



Operating Manual



SELECTOR

Type 570/16-VZ

342991

Manufacturer:

SCHWANOG

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1. Intended use

The Selector system is used to collect machined workpieces from processing machines. Depending on the application, cooling lubricant also drips into the collection containers. Depending on the type of application, the cooling lubricant can be returned directly to the machine or collected in a tank and then passed on.

Depending on the design, collection tanks of different sizes can be used.

The machine must not be operated in hazardous areas.

The operating personnel must have appropriate technical understanding and be instructed before using the machine. Maintenance work may only be carried out by qualified electricians.

2. Improper use

Any use contrary to the intended use is prohibited. This includes in particular

- Use as a seat or climbing aid
- Use of the machine in hazardous areas
- Use of the machine outside the specified limits
-

(The list is not complete, but only gives examples)

3. General safety information

The Selector may only be operated as intended by qualified and trained personnel. Do not reach into the running machine. During maintenance work, observe the 5 rules of electrical engineering.



According to DIN EN ISO 010, there is a danger of automatic starts on machines and systems. These starts can occur unexpectedly and without warning as soon as a power source is connected or an automatic control is activated.

Automatic starts can lead to serious injuries, occupational accidents or even fatalities. It is therefore extremely important that all employees working with machinery and equipment are aware of the dangers of automatic start-ups and take appropriate protective measures.

All employees should be trained and informed accordingly on how to behave during automatic start-ups and how to switch off the equipment safely.

We ask all employees who work with machines and equipment to take this warning seriously and to take the necessary safety measures to protect themselves and others from the dangers of automatic start-ups.



Attention! Never reach into the running Selector. There is a risk of injury from crushing.



Operating Manual



4. Checks before commissioning

A visual inspection for damage and completeness must be carried out before initial commissioning.

Electrical safety must also be verified in accordance with DGUV V3.

A visual inspection for damage and completeness must be carried out before each commissioning.

Regular inspections must be carried out by the user in accordance with the legal requirements.



5. Commissioning / Connections / Electrical connections



Electrical commissioning may only be carried out by trained personnel.

To connect the Selector, you must insert the electrical plug into the corresponding interface/socket, depending on the version.

Only connect the plug connection of the Selector or the control unit to the intended voltage and frequency (110V/60Hz; 200V/60Hz; 230V/50Hz; 400V/50Hz; 480V/50Hz; 480V/60Hz)! There is a danger to life and fire if the voltage or frequency is incorrect!

5.1. Design:

5.1.1. Selector with external control:

Insert the Selector plug into the existing socket on the machine.

The Selector is controlled exclusively by the machine. For information on how to program this, please refer to the relevant documentation of the machine manufacturer or ask the machine manufacturer. It may be necessary to purchase a corresponding adaptation from the machine manufacturer.

5.1.2. Selector with time clock control:

Insert the plug of the Selector into the socket of the timer control. Insert the plug of the timer control into the existing socket on the machine.

The Selector is controlled by the set time parameters.
For programming the timer control, see chapter Programming - Timer control.

5.1.3. Selector with piece count control:

Plug the selector and the pulse generator into the corresponding sockets of the piece count control. Insert the plug of the piece count control into the existing socket on the machine.

The selector is controlled by the set parameters of the piece count.
For programming the piece count control, see chapter Programming - piece count control.

5.1.4. Selector with external control and oil tank/tub (pump control):

If necessary, plug the Selector's connector into the pump control, then plug the pump control's connector into the existing socket on the machine.

The Selector is now controlled exclusively by the machine. Please refer to the relevant documentation from the machine manufacturer on how to programme this.
The pump of the oil tank/tub is controlled by the pump control.



5.1.5. Selector with timer control and oil tank/tub (pump control):

If necessary, plug the Selector's connector into the socket of the timer/pump control. Insert the plug of the timer/pump control into the existing socket on the machine.

The Selector is controlled by the set time parameters.

