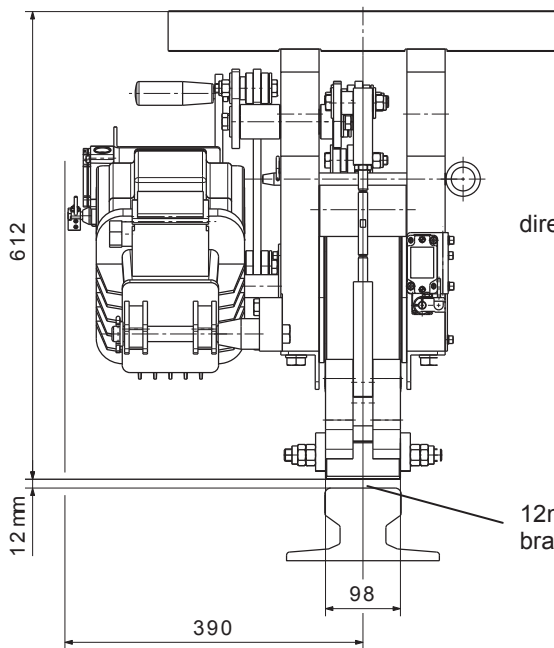




Sure to be safe

Storm Brakes



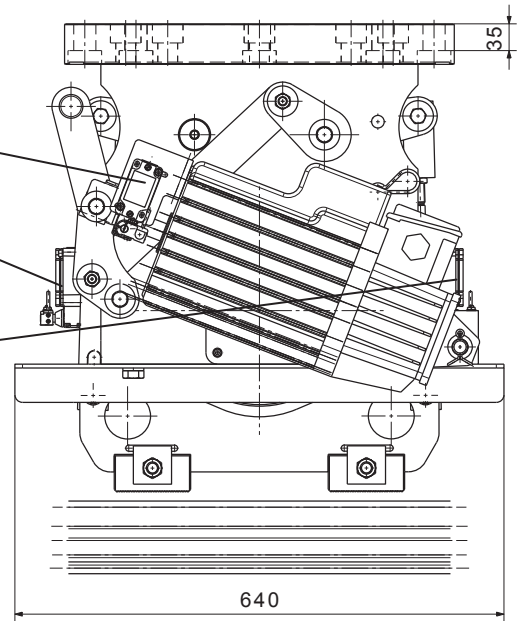


limit switch
„released“

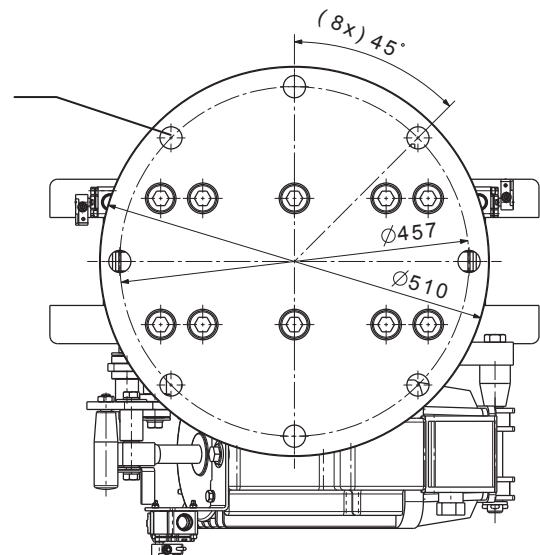
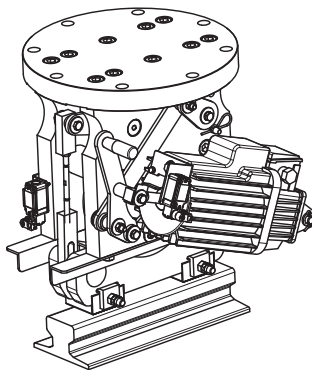
directional limit switch
„right“

directional limit switch
„left“

12mm nominal distance
brake „released“



8 bores Ø29 for
cylinder-head screws
DIN912-M27x80-10.9
MA= 1250Nm, μ 0,14

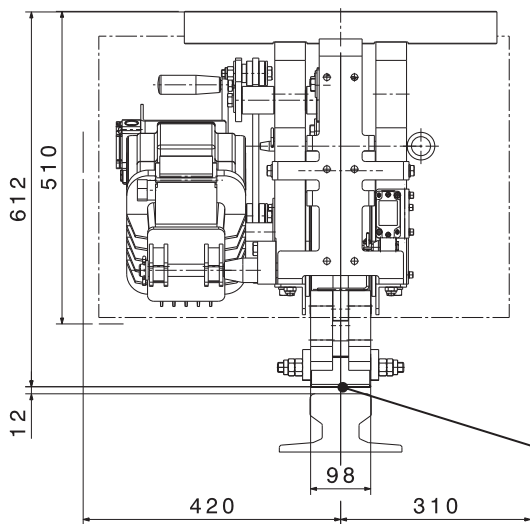


Technical Data:

- Bi-directionally acting, static storm brake for gantry travel.
- **Max. holding force $F_H = 225 \text{ KN}$.** It is generated by a wedge clamped between clamp wheel and crane rail.
- Released by Eldro thruster.
- Thruster with lowering valve and c-spring.
- With manual release lockable in released position.
- Field replaceable brake shoes.
- Brake shoes hardened and on the area of support it is carried out with sprockets.
- Limit switch for brake „released“.
- Limit switch for directional indication.
- Weight approx. 400kg.

Information:

- The crane can travel between 50mm and 100mm before the rail brake is engaged.
- Nominal gap between rail and released brake shoe is 12mm.
- Max. permissible deviation of rail height is +/- 6mm.
- The rail brake is designed for installation under gantry travel cross-beam.

