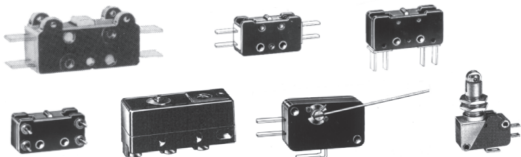


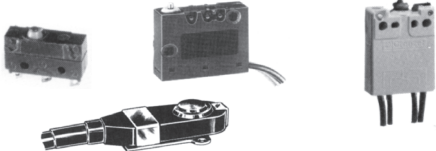

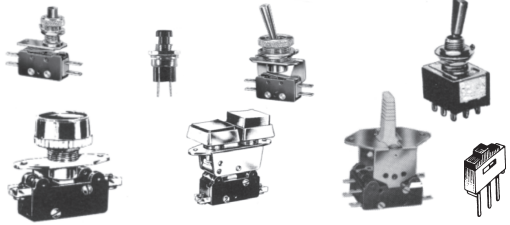
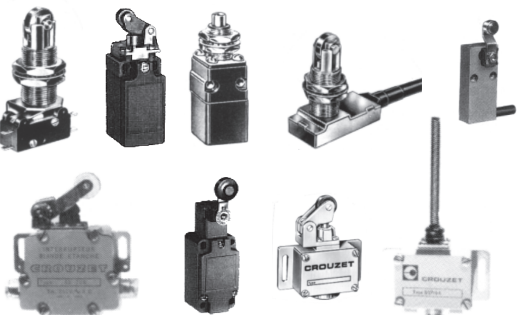


INNHALDSFORTEGNELSE AVSNITT E

BRYTERE

	Mikrobrytere	2 - 40
	Mikrobryter "V3" Mikrobryter "V4"	33 37
	Mikrobrytere, miniatyr	20 29
	Vanntette mikrobrytere	19 27 35 39
	Nøkkelbrytere Dørbrytere	41 42 - 43
	Håndbetjente brytere	45 - 51
	Ukapslede endebrytere Endebrytere	44 55 - 72

E

ELRA

Elra AS
 Tvetenveien 164
 Postboks 98, Tveita
 0617 Oslo

Telefon: 22 75 51 00
 Telefax: 22 75 51 07
 e-post: salg@elra.no
 Internet: www.elra.no

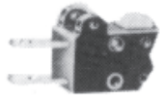
Mikrobryter

Type 83.101.0



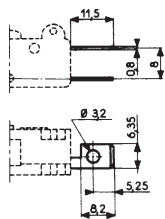
Flatstifttilkobling 6,35 mm (W3)

TYPE NR.



1 - 2 3 - 4
NC NO

83.101.0 I W3



1 - 2
NC

83.101.0 R W3



3 - 4
NO

83A.101.0 C W3

E

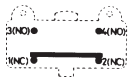
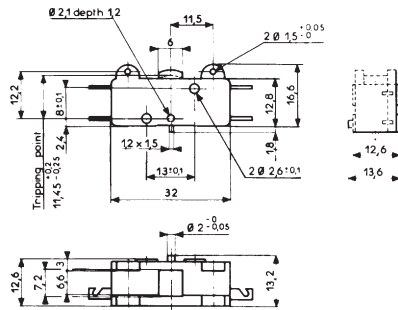
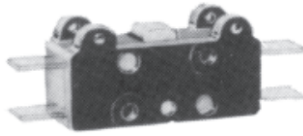
Mikrobryter

Type 83.104.0

5A 250V~

Dobbelt brudd

Tropikalisert



Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.

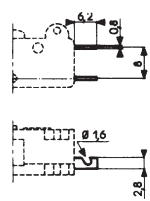
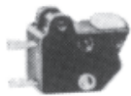
MEKANISKE DATA:	83.104
Max. betjeningskraft (N)	4
Min. returkraft (N)	1
Differensialbevegelse (mm)	0,5±0,2
Max. forbevegelse (mm)	1,35
Max. totalbevegelse (mm)	0,7
Kontaktavstand (mm)	0,4x2
Temp. område (°C)	-40 - +125
Vekt (g)	7,4
Mekanisk levetid (oper.)	10 ⁶

MATERIALE:

83.104 - Hus: Gul bakelitt. Fjær: Rustfritt stål
Kontakter: Sølv

Loddetilkobling (W2)

TYPE NR.

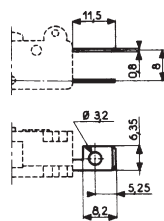


1 - 2 3 - 4
NC NO

83.104.0 I W2

Flatstifttilkobling 6,35 mm (W3)

83.104.0 I W3



1 - 2 3 - 4
NC NO

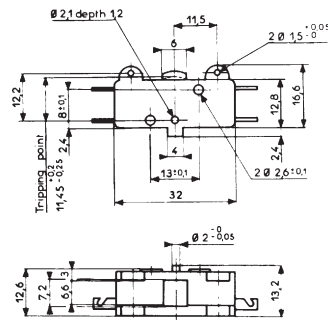
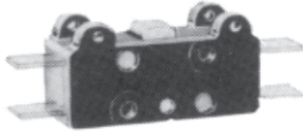
Disse bryterne leveres med samme tilkoblinger og utførelser som 83.101.

Mikrobryter

Type 83.106.0

5A 250V~

Dobbelt brudd



Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.

MEKANISKE DATA:

Max. betjeningskraft (N)	4
Min. returkraft (N)	1
Differensialbevegelse (mm)	0,5±0,2
Max. forbevegelse (mm)	1,35
Max. totalbevegelse (mm)	0,7
Kontaktavstand (mm)	0,4x2
Temp. område (°C)	-20 - +85
Vekt (g)	8
Mekanisk levetid (oper.)	10 ⁷

MATERIALE:

Hus: Polyamid
Kontakter: Sølv

Skrutilkobling (W1)		TYPE NR.
		 83.106.0 R W1
		 83.106.0 C W1
Loddetilkobling (W2)		TYPE NR.
		 83.106.0 I W2
		 83.106.0 R W2
		 83.106.0 C W2



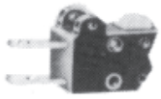
Mikrobryter

Type 83.106.0



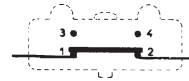
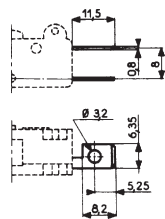
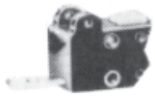
Flatstifttilkobling 6,35 mm (W3)

TYPE NR.



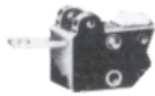
83.106.0 I W3

1 - 2 3 - 4
NC NO



83.106.0 R W3

1 - 2
NC



83.106.0 C W3

3 - 4
NO

E

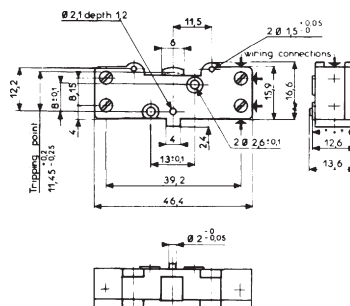
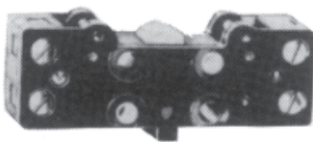
Mikrobryter

Type 83.112.0

5A 250V~

Dobbelt brudd

Lukkede skrutilkoblinger



Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.



MEKANISKE DATA:

Max. betjeningskraft (N)	4
Min. returkraft (N)	1
Differensialbevegelse (mm)	0,5±0,2
Max. forbevegelse (mm)	1,35
Max. totalbevegelse (mm)	0,7
Kontaktavstand (mm)	0,4x2
Temp. område (°C)	-20 - +85
Vekt (g)	7,4
Mekanisk levetid (oper.)	10 ⁷

MATERIALE:

Hus: Polyamid
Kontakter: Sølv

For tilkobling, skru opp settskruen, og stikk hull med en spiss.
(Max. Ø 2,4 mm)

Mikrobryter

Type 83.111

5A 250V~

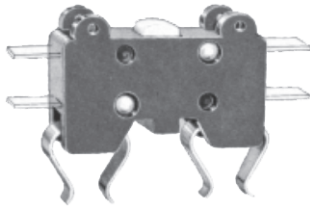
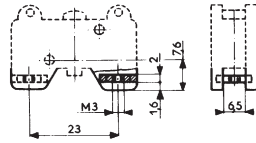
Dobbelt brudd

83.111.0 m/skrufeste

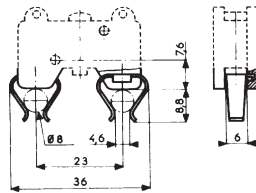
83.111.5 m/klipsfeste



83.111.0



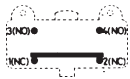
83.111.5

**MEKANISKE DATA:**

Max. betjeningskraft (N)	4
Min. returkraft (N)	1
Differensialbevegelse (mm)	0,5±0,2
Max. forbevegelse (mm)	1,35
Max. totalbevegelse (mm)	0,7
Kontaktavstand (mm)	0,4x2
Temp. område (°C)	-20 - +85
Vekt (g)	7,4
Mekanisk levetid (oper.)	10 ⁷

MATERIALE:

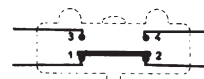
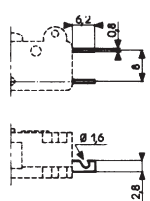
Hus: Polyamid
Kontakter: Sølv



Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.

Loddetilkobling (W2)

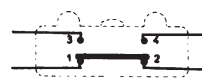
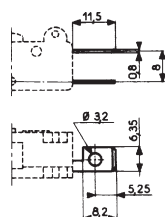
TYPE NR.



1 - 2 3 - 4
NC NO

83.111.0 I W2

83.111.5 I W2

Flatstifttilkobling (W3)

1 - 2 3 - 4
NC NO

83.111.0 I W3

83.111.5 I W3

E

Betjeningsarmer

for mikrobryter 83.101, 83.103, 83.104,
83.106, 83.111, 83.154



		TYPE NR.
		97 A
		97 A1
		97 B
		97 D
		97 E
		97 F
		97 G

E

Betjeningsarmer

for mikrobryter 83.101, 83.103, 83.104,
83.106, 83.111, 83.154




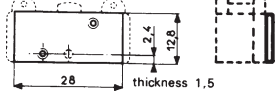

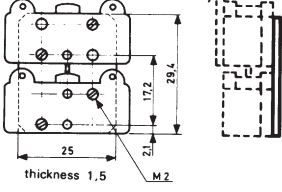

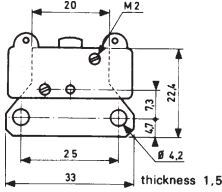
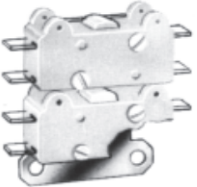
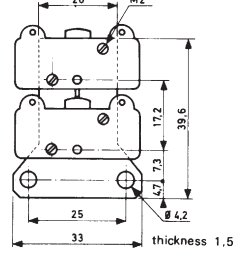
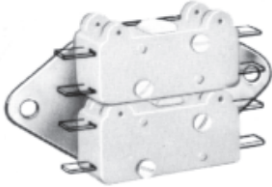
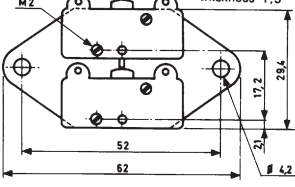
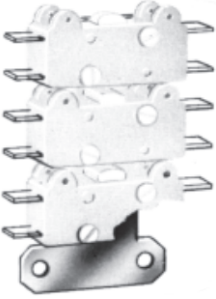
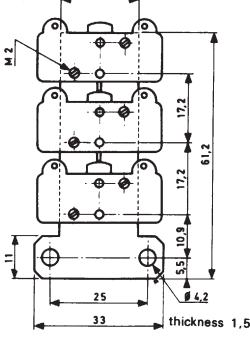
		TYPE NR.
		97 Q
		97 B9
		97 V
		97 V2
		97 V3
		97 V4
		97 T3

E

Festebraketter

for mikrobryter 83.101, 83.103, 83.104,
83.106, 83.154




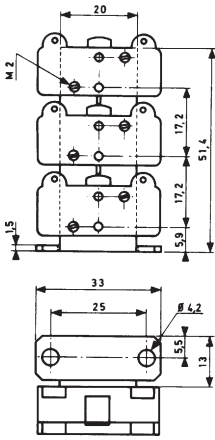


		TYPE NR.
		Y
		L
		H
		O
		O2
		O3

E

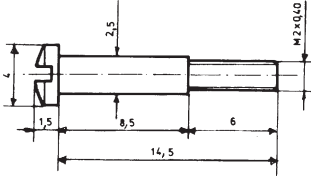
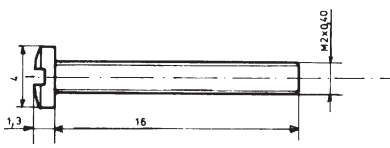
Festebraketter

for mikrobryter 83.101, 83.103, 83.104,
83.106, 83.154



		TYPE NR.
		K
		K2
		K3

Skruer for feste av mikrobrytere

	Skrue M2 x 14,5
	Skrue M2 x 16

NB!

Når flere brytere plasseres over hverandre må alle, unntatt den underste, ha akse for å få overført bryterbevegelsen. Vær oppmerksom på dette ved bestilling.

