

Notes:

1. Designed in accordance with EN14359:2017
2. Maximum working pressure:360BAR
3. Design pressure:360BAR
4. Test pressure:515BAR
5. Design temperature:-40℃T0+80℃

volume (L)	10	12	20	24.5	32	42	50	57
$L_1 \pm 10$ (mm)	403	503	713	848	1235	1375	1750	1845
$L \pm 16$ (mm)	561	661	871	1006	1393	1533	1908	2003

ITEM	PART No.	DESCRIPTION	QTY	MATERIAL
24		CHARGING VALVE QXF 23	1	
23	NX397-16	SEALING GASKET 2	1	T <sub>3</sub>
22	NX397-15	PROTECTIVE CAP	1	35
21	GB810-76	GAS VALVE LOCKNUT	2	45
20	NX397-14	NAMEPLATE	1	AL
19	GB1235-76	FLUID PORT 'O' RING	1	OIL RESISTANT RUBBER
18	NX397-13	GERM VALVE	1	40Cr
17	NX397-12	SPRING	1	65Mn
16	NX397-11	PISTON	1	40Cr
15	GB93-1987	SINGLE COIL SPRING LOCK WASHERS , NORMAL TYPE M12	1	65Mn
14	GB/T9457-1988	HEXAGON SLOTTED AND CASTLE NUTS M12×1.25	1	A <sub>3</sub>
13	GB/T91-2000	SPLIT PINS 3.2×22	1	Q235
12	NX397-10	OIL VALVE BODY	1	40Cr
11	NX397-9	SEALING GASKET 1	1	T <sub>3</sub>
10	NX397-8	SCREW PLUG	1	45
9	GB812-76	LOCKING RING	2	45
8	NX397-7	PRESSURE RING	1	45
7	NX397-6	ADJUSTING GEAR RING	1	POLYTETRAFLUORETHYLENE
6	GB1235-76	FLUID PORT 'O' RING	1	VITON
5	NX397-5	SPACER RING	1	35
4	NX397-4	RETAINING RING	1	40Cr
3	NX397-3	FILLER RING	1	NITRILE
2	NX397-2	BLADDER	1	NITRILE
1	NX397-1	ACCUMULATOR SHELL	1	34CrMo4

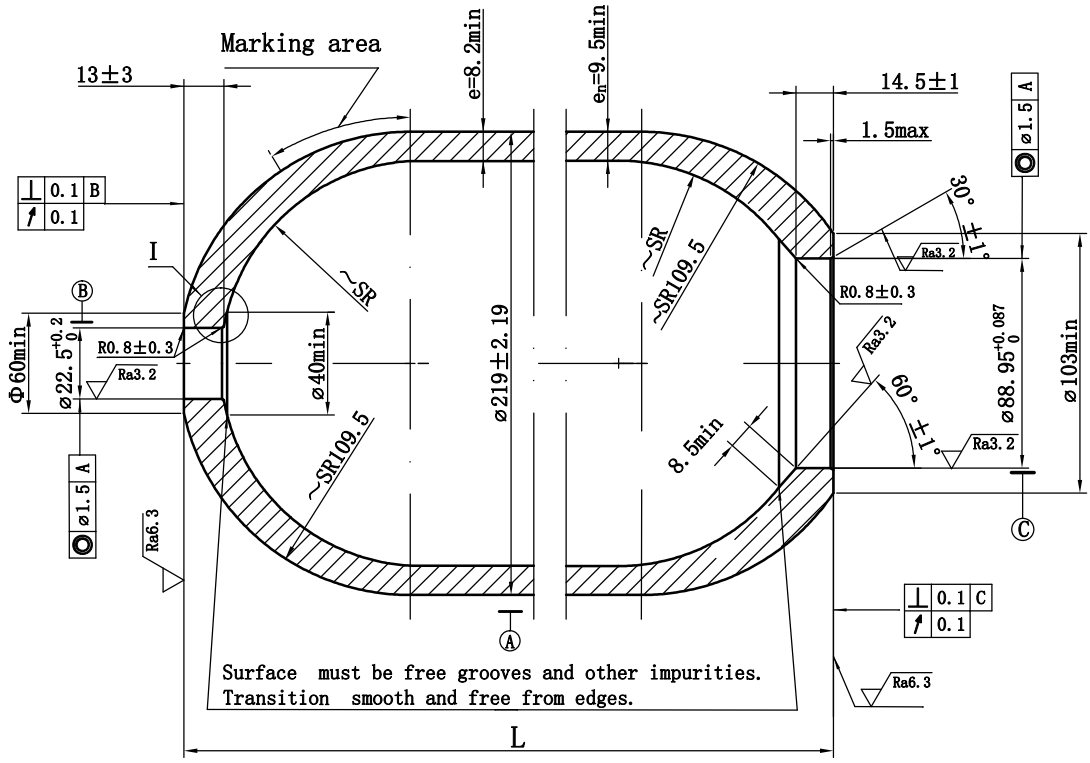
The technical requirements

1. The design, manufacture, inspection (test) and acceptance of the product are in accordance with PED 2014/68/EU *Pressure Equipment Directive* and EN14359:2017 *Gas Loaded Accumulators for Fluid Power Applications*
2. All parts shall be cleaned and checked before assembly. The inner surface of the shell should be clean without any sundries; The outer surface of the capsule shall not have scratches, sundries, pores and other air leakage defects; Other parts should be free of rust, burr and scratch defects.
3. The coating, packaging and transportation of the accumulator shall comply with the provisions of JB/T4711-2003 "Pressure Vessel Coating and Transportation Packaging", and shall be equipped with the accompanying documents and spare parts.

