

**KLÜG**  
HYDRAULICS



# ACCUMULATORS

## CATALOGUE / 2024

# 01

## Hydraulic accumulator station

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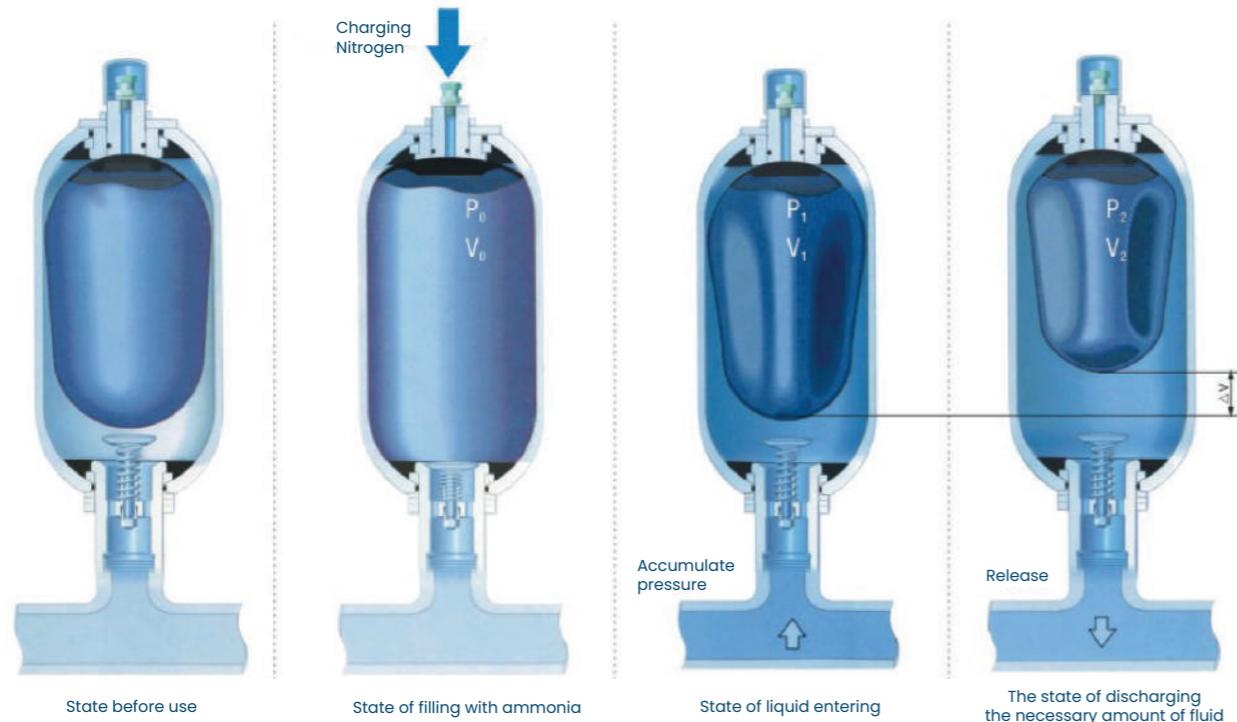
# 03

## GLC Series pipe type oil cooler

59

## Principle of Accumulator

Accumulator is a hydraulic accessory designed to accumulate the pressured liquid. Fluids are practically incompressible and cannot therefore store pressure energy. In hydraulic accumulators the compressibility of gas is utilized for storing fluids. The accumulator draws in fluid when the pressure increases and the gas are compressed. When the pressure drops, the compressed gas expands and forces the stored fluid into the circuit.



### ◆ Selection of energy accumulator capacity

1. Definition of state parameters

$P_0$ =pre-charging pressure;

$P_1$ = minimum working pressure;

$P_2$ = maximum working pressure;

$t_{\text{min}}$ = lowest working temperature;

$t_{\text{max}}$ = the highest working temperature;

$V_0$ = gas volume at  $P_0$

$V_1$ = Effective gas volume

$V_2$ = gas volume at  $P_2$ , time

$T_0$ = Pre-aired body temperature;

$n$ =variate index

### Calculation Formula:

$$\text{Changeable: } V_0 = \frac{\Delta V}{(\frac{P_0}{P_1})^{\frac{1}{n}} - (\frac{P_0}{P_2})^{\frac{1}{n}}}$$

$$\text{Isothermal: } V_0 = \frac{\Delta V}{\frac{P_0}{P_1} - \frac{P_0}{P_2}}$$

1. The state before use (ammonia and liquid did not enter).

2. The capsule is pre-filled with nitrogen, and the oil valve is closed to prevent the capsule from detaching.

3. When the minimum working pressure is reached, a small amount of oil (about 10% of the nominal capacity of the energy accumulator) should be retained outside the capsule and between the oil valve), so as not to cause the capsule to hit the valve during each expansion process, causing damage to the capsule.

4. The energy accumulator is at the highest working pressure. The volume change at the minimum working pressure and the highest working pressure is equivalent to the effective amount of oil.  $\Delta V = V_1 - V_2$

### ◆ The choice of pre-charged pressure

The NXQ series rubber table accumulator allows the volumetric utilization rate to be 75% of the actual gas capacity. Therefore, the ratio between the pre-filled nitrogen pressure and the maximum working pressure is limited to 1:4.

In addition, the pre-filled pressure shall not exceed 90% of the minimum system pressure.

Complying with this regulation can ensure a longer capsule service life. Other compression ratios can be achieved by special measures. In order to make full use of the capacity of the accumulator, it is recommended to use the following values.

Energy storage:  $P_0 t_{\text{max}} = 0,9 \times P_1$       Absorb impact:  $P_0 t_{\text{max}} = (0,6 \sim 0,9) \times P_m$  ( $P_m$  = The average working pressure of free circulation)

Absorption effect:  $P_0 t_{\text{max}} = 0,6 \times P_m$  ( $P_m$  = Average working pressure) or  $P_0 t_{\text{max}} = 0,8 \times P_1$  (Under the pressure of multi-god work)

The limit value of pre-charging pressure:  $P_0 \leq 0,9 \times P_1$ , the allowable compression ratio is  $P_2 : P_0 \leq 4:1$

### ◆ Energy accumulator capacity iterative juice calculation formula

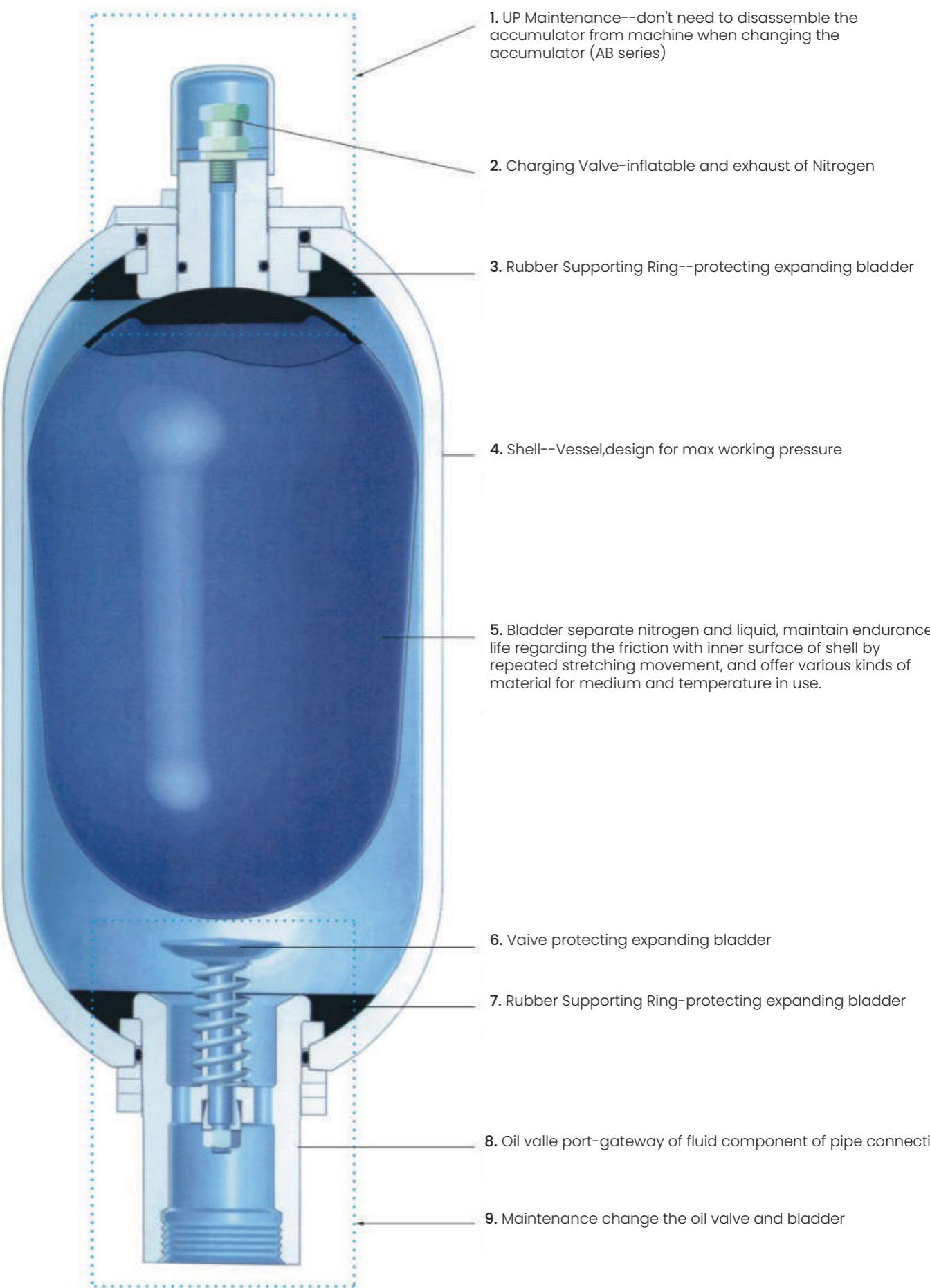
The compression and expansion processes in the accumulator should follow the law of variability of gas state.

The ideal gas is:  $P_0 \times V_0^n = P_1 \times V_1^n = P_2 \times V_2^n$

Among them, the influence index of the variable index "n" on gas properties over time should be considered.

The state change of the slow expansion and compression process is close to isotherm, and the variable index can be  $n=1$  while the rapid expansion and compression process changes the state of adiadic, and the variable index  $n=1,4$

( Nitrogen suitable for diatomic gases )



## Use of Accumulator

### ◆ Energy Storage

Accumulator is widely used in the auxiliary energy. It accumulates the oil intermittently outputted by pump while releases fluid more than the pump flux. Therefore the accumulator helps the pump to be size-miniatrization and energy-saving.



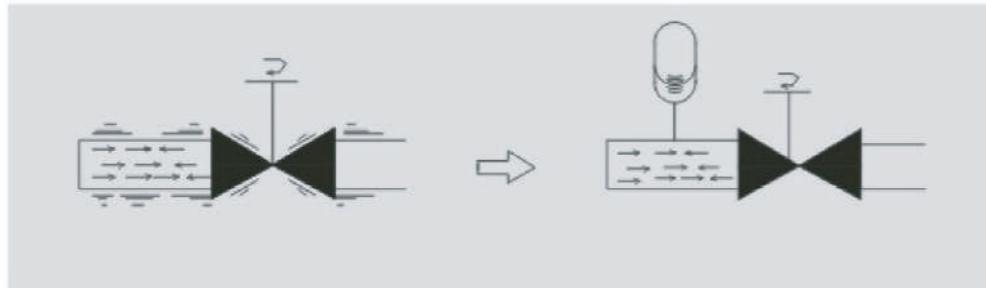
### ◆ Pulsation Absorption (Elimination)

Accumulator absorbs pulsation created by pressure fluid that is released by various pump to protect the pipe from the infection of pressure, noise and vibration.



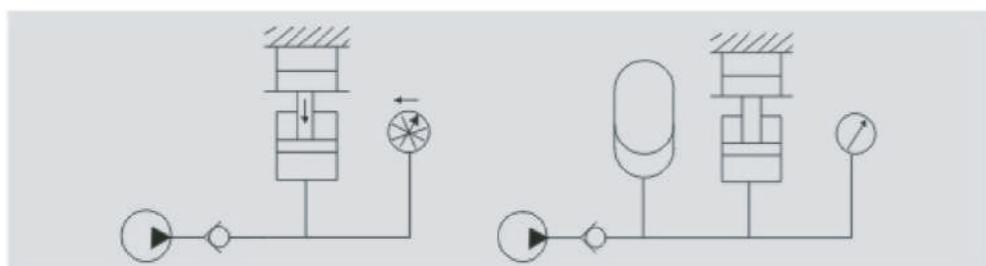
### ◆ Impact Absorption (Decrease)

In hydraulic circuit, impact in the pipe caused by rapid switching or sudden changing of load brings noise and pipe damage. Accumulator is set to absorb (decrease) the impact.



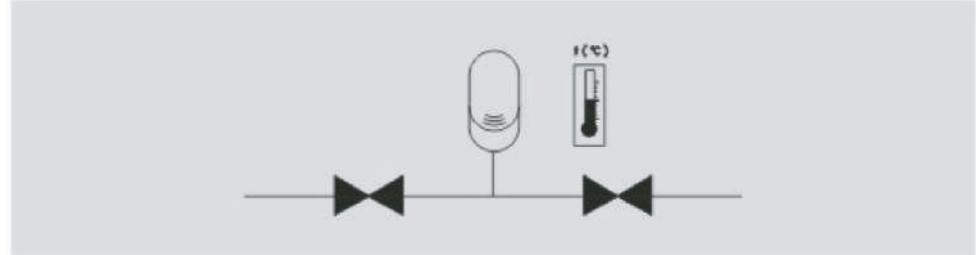
### ◆ Leakage Compensation

In pressure control circuit and condition of pressure maintaining, accumulator is set to maintain the pressure by compensating the pressure reduction caused by internal and external leakage.



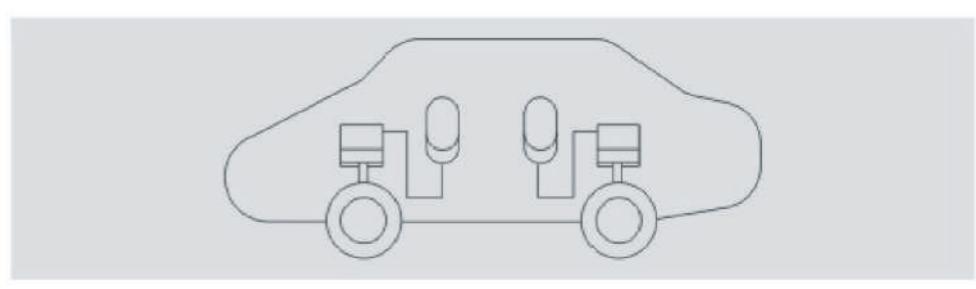
### ◆ Volume Compensation

Accumulator is widely used in the auxiliary energy. It accumulates the oil intermittently outputted by pump while releases fluid more than the pump flux. Therefore the accumulator helps the pump to be size-miniatrization and energy-saving.



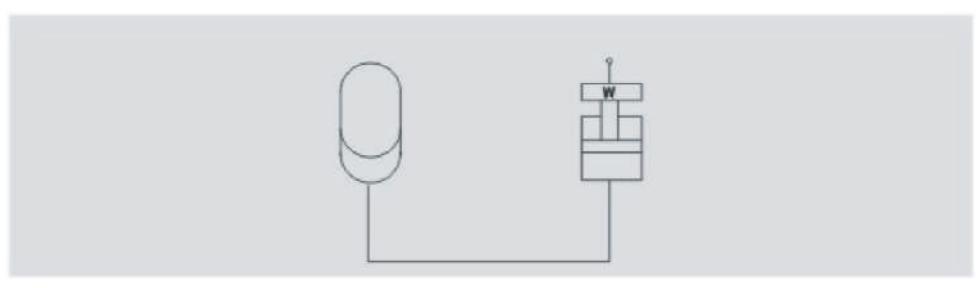
### ◆ Vibration Absorption

Accumulator absorbs pulsation created by pressure fluid that is released by various pump to protect the pipe from the infection of pressure, noise and vibration.



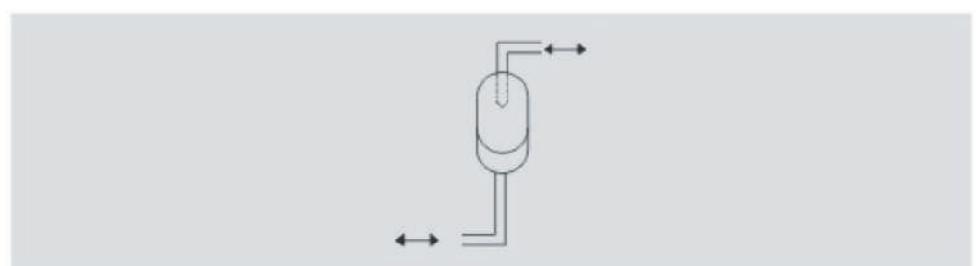
### ◆ Balance

In hydraulic circuit, impact in the pipe caused by rapid switching or sudden changing of load brings noise and pipe damage. Accumulator is set to absorb (decrease) the impact.



### ◆ Fluid separation

In pressure control circuit and condition of pressure maintaining, accumulator is set to maintain the pressure by compensating the pressure reduction caused by internal and external leakage.



( GB/T20663 )  
National Standard Accumulator



◆ Ordering Code

NXQ - / - -

Product Name: National standard accumulator

Structure Type: Type A, Type B

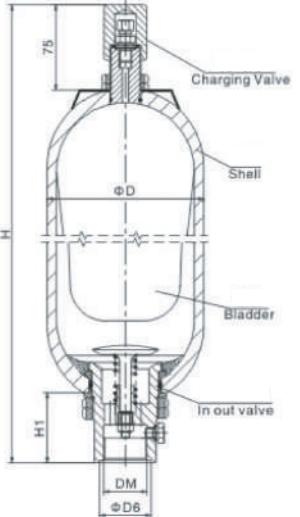
Nominal Volume: 0,4 ~ 250L

Nominal Pressure: 10,20,31,5Mpa, custom made

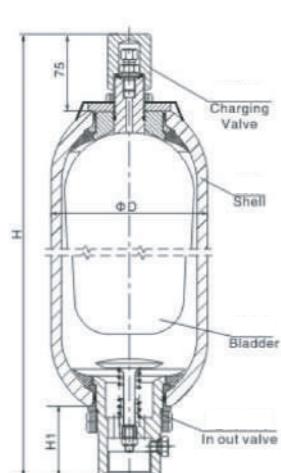
Coonnection type: L-Thread connection, F-Flang connection

◆ Structure and Dimension

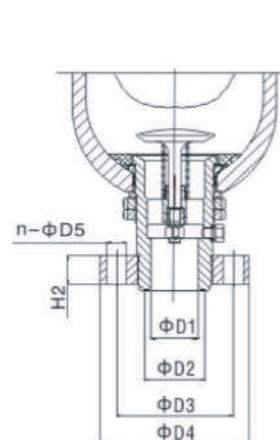
NXQA accumulator Thread connection  
NXQA - / - L -



NXQAB accumulator Thread connection  
NXQAB - / - L -



NXQA accumulator Flang connection  
NXQA - / - F -



◆ Dimensions

Model	Pressure (Mpa)	Max discharge flow rate		Volume (L)	Connection		Dimension (mm)									Weight (kg)	
					L	F	H	DM	ΦD1	ΦD2	ΦD3	ΦD4	n-ΦD5	ΦD6	H1	H2	
NXQ -0,4/ -L-	10	1	0,4	250	-												4,9
NXQ -0,63/ -L-			0,63	320	-												5,6
NXQ -1/ -L-			1	320	-												7,2
NXQ -1,6/ -LF-		3,2	1,6	355	370												12,5
NXQ -2,5/ -LF-			2,5	420	435												15
NXQ -4/ -LF-			4	530	545												18,5
NXQ -6,3/ -LF-			6,3	700	715												25,5
NXQ -10/ -LF-	20	6	10	660	685												38,5
NXQ -16/ -LF-			16	870	895												50,5
NXQ -20/ -LF-			20	1000	1025												58
NXQ -25/ -LF-			25	1170	1195												68
NXQ -32/ -LF-			32	1410	1435												82
NXQ -40/ -LF-			40	1690	1715												98
NXQ -50/ -LF-			50	2040	2065												118
NXQ -20/ -LF-		10	20	685	700												80
NXQ -25/ -LF-			25	780	795												92
NXQ -32/ -LF-			32	910	925												108
NXQ -40/ -LF-			40	1050	1065												125
NXQ -50/ -LF-			50	1240	1255												148
NXQ -63/ -LF-			63	1470	1485												176
NXQ -80/ -LF-			80	1810	1825												218
NXQ -100/ -LF-			100	2190	2205												266
NXQ -63/ -LF-	31,5	15	63	1188	1203												191
NXQ -80/ -LF-			80	1418	1433												228
NXQ -100/ -LF-			100	1688	1703												270
NXQ -125/ -LF-			125	2008	2023												322
NXQ -160/ -LF-			160	2478	2493												397
NXQ -100/ -LF-	20	25	100	1315	1360												441
NXQ -160/ -LF-			160	1915	1960												552
NXQ -160/ -LF-			200	2315	2360												663
NXQ -160/ -LF-			250	2915	2960												786

The number in bracket is the size of O-seal ring which meets GB/T235-76 Note: 1MPa=10bar=10.2kg/cm<sup>2</sup>

**◆ Mounting position**

Accumulators can be installed vertically, horizontally and obliquely. When vertically or obliquely installed, the oil valve must be at the bottom. In case of the applications listed below, particular positions are recommended.

Function	Installation requirements
Energy storage	Vertical
Pulse damping	Horizontal and vertical
Pressure maintaining	Horizontal and vertical
Volume compensation	Vertical

**◆ Type of Mounting**

Accumulators which volume is less than 1L, can be installed directly in the pipeline. For strong vibrations and volumes above 1L, fixed with bracket or accumulator mounting sets are recommended.

**◆ Charging Nitrogen**

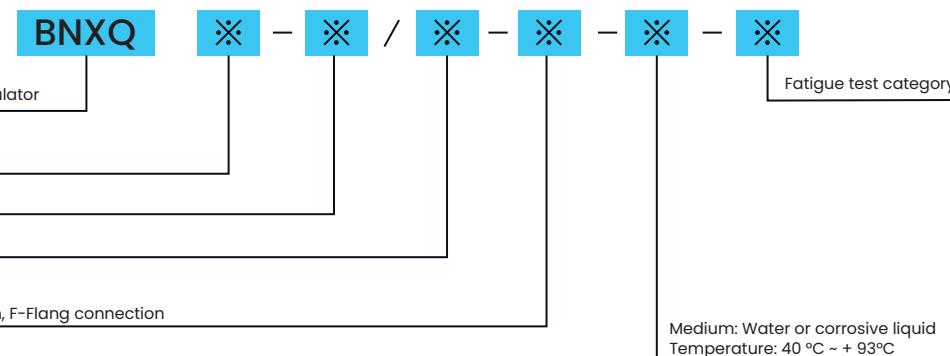
Nitrogen must be charged into the bladder before the accumulator starts to work. Charging nitrogen must use charging tools-CQJ type charging tool. If nitrogen pressure does not meet the requirement of accumulator, please use chaori CDZ type nitrogen filling vehicle.

**◆ Caution**

Do not have welding or mechanical processing work on the accumulator shell; Only nitrogen are allowed. Use of Oxygen, combustible or corrosive gases is strictly prohibited. Accumulators should be mounted in the hydraulic systems which have overflow valves or safety valves.

**◆ Booking Note**

Standard bladder accumulator:NXQA-40/31.5-F-Y.Nominal pressure:31.5MPa; Nominal volume:40L;  
Connection Type: Flanged connection; Medium: Hydraulic liquid.

