

Annular BOP

Blowout preventer is an important component assembly of well control device. It is characterized by flexible switch, easy operation, safety in use and simple maintenance, etc. Our Bops are designed as per the API 16A Specification, with good quality and best competitive price. Two types of Bop are offered Annular Bop and Ram Bop.

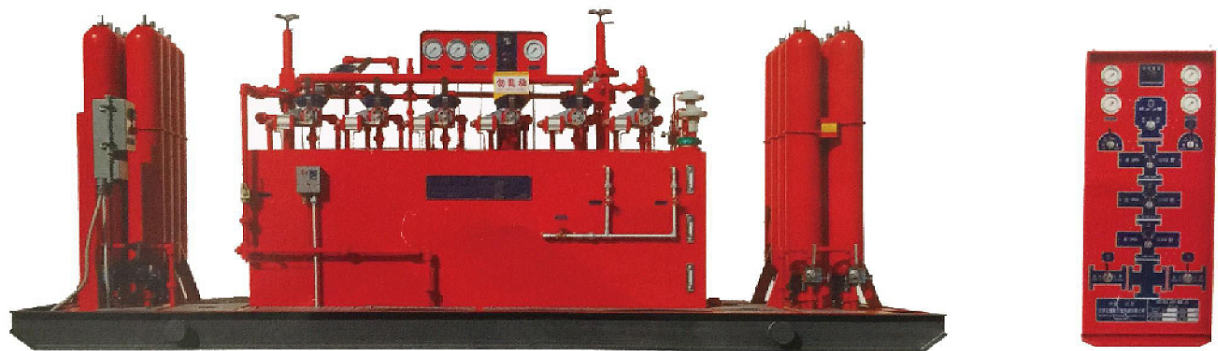
The design and manufacture of Annular BOP is according to API 16A standard. Annular blowout preventer is manipulated by hydraulic control system. Packing element is spherical or tapered type with massive storage volume, low operation pressure and excellent sealing function.



Annular BOP Specifications

Working Pressure (psi)	Bore (inches)				
	7 1/16	9	11	13 5/8	21 1/4
15,000					
10,000					
5,000					
3,000					
2,000					

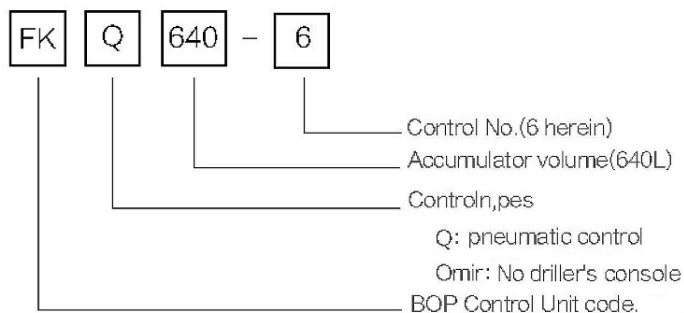
BOP Control Unit



BOP Control Unit (Hereinafter referred to as hydraulic control unit) is a necessary equipment for controlling wellhead BOP, Hydraulic choke & kill valve, and drilling & workover operation.

Two types of BOP Control Units are offered by us: One is pneumatic control hydraulic device. The hydraulic control device can be remote controlled with driller's console, to achieve the purpose of switching the BOP, which is commonly used in drilling operation; The other one is manual operation, which is suitable for drilling or work-over operation.

Model Description



Main Technical Parameters

Nominal working pressure : 21 Mpa / 3000 psi;
Regulation range : 0~14 Mpa / 0~2000 psi;
Nitrogen charging pressure of accumulator : 7 ± 0.7 Mpa / 1000 ± 100 psi;
Setting range of pressure controller : 18.9~21 Mpa / 2700~3000 psi;
Setting range of liquid-gas switch : 18.9~21 Mpa / 2700~3000 psi;
Air supply pressure : 0.65~0.8 Mpa / 93~115 psi
power : 380 ± 19 V / 50 Hz.

