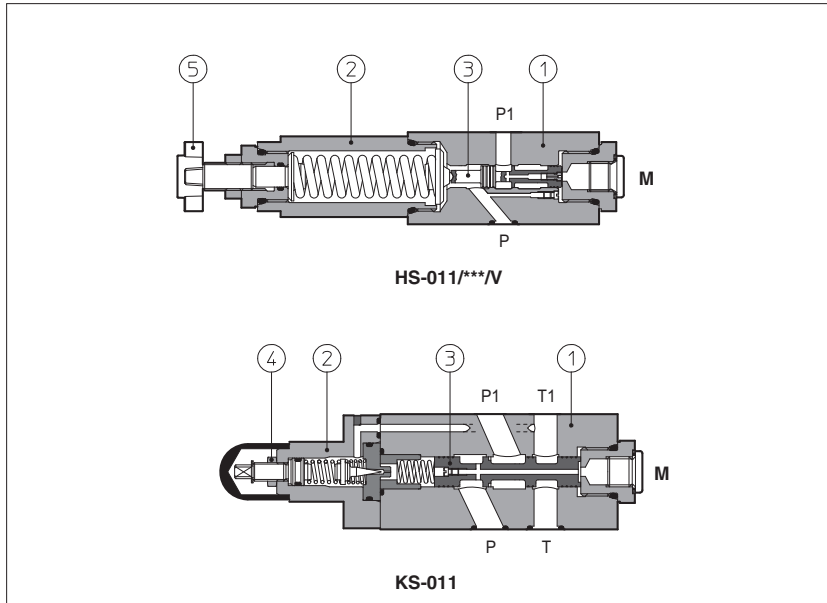


Modular sequence valves type HS-011 and KS-011

spool type, ISO 4401 size 06 and 10



HS are direct sequence valves, spool type ③.

KS are double stage ① ② sequence valves, spool type ③.

Pressure adjustment is operated by loosening the locking nut ④ and turning the setting screw in the normal model.

Optional versions with a handwheel ⑤ are available on request.

Clockwise rotation increases the pressure.

Valve size and max flow:

HS = size 06, flow up to 40 l/min

KS = size 10, flow up to 80 l/min

Mounting surface: **ISO 4401 size 06, 10**

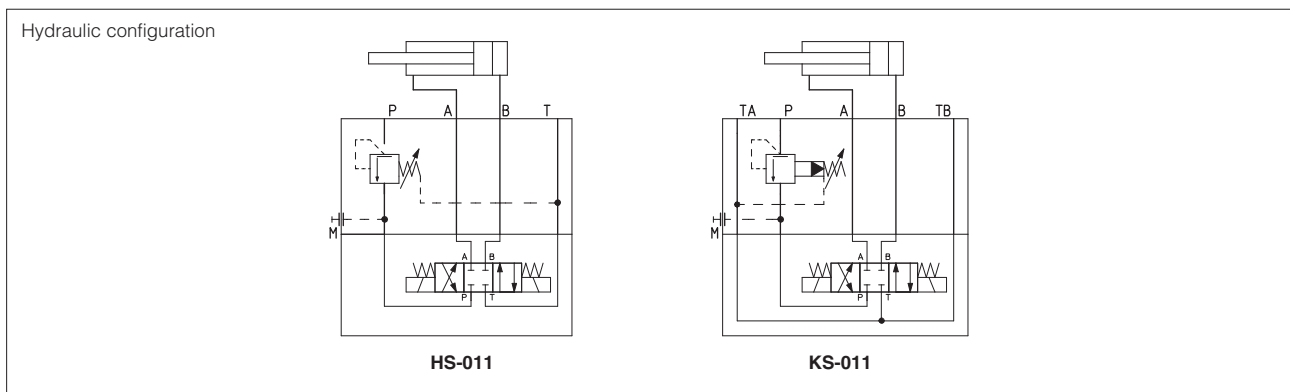
Max pressure: **350 bar (HS)**

315 bar (KS)