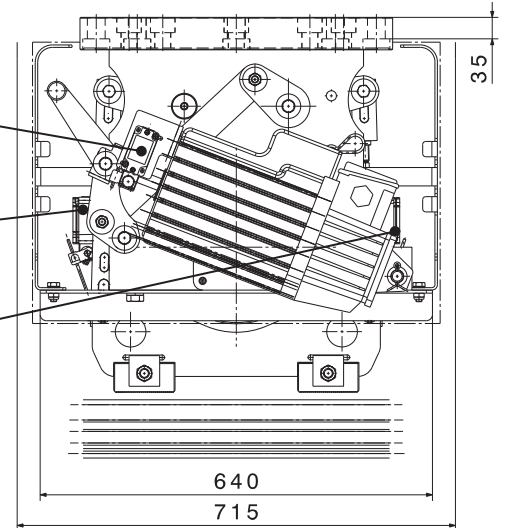


limit switch:
„released“

directional limit switch
„right“

directional limit switch
„left“

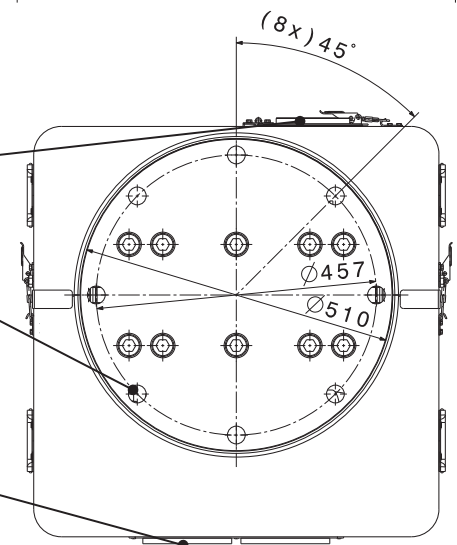
12 mm nominal distance
brake „released“



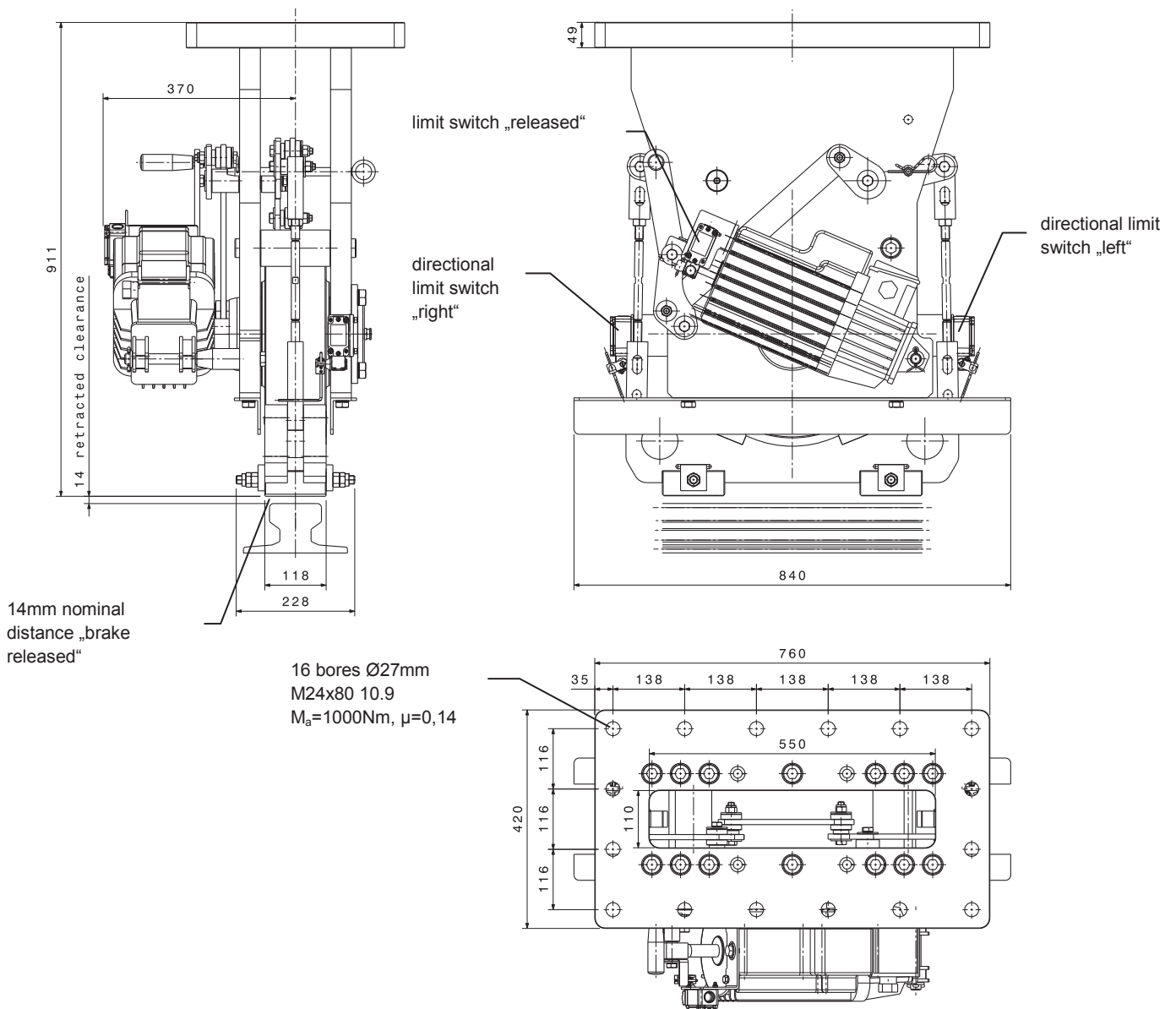
inspection window

8 bores $\varnothing 29$ for
cylinder-head screws
DIN912-M27-10.9
 $M_A = 1250 \text{ Nm}$, $\mu = 0,14$

ventilation



Technical Data:	Information:
Bi-directionally acting, static storm brake for gantry travel	The crane can travel between 50 mm and 100 mm before the rail brake is engaged
Max. holding force $F_H = 225 \text{ kN}$, it is generated by a wedge clamped between clamp wheel and crane rail	Nominal gap between rail and released brake show is 12 mm
Released with Eldro thruster	Max. permissible deviation of rail height is +/- 6 mm
Thruster with lowering valve and c-spring	The rail brake is designed for installation under gantry travel cross-beam
With manual release loackable in released position	
Field replaceable brake shoes	
Brake shoes hardened and on the are of support it is carried out with sprockets	
Limit switch for brake "released"	
Limit switch for directional indication	
Option A: steel version powdered (80 μm), fittings, inspection window, ventilation of stainless steel; weight approx. 395 kg	
Option B: stainless steel version powdered (80 μm), fittings, inspection window, ventilation of stainless steel; weight approx. 395 kg	

