

# COMPUTING EXPERIMENTAL

Bauanleitung · Assembly Manual · Mode d'emploi



**fischertechnik**  
COMPUTING



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gescannt von Peter Remm**

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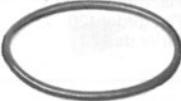
## Contenu

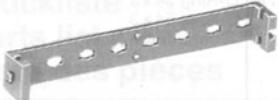
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**Stückliste**  
**Parts list**  
**Liste des pièces**

	31003	Baustein 30 Building block 30 Pierre de 30		37636	Rollenlager, rot Roller bearing, red Support de poulie, rouge
	31004	Baustein 30 mit Bohrung Building block 30 with bore Pierre de 30 percée		36300	Winkelträger 15 Angle girder 15 Cornière de 15
	31005	Baustein 15 Building block 15 Pierre de 15		32085	Rollenbock, rot Roller block, red Palier, rouge
	31006	Baustein 15 mit 2 Zapfen Double ended block Pierre de 15 à 2 tenons		31423	Gelenkwürfel 15 Hinged block 15 Pierre d'articulation de 15
	37237	Baustein 5 Building block 5 Pierre de 5		38240	Baustein V15 Eck Building Block V15 Pierre angulaire de 15
	32064	Baustein 15 mit Bohrung, rot Building block 15 with bore, red Pierre de 15 percée, rouge		31981	Winkelstein 15° Angular block 15° Pierre à 15°
	32322	Baustein 15 mit Ansenkung, grau Building block 15 with counter- bore, grey Pierre fraisée de 15, gris		31011	Winkelstein 30° Isosceles 30° Pierre angulaire isocèle 30°
	32330	Bauplatte 15 x 30 x 3,75 Mounting plate 15 x 30 x 3,75 Plaque de 15 x 30 x 3,75		31983	Hülse 15 Sleeve 15 Douille de 15

	36334	Riegelscheibe Locking washer Disque d'arrêt
	31597	Abstandsring Spacer ring Bague
	31647	Scheibe 4 Disk 4 Disque de 4
	37679	Klemmbuchse 5 Clip 5 Bague de serrage 5
	31915	Zangenmutter Chuck nut Ecran
	35112	Ritzel Z10 Cog wheel Z10 Pignon Z10
	37858	Klemmbare Schnecke Clamping worm Vis sans fin serrable
	37926	Schneckeenteil Worm Élément des vis sans fin
	37925	Schneckenmutter Worm nut Ecran de vis sans fin
	31021	Zahnrad Z20 Gear wheel Z20 Roue dentée Z20

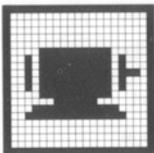
	35678	O-Ring 54 x 3 O-Ring 54 x 3 Jante torique 54 x 3
	31019	Drehscheibe 60 $\phi$ Large pulley 60 $\phi$ Couronne de poulie 60 $\phi$
	31058	Nabenmutter Hub nut Ecrou de moyeu
	35031	Flachnabenzange Flat hub chuck Couronne
	31016	Seiltrommel Cable drum Treuil
	35787	Flugzeugrad Airplane tire Roue d'avion
	31065	U-Achse 135 U-axle 135 U-Axe 135
	32370	Schneckenantrieb Worm drive Vis sans fin
	31032 31031	Achse – Axle – Axe 60 110

	36305	Flachträger 120 Flat girder 120 Etrier de 120
	36310	I-Strebe 45 I-strut 45 Entretoise de 45
	38251	Bauplatte 30x90 Mounting plate 30x90 Panneau de revêtement 30 x 90
	38432	Bauplatte 30x60 Mounting plate 30x60 Panneau de revêtement 30 x 60
	38474	Bauplatte 15x60 Mounting plate 15x60 Panneau de revêtement 15 x 60
	38268	Bauplatte 15x30, gelb Mounting plate 15 x 30, yellow Panneau de revêtement 15 x 30, jaune
	38263	Bauplatte 15x15, weiß Mounting plate 15 x 15, white Panneau de revêtement 15 x 15, blanc
	32366	Bauplatte 15x15, grau Mounting plate 15 x 15, grey Panneau de revêtement 15 x 15, gris
	38246	Bauplatte 15x15, rot Mounting plate 15 x 15, red Panneau de revêtement 15 x 15, rouge
	33582	Tesa-Klebepunkt Stick-pad Film adhésif

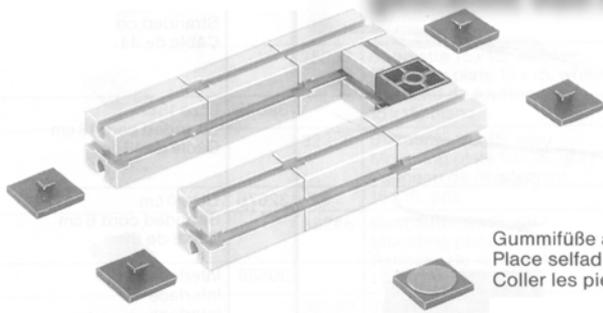
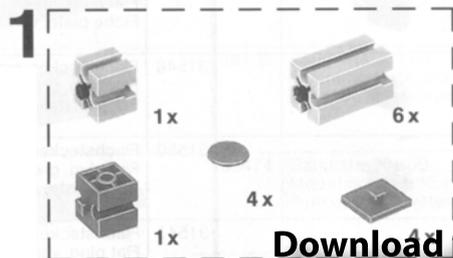
	32247	Luftschraube Propeller Hélice
	31124	Aufnahmeachse Holding axle Axe
	31060	Verbindungsstück 15 Link 15 Languette d'assemblage de 15
	36323	S-Riegel 4 mm Single rivet 4 mm Rivet de 4 mm
	31982	Federnocken Spring cam Came
	35404	V-Achse 4x17 V-axle 4x17 Axe de 4x17
	37604	Störlichtkappe Stray light cap Coiffe d'occult.
	31320	Leuchtkappe, weiß Light cap, white Cabochon, blanc
	36437	Heißleiter NTC resistor Thermistance
	32680	Netzgerät Power supply Alimentation

	38612	Fotowiderstand Photoresistor Photo-résistance
	37875	Linsenstecklampe Plug light with lens Lampe à lentille
	38217	Leuchtstein mit Steckfassung Plug in light holder Socle de lampe
	37780	Mini-Taster Mini switch Mini-interrupteur
	31068	U-Getriebe Mini Mini motor gear box Réducteur en U
	31062	Mini-Motor Mini motor Mini-moteur
	32674	Steckerbuchse 28polig Plug socket Fiche femelle
	36443	Schraubendreher Screw-driver Tournevis
	32673	Flachbandkabel Rainbow cable Natte

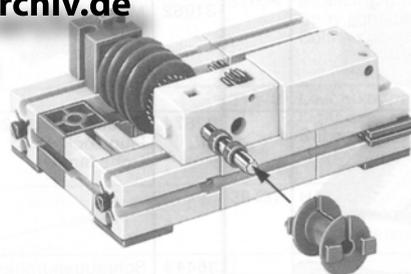
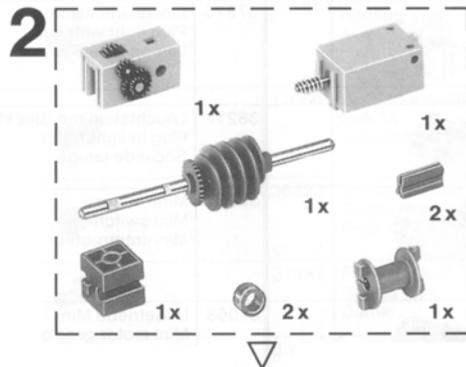
	31548	Flachstecker, blau Flat plug, blue Fiche plate, bleu
	31337	Flachstecker, rot Flat plug, red Fiche plate, rouge
	31549	Flachstecker, violett Flat plug, violet Fiche plate, violet
	31336	Flachstecker, grün Flat plug, green Fiche plate, vert
	31546	Flachstecker, orange Flat plug, orange Fiche plate, orange
	31550	Flachstecker, grau Flat plug, grey Fiche plate, gris
	31547	Flachstecker, gelb Flat plug, yellow Fiche plate, jaune
	32678	Litze 44 cm Stranded cord 44 cm Câble de 44 cm
	32677	Litze 18 cm Stranded cord 18 cm Câble de 18 cm
	32676	Litze 6 cm Stranded cord 6 cm Câble de 6 cm
	30566	Interface Interface Interface



Seilwinde 1  
Winch 1  
Palan 1

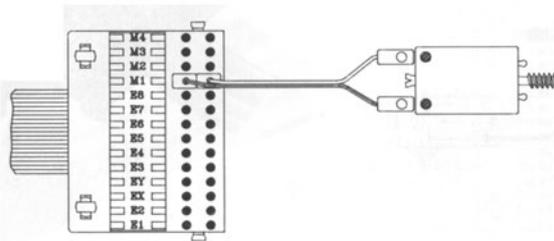
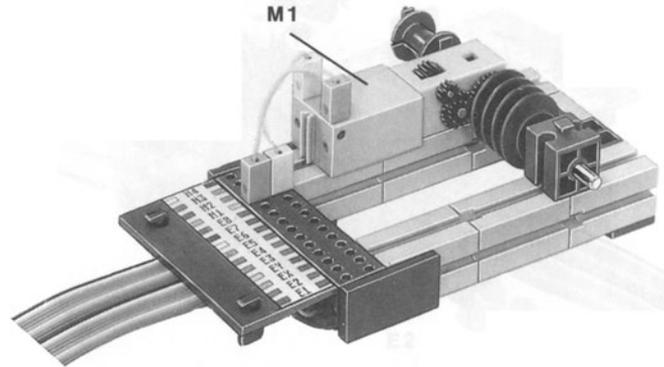
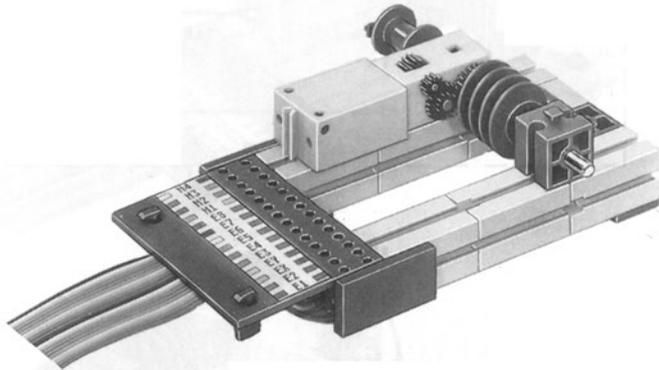
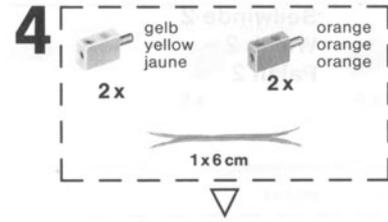
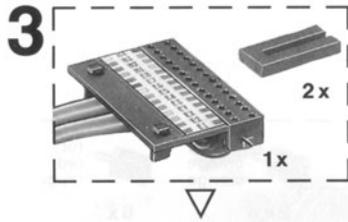


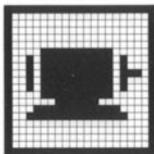
GummifüÙe aufkleben  
Place selfadhesive pads  
Coller les pieds en caoutchouc



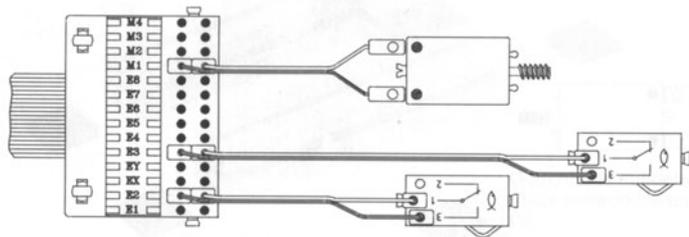
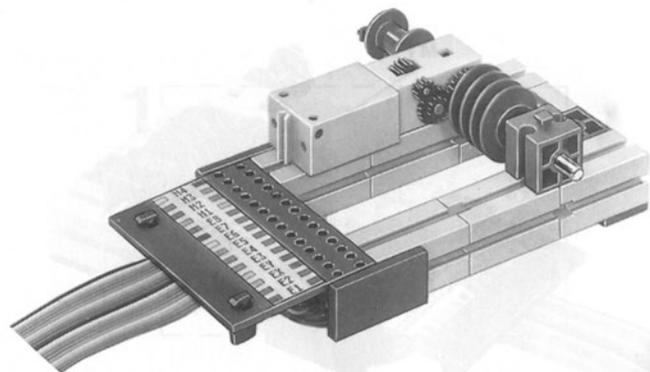
Bis Anschlag aufstecken  
Insert to full stop  
Fixer jusqu'au blocage

