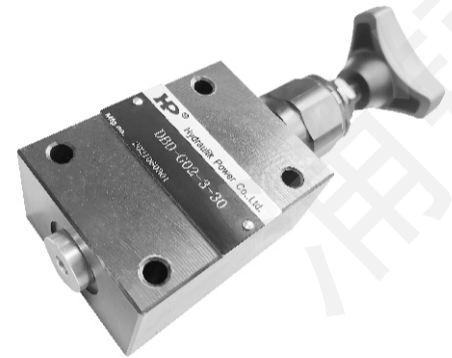


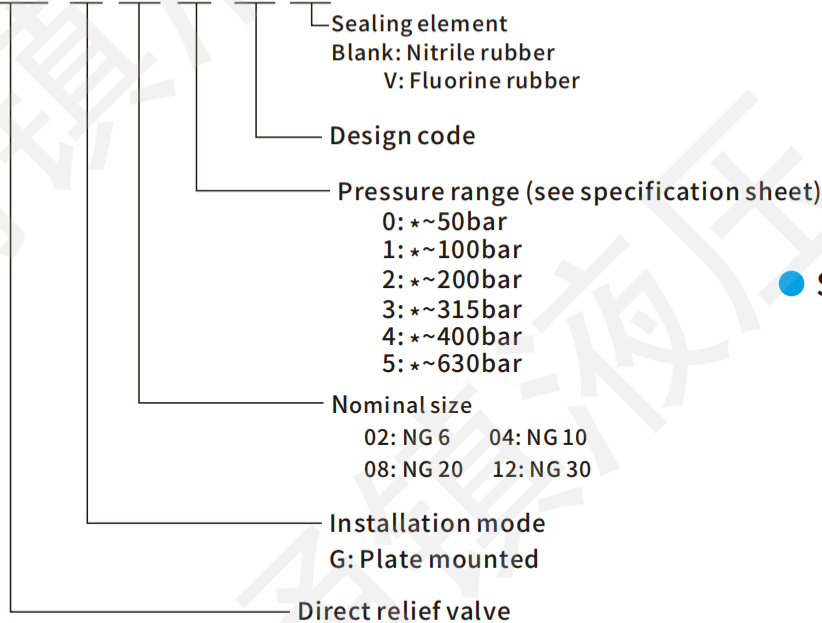
DBD Series

1. Protect the pump and control valve to avoid overpressure, so that the hydraulic system to maintain a constant pressure.
2. Direct acting, main valve with guide column design, large flow, low noise, stable pressure.

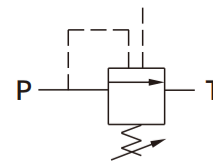


How to order

DBD-G02-1-30-V



● Symbol



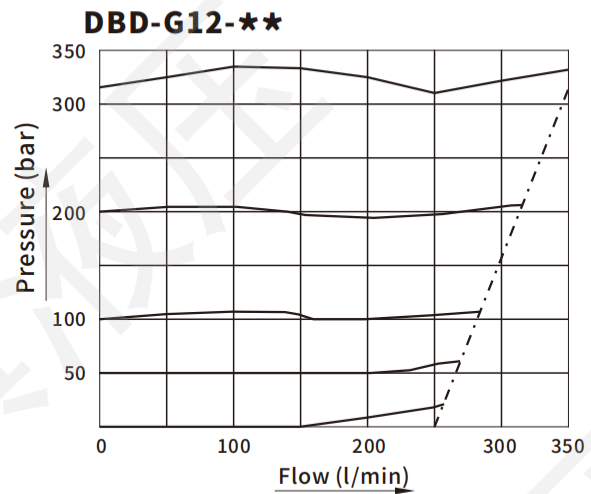
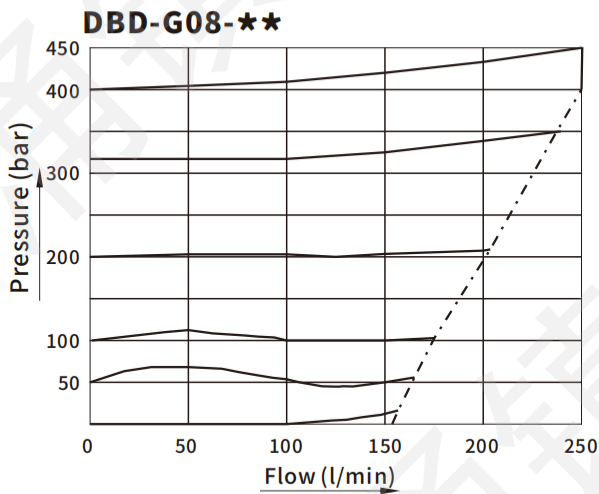
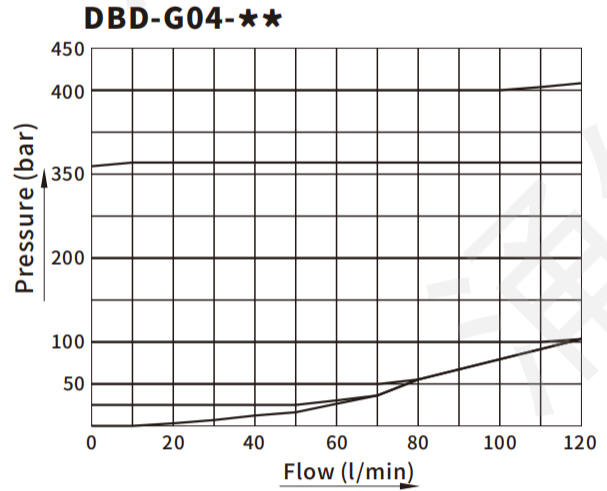
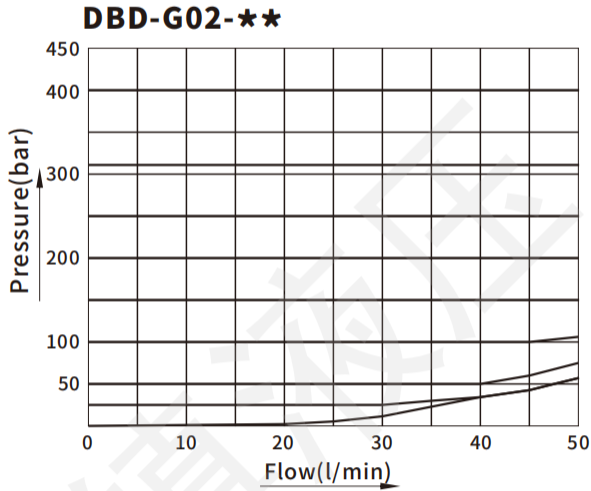
● Specification

Model	Max. pressure (bar)		Max. flow (l/min)	Pressure range (bar)	Weight(kg)
DBD-G02	P:400	T:315	50	0: *~50bar 1: *~100bar 2: *~200bar 3: *~315bar 4: *~400bar 5: *~630bar	1.5
DBD-G04	P:630	T:315	120		3.7
DBD-G08	P:400	T:315	250		6.4
DBD-G12	P:315	T:315	350		13.9

Note: Pressure range 5: DBD-G04 only

● Overflow-load

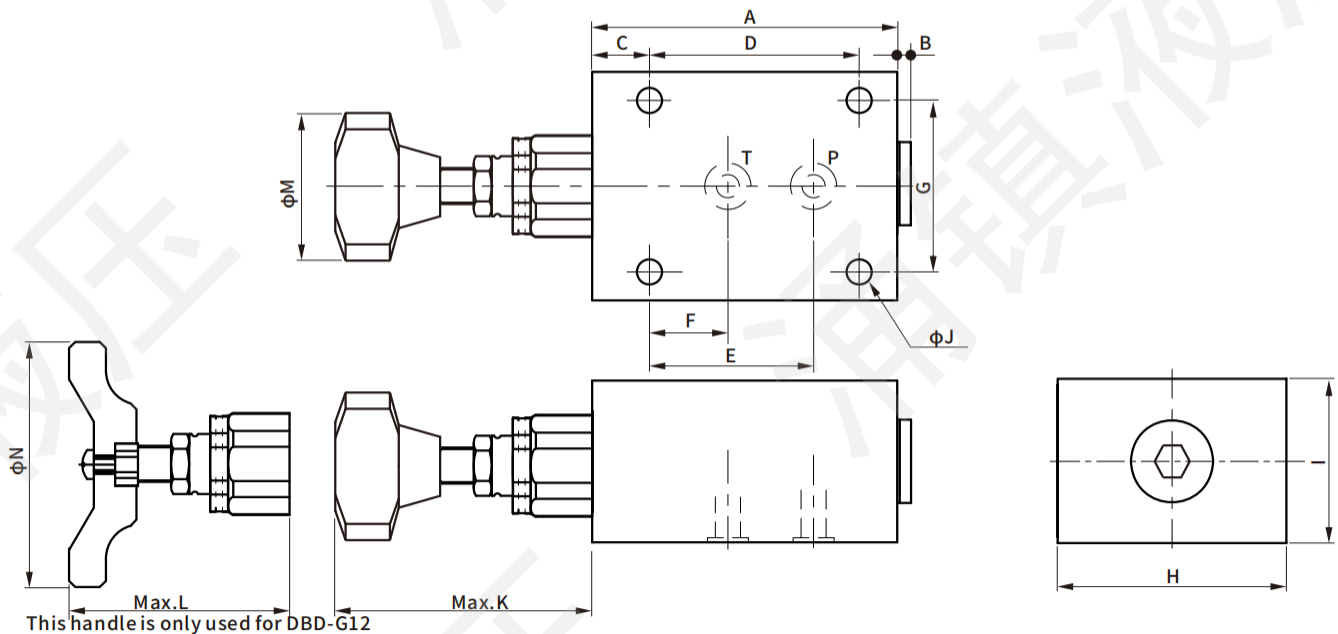
Test conditions: Viscosity: 46cSt; Temperature: 40°C ± 5°C

