

# Rack and Pinion Jacks



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# Rack and Pinion Jacks

## Crank Handles



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### Safety Crank (Siku)

- With one-sided braking effect
- The load is held securely at every height
- With collapsible handle
- Without pawl

#### 250 mm arm length:

- Square mounting 17 mm
- max. drive torque 60 Nm (braking torque)

#### 300 mm arm length:

- Square mounting 17 mm
- max. drive torque 120 Nm (braking torque)

### Safety Ratchet Crank (Raku)

- for use in cramped spaces
- lift by moving the ratchet upwards and downwards
- adjust the lifting or lowering movement by moving a lever
- the load is securely held at every height
- with collapsible handle
- without pawl

#### 250 mm arm length:

- Square mounting 17 mm
- max. drive torque 60 Nm (braking torque)

#### 300 mm arm length:

- Square mounting 17 mm
- max. drive torque 120 Nm (braking torque)



### Spring Loaded Safety Crank (Sifeku)

for special safe application

- without pawl
- silent
- recoil proof
- maintenance-free
- totally enclosed
- weather and temperature resistant
- braking effect at both ends
- at every height, the load is securely held in the pushing and pulling direction
- approved by the TÜV as an independent crank
- with collapsible handle



#### 250 mm arm length:

- Square mounting 17 mm
- max. drive torque 60 Nm (braking torque)

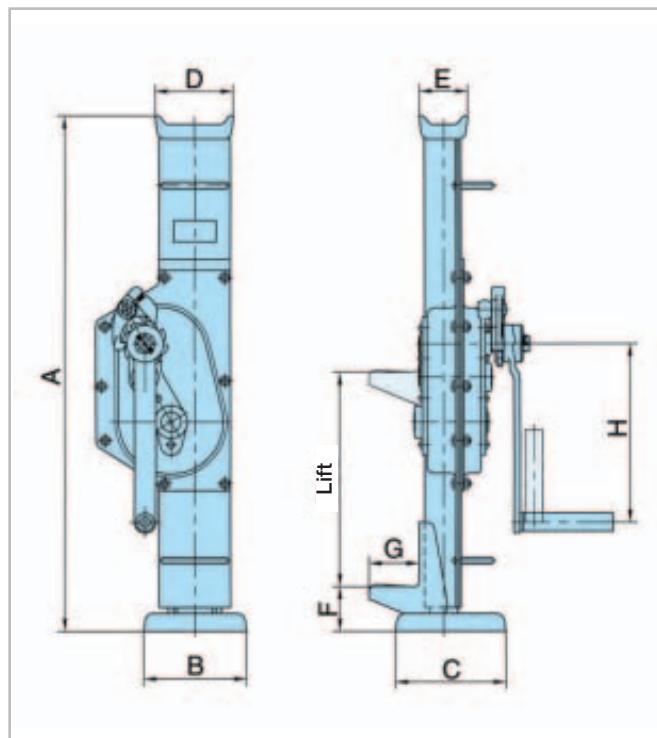
# Rack and Pinion Jacks

## Steel Jacks



### Steel Jack according to DIN 7355 STW-F with fixed lifting claw

The steel jack is standard equipment for tool and machinery shops, contractors, shipyards, agriculture and workshops: our steel jack with fixed lifting claw can be delivered with different types of hand crank for lifting the jack shaft along the rack. It offers a very long service life due to its high quality spur gear, precise worked crank gear as well as additional worked pawl. The steel jack STW-F is a masterpiece of technique and price/performance ratio.



