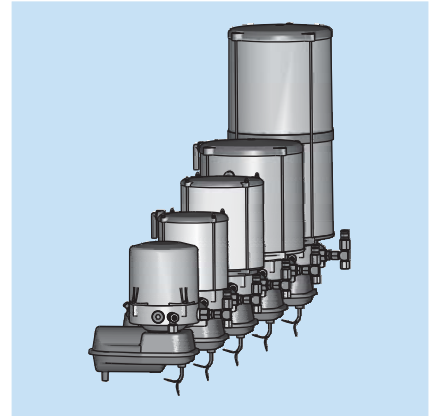


8.1 Electric pumps and control units

Table of Contents	Page
Electric pump EP-1 without control unit	8.1.2
Electric pump EP-1 with integrated control unit BEKA-troniX1 with bayonet connector	8.1.3
Integrated control unit BEKA-troniX1 for installation into the electric pump EP-1 and OC-1	8.1.4
Integrated control unit S-EP 4 for installation into the electric pump EP-1 and OC-1	8.1.5
Electric pump EP-1 with integrated control unit EP-tronic with bayonet connector	8.1.6
Integrated control unit EP-tronic for installation into the electric pump EP-1 and OC-1	8.1.7
Electric pump EP-1 with integrated control unit EP-tronic T1 with bayonet connector	8.1.8
Integrated control unit EP-tronic T1 for installation into the electric pump EP-1 and OC-1	8.1.9
Electric pump EP-1 with integrated control unit EP-T2 with bayonet connector	8.1.10
Integrated control unit EP-T2 for installation into the electric pump EP-1 and OC-1	8.1.10
Central lubrication pump PICO without control unit	8.1.11
Central lubrication pump PICO with integrated control unit PICO S-EP 4	8.1.11
Central lubrication pump PICO with integrated control unit PICO-tronic T1	8.1.11
Central lubrication pump PICO with integrated control unit PICO-T2	8.1.11
Integrated control unit PICO-tronic for installation into the central lubrication pump PICO	8.1.12
Integrated control unit PICO S-EP 4 for installation into the central lubrication pump PICO	8.1.13
Integrated control unit PICO-tronic T1 for installation into the central lubrication pump PICO	8.1.13
Integrated control unit PICO-T2 for installation into the central lubrication pump PICO	8.1.13
External control unit S-EP 6	8.1.14



Electric Pump EP-1



Order Key:

Construction type 2152 . XX . XX . XX . 000

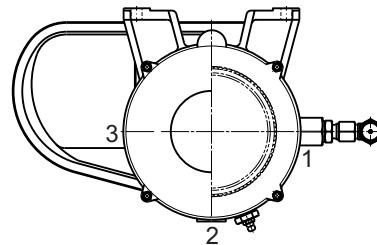
Motor voltage				
	without plug		with bayonet connector	
Voltage	12 V	24 V	12 V	24 V
Code	01	02	03	04

Pump elements	Outlet No		
	1	2	3
without	0	0	0
PE-60	1	1	1
PE-120	2	2	2
PE-120 V	3	3	3
PE-170	4	4	4

Fig.	Code	Fig.	Code	Fig.	Code	Fig.	Code	Fig.	Code
000	A0	100	F0	200	01	300	41	400	V0
001	A1	101	F1	201	K1	301	Q1	401	V1
002	A3	102	F2	202	K2	302	Q2	402	V2
003	A4	103	F3	203	K3	303	Q3	403	V3
004	A5	104	F4	204	K4	304	Q4	404	V4
010	B0	110	N0	210	L0	310	R0	410	W0
011	B1	111	G1	211	L1	311	R1	411	W1
012	B2	112	G2	212	L2	312	R2	412	W2
013	B3	113	G3	213	L3	313	R3	413	W3
014	B4	114	G4	214	L4	314	R4	414	W4
020	C0	120	H0	220	02	320	S0	420	X0
021	C1	121	H1	221	M1	321	S1	421	X1
022	C2	122	H2	222	03	322	S2	422	X2
023	C3	123	H3	223	M3	323	S3	423	X3
024	C4	124	H4	224	M4	324	S4	424	X4
030	D0	130	H5	230	52	330	42	430	Y0
031	D1	131	H6	231	N1	331	T1	431	Y1
032	D2	132	H7	232	N2	332	T2	432	Y2
033	D3	133	H8	233	53	333	43	433	Y3
034	D4	134	H9	234	N4	334	T4	434	Y4
040	E0	140	J0	240	P0	340	U0	440	Z0
041	E1	141	J1	241	P1	341	U1	441	Z1
042	E2	142	J2	242	P2	342	U2	442	Z2
043	E3	143	J3	243	P3	343	U3	443	Z3
044	E4	144	J4	244	P4	344	U4	444	Z4

