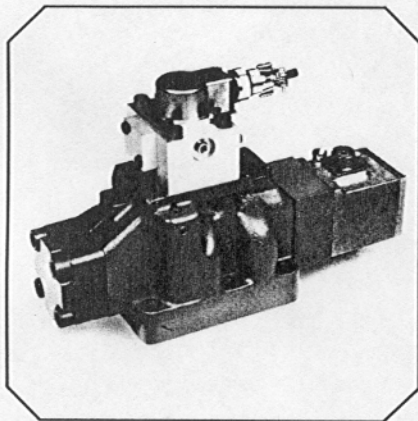


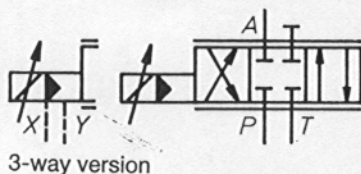
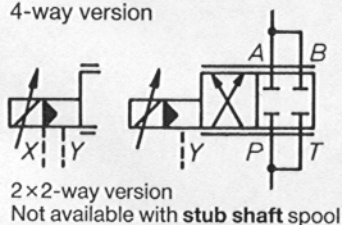
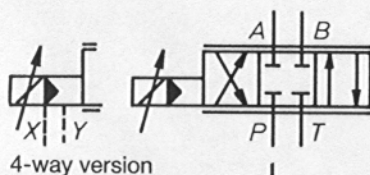


Proportional Control Valves with Integrated Electronics

Series D644

Rated flow 600 (340) l/min ($\Delta p_N = 10$ bar)
Operating pressure up to 350 bar

Mounting pattern to DIN 24340
Form A 25 (ISO 4401-AE-08-4-A)



Port size
Valve body design,
Rated flow ($\pm 10\%$)
at 10 bar valve pressure drop

[mm] dia 32
4 chamber version

Valve version:
Spool configuration

[l/min] 600 P ∇ B ∇ A ∇ T
340 P ∇ A ∇ B ∇ T
2-stage
with stub
shafts
Standard

Pilot valve:
Main spool stroke,
Main spool drive area
Response time for 0 to 100 % stroke*
Threshold*
Hysteresis*
Null shift for $\Delta T = 55^\circ \text{C}$

[mm] ± 7
[cm²] 2
[ms] 70
[%] < 0.4
[%] < 1.5
[%] < 1.5

Null flow* max.

[l/min] 5.0 4.5

(axis cut version)

Pilot valve oil flow

[l/min] 3 20

at 100 % step input*

Mass

[kg] 13.5 14

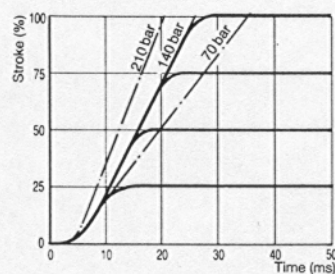
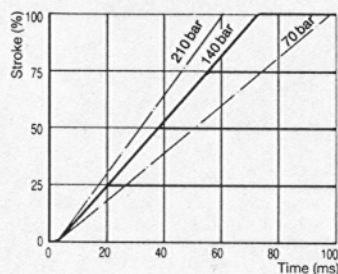
*For 140 bar pilot pressure or operating pressure

Typical characteristics

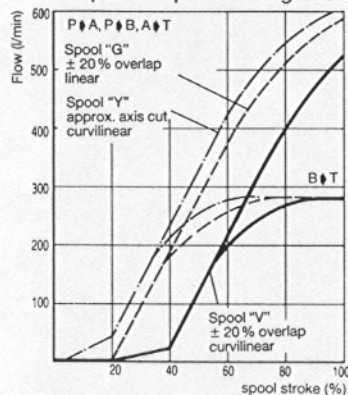
with pilot valve D061-601

with pilot valve D076-039

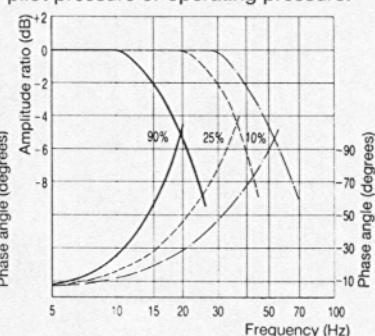
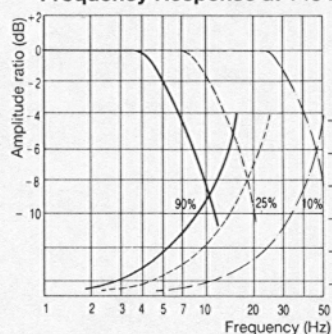
Step response



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

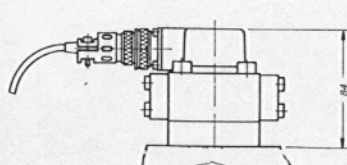
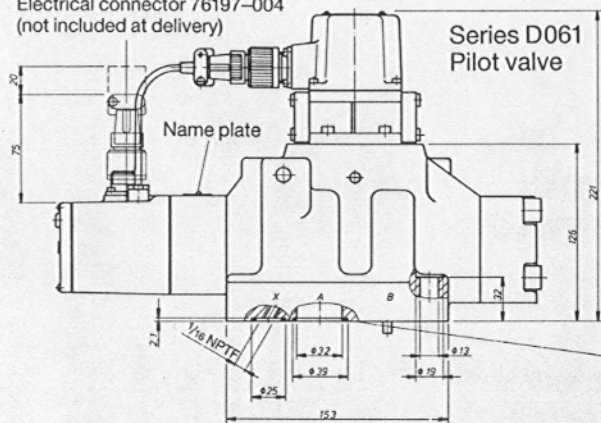


Frequency Response at 140 bar pilot pressure or operating pressure.

