

Industrial encoders incremental

Size up to ø58 mm

Size (ø)	Precise optical sensing	Robust magnetic sensing	Solid shaft	Blind hollow shaft	Through hollow shaft	TTL / RS422	HTL / push-pull	Pulses per revolution	≤ 5000	> 5000	Programmable	Product family	Page
24 mm	■		■			■	■					ITD 01 B14	6
24 mm	■			■		■	■					ITD 01 A4	6
30 mm	■		■			■	■					BDK 16	6
40 mm	■			■	■	■	■					BHK 16	6
30 mm		■	■			■	■					BRIV 30	7
30 mm		■	■			■	■					BRIV 30R	7
40 mm		■		■		■	■					BRIH 40	7
58 mm	■		■			■	■					EIL580-SC	8
58 mm	■		■			■	■					EIL580P-SC	8
58 mm	■					■	■					EIL580-SY	8
58 mm	■		■			■	■					EIL580P-SY	8
58 mm	■			■		■	■					EIL580-B	8
58 mm	■			■		■	■					EIL580P-B	8
58 mm	■				■	■	■					EIL580-T	8
58 mm	■				■	■	■					EIL580P-T	8
58 mm		■	■			■	■					BRIV 58K	9
58 mm		■	■			■	■					BRIV 58S	9
58 mm		■		■		■	■					BRIH 58S	9
58 mm		■			■	■	■					BRID 58S	9



Large hollow shaft

Size (ø max.)	Through hollow shaft	TTL / RS422	HTL / push-pull	Pulses per revolution	≤ 5000	> 5000	Programmable	Product family	Page
25 mm	■	■	■		■			ITD 40	10
27 mm	■	■	■		■			ITD 41	10
25.4 mm	■	■	■					HS35F	10
25.4 mm	■	■	■		■			HS35P	10
50 mm	■	■	■		■			ITD61H00	11
65 mm	■	■	■		■			ITD 70	11
85 mm	■	■	■		■			ITD 75	11



Sine/Cosine

Size (ø)	Through hollow shaft	Sine waves per revolution	≤ 2048	> 2048	Option: SiL	Product family	Page
58 mm	■		■			ITD22H00	12
80 mm	■		■			HS35S	12
80 mm	■			■		ITD 42 A4 Y79	12



Industrial encoders incremental

Inch size / square flange

Size (ø)	Inch size	Solid shaft	Blind hollow shaft	Through hollow shaft	TTL/RS422	HTL/push-pull	Programmable	Product family	Page
2.5x2.5"	■	■			■	■		EIL580-SQ	14
2.5x2.5"	■	■			■	■	■	EIL580P-SQ	14
2.28"	■		■		■	■		EIL580-B	14
2.28"	■		■		■	■	■	EIL580P-B	14
2.28"	■		■		■	■		EIL580-T	14
2.28"	■		■		■	■	■	EIL580P-T	14
3.15"	■		■		■	■		HS35F	14
3.15"	■		■		■	■	■	HS35P	14



EURO flange B10

Size (ø)	EURO flange B10	Solid shaft	TTL/RS422	HTL/push-pull	Pulses per revolution	≤5000	>5000	Programmable	Product family	Page
58 mm	■	■	■	■		■			EIL580-S1	15
58 mm	■	■	■	■		■		■	EIL580P-S1	15
82 mm	■	■		■					ITD 40 B10	15
82 mm	■	■		■		■			ITD 41 B10	15



Industrial encoders absolute

Size up to ø36 mm

Size (ø)	Solid shaft	Blind hollow shaft	Singleturn	Multiturn	SSI	Analog	CANopen*	CANopen* redundant	CANopen* Lift	SAE J1939	Corrosion protection CX (C5-M)	Product family	Page
28 mm	■		■			■	■	■				EAM280	18
36 mm	■		■	■		■		■				EAM360-SW	18
36 mm	■		■	■		■		■	■			EAM360R-SW	18
36 mm		■	■	■		■		■				EAM360-B	18
36 mm		■	■	■		■		■	■			EAM360R-B	19



Size ø58 mm - robust magnetic sensing

Size (ø)	Solid shaft	Blind hollow shaft	Singleturn	Multiturn	Integrated interface	Flexible bus cover	SSI	Analog	CANopen*	CANopen* redundant	CANopen* Lift	Profinet	SAE J1939	EtherCAT / EtherNet/IP	Profibus	Corrosion protection CX (C5-M)	Product family	Page
58 mm	■		■	■			■		■	■							EAM580-S	20
58 mm	■		■	■			■		■	■							EAM580R-S	20
58 mm		■	■	■			■		■	■							EAM580-B	20
58 mm		■	■	■			■		■	■							EAM580R-B	20
58 mm	■		■	■			■		■	■							BMMV 58 hermetic	21
58 mm	■		■	■			■		■	■							BMMV 58 hermetic	21



