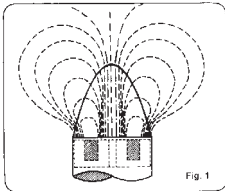


Princippet i en induktiv aftaster består i en oscillator, som genererer et højfrekvent magnetisk felt, der udstråler fra aftasterens front.

Hvis en metalgenstand nærmer sig dette felt, bliver oscillatoren dæmpet, og den resulterende ændring i strømforbruget detekteres af elektronikken, og aftasterens udgang aktiveres.

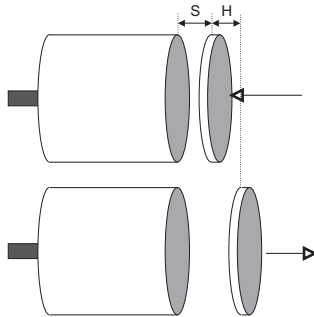


Tasteafstand (S):

Afstanden mellem aftasterforsiden og det materiale, som detekteres, i det øjeblik udgangssignalet skifter. Tasteafstanden varierer med typen af materiale.

Hysterese (H):

Hysterese er afstanden mellem det punkt, hvor aftasteren aktiveres, når materialet nærmes til aftasteren, og det punkt, hvor aftasteren afbryder igen, når materialet fjernes fra aftasteren.



Korrektionsfaktor:

Den tasteafstand, der er angivet for de forskellige følere, gælder for jern. Hvis aftasteren benyttes til at detektere andre metaller, skal man benytte følgende korrektionsfaktorer:

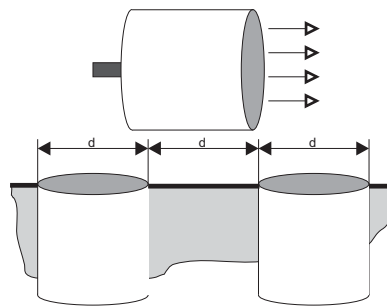
Messing:	S x 0,9
Aluminium:	S x 0,5
Kobber:	S x 0,45
Krom-nikkel legeringer:	S x 1,0
Rustfrit stål:	S x 1,0

Montering af aftaster:

De forskellige aftastere er fremstillet for enten planforsænket eller ikke-planforsænket installation.

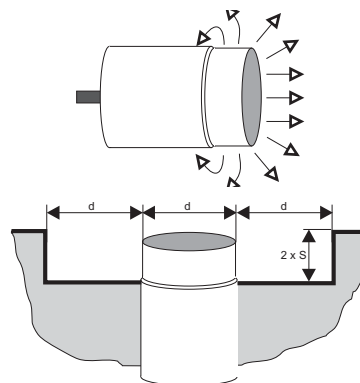
Planforsænket installation: •

Planforsænkede aftastere kan monteres i alle type materialer, uden ændring i de angivne karakteristikker. Hvis flere aftastere monteres ved siden af hinanden, skal der være en indbyrdes afstand svarende til minimum diameteren på aftasterne, for at undgå at de påvirker hinanden. Foran føleren skal der desuden være en minimum luftafstand på 3 gange tasteafstanden til omgivende materialer.

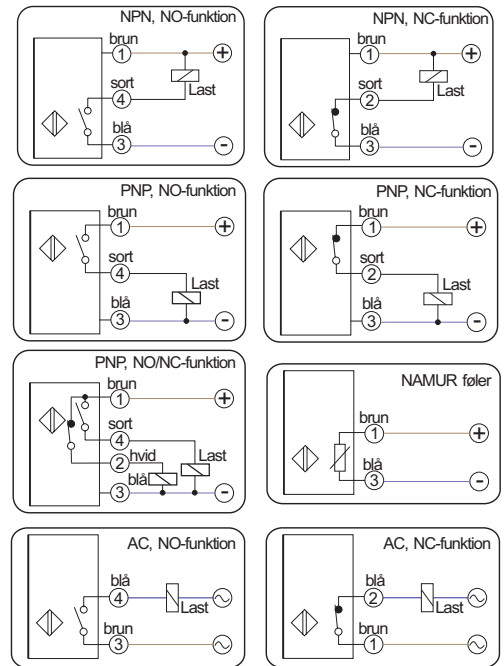


Ikke-planforsænket installation: o

Denne type aftastere har et mere spredt magnetfelt, og derfor kan de ikke monteres i plan med omgivende materialer. Fronten af aftasteren skal være fri i en afstand af minimum 2 gange tasteafstanden. Der skal være afstand svarende til minimum diameteren til omgivende materiale, og hvis 2 aftastere monteres ved siden af hinanden, skal der være en indbyrdes afstand på minimum 2 gange diameteren.



