

APPLICATION

Proportional flow regulators electric controlled type UDRDE6 are used to control fluid flow in one direction and allow free flow in the opposite direction independent of the pressure.

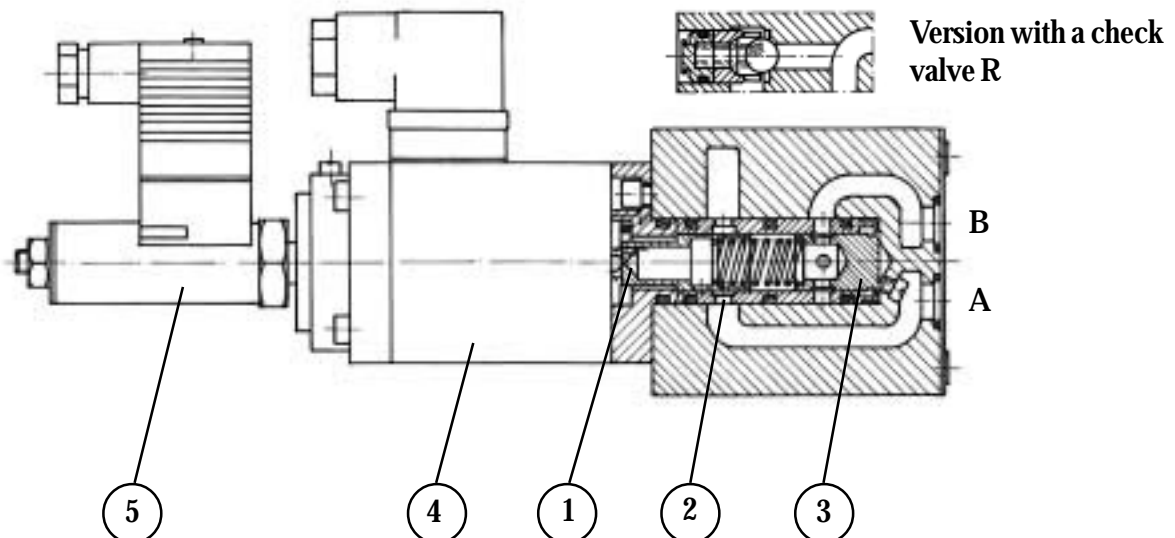
The flow regulation is a function of initial current. Electronic amplifier type 30RE11 or similar serves to control the regulator.



OPIS DZIAŁANIA

The oil flowing from port A to B is throttled by a choke 1 at the throttling slot 2. Flow is proportional to the current of a solenoid 4. Real position of the choke 1 is controlled by a position sensor 5. Independence of the flow set from pressure is assured by a so-called pressure balance 3.

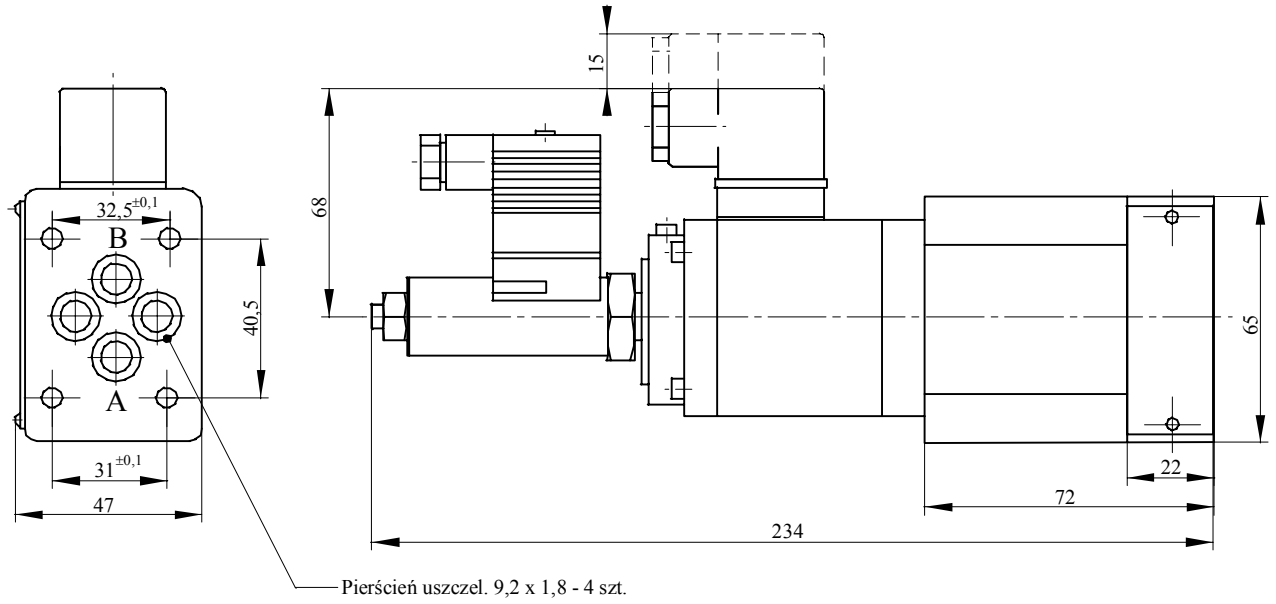
A check valve (version with a check valve) is used to give free flow from B to A.



