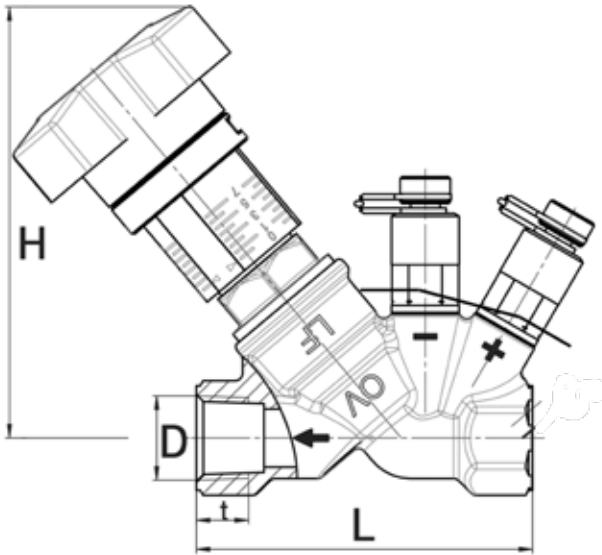


# oventrop

"Hydrocontrol MTR" Lead free brass  
Double Regulating and Commissioning Valves  
Thread Connection 1/2"-LF - 2" (DN 15LF - DN 50)

Job Name: _____	Submitted by: _____	Date: _____
_____	Spec Section: _____	_____
Job Location: _____	Engineer/Architect: _____	_____
_____	Approval: _____	Date: _____



**Dimensions in Inches**

Size	Connection	Item no.	Cv	D	L	H
DN15LF 1/2"	FNPT	166 04 64	0.64	1/2	3.4	4.5
DN15MF 1/2"	FNPT	166 04 34	1.39	1/2	3.4	4.5
DN15 1/2"	FNPT	166 04 04	2.55	1/2	3.4	4.5
DN20 3/4"	FNPT	166 04 06	4.93	3/4	3.8	4.6
DN25 1"	FNPT	166 04 08	9.98	1	4.0	4.7
DN32 1 1/4"	FNPT	166 04 10	18.44	1-1/4	4.7	5.3
DN40 1 1/2"	FNPT	166 04 12	27.14	1-1/2	5.2	5.4
DN50 2"	FNPT	166 04 16	54.52	2	6.4	5.8

Size	Connection	Item no.	Minimum Flow [GPM]	Maximum Flow [GPM]
DN15LF 1/2"	FNPT	166 04 64	0.2	2.4
DN15MF 1/2"	FNPT	166 04 34	0.5	5
DN15 1/2"	FNPT	166 04 04	1	5
DN20 3/4"	FNPT	166 04 06	2	7
DN25 1"	FNPT	166 04 08	3.8	12
DN32 1 1/4"	FNPT	166 04 10	7	25
DN40 1 1/2"	FNPT	166 04 12	10	35
DN50 2"	FNPT	166 04 16	21	50



### Product Specification

Oventrop double regulating and commissioning valves "Hydrocontrol MTR" are installed in the pipework of central hot water heating and cooling systems and serve to achieve a hydronic balance between the various circuits of the system.

The balance is achieved by a presetting with memory position. The calculated flow rate or pressure loss for each individual pipe can be preset centrally and regulated precisely. The required values of presetting can be obtained from the flow charts. All intermediate values are infinitely adjustable. The selected presetting can be read off two scales. The Oventrop double regulating and commissioning valves have two threaded ports which are equipped with the pressure test points for measuring the differential pressure across an integrated venturi. These valves are compliant with ANSI/NSF 372.

