



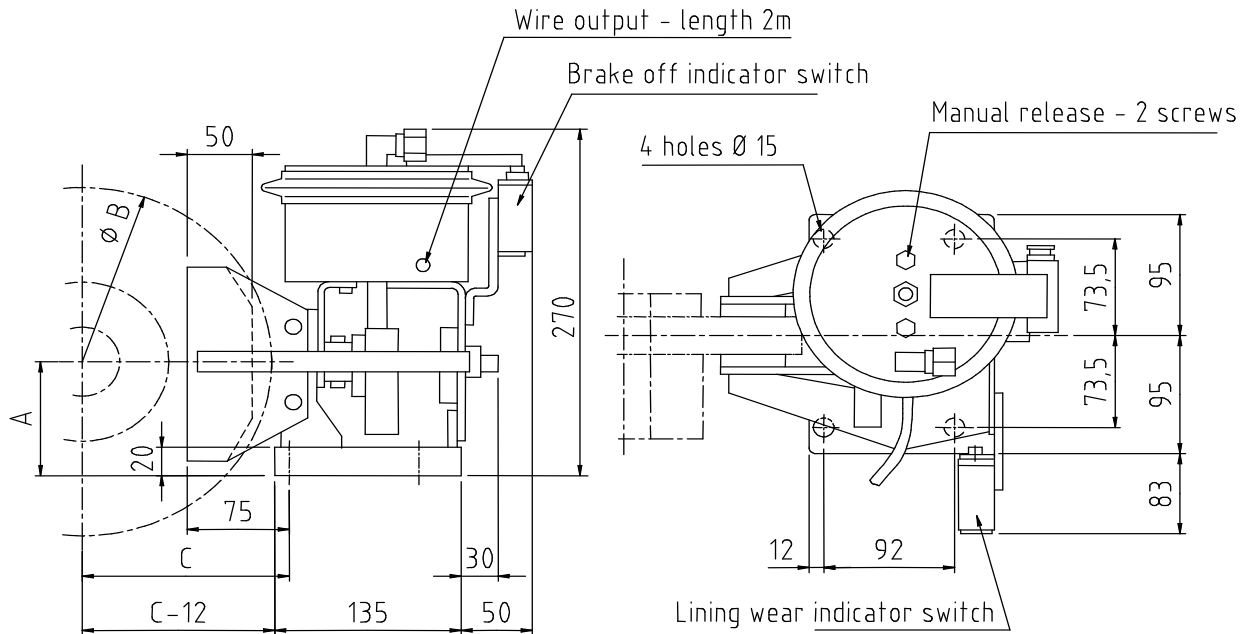
Appareils Transformation de Vitesse

Direction Technique et Commerciale Paris
 54, Route de Sartrouville
 F 78230 Le Pecq
 Tel : (33) - 1 - 30.15.41.00.
 Fax : (33) - 1 - 30.15.41.19.

561 SE

FAIL SAFE BRAKE

Spring braking - Electric release - Disc thickness: 12,7 to 30 mm



Dimensions and Data open to improvement

Caliper to be mounted on right or left side

With automatic lining wear adjustment (REF : 561 SE)

Without automatic lining wear adjustment (REF : 561 SERM)

The brake must work with an automatic power supplier (type ESE or ESP)

Brake disc diameter ØB	mm	175	220	260	315	355	395	445	495	550	625
Braking torque	N.m	40	50	60	80	90	100	120	140	150	180
Braking force	N	640 Adjustable from 50% to 100%									
Max Reaction force	N	1 Caliper : 640 N - 2 Calipers : 0 N									

CALIPER	$C (mm) = (\text{Ø}B)/2+20$ (Formula for non standard discs)										
Power consumption	W	Release 255 W, Hold : 7 W									
Response time	s	0,15									
Weight	kg	20									
A	mm	85									
C	mm	118	130	150	178	198	218	243	268	295	333



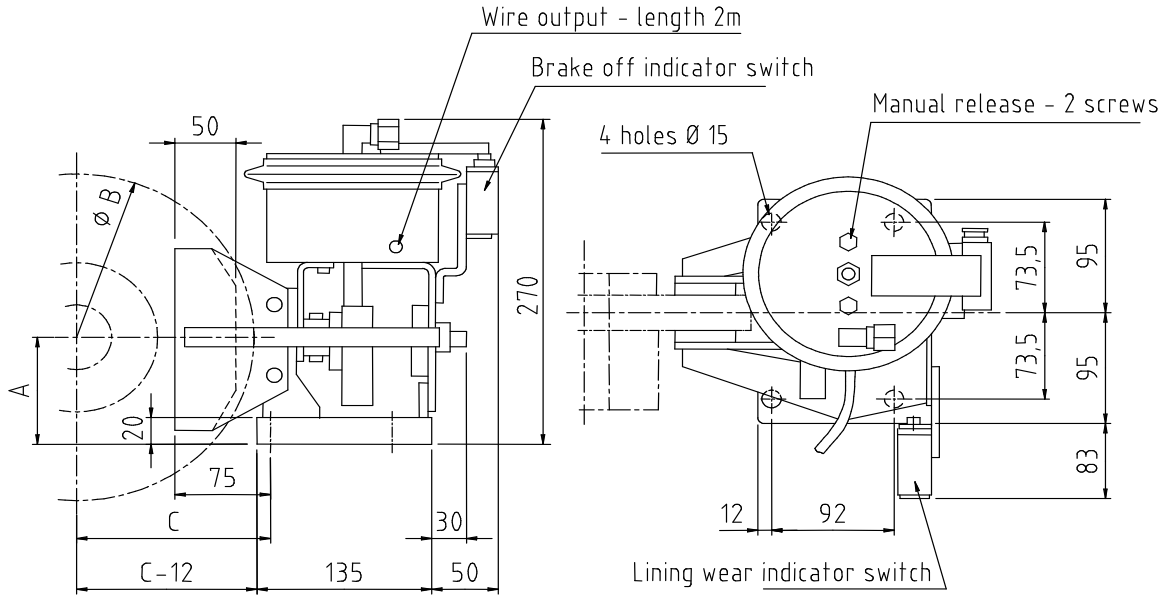
Appareils Transformation de Vitesse

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 Tel : (33) - 1 - 30.15.41.00.
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560 SE

FAIL SAFE BRAKE

Spring braking - Electric release - Disc thickness: 12,7 to 30 mm



Dimensions and Data open to improvement

Caliper to be mounted on right or left side

With automatic lining wear adjustment (REF : 560 SE)

Without automatic lining wear adjustment (REF : 560 SERM)

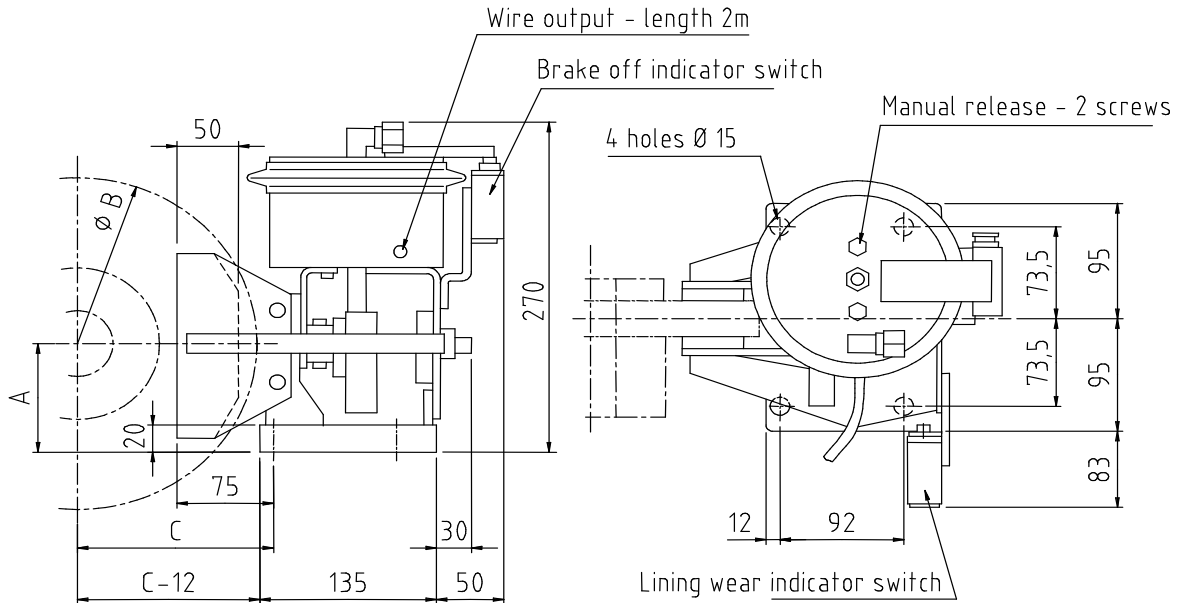
The brake must work with an automatic power supplier (type ESE or ESP)

Brake disc diameter ØB	mm	175	220	260	315	355	395	445	495	550	625
Braking torque	N.m	80	90	120	150	170	200	230	265	280	340
Braking force	N	1220 Adjustable from 50% to 100%									
Max Reaction force	N	1 Caliper : 1220 N - 2 Calipers : 0 N									

CALIPER	$C (mm) = (\text{Ø}B)/2+20$ (Formula for non standard discs)										
Power consumption	W	Release 310 W, Hold : 8 W									
Response time	s	0,15									
Weight	kg	20									
A	mm	85									
C	mm	118	130	150	178	198	218	243	268	295	333

FAIL SAFE BRAKE

Spring braking - Electric release - Disc thickness: 12,7 to 30 mm



Dimensions and Data open to improvement

Caliper to be mounted on right or left side

With automatic lining wear adjustment (REF : 56 SE)

Without automatic lining wear adjustment (REF : 56 SERM)

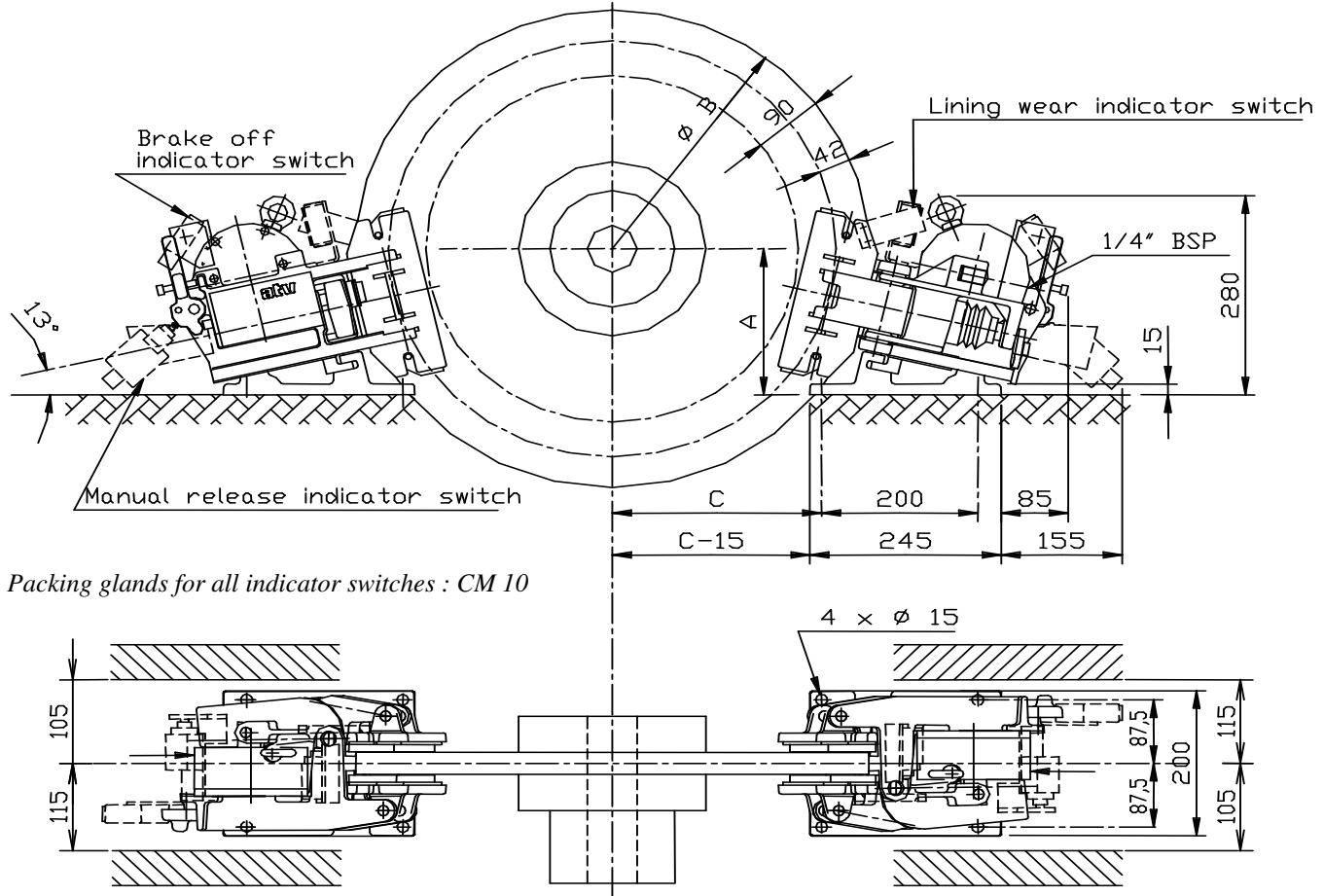
The brake must work with an automatic power supplier (type ESE or ESP)

Brake disc diameter ØB	mm	175	220	260	315	355	395	445	495	550	625
Braking torque	N.m	110	130	150	190	220	260	300	350	390	440
Braking force	N	1600 Adjustable from 50% to 100%									
Max Reaction force	N	1 Caliper : 1600 N - 2 Calipers : 0 N									

CALIPER	$C (mm) = (\text{Ø}B)/2+20$ (Formula for non standard discs)										
Power consumption	W	Release 895 W, Hold : 33 W									
Response time	s	0,15									
Weight	kg	20									
A	mm	85									
C	mm	118	130	150	178	198	218	243	268	295	333

FAIL SAFE DISC BRAKE

Spring braking - Electric release - Disc thickness : 12,7 to 30mm



Packing glands for all indicator switches : CM 10

Dimensions and Data open to improvement

Without automatic lining wear adjustment (REF : 5 SERM)

With automatic lining wear adjustment (REF : 5 SE)

The brake must work with an automatic power supplier (type ESE or ESP)

Brake disc diameter ØB	mm	315	355	395	445	495	550	625
Braking torque	N.m	190	220	260	300	340	390	460
Braking force	N	1650 Adjustable from 50% to 120%						
Max Reaction force	N	1 Caliper : 1980 N - 2 Calipers : 890 N						

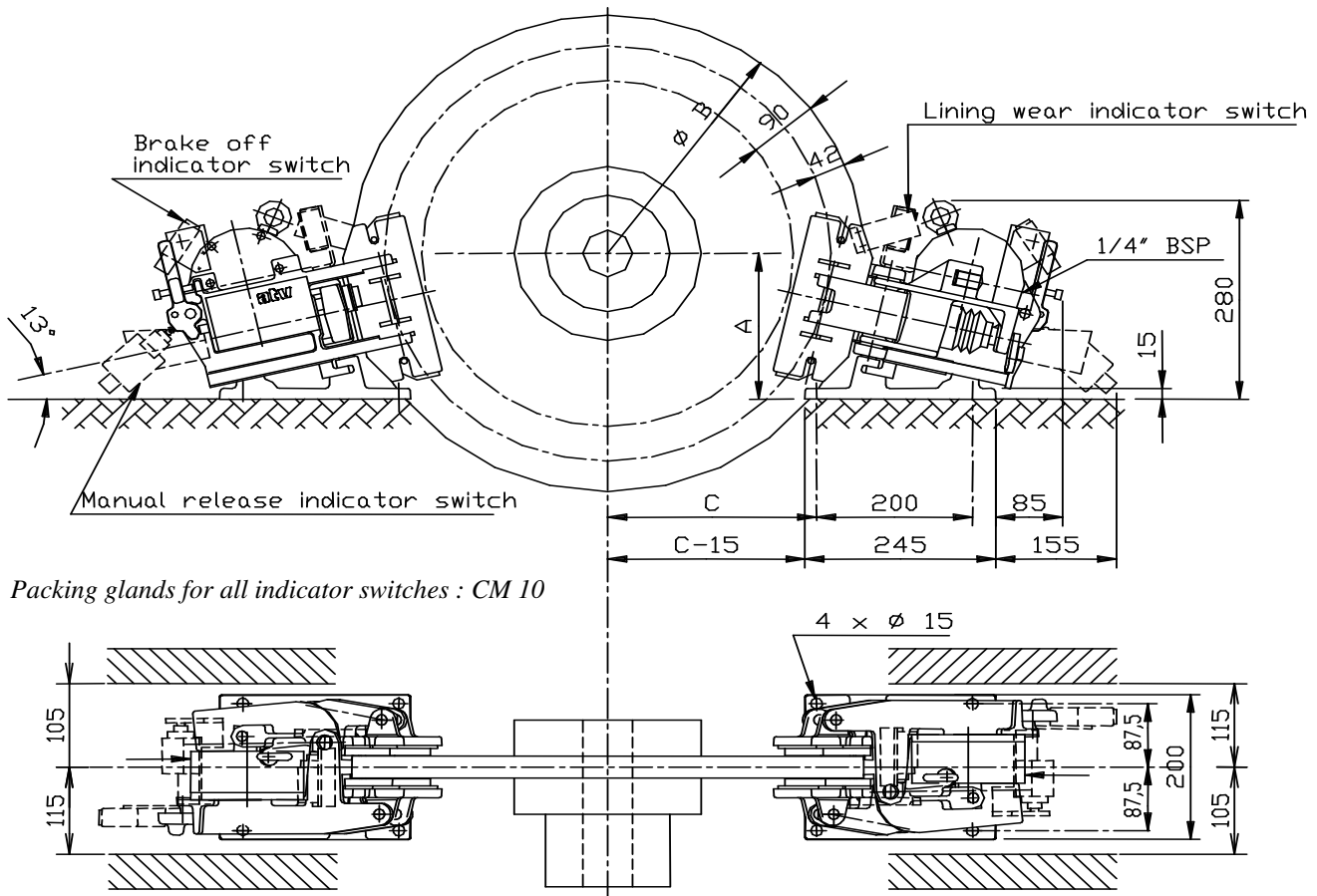
CALIPER

Power consumption	W	Release : 475 W - Hold : 14 W						
Response time	s	0,15						
Weight	kg	34						
A	mm	160	165	170	180	186	195	205
C	mm	100	120	140	160	190	220	255

For non standard discs : please contact ATV

FAIL SAFE BRAKE

Spring braking - Electric release - Disc thickness: 12,7 to 30 mm



Dimensions and Data open to improvement

Without automatic lining wear adjustment (REF : 450 SERM)

With automatic lining wear adjustment (REF : 450 SE)

The brake must work with an automatic power supplier (type ESE or ESP)

Brake disc diameter ØB	mm	315	355	395	445	495	550	625	705	795
Braking torque	N.m	380	450	510	600	680	770	900	1030	1180
Braking force	N	3340 Adjustable from 50% to 100%								
Max Reaction force	N	1 Caliper : 3340 N - 2 Calipers : 1500 N								

