

HSCBGA/HSCBGG

平衡阀

Counterbalance Cartridge valve

OPERATION

工作原理

Counterbalance valves with pilot assist are meant for control on overrunning load. The check valve allows free flow from port ② to port ① while a direct-acting, pilot-assisted relief valve controls flow from port ① to port ②. Pilot assist at port ③ lowers the effective setting of the relief valve at a rate determined by the pilot ratio.

带先导开启平衡阀用于控制超越负载工况。油液从②口到①口单向自由流动；油液经直动，先导辅助从①口溢流到②口，③口是溢流辅助控制口，按控制比降低溢流功能的有效设定值。

FEATURES

特性

Counterbalance valves should be set at least 1.3 times the maximum load induced pressure

最大设定压力至少为最大负载压力的1.3倍。

Backpressure at port ② adds to the effective relief setting at a ratio of 1 plus the pilot ratio times the backpressure

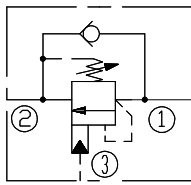
②口的背压按"控制比+1"的倍数加到溢流阀的设定值上即增加值 = (1+控制比) × 压力值。

Reseat exceeds 85% of set pressure when the valve is standard set. Setting lower than the standard set pressure may result in lower reseat percentages.

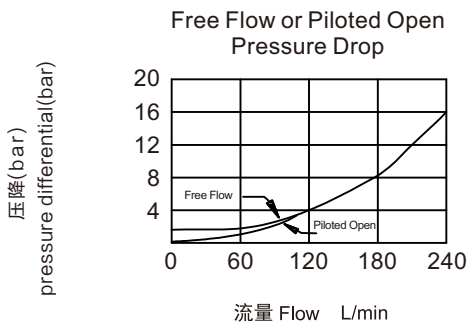
标准设定时闭合压力值大于设定压力值的85%；低于标准设定则闭合压力值的百分比相应降低。

Factory pressure setting established at 30cc/min(2 in³/min). 工厂的设定是指当溢流阀开启（流量为30cc/min）时的压力。

SYMBOL 机能符号



PRESSURE DROP VS.FLOW 性能图



SPECIFICATIONS

技术参数

最大设定值Max. Setting : (HSCBGA)280Bar / (HSCBGG) 350bar

最大负载 (Max. Recommended Load Pressure at Max. Setting):

在最大设定时所能承受的最大负载压力: 215bar HSCBGA
270bar HSCBGG

流量Flow : 240L/Min

内泄漏 Internal Leakage: 5drops/min

控制比Pilot Ratio: (HSCBGA)3:1/(HSCBGG)4.5:1

油液 Fluids: Mineral-based fluids with viscosities of 7.4 to 420 cSt.

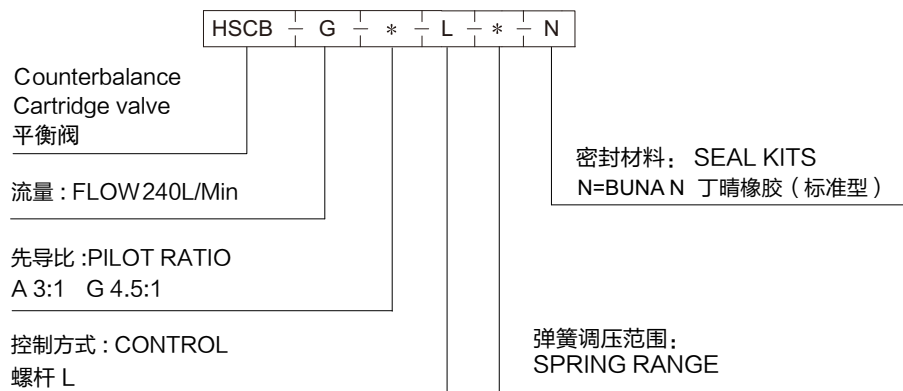
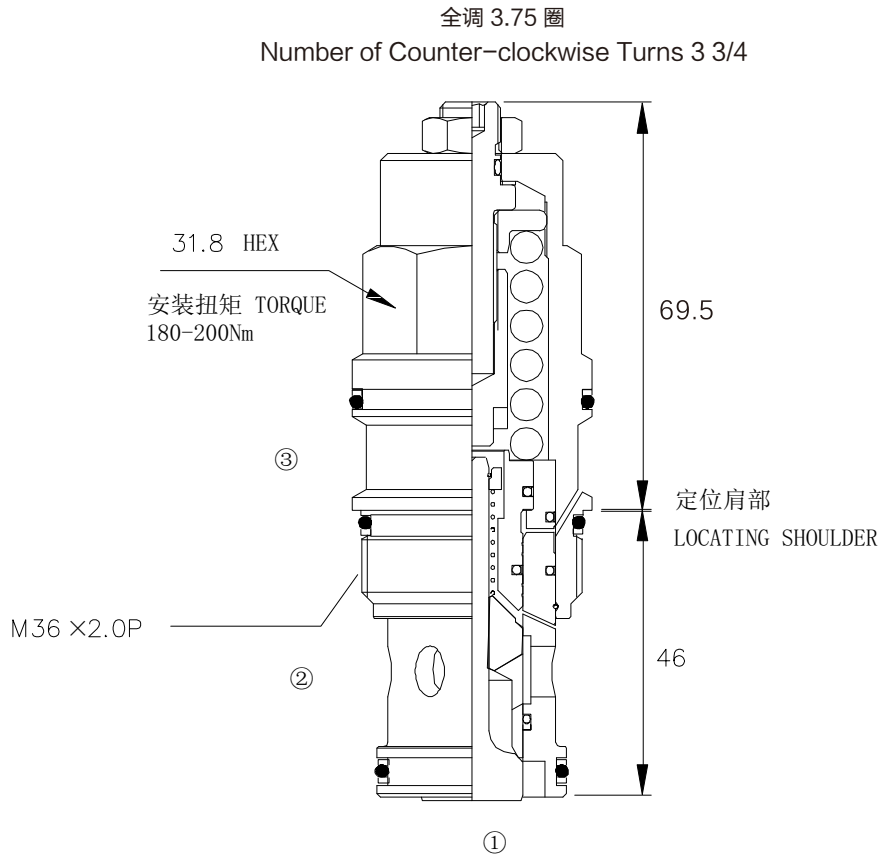
插孔 Cavity: Sun T-17A

阀块材料Body Material: 钢材允许使用最大压力350bar
Steel rated at 350bar

INSTALLATION DIMENSIONS 安装尺寸

Turn adjustment clockwise to decrease setting and release load
顺时针方向旋转螺杆减少设定压以致卸载

Unit=Millimeters



弹簧调压 HSCBGA:

H=1000-4000psi(70-280bar)
Preset: 3000psi(210bar) (Check:1.7bar)
I=350-1500psi(25-105bar)
Preset: 1000psi(70bar) (Check:1.7bar)
A=1000-4000psi(70-280bar)
Preset: 3000psi(210bar) (Check:0.3bar)
B=350-1500psi(25-105bar)
Preset: 1000psi(70bar) (Check:0.3bar)

弹簧调压 HSCBGG:

J=2000-5000psi(140-350bar)
Preset: 3000psi(210bar) (Check:1.7bar)
K=1000-2500psi(70-175bar)
Preset: 2000psi(140bar) (Check:1.7bar)
C=2000-5000psi(140-350bar)
Preset: 3000psi(210bar) (Check:0.3bar)
D=1000-2500psi(70-175bar)
Preset: 2000psi(140bar) (Check:0.3bar)