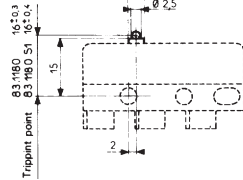
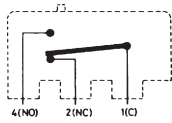
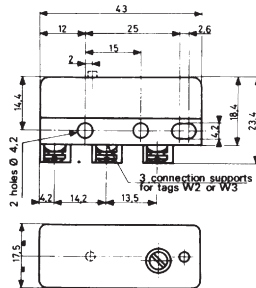
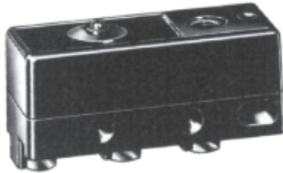
Mikrobryter

Type 83.118

5A 250V~

83.118.0 - Standard

83.118.0 S1 - Lett trykk

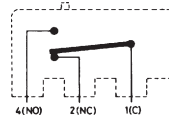
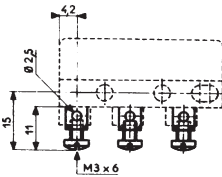


MEKANISKE DATA:	83.118.0	83.118.0 S1
Max. betjeningskraft (N)	2,7	1,5
Min. returkraft (N)	0,75	0,5
Max. kraft for totalbevegelse (N)	4	3
Max. tillatt kraft i endestilling (N)	30	30
Differensialbevegelse (mm)	0,03 - 0,09	0,3 - 0,9
Max. forbevegelse (mm)	0,5	0,5
Min. restbevegelse (mm)	0,2	0,3
Kontaktavstand (mm)	0,5	0,5
Temp. område (°C)	-40 - +125	-40 - +125
Vekt (g)	21	21
Mekanisk levetid (oper.)	5 x 10 ⁵	5 x 10 ⁵

MATERIALE:

Hus: Plast
Kontakter: Sølv

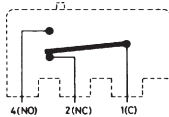
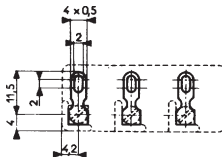
Skrutilkobling (W1)



TYPE NR.

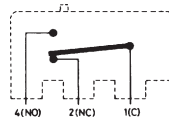
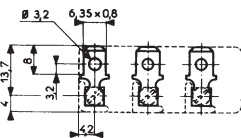
83.118.0 I W1
83.118.0 S1 I W1

Loddetilkobling (W2)



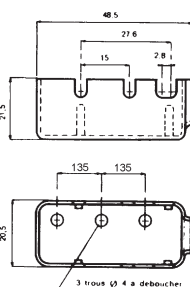
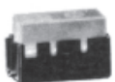
83.118.0 I W2
83.118.0 S1 I W2

Flatstifttilkobling (W3)



83.118.0 I W3
83.118.0 S1 I W3

Deksel for beskyttelse av tilkoblinger



70.520.029

Betjeningsarmer
for mikrobryter 83.118



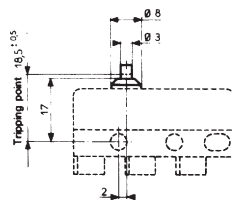
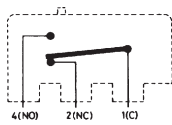
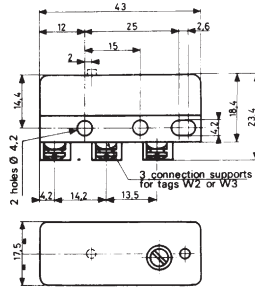
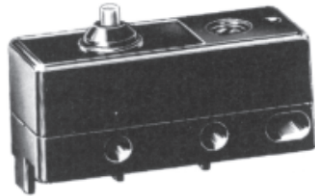
		TYPE NR.
		52A
		52B
		52D
		52E
		lang 52F kort 52J
		lang 52G kort 52K
		52T

E

Mikrobryter

Type 83.120

5A 250V~



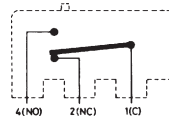
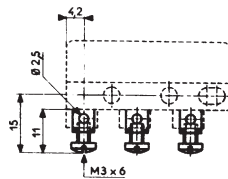
MEKANISKE DATA:

Max. betjeningskraft (N)	0,35
Min. returkraft (N)	0,08
Max. kraft for totalbevegelse (N)	0,4
Max. tillatt kraft i endestilling (N)	20
Differensialbevegelse (mm)	0,2 - 0,7
Max. forbevegelse (mm)	2,2
Min. restbevegelse (mm)	0,8
Kontaktavstand (mm)	0,5
Temp. område (°C)	-40 - +125
Vekt (g)	22
Mekanisk levetid (oper.)	5 x 10 ⁵

MATERIALE:

Hus: Plast
Kontakter: Sølv

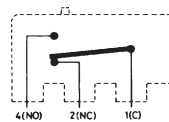
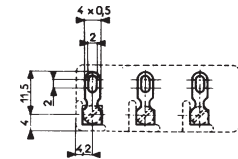
Skrutilkobling (W1)



TYPE NR.

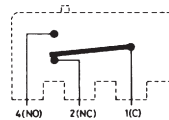
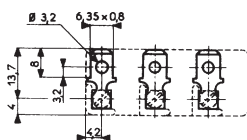
83.120.0 I W1

Loddetilkobling (W2)



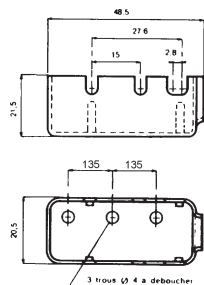
83.120.0 I W2

Flatstifttilkobling (W3)



83.120.0 I W3

Deksel for beskyttelse av tilkoblinger


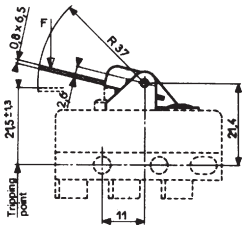

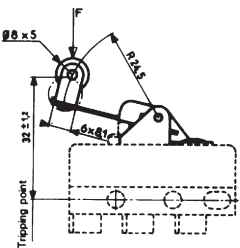
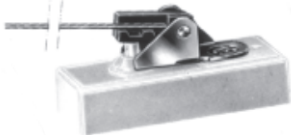
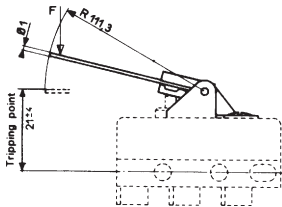


70.520.029

Betjeningsarmer

for mikrobryter 83.120



		TYPE NR.
		52E 3
		52J 3
		52T 3

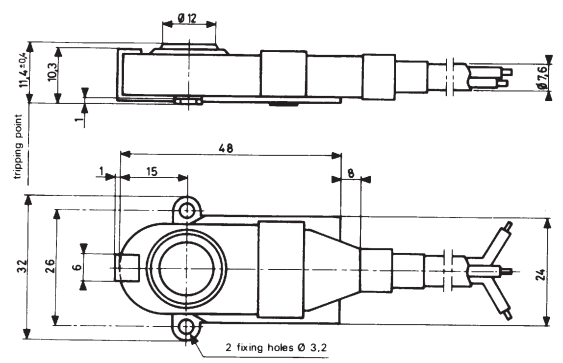
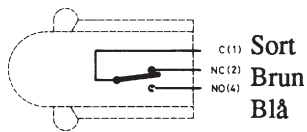
E

Mikrobryter

Type 83.123.0

5A 250V~

Sprutvanntett IP 66



3 x 1 mm² sort PVC - kabel
 Standard kabellengde: 0,5 og 2 m
 Andre lengder leveres på bestilling

MATERIALE:

Kappe: Nitrilgummi/oljebestandig
 Kontakter: Sølv
 Festebrakett: Stål, galvanisert

MEKANISKE DATA:

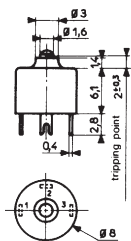
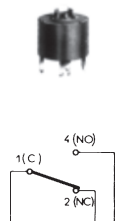
Max. betjeningskraft (N)	5,3
Min. returkraft (N)	1,5
Max. tillatt kraft i endestilling (N)	30
Differensialbevegelse (mm)	0,1 ± 0,05
Max. forbevegelse (mm)	1,4
Min. restbevegelse (mm)	0,2
Kontaktavstand (mm)	0,5
x) Temp. område (°C)	0 - +85
Vekt (g)	45
Mekanisk levetid (oper.)	10 ⁶

x) For temperaturområde +85°C til -40°C leveres silikon-gummikapsling

Mikrobryter

Type 83.128.0 I W2

0,5A 250V~

**MEKANISKE DATA:**

Max. betjeningskraft (N)	1,7
Min. returkraft (N)	0,4
Max. tillatt kraft i endestilling (N)	4,5
Differensialbevegelse (mm)	0,015 - 0,05
Max. forbevegelse (mm)	0,22
Ikke ødeleggende overbevegelse (mm)	0,15
Kontaktavstand (mm)	0,15
Temp. område (°C)	-40 - +100
Vekt (g)	0,8
Mekanisk levetid (oper.)	10 ⁵

MATERIALE:

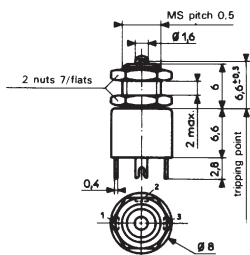
Hus: Glassfylt Diallyl- Phtalate
Kontakter: Sølv

Denne bryteren har ikke noen mekanisk stopper på aktuatoren. Vi anbefaler derfor at angitt overbevegelse og max. kraft i endestilling ikke overskrides.

Mikrobryter

Type 83.129.0 I W2

5A 250V~

**MEKANISKE DATA:**

Max. betjeningskraft (N)	1,7
Min. returkraft (N)	0,4
Max. tillatt kraft i endestilling (N)	4,5
Differensialbevegelse (mm)	0,015 - 0,05
Max. forbevegelse (mm)	0,22
Ikke ødeleggende overbevegelse (mm)	0,15
Kontaktavstand (mm)	0,15
Temp. område (°C)	-40 - +100
Vekt (g)	1,3
Mekanisk levetid (oper.)	10 ⁵

MATERIALE:

Hus: Glassfylt Diallyl- Phtalate
Kontakter: Sølv

Denne bryteren har ikke noen mekanisk stopper på aktuatoren. Vi anbefaler derfor at angitt overbevegelse og max. kraft i endestilling ikke overskrides.

E

Betjeningsarmer
for mikrobryter 83.131



		TYPE NR.
	<p>R = 20 mm R = 27 mm R = 43 mm</p>	<p>57A 20 57A 27 57A 43</p>
	<p>R = 24 mm (R = 60 mm)</p>	<p>57D 24 (57D 60)* * Kontakt oss</p>
	<p>R = 18,7 mm R = 25,3 mm</p>	<p>57E 18,7 57E 25,3</p>

E

Mikrobryter

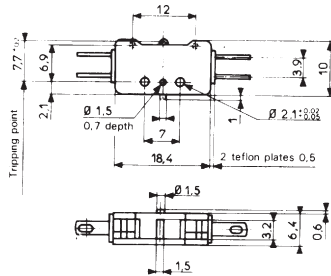
Type 83.132.0

5A 250V~

Dobbelt brudd



Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.



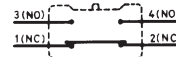
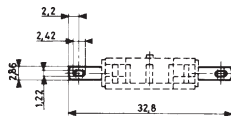
MATERIALE:
Hus: Glassfylt Polyamid
Kontakter: Sølv
Terminaler: Forgylt messing

MEKANISKE DATA:

Max. betjeningskraft (N)	1,6
Min. returkraft (N)	0,4
Max. tillatt kraft i endestilling (N)	10
Differensialbevegelse (mm)	0,35±0,1
Max. forbevegelse (mm)	0,8
Min. restbevegelse (mm)	0,3
Kontaktavstand (mm)	0,3 x 2
Temp. område (°C)	-20 - +125
Vekt (g)	1,8
Mekanisk levetid (oper.)	10 ⁷

Lodde-/flatstifttilkobling 2,85 mm (W2)

TYPE NR.



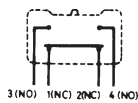
83.132.0 I W2

Mikrobryter

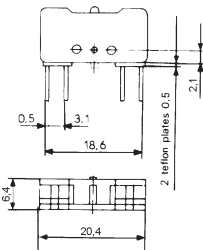
Type 83.133.0

5A 250V~

Dobbelt brudd



Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.



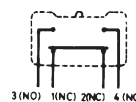
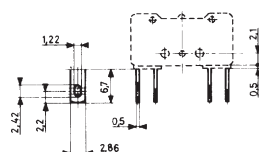
MATERIALE:
Hus: Glassfylt Polyamid
Kontakter: Sølv
Terminaler: Forgylt messing

MEKANISKE DATA:

Max. betjeningskraft (N)	1,6
Min. returkraft (N)	0,4
Max. tillatt kraft i endestilling (N)	10
Differensialbevegelse (mm)	0,35±0,1
Max. forbevegelse (mm)	0,8
Min. restbevegelse (mm)	0,3
Kontaktavstand (mm)	0,3 x 2
Temp. område (°C)	-20 - +125
Vekt (g)	1,8
Mekanisk levetid (oper.)	10 ⁷

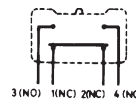
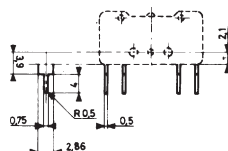
Lodde-/flatstifttilkobling 2,85 mm (W2)

TYPE NR.



83.133.0 I W2

For trykte kort (X1)



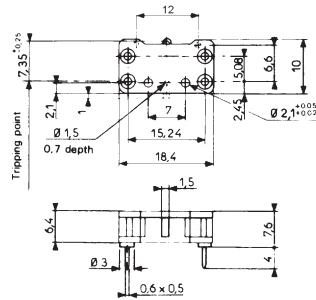
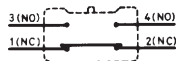
83.133.0 I X1

Mikrobryter

Type 83.134.0 I X1

5A 250V~

Dobbelt brudd

**MEKANISKE DATA:**

Max. betjeningskraft (N)	1,6
Min. returkraft (N)	0,4
Max. tillatt kraft i endestilling (N)	10
Differensialbevegelse (mm)	0,35±0,1
Max. forbevegelse (mm)	0,8
Min. restbevegelse (mm)	0,3
Kontaktavstand (mm)	0,3 x 2
Temp. område (°C)	-20 - +125
Vekt (g)	1,8
Mekanisk levetid (oper.)	10 ⁷

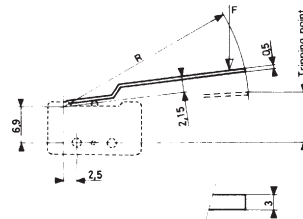
Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.

