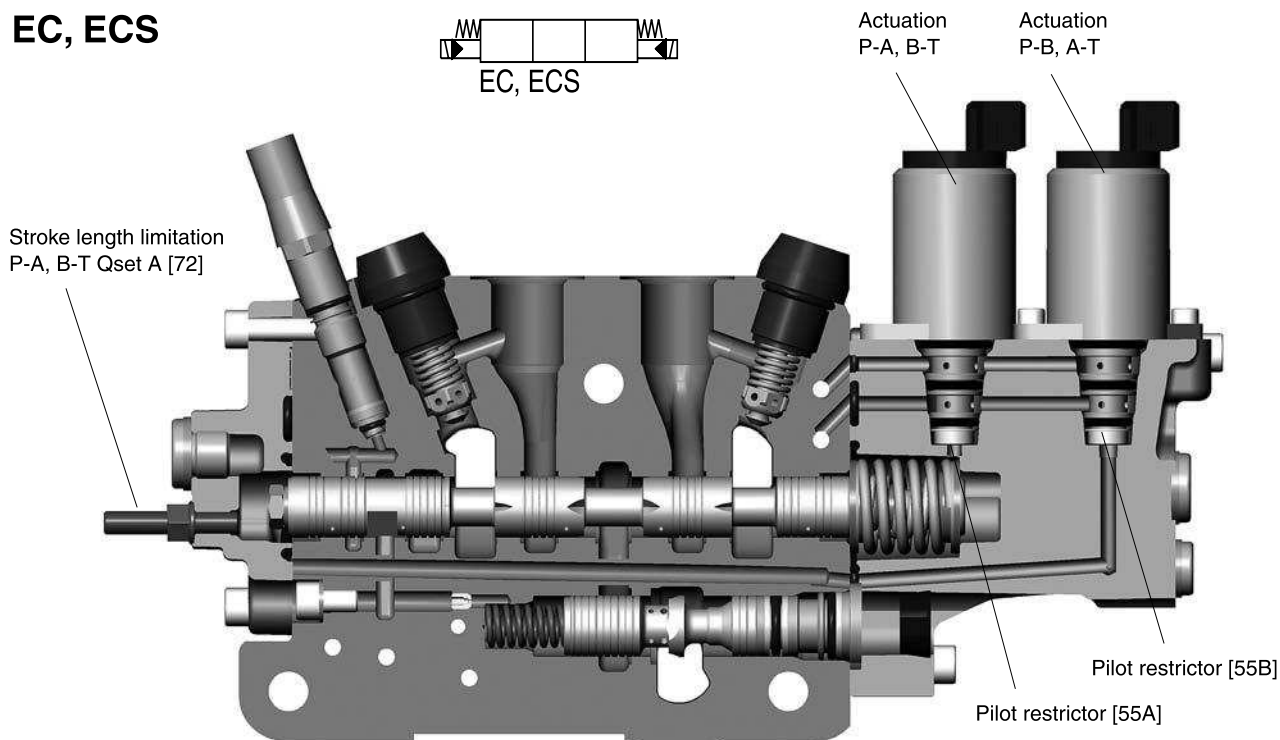


EC, ECS



Proportionally remote-controlled actuators, with enclosed spool-ends

EC/ECS Electro-hydraulic spool actuator

The EC/ECS are proportional, electro-hydraulically controlled spool actuators with spring centering to neutral. They are intended to be controlled remotely by the IQAN control systems. Pilot-pressure oil is led to the spool actuators through internal ducts in the directional valve. This means that only the cable connectors from the control system to the pilot solenoid valve needs to be connected externally.

Control current for 12 V

Breakaway*	min. 550 mA
Fully actuated	max. 980 mA

Control current for 24 V

Breakaway*	min. 260 mA
Fully actuated	max. 510 mA

The control current must be regulated for temperature compensation and with ripple to minimise hysteresis.
 Measuring connections: G1/4 or 9/16-18 UNF

EC as ECS but with manual over-ride and air-bleed screw in the pilot solenoid valve.

*

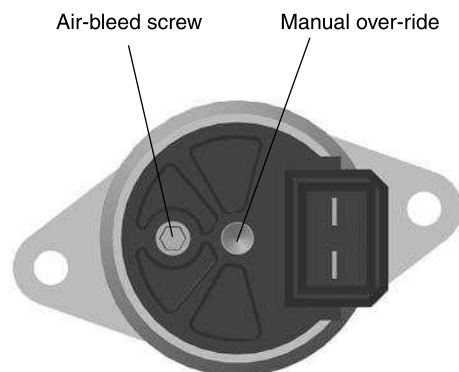
The breakaway current refers to the current needed for the directional valve to open the connection "pump to service port". The final current is the lowest current needed to effect full actuation of a spool in the directional valve. This data must be taken into consideration when choosing control units, since the opening current of the control unit must be lower than the breakaway current of the spool actuator in order to avoid jerky starting and stopping. However, the control unit's final current must be higher than the final current of the directional valve in order to ensure that the spools can be fully actuated.

