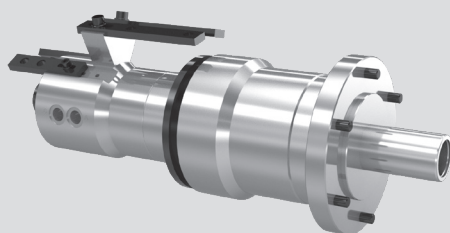


ZHVD-SZ

Rotating hydraulic cylinder
with 2 independent pistons

- Up to 80 bar
- Central bore for air / coolant / oil
- Stroke control via proximity switch or LPS 4.0



Application/customer benefits

- Actuation of retractable jaw chuck with power operated face drivers (type W / GSA)
- Actuation of power chuck with part-ejector
- Actuation of power chucks with retractable axial stop / finger chucks with power operated centering fixture / chuck type TPT-C with 2+2 actuation

Technical features

- Double piston cylinder with 4 way oil manifold for separate actuation of the cylinders
- Horizontal or vertical installation
- Stroke control on each cylinder, safety valves on the big cylinder (Piston 1)
- Central bore for coolant, oil or air with thread for rotary union
- Mounting from the rear side with bolts
- A 10 µm filter in pressure line is requested. Use oil HM32 ISO 3448
- Pressure range 8 - 80 bar

Standard equipment

Double piston cylinder with shift ring
Mounting screws
Stroke control on each cylinder
Proximity bracket (without proximity switches)

Ordering example

Double piston cylinder ZHVD-SZ 068-17
or
Double piston cylinder ZHVD-SZ 068-17
with rotary union (optional)

Technical data

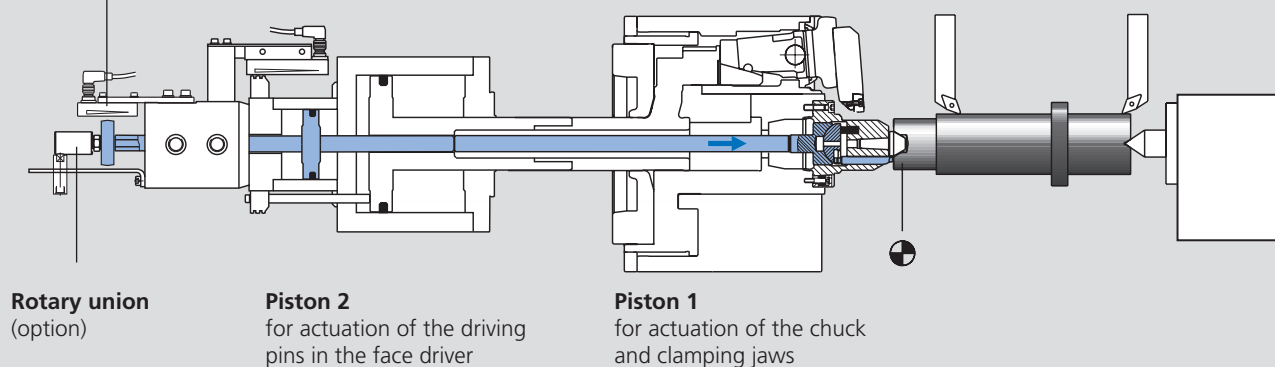
SMW-AUTOBLOK Type		ZHVD-SZ 068-17	ZHVD-SZ 110-25	ZHVD-SZ 240-40
Id. No.		044429	044577	045220
Piston stroke	mm	70 / 15	90 / 15	105 / 20
Piston area A / piston force max.	cm ² / kN	68 / 54	110 / 88	241 / 144
Piston area B / piston force max.	cm ² / kN	60 / 48	92 / 73	222 / 133
Piston area C / piston force max.	cm ² / kN	16 / 12	25 / 20	40 / 24
Piston area D / piston force max.	cm ² / kN	14 / 11	21 / 16	36 / 21.6
Speed max.	r.p.m.	5000	4000	4000
Weight	kg	26	37	68
Moment of inertia	kg·m ²	0.065	0.125	0.42
Operating pressure max.	bar	80	80	60
Operating pressure min.	bar	8 - 10	8 - 10	8 - 10
Oil leakage (*)	dm ³ / min	3	3	3

* Total at 30 bar / 50 °C.