Industrial encoders absolute

Size \varnothing 58 mm - precise optical sensing

Size (\varnothing)	Solid shaft	Blind hollow shaft	Through hollow shaft	Multiturn	Singleturn	Resolution up to 18 bit per turn	SSI / SSI + Incremental	CANopen*	EtherCAT	EtherNet/IP	Profinet	Product family	Page
58 mm	■			■				■	■	■		EAL580-SC	22
58 mm	■			■				■	■	■		EAL580-SV	22
58 mm		■		■				■	■	■		EAL580-B	22
58 mm			■	■				■	■	■		EAL580-T	22
58 mm	■			■								GM400	23
58 mm	■			■								GM401	23
58 mm	■			■								GA240	23
58 mm	■			■								GA241	23
58 mm		■		■								GXM2S	23
58 mm		■		■								GXA2S	23
58 mm			■	■								G0M2H	23
58 mm			■	■								G0A2H	23
58 mm			■	■								G0P5H	23
58 mm	■			■								GXP5W	23
58 mm	■			■								G XU5W	23
58 mm		■		■								GXP5S	23
58 mm	■			■								GBM2W	23
58 mm	■			■								GBA2W	23
58 mm		■		■								GBM2S	23
58 mm		■		■								GBA2S	23
58 mm			■	■								GBM2H	23
58 mm			■	■								GBA2H	23



Large hollow shaft

Hollow shaft (\varnothing max.)	Multiturn	Integrated interface	Modular bus cover	SSI / SSI + Incremental	CANopen*	Profibus-DP	Product family	Page
25.4 mm	■	■		■			G1M2H	24
50.8 mm	■	■		■			G2M2H	24
25.4 mm	■		■	■	■		G1MMH	24
50.8 mm	■		■	■	■		G2MMH	24



HeavyDuty encoders incremental

Size up to $\varnothing 120$ mm / solid shaft

Size (\varnothing)	Shaft (\varnothing max.)	TTL/RS422	HTL/push-pull	HTL-P/Power	LWL	EURO flange B10	Terminal box	Redundant sensing	EMS	Ex II 3G/3D (ATEX)	Ex II 2G (ATEX/IECEX)	Product family	Page
115 mm	11 mm	■	■	■	■	■	■	■	■	■	■	POG 86E	28
115 mm	11 mm	■	■	■	■	■	■	■	■	■	■	POG 86	28
115 mm	11 mm	■	■	■	■	■	■	■	■	■	■	OG 9	28
115 mm	11 mm	■	■	■	■	■	■	■	■	■	■	POG 9	28
115 mm	11 mm	■	■	■	■	■	■	■	■	■	■	POG 90	29
115 mm	11 mm	■	■	■	■	■	■	■	■	■	■	POG 10	29
115 mm	11 mm	■	■	■	■	■	■	■	■	■	■	POG 11	29
120 mm	11 mm	■	■	■	■	■	■	■	■	■	■	EEx OG 9	29



Size up to $\varnothing 105$ mm / hollow shaft

Size (\varnothing)	Hollow shaft (\varnothing max.)	TTL/RS422	HTL/push-pull	HTL-P/Power	LWL	EURO flange B10	Terminal box	Redundant sensing	EMS	Ex II 3G/3D (ATEX)	Product family	Page
60 mm	12 mm	■	■	■	■	■	■	■	■	■	HOG 71	30
99 mm	16 mm	■	■	■	■	■	■	■	■	■	HOG 86E	30
99 mm	16 mm	■	■	■	■	■	■	■	■	■	HOG 86	30
97 mm	16 mm	■	■	■	■	■	■	■	■	■	HOG 9	31
105 mm	20 mm	■	■	■	■	■	■	■	■	■	HOG 10	31
105 mm	20 mm	■	■	■	■	■	■	■	■	■	HOG 11	31
105 mm	20 mm	■	■	■	■	■	■	■	■	■	HOG 100	31



Large hollow shaft

Size (\varnothing)	Hollow shaft (\varnothing max.)	TTL/RS422	HTL/p/Power	LWL (Outdoor-Box)	Terminal box	Redundant sensing	Ex II 3G/3D (ATEX)	Product family	Page
130 mm	36 mm	■	■	■	■	■	■	HOG 131	32
158 mm	38 mm	■	■	■	■	■	■	HOG 16	32
158 mm	75 mm	■	■	■	■	■	■	HOG 163	32
165 mm	25 mm	■	■	■	■	■	■	HOG 165	32
227 mm	115 mm	■	■	■	■	■	■	HOG 220	33
227 mm	115 mm	■	■	■	■	■	■	HOG 22	33
287 mm	150 mm	■	■	■	■	■	■	HOG 28	33