Connector Type [56]

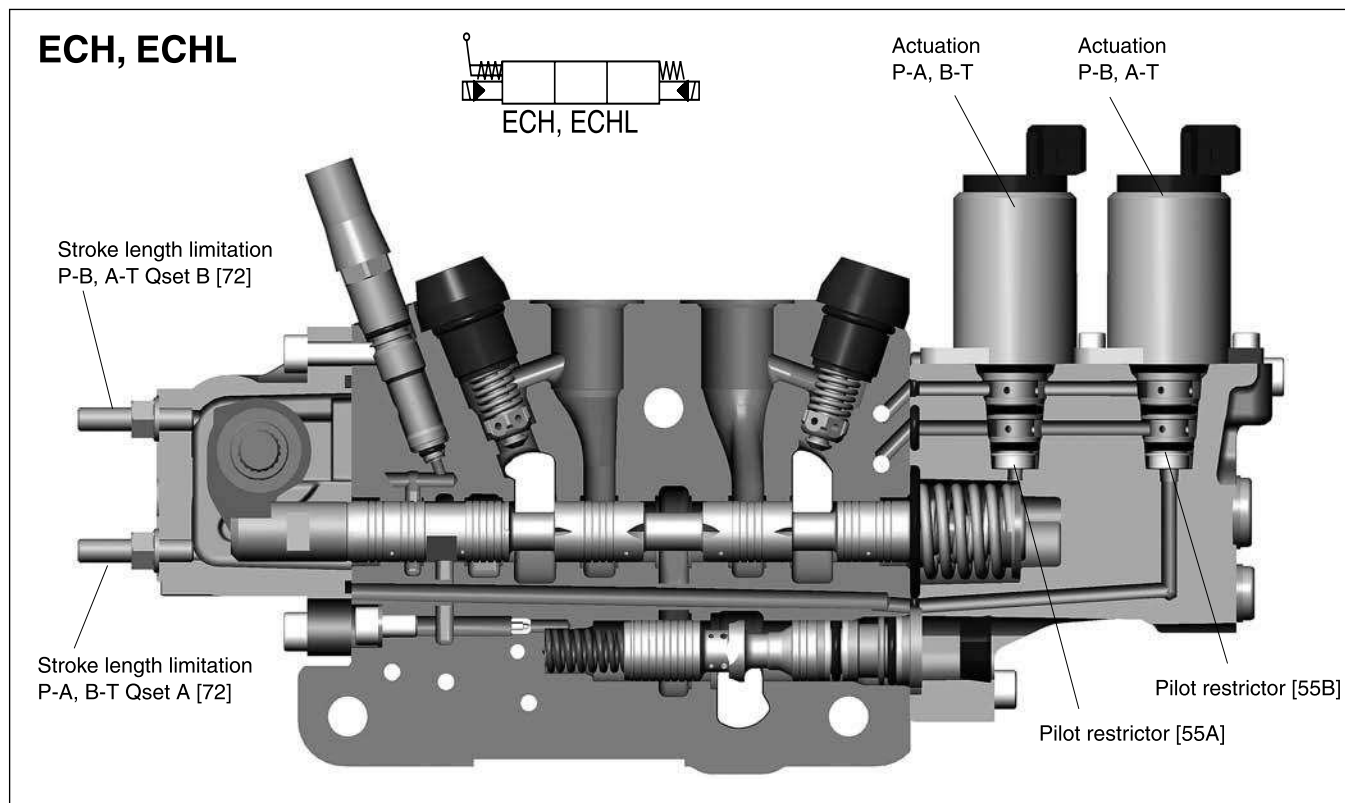
The connector of the solenoid is of type:

- A** AMP Junior-Timer type C.
- D** Deutsch type DT04-2P. Mates with DT06-2S Plugs.

The connector must be ordered separately.



EC pilot solenoid valve with manual over-ride and air-bleed screw.



Proportionally remote-controlled actuators, with enclosed spool-ends and facility for manual control

ECH Electro-hydraulic spool actuator with facility for supplementary local lever for direct control
The ECH spool actuator can be operated directly and steplessly by a supplementary local lever (optional).

Spring force in neutral	60 N
Spring force with spool fully actuated	350 N

Other data as for ECS to the left.

ECHL Same as ECH, but with weaker centering spring.
Suitable for use, e. g. when spool actuator is mainly intended to be operated directly.

Spring force in neutral	85 N
Spring force with spool fully actuated	250 N

Control current for 12 V

Breakaway*	min. 550 mA
Fully actuated	max. 820 mA

Control current for 24V

Breakaway*	min. 260 mA
Fully actuated	max. 440 mA

Other data as for ECH above.

*

The breakaway current refers to the current needed for the directional valve to open the connection "pump to service port". The final current is the lowest current needed to effect full actuation of a spool in the directional valve. This data must be taken into consideration when choosing control units, since the opening current of the control unit must be lower than the breakaway current of the spool actuator in order to avoid jerky starting and stopping. However, the control unit's final current must be higher than the final current of the directional valve in order to ensure that the spools can be fully actuated.

Connector Type [56]

The connector of the solenoid is of type:

A AMP Junior-Timer type C.

D Deutsch type DT04-2P. Mates with DT06-2S Plugs.

The connector must be ordered separately.