



ROTH MIONS SAS
43, rue des Brosses
69780 MIONS
Tel : +33(0) 472 28 15 60
www.rothmions.fr

TECHNICAL DATA

ACCUMULATOR DIVING BOTTLE

This version of the Technical Data is not contractual and cannot be used as an element for claim.

CERTIFICATION SAMPLES





TECHNICAL DATA ACCUMULATOR

This version of the Technical Data is not contractual and cannot be used as an element for claim.

MATERIAL FROM SEAMLESS TUBES :

- steel 34CrMo4 / SA372F70.
- steel Tu52b / SA765-IV.
- stainless steel 316L or 304L may be possible depending on demand.

POSSIBLE CAPACITY :

- from 0,2L to 57L depending on tube diameter and customer request.

WORKING TEMPERATURE :

- minimum working temperature : Standard is - 40°C. Possibility up to - 60°C.
- maximum working temperature : depending on the certification
 - o example following 97/23/EC : 200°C or 350°C.
 - o example following ASME : 315°C (600°F) with SA372 F70.

WORKING PRESSURE :

- defined by type of certification : see below tables.
- determined according standard working temperatures and standard tubes.
- working pressure at different working temperature can be calculated on demand.

POSSIBLE CERTIFICATIONS (after analysis of your need) :

- CE following 97/23/EC Directive (based on EN14359 or AD2000-Merkblatt).
- ASME following ASME Code Section VIII division 1.
- Marine, Offshore approvals : DNV, ABS, RINA, BV Marine, Germanischer Lloyd's (GL).
- DOSH for Malaysia (coupled with ASME), AS1210 for Australia, CRN for Canada.
- SELO for China (coupled with CE), KGS or KOSHA or KEMCO for Korea.
- BPVA for Hong Kong, IBR for India, METI or MHLW for Japan, MOM for Singapore.
- Others may be possible on demand...

A project, a question ?

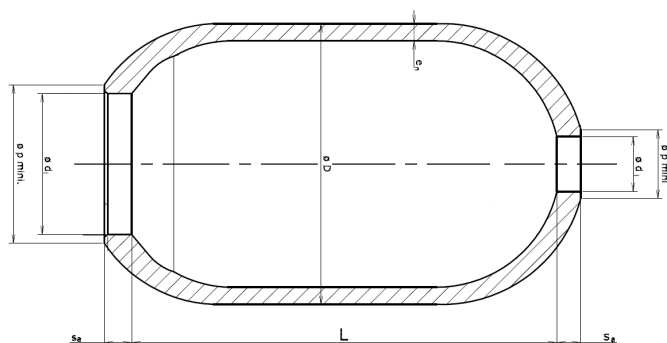
Please inform us about
Pressure
Temperature
Dimension
Certification
Other...

Please

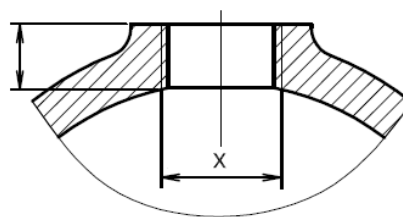
Contact our

Commercial Department
Tel : +33 (0)4 72 28 15 60
Fax : +33 (0)4 78 21 16 26
Site : www.rothmions.fr

SCHEME OF ACCUMULATOR



Other possibility of opening :



Possibility for X under certain conditions (see Commercial Dept)
G3/8"
G1/2"
G3/4"
G1"
G1"1/4
G1"1/2
G2"

Some standard drawings are available in Appendix.

Maximum Allowable Working Pressure

Material : steel 34CrMo4 - SA372 grade F70

Please note that Working Pressures in tables are indicative

Roth Standard Capacity Liters (Gallons)				1		4	10 (2,5)	10 (2,5)	10 (2,5)	10 (2,5)
			0,5	1,1	1	5	12 (3)	12 (3)	12 (3)	12 (3)
			1,14	1,6	2,5	6	24,5 (6)	24,5 (6)	24,5 (6)	24,5 (6)
			1,5	2,5	3	10	28 (7)	28 (7)	28 (7)	28 (7)
			2,14	3	5	12,5	32 (10)	32 (10)	32 (10)	32 (10)
				5		15	42 (12)	42 (12)	42 (12)	42 (12)
Roth Standard Tubes Ø x mini thickness in mm			88,9 x	114,3 x	121 x	168,3 x	219,1 x	221 x	223,6 x	226,2 x
			4,8	6,3	9,7	8,33	8,35	9,3	10,2	11,3
“EARTH” Certifications	CE (97/23/EC) EN14359 -40/+80°C (bar)	Dual shell (CE+ASME)	500	510	760	450	340	380	420	460
		STD	540	560	760	480	380	420	450	480
		High Performance	600	620	760	480	420	460	480	480
	CE (97/23/EC) AD2000-Merkblatt -40/+80°C (bar)	Dual shell (CE+ASME)	490	500	760	450	340	380	410	450
		STD	540	550	760	480	370	410	450	480
		High Performance	600	610	760	480	410	460	480	480
	ASME (VIII div. 1) -40/+200°F (psi)	w/o App.22	n/a	3000	3000	3000	2600	2900	3000	3000
		with App.22	n/a	4600	6800	4100	3100	3450	3800	4150

Maximum Allowable Working Pressure

Material : steel 34CrMo4 - SA372 grade F70

Please note that Working Pressures in tables are indicative

		1		4		10 (2,5)		10 (2,5)		
		0,5	1,1	1	4	12 (3)	12 (3)	12 (3)	12 (3)	
Roth Standard Capacity Liters (Gallons)		1,14	1,6	2,5	5	20 (5)	20 (5)	20 (5)	20 (5)	
		1,5	2,5	3	6	24,5 (6)	24,5 (6)	24,5 (6)	24,5 (6)	
		2,14	3	5	10	28 (7)	28 (7)	28 (7)	28 (7)	
			5		12,5	32 (10)	32 (10)	32 (10)	32 (10)	
					15	42 (12)	42 (12)	42 (12)	42 (12)	
Roth Standard Tubes Ø x mini thickness in mm		88,9 x 4,8	114,3 x 6,3	121 x 9,7	168,3 x 8,33	219,1 x 8,35	221 x 9,3	223,6 x 10,2	226,2 x 11,3	
“MARINE” Certifications	DNV Rules EN14359 -60/+80°C (bar) corrosion = 1mm	Dual shell (DNV+ASME)			401	305	340	375	420	
		High Performance				370	415	455	480	
	ABS Rules EN14359 -60/+80°C (bar) corrosion = 0mm	Dual shell (ABS+ASME)	500	510	760	450	340	380	420	460
		STD	540	560	760	480	380	420	450	480
		High Performance	600	620	760	480	420	460	480	480
	GL Rules EN14359 -60/+80°C (bar) corrosion = 0mm	Dual shell (GL+ASME)	340	350	530	310	240	260	290	320
		STD	380	380	580	340	260	290	315	350
		High Performance	410	420	630	380	280	320	345	380
	RINA Rules -40/+80°C (bar) corrosion = 0,75mm (Oil+N2) Gas possible	Dual shell (BVM+ASME)	290	310	485	285	220	245	270	295
		STD	315	340	530	310	235	265	290	325
		High Performance	345	370	580	340	265	290	320	355
	BV Marine Rules EN14359 -40/+80°C (bar) corrosion = 0mm	Dual shell (BVM+ASME)	500	510	765	455	345	385	420	460
		STD	545	560	835	480	380	420	455	480
		High Performance	605	620	925	480	420	465	480	480