

Bestelltext / How to order

Typ

Bauvorschrift / Art. Nr.

Getriebeendschalter / Geared limit switches

FRL90 L2 M30:1 MS3102-18-1P ZERO

TD 9800.10.290

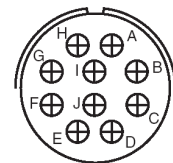
**CNC Machinery OEM
MICRON Reference****Strippit
45-307-526-1830****Eingangsübersetzungen (Welle zu Schalter) /
Input ratio****30 : 1** (Getr. M25 / Z₁ = 35 / Z₂ = 42)**Anzahl Endschalter / number of switches**
Feinjustierbare Einfachnockenscheiben
mit Schraubenzieher einstellbar

2 x

NV 4202.180° (ZERO-LINE, Double Cam)

Mikroschalter / Snap action switch
Schalterbelastung / Switching powerKS 25 B4 low hysteresis (6099.00.034)
250 VAC 4 A / 60 VDC 1 A**lose mitgeliefert:**Befestigungsbride / Hold down clamp
Schraubenzieher3 x BMF (M3 x 12 mm)
SD 2**Standardverdrahtung / Electrical connection**

Mounted Receptable: MS3102A18-1P (10 Pin , Male , Pin Contacts)



Drahtfarbe Wire color	Schalter Switches	Anschluss Function	Stecker / Pin Nr. Connector / pin no.
RED	1	COM	A
WHITE		NO	B
BROWN		NC	C
-	-	-	D
-	-	-	E
-	-	-	F
PURPLE	2	COM	G
BLUE		NO	H
ORANGE		NC	I
-	-	-	J

Label:

Geared Limit SwitchReplaces Micron 45-307-526-1830
L2 M30:1 per TD 9800.10.290**MADE IN SWITZERLAND BY MICRONOR**

US +1-805-389-6600

CH +41-44-843-4020 WWW.MICRONOR.COM

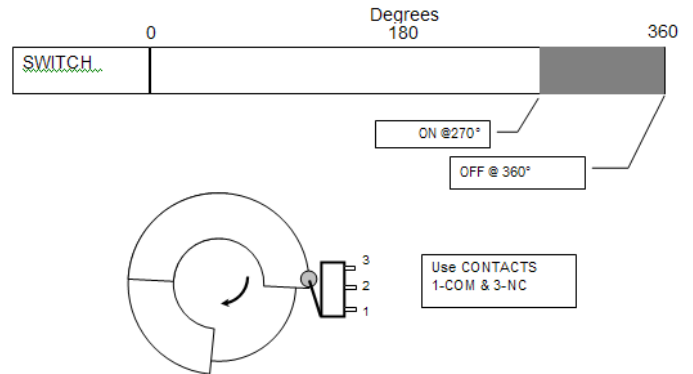
Subject to change without prior notice

Cam Programming (General)

Single cams can produce only a fixed single pulse 20° wide if switch channel uses NV4101.20 single cams.

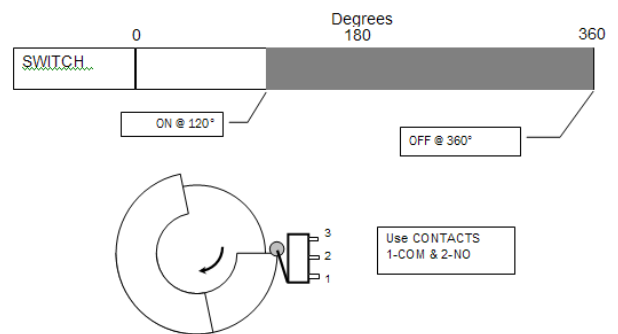
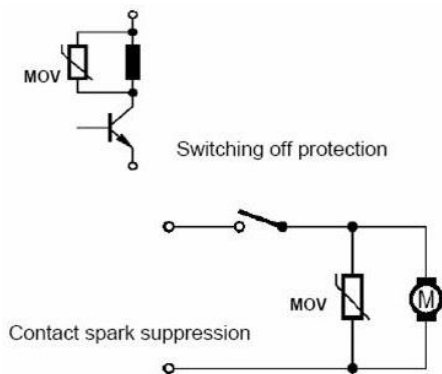
Double cams can be programmed for a switching profile of 4° to 356°. Due to the design of the cam, switches cannot be disengaged for more than 180°.

