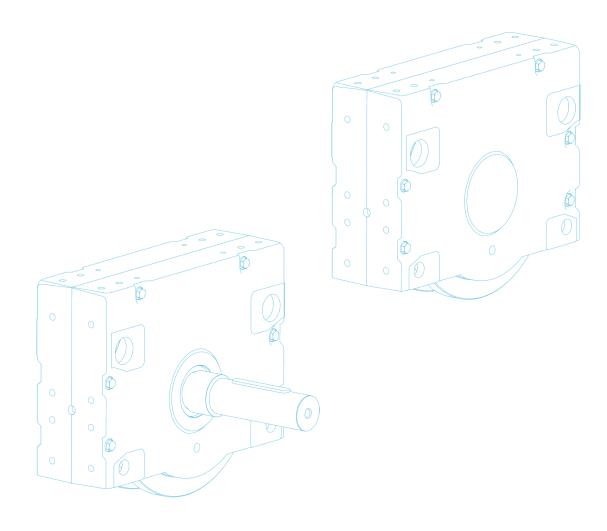




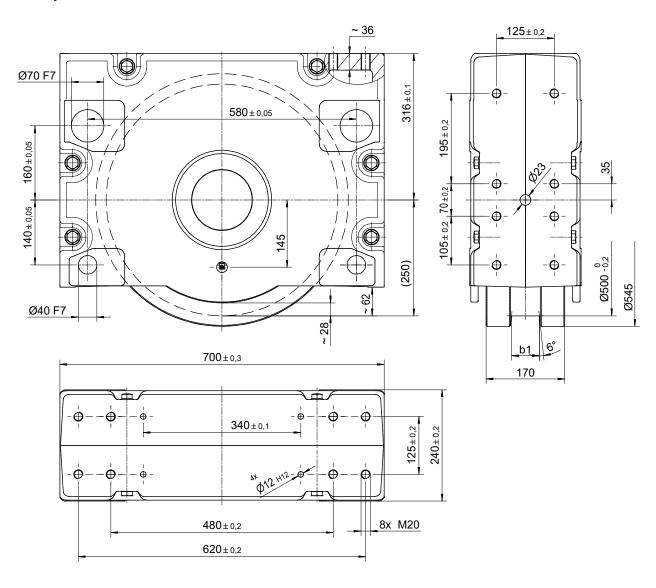
# WHEEL BLOCK SYSTEM

# **RB 500**





#### **Primary dimensions**



Weigth: ca. 310 kg max. wheel load: 40 000 kg

#### **Ordering examples**

#### **RBA 500×90**

wheel block 500, driven, with internal taper, with two-sided wheel flange, design Form 1, running tread 90 mm

#### **RBN 500×90**

Wheel block 500, non- driven, without internal taper, with two-sided wheel flange, design Form 1, running tread 90 mm  $\,$ 

#### **RBA 500×130**

Wheel block 500, driven, with internal taper, with one-sided wheel flange design Form 2, running tread 130 mm  $\,$ 

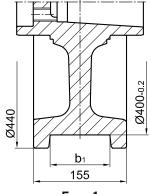
#### RBA 500×170

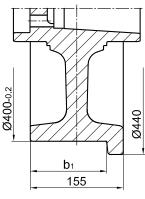
Design RBA and RBN refer to Page 5

Wheel block 500, driven, with internal taper, without wheel flanges, design Form  $4\,$ 

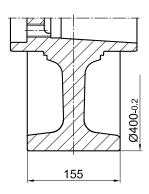


#### Standard models





D1 155 21)

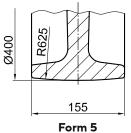


Form 1 two-sided wheel flange

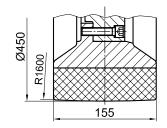
Form 2<sup>1)</sup>
one-sided wheel flange
on the drive side

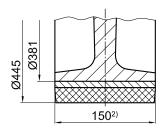
Form 3<sup>1)</sup>
one-sided wheel flange
opposite to the drive side

