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DBEM5X series electroohydraulic proportional relief valves

MACHYDRA



CONTENT

1. The pilot control valve is used to control the system pressure
2. The valve and electric controller assorts,and can be used with AC-YO--1 proportional amplifier produced by our company.
3. The pilot control valve with spring can limit the maximum pressure
4. The maximum safe pressure can be divided into five-range, and all can be non-polar control.

ORDERING DETAILS

DBE _ _ _ **-5X/** _ _ **D24** _

Series code
DBE = Proportional relief valve

Pressure relief function
With the maximum pressure limit
M = Pressure relief function

Amplifier board
No code = External amplifier board
M = With internal amplifier board

Size
10 = NG 10
25 = NG 25
32 = NG 32

Serial number
5X = 50-59 series(50-59:the mounting connection size remains the same

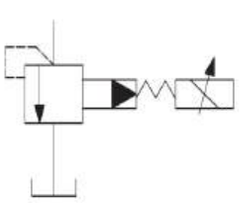
Suitable for mineral hydraulic oil
V = Viton seal
M = Nitril rubber seal

Electric control supply voltage
D24 = 24VDC

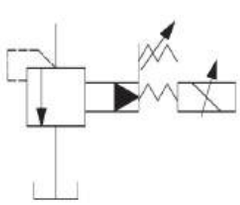
Oil discharge
Y = Pilot oil discharge
XY = Unload port X, pilot oil discharge

Pressure rating
5 = To 50 bar
10 = To 100 bar
20 = To 200 bar
31 = To 310 bar
35 = To 350 bar

SYMBOLE



DBE



DBEM

All original manufacturers'names,part numbers and description are for reference purposes only and it doesn't imply that any Part listed is the product of these manufacturers.

TECHNICAL DATA

General parameter

Drifter Diameter			10	25	32
Weight	DBEM	kg	4.5	5.4	6.8
	DBEMM	kg	4.8	5.7	7.1
Mounting site			anywhere		
Deposited temperature range		°C	-20~+80		
Temperature range	DBEM	°C	-20~+70		
	DBEMM	°C	-20~+50		

Hydraulic Parameter (Measured in the oil temperature of HLP 46=40°C+/-5°C)

Drifter diameter			10	25
The maximum operating pressure	Oil port A, B and X	bar	350	
	Oil port Y		Independent no-pressure oil-returning tank	
The maximum setting pressure	Pressure rating 5	bar	50	
	Pressure rating 10	bar	100	
	Pressure rating 20	bar	200	
	Pressure rating 31.5	bar	315	
	Pressure rating 35	bar	350	
Working pressure, A port		L/min	200	400
Minimum pressure drop		L/min	0.5-1.8	0.5-2.1
Filtration (increase service life)			Mineral hydraulic oil	Phosphate hydraulic oil
Oil temperature		°C	-20~+80	
Viscosity range		mm^2/s	2.8~500	
The maximum pollution level oil allowed ISO 4406 (c)			Class 20/18/15	
Hysteresis(Refer to instruction value pressure character curve)		%	About +/-1.5 of the maximum setting pressure	
Repetition rate		%	Less than the maximum pressure of+/-2	
Linearity		%	The maximum setting pressure of+/-3.5	

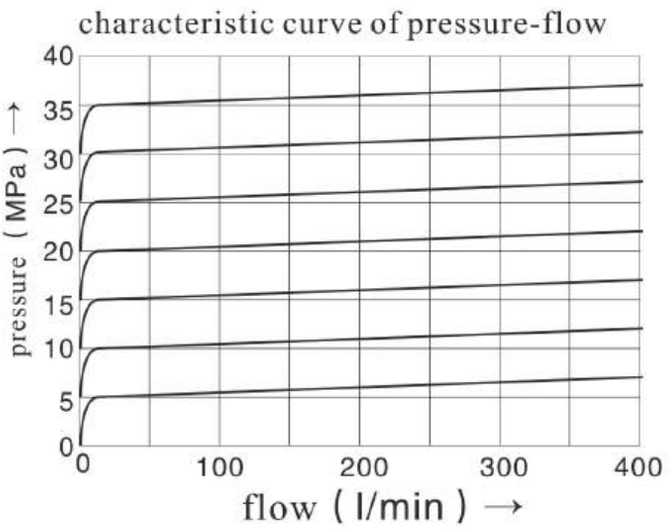
Electrical

Power voltage		V	24
The minimum control current		mA	100
The maximum control current		mA	800(1500)
Coil resistance	20°C cold value	Ω	19.5
	The maximum heat valve	Ω	25.4
Connection rate		%	100
Electric connection			With plug conform to DIN EN 175201-803
The protection class of the shell			IP65

