## **BDTM931 – THREE VALVE MANIFOLD**

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)
 Virgin PTFE

#### **TECHNICAL SPECIFICATIONS**

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

### **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	0								
AISI 316(L)	AISI 316(L)	•								
AISI 321	AISI 321		•							
Monel 400	Monel 500	0		•						
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	0	0	0	0	0	0	0	0	0

<sup>● =</sup> standard / ○ = optional

# SPINDLE GASKET

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

### **O**PTIONS

- 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

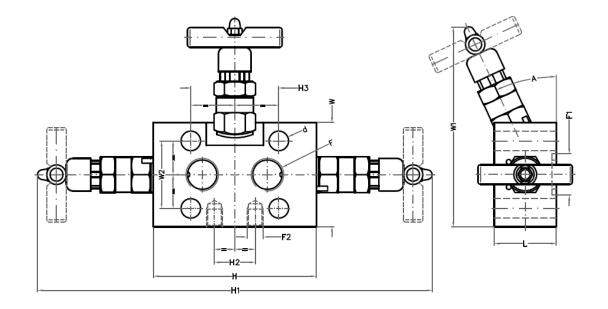
#### **DESIGN INFORMATION AND DRAWINGS**

DESIGN STANDARD
EN 12266-1 / SP 99 / SP

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	Н	H1 min	H1 max	H2	Н3	W	W1 min	W1 max	W2	d	Α
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 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



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

To our knowledge, the information contained herein is accurate as of the date of this document. However neither Badotherm, nor its affiliates makes any warranty, express or limited, or accepts any liability in connection with this information or its use. This information is for technical skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other product. The user alone finally determines suitability of any information or material in contemplated use, the manner of use and whether any patents are infringed. This information gives typical properties only.

Badotherm reserves the right to make changes to the specifications and materials without prior notice. The latest version of the datasheet can be found on www.badotherm.com.

© 2001 Badotherm, all rights reserved. Trademarks and/or other products referenced herein are either trademarks or registered trademarks of Badotherm. Registered trade names are Hastelloy, Inconel, Monel, and Stellite.

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