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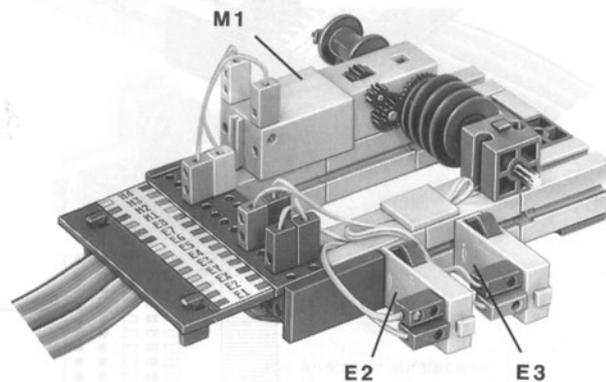
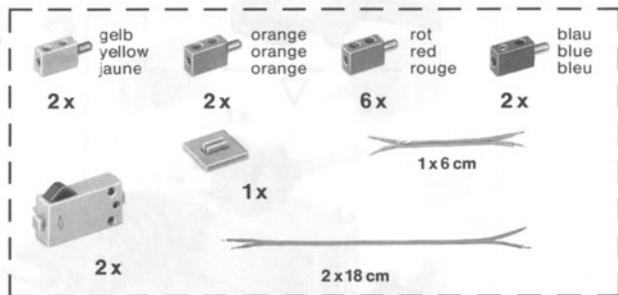




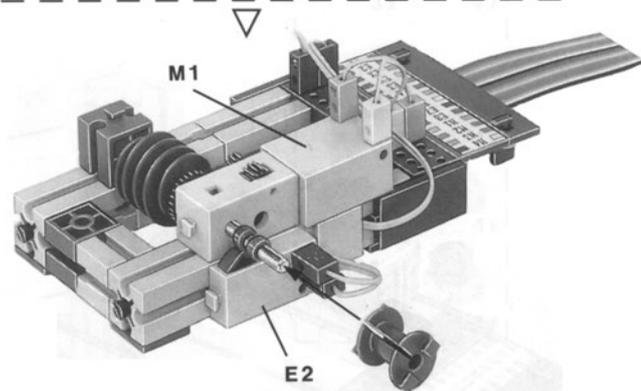
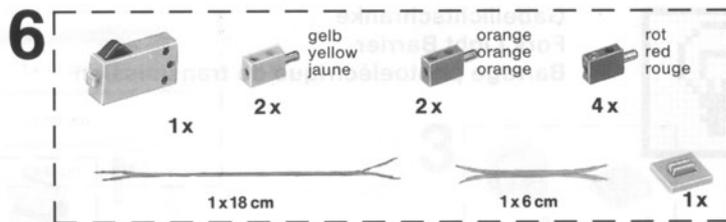
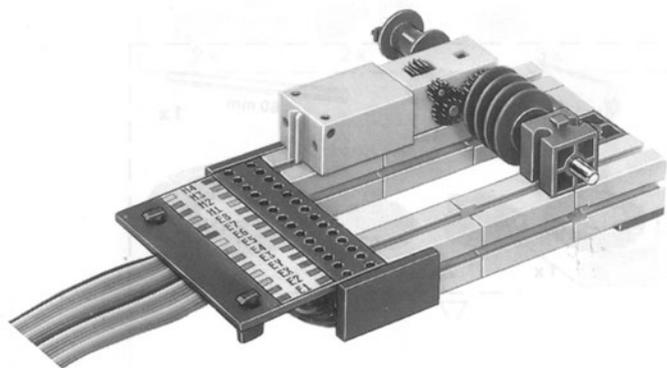
Seilwinde 2  
Winch 2  
Palan 2



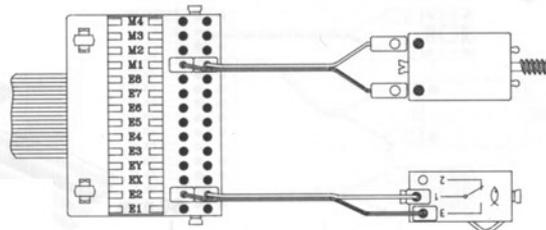
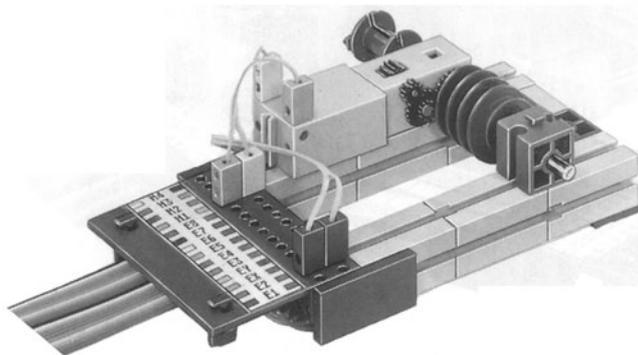
5



**Seilwinde 3**  
**Winch 3**  
**Palan 3**

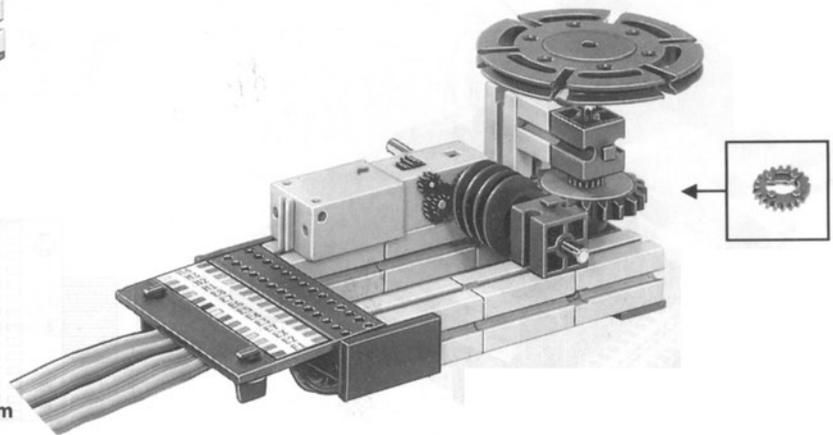
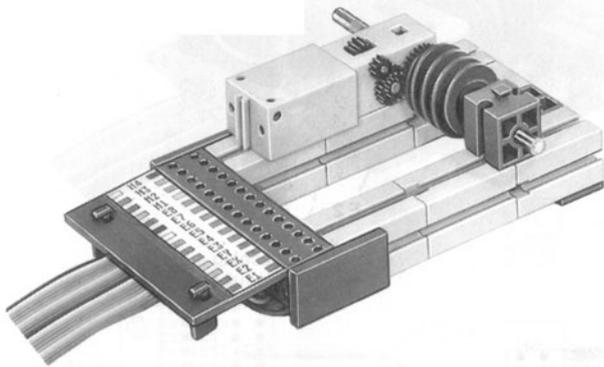
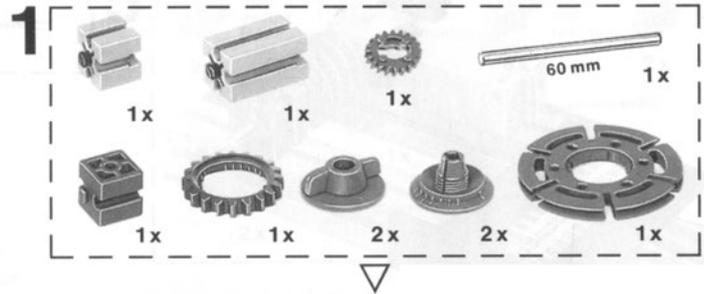


Bis Anschlag aufstecken  
 Insert to full stop  
 Fixer jusqu'au blocage





Gabellichtschranke  
Fork Light Barrier  
Barrage photoélectrique de transmission

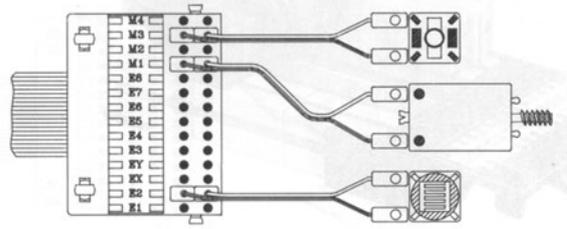
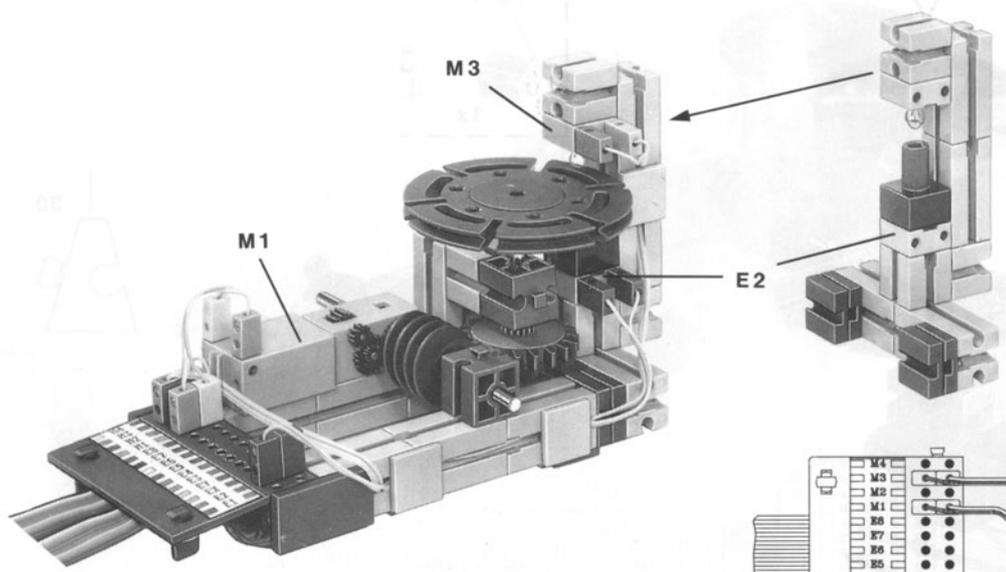


# 2

- 4 x rot red rouge
- 2 x orange orange orange
- 2 x violett violet violet
- 1 x 44 cm
- 2 x gelb yellow jaune
- 2 x grau grey gris
- 3 x
- 1 x 18 cm
- 1 x 6 cm

