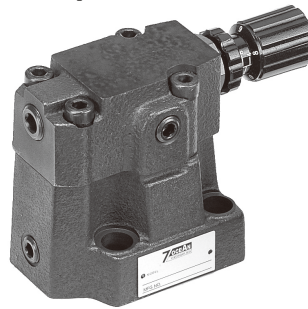


# PILOT OPERATED RELIEF VALVE SOLENOID CONTROLLED RELIEF VALVE (DECOMPRESSION TYPE)

## FEATURES :

- The valve protects the hydraulic system from excessive pressure.
- The valve can be used to maintain constant pressure in a hydraulic system
- Remote control and unloading are permitted by using vent circuit.



Model: DB-10-\* -10



Model: DBW-20-22A-\* -10

## SPECIFICATION :

Model	DB-10	DB-20	DB-30	DBW-10	DBW-20	DBW-30
Max. Pressure	350 Bar			350 Bar		
Max. Flow Rate	250 L/min	500 L/min	650 L/min	250 L/min	500 L/min	650 L/min
Y Port Allowable Back Pressure	350 Bar			350 Bar		
Weight	2.6 Kg	3.5 Kg	4.4 Kg	4.3 Kg	5.2 Kg	6.1 Kg

## ORDERING CODE :

DB W 10 – 22A – 1 – X – A220 – WB – 10  
 1 2 3 4 5 6 7 8 9

### 1 PILOT OPERATED RELIEF VALVE

### 2 DIRECTIONAL VALVE

None: with dir. Valve  
 W: with dir. valve

### 3 NOMINAL VALVE SIZE:

10: size 10  
 20: size 25  
 30: size 32

### 4 VALVE TYPE

22A: Closed  
 22AL: Open

### 5 PRESSURE ADJ. RANGE

1: 0~70 Bar  
 2: 0~140 Bar  
 3: 0~240 Bar  
 H: 320 Bar

### 6 DRAIN

None: Internal pilot, internal drain  
 X: External pilot, internal drain  
 Y: Internal pilot, external drain  
 XY: External pilot, external drain

### 7 ELECTRIC POWER SOURCE INDICATION

A110: AC100V, 50/60 Hz; AC110V, 60 Hz  
 A220: AC200V, 50/60 Hz; AC220V, 60 Hz  
 DC12: DC12V  
 DC24: DC24V  
 R110: AC110V, 60 Hz; Rectifier built-in type  
 R220: AC220V, 60 Hz; Rectifier built-in type

### 8 ELECTRICAL OPTIONS

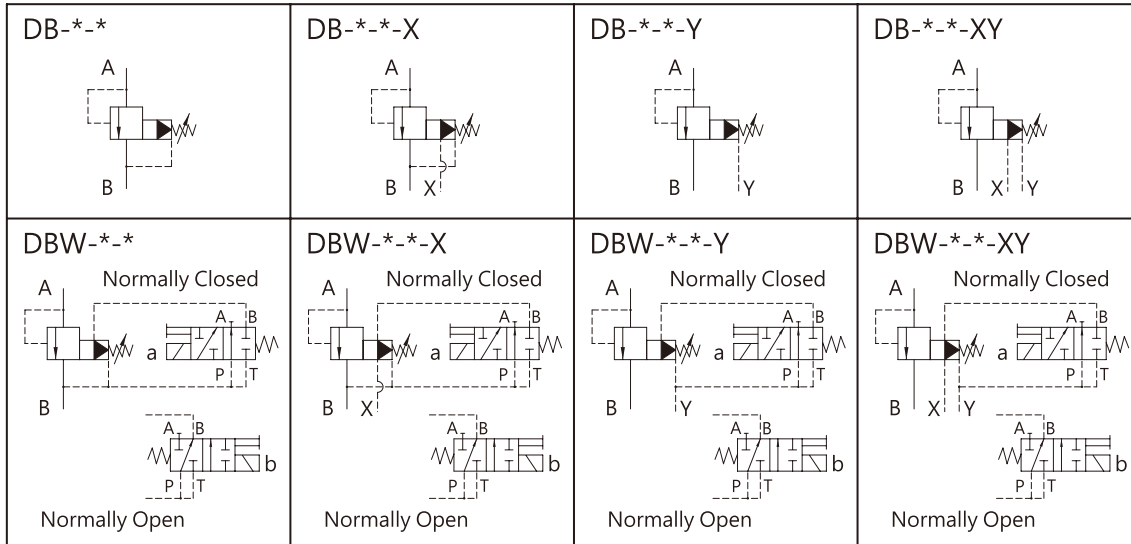
DN: DIN 43650 Coils  
 WB: Wiring housing with G1/2 thread and indicator lights

### 8 DESIGN NUMBER

10: with handle  
 20: without handle

# PILOT OPERATED RELIEF VALVE SOLENOID CONTROLLED RELIEF VALVE (DECOMPRESSION TYPE)

ORDERING CODE :