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Art. No.	Sifeku	Siku	030001139	030002135	030003131	—
	Siku	Raku	030001007	030002003	030003069	030004006
	Raku		030001015	030002011	030003018	030004014
A	mm		720	720	720	792
B	mm		130	130	145	145
C	mm		140	140	155	155
D	mm		90	90	110	125
E	mm		50	50	68	80
F	mm		60	61	62	85
G	mm		60	65	70	85
H	mm		250	250	250	300

Art. No.	Technical Data						
	Sifeku	Siku	Raku	Lifting capacity t	Height mm	Lift mm	Weight kg
030001139	030001007	030001015		1,5	720	350	12
030002135	030002003	030002011		3,0	720	350	21
030003131	030003069	030003018		5,0	720	300	26
—	030004006	030004014		10,0	792	300	42



# Rack and Pinion Jacks

## Steel Jacks



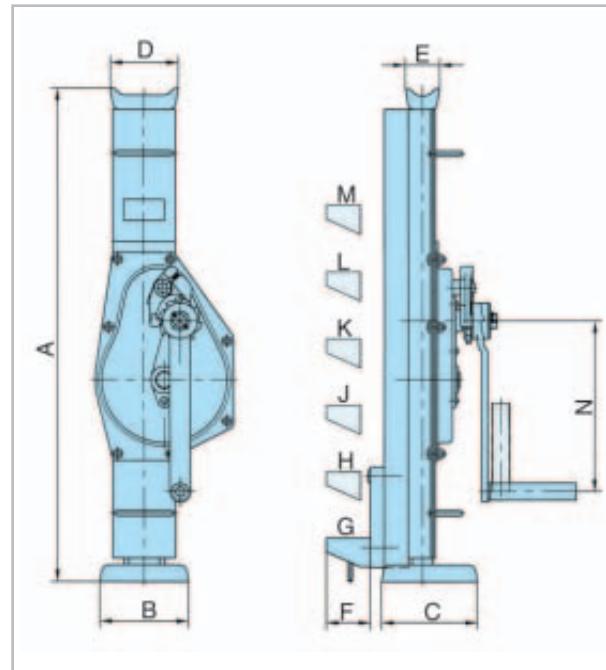
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Art. No.	Sifeku	030008133	030009156	—
	Siku	030008001	030009008	030010006
	Raku	030008028	030009016	030010014
A	mm	720	720	792
B	mm	130	145	145
C	mm	140	155	155
D	mm	100	110	125
E	mm	50	68	80
F	mm	65	65	70
G	mm	69	62	85
H	mm	166	159	191
J	mm	263	256	297
K	mm	360	353	403
L	mm	457	450	509
M	mm	554	547	615
N	mm	250	250	300

### Steel Jack according to DIN 7355 STW-V with adjustable lifting claw

Quality produced in series. In the steel jack with adjustable lifting claw our experience is shown in our technical competence. The crank handle – in different executions – moves the jack shaft at the rack. The toe height of the claw can be adjusted to the required mounting or maintenance application. Reliability and long service life can be guaranteed by the high-quality spur gear, the exactly milled as well as the precise and wear-resistant rack.

As someone so experienced in the manufacture of steel jacks, quality can only be expected!



Art. No.	Technical Data						
	Sifeku	Siku	Raku	Lifting capacity t	Height mm	Lift mm	Weight kg
030008133		030008001	030008028	3,0	720	350	25
030009156		030009008	030009016	5,0	720	300	30
—		030010006	030010014	10,0	792	300	48