#### Specifications:

Maximum working temperature: 300 °F  
Maximum working pressure: 360 psi

Bonnet, stem and disc made of bronze/dezincification resistant brass.  
Disc with PTFE seal.  
Double EPDM O-ring stem seal.

$$GPM = \frac{\sqrt{PSID}}{Cv}$$

Oventrop Corporation  
PO Box 789  
East Granby, CT 06026  
Phone: (860) 413-9173  
www.oventrop-us.com

Pressure drop [PSI] measured at the valve  
for select flow rates [GPM]

Flow rate - GPM	DN15LF 1/2"	DN15MF 1/2"	DN15 1/2"	DN20 3/4"	DN25 1"	DN32 1 1/4"	DN40 1 1/2"	DN50 2"
0.25	0.15							
0.33	0.27							
0.5	0.61	0.13						
0.75	1.38	0.29						
1	2.46	0.52	0.15					
1.25	3.84	0.81	0.24					
1.5	5.53	1.16	0.35					
1.75	7.52	1.58	0.47	0.13				
2	9.83	2.06	0.61	0.16				
2.5		3.23	0.96	0.26				
3		4.64	1.38	0.37				
4		8.26	2.46	0.66	0.16			
5		12.90	3.84	1.03	0.25			
6			5.53	1.48	0.36			
7			7.52	2.02	0.49	0.14		
8			9.83	2.63	0.64	0.19		
9			12.44	3.33	0.81	0.24		
10				4.11	1.00	0.29	0.14	
12				5.92	1.45	0.42	0.20	
15				9.26	2.26	0.66	0.31	
20					4.02	1.18	0.54	
25					6.28	1.84	0.85	0.21
30					9.04	2.65	1.22	0.30
35					12.31	3.60	1.66	0.41
40						4.70	2.17	0.54
45						5.95	2.75	0.68
50						7.35	3.39	0.84

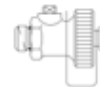
### “Hydrocontrol” Valve Accessories



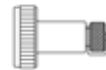
Set of two pressure test points  
Item 106 02 81



Extension piece for pressure test points  
80mm Item 106 02 95



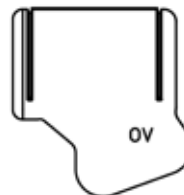
Fill and drain ball valve 1/4"  
Item 106 01 91



Measuring adapter  
for fill-and-drain ball valve  
Item 106 02 98



Flow meter  
OV-DMC 2  
Item 106 91 77



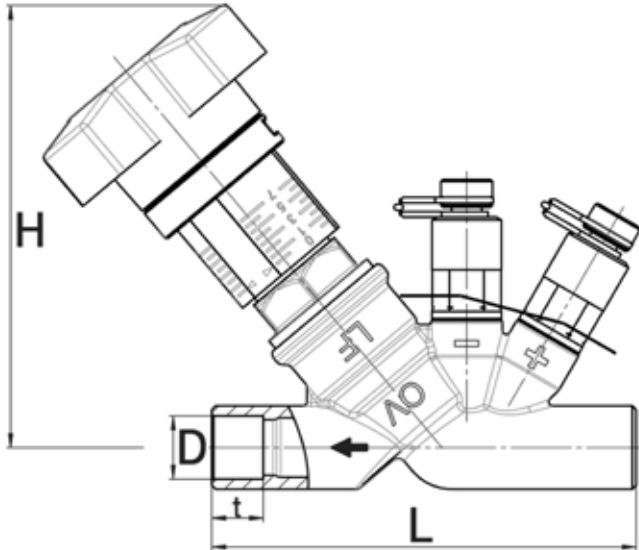
Insulation Shell  
for “Hydrocontrol MTR”

Size	Item no.
DN15 1/2"	106 00 81
DN20 3/4"	106 00 82
DN25 1"	106 00 83
DN32 1 1/4"	106 00 84
DN40 1 1/2"	106 00 85
DN50 2"	106 00 86

# oventrop

“Hydrocontrol MTR” Lead free brass  
Double Regulating and Commissioning Valves  
Thread Connection 1/2”-LF - 2” (DN 15LF - DN 50)

Job Name:	Submitted by:	Date:
	Spec Section:	
Job Location:	Engineer/Architect:	
	Approval:	Date:



Dimensions in Inches

Size	Connection	Item no.	Cv	D	L	H
DN15LF 1/2"	SWT	166 04 49	0.64	1/2	3.4	4.5
DN15MF 1/2"	SWT	166 04 50	1.39	1/2	3.4	4.5
DN15 1/2"	SWT	166 04 51	2.55	1/2	3.4	4.5
DN20 3/4"	SWT	166 04 52	4.93	3/4	3.8	4.6
DN25 1"	SWT	166 04 53	9.98	1	4.0	4.7
DN32 1 1/4"	SWT	166 04 54	18.44	1-1/4	4.7	5.3
DN40 1 1/2"	SWT	166 04 55	27.14	1-1/2	5.2	5.4
DN50 2"	SWT	166 04 56	54.52	2	6.4	5.8