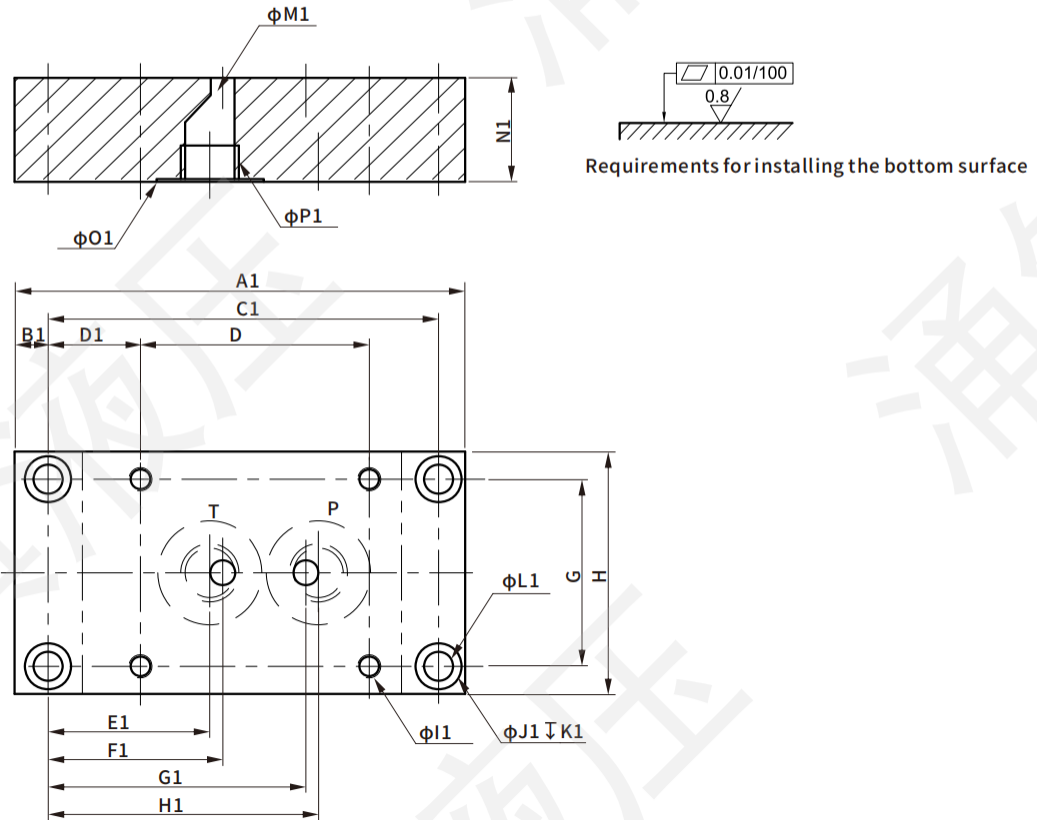


Pressure valve

Dimensions

● DBD-G02/G04/G08/G12-★★





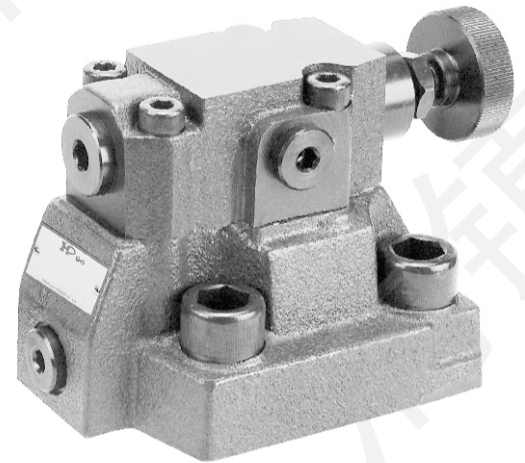
● Specification

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	A1	B1
DBD-G02	80	4	15	55	40	20	45	60	40	6.6	94	-	60	-	110	8
DBD-G04	100	4	20	70	45	21	60	80	60	9	90	-	60	-	135	10
DBD-G08	135	5.5	20	100	65	34	70	100	70	9	88	-	60	-	170	15
DBD-G12	180	5.5	25	130	85	35	100	130	90	11	-	67	-	80	190	12.5

C1	D1	E1	F1	G1	H1	I1	J1	K1	L1	M1	N1	O1	P1
94	22	39	42	62	65	M6X15	11	9	7	6	25	25	G1/4
115	27.5	40.5	48.5	72.5	80.5	M8X15	11	9	7	10	25	34	G1/2
140	20	42	54	85	97	M8X22	17.5	13	11.5	20	40	47	G1
165	17.5	42	52.5	102.5	117	M10X22	17.5	11.5	11.5	30	40	61	G1-1/2

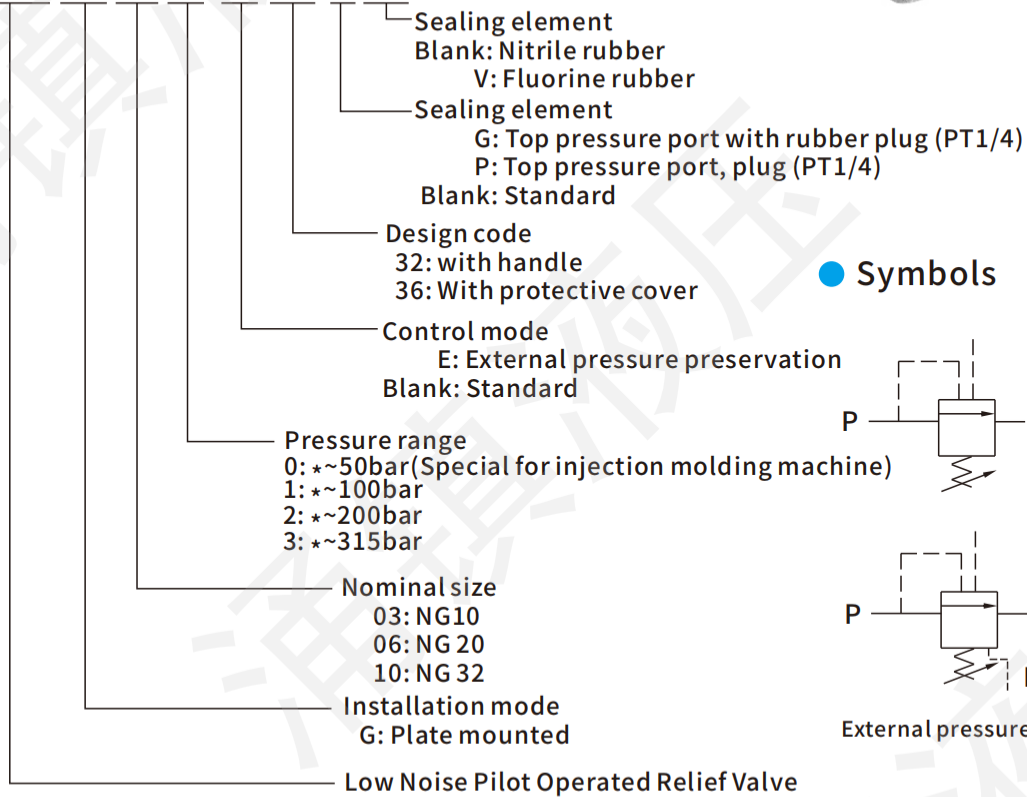
DRF Series

1. High working pressure, large flow, fast reaction speed, etc.;
2. Protect the pump and control valve from overpressure, and keep the hydraulic system at constant pressure;
3. Remote control and unloading can be achieved by using the unloading port.

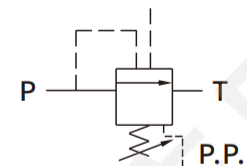
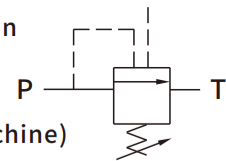


How to order

DRF -G 03 -1- E-32 G-V



● Symbols



External pressure preservation

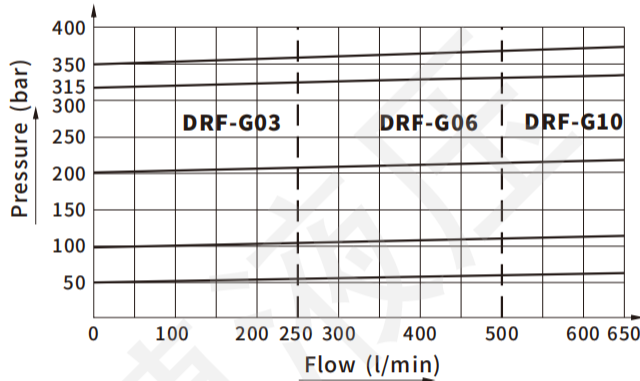
● Specification

Model	Max.pressure (bar)	Max. flow (l/min)	Weight (kg)
DRF-G03-**	350	250	3.4
DRF-G06-**		500	5
DRF-G10-**		650	5.9

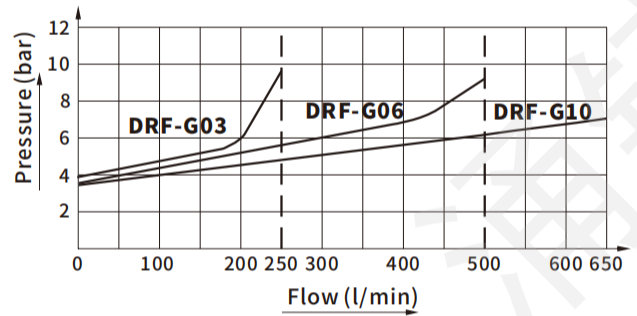
Test conditions: Viscosity :35cSt; Temperature :50°C

● Characteristic curve

Overflow-load



Min. adjusting pressure



Dimensions

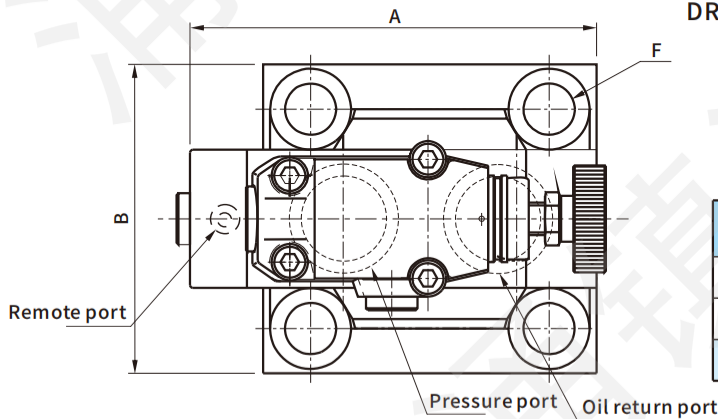
Units: mm

● DRF-G-**-**-*

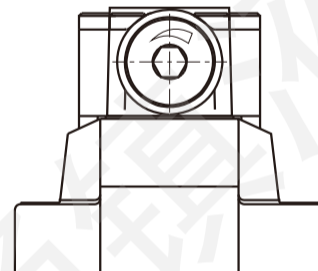
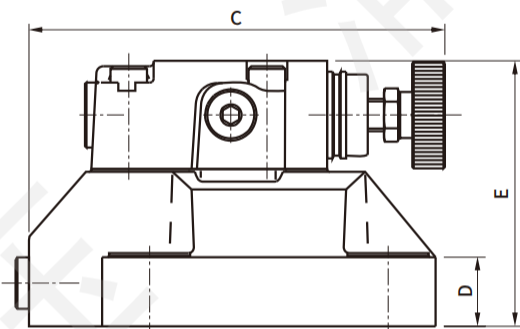
DRF-G03 Series valve installation surface: ISO 6264-06-09-**-97