# Rack and Pinion Jacks

## Track Jack

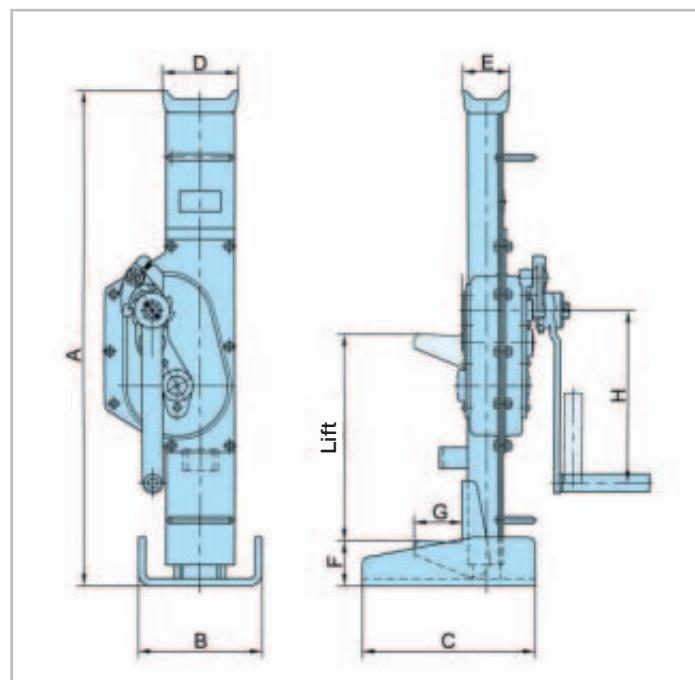


### Track Jack GHW

Performance with positive side-effect – you will be surprised of the efficiency of the track jack: the pleasant crank forces, its long service life as well as its robustness. Rails can be lifted fast, easy and safely even under most unfavourable conditions. Due to its shoe-shaped base the jack can be easily fitted with its lifting claw between railway sleepers and rails. Due to its very high quality of toothing all gear parts as well as the overall excellent finish this comfortable assistant offers reliable help with long service life. The GHW track jack can be delivered with numerous options.



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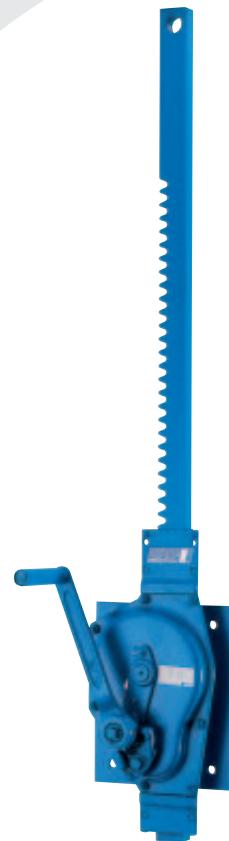


Art. No.		030021008
Lifting capacity	t	5
Crank type		Siku
Lifting height	mm	300
Overall height	mm	717
Req. crank force	daN	28
Weight	kg	26
A	mm	717
B	mm	180
C	mm	250
D	mm	110
E	mm	68
F	mm	65
G	mm	70
H	mm	250

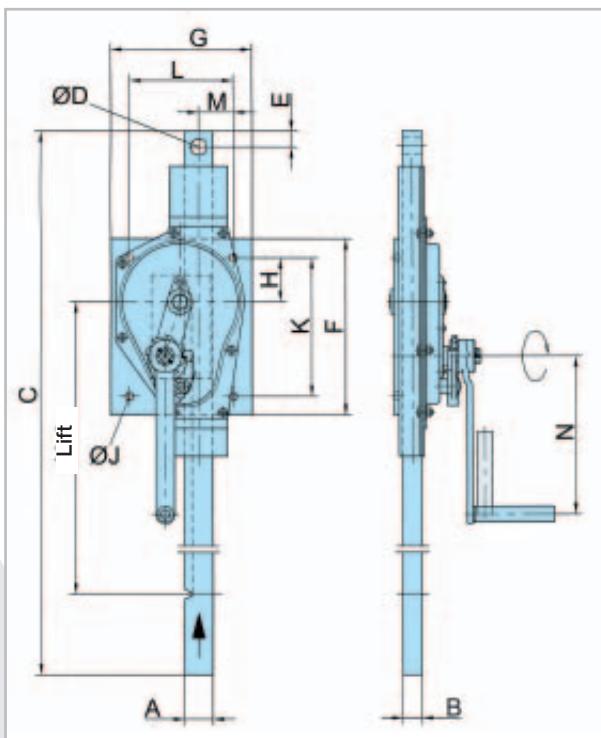


# Rack and Pinion Jacks

## Container Jack



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### Container Jack CZW Rack and Pinion Jack 3 ton with mounting plate

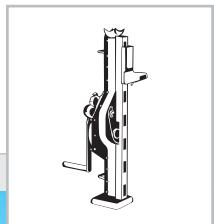
The precision of our CZW is unbeatable – it does not only perfectly open container lids but also show new ways of rentability. Precise toothing of all gear parts leads to high efficiency at low crank forces. The safety crank for safe lifting force and the high precision of the mounting plates are further evidence of our CZW offering a long service life!

