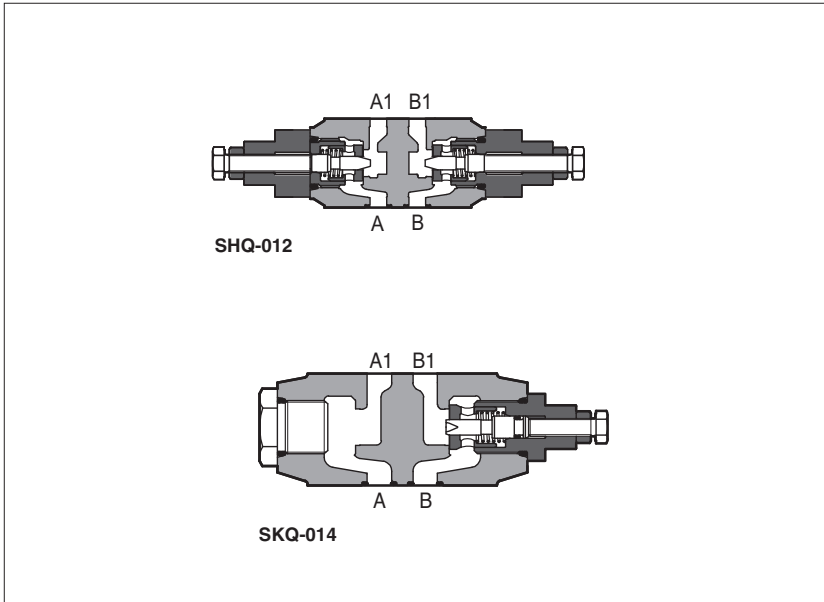


# Modular throttle valves type SHQ, SKQ

flow control, ISO 4401 sizes 06 and 10



**SHQ** and **SKQ** are flow throttling valves, not compensated, and with check valve to allow free reverse flow. The flow adjustment is performed by turning the setting screw. Optional versions with a graduate micrometer knob are available on request. Clockwise rotation increases the throttling (passage reduced).

Valve size and max flow:

**SHQ-0** = size 06, flow up to 25 l/min for /U option, up to 80 l/min for standard

**SKQ-0** = size 10, flow up to 160 l/min

Mounting surface:

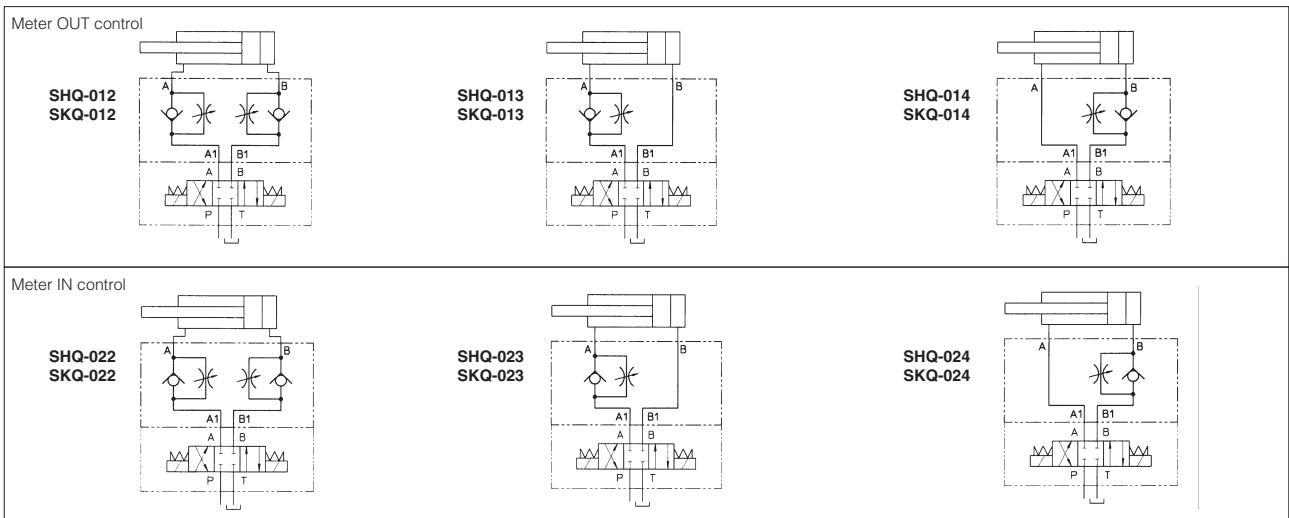
**ISO 4401 size 06 and 10**

Max pressure: **350 bar** (SHQ)  
**315 bar** (SKQ)

## 1 MODEL CODE

<b>SHQ-0</b>	<b>13</b>	<b>**</b>	<b>/</b>	<b>*</b>
Modular flow control valve, size: <b>SHQ-0</b> = 06 <b>SKQ-0</b> = 10		Seals material, see section 3: - = NBR <b>PE</b> = FKM <b>BT</b> = HNBR		
Configuration, see section 2 meter OUT control: <b>12</b> = double, acting on port A and B <b>13</b> = single, acting on port A <b>14</b> = single, acting on port B		meter IN control: <b>22</b> = double, acting on port A and B <b>23</b> = single, acting on port A <b>24</b> = single, acting on port B		
Series number				

## 2 VALVE CONFIGURATION

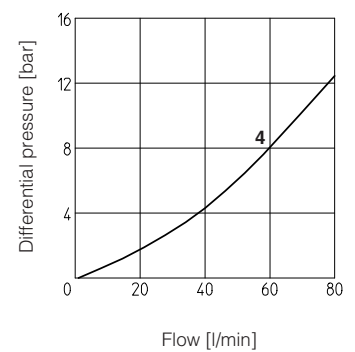
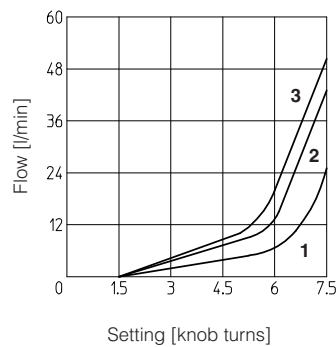


**3 MAIN CHARACTERISTICS, SEALS and HYDRAULIC FLUID** - for other fluids not included in below table, consult our technical office

Assembly position / location	Any position		
Subplate surface finishing	Roughness index Ra 0,4 - flatness ratio 0,01/100 (ISO 1101)		
MTTFd values according to EN ISO 13849	150 years, for further details see technical table P007		
Ambient temperature	Standard execution = -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 <sup>2</sup> /s - max allowed range 2.8 ÷ 500 mm <sup>2</sup> /s		
Fluid contamination class	ISO 4406 class 21/19/16 NAS 1638 class 10, achievable with in line filters - 25 µm (β10 ≥75 recommended)		
<b>Hydraulic fluid</b>	<b>Suitable seals type</b>	<b>Classification</b>	<b>Ref. Standard</b>
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	

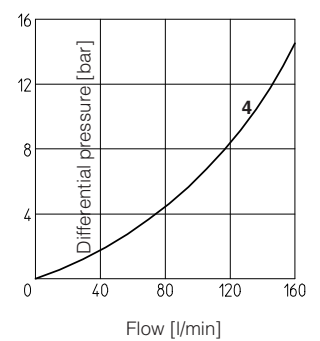
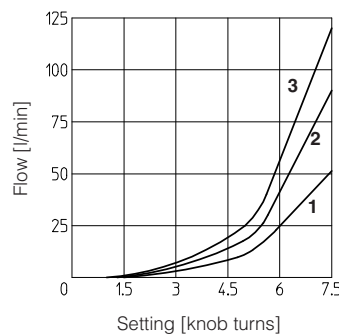
**4 DIAGRAMS OF SHQ-0** based on mineral oil ISO VG 46 at 50°C