DRF-G06 Series valve installation surface: ISO 6264-08-13-**-97

DRF-G10 Series valve installation surface: ISO 6264-10-17-**-97



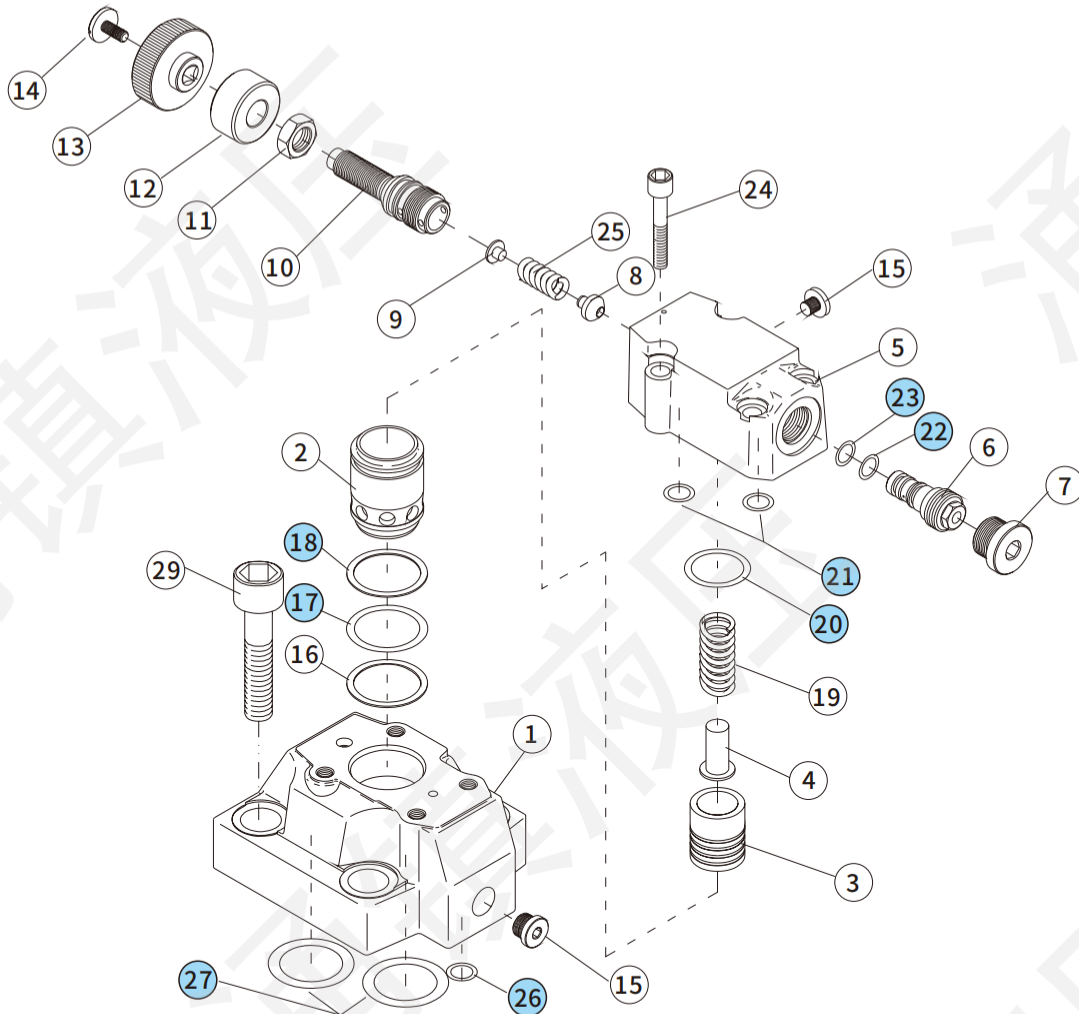
Model	A	B	C	D	E	F
DRF-G03	91	78	135	26	98	14
DRF-G06	116	100	144	26	98	18
DRF-G10	148	115	154	26	98	22



● Install attachment

Model	DRF-G03-**-*	DRF-G06-**-*	DRF-G10-**-*	Quantity
Mountingscrew	M12×45L	M16×50L	M18×50L	4
Mountingvalve plate	MF-04 Series	MF-06Series	MF-10Series	

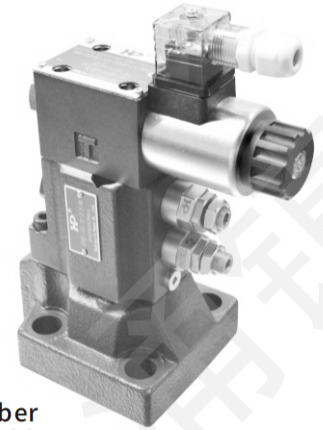
Sealing elements



No.	Install attachment	Model			Quantity
		DRF-G03-**	DRF-G06-**	DRF-G10-**	
17	O-ring	28x1.8	28x1.8	28x1.8	1
18		27.3x2.4	27.3x2.4	27.3x2.4	1
20		28x2.65	28x2.65	28x2.65	1
21		AS568-012	AS568-012	AS568-012	1
22		AS568-012	AS568-012	AS568-012	1
23		7.5x1.8	7.5x1.8	7.5x1.8	1
26		AS568-012	AS568-012	AS568-012	1
27		AS568-115	AS568-216	AS568-220	2

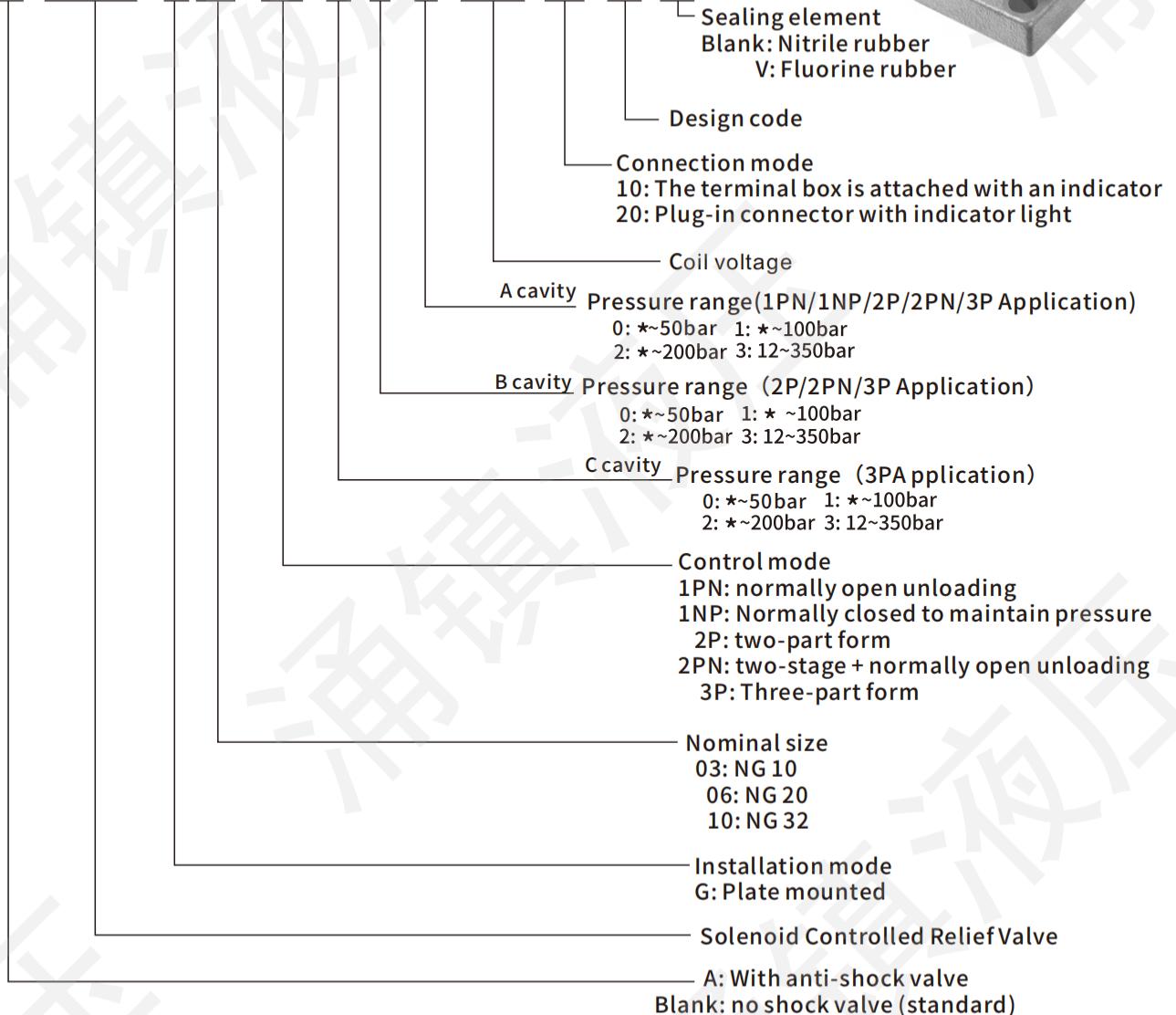
DSRF Series

1. It has the characteristics of high working pressure, large flow rate, fast reaction speed, etc.
2. The pump can be unloaded using electrical signals;
3. The hydraulic system can be controlled in a variety of ways by using pilot relief valve.