If the system requires that the switch does not make contact for more than 180°, the normally closed (NC) contact must be wired. For programs greater than 180°, the NO contact is used. The right-hand illustrations depict these two cam programming cases. It is always helpful to diagram the desired switch settings before wiring and programming the cams.



Contact Arcing Protection With Relay (Inductive Loads)

Consult www.littlefuse.com for MOV (varistor) product information and application notes.



Subject to change without prior notice

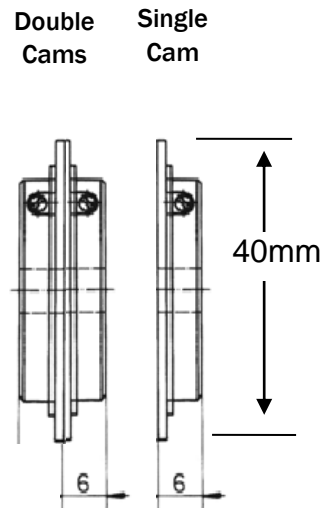
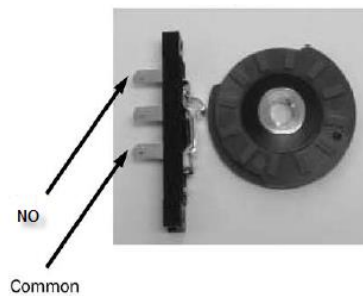
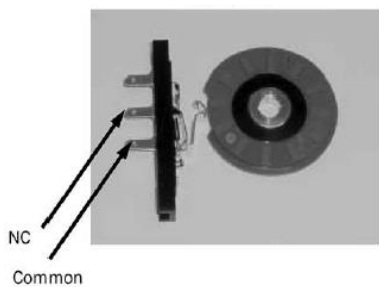
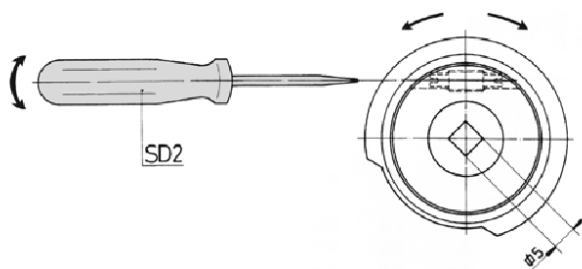
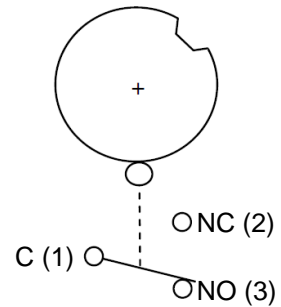
Cam Programming (NV Series)

Programming the switching profile is done with the SD2 cam programming tool. The general technique is shown in the diagram to the right.

Single cams can produce only a fixed single pulse.- 20° wide if switch channel uses standard NV4101.20 single cams.

Double cams (NV4201.180, see diagram to right) can be programmed for a switching profile of 4° to 356°. Due to the design of the cam, switches cannot be disengaged for more than 180°. If the system requires that the switch does not make contact for more than 180°, the normally closed (NC) contact must be wired.

NV Style Precision Programmable Cams



Subject to change without prior notice

Cam Programming Guidance for Replacing Thomson Micron Rotary Limit Switches

Micronor Limit Switches use a "universal" double cam design. Thus, the Micronor double cam limit switch replaces 3 types of Thomson Micron limit switches (A,B and I). To connect to the proper switch contacts and set the cams properly, you will need to know the type of switch used on each channel of the original Micron unit.

- **Type A** - Forced actuation in in CW rotation of Input, reset on CCW rotation past set point
- **Type B** - Forced actuation in in CCW rotation of Input, reset on CW rotation past set point
- **Type I** - Impulse at set point

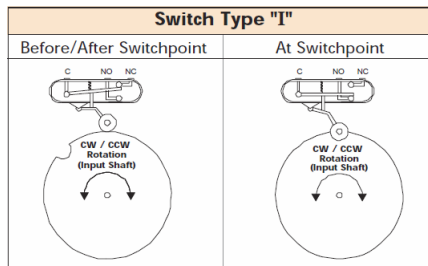
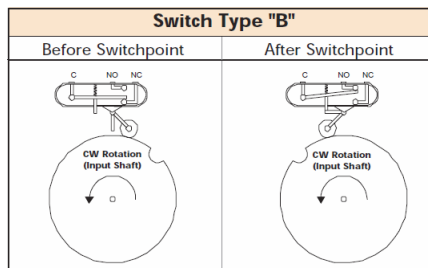
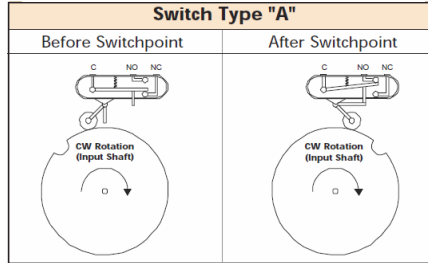
How To Program Micronor Cams