Pfaff-silberblau quality made in Germany! Available at short notice and guaranteed spare parts availability assists you in playing safe!

Art. No.		030056510
Lifting capacity	t	3
Lifting height	mm	800
Rack length	mm	1265
Req. crank force	daN	28
Lift each crank turn	mm	8,6
Cross section		45/30
Weight	kg	22
A	mm	45
B	mm	30
C	mm	1265
Ø D	mm	26
E	mm	25
F	mm	280
G	mm	225
H	mm	70
Ø J	mm	12,5
K	mm	220
L	mm	165
M	mm	55
N	mm	250

# Rack and Pinion Jacks

## Wall-Mounted Rack and Pinion Jack

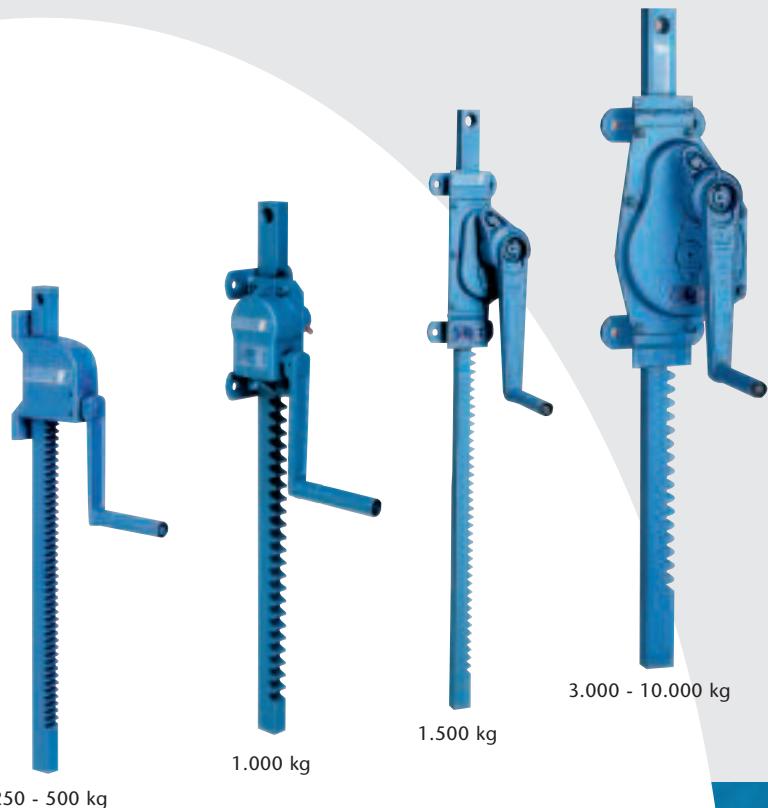


### Wall-Mounted Rack and Pinion Jacks ZWW

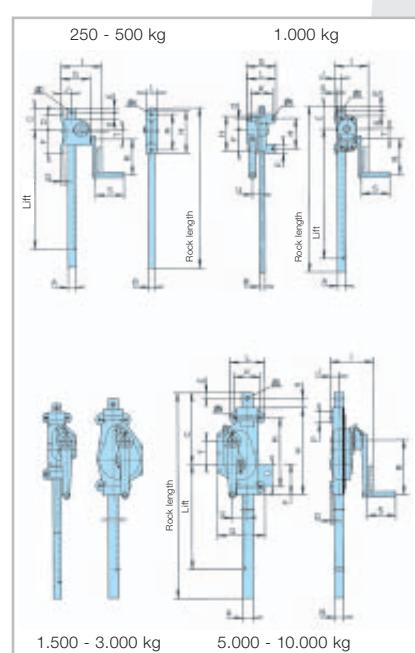
- with spur gear
- with worm gear

Hats off to such smooth lifting and high efficiency – in plant engineering, container construction, within the workshops or the building trade. For pulling and pushing, horizontal moving or vertical supporting of loads of up to 10 t. Precision guarantees long service life and this will result in cost saving. Only precisely machined racks and high quality gear parts are used – so optimum tooth quality can be achieved with the lowest possible material wear, resulting in low costs.

