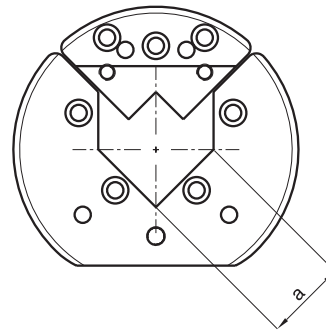
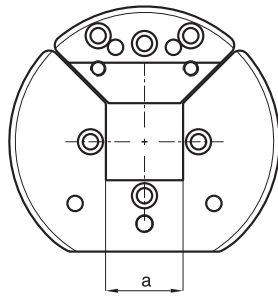


Dimension sheet VT-inserts

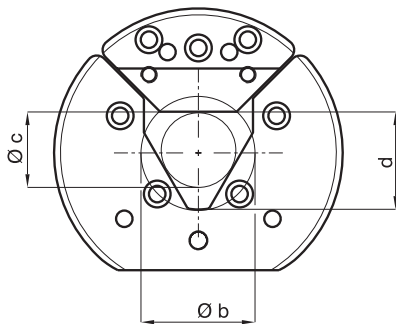


VT1/VT2

	dimension a (mm)										
22 - 30	25	30									
30 - 40		30	32	35	40						
40 - 50					40	45	50				
50 - 80							50	60	80		
80 - 120								80	100	120	

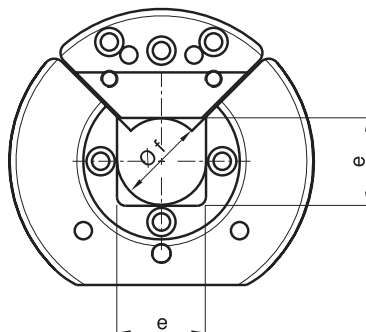
	dimension a (inch/mm)										
22 - 30	1"	1 1/8"	1 1/4"								
	25.4	28.57	31.75								
30 - 40			1 1/4"	1 1/2"							
			31.75	38.1							
40 - 50			1 1/4"	1 1/2"		1 3/4"	2"				
			31.75	38.1		44.45	50.8				
50 - 80							2"	2 1/2"			
							50.8	63.5			
80 - 120										4"	
										101.6	

VT2: 50-80 a = max. 63.5 80-120 a = max. 100



VT6

	dimensions (mm)		
	Ø b	Ø c	d
22 - 30	45	30	37.5
30 - 40	55	36	45.5
40 - 50	70	46	58
50 - 80	105	67	86
80 - 120	150	96	123



VT7

	dimension (mm)	
	e	Ø f F7
22 - 30	31	30
30 - 40	41	40
40 - 50	51	50
50 - 80	51	50
	81	80

Special version on customer request

Info
5.23

Generally safety chucks should always be closed by hand.

In order to ensure the undriven chucks types VT2 or VT6 to lock automatically, a radial driver is offered.

Maintenance inspection suggestions



To better maintain your Boschert Safety Chucks please check the following points:

Fingerguard is securely glued to hand wheel and not worn

Check to see that the detent in the shoulder of the seat opening is concentric, not deformed or elongated

After inspecting, or when replacing the hinge pin, you should use a light coat of general purpose grease to lubricate it.

Replacable insert are matched and have the same indentification number stamped on the backside of the top piece and the bottom piece.

This set screw locates the position of the hinge pin. It is a size (M5) and can be removed with a 2.5 Allen wrench.

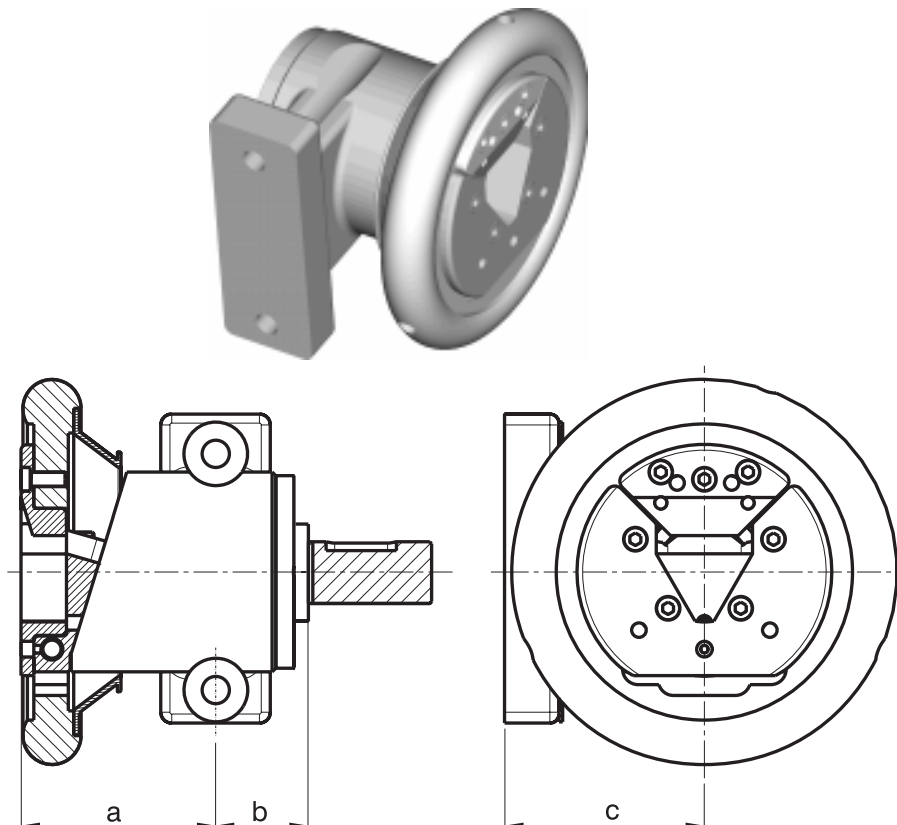
Use new screws and pins when installing a new replaceable insert.

The bottom of the housing is 1-1.5 mm behind the hand wheel. Check to see that the housing is not worn at this location.

When installing new replacement VT inserts, the holes have to be reamed again.