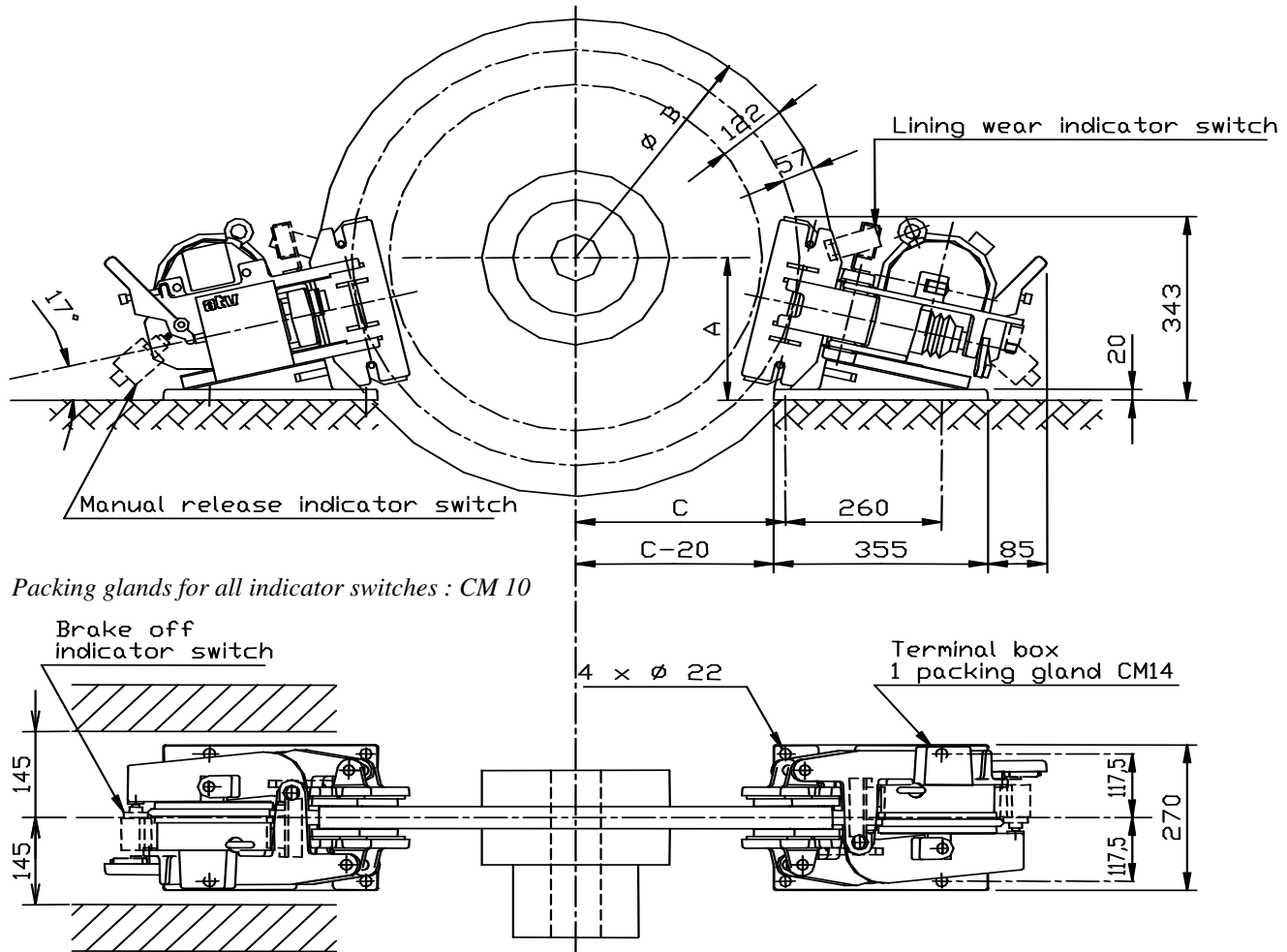
CALIPER

Power consumption	W	Release : 1000 W - Hold : 44 W								
Response time	s	0,15								
Weight	kg	34								
A	mm	160	165	170	180	186	195	205	217	231
C	mm	100	120	140	160	190	220	255	296	341

For non standard discs : please contact ATV

FAIL SAFE BRAKE

Spring braking - Electric release - Disc thickness: 12,7 to 30 mm



Dimensions and Data open to improvement

Packing glands for all indicator switches : CM 10

Without automatic lining wear adjustment (REF : 4 SERM)

With automatic lining wear adjustment (REF : 4 SE)

The brake must work with an automatic power supplier (type ESE or ESP)

Brake disc diameter ØB	mm	445	495	550	625	705	795
Braking torque	N.m	950	1120	1270	1500	1750	2000
Braking force	N	5880 Adjustable from 50% to 120%					
Max Reaction force	N	1 Caliper : 7060 N - 2 Calipers : 4130 N					

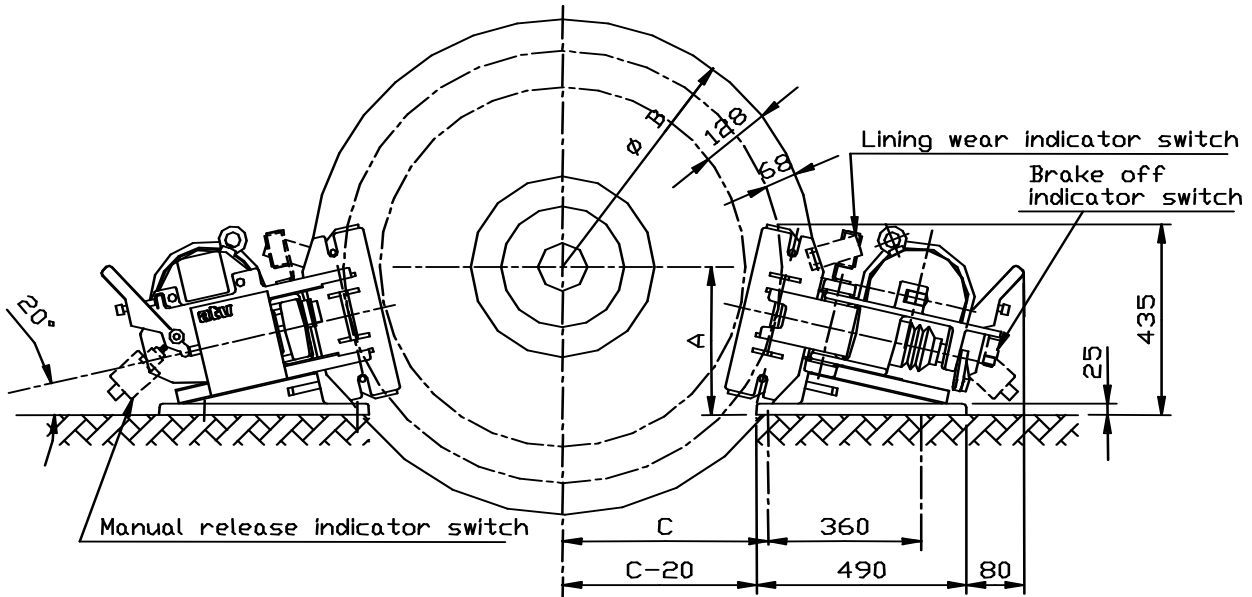
CALIPER

Power consumption	W	Release : 1000 W - Hold : 42 W					
Response time	s	0,2					
Weight	kg	77					
A	mm	225	232	240	250	260	275
C	mm	130	154	180	215	255	295

For non standard discs : please contact ATV

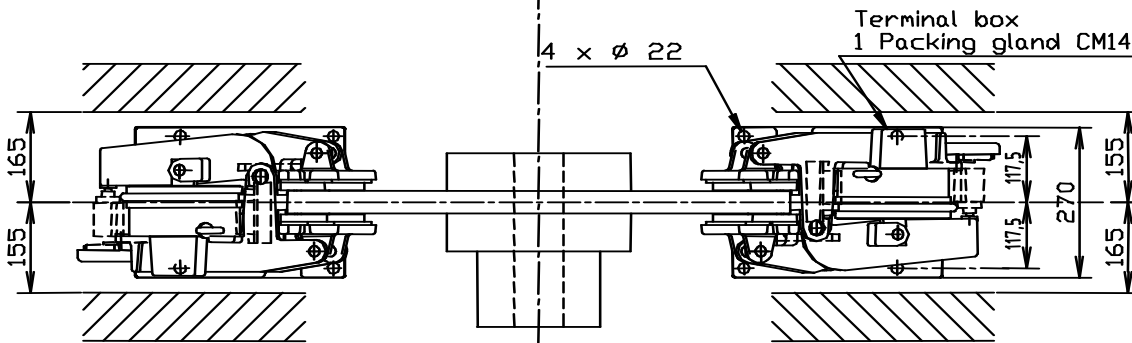
FAIL SAFE BRAKE

Spring braking - Electric release - Disc thickness: 12,7 to 30 mm



Packing glands for all indicator switches : CM 10

Dimensions and Data open to improvement



Without automatic lining wear adjustment (REF : 3 SERM)

With automatic lining wear adjustment (REF : 3 SE)

The brake must work with an automatic power supplier (type ESE or ESP)

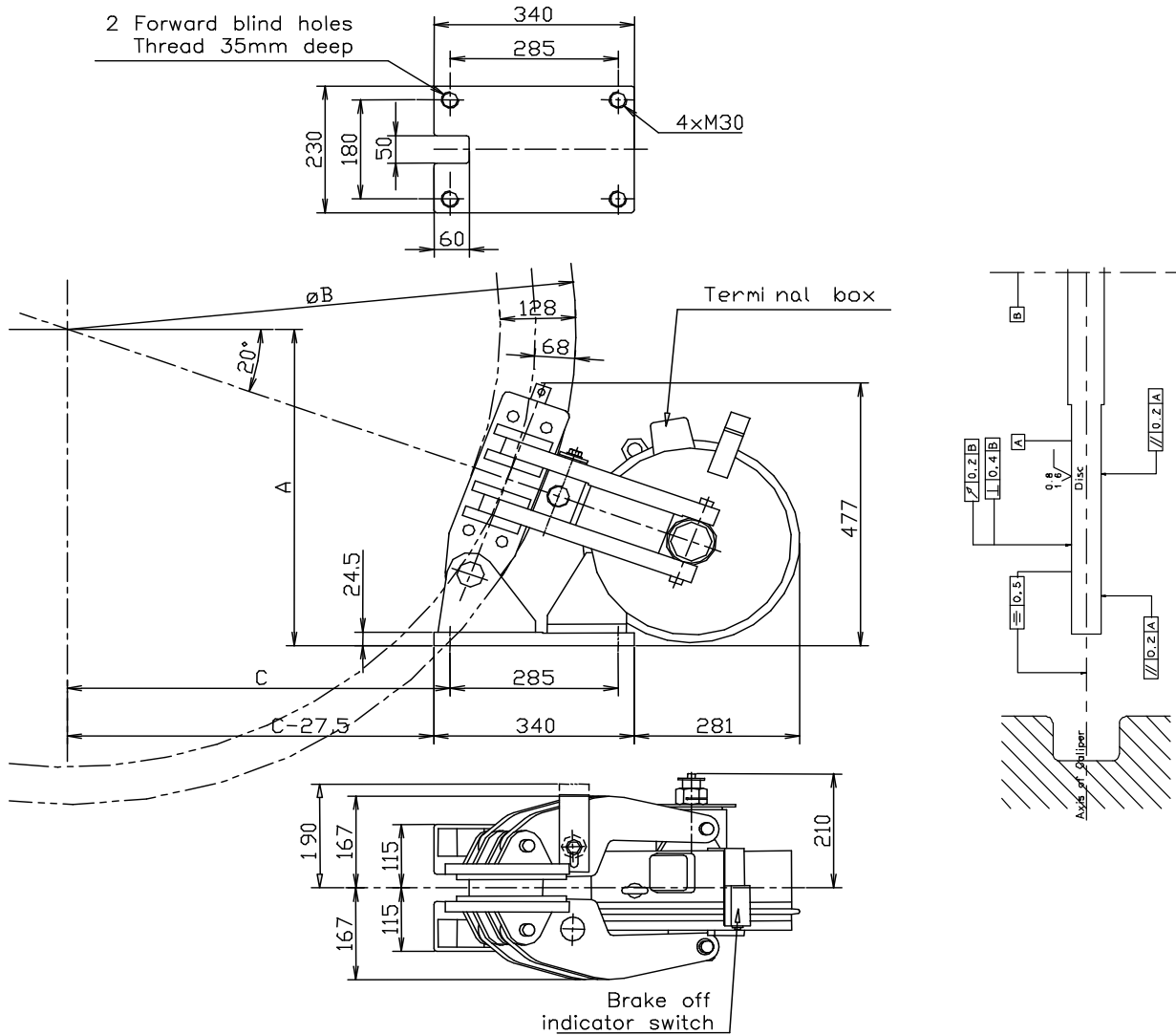
Brake disc diameter ϕB	mm	445	495	550	625	705	795
Braking torque	N.m	1600	1820	2100	2500	2900	3350
Braking force	N	10170	Adjustable from 50% to 120%				
Max Reaction force	N	1 Caliper : 12200 N - 2 Calipers : 8350 N					

CALIPER

Power consumption	W	Release : 1095 W - Hold : 58 W					
Response time	s	0,2					
Weight	kg	120					
	A mm	285	294	305	315	330	345
	C mm	100	124	150	185	225	265

For non standard discs : please contact ATV

FAIL SAFE DISC BRAKE
Spring braking - Electric release



Braking torque (N.m) = Braking force / 1000 x [(ØB)/2 - 68]

The brake must work with an automatic power supplier (type ESE or ESP)

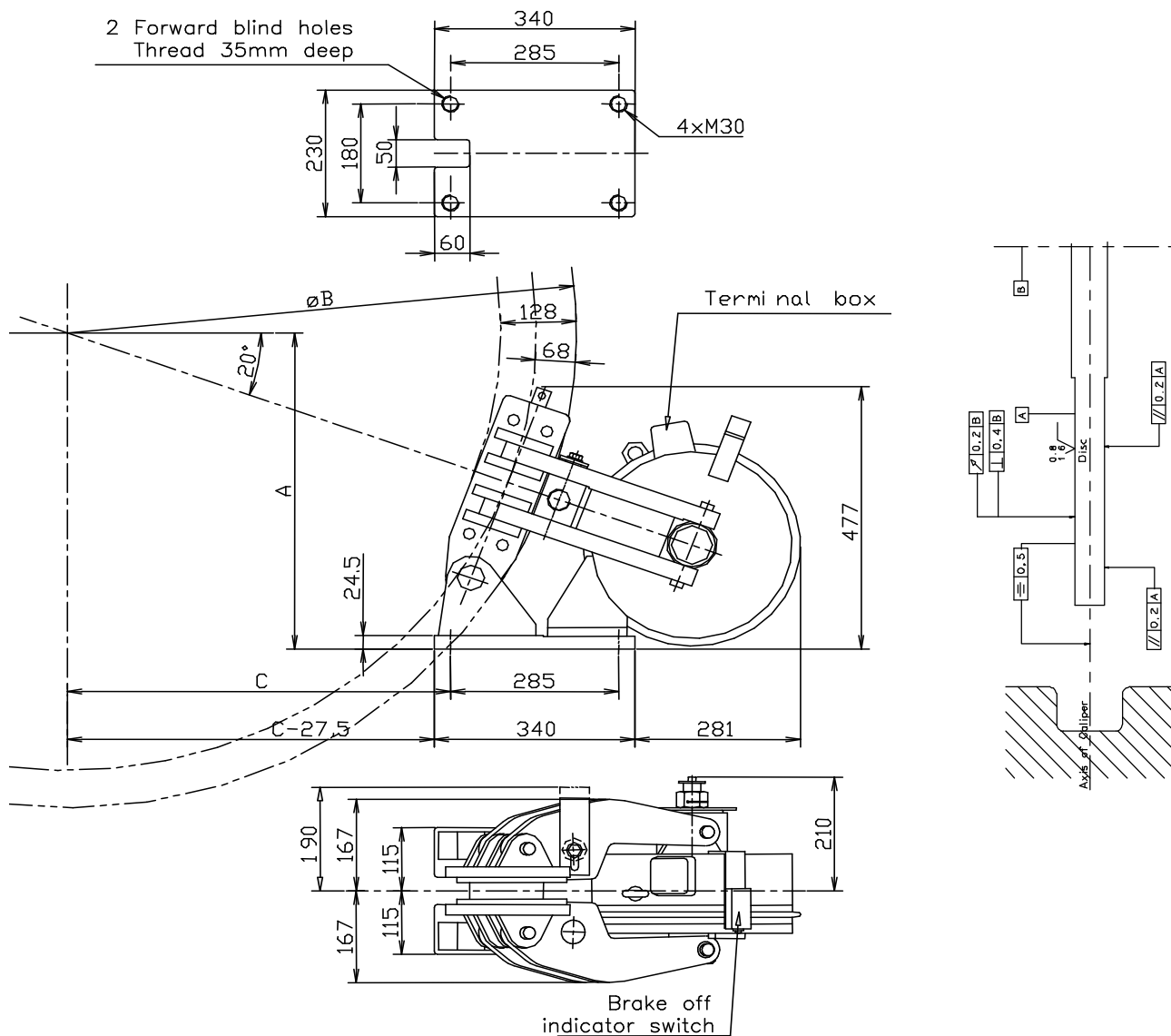
BRAKING FORCE

as Emergency Brake	N	35 000	(Lining A)	ST1-A
as Service Brake	N	25 000	(Lining M)	ST1-M

CALIPER

Power consumption	W	Release : 2830 W - Hold : 160 W
Response time	s	0,2
Weight	kg	194
	A	mm = (0,171 x ØB) + 279
	C	mm = (0,470 x ØB) - 161

FAIL SAFE DISC BRAKE
Spring braking - Electric release



Dimensions and Datas open to improvement

Braking torque (N.m) = Braking force / 1000 x [(ØB)/2 - 68]
The brake must work with an automatic power supplier (type ESE or ESP)

BRAKING FORCE

as Emergency Brake

N	70 000	(Lining A)	ST2-A
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as Service Brake

N	50 000	(Lining M)	ST2-M
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CALIPER

Power consumption

W	Release : 2830 W - Hold : 160 W
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Response time

s	0,2
---	-----

Weight

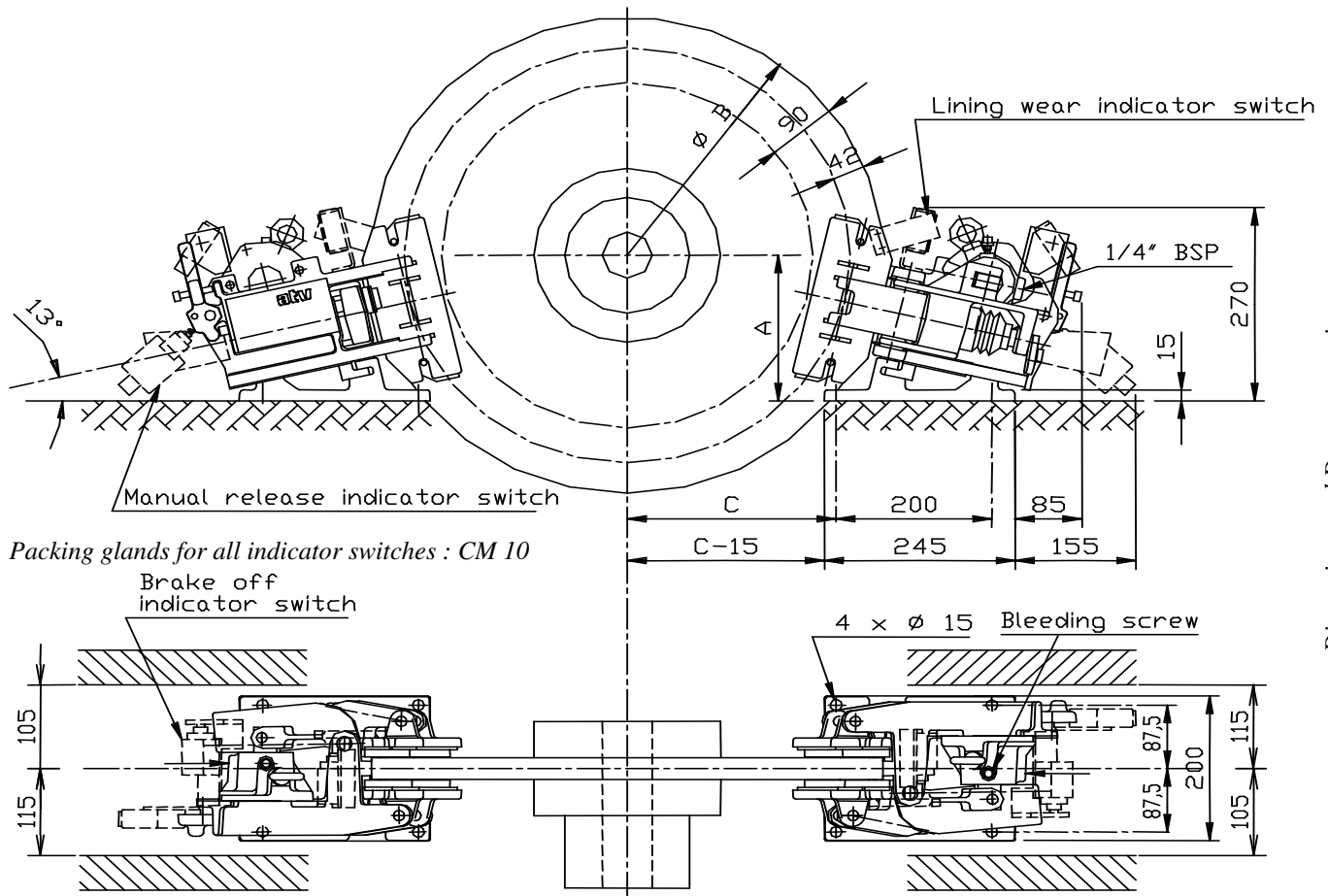
kg	194
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A	mm	= (0,171 x ØB) + 279
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C	mm	= (0,470 x ØB) - 161
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FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness: 12,7 to 30mm