For programming the timer control, see chapter Programming - Timer control.

The pump of the oil tank/tub is controlled by the pump control.

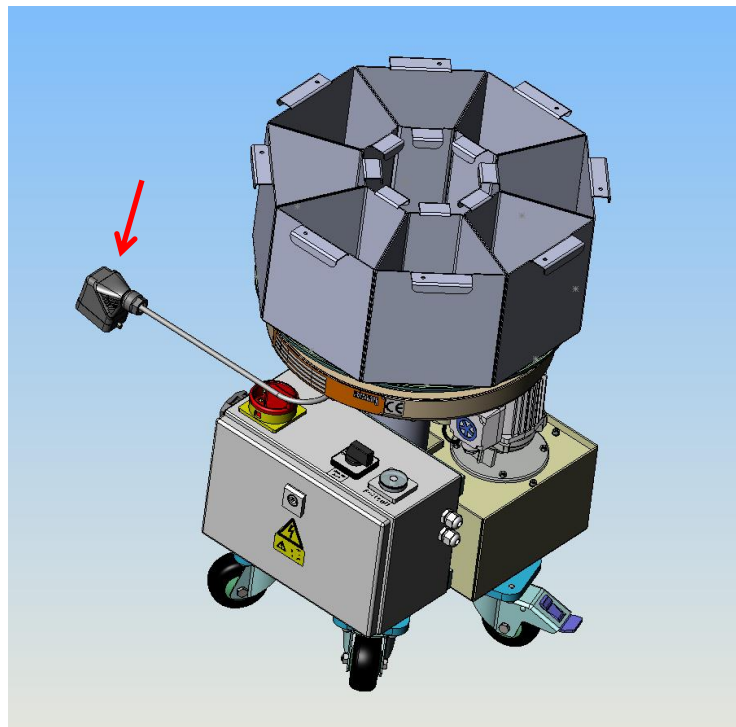
5.1.6. Selector with piece count control and oil tank/tub (pump control):

If necessary, insert the plug of the Selector into the corresponding socket of the piece count/pump control and also insert the plug of the pulse generator into the corresponding socket of the control. Insert the plug of the control unit into the existing socket on the machine.

The selector is controlled by the set parameters of the piece count. For programming the piece count control, see chapter Programming - piece count control.

The pump of the oil tank/tub is controlled by the pump control.

Connect the plug (red arrow) to the corresponding interface/socket.





6. Programming

6.1. External control / external control with test cup:

The Selector is controlled exclusively by the machine. For information on how to program this, please refer to the relevant documentation of the machine manufacturer or ask the machine manufacturer. It may be necessary to purchase a corresponding adaptation from the machine manufacturer.

6.2. Timer control:

The Selector is controlled by the pulse of the time clock.

Settings / display:

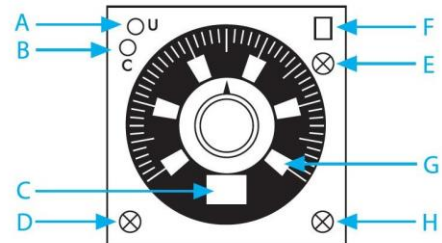
- A: Yellow LED: Operating voltage ON (U)
- B: Red LED: Time running (C)
- C: Window of the selected time (sec/min/h/x10h); setting at switch H.
- F: Window of the selected function (CE); do not change setting
- G: Selected time scale (sec/min/h/x10h)
- D: See table below (scale)
- H: See table below (sec/min/h/x10h)

Time scales

Full scale value

D \ H	s	min	h	x10h
0.5	0.5 second	0.5 minute	0.5 hour	5 hour
1	1 second	1 minute	1 hour	10 hour
5	5 second	5 minute	5 hour	50 hour
10	10 second	10 minute	10 hour	100 hour

NOTE: time scales and functions must be set before energising the timer.