Tilslutningskemaer:



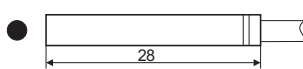

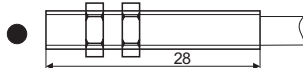
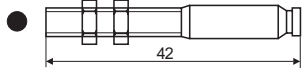
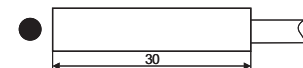
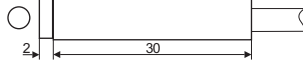
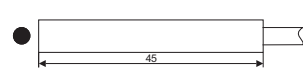
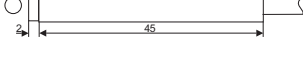
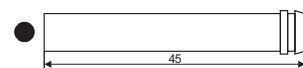
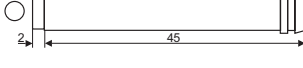
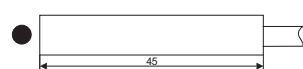
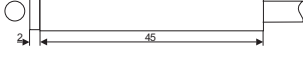
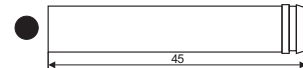
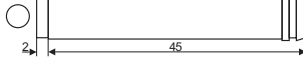
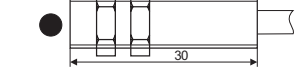
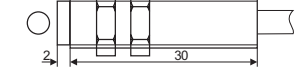
Fælles tekniske data:

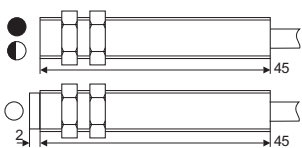
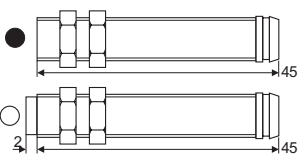
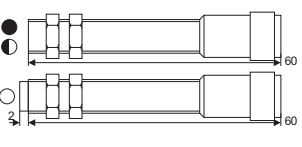
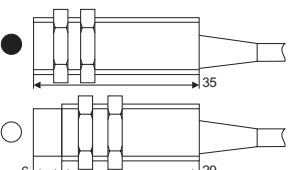
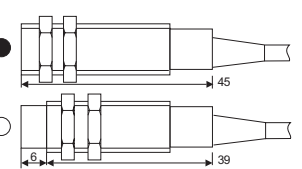
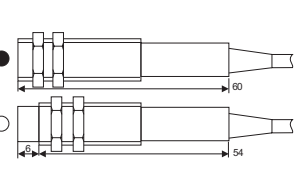
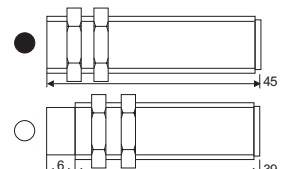
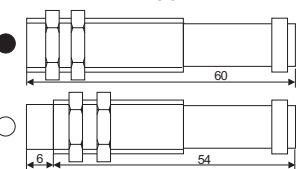
DC-typer:

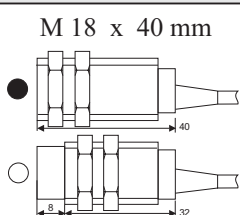
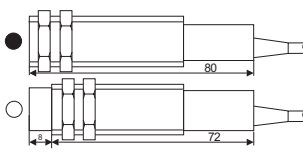
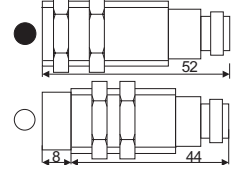
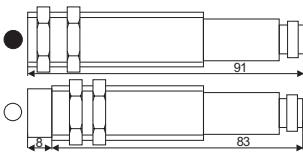
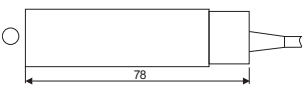
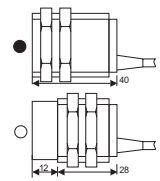
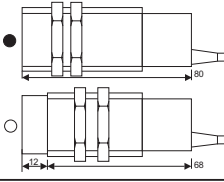
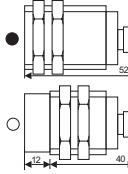
Forsyningsspænding:	10-35 VDC
Eget strømforbrug:	< 15 mA
Max. belastning:	300 mA
Restspænding, aktiveret:	< 2,5 V
Hysterese:	1-15%
Temperaturdrift:	< 10%
Tæthed, med kabel:	IP67
Tæthed, med stik:	IP65
Temperaturområde:	-25°C til +70°C

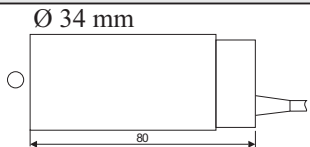
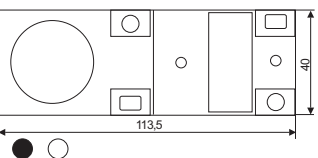
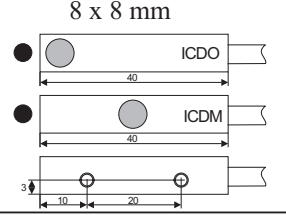
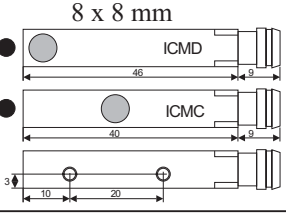
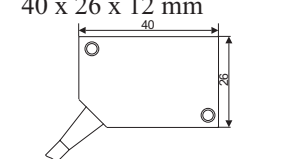
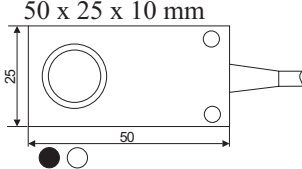
AC-typer:

Forsyningsspænding:	20-250 VAC
Eget strømforbrug:	< 2,5 mA
Minimum belastning:	10 mA
Max. belastning:	500 mA
Restspænding, aktiveret:	< 4,5 V
Hysterese:	1-15%
Temperaturdrift:	< 10%
Tæthed, med kabel:	IP67
Tæthed, med stik:	IP65
Temperaturområde:	-25°C til +70°C

	taste-afstand	taste-frekvens	føler-materiale	funktion	typenummer NO udgang	typenummer NC udgang	stik type
Ø 4 mm 	1,0 mm	2 kHz	V2A/ PVC	NPN	IBDA 0412	IBDA 0413	
				PNP	IBDA 0414	IBDA 0415	
	1,0 mm	2 kHz	V2A/ PVC	NPN	IBMD 0412	IBMD 0413	M8
				PNP	IBMD 0414	IBMD 0415	M8
M 5 	1,0 mm	2 kHz	V2A/ PVC	NPN	IBCA 0512	IBCA 0513	
				PNP	IBCA 0514	IBCA 0515	
	1,0 mm	2 kHz	V2A/ PVC	NPN	IBLD 0512	IBLD 0513	M8
				PNP	IBLD 0514	IBLD 0515	M8
Ø 6,5 x 30 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	IDDA 6512	IDDA 6513	
				PNP	IDDA 6514	IDDA 6515	
	2,0 mm	5 kHz	MS/ PVC	NPN	IODA 6512	IODA 6513	
				PNP	IODA 6514	IODA 6515	
Ø 6,5 x 45 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	ICDA 6512	ICDA 6513	
				PNP	ICDA 6514	ICDA 6515	
	2,0 mm	5 kHz	MS/ PVC	NPN	INDA 6512	INDA 6513	
				PNP	INDA 6514	INDA 6515	
Ø 6,5 x 45 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	IDMD 6512	IDMD 6513	M8
				PNP	IDMD 6514	IDMD 6515	M8
	2,0 mm	5 kHz	MS/ PVC	NPN	IOMD 6512	IOMD 6513	M8
				PNP	IOMD 6514	IOMD 6515	M8
Ø 8 x 45 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	ICDA 0812	ICDA 0813	
				PNP	ICDA 0814	ICDA 0815	
	2,0 mm	5 kHz	MS/ PVC	NPN	INDA 0812	INDA 0813	
				PNP	INDA 0814	INDA 0815	
Ø 8 x 45 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	IDMD 0812	IDMD 0813	M8
				PNP	IDMD 0814	IDMD 0815	M8
	2,0 mm	5 kHz	MS/ PVC	NPN	IOMD 0812	IOMD 0813	M8
				PNP	IOMD 0814	IOMD 0815	M8
M 8 x 30 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	IDCA 0812	IDCA 0813	
				PNP	IDCA 0814	IDCA 0815	
	2,0 mm	5 kHz	MS/ PVC	NPN	IOCA 0812	IOCA 0813	
				PNP	IOCA 0814	IOCA 0815	