Form 4
no wheel flanges with
cylindrical runnning surface

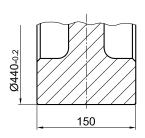


no wheel flanges with spherical running surface

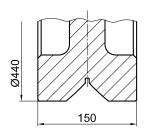




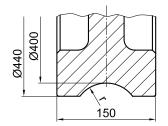
## Special models



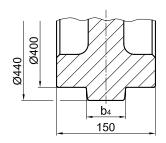
Form 9 no wheel flanges, wide with cylindrical running surface



Form 10 with prismatic guide



Form 11
with concave groove
r=1.1× track radius
(recommended)



Form 12 with middle wheel flange

Form 1 Running tread b1 for two-sided wheel flange			Form 2 und 3 Running tread b1 for one-sided wheel flange		
minimal	l maximal Standard		minimal	maximal	
60	130	90	115	150	

<sup>1)</sup> Forms 2 and 3 are identical for the non-driven Wheel block RBN



Connection options

## **Top connection KA 500.1**

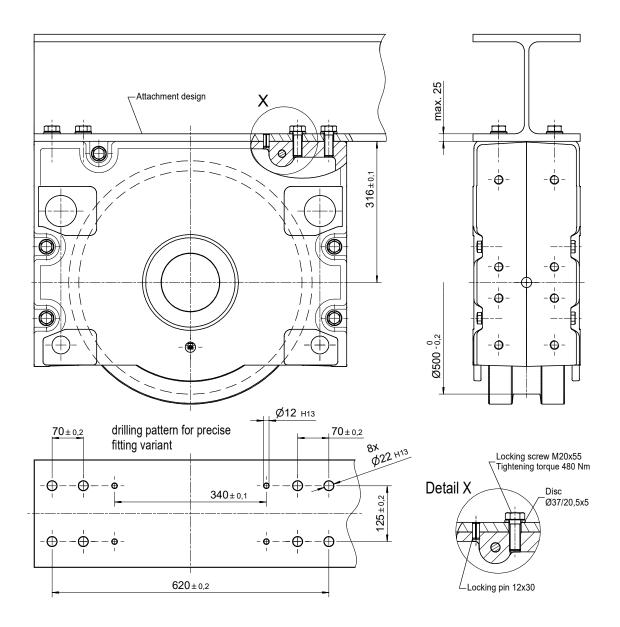
Precisely fitted direct attachment as bolted connection (welded construction, roll section, etc. Top connection using locking screws for installation in accurately drilled connecting constructions. No adjustment of the wheel block is required.

#### 1 Set KA 500.1 comprising of:

- 8 Hexagon screw with thread locking M20×55 –10.9 DIN EN ISO 4017 (DIN 933)
- 8 Discs Ø37 / 20.5×5
- 4 Locking pins 12×30 DIN EN ISO 8752 (DIN 1481)

Mounting parts for larger sheet thicknesses and/or adjustable direct connection are available on request.

For the directional version refer to the pattern of drilling KA 500.2 (Page 148).





Connection options

### **Top connection KA 500.2**

Adjustable direkt attachment as bolted connection (welded construction, roll section, etc.)

Top connection using locking pins for installation in attachment design with precisely or larger drilled attachment holes.

For larger drilled attachment holes, the wheel block must be aligned. Subsequently, the wheel block is attached by bolts and should be drilled with the locking pins 12×30 supplied. However, this should not be done in the area of the attachment bolts or the existing adjusting pin hole [1)]. Alignment is not required for precisly drilled attachment holes.

