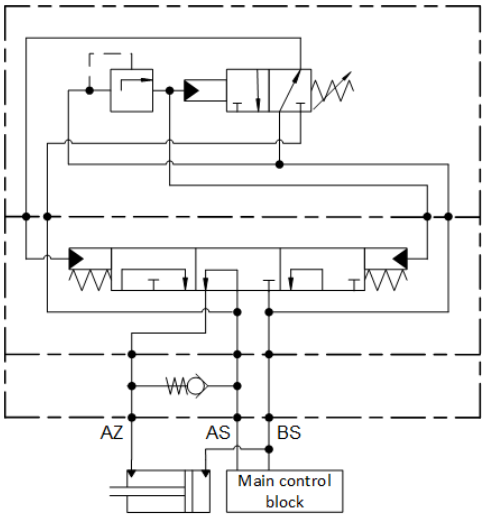
REG-2D Speed Valve

- Robust technology for challenging applications
- Direct mounted or with SAE connections
- For scrap- and concrete shears

Hydraulic schematic



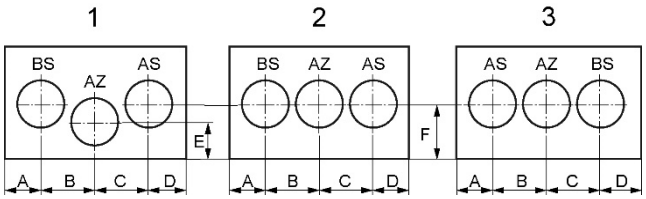
Description

The valve consists of a main valve with the main spool, a flanged pilot valve and a check valve.

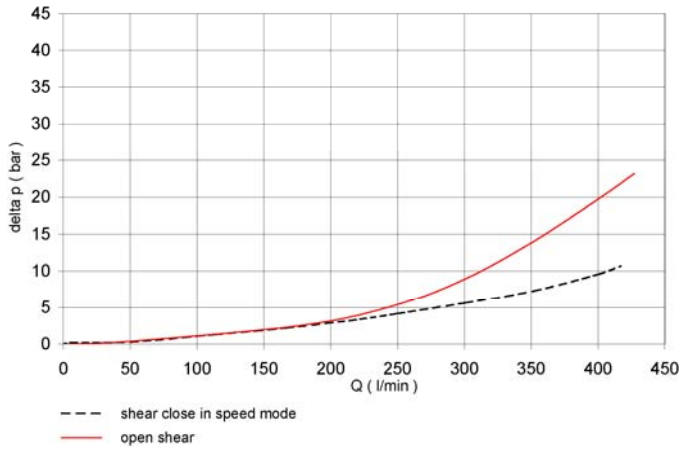
The pilot valve allows switching from speed mode to power mode. If power mode is switched, it remains switched due to the hysteresis of the valve until the inlet pressure falls by about 15% of the switching level.

The check valve ensures that there is always only a small loss of pressure when opening the shears.

Connection Ports



Characteristic curve (400 lpm -valve)



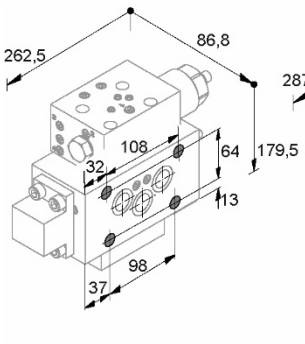
	1 250 lpm	1 400 lpm	2, 3 800 lpm	3 1000 lpm
AS, AZ, BS	Ø21,0	Ø27,0	Ø35,0	Ø40,0
A	56	66	40	58
B	30	39	60	57
C	30	39	60	57
D	55	56	40	58
E	37	43	70	70
F	53	57	70	70

