

KV 1/2" solenoid valves are designed for small hydraulic lifts operating at speeds up to 0.16 m/s (32 fpm) depending on the valve selected. The smooth and accurate ride characteristics of the KV2S valve which includes 'soft stop' in both directions, render it highly suitable for quality home lifts and lifts for the handicapped.

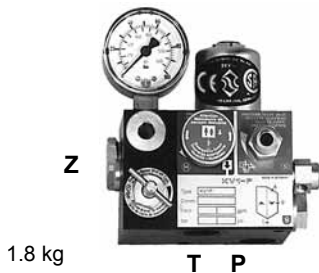
Flow Range: 5-80 l/min. (1.3-20 gpm) - see flow pressure charts on page 6
Oil Viscosity: 25-60 cSt. at 40°C (104°F)
Solenoids AC: 24 V/1.8 A, 42 V/1.0 A, 110 V/0.5 A, 230 V/0.18 A, 50/60 Hz
Solenoids DC: 12 V/2.1 A, 24 V/1.1 A, 42 V/0.6 A, 80 V/0.3 A, 125 V/0.25 A, 196 V/0.14 A.
Ports: P Pump, Z Cylinder and T Tank all G1/2"
Insulation Class, AC and DC: IP 68

Pressure Range: 3-100 bar (45-1500 psi)
Burst Pressure: 500 bar (7500 psi)
Max. Oil Temperature: 70°C (158°F)



Speeds max. (EN code)

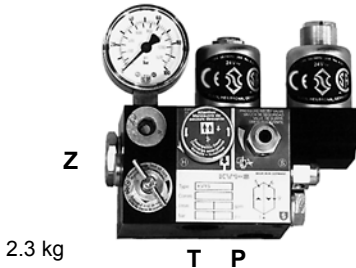
KV1P



Up One up speed, 0.16 m/s (32 fpm) max.
 Up start has built-in damping.
 Up stop has no damping (pump stops).

Down One down speed, 0.16 m/s (32 fpm) max.
 Down start has adjustable damping.
 Down speed is adjustable.
 Down stop has built-in damping.

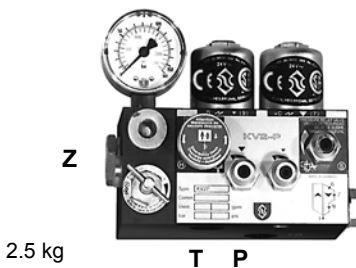
KV1S



Up One up speed 0.16 m/s (32 fpm) max. with soft stop,
 or 0.4 m/s (80 fpm) max. with overtravel and relevelling.
 Up start has built-in damping.
 Up stop has adjustable damping (delayed pump stop required).

Down One down speed, 0.16 (32 fpm) max.
 Down start has adjustable damping.
 Down speed is adjustable.
 Down stop has built-in damping.

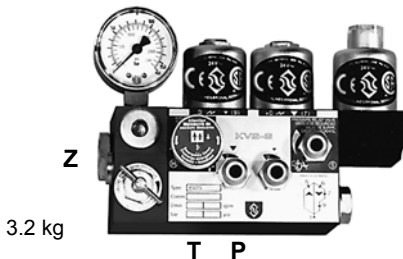
KV2P



Up One up speed, 0.16 m/s (32 fpm) max.
 Up start has built-in damping.
 Up stop has no damping (pump stops).

Down Two down speeds, 1 m/s (200 fpm) max.
 Down start has adjustable damping.
 Fast down speed and levelling speeds are adjustable.
 Slow down and stop have built-in damping.

