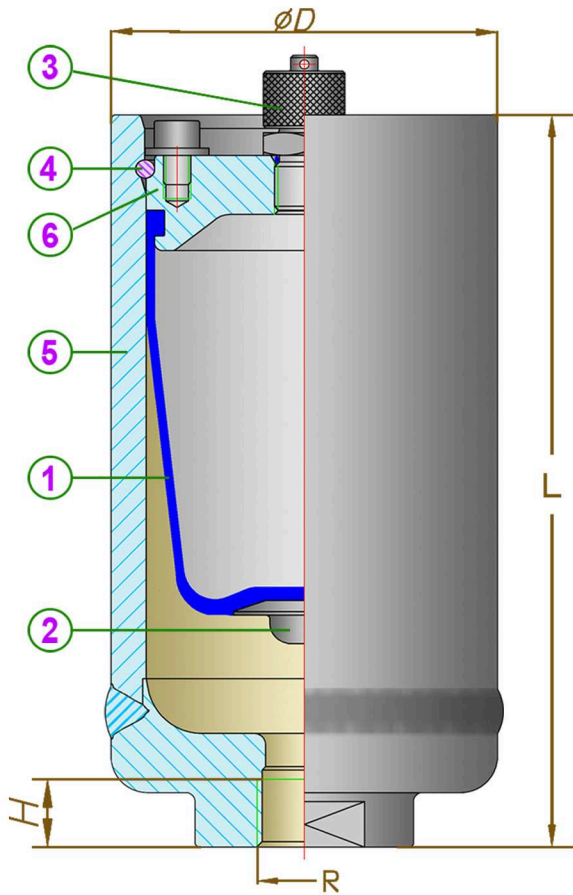


Wall thickness according to AD-2000 code

FOR HIGHER PRESSURES, OTHER SIZES, MATERIALS AND CONNECTION THREAD GAUGES, PLEASE CONSULT

TOLERANCES: External dimensions: ±3% Volume: ±2.5% Weight: ±5%

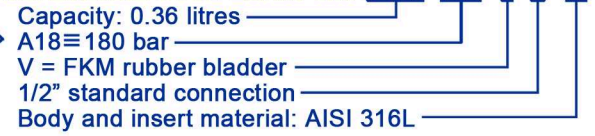
U003 to U250



H = MAX. LENGTH OF THE THREADED CONNECTION

A26	≡	260 bar
A18	≡	180 bar
A12	≡	120 bar
A11	≡	110 bar
A10	≡	100 bar

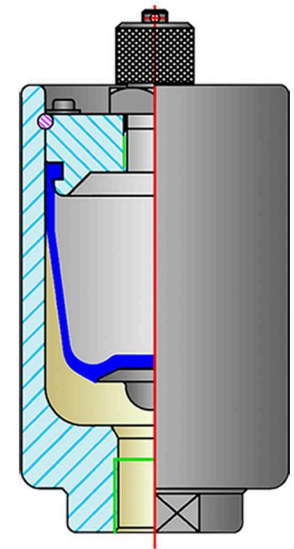
ORDER REFERENCE CODE EXAMPLE: U003 A18 V 1 AI



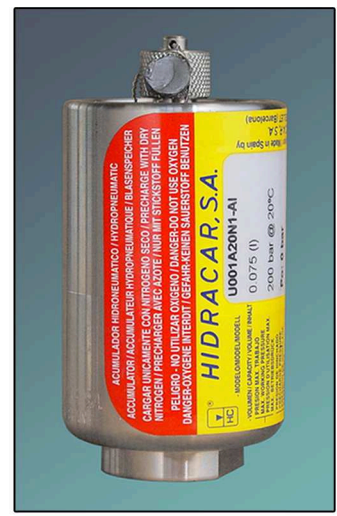
Standard bladder rubbers:
N= NBR E= EPDM V= FKM
(other rubbers: Butyl, Hypalon, HNBR, etc...)

Rubbers maximum working temperatures (°C):

N	E	V
+80 / -15	+130 / -30	+200 / -20



U001 & U002



Working temperature versus Working pressure

A working temperature of 80°C	lowers the working pressure x 0.87
" " " " 130°C	" " " " x 0.78
" " " " 200°C	" " " " x 0.68

THE MAX. TEMPERATURE CAN GET REDUCED DEPENDING ON THE PROCESS LIQUID
These pulsation dampeners should be filled with gas at 80% of the working pressure and at the working temperature in order to stabilize the flow.

$$\text{Value of "K"} : \frac{\text{Max. pressure}}{\text{Gas filling pressure}} \approx K (\text{@ constant temperature})$$

PULSATION DAMPENER MODEL	VOLUME (litres)	DESIGN PRESSURE (bar-g @ 20°C)	D (mm)	L (mm)	R (BSP)	H (mm)	WEIGHT (kg)	K VALUE
U001	0.09	260	55	100	3/8"	14	1.0	2.5
U002	0.18	180	70	118	1/2"	16	1.8	3
U003	0.36	180	85	161	1/2"	20	3.6	3.5
U007	0.65	120	90	205	1/2"	25	3.8	3
U010	0.95	110	112	245	3/4"	27	6.0	3.5
U015	1.50	110	140	295	1"	35	6.8	5
U030	2.60	110	140	386	1"	46.0	10.5	5
U040	3.80	110	170	438	1 1/2"	52.5	12.2	4
U060	5.60	120	170	438	1 1/2"	70.0	24.0	4
U100	10.4	100	224	442	2"		46.0	4
U150	15.0	100	270	625	2"		52.5	5
U250	25.0	100	270	691	2 1/2"		70.0	4

No.	DENOMINATION	QTY.	MATERIAL
6	GAS LID	1	AISI 316L
5	BODY	1	AISI 316L
4	RETAINING RING	1 / 2	DIN 17224 (AISI 316L)
3	GAS CHARGING VALVE	1	AISI 316L (1/4" BSP)
2	INSERT (BUTTON)	1	AISI 316L
1	BLADDER	1	NBR, EPDM, FKM and others

ATTENTION: MOUNT THE DAMPENER ALWAYS UPRIGHT (w/ #3 VALVE ON TOP)
IMPORTANT: The pre-charge with nitrogen gas or compressed air must be performed slowly and with the help of our charging tool (ref. BV#A1TM)

HIDRACAR S.A.
Pol. Ind. "Les Vives" - c/ Anaïs Nin, 14
08295 Sant Vicenç de Castellè (Barcelona) - SPAIN
www.hidracar.com - e-mail: hidracar@hidracar.com
Tel.: +34 938330252 Fax: +34 93 833 19 50

Customer _____ Customer ref. _____
Title **MEDIUM PRESSURE STAINLESS STEEL BLADDER PULSATION DAMPENERS (standard units)**

Replaces drawing AV.AI.MP.IN.DOC. (Rev. 16) Drawing AV.AI.MP.IN.DOC.
Drawn by E.Ponsa Rev. 17
Approved by M. Carcaré Date Dec 2015 Scale N/A