**SS Bladder accumulator****◆ Ordering Code****◆ Structure and Dimension according national standard bladder accumulator**

### Bladder accumulator (ASME)



#### ◆ Ordering Code

BA(TA) - ✕ / ✕ - ✕ - ✕

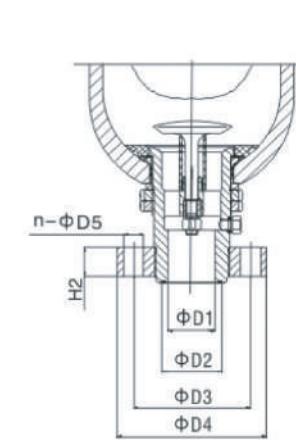
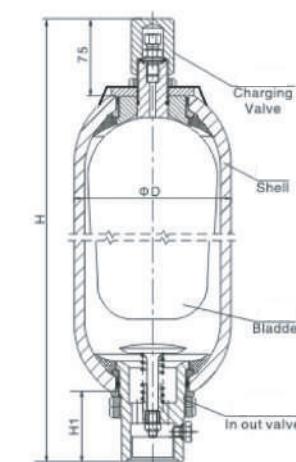
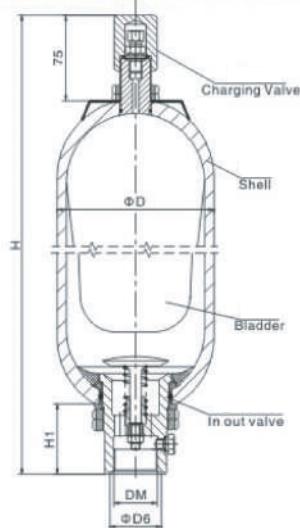
Structure:  
Bottom Dismantlement: BA  
Top Dismantlement:TA1, TA2

Volume: 0,15 ~ 15gal

Maximum Operating pressure: 3000 PSI - 5000PSI

Medium: O-hydraulic oil  
Coonection type: L-Thread connection  
F-Flang connection

#### ◆ Structure and Dimension



Standard

Top repairable

Accumulator flang connection

Design pressure	20.7 Mpa		3000psi
	34.5Mpa		5000psi
Test pressure	27Mpa		3900psi
	44.9Mpa		6500psi
Medium	Oil, Nitrogen		Oil, N
	Operating temp		-20°C ~ 70°C
Charging pressure	Minimum working pressure 60 ~ 90%		60 ~ 90%
	Connection type		Threaded connection
Fixation	Flange connection		Flang connection
	Instalation		Fastening ring and support seat
Vertical Installation		Fastening ring&Support seat	
Instalation		Vertically mounted	

### 3000PSI

Model	VOL		Dimensions						Netwt			
	gal	L	H	mm	In	mm	H1	D	M	G	IB	kg
BA - 0.15/3000-N-0	0,15	0,6	12,6	320	7,48	190					12,4	5,6
BA - 0.25/3000-N-0	0,25	1	12,6	320	7,48	190					17,6	8
BA - 0.6/3000-N-0	0,6	2,5	16,54	420	11,02	280					30	14
BA - 1.0/3000-N-0	1	4	20,87	530	15,35	390					40	18
BA - (TA) - 2,5/3000-N-0	2,5	10	21,56	550	16,14	410					81	37
BA - (TA) - 5/3000-N-0	5	20	33,46	850	27,95	710					125	57
BA - (TA) - 8/3000-N-0	8	20	47,64	1210	42,13	1070					176	80
BA - (TA) - 10/3000-N-0	10	40	56,70	1440	51,18	1300					209	95
BA - (TA) - 11/3000-N-0	11	44	61,42	1560	55,9	1420					227	103
BA - (TA) - 14/3000-N-0	14	56	75,60	7920	70,08	1780					288	130
BA - (TA) - 15/3000-N-0	15	60	80,31	2040	74,8	1900					303	138

### 5000PSI

Model	VOL		Dimensions						Netwt			
	gal	L	H	mm	In	mm	H1	D	M	G	IB	kg
BA - 2,5/5000 - * - *	2,5	10	21,26	540	15,75	400					9,65	245
BA - 5/5000 - * - *	5	20	32,68	830	27,17	690					9,65	245
BA - 8/5000 - * - *	8	32	46,46	1180	40,94	1040					9,65	245
BA - 10/5000 - * - *	10	40	55,12	1400	49,61	1260					9,65	245
BA - (TA) - 11/5000 - * - *	11	44	59,84	1520	54,33	1380					9,65	245
BA - (TA) - 14/5000 - * - *	14	56	73,62	1870	68,11	1730					9,65	245
BA - (TA) - 15/5000 - * - *	15	60	78,35	1990	72,83	1850					9,65	245

Note: 1. BA: Bottom dismantlement, TA: Top dismantlement

2. Special accumulators not in the list, with increased flowrate or top dismantlement can be ordered accordingly

### PED type Bladder accumulator



#### ◆ Ordering Code

NXQ **\*** - **\*** / **\*** - **\*** - **\***

Product Name: Standard accumulator

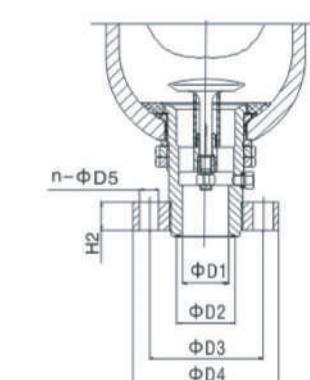
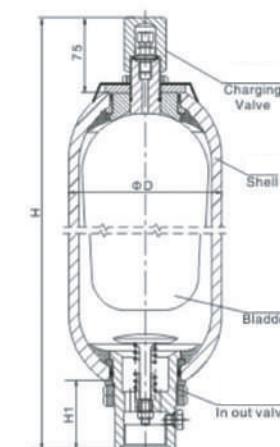
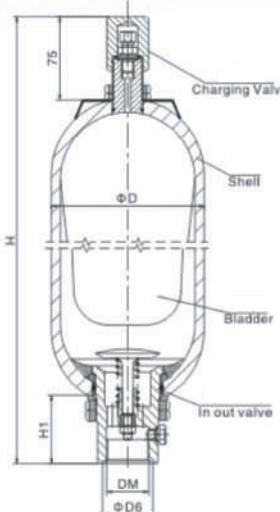
Structure Type: Type A, Type B

Nominal Volume: 0,4 ~ 250L

Nominal Pressure: 10,20,31,5Mpa, custom made

Connection type: L-Thread connection, F-Flang connection

#### ◆ Structure and Dimension



Standard

Top repairable

Accumulator flang connection

#### ◆ Dimensions

Model	Pressure (Mpa)	Max discharge flow rate		Volume (L)	Connection		Dimension (mm)								Weight (kg)	
					L	F	L	F	H1	H2	φD					
		L	F		H		DM	-D1	φD2	φD3	φD4	n-φD5	φD6	H1	H2	
NXQ <b>*</b> -0,4/ <b>*</b> -L- <b>*</b>	10	1	0,4	250	-	M27x2	-	-	-	-	-	32 (φ50x3,1)	52	89	4,9	
NXQ <b>*</b> -0,63/ <b>*</b> -L- <b>*</b>			0,63	320	-		-	-	-	-	-	32 (φ50x3,1)	52		5,6	
NXQ <b>*</b> -1/ <b>*</b> -L- <b>*</b>			1	320	-		-	-	-	-	-	114	7,2		7,2	
NXQ <b>*</b> -1,6/ <b>*</b> -LF- <b>*</b>		3,2	1,6	355	370	M42x2	42	50 (φ50x3,1)	97	130	6-Φ17	50 (φ50x3,1)	66	25	152	12,5
NXQ <b>*</b> -2,5/ <b>*</b> -LF- <b>*</b>			2,5	420	435		-	-	-	-	-	50 (φ50x3,1)	66	25	152	15
NXQ <b>*</b> -4/ <b>*</b> -L/F- <b>*</b>			4	530	545		-	-	-	-	-	50 (φ50x3,1)	66	25	152	18,5
NXQ <b>*</b> -6,3/ <b>*</b> -L/F- <b>*</b>			6,3	700	715		-	-	-	-	-	50 (φ50x3,1)	66	25	152	25,5
NXQ <b>*</b> -10/ <b>*</b> -L/F- <b>*</b>	20	6	10	660	685	M60x2	50	50 (φ70x3,1)	125	160	6-Φ21	50 (φ70x3,1)	90,5	32	219	38,5
NXQ <b>*</b> -16/ <b>*</b> -L/F- <b>*</b>			16	870	895		-	-	-	-	-	50 (φ70x3,1)	90,5	32	219	50,5
NXQ <b>*</b> -20/ <b>*</b> -L/F- <b>*</b>			20	1000	1025		-	-	-	-	-	50 (φ70x3,1)	90,5	32	219	58
NXQ <b>*</b> -25/ <b>*</b> -L/F- <b>*</b>			25	1170	1195		-	-	-	-	-	50 (φ70x3,1)	90,5	32	219	68
NXQ <b>*</b> -32/ <b>*</b> -L/F- <b>*</b>			32	1410	1435		-	-	-	-	-	50 (φ70x3,1)	90,5	32	219	82
NXQ <b>*</b> -40/ <b>*</b> -L/F- <b>*</b>			40	1690	1715		-	-	-	-	-	50 (φ70x3,1)	90,5	32	219	98
NXQ <b>*</b> -50/ <b>*</b> -L/F- <b>*</b>			50	2040	2065		-	-	-	-	-	50 (φ70x3,1)	90,5	32	219	118
NXQ <b>*</b> -20/ <b>*</b> -L/F- <b>*</b>	31,5	10	20	685	700	M72x2	60	80 (φ80x3,1)	150	200	6-Φ26	80 (φ80x3,1)	110	40	299	80
NXQ <b>*</b> -25/ <b>*</b> -L/F- <b>*</b>			25	780	795		-	-	-	-	-	80 (φ80x3,1)	110	40	299	92
NXQ <b>*</b> -32/ <b>*</b> -L/F- <b>*</b>			32	910	925		-	-	-	-	-	80 (φ80x3,1)	110	40	299	108
NXQ <b>*</b> -40/ <b>*</b> -L/F- <b>*</b>			40	1050	1065		-	-	-	-	-	80 (φ80x3,1)	110	40	299	125
NXQ <b>*</b> -50/ <b>*</b> -L/F- <b>*</b>			50	1240	1255		-	-	-	-	-	80 (φ80x3,1)	110	40	299	148
NXQ <b>*</b> -63/ <b>*</b> -L/F- <b>*</b>			63	1470	1485		-	-	-	-	-	80 (φ80x3,1)	110	40	299	176
NXQ <b>*</b> -80/ <b>*</b> -L/F- <b>*</b>			80	1810	1825		-	-	-	-	-	80 (φ80x3,1)	110	40	299	218
NXQ <b>*</b> -100/ <b>*</b> -L/F- <b>*</b>		15	100	2190	2205		-	-	-	-	-	80 (φ80x3,1)	110	40	299	266
NXQ <b>*</b> -63/ <b>*</b> -L/F- <b>*</b>			63	1188	1203		-	-	-	-	-	80 (φ80x3,1)	110	40	299	191
NXQ <b>*</b> -80/ <b>*</b> -L/F- <b>*</b>			80	1418	1433		-	-	-	-	-	80 (φ80x3,1)	110	40	299	228
NXQ <b>*</b> -100/ <b>*</b> -L/F- <b>*</b>			100	1688	1703		-	-	-	-	-	80 (φ80x3,1)	110	40	299	108
NXQ <b>*</b> -125/ <b>*</b> -L/F- <b>*</b>			125	2008	2023		-	-	-	-	-	80 (φ80x3,1)	110	40	299	125
NXQ <b>*</b> -160/ <b>*</b> -L/F- <b>*</b>			160	2478	2493		-	-	-	-	-	80 (φ80x3,1)	110	40	299	148
NXQ <b>*</b> -100/ <b>*</b> -L/F- <b>*</b>	20	25	100	1315	1360	M100x3	98	115 (φ115x5,7)	220	255	8-Φ26	115 (φ115x5,7)	116	50	426	441
NXQ <b>*</b> -160/ <b>*</b> -L/F- <b>*</b>			160	1915	1960		-	-	-	-	-	115 (φ115x5,7)	116	50	426	552
NXQ <b>*</b> -160/ <b>*</b> -L/F- <b>*</b>			200	2315	2360		-	-	-	-	-	115 (φ115x5,7)	116	50	426	663
NXQ <b>*</b> -160/ <b>*</b> -L/F- <b>*</b>			250	2915	2960		-	-	-	-	-	115 (φ115x5,7)	116	50	426	786

Note: 1. Contact us if special requirement is needed.

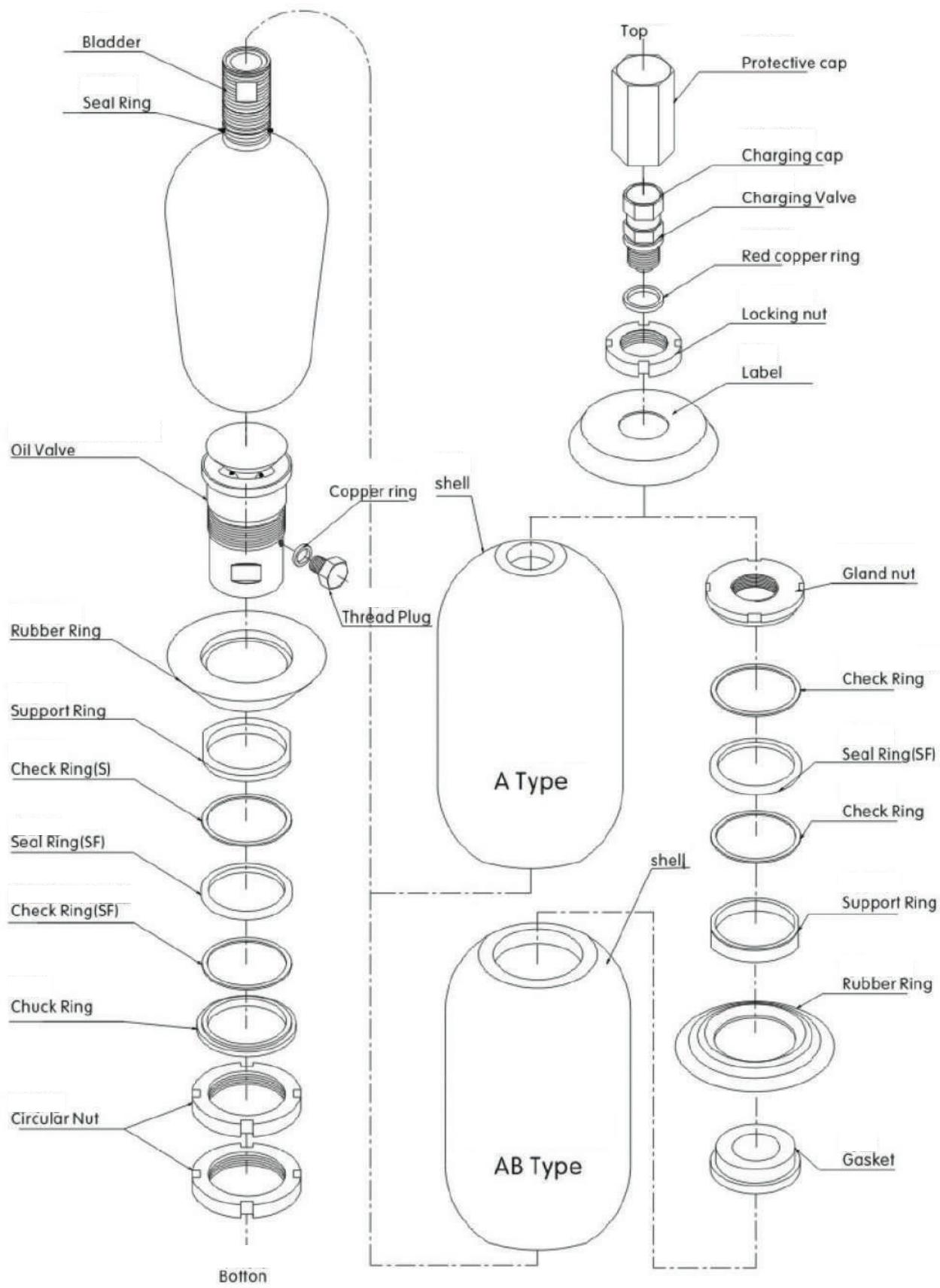
2. Design change is retained by our company and amendment is effected without further notice.

3. If customers need to increase the flow of production can be ordered.

#### ◆ Booking Note

Nominal working pressure 31,5Mpa, nominal Volume 10L, Flange connection , Hydraulic oil: NXQA-10/31,5-F-Y.

### Bladder Accumulator Assembly Drawing



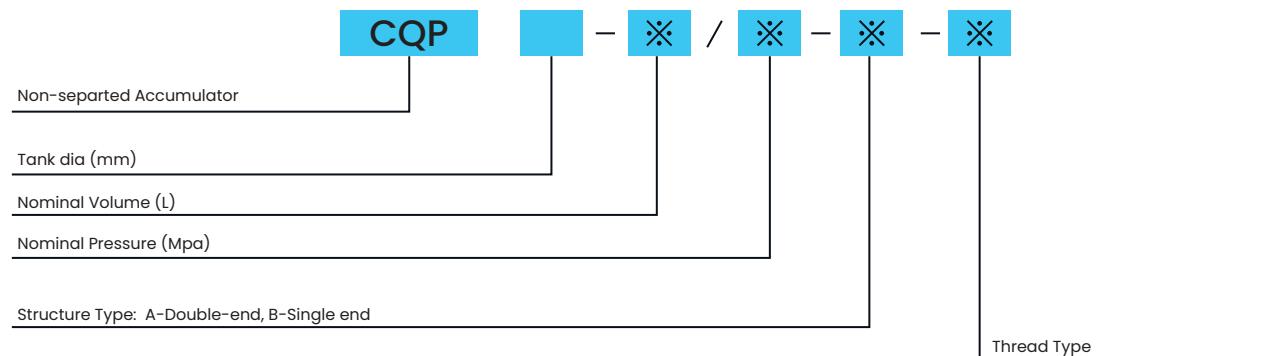
### CQP Nitrogen tank (Gas bottle)

#### ◆ General description

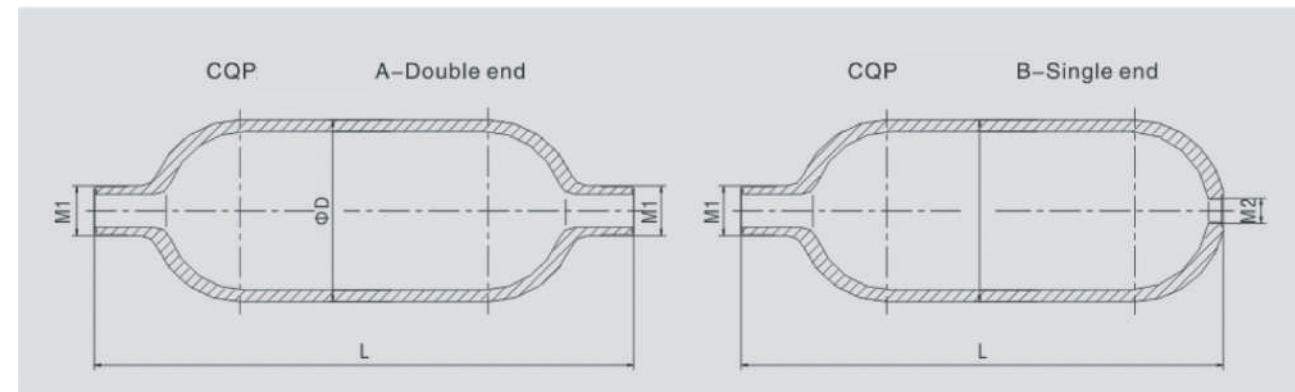
The gas container stores energy. In hydraulic and pneumatic systems, it can store energy and stabilize pressure. It has the advantage of big volume, small power and compact size. The gas containers adopt seamless steel tube thermal stretch spinning technique and have the advantages of high reliability, pretty appearance, and steady capability and So on. They have been widely used in mechanical industry and military industry.



#### ◆ Ordering Code

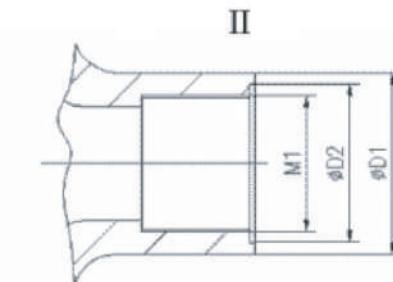
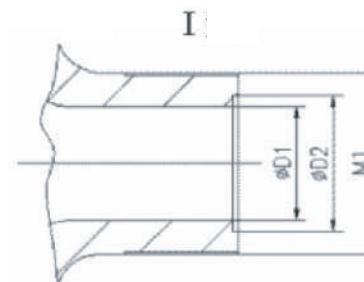


#### ◆ Dimensions and Sizes



◆ Dimensions

Model	Outer diameter ΦD (mm)	Nominal Pressure ΦD (Mpa)	Nominal Volume (L)	Dimensions (mm)		Connection thread		Weight	
				A	B	M1	M2	A	B
CQP219 - 10/20 - ✕	219	20	10	540	480	I M1=M60 X 2 ΦD1=40 ΦD2=50	M30X1,5-6H (O Type Ring Φ38X3,1)	25	22
CQP219 - 16/20 - ✕			1,6	740	680			34	32
CQP219 - 25/20 - ✕			7,5	2030	970			48	45
CQP219 - 32/20 - ✕			32	1250	1190			58	56
CQP219 - 40/20 - ✕			40	1510	1450			70	68
CQP219 - 50/20 - ✕		31,5	50	1830	1770			85	83
CQP219 - 10/31,5 - ✕			10	560	490			28	27
CQP219 - 16/31,5 - ✕			16	760	700			40	39
CQP219 - 25/31,5 - ✕			25	1060	990			58	57
CQP219 - 32/31,5 - ✕			32	1300	1240			73	73
CQP219 - 40/31,5 - ✕		20	40	1560	1500			89	88
CQP219 - 50/31,5 - ✕			50	1900	1840			110	109
CQP299 - 32/20 - ✕	299	20	32	800	720	I M1=M60 X 2 ΦD1=50 ΦD2=60	M42X2-6H (O Type Ring Φ50X3,1)	59	57
CQP299 - 40/20 - ✕			40	920	860			70	69
CQP299 - 50/20 - ✕			50	1090	1030			84	83
CQP299 - 63/20 - ✕			63	1310	1250			103	102
CQP299 - 72/20 - ✕			72	1460	1400			116	114
CQP299 - 80/20 - ✕		31,5	80	1600	1530			127	125
CQP299 - 100/20 - ✕			100	1940	1870			156	154
CQP299 - 32/31,5 - ✕			32	830	760			80	78
CQP299 - 40/31,5 - ✕			40	970	910			96	95
CQP299 - 50/31,5 - ✕			50	1150	1080			116	114
CQP299 - 63/31,5 - ✕		20/31,5	63	1380	1320			141	140
CQP299 - 72/31,5 - ✕			72	1540	1480			159	158
CQP299 - 80/31,5 - ✕			80	1690	1620			176	174
CQP299 - 100/31,5 -			100	2040	1980			215	214
CQP351 - 63/ ✕- ✕	351	20/31,5	63	1100	1300	I M1=M115 X 3 ΦD1=75 ΦD2=85	M42X2-6H (O Type Ring Φ50X3,1)	155	153
CQP351 - 80/ ✕- ✕			80	1320	1250			189	185
CQP351 - 100/ ✕- ✕			100	1580	1510			229	226
CQP351 - 125/ ✕- ✕			125	1900	1840			279	277
CQP351 - 140/ ✕- ✕			140	2090	2020			310	300
CQP351 - 150/ ✕- ✕		31,5	150	2230	2160			331	327
CQP351 - 180/ ✕- ✕			180	2620	2550			391	388
CQP351 - 200/ ✕- ✕			200	2880	2810			432	428
CQP351 - 250/ ✕- ✕			250	3520	3470			532	530



◆ Matters needing attention

- 1.Gas container should not be fixed by welding type or riveting type.
2. Be sure that there is no gas leakage after installed.
3. The gas bottle should carry on the inspection regularly according to the stipulation.
4. The oxygen gas and other tincture and explosive gases are forbidden.

◆ Booking Note

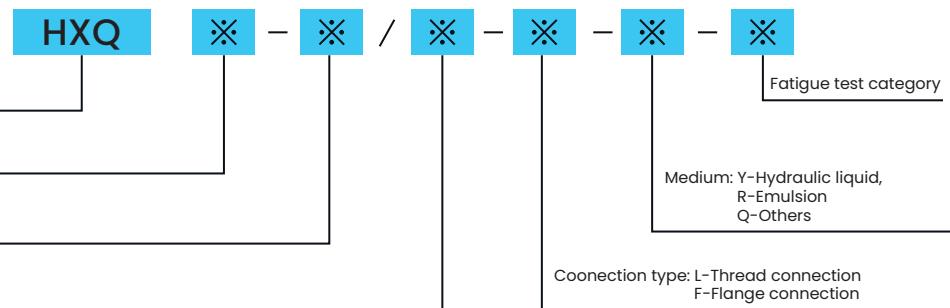
1.Full type code is needed when booking. For example: the gas bottle of operating pressure:20MPa,nominal volume: 16L, diameter:219mm,structure type: double end.CQP219-16/20-A

## Bladder Accumulator Assembly Drawing

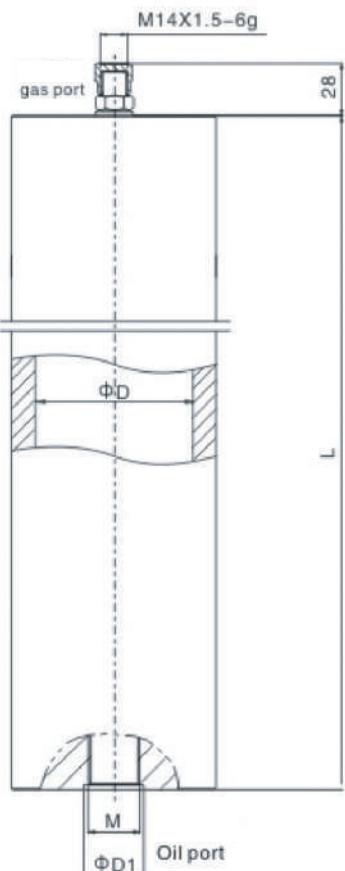
### ◆ General description

HXQ series piston type accumulator, designed by our factory with complete product specifications.we can design according customer request. Piston accumulator advantage with good sealing ,no leakage,high temperature resistance,long service life.