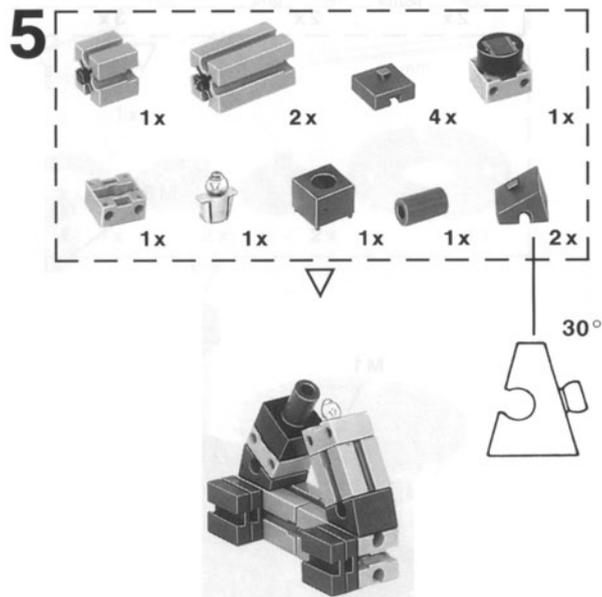
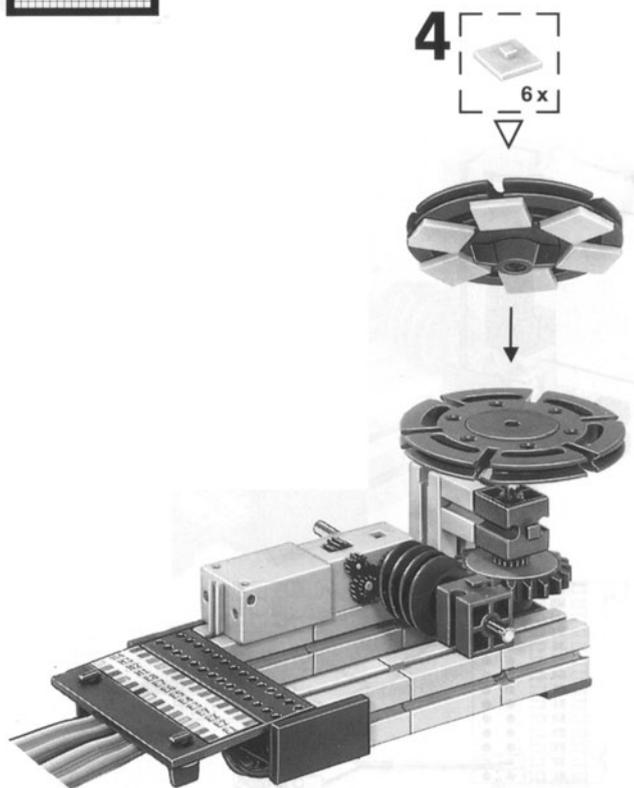
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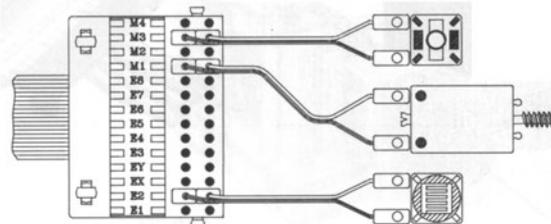
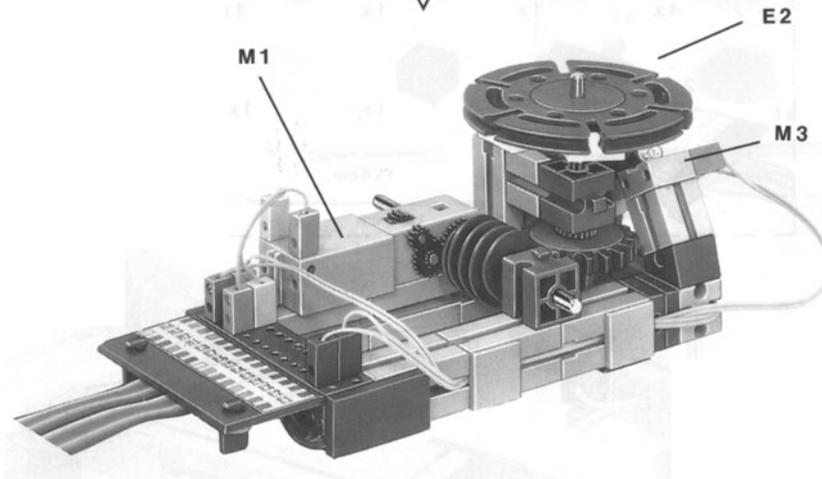
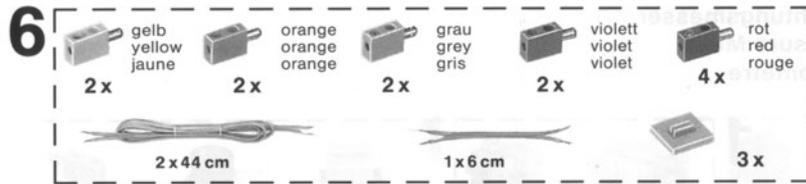
- 3 x
- 4 x
- 4 x
- 1 x
- 1 x
- 1 x
- 1 x
- 1 x

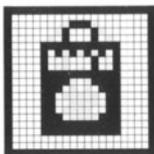




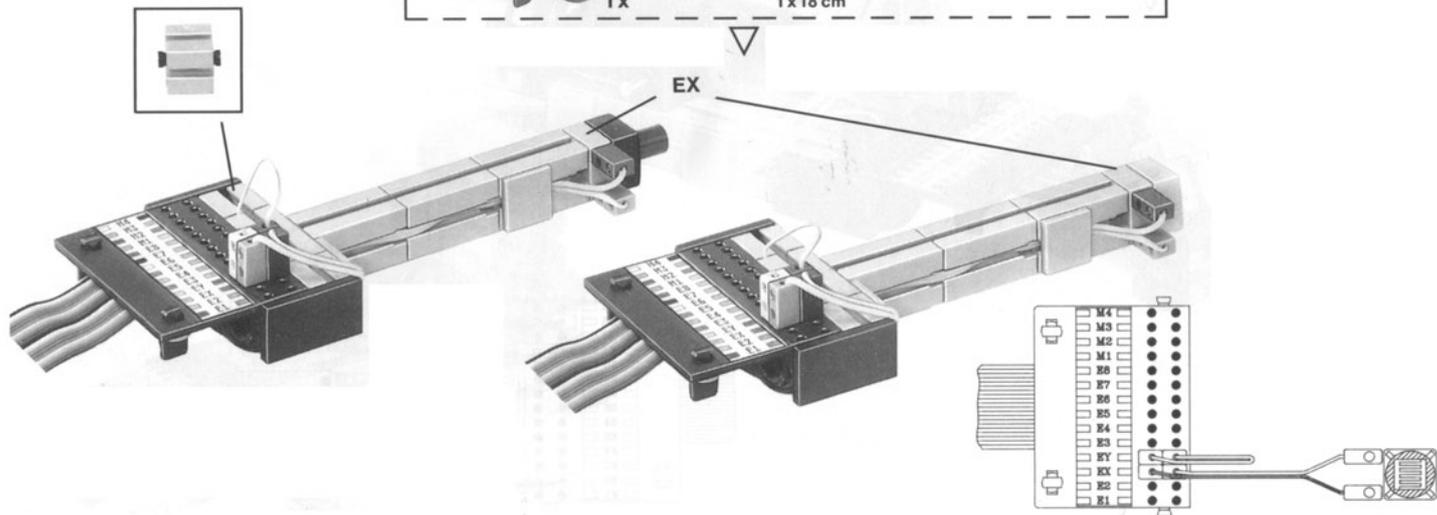
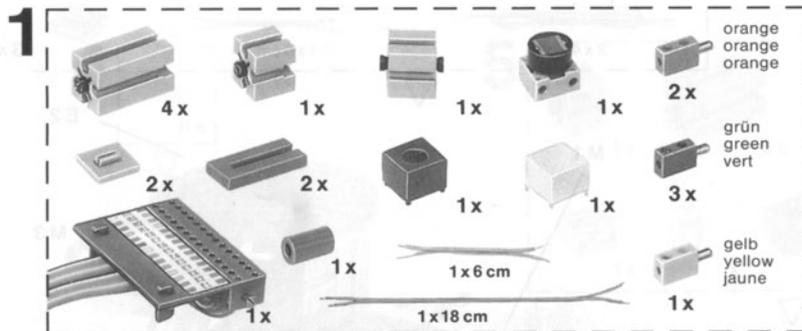
Reflexionslichtschranke  
Reflecting Light Barrier  
Barrage photoélectrique de réflexion





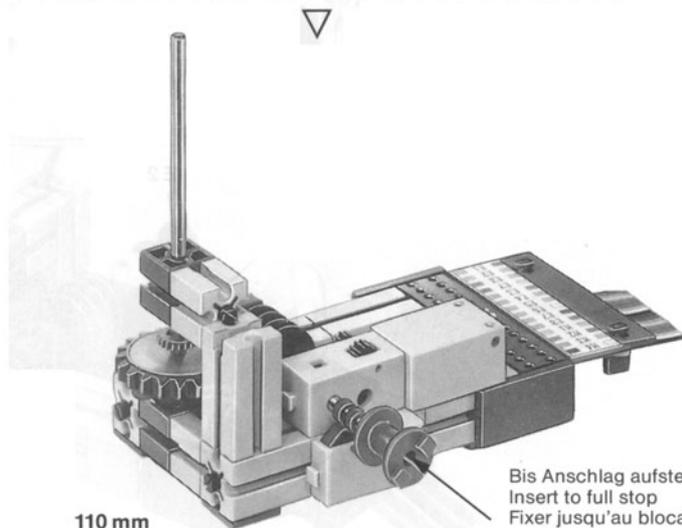
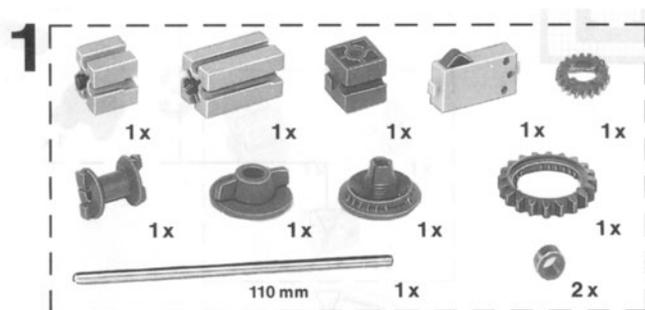
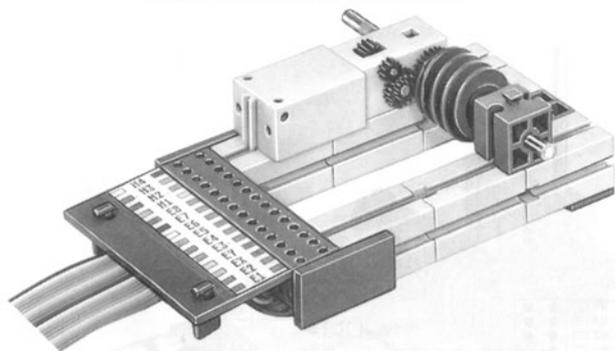


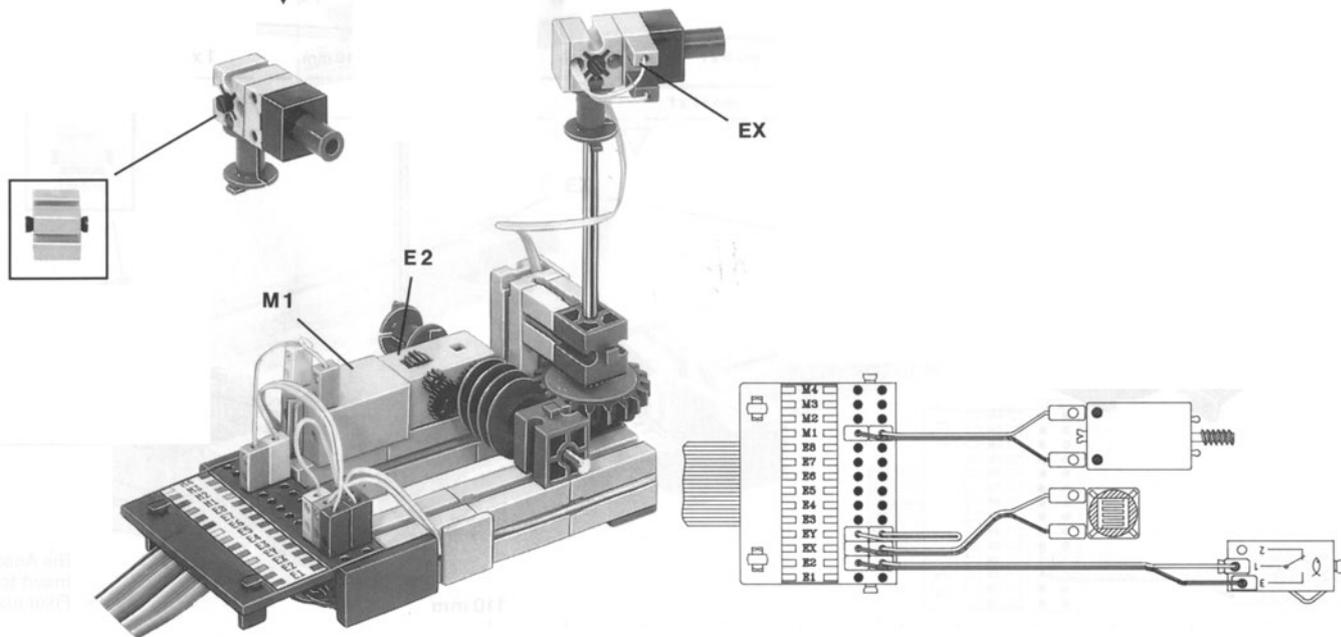
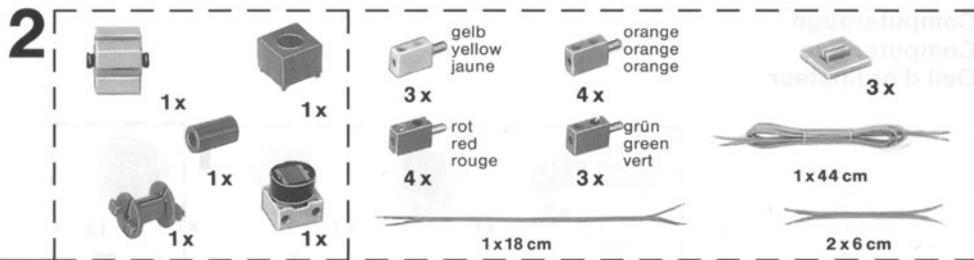
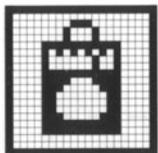
**Belichtungsmesser**  
**Exposure Meter**  
**Photomètre**



