

Serie FPL 90



• Leitplastik Potentiometer Conductive plastic Potentiometer	Typ CP22 (Typ CP36)
• Widerstandswerte Resistance	1K0 / 5K0 / 10K (Ω)
• Hohe Linearität Excellent linearity	±0,03 ... ±0,1%
• Eingangsübersetzungen Input ratios	1:1...1000 : 1
• Programmkanäle (einstellbar) Program channel (free setting)	2, 3, 4
• Schutzart Protection	IP 64

Technical data

Verstellbare Einfachnockenscheibe
Verstellbare Doppelnockenscheibe

Adjustable single cam
Adjustable double cam

NK4101.20°
NK4201.180°

Programmierungsmöglichkeiten
Anzahl Impulse pro Umdrehung
mit Nockenvertiefung 4...180° ≅ 1...50 %
mit Nockenerhöhung 4...356° ≅ 1...99 %

Programming possibilities
Number of pulses per revolution
with cam profile valley 4...180° ≅ 1...50 %
with cam profile peak 4...356° ≅ 1...99 %

1
COM ⁽¹⁾ NC ⁽²⁾
COM ⁽¹⁾ NO ⁽³⁾

Mikroschalter
Kontaktmaterial
Übergangswiderstand
Schaltleistung

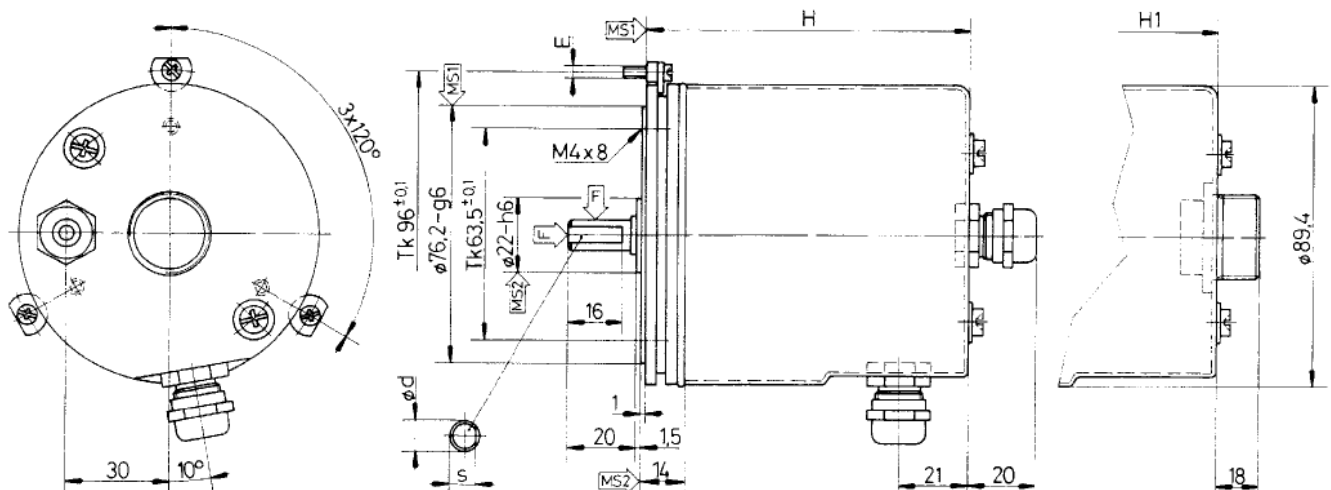
Snap action switch
Contact material
Contact resistance
Switching power

KS25F4
Ag 999
< 25mΩ
4A 250V AC / 1A 60V DC

KS26F4
Au 4...6 μm
< 10 mΩ

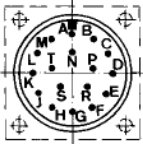
Outline drawing

ø d = 9-h8 s = 8,5 E = M3 (4-40 UNC) F = ⇨40 N ⇩80 N MS = Montagefläche / Mounting surface



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Electrical connection



Flanschdose männlich (Ansicht auf Steckerseite)
Connector male (View from face side)

