

HD Main Valve • Ductile Iron

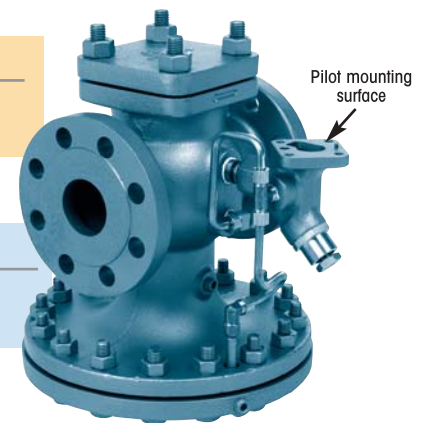
Main Valve	HD-Series
Sizes	1/2" - 6"
Connections	NPT: 1/2" - 2" FLG: 1" - 6"
Body Material	Ductile Iron
PMO Max. Operating Pressure	300 PSIG
Design Pressure/	NPT 450 PSIG @ 650° F
Temperature Ratings	150# FLG 150 PSIG @ 566° F
TMA/PMA	300# FLG 450 PSIG @ 650° F

STANDARD Main Valve Spring:

Inlet Pressure: **15-300 PSIG**
Example Model Code: **HD-12-N**

LOW-PRESSURE Main Valve Spring:

Inlet Pressure: **5-20 PSIG**
Example Model Code: **HD-12-N-LP**



Pilot-Operated REGULATORS

Model Code Configuration Chart

Models	Code	Size	Code	Connection Type	Options (Suffix)
HD Full Port	12	1/2"	N	NPT (1/2"-2")	SSD SS Diaphragm
HDR Reduced Port	13	3/4"	BSP	BSPT (1/2"-2")	SSXT SS External Tubing
	14	1"	F150	150# FLG (1" - 6")	LP Low Pressure Main Valve Spring with EPDM Diaphragm
	15	1 1/4"	F300	300# FLG (1" - 6")	
	16	1 1/2"			
	17	2"			
	18	2 1/2"			
	19	3"			
	20	4"			
	22	6"			

Note: For more than one Option, combine suffixes.
Example: SSD-SSXT

Model Codes below are for HD Main Valve ONLY. Control Pilot must be ordered separately. When two or more pilots are used on the same valve, a pilot adapter must be ordered also. Use Part Number BADAPTER.

Size/Connection	STANDARD Inlet Pressure 15 - 300 PSI	LOW-PRESSURE Inlet Pressure 5 - 20 PSI	Weight lbs
1/2" NPT	HD-12-N	HD-12-N-LP	24
3/4" NPT	HD-13-N	HD-13-N-LP	24
1" NPT	HD-14-N	HD-14-N-LP	30
1" 150# FLG	HD-14-F150	HD-14-F150-LP	31
1" 300# FLG	HD-14-F300	HD-14-F300-LP	34
1 1/4" NPT	HD-15-N	HD-15-N-LP	50
1 1/2" NPT	HD-16-N	HD-16-N-LP	51
1 1/2" 150# FLG	HD-16-F150	HD-16-F150-LP	54
1 1/2" 300# FLG	HD-16-F300	HD-16-F300-LP	60
2" NPT	HD-17-N	HD-17-N-LP	72
2" 150# FLG	HD-17-F150	HD-17-F150-LP	80
2" 300# FLG	HD-17-F300	HD-17-F300-LP	82
2 1/2" 150# FLG	HD-18-F150	HD-18-F150-LP	105
2 1/2" 300# FLG	HD-18-F300	HD-18-F300-LP	109
3" 150# FLG	HD-19-F150	HD-19-F150-LP	150
3" 300# FLG	HD-19-F300	HD-19-F300-LP	158
4" 150# FLG	HD-20-F150	HD-20-F150-LP	230
4" 300# FLG	HD-20-F300	HD-20-F300-LP	250
6" 150# FLG	HD-22-F150	HD-22-F150-LP	450
6" 300# FLG	HD-22-F300	HD-22-F300-LP	472

Ordering Instructions:

NOTE: When two or more pilots are used on the same valve: An additional Pilot Adapter for Second Pilot is required: (Not required for Solenoid Pilot)

Use part number: **(BADAPTER)**

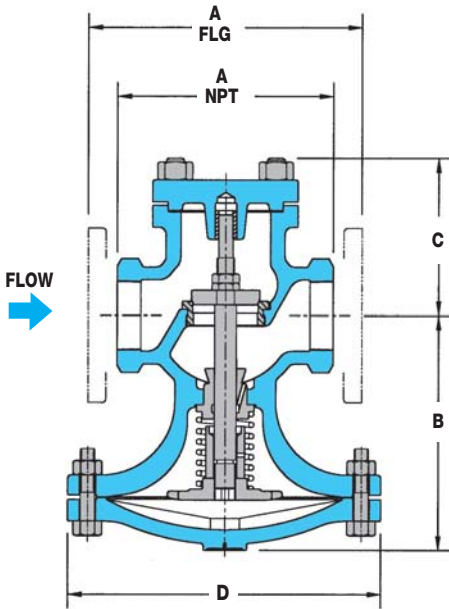
Options & Adders:	Code
Low Pressure Main Valve:	LP
Reduced Port Valves:	HDR
Stainless Steel Diaphragm:	SSD
Stainless Steel External Tubing:	SSXT