#### 1 Set KA 500.2 comprising of:

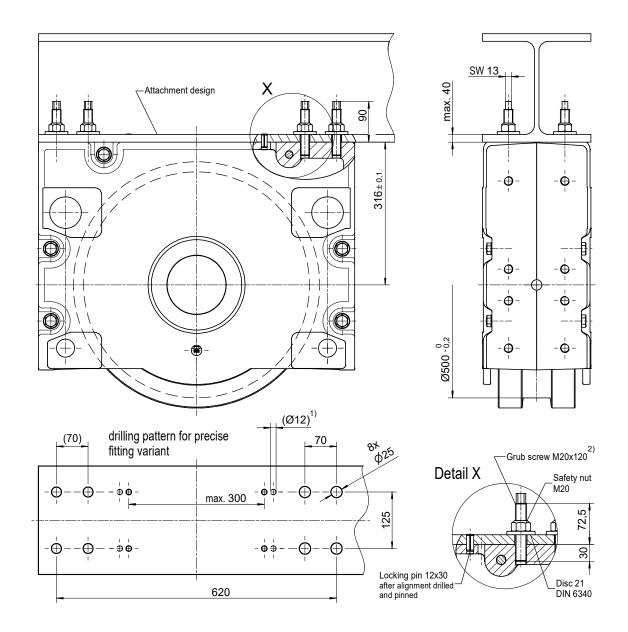
8 Grub screws M20×120 - 10.9 ZT

8 Safety nuts M20-10 DIN EN ISO 7042 (DIN 980)

8 Discs 21 DIN 6340

4 Locking pins 12×30 DIN EN ISO 8752 (DIN 1481)

#### Longer locking pins are available for thicker plates.



- 1) Pinning is not permitted in this area!
- 2) Can be factory-glued in the wheel block housing on request



Connection options

#### Pin attachment BA 500.2

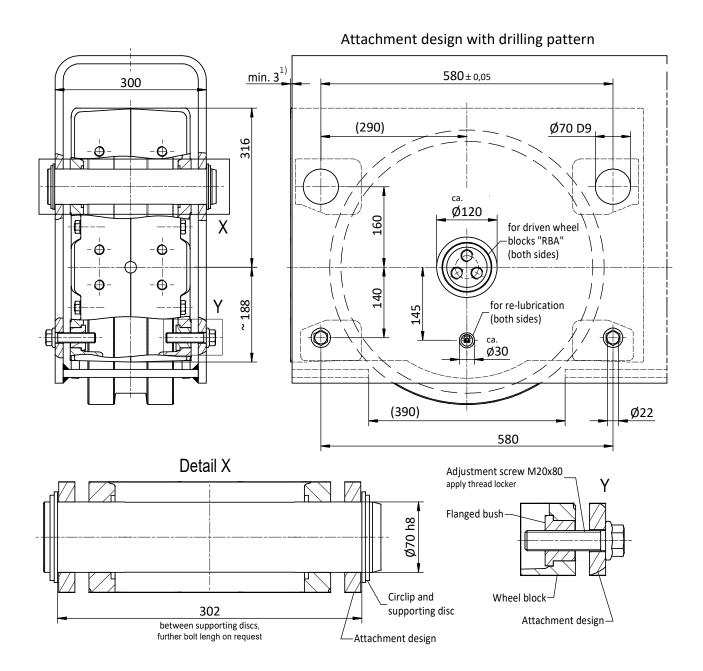
Adjustable pin attachment for installation in hollow profiles, floating levers, etc.

Pin connection with alignment possibility by adjustable grub screws. The alignment is done in assembled and relieved mode.

#### 1 Set BA 500.2 comprising of:

- 2 Bolts Ø70
- 4 Circlipse 70×4, DIN 471
- 4 Supporting discs S 70×90 DIN 988
- 4 Flange bushings with internal thread (bonded)
- 4 Locking screws M20×80 (to be fixed with screw locking adhesive) screw locking adhesive is not included in the scope of delivery

Pin connections are available in special design according to the customer drawing.