Dimensions and Data open to improvement

Without automatic lining wear adjustment (REF : 5 SHRM)

With automatic lining wear adjustment (REF : 5 SH)

The brake must work with a hydraulic power unit

Brake disc diameter ØB	mm	315	355	395	445	495	550	625
Braking torque	N.m	190	220	260	300	340	390	460
Braking force	N	1650 Adjustable from 50% à 120%						
Max Reaction force	N	1 Caliper : 1980 N - 2 Calipers : 890 N						

CALIPER

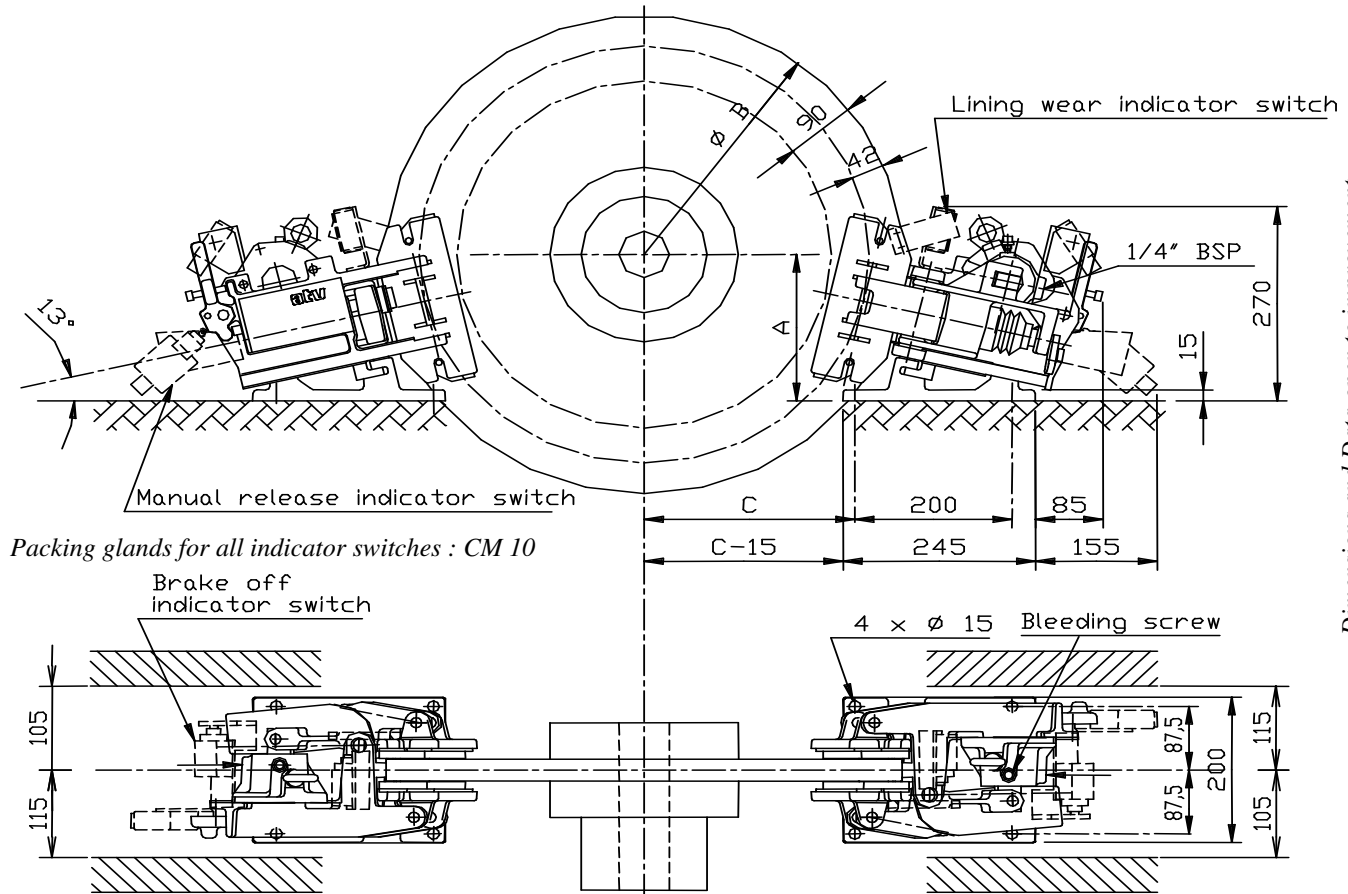
For non standard discs : please contact ATV

A	mm	160	165	170	180	186	195	205
C	mm	100	120	140	160	190	220	255

Pressure	bar	100
Displaced volume for complete release	cm ³	1,5
Total cylinder volume	cm ³	13
Response time	s	0,15
Weight	kg	27

FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness: 12,7 to 30mm



Dimensions and Data open to improvement

Without automatic lining wear adjustment (REF : 450 SHRM)

With automatic lining wear adjustment (REF : 450 SH)

The brake must work with a hydraulic power unit

Brake disc diameter ØB	mm	315	355	395	445	495	550	625	705	795
Braking torque	N.m	380	450	510	600	680	770	900	1030	1180
Braking force	N	3340 Adjustable from 50% à 100%								
Max Reaction force	N	1 Caliper : 3340 N - 2 Calipers : 1500 N								

CALIPER

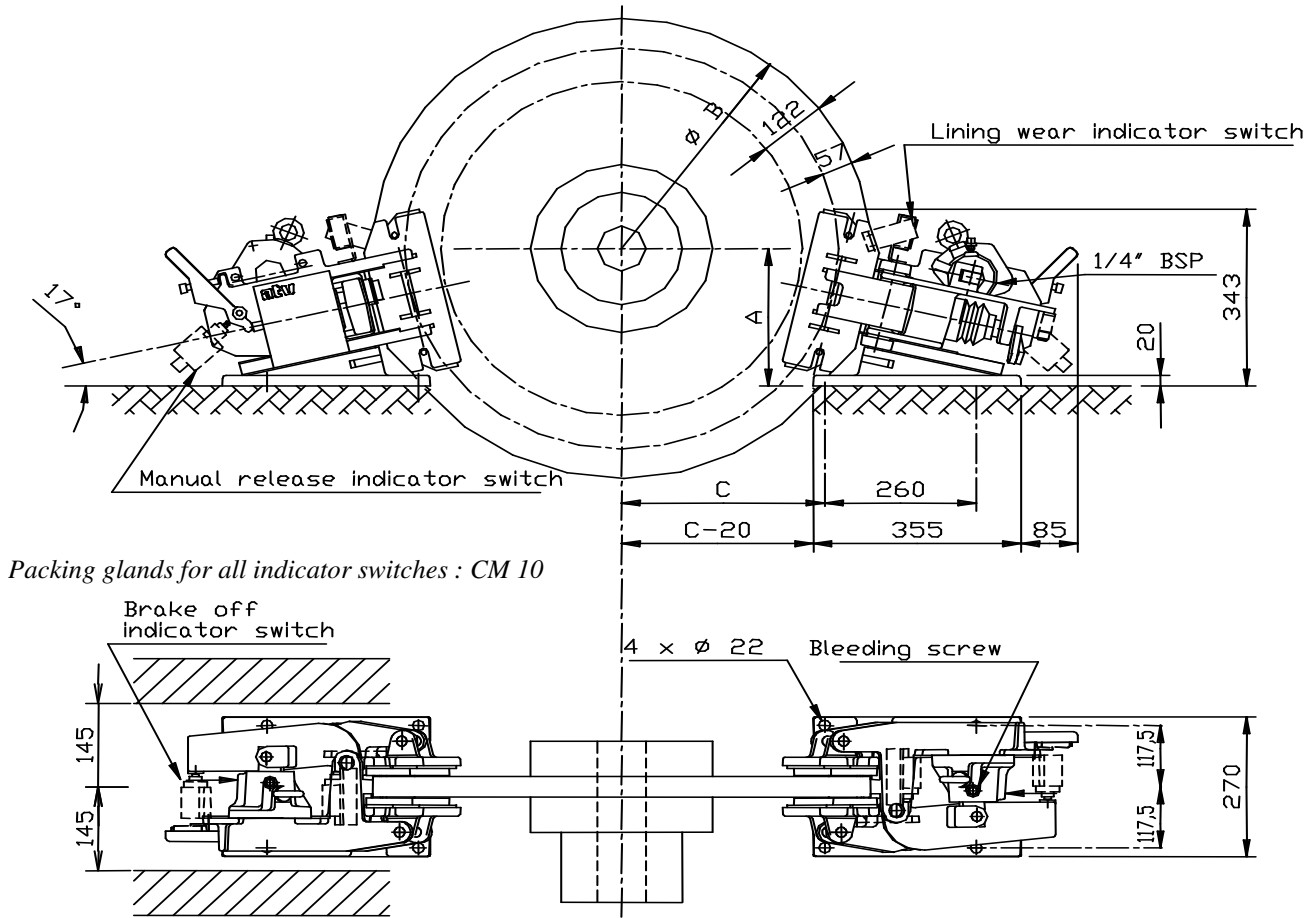
For non standard discs : please contact ATV

A	mm	160	165	170	180	186	195	205	217	231
C	mm	100	120	140	160	190	220	255	296	341

Pressure	bar	100
Displaced volume for complete release	cm ³	3,1
Total cylinder volume	cm ³	25
Response time	s	0,15
Weight	kg	28

FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness: 12,7 to 30mm



Dimensions and Data open to improvement

Without automatic lining wear adjustment (REF : 4 SHRM)

With automatic lining wear adjustment (REF : 4 SH)

The brake must work with a hydraulic power unit

Brake disc diameter ØB	mm	445	495	550	625	705	795
Braking torque	N.m	950	1120	1270	1500	1750	2000
Braking force	N	Adjustable from 50% à 120%					
Max Reaction force	N	1 Caliper : 7060 N - 2 Calipers : 4130 N					

CALIPER

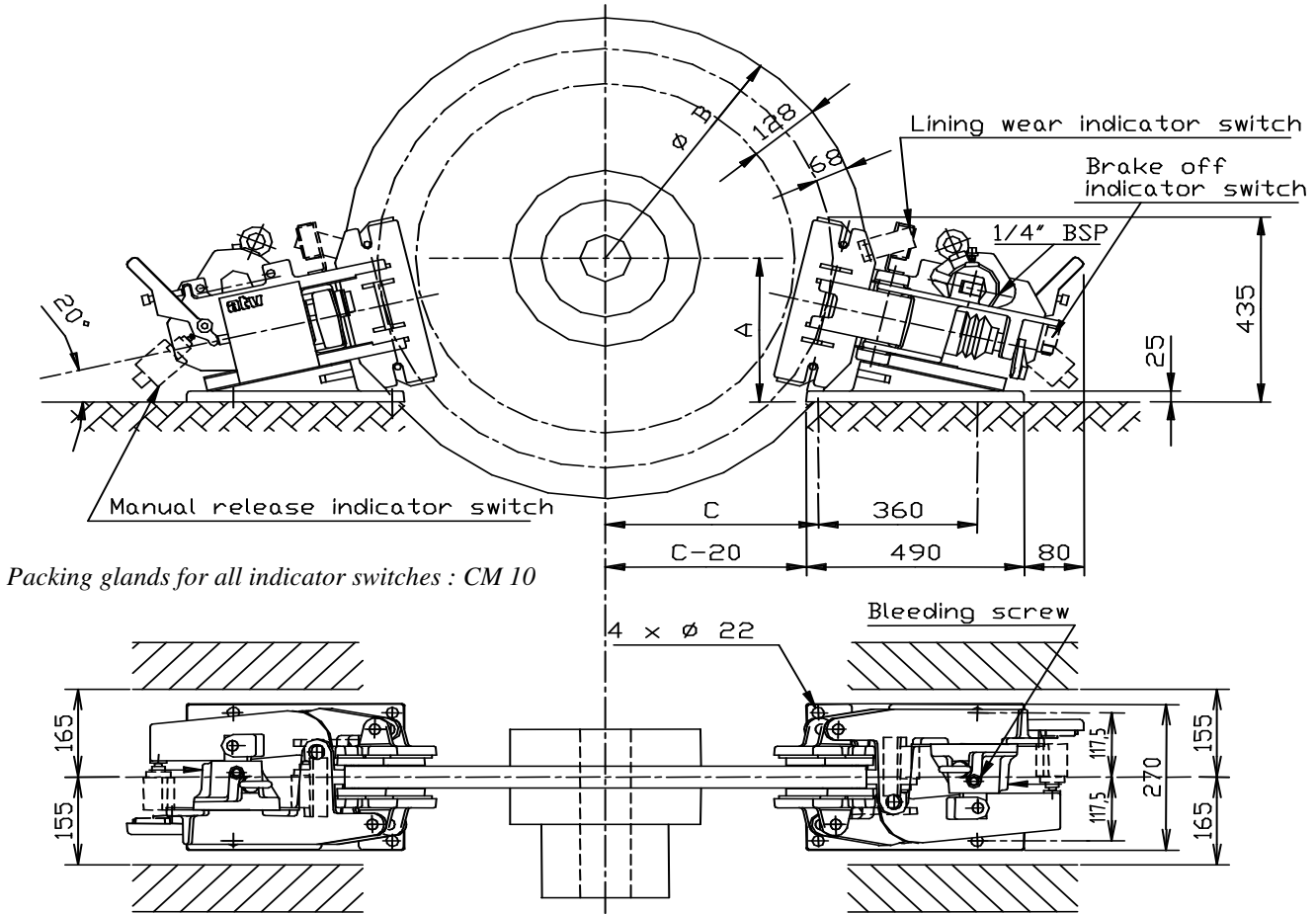
For non standard discs : please contact ATV

A	mm	225	232	240	250	260	275
C	mm	130	154	180	215	255	295

Pressure	bar	100
Displaced volume for complete release	cm ³	6,8
Total cylinder volume	cm ³	77
Response time	s	0,2
Weight	kg	62

FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness: 12,7 to 30mm



Dimensions and Data open to improvement

Packing glands for all indicator switches : CM 10

Without automatic lining wear adjustment (REF : 3 SHRM)

With automatic lining wear adjustment (REF : 3 SH)

The brake must work with a hydraulic power unit

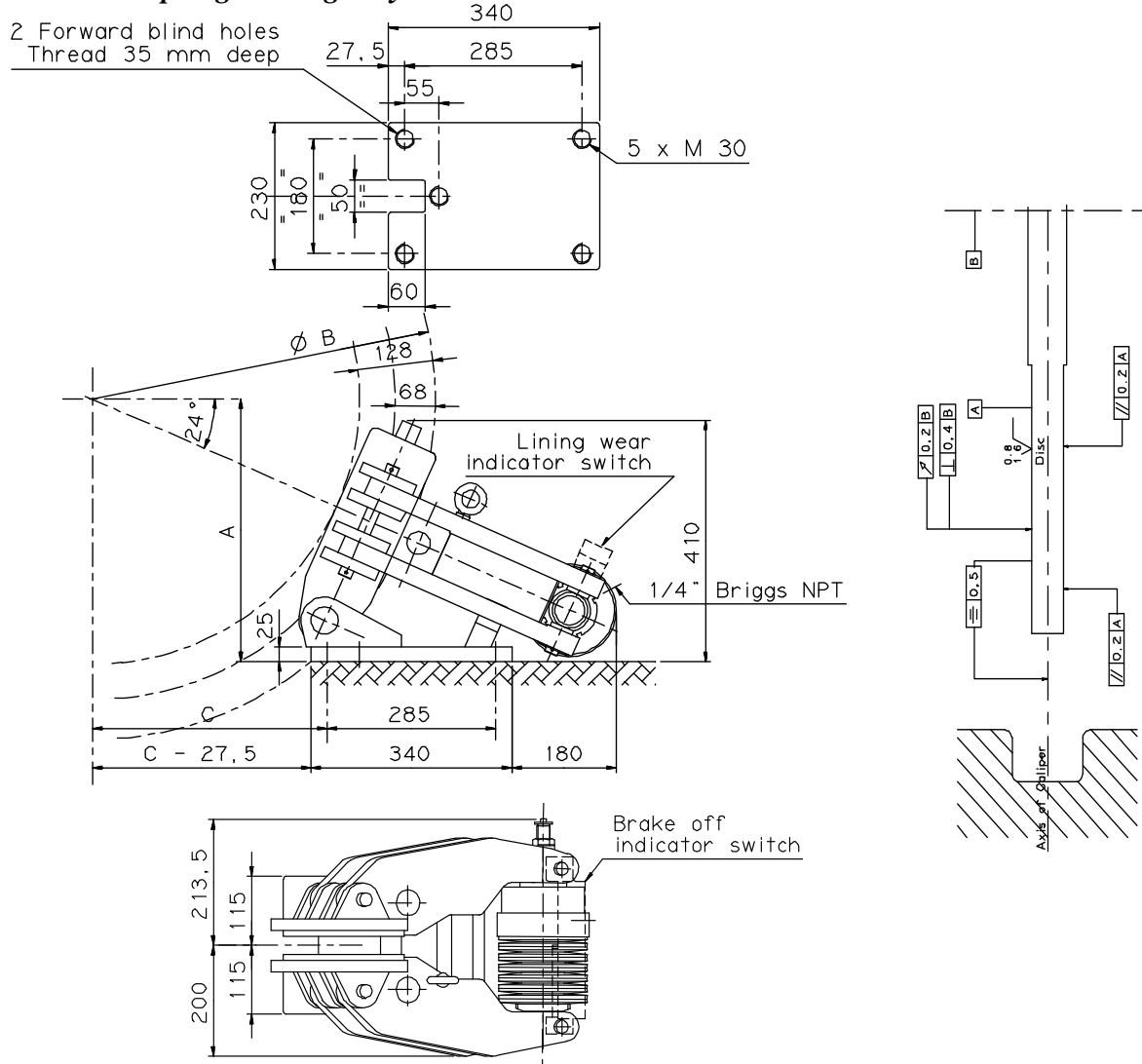
Brake disc diameter ØB	mm	445	495	550	625	705	795
Braking torque	N.m	1600	1820	2100	2500	2900	3350
Braking force	N	10170 Adjustable from 50% à 120%					
Max Reaction force	N	1 Caliper : 12200 N - 2 Calipers : 8350 N					

CALIPER		<i>For non standard discs : please contact ATV</i>					
A	mm	285	294	305	315	330	345
C	mm	100	124	150	185	225	265

Pressure	bar	100
Displaced volume for complete release	cm ³	8,5
Total cylinder volume	cm ³	102
Response time	s	0,2
Weight	kg	95

FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness : 30 mm



Braking torque (N.m) = Braking force / 1000 x $[(\varnothing B)/2 - 68]$

Manual lining wear adjustment

MAXIMUM BRAKING FORCE

as Emergency Brake	N	35 000	(Lining A)	ST1-A
as Service Brake	N	25 000	(Lining M)	ST1-M