	taste-afstand	taste-frekvens	føler-materiale	funktion	typenummer NO udgang	typenummer NC udgang	stik type
M 8 x 45 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	ICCA 0812	ICCA 0813	
				PNP	ICCA 0814	ICCA 0815	
	2,0 mm	5 kHz	MS/ PVC	NPN	INCA 0812	INCA 0813	
				PNP	INCA 0814	INCA 0815	
M 8 x 45 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	IDLD 0812	IDLD 0813	M8
				PNP	IDLD 0814	IDLD 0815	M8
	2,0 mm	5 kHz	MS/ PVC	NPN	IOLD 0812	IOLD 0813	M8
				PNP	IOLD 0814	IOLD 0815	M8
M 8 x 60 mm 	1,5 mm	5 kHz	MS/ PVC	NPN	IELI 0812	IELI 0813	M12
				PNP	IELI 0814	IELI 0815	M12
	2,0 mm	5 kHz	MS/ PVC	NPN	IPLI 0812	IPLI 0813	M12
				PNP	IPLI 0814	IPLI 0815	M12
M 12 x 35 mm 	2,0 mm	2 kHz	MS/ PVC	NPN	IKCT 1212	IKCT 1213	
				PNP	IKCT 1214	IKCT 1215	
	4,0 mm	2 kHz	MS/ PVC	NPN	IOCT 1212	IOCT 1213	
				PNP	IOCT 1214	IOCT 1215	
M 12 x 45 mm 	2,0 mm	2 kHz	MS/ PVC	NPN	ILCT 1212	ILCT 1213	
				PNP	ILCT 1214	ILCT 1215	
	4,0 mm	2 kHz	MS/ PVC	NPN	IPCT 1212	IPCT 1213	
				PNP	IPCT 1214	IPCT 1215	
M 12 x 60 mm 	2,0 mm	2 kHz	MS/ PVC	NPN	IBCT 1212	IBCT 1213	
				PNP	IBCT 1214	IBCT 1215	
	4,0 mm	2 kHz	MS/ PVC	NPN	INCT 1212	INCT 1213	
				PNP	INCT 1214	INCT 1215	
2,0 mm 4,0 mm	25 Hz	MS/ PVC	AC	IBGT 1248	IBGT 1249		
M 12 x 45 mm 	2,0 mm	2 kHz	MS/ PVC	NPN	IKLI 1212	IKLI 1213	M12
				PNP	IKLI 1214	IKLI 1215	M12
	4,0 mm	2 kHz	MS/ PVC	NPN	IOLI 1212	IOLI 1213	M12
				PNP	IOLI 1214	IOLI 1215	M12
M 12 x 60 mm 	2,0 mm	2 kHz	MS/ PVC	NPN	ILLI 1212	ILLI 1213	M12
				PNP	ILLI 1214	ILLI 1215	M12
	4,0 mm	2 kHz	MS/ PVC	NPN	IPLI 1212	IPLI 1213	M12
				PNP	IPLI 1214	IPLI 1215	M12