<sup>1)</sup> Dimension must be observed only with front mounting parts

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Connection options

#### Pin attachment BA 500.3

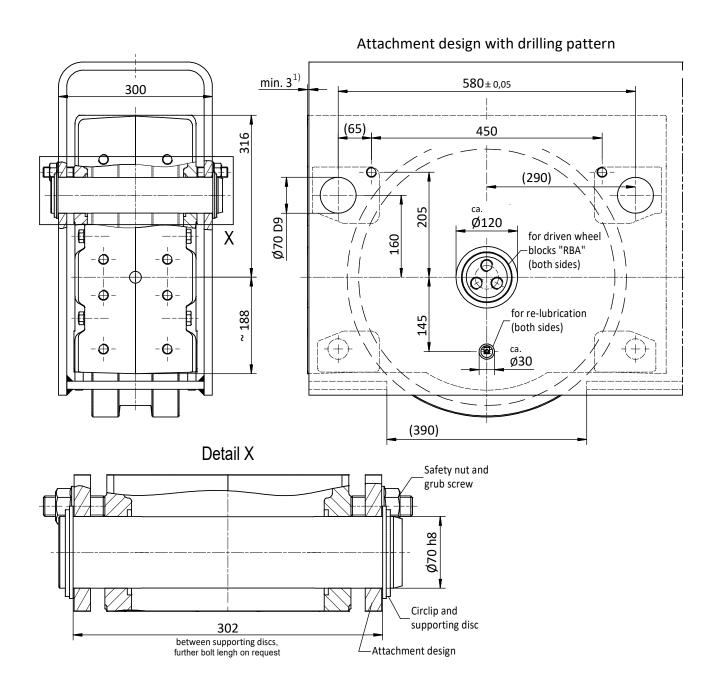
Adjustable pin attachment for installation in hollow profiles, floating levers, etc.

Pin connection with alignment possibility by adjustable grub screws. The alignment is done in assembled and relieved mode.

#### 1 Set BA 500.3 comprising of:

- 2 Bolts Ø70
- 4 Circlipse 70×4, DIN 471
- 4 Supporting discs S 70×90 DIN 988
- 4 Threaded pins M 20 x 60 DIN 913
- 4 Safety nuts M20

Pin connections are available in special design according to the customer





Connection options

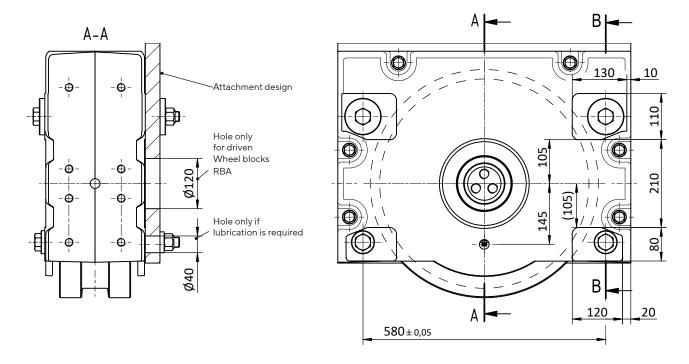
#### **Side connection WA 500**

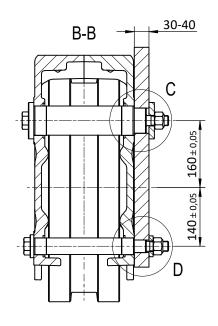
# 1 Set WA 500 comprising of:

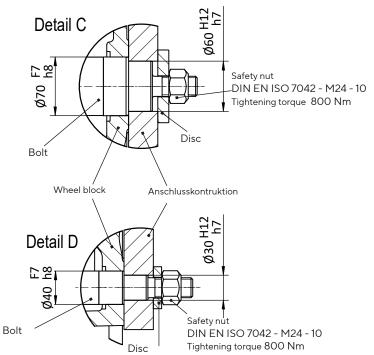
Lateral connection option for low construction designs

2 Bolts Ø70/60 2 Discs Ø25/87 2 Bolts Ø40/30 2 Discs Ø25 DIN 7349

4 Safety nuts M 24 DIN EN ISO 7042





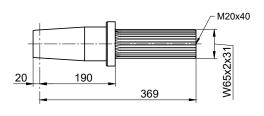


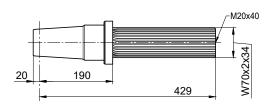


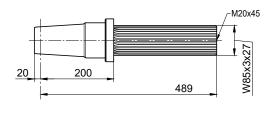
Drive shafts suitable for slip-on gear mechanisms from other manufacturers on request.

