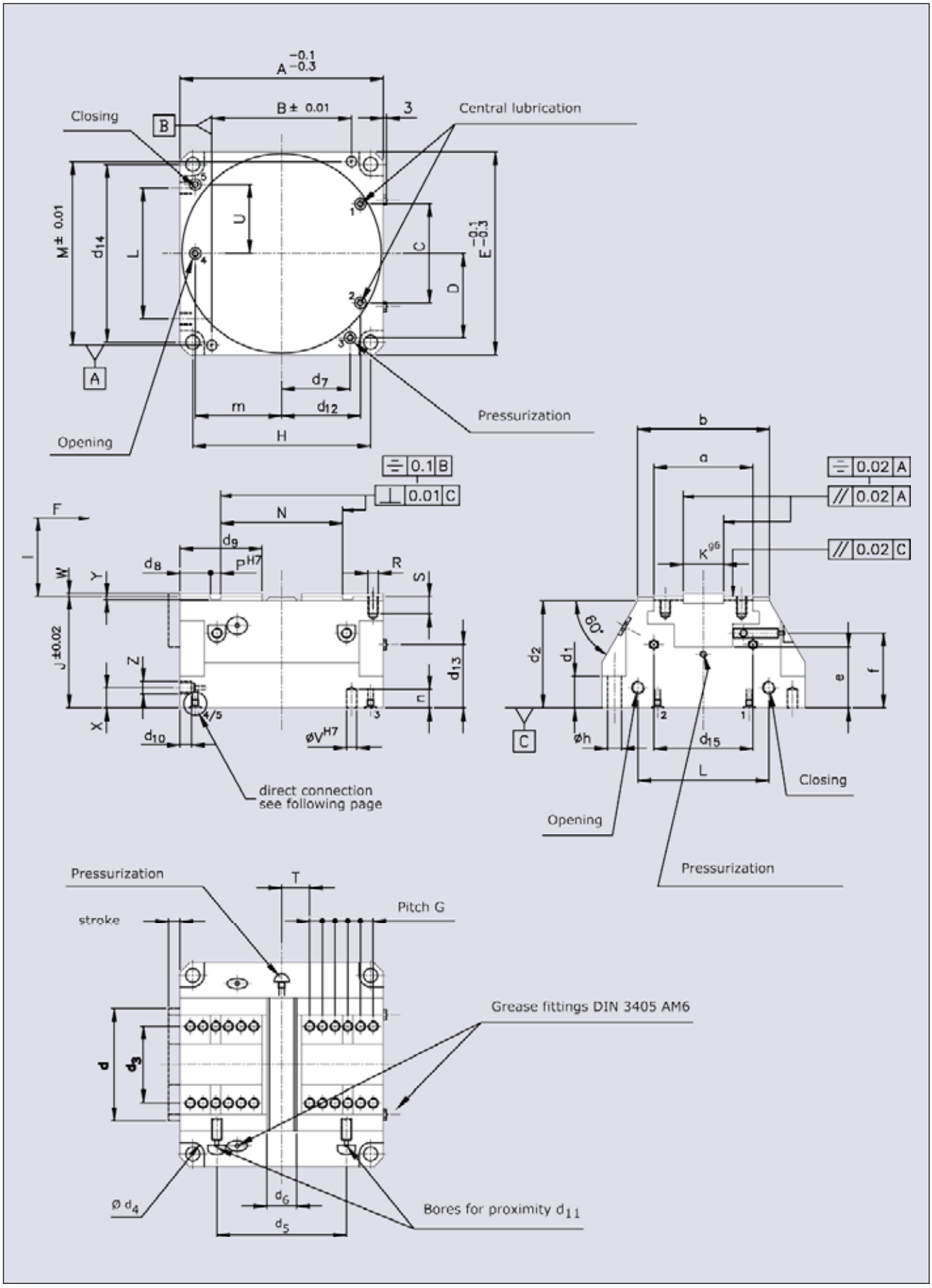
Clamping force blocks, pneumatic-hydraulic, centric clamping SCV-N