Specifications of BOP Control Unit

Type	Number of controlled objects				Accumulators sets			Volume of reservoir (L)	Motor power (KW)	Flow volume of pump	
	Annual	Ram	Choke	Spare	Nominal volume (L)	Effective volume (L)	Alignment			Electric pump (L/min)	Pneumatic pump (m ³ /stroke)
FKQ1440-14	1	4	7	2	60*24	720	rear	2300	18.5*2	46*2	60*4
FKQ1280-8	1	3	2	1	80*16	640	side	1650	18.5*2	46*2	60*2
FKQ960-8	1	3	3	1	60*16	480	side	1650	18.5*2	46*2	60*2
FKQ840-8	1	3	3	1	60*14	420	side	1650	18.5	46	60*2
FKQ1280-7B	1	3	2	1	80*16	640	side	1600	18.5*2	46*2	60*2
FKQ800-7	1	3	2	1	40*20	400	side	1600	18.5	46	60*2
FKQ800-7B	1	3	2	1	80*10	400	side	1600	18.5	46	60*2
FKQ800-7C	1	3	2	1	40*20	400	rear	1600	18.5	46	60*2
FKQ800-7D	1	3	2	1	40*20	400	side	1600	18.5	46	60*2
FKQ800-7E	1	3	2	1	40*20	400	side	1600	18.5	46	60*2
FKQ720-6	1	3	2		60*12	360	side	1290	18.5	46	60*2
FKQ720-6C	1	3	2		60*12	360	rear	1290	18.5	46	60*2
FKQ720-6D	1	3	2		60*12	360	side	1290	18.5	46	60*2
FKQ640-6	1	3	2		40*16	320	side	1290	18.5	46	60*2
FKQ640-6B	1	3	2		80*8	320	side	1290	18.5	46	60*2
FKQ640-6C	1	3	2		40*16	320	rear	1290	18.5	46	60*2
FKQ640-6D	1	3	2		40*16	320	side	1290	18.5	46	60*2
FKQ640-6E	1	3	2		40*16	320	side	1290	18.5	46	60*2
FKQ480-5	1	3	1		40*12	200	side	1100	18.5	46	60*2
FKQ480-5B	1	3	1		80*6	200	side	1100	18.5	46	60*2
FKQ480-5C	1	3	1		40*12	200	rear	1100	18.5	46	60*2
FKQ480-5E	1	3	1		40*12	200	side	1100	18.5	46	60*2
FKQ320-4	1	2	1		40*8	160	side	790	11	35	60*1
FKQ320-4C	1	2	1		40*8	160	rear	790	11	35	60*1
FKQ320-4E	1	2	1		40*8	160	side	790	11	35	60*1
FKQ240-3C	1	1	1		40*6	120	rear	550	11	35	60*1
FK240-4	1	2	1		40*6	120	rear	550	11	20	
FK240-4E	1	2	1		40*6	120	rear	550	11	20	
FK240-3	1	1	1		40*6	120	rear	550	11	20	
FK125-3	1	1	1		25*5	62.5	rear	440	7.5	20	
FK125-3E	1	1	1		25*5	62.5	rear	440	7.5	20	
FK125-2		1	1		25*5	62.5	rear	440	7.5	20	
FK125-2E		1	1			62.5	rear	440	7.5	20	

Specifications of BOP Control Unit

(gal) Accumulator	Electric pump	Pneumatic pump	Manual pump	Warning device	Nitrogen standby system	Protect room	Insulated building & air condition	Steam heating	Electric heating	Driller's console	Auxiliary Console	Pipe rack & tube
	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
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	●	●	○	○	○	●	○	○	○	●	○	○
11x20	●	●	○	○	○	●	○	○	○	●	○	○
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	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
11x16	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
11x8	●	●	○	○	○	●	○	○	○	●	○	○
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	●	●	○	○	○	●	○	○	○	●	○	○
11x8	●	●	○	○	○	●	○	○	○	●	○	○
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	●	●	○	○	○	●	○	○	○	●	○	○
11x6	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
11x3	●	●	○	○	○	●	○	○	○	●	○	○
	●	●	○	○	○	●	○	○	○	●	○	○
11x3	●	●	○	○	○	●	○	○	○	●	○	○

Remark: 1. Above list is basic configuration, '●' is basic configuration, '○' is optional configuration.
 2. Optional configuration in the above list does not mean it's available to each model, pls contact us for details.
 3. With regards to the configuration or function which is not listed above, can be made as per customer request.