### ◆ Ordering Code



### ◆ Structure and Dimension



Model	Nominal Pressure (Mpa)	Nominal Volume (l)	Dimensions (mm)				Length (mm)	Weight (kg)
			ΦD	M	ΦD1	ΦD2		
HXQ※- 0.22/※ -※ -※	10 ~ 99	0.22	63	M22 X 1.5	35	83	225	7.1
HXQ※- 0.49/※ -※ -※		0.49					310	8.5
HXQ※-1/※ -※ -※		1					470	11.5
HXQ※-2/※ -※ -※		2					795	17.5
HXQ※-1/※ -※ -※	10 ~ 35	1	80	M27 X 2	I08	380	22	
HXQ※-2/※ -※ -※		2					580	28
HXQ※-2.5/※ -※ -※	10 ~ 99	2.5	100	M42X 2	50	I27	510	31
HXQ※-3.5/※ -※ -※		3.5					640	36
HXQ※-5/※ -※ -※		5					830	44
HXQ※-6/※ -※ -※		6					955	49
HXQ※-7.5/※ -※ -※		7.5					1145	57
HXQ※-2/※ -※ -※	10 ~ 35	2	125	M42X 2	163	I63	390	44.5
HXQ※-4/※ -※ -※		4					555	55.5
HXQ※-5/※ -※ -※		5					635	61
HXQ※-6/※ -※ -※		6					715	66.5
HXQ※-8/※ -※ -※		8	150	M60 X 2	194	I94	600	86
HXQ※-10/※ -※ -※		10					715	97
HXQ※-12/※ -※ -※		12					830	107.5
HXQ※-10/※ -※ -※		10	180	M60 X 2	219	I94	940	118
HXQ※-16/※ -※ -※		16					670	90.5
HXQ※-25/※ -※ -※		25					910	114
HXQ※-32/※ -※ -※		30					1250	146
HXQ※-35/※ -※ -※		35					1540	174
HXQ※-40/※ -※ -※	10 ~ 35	40	21	M60 X 2	219	I94	1655	198
HXQ※-45/※ -※ -※		45					1850	218
HXQ※-50/※ -※ -※		50					2050	238
HXQ※-25/※ -※ -※		25	195	M60 X 2	219	I94	2245	258
HXQ※-30/※ -※ -※		30					1116	121.5
HXQ※-40/※ -※ -※		40					1285	121.5
HXQ※-50/※ -※ -※		50					1620	151.5
HXQ※-60/※ -※ -※		60					1955	172.5
HXQ※-40/※ -※ -※	10 ~ 35	40	200	M60 X 2	245	I94	1625	280.5
HXQ※-45/※ -※ -※		45					1770	301.5
HXQ※-50/※ -※ -※		50					1930	322.5
HXQ※-60/※ -※ -※		60					2250	365.5
HXQ※-80/※ -※ -※		80					267	
HXQ※-20/※ -※ -※	10 ~ 35	20	220	M60 X 2	267	I94	850	192
HXQ※-32/※ -※ -※		32					1165	250
HXQ※-40/※ -※ -※		40					1380	267
HXQ※-50/※ -※ -※		50					1640	323
HXQ※-60/※ -※ -※		60					1905	341
HXQ※-80/※ -※ -※		80					2430	443

Model	Nominal Pressure (Mpa)	Nominal Volume (L)	Dimensions (mm)				Length (mm)	Weight (kg)				
			ΦD	M	ΦD1	ΦD2						
HXQ-40/※-※-※	10 ~ 99	0.22	63	M22 X 1.5	35	83	225	7.1				
HXQ-50/※-※-※		0.49					310	8.5				
HXQ-60/※-※-※		1					470	11.5				
HXQ-80/※-※-※		2					795	17.5				
HXQ-100/※-※-※		1	80	M27 X 2	108		380	22				
HXQ-120/※-※-※	10 ~ 35	2					580	28				
HXQ-60/※-※-※		2.5	100	M42 X 2	127		510	31				
HXQ-70/※-※-※		3.5					640	36				
HXQ-80/※-※-※		5					830	44				
HXQ-90/※-※-※		6					955	49				
HXQ-100/※-※-※		7.5					1145	57				
HXQ-110/※-※-※		2	125				390	44.5				
HXQ-120/※-※-※		4					555	55.5				
HXQ-130/※-※-※		5					635	61				
HXQ-140/※-※-※		6					715	66.5				
HXQ-150/※-※-※		6	150	194	163		600	86				
HXQ-160/※-※-※		8					715	97				
HXQ-100/※-※-※		10					830	107.5				
HXQ-120/※-※-※		12					940	118				
HXQ-130/※-※-※		10	180	219	50		670	90.5				
HXQ-150/※-※-※		16					910	114				
HXQ-250/※-※-※		25					1250	146				
HXQ-215/※-※-※		30					1540	174				
HXQ-130/※-※-※		35					1655	198				
HXQ-150/※-※-※		40					1850	218				
HXQ-180/※-※-※		45					2050	238				
HXQ-200/※-※-※		50					2245	258				
HXQ-250/※-※-※		25					1116	121.5				
HXQ-350/※-※-※		30					1285	121.5				

#### ◆ Booking Note

1. Piston accumulater:HQA-50/20-L-Y-I, Nominal volume is 50L, Nominal pressure is 20Mpa thread connection. Medium is Hydraulic liquid.

2. Design change is retained by our company and amendment is effected without further notice.

#### ◆ Special order

Contact us if special requirement is needed, custom made are welcome.

## Pipeline Accumulator

#### ◆ General description

HXQ series piston type accumulator, designed by our factory with complete product specifications. We can design according customer request. Piston accumulator advantage with good sealing, no leakage, high temperature resistance, long service life.



#### ◆ Ordering code

GLXQ - \* / \* - F - G

Product Name: Pipeline Accumulator

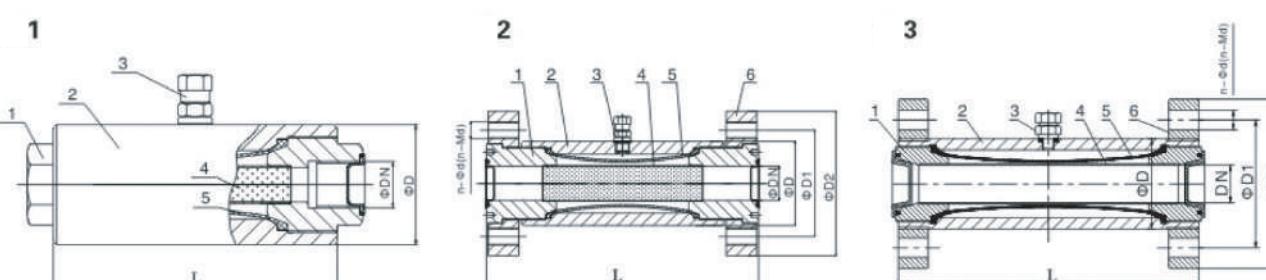
Nominal Volume (L): 0.16L, 0.32L  
0.63L, 1.6L

Nominal Pressure (Mpa): 10, 2Mpa

Medium: Y-Hydraulic liquid, R-emulsion

Connection type: L - Thread connection,  
F - Flange connection

#### ◆ Structure and dimension



Model	1	2	3	4	5	6
Name	Pipe Points	Shell	Charging Valve	Inner Pipe	Tubing Bladder	Flange

Model	DN mm	Tube L mm	Outer ΦD mm	Connection size	Flange			Remarks
					ΦD1	ΦD2	n-Φd (n-M)	
GLXQ-0.16 /※ - L -※					166	70	M27X2	
GLXQ-0.32 /※ - F -※	Φ27	294			112	157	4 - M18	Imagen 1
GLXQ-0.63 /※ - F -※	Φ40	320			125	170	4 - M20	Imagen 2
GLXQ-1.6 /※ - F -※	Φ50	400	120		170	225	6 - Φ 26	Imagen 3

#### ◆ Booking Note

1. Full type code is needed when booking. For example: pipeline accumulator of operating pressure:20MPa, nominal volume: 0.16L, medium:hydraulic liquid, threaded connection. GLXQ-0.16/20-L-Y.

2. Contact us if special requirement is needed.

3. Design change is retained by our company and amendment is effected without further notice.

## Diaphragm Accumulator



### ◆ General description

ABD series diaphragm accumulator is for absorbing pulsation, impact and compensation leaks.

### ◆ Structure

There are two types: the diaphragm accumulator welding type and screw type  
 Welding Type A:  
 Welding of pressure vessels, use chaori GCQJ charging, oil has been  
 Connected to a variety of types.  
 The flexible diaphragm (not change), is used to isolate the oil and gas  
 Set the diaphragm at the bottom of the seat.

### ◆ Ordering code

**NXQ A - ✕ / ✕ - ✕ - ✕ - ✕ - ✕ - ✕**

Product Name: Diaphragm accumulator

Structure Type: Type A, Type B

Nominal Volume: 0.16 ~ 3.15L

Nominal Pressure: 10 ~ 33Mpa

Shell material: 1 Carbon steel 2. Stainless steel 3. Low temperature

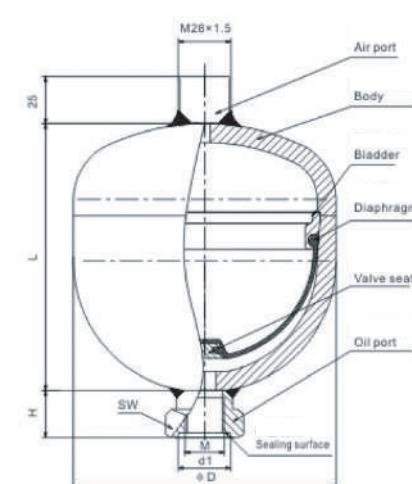
Diaphragm material: 1. Dingla NBR 2. Butyl IIR 3. FluorineFKM 4. Chlorobutyl CR 5. Others

Maximum working pressure ( Mpa )

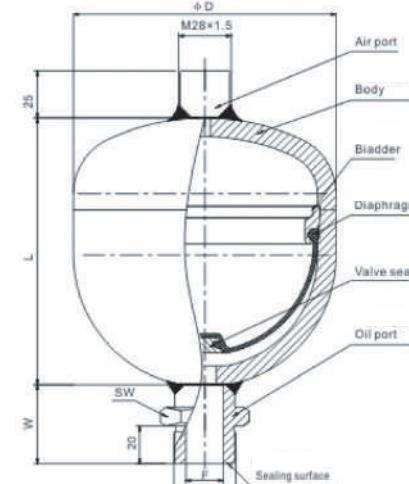
Liquid end connection type: A: internal thread B: Other C: external thread

Factory precharge pressure

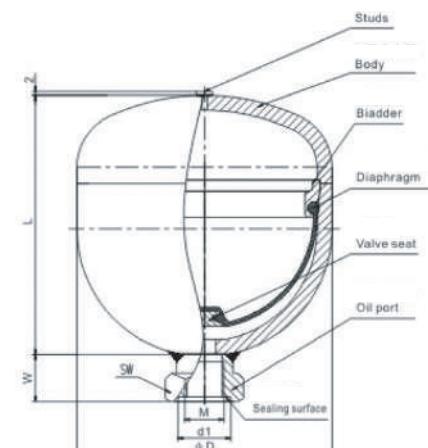
### ◆ Dimensions



(ADB-A) A chain of interface



(ADB-A) A chain of interface



(ADB-B) B chain of interface

### ◆ A/B Type diaphragm Accumulator

Model	Nominal Volume L	Nominal Pressure Mpa	ΦD mm	L mm	H mm	Oil terminal interface Pore		W (mm)	SW (mm)	Weight (kg)			
						Type A							
						Metric	Inch						
ADB-A/ ADB-B	0.075	10	64	70	25	MI4x1.5/ (OTypeΦ25x2.4)	G1/2 (Φ28x3.1)	M18x1.5	32	1.5 2 2.5 3.5 4			
	0.16		74	80		MI8x1.5/ (OTypeΦ25x2.4)							
	0.25		84	85									
	0.32		93	93									
	0.5		105/101	113									
	0.6	21	115	22	30	M33x1.5/ M45x1.5/	G3/4 (Φ35x3.1)	42	5 6 47.5 9.5 14.5	36 41/46			
	0.75		121/125	126									
	1		136/140	142									
	1.4		150/154	160									
	2		170/173	177									
	2.8		170/173	234									
	3.5		170/173	280									

### ◆ Booking Note

1. Full type code is needed when booking. For example: Nominal volume is 0.75L, Nominal Pressure 21MPa, The shell mater carbon steel, the diaphragm material is NBR threaded connection, and the pressure is 5MPaWelded diaphragm accumulator:

ADB-A-0.75/21-1-1-A-5

2. Contact us if special requirement is needed

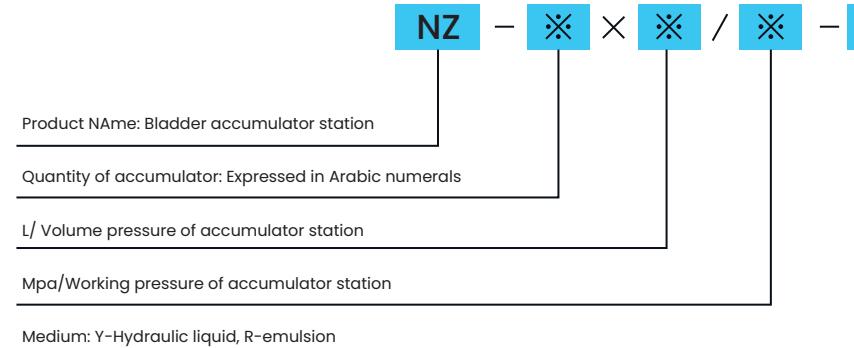
3. Design change is retained by our company and amendment is effected without further notice.

## Bladder accumulator station

### ◆ General description

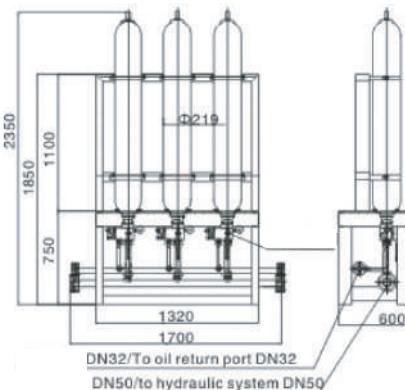
Chaori hydraulic corporation offers series of full bladder type accumulator station which include fixed bolster, bladder type accumulator, control valve group, ball valve, pipeline, oil return pipe, etc.

### ◆ Ordering code

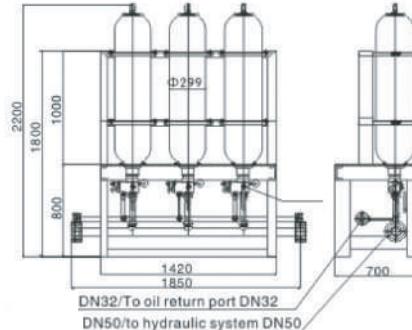


### ◆ Structure and dimension

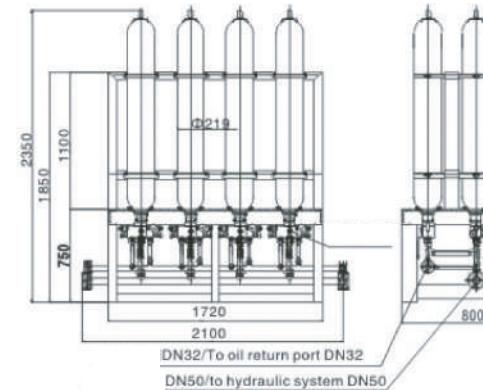
◆ Bladder Accumulator Station for example 1 Specification: 3 bladder accumulators, each 40L, With safety shutoff valve



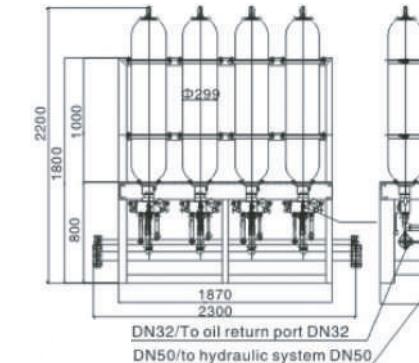
◆ Bladder Accumulator station for example 3 specification: 3 bladder accumulators, each 63L, With safety shutoff valve



◆ Bladder Accumulator Station for example2 Specification: 8 bladder accumulators.each 40L, With safety shutoff valve



◆ Bladder Accumulator station for examples4 specification: 8 bladder accumulators, each 63L, With safety shutoff valve



### ◆ Booking Note

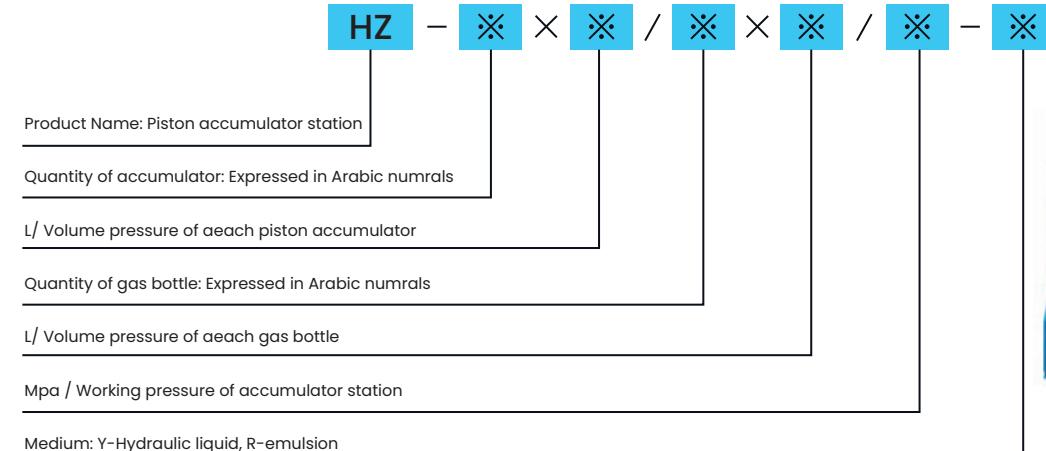
1. Full type code is needed when booking.
2. Contact us if special requirement is needed.
3. Design change is retained by our company and amendmentis effected without further notice.

## Piston accumulator station and nitrogen cylinder group

### ◆ General description

Chaori hydraulic corporation offers series of full piston accumulator station, which include fixed bolster, piston accumulator, control valve group, dall valve, gas protection valve, nitrogen cylinder group, etc.

### ◆ Ordering code

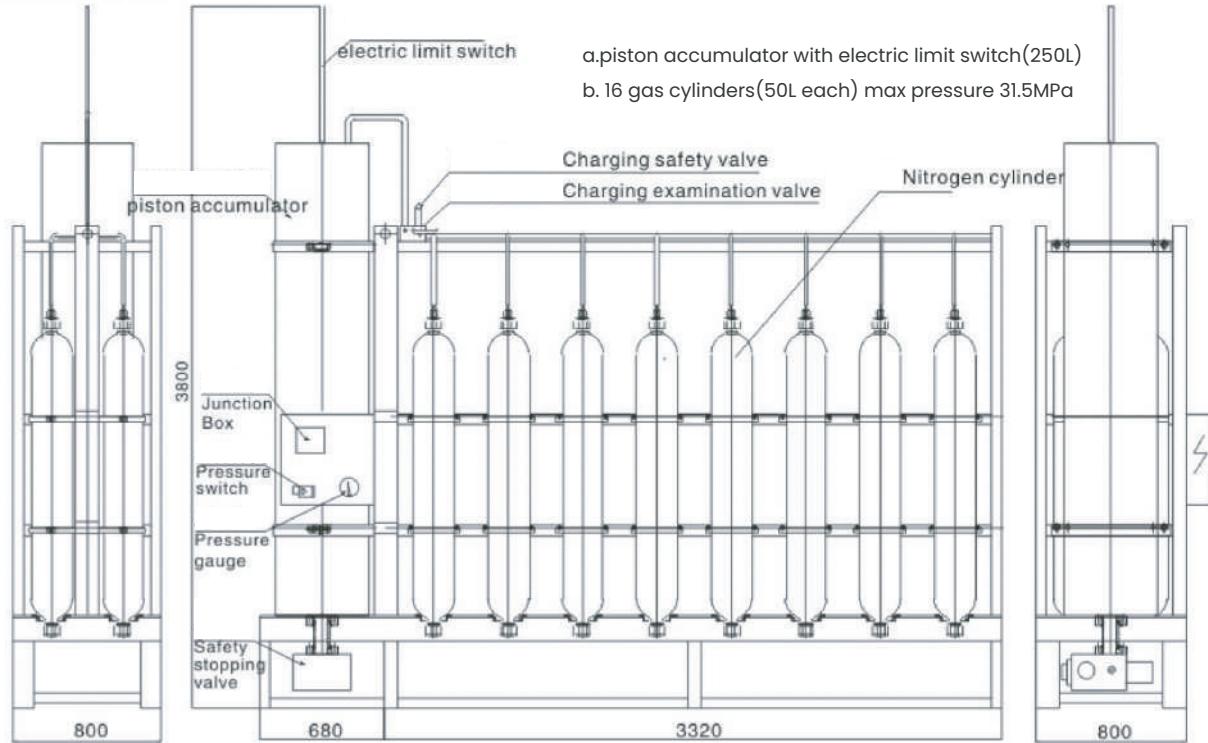


### ◆ Structure and dimension

#### Piston Accumulator Station

Technical data:

a.piston accumulator with electric limit switch(250L)  
b.16 gas cylinders(50L each) max pressure 31.5MPa



### ◆ Booking Note

1. Full type code is needed when booking.
2. Contact us if special requirement is needed.
3. Design change is retained by our company and amendmentis effected without further notice.

## CDZ - Y, N<sub>2</sub> Charging Vehicle (N<sub>2</sub> Pressurization)

### ◆ General description

CDZ-Y, Nitrogen Charging Vehicle works as a special N<sub>2</sub> pressurizer and charging device of hydraulic accumulator, piston accumulator, diaphragm accumulator and other high-pressure vessel of NXQ series. Max N<sub>2</sub> pressure is 42MPa.

### ◆ Ordering code

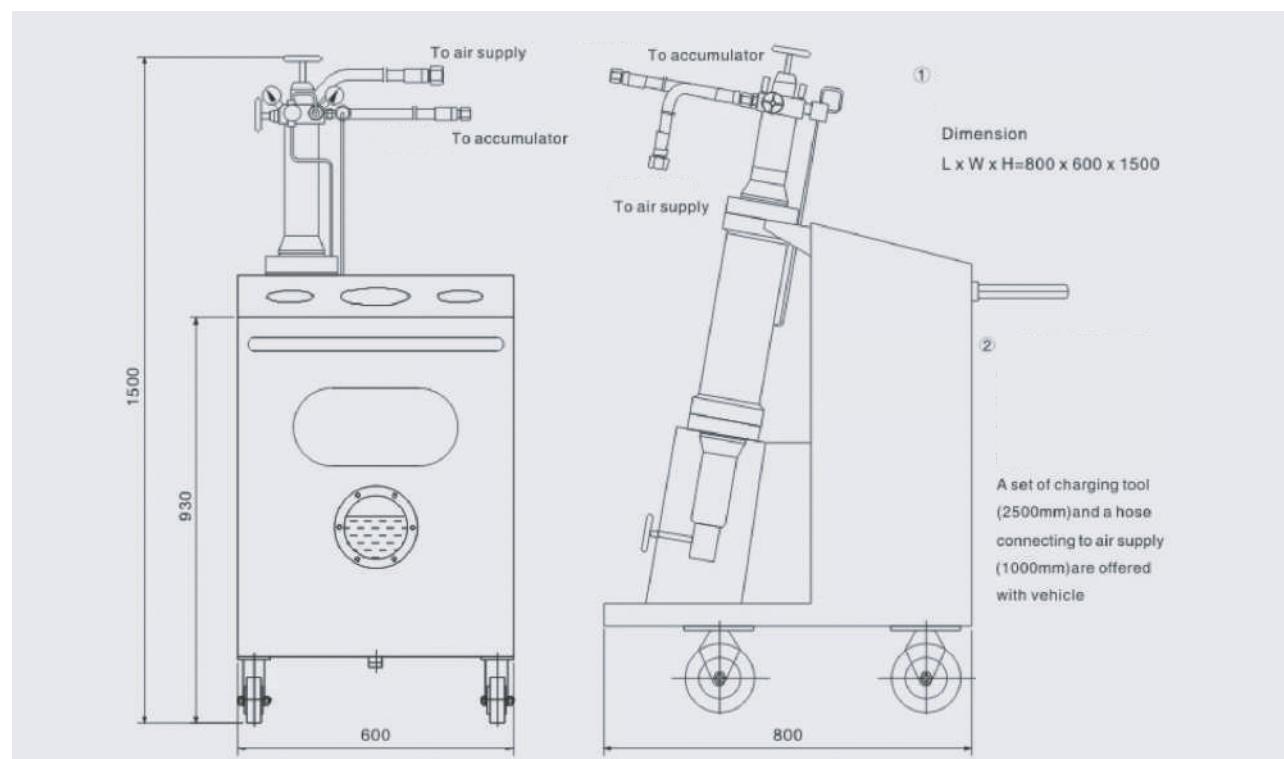
CDZ	-	*	Y1
Product Name: Nitrogen accumulator vehicle			
Nominal Pressure:25,35,42Mpa			
Reserving type: Hydraulic Pilot			



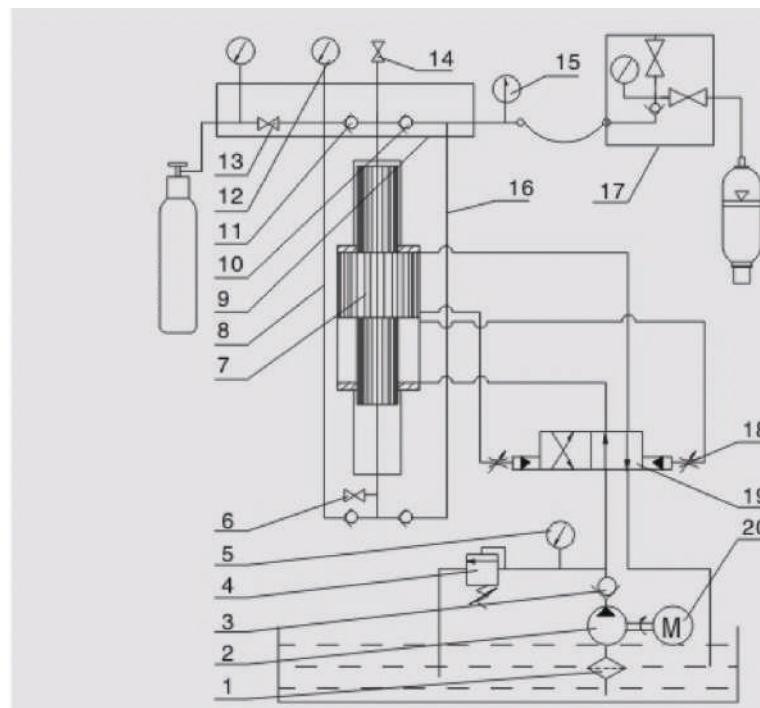
### ◆ Operating Principle

The Nitrogen Charging Vehicle consists of hydraulic device, gas device and electric device. The pressure fluid flows into the pressurizer through reversal valve to push the piston move upward (downward) to pressurize the N<sub>2</sub> in the pressurizer and then flow into the accumulator (or high-pressure vessel) through holding valve. N<sub>2</sub> is pressurized to the operating pressure by the reciprocating movement of piston. (Less than 42 Mpa).

