

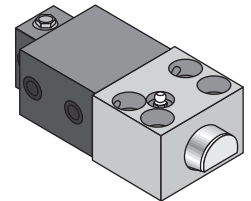
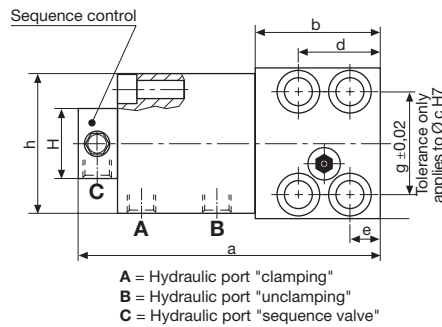
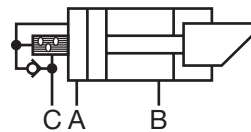
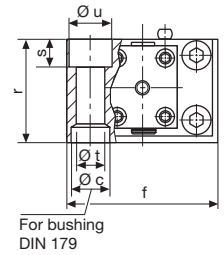
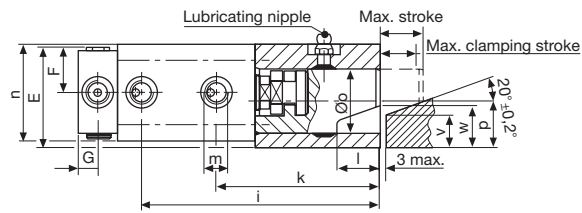


Wedge clamp with sequence valve control

Wedge clamps with hydraulic position monitoring, suitable for high temperatures:

An additional valve block on the standard wedge clamp enables hydraulic control of the clamping position. Only after the last wedge clamp has been clamped is the machine control released by a pressure switch on the pressure generator.

Resistant to temperatures of up to 160°C (higher temperatures on request)



* In the case of the 25 kN version, the lubricating nipples protrude by 5 mm and are offset by 9.5 mm

*Clamping force **permissible retention force (for details, see 2.2400, page 2)

Max. clamping force*	(kN)	25	50	100	160	250	400	630
Perm. operating pressure**	(kN)	35	65	130	210	320	520	820
Screw property class 8.8								
Max. operating pressure	(bar)	350	275	350	350	350	350	350
Cylinder Ø	(mm)	25	40	50	63	80	100	125
Max. stroke	(mm)	20	25	25	30	32	40	40
Clamping stroke	(mm)	15 - 18	18 - 22	19 - 22	23 - 27	24 - 29	30 - 36	30 - 36
Max. oil consumption	(cm ³)	10	31	49	94	161	314	491
Sequence control at	(mm)	12	14	14	17	17	22	22
a	(mm)	152	187	220	262	302	345	410
b	(mm)	58	78	100	125	150	180	225
Ø c H7 x depth	(mm)	18/7	26/9	30/11	35/11	48/13	55/16	62/16
d	(mm)	38	46	58	75	78	95	108
e	(mm)	14	16	20	25	26	32	38
f	(mm)	70	95	120	150	200	240	280
g	(mm)	48	65	85	106	140	180	210
h	(mm)	65	85	100	125	160	200	230
i	(mm)	111	146	177	210	246	285	344
k	(mm)	76	102	127	151	184	215	272
l	(mm)	20	25	26	32	40	45	50
m	(mm)	G 1/4	G 1/4	G 1/4	G 1/2	G 1/2	G 1/2	G 1/2
n	(mm)	45	63	75	95	120	150	180
Ø o	(mm)	30	40	55	70	80	100	125
p	(mm)	21,5	28	37	49	55	75	85
r	(mm)	48	65	80	105	125	160	190
s	(mm)	13	18	20	26	32	38	44
Ø t	(mm)	13	17	21	26	33	39	45
Ø u	(mm)	20	26	32	40	48	57	66
v	(mm)	15	18	25	30	30	50	60
w	(mm)	19,5	23,5	30,5	37,0	38,0	60	70,0
E	(mm)	48	68	75	89	96,5	116,5	131,5
F	(mm)	22,5	31,5	37,5	47,5	60	75	90
G	(mm)	16	14	14	16	16	16	16
H	(mm)	64	48	48	90	90	90	90
Screw DIN 912-8.8 (4 pcs.)		M 12	M 16	M 20	M 24	M 30	M 36	M 42
Tightening torque	(Nm)	86	210	410	710	1450	2520	4050
Weight	(kg)	3,0	6,5	11,4	21,7	41	74,7	126
Part no.		8.2403.2500	8.2404.2500	8.2405.2500	8.2406.2500	8.2407.2500	8.2408.2500	8.2409.2500
Accessories								
Bushings DIN 179		12 x 12	17 x 16	21 x 20	26 x 20	32 x 25	38 x 30	44 x 30
Part no.		3300 285	3300 287	3300 288	3300 289	3300 420	3300 430	3300 440