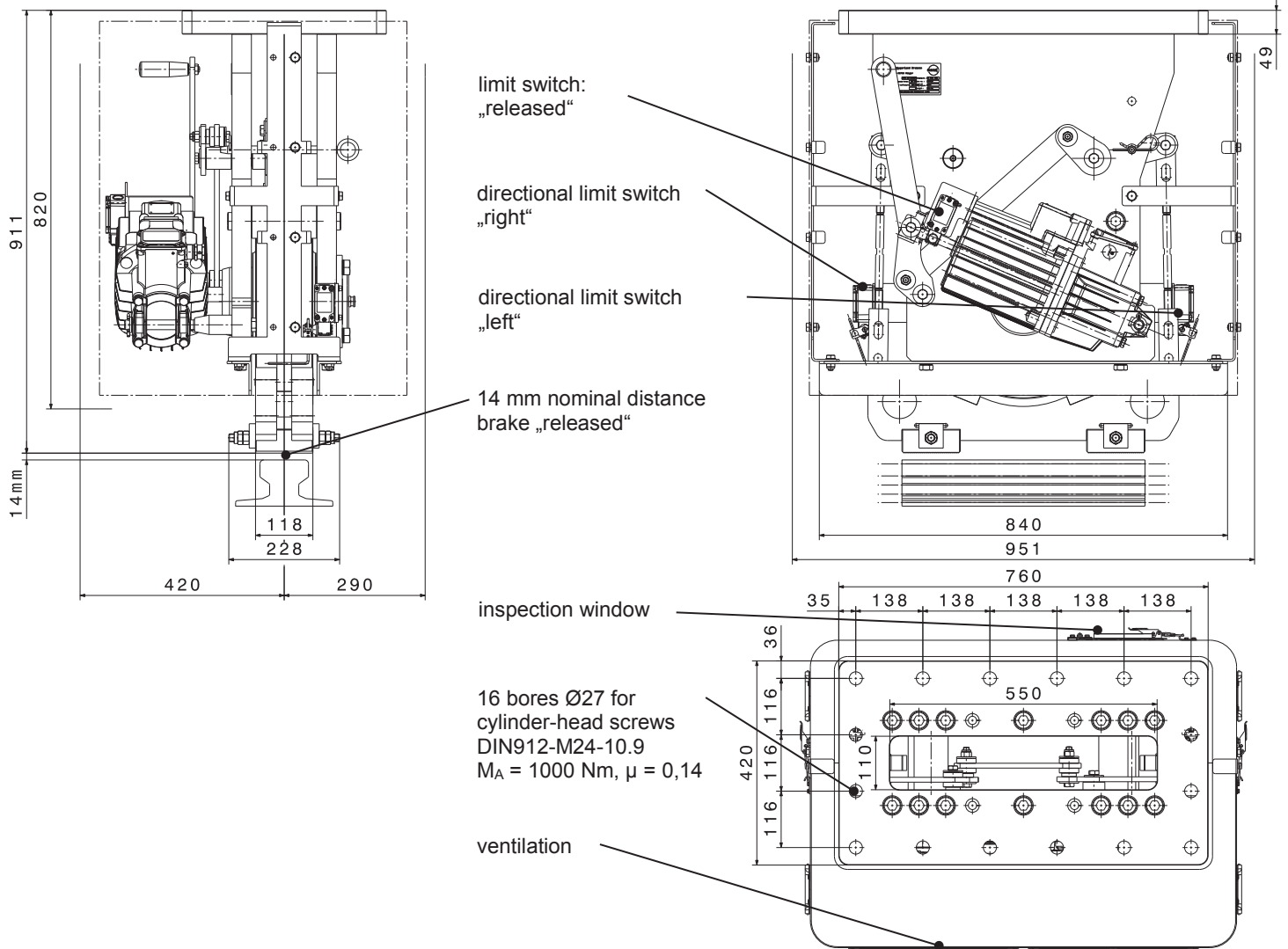


Technical Data:

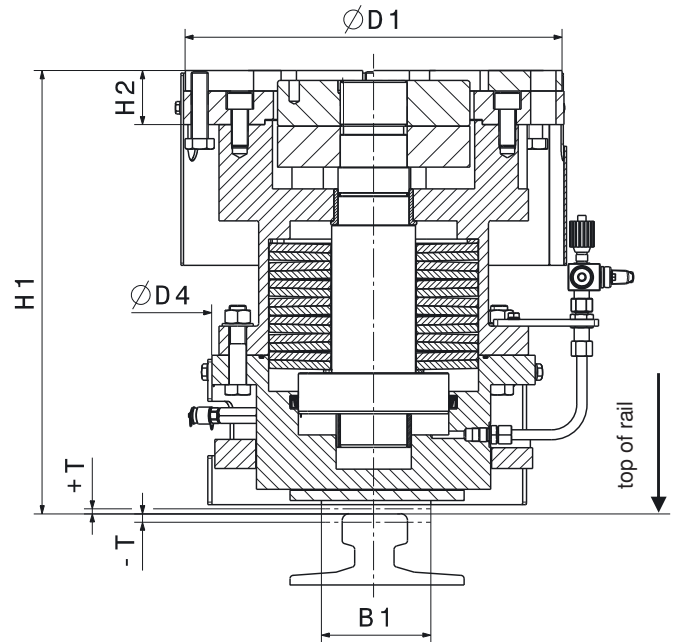
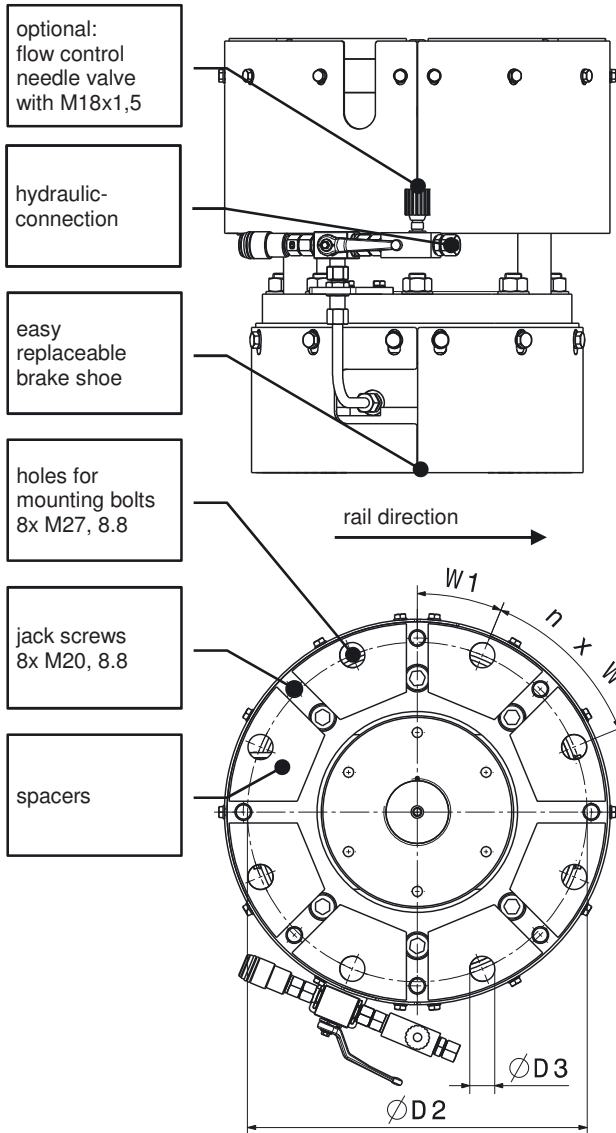
- Bi-directionally acting, static storm brake for gantry travel.
- **Max. holding force $F_H = 350 \text{ KN}$.** It is generated by a wedge clamped between clamp wheel and crane rail.
- Released by Eldro thruster.
- Thruster with lowering valve and c-spring.
- With manual release lockable in released position.
- Field replaceable brake shoes.
- Brake shoes hardened and on the area of support it is carried out with sprockets.
- Limit switch for brake „released“.
- Limit switch for directional indication.
- Weight approx. 600kg.

Information:

- The crane can travel between 50mm and 90mm before the rail brake is engaged.
- Nominal gap between rail and released brake shoe is 14mm.
- Max. permissible deviation of rail height is +/- 8mm.
- The rail brake is designed for installation under gantry travel cross-beam.