### ◆ Dimension



### ◆ CDZ - Y1 nitrogen charging vehicle drawing



- |                                |
|--------------------------------|
| 1. Oil purifier                |
| 2. Oil Pump                    |
| 3. Straight way check valve    |
| 4. Overflow valve              |
| 5. Oil pressure gauge          |
| 6. Bottom deflating valve      |
| 7. Two-way booster             |
| 8. Gas Inlet                   |
| 9. main gas check              |
| 10. Air Intake valve           |
| 11. Air Vent valve             |
| 12. Gas pressure gauge         |
| 13. Gas Inlet switch           |
| 14. Exhaust valve              |
| 15. Electro pressure gauge     |
| 16. Exhaust pipe               |
| 17. Gas charging tool          |
| 18. Isolating throttling valve |
| 19. Pilot direction valve      |
| 20. Motor                      |

### ◆ Technical Parameter

Model	Input Pressure P <sub>in</sub> (Mpa)	The highest Input Pressure MaxP <sub>in</sub> (Mpa)	Pump		Pressurizer		Weight (kg)
			Pressure (Mpa)	Flux (L)	Rate	Times/min	
CDZ-25Y1	3 ~ 13.5	25	7	16	1:6	8	285
CDZ-35Y1	3 ~ 13.5	35	7	16	1:6	8	285
CDZ-42Y1	3 ~ 13.5	42	7	16	1:7	8	285

### ◆ Typical Application

- Gas Pressurization: charge or pressurize accumulator, aero tire, and high-pressure vessel, telecommunication cable with N<sub>2</sub> or inert gases.
- Pipe pressure test: N<sub>2</sub> or inert gases in aerospace, oil field, refining, automobile, instruction.
- Gas replenishment: chemical processes, plastic processes.
- Gas Reuse: recover the gas or inert gas left in the nitrogen cylinder to high-pressure vessel for further usage.
- Gas output and charging: N<sub>2</sub>, inert gases

### ◆ Booking Note

- Full type code is needed when booking. For example: Nitrogen charging vehicle of operating pressure: 25MPa, reversing type, hydraulic pilot: CDZ-25Y1.
- Contact US if special requirement is needed.
- Design change is retained by our company and amendment is effected without further notice.

## CDZ - Y N Charging Vehicle (N Pressurization)

### ◆ General description

CDZ-D1 Mini Nitrogen Charging Vehicle works as a special N<sub>2</sub> supercharging device and charging device of hydraulic bag accumulator, diaphragm accumulator and other high-pressure vessel of NXQ series. Max N<sub>2</sub> pressure is 42MPa

### ◆ Ordering Code

CDZ - 25 D1 2.5L

Product Name: Nitrogen Charging vehicle

Nominal Pressure: 25,35 Mpa

Reserving type: Electromagnetic Directional Type

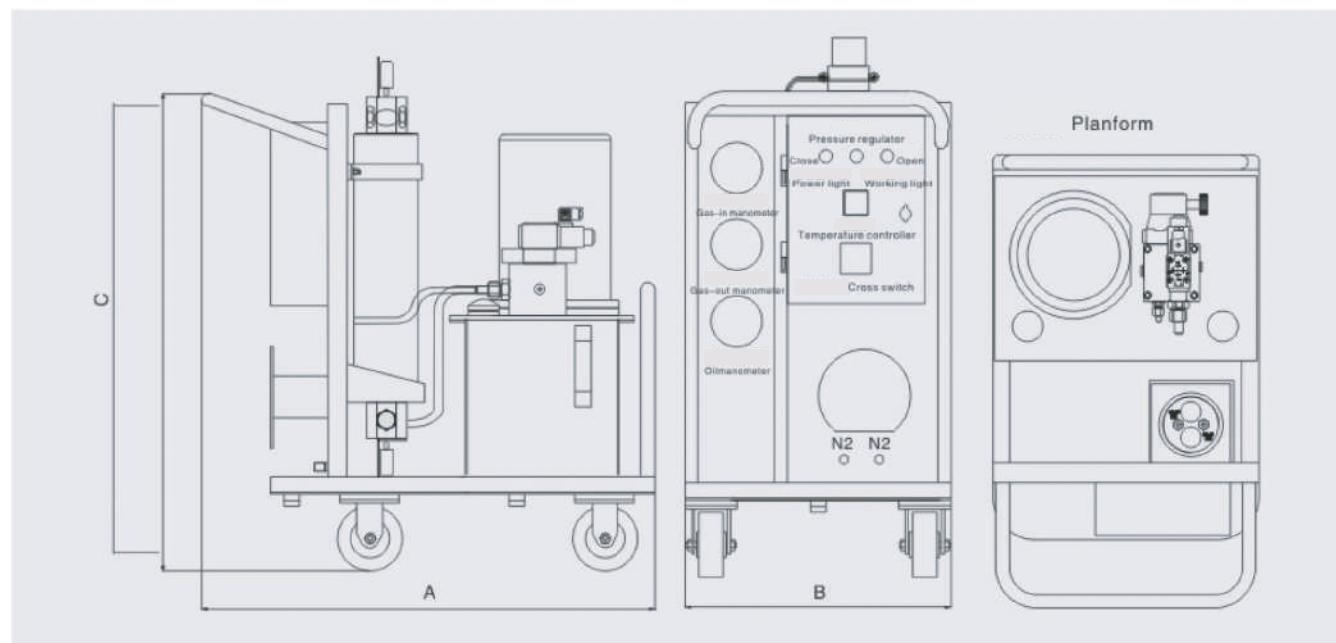
Inflatable Volume: 1.6L, 2.5L, 4L



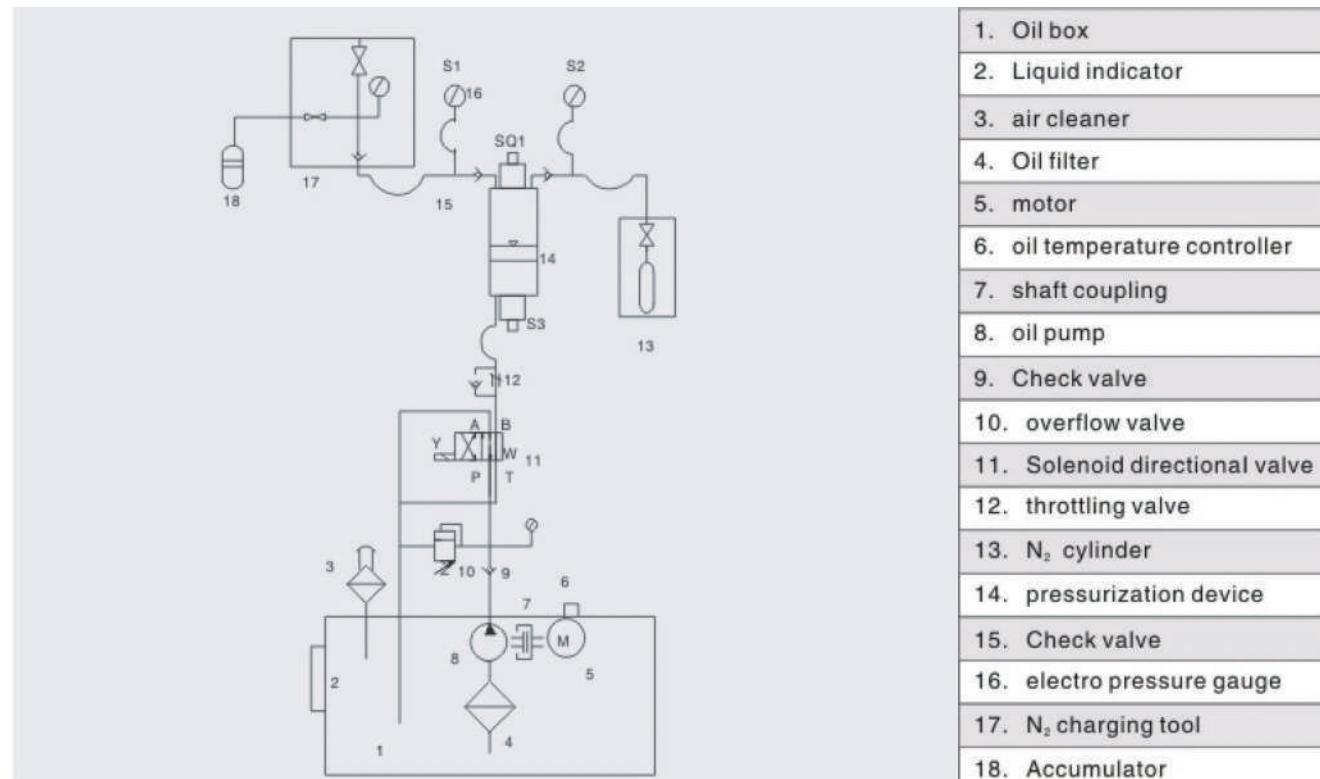
### ◆ Ordering Code

The Nitrogen Charging Vehicle consists of hydraulic system, gas system and electric system. The pressure fluid flows into the pressure cylinder through solenoid directional valve to push the piston move upward (downward) to pressurize the N<sub>2</sub> in the pressure cylinder and then flow into the accumulator (or high-pressure vessel) through holding valve and charging tool. N<sub>2</sub> is pressurized to the operating pressure by the reciprocating movement of piston under the effect of limit switch. After that turned off itself.

### ◆ Structure and Dimensions



### ◆ General description



### ◆ Technical Parameter

Model	Input Pressure P <sub>in</sub> (Mpa)	The highest Input Pressure MaxP <sub>in</sub> (Mpa)	Pump		Volume (L)	Power	A (mm)	B (mm)	C (mm)	Weight (kg)
			Pressure (Mpa)	Flux (L)						
CDZ - 25D1 - 1.6L	3 ~ 13.5	25	31.5	3.75	1.6	3 phases 380V 50Hz	890	520	950	240
CDZ - 25D1 - 2.5L				7.5	2.5		890	520	950	245
CDZ - 25D1 - 4.0L				15	4		1200	640	1200	300
CDZ - 35D1 - 1.6L		35	50	2.68	1.6		890	460	950	240
CDZ - 35D1 - 2.5L				5.37	2.5		890	520	950	245
CDZ - 35D1 - 4.0L				10.74	4.0		1200	640	1200	300

### ◆ Booking Note

- Full type code is needed when booking. For example: Nitrogen charging vehicle of operating pressure: 25MPa, air supply volume 2.5L, reversing type, electromagnetic directional type: CDZ-25D1-2.5L.
- Contact us if special requirement is needed.
- Design change is retained by our company and amendment is effected without further notice.

## CDZs - D1 N<sub>2</sub> Charging Vehicle (N<sub>2</sub> Pressurization)

### ◆ General description

CDZSD1 Mini Nitrogen Charging Vehicle works as a special N<sub>2</sub> supercharging device and charging device of hydraulic bag accumulator, piston accumulator, diaphragm accumulator and other high pressure vessel of NXQ series. Max N<sub>2</sub> pressure is 42MPa.

### ◆ Ordering Code

CDZs - \* D1 \* L

Product Name: Nitrogen Charging vehicle

Nominal Pressure: 25,35 Mpa

Reserving type: Electromagnetic Directional Type

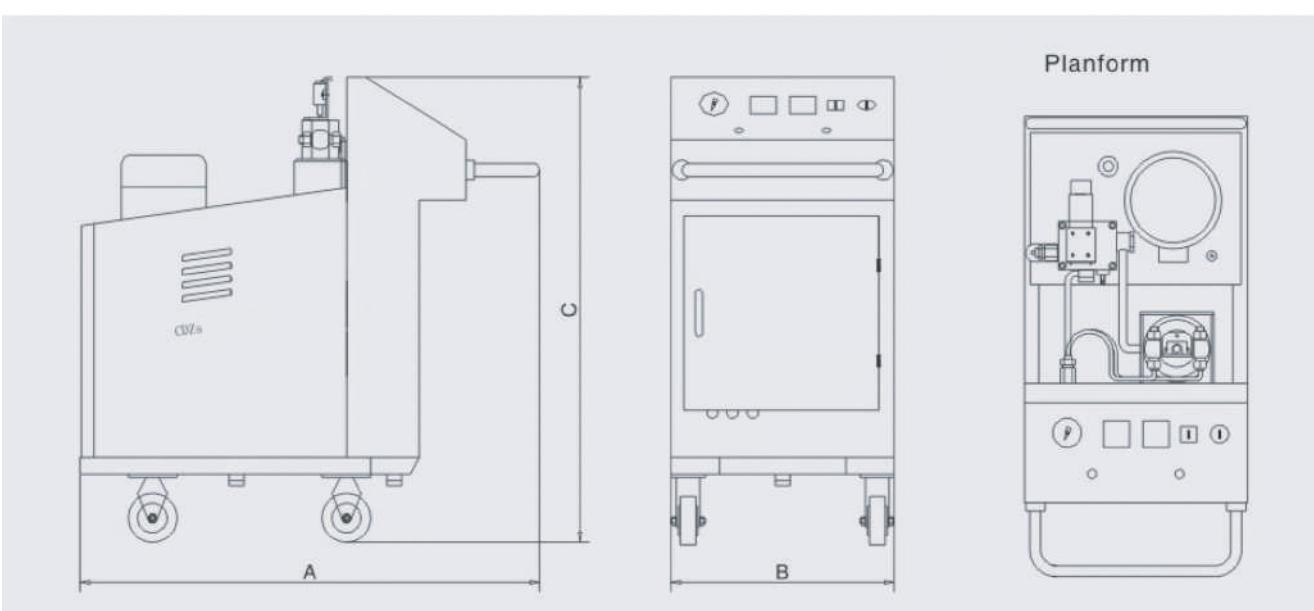
Inflatable Volume: 1.6L, 2.5L, 4L



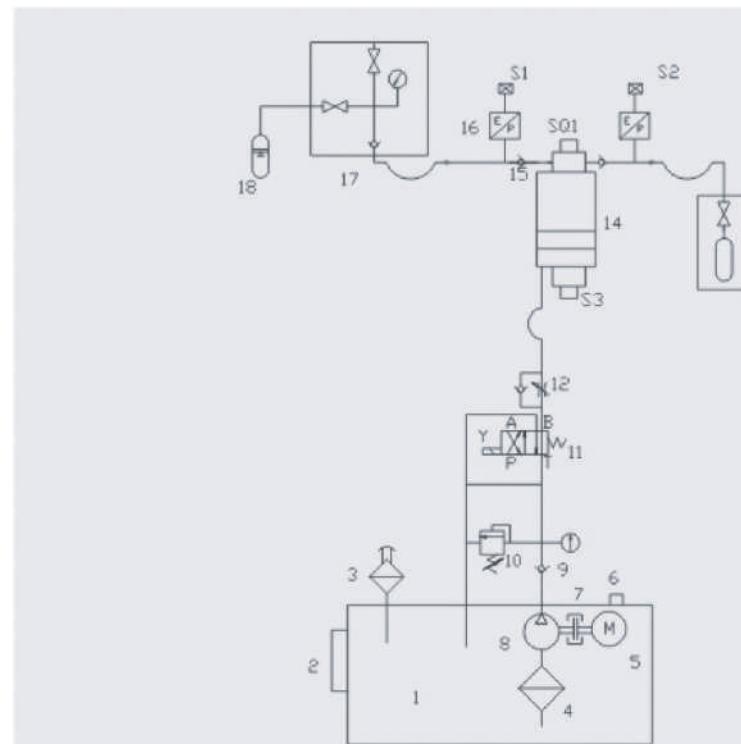
### ◆ Operating Principle

The Nitrogen Charging Vehicle consists of hydraulic system, gas system and electric system. The pressure fluid flows into the pressure cylinder through solenoid directional valve to push the piston move upward (downward) to pressurize the N<sub>2</sub> in the pressure cylinder and then flow into the accumulator (or high-pressure Vessel) through holding valve and charging tool. N<sub>2</sub> is pressurized to the operating pressure by the reciprocating movement of piston under the effect of limit switch. After that turned off itself.

### ◆ Structure and dimension



### ◆ Structure drawing



- |     |                              |
|-----|------------------------------|
| 1.  | Oil box                      |
| 2.  | Liquid indicator             |
| 3.  | air cleaner                  |
| 4.  | Oil filter                   |
| 5.  | motor                        |
| 6.  | oil temperature controller   |
| 7.  | shaft coupling               |
| 8.  | oil pump                     |
| 9.  | Check valve                  |
| 10. | overflow valve               |
| 11. | Solenoid directional valve   |
| 12. | throttling valve             |
| 13. | N2 cylinder                  |
| 14. | pressurization device        |
| 15. | Check valve                  |
| 16. | electro pressure gauge       |
| 17. | N <sup>2</sup> charging tool |
| 18. | Accumulator                  |

### ◆ Technical Parameter

Model	Input Pressure P <sub>in</sub> (Mpa)	The highest Input Pressure MaxP <sub>in</sub> (Mpa)	Pump		Volume (L)	Power	A (mm)	B (mm)	C (mm)	Weight (kg)
			Pressure (Mpa)	Flux (L)						
CDZ - 25D1 - 1.6L	3 ~ 13.5	25	31.5	3.75	1.6	3 phases 380V 50Hz	890	520	950	240
CDZ - 25D1 - 2.5L				7.5	2.5		890	520	950	245
CDZ - 25D1 - 4.0L				15	4		1200	640	1200	300
CDZ - 35D1 - 1.6L		35	50	2.68	1.6		890	460	950	240
CDZ - 35D1 - 2.5L				5.37	2.5		890	520	950	245
CDZ - 35D1 - 4.0L				10.74	4.0		1200	640	1200	300

### ◆ Booking Note

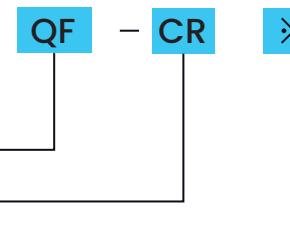
- Full type code is needed when booking. For example: Nitrogen charging vehicle of operating pressure: 25MPa, air supply volume 2.5L, reversing type, electromagnetic directional type: CDZ-25D1-2.5L.
- Contact us if special requirement is needed.
- Design change is retained by our company and amendment is effected without further notice.

## CDZs - D<sub>1</sub> N<sub>2</sub> Charging Vehicle (N<sub>2</sub> Pressurization)

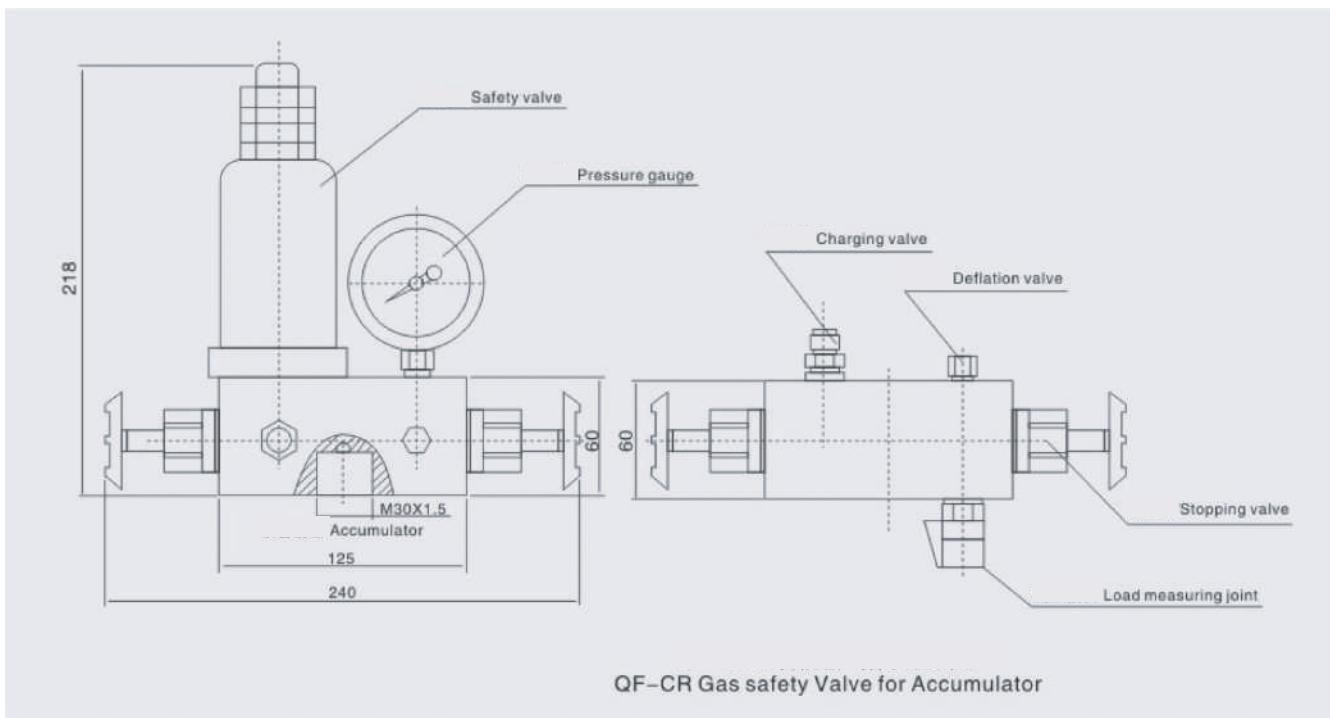
### ◆ General description

CDZSD1 Mini Nitrogen Charging Vehicle works as a special N<sub>2</sub> supercharging device and charging device of hydraulic bag accumulator, piston accumulator, diaphragm accumulator and other high pressure vessel of NXQ series. Max N<sub>2</sub> pressure is 42MPa.

### ◆ Ordering Code



### ◆ Structure and dimension



### ◆ Booking Note

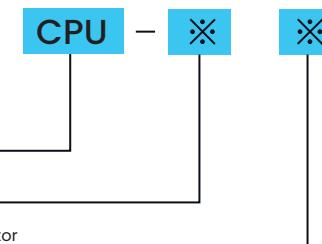
1. Full type code is needed when booking. For example: Gas safety Valve of operating pressure 31.5MPa; QF-CR-31.5.
2. Contact us if special requirement is needed.
3. Design change is retained by our company and amendment is effected without further notice

## CPU Box Type N<sub>2</sub> Charging Tool

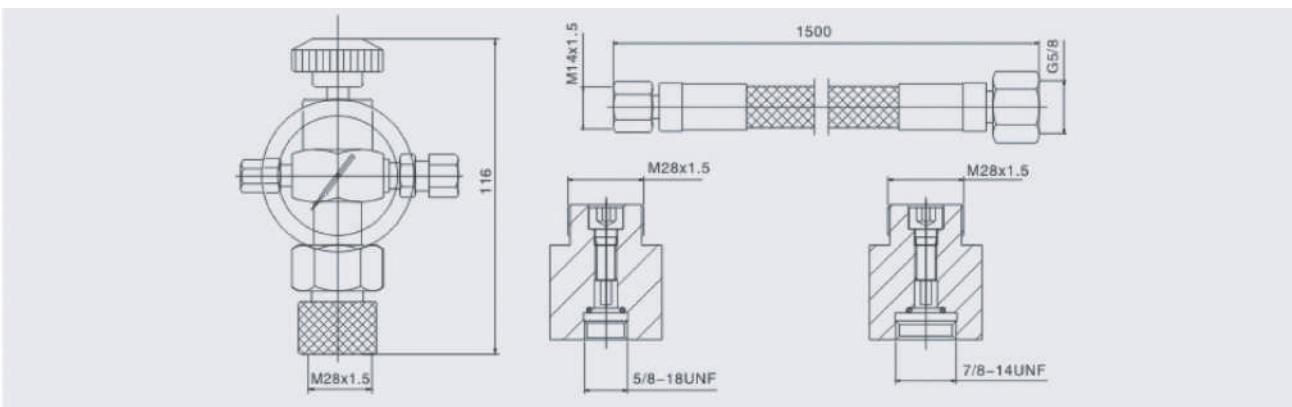
### ◆ General description

CPU Box Type Charging Tool consists of A-alloy toolbox, multifunctional charging valve with pressure gauge, anti-seismic stainless steel pressure gauge, high-pressure hose of 1.5m length, claw wrench for accumulator maintenance, exchange joint for foreign series etc.

### ◆ Ordering Code



### ◆ Structure and dimension



### ◆ Technical Parameter

Model	Nov. pressure (Mpa)	Anti-seismic pressure gauge		(Inner diameter x length)	Accumulator (mm)	Applied accumulator
		Scale (Mpa)	Precision (Mpa)			
CPU - 16	10	0 ~ 16	2.5	Φ4x1.5m	M27x1.5	Diaphragm accumulator
					M28x1.5	
CPU - 25	20	0 ~ 25			M14x1.5	National standard accumulator
					5/16"-32UNEF	Bladder accumulator and piston accumulator
CPU - 40	31.5	0 ~ 40			5/8"-18UNF	
					7/8"-14UNF	

### ◆ Booking Note

1. Full type code is needed when booking. For example: Box type charging tool of operating pressure 20MPa; PN≤31.5MPa; CPU-40
2. Contact us if special requirements are needed
3. Design change is retained by our company and amendment is effected without further notice

## CQG Charging Tool

### ◆ General description

Charging Tool is an indispensable special tool to charge, supply, adjust pressure and test charging pressure . Its merits are made up of compact structure. High-reability, high-pressure and impact resistance, conveniencie. To use we have two type charging tool CQJ and GCQJ.