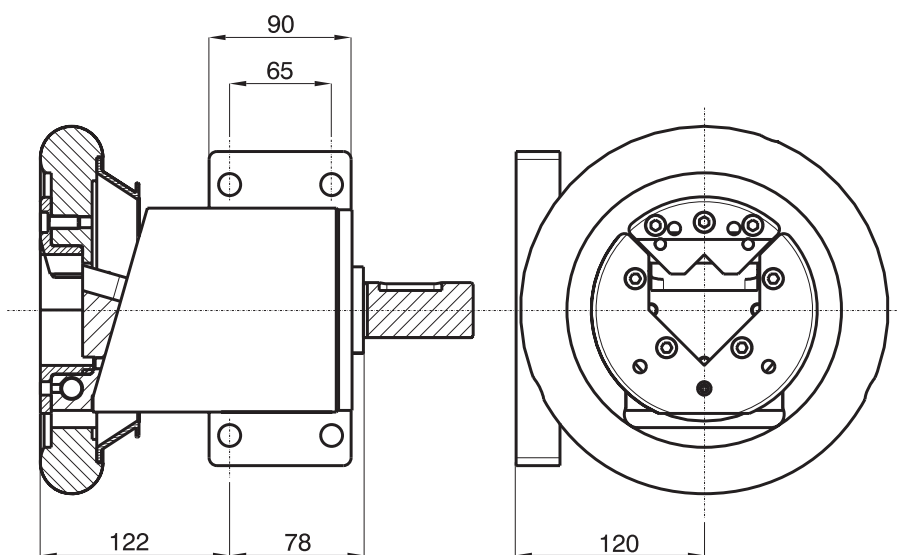
5.40 Foot mounted chucks for 90° Mounting

Foot mounted chucks to fix at a vertical frame



Type 22-30 / 30-40

	a	b	c
ST 22 - 30	92	40	85
ST 30 - 40	107	45	110

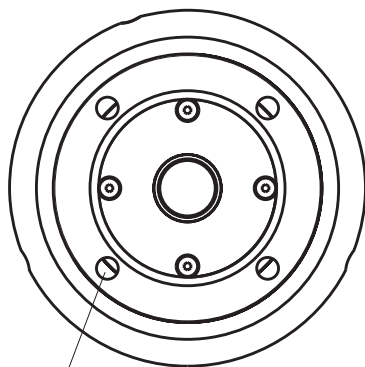
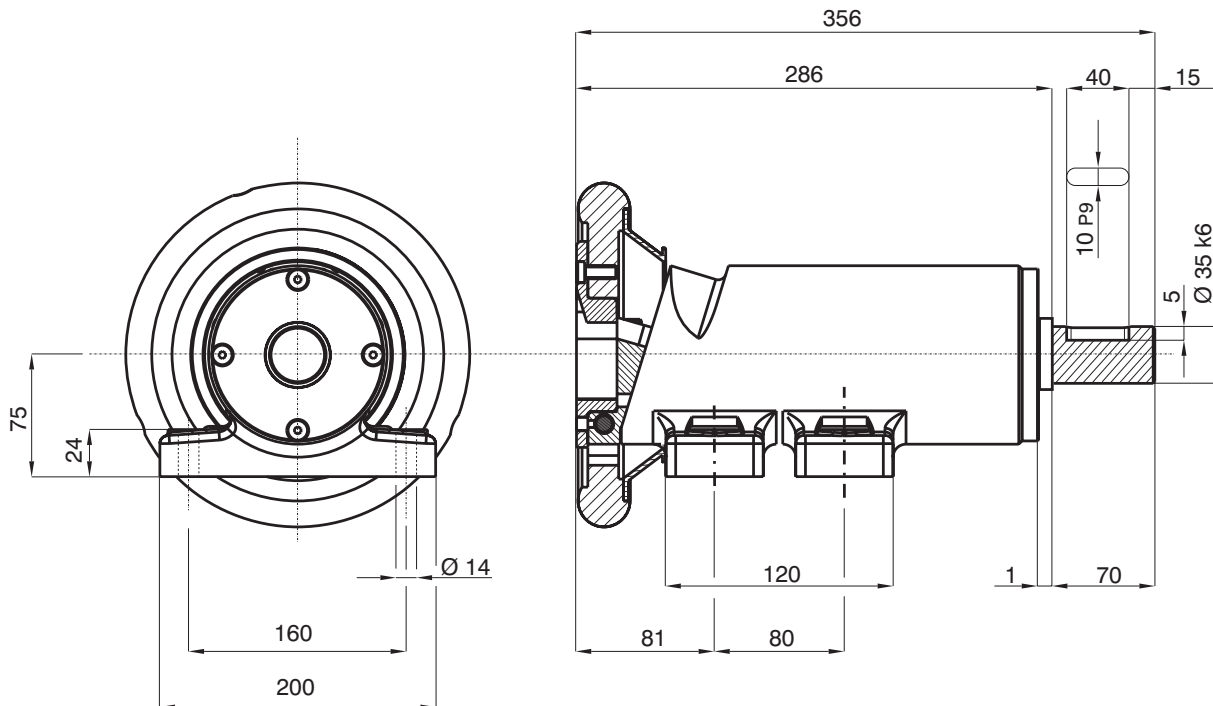


Type 40-50

Other dimensions as standard chucks

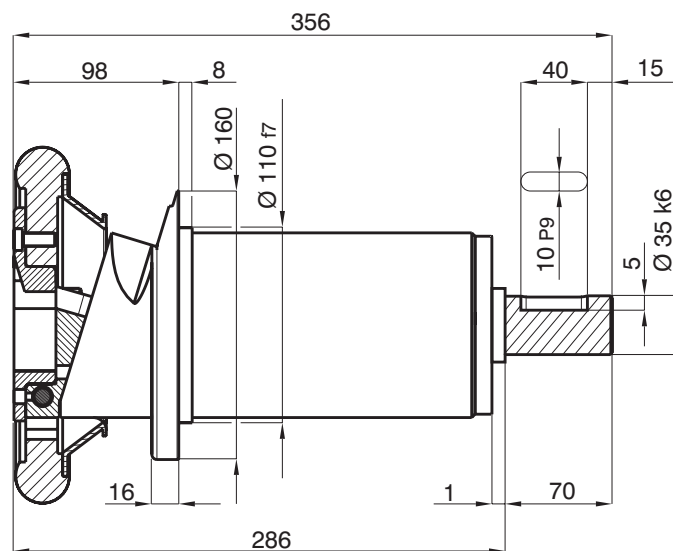
above showed chuck = 90° turned right

Flange and foot mounted chuck Extended Chucks type 30 - 40



TK Ø 135 4 x Ø 13

TK = bolt hole circle



Beam weight max.:

max. 2000 kg (max. 4410 lbs)

