Part number:

148-10177

HYDROMA HYDRAULICKÉ SYSTÉMY

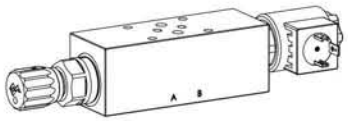
HIDROMA SISTEMS UKŁADY HYDRAULICZNE

HYDROMA ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

# Fine feed-/fast approach valve
## Sandwich construction

- $Q_{max}$ = **40 l/min** (Fine feed)
- $Q_{max}$ = **80 l/min** (Fast approach)
- $Q_{N\,max}$ = **40 l/min**
- $p_{max}$ = **350 bar**

**NG6**
ISO 4401-03



### DESCRIPTION
Fine feed-/fast approach valve in sandwich construction. 2-way flow control- and 2/2-way poppet valve cartridges are installed. 5 standard nominal volume flow ranges are available (see data sheet 2.5-535). The poppet valve cartridge is electrically actuated (see data sheet 1.11-2082). The sandwich body made of steel is phosphatized.

### FUNCTION
The fine feed-/fast approach valve serves for the electrically controlled two-stage speed control. Fine feed and fast approach. In the first stage, the fine feed, the volume flow is controlled by the flow control valve, to the manually adjusted value independent on the load. In doing so, the poppet valve is closed. In the second stage, the fast approach, the volume flow, dependent of the load and of the system pressure, flows through the poppet valve.

### APPLICATION
The fine feed-/fast approach valves are utilised in hydraulic systems, which require an electrically controlled fine feed-/fast approach changeover, such as positioning controls on machine tools or elevation controls of elevating platforms, etc. Due to the sandwich construction, these fine feed-/fast approach valves can be integrated into stacked systems as an intermediate flange.

### TYPE CODE

V Q ☐ S A06 - ☐ ☐ - ☐ - ☐ / W ☐ # ☐

| | | | | | | |
|---|---|---|---|---|---|---|
| Fine feed- / fast approach valve | | | | | | |
| Flow control function | | | | | | |
| Type of adjustment | Key | S | | | | |
| | Control knob | D | | | | |
| Sandwich construction | | | | | | |
| International standard interface ISO, NG6 | | | | | | |
| Type list / Function | | | | | | |
| | | | Meter-out flow control | | Meter-in flow control in | |
| | in P | P | in A | A | in A | AV |
| | in T | T | in B | B | in B | BV |
| Poppet valve | Normally closed | C | | | | |
| | Normally open | O | | | | |
| Nominal volume flow rate $Q_N$ | | 2,5 l/min | 2.5 | | | |
| Flow control valve | | 6,3 l/min | 6.3 | | | |
| | | 16 l/min | 16 | | | |
| | | 20 l/min | 20 | | | |
| Nominal voltage $U_N$ | | 12VDC | G12 | 115VAC | R115 | |
| | | 24VDC | G24 | 230VAC | R230 | |
| Slip-on coil | | Metal housing round | | | | |
| Connection execution | | Connector socket EN175301-803/ISO 4400 | | | D | |
| | | Connector socket AMP Junior-Timer | | | J (only for $U_N \leq 75$ VDC) | |
| Design index (subject to change) | | | | | | |

### GENERAL SPECIFICATIONS

| | |
|---|---|
| Description | Fine feed-/fast approach valve |
| Nominal size | NG6 acc. to ISO 4401-03 |
| Construction | Sandwich construction |
| Mounting | 4 holes for socket cap screws M5 or studs screws M5 |
| Connection | Threaded connection plates, multi-flange subplate, longitudial stacking system |
| Ambient temperature | -20 ... +50 °C |
| Mounting | any |
| Fastening torque | $M_D$ = 5,5 Nm (Qual. 8.8) |
| Weight | m = 1,9 kg |

### HYDRAULIC SPECIFICATIONS

| | |
|---|---|
| Fluid | Mineral oil, other fluid on request |
| Contamination efficiency | ISO 4406:1999, class 18/16/13 (Required filtration grade ß 6...10≥75) refer to data sheet 1.0-50/2 |
| Viscosity range | 12 mm²/s...320 mm²/s |
| Fluid temperature | -20...+70 °C |
| Peak pressure | $p_{max}$ = 350 bar |
| Nominal volume flow rates | $Q_N$ = 2,5 l/min, 6,3 l/min, 16 l/min, 25 l/min, 40 l/min |
| Min. volume flow | $Q_{min}$ = 0,1 l/min |
| Max. volume flow | $Q_{max}$ = 80 l/min |

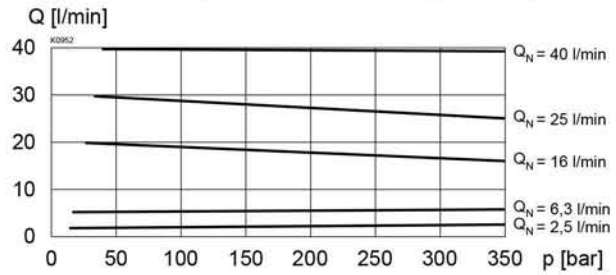
### ELECTRICAL CONTROL

Solenoid construction: see data sheet poppet valve (1.11-2082)