## NORMALLY CLOSED:

Coil de-energized build pressure,  
coil energized pressure drain

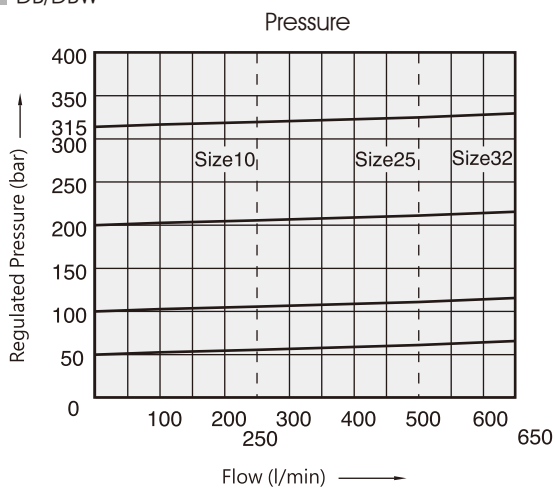
## NORMALLY OPEN:

Coil de-energized pressure drain,  
coil energized build pressure

## PERFORMANCE CURVES:

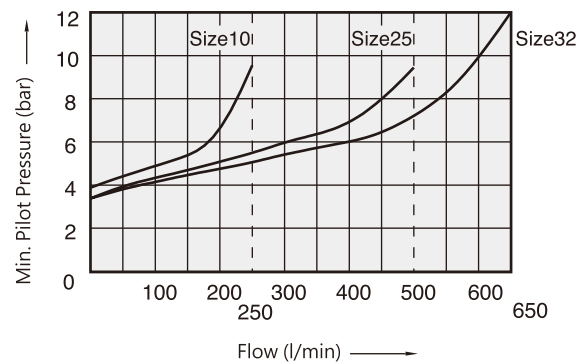
Flow VS Regulated

■ DB/DBW



Min.Pilot Pressure Characteristic

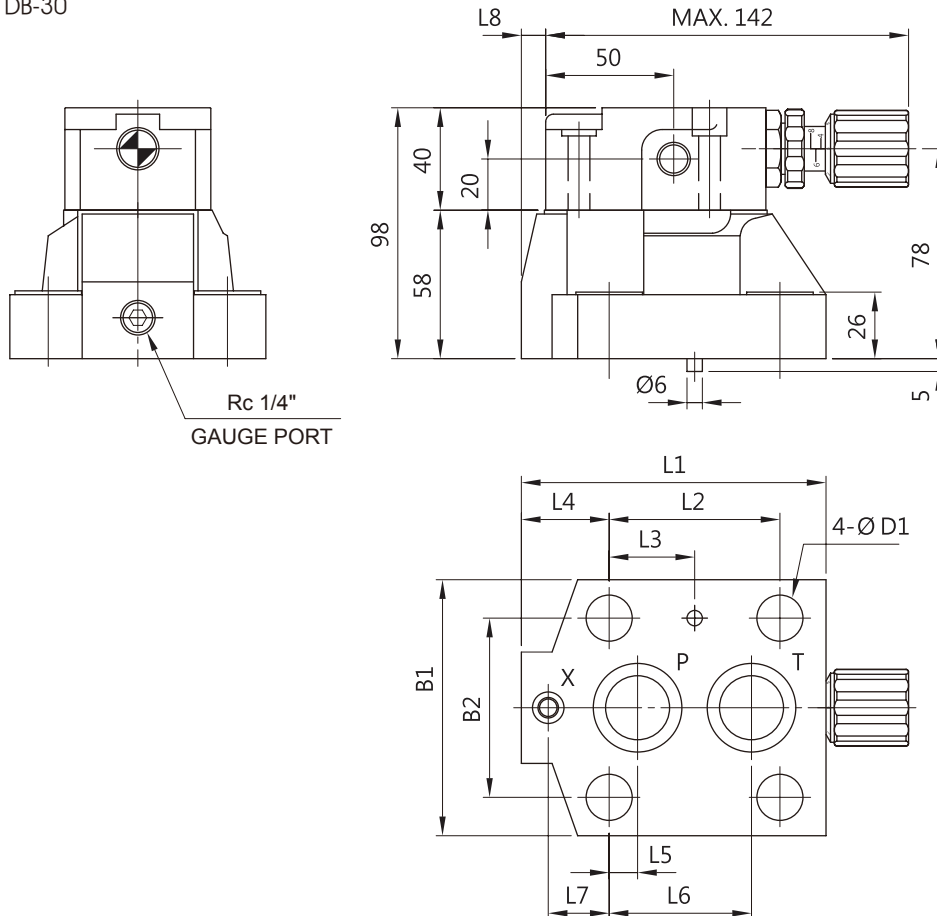
■ DB/DBW-\*



# PILOT OPERATED RELIEF VALVE SOLENOID CONTROLLED RELIEF VALVE (DECOMPRESSION TYPE)

Dimensions:

■ DB-10 / DB-20 / DB-30



Model	L1	L2	L3	L4	L5	L6	L7	L8	B1	B2	D1
DB-10	93.5	53.8	22.1	27.7	22.1	47.5	0	0.7	78	53.8	14
DB-20	119	66.7	33.4	34.3	11.1	55.6	23.8	10	100	70	18
DB-30	149	88.9	44.5	41.5	12.7	76.2	31.8	20	115	82.6	20