SFP16 (16 Pin) DIN

MS 3102 A20-29P (17 Pin) MIL

Drahtfarbe Wire colour	Schalter Switches	Anschluss Function	Pin-Nr.	Pin-Nr.	-
White	1 (KS...F4)	COM (1)	1	A	
		NC (2)			
Brown	2 (KS...F4)	NO (3)	2	B	
Green		COM	3	C	
	3 (KS...F4)	NC			
Yellow		NO	4	D	
Grey	4 (KS...F4)	COM	5	E	
		NC			
Pink	5 (KS...F4)	NO	6	F	
Blue		COM	7	G	
	6 (KS...F4)	NC			
Red		NO	8	H	

Drahtfarbe Wire colour	Potentiometer	Anschluss Function	Pin-Nr.	Pin-Nr.
White		1	9	J
Brown	→	2	10	K
Green		3	11	L

Potentiometerschleifer verstellbar / Potentiometer slider adjustable

Ja / Yes

Anschlüsse mit Stecker / Connection with connector
Signalfarben nach / Cable designation at
Kabelquerschnitt für Schalter / Cable section for switches

COM-NO (2,8 x 0,5 mm)
DIN 47100
0.34 mm² / AWG 22

Zubehör / Accessories
Befestigungsbride / Hold down clamp
Programmierschlüssel / Program key

3 x BMF (M3x12 mm)
PSN

Option
Gegenstecker gerade (weiblich) / Female cable connector straight plug
Gegenstecker gerade (weiblich) / Female cable connector straight plug
Gegenstecker 90° (weiblich) / Female right angle connector 90°

SGS16.PG9 (16 Pin) DIN
MS 3106 A20-29S (17 Pin) MIL
MS 3108 B20-29S (17 Pin) MIL

Technische Daten und Zubehör / Technical data and accessories

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Order key

FPL90 2 U1 1 1 1

Dimension: Ø 3.50 inch

Size (mm) / Number of switches:

Dimension: 2
114 mm --> Size (H)
138 mm --> Size (H1)
2 = 2 Switches
2 Adjustable limit switches (NK4101.20°)
0 Program channels (free setting) (NK4201.180°)

Dimension: 3
122 mm --> Size (H)
146 mm --> Size (H1)
3 = 3 Switches
2 Adjustable limit switches (NK4101.20°)
1 Program channels (free setting) (NK4201.180°)
1 Program key (PSN)

Dimension: 3
130 mm --> Size (H)
154 mm --> Size (H1)
4 = 4 Switches
2 Adjustable limit switches (NK4101.20°)
2 Program channels (free setting) (NK4201.180°)
1 Program key (PSN)

Input ratios (Shaft to switches + Potentiometer): --> U = one stage; M = more stage

U1 = 1:1	M1 = 12,5:1
U2 = 1,25:1	M2 = 17,5:1
U3 = 1,66:1	M3 = 20,83:1
U4 = 2:1	M4 = 25:1
U5 = 2,5:1	M5 = 37,5:1
U6 = 3:1	M6 = 50:1
U7 = 3,5:1	M7 = 75:1
U8 = 3,75:1	M8 = 125:1
U9 = 4:1	M9 = 250:1
U10 = 4,5:1	M10 = 500:1
U11 = 5:1	M11 = 750:1
	M12 = 1000:1

Conductive plastic potentiometer:

1 = Type CP22 1KΩ / ± 0,1%	4 = Type CP36 5K0.L7 / ± 0,07%
2 = Type CP22 5KΩ / ± 0,1%	5 = Type CP36 5K0.L5 / ± 0,05% On request
3 = Type CP22 10KΩ / ± 0,1%	6 = Type CP36 5K0.L3 / ± 0,03% On request

Cable outlet

1 = axial H1 R
2 = radial H S

Male receptacle:

1 = SD12 (12 Pin) DIN
2 = SD16 (16 Pin) DIN
3 = MS3102 A18-1P (10Pin) MIL
4 = MS3102 A20-27P (14Pin) MIL
5 = MS3102 A 20-29P (17Pin) MIL

Accessoires: Hold down clamp

3 x BMF (M3 x 12 mm)

Technische Änderungen vorbehalten / Subject to change without prior notice