Long-term experience with rack and pinion jacks result in superior Pfaff-silberblau quality, guaranteeing the lifting and lowering of all kinds of loads.



Art. No.		030052000	030053007	030054003	030055131	030056138	030057134	030058009
Gear type		Worm gear			Spur gear			
Load safety		self-lock.	self-lock.	self-lock.	Sifeku	Sifeku	Sifeku	Siku
Lifting capacity	kg	250	500	1000	1500	3000	5000	10000
Lift each crank turn	mm	11	11	3,8	14	8,6	4,5	3,2
Crank force	daN	11	16,5	22	28	28	28	40
Rack length	mm	740	895	765	1090	975	1170	1240
Lift	mm	550	700	600	800	565	700	700
Weight	kg	9	10	11	11	19	28	55
A	mm	35	35	35	35	45	50	60
B	mm	25	25	25	25	30	40	50
C	mm	100	100	105	215	280	330	380
DØ	mm	16	16	21	21	21	21	30
E	mm	20	20	20	20	25	25	30
F	mm	109,5	109,5	100	135	165	140	160
G	mm	133	133	134	151	212	219	269
H	mm	195	195	160	310	395	400	480
I	mm	188	188	155	168	179	197	200
J	mm	47,5	47,5	29,5	26	31	37	39,5
K	mm	–	–	100	100	120	120	140
L	mm	52	52	130	130	160	160	180
M	mm	165	165	140	260	305	320	410
NØ	mm	12,5	12,5	12,5	12,5	14,5	17	21
O	mm	70,5	70,5	50	110	120	105	125
P	mm			40	40	50	50	60
Q	mm	12	12	8	8	10	10	10
R	mm	165	220	165	250	250	250	300
S	mm	130	130	130	130	130	130	250
T	mm	44,5	44,5	46,8	42,4	86,25	109,1	150,4
U	mm	–	–	44	43,3	53,1	69,5	88,3
X	mm	32	32	25	20	25	45	30