Square bar:

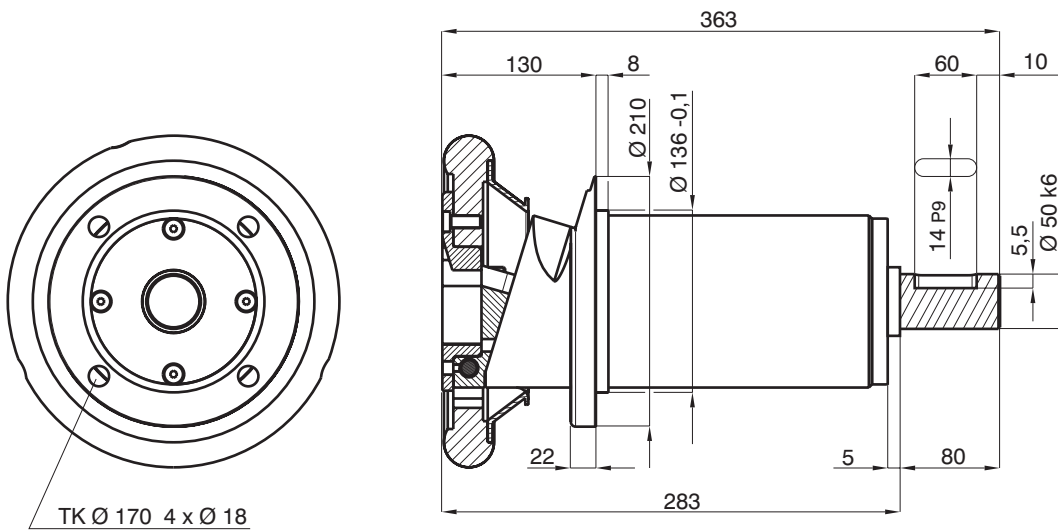
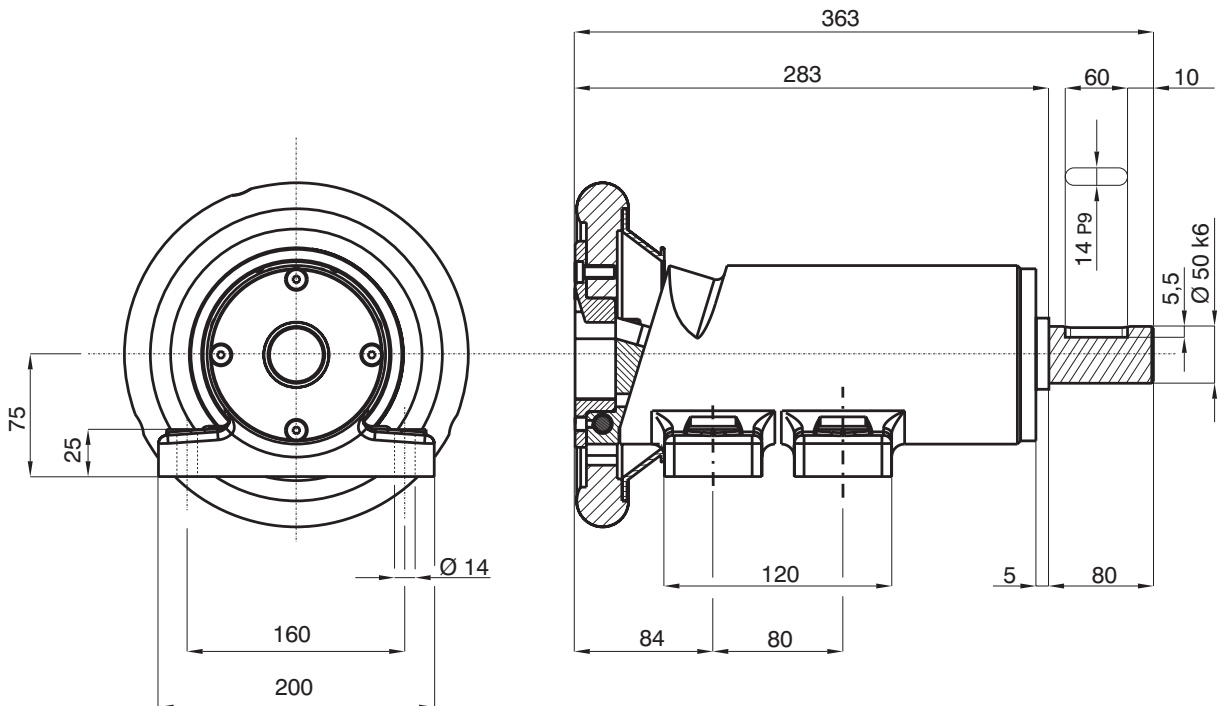
30 mm - 40 mm (1.1811" - 1.5748")

Torque:

300 Nm (220 ft/lb)

Standard dimension see chapter 2.30

Flange and foot mounted chuck Extended Chucks type 40 - 50



TK \varnothing 170 4 x \varnothing 18

TK = bolt hole circle

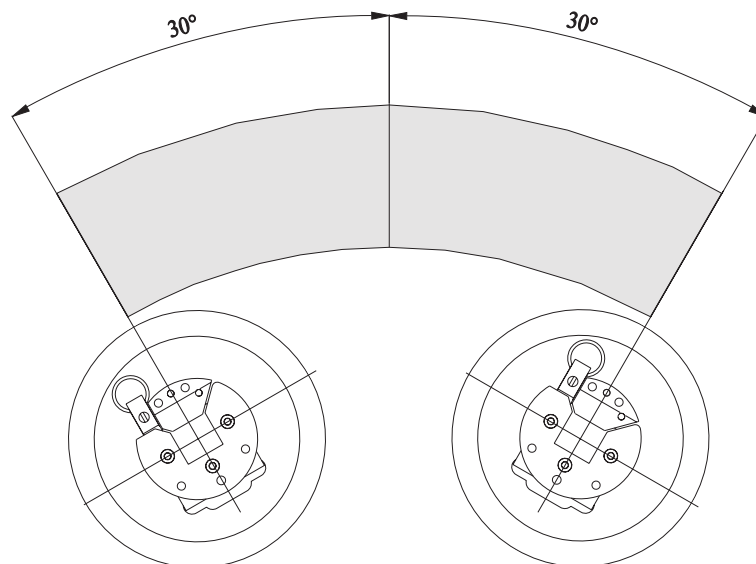
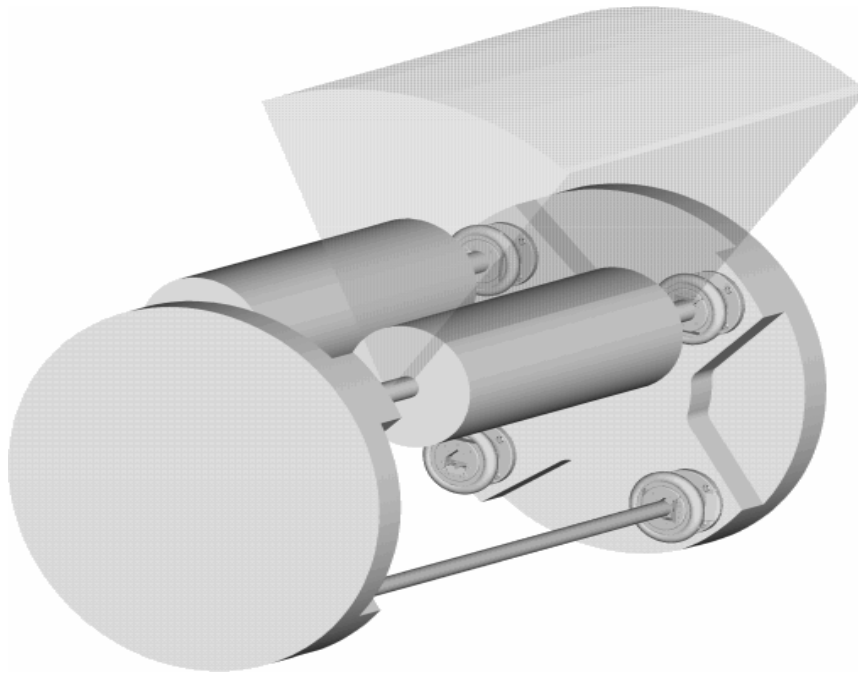
Beam weight max.: max. 3000 kg (max. 6610 lbs)
 Square bar: 40 mm - 50 mm (1.5748" - 1.9685)
 Torque: 1000 Nm (720 ft/lb)

Standard dimension see chapter 2.40

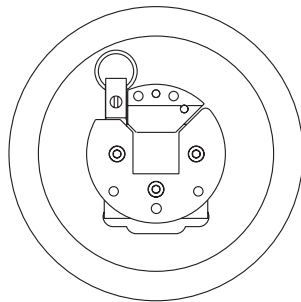
Extended opening angle



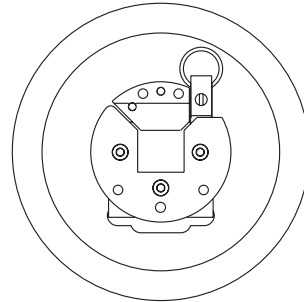
We provide chucks with extended opening angle especially for turret winders, because it allows easy exchange of the beam even when the chuck is not in exact vertical position for loading.



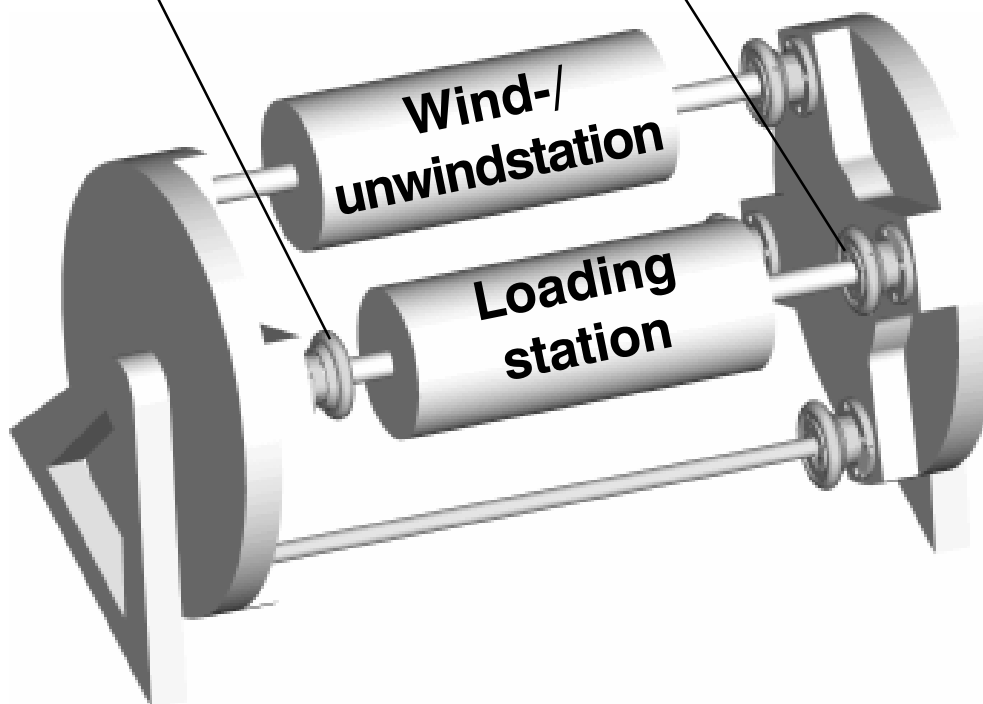
Optional opening angle to both sides up to max. 30°.



