

Ny utgave 2010

Vg2 elektro

Teori med
praktiske
øvinger

Kunnskaps-
løftet

Frank Fosbæk

Automatiserte anlegg

Vg2 elenergi

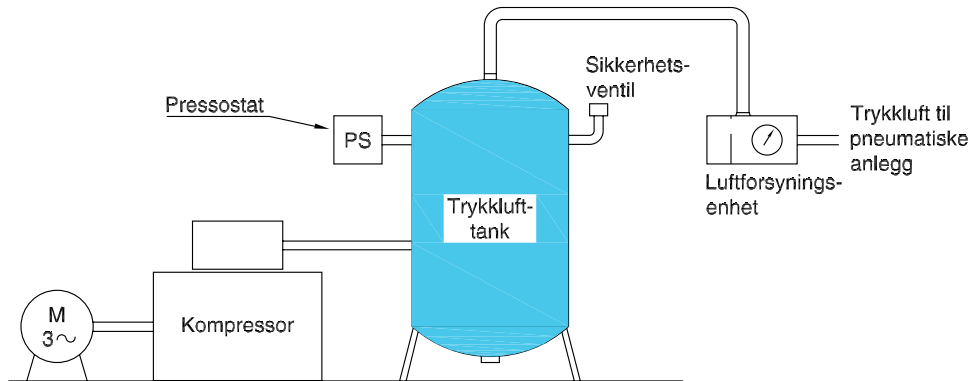
ELFORLAGET

Illustrasjoner til Automatiserte anlegg Vg2 elenergi

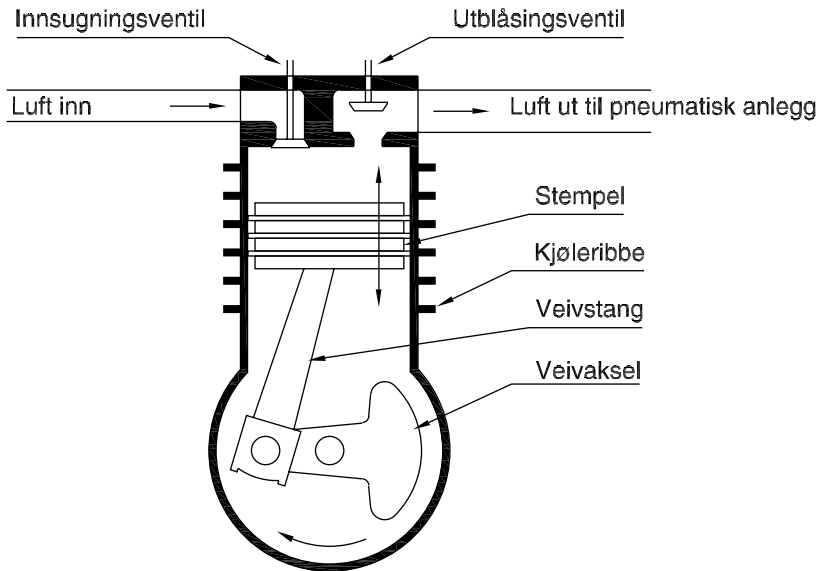
Kapittel 14

Illustrasjonene kan brukes fritt i undervisningen

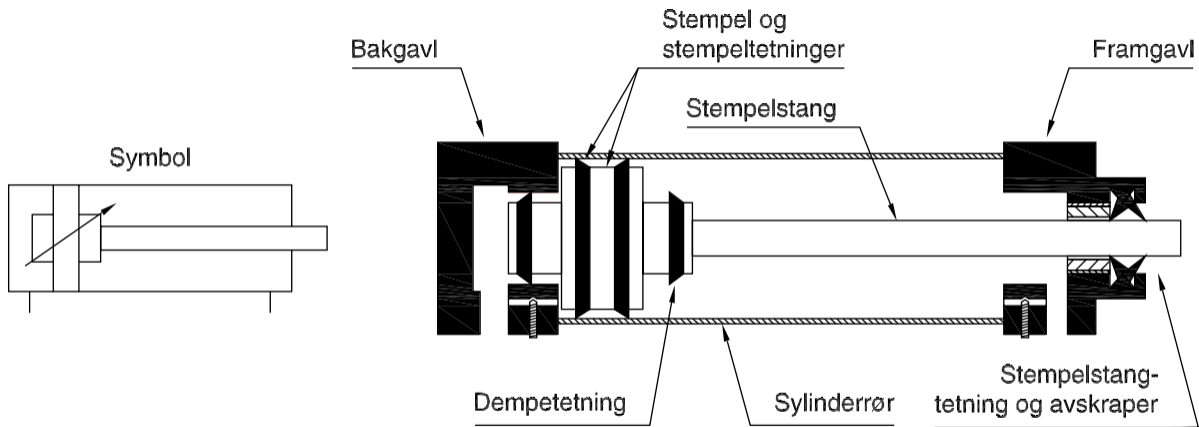