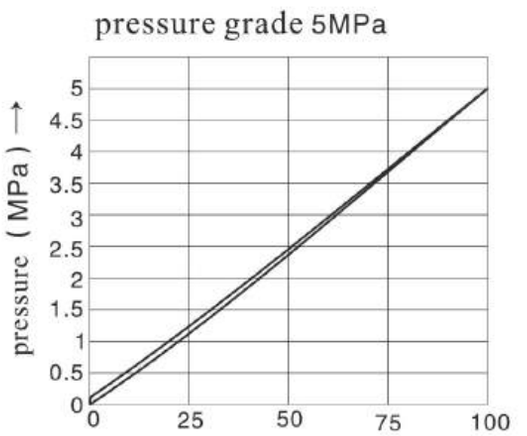
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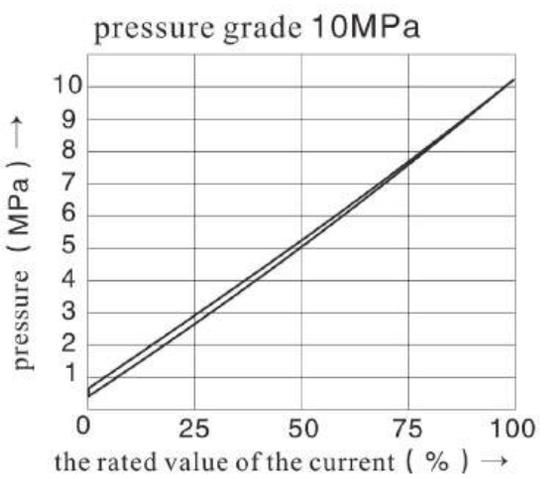
CHARACTERISTIC CURVE