Technical Data:	Information:
Bi-directionally acting, static storm brake for gantry travel	The crane can travel between 50 mm and 90 mm before the rail brake is engaged
Max. holding force $F_H = 350 \text{ kN}$, it is generated by a wedge clamped between clamp wheel and crane rail	Nominal gap between rail and released brake show is 14 mm
Released with Eldro thruster	Max. permissible deviation of rail height is +/- 8 mm
Thruster with lowering valve and c-spring	The rail brake is designed for installation under gantry travel cross-beam
With manual release loackable in released position	
Field replaceable brake shoes	
Brake shoes hardened and on the area of support it is carried out with sprockets	
Limit switch for brake "released"	
Limit switch for directional indication	
Option A: steel version powdered (80µm), fittings, inspection window, ventilation of stainless steel; weight approx. 643 kg	
Option B: stainless steel version powdered (80 µm), fittings, inspection window, ventilation of stainless steel; weight approx. 643 kg	



Hydraulic Data

medium: HLP-hydraulic oil DIN 51524-T2
HLP Synth 32 standard

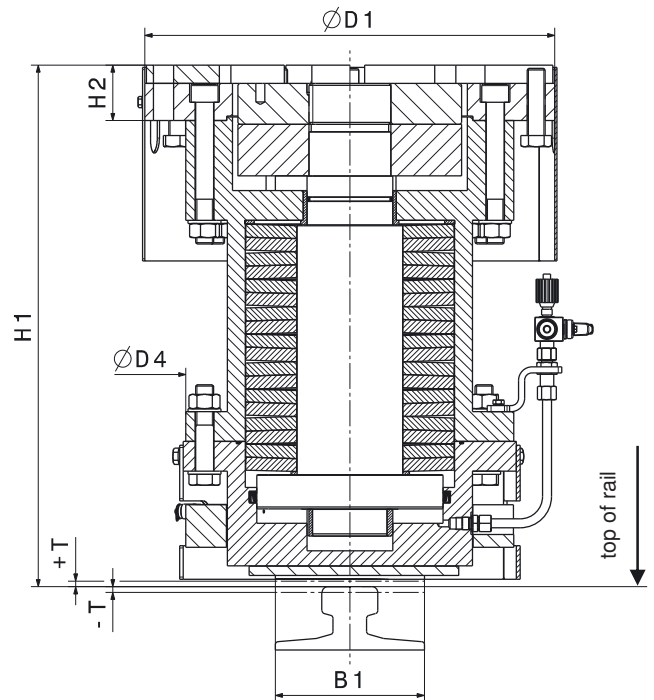
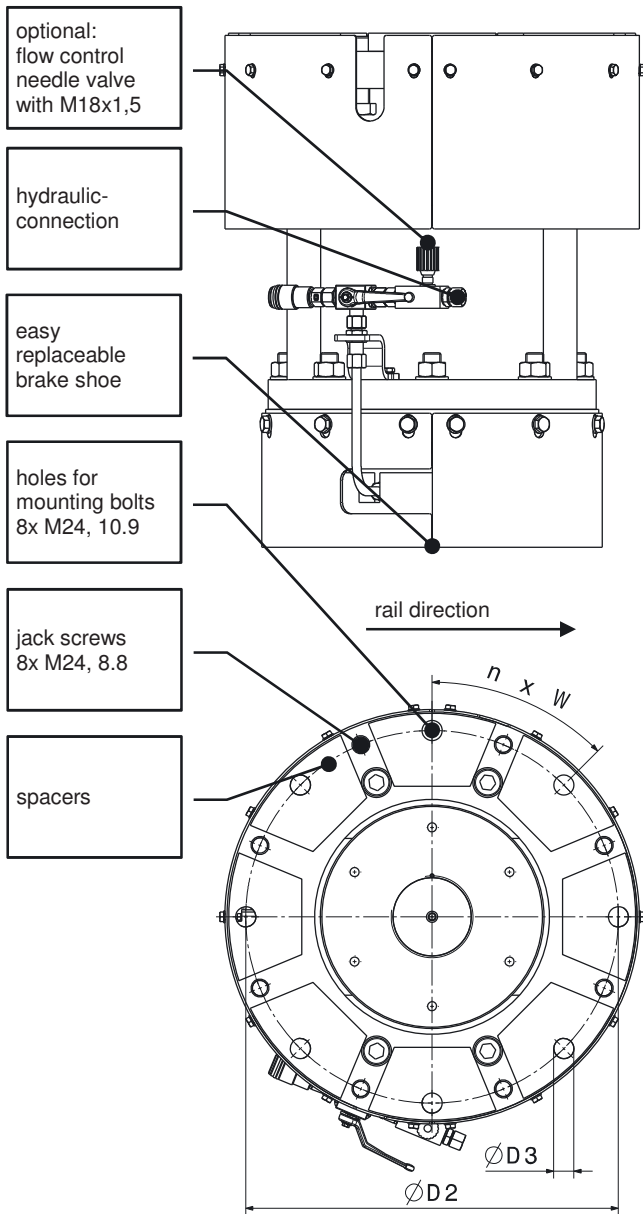
temperature range: (-15°C.....+40°C)

we recommend: SIBRE-hydraulic power packs
V3.B *) for RPS 200
V3.C *) for RPS 300
with electronic control box acc.
data sheet M 1501 264 E

*) max. 4 brakes per power pack
dimensional drawings upon request

type	H1 mm	H2 mm	B1 mm	+T mm	-T mm	D1 mm	D2 mm	D3 mm	D4 mm	W1	n x W
RPS 200	530	64,5	125	+9	-9	455	406	30	397	22,5°	8 x 45°
RPS 300	630	64,5	125	+9	-9	455	406	30	397	22,5°	8 x 45°

type	holding force	holding force at max. rail tolerance		release pressure	max. operating pressure	hydraulic- connection	weight
		+T	-T				
RPS 200	100 kN	120 kN	75 kN	110 bar	150 bar	3/8"	395 kg
RPS 300	160 kN	180 kN	135 kN	160 bar	205 bar	3/8"	440 kg



Hydraulic Data

medium: HLP-hydraulic oil DIN 51524-T2
HLP Synth 32 standard

temperature range: (-15°C.....+40°C)

we recommend: SIBRE-hydraulic power pack V3.D *) for RPS 450 with electronic control box acc. data sheet M 1501 264 E