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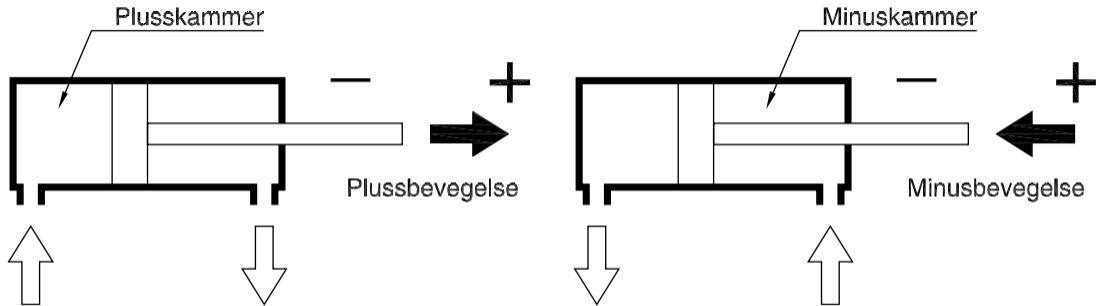
Figur 14.1 Prinsippskisse av et trykkluftanlegg



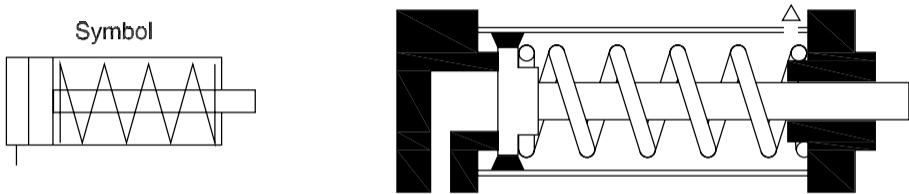
Figur 14.2 Prinsippskisse av en stempelkompressor



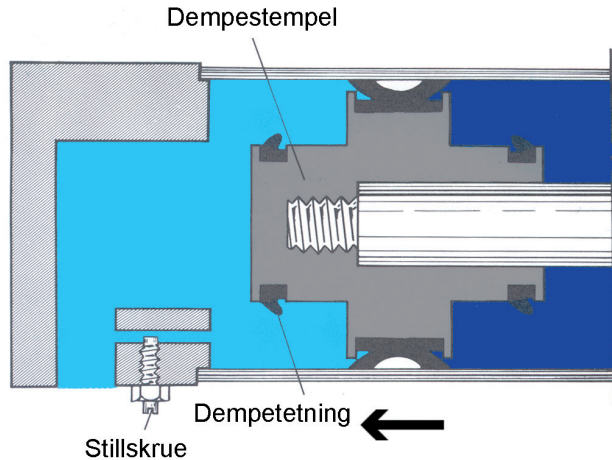
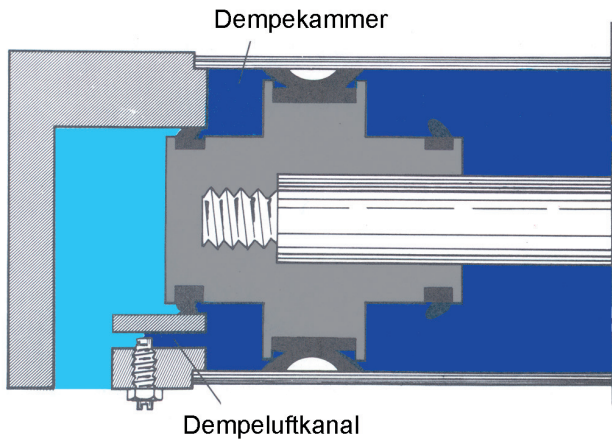
Figur 14.3 Dobbeltvirkende sylinder med endedempning



