


Badotherm instrument valve model BDTV910 can be used for shutting off impulse lines or for isolation 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

	BDTV910	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
Maximum pressure	413 bar (6.000 psi) at 38°C		safety back seating T-bar
Maximum temperature	240 °C		flow coefficient $C_v = 0.23$
			isolation valve (blue)

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

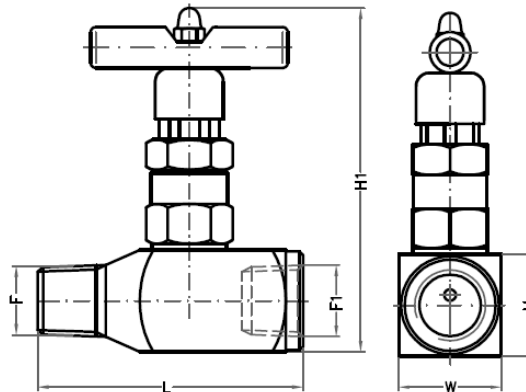
- cleaning for oxygen service (only with Virgin PTFE spindle gasket)
- 1/4" NPT-f purge port
- high pressure up to 689 bar (10.000 psi) at 38°C
- anti-tamper spindle to prevent unauthorized use
- mounting bracket for 2" pipe mounting

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
0.6 kg



F	F1	L	H	H1 min	H1 max	W
1/4"NPT-f	1/4"NPT-f	62	30	98	102	30
1/4"NPT-f	1/2"BSP-f EN837	62	30	98	102	30
1/4"NPT-m	1/4"NPT-f	72	30	98	102	30
1/4"NPT-m	1/4"NPT-m	88	30	98	102	30
1/4"BSP-f ¹	1/4"BSP-f	62	30	98	102	30
1/4"BSP-m ²	1/4"BSP-f	62	30	98	102	30
1/4"BSP-m ²	1/4"BSP-m	68	30	98	102	30
1/4"BSP-m ²	3/8" compression fitting	70	30	98	102	30
1/4"BSP-f EN837	1/4"BSP-f EN837	62	30	98	102	30
1/4"BSP-m EN837	1/4"BSP-f EN837	68	30	98	102	30
1/4"BSP-m EN837	1/4"BSP-m EN837	72	30	98	102	30
3/8"NPT-f	3/8"NPT-f	68	30	98	102	30
3/8"NPT-m	3/8"NPT-f	72	30	98	102	30
3/8"NPT-m	3/8"NPT-m	88	30	98	102	30
3/8"BSP-f ¹	3/8"BSP-f	68	30	98	102	30
3/8"BSP-m ²	3/8"BSP-f	62	30	98	102	30
3/8"BSP-m ²	3/8"BSP-m	68	30	98	102	30
3/8"BSP-f EN837	3/8"BSP-f EN837	68	30	98	102	30
3/8"BSP-m EN837	3/8"BSP-f EN837	78	30	98	102	30
3/8"BSP-m EN837	3/8"BSP-m EN837	88	30	98	102	30
1/2"NPT-f	1/2"NPT-f	78	30	98	102	30
1/2"NPT-m	1/2"NPT-f	78	30	98	102	30
1/2"NPT-m	1/2"NPT-m	88	30	98	102	30
1/2"BSP-f ¹	1/2"BSP-f	78	30	98	102	30
1/2"BSP-m ²	1/2"BSP-f	68	30	98	102	30
1/2"BSP-m ²	1/2"BSP-m	68	30	98	102	30
1/2"BSP-f EN837	1/2"BSP-f EN837	78	30	98	102	30
1/2"BSP-m EN837	1/2"BSP-f EN837	78	30	98	102	30
1/2"BSP-m EN837	1/2"BSP-m EN837	78	30	98	102	30
butt weld	1/4"NPT-f	72	30	98	102	30
butt weld	1/4"BSP-f	72	30	98	102	30
butt weld	1/4"BSP-f EN837	72	30	98	102	30
butt weld	1/2"NPT-f	78	30	98	102	30
butt weld	1/2"BSP-f	78	30	98	102	30
butt weld	1/2"BSP-f EN837	78	30	98	102	30
swivel	1/2"NPT-f	72	30	98	102	30
swivel	1/2"BSP-f	72	30	98	102	30
swivel	1/2"BSP-f EN837	72	30	98	102	30
socket weld	1/2"NPT-f	88	30	98	102	30
socket weld	1/2"BSP-f	88	30	98	102	30
socket weld	1/2"BSP-f EN837	88	30	98	102	30
tube fitting	1/2"NPT-f	83	30	98	102	30
tube fitting	1/2"BSP-f	88	30	98	102	30
tube fitting	1/2"BSP-f EN837	93	30	98	102	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 °C¹	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 °C¹	278	272	386	337	337	386
300 °C¹	263	272	357	323	324	357
350 °C¹	253	272	335	-	-	335
400 °C¹	245	267	305	-	-	305
450 °C¹	240	224	282	-	-	282

All pressures in Bar

¹Only applicable in combination with Flexible Graphite gasket



Holland – UK – Romania – India – Thailand – Dubai – USA

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