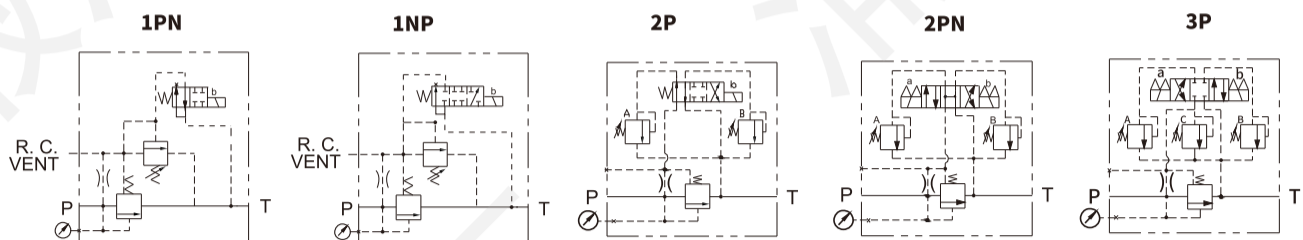
How to order

A - DSRF - G 03 - 2P - 1 - 3 - 3 - D24 - 20 - 40 - V



Pressure valve

● Symbols



Coil voltage

A240	AC240V 60Hz	AC220V 50Hz	R220	AC220V 60Hz	AC200V 50Hz
A220	AC220V 60Hz	AC200V 50Hz	R120	AC120V 60Hz	AC110V 50Hz
A120	AC120V 60Hz	AC110V 50Hz	R110	AC110V 60Hz	AC100V 50Hz
A110	AC110V 60Hz	AC100V 50Hz	D12	DC12V	
R240	AC240V 60Hz	AC220V 50Hz	D24	DC24V	

Specification

Model	Max. pressure (bar)	Max. flow (l/min)
DSRF-G03- **	350	250
DSRF-G06- **		500
DSRF-G10- **		650

Dimensions

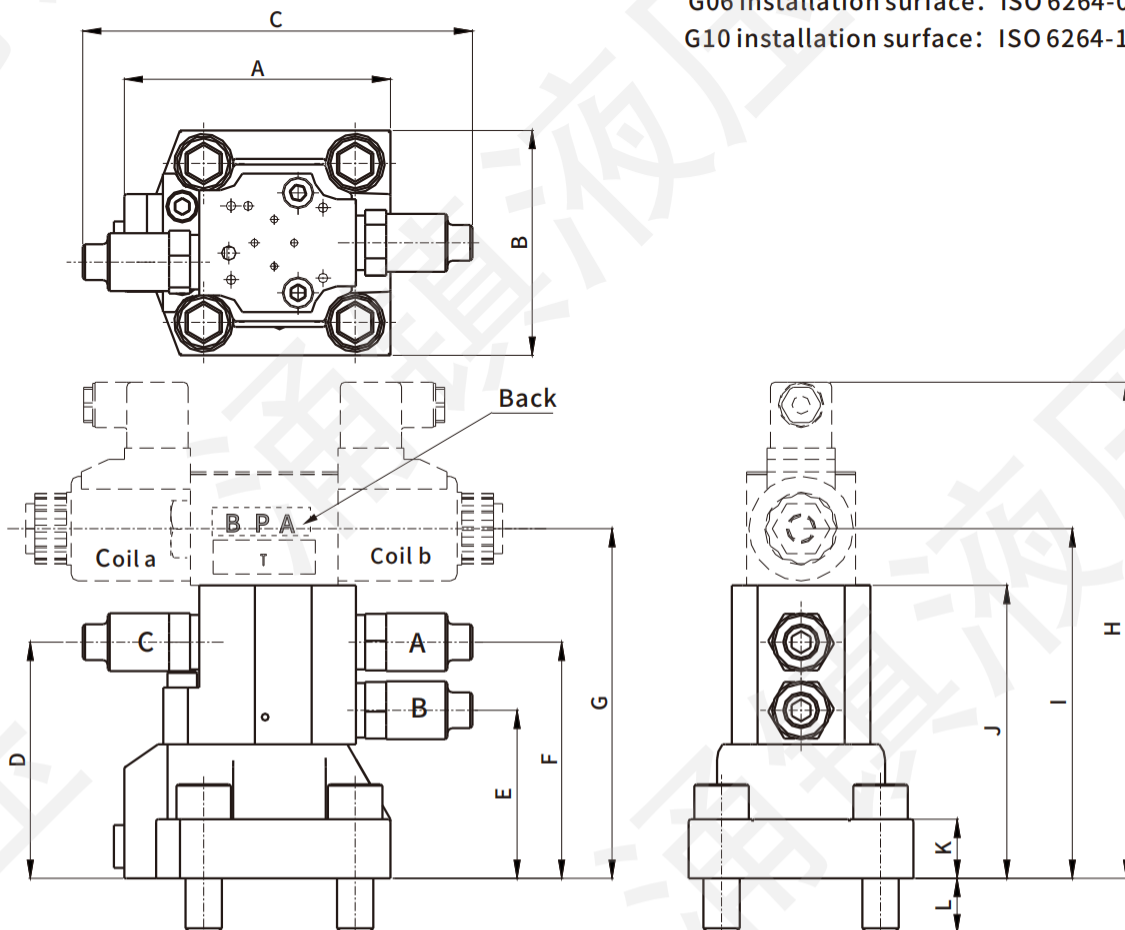
Units: mm

DSRF-G03/06/10-2P/2PN/3P

G03 installation surface: ISO 6264-06-09-* -97

G06 installation surface: ISO 6264-08-13-* -97

G10 installation surface: ISO 6264-10-17-* -97



Model	A	B	C	D	E	F	G	H	I	J	K	L
DSRF-G03- *	91	78	172	103	73	103	153	219	153	128	26	19
DSRF-G06- *	117	99	172	104	74	104	154	220	154	129	26	24
DSRF-G10- *	148	115	172	104	74	104	154	220	154	129	26	24

Dimensions

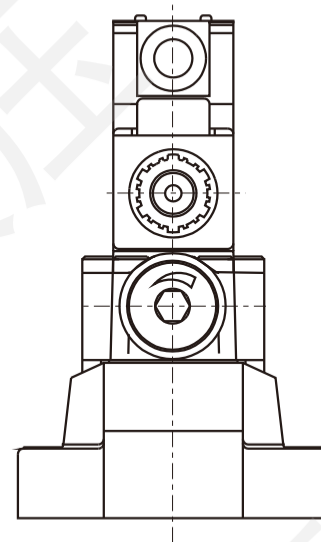
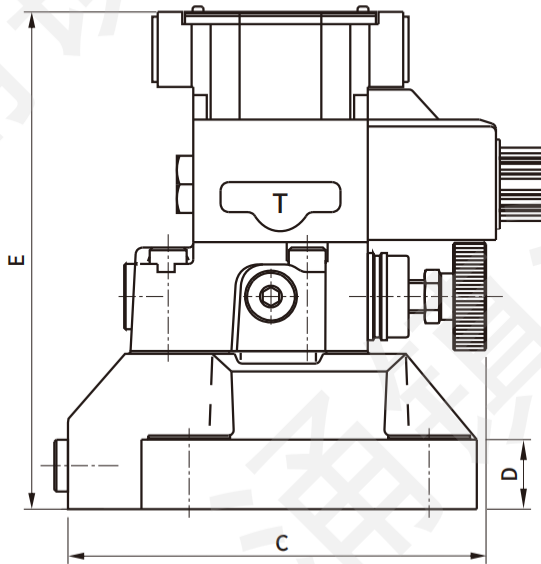
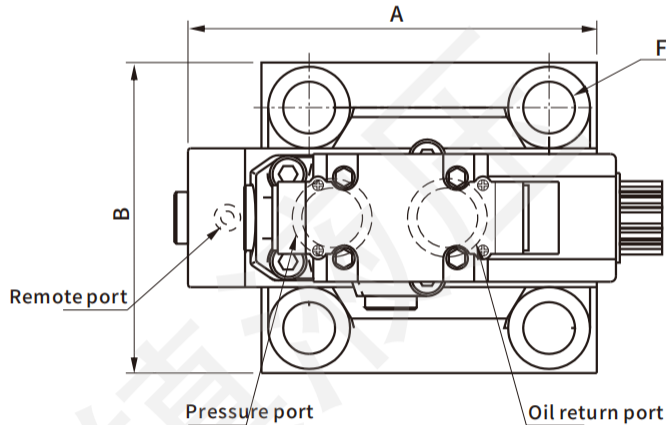
Units: mm

- DSRF-G03/06/10-1PN/1NP

G03 Installation surface: ISO 6264-06-09-★-97

G06 Installation surface: ISO 6264-08-13-★-97

G10 Installation surface: ISO 6264-10-17-★-97



Pressure valve

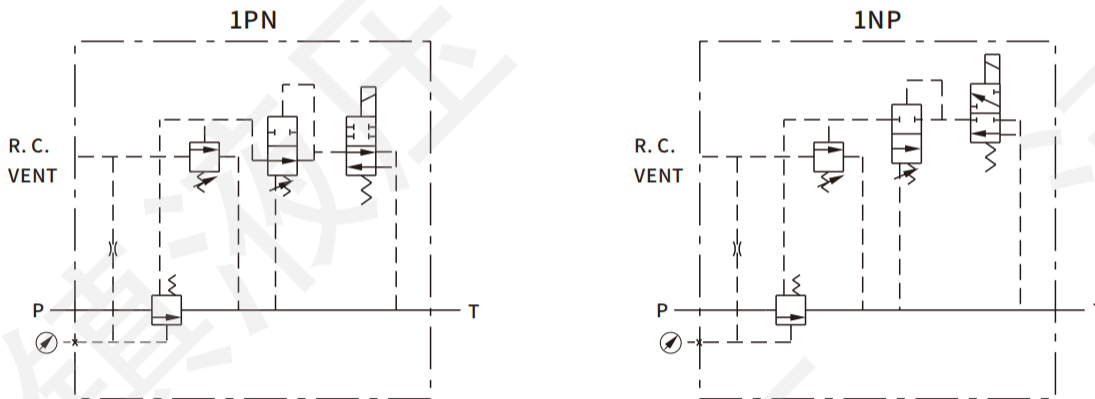
Model	A	B	C	D	E	F
DSRF-G03-★	91	78	135	26	183	Φ14
DSRF-G06-★	116	100	144	26	183	Φ18
DSRF-G10-★	148	115	154	26	183	Φ22

- Install attachment

Model	DSRF-G03-★★	DSRF-G06-★★	DSRF-G10-★★	Quantity
Mounting screw	M12×45L	M16×50L	M18×50L	4