Special variants 000

Ordering example pump elements:



1 PE-120 installed in outlet position 1:

Fig. = 200 -> Code = 01

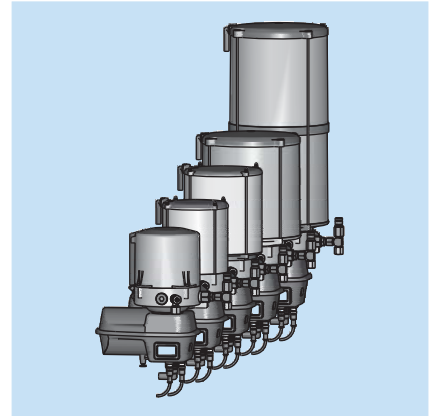
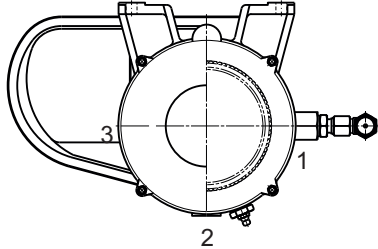
Reservoir size (kg)	1,9	2,5	4	8	16
Transparent reservoir					
without grease level control	27	25	30	35	37
with LM min. plug connection M12x1 in reservoir cover		51	52	53	
Reservoir size (kg)	2	4	8		
Steel reservoir					
without grease level control	31	26	36		

Special variants: 028 = Pump elements with microswitch
 257 = Pump elements with malfunction indicator and grease repatriation



EP-1 with integrated Control Unit BEKA-troniX1

Positions of outlets:



Order Key with integrated Control Unit BEKA-troniX1:

Construction type 2175 . 3 . 1 . E . 0 . 1 . 2 . 1 . 000

Motor voltage	
with bayonet connector	
12V	24V
3	4

Outlet	Pump element	without	PE-60	PE-120	PE-120 V	PE-170
Pos. 1	without micro switch	0	7	1	2	G
	with micro switch	0	A	D	N	H
Pos. 2	without micro switch	0	8	3	4	J
	with micro switch	0	B	E	P	K
Pos. 3	without micro switch	0	9	5	6	L
	with micro switch	0	C	F	A	M
Special variants		ZZZ				

Only one micro switch can be connected to the BEKA-troniX1 controller!

Size of reservoir (kg)	Transparent reservoirs				Steel reservoirs			
	1,9	4	2,5	8	16	2	4	8
without grease level monitoring	1	2	4	8	9	6	7	5
with LM min. plug connection M12x1 in reservoir cover		B	A	C				

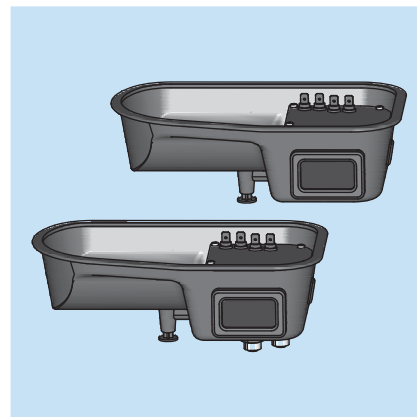
Additional equipment connected at controller	
without additional equipment	0
Grease level monitoring	1
System excess pressure monitoring	2
Grease level controller and system excess pressure monitoring	3
without connection to the controller (only connectors, not connected, not activated)	4