TECHNICAL DATA

- Operating pressure range:	9 bar with air (6 bar per SCV 250) max 60 bar with olio
- Repeatability accuracy:	SCV 66... 100 = 0,01 mm SCV 160... 200 = 0,02 mm SCV 250 = 0,03 mm over 100 cycles
- Operating temperature range:	from 5 °C to 60 °C
- Operating principle:	wedge and piston design with mechanically restricted guidance
- Stroke range:	from 4 to 30 mm
- Mounting:	by means of bores for H7 pins
- Housing material:	hardened steel
- Material for functional parts:	hardened steel
- Actuation:	filtered hydraulic oil (10 µm) , viscosity 46 mm^2/s a 40 °C ISO VG max 60 °C; compressed air (10 µm), dry or lubricated
- Connections:	sides-bases
- Maintenance:	relubrified every 100.000 cycles when used in handling. When used in machining centers for tool clamping, lubricate every 5.000 cycles

Clamping force blocks, pneumatic-hydraulic, centric clamping SCV-N



PNEUMATIC

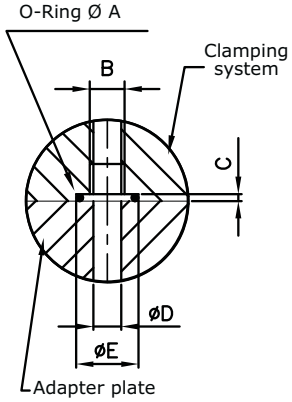
Type	A	B	C	D	E	G	H	L	M	P	R	S	U	V	Z	X	Y	W	J	K	a	b
SCV 66	66	42	34	29.5	66	5x3	54	37	59	4	M4	6.5	18.5	4	M5	15	2.7	1.8	53	14	30	43
SCV 100	102	64	50	45	102	7x4	80	63	90	6	M6	9	31	6	M5	20	2.7	1.8	71.5	20	47	66
SCV 160	160	110	78	55	160	10x5	140	103	140	8	M8	13	51.5	8	1/8	16	3.2	1.8	88.5	32	78	104
SCV 200	200	130	106	65	200	10x7	164	128	186	8	M8	13	64	8	1/8	18	4	2.3	93.5	40	102	140
SCV 250	254	156	124	79	254	12x7	202	159	232	10	M10	18	79.5	10	1/8	18	4	2.3	103	50	125	170

Type	d	d_1	d_2	d_3	d_4	d_5	d_6	d_7	d_9	d_{10}	d_{11}	d_{12}	d_{13}	d_{14}	d_{15}	e	f	Vers. 1			Vers. 2		
																		T	N	d_8	T	N	d_8
SCV 66	38	26	49.5	24	11	/	12	19.5	26.3	6	/	23	16	54	34	30	/	10.2	26.4	15.8	/	/	/
SCV 100	58	34	68	35	13.5	55	19	31	41	6	M5	37	15	80	51	38	47.5	14.5	51	19.5	15	52	19
SCV 160	91	25	84.8	60	18	102	24	70	67.5	9	M8	62	49.5	140	78	47.5	58.5	18.8	89.6	27.2	19	90	27
SCV 200	118	35	89.5	74	19	110	27	87	85.5	9	M8	91.5	54	164	106	51	74	20	92	46	20	92	46
SCV 250	142	45	98.8	90	19	150	35	109	108.5	9	M8	119	58	202	124	55	81	32.5	103	65.5	25	112	61

code	Type	h	l	m	n	Gripping force at 9 bar (N)		Approx. time (sec.)		Air consumption for double stroke (cm^3)	Stroke for jaw (mm)		Mass vice (kg)	Max finger lenght	
						Vers 1	Vers 2	opening	closing		Vers 1	Vers 2		Vers 1	Vers 2
30301004	SCV 66 P	6.5	10	25	7.5	4500		0.1	0.1	30	2		1.5	60	
30301005	SCV 100 P	8.5	16	31.5	12	7600		0.2	0.2	135	6		4.5	150	
30301006	SCV 160 P	11	25	52	14	20000		0.4	0.4	500	8		14	200	
30301007	SCV 200P	13	32	66	14	21000		0.85	0.85	685	10		23	280	
30301008	SCV 250P	13	40	88.5	18	21000*		1	1	1420	15		35	500	
30303005	SCV 100 P	8.5	16	31.5	12		19000	0.2	0.2	135		2	4.5		60
30303006	SCV 160 P	11	25	52	14		46000	0.4	0.4	500		3	14		60
30303007	SCV 200P	13	32	66	14		52000	0.85	0.85	685		4	23		95
30303008	SCV 250P	13	40	88.5	18		55000*	1	1	1420		5	35		145