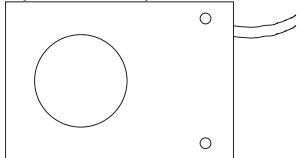
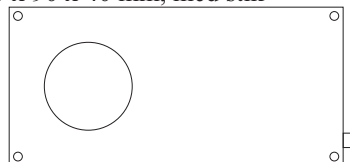
	taste-afstand	taste-frekvens	føler-materiale	funktion	typenummer NO udgang	typenummer NC udgang	stik type
M 18 x 40 mm 	5,0 mm	500 Hz	MS/ PVC	NPN PNP	ILCT 1812 ILCT 1814	ILCT 1813 ILCT 1815	
	8,0 mm	500 Hz	MS/ PVC	NPN PNP	IPCT 1812 IPCT 1814	IPCT 1813 IPCT 1815	
M 18 x 80 mm 	5,0 mm	500 Hz	V2A/ PVC	NPN PNP	IBCT 1812 IBCT 1814	IBCT 1813 IBCT 1815	
	8,0 mm	500 Hz	MS/ PVC	NPN PNP	INCT 1812 INCT 1814	INCT 1813 INCT 1815	
	5,0 mm 8,0 mm	25 Hz	MS/ PVC	AC AC	IBCT 1848 INCT 1848	IBCT 1849 INCT 1849	
M 18 x 52 mm 	5,0 mm	500 Hz	PVC	NPN PNP	ILLI 1812 ILLI 1814	ILLI 1813 ILLI 1815	M12
	8,0 mm	500 Hz	MS/ PVC	NPN PNP	IPLI 1812 IPLI 1814	IPLI 1813 IPLI 1815	M12
M 18 x 91 mm 	5,0 mm	500 Hz	MS/ PVC	NPN PNP	IBLI 1812 IBLI 1814	IBLI 1813 IBLI 1815	M12
	8,0 mm	100 Hz	MS/ PVC	NPN PNP	INLI 1812 INLI 1814	INLI 1813 INLI 1815	M12
Ø 20 x 78 mm 	10 mm	300 Hz	PVC	NPN PNP	INHT 2012 INHT 2014	INHT 2013 INHT 2015	
M 30 x 40 mm 	10 mm	250 Hz	MS/ PVC	NPN PNP	IKCT 3012 IKCT 3014	IKCT 3013 IKCT 3015	
	15 mm	150 Hz	MS/ PVC	NPN PNP	IOCT 3012 IOCT 3014	IOCT 3013 IOCT 3015	
M 30 x 80 mm 	10 mm	250 Hz	MS/ PVC	NPN PNP	IBCT 3012 IBCT 3014	IBCT 3013 IBCT 3015	
	15 mm	150 Hz	MS/ PVC	NPN PNP	INCT 3012 INCT 3014	INCT 3013 INCT 3015	
	10 mm 15 mm	25 Hz	MS/ PVC	AC AC	IBCT 3038 INCT 3038	IBCT 3039 INCT 3039	
M 30 x 52 mm 	10 mm	250 Hz	MS/ PVC	NPN PNP	IKLI 3012 IKLI 3014	IKLI 3013 IKLI 3015	M12
	15 mm	150 Hz	MS/ PVC	NPN PNP	IOLI 3012 IOLI 3014	IOLI 3013 IOLI 3015	M12

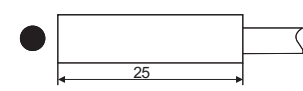
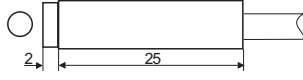
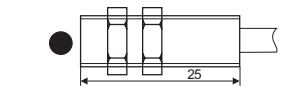