Handwheel lock type left

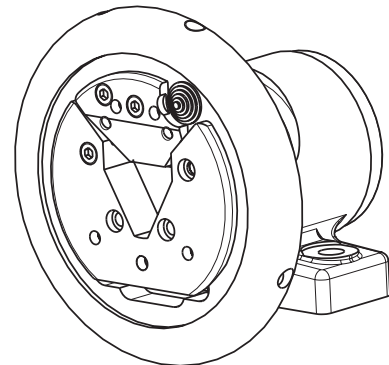
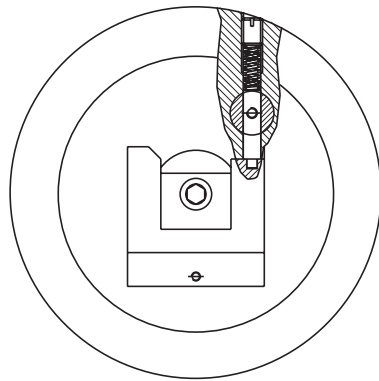
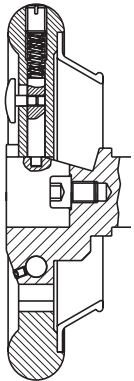


Handwheel lock type right

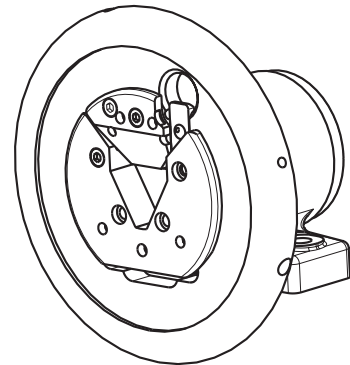
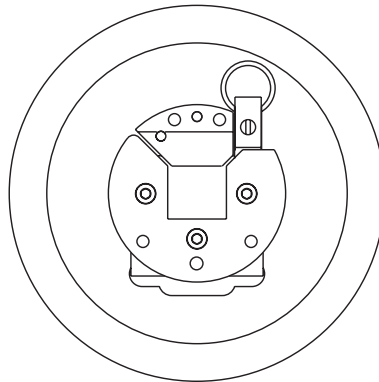
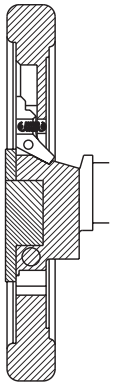


Normally the face cam on the housing prevents an opening of the handwheel. On a turret winder, the safety chucks are in normal position, when they are in the loading position. For wind or unwind the chucks are turned 180° and now work upside down. In that position, the security of the face cam apex is only partly in order. Therefore we recommend a handwheel lock.

Handwheel lock



Handwheel lock type I
only type 22-30

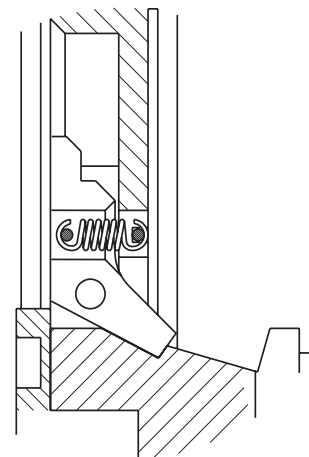


Handwheel lock type II

The handwheel lock type II is a very solid design.

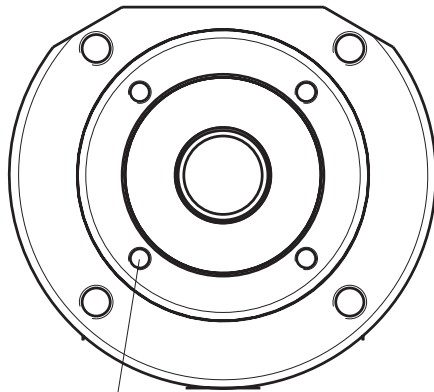
On using the handwheel lock type II on type 30-40 and 40-50 the handwheel-Ø will be 250 mm.

In case of order note: The position of the lock (left or right) is necessary.