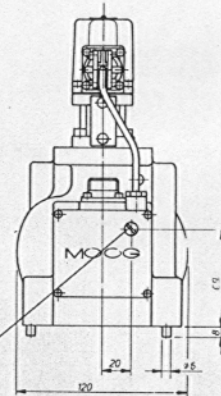


Dimensions

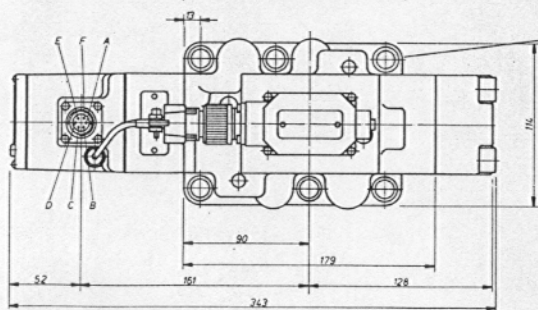
Electrical connector 76197-004
(not included at delivery)



O-rings included
at delivery
4 x 45122-113
2 x 45122-195



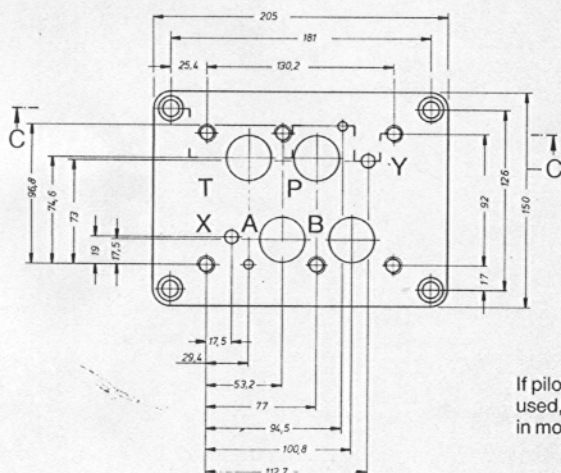
Electrical null adjustment:
Flow will increase out of port A
when potentiometer turned in counter
clockwise direction
(4 turn potentiometer under screw plug)



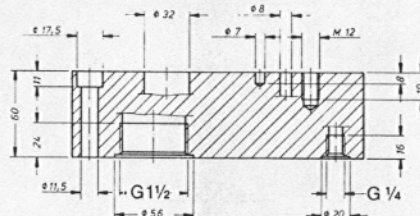
6 mounting bolts M 12 x 50
DIN 912-10.9,
tightening torque 110 Nm
(not included at delivery)

Replaceable filter element
for pilot valve D061: A40311
for pilot valve D076: A02640

Flushing plate: 76047



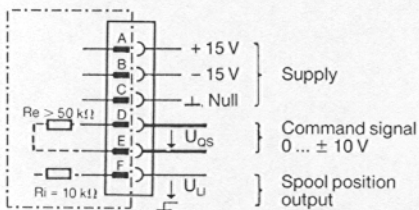
Mounting manifold A25855-009
Dimensions to DIN 24340, form A 25, port NG 32,
mounting surface flat within 0,02 mm, average surface finish value
Ra better than 1 μ m



If pilot ports (X, Y) are not
used, they must be plugged
in mounting manifold

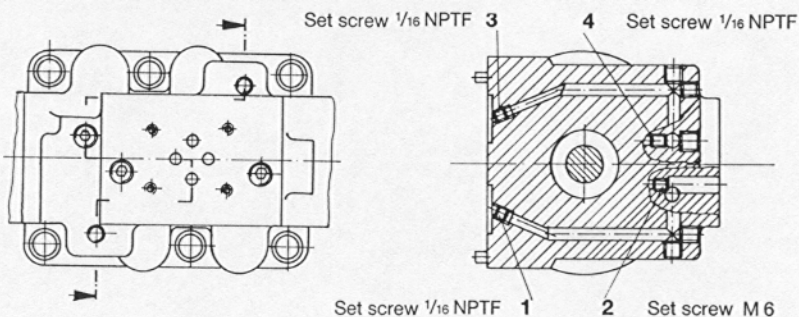
Electrical connection

Valves with voltage command
Standard



Conversion instructions for main stage

The supply and return connections to the pilot valve
may be either internally or externally connected as follows:



Pilot supply via	Set screw location		Pilot return via	Set screw location	
	1	2		3	4
internal P	closed	open	internal T	closed	open
external X	open	closed	external Y	open	closed

East Aurora, N.Y., USA · São Paulo, Brazil
Victoria, Australia · Tewkesbury, England
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Paris, France · Malmate (VA), Italy
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MOOG GmbH Germany · D-7030 Böblingen · Hanns-Klemm-Str. 28
Telephone (070 31) 622-0 · Telex 7 265 777 · Telefax (070 31) 62 21 00
Branch Office Düsseldorf · D-4000 Düsseldorf 13 · Marienburger Str. 51
Telephone (02 11) 7 48 95 87
Branch Office Vienna: A-1235 Wien · Fröhlichgasse 44
Telephone (0222) 86 93 47 · Telex 135 888

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