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Wedge clamp with sequence valve control + safety step

Wedge clamps with hydraulic position monitoring, suitable for high temperatures:

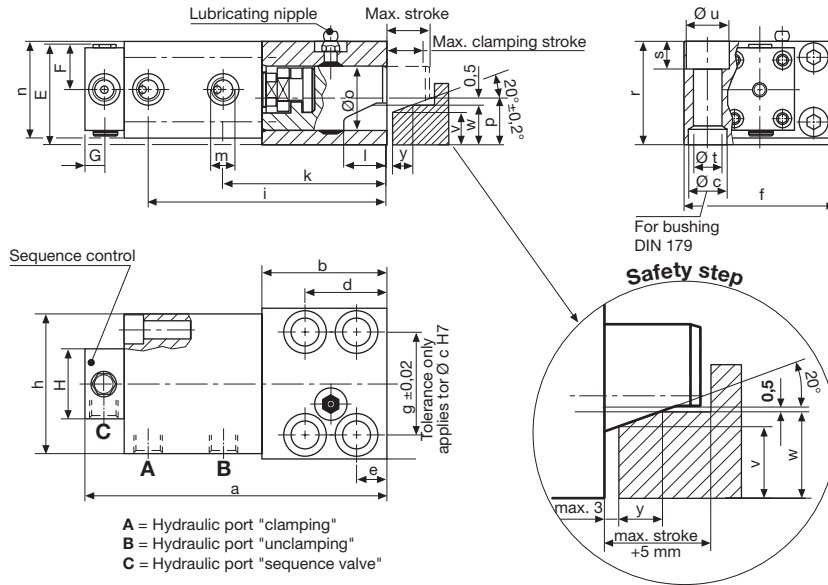
An additional valve block on the standard wedge clamp enables hydraulic control of the clamping position. Only after the last wedge clamp has been clamped is the machine control released by a pressure switch on the pressure generator.

A high degree of safety:

This design features a clamping bolt with an additional accommodation surface which is parallel to the clamping edge. Should the pressure drop (machine failure or standstill), the upper die will lower onto the safety step where it is safely held in position.

Resistant to temperatures of up to 160°C (higher temperatures on request)

* In the case of the 25 kN version, the lubricating nipples protrude by 5 mm and are offset by 9.5 mm



A = Hydraulic port "clamping"
 B = Hydraulic port "unclamping"
 C = Hydraulic port "sequence valve"

*Clamping force **permissible retention force (for details, see 2.2400, page 2)