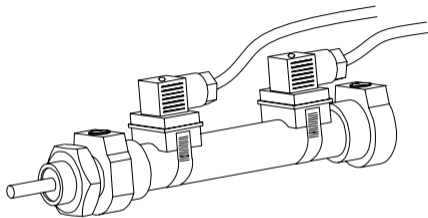
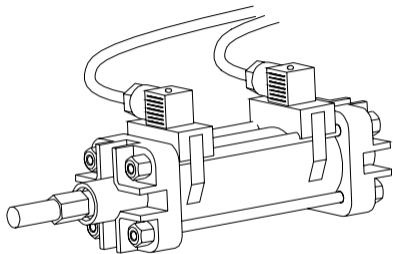
Figur 14.4 Pluss- og minuskammer og stempelbevegelsen til en dobbeltvirkende sylinder



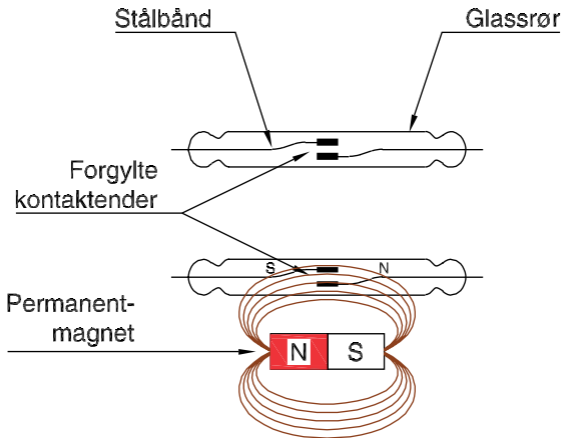
Figur 14.5 Enkeltvirkende sylinder med returfjær



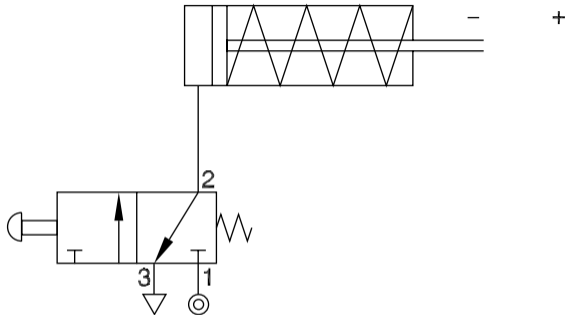
Figur 14.6 Luftdemping av stempelbevegelsen



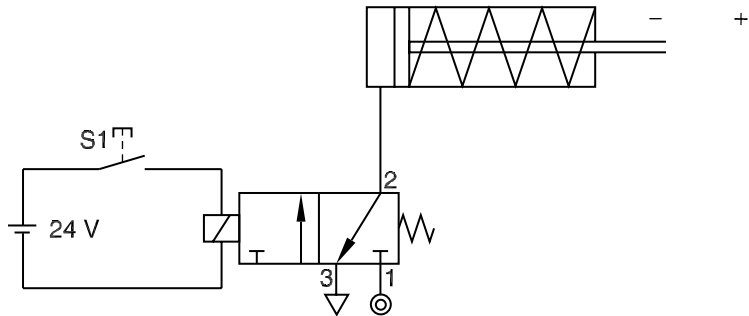
Figur 14.7 Sylinder med magnetstempel og magnetbrytere montert utenpå cylinderrøret



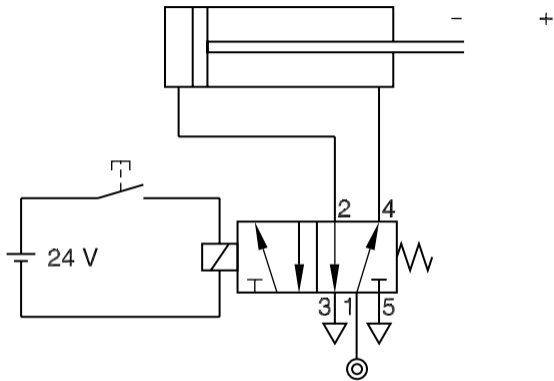
Figur 14.8 Prinsippet for en magnetkontakt



