

Notes:

1. Designed in accordance with EN14359:2017
2. Maximum working pressure:350BAR
3. Design pressure:350BAR
4. Test pressure:501BAR
5. Design temperature;-40℃T0+80℃

volume (L)	4	6
L <sub>1</sub> ±11 (mm)	286	416
L±16 (mm)	432	562

24		CHARGING VALVE QXF 23	1		
23	FF1802-008-16	SEALING GASKET 2	1	T <sub>3</sub>	
22	FF1802-008-15	PROTECTIVE CAP	1	35	
21	GB810-76	GAS VALVE LOCKNUT	2	45	
20	FF1802-008-14	NAMEPLATE	1	AL	
19	GB1235-76	FLUID PORT 'O' RING	1	OIL RESISTANT RUBBER	
18	FF1802-008-13	GERM VALVE	1	40Cr	
17	FF1802-008-12	SPRING	1	65Mn	
16	FF1802-008-11	PISTON	1	40Cr	
15	GB93-1987	SINGLE COIL SPRING LOCK WASHERS	1	65Mn	
14	GB/T9457-1988	HEXAGON SLOTTED AND CASTLE NUTS	1	A <sub>3</sub>	
13	GB/T91-2000	SPLIT PINS	1	Q235	
12	FF1802-008-10	OIL VALVE BODY	1	40Cr	
11	FF1802-008-9	SEALING GASKET 1	1	T <sub>3</sub>	
10	FF1802-008-8	SCREW PLUG	1	45	
9	GB812-76	LOCKING RING	2	45	
8	FF1802-008-7	PRESSURE RING	1	45	
7	FF1802-008-6	ADJUSTING GEAR RING	1	POLYTETRAFLUORETHYLENE	
6	GB1235-76	FLUID PORT 'O' RING	1	VITON	
5	FF1802-008-5	SPACER RING	1	35	
4	FF1802-008-4	RETAINING RING	1	40Cr	
3	FF1802-008-3	FILLER RING	1	NITRILE	
2	FF1802-008-2	BLADDER	1	NITRILE	
1	FF1802-008	ACCUMULATOR SHELL	1	34CrMo4	
ITEM	PART No.	DESCRIPTION	QTY	MATERIAL	

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*

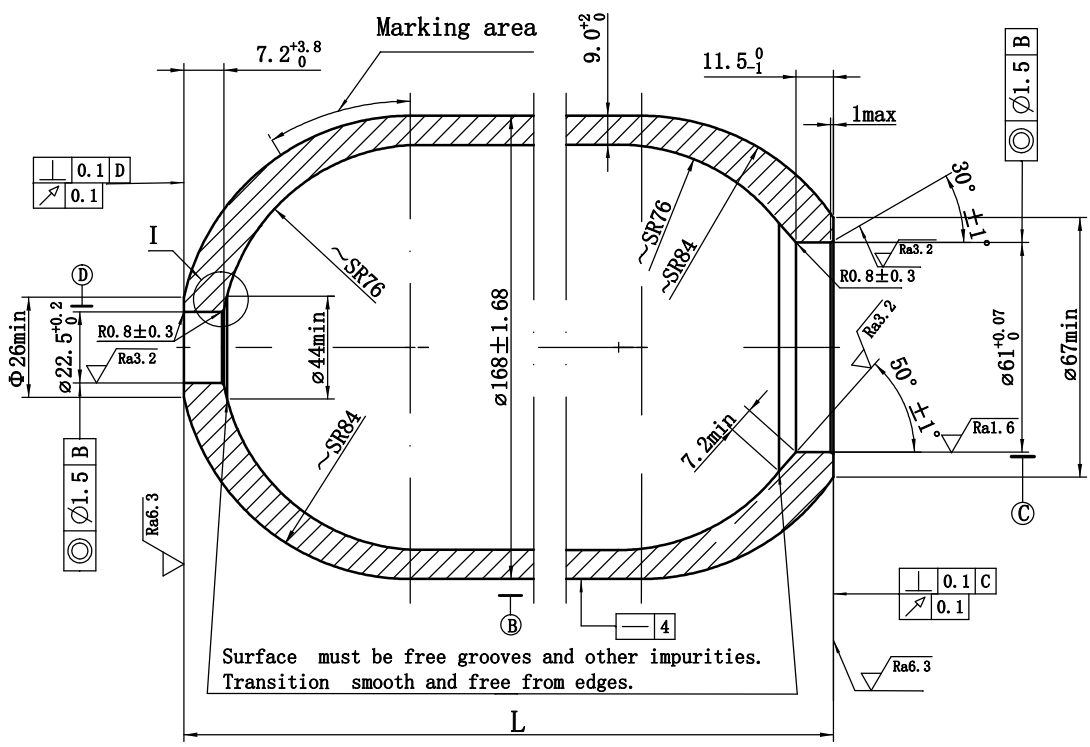
2. All parts shall be cleaned and checked before assembly. The inner surface of the shell should be clean without any sundries; The outer surface of the capsule shall not have scratches, sundries, pores and other air leakage defects; Other parts should be free of rust, burr and scratch defects.

