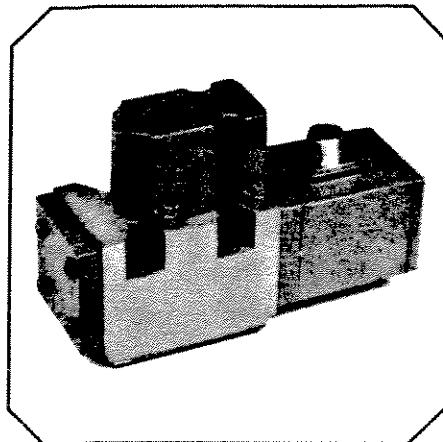


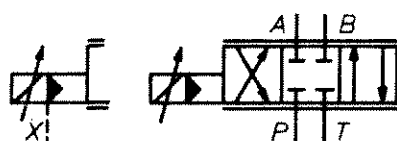


Proportional Control Valves with Integrated Electronics

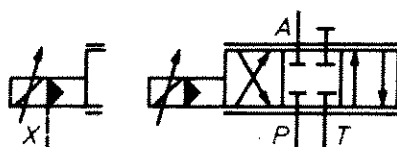
Series D641 P

Rated flow 16...140 l/min ($\Delta p_N = 10$ bar)
Operating pressure up to 350 bar

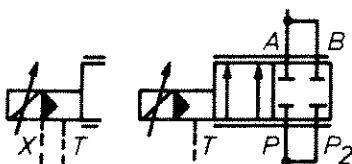
**Mounting pattern to DIN 24340
Form A 10 (ISO 4401-AC-05-4-A)**



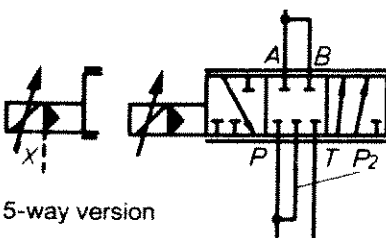
4-way version



3-way version

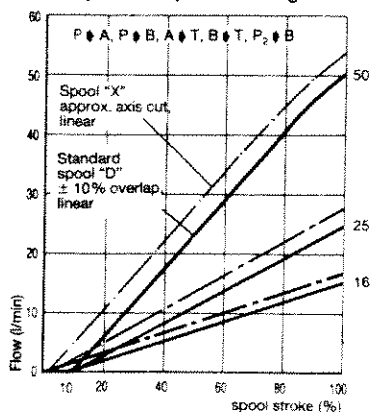


2 x 2-way version



5-way version

Flow characteristic
at $\Delta p = 5$ bar per metering land



Port size
Valve body design:

[mm] dia 10.5
 4-way version with 5 chambers
 2 x 2-way version, P to A and P2 to B
 5-way version P to A, P2 to B and A to T

Rated flow ($\pm 10\%$)
 at 10 bar valve pressure drop

[l/min] **16/25/50** 4-way version
140 2 x 2-way and 5-way versions

Valve version

Spool configuration

Pilot valve

Without additional mechanical feedback

With additional mechanical feedback

Main spool stroke

Main spool drive area

Response time for 0 to 100 % stroke*

Threshold*

Hysteresis*

Null shift for $\Delta T = 55^\circ \text{C}$

Null flow* max.

(axis cut version)

Pilot valve oil flow

at 100 % step input*

Mass

A67815-001

A03086-011

± 2.5

2

45

< 0.3

< 1

< 1.5

3.0

2

5.4

4.0

3

5.4

A67815-003

A03086-015

± 2.5

2

28

< 0.25

< 1

< 1.5

4.0

3

5.4

3

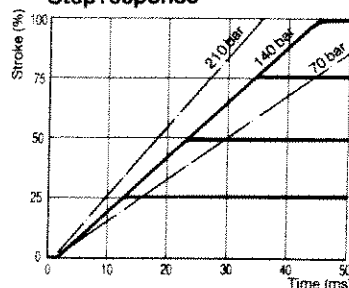
5.4

*At 140 bar pilot pressure or operating pressure

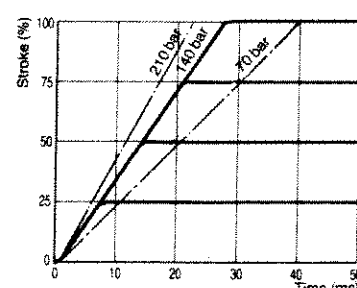
Typical characteristics

With pilot valve **A67815-001**
 or **A03086-011**

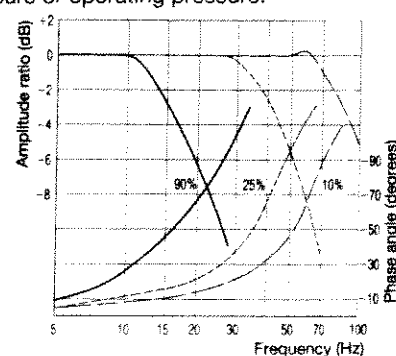
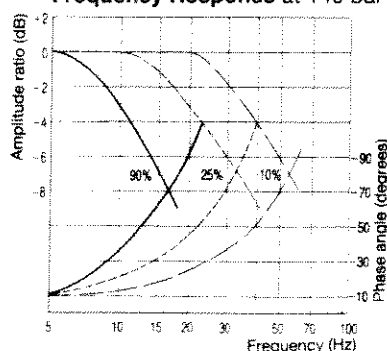
Step response