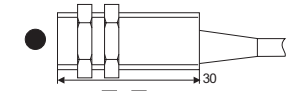

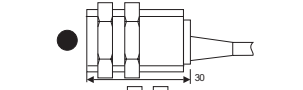
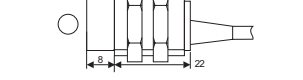
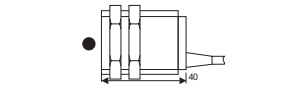
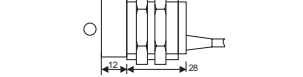
	taste-afstand	taste-frekvens	føler-materiale	funktion	typenummer NO udgang	typenummer NC udgang	stik type	
 Ø 34 mm 80	20 mm	300Hz	PVC	NPN	INHT 3412	INHT 3413		
				PNP	INHT 3414	INHT 3415		
	20 mm	25 Hz	PVC	AC	INHT 3438	INHT 3439		
 40 x 113 mm 40 113,5	15 mm	300Hz	PVC	NPN	IBHK 4012	IBHK 4019		
				PNP	IBHK 4014	IBHK 4020		
	30 mm	300 Hz	PVC	NPN	INHK 4012	INHK 4019		
				PNP	INHK 4014	INHK 4020		
	15 mm	25 Hz	PVC	AC	IBHK 4035			
	30 mm			AC	INHK 4035			
 8 x 8 mm ICDO 40 ICDM 40 3 10 20	1,5 mm	2 kHz	MS	NPN	ICDO 8812	ICDO 8813		
				PNP	ICDO 8814	ICDO 8815		
	1,5 mm	2 kHz	MS	NPN	ICDM 8812	ICDM 8813		
				PNP	ICDM 8814	ICDM 8815		
	 8 x 8 mm ICMD 46 9 ICMC 40 9 3 10 20	1,5 mm	2 kHz	MS	NPN	ICMD 8812	ICMD 8813	M8
					PNP	ICMD 8814	ICMD 8815	M8
1,5 mm		2 kHz	MS	NPN	ICMC 8812	ICMC 8813	M8	
				PNP	ICMC 8814	ICMC 8815	M8	
 40 x 26 x 12 mm 40 26 12		2 mm	2 kHz	PVC	NPN	IBHE 5212	IBHE 5213	
					PNP	IBHE 5214	IBHE 5215	
	4 mm	2 kHz	PVC	NPN	INHE 5212	INHE 5213		
				PNP	INHE 5214	INHE 5215		
	 50 x 25 x 10 mm 25 50	5 mm	800 Hz	PVC	NPN	IBHT 6012	IBHT 6013	
					PNP	IBHT 6014	IBHT 6015	
8 mm		400 Hz	PVC	NPN	INHT 6012	INHT 6013		
				PNP	INHT 6014	INHT 6015		

Ringaftastere:

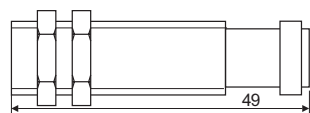
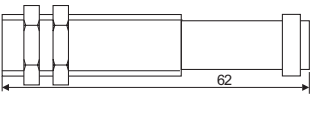
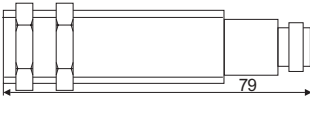
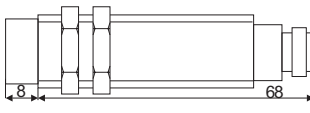
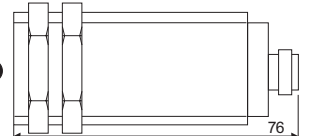
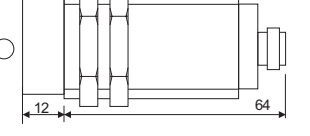
Følere med hul, som benyttes til at detektere emner, som føres gennem hullet i føleren.

Bemærk: min. emnestørrelse er angivet med en stålkugle, ved andre materialer er denne værdi højere.

	huldiameter	min. enme	tastefrekvens	funktion	typenummer
 106 x 73,5 x 24 mm, med kabel	Ø43	Ø9	500 Hz	PNP-NO	IRHE 0414
 190 x 90 x 40 mm, med stik	Ø50	Ø3	300 Hz	PNP NO/NC	IRRI 0520
	Ø50	Ø3	300 Hz	NPN NO/NC	IRRI 0519

