

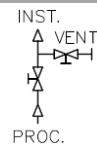
Badotherm two valve manifold model BDTM924 can be used for isolation, bleeding, calibration, and testing of pressure instruments. All Badotherm valves are standard stainless steel and optional available in exotic materials, such as Hastelloy and Monel. This valve has a non-rotatable conical tip to ensure perfect alignment. Badotherm valves are manufactured within the European Union.



MATERIAL SPECIFICATIONS

BODY	STEM	TIP	BONNET	SPINDLE GASKET
AISI 316(L)	AISI 316(L)	AISI 316(L)	AISI 316(L)	Virgin PTFE

TECHNICAL SPECIFICATIONS

	BDTM924	flow diagram	product features
Process connection (F)	1/2"NPT-m		non-rotating spindle tip
Instrument connection (F1)	1/2"NPT-f		bonnet locking pins
Vent connection	1/4"NPT-f		safety back seating T-bar
Maximum pressure	413 bar (6.000 psi) at 38°C		isolation valve (blue)
Maximum temperature	240 °C		vent valve (red)

EXOTIC STEM AND TIP CONFIGURATIONS WITH BODY MATERIALS

stem	tip	body material								
		AISI 316(L)	AISI 321	Monel 400	Hastelloy C276	Duplex F51	Super Duplex F53	Super Duplex F55	Inconel 625	Titanium Gr. 2
AISI 630	AISI 420	○								
AISI 316(L)	AISI 316(L)	●								
AISI 321	AISI 321		●							
Monel 400	Monel 500	○		●						
Hastelloy C276	Hastelloy C276				●					
Duplex F51	Duplex F51					●				
Super Duplex F53	Super Duplex F53						●			
Super Duplex F55	Super Duplex F55							●		
Inconel 625	Inconel 625								●	
Titanium Gr. 2	Titanium Gr. 2									●
Stellite 6B	Stellite 6B	○	○	○	○	○	○	○	○	○

● = standard / ○ = optional

SPINDLE GASKET

Material	operating temperature
Virgin PTFE	-200 / +260°C
Flexible Graphite	-250 / +450°C

PROCESS (F) AND INSTRUMENT (F1) CONNECTIONS

1/4"		3/8"		1/2"		other	
NPT-f		NPT-f		NPT-f		butt weld	
NPT-m		NPT-m		NPT-m		swivel	
BSP-f		BSP-f		BSP-f		socket weld	
BSP-m		BSP-m		BSP-m		tube fitting	
BSP-f	EN837	BSP-f	EN837	BSP-f	EN837		
BSP-m	EN837	BSP-m	EN837	BSP-m	EN837		

OPTIONS

- cleaning for oxygen service (only with Virgin PTFE spindle gasket)
- high pressure up to 689 bar (10.000 psi) at 38°C
- anti-tamper spindle to prevent unauthorized use
- mounting bracket for 2" pipe mounting