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.

		PRODUCT		Drawing No. FF1802-008 Rev. 0	
		HPD-S-(4~6)-350-G-Y Bladder Accumulator		Mark of drawing	Weight Scale
				S	
Design	Reviewed	Material			
Drawing	Approved				
Corrected	Date:			Zhuolu High Pressure Vessel Co., Ltd.	

PN	31S11-004-03-00	31S11-006-02-00
volume (L)	4	6
L (mm)	286±11	416±11
weight (±10%)	11.5kg	16.1kg

others 



**DESIGN DATA**

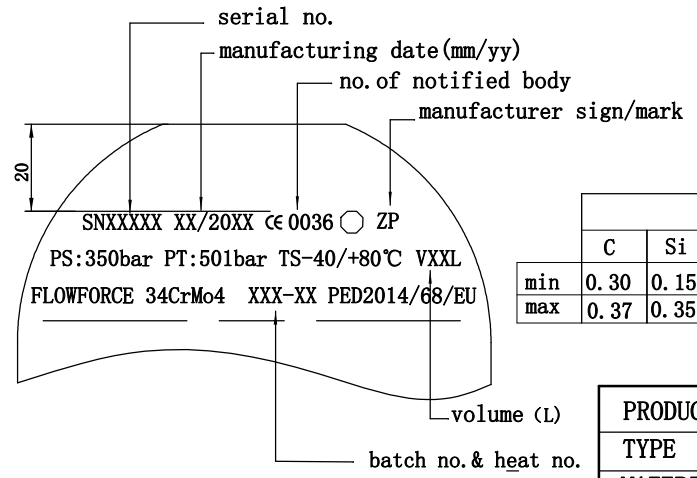
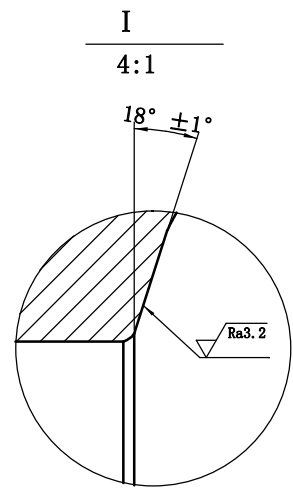
- VOLUME ; 4-6L
- MAX. WORKING PRESSURE; 350BAR
- TEST PRESSURE: 501BAR
- DESIGN TEMP: -40°C TO 80°C
- CALCULATION/MANUFACTURING: EN14359: 2006
- APPROVED ACC TO: PED 2014/68/EU MODULE B+F OR G
- MATERIAL: 34CrMo4 ACC TO VDTUV431-3.2
- CLASSIFICATION: CATEGORY III-FLUID GROUP2(4L, 6L)
- OVALITY: ≤0.5%
- ROUGHNESS: Rz ≤200 μm

**MECHANICAL DATA:**

- TENSILE STRENGTH: 880 ≤ Rm ≤ 1030N/mm<sup>2</sup>
- YIELD STRENGTH : R<sub>p0.2</sub>(150°C) ≥ 650N/mm<sup>2</sup> ;  
R<sub>p0.2</sub>(20°C) ≥ 755N/mm<sup>2</sup> ;  
R<sub>p0.2</sub>(80°C) ≥ 707N/mm<sup>2</sup> ;
- YIELD IS TO TEST AT 150°C:
- ELONGATION A: LONGITUDINAL 16% AT L0=5d
- AVERAGE CHARPY ISO-V MW ≥ 49J/cm<sup>2</sup> (AT -40°C)  
EW ≥ 34J/cm<sup>2</sup>  
IN LONGITUDINAL
- HEAT TREATMENT: LIQUID QUENCHED AND TEMPERED
- CORROSION ALLOWANCE: 1mm
- HARDNESS: 230HBW-313HBW
- SURFACE TREATMENT: IN AND OUTSIDE SHOT BLASTED  
INSIDE OILED-OUTSIDE 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.



**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	4-6L 350BAR
MATERIAL	34CrMo4

	NAME	DATE
DRAWN		
CHECKED		
APPROVED		
Zhuolu High Pressure Vessel. Co. Ltd		
DRG. NO.	FF1802-008	REV 0