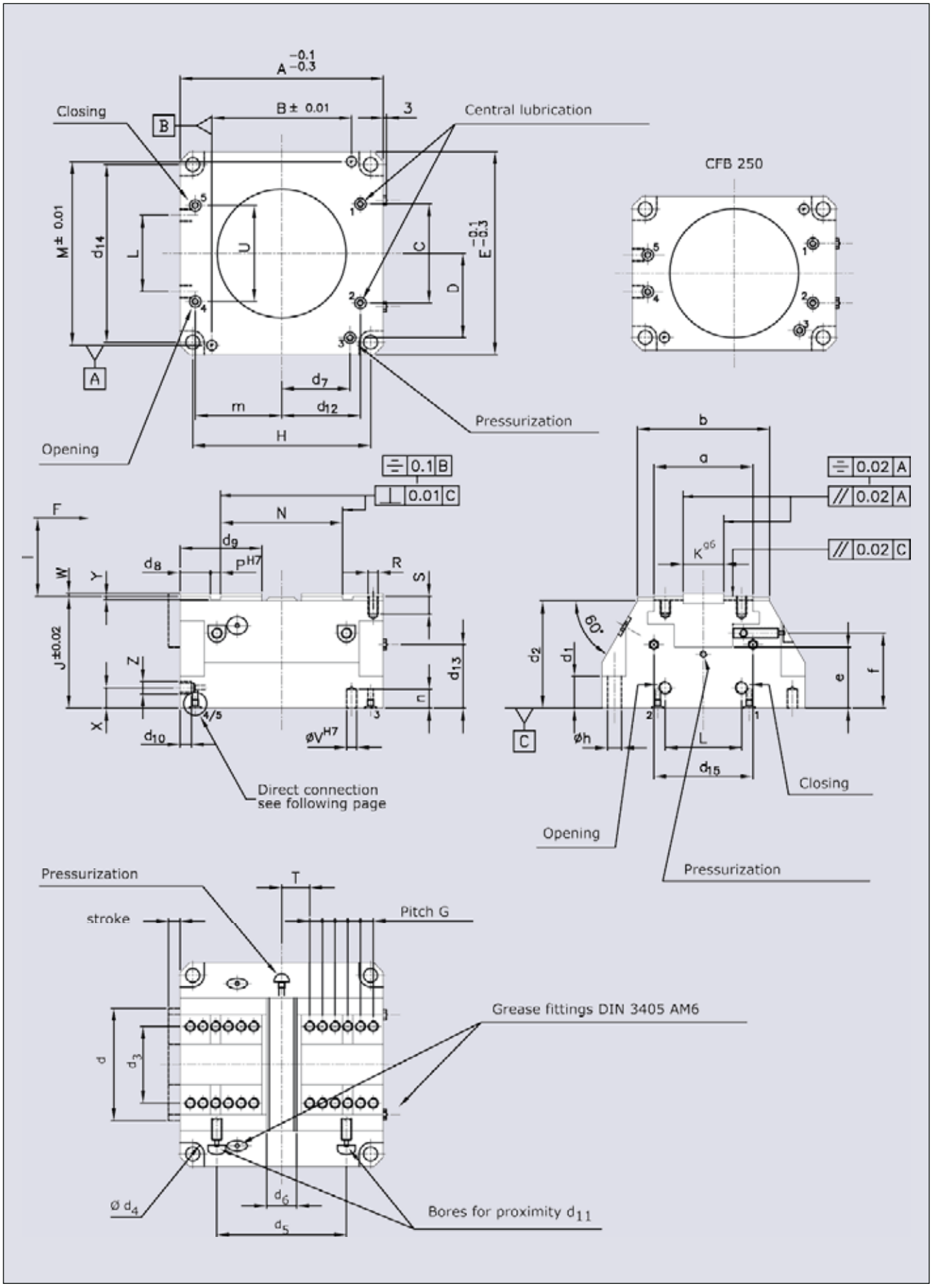
- The gripping force is the arithmetic sum of the individual forces created at the fingers at "l" distance at 9 bar
* **Gripping force at 6 bar**

