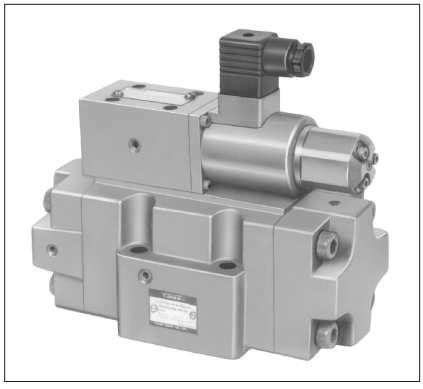
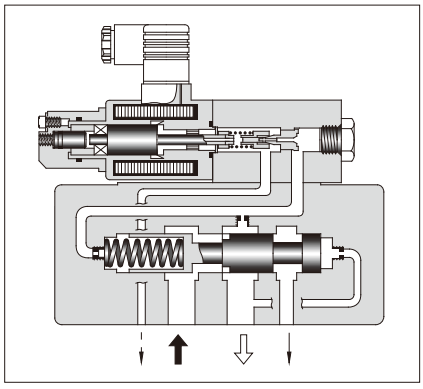
电—液比例溢流减压阀

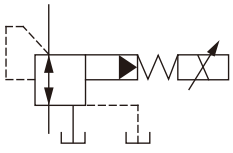
Proportional Electro-Hydraulic Relieving and Reducing Valves

这类阀由一个小型的高性能 1/8电–液比例先导式溢流阀和一个具有溢流功能的减压阀组成。这类阀可以输入电流比例地控制系统压力。此外，这类阀具有溢流功能，即使在大负载情况下减压时可获得较快的响应速度，注意，这种阀应和配套的功率放大器一起使用。





液压图形符号



■参　数

项目 \ 型号		ERBG-06-※-51	ERBG-10-※-51
最高工作压力	MPa	24.5	24.5
最大流量	L/min	100	250
最大溢流量	L/min	35★	15★
二次压力调节范围	MPa	参见“型号说明”	
额定电流	mA	B：800 C：800 H：950	B：800 C：800 H：950
线圈电阻	Ω	10	10
滞环		小于3%	小于3%
重复性		小于1%	小于1%
质量	kg	12	13.5

★所示数值是在2次压力口和回油口之间的压差为13.7MPa的值。

■型号说明

ERB	G	−06	−B	−51
系列号	连接型式	规格	二次压力调节范围 MPa	设计号
ERB：电–液比例溢流减压阀	G：底板安装型	06	B：0.8～6.9 C：1.2～13.7 H：1.5～20.6	51
		10	B：0.9～6.9 C：1.2～13.7 H：1.5～20.6	

■附　件

● 安装螺钉

阀型号	内六角螺钉
ERBG-06	M10×70L……4 个
ERBG-10	M10×70L……6 个

■底　板

阀型号	底板型号	连接口径 Rc	质量 kg
ERBG-06	ERBGM-06-20	¾	3.0
ERBG-10	ERBGM-10-10	1¼	6.5

● 用底板时，请按上表底板型号订购。不用底板时，安装面须经▽精度机械精加工。

■配套的功率放大器

为使性能稳定，推荐使用油研公司配套的功率放大器（详见 H-111，H-114，H-119 页）。

型号：AME–D–10–※–20
AME–D2–1010–※–11
AMN–D–10(直流电源用)
SK1022–※–※–11
SK1015–11(直流电源用)