Size	Connection	Item no.	Minimum Flow [GPM]	Maximum Flow [GPM]
DN15LF 1/2"	SWT	166 04 49	0.2	2.4
DN15MF 1/2"	SWT	166 04 50	0.5	5
DN15 1/2"	SWT	166 04 51	1	5
DN20 3/4"	SWT	166 04 52	2	7
DN25 1"	SWT	166 04 53	3.8	12
DN32 1 1/4"	SWT	166 04 54	7	25
DN40 1 1/2"	SWT	166 04 55	10	35
DN50 2"	SWT	166 04 56	21	50



## Product Specification

Oventrop double regulating and commissioning valves “Hydrocontrol MTR” are installed in the pipework of central hot water heating and cooling systems and serve to achieve a hydronic balance between the various circuits of the system.

The balance is achieved by a presetting with memory position. The calculated flow rate or pressure loss for each individual pipe can be preset centrally and regulated precisely. The required values of presetting can be obtained from the flow charts. All intermediate values are infinitely adjustable. The selected presetting can be read off two scales. The Oventrop double regulating and commissioning valves have two threaded ports which are equipped with the pressure test points for measuring the differential pressure across an integrated venturi. These valves are compliant with ANSI/NSF 372.

## Specifications:

Maximum working temperature: 300 °F  
Maximum working pressure: 235 psi

Bonnet, stem and disc made of bronze/dezincification resistant brass.  
Disc with PTFE seal.  
Double EPDM O-ring stem seal.

$$GPM = \frac{\sqrt{PSID}}{Cv}$$

Oventrop Corporation  
PO Box 789  
East Granby, CT 06026  
Phone: (860) 413-9173  
www.oventrop-us.com

3-HydrocontroMTR-S-140828

Pressure drop [PSI] measured at the valve  
for select flow rates [GPM]

	Flow rate - GPM									
	DN15LF 1/2"	DN15MF 1/2"	DN15 1/2"	DN20 3/4"	DN25 1"	DN32 1 1/4"	DN40 1 1/2"	DN50 2"		
0.25	0.15									
0.33	0.27									
0.5	0.61	0.13								
0.75	1.38	0.29								
1	2.46	0.52	0.15							
1.25	3.84	0.81	0.24							
1.5	5.53	1.16	0.35							
1.75	7.52	1.58	0.47	0.13						
2	9.83	2.06	0.61	0.16						
2.5		3.23	0.96	0.26						
3		4.64	1.38	0.37						
4		8.26	2.46	0.66	0.16					
5		12.90	3.84	1.03	0.25					
6			5.53	1.48	0.36					
7			7.52	2.02	0.49	0.14				
8			9.83	2.63	0.64	0.19				
9			12.44	3.33	0.81	0.24				
10				4.11	1.00	0.29	0.14			
12				5.92	1.45	0.42	0.20			
15				9.26	2.26	0.66	0.31			
20					4.02	1.18	0.54			
25					6.28	1.84	0.85	0.21		
30					9.04	2.65	1.22	0.30		
35					12.31	3.60	1.66	0.41		
40						4.70	2.17	0.54		
45						5.95	2.75	0.68		
50						7.35	3.39	0.84		

### “Hydrocontrol” Valve Accessories



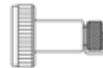
Set of two pressure test points  
Item 106 02 81



Extension piece for pressure test points  
80mm Item 106 02 95



Fill and drain ball valve 1/4"  
Item 106 01 91



Measuring adapter  
for fill-and-drain ball valve  
Item 106 02 98



Flow meter  
OV-DMC 2  
Item 106 91 77



Insulation Shell  
for “Hydrocontrol MTR”

Size	Item no.
DN15 1/2"	106 00 81
DN20 3/4"	106 00 82
DN25 1"	106 00 83
DN32 1 1/4"	106 00 84
DN40 1 1/2"	106 00 85
DN50 2"	106 00 86