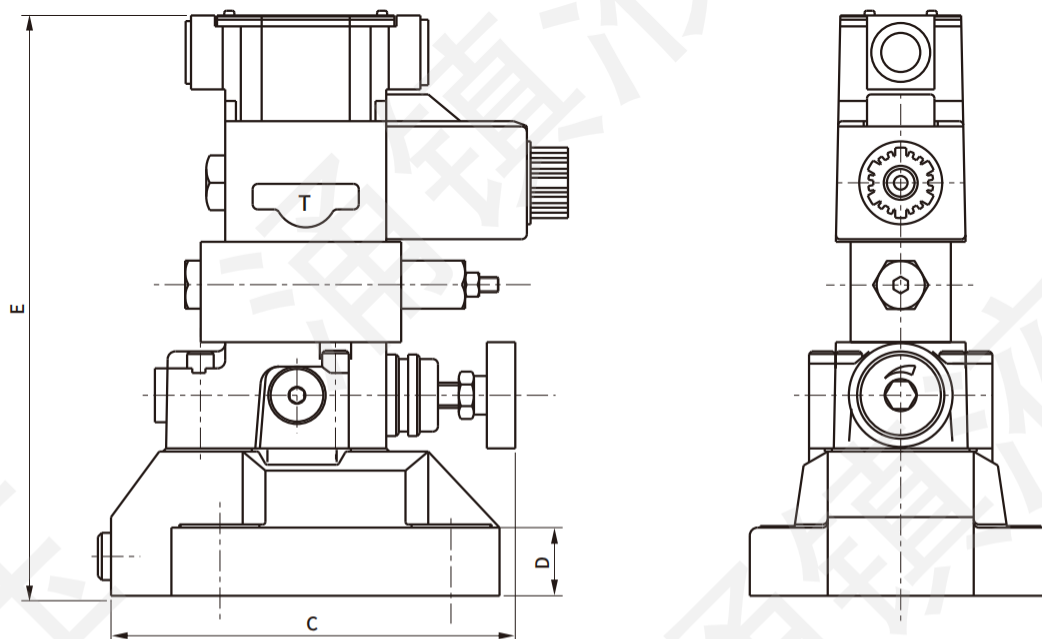
- With anti-shock valve

An anti-impact valve is installed between the relief valve and the electromagnetic reversing valve of the unloading type 1PN and 1NP. When transferring from the set pressure to the unloading, the unloading pressure is slowly reduced to prevent the impact on the main circuit. The unloading pressure is the same as that without the anti-impact valve.



Dimensions

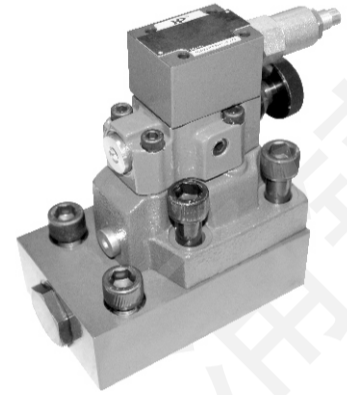
- A-DSRF-G03/06/10-1PN/1NP



Model	C	D	E
A-DSRF-G03-*	135	26	223
A-DSRF-G06-*	144	26	223
A-DSRF-G10-*	154	26	223

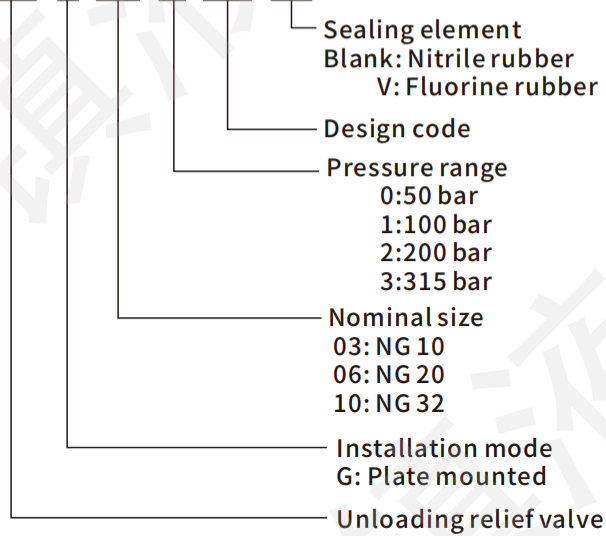
UP Series

UP series unloading relief valve in the accumulator circuit or high and low pressure circuit, so that the hydraulic pump to maintain the minimum load under the condition of operation to save power, extend the purpose of service life.

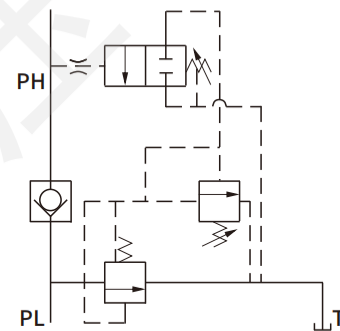


How to order

UP-G 06 -1 -40 -V



● Symbols



Pressure valve

● Specification

Model	Max. pressure (bar)	Max. flow (l/min)	Pressure range (bar)	Weight (kg)
UP-G03-**	350	200	0: **~35	7.0
UP-G06-**		500	1: **~100 2: **~200	11.0
UP-G10-**		650	3: **~315	16.1

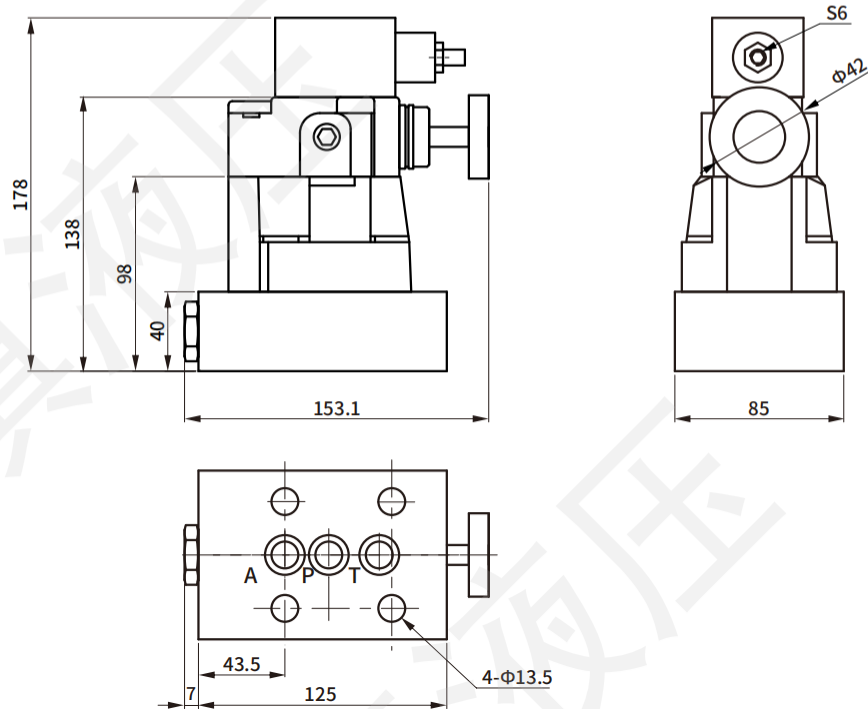
Note:

1. Fluid model: ISO VG32, 46, 68;
2. Viscosity range: 10~400cSt;
3. Operating temperature: -15~80°C (fluorine rubber seal); -30~80°C (NBR seal);
4. Pollution standard: ≤NAS 12, 25µm.