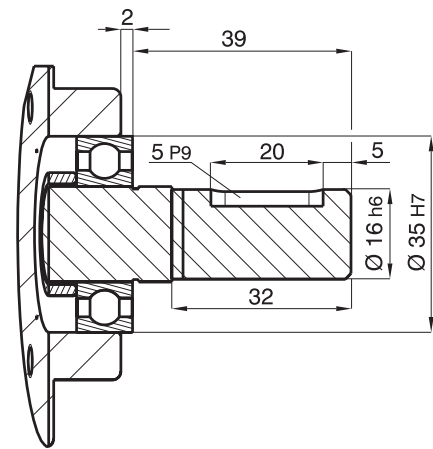
5.50 Shaft ends ESB Mini/19-25

shaft end Mini



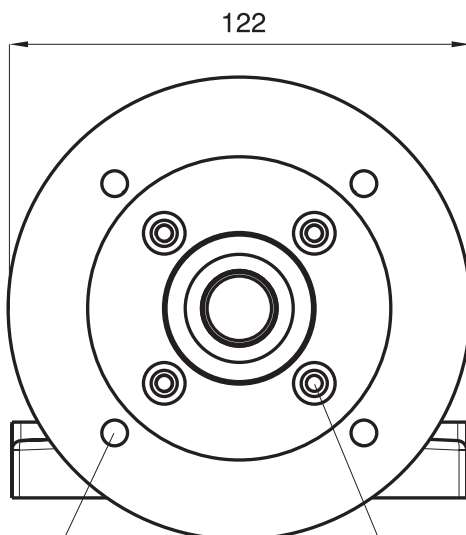
TK Ø 42 x 4 x M4

TK = bolt hole circle



On using brakes and clutches TK is Ø 42 x 4 x M5

shaft end 19-25

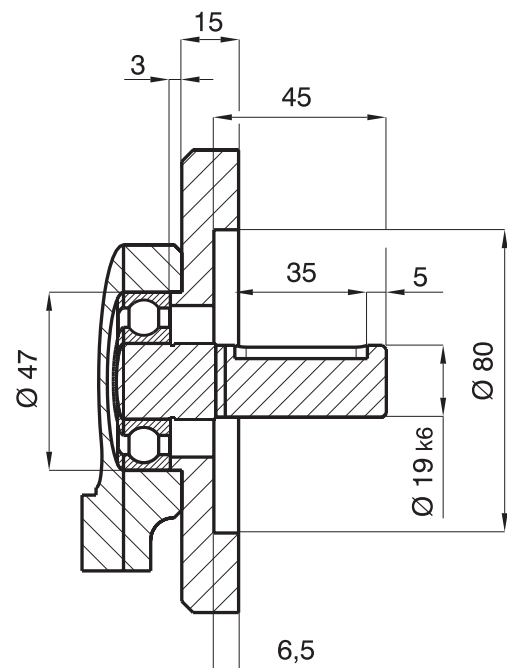


TK Ø 93 x 4 x M8

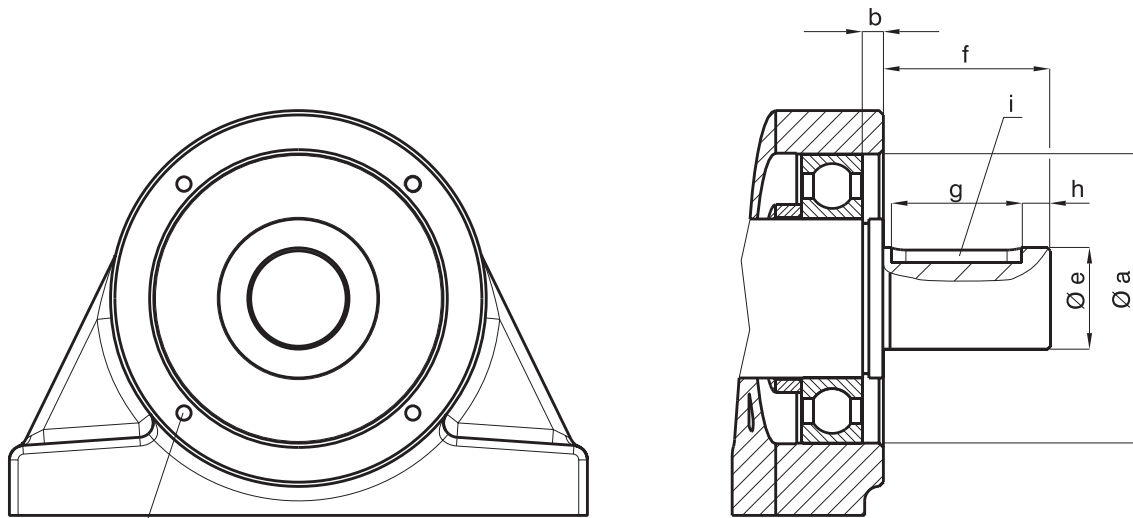
TK Ø 56

TK = bolt hole circle

housing: 4 x M6
adapter flange: 4 x Ø 6.6



shaft end ESB

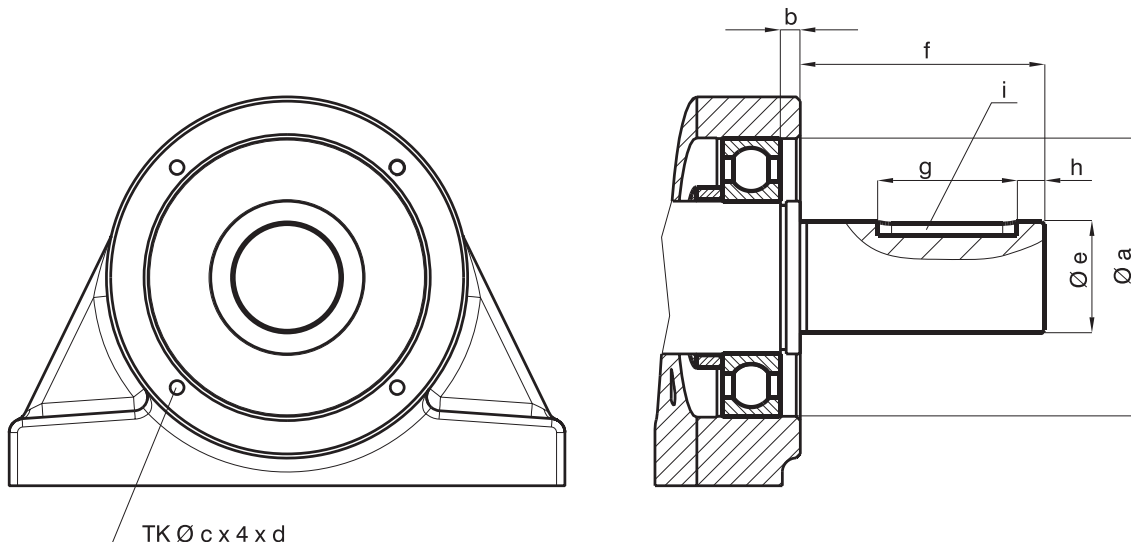


TK $\varnothing c \times 4 \times d$
TK = bolt hole circle

	$\varnothing a$	b	$\varnothing c$	d	$\varnothing e$ f7	f	g	h	i P9
22 - 30	62	2	73.5	M6	28	39.5	30	3	8
30 - 40	80	5	93	M6	35	40	32	4	10
40 - 50	100	7.5	112	M6	45	58	45	8	14

On using brakes and clutches d = M8

shaft end ESB i

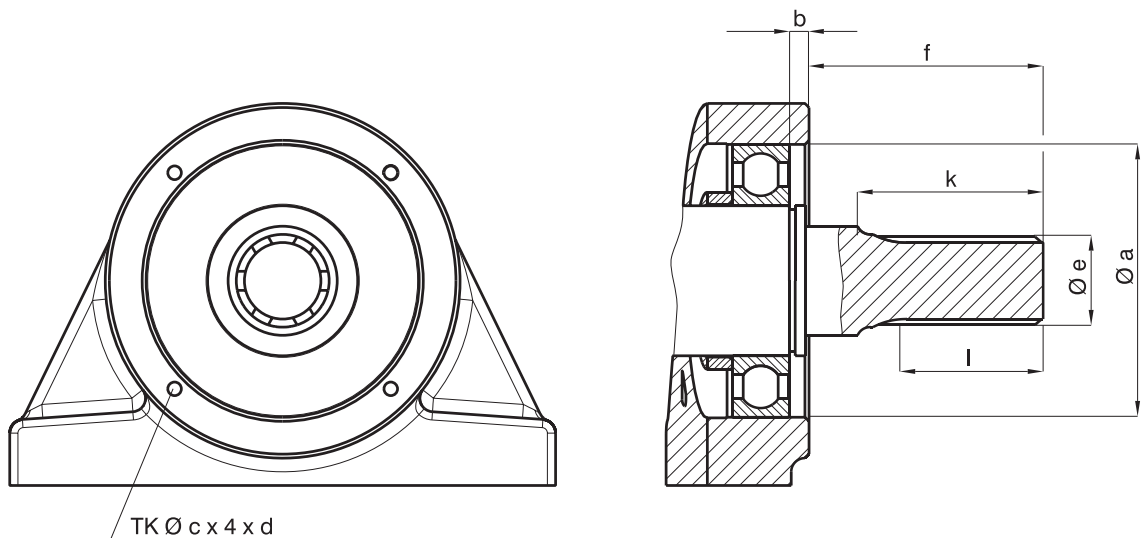


TK = bolt hole circle

	$\varnothing a$	b	$\varnothing c$	d	$\varnothing e$ f7	f	g	h	i P9
30 - 40	80	5	93	M6	40	84.5	50	5	12
40 - 50	100	7.5	112	M6	40	84.5	50	5	12