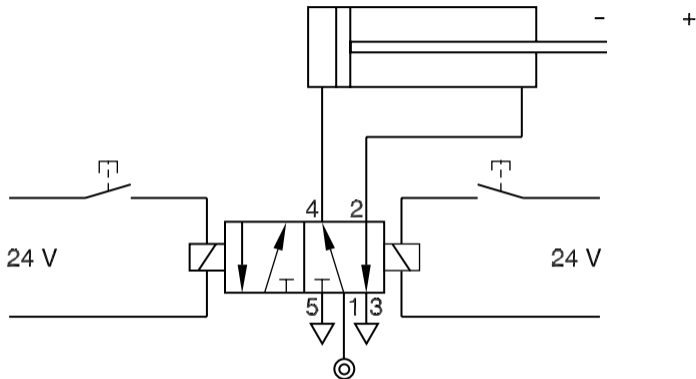
Figur 14.9 Pneumatisk koblingskjema for styring av en enkeltvirkende sylinder med manuelt aktivert 3/2 ventil



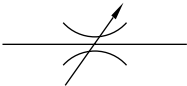
Figur 14.10 Pneumatisk koblingskjema for elektrisk styring av en enkeltvirkende sylinder.



Figur 14.11 Elektropneumatisk koblingskjema for elektrisk styring av en dobbeltvirkende sylinder

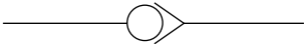


Figur 14.12 Pneumatisk koblingskjema for elektrisk styring av en dobbeltvirkende sylinder med bistabil retningsventil

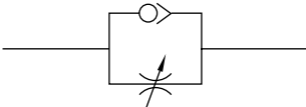


Figur 14.13

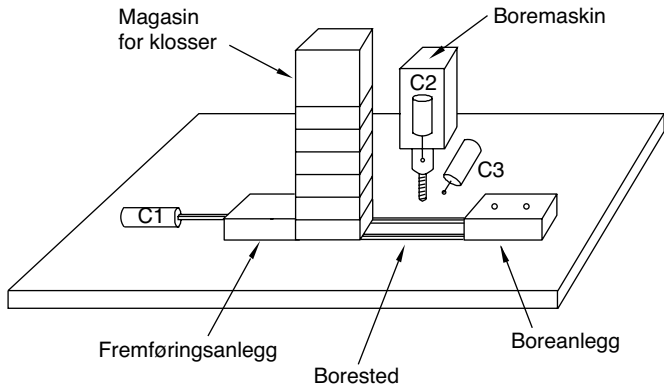
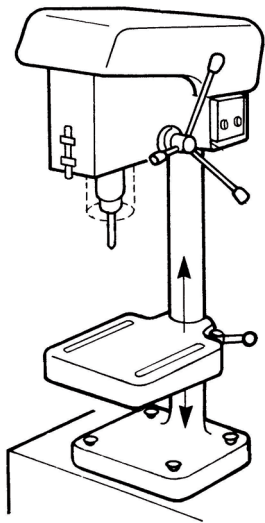
**Skjemasymbolet for
strupeventil**