KV2S

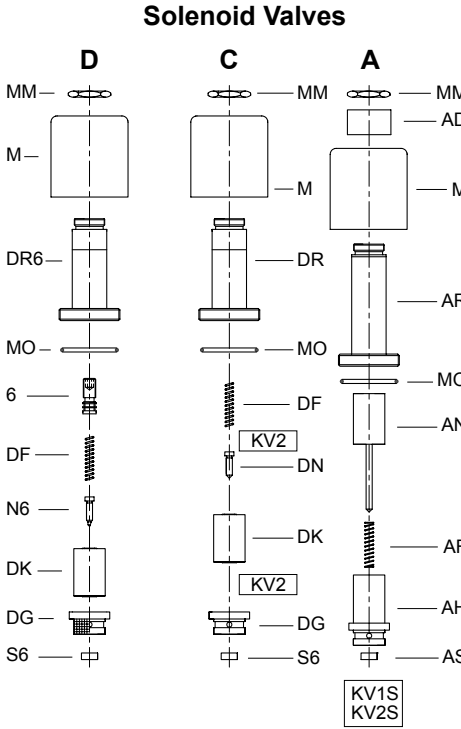


Up One up speed, 0.16 m/s (32 fpm) max. with soft stop,
 or 0.4 m/s (80 fpm) max. with overtravel and relevelling.
 Up start has built-in damping.
 Up stop has adjustable damping (delayed pump stop required).

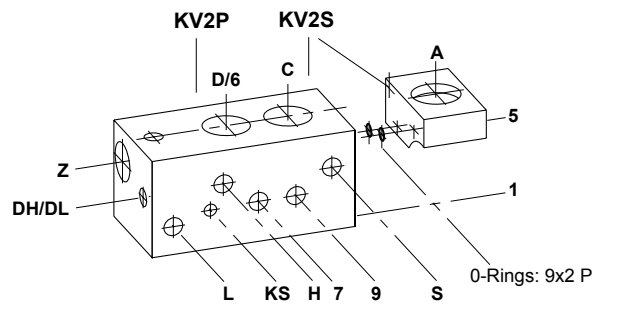
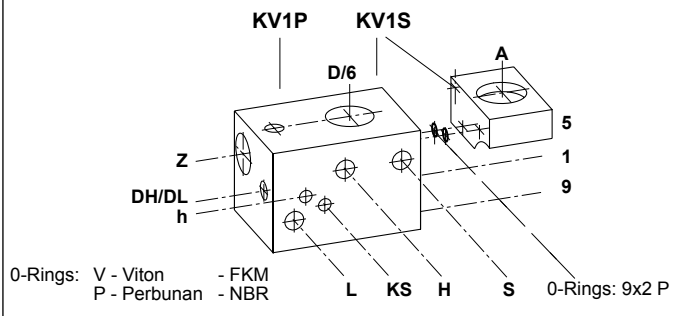
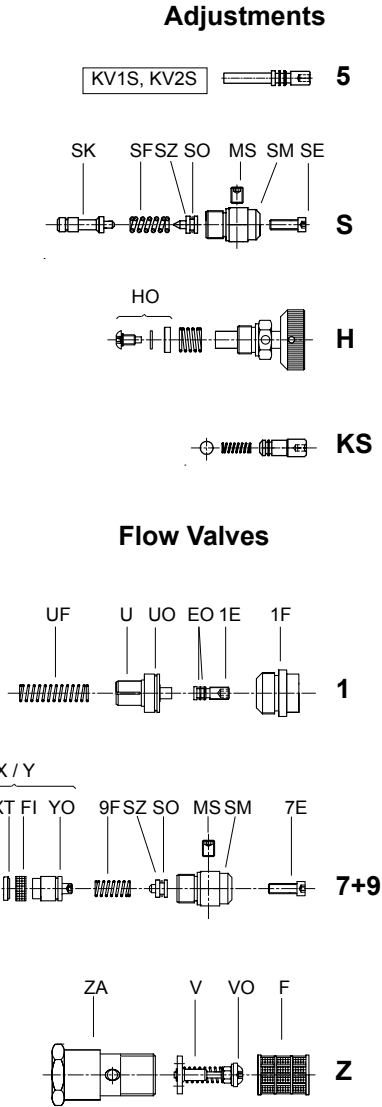
Down Two down speeds, 1 m/s (200 fpm) max.
 Down start has adjustable damping.
 Fast down speed and levelling speeds are adjustable.
 Slow down and stop have built-in damping.