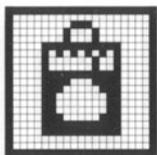
**Computerauge  
Computer Eye  
Oeil d'ordinateur**

Baustufen ab Seite 6  
Construction steps from page 6 on  
Etapes de construction voir page 6



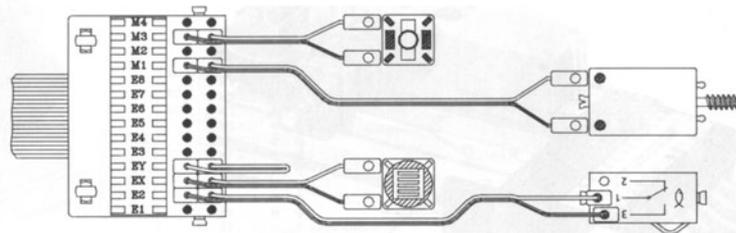
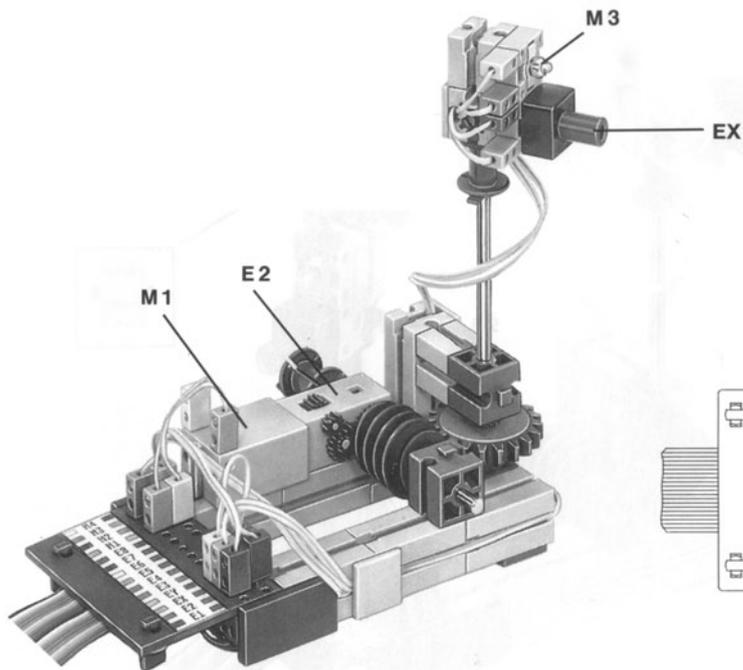






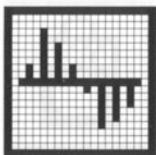
**4**

	orange orange		violett violet		grau grey gris		grün green vert		rot red rouge		gelb yellow jaune
4 x		2 x		2 x		3 x		4 x		3 x	
			2 x 6 cm		2 x 44 cm		1 x 18 cm				

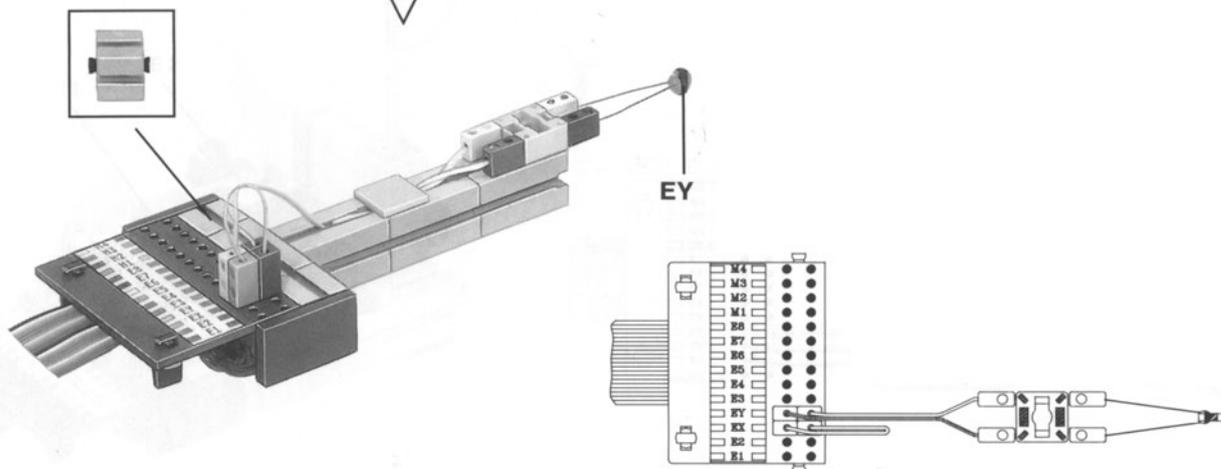
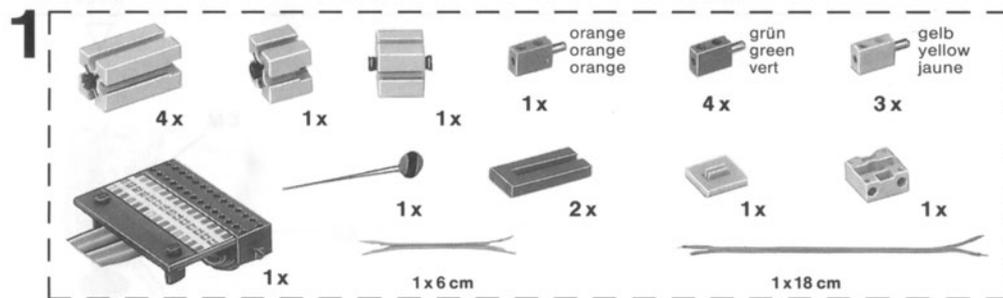


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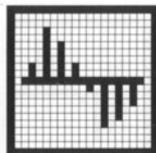


Thermometer  
Thermometer  
Thermomètre



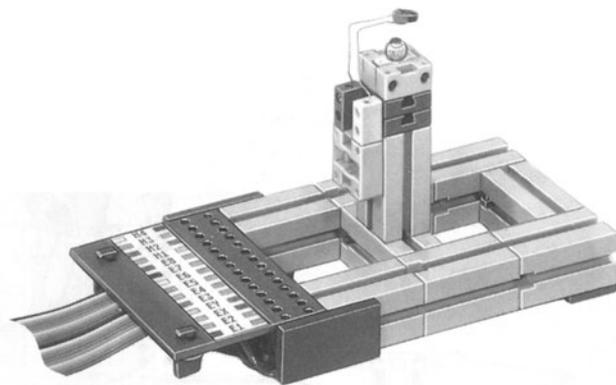
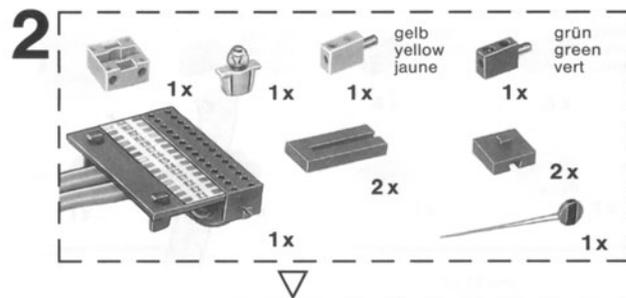
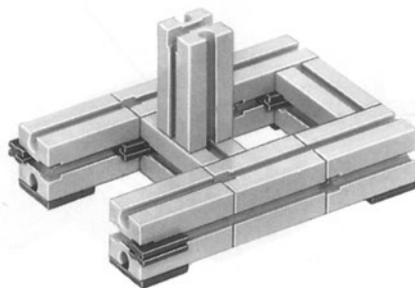
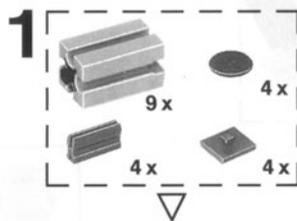
**Kalibrierung des Heißeleiters**  
**Calibration of the thermistor**  
**Calibration du thermistance**





Ofen  
Furnace  
Chauffage

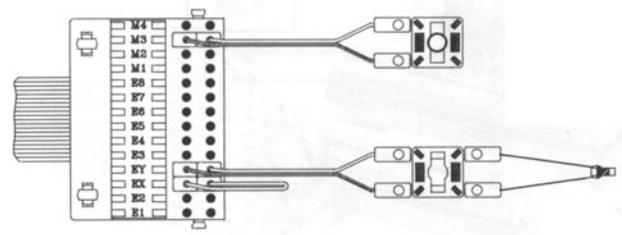
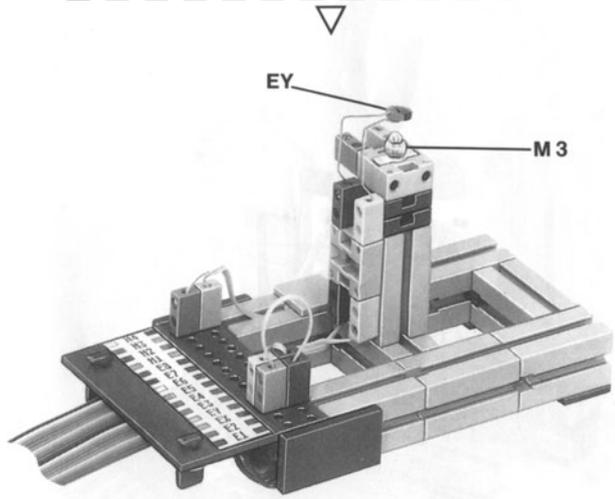
© 2008  
Technik des Heißluft  
Ofens  
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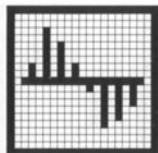