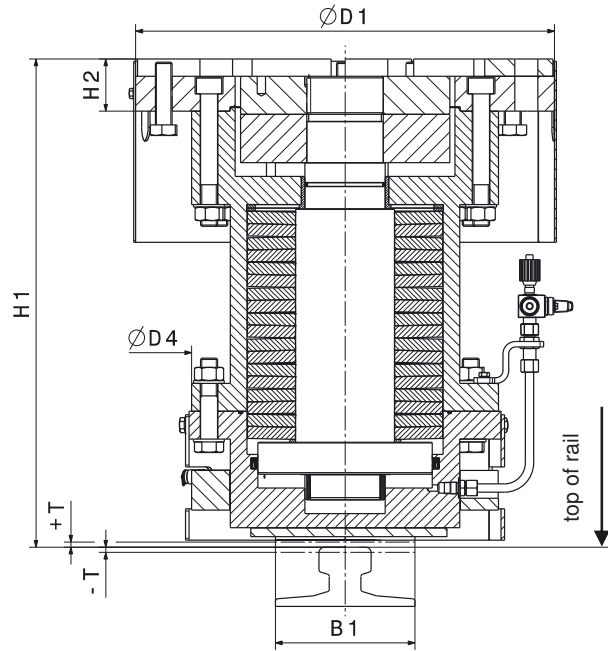
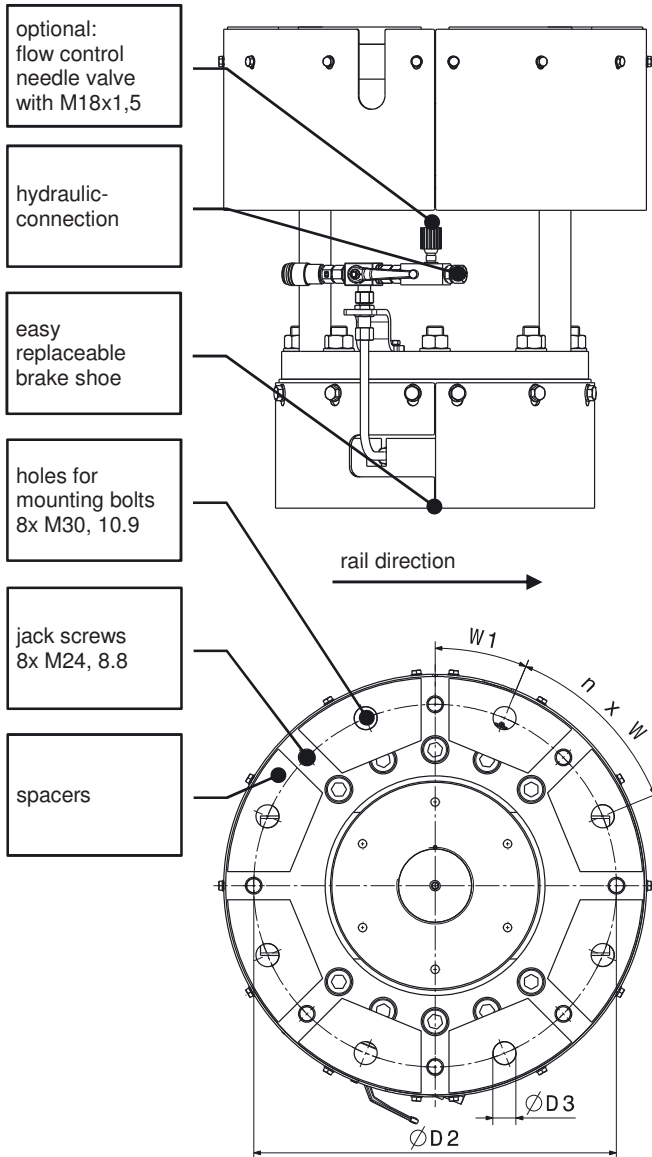
*) max. 4 brakes per power pack
dimensional drawings upon request

type	H1 mm	H2 mm	B1 mm	+T mm	-T mm	D1 mm	D2 mm	D3 mm	D4 mm	W1	n x W
RPS 450	700	74,5	200	+7,5	-7,5	550	500	27	457	-	8 x 45°

type	holding force	holding force at max. rail tolerance		release pressure	max. operating pressure	hydraulic-connection	weight
		+T	-T				
RPS 450	225 kN	299 kN	148 kN	145 bar	175 bar	1/2"	670 kg

Alterations reserved

SIBRE Siegerland-Bremsen GmbH – Auf der Stücke 1-5 – D-35708 Haiger, Germany
Tel.: +49 2773 94000 – Fax: +49 2773 9400-10 – e-mail: info@sibre.de – www.sibre.de



Hydraulic Data

medium: HLP-Hydraulic oil DIN 51524-T2
HLP Synth 32 standard

temperature range: (-15°C.....+40°C)

we recommend: SIBRE-hydraulic power pack
V3.C *) for RPS 610
with electronic control box acc.
data sheet M 1501 264 E

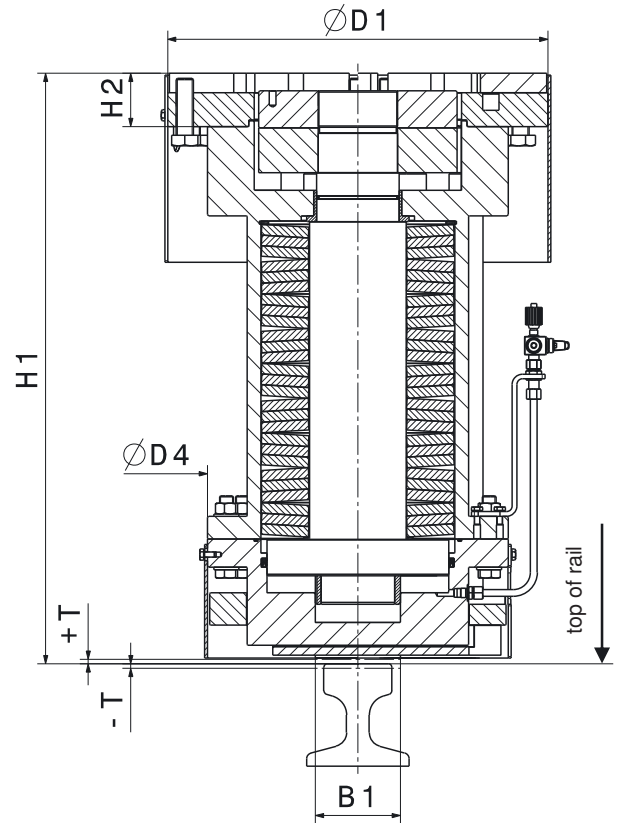
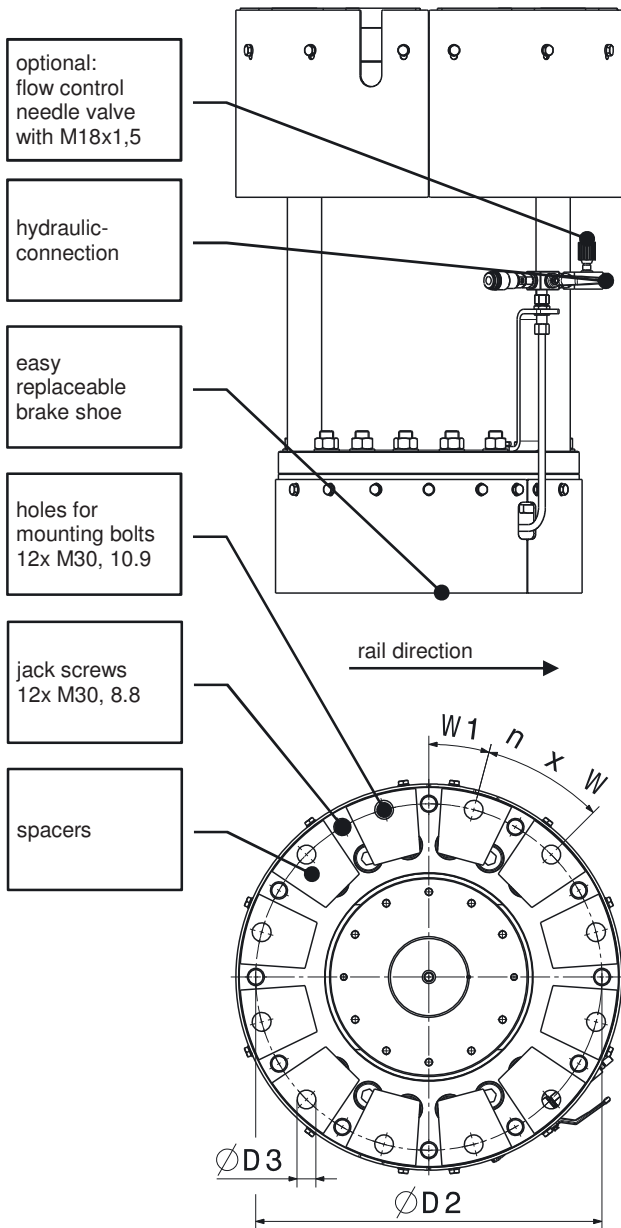
*) max. 4 brakes per power pack
dimensional drawings upon request

