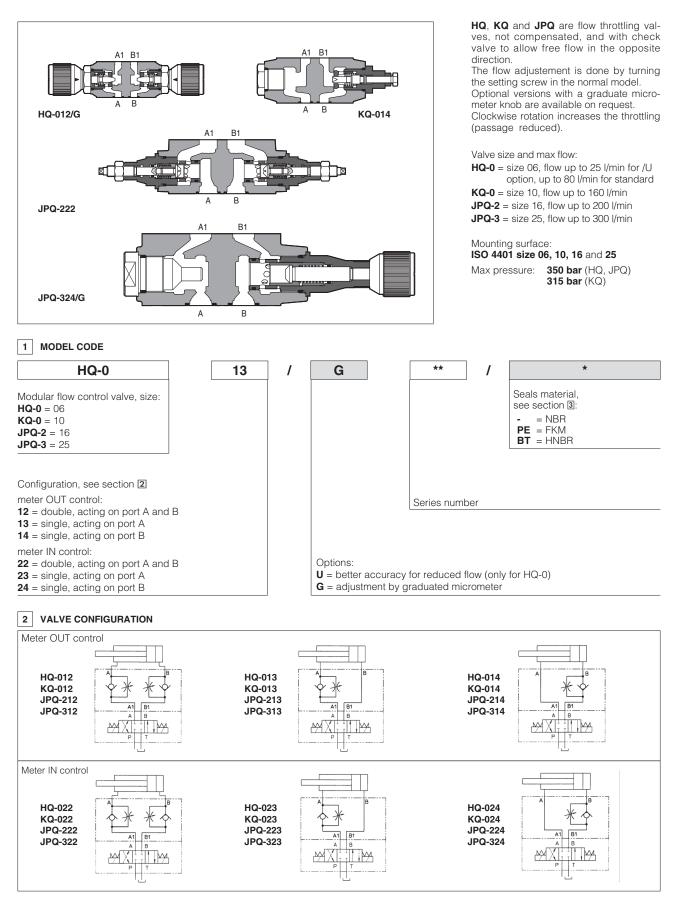


Modular throttle valves type HQ, KQ, JPQ

flow control, ISO 4401 sizes 06, 10, 16 and 25



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 | | |
| Compliance | RoHS Directive 2011/65/EU as last update by 2015/65/EU REACH Regulation (EC) n°1907/2006 | | |
| 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) = $-20^{\circ}C \div +60^{\circ}C$, with HFC hydraulic fluids = $-20^{\circ}C \div +50^{\circ}C$ FKM seals (/PE option)= $-20^{\circ}C \div +80^{\circ}C$ HNBR seals (/BT option)= $-40^{\circ}C \div +60^{\circ}C$, with HFC hydraulic fluids = $-40^{\circ}C \div +50^{\circ}C$ | | |
| Recommended viscosity | 15÷100 mm²/s - max allowed range 2.8 ÷ 500 mm²/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 | |

Flow [I/min]

125

200

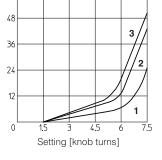
150

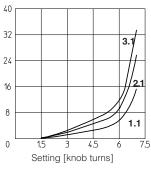
Flow [I/min]

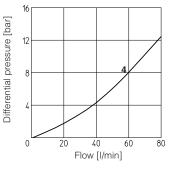
4 DIAGRAMS OF HQ-0 based on mineral oil ISO VG 46 at 50°C 60

Flow [I/min]

- 1 = Regulation diagram at ∆p 10 bar (1.1 = option /U)
- 2 = Regulation diagram at ∆p 30 bar (2.1 = option /U)
- **3** = Regulation diagram at Δp 50 bar (3.1 = option /U)
- $\mathbf{4} = \mathbf{Q}/\Delta \mathbf{p}$ diagram for free flow through the non-return valve