### ◆ Ordering Code

**CQJ - × ×**

Code Name: N<sub>2</sub> Charging Tool

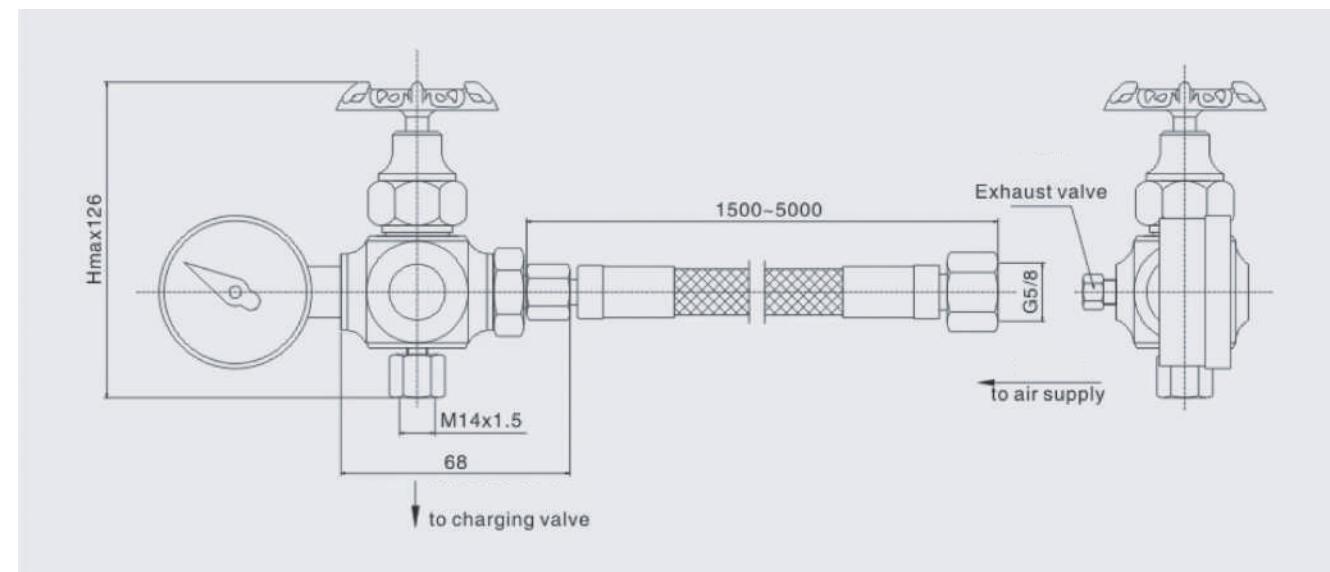
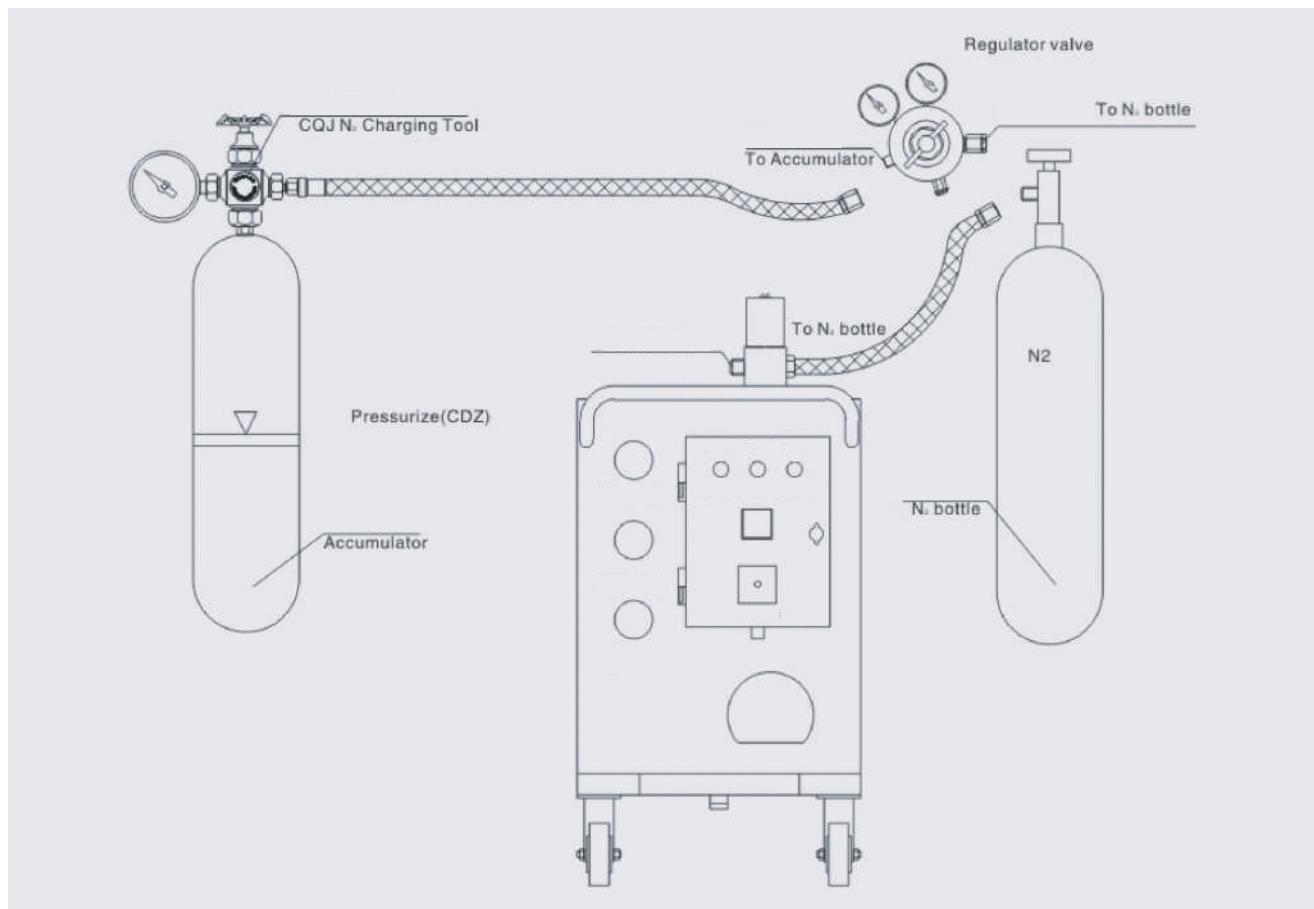
Pressure: 10, 20, 31,5Mpa

National Standard: (standard connect M14x1.5)

Foreign Standard: 5/8-18UNF



### ◆ Structure and dimension



1. Charging tools are designed to charge, test gas pressure or change the existed pre-charge pressure
2. When the max pressure of accumulator charged is less than max pressure of nitrogen cylinder, relief valve is used to charge accumulator.
3. When the max pressure of accumulator charged is more than max pressure of nitrogen cylinder, nitrogen charging vehicle is used to charge accumulator.
4. Note: After charging, the connector between nitrogen cylinder and accumulator should be closed. and then open the bleed valve of charging tool to exhaust completely the gas in hose, finally, unload the charging tool

### ◆ Technical Parameter

Model	NOM.P (Mpa)	Presure gauge		Hose specification		Connection Dimension (mm)	For Accumulator	Weight (kg)
		Scale (Mpa)	Precision (Mpa)	Inner D(mm)x No. of layer	Lenght (mm)			
CQJ - 16	10	16	2.5	Φ8x1	1500 to 5000	M14x1.5 - 6g	NXQ - ×/10-L/F	1.7
CQJ - 25	20	25					NXQ - ×/20-L/F	
CQJ - 40	31,5	40					NXQ - ×/31.5-L/F	

### ◆ Booking Note

1. Full type code is needed when booking. For example: charging tool of operating pressure 10MPa<PN<20MPa: CQJ-25, 1.5m tube
2. Contact us if special requirement is needed.
3. Design change is retained by our company and amendment is effected with out further notice.

## CQG Charging Tool

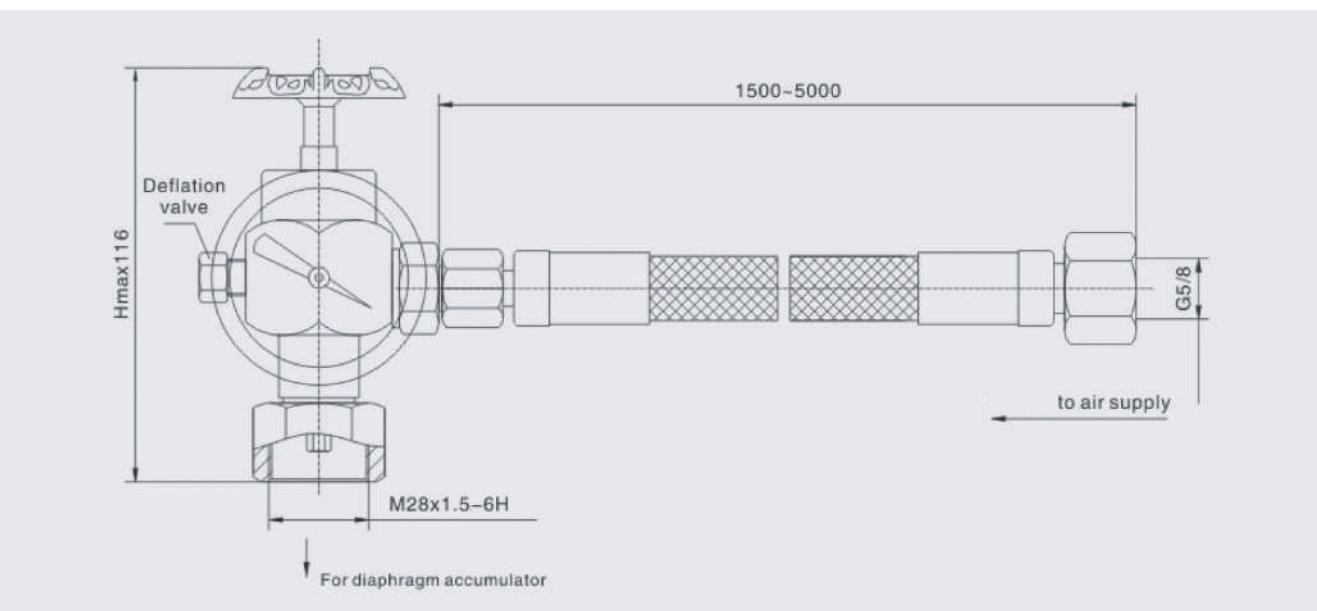
### ◆ Ordering Code

GCQJ - ✕ ✕

Code Name: N<sub>2</sub> Charging Tool

Pressure: 10, 20, 31,5Mpa

National Standard: (standard connect M28x1.5)  
Foreign Standard: 5/8"-18UNF



### ◆ Technical Parameter

Model	NOM.P (Mpa)	Presure gauge		Hose specification		Connection Dimension (mm)	For Accumulator	Weight (kg)
		Scale (Mpa)	Precision (Mpa)	Inner D(mm)x No. of layer	Lenght (mm)			
GCQJ - 16	10	16	2.5	Φ8x1	1500 to 5000	M28x1.5 - 6g	Diaphragm accumulator	1.7
GCQJ - 25	20	25						
GCQJ - 40	31,5	40						

### ◆ Booking Note

1. Full type code is needed when booking. For example: charging tool of operating pressure 10MPa < PN < 20MPa: CQJ-25, 1.5m tube

2. Contact us if special requirement is needed.

3. Design change is retained by our company and amendment is effected with out further notice.

## Accumulator QXF Charging Valve

### ◆ General description

QXF charging valve is the special check valve to charge the nitrogen for accumulator by charging tools. If turned off after charging.

### ◆ Ordering Code

QXF - ✕ ✕

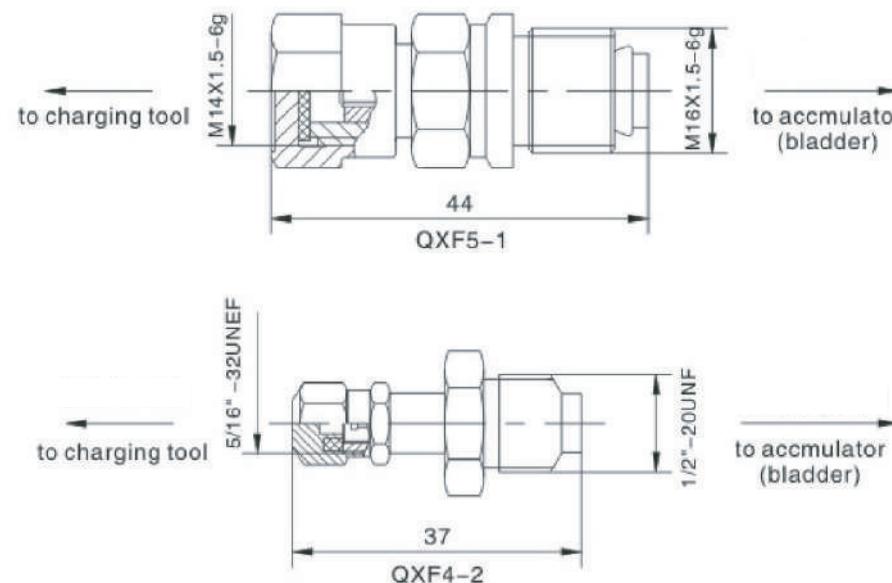
Code Name: Charging Valve

Nominal Diameter: 4mm, 5mm

1. China Market 2. ASME type



### ◆ Dimension



### ◆ Technical Parameter

Model	Charging Range (Mpa)	Nominal Diameter	Thread Connection		Accumulator Hotel	Weight (kg)
			Input (to charging tool)	Output (to accumulator)		
QXF5 - 1	0.4 ~ 40	5	M14x1.5 - 6g	M16x1.5 - 6g	NXQ - 0.4 ~ 250/※ - L/F - ※	0.07
QXF4 - 2	0.4 ~ 40	4	5/16" - 32UNEF	1/2" - 20UNF	BA(TA) - 0.15 ~ 15/※ - ※ - ※	0.03

### ◆ Booking Note

1. Contact us if special requirement is needed

2. Design change is retained by our company and amendment is effected with out further notice.

## Bladder for NXQ accumulator

### ◆ General description

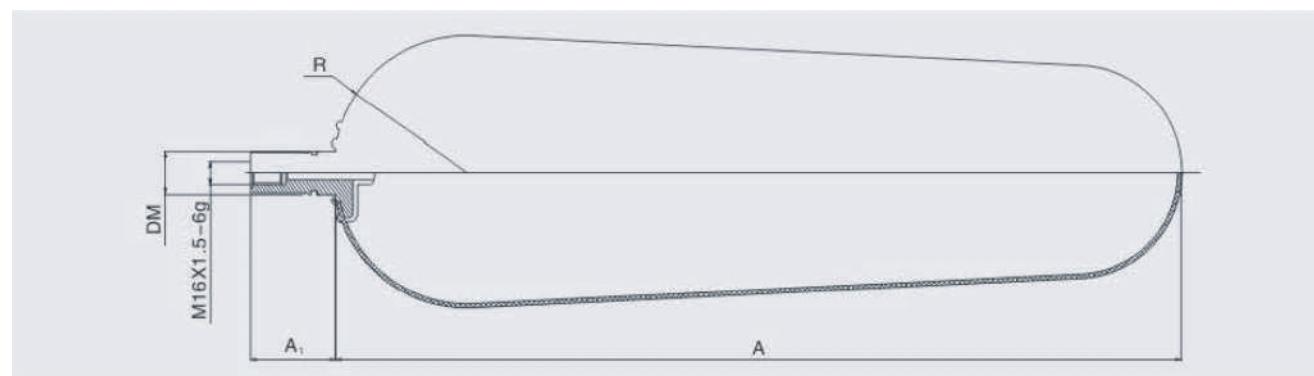
Bladder advantages of enduring oil, acid-and-alkali and Bend resistance, high strength and long useful time and meets the China standard of HG/2331-92 and ASME.

### ◆ Ordering code

Bladder Volume: 0.4 - 160L	—	—	—	—
Bladder Length: 74 ~ 2150mm	—	—	—	—
Out dia(mm)	—	—	—	—
Material: NBR, IIR, CR, FPM	—	—	—	—



### ◆ Dimension



### ◆ Technical Parameter

Volume (L)		Dimension (mm)				Volume (L)		Dimension (mm)				Volume (L)		Dimension (mm)			
Spc	Vol	A	A1	R	DM	Spc	Vol	L	L1	R	DM		L	L1	R	DM	
89	0.4	74	44	38.5	M24x1.5	219	10	370	60	95	M30x1.5	299	70	370	70	131	M30x1.5
	0.63	144					16	570					20	460			
114	1	146	53	66	M30x1.5	219	20	710					32	600			
	1.6	144					25	873					40	725			
152	2.5	206	53	66	M30x1.5	219	32	1130					50	910			
	4	312					40	1385					63	1130			
351	6.3	486	351	78	158	M30x1.5	50	1720					80	1440			
	63	780					100	1270					100	1830			
Head thread specification / O ring specification		M24x1.5/Φ24x2.4				M30x1.5/Φ30x3.1		M50x1.5/Φ50x3.1									

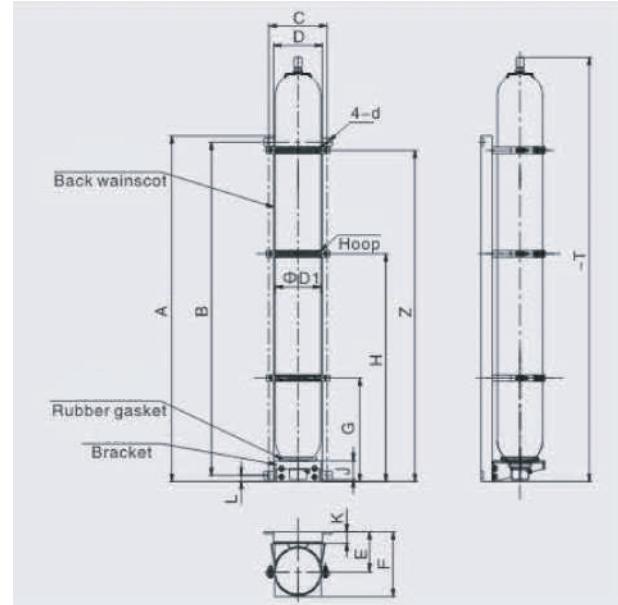
### ◆ Booking Note

- Full type code is needed when booking For example:the nominal capacity of the accumulator is 40L;diameter: <math>\Phi 219</math>; Length: 1405mm:40L x 1405-219-NBR.
- Contact us if special requirement is needed.
- Design change is retained by our company and amendment is effected without further notice

## Bladder for NXQ accumulator

### ◆ General description

Full set of accumulator installation components consists of back wainscot, hoop, bracket, rubber gasket, etc, it is used to fix the accumulator and avoid the dangerous vibration.



### ◆ Ordering code

NXQ	—	—	—
Bladder Volume: 0.4 - 160L	—	—	—
Bladder Length: 74 ~ 2150mm	—	—	—
Out dia(mm)	—	—	—

Material: NBR, IIR, CR, FPM

### ◆ Structure and Dimension

Model	~T	A	B	L	J	G	H	Z	C	ΦDI	Φd	K	E	F
NXQ - L0.63-89	320	200	170	15	45	—	160	—	130	106	89	9	30	92.5, 142
NXQ - L1-114	315	190	160	15	50	—	160	—	155	131	114	9	30	105, 168
NXQ - L1.6-152T	355	210	170			—	175	—						
NXQ - L2.5 - 152	420	280	140			—	220	—	203	169	152	13	30	126, 208
NXQ - L4-152	530	360	320			—	300	—						
NXQ - L6.3-152	700	500	460			—	440	—						
NXQ - L10-219	660	480	420			—	360	—	282	236	219	17	55	188, 307
NXQ - L16 - 219	870	650	590			—	550	—						
NXQ - L25-219	1170	850	790			—	750	—	30	100	362	316	299	17, 60, 233, 392
NXQ - L40-219	1690	1350	1290			—	620	—						
NXQ - L50-219	2050	1670	1610			—	1100	1600						
NXQ - L20 - 299	690	480	420			—	400	—						
NXQ - L25-299	780	570	510			—	450	—						
NXQ - L40-299	1050	780	720			—	660	—						
NXQ - L50-299	1270	970	910			—	770	—						
NXQ - L63 - 299	1500	1200	1140			—	1000	—						
NXQ - L80-299	1810	1500	1440			—	1300	—						
NXQ - L100-299	2220	1800	1740			—	1600	—						

### ◆ Booking Note

- Full type code is needed when booking For example:the accumulator capacity is 40L;diameter: <math>\Phi 219</math>;two accumulator fixing components:NXQ-L40-219-B.
- Contact us if special requirement is needed.
- Design change is retained by our company and amendment is effected without further notice

## Fixing clamp for accumulator

### ◆ General description

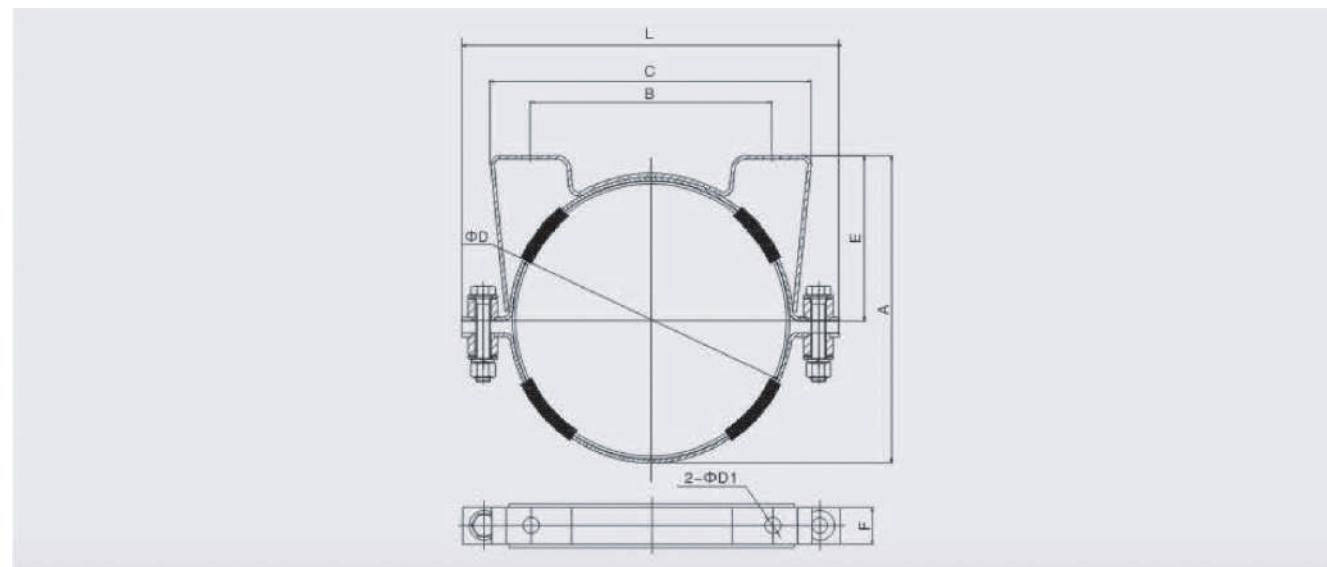
The special device designed to fix accumulator with the advantage of compact structure, flexible connection, nice appearance.

### ◆ Ordering code

NX-KG —  $\Phi \times \times$   
 Code Name: Hoop accumulator  
 Diameter:  $\Phi 89 \sim \Phi 426$



### ◆ Internal Structure Dimension



Model	A	B	C	ΦD	ΦD1	E	F	L	Matching accumulator model	Weight (Kg)
NX - KG/Φ89	112	76	110	Φ89	Φ9	62.5	20	150	NXQ - 0.4L ~ 0.63L	0.3
NX - KG/Φ114	137	100	138	Φ114	Φ9	75	20	176	NXQ - 1L	0.4
NX - KG/Φ152	177	126	186	Φ152	Φ11	96	20	212	NXQ - 1.6L	0.5
NX - KG/Φ219	248	196	260	Φ219	Φ13	133	30	306	NXQ - 10L ~ 40L	1.1
NX - KG/Φ299	328	276	350	Φ299	Φ13	173	30	385	NXQ - 20L ~ 100L	1.5
NX - KG/Φ351	396	330	405	Φ351	Φ15	212	40	442	NXQ - 63L ~ 160L	
NX - KG/Φ426	456	403	478	Φ426	Φ15	237	40	518	NXQ - 100L ~ 250L	

### ◆ Booking Note

1. Full type code is needed when booking. For example: the nominal capacity of the accumulator is 40L; diameter: < D 299: NX-KG/t 299. (Rubber pad included).
2. Contact us if special requirement is needed.
3. Design change is retained by our company and amendment is effected without further notice.

