cylinders, including jog and load-holding functions
- Redundant control with position feedback – can achieve Category 4, PL e, when used with proper safety controls
- Designed for external monitoring – allows full safety control and feedback monitoring of cylinder control circuit
- Mid-position sensing – for detection of safe, closed center position
- ROSS poppet technology – fast, reliable, dirt-tolerant, face-sealing, low friction
- LED indicators on solenoids – aid troubleshooting

#### HOW TO ORDER

(Choose your options (in red) to configure your valve model number).

<b>CC4</b>	<b>M</b>	<b>2</b>	<b>2</b>	<b>G</b>	<b>A</b>	<b>E</b>	<b>X</b>	<b>S</b>	<b>A</b>
Series	Pressure Release	Basic Size	Port Size	Thread	Voltage	Communication	Monitoring	Pin Configuration	Revision Level
Manual M	0 2 2 4	0 2 2 4	Inlet Outlet G 1/4 G 1/4 2 G 3/8 G 3/8 3 G 1/2 G 1/2 4 G 3/4 G 3/4 5 Valve only (no base) X	BSPP G NPT N Valve Only X	24 volts DC A	None X	External E	Standard S	

#### Simplified Schematic



Port Size		Basic Size	Cv				Weight kg
Inlet	Outlet		1-2	1-4	2-3	4-3	
G 1/4	G 1/4	0	1	1	0.8	0.8	5.1
G 3/8	G 3/8	0	1	1	0.8	0.8	5.1
G 1/2	G 1/2	2	1.9	2	2	1.9	8.3
G 3/4	G 3/4	2	1.9	2	2	1.9	8.3

**APPLICATIONS:** Category 4 applications - e.g., cylinder stop & load holding applications. The CROSSCHECK™ CC4 Series valve is designed to be controlled by a safety controller or safety relay with dual channel outputs and the capability of monitoring the mid-position feedback sensors. The valve is a redundant valve and is driven by 4 solenoid pilot valves - two for extending and two for retracting.

#### Standard Specifications

**Construction:** Redundant dual 4/3 closed center, poppets.  
**Mounting Type:** Sub-base mounted.  
**Pilot Solenoid:** Version as per VDE 0580. Rated for continuous duty. Enclosure rating according to DIN 400 50 IP 65.  
**Standard Voltages:** 24 volts DC.  
**Pilot Solenoids Power Consumption** (each solenoid): 3.5 watts.  
**Electrical Connections:** Three 5-pin, M12 connectors.  
**Ambient Temperature:** +4°C to 60°C.  
**Medium Temperature:** +4°C to 80°C.  
 For temperatures below 4°C, the compressed air must be dried according to ISO 8573-3, class 7.  
**Flow Media:** Compressed, filtered air acc. to ISO 8573-1:2010 [7:4:4].  
**Inlet Pressure:** With Internal Pilot Supply: 4 to 8 bar.  
 With External Pilot Supply: 0 to 8 bar.

**Pilot Supply Pressure:** 4 to 8 bar. Must be equal to or greater than inlet pressure.  
**Static Pressure:** 0 to 10 bar  
**Mounting Orientation:** Any, but horizontally with solenoids on top is preferred.  
**Monitoring:** Dynamic, cyclical, external with customer supplied equipment. Monitoring should check state of both valve mid-position sensors with any and all changes in state of valve control signals.

**Functional Safety Data:** Pending.

*This valve is not designed for controlling clutch/brake mechanisms on mechanical power presses, see DM2® Series D for such applications.*