

Hydrocore™ Symmetrical Timer Operated Valve



HYDROCORE
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solutions for
your business*

APPLICATION

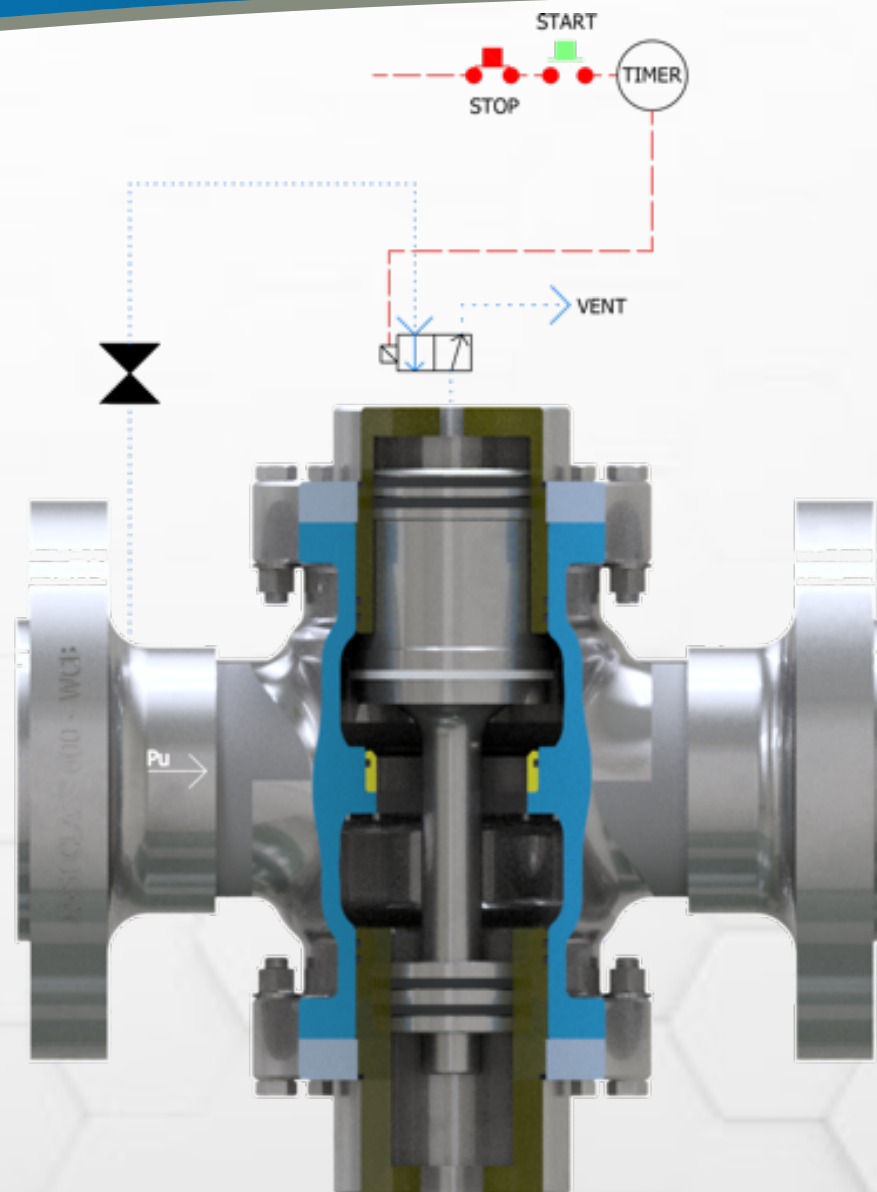
The Hydrocore™ timer operated valve opens or closes the water and compressed air lines to allow for mining operations to resume, on a predetermined weekly timing schedule. The valve can be actuated by various means: hydraulically, pneumatically or electrically.

SAVING

The implementation of the timer activated valves has a three month payback period when applied as air/water isolating valves in the gold and platinum mining industries.

PREVENTING MUD RUSH

Automatic isolation of the water lines in the workings prevents the occurrence of mud rush in the ore-passes, which is typical to pipe bursts during blast shifts or off-mining shifts.



PRINCIPLES OF OPERATION

The control system consists of two timer switches, operating as follows:

START - Within Normal Shift

Pressing the START button causes both valves to open from this moment to the end of the shift as programmed by timer T1.

START - Out of Normal Shift

Pressing the START button causes both valves to open from this moment to a fixed duration as pre-programmed by timer T2.

STOP - At any time

Pressing the STOP button causes both valves to close at any time.