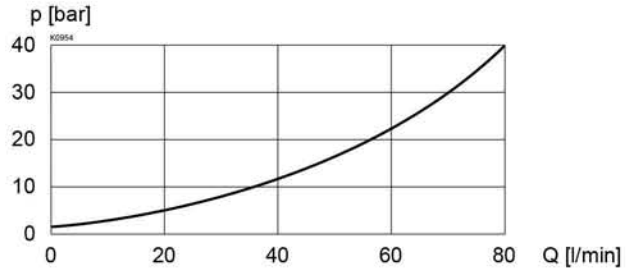
For further hydraulic specifications, refer to data sheet 2.5-535

## CHARACTERISTICS Oil viscosity $\upsilon$ = 30 mm²/s

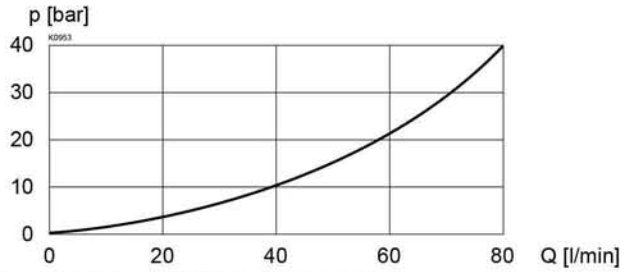
Q = f (p) Volume flow pressure characteristics (Fine feed)




Δp = f (Q) Pressure drop volume flow characteristic over non-return valve




Δp = f (Q) Pressure drops volume flow characteristic (Fast approach)




## SCREW-IN CARTRIDGES INSTALLED

The following screw-in cartridges are used in the sandwich body:

| *Type* | *Designation* | *Data sheet no.* |
|---|---|---|
| QZ.PM22 | Flow control valve | 2.5-535 |
| SVSPM22 | Solenoid poppet valve | 1.11-2082 |

## PARTS LIST

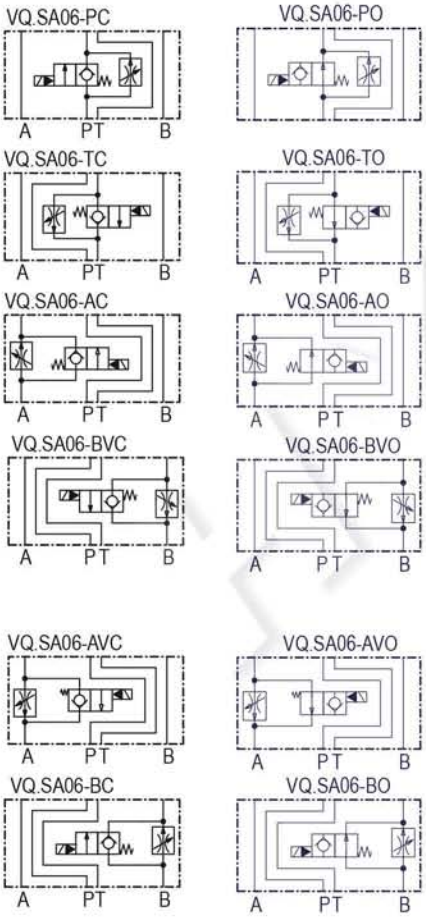
| Position | Article | Description |
|---|---|---|
| 10 | 160.2093 | O-ring ID 9,25x1,78 (NBR) |

## ACCECOIRES

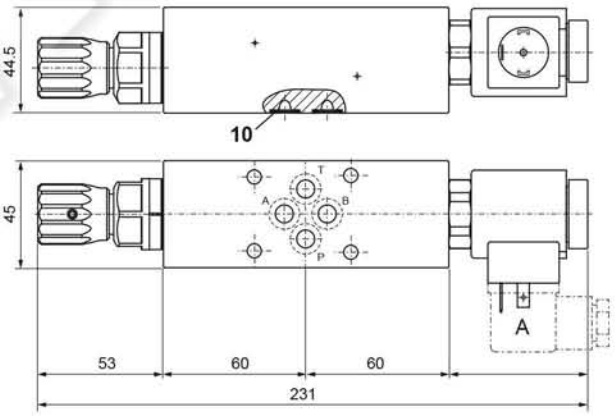
Threaded connection plates and multi-flange subplates Register 2.9
Mating connector EN 175301-803 Article no. 219.2002

Technical explanation see data sheet 1.0-100

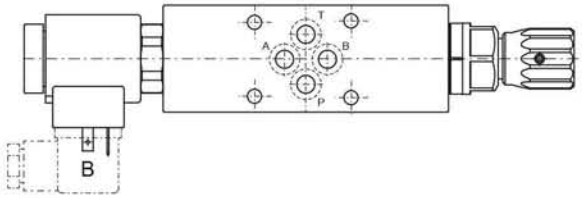
## TYPES / DIMENSIONS




Control P, T, A, BV




Control AV, B




Dimensions of the other setting versions see data sheet 2.5-535