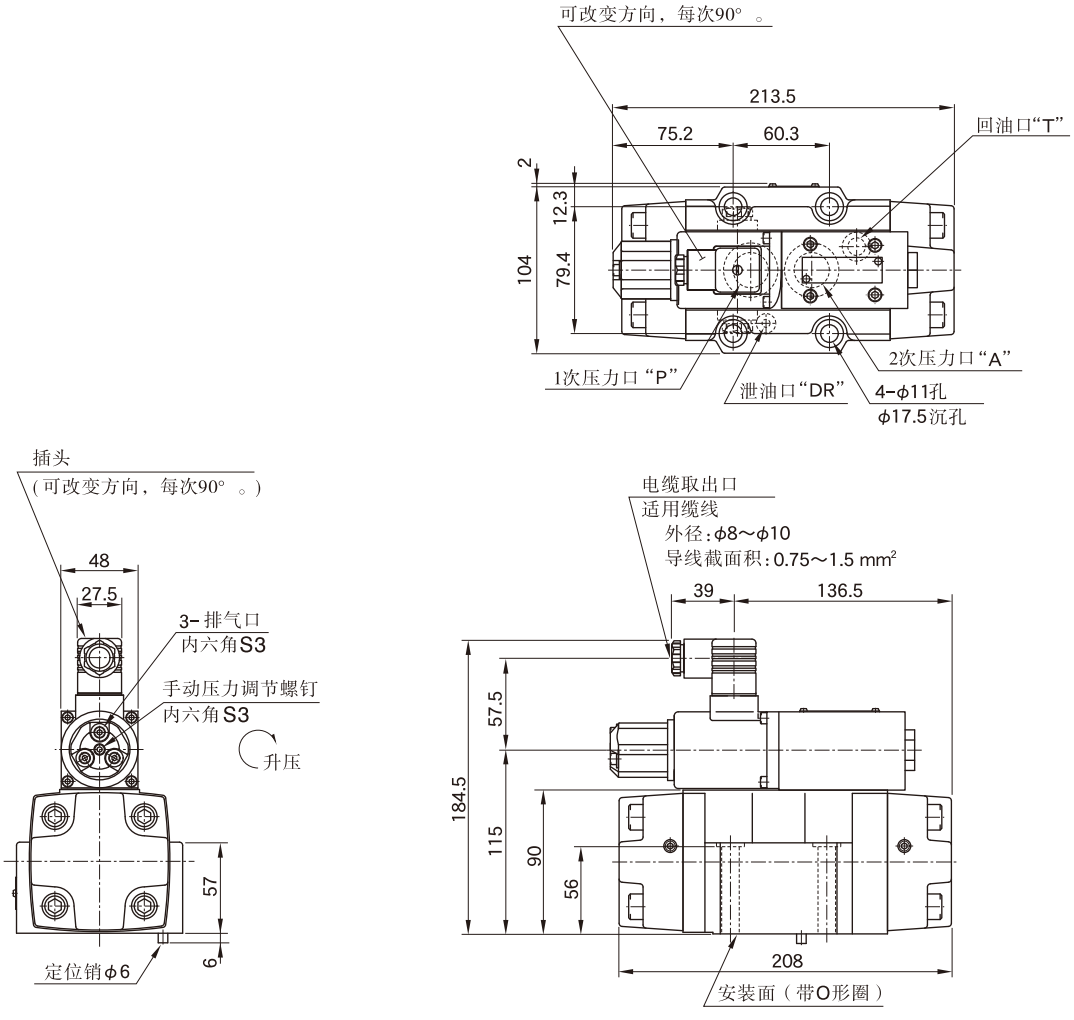
■使用注意事项

● **设定压力所要求的进口(1次)压力**
1次压力必须比设定的压力高1MPa。

● **泄油背压**
请在低于0.2MPa情况下使用。

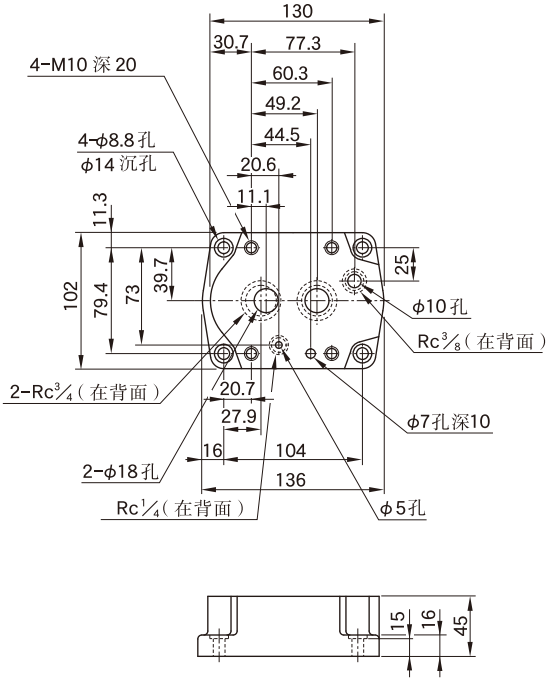
● **负载容量**
二次侧的负载容量推荐约为20L。
而且，应在不小于1.4L情况下使用。