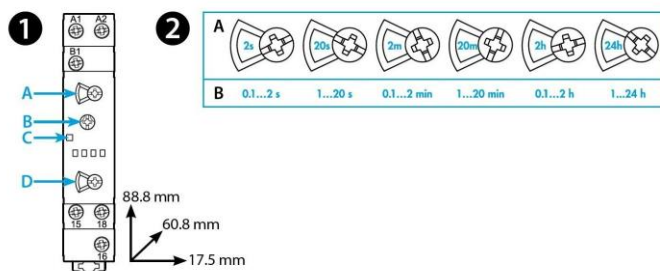


6.3. Time clock control with test cup:

The Selector is controlled by the pulse of the time clock.

For setting the timer, see point 6.2.

The impulse for the test cup must be set on the multifunction time relay with a screwdriver when the switch box is open. When doing this, please pull out the mains plug! Danger of electric shock!



ENGLISH

80.01 MODULAR TIMER, MULTI-FUNCTION

1 FRONT VIEW

- A Time scale rotary selector (Tmax)
- B Time setting (Tmin...Tmax)
- C LED
- D Function rotary selector

2 TIME SCALES

(Eg. T=10 min: set A=20 m and B=10)



6.4. Piece count control Siemens logo:



Display:

- Cup: Display counted number of pieces in the cup
- Target value: Display target content per cup (after the number of pieces has been reached, the selector clocks to the next cup).
- Total: Display counted total number of pieces

Set the target value for the number of pieces per cup:

- Press "ESC" for longer than 3 sec. Hold down
- Use the arrow key "▼" to move to the setpoint field.
- Press ENTER
- Use the arrow key "▶" to select the value to be set.
- Set the value with the arrow keys "▼/▲".
- When all digits have been set, press "ENTER"
- Exit the menu with "ESC"

Reset the counted total number of pieces:

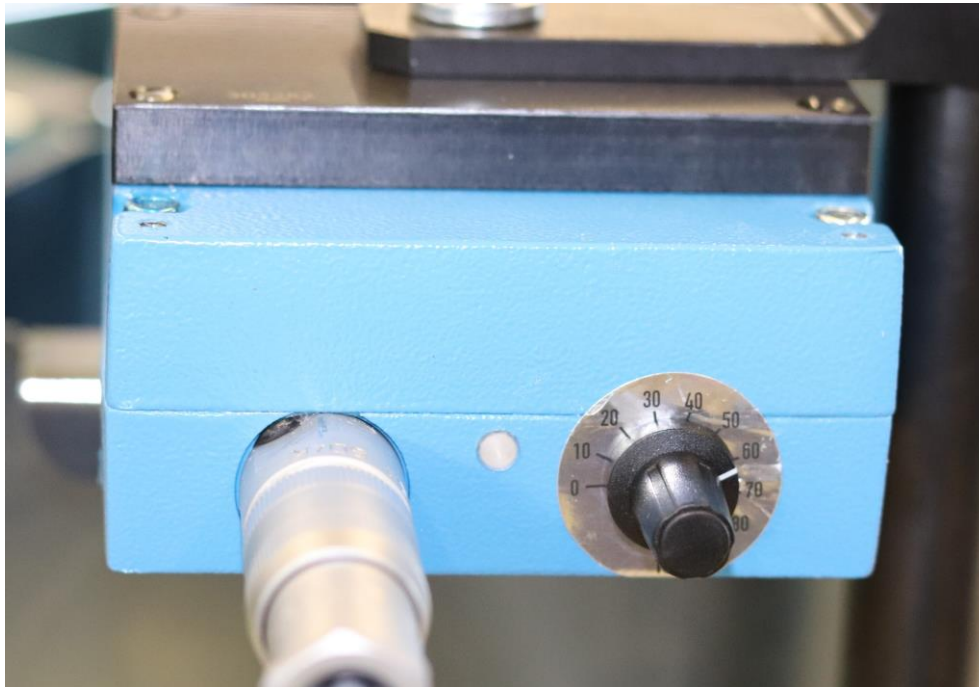
- Press and hold "F4" for more than 3 sec.