MATERIALE:

Hus: Glassfyllt Polyamid
Kontakter: Sølv
Terminaler: Forgylt messing

Betjeningsarmer

for mikrobryter 83.120, 83.133, 83.134



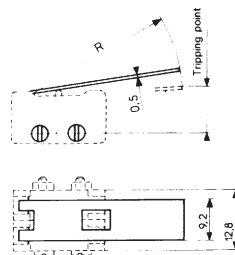
R = 7,7 mm
R = 14,75 mm
R = 35,75 mm

TYPE NR.

54A 7,7
54A 14,75
54A 35,75



2 - polet

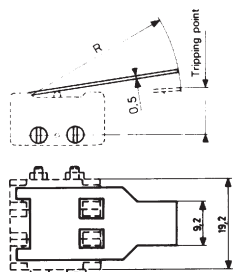


R = 30 mm

54A 2

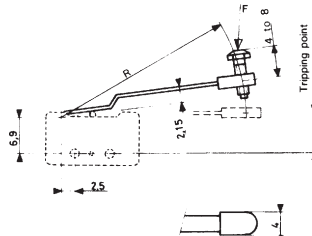


3 - polet



R = 30 mm

54A 3




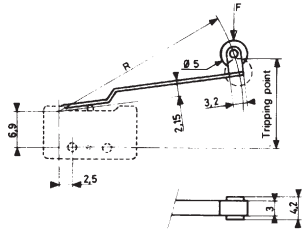

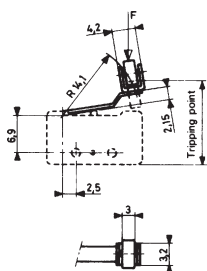
R = 27,1 mm

54D

Betjeningsarmer

for mikrobryter 83.132, 83.133, 83.134

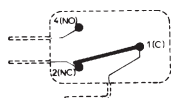
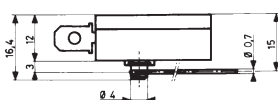
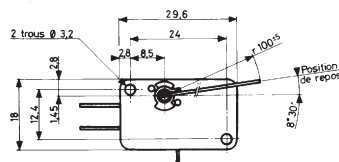
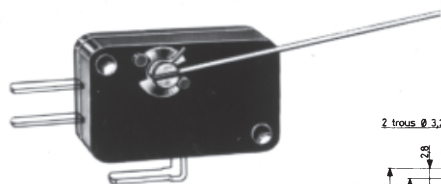


		TYPE NR.
	 <p>Aksial rulle</p>	<p>R = 7,5 mm 54E 7,5 R = 14,1 mm 54E 14,1 R = 34,4 mm 54E 34,4</p>
	 <p>Lateral rulle</p>	<p>R = 14,1 mm 54E 14,1 Lateral</p>

Mikrobryter

Type 83.137.0

5A 250V~

**MEKANISKE DATA:**

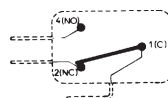
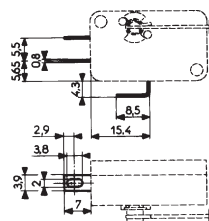
Max. betjeningsmoment (Ncm)	0,12
Min. returnmoment (Ncm)	0,03
Differensialbevægelse (°)	10±4
Max. forbevegelse (°)	26
Min. restbevægelse (°)	12
Kontaktavstand (mm)	0,8
Temp. område (°C)	-20 - +125
Vekt (g)	7,2
Mekanisk levetid (oper.)	10 ⁷

MATERIALE:

Hus: Glassfyllt Polyamid
 Tråd: Stål, rustfritt
 Kontakter: Sølv

Loddetilkobling (W2)

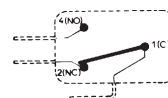
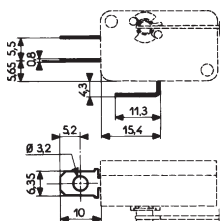
TYPE NR.



83.137.0 I W2

Flatstifttilkobling (W3)

83.137.0 I W3



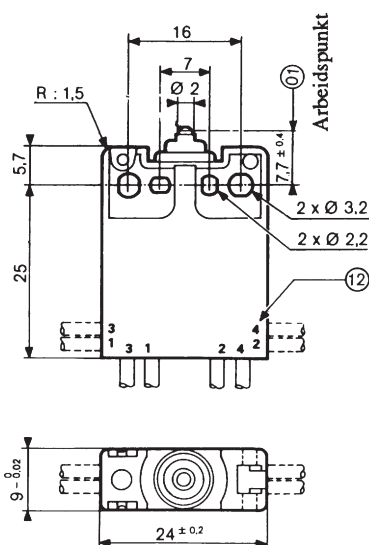
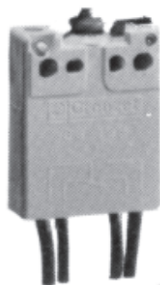
Mikrobryter

Type 83.139.0

5 A 250 V~

Dobbelt brudd

Vanntett IP 67



Kabellengde: 0,5 m
Kabellversnitt: 0,75 mm²

⑫ Kabelutgang i bunnen av bryteren er standard. Andre kabellengder og/eller utgang på siden kan leveres.

MEKANISKE DATA

Max. betjeningskraft (N)	3
Min. returkraft (N)	0,60
Max. tillatt kraft i endestilling (N)	10
Differensialbevegelse (mm)	0,35 + 0,1
Max. forbevegelse (mm)	1,4
Min. restbevegelse (mm)	0,3
Temperaturområde (°C)	0 - +85
Kontaktavstand (mm)	0,3x2
Mekanisk levetid (oper)	10 ⁷
Beskyttelse	IP 67
Max. tiltrekkingsmoment Ø 3 (N.cm)	40
Max. tiltrekkingsmoment Ø 2 (N.cm)	20
Vekt (g)	37

MATERIALE

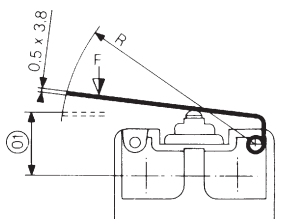
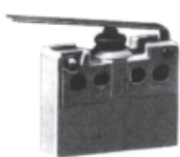
Hus: Glassfylt svart makrolon
Kontakter: Sølv
Membran: Nitrilgummi

For bruk ved lavere temperatur enn 0 °C :
Bruk type 83.139.5 med silikongummi - membran (-40 - +85 °C).

Bryteren kan også leveres i EExd IIC T6 utførelse, kontakt oss.

Betjeningsarmer for mikrobryter 83.139

E



Leveres kun fabrikkmontert

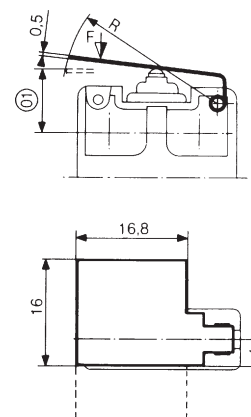
R = 16,2

139AX 16,2

R = 29,7

139AX 29,7

Radius (R) [mm]	16,2	29,7
Arbeidspunkt ① [mm]	8,2 ± 0,6	8,2 ± 1,2
Betj. kraft (F) [N]	2,5	1,5



Leveres kun fabrikkmontert

R = 24

139A2X 24

Radius (R) [mm]	24
Arbeidspunkt ① [mm]	8,2 ± 0,9
Betj. kraft (F) [N]	1,7

Betjeningsarmer for mikrobryter 83.139



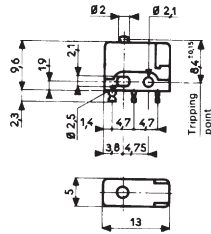
				TYPE NR.
		Leveres kun fabrikkmontert		139EX 15,8 139EX 28,7
		R = 15,8 R = 28,7		
		Radius (R) [mm]	15,8	28,7
		Arbeidspunkt ① [mm]	13,4 ± 0,7	13,4 ± 1,2
		Betj. kraft (F) [N]	2,5	1,5
		Leveres kun fabrikkmontert		139FX 24,3
		R = 24,3		
		Radius (R) [mm]	24,3	
		Arbeidspunkt ① [mm]	13,3 ± 0,6	
		Betj. kraft (F) [N]	1,7	
				161A 14,2 161A 25,4
		R = 14,2 R = 25,4		
		Radius (R) [mm]	14,2	25,4
		Arbeidspunkt ① [mm]	8,2 ± 0,6	8,2 ± 1
		Betj. kraft (F) [N]	2,6	1,7
				161E 13,6 161E 24,1
		R = 13,6 R = 24,1		
		Radius (R) [mm]	13,6	24,1
		Arbeidspunkt ① [mm]	13,9 ± 0,7	13,9 ± 1
		Betj. kraft (F) [N]	2,6	1,7
				161F 22,3
		R = 22,3		
		Radius (R) [mm]	22,3	
		Arbeidspunkt ① [mm]	13,3 ± 0,6	
		Betj. kraft (F) [N]	2	

E

Mikrobryter

Type 83.141.0 I W2

1A 250V~



MATERIALE:
 Hus: Glassfyllt Diallyl-Phtalate
 Kontakter: Sølv
 Terminaler: Forgylt messing

MEKANISKE DATA:

Max. betjeningskraft (N)	2
Min. returkraft (N)	0,4
Max. tillatt kraft i endestilling (N)	10
Differensialbevegelse (mm)	0,02 - 0,06
Max. forbevegelse (mm)	0,42
Min. restbevegelse (mm)	0,1
Kontaktavstand (mm)	0,3
Temp. område (°C)	-50 - +125
Vekt (g)	1
Mekanisk levetid (oper.)	10 ⁵

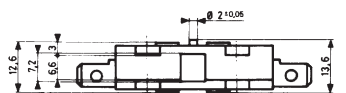
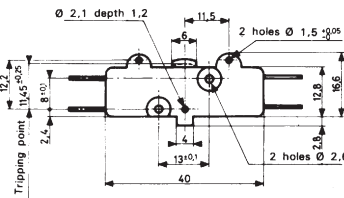
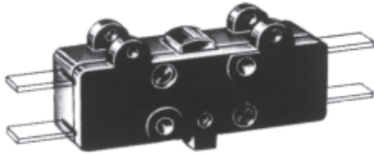
Betjeningsarmer
 for mikrobryter 83.141

		TYPE NR.
		55A
		55A S
		55A 2
		55A 2S
		55B

Leveres kun fabrikk-montert

Mikrobryter**Magnetisk gnistslukker****Type 83.154.0**

5A 250V = Dobbelt brudd

**MEKANISKE DATA:**

Max. betjeningskraft (N)	4,5
Min. returkraft (N)	1
Max. tillatt kraft i endestilling (N)	20
Differensialbevegelse (mm)	0,65 ± 0,25
Max. forbevegelse (mm)	1,35
Min. restbevegelse (mm)	0,7
Kontaktavstand (mm)	0,4 x 2
Temp. område (°C)	-40 - +125
Vekt (g)	11
Mekanisk levetid (oper.)	10 ⁷

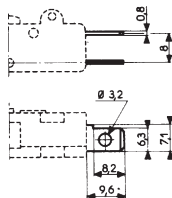
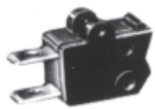
Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.

MATERIALE:

Hus: Glassfylt Diallyl-Phtalate
Kontakter: Sølv
Terminaler: Forgylt messing

ELEKTRISKE DATA:

Motstandsbelastet:
3A 250V =
10A 125V =
Levetid: 10⁶ operasjoner

Flatstifttilkobling 6,35 mm (W3)**TYPE NR.**

1 - 2 3 - 4
NC NO

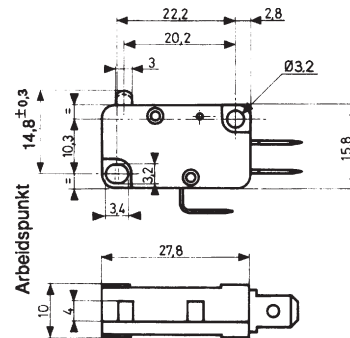
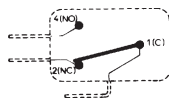
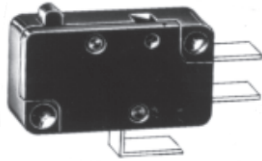
83.154.0 I W3

Betjeningsarmer
Samme betjeningsarmer som
83.101 - se foran

Mikrobryter

Type 83.160.-

16A - 250V~	Industrielt bruk	83.160.0
10A - 250V~	Redusert betjeningskraft	83.160.3
6A - 250V~	Lav betjeningskraft	83.160.4
12A - 250V~	3 mm kontaktavstand	83.160.6
10A - 250V~	Høy temperatur	83.153.7

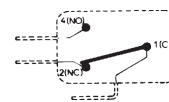
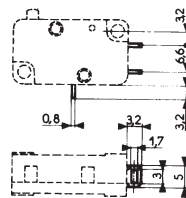


MATERIALE:	83.160.-	83.153.7
Hus:	Glassfyllt Polyamid	Glassfyllt Diallyl-Phtalate
Kontakter:	Sølv	Sølv

MEKANISKE DATA:

	83.160.0	83.160.3	83.160.4	83.160.6	83.153.7
Arbeidspunkt (mm)	14,8 ^{±0,3}	14,8 ^{±0,3}	14,7 ^{±0,3}	14,6 ^{±0,4}	14,8 ^{±0,3}
Max. betjeningskraft (N)	4	2	1	5	4
Min. returkraft (N)	1,5	0,6	0,3	1	1,5
Max. tillatt kraft i endestilling (N)	20	20	20	20	20
Max. forbevegelse (mm)	0,3	0,4	0,35	0,7	0,4
Max. differensialbevegelse (mm)	1,2	1,2	1,2	1,4	1,2
Min. restbevegelse (mm)	0,8	0,8	0,8	0,6	0,8
Kontaktavstand (mm)	1,2	1,2	1,2	3,2	1,2
Mek. levetid (oper.)	10 ⁷	10 ⁷	10 ⁷	10 ⁶	10 ⁶
Temperaturområde (°C)	-20	-20	-20	-20	-50
Vekt (g)	6,7	6,7	6,7	6,7	7,5

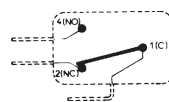
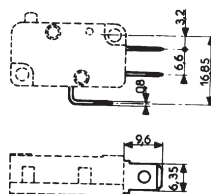
Loddetilkobling (W2)



TYPE NR.