Technical Data

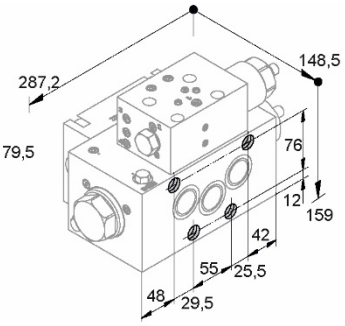
Installation position	Any
Weight	250 lpm=12,8kg; 400 lpm=22,7kg; 800 lpm=29,0kg ; 1000 lpm=34,0kg
Maximum inlet pressure	420bar (320bar for the 250 lpm)
Pressure setting power mode	Adjustable 250bar to 300bar, factory setting 270bar
Switchover point -> power mode into speed mode	If inlet pressure is under ca. 15% of pressure setting power mode
Maximum inlet flow	Depending on size 250 lpm; 400 lpm; 800 lpm; 1000 lpm
Maximum back pressure (AS)	< 80bar , (<30bar for size 250 lpm)

Mounting space

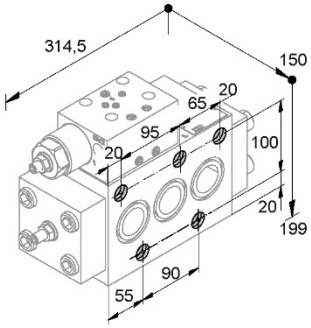
250 lpm



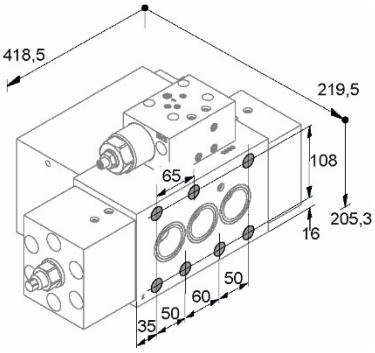
400 lpm



800 lpm



1000 lpm



Ordering Code

REG-2D	-	X X X X	-	X X X

Product group – Construction type	Inlet flow:	Pressure setting:
	0250 lpm	standard **270** bar
	0400 lpm	
	0800 lpm	
	1000 lpm	

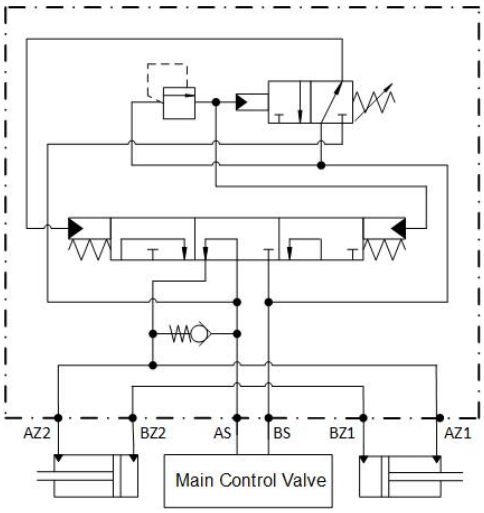
REG-2F Speed Valve - double cylinder technology

- Robust technology for challenging applications
- Compact design

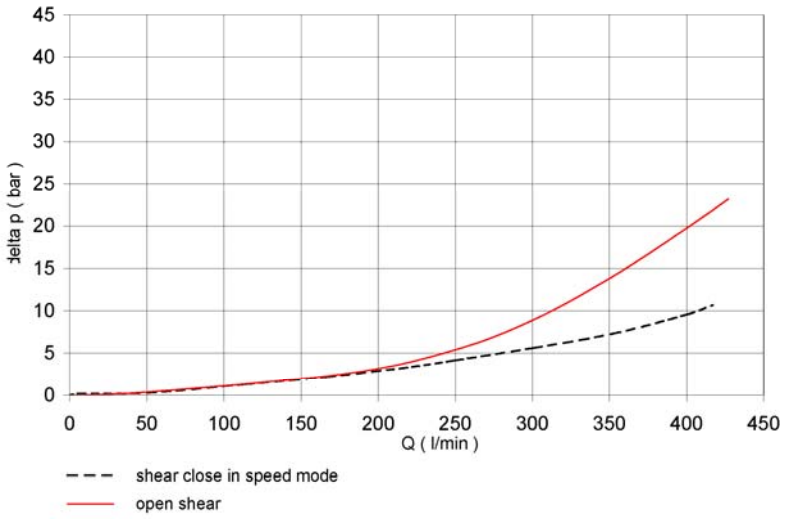
Description

This valve is suitable for the operation of a double cylinder shear.
The function of this valve is similar to the REG-2D. The pilot control is installed directly in the body. The valve consists of a compact body with the integrated valve technology required. Flanged on a base plate between both cylinders.