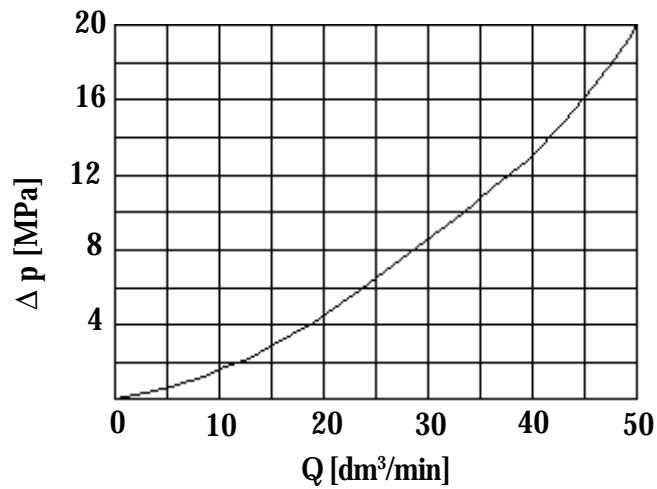
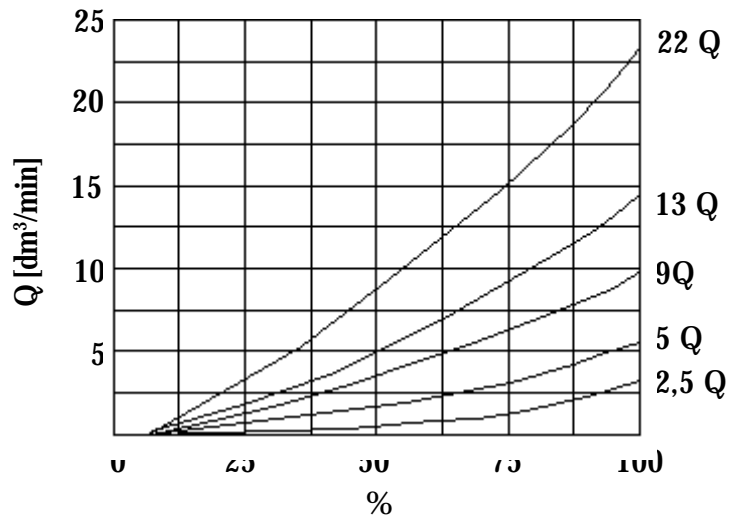
TECHNICAL DATA

Working fluid	Mineral oil
Nominal fluid viscosity	37 mm ² /s at temp. 328 K
Viscosity range	2,8 to 380 mm ² /s
Optimum working temperature range	313 to 328 K
Fluid temperature range	243 to 343 K
Max working pressure	21 MPa
Required fluid filtration	16 µm
Recommended fluid filtration	10 µm
Tolerance of flow regulation at constant temp. and pressure.	
Min pressure difference before and after flow regulator	1,5 MPa
Flow stability at changing pressure	± 5%
Weight	2,2 kg
Hysteresis	< 1 %
Repetition accuracy	< 1 %
Operating position	optional
Electrical characteristics	
Nominal solenoid power	~13 W
Resistance of cold solenoid coil (293 K)	5,4 ohm
Resistance oh max hot solenoid coil	8,5 ohm
Inductive sensor - adjustable stroke	± 4,5 mm linear
Resistance of detector winding: turns 1	56 ohm
turns 2	56 ohm
turns 3	112 ohm