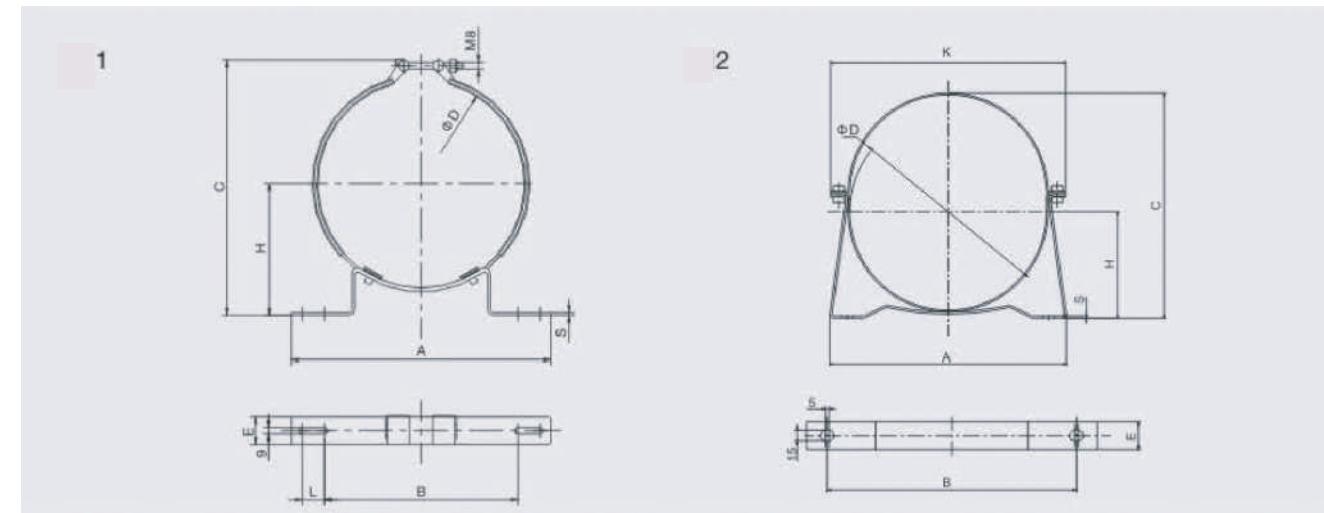
## Bladder for NXQ accumulator

### ◆ Ordering Code

NXJ —  $\times \times$   
 Code Name: Hoop for accumulator  
 No.A1 ~ A6



### ◆ Internal Structure Dimension



Model	A	B	C	ΦD	H	E	L	S	K	Matching accumulator model	Weight (Kg)	Remarks
NXJ - A1	120	85	112	89-92	51-52	60	18	3	—	NXQ Δ-L0.4-L0.63	0.17	Figure 1
NXJ - A2	156	100	143	106-114	62-66	60	18	3	—	NXQ Δ-L1	0.41	
NXJ - A3	156	100	191	152-159	87-91	60	18	3	—	NXQ Δ-L1.6-L6.3	0.46	
NXJ - A4	236	152	256	216-224	120-124	60	32	4	—	NXQ Δ-L10-L40	0.77	
NXJ - A5	332	280	322	299	190	40	5	4	395	NXQ Δ-L20-L100	2.05	
NXJ - A6	422	360	378	351	192	40	5	4	420	NXQ Δ-L63-L200	4.40	
NXJ - 62-65	120	85	85	62-65	38-39.5	60	60	3	—	ADB- Δ-L0.075	0.16	Figure 2
NXJ - 73-76	120	85	96	73-76	43.5-45	60	18	3	—	ADB- Δ-L0.16	0.16	
NXJ - 82-85	120	120	121	82-85	50-52.5	60	18	3	—	ADB- Δ-L0.25	0.17	
NXJ - 92-95	120	85	115	92-95	52.4-54	60	18	3	—	ADB- Δ-L0.32	0.17	
NXJ - 100-105	156	100	135	100-105	59-62	60	18	3	—	ADB- Δ-L0.5	0.54	
NXJ - 106-114	156	100	143	106-114	62.5-66	60	18	3	—	ADB- Δ-L0.5	0.41	
NXJ - 110-118	156	100	156	110-118	72.5-77	60	18	3	—	ADB- Δ-L0.6	0.42	
NXJ - 121-129	156	100	165	121-129	75.5-80	60	18	3	—	ADB- Δ-L0.75	0.43	
NXJ - 133-142	156	100	174	133-142	76.5-82	60	18	3	—	ADB- Δ-L1	0.44	
NXJ - 143-151	156	100	182	143-151	83-86.5	60	18	3	—	ADB- Δ-L1.4	0.45	
NXJ - 152-159	156	100	191	152-159	87-91	60	18	3	—	ADB- Δ-L1.4	0.46	
NXJ - 167-175	236	152	207	167-175	92.5-196.5	60	32	4	—	ADB- Δ-L2/L2.8/L3.5	0.72	

Note: Please care ΦD size.

## NX type accumulator mounting bracket

◆ Ordering code

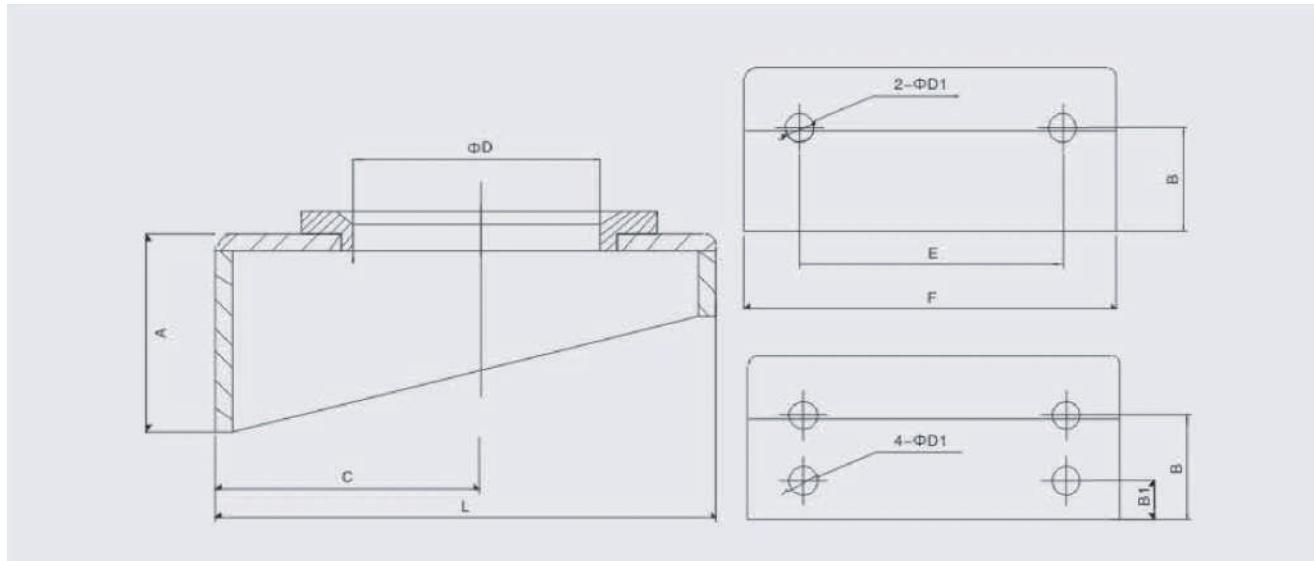
NX-TJ -  $\Phi \times \times$   
 Code Name:  
Accumulator bracket

$\Phi \times \times$

Outer Diameter:  $\Phi 89\sim\Phi 426$



◆ Internal Structure Dimension



Model	A	B	C	$\Phi D$	$\Phi D1$	E	F	B1	L	Matching accumulator model	Weight (Kg)
NX - TJ/ $\Phi 89$	45	23	62.5	$\Phi 60$	2 - $\Phi 9$	60	98	/	112	NXQ - 0.4L ~ 0.63L	0.8
NX - TJ/ $\Phi 114$	50	28	75	$\Phi 60$	2 - $\Phi 9$	70	126	/	138	NXQ - 1L	1
NX - TJ/ $\Phi 152$	65	35	96	$\Phi 88$	2 - $\Phi 11$	113	162	/	178	NXQ - 1.6L ~ 6.3L	2
NX - TJ/ $\Phi 219$	100	62	133	$\Phi 125$	4 - $\Phi 13$	160	226	22	252	NXQ - 10L ~ 40L	7
NX - TJ/ $\Phi 299$	100	62	173	$\Phi 140$	4 - $\Phi 13$	200	306	22	332	NXQ - 20L ~ 100L	12
NX - TJ/ $\Phi 351$	120	70	212	$\Phi 150$	4 - $\Phi 15$	280	360	30	412	NXQ - 63L ~ 160L	20
NX - TJ/ $\Phi 426$	120	70	237	$\Phi 220$	4 - $\Phi 15$	300	435	30	462	NXQ - 125L ~ 250L	24

◆ Booking Note

1. Full type code is needed when booking For example:the nominal capacity of the accumulator is 25L;diameter: et>2 99:

NX-T JI <1>2 99.(Rubber pad included).

2. Contact us if special requirement is needed.

3. Design change is retained by our company and amendment is effected without further notice

## DQa ccumulator NBR washer

◆ Ordering Code

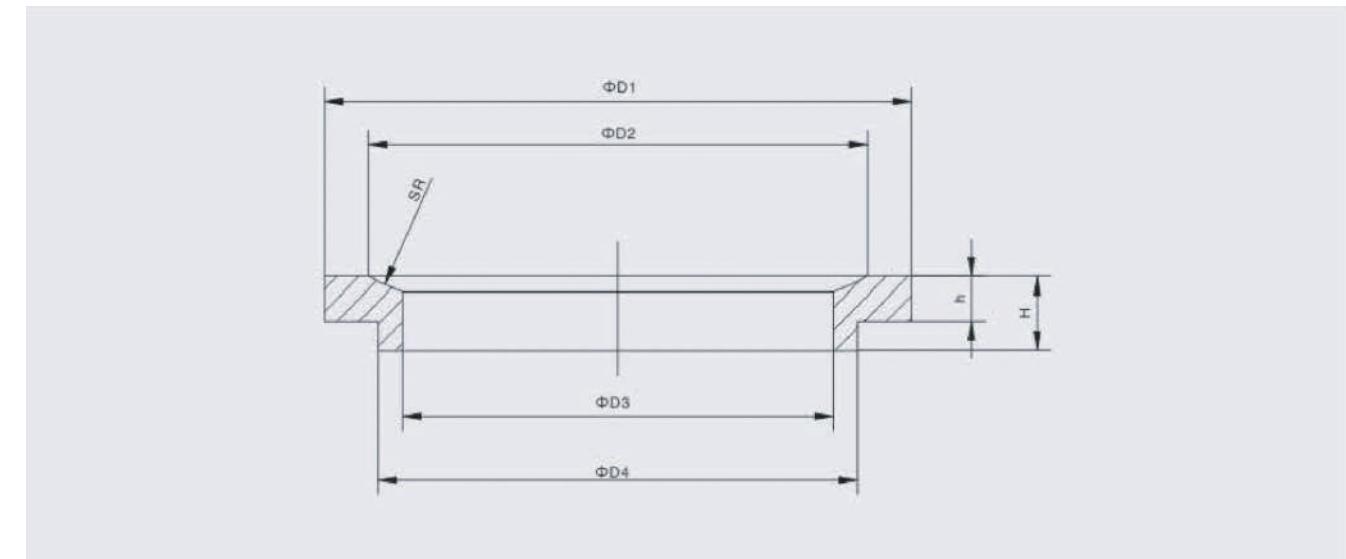
DQ -  $\Phi \times \times$   
 Code Name:  
Accumulator bracket

$\Phi \times \times$

Outer diameter:  $\Phi 89\sim\Phi 426$



◆ Internal Structure Dimension



Model	D1	D2	D3	D4	SR	H	h
DQ89	80	72	60	68	55	12	7
DQ114	80	72	60	68	55	12	7
DQ152	120	102	88	98	73	15	9
DQ219	180	146	125	138	106	23	15
DQ229	200	170	158	168	115	20	16
DQ299	200	168	140	158	145	23	15
DQ351	250	200	150	180	174	30	20
DQ426	300	149	220	240	213	32	20

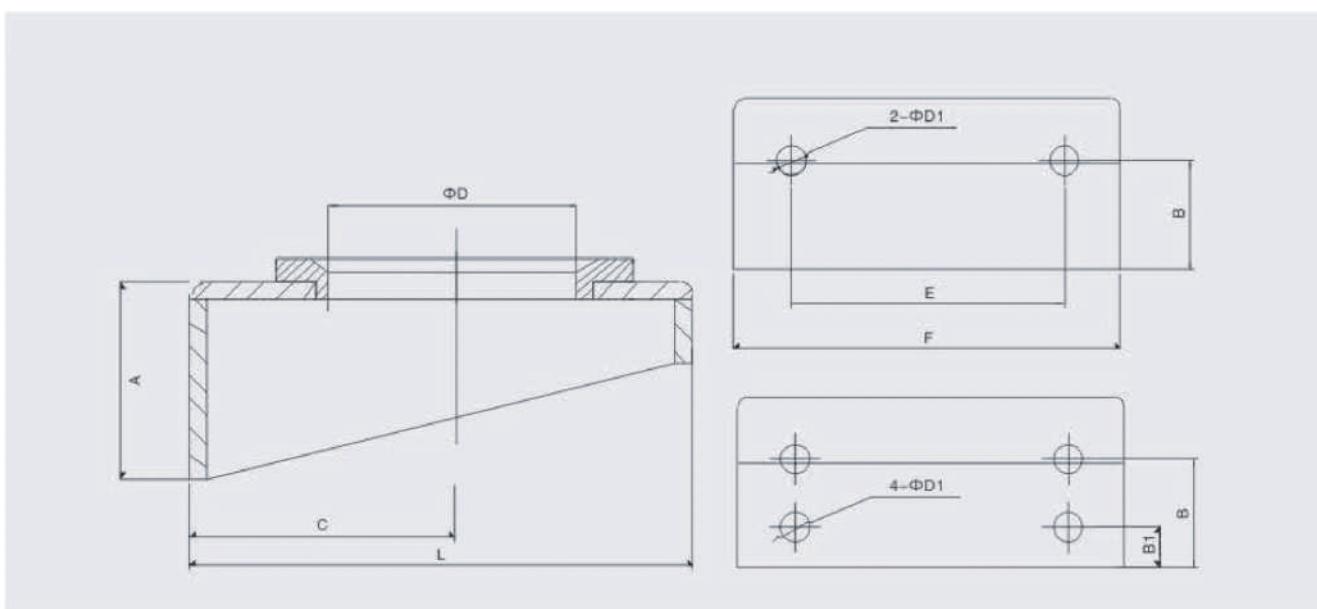
## NX type accumulator mounting bracket

### ◆ Ordering code

NXJ — ×  
Code Name:  
Accumulator bracket



### ◆ Internal Structure Dimension



Model	A	B	C	ΦD	ΦD1	E	F	B1	L	Accumulator out diameter	Matching accumulator model	Weight (kg)
NXJ - B1	100	65	92	104	14	180	260	25	225	152	NXQ - 16L ~ 6.3L	2.5
NXJ - B2	100	65	123	159	14	180	260	25	250	219	NXQ - 10L ~ 40L	2.8
NXJ - B3	240	180	190	200	22	260	380	60	380	299	NXQ - 20L ~ 150L	19.1

### ◆ Booking Note

1. Full type code is needed when booking For example:the nominal capacity of the accumulator is 40L;diameter: <math>\Phi 299</math> NXJ-B-3.(Rubber pad included).
2. Contact us if special requirement is needed.
3. Design change is retained by our company and amendment is effected without further notice

## AQF Safety Ball Valve for Accumulator

### ◆ General description

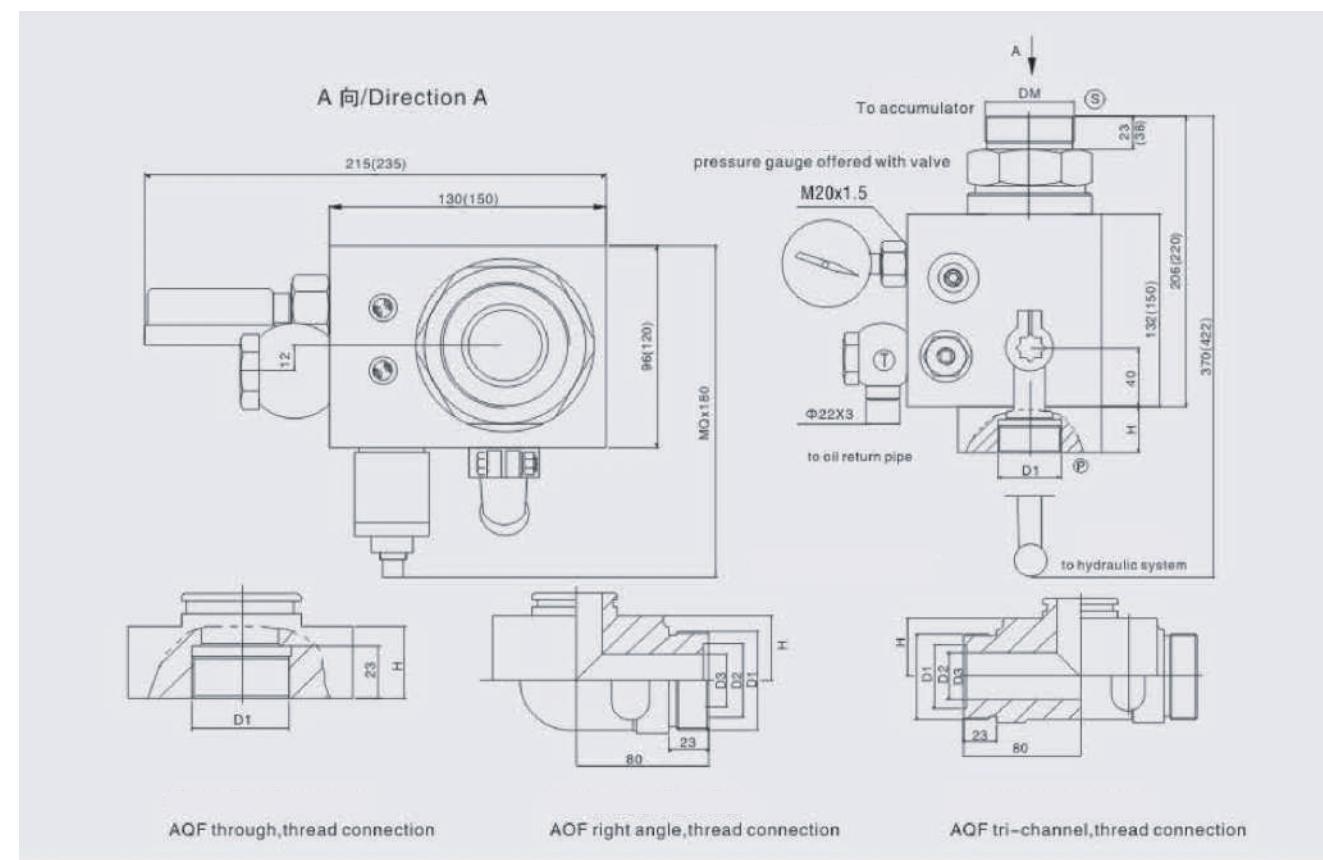
AQF safety ball valve for accumulator, which consists of stopping valve. Protection valve, unloading valve and so on. Sets between accumulator and hydraulic system to control the oil condition of open and break, overflow and unloading.

### ◆ Ordering code

AQF — × × × — × ×  
Code Name: safety ball valve  
Connection Type Throgh, LS-right angle LW-tri-channel  
Nominal pressure diameter: 25, 32, 40, 50mm  
Pressure: H1-10Mpa, H2-20Mpa, H3-31.5 Mpa  
Connector: M27 x2, M42 x2, M60 x2, M72 x2  
Structure: A-direct overflow valve



### ◆ Dimension



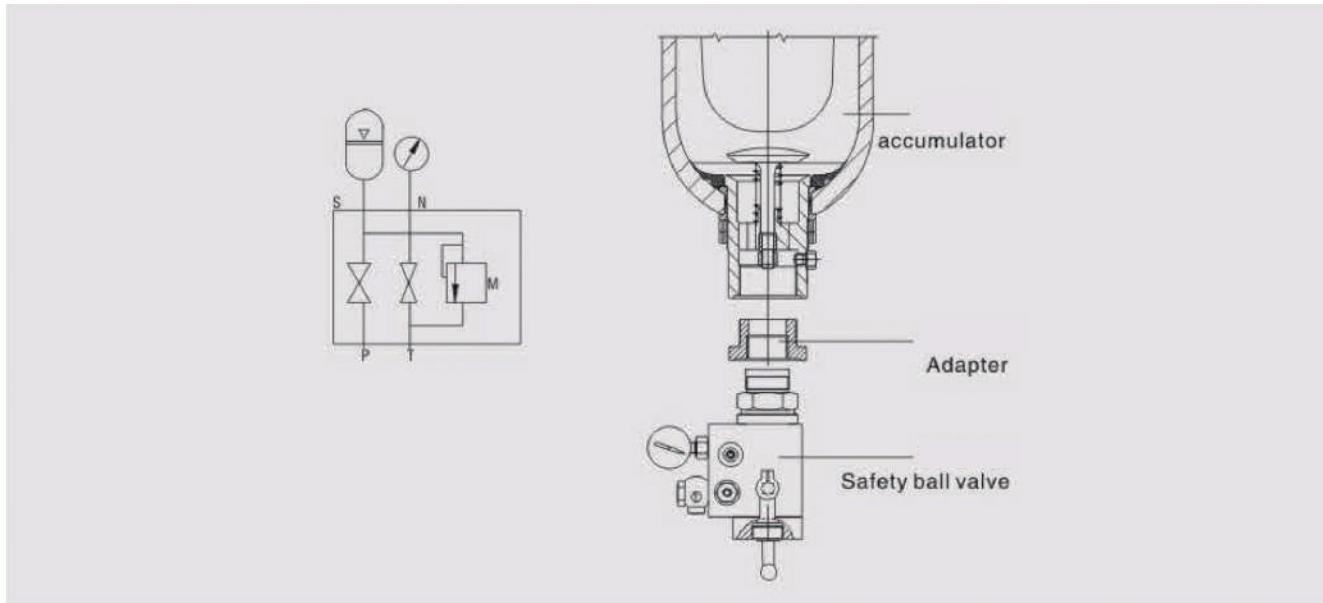
AQF through,thread connection

AOF right angle,thread connection

AQF tri-channel,thread connection

## QFZ Safety Valve Group for accumulator

### ◆ Structure principle Chart



Model	NOM.P (Mpa)	Adjusting rang(Mpa)	NOM.D (mm)	NOM Flux (Lm)	Dimension (mm)					For accumulator	Weight (kg)	
					H	D3	D2	D1	DM			
AQF - L25H※-A	10	H1=3.5-14	25	100	31.5	24		M33x2		M27x2 M42x2	NXQ - 1.6 ~ 10 ※ -L-A	17
AQF - LS25H※-A					30	22	35	M42x2				
AQF - LW25H※-A			32	160	31.5	30		M42x2		M42x2 M60x2	NXQ - 10 ~ 100 ※ -L-A	17,5
AQF - L32H※-A			32	160	36	26	40	M52x2				
AQF - LS32H※-A					31.5	31.5		M48x2		M60x2 M72x2		
AQF - LW32H※-A	20	H2=7-21	40	250	40	32	45	M60x2		18,5	20	
AQF - L40H※-A					31.5	31.5		M72x2				
AQF - LS40H※-A			50	500	36	48		M72x2	M72x2			
AQF - LW40H※-A												
AQF - L50H※-A												

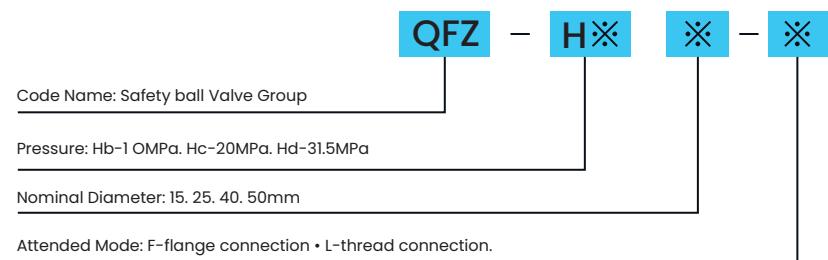
### ◆ Booking Note

1. Full type code is needed when booking. For example:pressure:31.5MPa;inside diameter:20mm;three way;screw thread:M42 x 2;AQF-LW20H3-A/M42 x 2.
2. Contact us if special requirement is needed
3. Design change is retained by our company and amendment is effected without further notice

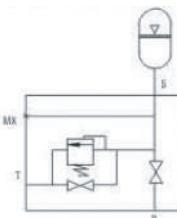
### ◆ General description

QFZ safety Valve Group for Accumulator,which consists of stopping valve with high pressure ball core,direct overflow valve and amini stopping valve. plays the role of open and close,safety,unloading valve,etc