1 MODEL CODE

HS	-	011	/	210	/	V	/	**	/	*
Modular sequence valve, size: HS = 06 KS = 10										Seals material, see section ③: - = NBR PE = FKM BT = HNBR
Configuration, see section ② 011 = single, acting on port P, drain to port T										Series number
Pressure range: for HS: for KS: 32 = 3 - 32 bar 100 = 20 - 100 bar 100 = 7 - 100 bar 210 = 50 - 210 bar 210 = 8 - 210 bar										Options: V = setting adjustment by handwheel instead of a grub screw protected by cap Only for HS: VF = regulating knob VS = regulating knob with safety locking

2 HYDRAULIC CHARACTERISTICS



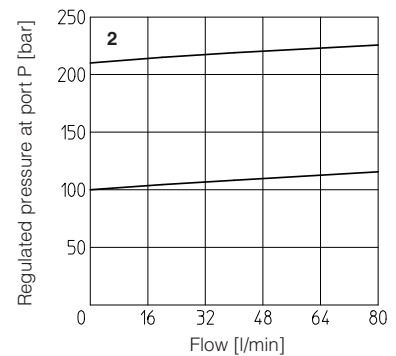
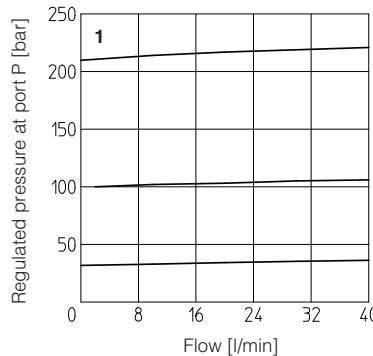
Valve model	HS-011/32	HS-011/100	HS-011/210	KS-011/100	KS-011/210
Max flow [l/min]		40			80
Max drain [cm ³ /min]		50			50
Pressure range [bar]	3 - 32	20 - 100	50 - 210	7 - 100	8 - 210
Max inlet pressure [bar]		350			315
Max pressure on port T [bar]		160			160

3 MAIN CHARACTERISTICS SEALS and HYDRAULIC FLUIDS - for other fluids not included in below table, consult our technical office

Assembly position / location	Any position		
Subplate surface finishing	Roughness index Ra 0,4 - flatness ratio 0,01/100 (ISO 1101)		
Compliance	RoHS Directive 2011/65/EU as last update by 2015/65/EU REACH Regulation (EC) n°1907/2006		
Ambient temperature	Standard = -30°C ÷ +70°C / PE option = -20°C ÷ +70°C / BT option = -40°C ÷ +70°C		
Seals, recommended fluid temperature	NBR seals (standard) = -20°C ÷ +60°C, with HFC hydraulic fluids = -20°C ÷ +50°C FKM seals (/PE option)= -20°C ÷ +80°C HNBR seals (/BT option)= -40°C ÷ +60°C, with HFC hydraulic fluids = -40°C ÷ +50°C		
Recommended viscosity	15 ÷ 100 mm ² /s - max allowed range 2,8 ÷ 500 mm ² /s		
Max fluid contamination level	ISO4406 class 20/18/15 NAS1638 class 9, see also filter section at www.atos.com or KTF catalog		
Hydraulic fluid	Suitable seals type	Classification	Ref. Standard
Mineral oils	NBR, FKM, HNBR	HL, HLP, HLPD, HVLP, HVLPD	DIN 51524
Flame resistant without water	FKM	HFDU, HFDR	ISO 12922
Flame resistant with water	NBR, HNBR	HFC	

4 REGULATED PRESSURE VERSUS FLOW DIAGRAMS based on mineral oil ISO VG 46 at 50°C

1 = HS
2 = KS



5 INSTALLATION DIMENSIONS [mm]

HS-011

(M) = Pressure gauge port = G 1/4"

Adjustment device for option/V

ISO 4401: 2005
Mounting surface: 4401-03-02-0-05
Diameter of ports A, B, P, T: Ø = 7,5 mm
Seals: 4 OR 108

Adjustment device for option /VF and /VS

Fastening bolts: n°4 socket head screws M5. The length depends on number and type of modular elements associated. Mass: 2 Kg

KS-011

(M) = Pressure gauge port = G 1/4"

Adjustment device for option/V

ISO 4401: 2005
Mounting surface: 4401-05-04-0-05
Diameter of ports A, B, P, T: Ø = 11,2 mm
Seals: 5 OR 2050

Adjustment device for option /VF and /VS

Fastening bolts: n°4 socket head screws M6. The length depends on number and type of modular elements associated. Mass: 3 Kg