- 83.160.0 I W2
- 83.160.3 I W2
- 83.160.4 I W2
- 83.160.6 I W2
- 83.153.7 I W2


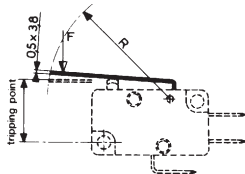

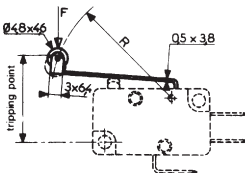
Flatstifttilkobling (W3)



- 83.160.0 I W3
- 83.160.3 I W3
- 83.160.4 I W3
- 83.160.6 I W3
- 83.153.7 I W3

Betjeningsarmer for mikrobryter 83.153.7 og 83.160.-



		TYPE NR.
	 <p>R = 16,2 R = 29,7 R = 54,7</p>	<p>153A 16,2 153A 29,7 153A 54,7</p>
	 <p>R = 15,8 R = 28,7</p>	<p>153E 15,8 153E 28,7</p>

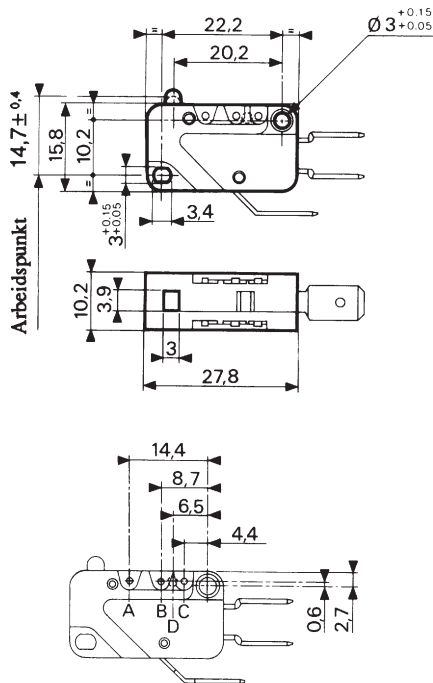
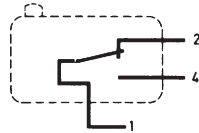
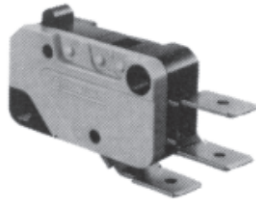
Mikrobryter

Type 83.161

"V3" - DIN 41635A

16A 250 V~ Vanlig bruk 83.161.3

12A 250 V~ Kontaktavstand 3,2 mm 83.161.6



MEKANISKE DATA:

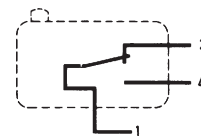
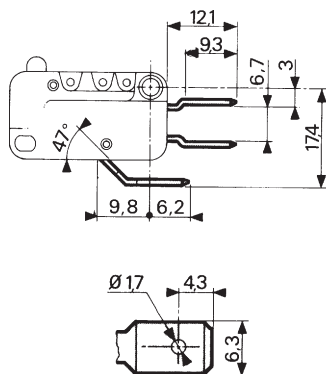
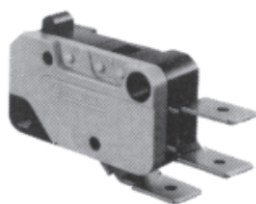
	83.161.3	83.161.6
Max. betjeningskraft (N)	0,8	5
Min. returkraft (N)	0,2	0,5
Max. tillatt kraft i endestilling (N)	20	20
Differensialbevegelse (mm)	0,35	0,8
Max. forbevegelse (mm)	1,4	1,6
Min. restbevegelse (mm)	1,2	0,9
Temperaturområde (°C)	-20 +125	-20 + 125
Kontaktavstand (mm)	0,4	3,2
Mekanisk levetid (oper)	2 x 10 ⁷	10 ⁵
Vekt (g)	5,6	5,6

MATERIALE

Hus: Glassfyllt Polyamid
 Kontakter: Sølv/Nikkel legering

Flatstifttilkobling (W3)

TYPE NR.

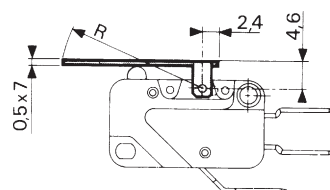


83.161.3 I W3

83.161.6 I W3

Betjeningsarmer

for mikrobryter 83.161.3 og 83.161.6



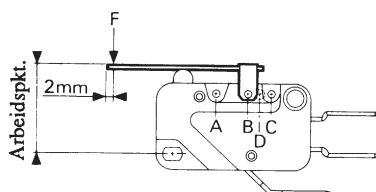
R = 14,2

TYPE NR.

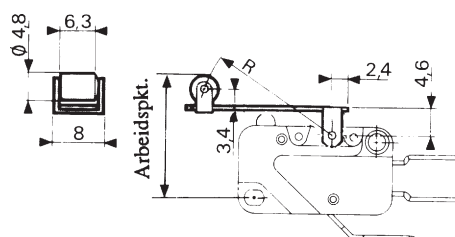
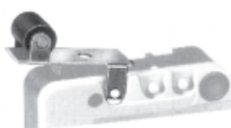
161A 14,2

R = 25,4

161A 25,4



Radius (R) mm	25,4		
Posisjon	A	B	C
Faktor ¹⁾	4	2	1,5
Arbeidspunkt mm type nr. 83.161.3	15,2 ±2,5	15,2 ±1	15,2 ±0,8
Arbeidspunkt mm type nr. 83.161.6	14,4 ±2,5	14,8 ±1	14,9 ±0,8



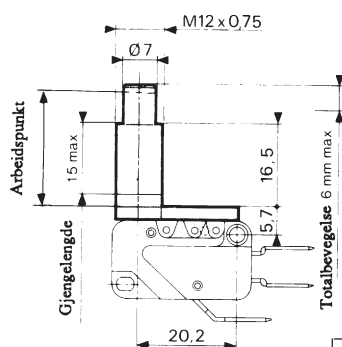
R = 13,6

161E 13,6

R = 24,1

161E 24,1

Radius (R) mm	24,1		
Posisjon	A	B	C
Faktor ¹⁾	4	2	1,5
Arbeidspunkt mm type nr. 83.161.3	20,5 ±2,9	20,5 ±1,5	20,5 ±1,2
Arbeidspunkt mm type nr. 83.161.6	19,7 ±2,9	20,1 ±1,5	20,2 ±1,2



Leveres kun
fabrikk montert,
uten festemuttere

161L

Arbeidspunkt mm type nr. 83.161.3	21,5 ±1
Arbeidspunkt mm type nr. 83.161.6	21,5 ±1

1) Faktor for beregning av:

Betjeningskrefter: Divider oppgitte krefter for bryteren med faktoren.

Bevegelse: Multipliser oppgitte bevegelse for bryteren med faktoren.

Mikrobryter

Vanntett IP 67

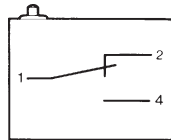
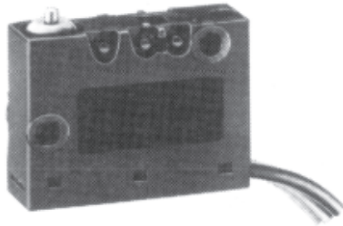
Type 83.169

"V3" DIN 41635A

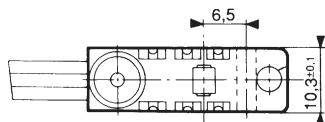
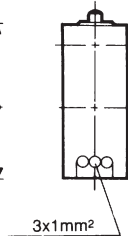
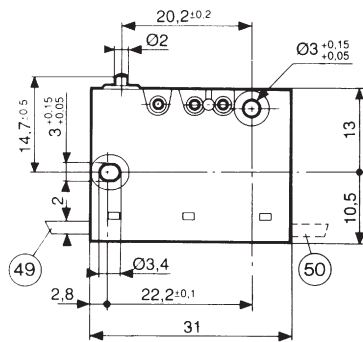
10A 250V~ Høy strøm 83.169.0

5A 250V~ Vanlig bruk 83.169.4

0,1A Lav strøm 83.169.8



Kabelfarge: 1 - sort
2 - brun
4 - blå



49 - Ledningutgang - venstre
50 - Ledningutgang - høyre

MEKANISKE DATA:

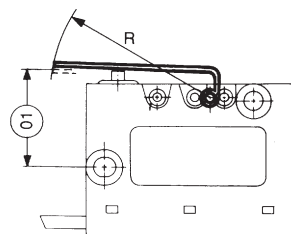
Max. betjeningskraft (N)	4
Min. returkraft (N)	1
Max. tillatt kraft i endestilling (N)	20
Max. differensialbevegelse (mm)	0,35
Max. forbevegelse (mm)	1,5
Min. rest bevegelse (mm)	1
Kontaktavstand (mm)	0,4
Mekanisk levetid (oper)	10 ⁷
Temperaturområde (°C)	- 20 +85
Max. tiltrekkingsmoment (N.cm)	40
Vekt (g)	30

MATERIALE

Hus: Polyester
Membran: Fluorsilikon

Arbeidsområde	Kontakter	TYPE NR.
0,1A 24V til 10A 250V~	Sølv/nikkel	83.169.0
0,1A 24V til 5A 250V~	Sølv/nikkel	83.169.4
0.01 - 0,1A 4 - 30V≅	Gullegering	83.169.8

**Betjeningsarmer
for mikrobryter 83.169**



Leveres kun fabrikkmontert

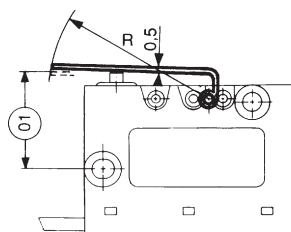
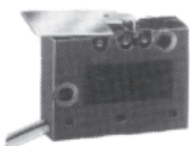
R = 16,2

TYPE NR.

139AX 16,2

R = 29,7

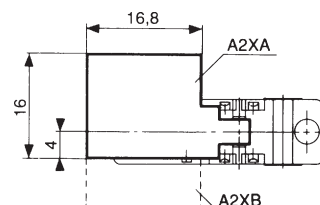
139AX 29,7



Leveres kun fabrikkmontert

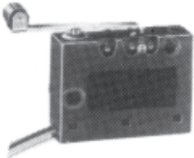
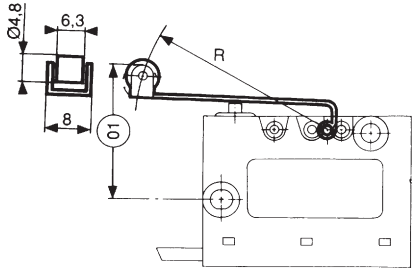

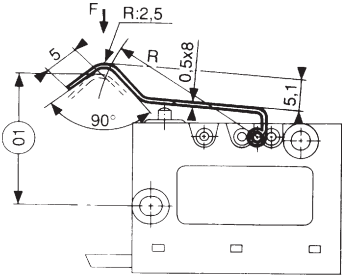
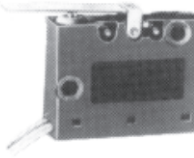
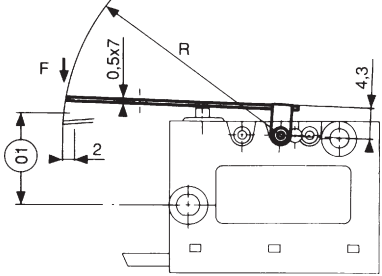
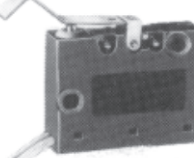
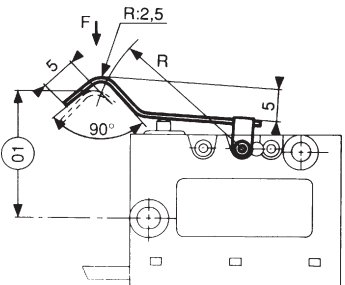
R = 24

139A2X 24



Betjeningsarmer for mikrobryter 83.169



		TYPE NR.
	 <p>Leveres kun fabrikkmontert</p>	<p>R = 15,8 139EX 15,8</p> <p>R = 26,7 139EX 26,7</p>
		<p>R = 24,3 139FX 24,3</p>
	 <p>Leveres kun fabrikkmontert</p>	<p>R = 14,2 161A 14,2</p> <p>R = 25,4 161A 25,4</p>
		<p>R = 24,3 161E 13,6</p> <p>R = 24,1 161E 24,1</p>
		<p>R = 13,6 161E 13,6</p> <p>R = 24,1 161E 24,1</p>
		<p>R = 22,3 161F 22,3</p>
		<p>R = 22,3 161F 22,3</p>

E

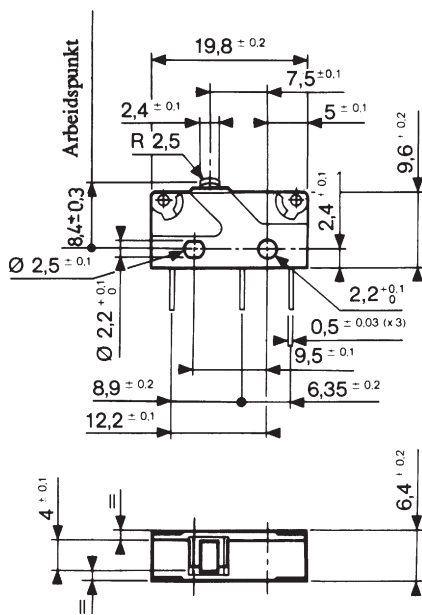
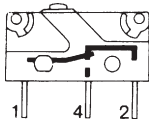
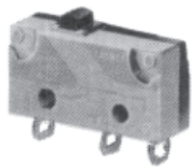
Mikrobryter

Type 83.170.-

"V4" - DIN 41635B

5A 250V~ Vanlig bruk 83.170.4

0,1A 250V~ Lav strøm 83.170.9



MEKANISKE DATA:

Max. betjeningskraft (N)	0,5
Min. returkraft (N)	0,1
Max. tillatt kraft i endestilling (N)	10
Differensialbevegelse (mm)	0,15
Temperaturområde ¹⁾ (°C)	-20 + 125
Kontaktavstand (mm)	0,4
Mekanisk levetid (oper)	3 x 10 ⁷
Vekt (g)	1,7

MATERIALE

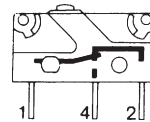
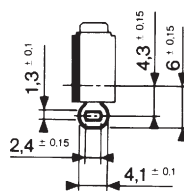
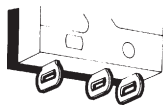
Hus: Glassfyllt Polyamid
Terminaler: Kobberlegering, korrosjonsbeskyttet.
God loddbarhet.

