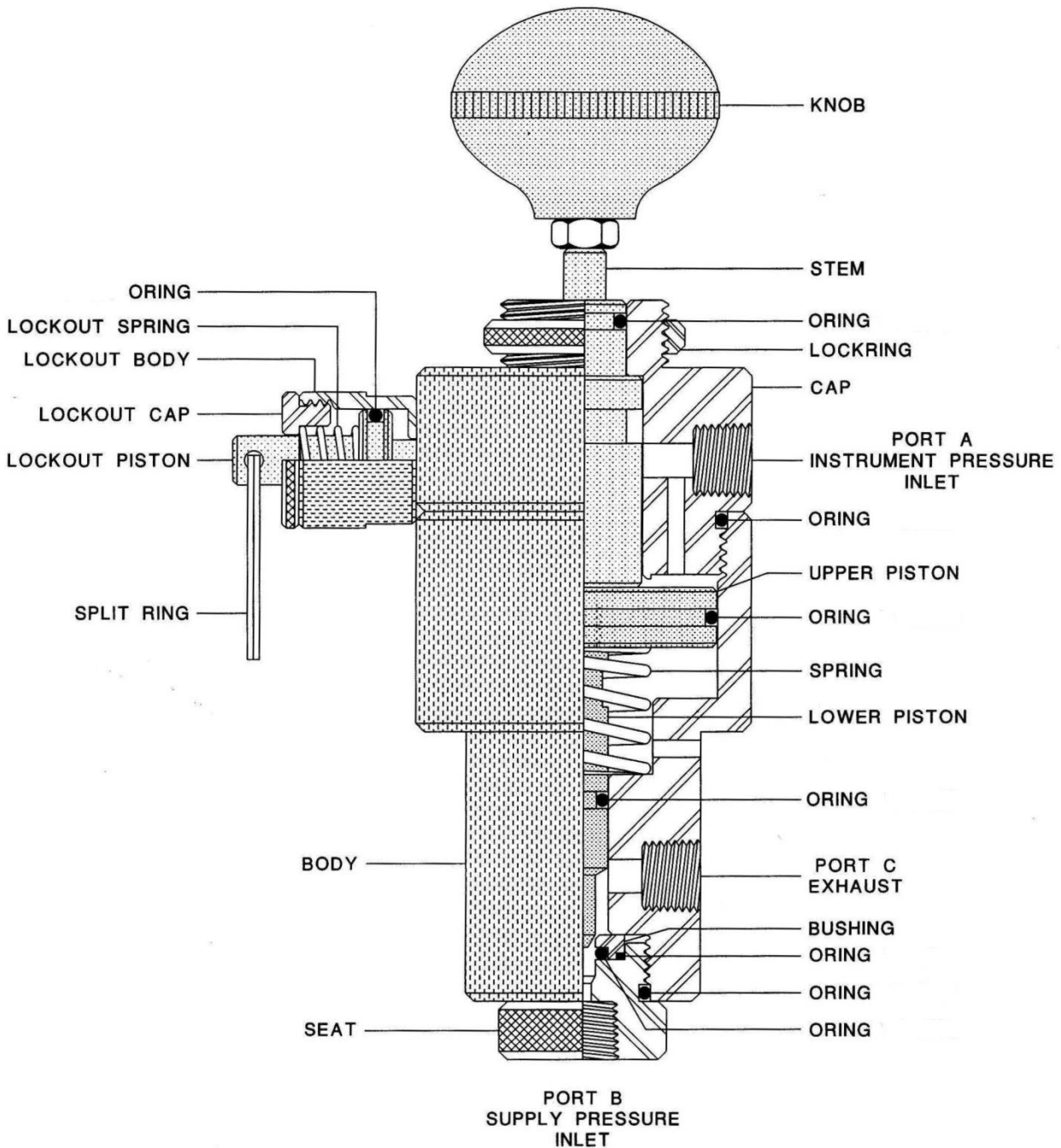


‘HCT-2’ HYDRAULIC CONTROLLER **PNEUMATIC / HYDRAULIC OVER HYDRAULIC** **WITH KNOB AND LOCKOUT**





‘HCT-2’ HYDRAULIC CONTROLLER

PNEUMATIC / HYDRAULIC OVER HYDRAULIC

WITH KNOB AND LOCKOUT

INSTALLATION

CONNECTION 1/4" NPTF

PANEL MOUNT 1 5/16" (33.3 mm) Diameter Hole

PORT A	Instrument Pressure Inlet	Pneumatic / Hydraulic, 50-150 PSI (3.5 to 10.3 bar)
PORT B	Supply Pressure Inlet	Hydraulic, 30-10,000 PSI (2 to 690 bar)
PORT C	Exhaust	

OPERATION

The BWB "HCT-2" is a 2 way, normally open, pilot operated, automatic hydraulic controller with knob and manual lockout. It is normally installed in a SCSSV control panel. It receives instrument pressure (Port A) from a safety system component such as a master relay and hydraulic supply pressure (Port B) from a pump.