	taste afstand	taste- frekvens	føler- materiale	funktion	typenummer NO udgang	typenummer NC udgang	stik type
Ø 6,5 x 25 mm  	1,5 mm	5 kHz	MS/ PVC	NAMUR	ICBA 6508		
	2,0 mm	5 kHz	MS/ PVC	NAMUR	INBA 6508		
M 8 x 25 mm  	1,5 mm	5 kHz	MS/ PVC	NAMUR	ICAA 0808		
	2,0 mm	5 kHz	MS/ PVC	NAMUR	INAA 0808		
M 12 x 30 mm  	2 mm	2 kHz	MS/ PVC	NAMUR	IBAT 1208		
	4 mm	1 kHz	MS/ PVC	NAMUR	INAT 1208		
M 18 x 30 mm  	5 mm	1 kHz	MS/ PVC	NAMUR	IBAT 1808		
	8 mm	1 kHz	MS/ PVC	NAMUR	INAT 1808		
M 30 x 40 mm  	10 mm	500 Hz	MS/ PVC	NAMUR	IBAT 3008		
	15 mm	500 Hz	MS/ PVC	NAMUR	INAT 3008		

Aftastere med forlænget tasteafstand.

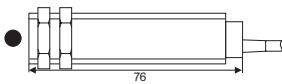
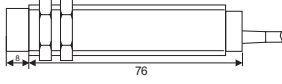
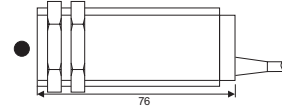
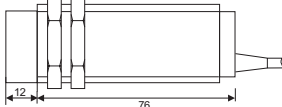
	tasteafstand	taste-frekvens	føler-materiale	funktion	typenummer NO udgang	typenummer NC udgang	stik type
M 12 x 49 mm 	4,0 mm	500 Hz	MS/ PVC	NPN	IK4LI 1212	IK4LI 1213	M12
				PNP	IK4LI 1214	IK4LI 1215	M12
M 12 x 62 mm 	10,0 mm	500 Hz	MS/ PVC	NPN	IP10LI 1212	IP10LI 1213	
				PNP	IP10LI 1214	IP10LI 1215	
M 18 x 79 mm 	8,0 mm	500 Hz	MS/ PVC	NPN	IB8LI 1812	IB8LI 1813	M12
				PNP	IB8LI 1814	IB8LI 1815	M12
M 18 x 68 mm 	20,0 mm	100 Hz	MS/ PVC	NPN	IN20LI 1812	IN20LI 1813	M12
				PNP	IN20LI 1814	IN20LI 1815	M12
M 30 x 76 mm 	15 mm	300 Hz	MS/ PVC	NPN	IB15LI 3012	IB15LI 3013	M12
				PNP	IB15LI 3014	IB15LI 3015	M12
M 30 x 64 mm 	40 mm	100 Hz	MS/ PVC	NPN	IN40LI 3012	IN40LI 3013	M12
				PNP	IN40LI 3014	IN40LI 3015	M12

Aftastere for højtemperatur.

Disse aftastere, som alle er udført i rustfrit stål, er specielt velegnet til anvendelse, hvor omgivelsestemperaturen er højere end de 70°C, som er den maksimale værdi for de øvrige aftastertyper.

Fælles tekniske data:

Forsyningsspænding:	10-30 VDC
Eget strømforbrug:	< 15 mA
Max. belastning:	120 mA
Restspænding, aktiveret:	< 2,5 V
Hysterese:	< 15%
Temperaturdrift:	< 10%
Tæthed, med kabel:	IP67

	taste afstand	taste-frekvens	føler-materiale	tilslutning	temp. område	funktion	typenummer.
M18 x 76 mm  	5 mm	200 Hz	Rustfrit stål	kabel	-40 - +180°C	PNP-NO	IBAC 1814
	8 mm	150 Hz	Rustfrit stål	kabel	-40 - +180°C	PNP-NO	INAC 1814
M30 x 76 mm  	10 mm	100 Hz	Rustfrit stål	kabel	-40 - +180°C	PNP-NO	IBAC 3014
	15 mm	500 Hz	Rustfrit stål	kabel	-40 - +180°C	PNP-NO	INAC 3014

Specielle aftastere:

Foruden de aftastere, som er vist i dette katalog, fremstiller Schönbuch Sensor et større antal specielle aftastere, som f.eks.

- Trykfaste
- Svejsefaste
- Helmetal

De er velkommen til at kontakte os, hvis De ønsker yderligere oplysninger om specialtyper.