# Rack and Pinion Jacks

## Sluice Gate Jack

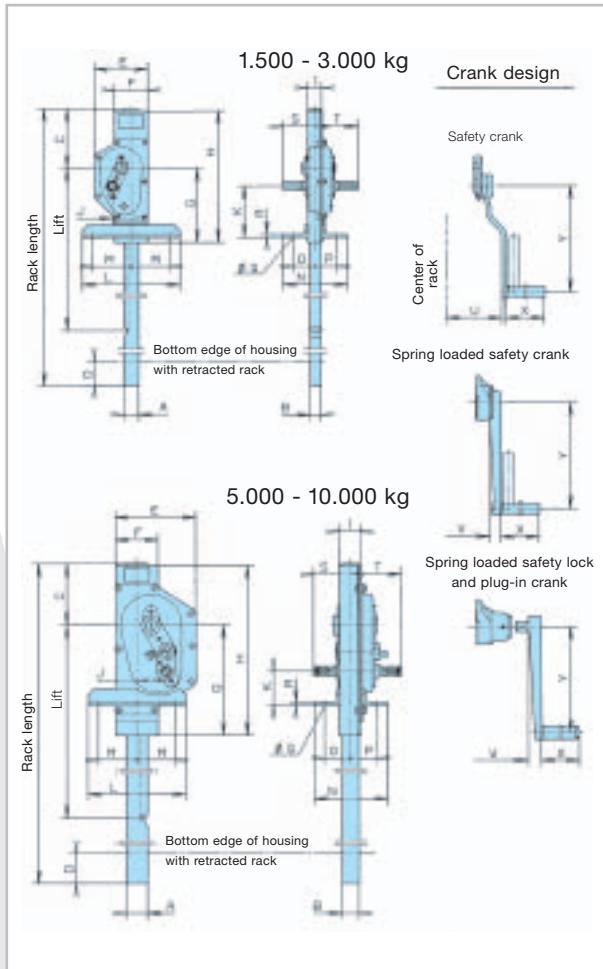


### Sluice Gate Jack SCH-W

Only one jack is closing and opening the shutter in such a way – the sluice gate jack SCH-W – the reliable one among the tested products. This is guaranteed by the spur gear with formed gearwheels, precisely milled crank gear, crank gear, medium and rack pinions... but unique: only Pfaff-silberblau has developed a spring-loaded safety crank which safely provides permanent pressure when required.

All winches are equipped with adequate reserves and are optimally suitable for vehicle and machinery construction. Numerous options are available to suit your specific requirements.

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Art. No.	030029130	030030139	030031135	030030218
Crank type	Sifeku	Sifeku	Sifeku	Siku
Lifting capacity t	1,5	3	5	10
Pressure force * t	1	2	3	6
Rack length mm	1200	1250	1350	1550
Lift mm	800	800	900	1000
Weight kg	18	25	32	56
A mm	35	45	50	60
B mm	25	30	40	50
C mm	140	160	145	165
D mm	85	60	45	65
E mm	125	204	189	235
F mm	78	92	100	112
G mm	175	230	260	320
H mm	310	395	400	480
I mm	33,5	39,5	51	59
J mm	43,3	53,1	69,5	88,3
K mm	121	138	81	84
L mm	230	230	230	290
M mm	90	90	90	115
N mm	153	158	173	183
O mm	52,5	55	61	66
P mm	52,5	55	64	70
QØ mm	14	14	14	14
R mm	7	7	7	8
S mm	76,5	85,5	88	100
T mm	100,5	108,5	120	140
U mm	113	121	132	185
V mm	86	94	105	–
W mm	136	144	155	–
X mm	130	130	130	250
Y mm	250	250	250	300

\* Load case II according to Euler – the press. force will be reduced with higher lift

# Rack and Pinion Jacks

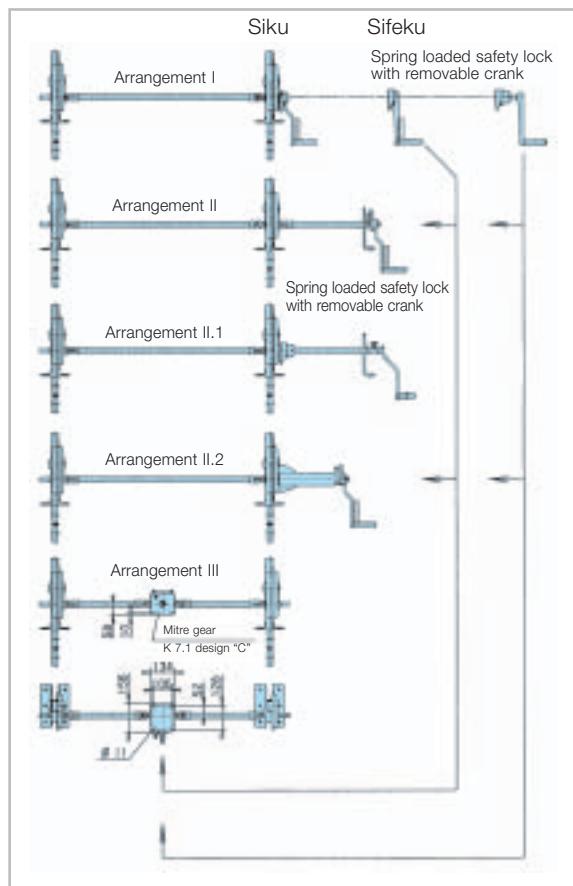


## Sluice Gate Jack Systems w. rack and pinion drive

### Sluice Gate Jack Systems SCH-W AZ with rack and pinion drive

Being important in the field of water power, agriculture or plant engineering means to have the right equipments: best using the sluice gate jack system SCH-W AZ. Slide-lacquer-treated racks made of solid material, spur gears with high efficiency, low expenditure of force due to optimum transmission, smooth