1) Temperaturområde: -40 - +150°C - kontakt oss.

Arbeidsområde	Kontakter	TYPE NR.
0,1A 24V til 5A 250V~	Sølv/nikkel	83.170.4
0,01 - 0,1A 4 - 30V≅	Gullegering	83.170.9

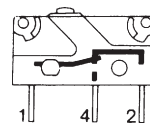
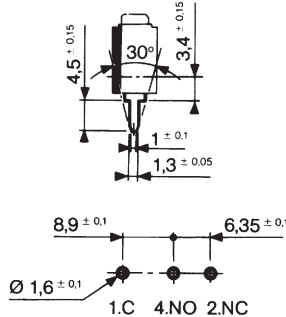
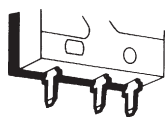
Tilfredsstiller CEE 24

Loddetilkobling (W2)



TYPE NR.	
Sølvkontakter	Gullkontakter
83.170.4 I W2	83.170.9 I W2

For trykte kort (X1)


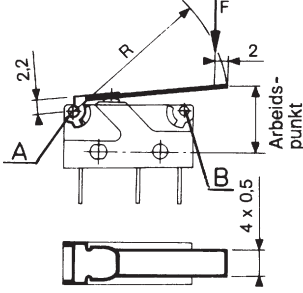

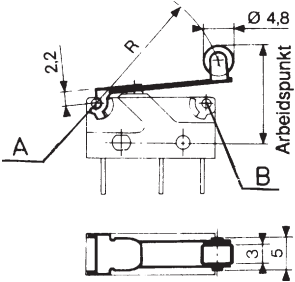


83.170.4 I X1	83.170.9 I X1
----------------------	----------------------

Leveres i flere utførelser
be om spesialkatalog

Betjeningsarmer for mikrobryter 83.170.-



		TYPE NR.				
		R = 18,3		170A 18,3		
		R = 24		170A 24		
		Radius (R) mm	18,3		24	
		Posisjon	A	B	A	B
		Faktor ¹⁾	3	1,5	4	2
Arbeidspunkt mm	10,4 ± 1,2	9,2 ± 0,5	11,1 ± 1,2	9,6 ± 0,6		
		R = 20		170E 20		
		Radius (R) mm	20			
		Posisjon	A	B		
		Faktor ¹⁾	3	1,5		
		Arbeidspunkt mm	15,4 ± 1,2	14,5 ± 0,6		

¹⁾ Faktor for beregning av:

Betjeningskrefter: Divider oppgitte krefter for bryteren med faktoren.

Bevegelse: Multipliser oppgitt bevegelse for bryteren med faktoren.

CEE 24 normen krever at:

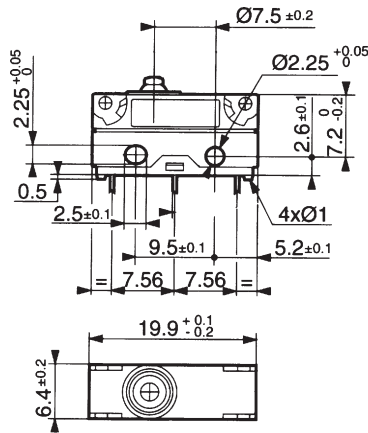
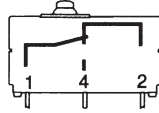
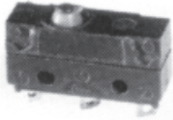
- det må være et isolerende materiale mellom bryteren og festet dersom dette er av metall.
- dersom en metallarm er montert på bryteren må den bare kunne opereres manuelt via et isolerende materiale.

Mikrobryter

Vanntett IP 67

Type 83.186.-

"V4" - DIN 41 635 B
6 A 250 V~



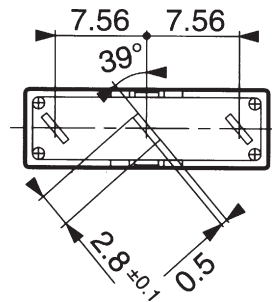
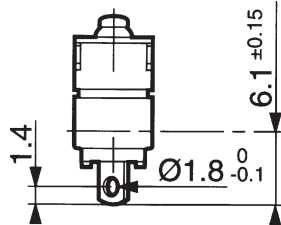
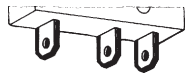
Tett standardbryter for lodding, flatstift eller ledningstilkobling
Vendekontakt 1mA/4V - 6A/250 VAC
Vanntett IP 67

Forskjellige betjeningsarmer leveres og monteres ved "snap - in"

MEKANISKE DATA:

Max. betjeningskraft (N)	2,5
Max. differensialbevegelse (mm)	0,1
Min. restbevegelse (mm)	0,6
Mek. levetid (oper)	10 ⁶
Temperaturområde (°C)	-40 - +125

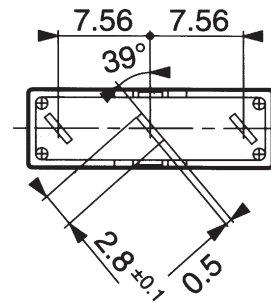
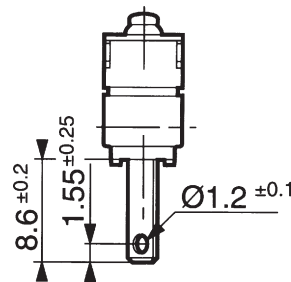
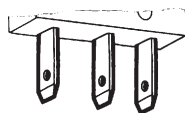
Loddetilkobling (W2S)



TYPE NR.

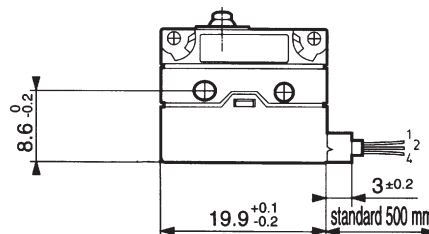
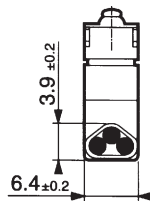
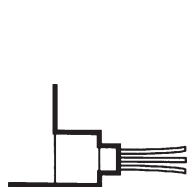
83.186.001

Flatstifttilkobling (W7S)



83.186.002

Ledningstilkobling



Ledningstilkobling
0,5 m - uttak til høyre
(til venstre på bestilling)

83.186.003

- 1 Felles: svart
- 2 NC: grå
- 4 NO: blå

Betjeningsarmer for mikrobryter 83.181.-



		TYPE NR.
	<p>R = 18,3 R = 24</p>	<p>170A 18,3 170A 24</p>
	<p>R = 20</p>	<p>170E 20</p>
	<p>R = 19,5</p>	<p>170F 19,5</p>

E


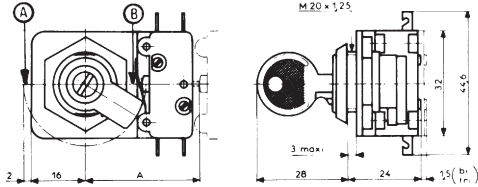
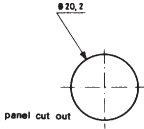
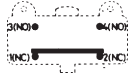
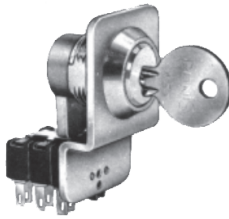
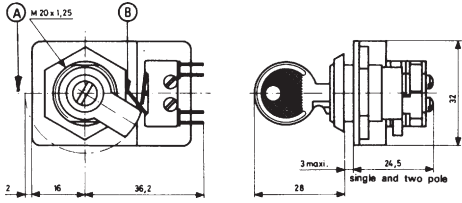
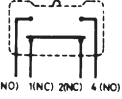
Nøkkelsbrytere

Type 83.518.- og 83.567.-

5A 250V~

Dobbelt brudd



		Funksjon	Poler	TYPE NR.
	  A 1 pol 34,1 2 pol 51,3	 (A) (B) 1 - 2 3 - 4 S S		
		Nøkkel uttagbar i stilling A og B	1 2	83.518.0 83.518.3
		Nøkkel uttagbar i stilling B	1 2	83.519.0 83.519.3
	Leveres med 2 stk. nøkler Bryterelement: 83.101.0	Nøkkel uttagbar i stilling A	1 2	83.520.0 83.520.3
	 A (B) 1 - 2 3 - 4 S S	 (A) (B) 1 - 2 3 - 4 S S		
		Nøkkel uttagbar i stilling A og B	1 2	83.567.0 83.567.3
		Nøkkel uttagbar i stilling B	1 2	83.568.0 83.568.3
	Leveres med 2 stk. nøkler Bryterelement: 83.133.0	Nøkkel uttagbar i stilling A	1 2	83.569.0 83.569.3

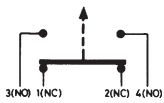
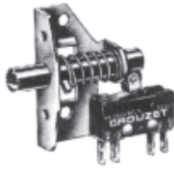
S = Stabil stilling F = Tilbakefjærende

Dørbryter

Type 83.528

5A 250V~

Dobbelt brudd



Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.

Bryteren kan låses i betjent stilling ved at sluttstykket trykkes inn og dreies 90°.

Når døren lukkes vil sluttstykket trykkes inn igjen og låsingen oppheves.

MEKANISKE DATA:

	1 polet	2 polet
Max. betjeningskraft (N)	6	8
Max. kraft i enden av bevegelse (N)	8	10
Min. bevegelse til brytepunkt (mm)	2,5	2,5
Differensialbevegelse (mm)	0,7	0,7
Max. totalbevegelse (mm)	6	6

BRYTERELEMEN: 83.133.0 I W2

		Funksjon	Poler	TYPE NR.
			1	83.528.0
			2	83.528.3

	A	B
1 pol	42,2	37,5
2 pol	51	42

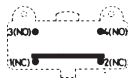
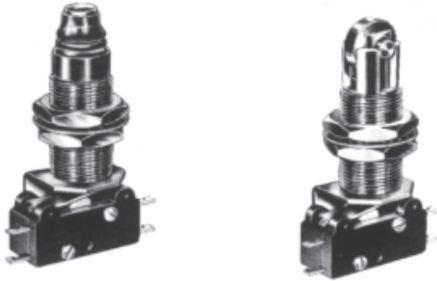
E

Ukapslede ende brytere

Type 83.537.- og 83.538.-

5A 250V~

Dobbelt brudd



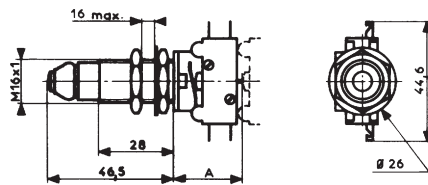
Normalt åpen og normalt lukket. Kretsene må tilkobles samme polaritet.

MEKANISKE DATA:

	1 polet	2 polet
Max. betjeningskraft (N)	6	8
Max. kraft i enden av bevegelse (N)	8	10
Min. bevegelse til brytepunkt (N)	2,5	2,5
Differensialbevegelse (mm)	0,7	0,7
Max. totalbevegelse (mm)	6	6

BRYTERELEMEN: 83.133.0 I W2

E

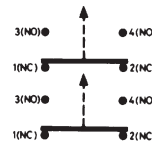


A
1 pol 23,7
2 pol 41,2

Funksjon**Poler****TYPE NR.**

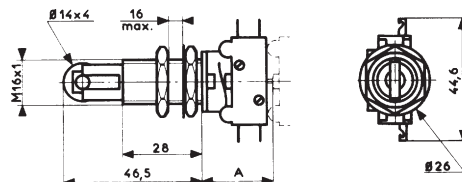
1

83.537.0 I W2



2

83.537.3 I W2

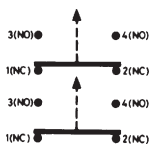


A
1 pol 23,7
2 pol 41,2



1

83.538.0 I W2



2

83.538.3 I W2

Trykknapper

5A 250V~

Dobbelt brudd

MATERIALE:
Kontakter: Sølv

		Funksjon	Poler	TYPE NR.
	<p>Hull i panel</p> <p>A</p> <p>1 pol 26,5 2 pol 37,0 3 pol 47,5</p> <p>Sort teleskopisk knapp</p>	<p>3 (NO) 4 (NO) 1 (NC) 2 (NC)</p> <p>Ⓐ Ⓑ</p> <p>1 - 2 3 - 4</p> <p>S S</p> <p>S F</p>	<p>1</p> <p>2</p> <p>3</p> <p>1</p> <p>2</p> <p>3</p>	<p>83.540.0</p> <p>83.540.3</p> <p>83.540.6</p> <p>83.542.0</p> <p>83.542.3</p> <p>83.542.6</p>
	<p>Hull i panel</p> <p>A</p> <p>2 pol 15,2 3 pol 21,5 4 pol 28,0</p> <p>Sort teleskopisk knapp</p>	<p>3 (NO) 1 (NC) 2 (NC) 4 (NO)</p> <p>Ⓐ Ⓑ</p> <p>1 - 2 3 - 4</p> <p>S S</p> <p>S F</p>	<p>2</p> <p>3</p> <p>4</p> <p>2</p> <p>3</p> <p>4</p>	<p>83.541.3</p> <p>83.541.6</p> <p>83.541.9</p> <p>83.543.3</p> <p>83.543.6</p> <p>83.543.9</p>
	<p>Hull i panel</p> <p>A</p> <p>1 pol 31,8 2 pol 49,3</p> <p>Sort teleskopisk knapp</p>	<p>3 (NO) 4 (NO) 1 (NC) 2 (NC)</p> <p>Ⓐ Ⓑ</p> <p>1 - 2 3 - 4</p> <p>S F</p> <p>S S</p>	<p>1</p> <p>2</p> <p>1</p> <p>2</p>	<p>83.552.0</p> <p>83.552.3</p> <p>83.553.0</p> <p>83.553.3</p>
	<p>Hull i panel</p> <p>A</p> <p>1 pol 28,5 2 pol 45,7</p> <p>Blank teleskopisk knapp</p>	<p>3 (NO) 4 (NO) 1 (NC) 2 (NC)</p> <p>Ⓐ Ⓑ</p> <p>1 - 2 3 - 4</p> <p>S F</p> <p>S F</p>	<p>1</p> <p>2</p>	<p>83.522.0</p> <p>83.522.3</p>
	<p>Hull i panel</p> <p>A</p> <p>1 pol 28,5 2 pol 45,7</p> <p>Blank teleskopisk knapp</p>	<p>2 (NC) 4 (NO) 1 (C)</p> <p>Ⓐ Ⓑ</p> <p>C-NC C-NO</p> <p>S F</p>	<p>1</p>	<p>83.131.9</p>