Important: On higher pressure the leakage increases proportionally. On higher oil temperature the leakage increases over proportionally (the use of an oil cooler is recommended). When designing / checking the hydraulic unit please ask for our data sheets.

ZHVD-SZ cylinder with retractable jaw chuck and power operated face driver

Linear stroke control
LPS 4.0 (option)



Rotary union
(option)

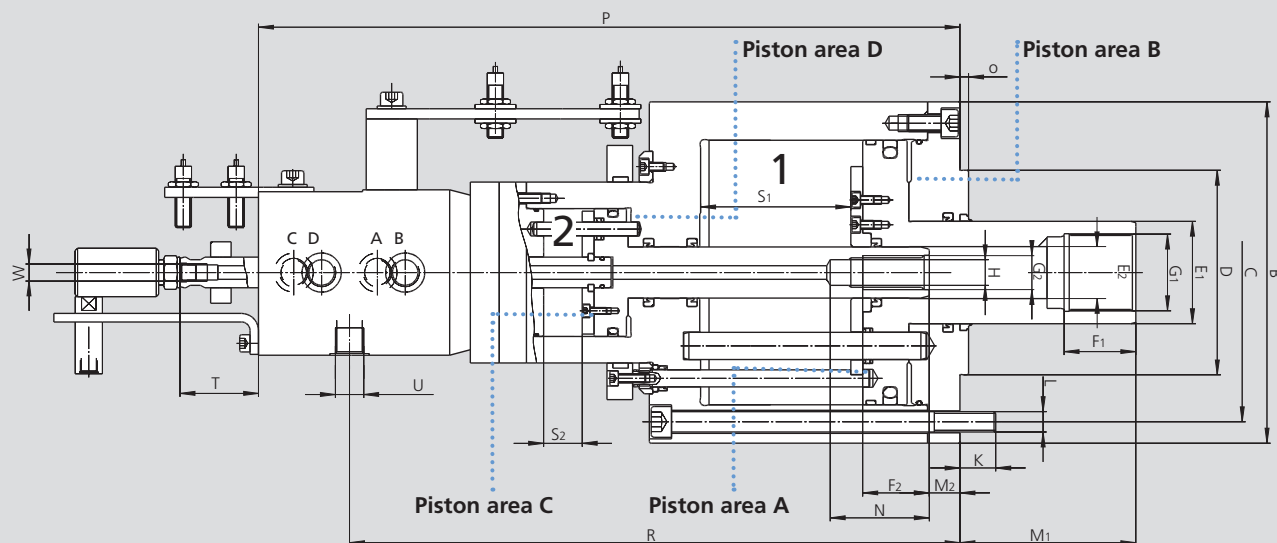
Piston 2
for actuation of the driving
pins in the face driver

Piston 1
for actuation of the chuck
and clamping jaws

ZHVD-SZ

- Up to 80 bar
- Central bore for air / coolant / oil
- Stroke control via proximity switch or LPS 4.0

Rotating hydraulic cylinder
with 2 independent pistons



Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			ZHVD-SZ 068-17	ZHVD-SZ 110-25	ZHVD-SZ 240-40
Id. No.			044429	044577	045220
	B	mm	165	198	230
Fixing bolts circle	C	mm	145	175	205
Centering rim	D h6	mm	105	120	160
	E1	mm	45	60	60
	E2	mm	25	30	30
	F1	mm	33	42	42
	F2	mm	28	41	39
Piston rod thread 1	G1	mm	M36 x 1.5	M45 x 1.5	M50 x 1.5
Piston rod thread 2	G2	mm	M16	M20	M20
	H	mm	13.5	15	15
	K	mm	15	15	21
Fixing bolts / number	L	mm	M10 / 6x	M12 / 6x	M12 / 6x
Max. / min.	M1	mm	82 / 12	105 / 15	106 / 1
Max. / min.	M2	mm	33 / 18	33 / 18	67 / 47
	N	mm	50	58	58
	O	mm	5	5	5
	P	mm	370.5	400	442
	R	mm	305	348	389
Piston stroke cyl. 1	S1	mm	70	90	105
Piston stroke cyl. 2	S2	mm	15	15	20
Max. / min.	T	mm	48 / 33	52 / 37	77 / 57
	U	mm	G3/8"	G3/8"	G3/8"
	W	mm	M10 x 1	M10 x 1	M10 x 1

Option: LPS 4.0 Linear stroke control.
Rotary union for oil / coolant / air.