



FACTORY AUTOMATION

SENSORIK 1

INDUCTIVE, CAPACITIVE AND MAGNETIC SENSORS

Edition 2004



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For this reason, this printed matter is produced on paper bleached without the use of chlorine.

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Overview of inductive proximity switches

Slotted and ring type design

Housing		2 mm	3.5 mm	5 mm	10 mm	15 mm	30 mm	10/15 mm		21/43 mm			
Dimensions		Length [mm]		8	19.5	15	44	48	84	25		45	70
		Width [mm]		8	10	10	55	30	51	20		20	20
		Height [mm]		12	17	17	45	60	110	32.5		80	100
Slot width		[mm]		2	3.5	5	10	15	30				
Internal diameter		[mm]								10	15	21	43
Output		NAMUR Pages...		● 128 ...	● 128 ...	● 128 ...	130	● 131	● 131	● 133 ...	● 133 ...	● 135	● 135
		Two-wire DC Pages...											
		Three-wire DC Pages...			● 103		● 104	● 104				● 106	● 106
		Four-wire DC Pages...						● 104	● 105				
		AS-Interface Pages...											
		Two-wire AC Pages...						● 104	● 105				
		Two-wire AC/DC Pages...											
Connection		Cable		●	●	●	●	●	●	●	●	●	●

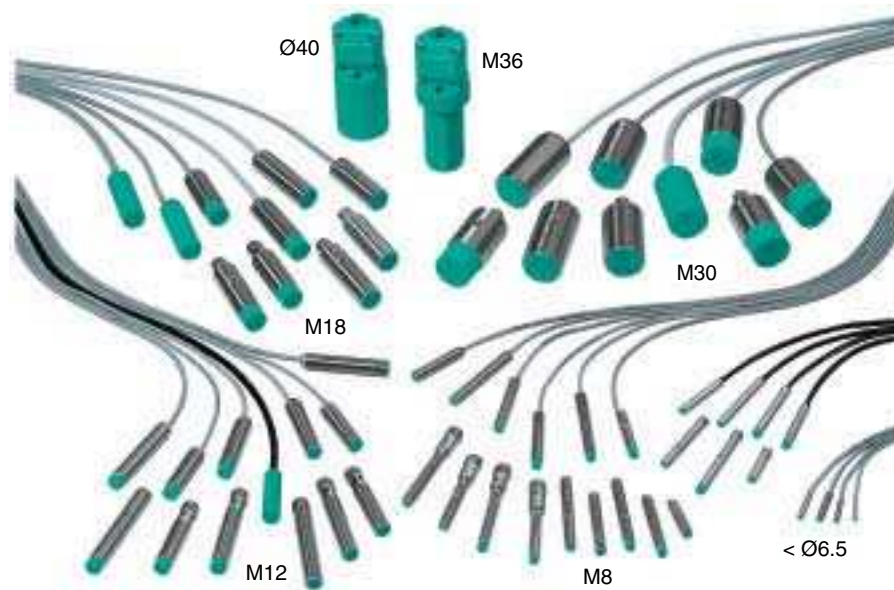


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Overview of inductive proximity switches