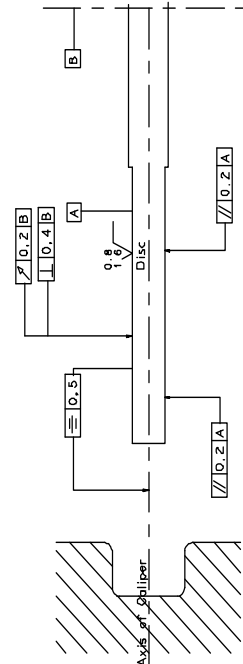
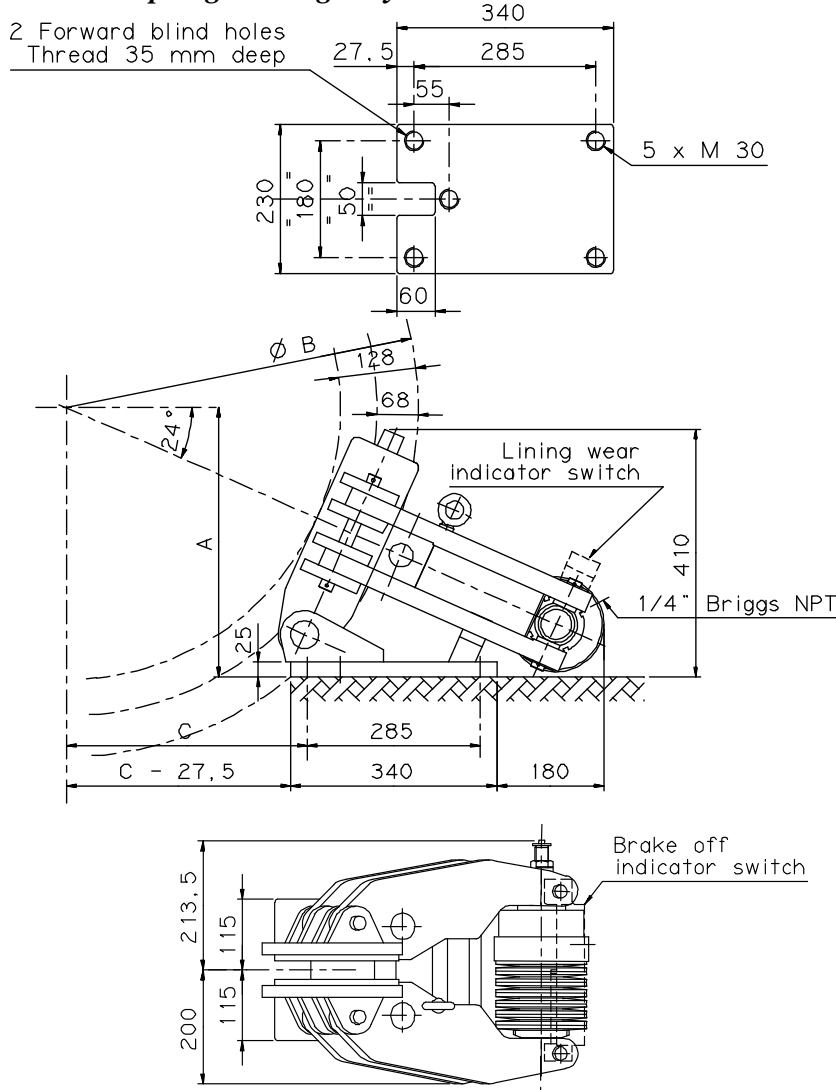
CALIPER

Release pressure	bar	100
Displaced volume for complete release	cm ³	18
Total cylinder volume	cm ³	34
Response time	s	0,2
Weight	kg	117
A	mm	= (0,203 x $\varnothing B$) + 211
C	mm	= (0,456 x $\varnothing B$) - 133

Dimensions and Data open to improvement

FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness : 30 mm



Dimensions and Data open to improvement

Braking torque (N.m) = Braking force / 1000 x $[(\text{ØB})/2 - 68]$

Manual lining wear adjustment

MAXIMUM BRAKING FORCE

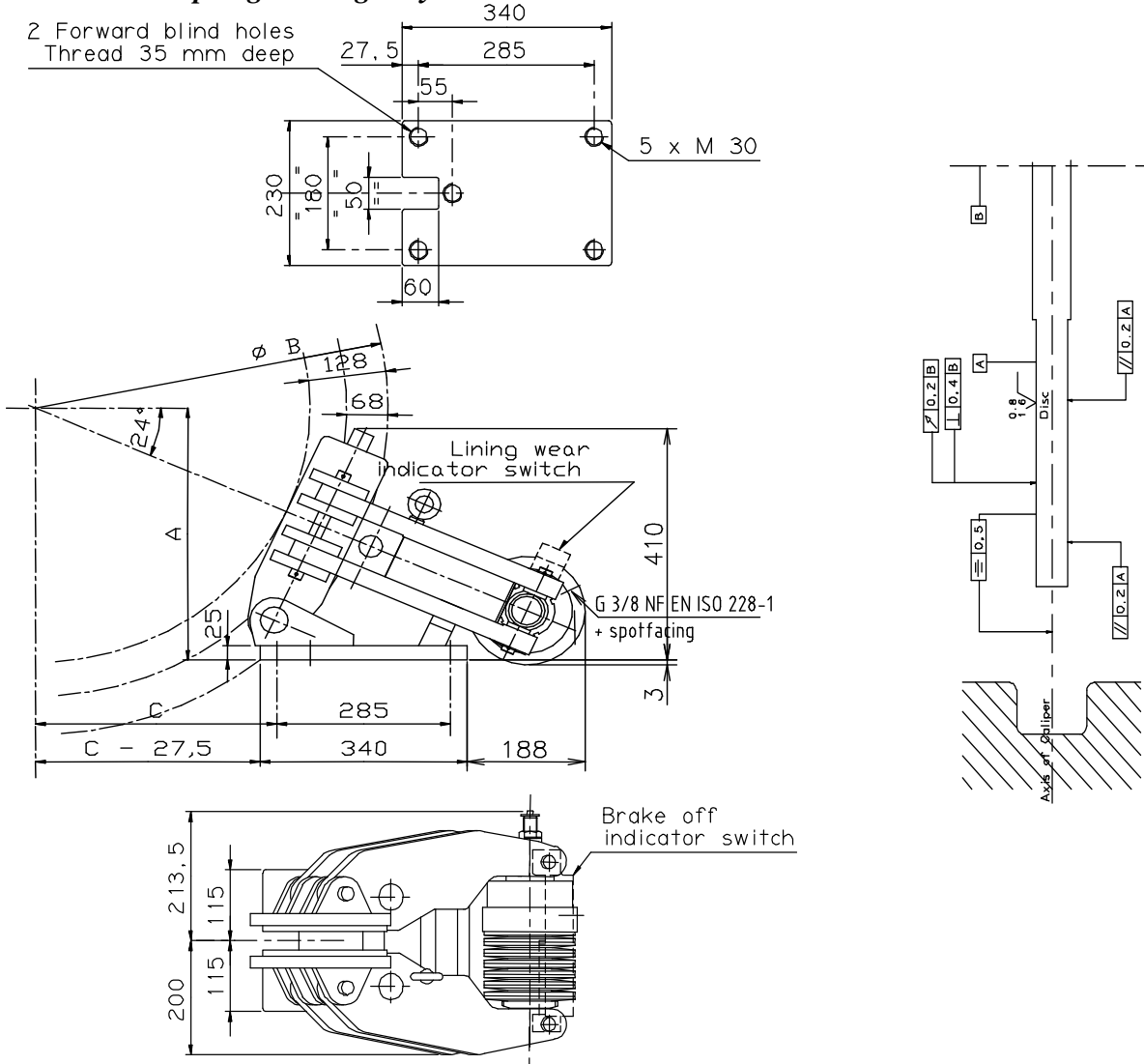
as Emergency Brake	N	70 000	(Lining A)	ST2-A
as Service Brake	N	50 000	(Lining M)	ST2-M

CALIPER

Release pressure	bar	100
Displaced volume for complete release	cm ³	50
Total cylinder volume	cm ³	83
Response time	s	0,2
Weight	kg	117
A	mm	= (0,203 x ØB) + 211
C	mm	= (0,456 x ØB) - 133

FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness : 30 mm



Braking torque (N.m) = Braking force / 1000 x [(ØB)/2 - 68]

Manual lining wear adjustment

MAXIMUM BRAKING FORCE

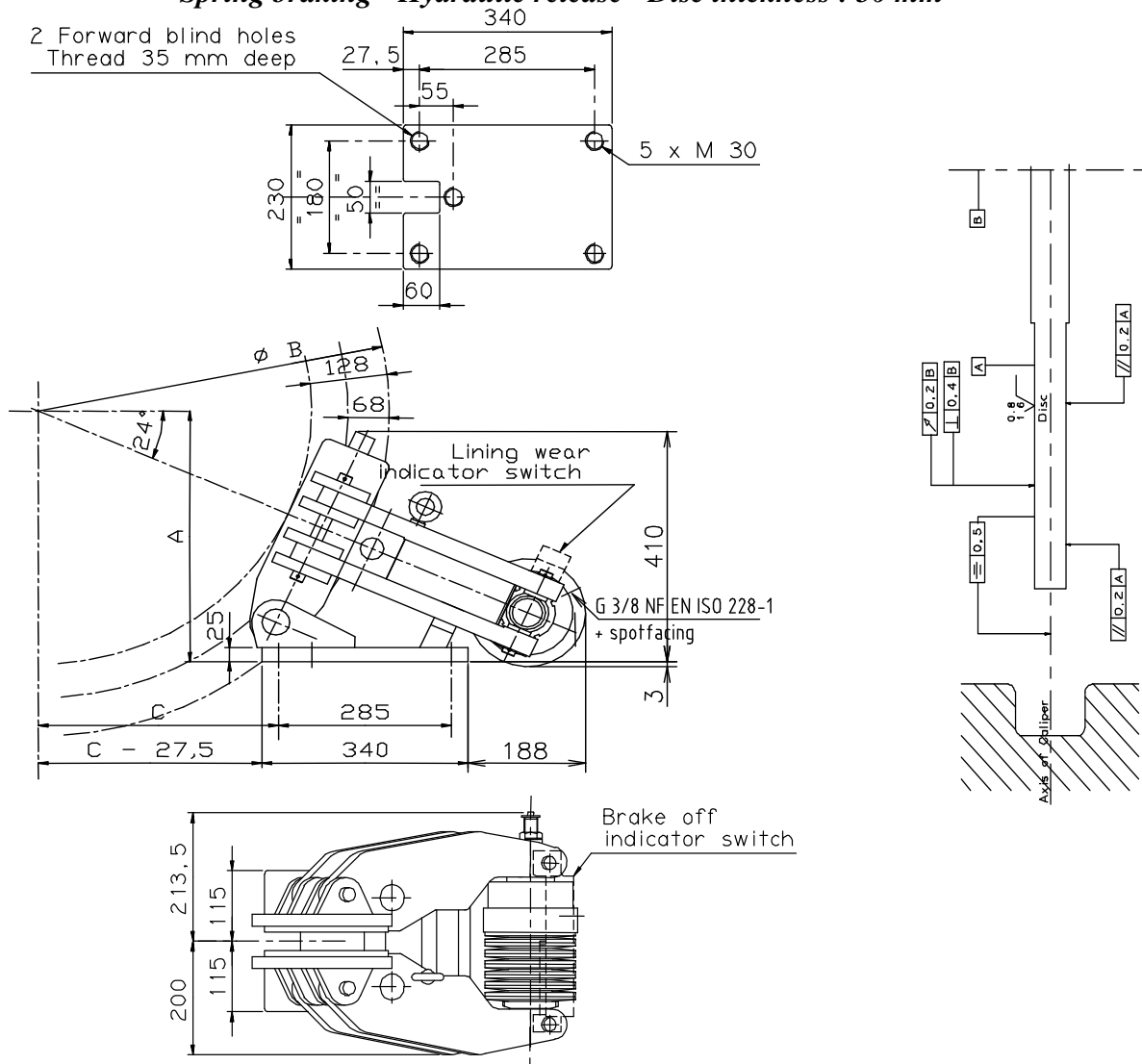
as Emergency Brake	N	147 000 (Lining A)	ST3-A
as Service Brake	N	105 000 (Lining M)	ST3-M

CALIPER

Release pressure	bar	100
Displaced volume for complete release	cm ³	135
Total cylinder volume	cm ³	227
Response time	s	0,2
Weight	kg	118
A	mm	= (0,203 x ØB) + 211
C	mm	= (0,456 x ØB) - 133

FAIL SAFE DISC BRAKE

Spring braking - Hydraulic release - Disc thickness : 30 mm



Dimensions and Data open to improvement

Braking torque (N.m) = Braking force / 1000 x [(ØB)/2 - 68]

Manual lining wear adjustment

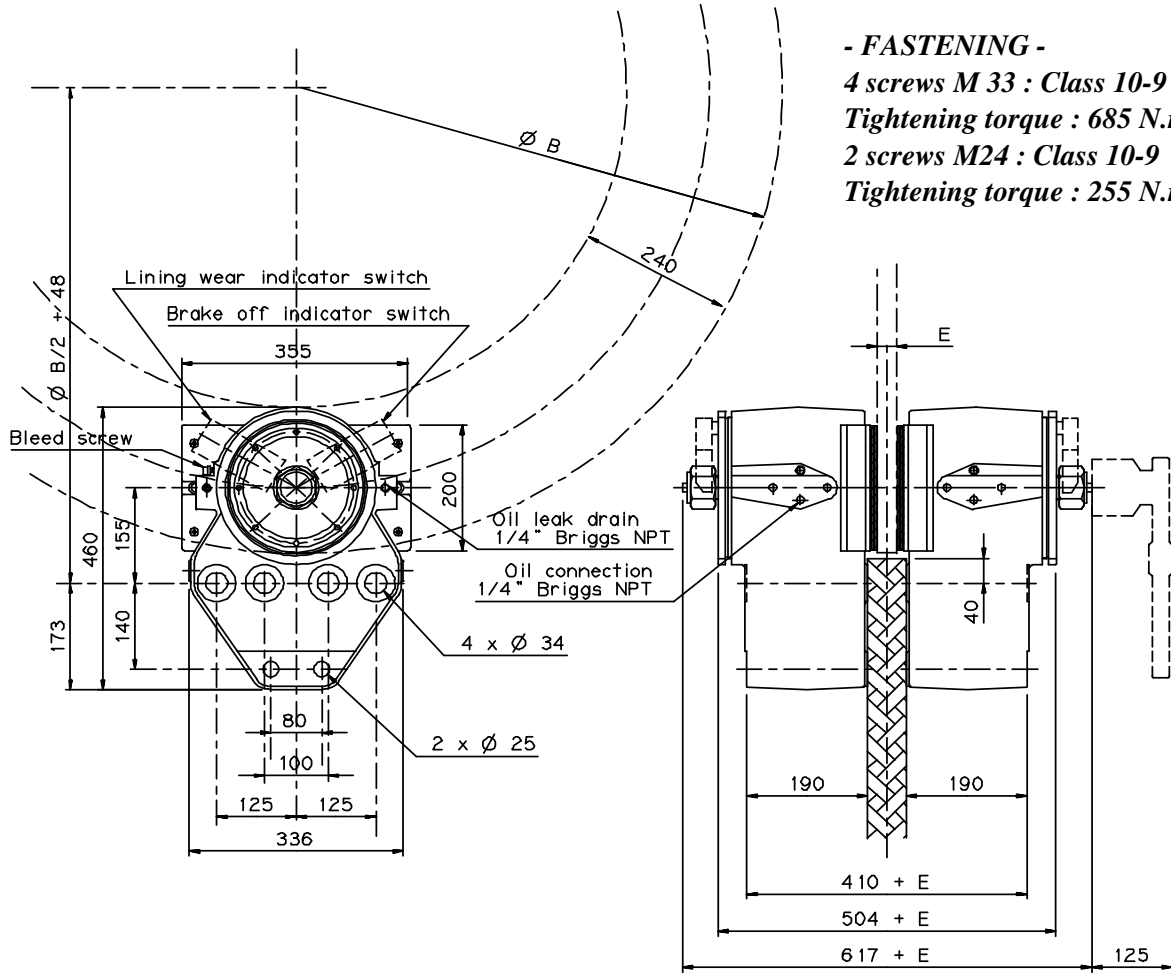
MAXIMUM BRAKING FORCE

as Emergency Brake	N	147 000 (Lining A)	ST3-A
as Service Brake	N	105 000 (Lining M)	ST3-M

CALIPER

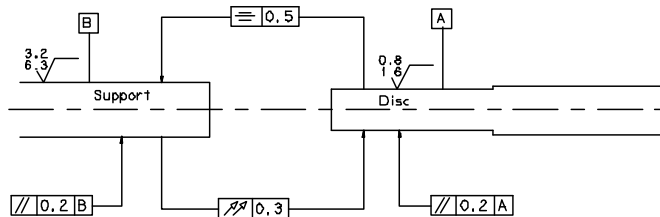
Release pressure	bar	100
Displaced volume for complete release	cm ³	135
Total cylinder volume	cm ³	227
Response time	s	0,2
Weight	kg	118
A	mm	= (0,203 x ØB) + 211
C	mm	= (0,456 x ØB) - 133

FAIL SAFE DISC BRAKE
Spring braking - Hydraulic release



- FASTENING -
 4 screws M 33 : Class 10-9
 Tightening torque : 685 N.m
 2 screws M24 : Class 10-9
 Tightening torque : 255 N.m

Dimensions and Data open to improvement



Braking torque (N.m) = Braking force / 1000 x $[(\varnothing B)/2 - 108]$

Manual lining wear adjustment

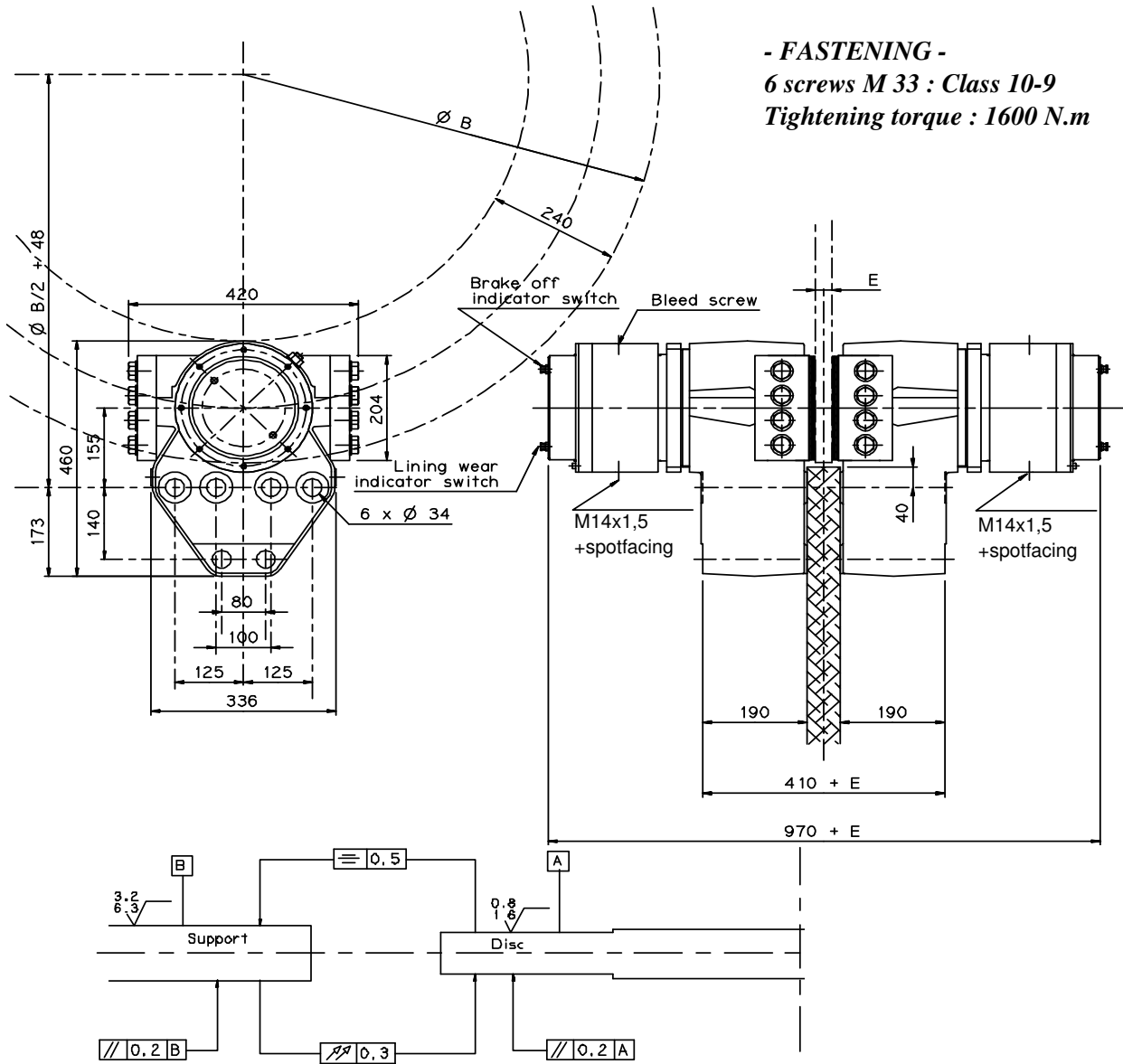
MAXIMUM BRAKING FORCE

as Emergency Brake	N	120 000	(Lining A)	ST4-A
as Service Brake	N	90 000	(Lining M)	ST4-M

CALIPER

Release pressure	bar	100	
Displaced volume for complete release * Gap between lining and disc : 1 mm	cm ³	110	(55 cm ³ per piston)
Total cylinder volume	cm ³	408	(204 cm ³ per piston)
Response time	s	0,2	
Weight	kg	285	

FAIL SAFE DISC BRAKE
Spring braking - Hydraulic release



Dimensions and Data open to improvement

Braking torque (N.m) = Braking force / 1000 x [(ØB)/2 - 108]

