

Hydrocore™ Symmetrical Pressure Reducing Valve



HYDROCORE
LIMITED

*The smart
solutions for
your business*

FIXED REDUCTION RATIO VALVE

The fixed ratio valve reduces the upstream pressure 'Pu' by a fixed reduction ratio, irrespective of the flow rate.

PRINCIPLES OF OPERATION

The Hydrocore™ Symmetrical area-ratio pressure reducing valve reduces the upstream pressure 'Pu' by a fixed ratio to a required downstream pressure 'Pd', irrespective of the valve's flow rate. The valve's piston is in equilibrium state when the required pressure reduction ratio exists.

PRESSURE CONTROL VALVE

The Hydrocore™ Symmetrical pressure control valve can be converted to a pressure control valve that maintains a constant downstream pressure 'Pd', rather than a fixed pressure reduction ratio.

ALTERNATIVE CONTROL & ACTUATION

Various types of directional valves, operated by various types of actuators, could be applied for the purpose of venting or pressurizing of the control compartment.

MINIMAL MAINTENANCE

The Hydrocore™ Symmetrical pressure reducing valve requires minimal maintenance, consisting of an annual cleaning and greasing of the sealing surfaces inside the valve's bore.



MATERIALS & SPECIFICATIONS

Contact the manufacturer or distributors for details.

DIMENSIONS & RATINGS

Dimensions 50NB (2") - 600NB (24")
Ratings 10 bar (147 psi) - 250 bar (3675 psi)

VALVE ENDS

Flanges: SABS 1123, ANSI B16.5, BS10, ASME B16.34
Couplings: Tapered shoulders and other pipe couplings

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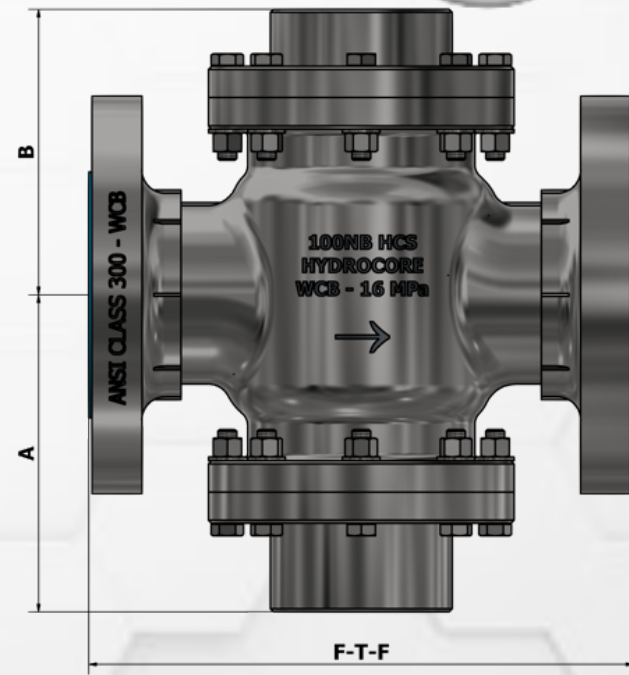
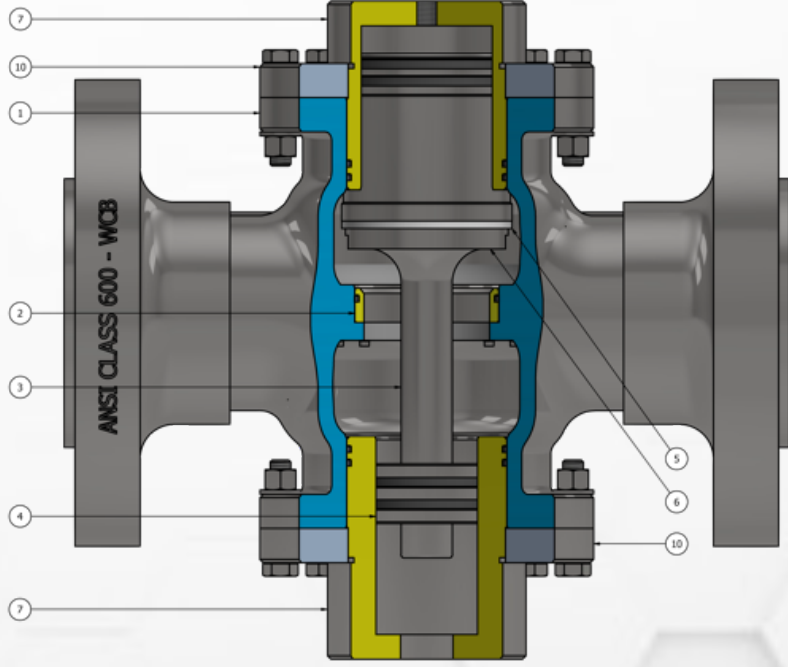
For more information please visit our website www.hydrocore.tech

Hydrocore™ Symmetrical Pressure Reducing 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