Hose-free direct connection



	Hole 4 and 5 Actuation					Hole 3 Pressurization					Hole 1 and 2 Central lubrication				
Type	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
SCV 66	Ø4x1	M3	0.7	2.5	6	Ø3.5x1	M3	0.7	2.5	5.5	Ø3.5x1	M3	0.7	2.5	5.5
SCV 100	Ø6x1.5	M5	1	4	9	Ø5x1.5	M4	1	3.5	8	Ø5x1.5	M4	1	3.5	8
SCV 160	Ø6x1.5	M5	1	4	9	Ø5x1.5	M4	1	3.5	8	Ø5x1.5	M4	1	3.5	8
SCV 200	Ø7x1.5	M6	1	5	10	Ø6x1.5	M5	1	4	9	Ø6x1.5	M5	1	4	9
SCV 250	Ø7x1.5	M6	1	5	10	Ø6x1.5	M5	1	4	9	Ø6x1.5	M5	1	4	9

Clamping force blocks, pneumatic-hydraulic, centric clamping SCV-N



HYDRAULIC

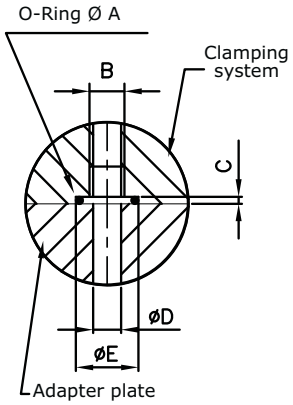
Type	A	B	C	D	E	G	H	L	M	P	R	S	U	V	Z	X	Y	W	J	K	a	b
SCV66	66	42	34	28	66	5x3	54	27	59	4	M4	6.5	35	4	1/8	15	2.7	1.8	53	14	30	43
SCV 100	102	64	51	44.5	102	7x4	80	34	90	6	M6	9	34	6	1/8	20	2.7	1.8	71.5	20	47	66
SCV 160	160	110	78	55	160	10x5	140	42	140	8	M8	13	42	8	1/8	16	3.2	1.8	88.5	32	78	104
SCV 200	200	130	106	65	200	10x7	164	70	186	8	M8	13	70	8	1/8	18	4	2.3	93.5	40	102	140
SCV 250	254	156	124	79	210	12x7	202	96	189	10	M10	18	96	10	1/8	18	4	2.3	103	50	125	170

Type	d	d_1	d_2	d_3	d_4	d_5	d_6	d_7	d_9	d_{10}	d_{11}	d_{12}	d_{13}	d_{14}	d_{15}	e	f	Vers. 1			Vers. 2		
																		T	N	d_8	T	N	d_8
SCV66	38	26	49.5	24	11	/	12	19	26.3	8	/	25	16	54	34	30	/	10.2	26.4	15.8	/	/	/
SCV 100	58	34	68	35	13.5	55	19	31	41	8	M5	37.2	15	80	51	38	47.5	14.5	51	19.5	15	52	19
SCV 160	91	25	84.8	60	18	102	24	70	67.5	9	M8	62	49.5	140	78	47.5	58.5	18.8	89.6	27.2	19	90	27
SCV 200	118	35	89.5	74	19	110	27	87	85.5	9	M8	91.5	54	164	106	51	74	20	92	46	/	/	/
SCV 250	142	45	98.8	90	19	150	35	109	108.5	9	M8	119	58	189	124	55	81	32.5	103	65.5	/	/	/

code	Type	h	l	m	n	Gripping force at 9 bar (N)		Approx. time (sec.)		Air consumption for double stroke (cm^3)	Stroke for jaw (mm)		Mass vice (kg)	Max finger lenght	
						Vers 1	Vers 2	opening	closing		Vers 1	Vers 2		Vers 1	Vers 2
30302004	SCV 66 H	6.5	10	25	7.5	4500		0.5	0.5	10	2		1.5	60	
30302005	SCV 100 H	8.5	16	40	12	8000		1	1	33	6		4.9	150	
30302006	SCV 160 H	11	25	68	14	20000		1.5	1.5	105	8		14.5	200	
30302007	SCV 200 H	13	32	88	14	50000		2.3	2.3	240	10		24	95	
30302008	SCV 250 H	13	40	115	18	60000		3	3	440	15		35	140	
30304005	SCV 100 H	8.5	16	40	12		19000	1	1	33		2	4.9		60
30304006	SCV 160 H	11	25	68	14		46000	1.5	1.5	105		3	14.5		60

