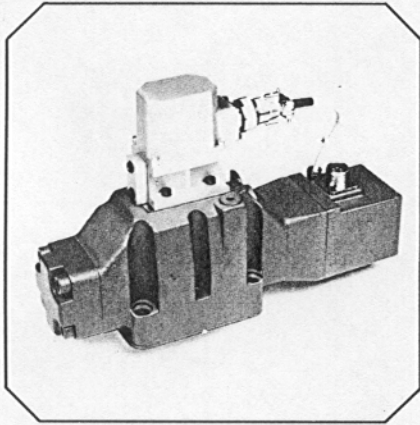


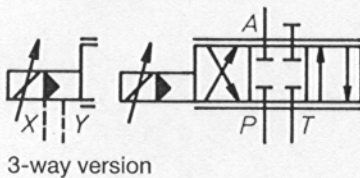
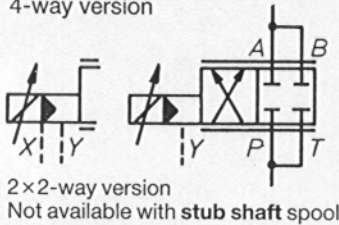
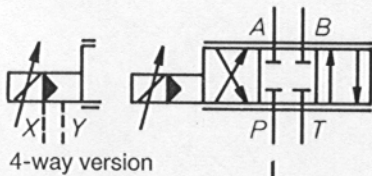


Proportional Control Valves with Integrated Electronics

Series D642

Rated flow 160 l/min ($\Delta p_N = 10$ bar)
Operating pressure up to 350 bar

Mounting pattern to DIN 24340
Form A 16 (ISO 4401-AD-07-4-A)



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

[mm]	dia 18 5 chamber version		
[l/min]	160	160	160
	2-stage	2-stage	3-stage
	Standard	with stub shafts	Standard
Pilot valve:	D061	D061	D076
Main spool stroke	[mm] ± 4	± 4	± 4
Main spool drive area	[cm ²] 7.1	2	7.1
Response time for 0 to 100 % stroke*	[ms] 120	35	16
Threshold*	[%] 0.25	< 0.4	< 0.3
Hysteresis*	[%] < 1	< 1.5	< 1
Null shift for $\Delta T = 55^\circ\text{C}$	[%] < 1.5	< 1.5	< 2
Null flow* max. (axis cut version)	[l/min] 4.5	4.5	4.0
Pilot valve oil flow at 100 % step input*	[l/min] 3	3	20
Mass	[kg] 11.0	11.0	11.5

*For 140 bar pilot pressure or operating pressure

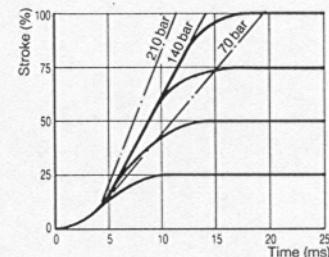
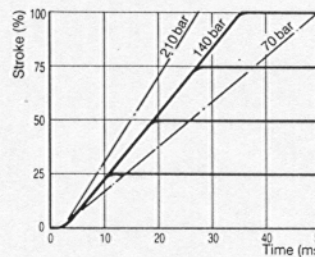
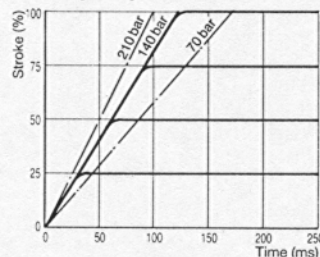
Typical characteristics

with pilot valve **D061-601**

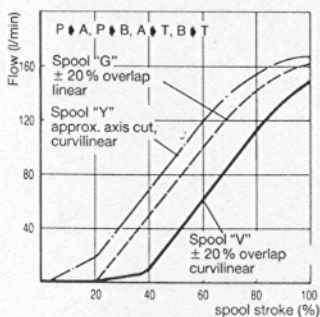
with pilot valve **D061-601**
and stub shafts

with pilot valve **D076-039**

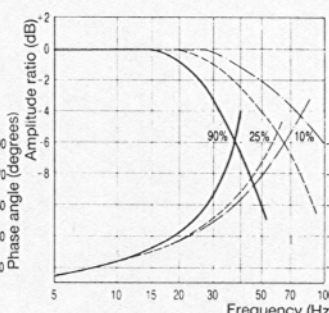
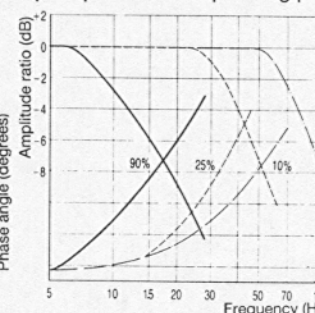
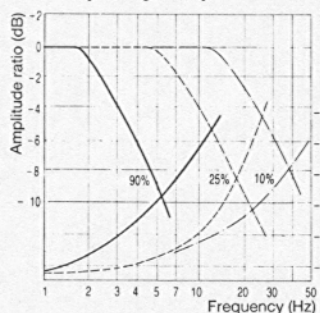
Step response



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



Frequency Response at 140 bar pilot pressure or operating pressure.



[illegible]

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

4 mounting bolts M 10 x
DIN 912-10.9,
tightening torque 65 Nm
(not included at delivery)

7619/-004
(not included at delivery)

228

114

30

122

11

19

25.5

14.6

Name plate

O-rings included at delivery
4 x 45122-195
2 x 45122-000

Technical drawing of the rear view of a vehicle chassis. The drawing shows a central differential housing with a central longitudinal slot. On either side of the housing are two sets of wheel hubs and brake components. Dimensions are indicated in millimeters: a vertical dimension of 90 mm on the left, a horizontal dimension of 36 mm at the top, a horizontal dimension of 85 mm from the center to the first set of wheels, a horizontal dimension of 120 mm from the center to the second set of wheels, a horizontal dimension of 170 mm from the center to the third set of wheels, and a horizontal dimension of 154 mm from the center to the fourth set of wheels. The total width is 327 mm. Labels A, B, C, D, E, and F point to various components: A points to the lower part of the differential housing, B points to the upper part, C points to the top of the rear axle housing, D points to the top of the rear axle housing, E points to the lower part of the rear axle housing, and F points to the lower part of the rear axle housing. The text 'bar)' is visible on the left side of the drawing.

Technical drawing of a mechanical part showing dimensions and tolerances. The drawing includes various diameters (ϕ) and lengths. Key features include:

- Diameters:** $\phi 15$, $\phi 10$, $\phi 6$, $\phi 9$, $\phi 7$, $\phi 4.2$.
- Lengths:** 12, 18, 21, 16, 15, 10, 6, 4, 10, 6.
- Tolerances:** $M 10$, $M 6$, $G 1$, $G \frac{1}{4}$.
- Text:** "mounting s within 0.02 Ra better th"

Technical drawing of the rear view of a mounting bracket. The drawing shows a rectangular plate with various mounting holes and dimensions. Key dimensions include: overall width 165 (417.8 mm), overall height 114 (290 mm), and a central horizontal slot width of 140 (354 mm). Mounting holes are labeled A, B, Y, X, and P. Pilot ports X and Y are indicated. Dimensions for hole positions and slot widths are provided in both inches and millimeters.

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