ERBG-06

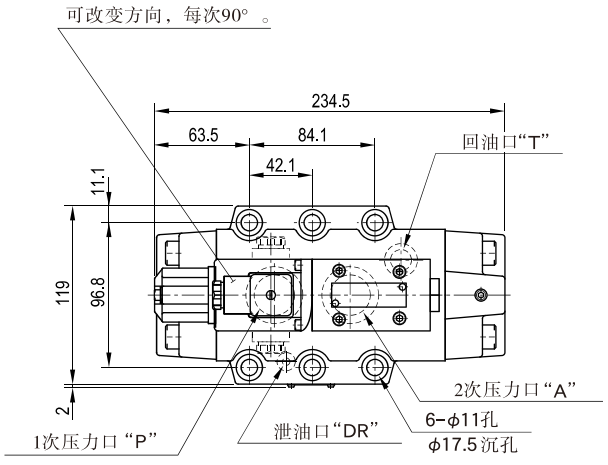


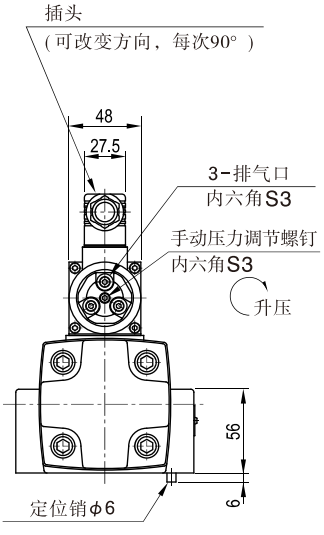
底 板

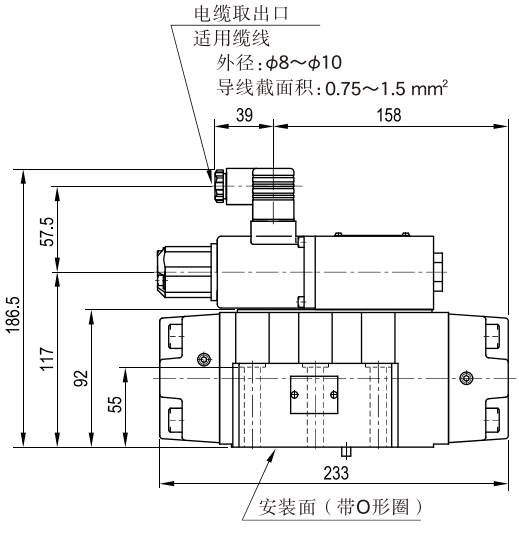
ERBGM-06



ERBG-10

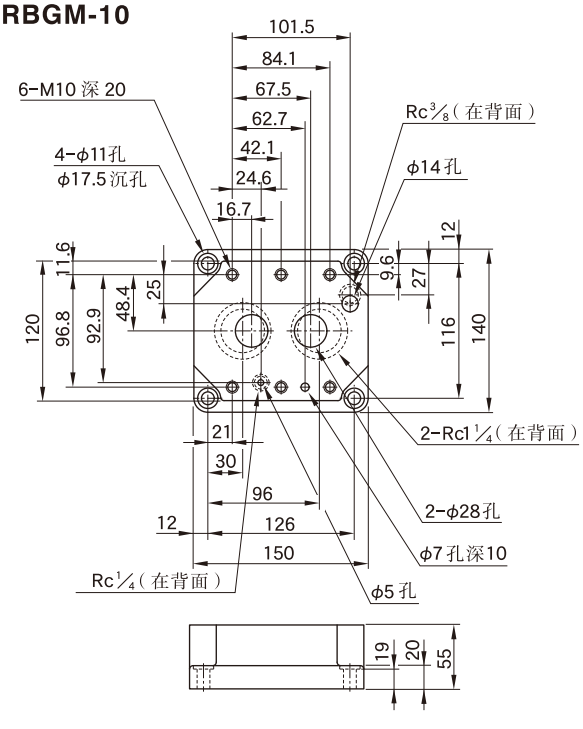






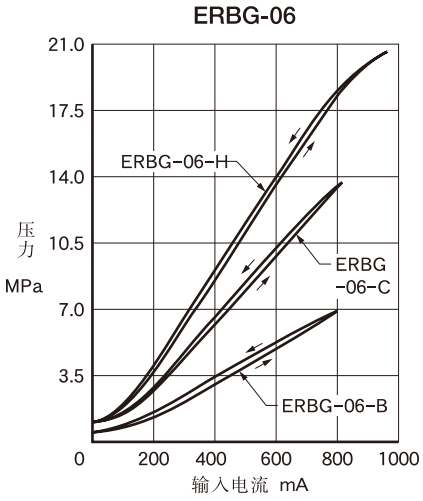
底 板

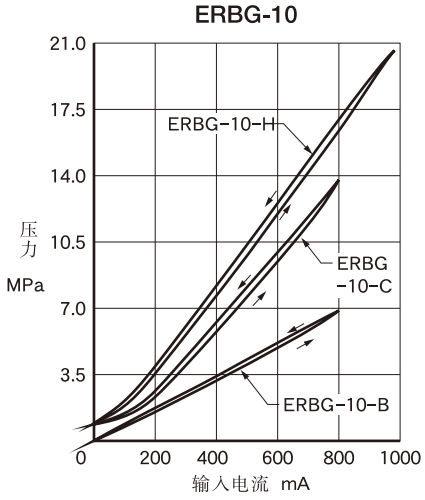
ERBGM-10



■ 输入电流—2次压力特性