-The gripping force is the arithmetic sum of the individual forces created at the fingers at "l" distance at 60 bar

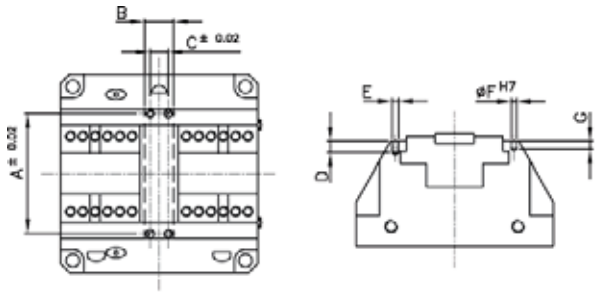
Hose-free direct connection



	Hole 4 and 5 Actuation					Hole 3 Pressurization					Hole 1 and 2 Central lubrication				
Type	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
SCV66	Ø5x1.5	M4	1	3.5	8	Ø2.5x1.5	M3	1	2.5	5.5	Ø2.5x1.5	M3	1	2.5	5.5
SCV100	Ø6x1.5	M5	1	4	9	Ø5x1.5	M4	1	3.5	8	Ø5x1.5	M4	1	3.5	8
SCV160	Ø7x1.5	M6	1	5	10	Ø5x1.5	M4	1	3.5	8	Ø5x1.5	M4	1	3.5	8
SCV200	Ø7x1.5	M6	1	5	10	Ø6x1.5	M5	1	4	9	Ø6x1.5	M5	1	4	9
SCV250	Ø7x1.5	M6	1	5	10	Ø6x1.5	M5	1	4	9	Ø6x1.5	M5	1	4	9

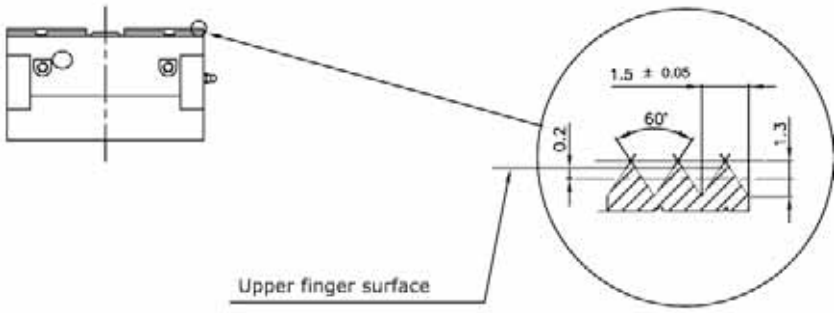
Clamping force blocks, pneumatic-hydraulic, centric clamping SCV-N

Centering - code BC

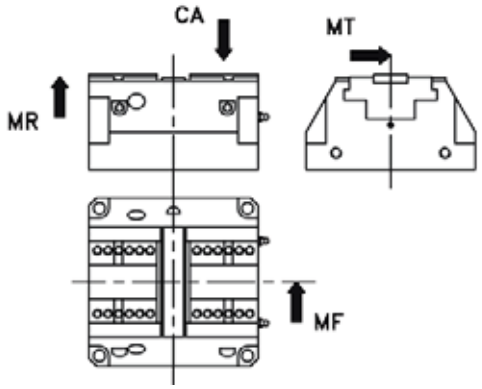


Cod.	A	B	C	D	E	F	G
SCV 66	37.4	12	5	4	M2.5	3	3
SCV 100	58	19	9	5	M3	4	4
SCV 160	94	23.6	10	7	M4	5	7
SCV 200	126	27	12	9	M5	5	7
SCV 250	155	35	14	12	M6	6	9

Version with serrated fingers - code D



Load data



Type	CA (N)	MR (Nm)	MF (Nm)	MT (Nm)
SCV 66	500	25	25	60
SCV 100	2500	70	120	140
SCV 160	18000	100	250	200
SCV 200	22000	120	250	240
SCV 250	24500	140	250	270