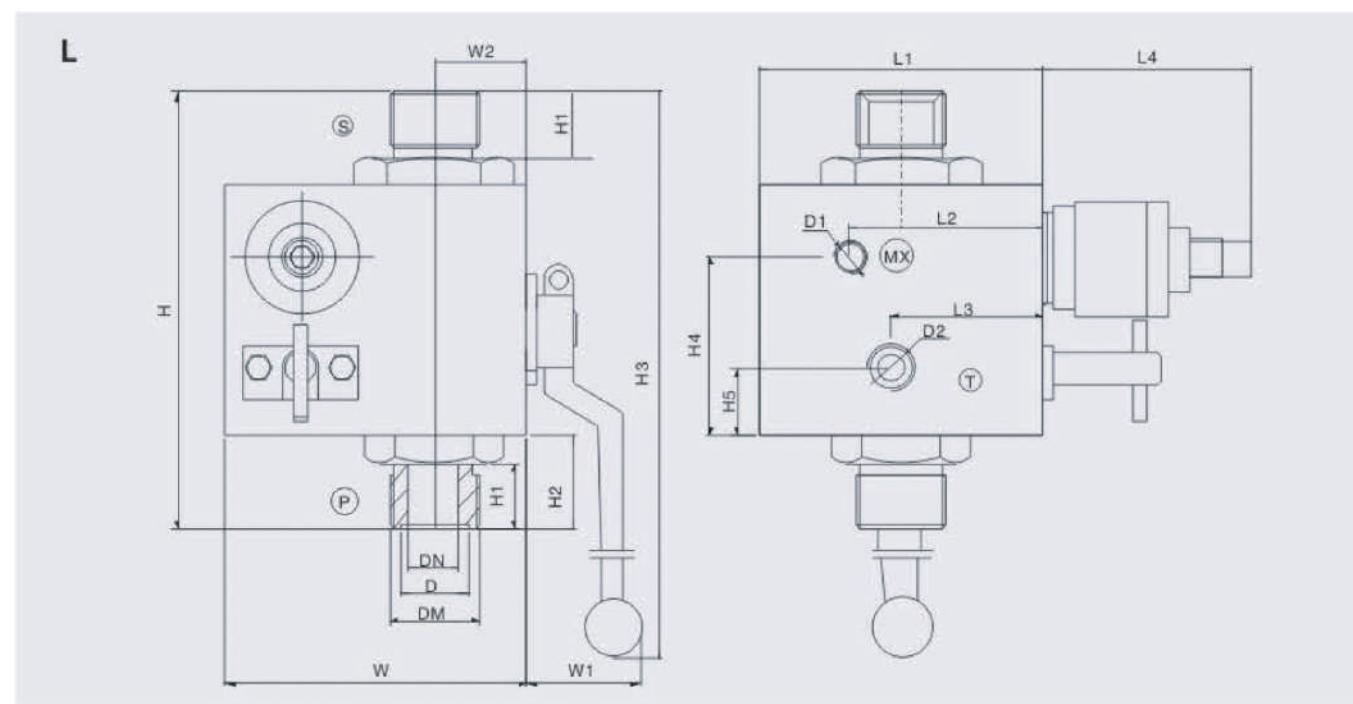
### ◆ Ordering code



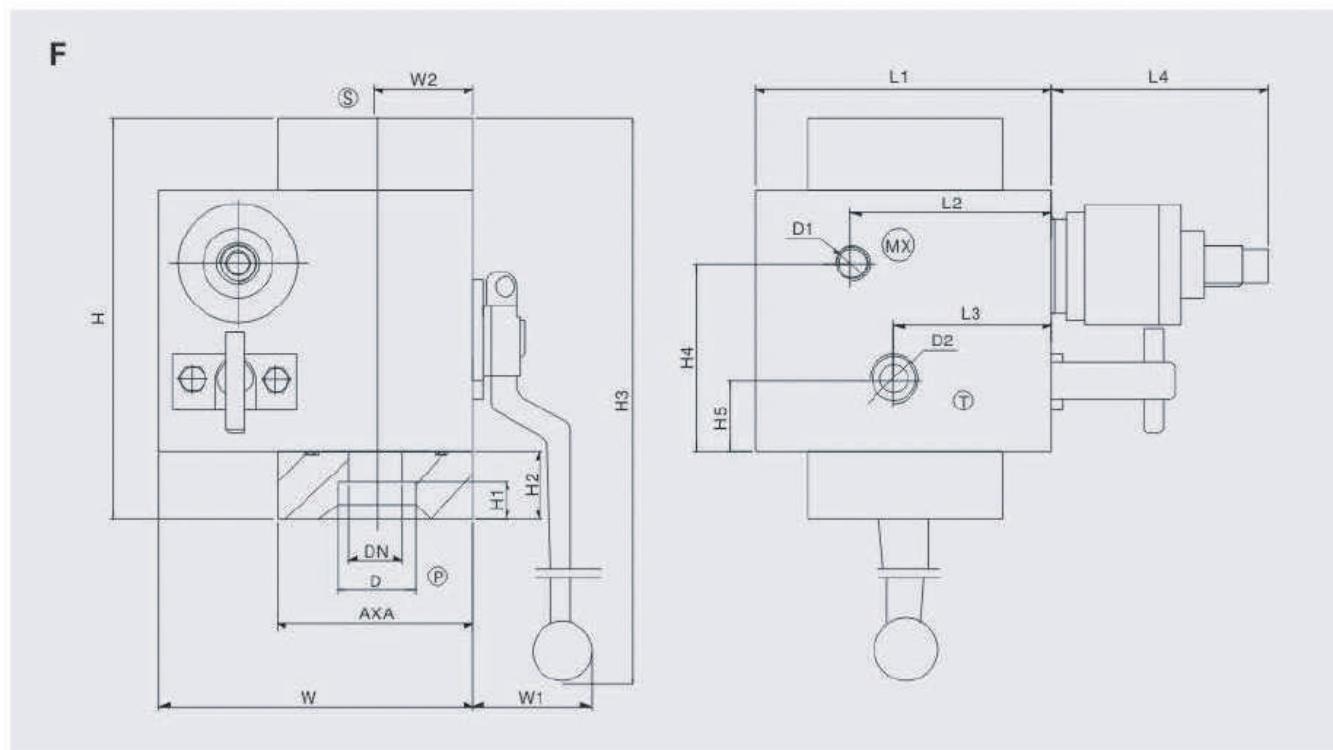
### ◆ Structure Principle Chart



### ◆ Dimension



QFZ-Hb-Hd15-50F/QFZ safety Valve Group(Flange connection)



1. Technical Parameter(thread connection)

Model	DN (mm)	PN (Mpa)	Dimension (mm)														Weight (kg)			
			L1	L2	L3	L4	H	H1	H2	H3	H4	H5	W	W1	W2	D	D1	D2	DM (S)	
QFZ-Hb-Hd15-50F	15	10	85	58	46	68	131	20	28	201	53	20	90	33	28	20	M10X1	M18X15	M27X2	5
QFZ-Hb-Hd25-50F			90	58	46	68	167	23	31	262	76	23	110	44	37	35			M42X2	9
QFZ-Hb-Hd40-50F			100	65	46	68	200	30	40	318	90	35	140	45	48	52			M60X2	19
QFZ-Hb-Hd50-50F			125	70	46	68	240	30	40	377	115	56	165	50	60	63			M72X2	27

2. Technical Parameter(Flange connection)

Model	DN (mm)	PN (Mpa)	Dimension (mm)														Weight (kg)			
			L1	L2	L3	L4	H	H1	H2	H3	H4	H5	W	W1	W2	D	D1	D2	AxA(S)	
QFZ-Hb-Hd15-50F	15	10	85	58	46	68	115	11	20	193	54	20	90	33	28	22.5	M10X1	M18X15	56	5
QFZ-Hb-Hd25-50F			90	58	46	68	155	14	25	256	76	23	110	44	37	35			74	9
QFZ-Hb-Hd40-50F			100	65	46	68	180	18	30	30	90	35	140	45	48	52			96	19
QFZ-Hb-Hd50-50F			125	70	46	68	130	20	35	372	115	56	165	50	60	65			110	27

◆ Booking Note

1. Full type code is needed when booking For example:the nominal capacity of the accumulator is 40L;diameter: < !>2.99: NXJ-B-3.(Rubber pad included).

2. Contact us if special requirement is needed.

3. Design change is retained by our company and amendment is effected without further notice

**AJ Application Valve Group for Accumulator**

◆ General description

AJ Application Valve Group for Accumulator, which consists of stopping valve, protection valve, unloading valve, etc., is set between accumulator and hydraulic system to control the oil condition of make-and-break, overflow and unloading (which consists of manual and electromagnetic).

◆ Ordering code

AJ - \* - \* - \* - \* - / \* - \*

Code Name: Application Valve Group for accumulator

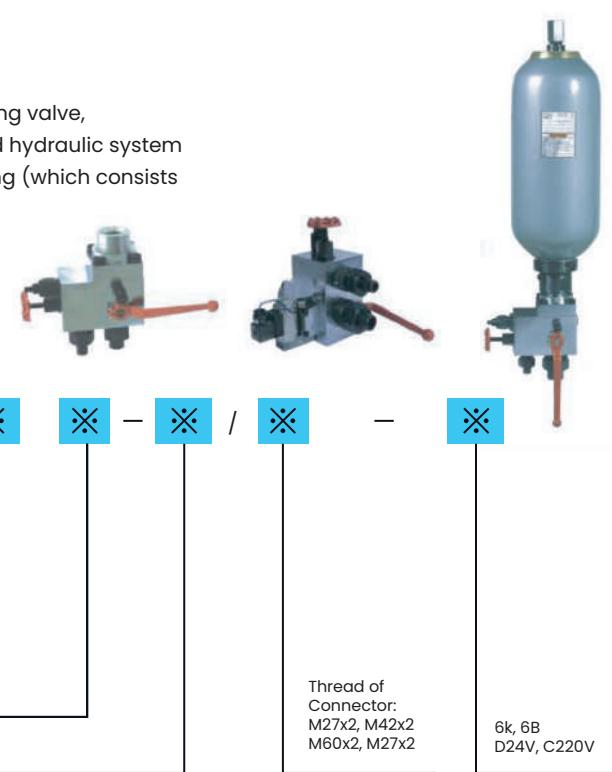
C-Custom No-Standard

Unloading Type: S-Manual(standard), O-electromagnetic

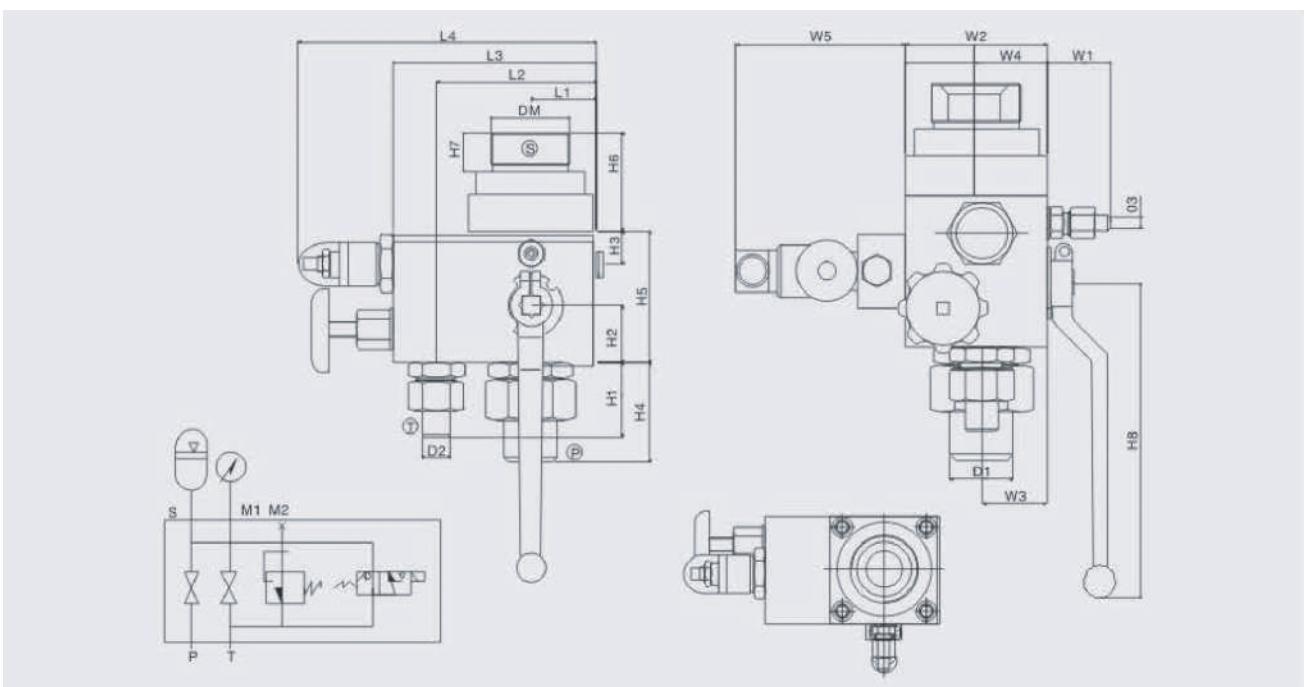
Nominal Diameter: 1 o. 20. 32mm

Pressure of Protection Valve:  
a-6.3MPa. b-16MPa. c-25MPa. H-31.5MPa

Structure(mode): Z-direct overflow valve



◆ Dimension and Structure Principle



### SAF type Energy Storage Safety Stop Valve Block(International Standard)

#### ◆ Technical parameter

Model	DN (mm)	PN (Mpa)	Dimension (mm)													
			L1	L2	L3	L4	W1	W2	W3	W4	H1	H2	H3	H4	M1	M2
AJS-10※Z※	10	10	25	68	90	155	42	50	22.5	25	40	24		55		
AJS-20※Z※	20	20	47.5	114	135	209	42	90	40	47.5	53	38	20	60		
AJS-32※Z※	32	31.5	47.5	114	135	209	42	95	42	47.5	53	38	20	78		

Model	Dimension (mm)								Weight (kg)
	H5	H6	H7	H8	D1	D2	D3	DM	
AJS - 10※Z※	85	31/35	16/23	130	22	17	10	M27X2/M42X2	4
AJS - 20※Z※	100	63/75	23/30	200	28	22	10	M42X2/M60X2	13
AJS - 32※Z※	100	75/80	30/35	200	42	22	10	M60X2/M72X2	15

Model	DN (mm)	PN (Mpa)	Dimension (mm)													
			L1	L2	L3	L4	W1	W2	W3	W4	W5	H1	H2	H3	M1	M2
AJS-10※Z※	10	10	25	68	90	155	42	50	22.5	25	113	40	24			
AJS-20※Z※	20	20	47.5	114	135	209	42	90	40	47.5	113	53	38	20		
AJS-32※Z※	32	31.5	47.5	114	135	209	42	95	42	47.5	113	53	38	20		

Model	Dimension (mm)								Weight (kg)	
	H4	H5	H6	H7	H8	D1	D2	D3	DM	
AJS - 10※Z※	55	85	31/35	16/23	130	22	17	10	M27X2/M42X2	4
AJS - 20※Z※	60	100	63/75	23/30	200	28	22	10	M42X2/M60X2	13
AJS - 32※Z※	78	100	75/80	30/35	200	42	22	10	M60X2/M72X2	15

#### ◆ Booking Note

1. Full type code is needed when booking. For example: pressure: 31.5MPa, inside diameter: 20mm; standard screwthread of accumulator connection M42x2, AJS-20HZ/M42x2.
2. Contact us if special requirement is needed.
3. Design change is retained by our company and amendment is effected without further notice.

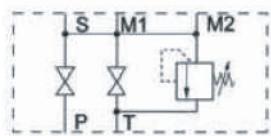


#### ◆ General description

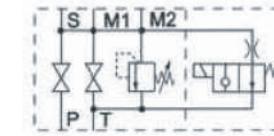
AJ Application Valve Group for Accumulator, which consists of stopping valve, protection valve, unloading valve, etc., is set between accumulator and hydraulic system to control the oil condition of make-and-break, overflow and unloading (which consists of manual and electromagnetic).

#### ◆ Hydraulic Principle Codes

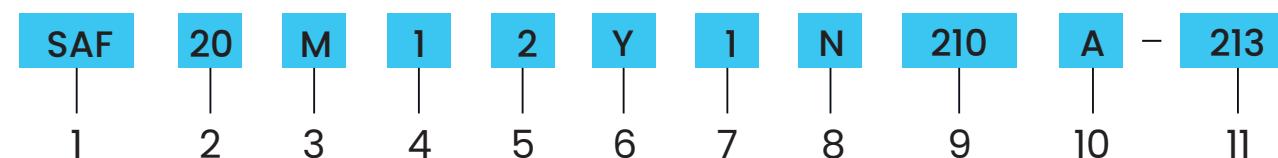
With manual unloading (SAF※M)



With electromagnetic unloading (SAF※E)



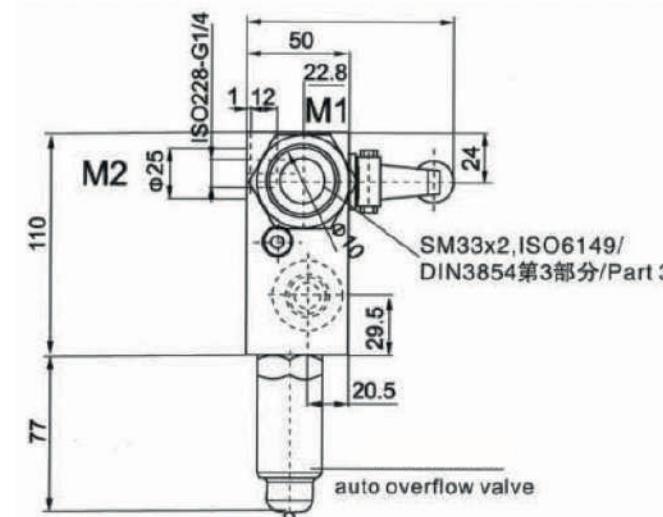
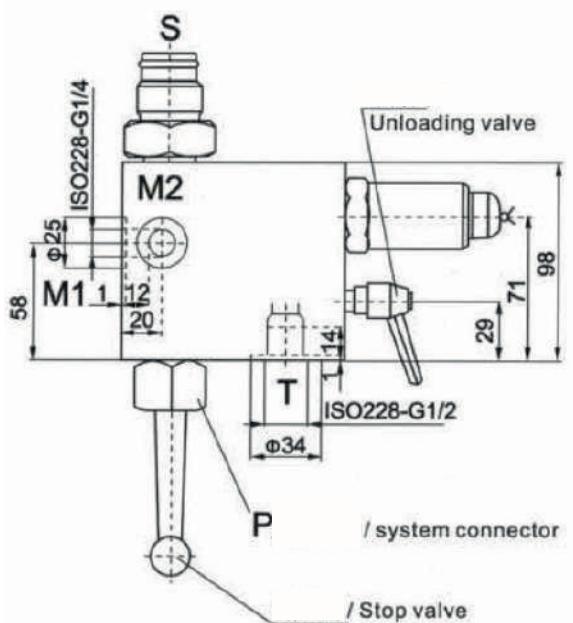
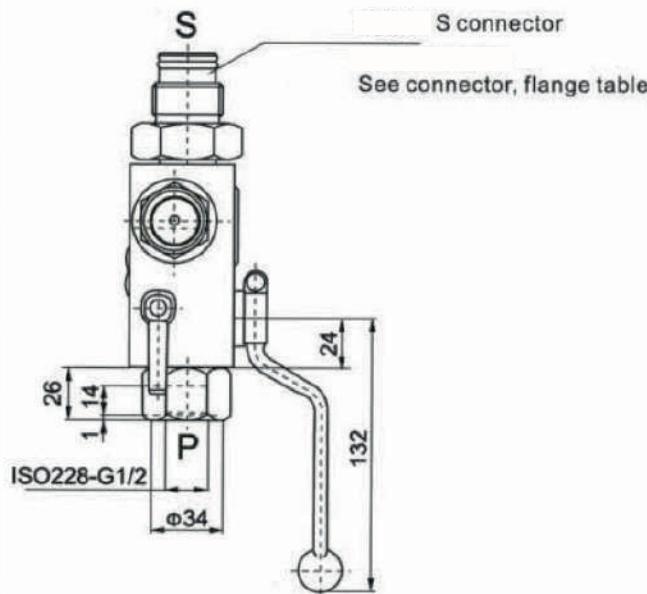
#### ◆ Ordering Code



1. Product code: SAF series safety stop valve block
2. Main stop valve specifications: nominal diameter 10, 20, 32
3. Unloading M Manual unload / Electrical and manual unload
4. Stainless steel 316
5. Rubber 5--EPDM 6--FPM
6. Electromagnetic and manual unload / Start unloading / Unloading closed
7. Other
8. Adjustable through the spanner
9. Pressure set value: 210 bar to 315 bar / e.g. 210 bar to 315 bar
10. Thread connecting standard  
A--IS0228(BSP)  
B--DIN 13, ~\*/ conforming to ISO965/1 (nominal)  
C--ANSI 81.1 (UNF, O sealing, conforming to SAE)
- Without pressure testing port

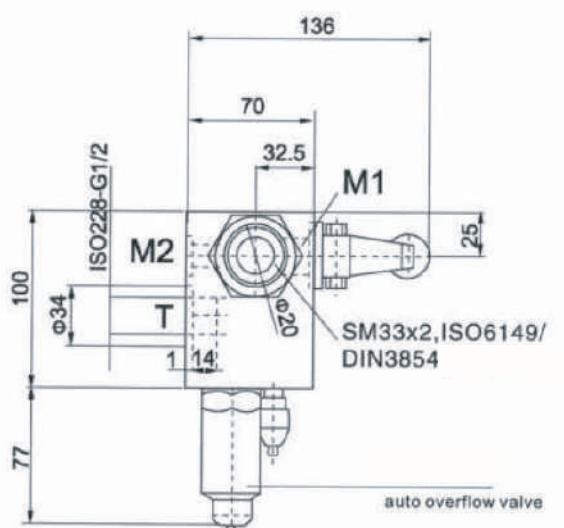
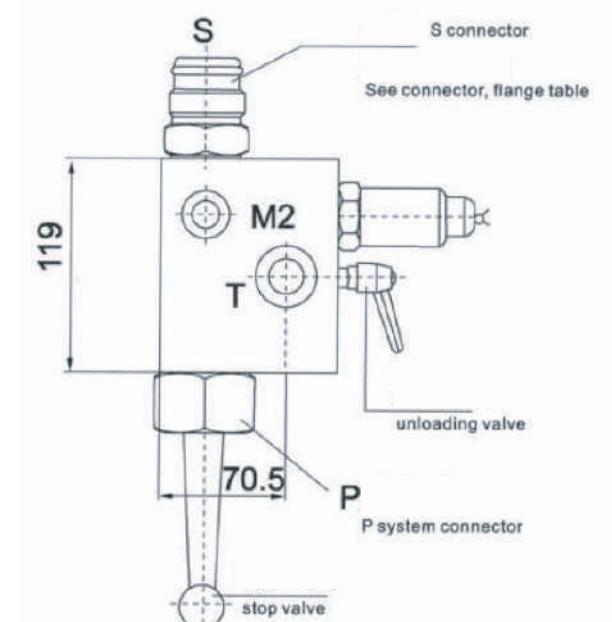
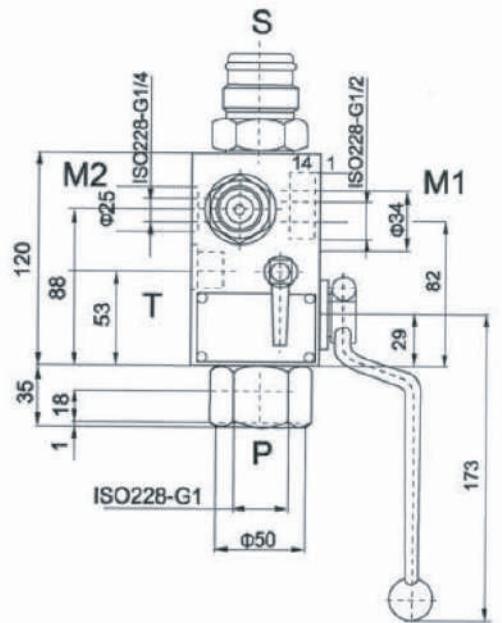
◆ Valve Block Dimensions

SAF1 Oenergy storage safety valve block

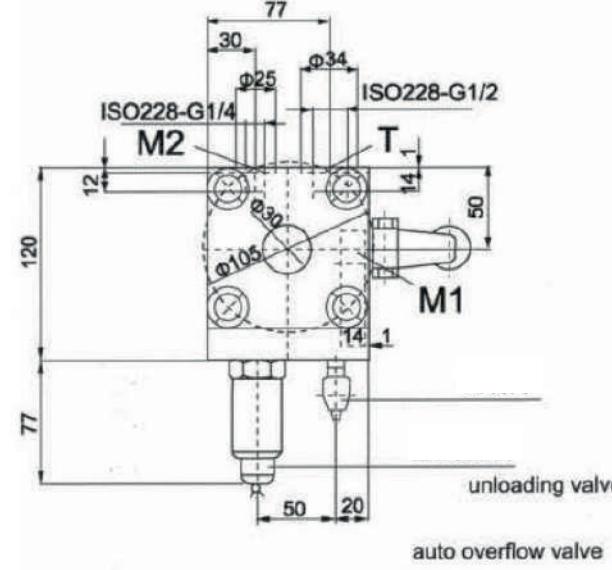
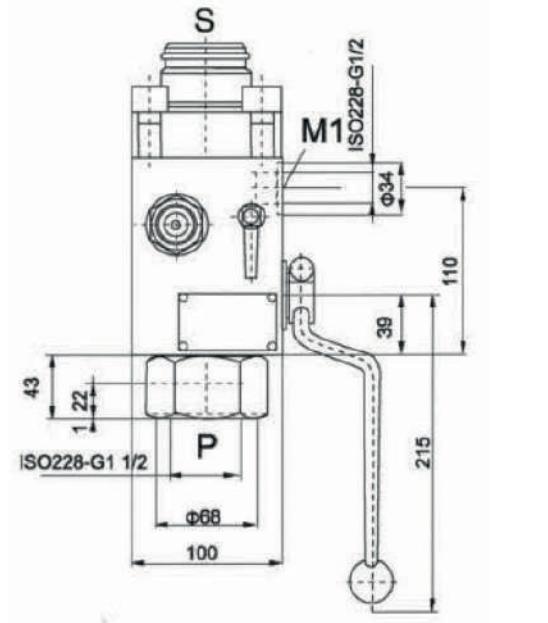
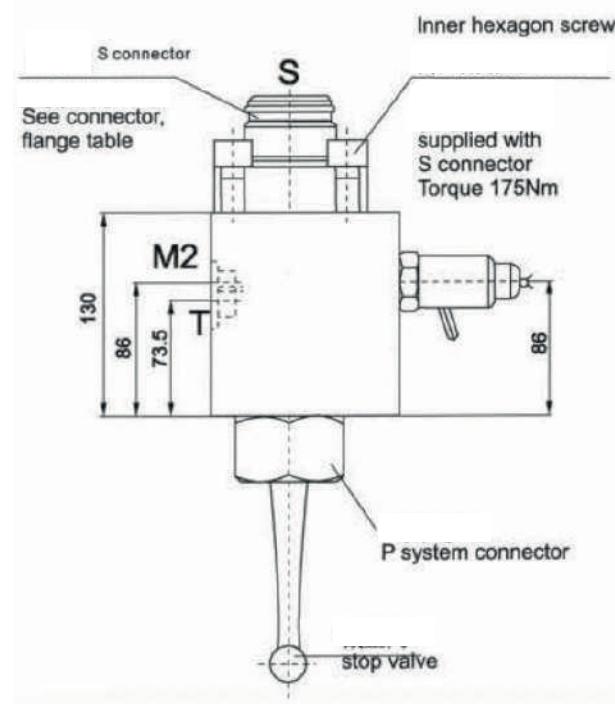