lift as well as exactly toothed gear parts – these are the typical properties for the enormous technical know-how of Pfaff-silberblau even in terms of conception and consultation. Pfaff-silberblau offers different crank types and layouts in combination with numerous useful options.



Art. No.		030082139	030083135	030084131	030085081
Crank type		Sifeku	Sifeku	Sifeku	Siku
Lifting capacity	t	1,5	3	5	10
Pressure force *	t	1,5	3	5	10
Rack length	mm	1200	1250	1350	1550
Lift	mm	800	800	900	1000
Rack cross-section	mm	35/25	45/30	50/40	60/50
Weight of arrangement	kg	18	25	32	56

\* load case II acc. to Euler – the press. force will be reduced with higher lift



# Rack and Pinion Jacks

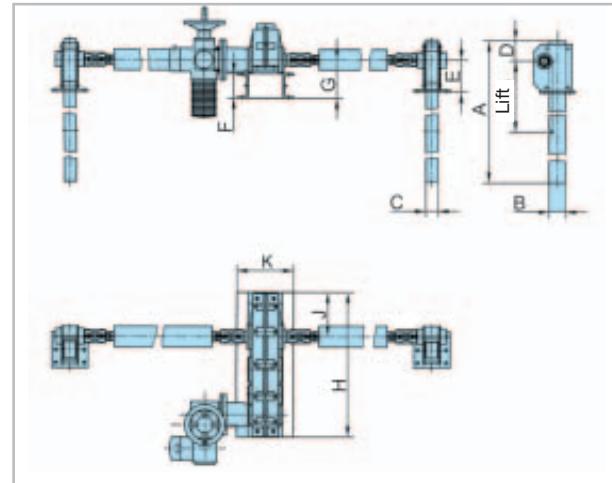
## Sluice Gate Jack Arrangement

### Motor-Driven Sluice Gate Jack Arrangements SCH-WW with enclosed rotary drive unit

Pfaff-silberblau sluice gate jack arrangements are installed crosswise to running water in order to control the water level i.e. the water flow by means of shutters. Sluice gate jack arrangements consist of 2 or more coupled racks for lifting capacities from 3 ton up to 12 tons. The high-quality rotary drive unit with integrated distance and torque stop is completely enclosed and ideal for the intended application. All Pfaff-silberblau sluice gate jack arrangements are equipped with slide-lacquer coated racks made of solid material (ST 70 or C

45) as well as pinions made of hardened chromium-manganese steel. As standard our sluice gate jack systems are equipped with corrosion protection (KS), protection class IP 65, stand-still heating and manual emergency drive, in order to guarantee long service-life with low susceptance to failure.

Feel free to take the advice of Pfaff-silberblau in order to chose the optimum and most economic sluice gate jack arrangement.



Art. No.		030087009	030088005	030089001	030090034
Lifting capacity	t	3	5	8	12
Pressure force	t	3	5	8	12
Spur gear design		G21	G45.1	G60.1	G90
Rack length	mm	1175	1600	2000	2000
Lift	mm	800	1200	1600	1600
Rack cross-section	mm	45/30	60/50	80/60	80/60
Rack center distance	mm	1200	1600	2000	2500
Weight	kg	125	190	318	320
A	mm	1175	1600	2000	2000
B	mm	45	60	80	80
C	mm	30	50	60	60
D	mm	100	100	100	100
E	mm	138	138	158	158
F	mm	U 80	U 80	U 120	U 120
G	mm	138	138	188	188
H	mm	410	510	710	710
J	mm	157	173	218	218
K	mm	200	235	280	280