Manual lining wear adjustment

MAXIMUM BRAKING FORCE

as Emergency Brake	N	293 000 (Lining A)	ST5-A
as Service Brake	N	220 000 (Lining M)	ST5-M

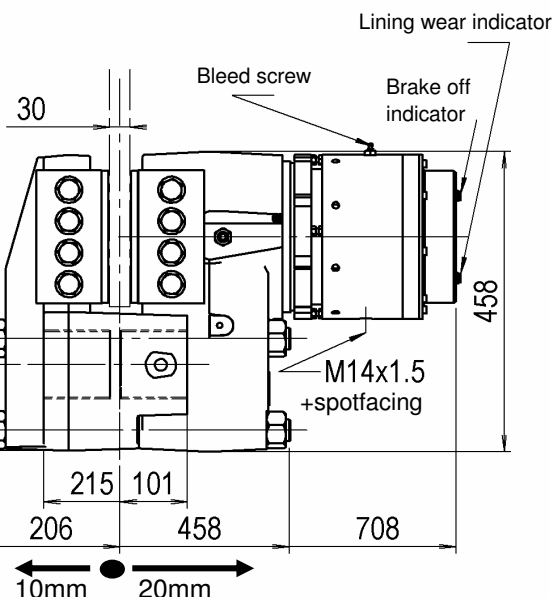
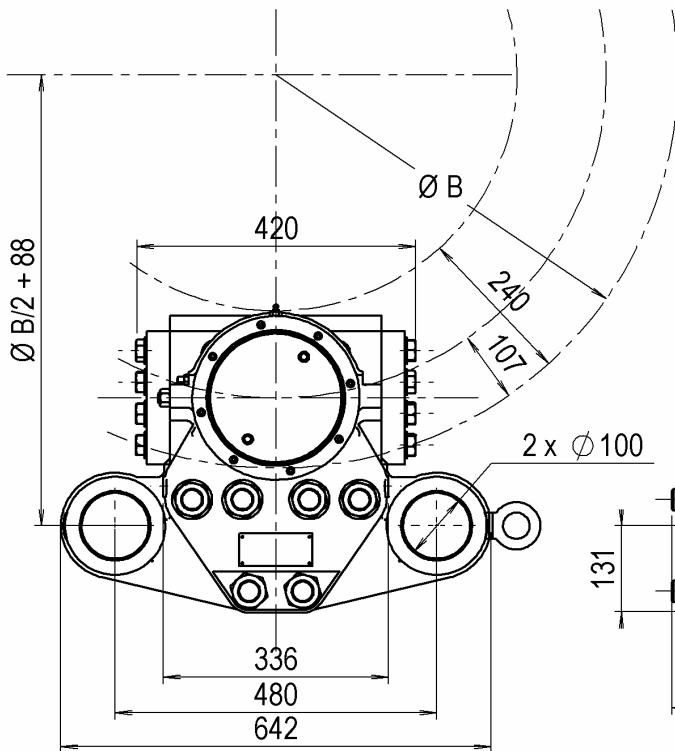
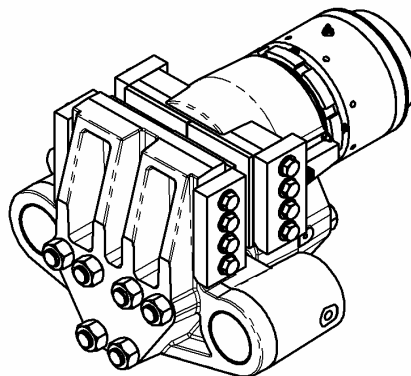
CALIPER

Release pressure	bar	190
Displaced volume for complete release*	cm ³	120 (60 cm ³ per piston)
Total cylinder volume	cm ³	678 (339 cm ³ per piston)
Response time	s	0,2
Weight	kg	440

FAIL SAFE DISC BRAKE
Floating

TECHNICAL DATA :

- Emergency brake
- Manual pad wear adjustment
- Spring applied
- Hydraulic release

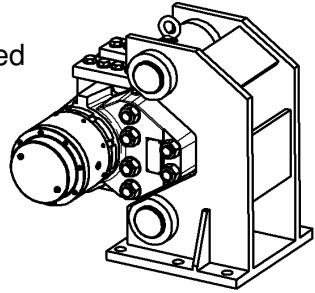


Dimensions and Data open to improvement

Mounting:

To be mounted on two bolts $\text{Ø}100 \text{ h6 Ra } 0,4$.
 Distance between bolt axis to be $480 \pm 0,1$.
 Parallelism of bolt axis and disc axis to be 0,5.
 Sliding distance of caliper on its bolts to be 20mm on right side and 10mm on left side.

OPTION:
 Caliper mounted on bolts and support.
 Fastening: 6 screws M30.



Braking torque (N.m) = Braking force / 1000 x $[(\text{Ø}B/2) - 108]$

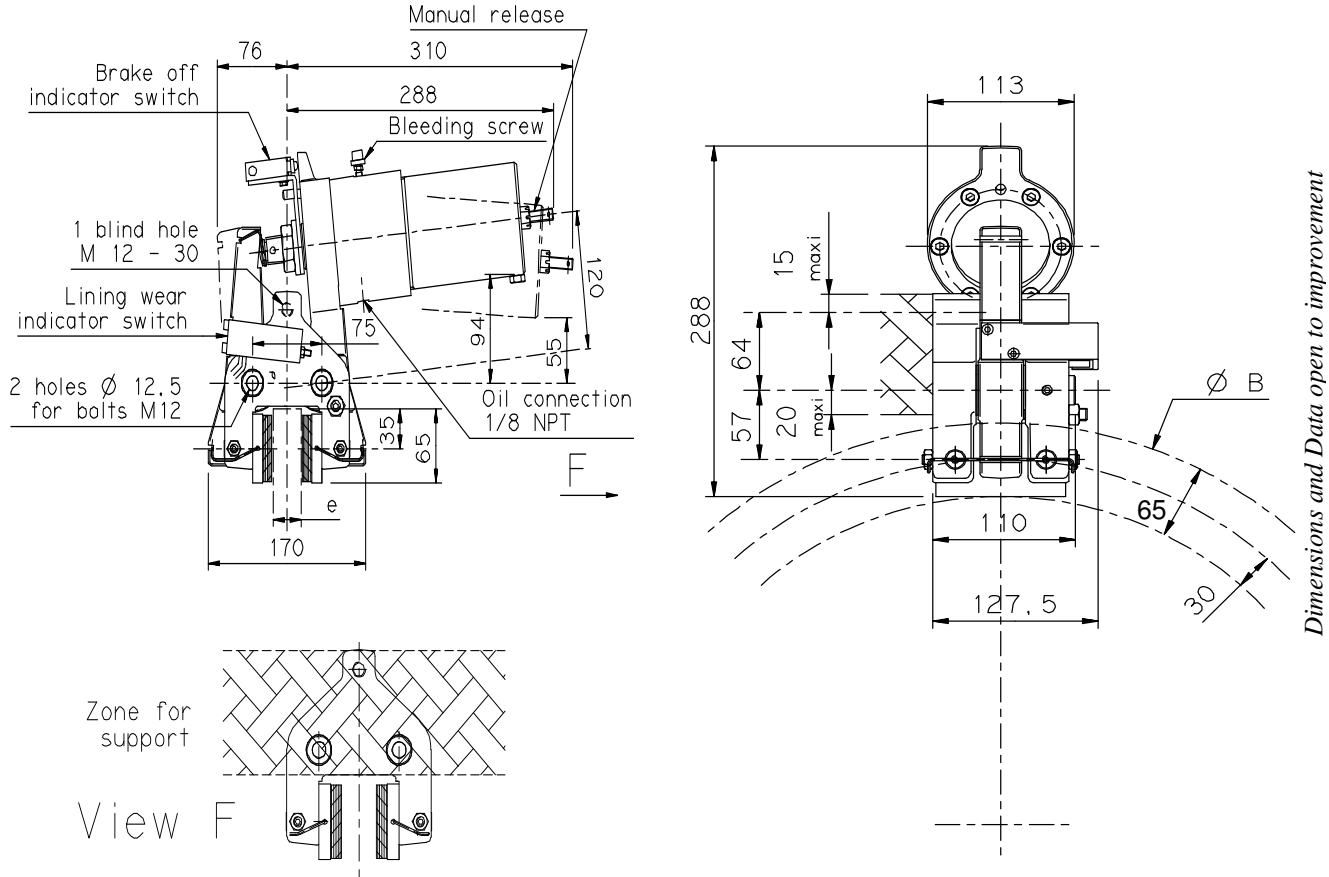
BRAKING FORCE

With lining type A	N	293 000
With lining type M	N	220 000

CALIPER

Release pressure	bar	190
Displaced volume for complete release (total gap between pad and disc:1mm)	cm ³	90
Total cylinder volume	cm ³	340
Response time	s	0,2
Weight	kg	340

FAIL SAFE DISC BRAKE
Spring braking - Hydraulic release



FASTENING :
 1 screw M12+ 2 bolts M12
 Class 10-9
 Tightening torque : 50 N.m

Automatic lining wear adjustment
 Disc thickness : 15 or 30 mm (to be indicated)
 Braking torque (N.m) = Braking force / 1000 x $[(\text{ØB})/2 - 30]$

MAXIMUM BRAKING FORCE

as Emergency Brake	N	12 000	(Lining A)	904-A
as Service Brake	N	9 000	(Lining M)	904-M

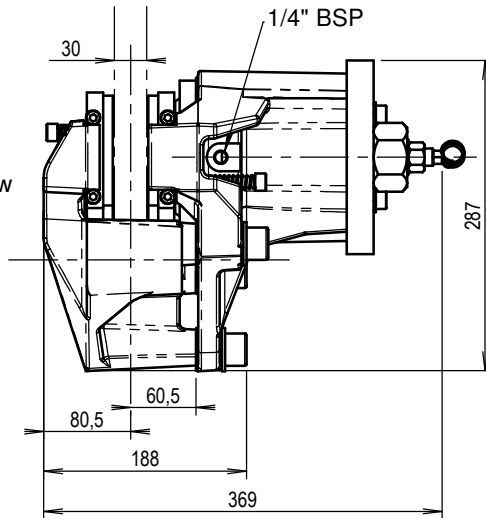
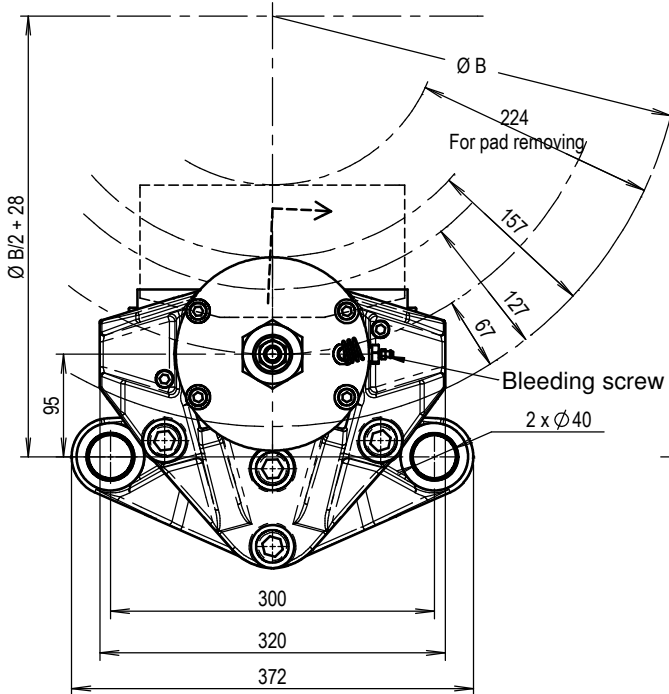
CALIPER

Release pressure	bar	60
Displaced volume for complete release	cm ³	33
Total cylinder volume	cm ³	98
Response time	s	0,3
Weight	kg	28

FAIL SAFE DISC BRAKE *Floating*

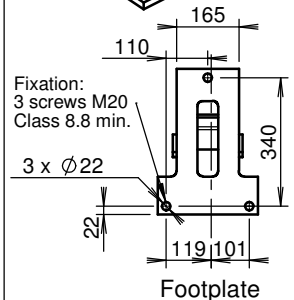
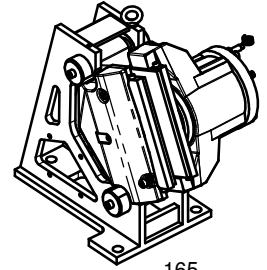
Data :

- For emergency stop
- Manual lining wear adjustment
- Spring braking
- Hydraulic release
- Manual release

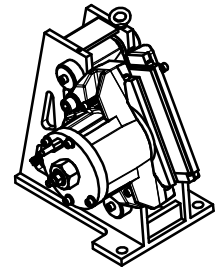


Options

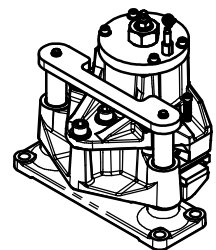
With vertical support
 Left hand mounting



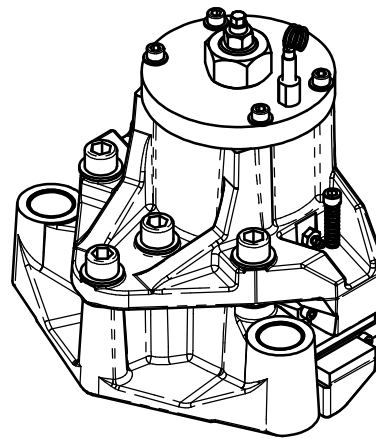
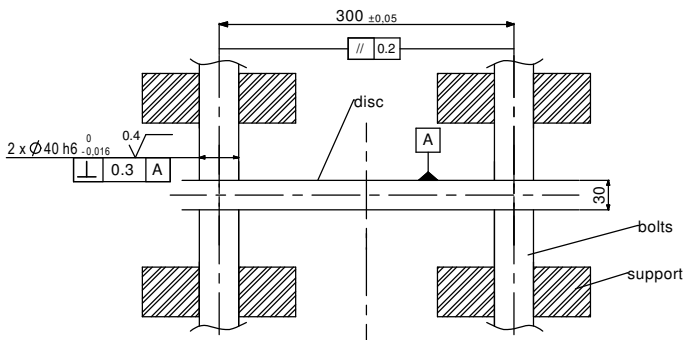
With vertical support
 Right hand mounting



For mounting with
 vertical disc axis
 take advice with **atv**.



Mounting on sliding bolts



- Right or left hand mounting.
- Dimensions valid for disc diameter below 1500 mm.
- Can be mounted with variable disc thickness (nominal 30 mm).
- Option DS__ SH (two fixe half calipers)

$$\text{Braking torque (N.m)} = \text{Braking force} / 1000 \times [(\text{ØB}/2) - 65]$$

MAXIMUM BRAKING FORCE

With lining type A	N	60 000	50 000	30 000	20 000
With lining type M	N	45 000	37 500	22 500	15 000

CALIPER		S60SH	S50SH	S30SH	S20SH
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Release pressure (with 1 mm gap)	bar	180	160	120	100
-------------------------------------	-----	-----	-----	-----	-----

Volume for complete release	cm ³		30		
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Cylinder volume	cm ³		200		
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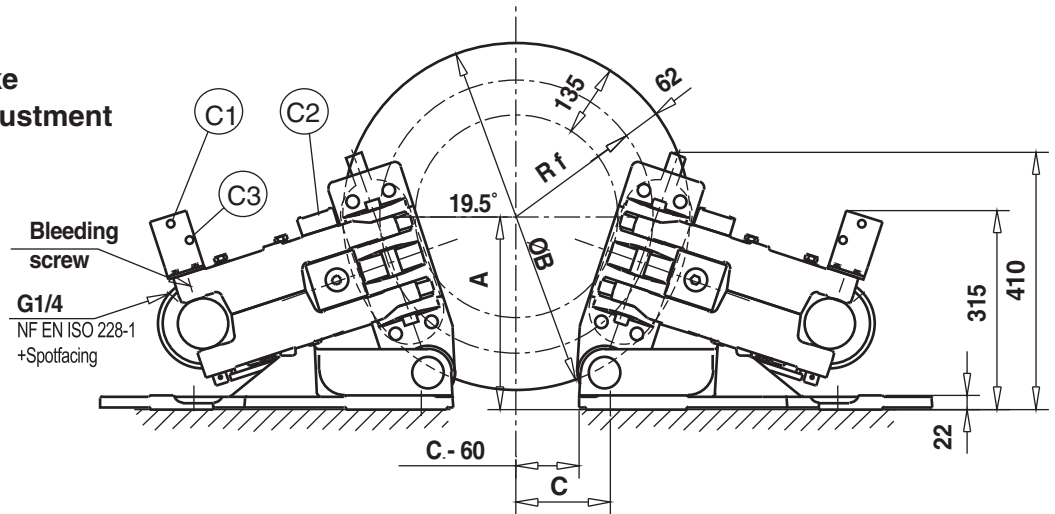
Response time	s		0.2		
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Weight	kg		100		
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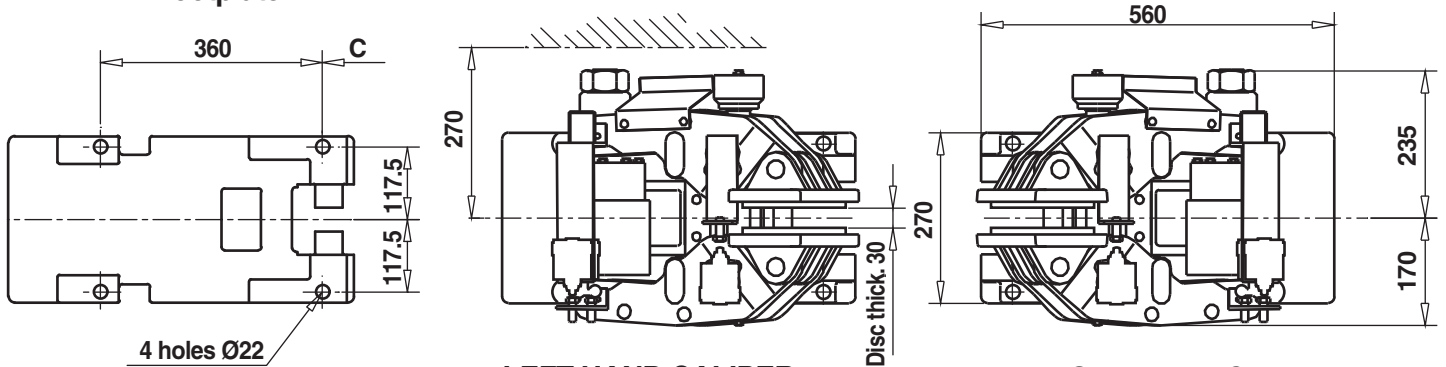
FAIL SAFE DISC BRAKE

Technical data:

- ▶ Application : service brake
- ▶ Automatic lining wear adjustment
- ▶ Spring braking
- ▶ Hydraulic release



Footplate



LEFT HAND CALIPER

RIGHT HAND CALIPER

Fixation: 4 screws CHc M20 type 8.8

Disc ØB (mm)		445	495	550	625	705	795	995
Braking torque adjustable from 42% to 100% (Nm) with lining "M"	Type 15 SH"M"	2 400	2 750	3 180	3 750	4 350	5 020	6 520
	Type 30 SH"M"	4 800	5 550	6 380	7 500	8 700	10 050	13 050
Dimensions	A (mm)	285	295	305	315	330	345	380
	C (mm)	100	120	150	185	225	265	365
Friction radius	Rf (mm)	160	185	213	250	290	335	435

Available options:

- Disc thickness 42
- Position indicator switch C1
- Disc thickness C2
- Manual wear adjustment and adjustment indicator C3

For mounting on discs sizes different from the chart, apply following formulas:

$$A = \text{ØB} \times 0,167 + 211$$

$$C = \text{ØB} \times 0,473 - 109$$

Working conditions:

- Ambient temperature - 10°C + 40°C
- Relative dampness < 70 %
- Dusty ambience ≥ 65 μ
- Horizontal position
- For other conditions, contact atv