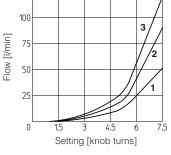


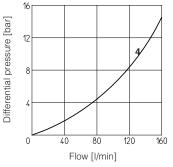




5 DIAGRAMS OF KQ-0 based on mineral oil ISO VG 46 at 50°C

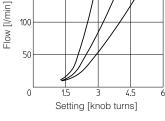
- **1** = Regulation diagram at Δp 10 bar
- $\mathbf{2}$ = Regulation diagram at Δp 30 bar
- $\mathbf{3}$ = Regulation diagram at Δp 50 bar
- $\mathbf{4} = \mathbf{Q}/\Delta \mathbf{p}$ diagram for free flow through the non-return valve



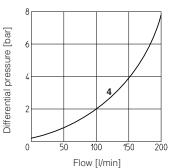


6 DIAGRAMS OF JPQ-2 based on mineral oil ISO VG 46 at 50°C

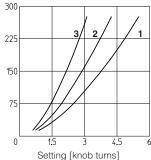
- $\mathbf{1}$ = Regulation diagram at Δp 10 bar
- $\mathbf{2}$ = Regulation diagram at Δp 30 bar
- $\mathbf{3}$ = Regulation diagram at Δp 50 bar
- $\mathbf{4} = \mathbf{Q}/\Delta \mathbf{p}$ diagram for free flow through the non-return valve

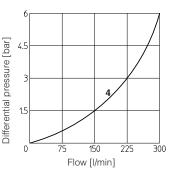


3



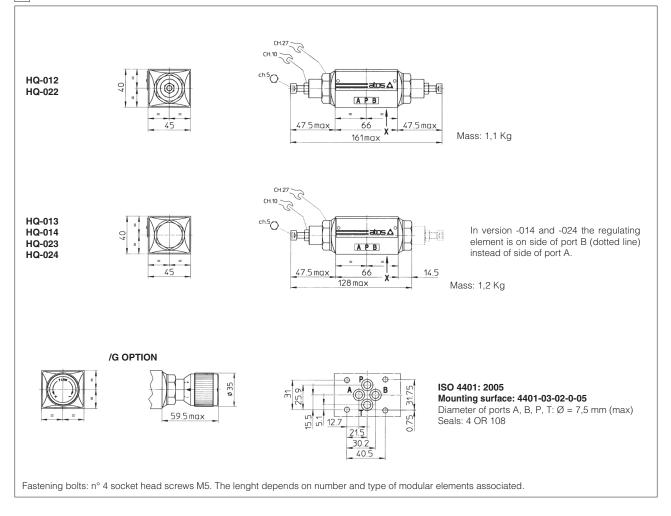




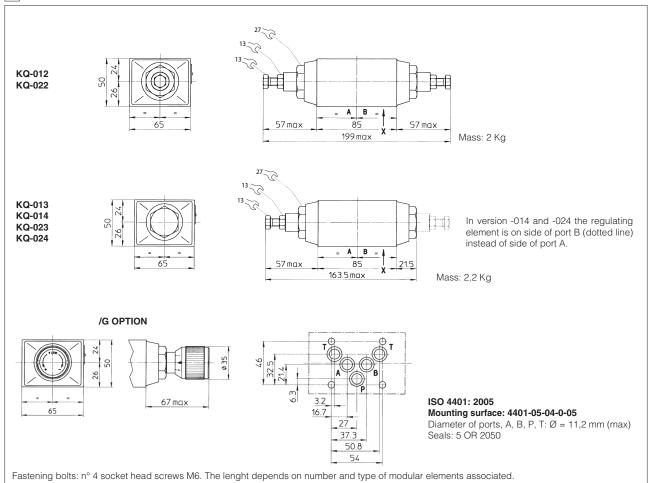


7 DIAGRAMS OF JPQ-3 based on mineral oil ISO VG 46 at 50°C

- $\mathbf{1}$ = Regulation diagram at Δp 10 bar
- $\mathbf{2}$ = Regulation diagram at Δp 30 bar
- $\mathbf{3}$ = Regulation diagram at Δp 50 bar
- $\mathbf{4} = \mathbf{Q}/\Delta \mathbf{p}$ diagram for free flow through the non-return valve



9 INSTALLATION DIMENSIONS OF KQ-0 VALVES [mm]



10 INSTALLATION DIMENSIONS OF JPQ-2 VALVES [mm]

