US-CL

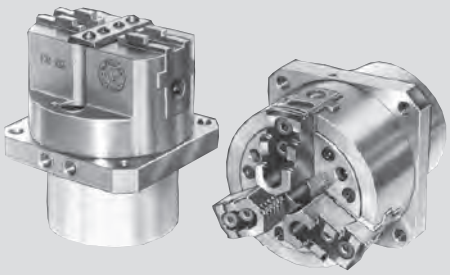
With 2 jaw long stroke chuck

US-A

With 3 jaw long or normal stroke chuck

Stationary cylinder + chuck unit Ø 80 - 315 mm

- hydraulic cylinder module + chuck
- closed center chucks type CL/AN/AL



Application/customer benefits

- Gripping units designed to suit special purpose machines and transfer lines
- Also used as loading chucks to handle workpieces

Technical features

- stationary hydraulic cylinder + chuck unit consisting of a modular cylinder and standard 2- or 3-jaw-chuck
- permanent oil pressure required
- for chuck details please see technical data of the selected chuck

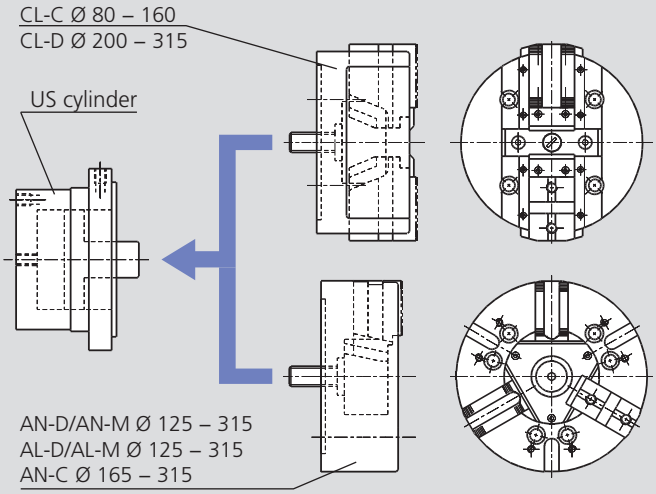
Remark: when ordering please specify the position of the oil connectors (on the side or on the back)
For chuck details please see technical data of the selected chuck

Standard equipment

Standard chuck with cylinder and connecting parts

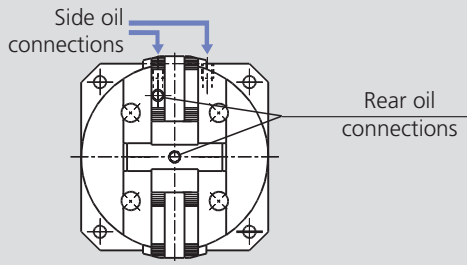
Ordering example

US 125-CLC with rear oil connection
or
US 250-AND with side oil connection and chuck 90° revolved

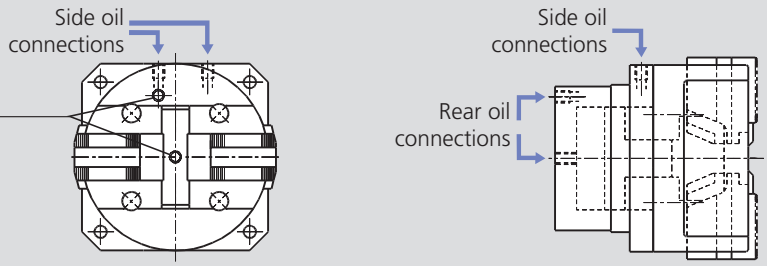


- **US-CL-C** = cylinder equipped with a 2 jaw chuck type CL-C (long stroke/tongue & groove). Chuck Ø 80 to 160 mm
- **US-CL-D** = cylinder equipped with a 2 jaw chuck type CL-D (long stroke/inch serration). Chuck Ø 200 to 315 mm
- **US-AN-D** = cylinder equipped with a 3 jaw chuck type AN-D (normal stroke/inch serration). Chuck Ø 125 to 315 mm
- **US-AN-M** = cylinder equipped with a 3 jaw chuck type AN-M (normal stroke/metric serration). Chuck Ø 125 to 315 mm
- **US-AL-D** = cylinder equipped with a 3 jaw chuck type AL-D (long stroke/inch serration). Chuck Ø 125 to 315 mm
- **US-AL-M** = cylinder equipped with a 3 jaw chuck type AL-M (long stroke/metric serration). Chuck Ø 125 to 315 mm
- **US-AN-C** = cylinder equipped with a 3 jaw chuck type AN-C (normal stroke/tongue & groove). Chuck Ø 165 to 315 mm
- **Special units** = on request the US cylinder can be equipped with other chucks, for example with a quick jaw change chuck type AN-RM with stationary cylinder available