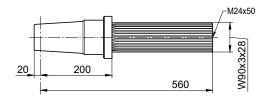
# Single drive unit

Drive shaft suitable for slip-on gear mechanism with splined-shaft profile in accordance with DIN 5480









Slip-on gear mechanism						
Model	Manu- facturer	Splined-shaft pro- file in acc. with DIN 5480				

FV 87 / KV 87	SEW	
SPZT / SKZT 56	PREMIUM STEPHAN	W65 x 2 x 31
F.A.T / KAT 109	SIEMENS	

FV 97 / KV 97	SEW	
SK 6282 EA	NORD	W/70 0 24
SPZT / SKZT 66	PREMIUM STEPHAN	W70 x 2 x 34
F.A.T / KAT 129	SIEMENS	

FV 107 / KV 107	SEW	
SK 7282 EA	NORD	MOS 2 07
SPZT / SKZT 76	PREMIUM STEPHAN	W85 x 3 x 27
F.A.T / KAT 149	SIEMENS	

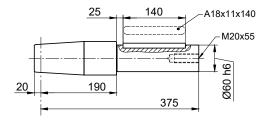
F.A.T / KAT 169	SIEMENS	W90 x 3 x 28

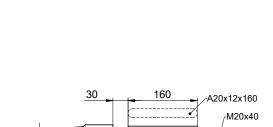


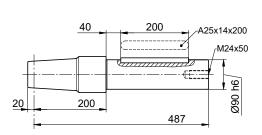
Drive shafts suitable for slip-on gear mechanisms from other manufacturers on request.

# Single drive unit

Drive shaft suitable for slip-on gear mechanism with feather key connection in accordance with DIN 6885







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Slip-on gear mechanism							
Model	Manu- facturer	Shaft end					

FA/KA/SA87	SEW	
SK 5282 AB	NORD	
FDA 109 (FDA 108) FZA 109 (FZA 108) KA 109 (KA 108)	SIEMENS (FLENDER)	avo.
GFL/GKS 09	LENZE	Ø60
К7	STÖBER	
SPZH 56 SKZH 56	PREMIUM STEPHAN	

FA/KA/SA97	SEW	
SK 6282 AB	NORD	Q70
FDA 129 (FDA 128) FZA 129 (FZA 128) KA 129 (KA 128)	SIEMENS (FLENDER)	Ø70
SPZH 66 SKZH 66	PREMIUM STEPHAN	

FA / KA 107	SEW	
FDA 149 (FDA 148) FZA 149 (FZA 148) KA 149 (KA 148)	SIEMENS (FLENDER)	Ø90
SPZH 77 SKZH 77	PREMIUM STEPHAN	

Ø70 h6

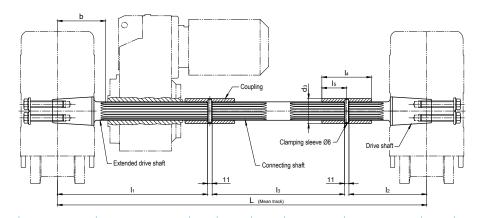
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Drive shafts suitable for slip-on gear mechanisms from other manufacturers on request.