1次压力：24.5 MPa
粘　　度：30 mm²/s

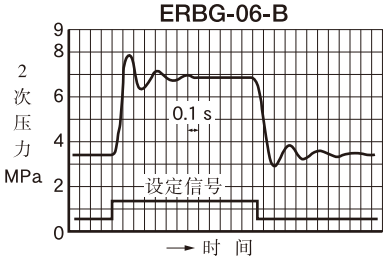


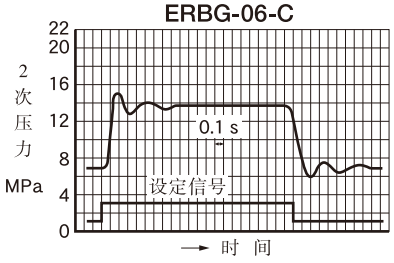


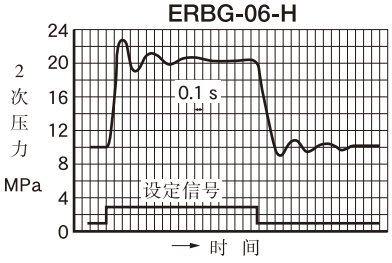
■ 阶跃响应特性(例)

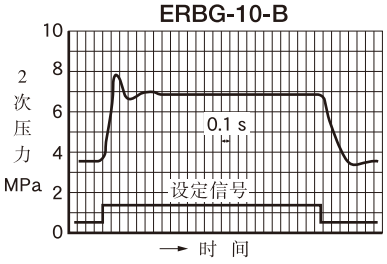
下述特性为负载容量20L时的数据。负载容量改变时，特性也变化。

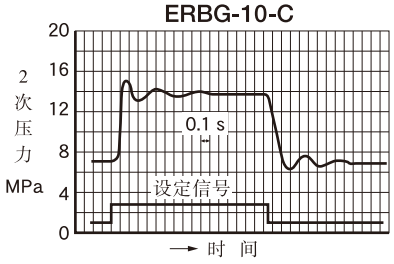
1 次压力 ：24.5 MPa
负载容量 ：20 L
粘　　度 ：30 mm²/s