## SCREW:

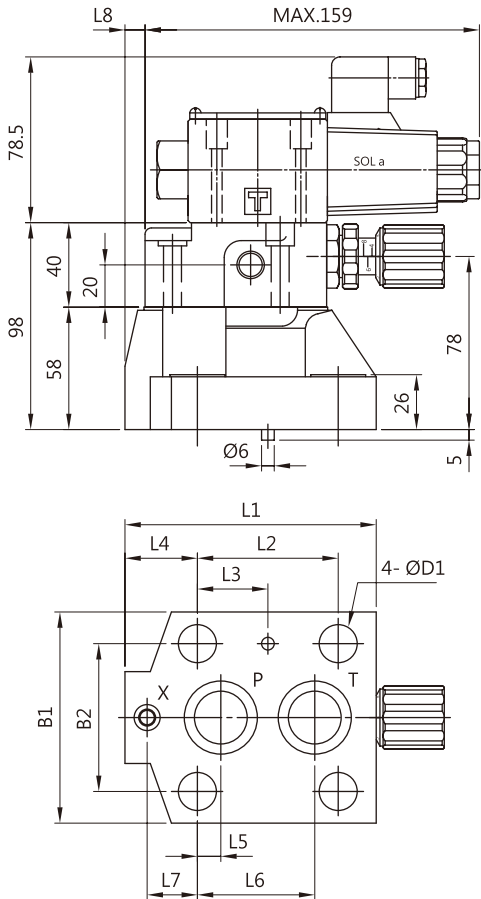
Model	Screw	Mounting Pattern
DB-10	DBW-10 M12 x 45 (4 pcs)	ISO 6264-AR-06-2-A
DB-20	DBW-20 M16 x 50 (4 pcs)	ISO 6264-AS-08-2-A
DB-30*	DBW-30 M18 x 50 (4 pcs)	ISO 6264-AT-10-2-A

\* Please order separately for M20 type (DB30)

# PILOT OPERATED RELIEF VALVE SOLENOID CONTROLLED RELIEF VALVE (DECOMPRESSION TYPE)

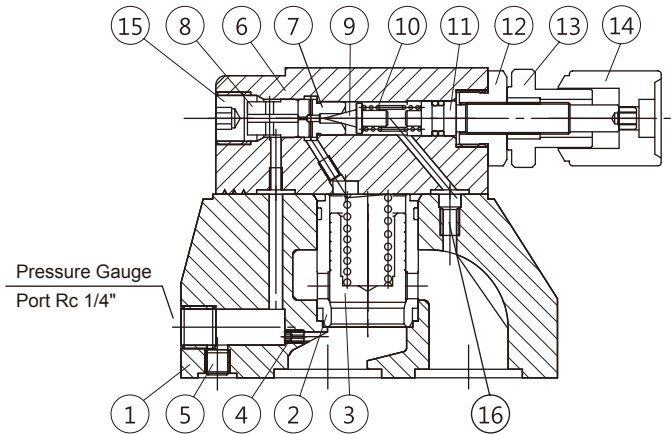
Dimensions:

■ DBW-10 / DBW-20 / DBW-30



## CROSS SECTION DRAWING :

■ DB-20-\*-10

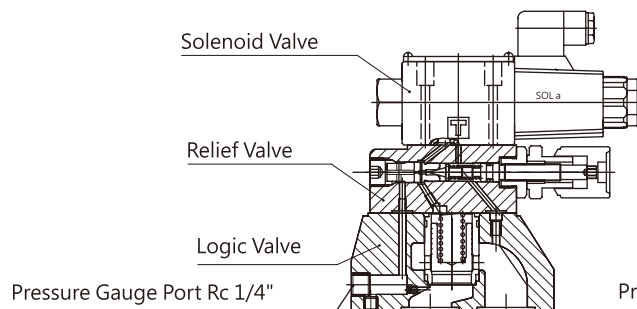


- |                     |                          |               |
|---------------------|--------------------------|---------------|
| 1. Logic Valve Seat | 7. Needle Valve Seat     | 13. Knob Unit |
| 2. Logic Valve Body | 8. Divider               | 14. Knob      |
| 3. Poppet           | 9. Needle Valve          | 15. Plug      |
| 4. Orifice          | 10. Pressure Adj. Spring | 16. Plug      |
| 5. Plug             | 11. Plunger              |               |
| 6. Relief Valve     | 12. Bushing              |               |

Model	L1	L2	L3	L4	L5	L6	L7	L8	B1	B2	D1
DBW-10	93.5	53.8	22.2	27.7	22.1	47.5	0	0.7	78	53.8	14
DBW-20	119	66.7	33.4	34.3	11.1	55.6	23.8	10	100	70	18
DBW-30	149	88.9	44.5	41.5	12.7	76.2	31.8	20	115	82.6	20

## CROSS SECTION DIAGRAM:

■ DBW-20-22A-\*-10  
(Normally Closed)



■ DBW-20-22AL-\*-10  
(Normally Open)