type	H1 mm	H2 mm	B1 mm	+T mm	-T mm	D1 mm	D2 mm	D3 mm	D4 mm	W1	n x W
RPS 610	700	74,5	200	+7,5	-7,5	600	520	33	457	22,5°	8 x 45°

type	holding force	holding force at max. rail tolerance		release pressure	max. operating pressure	hydraulic- connection	weight
		+T	-T				
RPS 610	275 kN	346 kN	200 kN	165 bar	205 bar	1/2"	690 kg

Alterations reserved

SIBRE Siegerland-Bremsen GmbH – Auf der Stücke 1-5 – D-35708 Haiger, Germany
Tel.: +49 2773 94000 – Fax: +49 2773 9400-10 – e-mail: info@sibre.de – www.sibre.de



Hydraulic Data

medium: HLP-hydraulic oil DIN 51524-T2
HLP Synth 32 standard

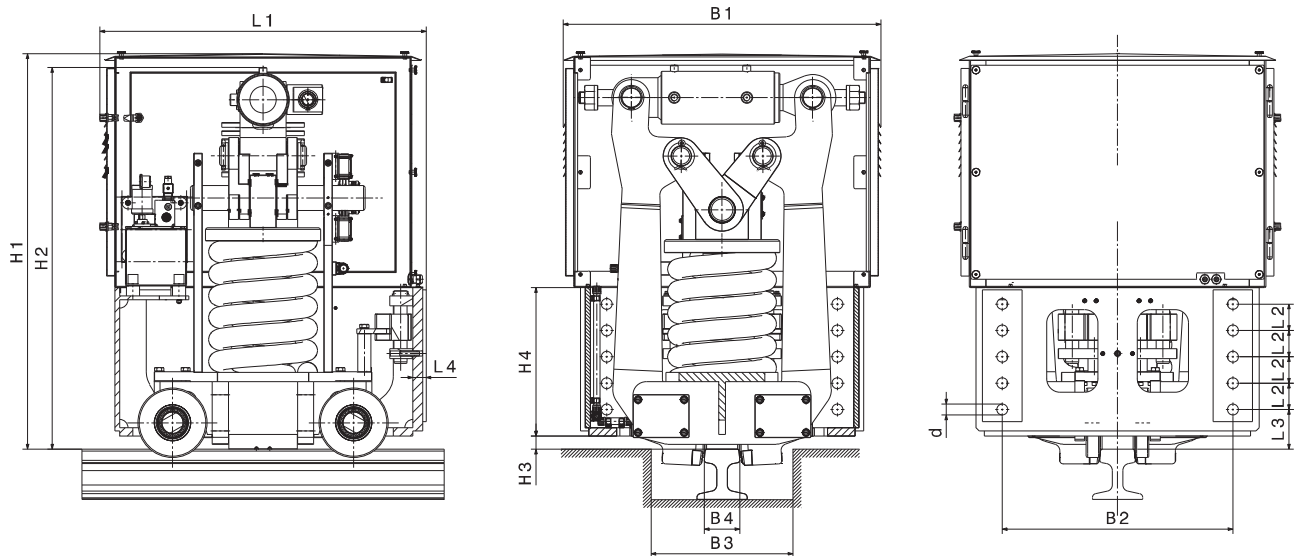
temperature range: (-15°C.....+40°C)

we recommend: SIBRE-hydraulic power pack V3.C-S *) for RPS 800 with electronic control box acc. data sheet M 1501 264 E

*) max. 2 brakes per power pack
dimensional drawings upon request

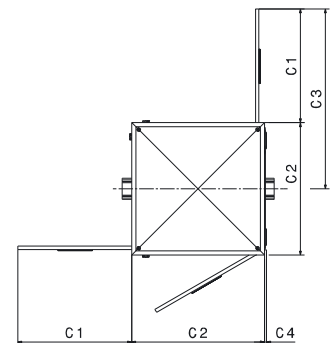
type	H1 mm	H2 mm	B1 mm	+T mm	-T mm	D1 mm	D2 mm	D3 mm	D4 mm	W1	n x W
RPS 800	1040	94	150	+8	-8	670	610	33	530	15°	12 x 30°

type	holding force	holding force at max. rail tolerance		release pressure	max. operating pressure	hydraulic-connection	weight
		+T	-T				
RPS 800	400 kN	500 kN	300 kN	180 bar	210 bar	1/2"	1320 kg



Technical Data

- Airgap per side : 4,5 mm – 5 mm
- Max. wear rail/ jaw per side : 5 mm
- Ambient temperature : - 20 °C to + 50 °C
- Closing time setting : 5 s to 30 s
- Opening time : 10 s to 15 s
- Operating cycles : 10 to 20 times per day
- Motor voltage : 230/ 400 V, 50/ 60 Hz, S3 – 30 %
- Valve voltage : 24 V