Max. clamping force* (kN)	25	50	100	160	250	400	630
Perm. operating pressure** (kN)	35	65	130	210	320	520	820
Screw property class 8.8							
Max. operating pressure (bar)	350	275	350	350	350	350	350
Cylinder Ø (mm)	25	40	50	63	80	100	125
Max. stroke (mm)	20	25	25	30	32	40	40
Clamping stroke (mm)	15 - 18	18 - 22	19 - 22	23 - 27	24 - 29	30 - 36	30 - 36
Max. oil consumption (cm³)	10	31	49	94	161	314	491
Sequence control at (mm)	12	14	14	17	17	22	22
a (mm)	152	187	220	262	302	345	410
b (mm)	58	78	100	125	150	180	225
Ø c H7 x depth (mm)	18/7	26/9	30/11	35/11	48/13	55/16	62/16
d (mm)	38	46	58	75	78	95	108
e (mm)	14	16	20	25	26	32	38
f (mm)	70	95	120	150	200	240	280
g (mm)	48	65	85	106	140	180	210
h (mm)	65	85	100	125	160	200	230
i (mm)	111	146	177	210	246	285	344
k (mm)	76	102	127	151	184	215	272
l (mm)	20	25	26	32	40	45	50
m (mm)	G 1/4	G 1/4	G 1/4	G 1/2	G 1/2	G 1/2	G 1/2
n (mm)	45	63	75	95	120	150	180
Ø o (mm)	30	40	55	70	80	100	125
p (mm)	21,5	28	37	49	55	75	85
r (mm)	48	65	80	105	125	160	190
s (mm)	13	18	20	26	32	38	44
Ø t (mm)	13	17	21	26	33	39	45
Ø u (mm)	20	26	32	40	48	57	66
v (mm)	15	18	25	30	30	50	60
w (mm)	17,5	21,2	28,2	34,7	35,8	57,8	67,8
y (mm)	7	9	10	14	14	20	21
E (mm)	48	68	75	89	96,5	116,5	131,5
F (mm)	22,5	31,5	37,5	47,5	60	75	90
G (mm)	16	14	14	16	16	16	16
H (mm)	64	48	48	90	90	90	90
Screw DIN 912-8.8 (4 pcs.)	M 12	M 16	M 20	M 24	M 30	M 36	M 42
Tightening torque (Nm)	86	210	410	710	1450	2520	4050
Weight (kg)	3,0	6,5	11,4	21,7	41	74,7	126
Part no.	8.2403.3500	8.2404.3500	8.2405.3500	8.2406.3500	8.2407.3500	8.2408.3500	8.2409.3500
Accessories							
Bushings DIN 179	12 x 12	17 x 16	21 x 20	26 x 20	32 x 25	38 x 30	44 x 30
Part no.	3300 285	3300 287	3300 288	3300 289	3300 420	3300 430	3300 440

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Subject to technical modification

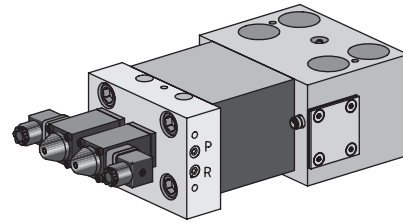


Wedge clamp with flanged single valve control

Wedge clamps with directional seat valves flanged to the rear serving as control valves for an individual control of all clamps

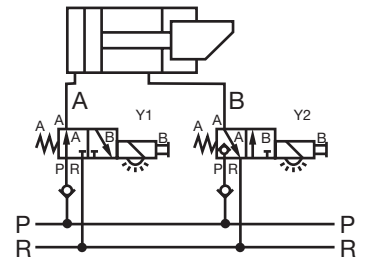
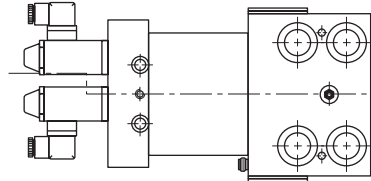
Benefits:

- Each element can be individually controlled
- Single dies can be clamped
- Little installation work as a result of a plug-type closed hydraulic circuit
- Suitable for BUS systems
- High degree of operational safety thanks to integral position monitoring and check valves. On request available with a safety step
- Very rugged clamp with a high standard of safety and a long service life



Resistant to temperatures of up to 100°C
 120°C for 1000 working hours
 Clamping force from 100 to 630 kN
 Operating pressure 350 bar
 Valve voltage 24 V DC

Dimensions, interfaces and other technical details will be defined in the planning phase.



5-stage drop forging press equipped with wedge clamps with directional seat valves to activate the different stages



Use of wedge clamps with sequence valve control in a forging press



Wedge clamps with flanged directional seat valves. Clamping and unclamping positions are electrically controlled. Little installation work as a result of plug-type connections between the clamps.