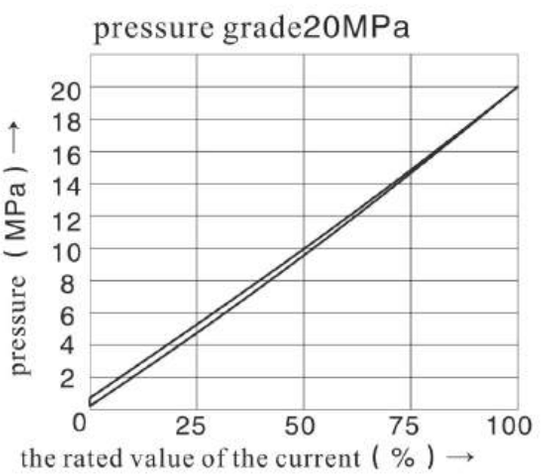
measured when t=40℃ ±50℃

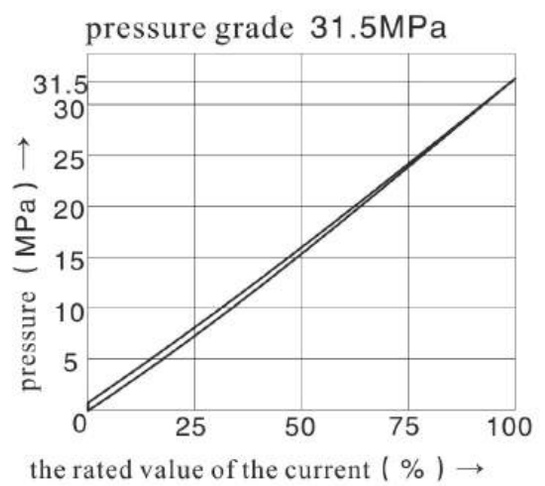


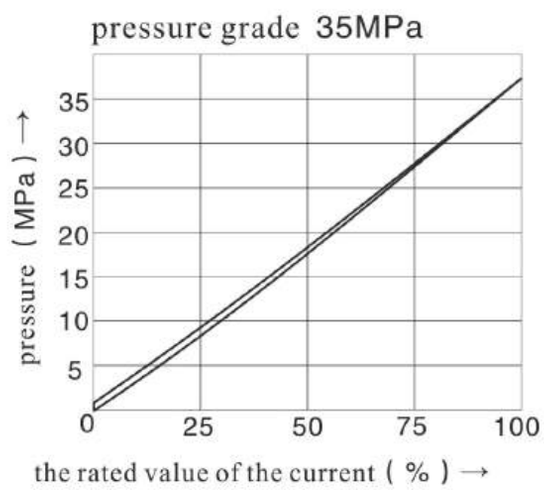
The characteristic curve of current-pressure, measured when Q=27L/min



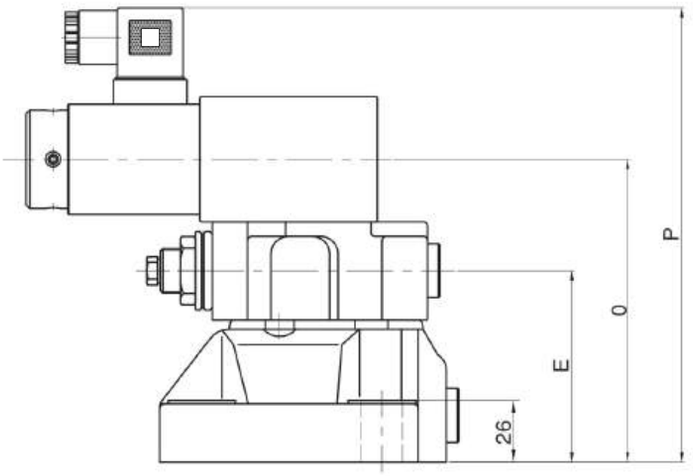


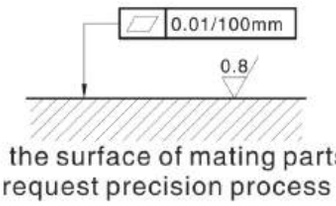


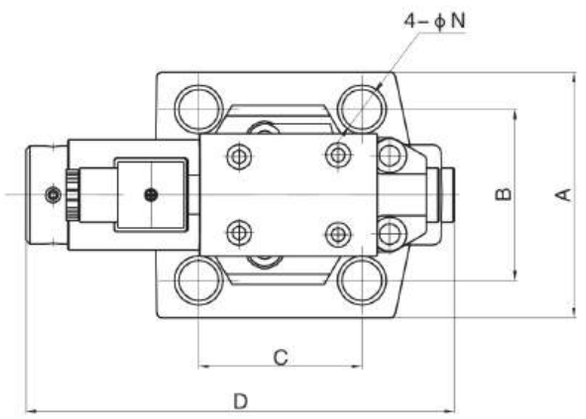


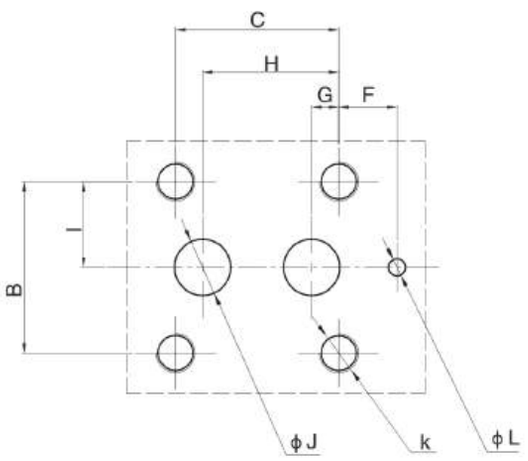


UNIT DIMENSIONS









type	A	B	C	D	E	F	G	H
DBEM10	78	53.8	53.8	163	78	0	22.1	47.5
DBEM20	100	70	66.7	175	78	23.8	11.1	55.6
DBEM30	115	82.6	88.9	186.5	78	31.8	12.7	76.2

type	I	J	K	L	N	O	P
DBEM10	26.9	12	M12	6	14	123.5	185.5
DBEM20	35	22	M16	6	18	123.5	185.5
DBEM30	41.3	30	M18	7	20	123.5	185.5