Schematic



Characteristic curve (400 lpm valve)

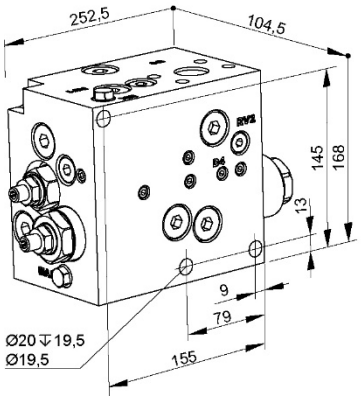


Technical Data

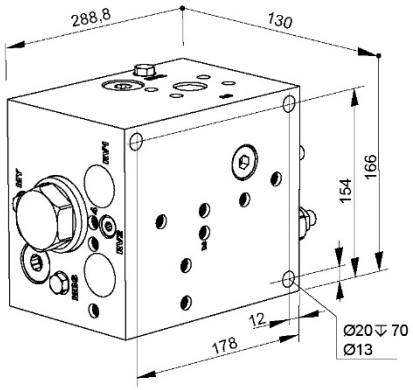
Installation position	any
Weight	250 lpm=16,6kg; 400 lpm=25,1kg; 700 lpm=35,3kg
Maximum input pressure	350 bar
Pressure setting power mode	Adjustable 250bar to 300bar, factory setting 270bar
Switchover point -> power mode into speed mode	If inlet pressure is under ca. 15% of pressure setting power mode
Maximum inlet flow	Depending on size 250 lpm; 400 lpm; 700 lpm
Flange connection:	
AS, BS	250 lpm SAE 1“; 400 lpm SAE 1“; 700 lpm SAE 1 ¼“
AZ1, AZ2	250 lpm SAE 3/4“; 400 lpm SAE 1“; 700 lpm SAE 1“
BZ1, BZ2	250 lpm SAE 3/4“; 400 lpm SAE 1“; 700 lpm SAE 1 ¼“

Mounting Space

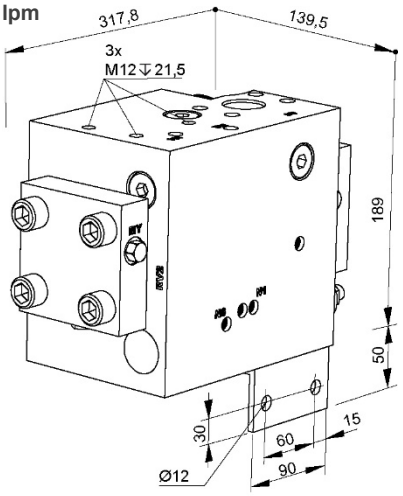
250 lpm



400 lpm



700 lpm



Installation example

Ordering Code

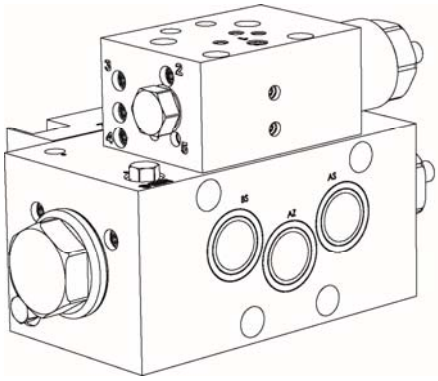
REG-2F	-	X X X	-	250
Product group – Construction type		maximum input volume flow:		switching pressure:
		0250 lpm		standard **250** bar
		0400 lpm		
		0700 lpm		

SV – Speed One The new generation of WESSEL Speed Valves

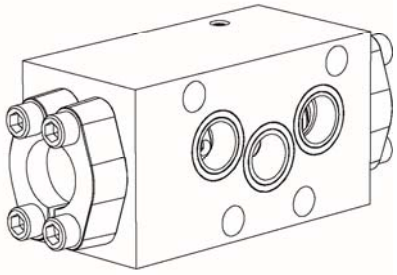
The new Speed Valve combines the advantages of slide valve technology with those of cartridge technology.
The company Wessel Hydraulik can draw on a wealth of experience of over 30 years.
Many shear manufacturers have their own philosophy of cylinder design and its valve connection.For this reason, many different variants have been developed over the years. A further aim in redesigning this product line was to minimise the number of variants and to design a valve with optimised installation.