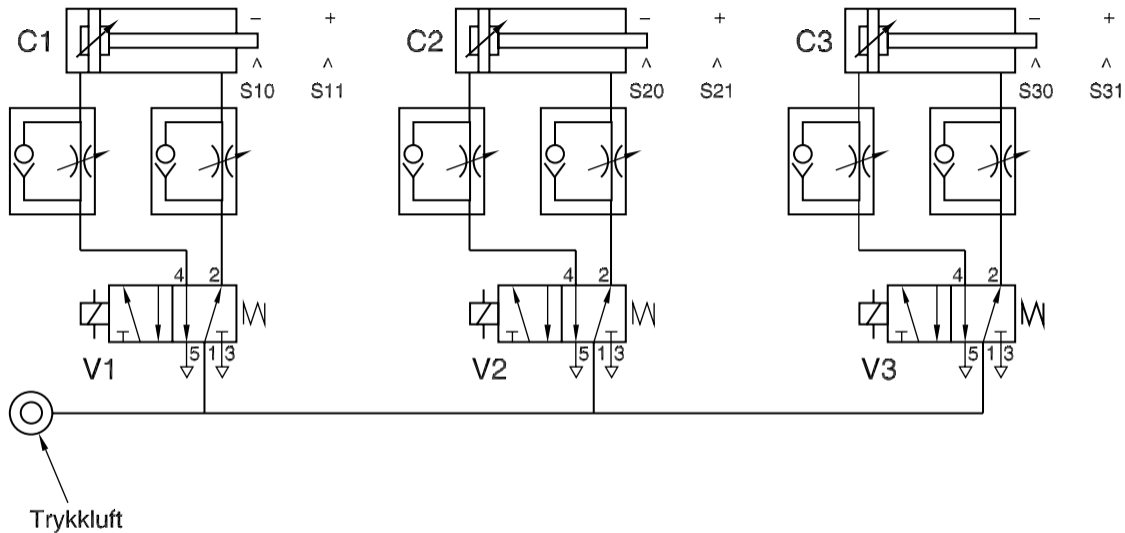
Figur 14.14
Skjemasymbalet for
tilbakeslagsventil



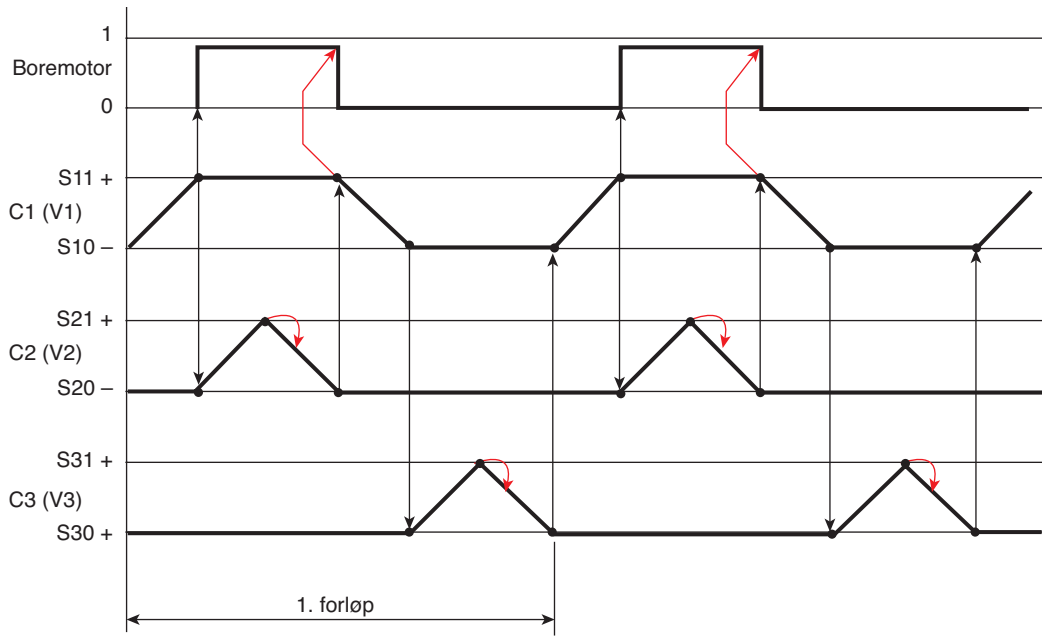
**Figur 14.15 Symbolet for
strupetilbakeslagsventil**