S = Stabil stilling F = Tilbakefjærende

Kippbrytere

5A 250V~

Dobbelt brudd

 MATERIALE:
Kontakter: Sølv


		Funksjon	Poler	TYPE NR.
	<p>Hull i panel</p> <p>A</p> <p>1 pol 22,3 2 pol 32,8 3 pol 43,3</p>	<p>Ⓐ Ⓑ</p> <p>1 - 2 3 - 4</p> <p>S S</p>	<p>1 2 3</p>	<p>83.544.0 83.544.3 83.544.6</p>
	<p>2 - pol</p> <p>Hull i panel</p> <p>A</p> <p>2 pol 15,2 3 pol 21,5 4 pol 28,0</p>	<p>Ⓐ Ⓑ</p> <p>1 - 2 3 - 4</p> <p>S S</p>	<p>2 3 4</p>	<p>83.545.3 83.545.6 83.545.9</p>
	<p>3 - 4 pol</p> <p>Hull i panel</p> <p>A</p> <p>1 pol 31,8 2 pol 49,3</p>	<p>Ⓐ Ⓑ</p> <p>1 - 2 3 - 4</p> <p>S S</p>	<p>1 2</p>	<p>83.554.0 83.554.3</p>
	<p>2 trous de fixation M3</p> <p>A</p> <p>1 pol 37,9 2 pol 55,1</p>	<p>Ⓐ Ⓑ Ⓒ</p> <p>3 - 4 1 - 2 1 - 2 1 - 2 1 - 2 3 - 4</p> <p>F S F S S S</p>	<p>1 2 1 2</p>	<p>83.515.0 83.515.3 83.516.0 83.516.3</p>

S = Stabil stilling F = Tilbakefjærende

Kippbrytere og trykknapper

Ø 6,2 mm

For trykte kort/panel

5A 250V~

Dobbelt brudd



		Funksjon	Poler	TYPE NR.
	<p style="text-align: center;">A</p> <p>1 pol 22,3 2 pol 32,8 3 pol 43,3</p>	<p style="text-align: center;">A B</p> <p>1 - 2 3 - 4</p> <p>S F</p>	<p>1 2 3</p>	<p>83.563.0 83.563.3 83.563.6</p>
	<p style="text-align: center;">A</p> <p>1 pol 17,6 2 pol 28,1 3 pol 38,6</p>	<p style="text-align: center;">A B</p> <p>1 - 2 3 - 4</p> <p>S F</p>	<p>1 2 3</p>	<p>83.564.0 83.564.3 83.564.6</p>
	<p style="text-align: center;">A</p> <p>1 pol 22,3 2 pol 32,8 3 pol 43,3</p>	<p style="text-align: center;">A B</p> <p>1 - 2 3 - 4</p> <p>S S</p>	<p>1 2 3</p>	<p>83.565.0 83.565.3 83.565.6</p>
	<p style="text-align: center;">A</p> <p>1 pol 17,6 2 pol 28,1 3 pol 38,6</p>	<p style="text-align: center;">A B</p> <p>1 - 2 3 - 4</p> <p>S S</p>	<p>1 2 3</p>	<p>83.566.0 83.566.3 83.566.6</p>


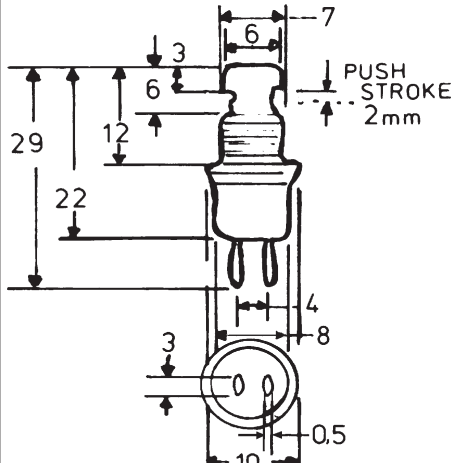

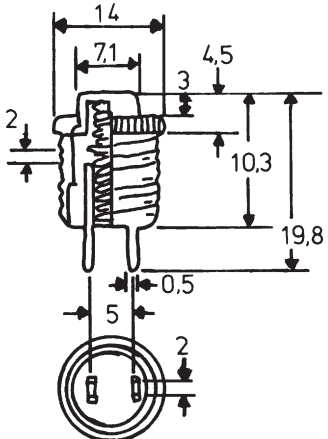
S = Stabil stilling F = Tilbakefjærende

E

Trykknapper, skyvevender

ELEKTRISKE DATA:

Nominelt: 0,5A 125V AC
 Kontaktmotstand: max. 15mΩ ved 1A, 5V DC
 Isolasjon: min. 100MΩ, 500V DC
 Spenningsprøve: 500V DC, 1 min.

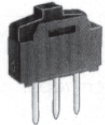
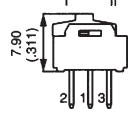
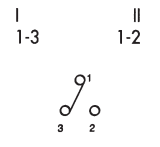
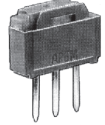
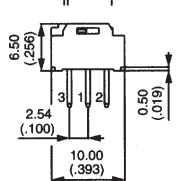
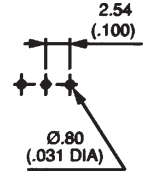
		Funksjon	Hebel	TYPE NR.
		1 pol Sluttekontakt Momentan	Sort Rød	PBS 102-1 PBS 102-2
		1 pol Sluttekontakt Momentan	Sort	PBS 401

E

Skyvevender for kretskort

Liten, praktisk skyvevender. Erstatte løse jumpere på kretskort. Forgylte kontakter og terminaler

Nominelt 12 V - 0,5 A DC
 Minimum 10 mV - 1 mA
 Kontaktmotstand: <30 mΩ

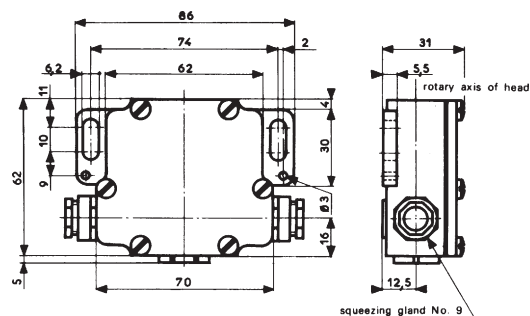
			TYPE NR.
			Stående høy
			Stående lav

Endebrytere

Type 83.70-

5A 250V~

Sprut-vanntett IP 55

**MATERIALE**

Støpt metallhus, malt gråblå

Oljebestandig

Temperaturområde: -5 - +70°C

Innvendig jordingsskrue

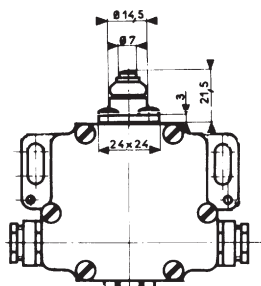
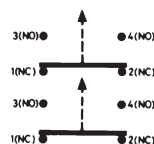
Leveres med to pakknipler nr. 9 og blindplugg for

alternativ pakknippel-montering

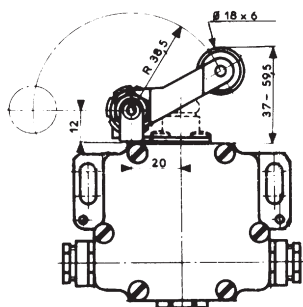
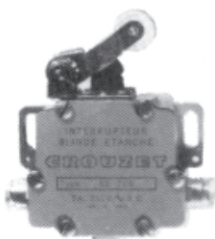
Loddetilkobling, max. 1,5 mm²**MEKANISKE DATA:**

	83.707	83.708	83.710
Max. betjeningskraft	14 N	16 N	7 N
Max. kraft i enden av bevegelse	28 N	28 N	22 N
Min. forbevegelse	2 mm	5°	5°
Differensialbevegelse	0,6 mm	1,5°	1,5°
Max. totalbevegelse	6 mm	16°	16°
Vekt (g)	240	280	300
Mekanisk levetid (oper)	10 ⁷	5 x 10 ⁶	2,5 x 10 ⁶

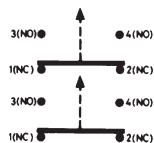
E

**Funksjon****TYPE NR.**

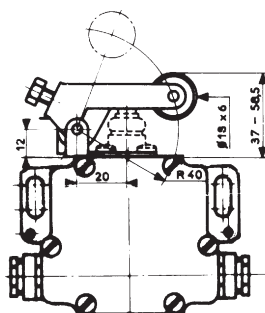
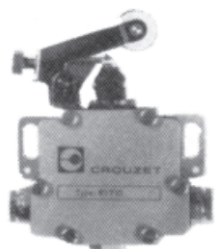
83.707.0



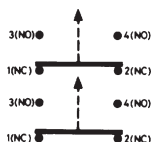
Metallarm m/plastrulle
Justerbar i trinn på 0° 10'
Kan vendes 4 x 90°



83.708.0



Justerbar metallarm
m/plastrulle
Kan vendes 4 x 90°



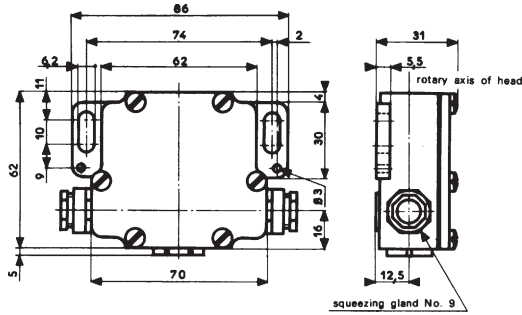
83.710.0

Endebryter

Type 83.709

5A 250V~

Sprut-vanntett IP 55



MATERIALE

Støpt lettmetallhus, malt gråblå
 Oljebestandig
 Temperaturområde: - 5 - + 70° C
 Innvendig jordingsskrue
 Leveres med to paknipler nr. 9 og blindplugg for alternativ paknippel-montering
 Loddetilkobling, max. 1,5 mm²

MEKANISKE DATA:

Max. betjeningskraft	10 N
Max. kraft i enden av bevegelse	28 N
Min. forbevegelse	2 mm
Differensialbevegelse	0,6 mm
Max. totalbevegelse	6 mm
Vekt (g)	290
Mekanisk levetid (oper)	10 ⁷

		Funksjon	TYPE NR.
	<p>Metallarm m/metallrulle</p> <p>IP 55</p>		83.709.0
	Reservebryter for: 83.707.0 83.708.0 83.709.0 83.710.0		83.322.025
	Reservebryter for: 83.713.0 83.713.5		83.322.062

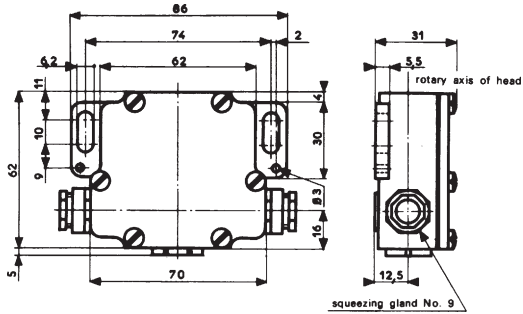


Endebrytere

Type 83.713

5A 250V~

Sprut-vanntett IP 55

**MATERIALE**

Støpt metallhus, malt gråblå

Oljebestandig

Temperaturområde: -5 - +70°C

Innvendig jordingsskrue

Leveres med to pakknippler nr. 9 og blindplugg for alternativ pakknippel-montering

Loddetilkobling, max. 1,5 mm²**MEKANISKE DATA:**

Max. betjeningskraft 1,5 N

Max. kraft i enden av bevegelse 4 N

Min. forbevegelse 10°

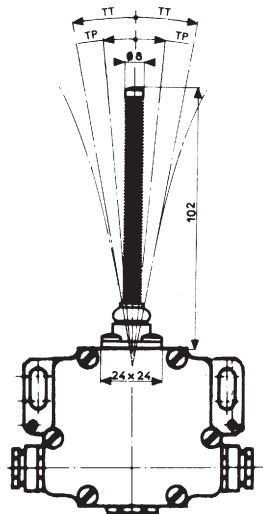
Differensialbevegelse 5°

Max. totalbevegelse 15°

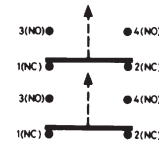
Vekt (g) 270

Mekanisk levetid (oper) 10⁷

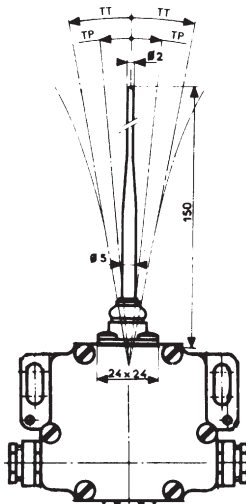
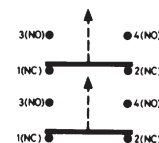
E