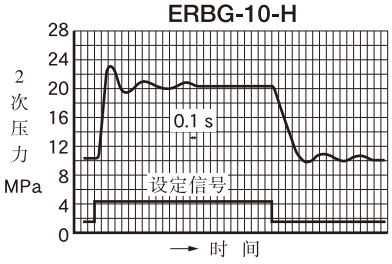






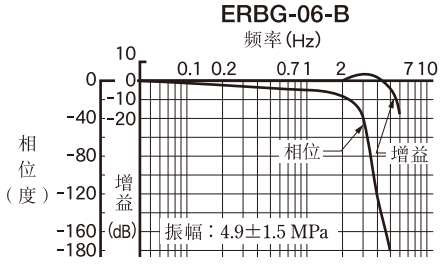


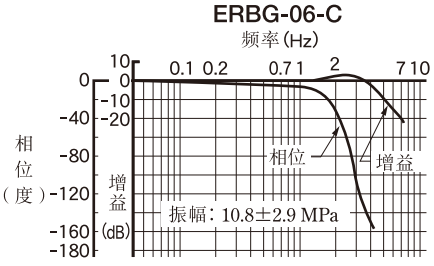


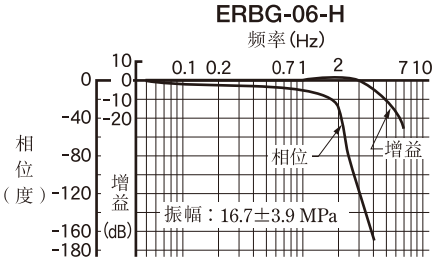


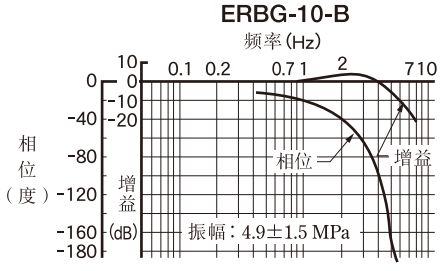
■ 频率特性

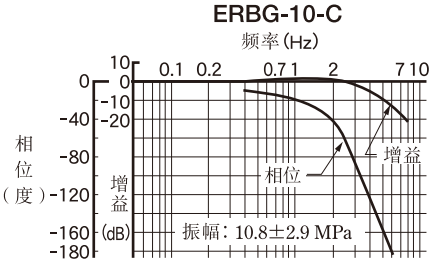
1 次压力 ：24.5 MPa
负载容量 ：20 L
粘　　度 ：30 mm²/s