Sine/Cosine

Size (\varnothing)	Shaft (\varnothing max.)	Solid shaft	Hollow shaft	EURO flange B10	Terminal box	Ex II 3G/3D (ATEX)	Product family	Page
115 mm	11 mm	■	■	■	■	■	POGS 90	34
60 mm	14 mm	■	■	■	■	■	HOGS 71	34
105 mm	20 mm	■	■	■	■	■	HOGS 100	35
158 mm	75 mm	■	■	■	■	■	HOGS 14	35
168 mm	70 mm	■	■	■	■	■	HOGS 151	35



HeavyDuty encoders absolute

Size up to ø115 mm

Size (ø)	SSI	CANopen*	DeviceNet	Profibus-DP	EtherCAT	EtherNet/IP	Profinet	EURO-flange B10	Terminal box	Ex II 3G/3D (ATEX) Programmable	Product family	Page
115 mm	■	■	■	■	■	■	■	■	■	■	PMG 10	36
115 mm	■	■	■	■	■	■	■	■	■	■	PMG 10P	36
105 mm	■	■	■	■	■	■	■	■	■	■	HMG 10	36
105 mm	■	■	■	■	■	■	■	■	■	■	HMG 10P	36



PMG 10
PMG 10P

HMG 10
HMG 10P

Size up to ø160 mm

Size (ø)	SSI	CANopen*	DeviceNet	Profibus-DP	Terminal box	Ex II 3G/3D (ATEX) Programmable	Product family	Page
160 mm	■	■	■	■	■	■	HMG 161	37



HMG 161

HeavyDuty speed switches / monitors

Mechanical / electronic

Size (ø)	Mechanical	Electronic	Solid shaft	Switching outputs	EURO flange B10	Terminal box	Product family	Page
115 mm	■	■	1	■	■	■	FS 90	38
115 mm	■	■	1	■	■	■	ES 90	38
115 mm	■	■	3	■	■	■	ES 93	38



FS 90

ES 90
ES 93

Digital / Stand-alone

Size	Digital/progr.	Switching outputs	Surface mount	Product family	Page
122 mm	■	3	■	DS 93	39
75 mm	■	3	■	DS 93 R	39
100 mm	■	4	■	GMM2xxS	39



DS 93

DS 93 R

GMM2xxS

Digital / encoder-integrated / incremental

Size (ø)	Digital/progr.	Solid shaft	Hollow shaft	TTL/RS422	HTL/push-pull	Switching outputs	EURO flange B10	Terminal box	Ex II 3G/3D (ATEX) Programmable	Product family	Page
105 mm	■	■	■	■	2	■	■	■	■	HOG 10 + DSL.E	40
105 mm	■	■	■	■	3	■	■	■	■	HOG 10 + DSL.R	40
165 mm	■	■	■	■	2	■	■	■	■	HOG 165 + DSL.E	40
165 mm	■	■	■	■	3	■	■	■	■	HOG 165 + DSL.R	40
120 mm	■	■	■	■	2	■	■	■	■	POG 10 + DSL.E	41
120 mm	■	■	■	■	3	■	■	■	■	POG 10 + DSL.R	41



HOG 10 + DSL.E
HOG 10 + DSL.R

HOG 165 + DSL.E
HOG 165 + DSL.R

POG 10 + DSL.E
POG 10 + DSL.R

Digital / encoder-integrated / absolute

Size (ø)	Solid shaft	Hollow shaft	SSI	CANopen*	DeviceNet	Profibus-DP / Profinet	EtherCAT / EtherNet/IP	HTL/ITL	Relay output	Transistor output	EURO flange B10	Programmable	Product family	Page
115 mm	■	■	■	■	■	■	■	■	■	■	■	■	PMG 10D	42
105 mm	■	■	■	■	■	■	■	■	■	■	■	■	HMG 10D	42
115 mm	■	■	■	■	■	■	■	■	■	■	■	■	PMG 10PD	42
105 mm	■	■	■	■	■	■	■	■	■	■	■	■	HMG 10PD	42




PMG 10D
PMG 10PD


HMG 10D
HMG 10PD

HeavyDuty tachogenerators


Size (ø)	Solid shaft	EURO flange B10	Terminal box	Product family	Page
115 mm	■	■		GTF 7.08	44
115 mm	■	■		GTF 7.16	44
85 mm	■	■	■	TDP 0,09	44
85 mm	■	■	■	TDPZ 0,09	44
115 mm	■	■	■	TDP 0,2	44
115 mm	■	■	■	TDPZ 0,2	44
175 mm	■	■	■	TDP 13	44
175 mm	■	■	■	TDPZ 13	44