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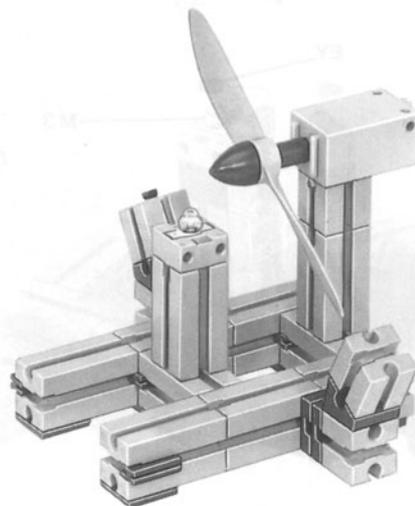
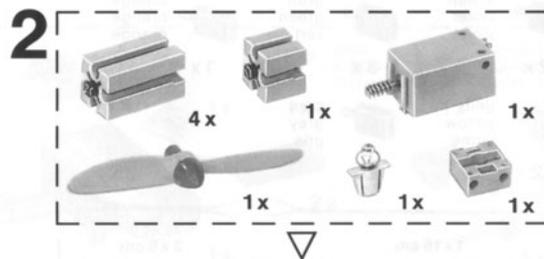
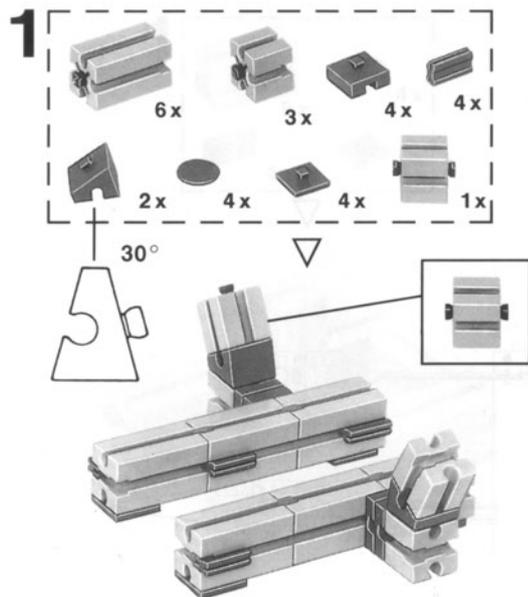
	violett violet violet		grün green vert		orange orange orange
<b>2 x</b>		<b>3 x</b>		<b>1 x</b>	
	gelb yellow jaune		grau grey gris		
<b>2 x</b>		<b>2 x</b>		<b>2 x</b>	

1 x 18 cm      2 x 6 cm

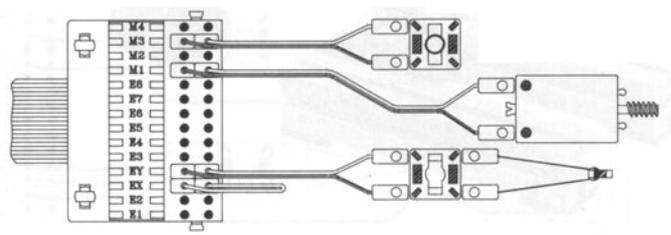
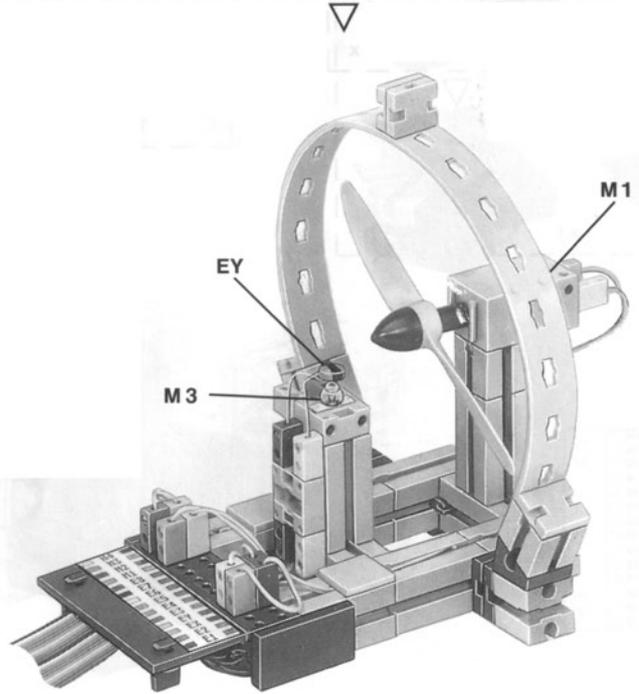
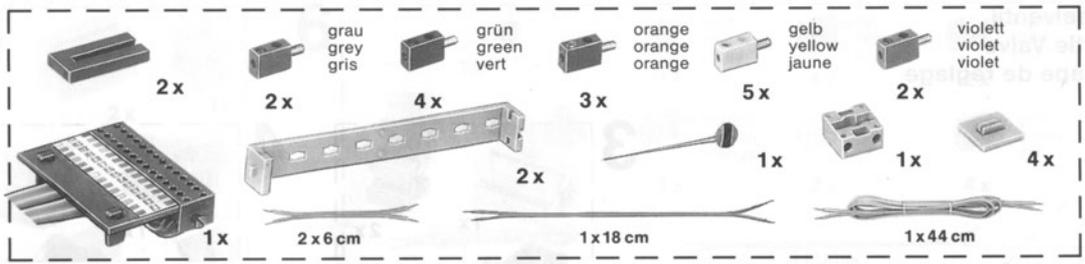


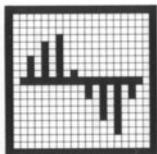


Gebläse  
Fan  
Ventilateur

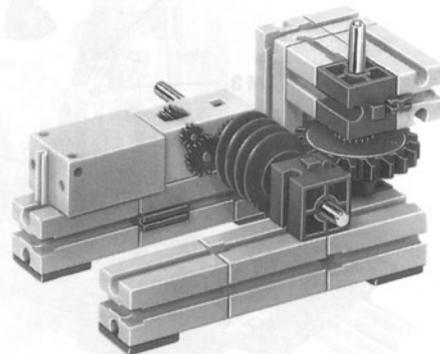
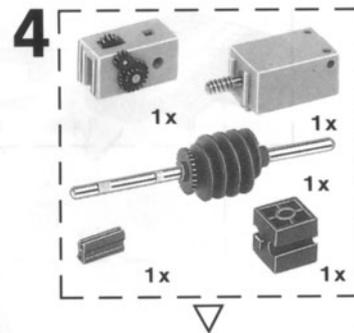
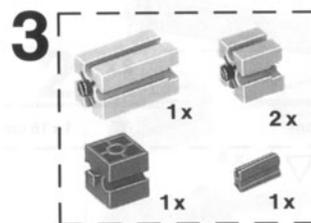
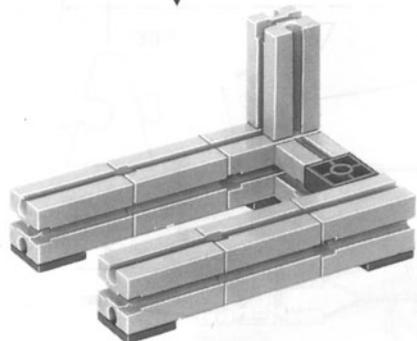
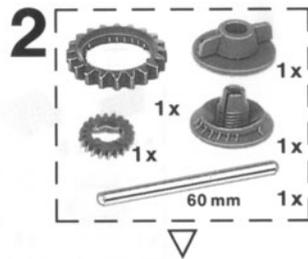
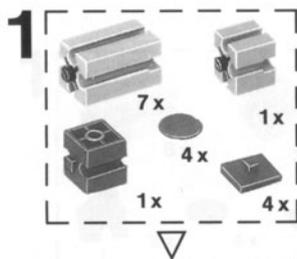


# 3





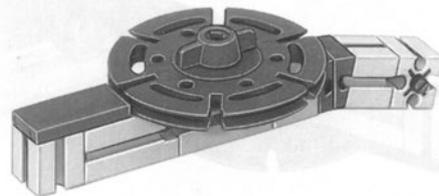
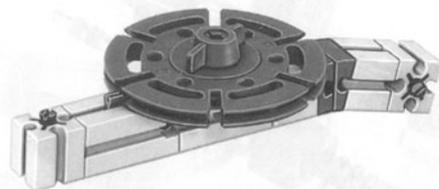
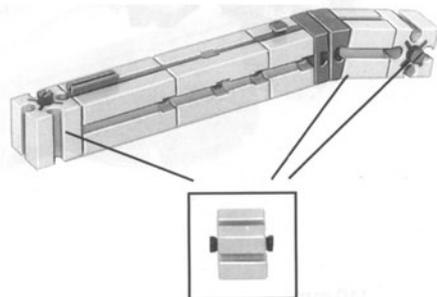
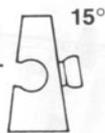
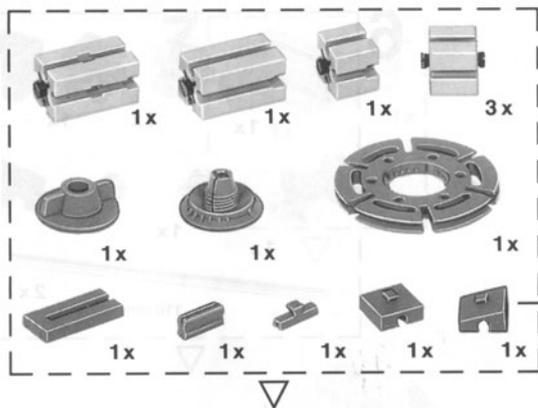
**Drosselventil**  
**Throttle Valve**  
**Soupape de réglage**

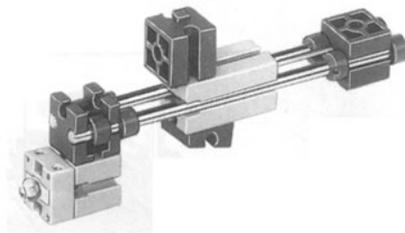
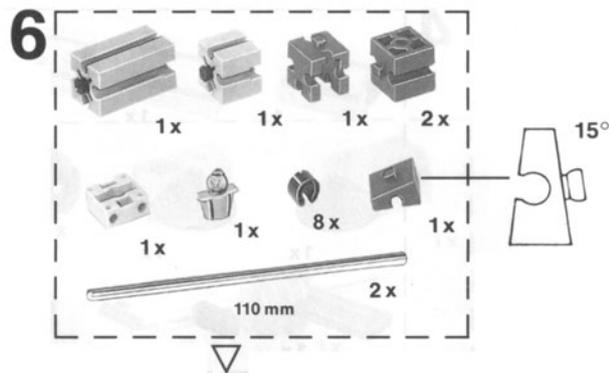
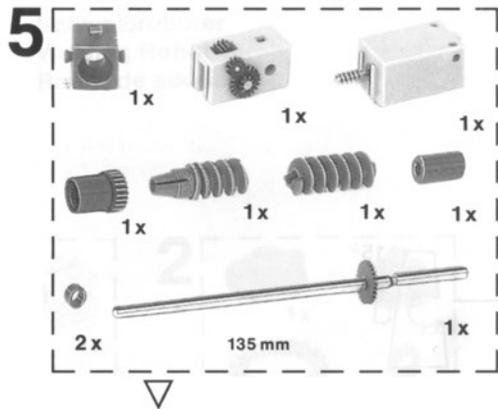
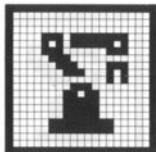