Cylindrical design

3 mm	4 mm	4.5 mm	5 mm	6.5 mm	8 mm	11 mm	12 mm	14 mm	18 mm	PG21	22 mm	30 mm	40 mm	50 mm		Housing
22	25	20	20	... 60	... 50	31	... 70	31	... 75	... 105	35	... 115	95	40	Length [mm]	Dimensions
3	4	4.5	M5	6.5	M8	11	M12	M14	M18	PG21	22	M30	40	50	Ø [mm]	
0.6	0.8	0.8	0.8	1,5, 2	1,5, 2, 3	2	2, 4, 6	2	2, 3, 5, 8, 12	6	6	5, 10, 15, 22			Embed. [mm]	Sensing range (mm)
				2, 3	2, 3, 6	5	4, 6, 10	5	8, 12, 20	10	10	15, 25, 40	20	25	Non-embed. [mm]	
		● 110	● 110	● 110	● 111	● 112 ...	● 113 ...	● 112 ...	● 115 ...	● 117 ...	● 117 ...	● 119 ...	● 118	● 121	NAMUR Pages...	Output
					● 41		● 47 ...		● 56 ...			● 65 ...			Two-wire DC Pages...	
● 34	● 35		● 35	● 37, 38	● 39 ...		● 53 ...		● 59 ...	●		● 68 ...		● 74	Three-wire DC Pages...	
					● 45		● 54		● 61 ...			● 69 ...	● 74		Four-wire DC Pages...	
							● 241 ...		● 243 ...			● 248 ...			AS-Interface Pages...	
					● 46		● 55		● 64	●		● 72 ...	● 74	● 74	Two-wire AC Pages...	
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Cable	Connection
				●	●		●		●			●	●		Connec.	
												●	●		Terminals	



Overview of inductive proximity switches

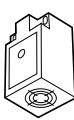
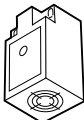



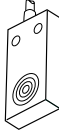
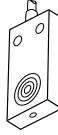


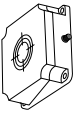

Rectangular design

Housing		V3	F25	F31	F31K	M1	M1K	L2	VariKont	F	F1	F9
Dimensions												
Length [mm]		27.8	52	65	65	72	91	67/86	118	45	40	38.5
Width [mm]		16	52/61	36	77.5	30	30	40	40/55	30	26	16
Height [mm]		10.2	20	33.5	35.5	30	30	40	40/55	12	12	16.5
Sensing range (mm)												
Embed. [mm]		2, 3						15, 20	6, 15, 20	6	2	5, 6
Non-embed. [mm]			2 x 3	2 x 3	2 x 3	15	15	30, 40	15, 20, 30, 40		4	
Output												
NAMUR Pages...		122 ...	149 ...	165 ...	170 ...		122		125 ...	122 ...	122	
Two-wire DC Pages...		77		163 ...	170 ...		84 ...		87 ...			
Three-wire DC Pages...		77	152 ...	160, 161	172	83	84	86 ...	88 ...	78	75	78
Four-wire DC Pages...								86 ...	88 ...	78		78
AS-Interface Pages...			159	168				253	259 ...	251		
Two-wire AC Pages...							84		94 ...			
Three-wire AC Pages...									236			
Two-wire AC/DC Pages...									94 ...		76	
Connection												
Cable		•	•	•				•		•	•	•
Connec.		•	•	•		•		•	•	•	•	•
Terminals			•		•		•		•			





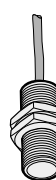
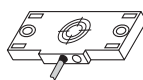
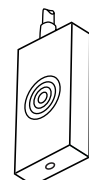