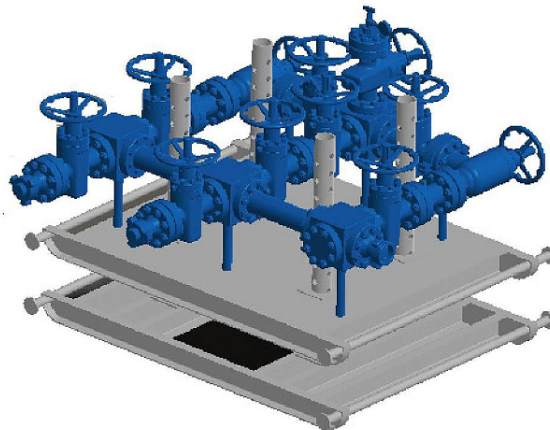
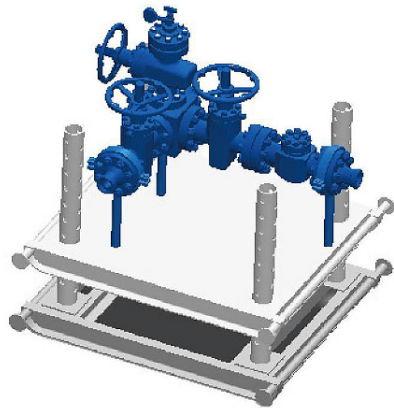
Choke & Kill Manifold



Choke manifold is necessary device to control the well kick successfully and execute the pressure control technology on oil/gas well in the course of drilling, as it is, the device is adopted to execute new drilling-well's technique of balance pressure, which can avoid pollution of oil-layer, improve the speed of drilling and control blowout effectively.

Kill Manifold consists of check valves, gate valves, pressure gauges and line pipes. One end of the kill manifold is connected to drilling spool and the other to pump. Kill manifold is necessary equipment in well-control system to pump drilling fluid into well barrel or inject the water into wellhead.

Our company's choke and kill manifold falls into five class: 14MPa, 21MPa, 35MPa, 70MPa and 105MPa. Also, We can design according to customer demand.



Choke and Kill Manifold

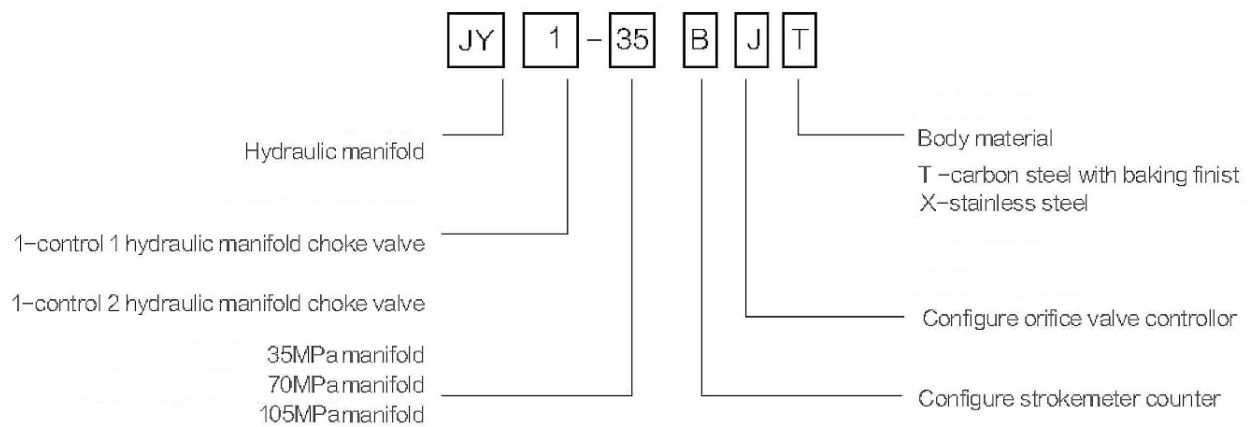
Name	Choke manifold			Kill manifold			
	JG/S ₂ -35	JG/SY-35	JG/SY ₂ -70	JG/S ₂ Y ₂ -105	YG-35	YG-70	YG-105
Main diameter and sideward diameter	31/8×21/16(80×52) 41/16×29/16(103×65) 41/16×31/16(103×78)						
Working pressure psi(Mpa)	3000(21)		3000(21)		5000(35)	10000(70)	15000(105)
	5000(35)		10000(70)				
Working temperature(°C (°F))	LU -46°C ~121°C (-50°F ~250°F)						
Working mediums	Drilling fluid, mud and petroleum (with sulfuretted hydrogen)						
Control type	Two-winged manual choke valve	Two-winged hydraulic manual choke valve	Three-winged hydraulic manual choke valve	Four-winged double hydraulic manual choke valve	Two-winged with main relief valve		