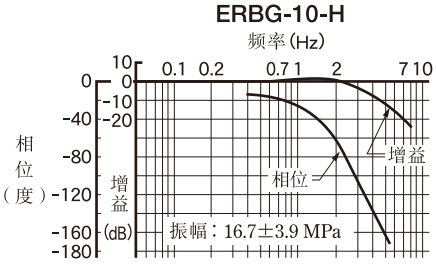






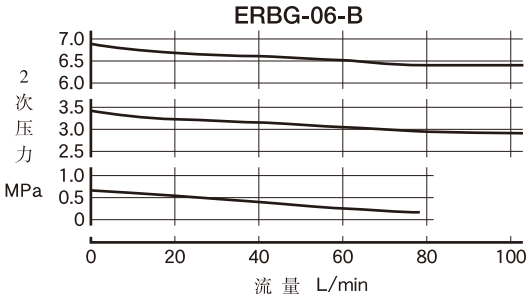


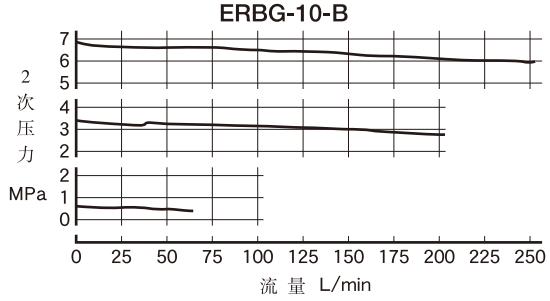


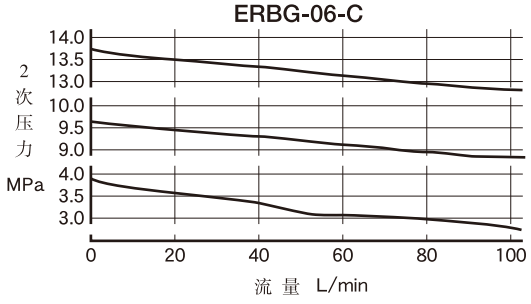


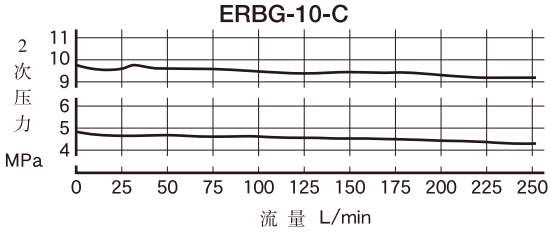
流量—2次压力特性

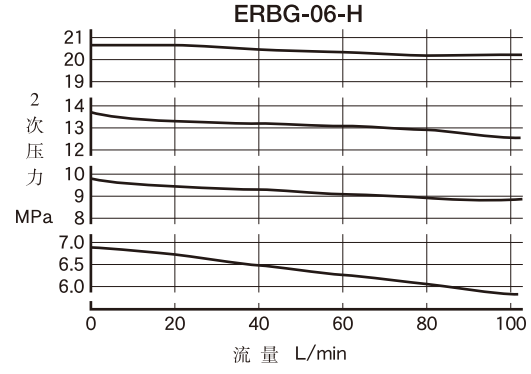
粘度：30 mm²/s

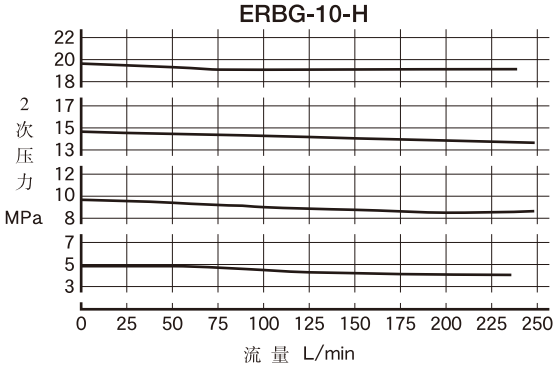






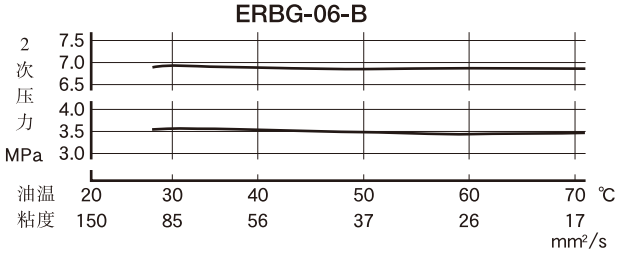


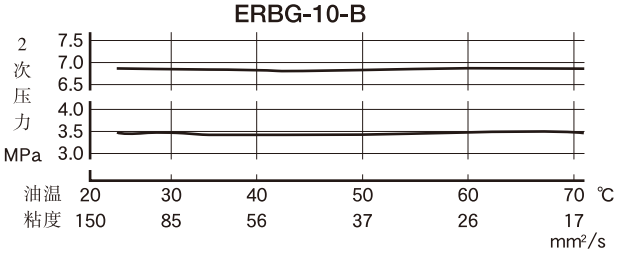


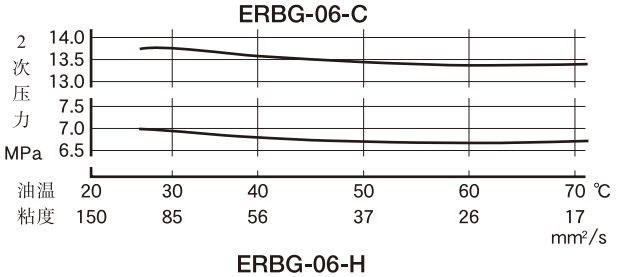


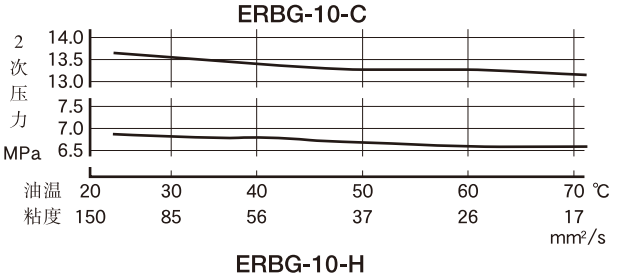
粘度—2次压力特性

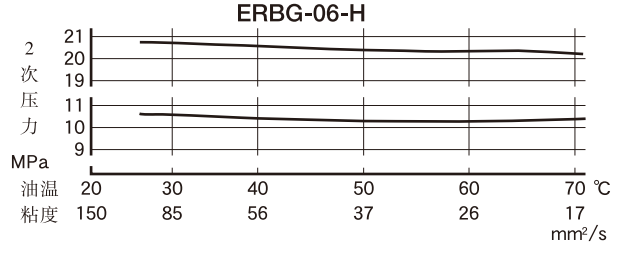
油液：ISO VG32

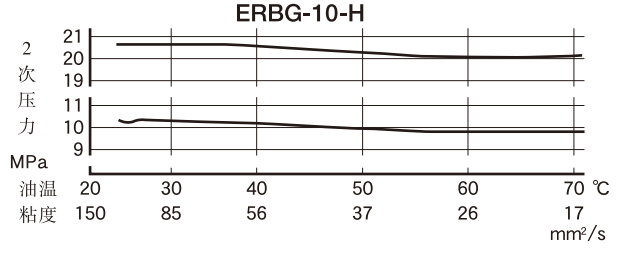




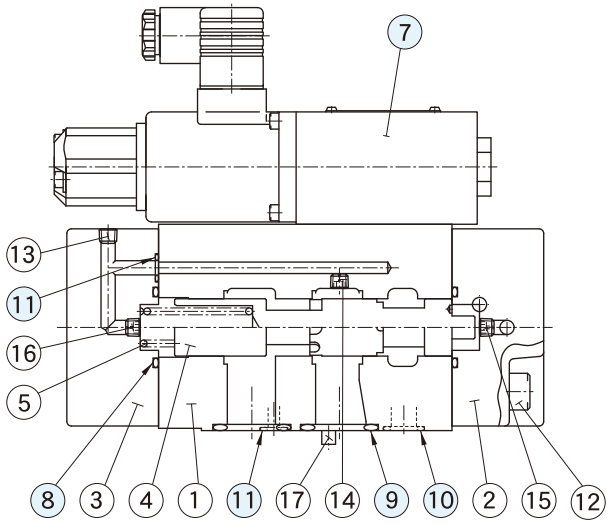








■ 密封件和先导阀表



● 先导阀表

阀型号	⑦先导阀型号
ERBG-06-B-51	EDG-01-B-PNTN-5101