#### **Central drive unit**

Both wheel blocks are driven with only one gear motor (Splined-shaft profile, feather key connection and shrink disc attachment)



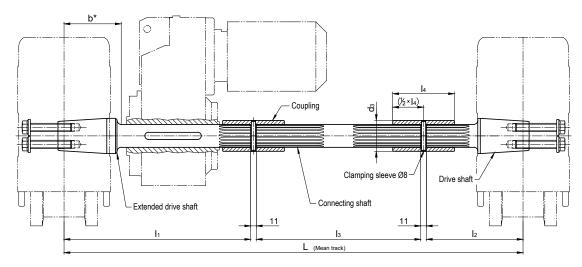
Model	Manufac- turer	Splined-shaft- profile DIN 5480	L	l1	12	13	Centre RB to gearing b	14	15	d3	Clamping sleeve DIN 1481															
AF 10 AUK 60	DEMAG																									
FV 87 KV 87	SEW																									
SK 9042.1AZEA	NORD	W65 x 2 x 31		510	218	Dimensi- on L	185	125	62.5	80	8 x 80															
SPZT 56 SKZT 56	PREMIUM STEPHAN					minus 750																				
F.AT 109 KAT 109	SIEMENS																									
FV 97 KV 97	SEW	W70 x 2 x 34																								
SK 6282EA SK 9052.1AZEA	NORD																ovide			Dimonsi						
F.A.T 108B KA.T 108	SIEMENS (FLENDER)		lease pi	580	218	Dimensi- on L minus	185	135	67.5	90	8 x 90															
SPZT 66 SKZT 66	PREMIUM STEPHAN		For ordering, please provide			820																				
F.AT 129 KAT 129	SIEMENS		For ord																							
FV 107 KV 107	SEW																									
SK 7282 EA SK 9072.1AZEA	NORD					D: .																				
F.AT 108B KA.T 108	SIEMENS	W85 x 3 x 27		650	228	Dimensi- on L minus	195	160	80	110	8 x 110															
SPZT 77 SKZT 77	PRMIUM STEPHAN																					900				
F.AT 149 KAT149	SIEMENS																									
F.AT 169 KAT 169	SIEMENS	W90 x 3 x 28		710	238	L minus 970	200	170	85	115	8 x 115															



Drive shafts suitable for slip-on gear mechanisms from other manufacturers on request.

#### Central drive unit

Both wheel blocks are driven with only one gear motor (Splined-shaft profile, feather key connection and shrink disc attachment)



For gearboxes with hollow shaft and feather key connection in acc. with DIN 6885

Suitable for gearboxes with hollow shaft		L	l1	12	13	<b>b*</b> without gearbox stop	Feather key DIN 6885	<b>Coupling</b> Internal gearing/ d3 x 14
Inner-Ø	Length					·		
Ø60	≤ 280 <sup>1)</sup> ≤ 250 <sup>2)</sup>	ovide	500	213	Dimension L minus 735	160	A 18 x 11 x 140	N60 x 2 x 28 Ø75 x 125
Ø70	≤ 350 <sup>1)</sup> ≤ 320 <sup>2)</sup>	please provide	600	218	Dimension L minus 840	160	A 20 x 12 x 180	N70 x 2 x 34 Ø90 x 135
Ø80	≤ 380 ¹) ≤ 350 ²)	For ordering, p	625	228	Dimension L minus 875	160	A 22 x 14 x 180	N75 x 3 x 24 Ø95 x 145
Ø90	≤ 410 ¹) ≤ 380 ²)	Foro	650	238	Dimension L minus 910	170	A 25x 14 x 200	N90 x 3 x 28 Ø115 x 170

<sup>\*</sup> Drive shafts without gearbox stop!

Dimension b = Smallest possible distance from the centre of the wheel block to the hollow drive shaft

- 1) at smallest possible distance of the gearbox (b)
- 2) at distance of the gearbox = 190 mm

Drive shafts with gearbox stop on request.

#### Suitable for gearboxes of the following manufacturers:

Siemens Motox (Flender), Bauer (Danfoss), KEB, Lenze, Nord, PREMIUM STEPHAN, SEW, Siemens, Stöber, Demag

<u>Et.al.</u> suitable type designations, refer to the single drive unit.

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