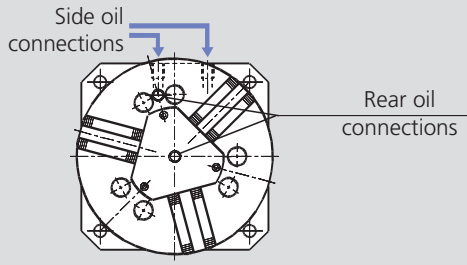
CL chuck in standard position



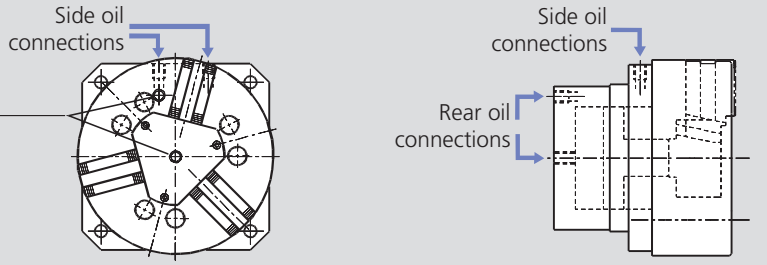
CL chuck 90° revolved



AN/AL chuck in standard position



AN/AL chuck 90° revolved



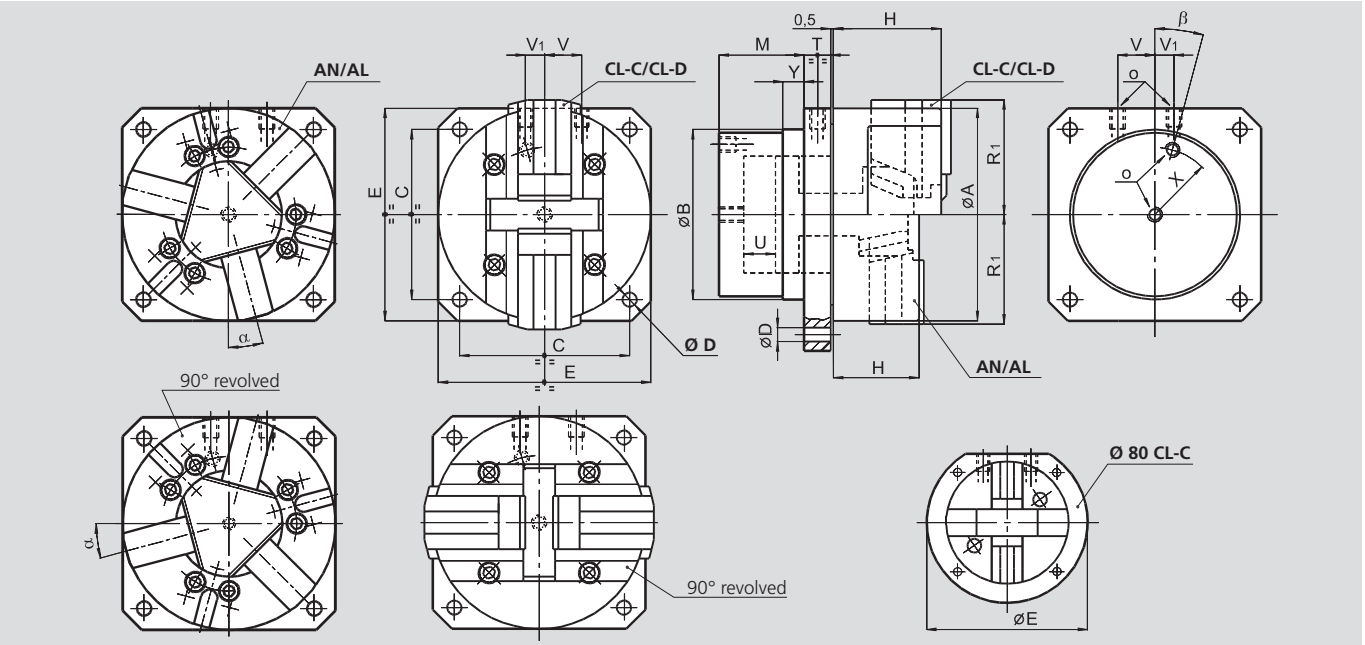
- The chuck can be mounted on the cylinder 90° revolved if the standard position creates interferences with the working cycle. Please specify in the order, if a revolved position is needed.
- The oil connections can be on the side or on the back of the cylinder in order to ease the installation of the gripping unit. Please specify in the order, which version is preferred.