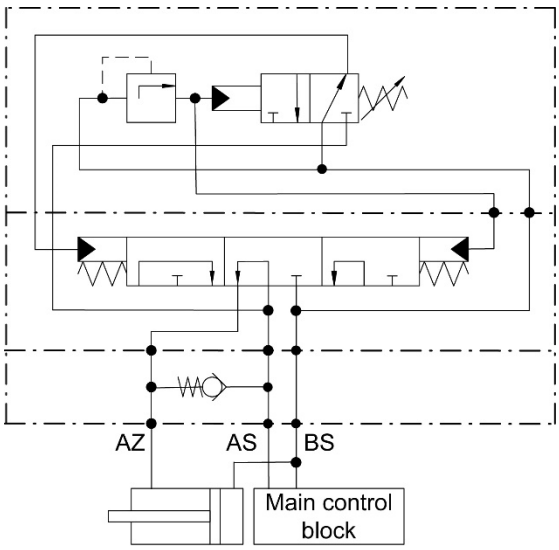
Comparison of the valves Standard and Speed One:

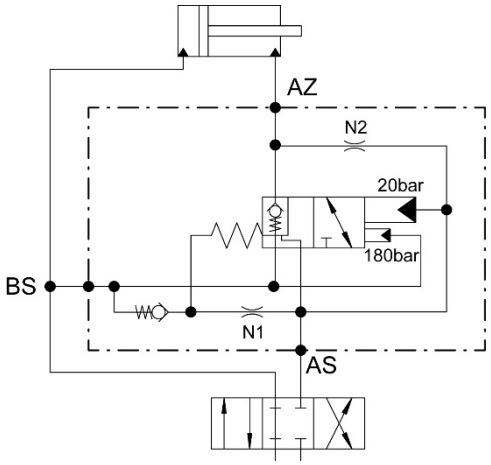
REG-2D 137.914.324.9



Speed One M (500 lpm) 137.914.328.9







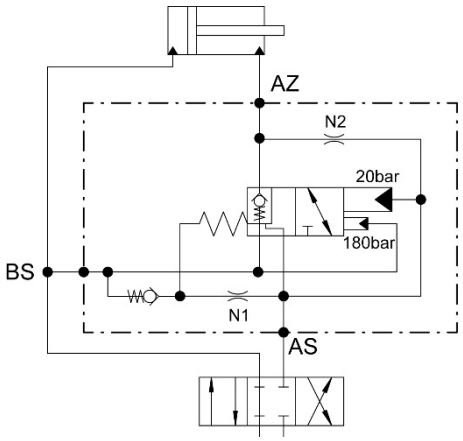
Improvements :

- Influence of the back pressure is eliminated
- compatible flange design -> 1:1 exchange with the standard series REG-2D
- Less connection holes -> minimized leakage points
- Optimized installation space -> only one valve body
- Weight reduction by almost 50%.
- Cost-optimized

Speed One M

- Compact design
- Combination of spool / cartridge technology
- Direct mounting on the cylinder

