

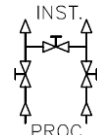
Badotherm three valve manifold model BDTM931 can be used for isolation, calibration, and testing of differential pressure instruments. The BDTM931 manifold has a flanged instrument connection suitable for differential pressure transmitters. The equalizing bonnet is inclined with a 25° angle. This manifold does not have a purge connection. 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**

	BDTM931	flow diagram	product features
<b>Process connection (F)</b>	1/2" NPT-f		non-rotating spindle tip
<b>Instrument connection (F1)</b>	flanged - IEC 61518		bonnet locking pins
<b>Purge connection</b>	-		safety back seating T-bar
<b>Maximum pressure</b>	413 bar (6.000 psi) at 38°C		2x isolation valves (blue)
<b>Maximum temperature</b>	240 °C		equalizing valve (green)

**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
<b>Virgin PTFE</b>	-200 / +260°C
<b>Flexible Graphite</b>	-250 / +450°C

**OPTIONS**

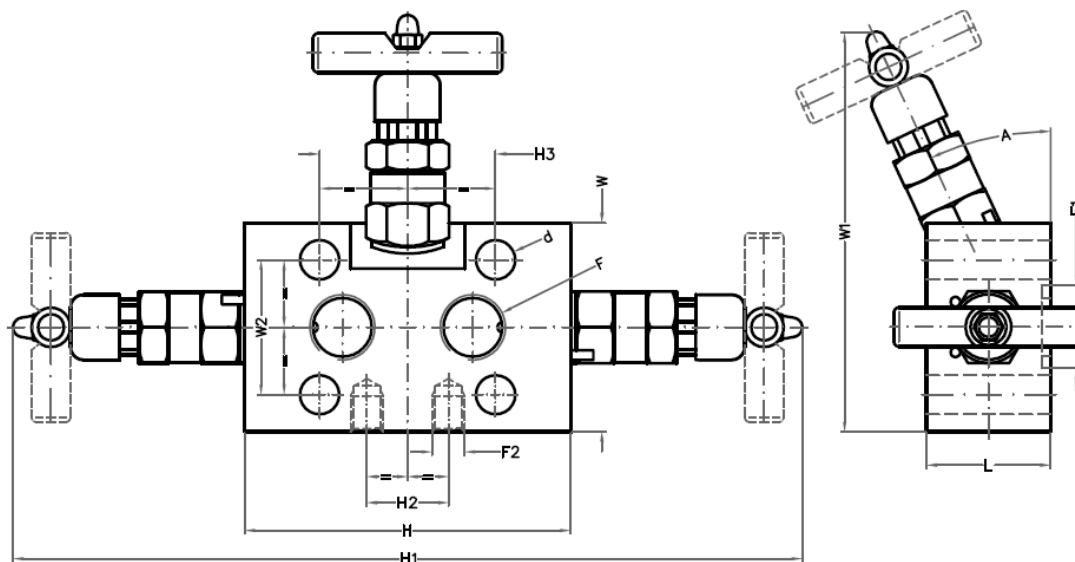
- cleaning for oxygen service (only with Virgin PTFE spindle gasket)
- high pressure up to 689 bar (10.000 psi) at 38°C
- anti-tamper spindle to prevent unauthorized use
- mounting bracket for 2" pipe mounting
- assembly kit including bolts, gaskets and anti-seizure compound

DESIGN INFORMATION AND DRAWINGS

DESIGN STANDARD  
EN 12266-1 / SP 99 / SP 61  
IEC 61518

PRESSURE TESTING  
1.5x MWP @ 20°C for shell test  
1.1x MWP @ 20°C for seat test

WEIGHT  
2.0 kg



F2	L	H	H1 min	H1 max	H2	H3	W	W1 min	W1 max	W2	d	A
M10	38	98	232	240	25	54	64	118	122	41,3	Ø12	25°

All dimensions in mm

PRESSURE TEMPERATURE TABLE

temperature °C	AISI 316(L)	Monel 400	Hastelloy C276	Duplex F51	Super Duplex F53 / F55	Inconel 625
-29 / -17 °C <sup>1</sup>	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 <sup>1</sup>	278	272	386	337	337	386
300 °C <sup>1</sup>	263	272	357	323	324	357
350 °C <sup>1</sup>	253	272	335	-	-	335
400 °C <sup>1</sup>	245	267	305	-	-	305
450 °C <sup>1</sup>	240	224	282	-	-	282

All pressures in Bar

<sup>1</sup> Only applicable in combination with Flexible Graphite gasket

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