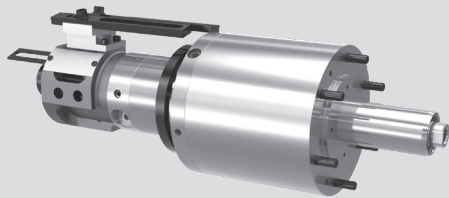


DCN/DCU/DCR

Rotating hydraulic cylinder
with 2 independent pistons

- Modular system for different piston strokes
- Up to 70 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
- Actuation of power chuck with part-ejector
- Actuation of power chucks with retractable axial stop / finger chucks with power operated centering fixture / chucks typ TPT-C with 2 piston actuation

Technical features

- Double piston cylinder with 4 way oil manifold for separate actuation of the 2 cylinders
- Pressure range 8 - 70 bar
- Modular system for different piston strokes: DCN, DCU and DCR
- Horizontal or vertical installation
- Stroke control on each cylinder, safety valves on the big cylinder
- 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

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 DCN 125-30
or
Double piston cylinder DCN 125-30
with rotary union (optional)

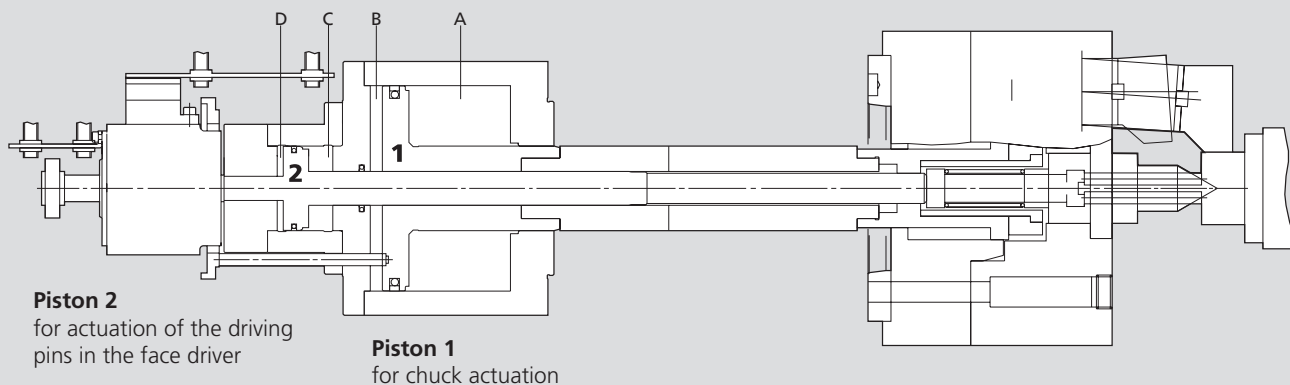
Technical data

SMW-AUTOBLOK Type		60 / 20		125 / 30				170 / 40	170 / 60	170 / 40
		DCN 55-38	DCR 32-38	DCN 70-25	DCN 87-40	DCU 40-40	DCR 40-80	DCN 95-50	DCU 50-48	DCR 50-95
Id. No.		33705206	33705406	33705213	33705214	33705313	33705413	33705215	33705315	33705415
Piston stroke	mm	55 - 38	32 - 38	70 - 25	87 - 40	40 - 40	40 - 80	95 - 50	50 - 48	50 - 95
Piston area A	cm ²	48	48	111	111	111	111	146	146	146
Piston area B	cm ²	60	60	125	125	125	125	168	168	168
Piston area C	cm ²	21	21	27	27	27	27	36	56	36
Piston area D	cm ²	21	21	30	30	30	30	40	60	40
A Piston force max.	kN	33.5	33.5	77	77	77	77	102	102	102
B Piston force max.	kN	42	42	87	87	87	87	118	118	118
C Piston force max.	kN	14.5	14.5	19	19	19	19	25	39	25
D Piston force max.	kN	14.5	14.5	21	21	21	21	28	42	28
Max. speed	r.p.m.	5000	5000	5000	5000	5000	5000	4000	4000	4000
Weight	kg	16.2	15.3	23.2	24	22.5	23	32	30	31
Moment of inertia	kg·m ²	0.027	0.026	0.088	0.091	0.085	0.087	0.15	0.14	0.14
Operating pressure max.	bar	70	70	70	70	70	70	70	70	70
Operating pressure min.	bar	8	8	8	8	8	8	8	8	8
Oil leakage (*)	dm ³ /min	3	3	3	3	3	3	3	3	3

* Total at 30 bar / 50 °C.