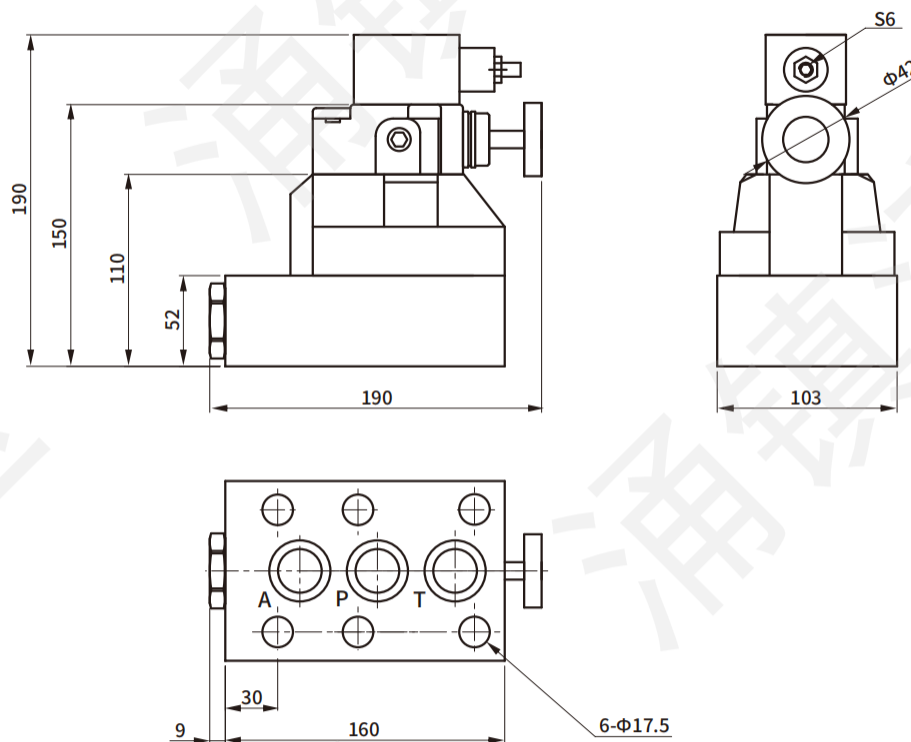
Dimensions

Units: mm

● UP-G03-★-40



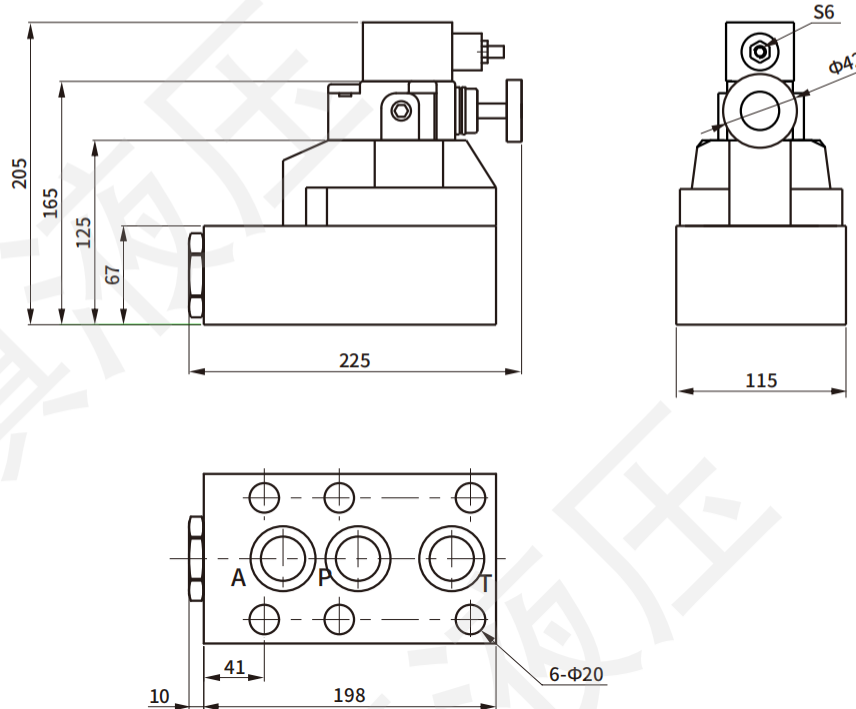
● UP-G06-★-40



Dimensions

Units: mm

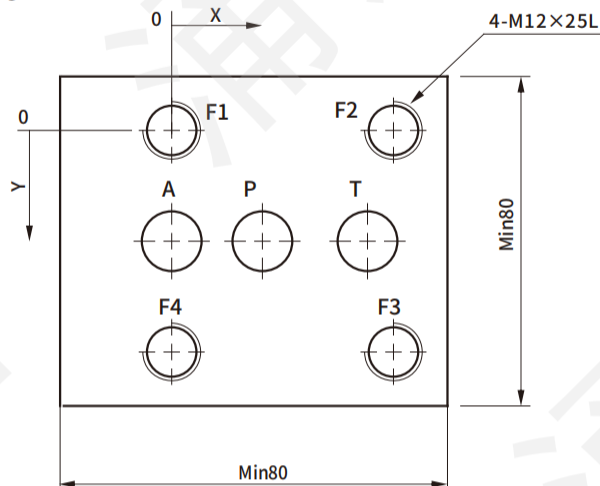
● UP-G10-**-40



Pressure valve

● Installation surface size

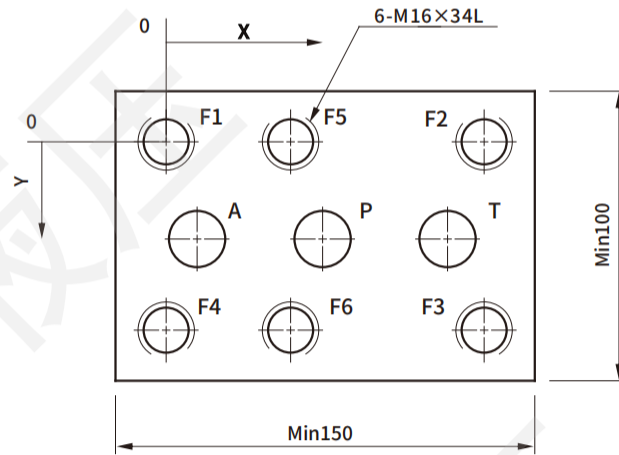
UP/SUP-G03-**-**



Code	P	A	T	F1	F2	F3	F4
Φ	14.5	14.5	14.5	M12	M12	M12	M12
X	22.1	0	47.5	0	53.8	53.8	0
Y	26.9	26.9	26.9	0	0	53.8	53.8

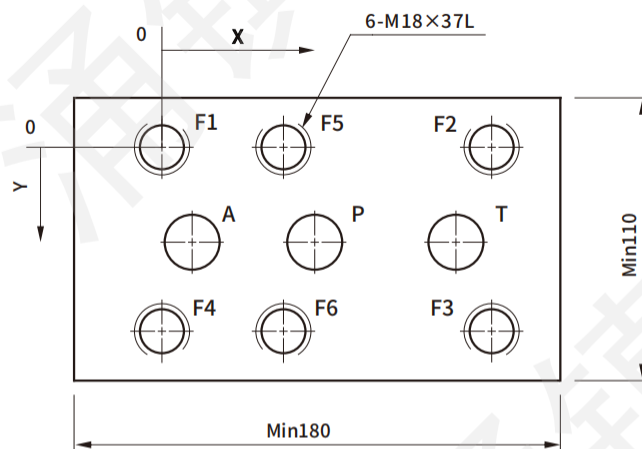
Units: mm

● UP/SUP-G06-**



Code	P	A	T	F1	F2	F3	F4	F5	F6
Φ	23.5	23.5	23.5	M16	M16	M16	M16	M16	M16
X	57.1	12.7	101.6	0	112.7	112.7	0	46	46
Y	35	35	35	0	0	70	70	0	70

● UP/SUP-G10-**



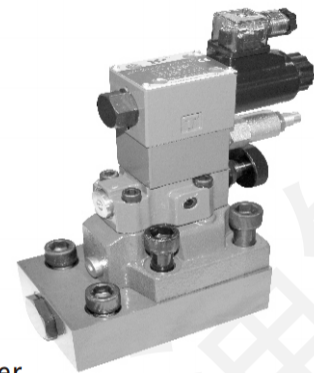
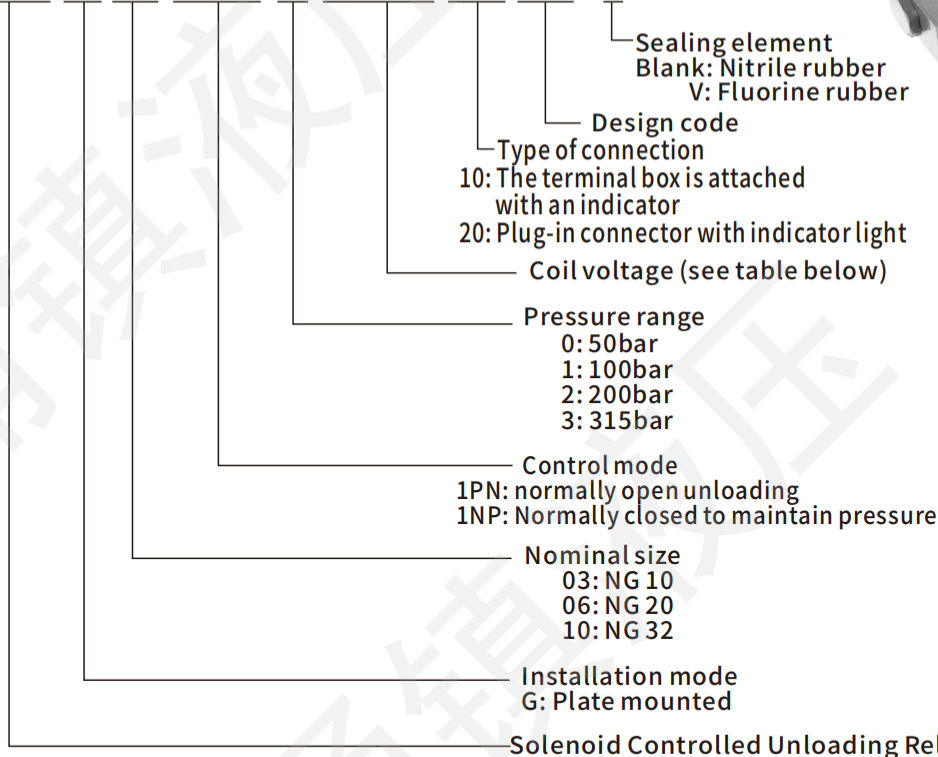
Code	P	A	T	F1	F2	F3	F4	F5	F6
Φ	30	30	30	M18	M18	M18	M18	M18	M18
X	63.5	12.7	127	0	139.7	139.7	0	50.8	50.8
Y	41.25	41.25	41.25	0	0	82.5	82.5	0	82.5

SUP Series

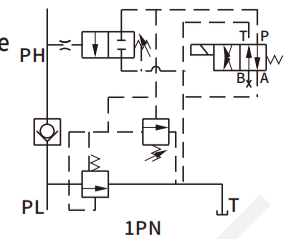
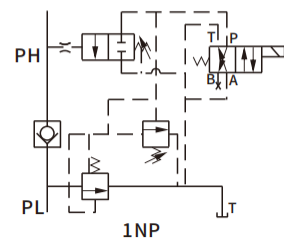
SUP series electromagnetic unloading relief valve not only has the characteristics of UP, but also can use the electric signal of the solenoid valve to unload the pump.

How to order

SUP - G 06 - 1PN - 1 - A220 - 20 - 40 - V



● Symbols



● Coil voltage

A240	AC240V 60Hz AC220V 50Hz	R220	AC220V 60Hz AC200V 50Hz
A220	AC220V 60Hz AC200V 50Hz	R120	AC120V 60Hz AC110V 50Hz
A120	AC120V 60Hz AC110V 50Hz	R110	AC110V 60Hz AC100V 50Hz
A110	AC110V 60Hz AC100V 50Hz	D12	DC12V
R240	AC240V 60Hz AC220V 50Hz	D24	DC24V

● Specification

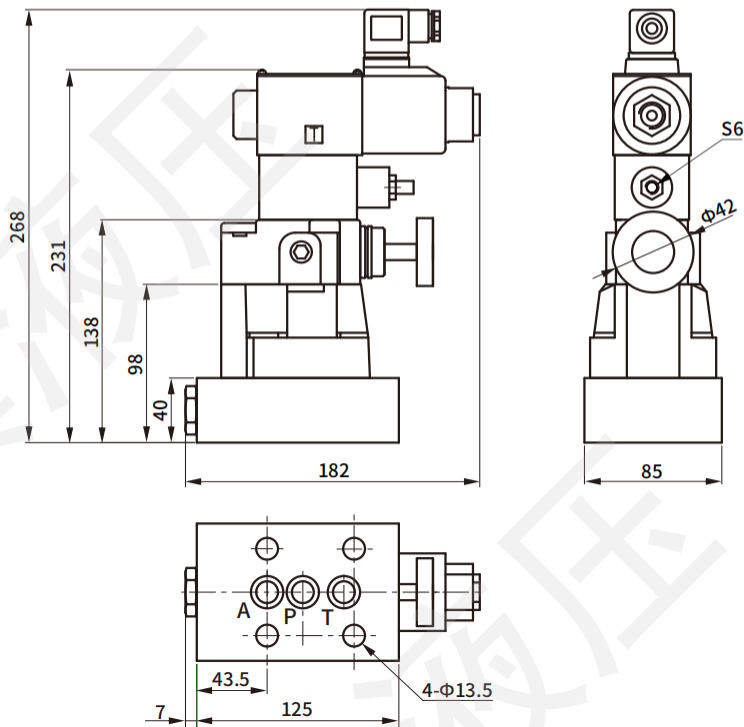
Model	Max. pressure (bar)	Max. flow (l/min)	Pressure range (bar)	Weight (kg)
SUP-G03	350	200	0: *~50 1: *~100 2: *~200 3: *~315	8.5
SUP-G06		500		12.5
SUP-G10		650		17.6

Note: 1. Fluid type: ISO VG 32, 46, 68; 2. Viscosity range: 10~400cSt;
3. Operating temperature: -15~80°C (fluorine rubber seal); -30~80°C (NBR seal); 4. Pollution standard: ≤NAS 12, 25µm.