		<b>PRODUCT</b>		Drawing No. NX397-00 Rev.0	
		HPD-S-(10~57)-360-G-Y Bladder Accumulator		Mark of drawing	Weight Scale
				S	
Design	Reviewed	Material			
Drawing	Approved				
Corrected	Date:				
Zhuolu High Pressure Vessel Co., Ltd.					

volume (L)	10	12	20	24.5	32	42	50	57
L (mm)	403±10	503±10	713±10	848±10	1235±12.5	1375±12.5	1750±12.5	1845±12.5
weight (±10%)	23kg	28kg	40kg	47kg	68kg	76kg	96kg	101kg

others 



Surface must be free grooves and other impurities.  
Transition smooth and free from edges.

DESIGN DATA

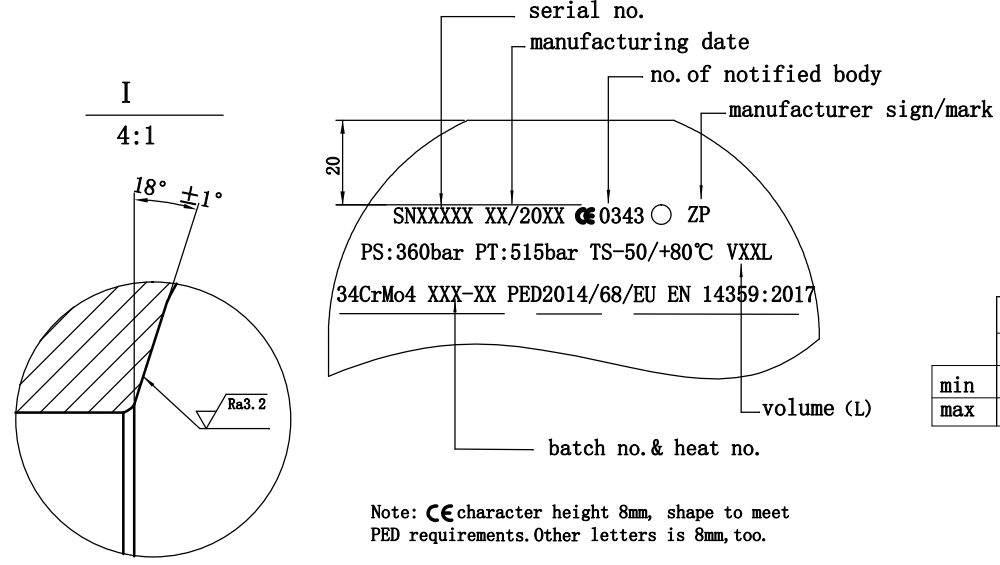
- VOLUME ; 10-57L
- MAX. WORKING PRESSURE; 360BAR
- TEST PRESSURE: 515BAR
- DESIGN TEMP: -50 TO +80°C
- CALCULATION/MANUFACTURING: EN14359: 2017
- APPROVED ACC TO: PED 2014/68/EU MODULE G
- MATERIAL: 34CrMo4 ACC TO VD TUV431:2020
- CLASSIFICATION: CATEGORY IV-FLUID GROUP2
- OVALITY: ≤1.0%
- ROUGHNESS Rz ≤200 μm
- FATIGUE ANALYSIS AND CALCULATION RESULTS (Acc to EN13445-3, art.17)  
Pmax-Pmin=360Bar-200Bar, Nall=44100 Cycles.

MECHANICAL DATA:

- TENSILE STRENGTH: 880 ≤ Rm ≤ 1030N/mm²
- YIELD STRENGTH : R<sub>p0.2</sub>(150°C) ≥ 650N/mm² ;  
R<sub>p0.2</sub>(20°C) ≥ 755N/mm² ;  
R<sub>p0.2</sub>(80°C) ≥ 707N/mm² ;
- YIELD IS TO TEST AT 150°C
- ELONGATION A: LONGITUDINAL 16% AT L0=5d
- AVERAGE CHARPY ISO-V MW ≥ 60J/cm² (AT -50°C)  
EW ≥ 48J/cm²  
IN LONGITUDINAL
- HEAT TREATMENT: LIQUID QUENCHED AND TEMPERED
- CORROSION ALLOWANCE: 0mm
- HARDNESS: 230HBW-313HBW
- SURFACE TREATMENT: INTERNAL SHOT BLAST AND OILED  
EXTERNAL SHOT BLAST AND PAINTED

NOTES:

- SAND BLASTED IN ACCORDANCE WITH ISO8501-1/SIS055900, INSIDE B SA2 AND OUTSIDE B SA2 1/2.
- ALL MACHINED SURFACE TO BE SMOOTH AND FREE OF TOOL MARKS AND NO COLOR / NO SAND BLASTED.
- PROTECT MACHINED PORTS WITHOUT CORROSION AND DAMAGE DURING STORAGE AND SHIPPING.
- GENERAL TOLERANCES ISO 2768-mk.



Note: CE character height 8mm, shape to meet PED requirements. Other letters is 8mm, too.

MELT ANALYSIS							
PROPORTION IN%							
	C	Si	Mn	P	S	Cr	Mo
min	0.30	0.15	0.50	-	-	0.90	0.15
max	0.37	0.35	0.80	0.035	0.020	1.20	0.30

PRODUCT	ACCUMULATOR SHELL
TYPE	10-57L 360BAR
MATERIAL	34CrMo4

		NAME	DATE
DRAWN			
CHECKED			
APPROVED			
Zhuolu High Pressure Vessel Co., Ltd.			
DRG. NO.	NX397	REV	0