Parameter	Cycle duration		
	0.5 to 8 h	2 to 32 min.	2 to 32 h
I 1 to 16 min.	1	A	J
II 2 to 32 min.	2	B	K
III 2 to 32 sec.	3	C	L
Pump revolutions			
I 1 to 16	7	G	O
II 10 to 160	8	H	Q
III 170 to 320	9	I	R

Special models 000



Integrated Control Unit BEKA-troniX1 for EP-1 and OC-1

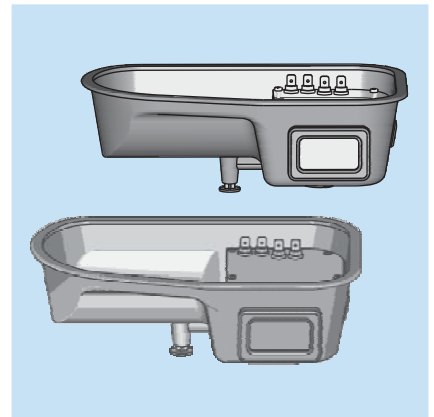


Order Key for integrated Control Unit BEKA-troniX1:

Construction type				2175 . 90 . 10 . 0 . A . 000
Connector version				
with bayonet connector	10			
additional equipment				
without additional equipment	0			
with grease level monitoring	1			
with system excess pressure monitoring	2			
with grease level monitoring and system excess pressure monitoring	3			
with contact plugs (not activated)	4			
Parameter	Cycle duration			
Lubrication time	0.5 to 8 h	2 to 32 min.	2 to 32 h	
I 1 to 16 min.	1	A	J	
II 2 to 32 min.	2	B	K	
III 2 to 32 sec.	3	C	L	
Pump revolutions				
I 1 to 16	7	G	P	
II 10 to 160	8	H	Q	
III 170 to 320	9	I	R	
Special models	000			



Integrated Control Unit S-EP 4



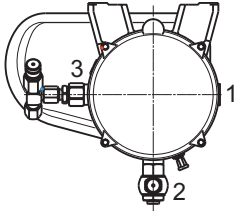
Order Key for Integrated Control Unit S-EP 4 with Bayonet Connector
 for EP-1 and OC-1 (Lower Motor Housing)

Construction type		2147 . 90 . 10 . 2 . 1 . 00	
Connector version			
for Hirschmann connector	00		
for bayonet connector	10		
Lubrication time			
Time range I	1 min. to 16 min.	1	
Time range II	2 min. to 32 min.	2	
Button for interim lubrication			
Yes	No		
Code	1	0	
Special type			
00			

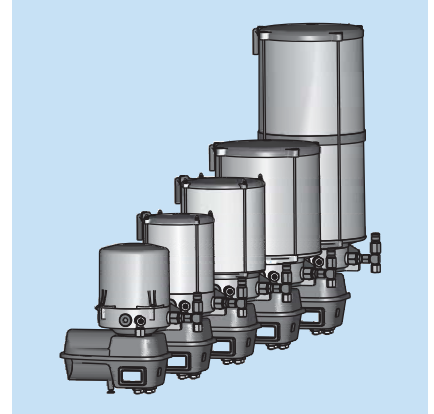


Electric Pump EP-1 with Integrated Control Unit EP-tronic

Ordering Example Pump Elements:



Order example:
 Outlet position: 1 2 3
 Fig.: 0 2 1
 Code: 9



Order Key EP-1 with Integrated Control Unit EP-tronic

with Bayonet connector

Construction type 2157 . 3 . 1 . 2 . 0 . A . 0 . 0000

Motor voltage	
with bayonet connector	
12V	24V
3	4

	Fig.					
1	1	2	3	4	0	
2	1	2	3	4	0	
3	1	2	3	4	0	
Outlet position	PE-120	PE-120 V	PE-60	PE-170	without	

001	G	Special variants				Z	
010	H	002	K	003	N	004	R
011	J	020	L	030	P	040	S
100	1	022	M	033	Q	044	T
110	2	200	4	300	V	400	D
111	3	220	5	330	B	440	E
120	7	222	6	333	C	444	F
102	W	021	9	122	8	123	U
Fig.	Code	Fig.	Code	Fig.	Code	Fig.	Code

Other combinations of pump elements on demand!