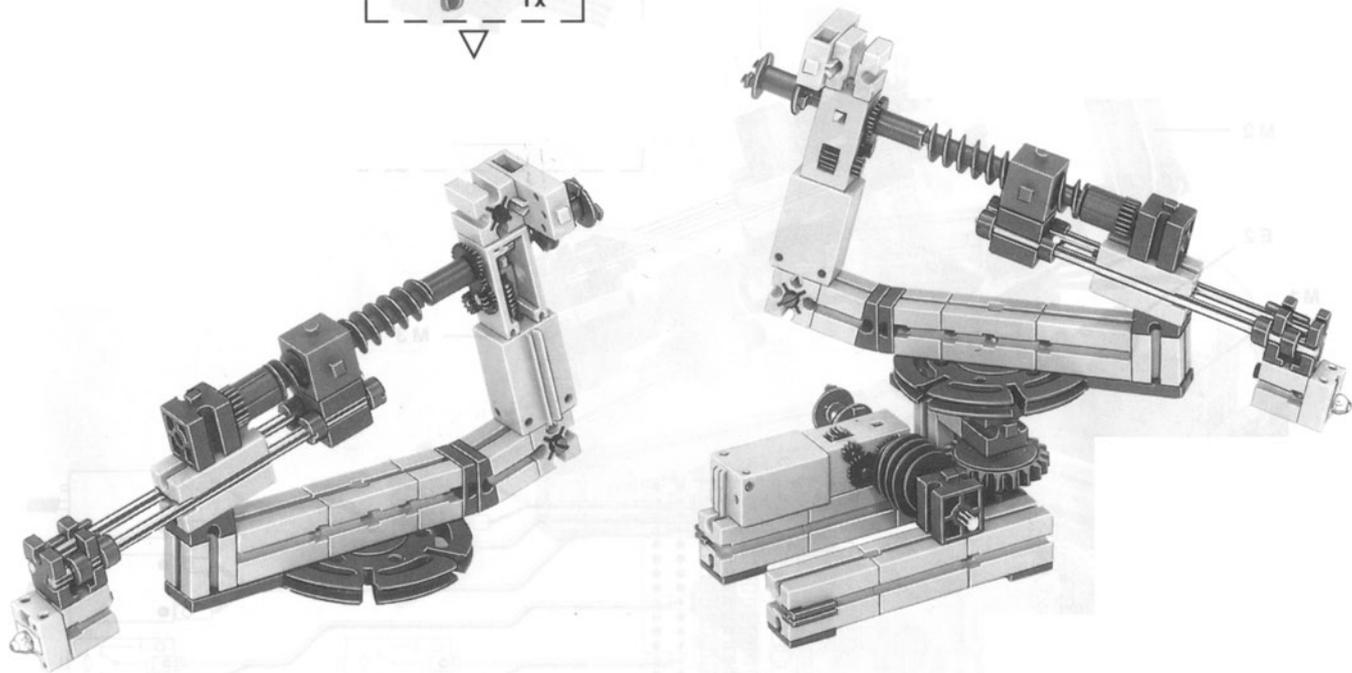
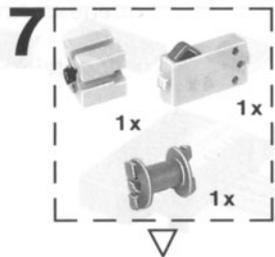


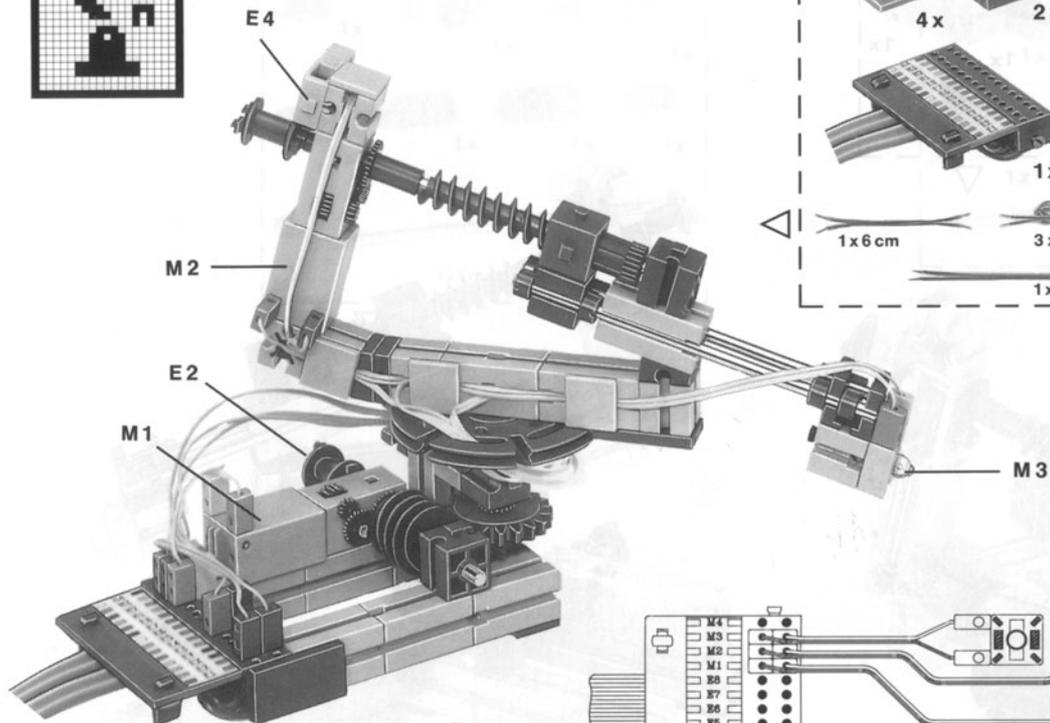


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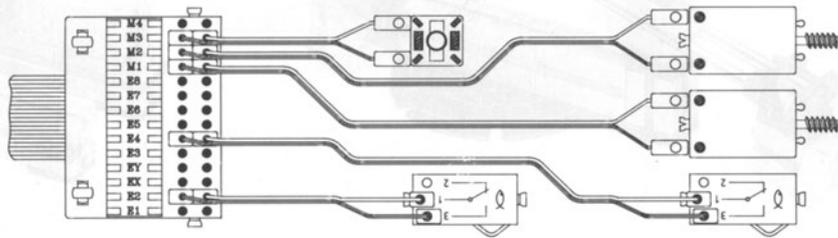
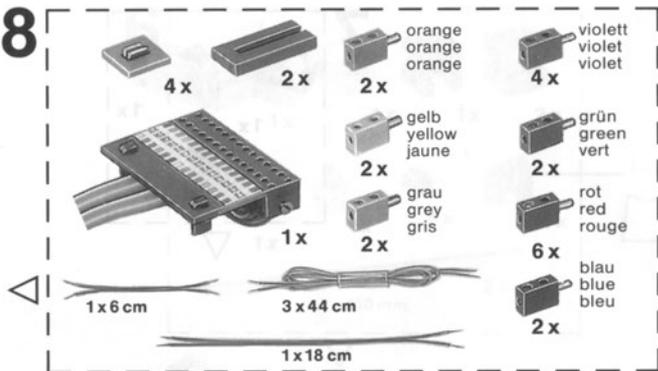




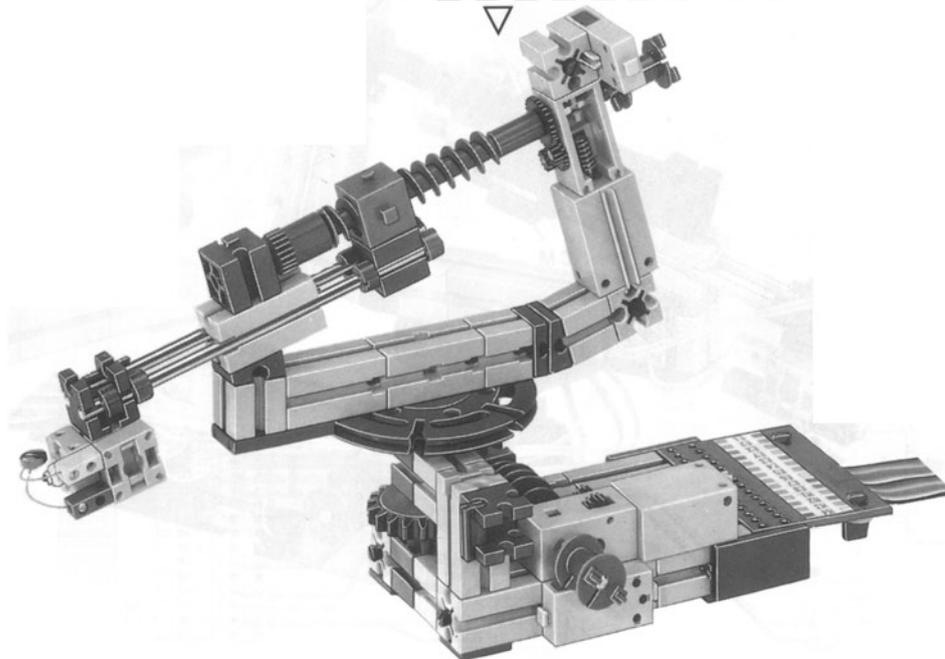
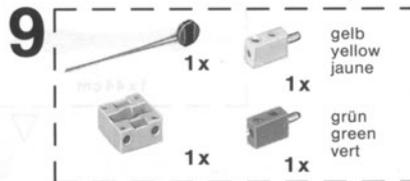


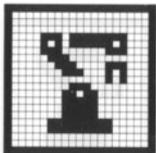


8



Schweißroboter mit Temperatursensor  
Welding Robot with Thermistor  
Robot de soudage avec thermistance





10

 orange  
orange  
orange  
1 x

 gelb  
yellow  
jaune  
2 x

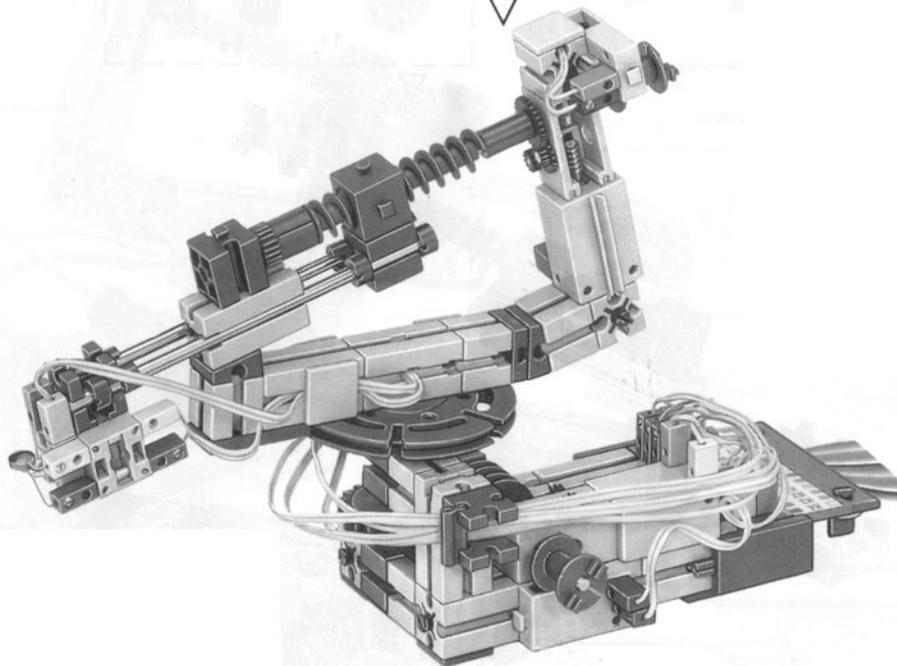
 grün  
green  
vert  
3 x

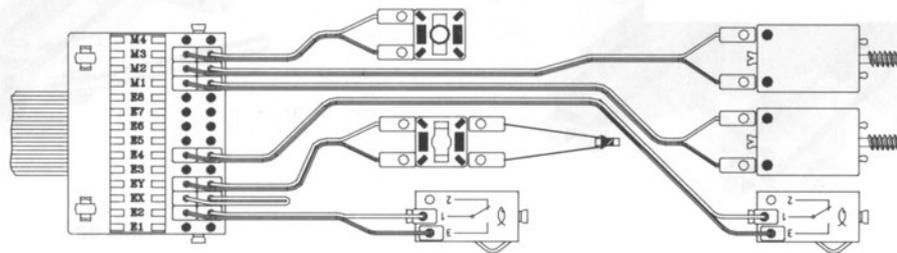
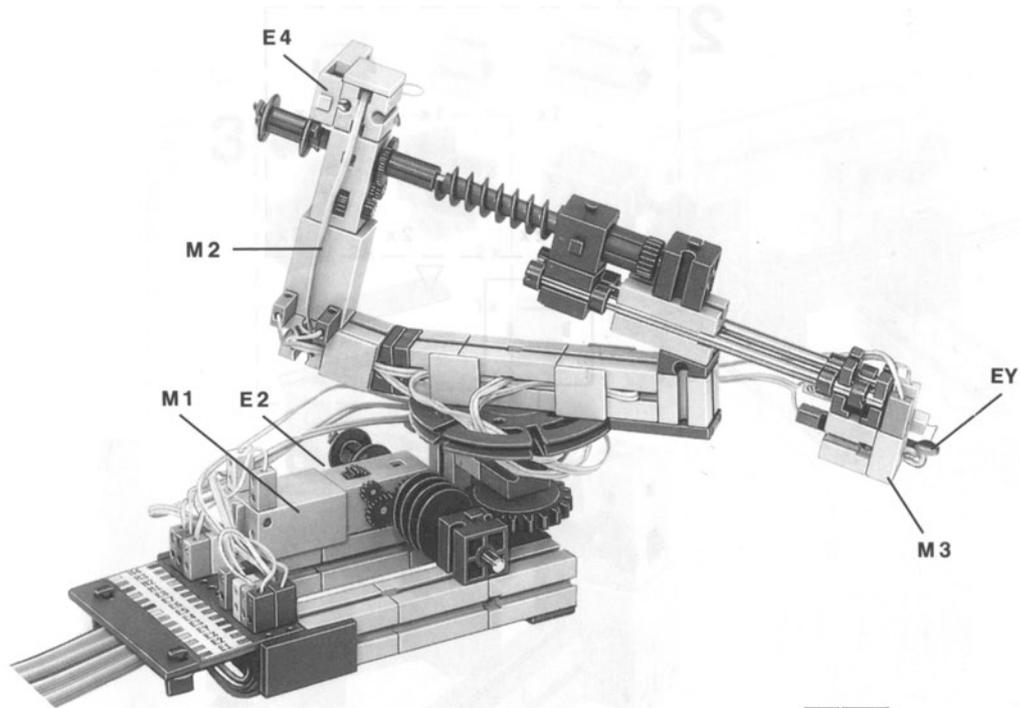