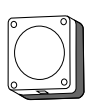
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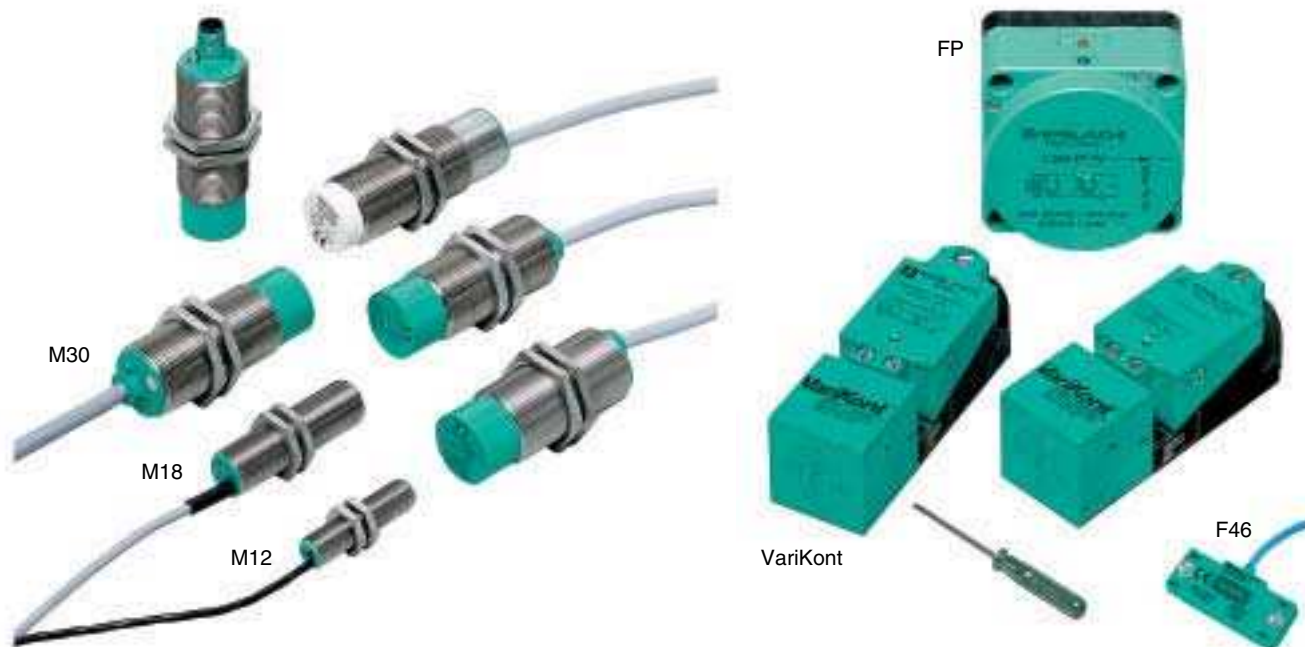
Overview of inductive proximity switches

F10	F11	F17	F29	F29A	F33	F33M	F41	FP	F23	F79	Housing	
												
38.5	52.5	50	27	27	50	50	40/55	80	177	16	Length [mm]	Dimensions
25	30	30	10	10	25	25	8	80	177	8	Width [mm]	
25.5	30.5	7	7.2	7.2	10	10	8	40	60.5	4.7	Height [mm]	
10		10	5		5	1.5, 5	1.5	40		1.5	Embed. [mm]	Sensing range (mm)
15	15		4	4				50	100		Non-embed. [mm]	
								● 127 ...			NAMUR Pages...	Output
								● 101 ...			Two-wire DC Pages...	
● 79	● 79	● 83	● 81 ...	● 206	● 81	● 82	● 80		● 100	● 82	Three-wire DC Pages...	
								● 97 ...			Four-wire DC Pages...	
											AS-Interface Pages...	
								● 97 ...			Two-wire AC Pages...	
											Three-wire AC Pages...	
											Two-wire AC/DC Pages...	
●	●	●	●	●	●	●	●			●	Cable	Connection
●	●						●	●	●		Connec.	
								●			Terminals	

Overview of capacitive proximity switches

Cylindrical and rectangular design

Housing		12 mm	18 mm	30 mm	F46 (F46A)	F64	VariKont	FP
								
Dimensions	Length [mm]	50/60	65/75	80/95	50	40	118	80
	Width [mm]	M12	M18	M30	20	25	40	80
	Height [mm]				5 (10)	12	40	40
Sensing range (mm)	Embed. [mm]	4	8	6, 10			15	
	Non-embed. [mm]	1, 4	2, 6		2, 5, 10	15		40
Output	NAMUR Pages...	● 275	● 275	● 276 ...	● 277			● 127
	Two-wire DC Pages...							
	Three-wire DC Pages...	● 269	● 269	● 271 ...	● 273	● 270		
	Four-wire DC Pages...			● 271 ...			● 274	● 97
	Two-wire AC Pages...			● 271 ...			● 274	● 100
Connection	Cable	●	●	●	●	●		
	Connec.		●	●			●	●
	Terminals						●	●



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