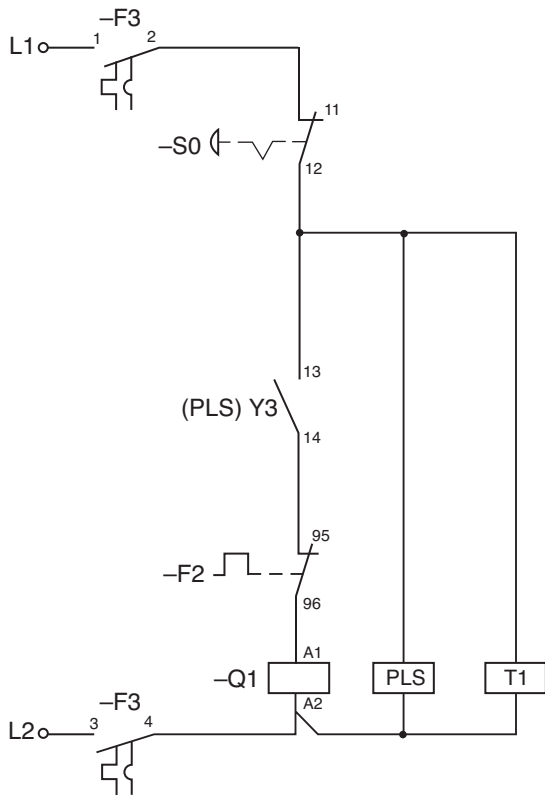
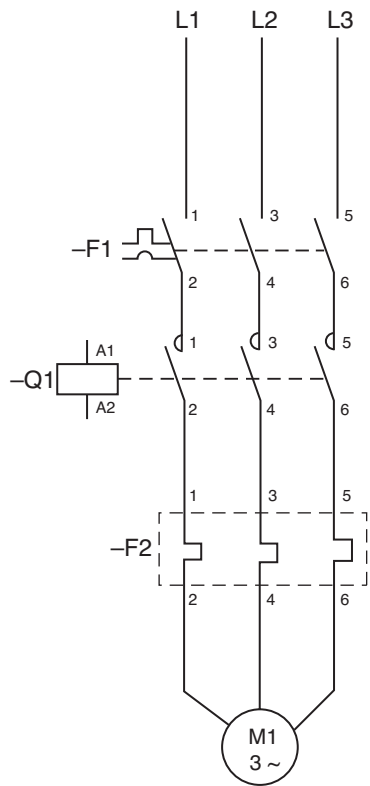
Figur 14.16 Benkeboremaskinen og konstruksjonsskissen for boreoperasjonen



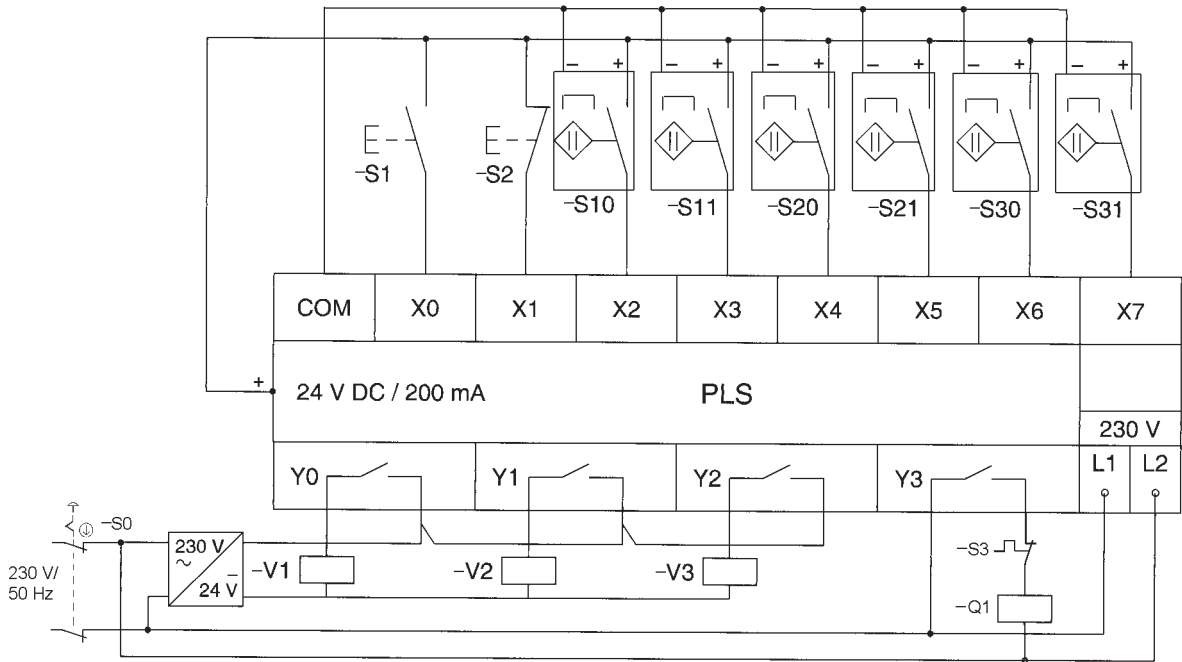
Figur 14.17 Pneumatisk koblingskjema for anlegget