DESIGN INFORMATION AND DRAWINGS

DESIGN STANDARD

EN 12266-1 / SP 99 / SP 61

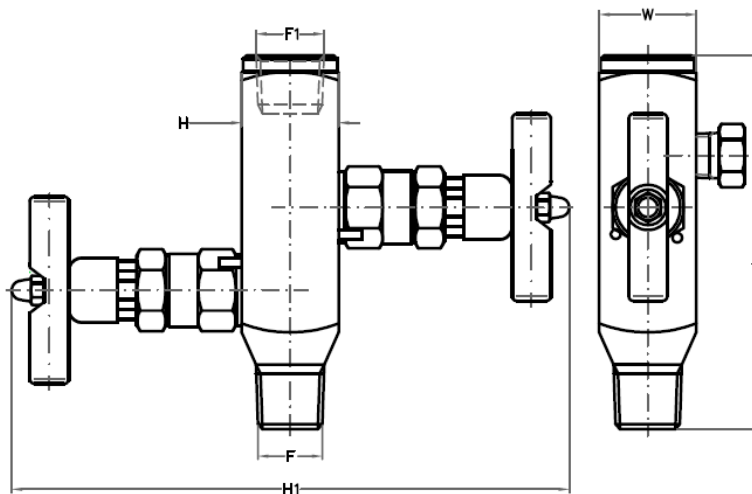
PRESSURE TESTING

1.5x MWP @ 20°C for shell test

1.1x MWP @ 20°C for seat test

WEIGHT

0.9 kg



F	F1	L	H	H1 min	H1 max	W
1/4"NPT-f	1/4"NPT-f	106	30	164	172	30
1/4"NPT-m	1/4"NPT-f	115	30	164	172	30
1/4"NPT-m	1/4"NPT-m	115	30	164	172	30
1/4"BSP-f ¹	1/4"BSP-f	106	30	164	172	30
1/4"BSP-m ²	1/4"BSP-f	115	30	164	172	30
1/4"BSP-m ²	1/4"BSP-m	115	30	164	172	30
1/4"BSP-f EN837	1/4"BSP-f EN837	106	30	164	172	30
1/4"BSP-m EN837	1/4"BSP-f EN837	115	30	164	172	30
1/4"BSP-m EN837	1/4"BSP-m EN837	115	30	164	172	30
3/8"NPT-f	3/8"NPT-f	106	30	164	172	30
3/8"NPT-m	3/8"NPT-f	115	30	164	172	30
3/8"NPT-m	3/8"NPT-m	115	30	164	172	30
3/8"BSP-f ¹	3/8"BSP-f	106	30	164	172	30
3/8"BSP-m ²	3/8"BSP-f	115	30	164	172	30
3/8"BSP-m ²	3/8"BSP-m	115	30	164	172	30
3/8"BSP-f EN837	3/8"BSP-f EN837	106	30	164	172	30
3/8"BSP-m EN837	3/8"BSP-f EN837	115	30	164	172	30
3/8"BSP-m EN837	3/8"BSP-m EN837	115	30	164	172	30
1/2"NPT-f	1/2"NPT-f	106	30	164	172	30
1/2"NPT-f	1/2"NPT-m	115	30	164	172	30
1/2"NPT-m	1/2"NPT-f	115	30	164	172	30
1/2"NPT-m	1/2"NPT-m	115	30	164	172	30
1/2"BSP-f ¹	1/2"BSP-f	106	30	164	172	30
1/2"BSP-m ²	1/2"BSP-f	115	30	164	172	30
1/2"BSP-m ²	1/2"BSP-m	115	30	164	172	30
1/2"BSP-f EN837	1/2"BSP-f EN837	106	30	164	172	30
1/2"BSP-m EN837	1/2"BSP-f EN837	115	30	164	172	30
1/2"BSP-m EN837	1/2"BSP-m EN837	115	30	164	172	30
butt weld	1/2"NPT-f	115	30	164	172	30
butt weld	1/2"BSP-f	115	30	164	172	30
butt weld	1/2"BSP-f EN837	115	30	164	172	30
swivel	1/2"NPT-f	110	30	164	172	30
swivel	1/2"BSP-f	110	30	164	172	30
swivel	1/2"BSP-f EN837	110	30	164	172	30
socket weld	1/2"NPT-f	125	30	164	172	30
socket weld	1/2"BSP-f	125	30	164	172	30
socket weld	1/2"BSP-f EN837	125	30	164	172	30
tube fitting	1/2"NPT-f	115	30	164	172	30
tube fitting	1/2"BSP-f	115	30	164	172	30
tube fitting	1/2"BSP-f EN837	115	30	164	172	30

All dimensions in mm

¹ In accordance with ISO 1179-1

² In accordance with ISO 1179-4

Non limitative list: other configuration dimensions on request

PRESSURE TEMPERATURE TABLE

temperature °C	AISI 316(L)	Monel 400	Hastelloy C276	Duplex F51	Super Duplex F53 / F55	Inconel 625
-29 / -17 °C ¹	413	335	431	431	431	431
-17 / +38 °C	413	335	431	431	431	431
50 °C	401	299	431	431	431	431
100 °C	351	281	429	422	422	429
150 °C	321	272	418	382	383	418
200 °C	297	272	403	355	355	403
250 °C ¹	278	272	386	337	337	386
300 °C ¹	263	272	357	323	324	357
350 °C ¹	253	272	335	-	-	335
400 °C ¹	245	267	305	-	-	305
450 °C ¹	240	224	282	-	-	282

All pressures in Bar

¹ Only applicable in combination with Flexible Graphite gasket

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