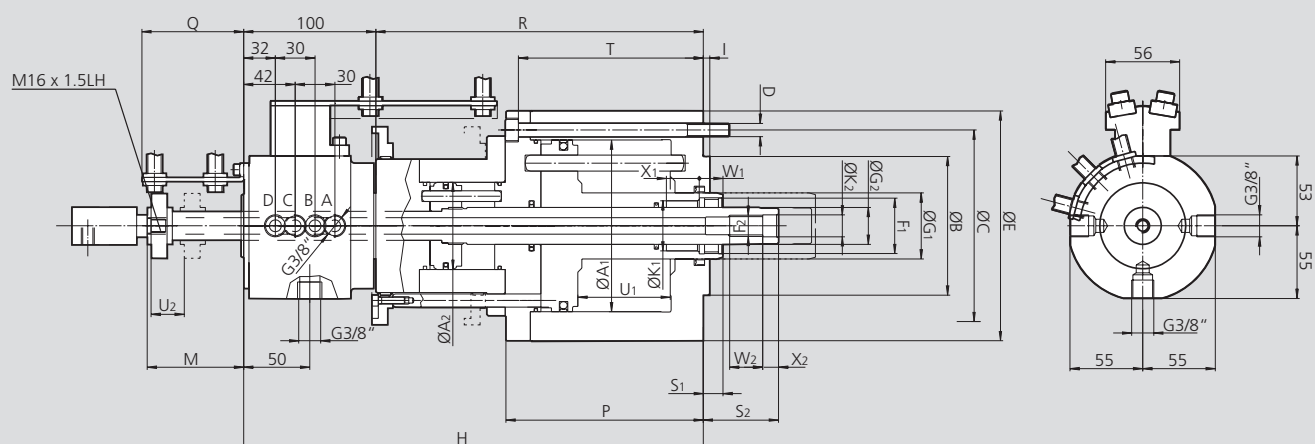
Important: On higher pressure the leakage increases proportionally. On higher oil temperature the leakage increases over proportionally (the use of an oil cooler is recommended). When designing / checking the hydraulic unit please ask for our data sheets.
Option: LPS 4.0 linear stroke control. Rotary union for oil / coolant / air.

Cylinder DCN for retractable jaw chucks type W or GSA with face drivers with fixed center



- Modular system for different piston strokes
- Up to 70 bar
- Central bore for air / coolant / oil
- Stroke control via proximity switch or LPS 4.0

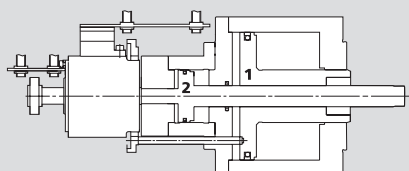
Rotating hydraulic cylinder
with 2 independent pistons



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

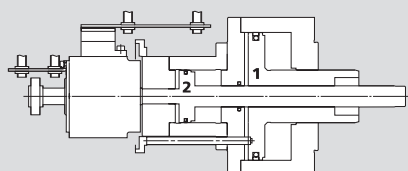
SMW-AUTOBLOK Type			60 / 20		125 / 30				170 / 40	170 / 60	170 / 40
			DCN 55-38	DCR 32-38	DCN 70-25	DCN 87-40	DCU 40-40	DCR 40-80	DCN 95-50	DCU 50-48	DCR 50-95
Piston diameter 1	A1	mm	90	90	130	130	130	130	150	150	150
Piston diameter 2	A2	mm	56	56	66	66	66	66	75	90	75
Centering rim	B h6	mm	80	80	105	105	105	105	120	120	120
Fixing bolt circle	C	mm	106	106	145	145	145	145	175	175	175
Fixing bolts	D	mm	6 x M8	6 x M8	6 x M10	6 x M10	6 x M10	6 x M10	6 x M12	6 x M12	6 x M12
	E	mm	125	125	174	174	174	174	204	204	204
Piston rod thread 1	F1	mm	M32 x 1.5	M32 x 1.5	M42 x 1.5	M42 x 1.5	M42 x 1.5	M42 x 1.5	M45 x 1.5	M45 x 1.5	M45 x 1.5
Piston rod thread 2	F2	mm	M16 x 1.5	M16 x 1.5	M16	M16	M16	M16	M20	M20	M20
	G1	mm	45	45	50	50	50	50	60	60	60
	G2	mm	22	22	28	28	28	28	30	30	30
	H	mm	331	308	348	380	333	373	411	366	411
	I	mm	5	5	5	5	5	5	5	5	5
	K1	mm	32.5	32.5	38	38	38	38	42	42	42
	K2	mm	16.5	16.5	16.5	16.5	16.5	16.5	22	22	22
Max.	M	mm	67	67	73	73	73	103	73	73	118
	P	mm	198	175	150	167	120	120	184	139	139
	Q	mm	77	77	77	77	77	107	77	77	122
	R	mm	231	208	248	280	233	273	306	266	311
Min.	S1	mm	8	8	15	15	45	45	15	60	60
Min.	S2	mm	35	12	57	75	72	82	73	118	73
	T	mm	-	-	140	157	110	110	172	127	127
Piston stroke cyl. 1	U1	mm	55	32	70	87	40	40	95	50	50
Piston stroke cyl. 2	U2	mm	38	38	25	40	40	80	50	48	95
	W1	mm	30	30	18	18	18	18	42	42	42
	W2	mm	25	25	25	25	25	25	25	25	25
	X1	mm	-	-	25	25	25	25	10	10	10
	X2	mm	7	7	12	12	12	12	12	12	12

DCN



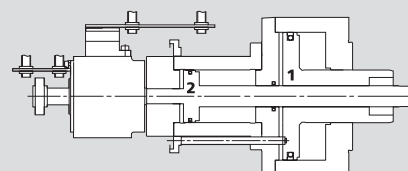
Piston 1: long stroke
Piston 2: short stroke

DCU



Piston 1: mid. stroke
Piston 2: mid. stroke

DCR



Piston 1: short stroke
Piston 2: long stroke