Funksjon**TYPE NR.**Bøyelig fjær
aktiverer bryteren
i alle retninger

IP 55



83.713.0

Stiv glassfiber
aktuator
Aktiverer bryteren
i alle retninger

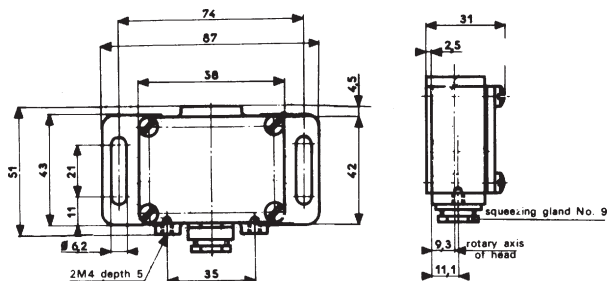
83.713.5

Endebrytere

Type 83.71 -

5A 250V~

Sprut-vanntett IP 55

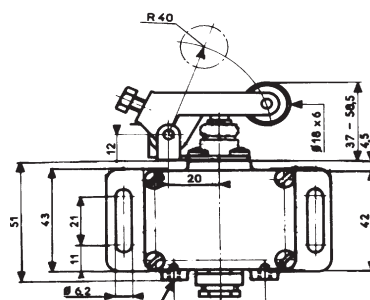
**MATERIALE**

Støpt metallhus, malt gråblå
 Temperaturområde: -5 - +70°C
 Innvendig jordingskrue
 Leveres med pakknippel nr. 9
 Loddetilkobling, max. 3 mm²

MEKANISKE DATA:

	83.716	83.718
Max. betjeningskraft	5 N	5 N
Max. kraft i enden av bevegelse	22 N	22 N
Min. forbevegelse	5°	5°
Differensialbevegelse	1,5°	1,5°
Max. totalbevegelse	16°	16°
Vekt (g)	270	290
Mekanisk levetid (oper)	2,5 x 10 ⁶	2,5 x 10 ⁶

E



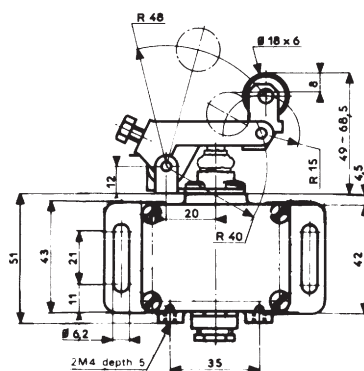
Justerbar metallarm m/plastrulle

Funksjon

TYPEa NR.



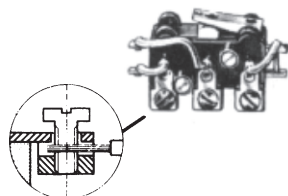
83.716.0 A



Justerbar metallarm m/vikende plastrulle



83.718.0 A



Reservebryter for:

83.714.0
 83.715.0
 83.716.0
 83.718.0
 83.719.0
 83.720.0



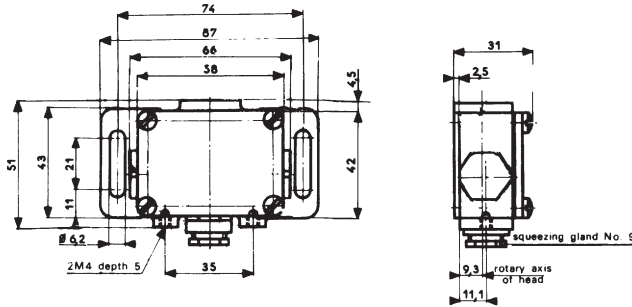
83.101.104

Endebryter

Type 83.720

5A 250V~

Sprut-vanntett IP 55



MATERIALE

Støpt metallhus, malt gråblå

Oljebestandig

Temperaturområde: -5 - +70°C

Innvendig jordingsskrue

Leveres med en pakknippel nr. 9 og to blindplugger for alternativ pakknippel-montering

Loddetilkobling, max. 3 mm²

MEKANISKE DATA:

Max. betjeningskraft 12 N

Max. kraft i enden av bevegelse 28 N

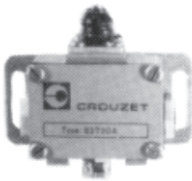
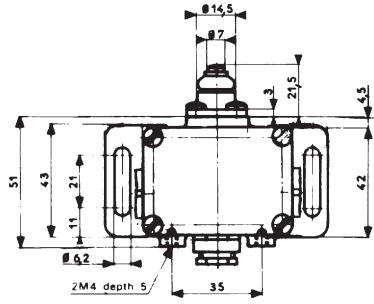

Min. forbevegelse 2 mm

Differensialbevegelse 0,6 mm

Max. totalbevegelse 6 mm

Vekt (g) 230

Mekanisk levetid (oper) 10⁷

		Funksjon	TYPE NR.
			<p>83.720.0 A</p>

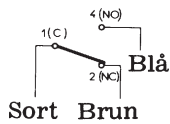
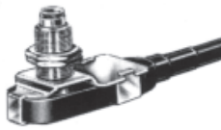


Gummikapslede endebrytere

Type 83.73 -

5A 250V~

Sprut-vanntett IP 55

**MATERIALE**

Oljebestandig nitril-gummikappe

Hus: Kadimert stål

Hals: Forniklet messing

Tverrsnitt leder: 1 mm²

Kabellengde: 0,5, 1 eller 2 m

Andre kabellengder kan leveres**MEKANISKE DATA:**

Max. betjeningskraft (N)

Max. kraft i enden av bevegelse (N)

Max. tillatt kraft i enden av bevegelse (N)

Min. forbevegelse (mm)

Differensialbevegelse (mm)

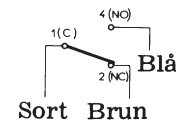
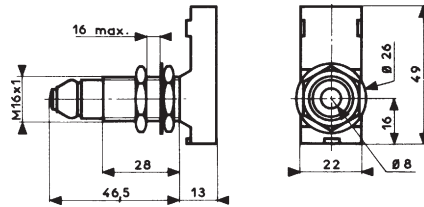
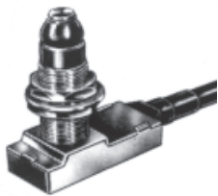
Max. totalbevegelse (mm)

Mekanisk levetid (oper)

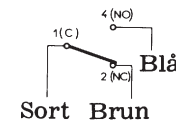
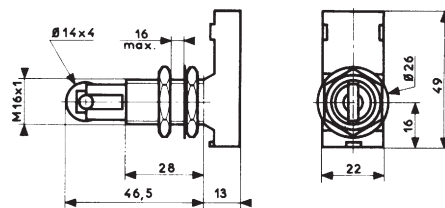
Temperaturområde (°C)

	83.731.3	83.732.3	83.733.3
Max. betjeningskraft (N)	15	15	6
Max. kraft i enden av bevegelse (N)	35	35	25
Max. tillatt kraft i enden av bevegelse (N)	40	40	30
Min. forbevegelse (mm)	2	2	1,5
Differensialbevegelse (mm)	0,2	0,2	0,2
Max. totalbevegelse (mm)	4	4	4
Mekanisk levetid (oper)	10 ⁶	10 ⁶	10 ⁶
Temperaturområde (°C)	-5 - +70	-5 - +70	-5 - +70

E

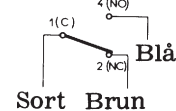
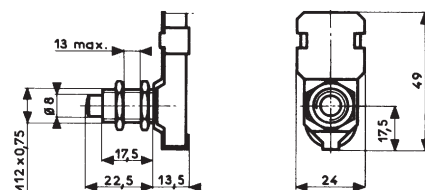
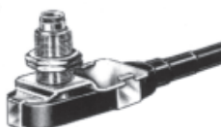


83.731.3



83.732.3

m/kadmiert stålrulle



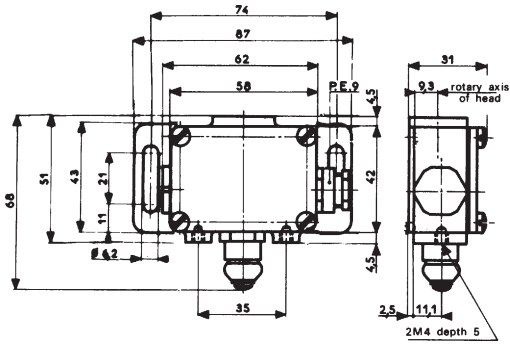
83.733.3

Endebryter - Bistabil

Type 83.740

5A 250V~

Sprut-vanntett IP 55



MATERIALE

Støpt lettmetallhus, malt gråblå
 Oljebestendig
 Temperaturområde: - 5 - +70° C
 Innvendig jordingsskrue
 Leveres med pakknippel nr. 9 og blindplugg
 for alternativ pakknippel-montering
 Bistabil funksjon, tilbakestilles med
 betjenings-stempel på undersiden
 Skrutilkobling, max. 3 mm²

MEKANISKE DATA:

83.740

Max. betjeningskraft 8 N
 Max. kraft i enden av bevegelse 28 N
 Min. forbevegelse 2 mm
 Differensialbevegelse 0,6 mm
 Max. totalbevegelse 6 mm
 Vekt (g) 260
 Mekanisk levetid (oper) 10⁷

		Funksjon	TYPE NR.
			83.740.0 A
	Reservebryter for 83.740.0		83.101.70 I

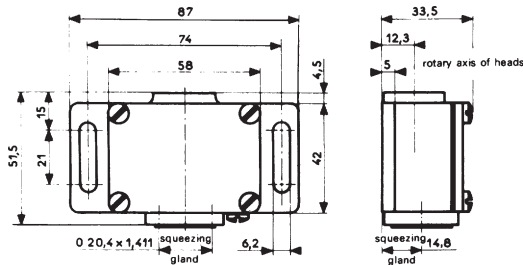
E

Endebrytere

Type 83.78 -

6A 250V~

Sprut-vanntett IP 65

**MATERIALE**

Støpt lettmetallhus, malt gråblå
 Oljebestendig
 Temperaturområde: -20 - +70°C
 Innvendig og utvendig jordingsskrue
 Gjenget hull for pakknippel PG nr. 13
 Skrutilkobling, max. 2 mm²

MEKANISKE DATA:	83.780	83.781	83.784
Max. betjeningskraft	10 N	15 N	15 Ncm
Max. kraft i enden av bevegelse	22 N	25 N	
Min. forbevegelse	1,5 mm	3 mm	65°
Differensialbevegelse	0,5 mm	0,5 mm	
Max. totalbevegelse	6 mm	6 mm	90°
Vekt (g)	285	325	300
Mekanisk levetid (oper)	10 ⁷	10 ⁷	10 ⁷

		Funksjon	TYPE NR.
			83.780
			83.781
			83.784
			79.210.780
		Reservebryter for: 83.780 83.781 83.784	83.157.002

Miniatyr endebrytere

Type 83.80-

5A 250V~

Sprut-vanntett IP 55/IP65



MATERIALE

Hus: Glassfyllt nylon, oljebestendig

Kontakter: Sølv

 Bryterelement: **83.133.0 I W2**

 Skrutilkobling, max. 2,5 mm²

Gjenget for PG-nippel nr. 9

Temperaturområde: -20 - +70°C (Spesialutf. -40°C)

MEKANISKE DATA:

	83.800.1	83.801.0	83.802.0
Max. betjeningskraft (N)	10	10	10
Max. kraft i enden av bevegelse (N)	22	22	22
Min. forbevegelse (mm)	1,5	1,5	1,5
Differensialbevegelse (mm)	0,4	0,4 </td <td>0,4</td>	0,4
Max. totalbevegelse (mm)	5	5	5
Vekt (g)	50	57	57

		Funksjon	TYPE NR.
	<p>IP 65</p>		83.800.1
	<p>IP 55</p>		83.801.0
	<p>Rulle av glassfyllt nylon</p> <p>IP 55</p>		83.802.0

Endebrytere

Type 83.82-

6A 250V~

Trykk-vanntett IP 67



MATERIALE

Hus: Sinklegering

Kontakter: Sølv

 Tverrsnitt leder: 0,75 mm²


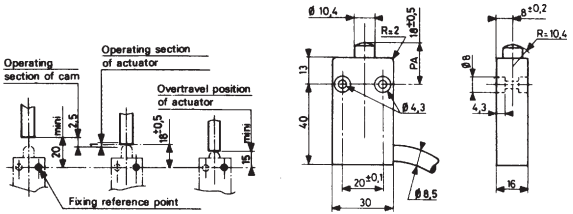

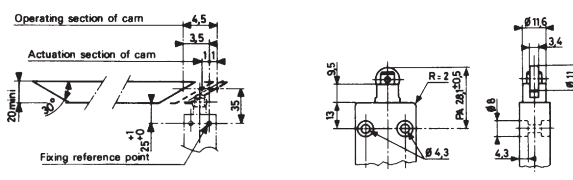

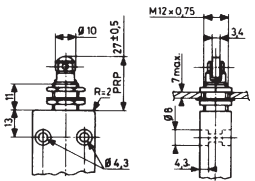
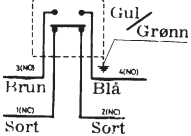

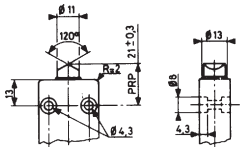

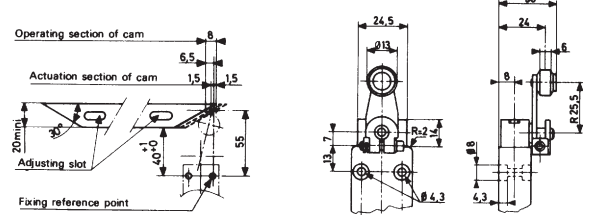
Temperaturområde: -25 - +70°C

Kabellengde: 1 m

Andre kabellengder kan leveres

MEKANISKE DATA:

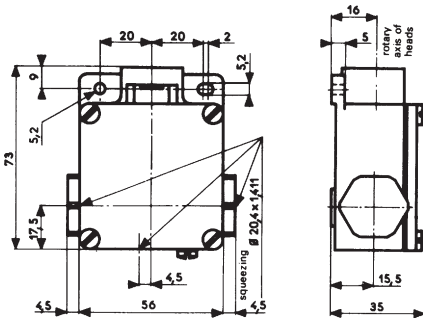
	83.820.0	83.821.0	83.822.0	83.823.0	83.824.0
Max. betjeningskraft	10 N	10 N	10 N	20 Nm	10 N
Max. kraft i enden av bevegelse	100 N	100 N	100 N	30 Nm	100 N
Max.. forbevegelse			2,5 mm		2,5 mm
Differensialbevegelse	0,4 mm	0,4 mm	0,4 mm	5°	0,4 mm
Max. totalbevegelse	4,7 mm	4,7 mm	4,7 mm	65°	4,7 mm
Vekt (g)	290	295	315	350	290
Mekanisk levetid (oper)	10 ⁷	10 ⁷	10 ⁷	10 ⁷	10 ⁷

		Funksjon	TYPE NR.
			83.820.0
			83.821.0
			83.822.0
			83.824.0
			83.823.0

Endebrytere - positivt brudd

Type 83.84-

2A 380V~ Sprut-vanntett IP 66

**MATERIALE**

Støpt lettmetallhus, malt rødt

Oljebestendig

3 gjennomføringer gjenget for PG nr. 13

2 blindplugger

Temperaturområde: -20 - +70°C

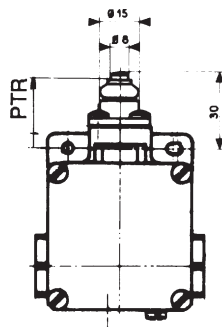
Kun hvilekontakt har positivt brudd

Tilfredsstill normene:

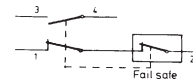
IEC 337.1, NFC 6340, VDE 0660, del 2

MEKANISKE DATA:	83.840.7	83.841.7	83.845.7
Arbeidspunkt (PTR) (mm)	26,9	49,7	44,6

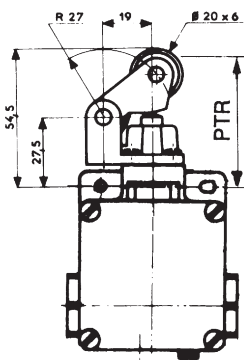
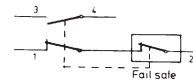
E



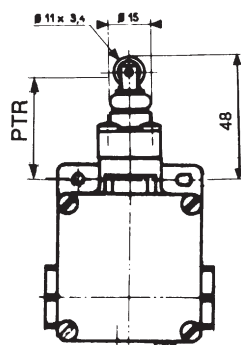
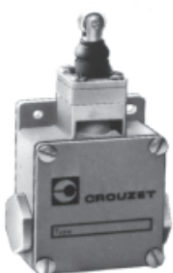
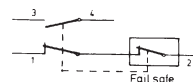
Metall trykkstempel



83.840.7

Metallarm
m/plastrulle
kan vendes 4 x 90°

83.841.7

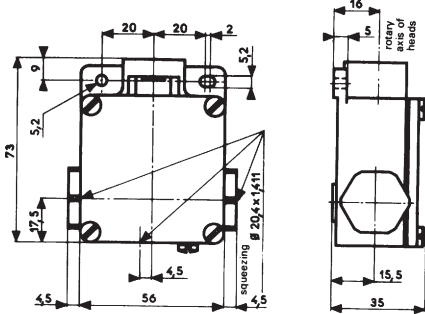
Trykkstempel
m/rulle
kan vendes 90°

83.845.7

Endebryter - positivt brudd

Type 83.843.7

2A 380V~ Sprut-vanntett IP 66



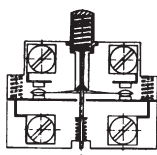
MATERIALE

Støpt lettmetallhus, malt rødt
 Oljebestandig
 3 gjennomføringer gjenget for PG nr. 13
 2 blindplugg
 Temperaturområde: -20 - +70°C
 Kun hvilekontakt har positivt brudd
 Tilfredsstillere normene:
 IEC 337.1, NFC 6340, VDE 0660, del 2

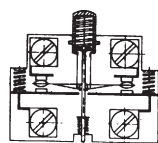
MEKANISKE DATA: **83.843.7**
 Arbeidspunkt (PTR) 45°

		Funksjon	TYPE NR.
			83.843.7
		Metall arm Plastrulle Passer for bryter type 83.843.7	79.210.998 (Rett arm)
		Metall arm Plastrulle Passer for bryter type 83.843.7	79.210.997 (Bøyd arm)

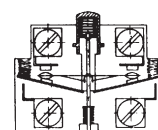
Virkemåte for brytere med positivt brudd (tvangsbrytere)



Hvilestilling



Arbeidsstilling:
Momentankontakten er koblet om



Tvangsbrytende stilling:
Dersom hvilekontakten er sveiset fast, åpnes den tvangsbrytende kontakten

Endebrytere, positivt brudd

Type 83.850 -

6A 250 ~ Sprut-vanntett IP a 66



MATERIALE

Hus: Termoplast, dobbeltisolert, metall aktuatorhode. Metallhus kan leveres

Tilkoblinger: Sadelskive med M3,5 skrue for 2 x 1,5 m² eller 1 x 2,5 m² leder. PG 13 gjennomføring

Temperaturområde: - 25 - + 80°C

Tilfredsstiller: IEC 536 - 1, IEC 947 - 5 - 1, CSA 22.2 No. 14, EN 50047, EN 60204 - 1

MEKANISKE DATA:

		83.850.001	83.850.501	83.850.101	83.850.201
Min. betjeningskraft:	N	10	10	9	9
Min. kraft for full bevegelse:	N	12	12	10	10
Min forbevegelse:	m m	5	5	5	5
Differensialbevegelse:	m m	1,5	1,5	1,5	1,5
Max totalbevegelse:	m m	7	7	7,5	7,5
Vekt (g):	g	90	100	100	105
Mekanisk levetid:		3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷

		Funksjon	TYPENR.
	<p>Stålstempel</p>		83.850.001
	<p>Stålrulle</p>		83.850.501
	<p>Plastrulle</p>		83.850.101
	<p>Plastrulle</p>		83.850.201

Endebrytere, positivt brudd

Type 83.850 -

6A 250 ~ Sprut-vanntett IP 66



MEKANISKE DATA:	83.850.301	83.850.302	83.850.303	83.850.304	83.850.601
Min. betjeningskraft: N - (Ncm)	(28)	(28)	(28)	(28)	3
Min. kraft for full bevegelse: N - (Ncm)	(37)	(37)	(37)	(37)	4,5
Min forbevegelse: °	30	30	30	30	30
Differensialbevegelse: °	20	20	20	20	20
Max totalbevegelse: °	75	75	75	75	75
Vekt (g): g	130	130	150	153	130
Mekanisk levetid:	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷

		Funksjon	TYPE NR.
	Plastrulle		83.850.301
	Plastrulle		83.850.302
	Plastrulle		83.850.303
	Polyamid stang		83.850.304
	Bøyelig stålfjær		83.850.601

E

Endebrytere, positivt brudd.

Type 83.861.-

6A 250 ~ Sprut-vanntett IP 66



MATERIALE

Hus: Metall, metall aktuatorhode.


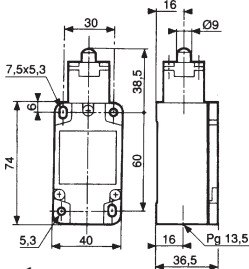
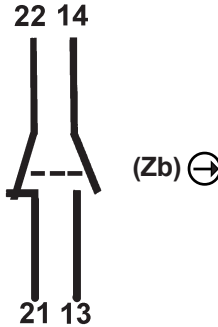

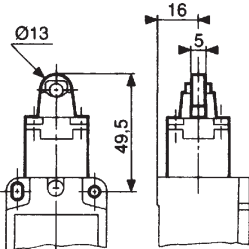

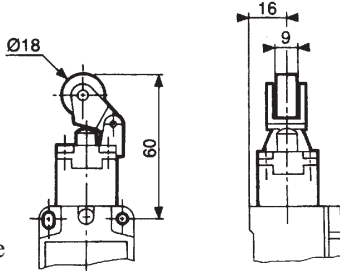

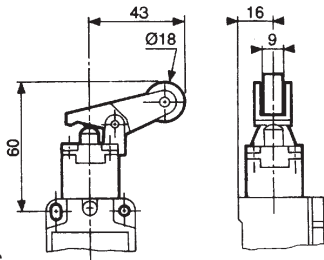
Tilkoblinger: Sadelskive med M3,5 skrue for 2 x 1,5 m² eller 1 x 2,5 m² leder. PG 13 gjennomføring

Temperaturområde: - 25 - + 80°C

Tilfredsstiller: IEC 536 -1, IEC 947 - 5 -1, CSA 22.2 No. 14, EN 5004, EN 60204 - 1, UL 508, VDE 0660 / 200, NFC 20030 Class 1

MEKANISKE DATA:

		83.861.101	83.861.501	83.861.101	83.861.201
Min. betjeningskraft:	N	10	10	9	9
Min. kraft for full bevegelse:	N	12	12	10	10
Min kraft for positivt brudd:	N	25	25	20	20
Min forbevegelse:	m m	5	5	5	5
Min. bevegelse for pos. brudd:	m m	6	6	6,5	6,5
Differensialbevegelse:	m m	1,5	1,5	1,5	1,5
Max totalbevegelse:	m m	7	7	7,5	7,5
Vekt (g):	g	305	315	320	325
Mekanisk levetid:		3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷

		Funksjon	TYPENR.
	 <p>Stålstempel</p>		83.861.001
	 <p>Stålrulle</p>		83.861.501
	 <p>Plastrulle</p>		83.861.101
	 <p>Plastrulle</p>		83.861.201

Endebrytere, positivt brudd

Type 83.861.-

6A 250 ~ Sprut-vanntett IP 66



MEKANISKE DATA:		83.861.301	83.861.302	83.861.303	83.861.304	83.861.601
Min. betjeningskraft:	N - (Ncm)	(28)	(28)	(28)	(28)	3
Min. kraft for full bevegelse:	N - (Ncm)	(37)	(37)	(37)	(37)	4,5
Min kraft for positivt brudd:	N - (Ncm)	(75)	(75)	(75)	(75)	
Min forbevegelse:	°	30	30	30	30	30
Min. bevegelse for pos. brudd:	°	60	60	60	60	
Differensialbevegelse:	°	20	20	20	20	20
Max totalbevegelse:	°	75	75	75	75	75
Vekt:	g	340	340	365	360	335
Mekanisk levetid:	oper.	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷	3 x 10 ⁷

		Funksjon	TYPENR.
	Plastrulle 		83.861.301
	Plastrulle 		83.861.302
	Plastrulle 		83.861.303
	Polyamid stang 		83.861.304
	Bøyelig stålfjær Ikke positivt brudd 		83.861.601

Vanntett endebryter

Type 83.589

8A 250V~ Vanntett IP 66/67



Max tiltrekkingsmoment: 9 Nm

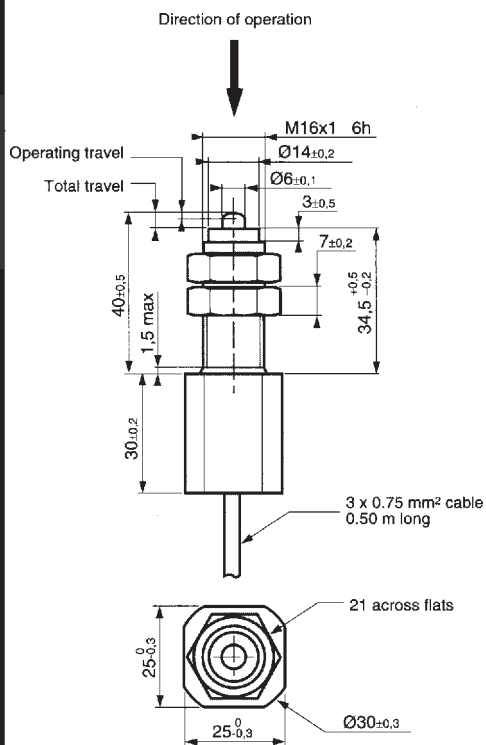
MATERIALE:

Oljebestandige og motstandsdyktige mot salttåke (400timer) materialer
 Hus: Polyester
 Aktuator: Rustfritt stål
 Muttere: Galvanisert stål
 Tetninger: Silikon og teflon
 Tverrsnitt kabel: 3 x 0,75 mm²
 Kabellengde: 0,5 m

MEKANISKE DATA:

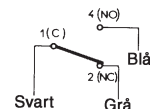
Min. betjeningskraft (N)	10
Min. kraft i enden av bevegelse (N)	15
Min. forbevegelse (mm)	2
Differensialbevegelse (mm)	0,1
Max. totalbevegelse (mm)	4
Mekanisk levetid (oper)*	10 ⁷
Temperaturområde (°C)	-40 - +85
Vekt (g)	80

*) ved 4mm betjeningsbevegelse

Strøm**Funksjon****TYPE NR.****Standard utførelse:**

8 A 250 V~: 30 000 oper.
 200 mA 24 V=, L/R=3 ms¹,
 10⁷oper

1) Relé belastning



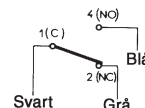
83.589.0

To nivå strøm:

Denne varianten er konstruert for enten å bryte lav nivå (1 mA 4 V min) eller mellomnivå (5A max.) En bryter kan bare arbeide på et av nivåene gjennom sin levetid.

1 mA 4 V : 10⁷ operasjoner
 200 mA 24 V=, L/R=3 ms¹,
 5x10⁶oper
 5 A 250 V~: 30 000 oper.

1) Relé belastning



83.589.8