- 1 = Regulation diagram at Δp 10 bar
- 2 = Regulation diagram at Δp 30 bar
- 3 = Regulation diagram at Δp 50 bar
- 4 = Q/Δp diagram for free flow through the non-return valve



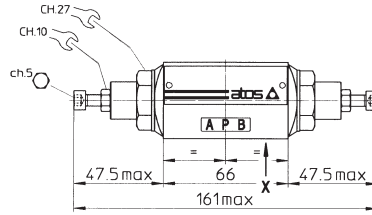
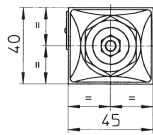
**5 DIAGRAMS OF SKQ-0** based on mineral oil ISO VG 46 at 50°C

- 1 = Regulation diagram at Δp 10 bar
- 2 = Regulation diagram at Δp 30 bar
- 3 = Regulation diagram at Δp 50 bar
- 4 = Q/Δp diagram for free flow through the non-return valve



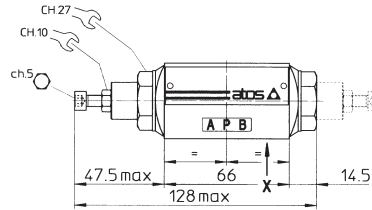
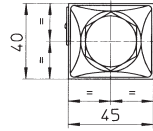
**8 INSTALLATION DIMENSIONS OF SHQ-0 VALVES [mm]**

**SHQ-012  
SHQ-022**



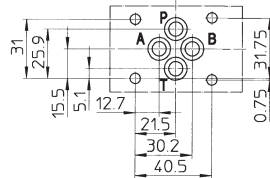
Mass: 1,1 Kg

**SHQ-013  
SHQ-014  
SHQ-023  
SHQ-024**



In version -014 and -024 the regulating element is on side of port B (dotted line) instead of side of port A.

Mass: 1,2 Kg



**ISO 4401: 2005**

**Mounting surface: 4401-03-02-0-05**

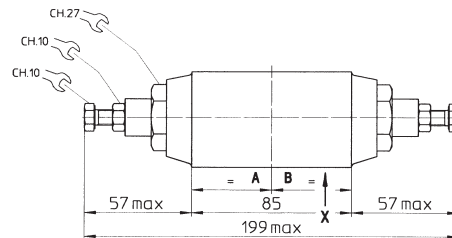
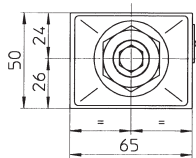
Diameter of ports A, B, P, T:  $\varnothing = 7,5$  mm (max)

Seals: 4 OR 108

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

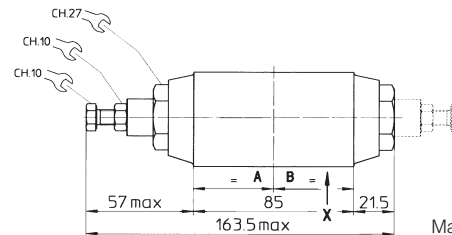
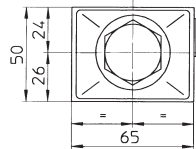
**9 INSTALLATION DIMENSIONS OF SKQ-0 VALVES [mm]**

**SKQ-012  
SKQ-022**



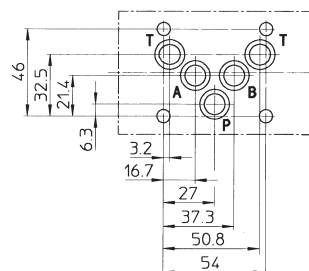
Mass: 2 Kg

**SKQ-013  
SKQ-014  
SKQ-023  
SKQ-024**



In version -014 and -024 the regulating element is on side of port B (dotted line) instead of side of port A.

Mass: 2,2 Kg



**ISO 4401: 2005**

**Mounting surface: 4401-05-04-0-05**

Diameter of ports, A, B, P, T:  $\varnothing = 11,2$  mm (max)

Seals: 5 OR 2050

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