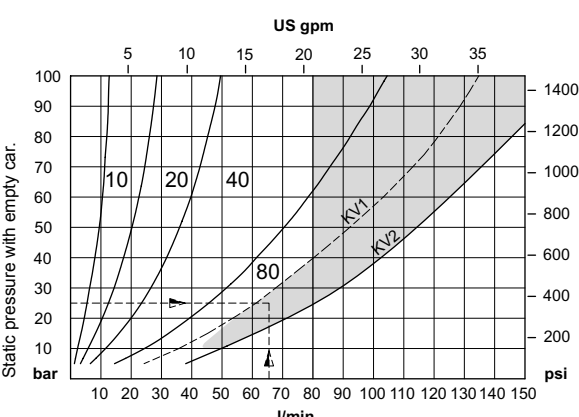
Pos. No.	Item
1	1F Flange - Bypass 1E Adjustment - Bypass EO 0-Ring - Adjustment (3,5x1,5 - P) U Flow Guide - Bypass UO 0-Ring - Bypass (17x1 - V) UF Spring - Bypass
5	Adjustment - Up Stop
6	Adjustment - Down Acceleration
7+9	7E Adjustment - Down Valve 9F Spring - Down Valve YO 0-Ring - Flow Guide (10x1 - V) XO Seal - Flow Guide (5,28x1,78 - V) XT 0-Ring Disc FI Filter - Down Valve X Down Flow Guide (Brass) Y Down Levelling Flow Guide (Steel) - KV2 Y Down Flow Guide (Steel) - KV1
S	SE Adjustment Screw - Relief Valve SM Hexagonal - Relief Valve MS Locking Screw SO 0-Ring - Nipple SZ Nipple - Relief Valve SF Spring - Relief Valve SK Piston - Relief Valve
H	H Manual Lowering - Self Closing HO Seal - Man. Lowering (0-Ring 5,28x1,78 - V)
HA	HA Adjustable Manual Lowering
KS	KS Slack Rope Valve
A	MM Nut Solenoid AD Collar Solenoid M Coil Solenoid (indicate voltage) AR Tube Solenoid 'Up' MO 0-Ring Solenoid AN Needle Solenoid 'Up' AF Spring Solenoid 'Up' AH Seat Housing 'Up' AS Seat Solenoid 'Up'
C+D	M Coil Solenoid (indicate voltage) C DR Tube - Solenoid 'Down', w/o adj. 6 D DR6 Tube Solenoid 'Down', with adj. 6 MO 0-Ring Solenoid DF Spring Solenoid 'Down' C DN Needle Solenoid 'Down' D N6 Needle Solenoid 'Down' (Nipple) C HN Needle Solenoid 'Down' DK Core Solenoid 'Down' DG Seat Housing 'Down'(Solen.D with screen) C S6 Seat Solenoid 'Down' C CO 0-Ring Seat Housing
Z	ZA Cylinder Thread Connection V Check Valve VO 0-Ring Check Valve (5,28x1,78 - V) F Main Filter
L	L Gauge Shut Off Cock



In case of down leakage, replace and test in the following order:
S6, N6, HO, V complete, XO, (2x XO with KV2).



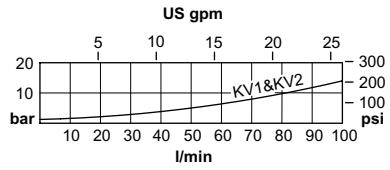
Insert Selection and Down Flow Chart



For pressure-flow conditions with-in shaded area, use 3/4" piping to avoid unnecessary power loss. Pump flows above 80 l/min. are not recommended

Example order
KV2S, 65 l/min, 25 bar (empty), 220WS
or: KV2S/80/220WS

Pressure Drop P - Z



Lowest Relief Pressure

