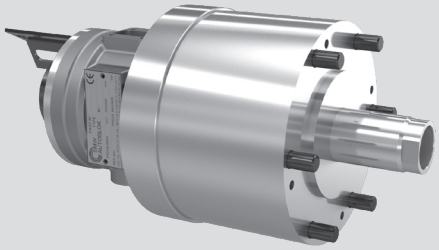
SIN-HL

Closed center rotating hydraulic cylinder

- **High-low clamping**
- **Up to 70 bar**
- **Central bore for media supply**
- **Stroke control via proximity switch or LPS 4.0**



Application/customer benefits

- Actuation of power chucks used for high-low clamping of thin-walled components in combination with SMW-AUTOBLOK chucks type KNCS-N, KNCS-NB, KNCS-NBX, HFKN, IEP or TS
- Closed or partial open center mounting applications

Technical features

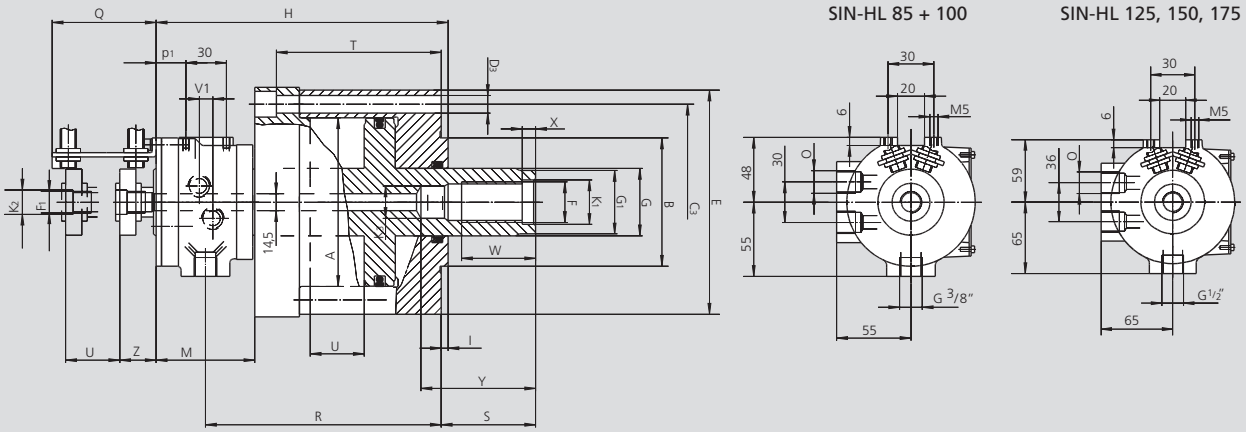
- Symmetric piston areas for high-low clamping
- Pressure range 8 - 70 bar
- Horizontal or vertical installation
- Safety valves and excess pressure relief valve
- Central bore for coolant, oil or air with thread for rotary union
- Mounting from the rear side with bolts
- Stroke control via proximity switch or LPS 4.0
- A 10 µm filter in pressure line is requested. Use oil HM32 ISO 3448

Standard equipment

Closed center hydraulic cylinder with stroke control and mounting bolts (without proximity switches)

Ordering example

Closed center cylinder
SIN-HL 125 Id. No. 33093812
with rotary union (optional)



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

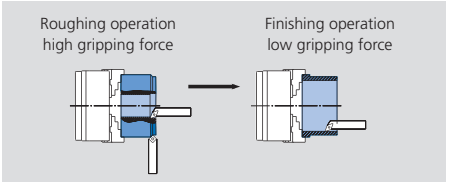
Dimensions and technical data

SMW-AUTOBLOK Type	Id. No.	A	B h6	C3	D3 (6x60°)	E	F	F1	G	G1 g6	H	I	K1 H7	K2 J6	K3 H8	M	O	Q
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	inch	mm
SIN-HL 85	**33093809**	85	80	120	11	140	M24	M16 x1.5 LH	32	30 x 10	192	5	25	18	18	75	G3/8"	77
SIN-HL 100	**33093810**	100	80	120	11	140	M24	M16x1.5 LH	32	30 x 10	192	5	25	18	18	75	G3/8"	77
SIN-HL 125	**33093812**	125	95	145	13	166	M30	M16x1.5 LH	40	38 x 12	231	5	31	18	24	93	G1/2"	97
SIN-HL 150	**33093815**	150	95	170	13	192	M36	M16x1.5 LH	50	48 x 12	237	5	37	18	28	97	G1/2"	97
SIN-HL 175	**33093817**	175	125	195	13	217	M36	M16x1.5 LH	50	48 x 12	259	5	37	18	28	97	G1/2"	97

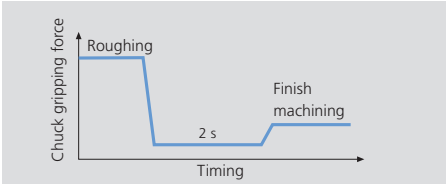
SMW-AUTOBLOK Type	R	S	T	U	V1	W	X	Y	Z min.	p1	Piston area	Max. pressure	Draw (at 40 bar)	Oil leakage*	Max. speed	Weight	Moment of inertia
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	cm²	bar	kN	dm³/min.	r.p.m.	kg	kg·m²
SIN-HL 85	149.5	47	95	32	10	40	10	62	27	23	49	70	19	1.5	7000	11	0.016
SIN-HL 100	149.5	47	95	32	10	45	10	62	27	23	70	70	28	1.5	7000	11	0.016
SIN-HL 125	181	70	121	40	12	55	10	75	27	37	110	70	44	1.5	6000	18	0.045
SIN-HL 150	183	70	121	40	12	55	10	75	27	41	157	70	62	1.5	6000	23	0.092
SIN-HL 175	205	72	143	52	12	55	10	75	27	41	220	70	88	1.5	5000	30	0.15

* Total at 30 bar and 50°C.

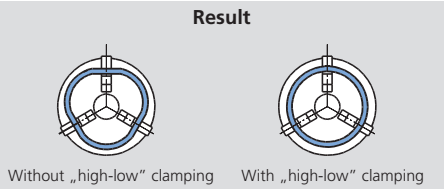
„High-low" clamping for thin-walled components



For easily deformed components SMW-AUTOBLOK offers "high-low" clamping. The gripping force of the chuck can be reduced from a large amount of gripping force used in roughing, to a smaller amount of gripping force for a finishing cut.



The combination between the SIN-HL cylinder and a SMW-AUTOBLOK "high-low" suitable chuck allows a monitored reduction in the gripping force. The component remains clamped in the chuck safely, however, the stress of the component can be released.



The result are round components with a minimum of deformation. The "high-low" cycle is programmable and is finished completely within 2-4 sec.
For additional information please ask our engineers.