For Type A operation where On (closed contacts) period <180°, use COM and NO switch contacts and program "valley" of switch "On" at Set Point and "Off" at about 355°. If On period >180°, then use COM and NC contacts and program "peak" of switch "On" at Set Point and "Off at 355°.

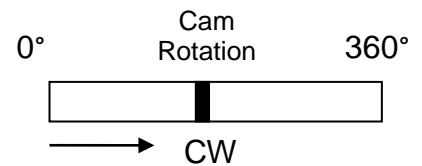
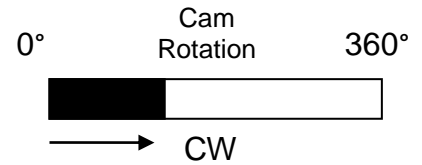
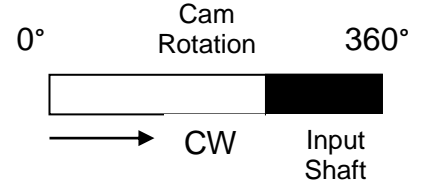
For Type B operation where On (closed contacts) period <180°, use COM and NO switch contacts and program "valley" of switch "On" at ~355° and "Off" at Set Point. If On period >180°, then use COM and NC contacts and program "peak" of switch "On" at Set Point and "Off at 355°.


For Type I operation (assume impulse to be about 6° wide, use COM and NO switch contacts and program "valley" of switch "On" at Set Point and "Off" at SetPoint+6°.

**THOMSON MICRON
Switch Types**



Switch Activation Profile

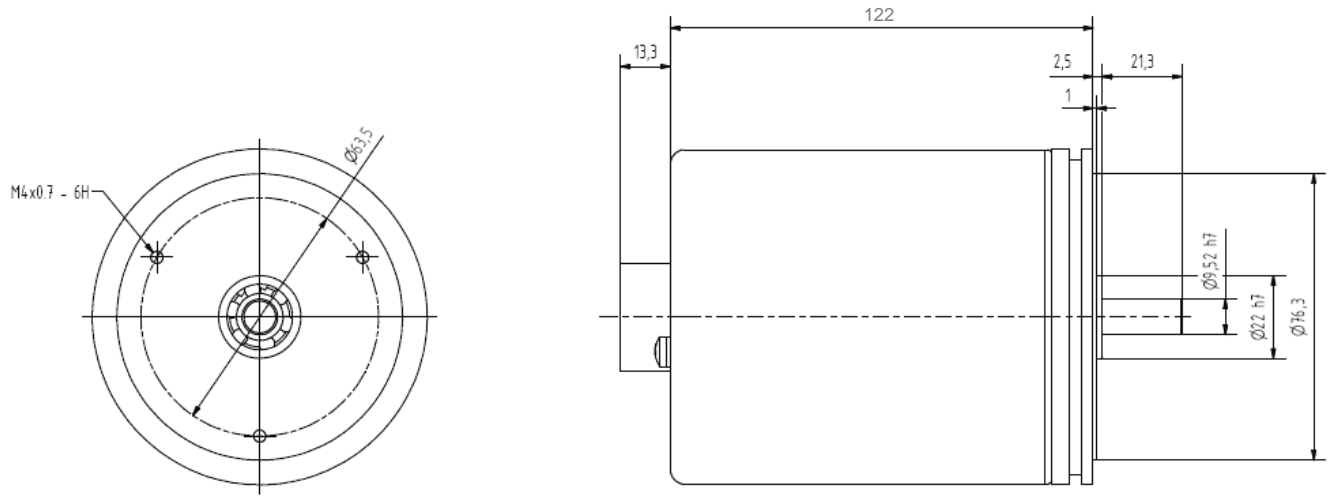


 Denotes Closed Contact

Subject to change without prior notice

Massbild / outline drawing

$\varnothing d = 9.52\text{-h8}$ with flat $F = \Rightarrow 40\text{ N}$ $\Downarrow 80\text{ N}$ /



Subject to change without prior notice