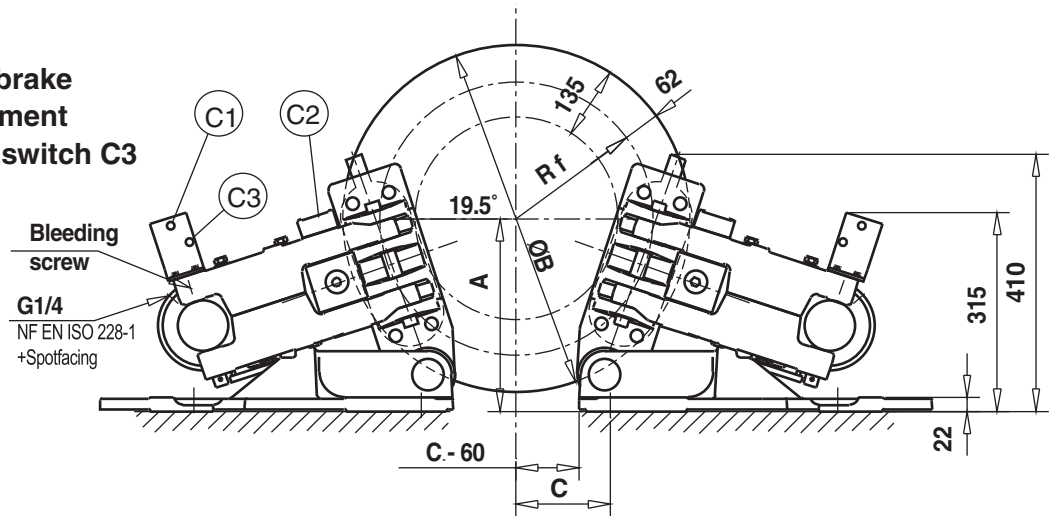
		Type 15 SH"M"	Type 30 SH"M"
Braking force adjustable from 42% to 100% with lining "M"		15 000 N	30 000 N
Max. reaction on the shaft	1 caliper	15 000 N	30 000 N
	2 calipers	10 000 N	20 000 N
Max. stopping rate at 40°C		600	600
Cylinder volume		43 cm ³	100 cm ³
Total release volume		17 cm ³	42 cm ³
Release pressure		100 bar	
Response time		0.2 s	
Weight		95 kg	

Dimensions and Data open to improvement

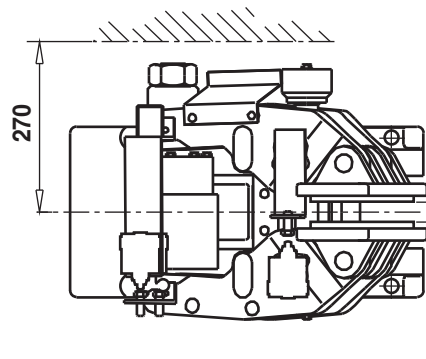
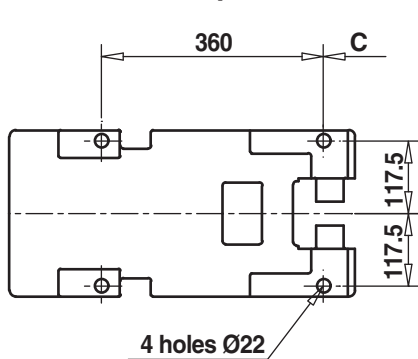
FAIL SAFE DISC BRAKE

Technical data:

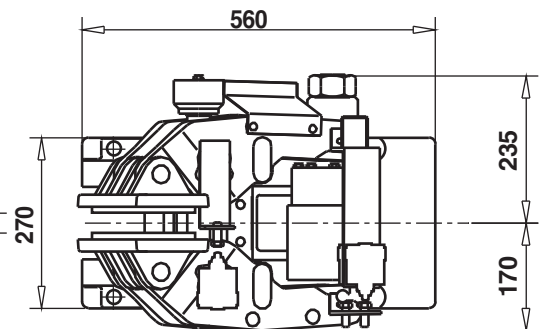
- ▶ Application : Emergency brake
- ▶ Manual lining wear adjustment and adjustment indicator switch C3
- ▶ Spring braking
- ▶ Hydraulic release



Footplate



LEFT HAND CALIPER



RIGHT HAND CALIPER

Fixation: 4 screws CHc M20 type 8.8

Disc ØB (mm)		445	495	550	625	705	795	995
Braking torque adjustable from 42% to 100% (Nm) with lining "A"	Type 15 SH"A"	3 150	3 650	4 200	4 950	5 750	6 650	8 650
	Type 30 SH"A"	6 300	7 300	8 400	9 900	11 500	13 300	17 300
Dimensions	A (mm)	285	295	305	315	330	345	380
	C (mm)	100	120	150	185	225	265	365
Friction radius	Rf (mm)	160	185	213	250	290	335	435

Available options:

- Automatic wear adjustment
- Position indicator switch C1
- Wear indicator switch C2

For mounting on discs sizes different from the chart, apply following formulas:

$$A = \text{ØB} \times 0,167 + 211$$

$$C = \text{ØB} \times 0,473 - 109$$

Working conditions:

- Ambient temperature - 10°C + 40°C
- Relative dampness < 70 %
- Dusty ambience $\geq 65 \mu$
- Horizontal position
- For other conditions, contact atv

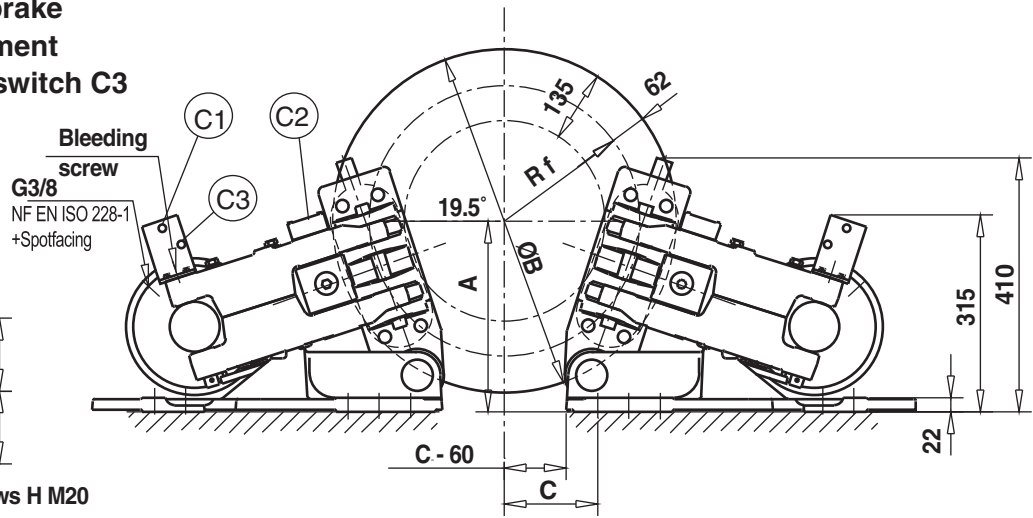
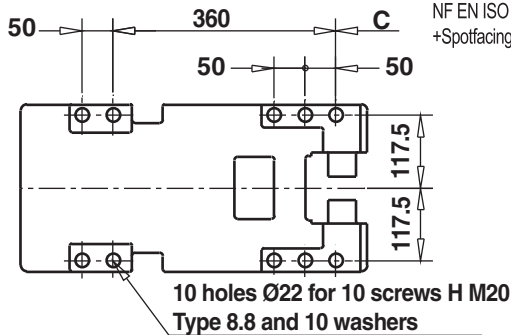
		Type 15 SH"A"	Type 30 SH"A"
Braking force adjustable from 42% to 100% with lining "A"		20 000 N	40 000 N
Max. reaction on the shaft	1 caliper	20 000 N	40 000 N
	2 calipers	14 000 N	27 000 N
Max. stopping rate at 40°C		600	600
Cylinder volume		43 cm ³	100 cm ³
Total release volume		17 cm ³	42 cm ³
Release pressure		100 bar	
Response time		0.2 s	
Weight		95 kg	

Dimensions and Data open to improvement

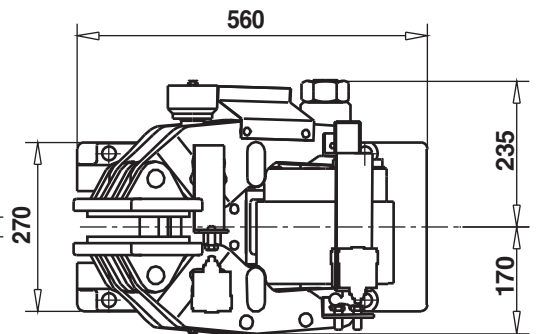
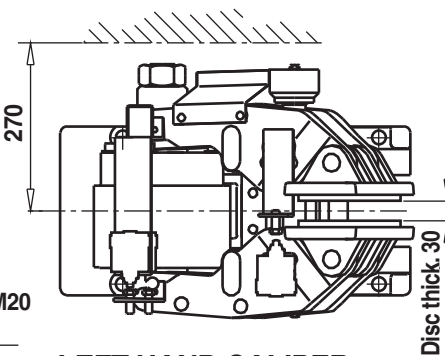
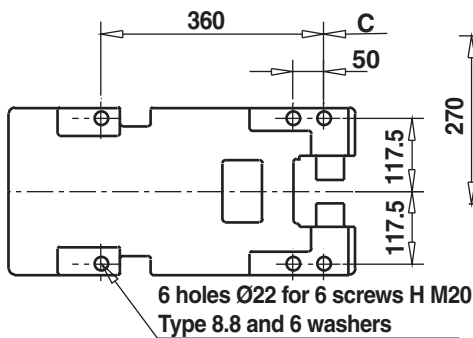
FAIL SAFE DISC BRAKE

Technical data:

- ▶ Application : Emergency brake
- ▶ Manual lining wear adjustment and adjustment indicator switch C3
- ▶ Spring braking
- ▶ Hydraulic release



Footplate 105SH



Footplate 60SH

LEFT HAND CALIPER

RIGHT HAND CALIPER

Fixation: 4 screws CHc M20 8.8 Class

Disc ØB (mm)		445	495	550	625	705	795	995
Braking torque adjustable from 42% to 100% (Nm) with lining "A"	Type 60 SH"A"	13 400	15 500	17 900	21 000	24 400	28 100	36 500
	Type 105 SH"A"	23 500	27 200	31 300	36 700	42 600	49 200	63 900
Dimensions	A (mm)	285	295	305	315	330	345	380
	C (mm)	100	120	150	185	225	265	365
Friction radius	Rf (mm)	160	185	213	250	290	335	435

Available options:

- Automatic wear adjustment
- Position indicator switch C1
- Wear indicator switch C2

For mounting on discs sizes different from the chart, apply following formulas:

$$A = \text{ØB} \times 0,167 + 211$$

$$C = \text{ØB} \times 0,473 - 109$$

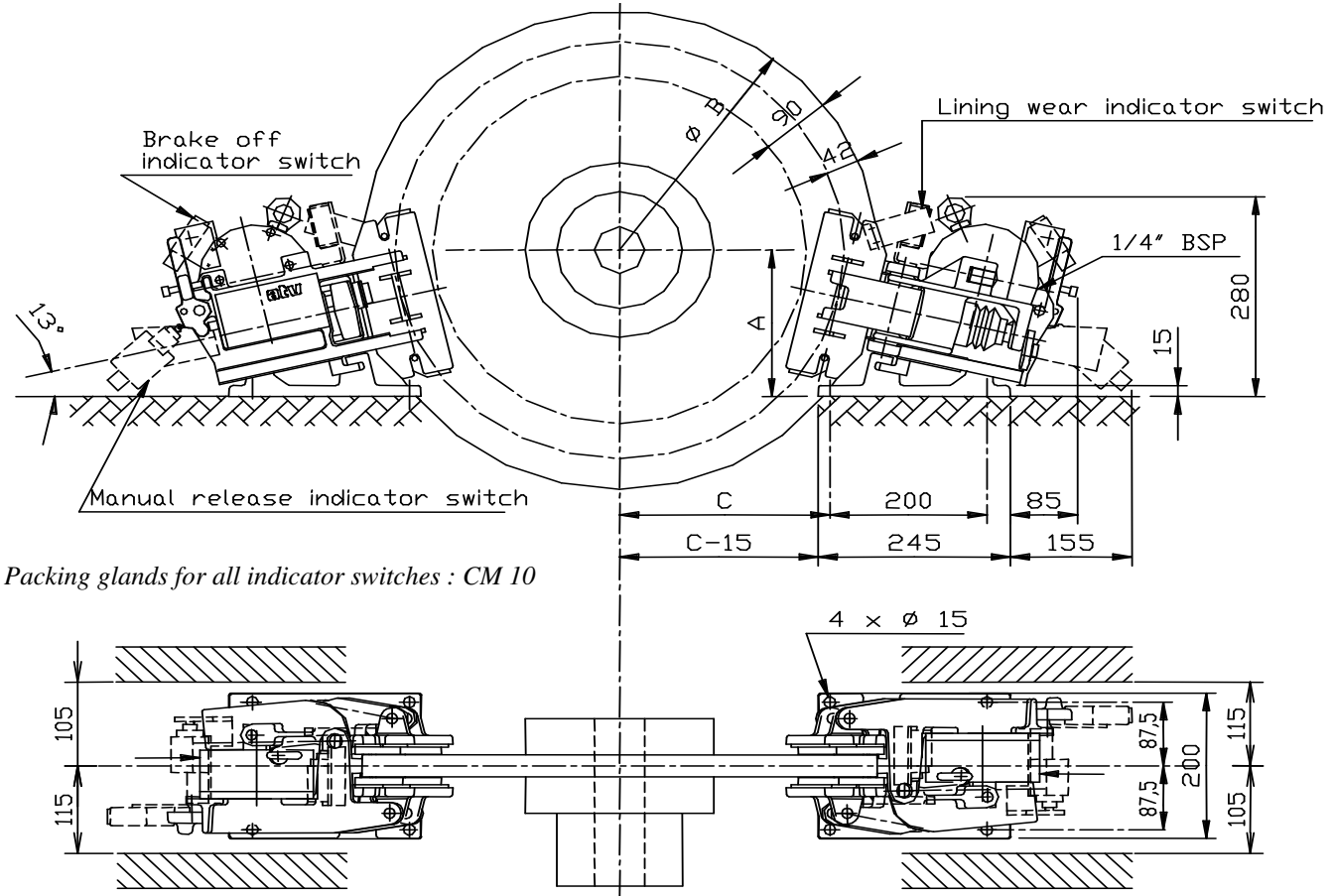
Working conditions:

- Ambient temperature - 10°C + 40°C
- Relative dampness < 70 %
- Dusty ambience ≥ 65 µ
- Horizontal position
- For other conditions, contact atv

		Type 60 SH"A"	Type 105 SH"A"
Braking force adjustable from 42% to 100% with lining "A"		84 000 N	147 000 N
Max. reaction on the shaft	1 caliper	84 000 N	147 000 N
	2 calipers	56 000 N	98 000 N
Max. stopping rate at 40°C		150	60
Cylinder volume		220 cm ³	410 cm ³
Total release volume		80 cm ³	166 cm ³
Release pressure		100 bar	
Response time		0.2 s	
Weight		105 kg	

FAIL SAFE DISC BRAKE

Spring braking - Pneumatic release - Disc thickness: 12,7 to 30mm



Packing glands for all indicator switches : CM 10

Dimensions and Data open to improvement

without automatic lining wear adjustment (REF : 5 SPRM)

with automatic lining wear adjustment (REF : 5 SP)

Brake disc diameter ØB	mm	315	355	395	445	495	550	625
Braking torque	N.m	190	220	260	300	340	390	460
Braking force	N	1650 Adjustable from 50% à 120%						
Max Reaction force	N	1 Caliper : 1980 N - 2 Calipers : 890 N						

CALIPER

For non standard discs : please contact ATV

A	mm	160	165	170	180	186	195	205
C	mm	100	120	140	160	190	220	255

Release pressure

bar 5

Response time

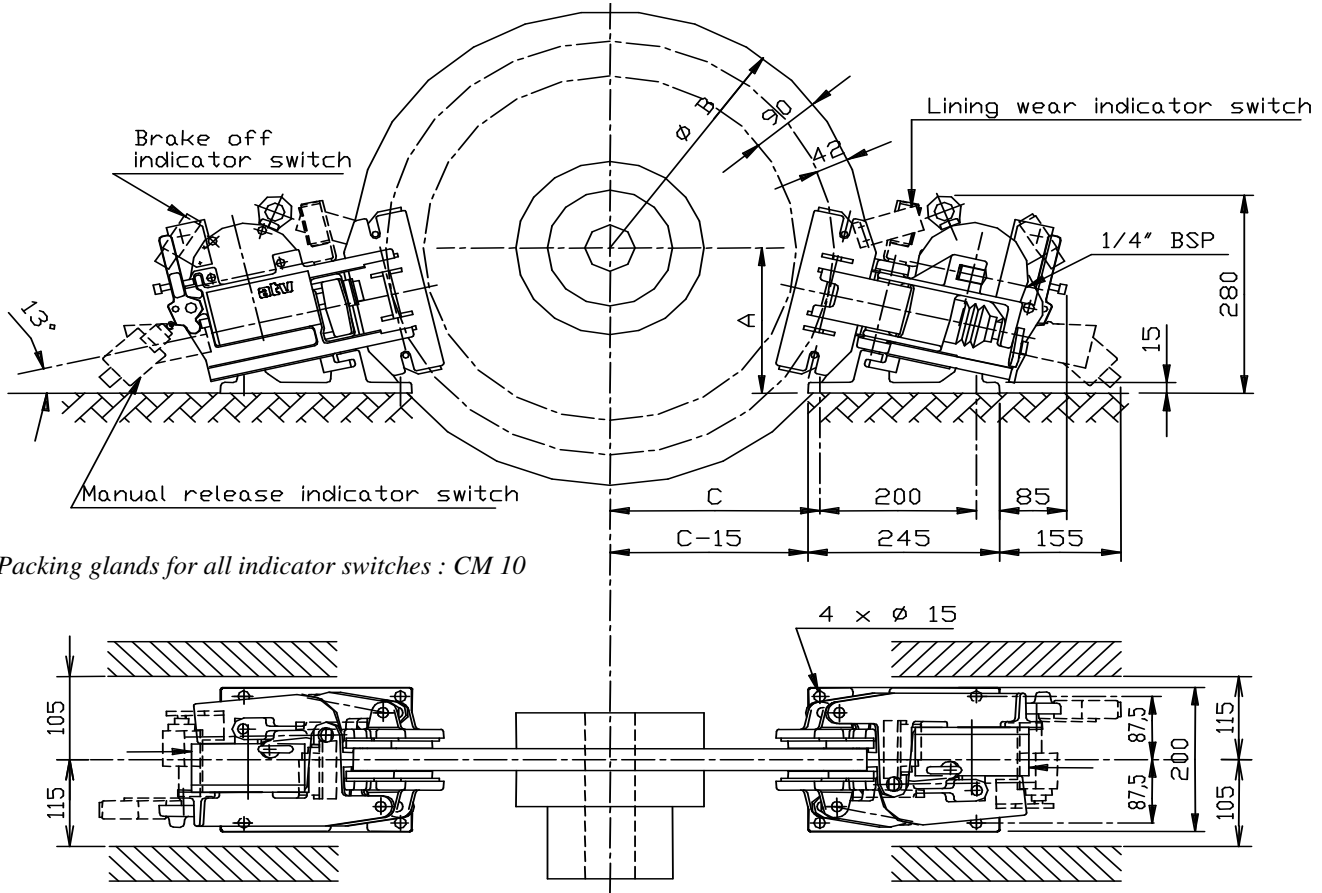
s 0,15

Weight

kg 34

FAIL SAFE BRAKE

Spring braking - Pneumatic release - Disc thickness: 12,7 to 30mm



Packing glands for all indicator switches : CM 10

Dimensions and Data open to improvement

Without automatic lining wear adjustment (REF : 450 SPRM)

With automatic lining wear adjustment (REF : 450 SP)

Brake disc diameter ØB	mm	315	355	395	445	495	550	625	705	795
Braking torque	N.m	380	450	510	600	680	770	900	1030	1180
Braking force	N	3340 Adjustable from 50% to 100%								
Max Reaction force	N	1 Caliper : 3340 N - 2 Calipers : 1500 N								