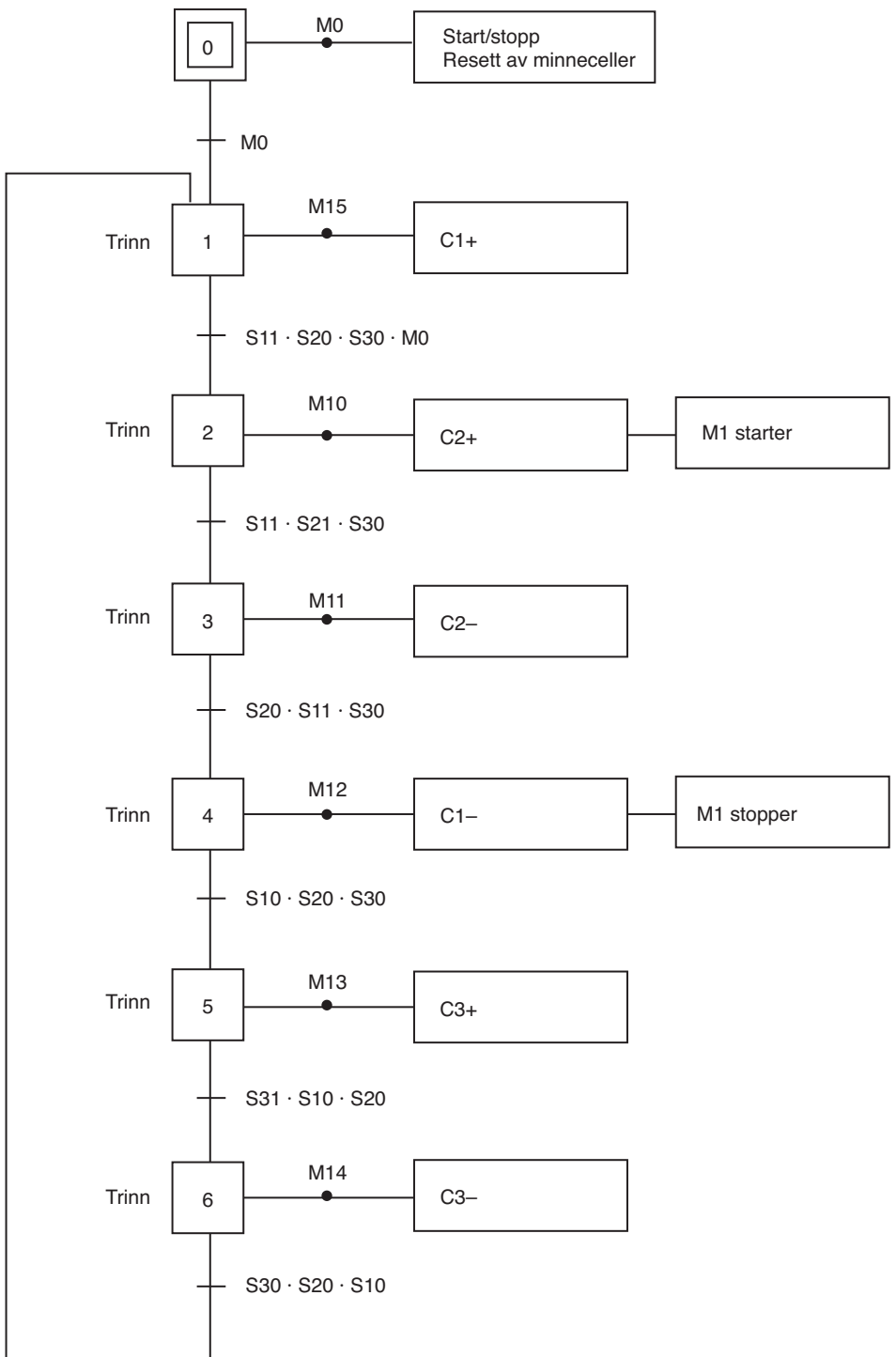
Figur 14.18 Forløpsdiagram for sylinderbevægelserne