Choke Manifold Control Panel



Control panel is the control device for hydraulic choke manifold. It can remote control the opening and closing of the hydraulic choke valve and show the pressure of standpipe and casing pressure, and the switching position of hydraulic choke valve. It can also show the strokes and frequency of the three mud pumps if equipped with pump stroke counter, which is an necessary equipment to control well kick,blowout and pressure balance.

Model Description

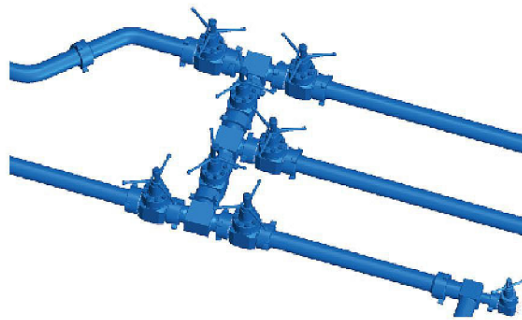
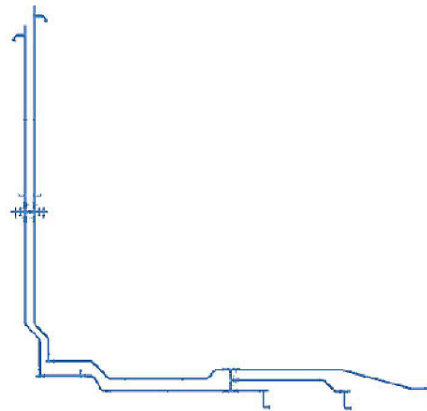
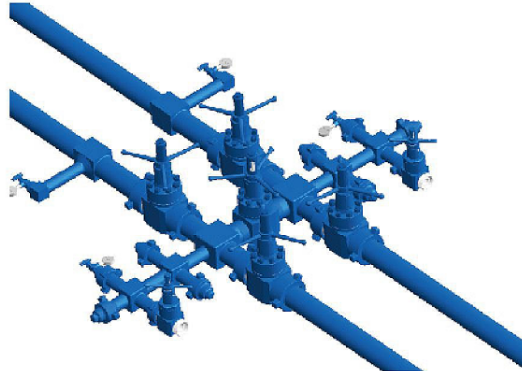


Main Technical Parameters

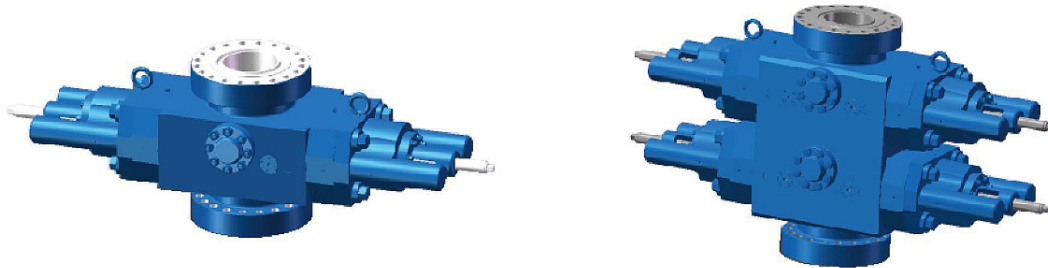
- Air pressure : 0.6MPa;
- Environment temperature : -20°C~+60°C;
- Working pressure : 3MPa;
- Gas circuit quick coupling size : M16×1.5;
- Oil passage quick coupling size : M22×1.5;
- Hydraulic oil specification : cold resistance hydraulic
- L×W×H : 960×600×1300;
- NW : 300kg。