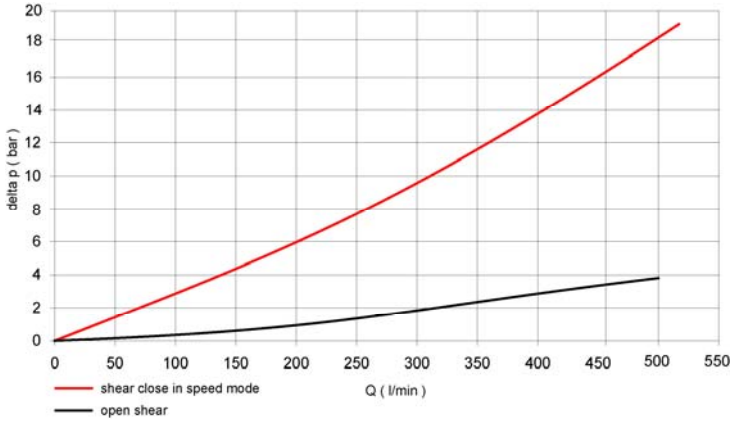
Hydraulic schematic



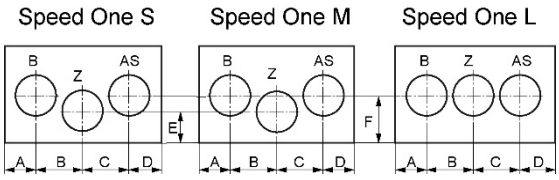
How it works

The speed mode is realized by a check valve (cartridge technology) integrated in the spool.
The spool does not move in this mode. The oil flows from the rod side to the bottom side of the cylinder (AZ to BS).

The activation of the power mode is pilot operated.
As soon as the pressure setting level for the power mode is reached, the spool moves into the other position always related to the load pressure. The oil will be released from the rod side towards the tank.
If the pressure drops under the pressure setting, the spool will move back to zero position and cut off the connection from AZ to AS.
-> ready to switch into speed mode again



Connection



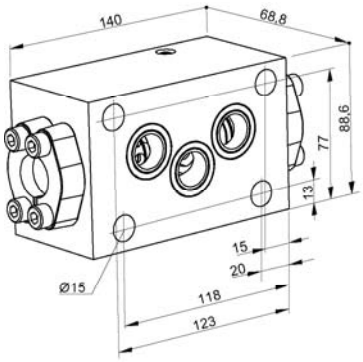
	S 250 lpm	**M** 500 lpm	**L** 800-1000 lpm
Z, AZ, B	Ø26 Ø27	Ø26 Ø27	Ø38
A	41	62	55
B	30	39	60
C	30	39	60
D	39	41	45
E	43	43	64
F	57	57	64

Technical Data

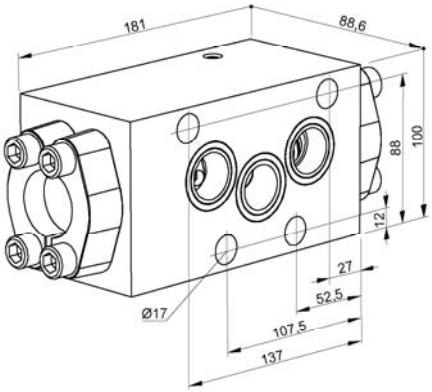
Installation position	any
Weight	Speed One S = 5,1kg / Speed One M = 9,5 kg / Speed One L = 14,2 kg
Maximum input pressure	420bar
Pressure setting power mode	250bar until 300bar, factory setting 270bar
Maximum inlet flow	Speed One S, 250 lpm; Speed One M, 500 lpm; Speed One L, 800 – 1000 lpm

Mounting space

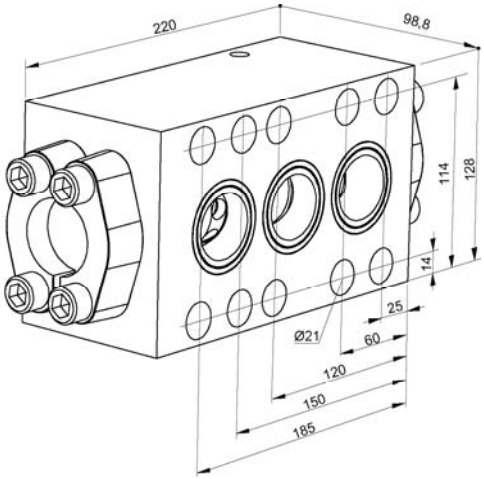
Speed One S, 250 lpm



Speed One M, 500 lpm



Speed One L, 800 – 1000 lpm



Ordering Code

Speed One	-	X X X	-	XXX

Product group - construction type

Inlet flow:
0250 lpm
0500 lpm
1000 lpm

Pressure setting:
standard **270** bar