Size of reservoir (kg)	Transparent reservoirs				Steel reservoirs			
	1,9	4	2,5	8	16	2	4	8
without grease level monitoring	1	2	4	8	K	A	B	C
with LM min. plug connection M12x1 in reservoir cover		N	M	P				

Additional equipment	
Without	0
Attached to controller	
System pressure P _{max.}	1
Grease level monitoring	2
System excess pressure monitoring and grease level controller	3

Parameter	Cycle duration			
Lubricating time	0.5 to 8 h	2 to 32 min.	2 to 32 h	
I	1 to 16 min.	1	A	J
II	2 to 32 min.	2	B	K
III	2 to 32 sec.	3	C	L
Strokes				
I	1 to 16 Strokes	4	D	M
II	17 to 32 Strokes	5	E	N
III	33 to 48 Strokes	6	F	O
Pump revolutions				
I	1 to 16	7	G	P
II	10 to 160	8	H	Q
III	170 to 320	9	I	R

With collective error notification (stat. error) (Standard)	1
With starter enabling device	2
Special models	0000

Subject to alterations! © BEKA 2013 All rights reserved!

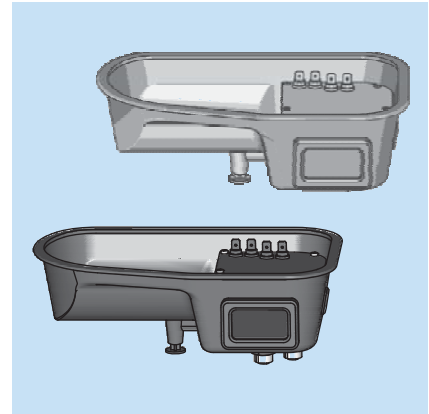
All additional functions of time periods can be activated or set later with the system analysis software on PC.

8.1.6





Integrated Control Unit EP-tronic for EP-1 and OC-1



Order Key for Integrated Controller EP-tronic

Order-No.: _____ **2157 . 90 . 00 . X . X . X . 00**

Connector version	
for Hirschmann connector	00
for bayonet connector	10

Additional Equipment at Hirschmann connector type	
Without	0
Connected to Control Unit	
System Pressure P max.	1
Grease Level Control	2
Observance of System Pressure and Grease Level Control	3

Additional equipment at bayonet connector type	
Without	0
Attached to controller	
System pressure P _{max.}	1
Grease level monitoring	2
System excess pressure monitoring and grease level controller	3

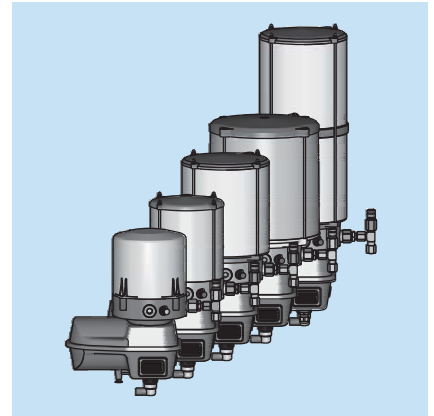
Parameter	Cycle Time		
	0.5 up to 8 h	2 up to 32 min.	2 up to 32 h
I 1 up to 16 min.	1	A	J
II 2 up to 32 min.	2	B	K
III 2 up to 32 sec.	3	C	L
Strokes			
I 1 up to 16 Strokes	4	D	M
II 17 up to 32 Strokes	5	E	N
III 33 up to 48 Strokes	6	F	O
Rotations of Pump			
I 1 up to 16	7	G	P
II 10 up to 160	8	H	Q
III 170 up to 320	9	I	R

With Collective Disturbance Report (Constant Error)	1
With Ignition Release	2

Special Model 00



Electric Pump EP-1 with integrated Control Unit EP-tronic T1



Order Key for Electric Pump EP-1 with integrated Control Unit EP-tronic T1
with Bayonet connector