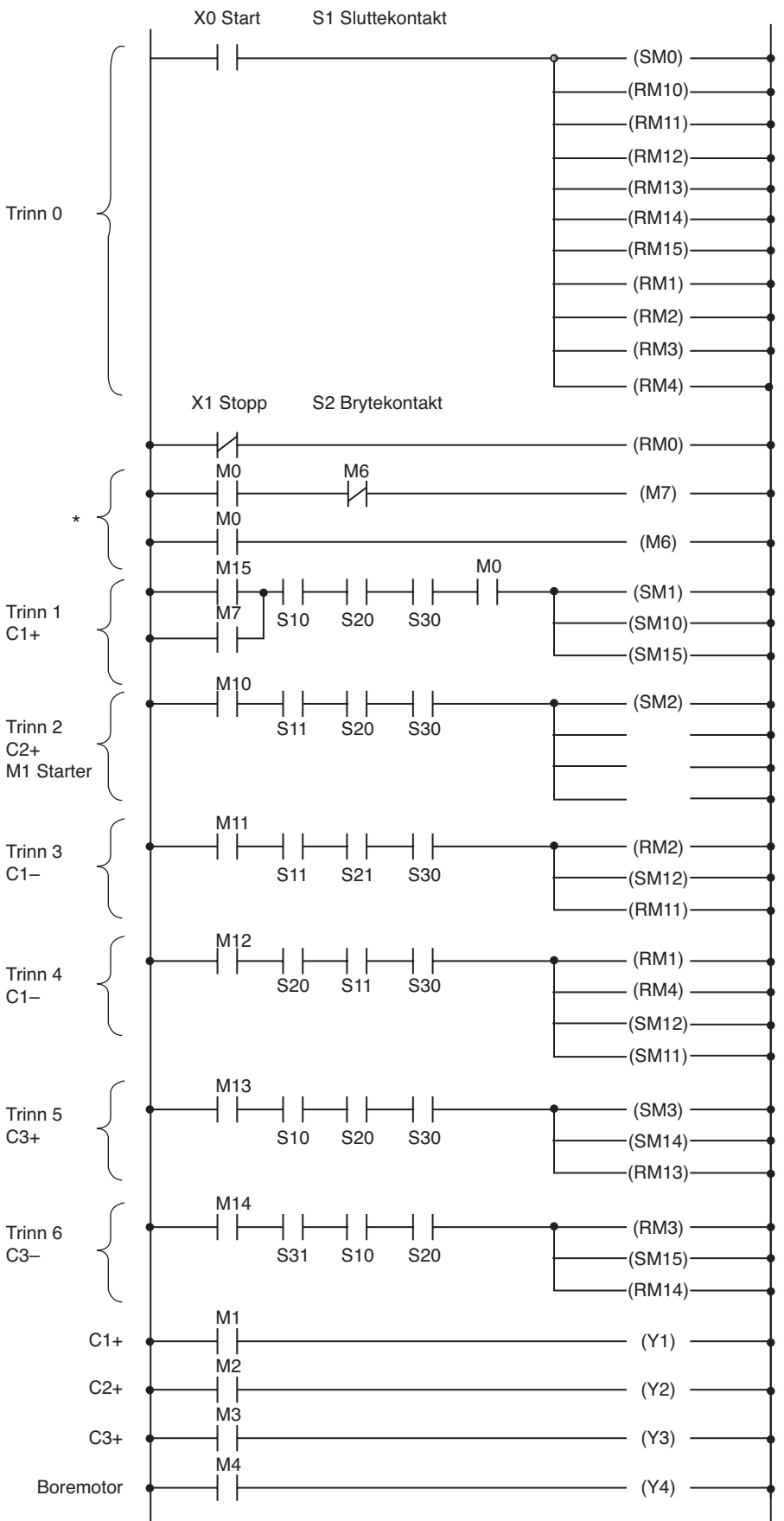
Figur 14.19 Hovedstrøms- og styrestromsskema



Figur 14.20 PLS-tilkoblinger



Figur 14.21 Sekvensielt funksjonsdiagram



Figur 14.22 Ladderdiagram