◆ Valve Block Dimensions

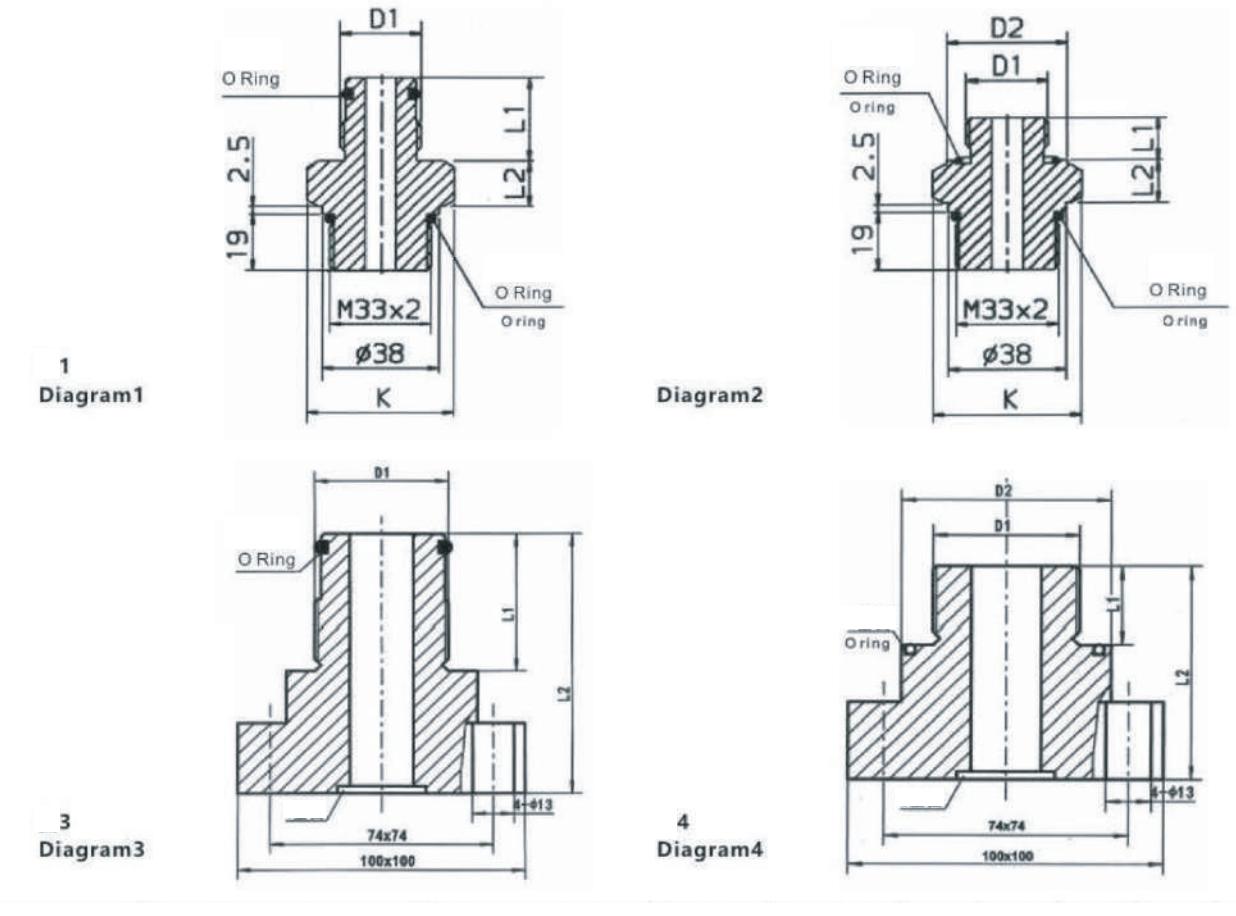
SAF20energy storage safety valve block



SAF32energy storage safety valve block



## SF type Connector, Flange and International Standard Bladder Energy Storage Specialized Connector



Connector	Energy Storage Type	D1 connecting thread	Conector	Diagram No.	KSW	L1 (mm)	L2 (mm)	D2 (mm)	O (ring)	
SAF 10/20 DSV10	SB 330/400-0.5 bis 1	G34A	S10	1	41	28	15.5		17 x 3	
	SB 550/600-1 bis 5	G1A	S11		46	34	16.5		22 x 3	
	SB 330/400-2.5 bis 1	G11/4A	S12		37				30 x 3	
	SB 330/400-10 bis 50	G2/A	S13		65	44	20.5		48 x 3	
	SB 440/500/600-1 bis 50				42	15	17.5	40	32 x 3	
	Nominal diné thread connecting	M3.0 x 1.5	S20	2	55	20	20.5	54	43 x 3	
		M4.0 x 1.5	S21		65	20	20.5	64	53 x 3	
		M5.0 x 1.5	S22							
SFA 32	SB 330/400-0.5 bis 1	G34A	S305	3		28	58		17 x 3	
	SB 550/600-1 bis 5	G1A	S306			34	64		22 x 3	
	SB 330/400-2.5 bis 1	G11/4A	S307			37	67		30 x 3	
	SB 330/400-10 bis 50	G2/A	S309			74			48 x 3	
	SB 440/500/600-1 bis 50					115				
	Nominal diné thread connecting	M3.0 x 1.5	S330	4		15	47	45	32 x 3	
		M4.0 x 1.5	S340			20	51	60	43 x 3	
		M5.0 x 1.5	S350					75	53 x 3	

## AJF safety Stopping Valve

### ◆ General description

AJF safety Stopping Valve for Accumulator, which consists of stopping valve, protection valve unloading valve, etc, is set between accumulator and hydraulic system to control the oil condition of make and break, overflow and unloading.



### ◆ Ordering code

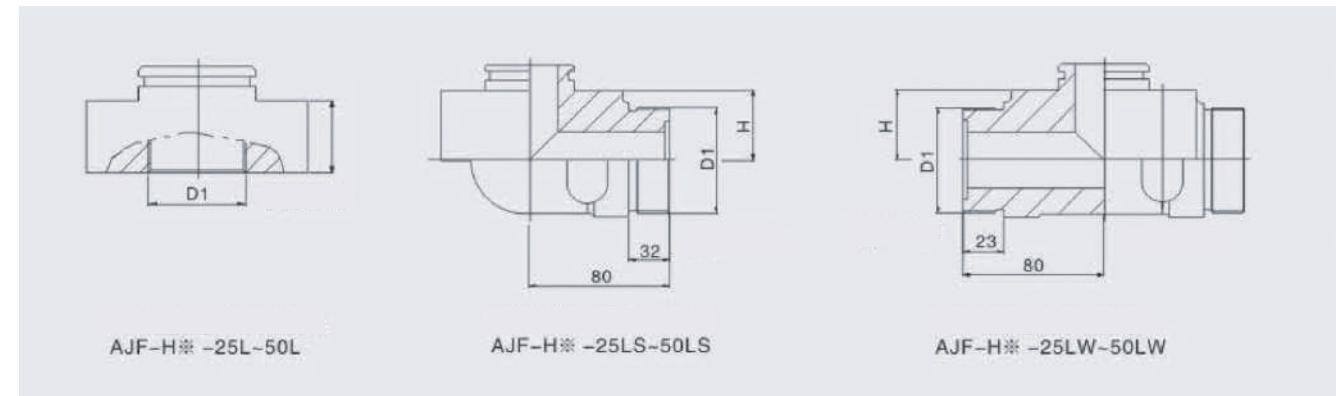
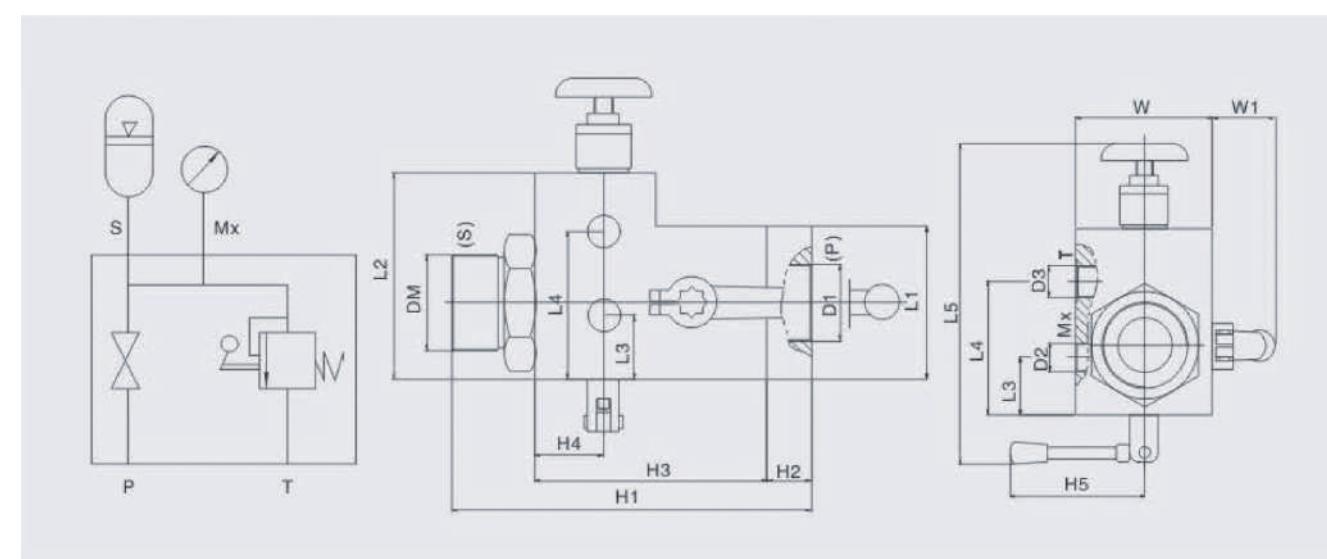
AFJ - H※ L※ - ※

Code Name:safety Stopping Valve
Pressure: Hb-1 OMPa. Hc-20MPa. Hd-31.5MPa
Nominal Diameter: 25. 40, 50mm
Connection Mode: L-through. LS-right angle. LW-three way

### ◆ Technical Parameter

Nominal Pressure	10-31.5MPa
Suitable medium	Mineral oil, water-glycol, emulsion
Medium temperature	-10 °C - + 93 °C

### ◆ Dimension and Structure Principle



Model	Dimension (mm)																
	L1	L2	L3	L4	L5	W	W1	H	H1	H2	H3	H4	H5	H6	DM	D1	D2
AJF-H※25L	68	100	34	67	190	68	45	30	180.5 / 189.5	26.5	110	38	95	24	M42x2 /M60x2	M33x2	
AJF-H※25LS														33			
AJF-H※25LW																	
AJF-H※40L	96	130	40	93	241 / 255	95	45	40	228 / 236	28	146	40	95	33	M60x2 /M72x2	M48x2	M20x1.5
AJF-H※40LS														33			
AJF-H※40LW														33			
AJF-H※50L	110	140	55	102	251 / 270	110	50	110	256	31	160	47	95	40	M72x2	M60x2	
AJF-H※50LS														40			
AJF-H※50LW																	

Model	PN (Mpa)	DN (mm)	Nominal Flux (L/min)	For Accumulator	Weight (Kg)
AJF-H※25L	10	25	160	NQX- 1.6-6.3 / -L-A NXQ-10-50/ -L-A	6.8
AJF-H※25LS					
AJF-H※25LW					
AJF-H※40L	20	30	400	NQX- 10-40 / -L-A NXQ-63-100/ -L-A	13.5
AJF-H※40LS					
AJF-H※40LW					
AJF-H※50L	31.5	50	630	NXQ-63-100/ -L-A	18.5
AJF-H※50LS					
AJF-H※50LW					

### ◆ Booking Note

- Full type code is needed when booking. For example: Safety Stopping valve group of operating pressure: 31.5MPa, inside diameter: 50mm; right angle; nut connection. AJF-Hd50Ls.
- Contact us if special requirement is needed.
- Design change is retained by our company and amendment is effected without further notice.

## XJF Stopping Valve for Accumulator

### ◆ General description

XJF stopping Valve for Accumulator,hydraulic balance meter valve type as its master valve core, developed on the basis of foreign information and designed oil drain for disassembly of accumulator which replaces the import stopping valve.

### ◆ Ordering Code

XJF -  /

inner Diameter of Discharge Outlet: 10mm

Nominal Diameter: 10, 20, 32, 40, 50mm

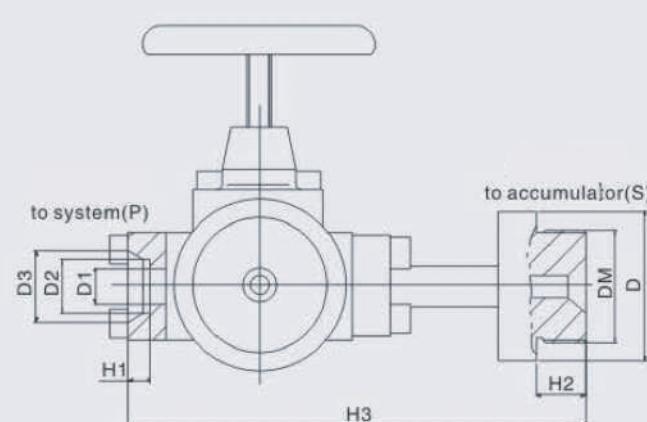
Code Name:  
Stopping Valve for Accumulator

### ◆ Technical Parameter

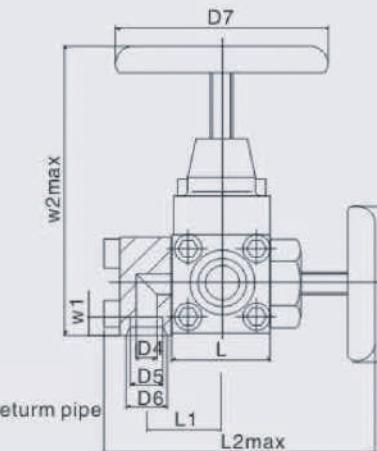
Nominal Pressure	10~31.5 Mpa
Suitable medium	Mineral oil, water-glycol, emulsion
Medium temperature	-10 °C ~ + 93 °C

### ◆ XJF stopping valve

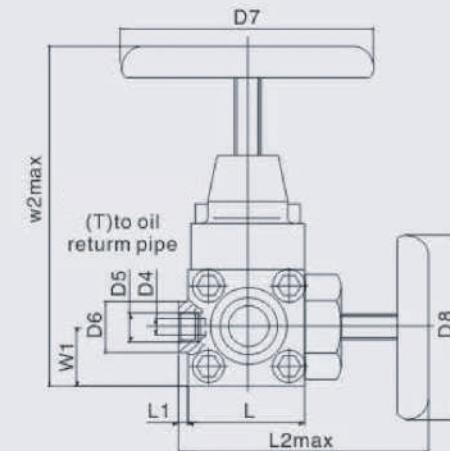
**XJF-10 ~ 50/10**



**XJF-10 ~ 32/10**



**XJF-40 ~ 50/10**



Model	NO. D (mm)	NO. P (Mpa)	Discharge port diameter (Mpa)	Dimension (mm)											
				L	L1	L2	W1	W2	H1	H2	H3	D	D1		
XJF-10/10	10	10	10	58	44	163	10	170	12	20/26	226/236	60	10	17.8	27
XJF-20/10				58	44	163	10	170	12	20/26	226/236	60	20	28.5	38
XJF-32/10				76	53	190	12	225	16	26	283	80	32	43	55
XJF-40/10				92	8	207	46	250	16	26	275	80	40	51	62
XJF-50/10				100	10	210	50	280	16	38	316	90	50	61	65

Model	Dimension (mm)						For Accumulator	Weight (kg)
	D4	D5	D6	D7	D8	DM		
XJF-10/10	12	18	24	125	92	M42x2/M60x2	NXQ-1.6~10/※-L-A	7
XJF-20/10	12	18	24	125	92	M42x2/M72x2		7
XJF-32/10	12	18	24	155	107	M60x2/M72x2	NXQ-1.6~100/※-L-A	13
XJF-40/10	12	M22x1.5	40	155 <sub>D8</sub>	107	M60x2		16
XJF-50/10	12	M22x1.5	40	155	107	M72x2		25

### ◆ Booking Note

- Full type code is needed when booking. For example: stopping valve group of operating pressure 31.5MPa, inside diameter:32mm; XJF-32/10
- Contact us if special requirement is needed.
- Design change is retained by our company and amendment is effected without further notice.

**XJF Stopping Valve for Accumulator**

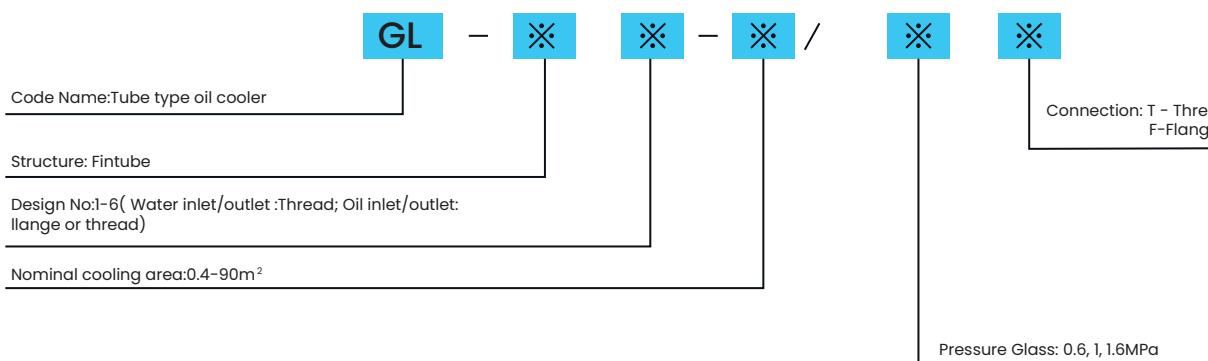
## ◆ General description

Tube type oil cooler GLC series is suitable for metallurgy, mining, chemical, electric power, machine tool, light industry, plastic industry such as hydraulic lubrication system, its working medium cooling to the prescribed temperature.

GLC series cooler with components of shell, the front cover, back cover, cooling core. Cooling core has a fixed heat exchange tube and tube sheet, floating tubesheet, split flow of plate, support bar. Using copper fin tube heat exchange tube and tube fixed at one end, one end of the float, thus effectively avoid the structure failure due to thermal expansion. Cooling pipe can be from shell in to facilitate inspection, cleaning and maintenance.

This type of cooler has small volume, light weight and innovative structure, characteristics of heat transfer effect is remarkable, performance reached the level of similar foreign products.

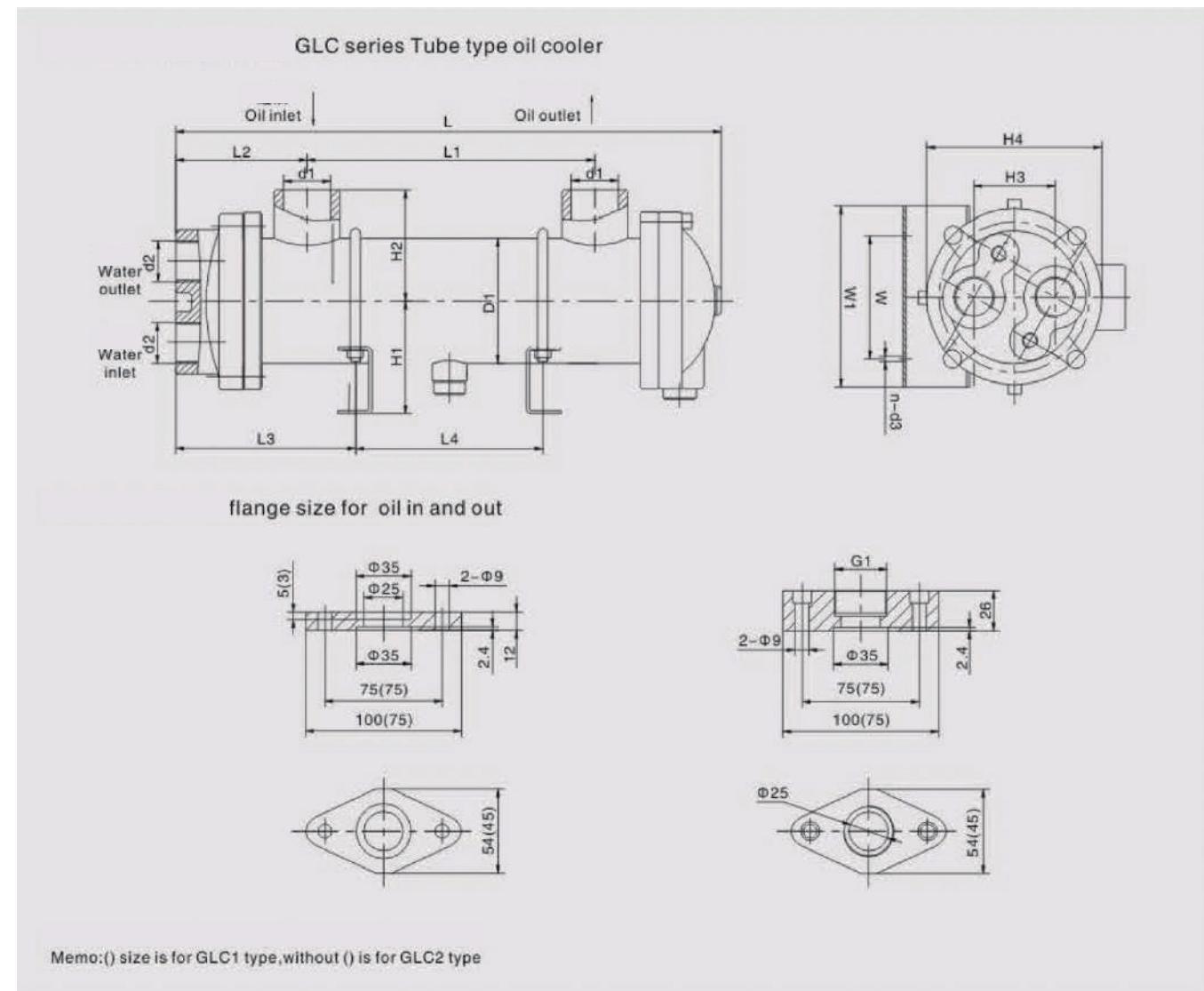
## ◆ Ordering Code



## ◆ Technical Parameter

Model	Cooling area (m <sup>2</sup> )	Working pressure (Mpa)	Working temperature (°C)	Pressure loss (Mpa)		Oil and water flow rate	Medium viscosity m <sup>6</sup> m <sup>2</sup> /s	Heat Transfer Coefficient W/m <sup>2</sup> K
				Oil Side	WaterSide			
GLC1	0.4 ~ 1.2	0.6 ~ 1.6	≤ 100	≤ 0.1	≤ 0.05	1:1	10 ~ 50	≥ 350
GLC2	1.3 ~ 3.5							
GLC3	4 ~ 11							
GLC4	13 ~ 27							
GLC5	30 ~ 54							
GLC6	55 ~ 90							

## ◆ Overall Dimension



◆ Technical Parameter

Model	Dimension (mm)														Nominal Flux (L/min)	Weight (Kg)	
	L	L1	L2	L3	L4	W	W1	H1	H2	H3	H4	D1	d1	d2	n-d3		
GLC1 - 0.4	370	240	67	115	145	102	132	60	68	52	92	78	$G_1$ (DN25)	$G_{3/4}$ (DN25)	4-12	10 ~35	10
GLC1 - 0.6	540	405			310											25 ~60	13
GLC1 - 0.8	660	532T			435											35 ~60	5
GLC1 - 1	810	665			570											60 ~75	17
GLC1 - 1.2	940	805			715											60 ~85	19
GLC2 - 1.3	560	375	98	172	225	145	175	85	93	78	137	120	$G_1$ (DN25)	$G_1$ (DN25)	4-12	30 ~85	21
GLC2 - 1.7	690	500			350											30 ~113	26
GLC2 - 2.1	820	635			485											30 ~113	29
GLC2 - 2.6	960	775			630											35 ~125	33
GLC2 - 3	1110	925			780											35 ~125	37
GLC2 - 2.5	1270	1085			935											40 ~150	41
GLC3 - 4	840	570	152	245	380	170	210	125	158	110	238	168	$G_{1/2}$ (DN36)	$G_{11/4}$ (DN36)	4-15	35 ~170	57
GLC3 - 5	990	720			530											35 ~190	70
GLC3 - 6	1140	870			680											40 ~220	83
GLC3 - 7	1310	1040			850											40 ~240	90
GLC3 - 8	1470	1200			1010											50 ~96	96
GLC3 - 9	1630	1360			1170											50 ~290	105
GLC3 - 10	1800	1530	197	318	1340	220	320	160	208	140	305	219	$G_2$ (DN50)	$G_{11/2}$ (DN36)	4-Φ19	60 ~320	110
GLC3 - 11	1980	1710			1520											60 ~350	118
GLC4 - 13	1340	985			745											50 ~300	152
GLC4 - 15	1500	1145			905											50 ~320	164
GLC4 - 17	1660	1305			1065											60 ~350	175
GLC4 - 19	1830	1475			1235											60 ~400	188
GLC4 - 21	2010	1655	202	327	1415	220	320	160	208	140	305	219	$G_2$ (DN50)	$G_2$ (DN50)	4-Φ23	70 ~430	200
GLC4 - 23	2180	1825			1585											70 ~450	213
GLC4 - 25	2360	2005			1765											80 ~480	225
GLC4 - 27	2530	2175			1935											80 ~520	238
GLC4 - 30	1832	1570			1320											150 ~650	255
GLC4 - 34	2152	1790			1540											150 ~700	280
GLC4 - 37	2322	1960	202	327	1710	280	320	200	234	180	355	273	$G_{11/2}$ (DN65)	$G_2$ (DN50)	4-Φ23	200 ~800	298
GLC5 - 41	2542	2180			1930											200 ~850	322
GLC5 - 44	2712	2350			2100											250 ~900	340
GLC5 - 48	2872	2510			2260											250 ~950	357
GLC5 - 51	3090	2730			2480											300~1000	380
GLC5 - 54	3262	2900			2650											300~1000	398
GLC6 - 55	2272	1860	300	390	1590	320	230	284	200	410	325	$G_3$ (DN65)	$G_{21/2}$ (DN65)	4-Φ23	350 ~1150	418	
GLC6 - 60	2452	2040			1770										350 ~1200	442	
GLC6 - 65	2632	2220			1950										400~1250	469	
GLC6 - 70	2812	2400															