Stationary cylinder + chuck unit Ø 80 - 315 mm

- hydraulic cylinder module + chuck
- closed center chucks type CL/AN/AL

US-CL With 2 jaw long stroke chuck

US-A With 3 jaw long or normal stroke chuck



Subject to technical changes
For more detailed information please ask for customer drawing

US actuating cylinder dimensions

SMW-AUTOBLOK cylinder		US 80	US 100	US 125	US 160 US 165	US 200	US 250	US 315
Id. No.		77755008	77755010	77755013	77755016	77755120	77755025	77755031
B h7	mm	70	84	106	128	158	185	185
C	mm	66	84	104	130	160	200	250
D	mm	7	9	11	11	13.5	17	17
E	mm	105	100	130	160	200	250	315
M	mm	45	52	60	70	80	90	90
O oil connections	inch	1/8 BSP	1/8 BSP	1/4 BSP	1/4 BSP	3/8 BSP	3/8 BSP	3/8 BSP
T	mm	16	16	20	20	25	25	25
U	mm	11	14	20	25	30	35	35
V	mm	15	18	12	28	35	41	41
V1	mm	15	18	12	15	18	15	15
X	mm	27	33	43	52	63	75	75
Y	mm	10	10	10	20	20	20	20
β	deg.	30°	30°	15°	15°	0°	0°	0°
Piston area	cm^2	16	25	42	68	112	166	166

Units with CL-C and CL-D chucks (more information at page 60)

SMW-AUTOBLOK Type		US 80-CL-C	US 100-CL-C	US 125-CL-C	US 160-CL-C	US 200-CL-D	US 250-CL-D	US 315-CL-D
A	mm	80	100	125	160	200	250	315
H	mm	45	54	76	92	103	109	114
Chuck open **R1**	mm	40	50	68	87	108	132	166
Max. pressure	bar	38	36	36	37	32	30	36
Max. gripping force	kN	9	14	24	40	55	78	95

Units with AN-D/AN-M/AN-C chucks (more information at page 22 and 26)

SMW-AUTOBLOK Type		US 125-AN-D US 125-AN-M	US 165-AN-D US 165-AN-M US 165-AN-C	US 210-AN-D US 210-AN-M US 210-AN-C	US 250-AN-D US 250-AN-M US 250-AN-C	US 315-AN-D US 315-AN-M US 315-AN-C
A	mm	127	165	210	254	315
H	mm	57	71	85	95	105
Chuck open **R1**	mm	64	83	105	128	158
α	deg.	0°	15°	15°	15°	15°
Max. pressure	bar	47	36	31	28	36
Max. gripping force	kN	56	70	105	140	180

Units with AL-D/AL-M chucks (more information at page 24)

SMW-AUTOBLOK Type		US 125-AL-D US 125-AL-M	US 165-AL-D US 165-AL-M	US 210-AL-D US 210-AL-M	US 250-AL-D US 250-AL-M	US 315-AL-D US 315-AL-M
A	mm	127	165	210	254	315
H	mm	57	71	85	95	105
Chuck open **R1**	mm	67	86	109	133	164
α	deg.	0°	15°	15°	15°	15°
Max. pressure	bar	60	44	45	39	45
Max. gripping force	kN	45	54	90	120	135

For further jaws and accessories please ask for our 150 pages special catalogue!