Reset the counted number of pieces in the current cup:

- Press and hold "F1" for more than 3 sec.



Settings on the pulse sensor:



Rotary control for setting the sensor sensitivity.

Can be adjusted when changing the piece size

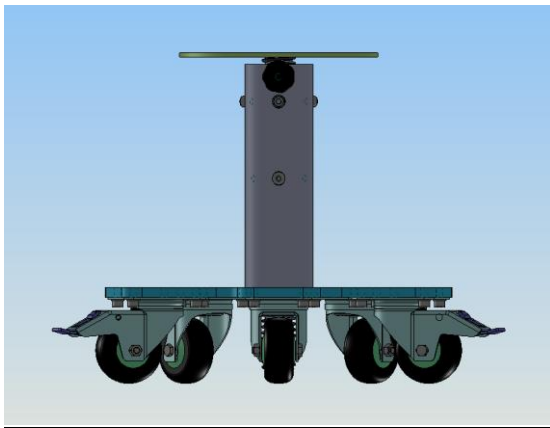
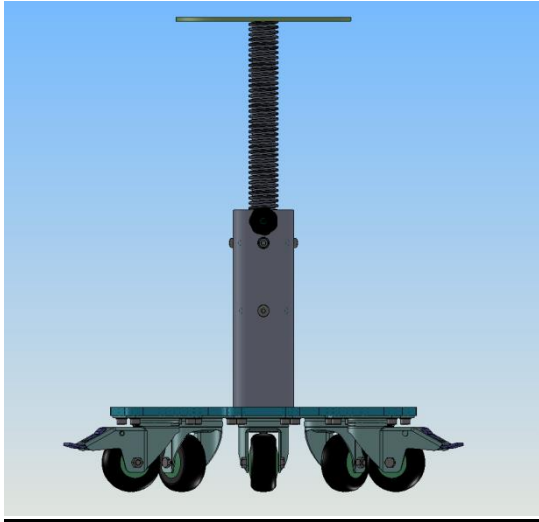
Attention: Depending on how the sensitivity is set, the distance of the sensor to the cups or the parts ramp or other metal parts must be increased!

6.5. Siemens Logo piece count control with test cups:

See chapter 6.4



7. Adjusting the Selector stand



Height adjustment

1. Loosen the locking screw
2. Turn clockwise to adjust the selector stand upwards.
3. Turn the selector stand anticlockwise to adjust it downwards.
4. After adjustment, tighten the locking screw.