Construction type		2183 . X . X . X . X . X . XXXX			
Motor voltage					
with bayonet connector					
12 V	24 V				
3	4				

	Fig.				
1	1	2	3	4	0
2	1	2	3	4	0
3	1	2	3	4	0

Outlet position	PE-120	PE-120 V	PE-60	PE-170	without
-----------------	--------	----------	-------	--------	---------

Fig.	Code	Fig.	Code	Fig.	Code	Fig.	Code
001	G	002	K	003	N	004	R
010	H	020	L	030	P	040	S
011	J	022	M	033	Q	044	T
100	1	200	4	300	V	400	D
110	2	220	5	330	B	440	E
111	3	222	6	333	C	444	F
120	7	021	9	122	8	123	U
Special variants							Z

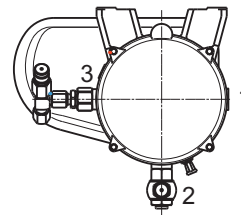
Other combinations of pump elements on demand!

Size of reservoir	1.9 kg	2.5 kg	4 kg	8 kg
Code	1	4	2	8

Integrated electronic controller EP-tronic T1			
Lubrication time range	Cycle time range		
	0.5 h to 8 h	2 min. to 32 min.	2 h to 32 h
I	1 min. to 16 min.	1	A
II	2 min. to 32 min.	2	B
III	2 sec. to 32 sec.	3	C

Button for interim lubrication	without	with
Code	0	1

Special types	without
Code	0000



Order example:
 Outlet position: 1 2 3
 Fig.: 0 2 1
 Code: 9

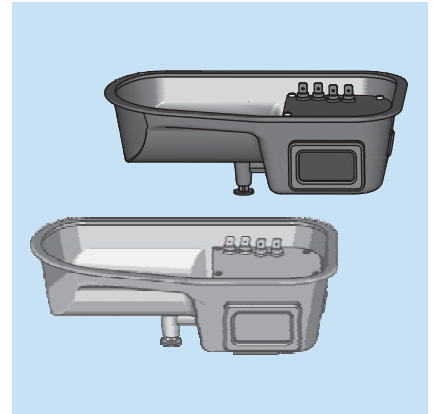
© BEKA 2013 All rights reserved!

Subject to alterations!

Date of issue Nov. 2012



Integrated Control Unit EP-tronic T1 for EP-1 and OC-1



Order Key for Integrated Control Unit EP-tronic T1

Construction type _____ 2183 . 90 . 10 . X . X . XXXX

Connector version	
for Hirschmann connector	00
with bayonet connector	10

Integrated electronic controller EP-tronic T1				
Lubrication time range		Cycle time range		
		0.5 h to 8 h	2 min. to 32 min.	2 h to 32 h
I	1 min. to 16 min.	1	A	J
II	2 min. to 32 min.	2	B	K
III	2 sec. to 32 sec.	3	C	L

Button for interim lubrication	without	with
Code	0	1

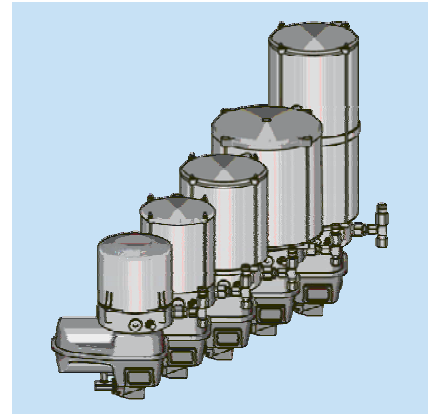
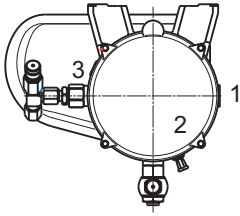
Special types	without
Code	0000

Date of issue Okt. 2004



EP-1 with integrated control unit EP-T2 and Integrated Control Unit EP-T2

Positions of outlets:



Order Key for EP-1 with integrated control unit EP-T2

Construction type		2184 . X . X . X . X . X . X . XXX				
Motor voltage						
with bayonet connector						
12 V	24 V					
3	4					
Code						
1	1	2	3	4	0	Z
2	1	2	3	4	0	Z
3	1	2	3	4	0	Z
Outlet-no.	PE-120	PE-120 V	PE-60	PE-170	without	Special variants
Size of reservoir	1,9 kg	2,5 kg	4 kg	8 kg		
Code	1	4	2	8		
Integrated electronic control unit EP-T2						
Lubricating time range	Code					
1 sec. to 60 sec.	1					
Special types	without					
Code	000					

Updated: 11.2012

Order Key for integrated control unit EP-T2

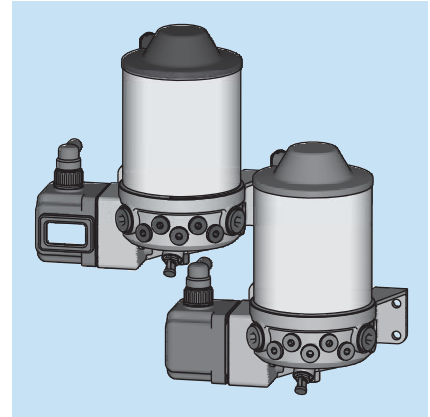
Construction type		2184 . 90 . 10 . X . XXXXX			
Connector version					
with bayonet connector	10				
Integrated electronic controller EP-T2					
Lubricating time range	Code				
1 sec. to 60 sec.	1				
Special types	without				
Code	00000				

Updated: January 2006

© BEKA 2013 All rights reserved!
Subject to alterations!



Central Lubrication Pump Pico



**Order Key for Electric Pump PICO
without Controller,
with integrated Control Unit PICO S-EP 4, PICO-tronic T1 or PICO-T2
with Bayonet Connector**

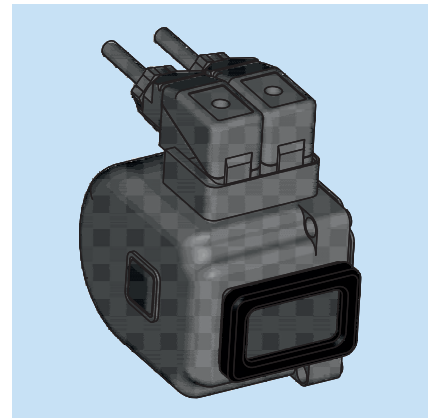
Order-No.		2185 . X . X . X . X . X . XXXX			
with Bayonet Connector					
Motor voltage	12 V	24 V			
Number	3	4			
Pump elements	Outlet-No.				Note: Pump elements PE-5 up to PE-50 must be ordered separately!
	4	10	4+10	without	
PE-120F	1	2	3	0	
PE-120FV	4	5	6		
PE-120F +	X		7		
PE-120FV		X			
PE-120F +		X	8		
PE-120FV	X				
Container size	1.2 kg				
Number	1				
Sort of control unit	without	PICO S-EP 4	Trailers and semi-trailers PICO-tronic T1	Trailers and semi-trailers PICO-T2	
Number	1	2	3	5	
without	0				
PICO S-EP 4					
Lubrication time range		Cycle time range			
		0.5 h up to 8 h			
I	1 min. up to 16 min.	Z			
II	2 min. up to 32 min.	T			
PICO-tronic T1 for trailers and semi-trailers					
Lubrication time range		Cycle time range			
		0.5 h up to 8 h	2 min. up to 32 min.	2 h up to 32 h	
I	1 min. up to 16 min.	1	A	J	
II	2 min. up to 32 min.	2	B	K	
III	2 sec. up to 32 sec.	3	C	L	
PICO-T2 for trailers and semi-trailers					
Lubrication time range					
1 sec. up to 1 min.		1			
Special variants	without				
Number	0000				

Subject to alterations! © BEKA 2013 All rights reserved!