Drilling Manifold

Drilling manifold is composed of mud gate valve, high pressure hammer union, tee, high-pressure hose, elbow, pressure gauge and spacer spool, etc. All parts of drilling manifold that offered are manufactured as per the API 16C standard.

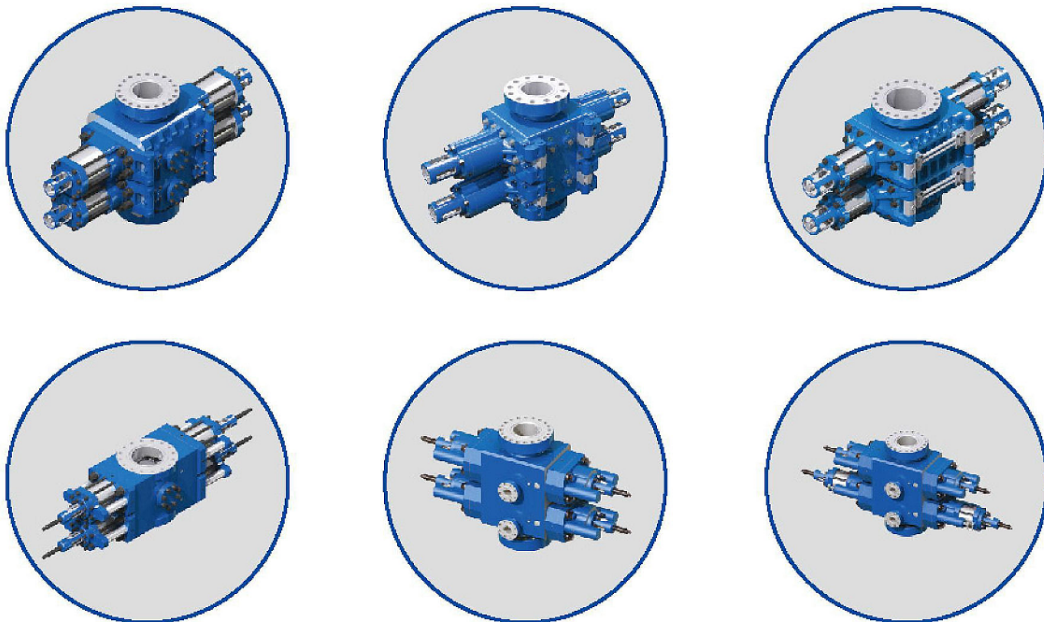


Ram BOP



Blowout preventer is an important component assembly of well control device. It is characterized by flexible switch, easy operation, safety in use and simple maintenance, etc. Our Bops are designed as per the API 16A Specification, with good quality and best competitive price. Two types of Bop are offered Annular Bop and Ram Bop.

Ram BOP is an important equipment widely used in onshore and offshore drilling. Ram BOP, such as single ram BOP, double ram BOP, are mainly hydraulic operated or manual operated. Ram Ram BOP is resistant to high-pressure characteristics which can prevent blowouts and seal wellhead safely.