ERBG-06-C-51	EDG-01-C-PNTN-5101
ERBG-06-H-51	EDG-01-H-PNT15-5101
ERBG-10-B-51	EDG-01-B-PNTN-5101
ERBG-10-C-51	EDG-01-C-PNTN-5101
ERBG-10-H-51	EDG-01-H-PNT15-5101

注）先导阀的详情请见H-46页电液比例先导式溢流阀。

● 密封件表

序号	名称	零件号		数量
		ERBG-06	ERBG-10	
8	O形圈	OR NBR-90 G30-N	OR NBR-90 P36-N	2
9	O形圈	OR NBR-90 P28-N	OR NBR-90 P32-N	2
10	O形圈	OR NBR-90 P14-N	OR NBR-90 P18-N	1
11	O形圈	OR NBR-90 P9-N	OR NBR-90 P9-N	3

■ 新旧产品的互换性

● **参数・特性**

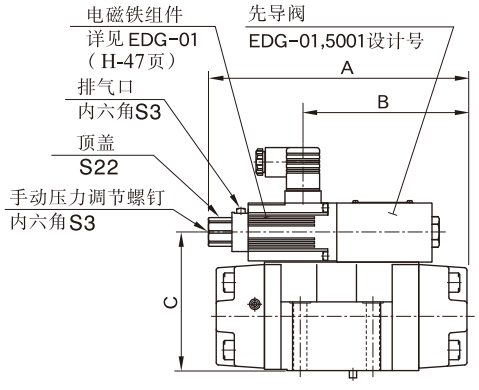
新旧产品输入电流—2次压力特性不同。详情请和我们联系，其它参数不变。

● **安装互换性**

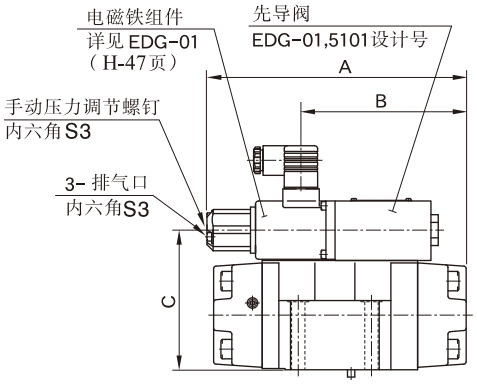
安装方面可互换。

但是，由于先导阀的改进和其他改变，外形和尺寸有变化，如下图所示。

旧：50设计



新：51设计



型　号	A	B	C
(旧) ERBG-06-※-50	214.5	136.5	115
(新) ERBG-06-※-51	213.5	136.5	115
(旧) ERBG-10-※-50	235.5	158	117
(新) ERBG-10-※-51	234.5	158	117