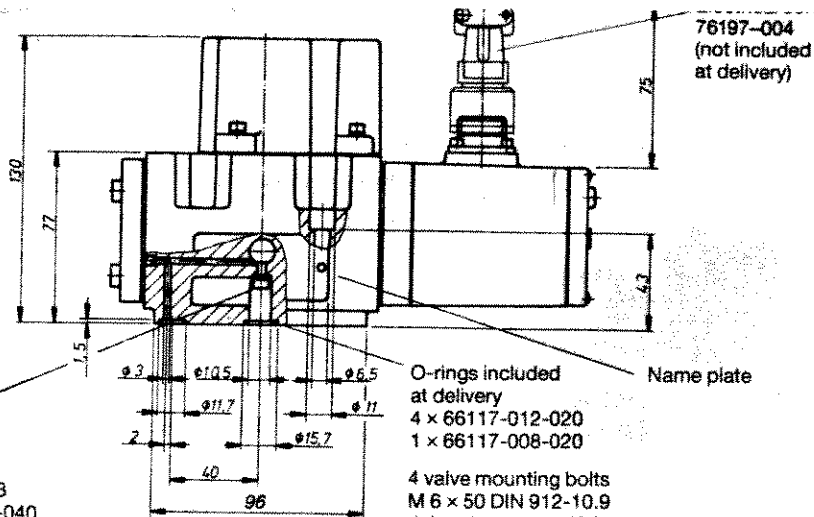
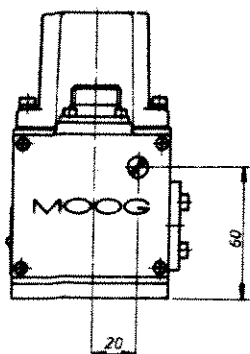


With pilot valve **A67815-003**
 or **A03086-015**



Frequency Response at 140 bar pilot pressure or operating pressure.



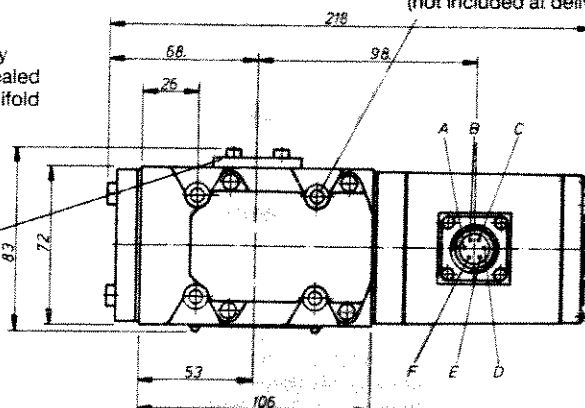


Screw plug M 4 x 8
DIN 6912-8.8 MOOG P/N 76689-040-008
with sealing ring dia 4 MOOG P/N 76425-040
not needed for internal pilot supply

Important: With internal pilot supply, the operating pressure is applied internally to **port X**; for this reason, port X must be sealed with an O-ring. Ensure that mounting manifold covers this area.

O-rings included at delivery
4 x 66117-012-020
1 x 66117-008-020
Name plate
4 valve mounting bolts
M 6 x 50 DIN 912-10.9
tightening torque 13 Nm
(not included at delivery)

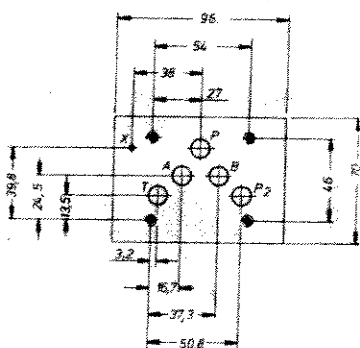
Replaceable filter element A67999-065



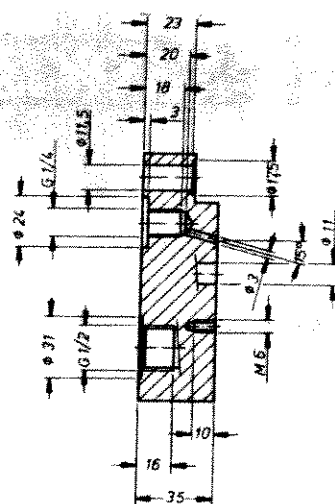
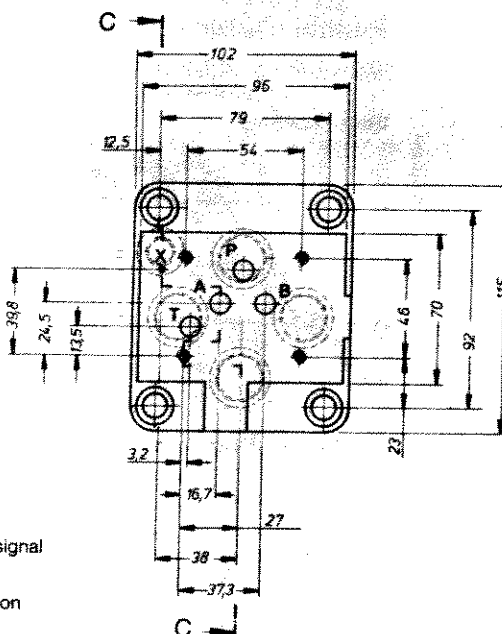
Electrical null adjustment:
Flow will increase out of port A, when potentiometer turned in clockwise direction
(4 turn potentiometer under screw plug)

Flushing plate for internal supply 76046-001
Flushing plate for external supply 76046-002

Mounting pattern for
2 x 2-way and 5-way version
Mounting manifold on request



Mounting manifold A03230-001 for internal supply
Mounting manifold A03230-002 for external supply
Dimensions to DIN 24340, form A 10, port NG 11,
mounting surface flat within 0,02 mm, average surface finish value Ra better than 1 μ m



Section C-C

Electrical connection
Valves with voltage command
Standard