Stand Feb. 2007



Integrated control for central Lubrication Pump PICO



Order-No. for integrated Control unit PICO-tronic

Order-No.: _____ 2185 . 900. .4 . X . XXXX

Model of Control Unit	PICO-tronic
Order-No.	4

at PICO-tronic				
Lubrication Time		Cycle Time		
		0.5 h up to 8 h	2 min. up to 32 min.	2 h up to 32 h
I	1 min. up to 16 min.	1	A	L
II	2 min. up to 32 min.	2	B	K
III	2 sec. up to 32 sec.	3	C	L
Strokes				
I	1 up to 16 Strokes	4	D	M
II	17 up to 32 Strokes	5	E	N
III	33 up to 48 Strokes	6	F	O
Rotations of pump				
I	1 up to 16 Rotations	7	G	P
II	10 up to 160 Rotations	8	H	Q
III	170 up to 320 Rotations	9	I	R

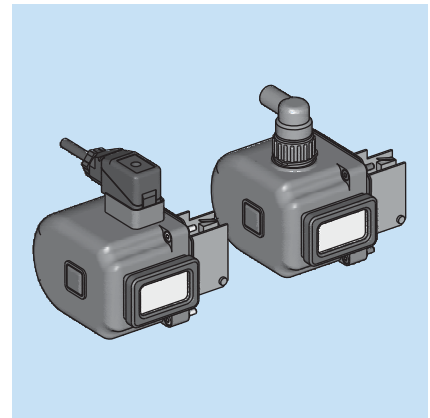
Special Model	without
Order-No.	0000

Updated March 2001





Integrated control for central Lubrication Pump PICO



Order-No. for integrated Control unit PICO S-EP 4

Type	Lubrication Time	Cycle Time	Order-No.
for bayonet connector 7 pol.	2 min. up to 32 min.	0.5 h up to 8 h	21859002T
	1 min. up to 16 min.		21859002Z
for bayonet connector 4 pol.	2 min. up to 32 min.	0.5 h up to 8 h	2185.9002.T.0002
	1 min. up to 16 min.		2185.9002.Z.0002
for Hirschmann connector	2 min. up to 32 min.	0.5 h up to 8 h	2185.9002.T
	1 min. up to 16 min.		2185.9002.Z

Order Key for integrated Control Unit PICO-tronic T1 and PICO-T2

Order-No.: _____ **2185.90.0.3.X.0000**

Connector version		_____	_____	_____
for Hirschmann connector	00			
for bayonet connector	10			

Model of Control Unit	PICO-tronic T1	PICO-T2
Order-No.	3	5

at Trailers and Semitrailers PICO-tronic T1				
Range of Lubrication Time	Range of Cycle Time			
	0.5 h up to 8 h	2 min. up to 32 min.	2 h up to 32 h	
I 1 min. up to 16 min.	1	A	J	
II 2 min. up to 32 min.	2	B	K	
III 2 sec. up to 32 sec.	3	C	L	

at Trailers and Semitrailers PICO-T2	
Lubricating time range	Code
1 sec. to 60 sec.	1

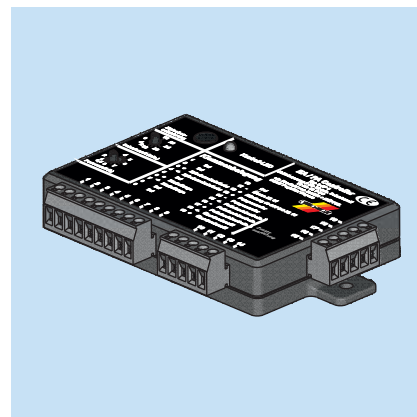
Special Model | 0000

© BEKA 2013 All rights reserved!

Subject to alterations!



External Control Unit S-EP 6



Order Key for external Control Unit S-EP 6

Order-No.: _____ 2166 . 9000 . X . X . 00

Mode of Operation		
	Range of Lubrication Time	
Control by Time	1 min. up to 16 min.	1
	2 min. up to 32 min.	2
Control by Strokes		3
Control by revolutions		4

Connector for Special Functions	
Yes	1
No	0

Special Models 00