On using brakes and clutches d = M8

shaft end DSB



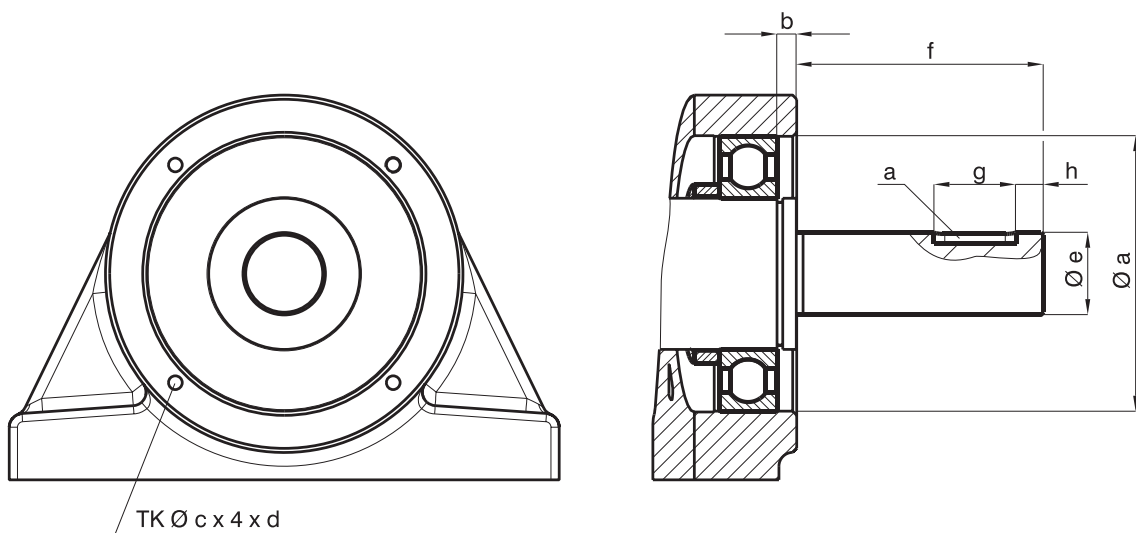
TK = bolt hole circle

	Ø a	b	Ø c	d	f	k	l
30 - 40	80	5	93	M6	89	68	50
40 - 50	100	7.5	112	M6	85.5	68	50
50 - 80	140	7.5	154	M6	87	68	50

Ø e = spline shaft 6 x 28 x 34 DIN 5463

On using brakes and clutches d = M8

shaft end RU

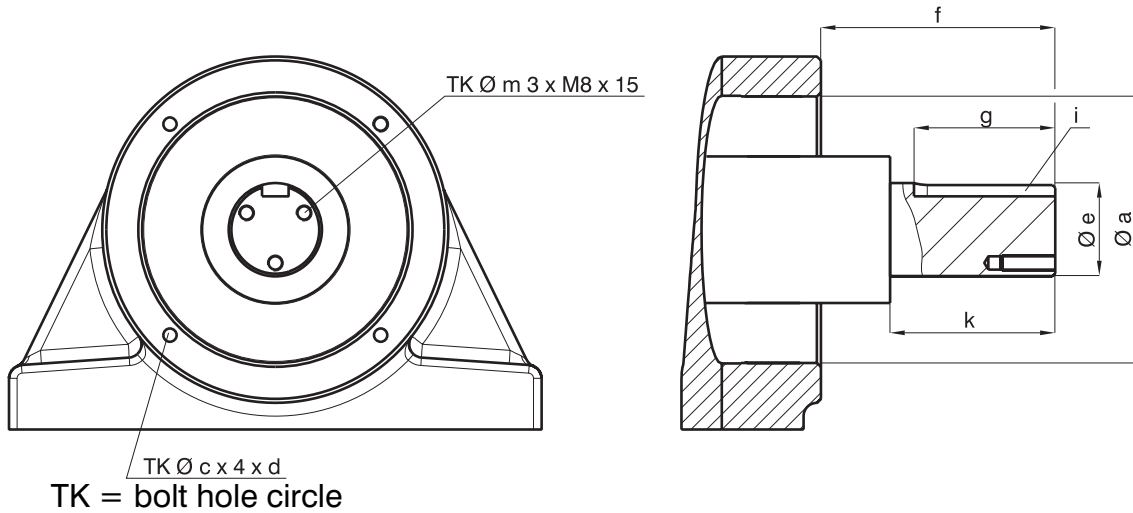


TK = bolt hole circle

	Ø a	b	Ø c	d	Ø e h7	f	g	h	i P9
22 - 30	62	2	73.5	M6	30	93.5	30	5	8
30 - 40	80	5	93	M6	30	90	30	5	8
40 - 50	100	7.5	112	M6	30	88	30	5	8