1 x 44 cm



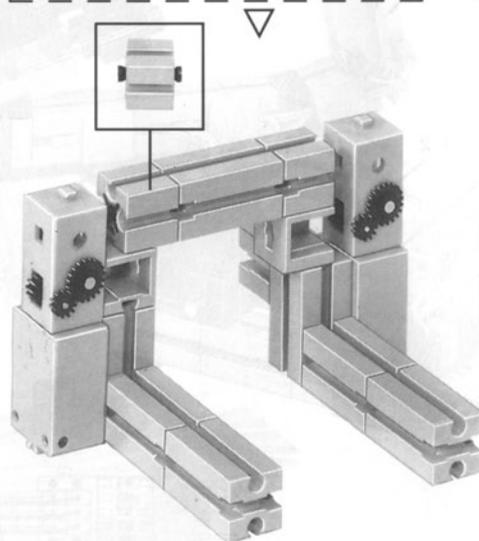
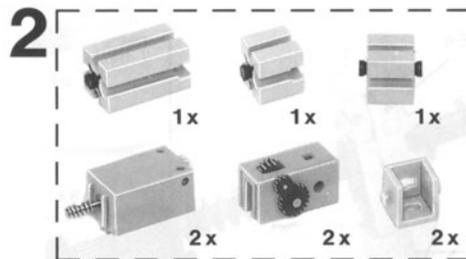
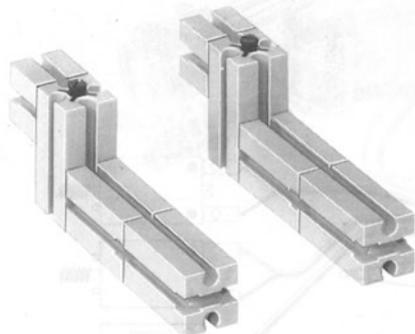
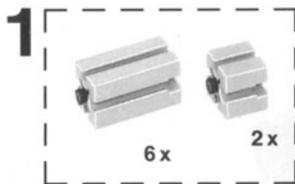
1 x 6 cm

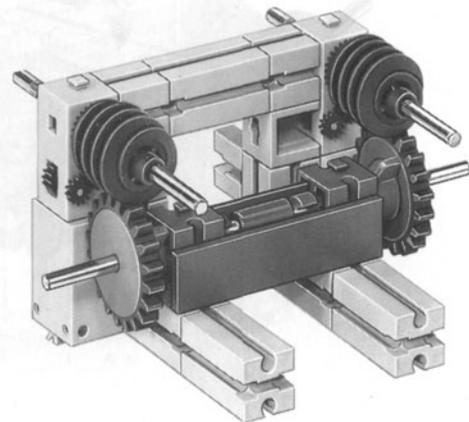
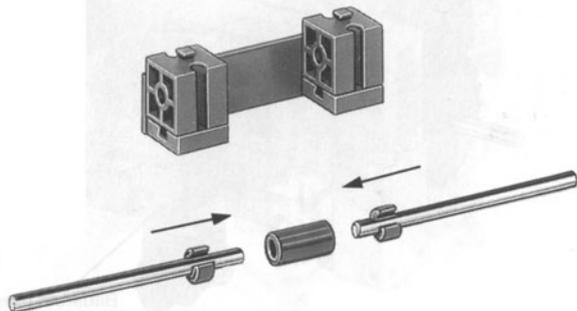
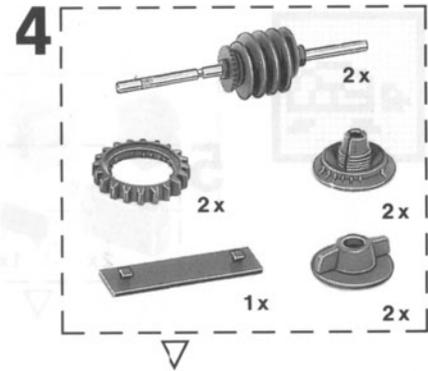
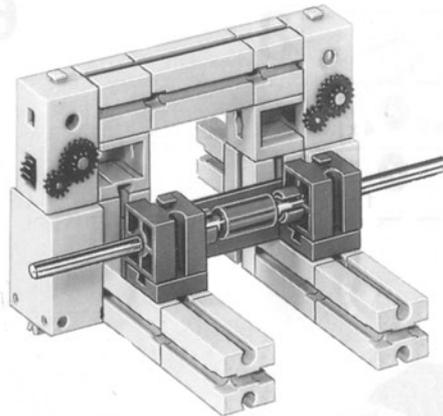
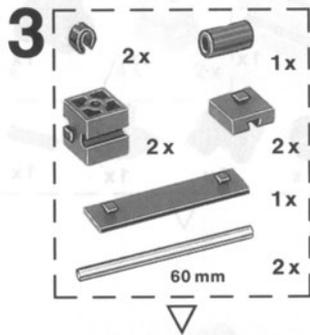


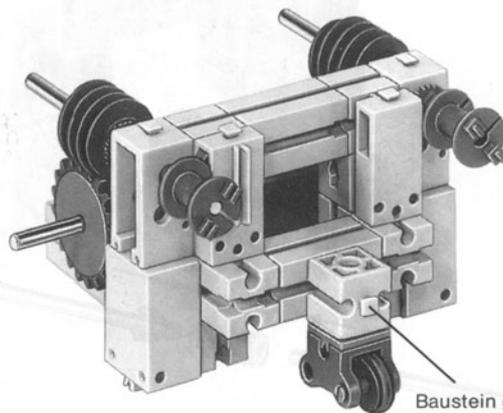
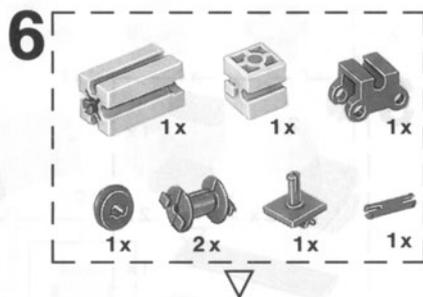
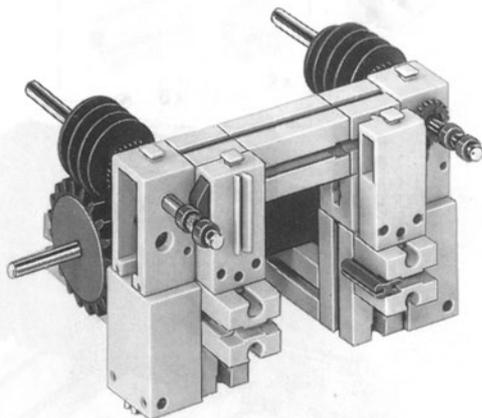
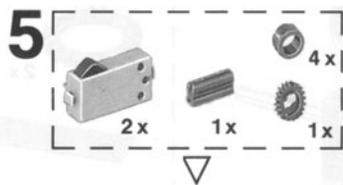
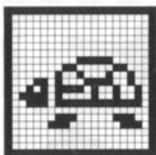




Schildkröte  
Turtle  
Tortue

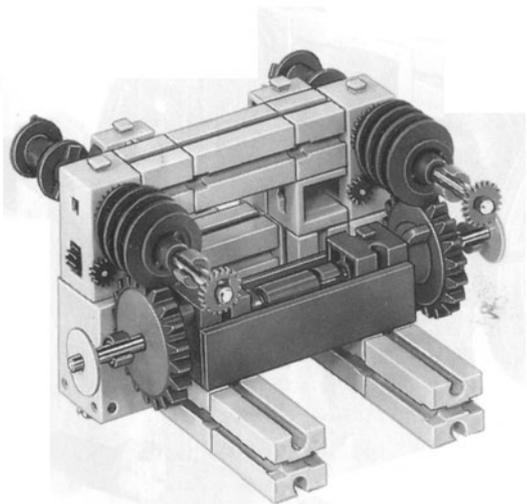




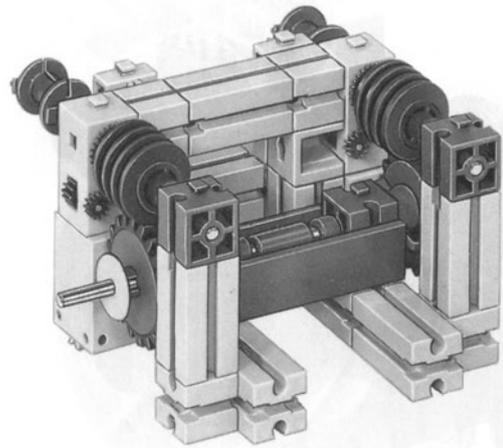
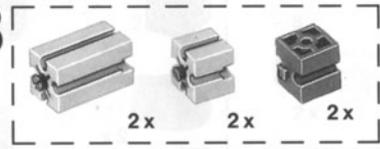


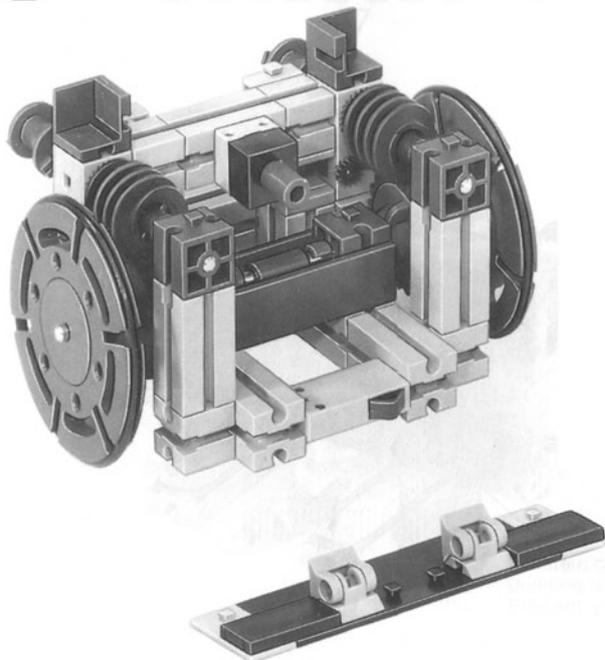
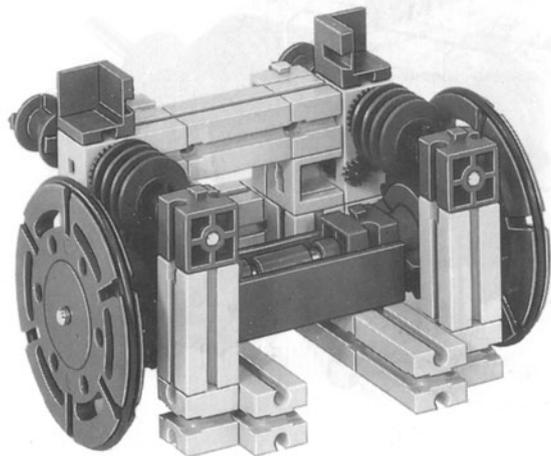
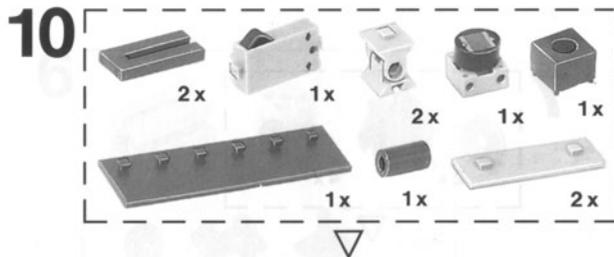
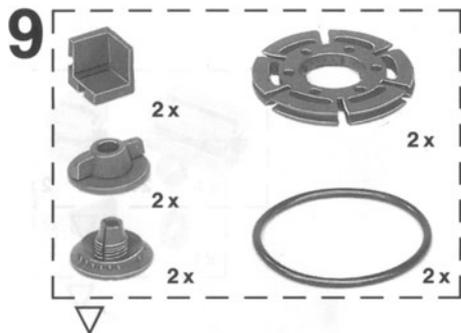
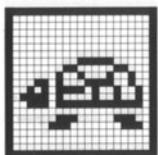
Baustein grau  
Building block grey  
Élément gris