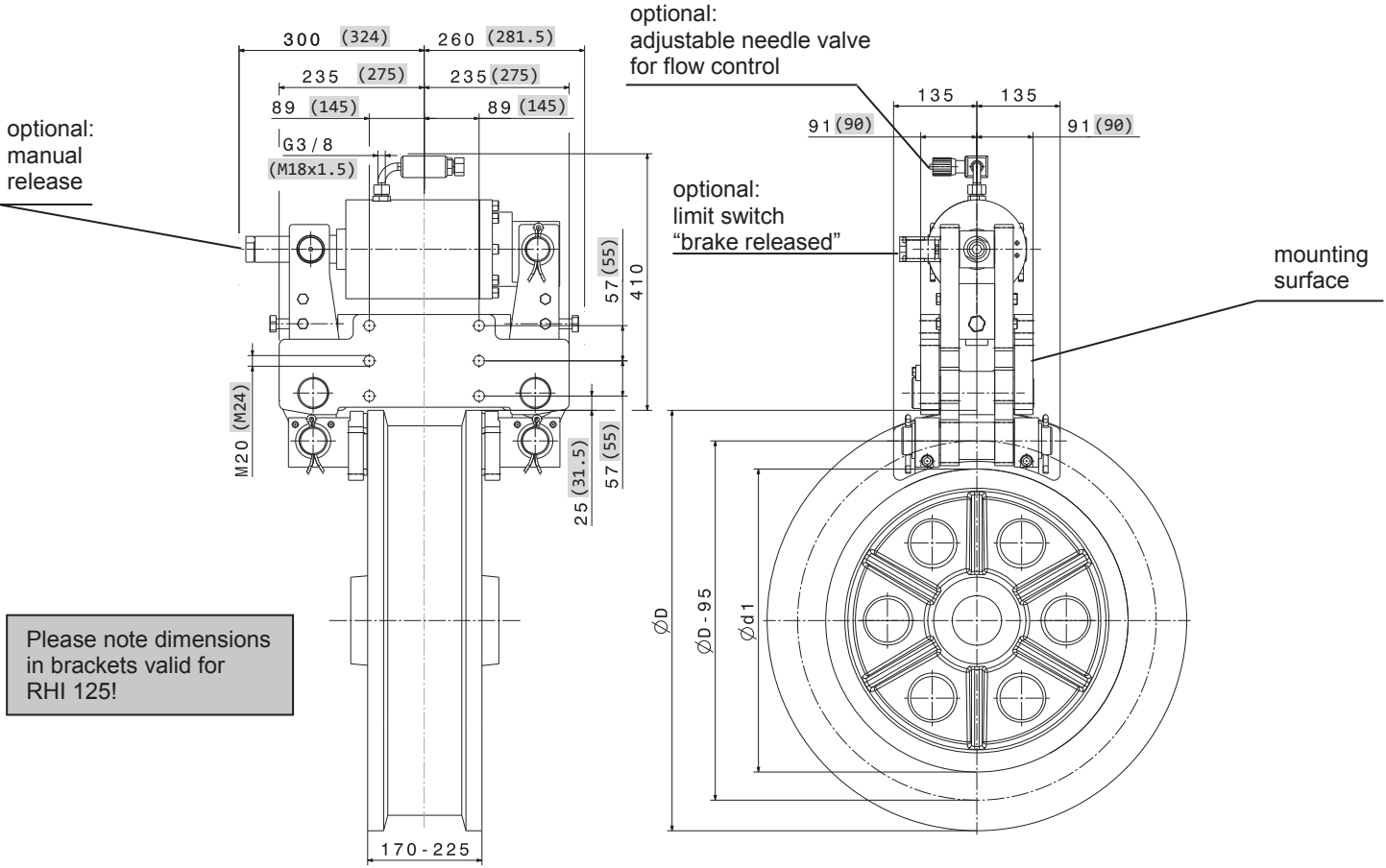
- *¹ At max. rail size acc. information B4. Deviations from the standard upon request.
- *² Crane rail acc. DIN, other types of crane rails upon request
- *³ Quantity and strength grade of the screws.
 - RB 200-50 : 6x M20 – 10.9 $M_a = 580 \text{ Nm}, \mu = 0,14$
 - RB 400-50 : 8x M24 – 10.9 $M_a = 1000 \text{ Nm}, \mu = 0,14$
 - RB 600-50 : 8x M30 – 10.9 $M_a = 2000 \text{ Nm}, \mu = 0,14$
 - RB 800-50 : 10x M30 – 10.9 $M_a = 2000 \text{ Nm}, \mu = 0,14$
 - RB 1000-50 : 12x M30 – 10.9 $M_a = 2000 \text{ Nm}, \mu = 0,14$

Holding force and dimensions

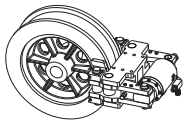
Typ:	Holding force		Weight [kg]	B1 [mm]	B2 [mm]	B3 ⁺¹ min. [mm]	B4 ⁺² [mm]	C1 [mm]	C2 [mm]	C3 [mm]	C4 [mm]	d ⁺³ [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	
	[kN]	[kN]																			
μ [-]	0,25	0,5																			
RB 200-50	100	200	520	820	540	270	A65 A75 A100	649	785	1042	7	22	925	842	40	320	808	100	110	30	
RB 400-50	200	400	760	865	580	300	A75 A100	694	830	1109	17	26	997	949	40	350	863	80	105	30	
RB 600-50	300	600	1190	955	650	380	A100 A120 A150	784	920	1244	15	33	1157	1116	40	400	951	90	115	35	
RB 800-50	400	800	1550	995	700	380	A120 A150	824	960	1304	15	33	1210	1167	40	450	990	80	120	40	
RB 1000-50	500	1000	1850	1035	780	400	A120 A150	864	1030	1394	0	33	1248	1210	40	530	1046	80	120	40	

Description and technical data

- The rail clamps are released electro-hydraulically and close with spring force.
- When the rail clamp is closed, the compression springs press on the pressure straps (knee lever system) in the middle, between the two clamp levers, thereby generating the clamping force.
- Via this system, the ratio of the lever system is increased as the jaw/ rail wears, thereby more or less compensating for the decreasing spring force. Within the permissible wear range of the jaws/ rail, the clamping force is nearly constant.
- The rail clamp is guided on the rail by the flange wheels; this ensures the mechanics of the rail clamp is afforded horizontal freedom of movement (float) of ± 30 mm and a vertical freedom of movement (float) of ± 20 mm in the rail clamp housing. In the direction parallel to the rails, the clamp is guided with minimal play (5 mm per direction of travel) in the rail clamp housing.
- Lockable protection cover made of stainless steel and three inspections doors.
- The release of the rail clamp occurs via integrated hydraulic power pack (HPU) with hydraulic cylinder. In emergency stop operation, the rail clamp can be released via hand pump connected to the HPU.
- The functional status of the rail clamp is monitored with the signals of the limit switches: „Brake open“, „Brake closed“, and „wear end“.