8. Removing and installing the geared motor

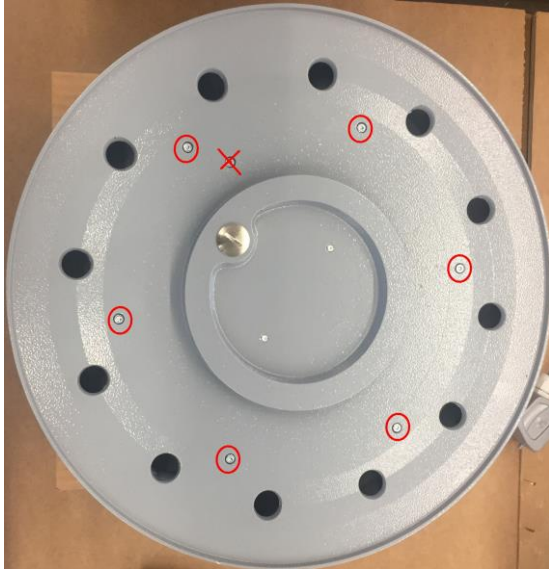


Fig. 1

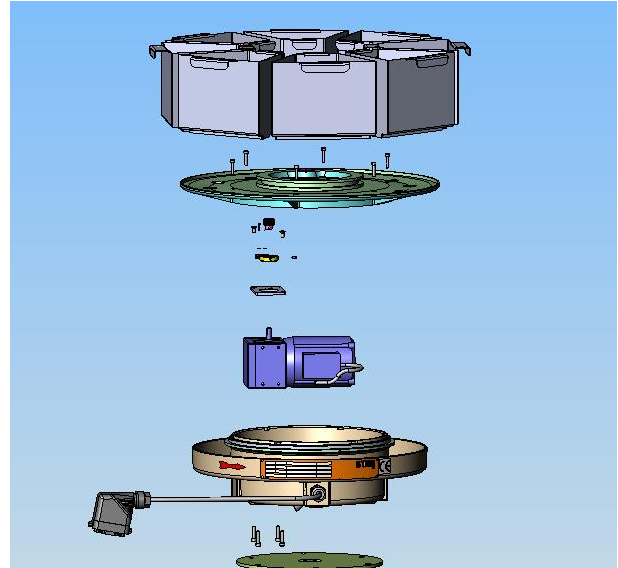


Fig. 2

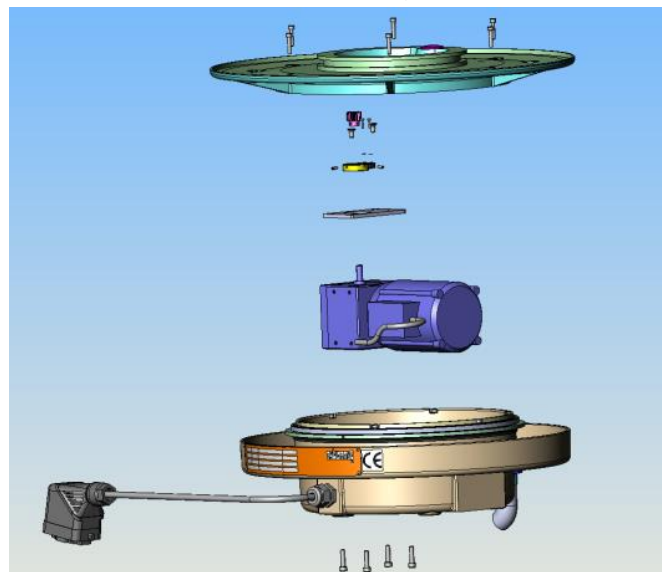


Fig. 3

Dismantling:

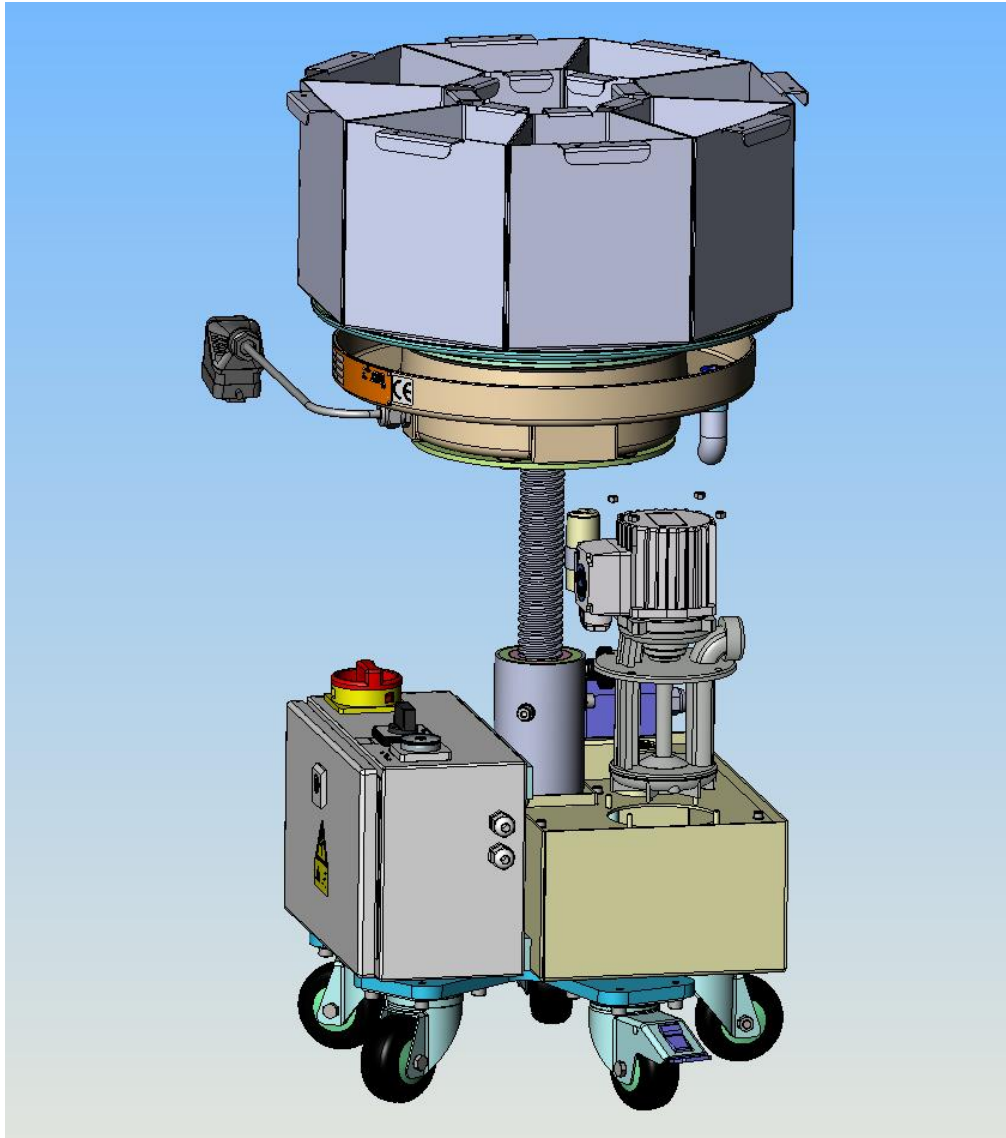
1. Unscrew the 6 screws (Fig. 1)
2. Remove the plate
3. Remove the pinion from the motor shaft
4. Remove the motor

Installation:

Assemble in reverse order



9. Removing and installing the pump



Dismantling:

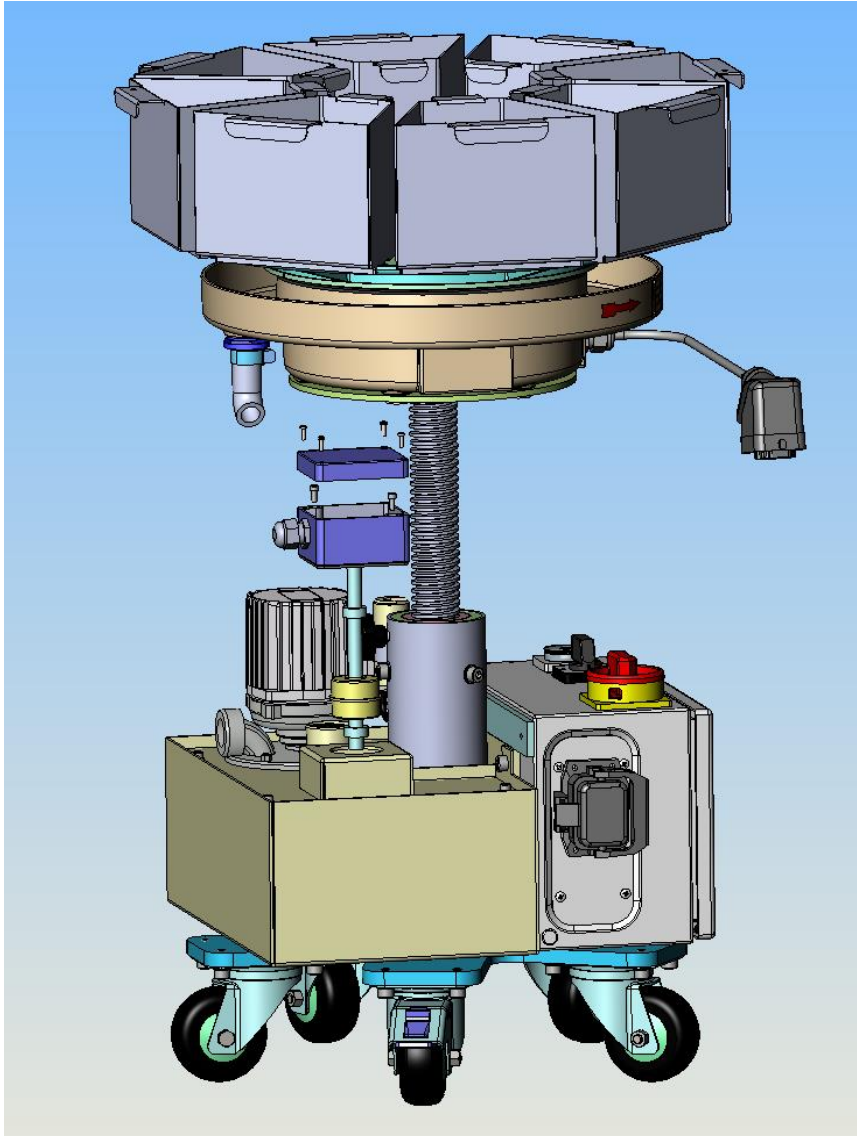
1. Remove nut on flange
2. Remove pump upwards

Installation:

In reverse order



10. Removing and installing the float switch



Dismantling:

1. Remove protective cap
2. Loosen the float switch with an open-ended spanner and remove it by pulling it upwards.
3. Pull the probe rod out of the pipe

Installation:

In reverse order



11. Spare parts list

Pos.	Item no.	Illustration no.	Designation	Designation	Standard	Quantity	MES
1	152020	06-1-047-00-001-	Housing	for Selector 570		1	PCS
2	152024	06-1-041-00-002-	Plate	for Selector 570		1	PCS
3	152869	06-1-041-00-003-	Gear wheel			1	PCS
5	152872	06-1-041-00-005-	Guide bolt			1	PCS
7	162565	06-1-041-00-007-	Drive pinion (pitch 8)			1	PCS
8	152855	06-1-041-00-008-	Control disc	(drive motor)		1	PCS
9	162335	06-1-052-00-009-	Switch plate	(laser part)		1	PCS
10	152845		Perbunan sealing profile	NBR quality, black		1	PCS
14	180582	06-1-052-00-014-	Holder (angle)			1	PCS
15	152850		Capacitor 8.0 uF, 30x70 mm	with 2-pole connection cable		1	PCS
16	152851	06-4-052-00-011-	Gear motor without capacitor	PFV50B4-0/1 MH - ready for		1	PCS
17	181719		Micro switch type V4N4S	mounted with lever V4N/S		1	PCS
18	152849		Thin-section deep groove ball	DRAZ 120 VA		1	PCS
20	185846		Cable gland PVC 137820	M 20 x 1,5		2	PCS
22	160751		Screw plug PG 16	1606 / with O-ring		1	PCS
24	153960		Hose nozzle N 3/4-P-13	with gasket		1	PCS
25	156781		PVC hose m.E.	16 x 4 mm		1	M
26	160767		Hose clamps D 12-22 mm	galvanised	DIN 3017-9	1	PCS
27	151479 *		Modular terminals Phoenix	Type UK5		5	PCS
28	152705 *		Modular terminals Phoenix	Type USLKG4		2	PCS
29	153216		Snap-on rail with perforation	35 x 7.5 mm		0.075	M
31	155182		Cylinder screw galvanised	M 5x 8 with hexagon socket	DIN 912	1	PCS
33	155184		Cylinder screw galvanised	M 5 x 20 with hexagon socket	DIN 912	4	PCS
34	153898		Countersunk screw galvanised	M 5 x 16	DIN 7991	2	PCS
35	181800		Cylinder screw galvanised	M 2 x 10	DIN 84	2	PCS
36	283509		Threaded pin	M 4 x 8	DIN 913	2	PCS
37	155170		Cylinder screw galvanised	M 4 x 8 with hexagon socket	DIN 912	7	PCS
40	155201		Cylinder screw galvanised	M 6 x 25 with hexagon socket	DIN 912	2	PCS
41	210125		Countersunk screw with	M 5 x 10 galvanised	DIN 7991	2	PCS
44	152913		Oval head screw with hexagonal	M 5 x 8, stainless steel	DIN ISO	2	PCS
49	171719		Toothed lock washer,	M 4	DIN 6797 A	1	PCS
50	181801		Washer	D 2,0	DIN 125	2	PCS
51	153941		Washer	D 4,0	DIN 125	6	PCS
52	155178		Cylinder screw galvanised	M 4 x 25 with hexagon socket	DIN 912	6	PCS
53	259503B		Half ring for Selector 570			2	PCS
60	162959		Foil label made of PVC film	25 x 25 mm, self-adhesive		1	PCS
62	161860		Directional arrows punched 60	Type 03/050 F, red		1	PCS
63	154839		Aluminium sign "Selector"	205 x 33 x 0,5		1	PCS
64	165506		Oelflex cable 400P	5 x 1.0 mm		2.2	M
65	165834		Oelflex cable 400P	3 x 1.0 mm		0.4	M
66	194576		Upper part of housing M20	no.: 70,350.0635.0		1	PCS
67	152722		Plug insert	No. 70.310.0640.0		1	PCS
70	240195		Cable grommet black	6 x 8 x 12 / order no.: 526940-		1	PCS
71	156779		Protective conductor sign D 16	Type 02/030 F		1	PCS
72	153574		Serrated tape type ZB 6	neutral		1	PCS
73	150308		KLA ring cable lug, red	620/4		6	PCS
74	152144		Wire H07V-K 1 x 1,5 mm	yellow/green		0.25	M
75	150304		DTE wire end sleeve DZ5-	1,5 qmm black		1	PCS
76	151462		Fixed bridge complete	Type FB-10-6 Manufacturer:		1	PCS
77	150302		Klauke GR 4718 Wire end ferrule	1,0 qmm red		13	PCS
78	161169		DTE wire end sleeve DZ5-	0.75 qmm blue		3	PCS

Note on products marked with *: We would like to comply with our duty to inform (REACH Regulation, Art. 33) and inform you that this product contains the SVHC substance PB (CAS: 7439-92-1) greater than 0.1% by mass.



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EC Declaration of Conformity

The manufacturer Schwanog Siegfried Güntert GmbH
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hereby declares that the following product

Product designation: Schwanog Selector System
Type: 570/16-VZ
Part number: 342991

complies to all relevant provisions of the

- EC Machinery Directive 2006/42/EC
- EMC Directive 2014/30/EU

According to Annex I No. 1.5.1. of the Machinery Directive 2006/42/EC, the protection objectives of the Low Voltage Directive 2014/35/EU have also been complied with.

The authorised person for the compilation of the technical documentation in the sense of the Machinery Directive is: Clemens Güntert, address see company address.

The following harmonised standards were applied:

- EN ISO 12100:2011
Safety of machinery: Terminology, methodology, guiding principles for risk assessment
- EN 60204-1:2006
Electrical equipment of machines: General requirements

Other technical specifications / standards:

- Low Voltage Directive 2014/35/EU

Obereschach (Germany), 23.06.2023


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Clemens Güntert, Managing Director