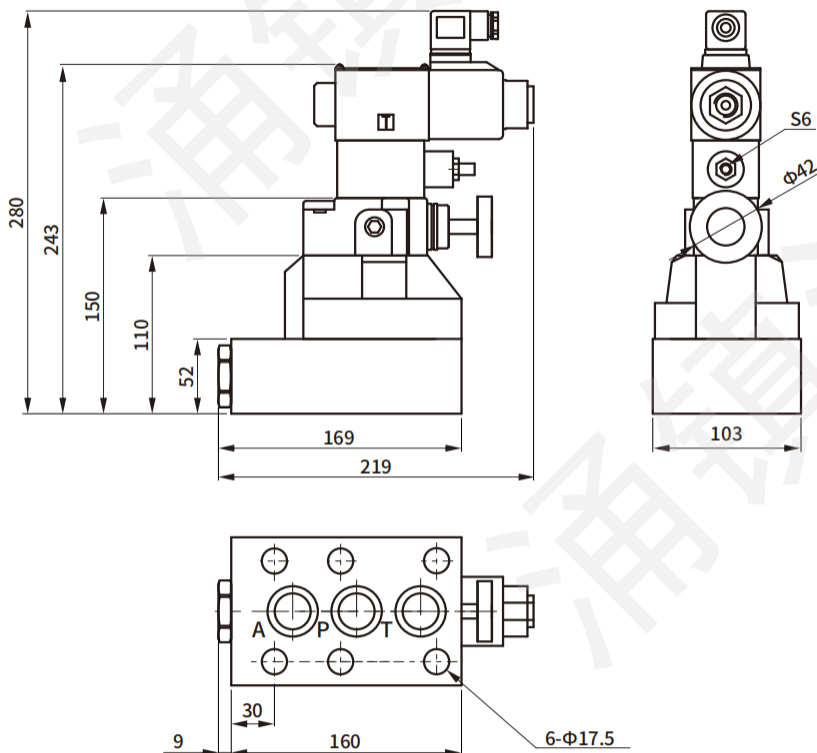
Dimensions

Units: mm

● SUP-G03-★-40



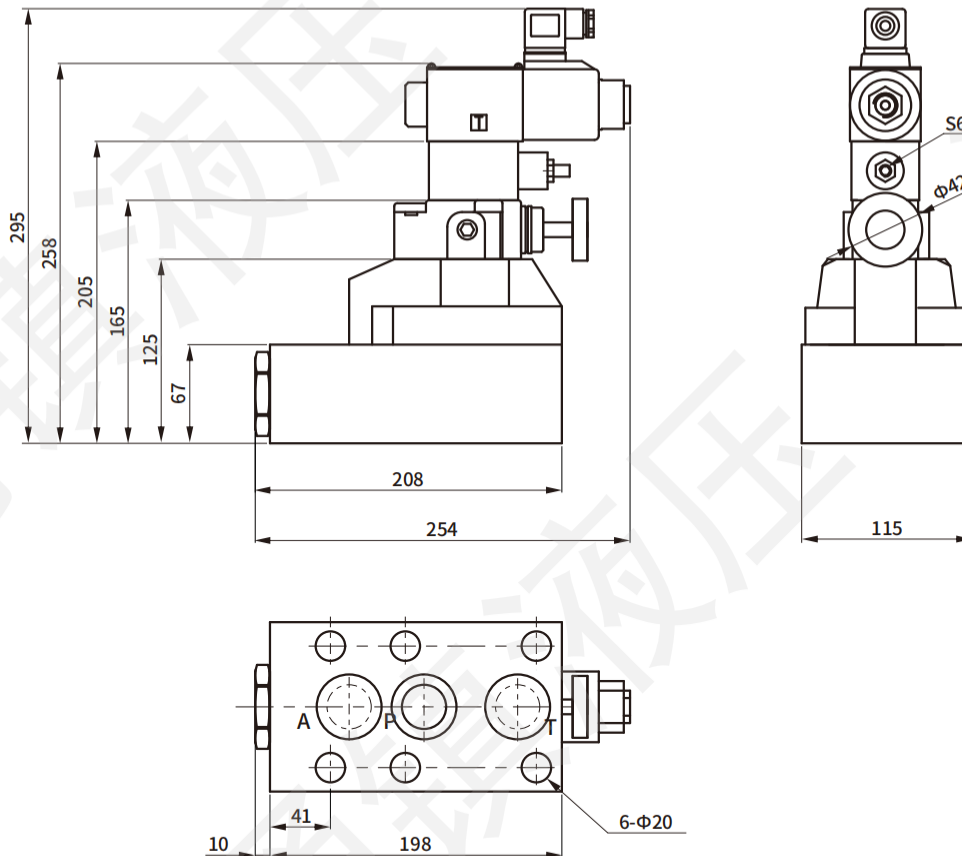
● SUP-G06-★-40



Dimensions

Units: mm

● SUP-G10-★-40



Pressure valve

● Install attachment

Model	Mounting screw	Quantity of screws (PCS)	Stand-out(mm)
UP/SUP-G03-★★	M12×85L	4	19
UP/SUP-G06-★★	M16×55L	2	19.5
	M16×100L	4	21.5
UP/SUP-G10-★★	M18×80L	2	33
	M18×120L	4	27

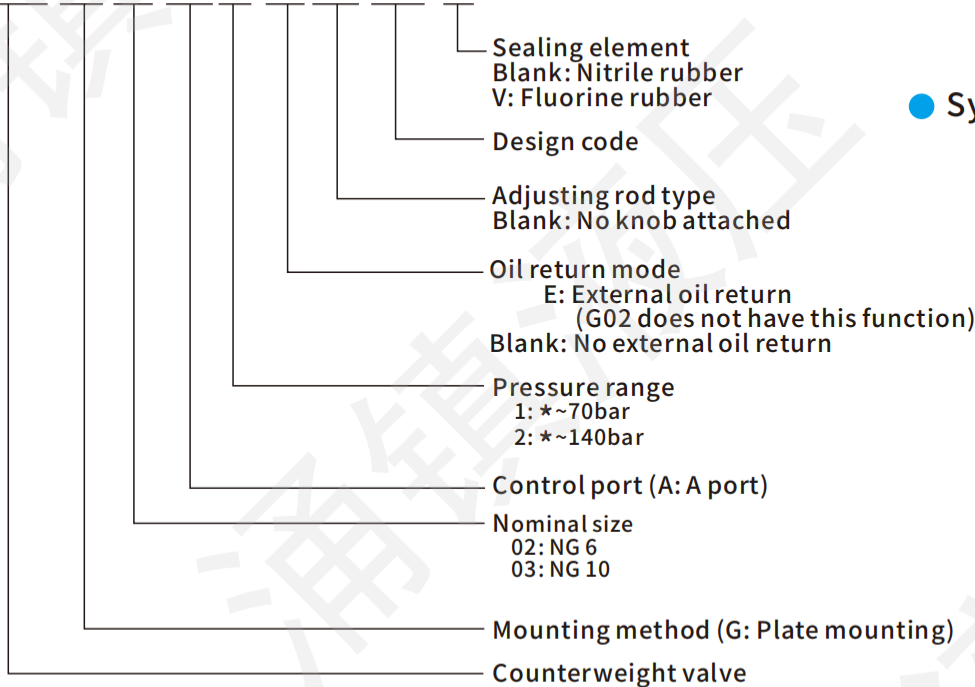
NGR Series

1. Because the function is equivalent to the combination of pressure reducing valve and relief valve, it plays the role of simplifying the pipeline in the actual hydraulic circuit, and its function is equivalent to the balance valve.
2. Adopt double handle adjustment mode, the rise and fall of the cylinder can be controlled separately.
3. It has the effect of maintaining pressure and is simple to operate.

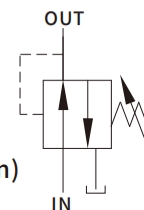


How to order

NGR -G 03 -A -1 -E -K -20 -V



● Symbols



● Specification

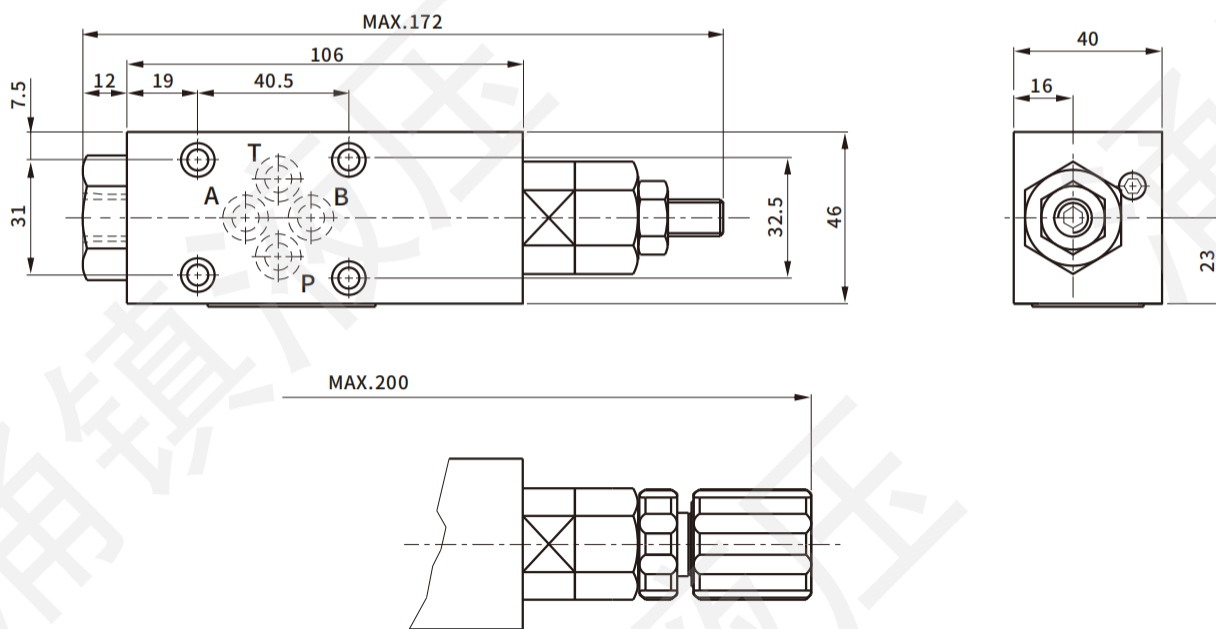
Model	Max. flow (l/min)	Max. pressure (bar)	Max. allowable back pressure (bar)	Pressure range (bar)
NGR-G02-* -20	40	210	≤2	1: *~70bar 2: *~140bar
NGR-G03-* -20	60			