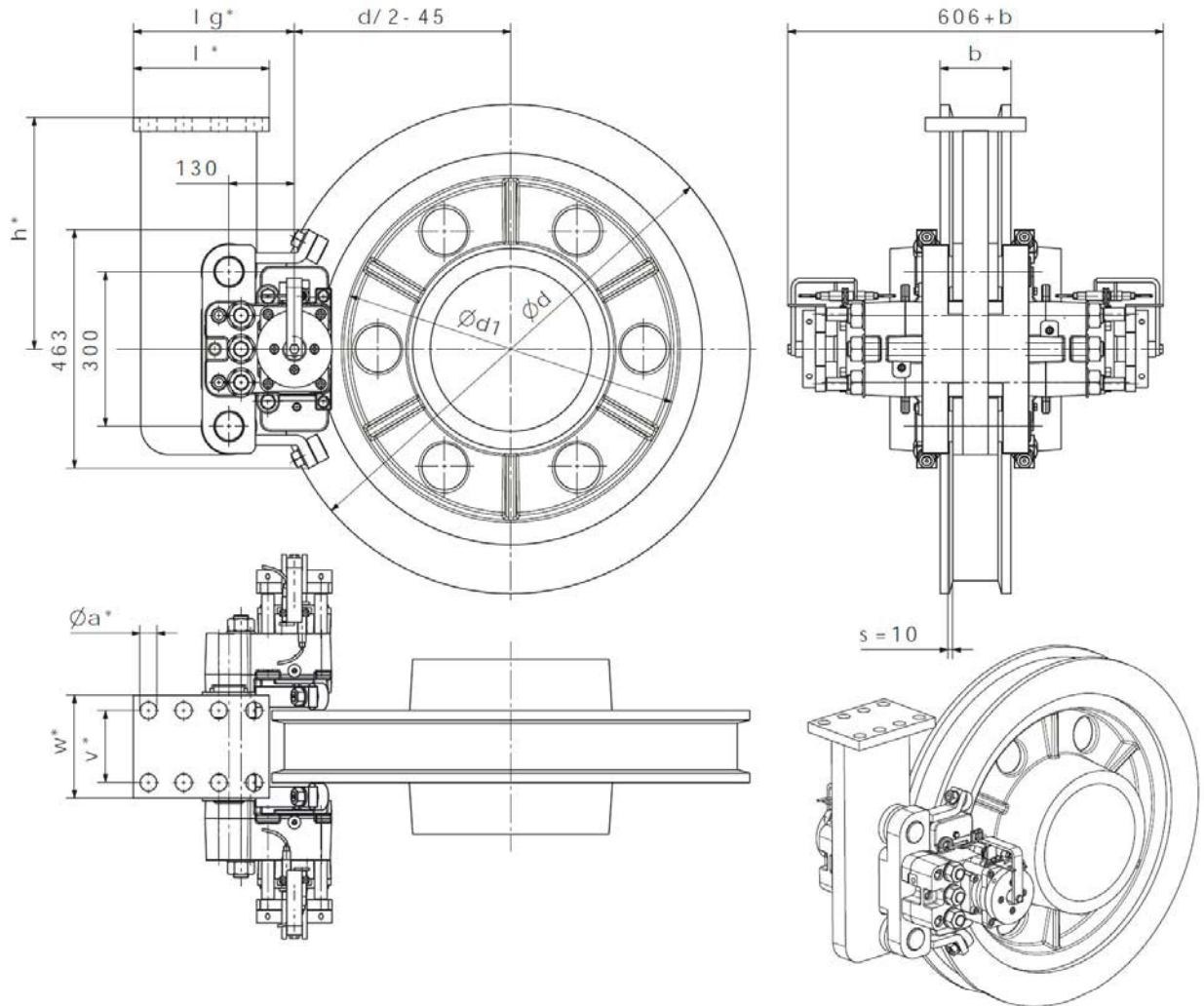


Please note dimensions in brackets valid for RHI 125!



RHI-Type		30	56	70	85	125	
Braking Force F_B ($\mu = 0.35$)							
F_B	@ air gap $c = 1,5$ mm	kN	30	56	70	85	125
Torque Calculation							
M_{Br}	braking torque in Nm	$F_B \times (D-95)/2$					
Hydraulic							
P_L	req. release pressure	bar	40	65	80	90	90
P_{max}	max. operating press.	bar	75	100	115	125	125
V_{max}	oil volume @ $c=1,5$ mm	ltr	0,18				
Wheel dimensions							
b	wheel width	mm	170 - 225				
D	wheel diameter	mm	ØD				
d ₁	max. inner diam.	mm	d- 95 mm				
Mass							
L x W x H = === x (===+b) x === mm							
weight: 180 kg							

Linings		
material		sinter
average friction coeff	μ	0,35



RHI-FC-Type		101	102	103	104	105	
Clamping Force F_A							
F_A	@ air gap $c = 1 \text{ mm}$	kN	29,0	45,1	55,4	74,1	83,2
F_A	@ air gap $c = 2 \text{ mm}$	kN	28,0	43,7	52,2	68,7	77,0
F_A	@ air gap $c = 3 \text{ mm}$	kN	27,0	41,3	48,8	62,7	74,4
Torque Calculation							
M_{Br}	braking torque in Nm	2 x F_A x 0,35 x (d/2-60)					
Hydraulic							
P_L	req. release pressure	bar	35	50	60	80	95
P_{max}	max. operating press.	bar	85	85	110	110	150
V_{max}	oil volume @ $c=2,0\text{mm}$	ltr	0,046				
Wheel dimensions							
b	wheel width	mm					
d	wheel diameter	mm					
d_1	max. hub diam.	mm	d-280mm				
Masses							
L x W x H = === x (===+b) x === mm							
weight: 180 kg (with console and floating bracket)							

Linings		
material		sinter
average friction coeff	μ	0,35

brake type	recommended Hydraulic Power Unit	
	<= 50 c / h	<= 200 c / h
SHI 282 & SHI 282 FC	V 2.1.C ^{*)}	V 3.C
SHI 281 & SHI 281 FC	V 2.1.D ^{*)}	V 3.D
SHI 252 & SHI 252 FC	V 2.1.D ^{*)}	V 3.D
SHI 251 & SHI 251 FC	V 2.1.B ^{*)}	V 3B
SHI 232 & SHI 232 FC	V 2.1.C ^{*)}	V 3.C
SHI 231 & SHI 231 FC	V 2.1.D ^{*)}	V 3.D
SHI 202 & SHI 202 FC	V 2.1.C ^{*)}	V 3.C
SHI 201 & SHI 201 FC	V 2.1.B ^{*)}	V 3.B
SHI 162 & SHI 162 FC	V 2.1.C ^{*)}	V 3.C
SHI 161 & SHI 161 FC	V 2.1.B ^{*)}	V 3.B
SHI 107 & SHI 107 FC	V 2.1.C ^{*)}	V 3.C
SHI 106 & SHI 106 FC	V 2.1.D ^{*)}	V 3.D
SHI 105 & SHI 105 FC	V 2.1.B ^{*)}	V 3.B
SHI 104 & SHI 104 FC	V 2.1.A ^{*)}	V 3.A
SHI 103 & SHI 103 FC	V 2.1.A ^{*)}	V 3.A
SHI 75-6 & SHI 75-6 FC	V 2.1.D ^{*)}	V 3.D
SHI 75-5 & SHI 75-5 FC	V 2.1.B ^{*)}	V 3.B
SHI 75-4 & SHI 75-4 FC	V 2.1.A ^{*)}	V 3.A
SHI 75-3 & SHI 75-3 FC	V 2.1.A ^{*)}	V 3.A
SHI 75-2 & SHI 75-2 FC	V 2.1.E ^{*)}	V 3.E
SHI 75-1 & SHI 75-1 FC	V 2.1.E ^{*)}	V 3.E
CB8-H	V 2.1.C ^{*)}	V 3.C
RPS 600	V 3.C	-
RPS 450	V 3.D	-
RPS 300	V 3.C	-
RPS 200	V 3.B	-
RHI 105 FC	V 3.B	-
RHI 104 FC	V 3.A	-
RHI 103 FC	V 3.A	-
RHI 102 FC	V 3.E	-
RHI 101 FC	V 3.E	-
RHI 125	V 3.B	-
RHI 85	V 3.B	-
RHI 70	V 3.B	-
RHI 56	V 3.B	-
RHI 30	V 3.B	-

^{*)} recommendation: for power packs V2 we recommend to connect up to two brakes per power pack