Single Ram Bop Specifications

Model	FZ1835	FZ1870	FZ18105	FZ2335	FZ2821	FZ2835	FZ2870	FZ28105	FZ3535	FZ3570	FZ35105	FZ414	FZ5321	
Bore mm (in)	179.4 (7 1/16")			228.6(9")	279.4 (11")				346.1 (13 5/8")			539.8 (21 1/4")	527.1 (20 3/4")	
Working Pressure MPa (psi)	35 (5000)	70 (10000)	105 (15000)	35 (5000)	21 (3000)	35 (5000)	70 (10000)	105 (15000)	35 (5000)	70 (10000)	105 (15000)	14 (2000)	21 (3000)	
Hydraulic Control Pressure MPa	≤ 10.5													
Piston Bore mm	150	180	280	220	220	220	250	355	250	355	355	250	250	
Open Volume(L)	2×1.6	2×2.22	2×6.1	2×4.7	2×2.68	2×5.2	2×6.6	2×14.4	2×7.4	2×19.9	2×17.44	2×13.2	2×12.2	
Close Volume(L)	2×1.9	2×2.5	2×6.56	2×5.3	2×3.22	2×5.45	2×7.4	2×16.7	2×8.3	2×20	2×19	2×15.4	2×13.6	
Locking Type	Manual													
Main Bore connection	Bolt	M36×3	M39×3	M39×3	M42×3	M36×3	M48×3	M45×3	M50×3	M42×3	M48×3	M58×3	M42×3	M52×3
	Ring Gasket	R46	BX156	BX156	R50	R53	R54	BX158	BX158	BX160	BX159	BX159	R73	R74
Dimension (mm)	Locking shaft Non-rising stem	1392	1720	1842	2036	1846	2265	2370	2640	2468	3274	3074	3366	3424
	Locking shaft rising stem						2615	2710		2940			3956	
	W	582	715	934	815	998	860	950	1168	970	1488	1305	1205	1238
	H	644	856	922	820	710	900	1076	1244	950	1275	1420	915	1070
Weight(kg)	1046	1750	3405	2033	1520	2980	3540	7154	4398	9485	10105	6605	5862	
Remark			Shear ram					Shear ram	Shear ram	Shear ram	Shear ram			
									Variable ram	Variable ram	Variable ram			

Double Ram Bop Specifications

Model	2FZ1835	2FZ1870	2FZ18105	2FZ2335	2FZ2821	2FZ2835	2FZ2870	2FZ28105	2FZ3535	2FZ3570	2FZ35105	2FZ414	2FZ5321	
Bore mm (in)	179.4 (7 1/16")			228.6(9")	279.4 (11")				346.1 (13 5/8")			539.8 (21 1/4")	527.1 (20 3/4")	
Working Pressure MPa (psi)	35 (5000)	70 (10000)	105 (15000)	35 (5000)	21 (3000)	35 (5000)	70 (10000)	105 (15000)	35 (5000)	70 (10000)	105 (15000)	14 (2000)	21 (3000)	
Hydraulic Control Pressure MPa	≤ 10.5													
Piston Bore mm	150	180	280	220	220	220	250	355	250	355	355	250	250	
Open Volume(L)	4×1.6	4×2.22	4×6.1	4×4.7	4×2.68	4×5.2	4×6.6	4×14.4	4×7.4	4×19.9	4×17.44	4×13.2	4×12.2	
Close Volume(L)	4×1.9	4×2.5	4×6.56	4×5.3	4×3.22	4×5.45	4×7.4	4×16.7	4×8.3	4×20	4×19	4×15.4	4×13.6	
Locking Type	Manual													
Main Bore connection	Bolt	M36×3	M39×3	M39×3	M42×3	M36×3	M48×3	M45×3	M50×3	M42×3	M48×3	M58×3	M42×3	M52×3
	Ring Gasket	R46	BX156	BX156	R50	R53	R54	BX158	BX158	BX160	BX159	BX159	R73	R74
Dimension (mm)	Locking shaft Non-rising stem	1392	1720	1842	2036	1846	2265	2370	2640	2468	3274	3074	3366	3424
	Locking shaft rising stem						2615	2710		2940			3956	
	W	582	715	934	815	998	860	950	1168	970	1488	1305	1205	1238
	H	918	1262	1372	1200	1090	900	1076	1784	950	1740	1420	1480	1480
Weight(kg)	1795	3320	6291	3669	2566	4910	6310	12686	6620	14340	16763	10724	12800	
Remark			Shear ram					Shear ram	Shear ram	Shear ram	Shear ram			
									Variable ram	Variable ram	Variable ram			