

HCS Brief

Hydraulic Cartridge Systems

Tech Brief TB-0003

PSI per turn for Pressure Controls

Guide to setting adjustable pressure controls

Parker Hannifin Hydraulic Cartridge Systems Division (HCS) offers many various different types of Pressure Control Valves to meet your needs. HCS offers Direct Acting, Differential Area, Pilot Operated, Cross-over, Unloading, Sequence, Reducing, and Reducing/Relieving.

HCS sets the relief valves to crack open at a standard or customer specific setting. Crack is defined as when drops turn into a steady stream, or approximately .25 gpm at the setting.

To assist the customer in setting the pressure control valve to a specific value for the application (if adjustable valve is ordered), the following chart of psi/turn is offered as a guide only. This guide is intended to help set a valve in the absence of a test stand or a gauge mounted on the system.

(For all valves shown as “S” Adjustable, “K” Knob option can be substituted.)

Valve Model	Standard Setting (psi)	PSI per Turn (+/- 20%)
A02A2H	1400	435
A02A2P	2900	800
A02B2F	725	228
A02B2H	1450	446
A02B2P	2900	881
A04B2H	1450	305
A04B2P	2900	630
A04C2D	360	76
A04C2F	725	147
A04H3H	1450	435
A04H3P	2900	800
A04J2H	1450	362
A04J2M	2900	493
A04K2H	1450	435
A04K2P	2900	800
A06G2H	1450	435
A06G2P	2900	800
A06H3H	1450	435

Valve Model	Standard Setting (psi)	PSI per Turn (+/- 20%)
A06H3P	2900	800
B02E3F	1100	318
B04C3H	1450	435
B04C3P	2900	800
B04D3H	1450	435
B04D3P	2900	800
B04E3E	580	125
B04E3G	1160	248
B04F3E	580	125
B04F3G	1160	248
B04G3E	580	125
B04G3G	1160	248
B04H4E	580	125
B04H4G	1160	248
B04J4E	580	125
B04J4G	1160	248
B04K4E	580	125
B04K4G	1160	248

Valve Model	Standard Setting (psi)	PSI per Turn (+/- 20%)
C02A3C	290	81
C02A3E	551	150
C02A3G	1088	302
PR103S02	100	50
PR103S06	300	95
PR103S12	600	165
PR103S20	1000	250
PRH081S10	500	285
PRH081S20	1000	570
PRH081S30	1500	855
PRH081S50	2500	1910
PRH082S10	500	285
PRH082S20	1000	570
PRH082S30	1500	855
PRH082S50	2500	1910
PRH101S03	250	285
PRH101S10	500	285
PRH101S20	1000	570
PRH101S30	1500	855
PRH101S50	2500	1910
PRH102S03	250	285
PRH102S10	500	285
PRH102S20	1000	570
PRH102S30	1500	855
PRH102S50	2500	1910
RAH081S10	500	285
RAH081S20	1000	570
RAH081S30	1500	855
RAH081S50	2500	1910
RAH101S10	500	285
RAH101S20	1000	570
RAH101S30	1500	855
RAH101S50	2500	1910
RD102S03	150	39
RD102S09	450	104
RD102S18	900	234

Valve Model	Standard Setting (psi)	PSI per Turn (+/- 20%)
RD102S30	1500	1500
RDH081S10	500	285
RDH081S20	1000	570
RDH081S30	1500	855
RDH081S50	2500	1910
RDH101S10	500	285
RDH101S20	1000	570
RDH101S30	1500	855
RDH101S50	2500	1910
RDH103S10	500	143
RDH103S20	1000	246
RDH103S30	1500	375
RDH103S50	2500	589
SV103S02	100	50
SV103S06	300	95
SV103S12	600	165
SV103S20	1000	250
SV104S02	100	50
SV104S06	300	95
SV104S12	600	165
SV104S20	1000	250
SV105S02	100	50
SV105S06	300	95
SV105S12	600	165
SV105S20	1000	250
SVH081S10	500	285
SVH081S20	1000	570
SVH081S30	1500	855
SVH081S50	2500	1910
SVH101S10	500	285
SVH101S20	1000	570
SVH101S30	1500	855
SVH101S50	2500	1910
XR101S20	1000	333
XR101S30	2500	425

More Information

Parker Cartridge Valves are available from the Hydraulic Cartridge Systems Division. Consult your HCS catalog or www.parker.com/hcs for more information. You can also contact a Product Manager or Technical Support Specialist for help at 847-955-5000 or HCSTechnical@parker.com.