On using brakes and clutches d = M8

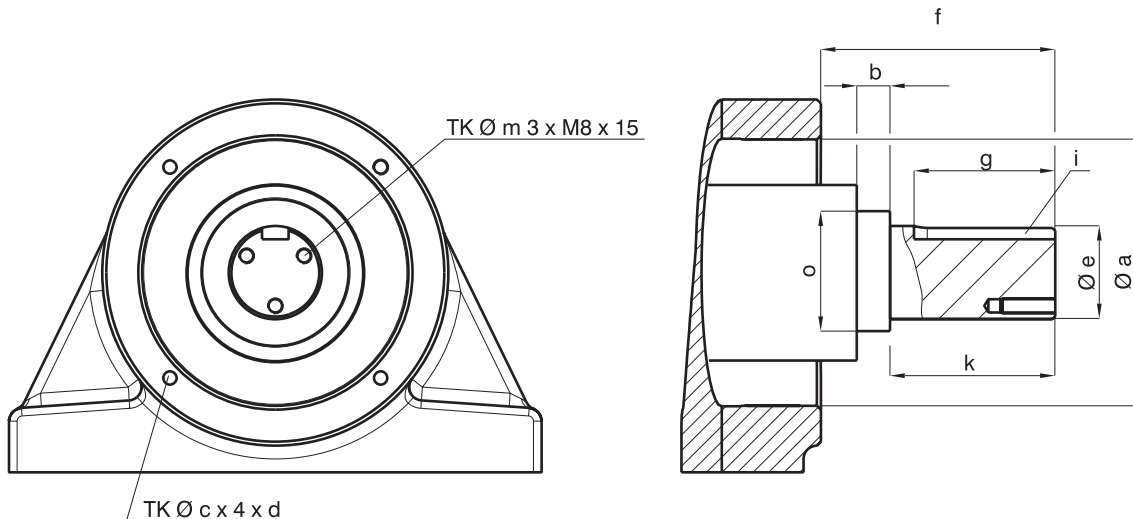
shaft end HRU 1,5 kW type 30-40



	Ø a	b	Ø c	d	Ø e j6	f	g	i P9	k	m
30 - 40	80	7.5	96	M6	35	98	52	10	62	25

On using brakes and clutches d = M8

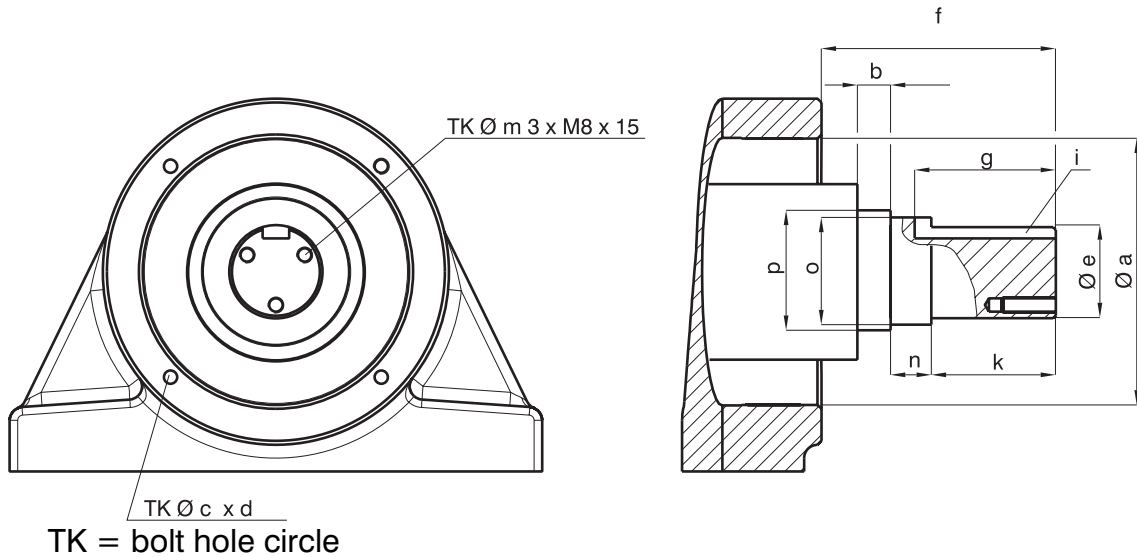
shaft end HRU 1,5 kW type 30-40



	Ø a	b	Ø c	d	Ø e j6	f	g	i P9	k	m	o
40 - 50	100	10	112	M6	35	98	52	10	62	25	40

On using brakes and clutches d = M8

shaft end HRU 3 kW type 40-50/50-80



	Ø a	b	Ø c	d	Ø e j6	f	g	i P9	k	m	n	o	p
40 - 50	100	6	112	4 x M6	42	102.7	56	12	50	30	18.7	45j6	50
50 - 80	140	21.5	154	6 x M8	50	149	64	14	56	34	44	55k6	60

On using brakes and clutches d = M8

5.60 Trouble shooting



Error description	Possible faults
It is difficult to open and close the hand wheel	<ul style="list-style-type: none"> - The journal was not made to specification as shown on catalogue page 2.10 - The journal tolerance is incorrect - There is no chamfer on the ends of the roll shaft - The Safety Chucks are not in alignment - The roll shaft is deflecting and bending up in the seat of the Safety Chuck. The seats of the Safety chucks have been rounded by wear and the roll shaft journals are cocked in the seats causing binding.
Unloaded roll shaft is difficult to rotate when in the Safety Chucks	<ul style="list-style-type: none"> - The journal tolerance is incorrect - The safety Chucks are not in alignment - The roll shaft journals are out of alignment with each other
The roll shaft is difficult to install or remove from the Safety Chucks. The roll shaft is stuck in the seat of the Safety Chucks	<ul style="list-style-type: none"> - The journal tolerance is incorrect - The safety Chucks are not in alignment - Not enough tolerance between the overall length of the roll shaft and the distance between the Safety Chuck - The seats of the Safety Chucks have been rounded by wear and the roll shaft journals are cocked in the seats causing binding
The journal is worn. The seat of the Safety Chuck is worn.	<ul style="list-style-type: none"> - Excessive weight and/or excessive torque - Limitations to VT2 insert not complied with - Overload of the chuck - The hardness of the journal and the hardness of the seat of the Safety Chuck are not compatible - The safety Chucks are not in alignment
Noisy operation	<ul style="list-style-type: none"> - The mounting surfaces for the Safety Chucks are not level or are misaligned - The roll shaft journal is falling inside the seat of the Safety Chuck - There is tramp material caught between the hand wheel and the housing

Error description	Possible faults
<p>Empty Safety Chucks are difficult to rotate by hand</p>	<ul style="list-style-type: none"> - The ball bearings are worn out - A drive or brake is engaged on Safety Chucks - The hinge pin is bent inside the hand wheel (see page 5.05 item 5.3)
<p>The handwheel opens during operation. There is black powder around the housing. There is a groove in the back side of the handwheel. The bottom of housing, at the front side, has been worn away</p> <p>Warning: This is a dangerous situation</p>	<ul style="list-style-type: none"> - The spring and ball in the detent system is damaged or destroyed - Too much tolerance between the overall length of the roll shaft and the distance between the Safety Chucks - Worn roll shaft journals. The load bearing foot print of the roll is no longer seated in the bottom of the seat. It is hanging at the front of the seat where the seat meets the face of the Safety Chuck. It tries to open the Safety Chuck. - Deflecting roll shaft journal. It has the same effect on the Safety Chuck as the worn roll shaft journal.