OVERALL DIMENSIONS

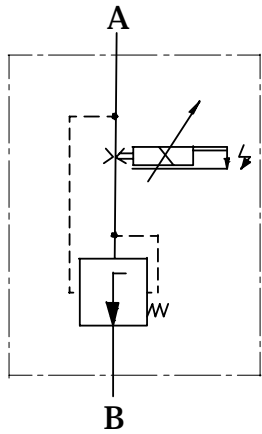


PERFORMANCE CURVES at $v = 41 \text{ mm}^2/\text{s}$ and temp. 323 K

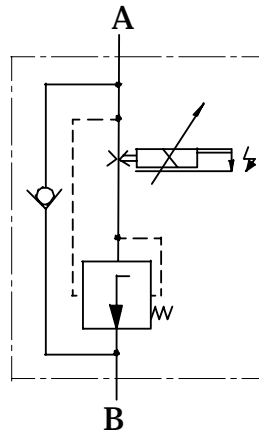
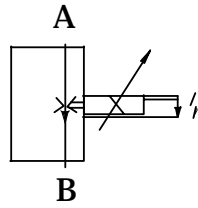


Flow resistance through the check valve (direction B to A)

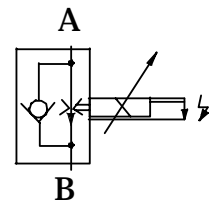
SYMBOL



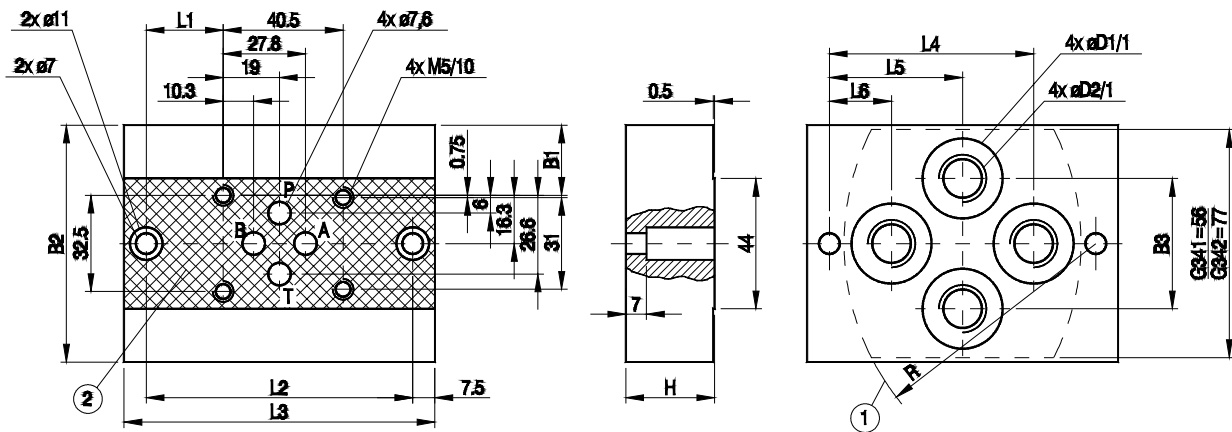
Type M



Type R



CONNECTION DIMENSIONS FOR SUBPLATE



WEIGHT ~ 0,8 kg.

1 - recess in subplate face
2 - connecting face

Typ	B1	B2	B3	L1	L2	L3	L4	L5	L6	H	D1	D2	R	T
G341/ 01	12,7	58	34	21	80	95	55	40	25	25	22	G 1/ 4	70	13
G342/ 01	23,7	80	44	26	90	105	69	45	21	30	28	G 3/ 8	85	13
G341/ 02	12,7	58	34	21	80	95	55	40	25	25	22	M14 x 1,5	70	15
G342/ 02	23,7	80	44	26	90	105	69	45	21	30	27	M16 x 1,5	85	15

Fixing the regulator to the subplate by means of 4 bolts
M5x30- 10.9 PN-74/M-82302 (DIN 912)
Tightning torque 9 Nm.
Bolts and a subplate have to be ordered separately

HOW TO ORDER

Orders coded in the way showed below should be forwarded to the manufacturer.

UDRDE 6 /	-	-		*
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SERIESNUMBER
01 = 01
(01- 09) = installation and connection dimensions unchanged

Flow range:
0 ÷ 2,5 dm ³ = 2,5 Q
0 ÷ 5 dm ³ = 5 Q
0 ÷ 9 dm ³ = 9 Q
0 ÷ 13 dm ³ =13 Q
0 ÷ 22 dm ³ =22 Q

Version:
With check valve = R
Without check valve = M

Sealing
oilproof = no destignation
viton = V

Further requirements to be added in text (to agree with manufacturer)

Coding example
UDRDE 6/01-5Q-R

NOTES:

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