Dimensions

Units: mm

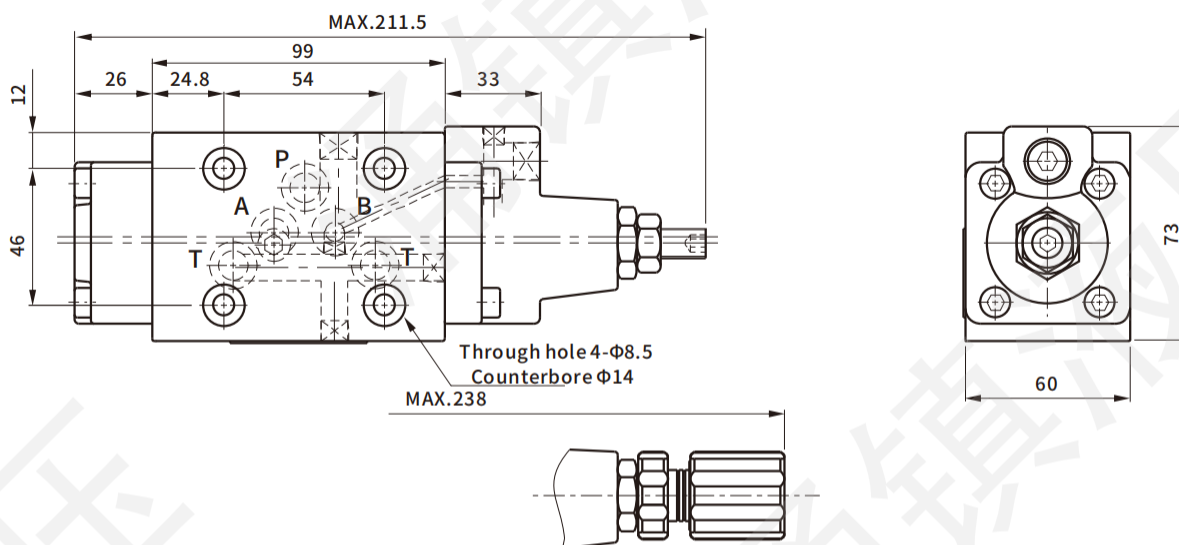
● NGR-G02-★★

Installation surface: ISO 4401-AB-03-4-A



● NGR-G03-★★

Installation surface: ISO 4401-AC-05-4-A

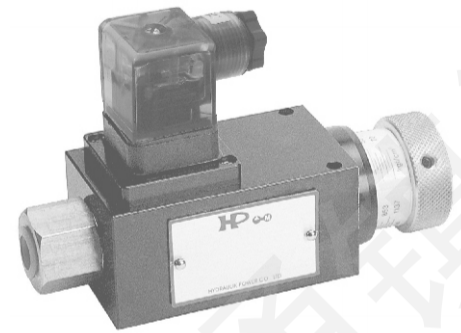
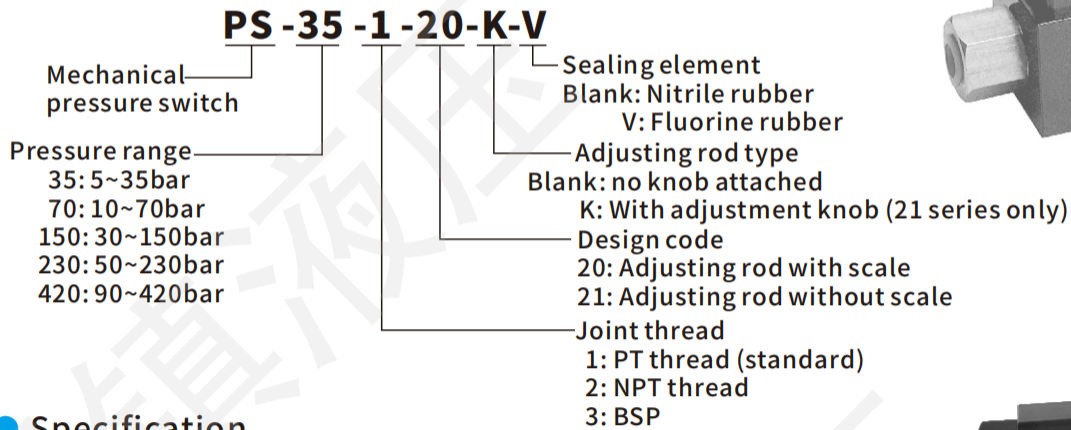


● Install attachment

Parts	NGR-G02-★★	NGR-G03-★★	Quantity
Hex socket screw	M5×40L	M8×30L	4
Mounting valve plate	M02 Series	M03 Series	

PS Series Mechanical Pressure Switch

How to order



PS--**-20**

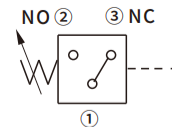


PS--**-21-K**

Specification

Model	Rated pressure (bar)	Pressure range (bar)	Max. pressure (bar)
PS-**-**-20	35	5~35	350
	70	10~70	350
	150	30~150	350
	230	50~230	420
	420	90~420	420
PS-**-**-21-K	35	5~35	350
	70	10~70	350
	250	25~250	350

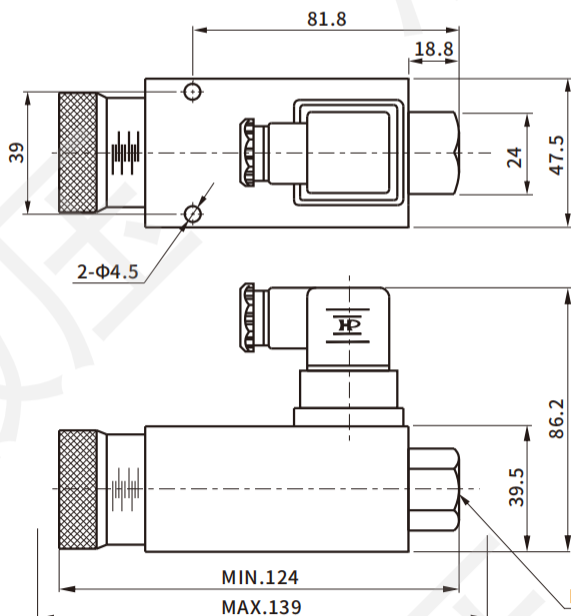
Symbol



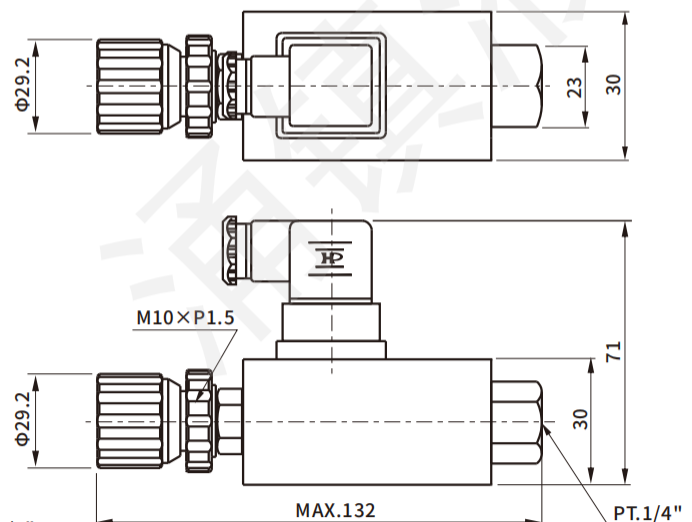
Note: When using DC power supply, a surge device should be installed to extend the life of the contact.

Dimensions

PS-**-**-20

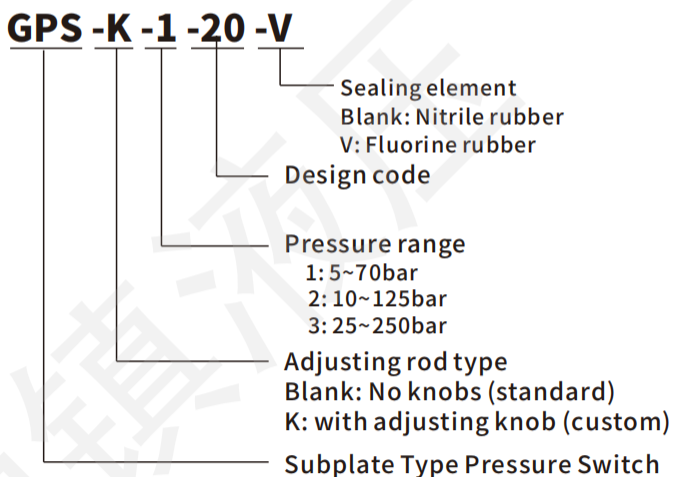


PS-**-**-21

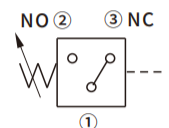


GPS Series Subplate Type Pressure Switch

How to order



Symbol



Pressure valve

Specification

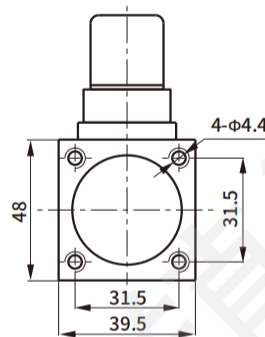
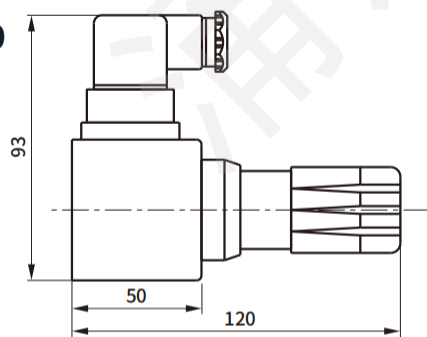
Model	Rated pressure (bar)	Pressure range (bar)	Max. pressure (bar)	Max. contact voltage/current
GPS-★-1-20	70	5~70	350	250V AC/3A or 30V DC/4A
GPS-★-2-20	125	10~125		
GPS-★-3-20	250	25~250		

Note: When using DC power supply, a surge device should be installed to extend the life of the contact.

Dimensions

Units: mm

GPS-K-★-20



GPS-★-20