During normal operation, instrument pressure (Port A) holds the controller in the closed position. The supply pressure (Port B) is blocked and the hydraulic system will maintain it's required working pressure.

When the master relay is actuated, it will bleed instrument pressure (Port A) from the controller and the spring will push the controller into the open position. The supply pressure (Port B) is exhausted (Port C), and returned to the reservoir; thus closing the SCSSV or system.

Should hydraulic working pressure be required to open the SCSSV or system before instrument pressure (Port A) is returned, the lockout assembly may be used. The knob is manually pushed in and the lockout stem engaged. This allows supply pressure (Port B) to be blocked and the hydraulic system to maintain it's working pressure. When instrument pressure (Port A) is returned the lockout stem will automatically release and the controller will resume normal operating conditions.

FEATURES

Standard Service: VITON O-Rings

All 316 Stainless Steel construction

When the controller is mounted on the panel face, the lockout assembly is located inside the panel

OPTIONS

<u>HCT-2</u>	(10,000 PSI)	<u>HCT-2J</u>	(6,000 PSI - High Flow)
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WEIGHT 5.25 Pounds

A detailed cross-sectional diagram of a mechanical assembly, likely a pressure vessel or a specialized pump. The diagram shows the internal components and their assembly. The main body is a large, cylindrical component with a textured surface. It is capped at both ends with a 'CAP' (top) and a 'LOWER CAP' (bottom). A 'STEM' passes through the center of the body, with a 'HANDLE' at the top. A 'P/M LOCKRING' is positioned around the stem near the top cap. The internal structure includes two pistons, 'UPPER PISTON' and 'LOWER PISTON', separated by a 'SPRING'. The assembly is sealed with multiple 'ORING's (O-rings) at various points. There are three main ports: 'PORT A INSTRUMENT PRESSURE INLET' at the top, 'PORT B SUPPLY PRESSURE INLET' at the bottom, and 'PORT C EXHAUST' on the side. A 'PEEK SEAT' is also visible near the bottom port. The diagram is a technical drawing with clear lines and labels.

HANDLE

STEM

P/M LOCKRING

CAP

BODY

LOWER CAP

ORING

PORT A INSTRUMENT PRESSURE INLET

ORING

UPPER PISTON

ORING

SPRING

LOWER PISTON

ORING

PORT C EXHAUST

PEEK SEAT

ORING

ORING

PORT B SUPPLY PRESSURE INLET



'HCT-2C' HYDRAULIC CONTROLLER

PNEUMATIC / HYDRAULIC OVER HYDRAULIC WITH MANUAL OVERRIDE

INSTALLATION

CONNECTION 1/4" FNPT
PANEL MOUNT 1 5/16" (33.3 mm) Diameter Hole

PORT A	Instrument Pressure Inlet	Pneumatic / Hydraulic, 50-150 PSI (3.45 to 10.34 bar)
PORT B	Supply Pressure Inlet	<u>HCT2C</u> Hydraulic, 30-6000 PSI (2.07 to 413.69 bar) <u>HCT2S</u> Hydraulic, 30-10,000 PSI (2.07 to 689.48 bar)
PORT C	Exhaust	

OPERATION

The BWB "HCT-2C" is a 2 way, normally open, pilot operated, automatic hydraulic controller with manual override. It is normally installed in a SCSSV control panel. It receives instrument pressure (Port A) from a safety system component such as a master relay and hydraulic supply pressure (Port B) from a pump.

During normal operation, instrument pressure (Port A) holds the controller in the closed position. The supply pressure (Port B) is blocked and the hydraulic system will maintain its required working pressure.

When the master relay is actuated, it will bleed instrument pressure (Port A) from the controller and the spring will push the controller into the open position. The supply pressure (Port B) is exhausted (Port C), and returned to the reservoir; thus closing the SCSSV or system.

Should hydraulic working pressure be required to open the SCSSV or system before instrument pressure (Port A) is returned, the manual override may be used. The override handle is manually screwed in; This allows supply pressure (Port B) to be blocked and the hydraulic system to maintain its working pressure. When instrument pressure (Port A) is returned, the manual override must be manually released for the controller to resume normal operating conditions.

FEATURES

Standard Service: VITON O-rings

All 316 Stainless Steel construction

OPTIONS

HCT-2C (6,000 PSI - High Flow)

HCT-2S (10,000 PSI)

WEIGHT 5 Pounds