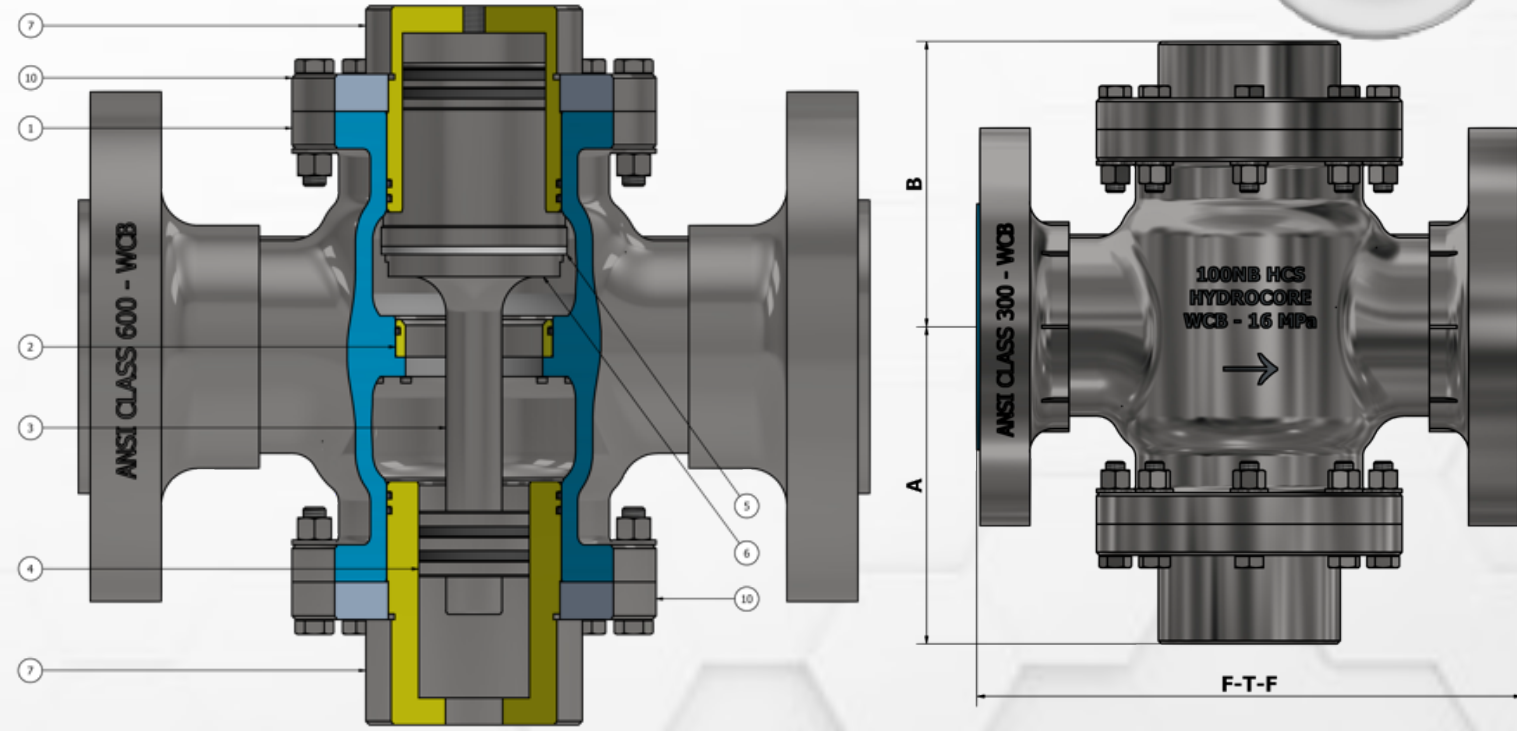


Hydrocore™ Symmetrical Timer Operated Valve



PART	DESCRIPTION	MATERIAL
1	Body	Mild Steel
2	Body Seat	Stainless Steel
3	Shuttle (50NB ~ 100NB)	Stainless Steel
3	Shuttle (150NB ~ 300NB)	Mild Steel
4	Shuttle Bottom	Stainless Steel
5	Shuttle Seat	Devlon / Polyurethane
6	Shuttle Seat Holder	Stainless Steel
7	Body Sleeve	Stainless Steel
10	Sleeve Cover	Mild Steel

* Seal Material - Nitrile, Viton, EPDM, Polyurethane



DIMENSIONS & WEIGHTS

NB	A	B	#150 F-T-F	#300 F-T-F	#600 F-T-F	#900 F-T-F	#1500 F-T-F
50	121 mm	120 mm	203 mm / 16kg	267 mm / 18kg	292 mm / 19kg	368 mm / 33kg	368 mm / 33kg
80	173 mm	172 mm	267 mm / 23kg	318 mm / 28kg	356 mm / 31kg	381 mm / 41kg	470 mm / 51kg
100	202 mm	183 mm	292 mm / 31kg	356 mm / 41kg	432 mm / 53kg	457 mm / 64kg	546 mm / TBD
150	262 mm	282 mm	356 mm / 109kg	445 mm / 131kg	559 mm / 162kg	610 mm / 187kg	705 mm / TBD
200	310 mm	329 mm	495 mm / 245kg	559 mm / 275kg	660 mm / 316kg	737 mm / 358kg	832 mm / TBD
250	378 mm	378 mm	622 mm / 465kg	622 mm / 498kg	787 mm / 585kg	838 mm / 636kg	991 mm / TBD
300	425 mm	425 mm	699 mm / 705kg	711 mm / 755kg	838 mm / 839kg	965 mm / 954kg	1130 mm / TBD

FLOW COEFFICIENTS, PRESSURE & FLOW RATES

CV	MAX PRESSURE	MAX FLOW
50	250 bar	9 l/sec
97	250 bar	25 l/sec
132	250 bar	38 l/sec
325	160 bar	117 l/sec
648	160 bar	152 l/sec
871	160 bar	233 l/sec
1500	160 bar	337 l/sec