7



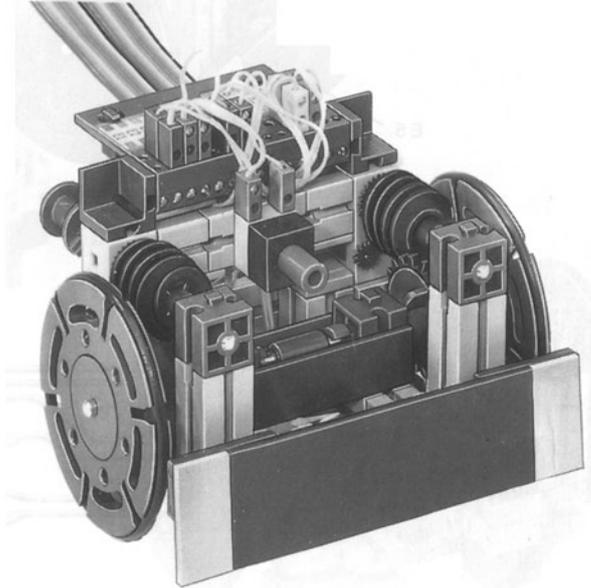
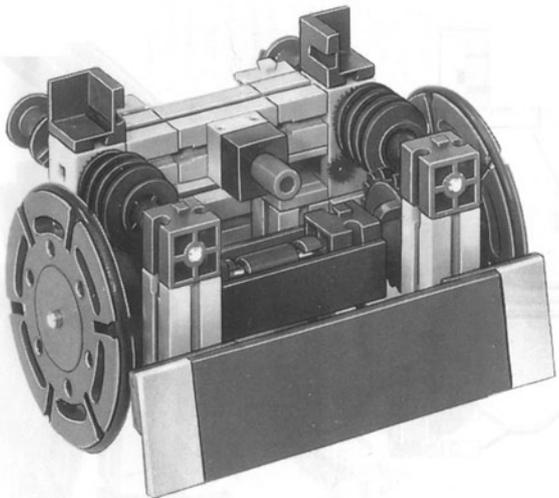
8

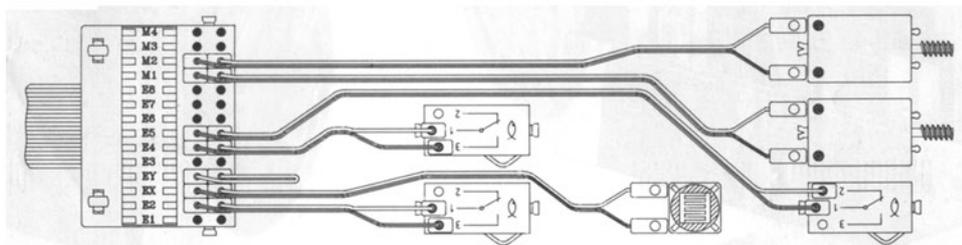
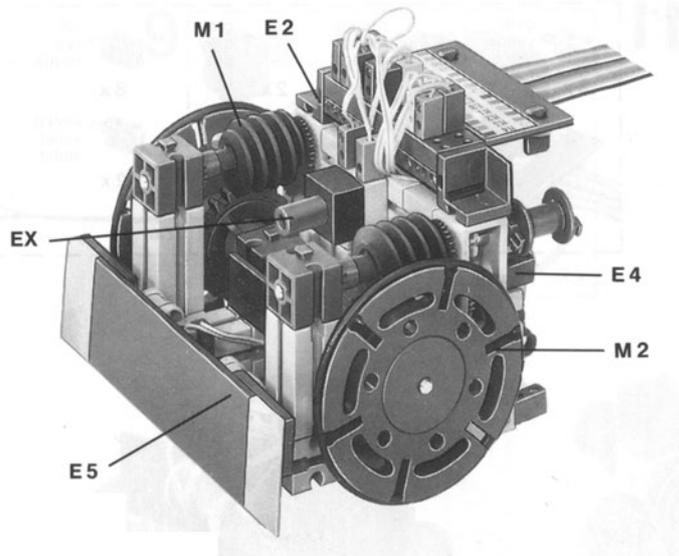
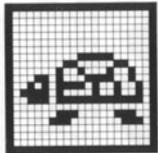




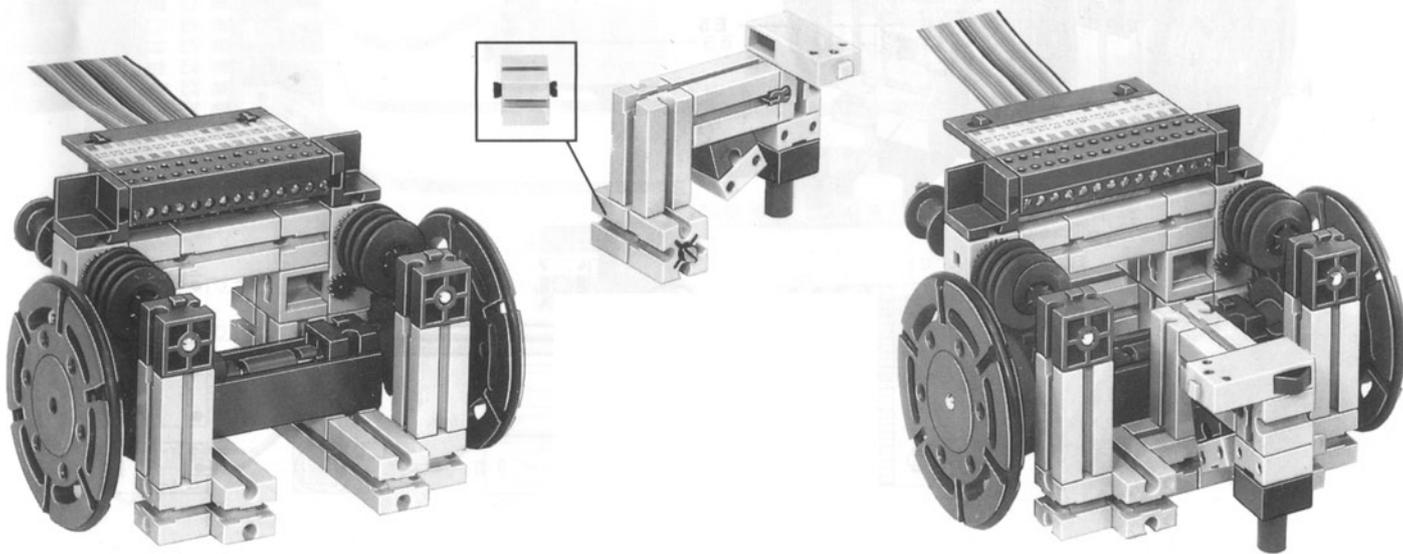
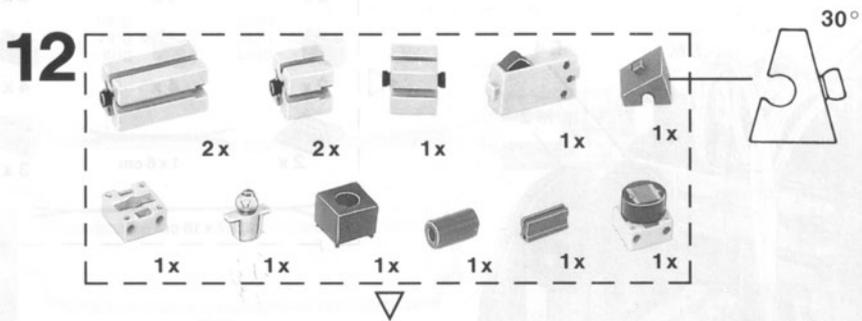
# 11

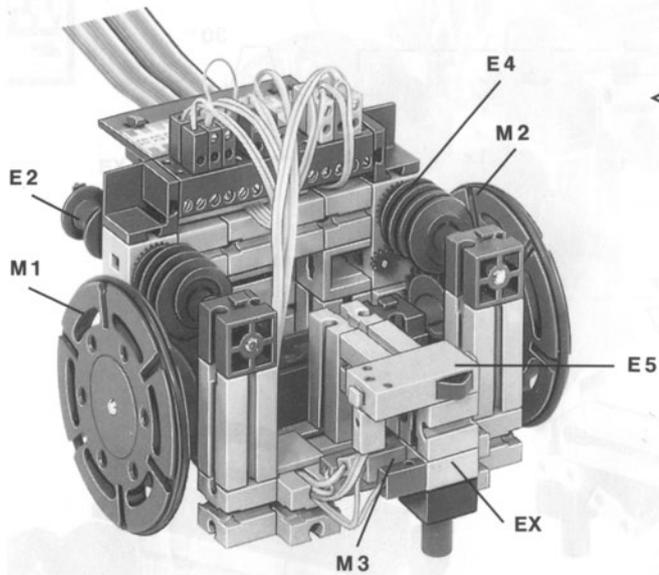
	gelb yellow jaune		orange orange orange		grau grey gris		rot red rouge		grün green vert
<b>3 x</b>		<b>4 x</b>		<b>2 x</b>		<b>8 x</b>		<b>5 x</b>	
									
<b>1 x</b>				<b>2 x 6 cm</b>		<b>2 x</b>		<b>2 x</b>	
									
						<b>5 x 18 cm</b>			





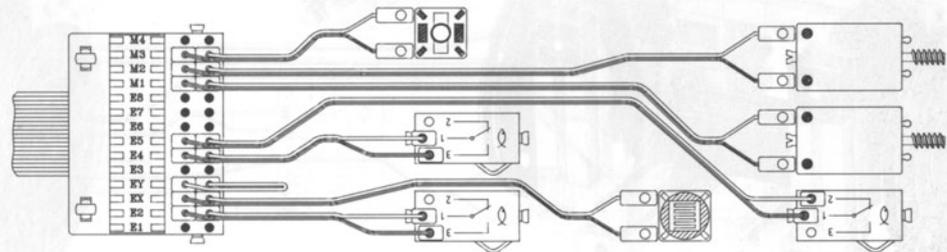
Schildkröte mit Lesekopf  
Turtle with Recording Head  
Tortue avec Tête de lecture





13

- |           |                      |          |                            |     |                             |
|-----------|----------------------|----------|----------------------------|-----|-----------------------------|
| 8 x       | rot<br>red<br>rouge  | 4 x      | orange<br>orange<br>orange | 5 x | grün<br>green<br>vert       |
| 2 x       | blau<br>blue<br>bleu | 4 x      | grau<br>grey<br>gris       | 4 x | violett<br>violet<br>violet |
| 2 x       |                      | 1 x 6 cm |                            | 3 x | gelb<br>yellow<br>jaune     |
| 7 x 18 cm |                      |          |                            |     |                             |



Anschlußbeispiel  
Examples of connection  
Plan de câblage (exemple)