Required for secondary Pilot: **BADAPTER**
(Not required for Solenoid Pilot)

Example Model Codes for Main Valve:

- 1) **HD-15-N**
(HD Series Valve with 1 1/4" Threaded, NPT connections)
- 2) **HDR-16-F150**
(HD Series Valve, Reduced Port with 1 1/2" 150# Flanged connections)
- 3) **HD-20-F300-SSXT**
(HD Series Valve with 4" 300# Flanged connections & SS External tubing)

HD Main Valve • Ductile Iron



HD-Series DIMENSIONS - inches

Size	(A) Face-To-Face			B	C	D	Weight (lbs)		
	NPT	150#	300#				NPT	150#	300#
1/2"	4 ³ / ₈			5 ¹ / ₂	3 ³ / ₈	6 ¹ / ₂	18		
3/4"	4 ³ / ₈			5 ¹ / ₂	3 ³ / ₈	6 ¹ / ₂	18		
1"	5 ³ / ₈	5 ¹ / ₂	6	6 ¹ / ₄	3 ¹ / ₂	7	23	40	45
1 ¹ / ₄ "	6 ¹ / ₂			7 ³ / ₈	4 ⁷ / ₈	8 ³ / ₄	43		
1 ¹ / ₂ "	7 ¹ / ₄	6 ⁷ / ₈	7 ³ / ₈	7 ³ / ₈	4 ⁷ / ₈	8 ³ / ₄	43	55	60
2"	7 ¹ / ₂	8 ¹ / ₂	9	8 ¹ / ₄	5 ³ / ₈	10 ⁷ / ₈	65	75	85
2 ¹ / ₂ "		9 ³ / ₈	10	9	5 ³ / ₄	11 ³ / ₄		100	105
3"		10	10 ³ / ₄	8 ⁷ / ₈	6 ³ / ₄	13 ¹ / ₄		130	145
4"		11 ⁷ / ₈	12 ¹ / ₂	10 ⁷ / ₈	7 ¹ / ₂	14 ³ / ₄		215	235
6"		15 ¹ / ₈	16	14 ¹ / ₈	10	19 ³ / ₄		420	470

Option: Stainless diaphragms and external tubing - consult factory

Standard pilot mounting is on the right side of the regulator when looking into the outlet port (as shown). Pilot mounting on HD regulators are field-reversible.

OPERATING PRESSURES

Inlet Pressure Range: (for Main Valve):
15 PSIG (Standard Main Valve)
5 PSIG (Low-Pressure Main Valve)

Minimum Differential Pressure (for Main Valve):*
10 PSI (Standard Main Valve)
3 PSI (Low-Pressure Main Valve)

* Not required for Temperature Pilot applications

MATERIALS

Body	Ductile Iron
Cover	Ductile Iron
Gasket	Grafoil/Garlock
Cover Screws	Steel
Pilot Adapter	Ductile Iron/Cast Steel
Screen	Stainless Steel
Tubing	Copper
Valve Seat	Hardened SST (55Rc)
Valve Disc	Hardened SST (55Rc)
Diaphragm	Phosphor Bronze (standard) EPDM (Low Pressure Main Valve)

Pilot-Operated
REGULATORS

Ordering Instructions: HD Series Regulator with a Pilot

Model Code for Main Valve: **HD-19-F150** HD Series Valve with 3" 150# Flanges
 Model Code for Pilot: **PP-B** Pressure Pilot, 20-100 PSIG (Blue spring color)

HD Valve with Pressure Pilot



Model Code for Main Valve: **HD-17-F150**
 (2" HD Series Valve with 150# Flanges)
 Model Code for Pilot: **PP-B**
 (Pressure Pilot with 20-100 PSIG Range)

HD Valve with Temperature Pilot



Model Code for Main Valve: **HD-17-F150**
 (2" HD Series Valve with 150# Flanges)
 Model Code for Pilot: **PTU-14-8**
 (Temperature Pilot (100-160° F) with 8 Ft. Capillary)

HD Valve with Pressure & Temperature Pilots



Model Code for Main Valve: **HD-17-F150**
 (2" HD Series Valve with 150# Flanges)
 Model Code for Pilot: **PP-B**
 (Pressure Pilot with 20-100 PSIG Range)
 Model Code for Pilot: **PTU-14-8**
 (Temperature Pilot (100-160° F) with 8 Ft. Capillary)
 Model Code for Secondary Pilot Adapter*: **BADAPTER**

* If 2 Pilots are used on the same valve, a Secondary Pilot Adapter is required.