CALIPER

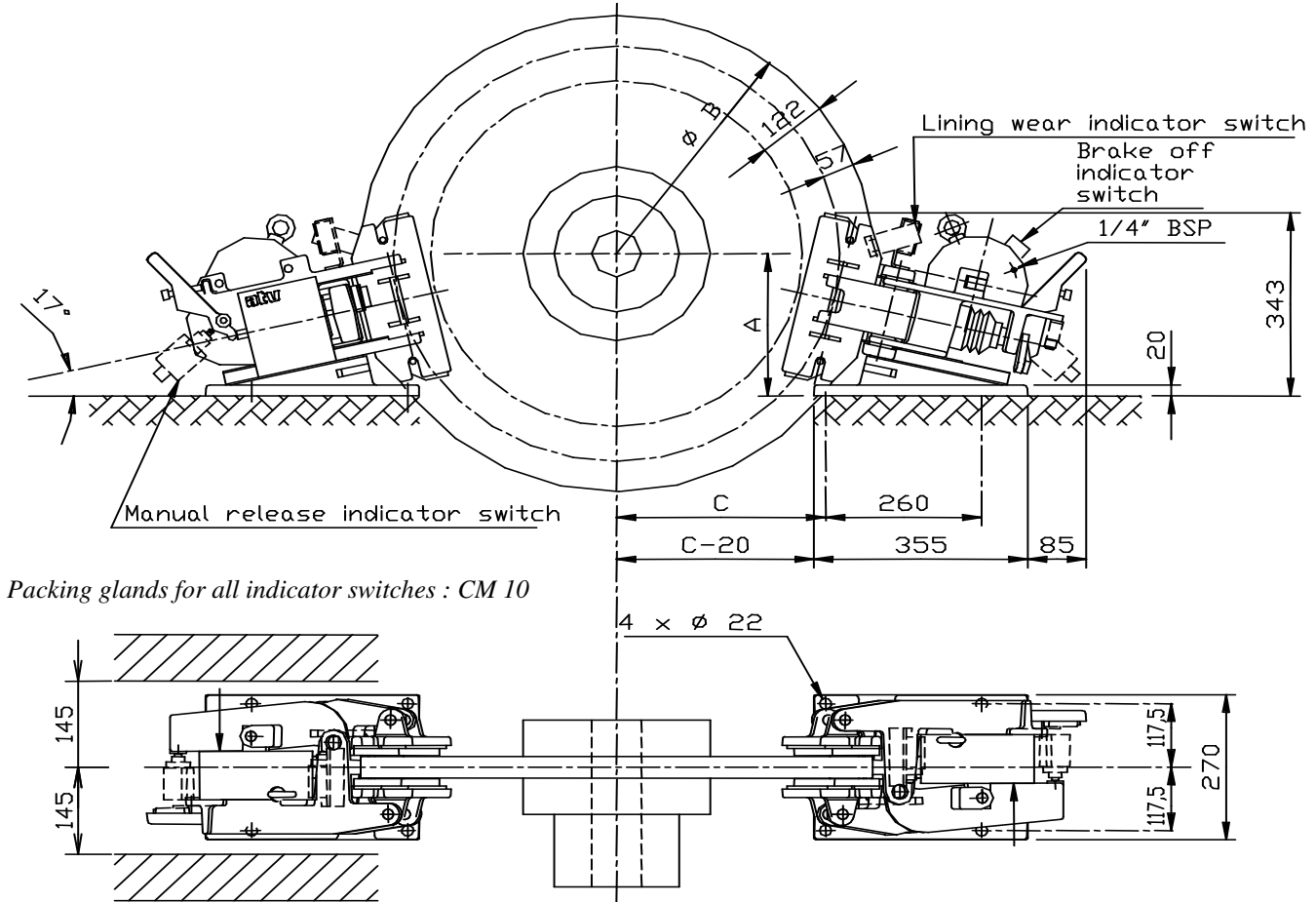
For non standard discs : please contact ATV

A	mm	160	165	170	180	186	195	205	217	231
C	mm	100	120	140	160	190	220	255	296	341

Release pressure	bar	6
Response time	s	0,15
Weight	kg	34

FAIL SAFE DISC BRAKE

Spring braking - Pneumatic release - Disc thickness: 12,7 to 30mm



Dimensions and Data open to improvement

Packing glands for all indicator switches : CM 10

Without automatic lining wear adjustment (REF : 4 SPRM)

With automatic lining wear adjustment (REF : 4 SP)

Brake disc diameter ØB	mm	445	495	550	625	705	795
Braking torque	N.m	950	1120	1270	1500	1750	2000
Braking force	N	5880 Adjustable from 50% à 120%					
Max Reaction force	N	1 Caliper : 7060 N - 2 Calipers : 4130 N					

CALIPER

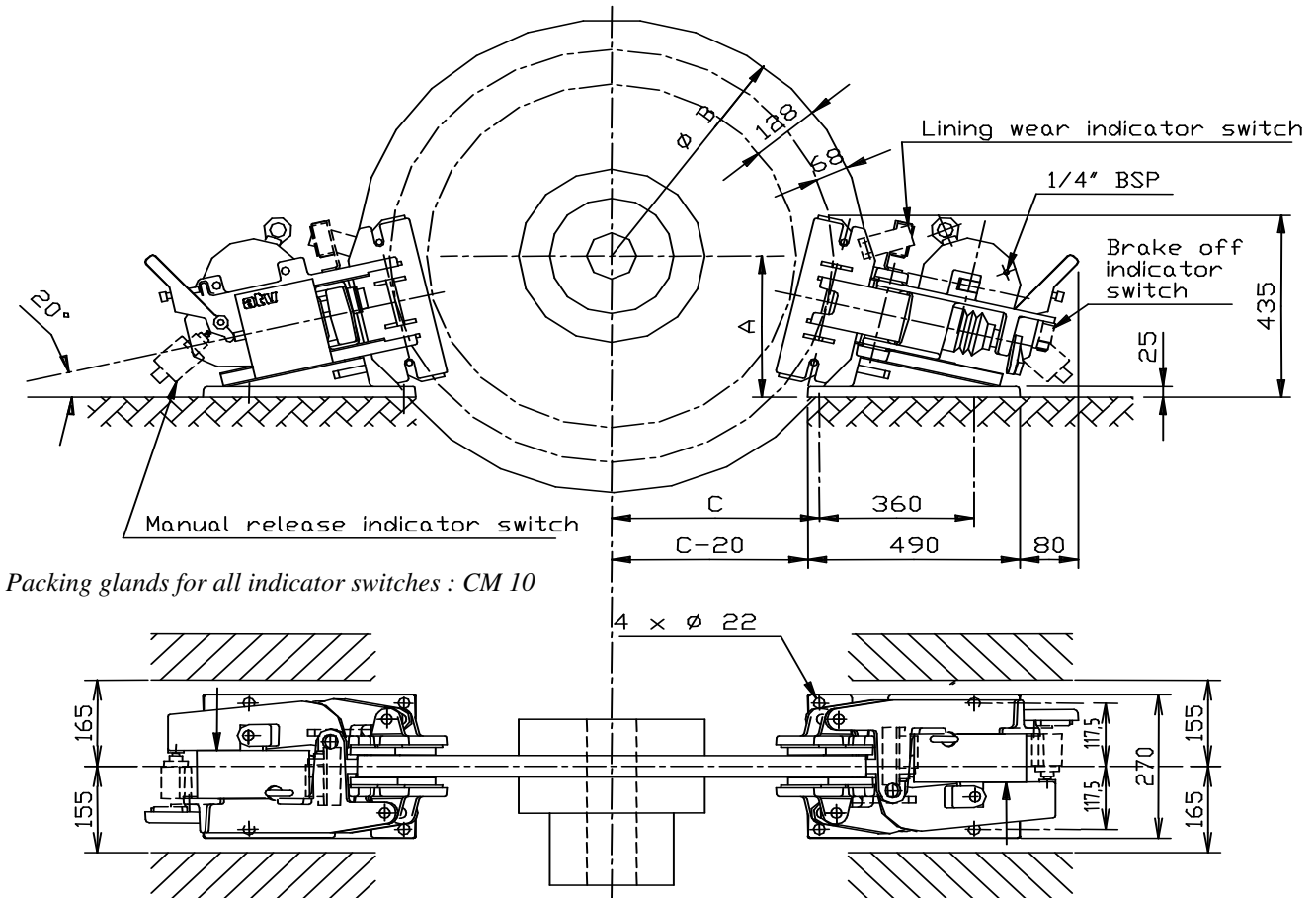
For non standard discs : please contact ATV

A	mm	225	232	240	250	260	275
C	mm	130	154	180	215	255	295

Release pressure	bar	5
Response time	s	0,2
Weight	kg	77

FAIL SAFE DISC BRAKE

Spring braking - Pneumatic release - Disc thickness: 12,7 to 30mm



Dimensions and Data open to improvement

Packing glands for all indicator switches : CM 10

Without automatic lining wear adjustment (REF : 3 SPRM)

With automatic lining wear adjustment (REF : 3 SP)

Brake disc diameter ØB	mm	445	495	550	625	705	795
Braking torque	N.m	1600	1820	2100	2500	2900	3350
Braking force	N	10070	Adjustable from 20% à 120%				
Max Reaction force	N	1 Caliper : 12200 N - 2 Calipers : 8350 N					

CALIPER

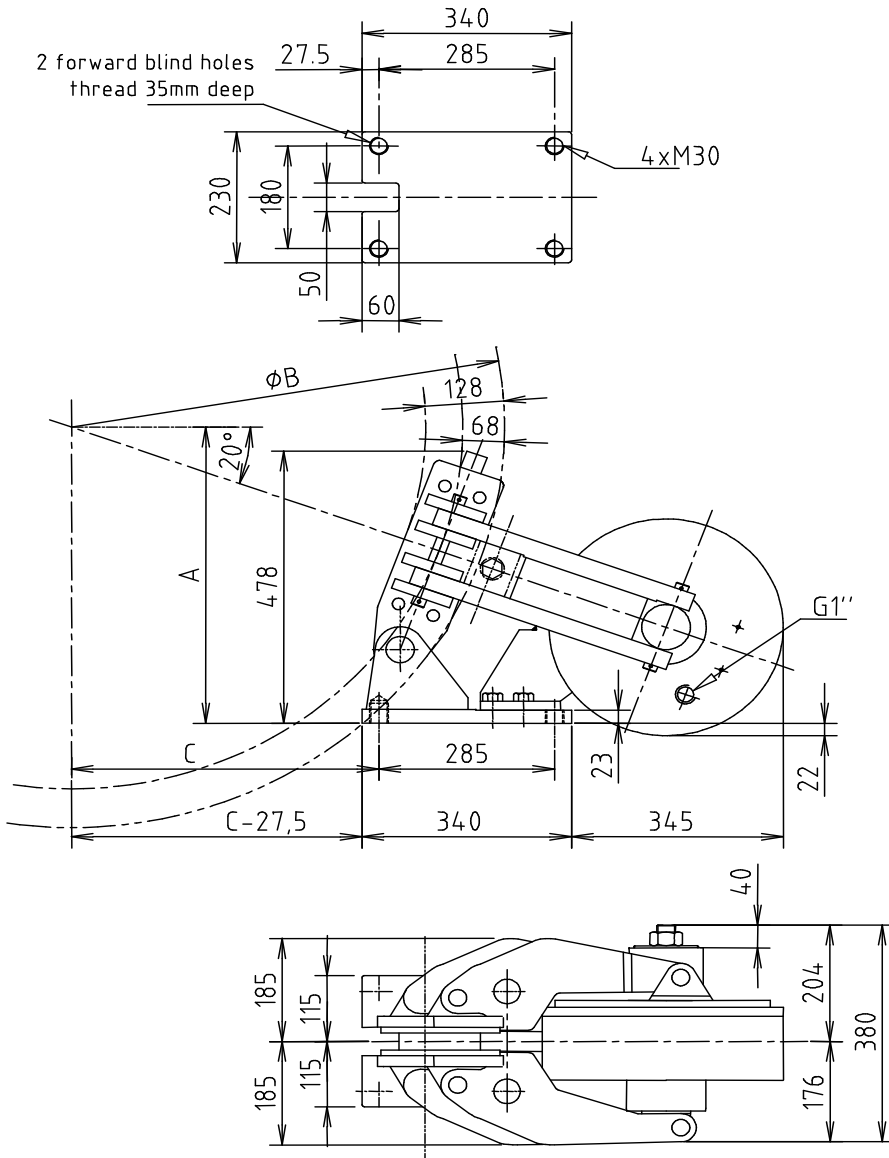
For non standard discs : please contact ATV

A	mm	287	295	305	317	331	346
C	mm	103	127	155	188	226	269

Release pressure	bar	5
Response time	s	0,2
Weight	kg	122

FAIL SAFE DISC BRAKE

Spring braking - Pneumatic release - Disc thickness : 30 mm



Dimensions and data open to improvement

Baking torque (Nm) = Braking force / 1000 x [(ØB)/2-68]

MAXIMUM BRAKING FORCE

as Emergency Brake	N	70 000	(Lining A)	ST2-A
as Service Brake	N	50 000	(Lining M)	ST2-M

CALIPER

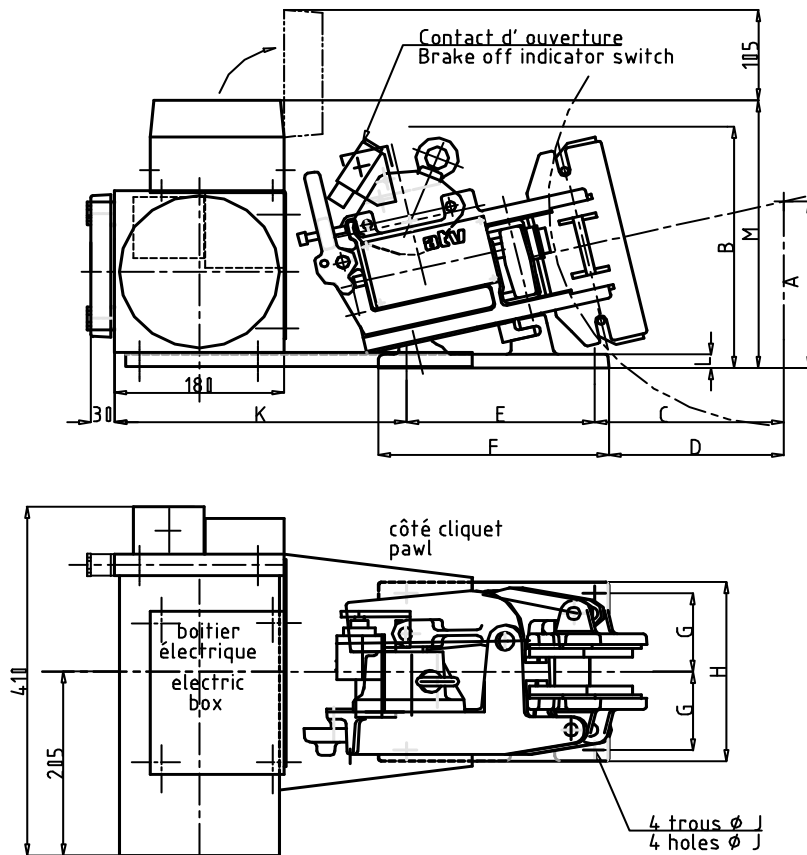
Release pressure	bar	6
Response time	s	0,2
Weight	kg	150
A	mm	= (0,171 x ØB) + 279
C	mm	= (0,470 x ØB) - 161

FAIL SAFE BRAKE

Spring braking - Electro-hydraulic release

Technical data:

- Alternative three phase current
- Standard Voltage : 230V or 400V , 50 Hz
- Power 0,65 KW
- Protection IP 54
- Response time: 0,25sec



With automatic lining wear adjustment (REF : SHCI)
 Without automatic lining wear adjustment (REF : SHRMCI)

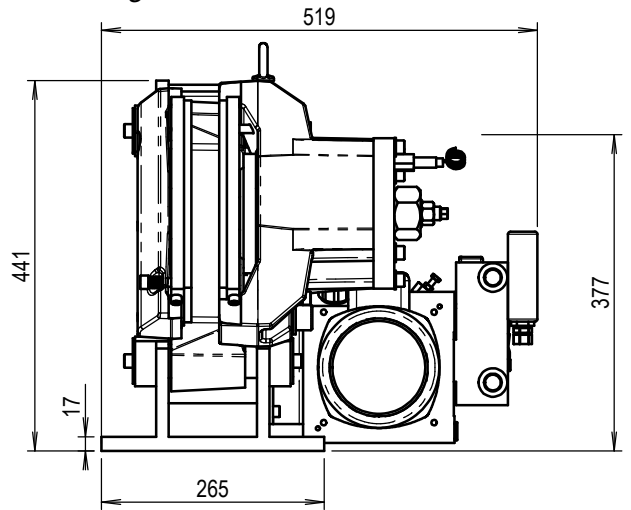
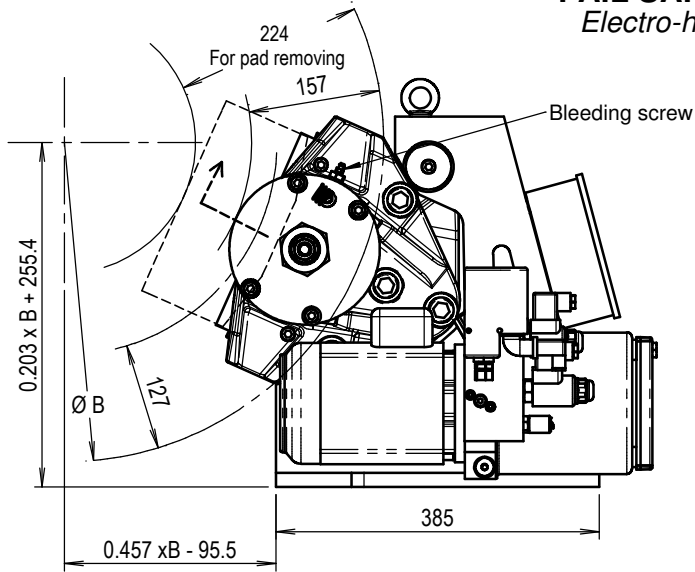
Dimensions and Data open to improvement

Calipers	Discs	Ø	315	355	400	450	500	560	630	710	800			
5SHCI	Max Braking torque (Nm)		228	268	310	360	410	470	540					
	Max Braking force (N)		1980 Ajustable from 30% to 100%											
	Reaction force (N)		1 Caliper : 1980 N - 2 Calipers : 890 N											
450SHCI	Max Braking torque (Nm)		460	540	610	720	800	920	1080	1240	1420			
	Max Braking force (N)		4000 Ajustable from 30% to 100%											
	Reaction force (N)		1 Caliper : 4000 N - 2 Calipers : 1800 N											
4SHCI	Max Braking torque (Nm)					1185	1360	1570	1820	2100	2420			
	Max Braking force (N)					7060 Ajustable from 30% to 100%								
	Reaction force (N)					1 Caliper : 7060 N - 2 Calipers : 4130 N								

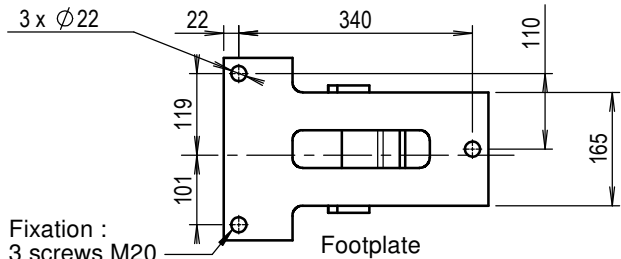
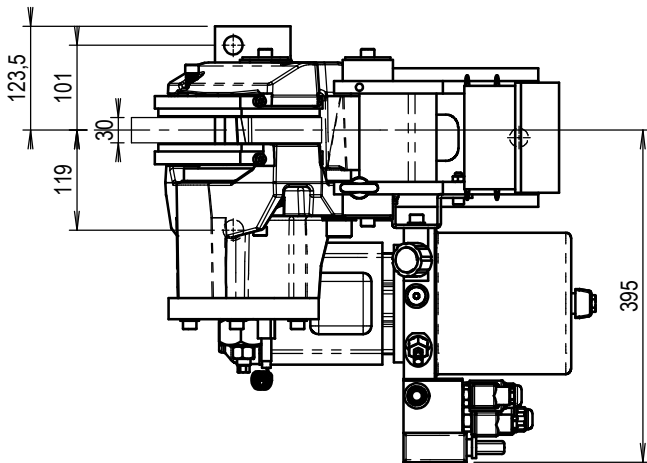
Dimensions

Calipers 5 & 450	A mm	160	165	170	180	186	195	205			
	B mm	270	270	270	270	270	270	270			270
D = C-15	C mm	100	120	140	160	190	220	255			
	A mm				225	232	240	250			260
B mm	343				343	343	343	343	343	343	
D = C-20	C mm				130	154	180	215	215	215	255
	E mm	Calipers 450 & 5					Caliper 4				
	F mm	200					260				
	G mm	245					355				
	H mm	87,5					117,5				
	I mm	200					270				
	J mm	15					22				
	K mm	310					360				
	L mm	15					20				
	M mm	300					305				
	Poids kg	43					77				

FAIL SAFE DISC BRAKE
Electro-hydraulic - Floating



Dimensions and data open to improvement

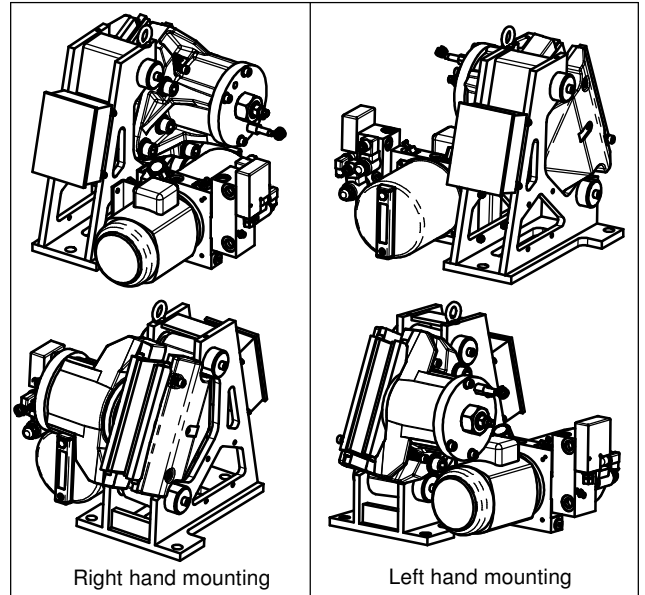


Fixation :
 3 screws M20
 Class 8.8 min.

Footplate

Data :

- For emergency stop
- Manual lining wear adjustment
- Integrated power pack
- Spring braking
- Hydraulic release
- Manual release
- Right or left hand mounting.
- Dimensions valid for disc diameter below 1500 mm.
- Can be mounted with variable disc thickness (nominal 30 mm).



Braking torque (N.m) = Braking force / 1000 x [(ØB/2) - 65]

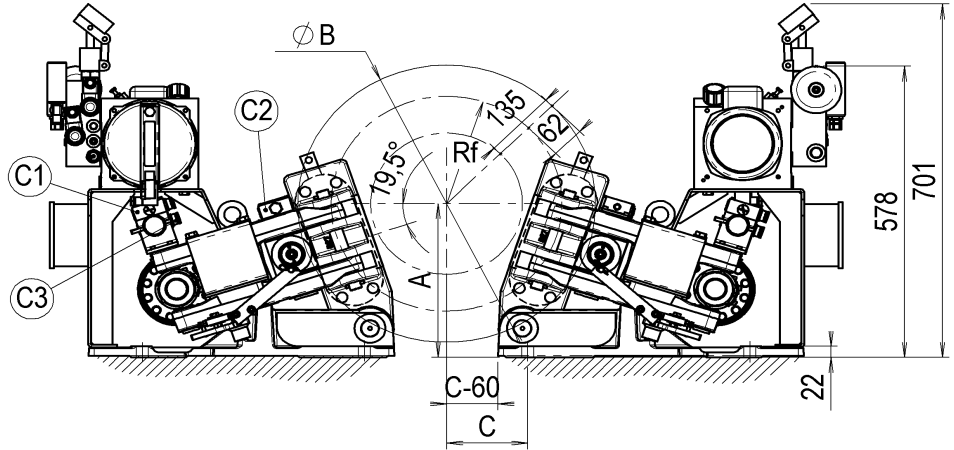
MAXIMUM BRAKING FORCE

With lining type A	N	60 000	50 000	30 000	20 000
With lining type M	N	45 000	37 500	22 500	15 000
CALIPER		S60SHCI	S50SHCI	S30SHCI	S20SHCI
Release pressure (with 1 mm gap)	bar	180	160	120	100
Power	kW	0.65			
Supply voltage		230V ou 400V 50 Hz Threephase voltage			
Response time	s	0.2			
Weight	kg	120			

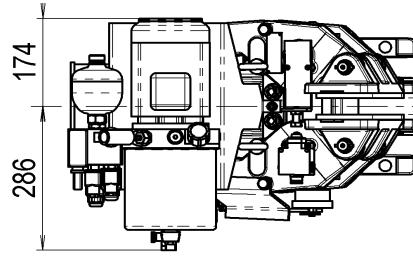
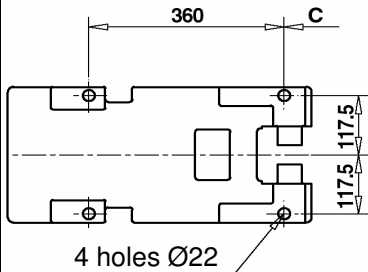
ELECTRO-HYDRAULIC FAIL-SAFE DISC BRAKE

Technical data:

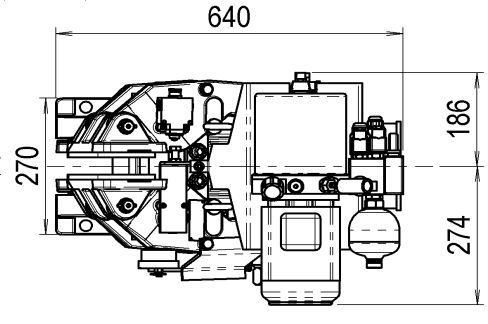
- Application : service brake
- Automatic pad wear adjustment
- Integrated power pack
- Spring braking
- Electric release



Footplate



RIGHT HAND CALIPER



LEFT HAND CALIPER

Data subject to modification without prior advice

Fixation : 4 screws H M20 type 8.8 and 4 washers Z20

Disc ØB (mm)		445	495	550	625	705	795	995
Braking torque adjustable from 42%-100%(Nm) with linings "M"	Type 15 SHCI "M"	2 400	2 750	3 180	3 750	4 350	5 020	6 520
	Type 30 SHCI "M"	4 800	5 550	6 380	7 500	8 700	10 050	13 050
Dimensions	A (mm)	285	295	305	315	330	345	380
	C (mm)	100	120	150	185	225	265	365
Friction radius	Rf (mm)	160	185	213	250	290	335	435

Available options :

- Position indicator switch C1
- Wear indicator switch C2
- Disc thickness 42
- Manual pad wear adjustment and adjustment indicator C3

For mounting on discs sizes different from the chart, apply following formulas:

A= ØB x 0,167 + 211
 C= ØB x 0,473 - 109

Works conditions :

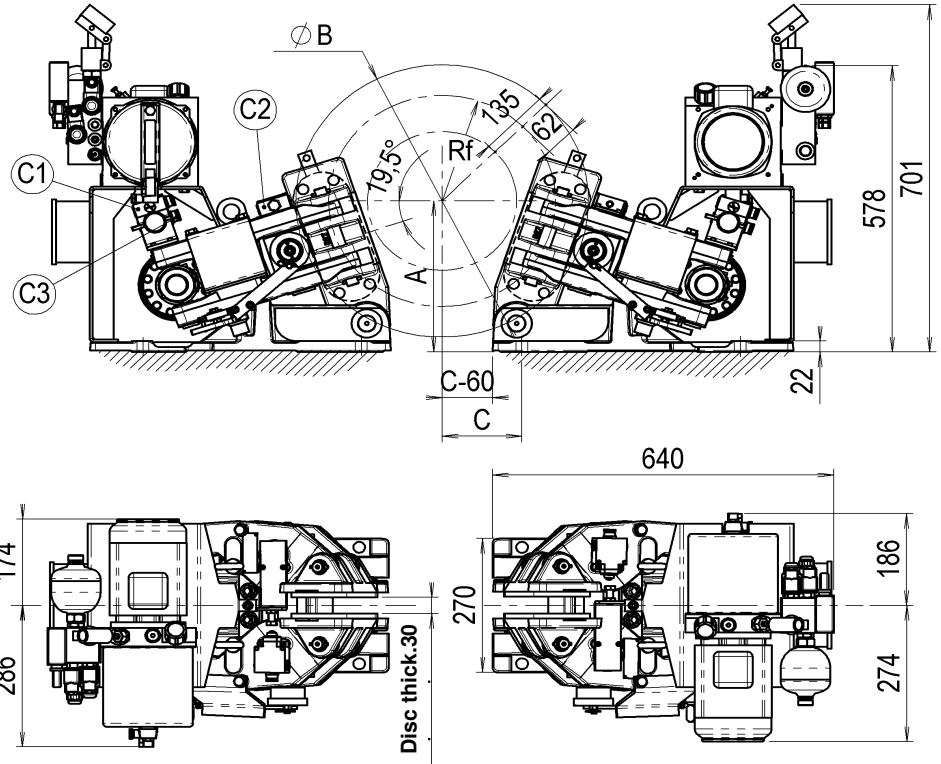
- Ambient temperature -10°C +40°C
- Relative dampness <70%
- Dusty ambience ≥ 65µ
- Horizontal position
- (For other conditions, contact ATV)

		Type 15 SHCI "M"	Type 30 SHCI "M"
Braking force adjustable from 42%-100% with linings "M"		15 000 N	30 000 N
Max.reaction on the shaft	1 caliper	15 000 N	30 000 N
	2 calipers	10 000 N	20 000 N
Max.stopping rate at 40°C		600	600
Power consumption		0,65 kW	
Response time		0,2 s	
Supply voltage		230 V ou 400V. 50Hz AC	
Weight		125 kg	
Protection		IP 54	

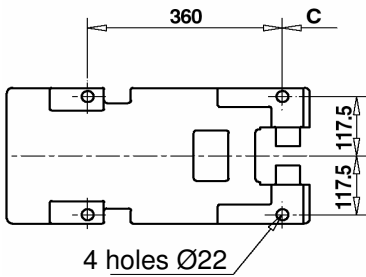
ELECTRO-HYDRAULIC FAIL-SAFE DISC BRAKE

Technical data:

- For emergency stop
- Manual pad wear adjustment and adjustment indicator C3
- Integrated power pack
- Spring braking
- Electric release



Footplate



RIGHT HAND CALIPER

LEFT HAND CALIPER

Fixation : 4 screws H M20 type 8.8 and 4 washers Z20

Disc ØB (mm)		445	495	550	625	705	795	995
Braking torque adjustable from 42%-100%(Nm) with linings "A"	Type 15 SHCI "A"	3 150	3 650	4 200	4 950	5 750	6 650	8 650
	Type 30 SHCI "A"	6 300	7 300	8 400	9 900	11 500	13 300	17 300
Dimensions	A (mm)	285	295	305	315	330	345	380
	C (mm)	100	120	150	185	225	265	365
Friction radius	Rf (mm)	160	185	213	250	290	335	435

Available options :

- Position indicator switch C1
- Wear indicator switch C2
- Disc thickness 42
- Automatic pad wear adjustment

For mounting on discs sizes different from the chart, apply following formulas:

$A = \text{ØB} \times 0,167 + 211$
 $C = \text{ØB} \times 0,473 - 109$

Works conditions :

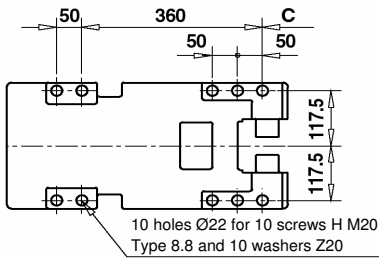
- Ambient temperature -10°C +40°C
- Relative dampness <70%
- Dusty ambience $\geq 65\mu$
- Horizontal position
- (For other conditions, contact ATV)

	Type 15 SHCI "A"	Type 30 SHCI "A"
Braking force adjustable from 42%-100% with linings "A"	20 000 N	40 000 N
Max.reaction on the shaft	1 caliper	20 000 N
	2 calipers	14 000 N
Max.stopping rate at 40°C	600	600
Power consumption	0,65 kW	
Response time	0,2 s	
Supply voltage	230 V ou 400V. 50Hz AC	
Weight	125 kg	
Protection	IP 54	

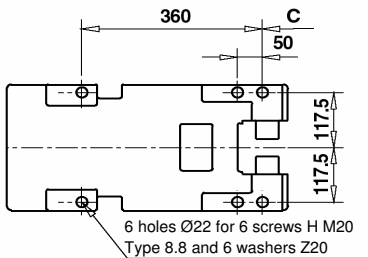
ELECTRO-HYDRAULIC FAIL-SAFE DISC BRAKE

Technical data:

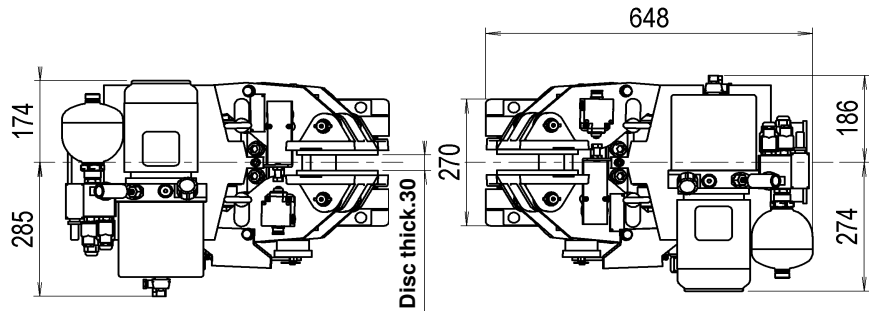
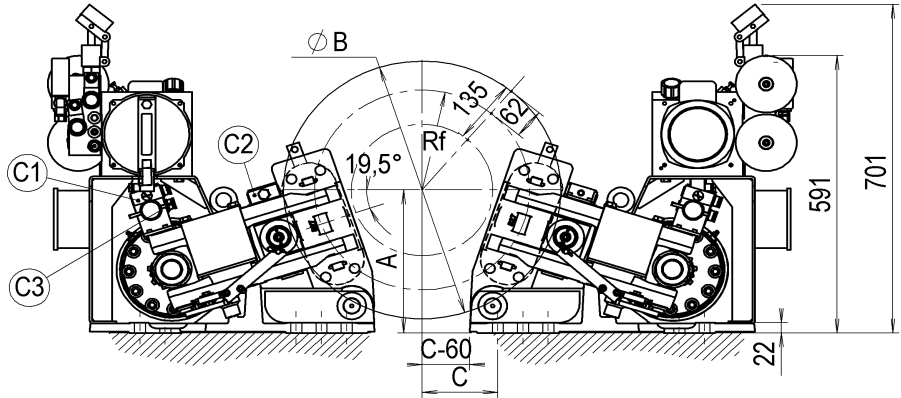
- Application : service brake
- Automatic pad wear adjustment
- Integrated power pack
- Spring braking
- Electric release



Footplate 105SHCI



Footplate 60SHCI



RIGHT HAND CALIPER

LEFT HAND CALIPER

Data subject to modification without prior advice

Disc ØB (mm)		445	495	550	625	705	795	995
Braking torque adjustable from 42%-100%(Nm) with linings "M"	Type 60 SHCI "M"	9 600	11 100	12 750	15 000	17 400	20 100	26 100
	Type 105 SHCI "M"	16 800	19 400	22 300	26 300	30 500	35 200	45 700
Dimensions	A (mm)	285	295	305	315	330	345	380
	C (mm)	100	120	150	185	225	265	365
Friction radius	Rf (mm)	160	185	213	250	290	335	435

Available options :

- Position indicator switch C1
- Wear indicator switch C2
- Manual pad wear adjustment and adjustment indicator C3

For mounting on discs sizes different from the chart, apply following formulas:

$$A = \text{ØB} \times 0,167 + 211$$

$$C = \text{ØB} \times 0,473 - 109$$

Works conditions :

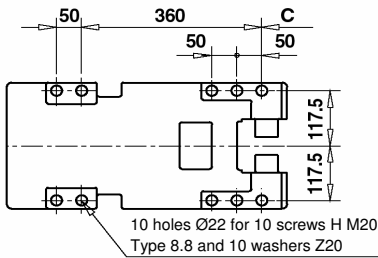
- Ambient temperature -10°C +40°C
- Relative dampness <70%
- Dusty ambience $\geq 65\mu$
- Horizontal position
- (For other conditions, contact ATV)

	Type 60 SHCI "M"	Type 105 SHCI "M"
Braking force adjustable from 42%-100% with linings "M"	60 000 N	105 000 N
Max.reaction on the shaft	1 caliper	60 000 N
	2 calipers	40 000 N
Max.stopping rate at 40°C	150	60
Power consumption	0,65 kW	
Response time	0,2 s	
Supply voltage	230 V ou 400V. 50Hz AC	
Weight	135 kg	
Protection	IP 54	

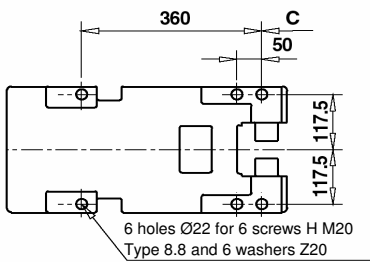
ELECTRO-HYDRAULIC FAIL-SAFE DISC BRAKE

Technical data:

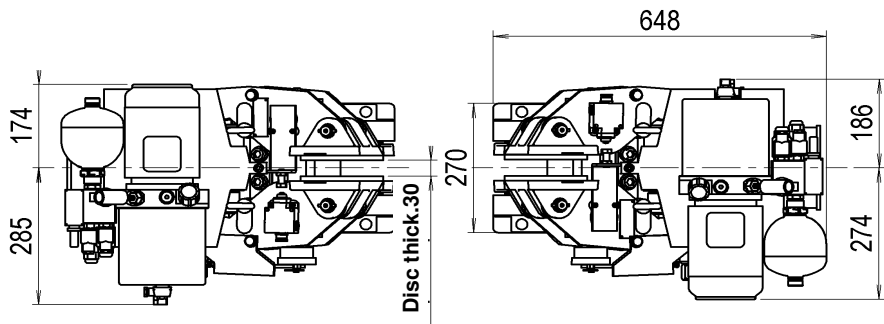
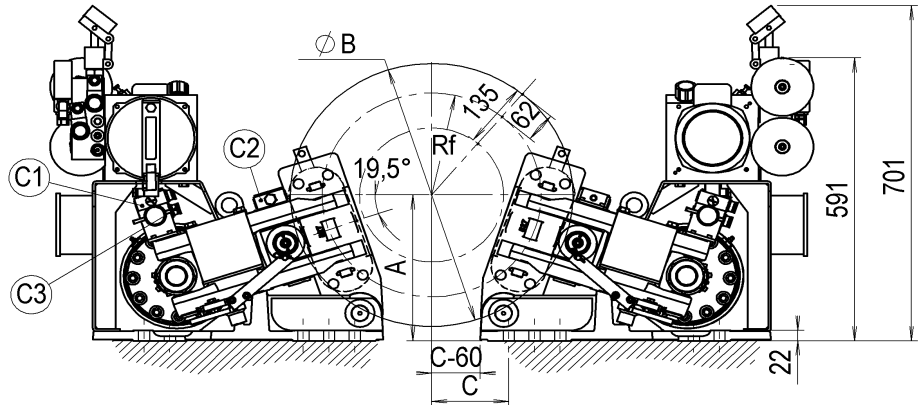
- For emergency stop
- Manual pad wear adjustment and adjustment indicator C3
- Integrated power pack
- Spring braking
- Electric release



Footplate 105SHCI



Footplate 60SHCI



RIGHT HAND CALIPER

LEFT HAND CALIPER

Data subject to modification without prior advice

Disc ØB (mm)		445	495	550	625	705	795	995
Braking torque adjustable from 42%-100%(Nm) with linings "A"	Type 60 SHCI "A"	13 400	15 500	17 900	21 000	24 400	28 100	36 500
	Type 105 SHCI "A"	23 500	27 200	31 300	36 700	42 600	49 200	63 900
Dimensions	A (mm)	285	295	305	315	330	345	380
	C (mm)	100	120	150	185	225	265	365
Friction radius	Rf (mm)	160	185	213	250	290	335	435

Available options :

- Position indicator switch C1
- Wear indicator switch C2
- Automatic pad wear adjustment

For mounting on discs sizes different from the chart, apply following formulas:

$$A = \text{ØB} \times 0,167 + 211$$

$$C = \text{ØB} \times 0,473 - 109$$

Works conditions :

- Ambient temperature -10°C +40°C
- Relative dampness <70%
- Dusty ambience ≥ 65µ
- Horizontal position
- (For other conditions, contact ATV)

	Type 60 SHCI "A"	Type 105 SHCI "A"
Braking force adjustable from 42%-100% with linings "A"	84 000 N	147 000 N
Max.reaction on the shaft	1 caliper	84 000 N
	2 calipers	56 000 N
Max.stopping rate at 40°C	150	60
Power consumption	0,65 kW	
Response time	0,2 s	
Supply voltage	230 V or 400V. 50Hz Threephase AC	
Weight	135 kg	
Protection	IP 54	