GTF 7.08



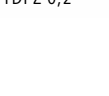
GTF 7.16



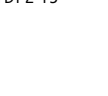
TDP 0,09




TDPZ 0,09




TDP 0,2



TDPZ 0,2



TDP 13



TDPZ 13

Size (ø)	Hollow shaft	Bearingless	Product family	Page
52 mm	■	■	GT 5	46
85 mm	■	■	GT 7.08	46
85 mm	■	■	GT 7.16	46
89 mm	■	■	GT 9	46
95 mm	■	■	GTB 9.06	46
95 mm	■	■	GTB 9.16	46
95 mm	■	■	GTR 9	47
86 mm	■		KTD 4	47



GT 5



GT 7.08



GT 7.16



GT 9



GTB 9.06



GTB 9.16



GTR 9




KTD 4


HeavyDuty combinations

Incremental twin encoders


Size (ø)	Solid shaft	Hollow shaft	TTL/RS422	HTL push-pull	EURO flange B10	Terminal box	Redundant sensing	EMS	Ex II 3G/3D (ATEX)	Corrosion protection CX (C5-M)	Product family	Page
115 mm	■		■	■	■	■	■	■			POG 86 G	48
115 mm	■		■	■	■	■	■	■			POG 9 G	48
115 mm	■		■	■	■	■	■	■			POG 10 G	48
115 mm	■		■	■	■	■	■	■			POG 11 G	48
97 mm		■	■				■	■			HOG 9 G	48
105 mm		■	■	■			■	■			HOG 10 G	48
105 mm		■	■	■			■	■			HOG 11 G	48




POG 86 G



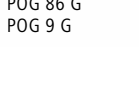
POG 9 G



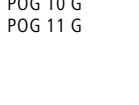
POG 10 G




POG 11 G



HOG 9 G



HOG 10 G



HOG 11 G

HeavyDuty combinations

Tachogenerators

Size (ø)	Centrifugal switch (FSL)	Speed switch (ESL)	Incremental encoder	Solid shaft	EURO Flange B10	Terminal box	Product family	Page
85 mm	■		■	■	■		TDP 0.09 + FSL	49
115 mm	■		■	■	■		TDP 0.2 + FSL	49
115 mm	■		■	■	■		TDPZ 0.2 + FSL	49
115 mm		■	■	■	■		TDP 0.2 + ESL	49
115 mm		■	■	■	■		TDPZ 0.2 + ESL	49
115 mm			■	■	■	■	TDP 0.2 + OG9	49



Incremental encoders with speed switch

Size (ø)	Incremental	Mechanical (FSL)	Electronic (ESL)	Solid shaft	Blind hollow shaft	TTL / RS422	HTL/push-pull	Product family	Page
115 mm	■	■		■	■	■		POG 86 + FSL	50
115 mm	■	■		■	■	■		POG 9 + FSL	50
115 mm	■		■	■	■	■		POG 9 + ESL	50
115 mm	■	■		■	■	■		POG 10 + FSL	50
115 mm	■		■	■	■	■		POG 10 + ESL	50
115 mm	■	■		■	■	■		POG 11 + FSL	50
115 mm	■		■	■	■	■		POG 11 + ESL	50
99 mm	■	■		■	■	■		HOG 86 + FSL	51
105 mm	■	■		■	■	■		HOG 10 + FSL	51
105 mm	■		■	■	■	■		HOG 10 + ESL	51
105 mm	■	■		■	■	■		HOG 11 + FSL	51
105 mm	■		■	■	■	■		HOG 11 + ESL	51



Bearingless encoders

Incremental

Size (ø max.)	TTL / RS422	HTL/push-pull	SimCos 1 Vpp	DNV certification	Product family	Page
47.8 mm	■	■			MDFK 08	54
47.8 mm	■	■			MIR 10	54
45 mm		■			ITD 67	54
28 mm	■	■			ITD49H	54
28 mm			■		ITD49H Sine	54
65 mm	■	■			ITD69H	55
65 mm			■		ITD69H Sine	55
140 mm	■	■			ITD89H	55
140 mm			■		ITD89H Sine	55
80 mm	■	■	■	■	MHGE 100	56
180 mm	■	■	■	■	MHGE 200	56
340 mm	■	■	■	■	MHGE 400	56
740 mm	■	■	■	■	MHGE 800	56
80 mm	■	■	■		MHGP 100	57
180 mm	■	■	■		MHGP 200	57
340 mm	■	■	■		MHGP 400	57



Bearingless encoders

Absolute

	Hollow shaft (ø max.)	Absolute Singleturn	Absolute Multiturn	SSI	Analog	CANopen*	SAE J1939	EtherCAT / EtherNet/IP	Powerlink / Profinet	TTL/RS422	HTL/push-pull	SinCos 1 Vpp	Corrosion protection CX (C5-M)	Product family	Page
12 mm	■	■	■		■									EAM360 Kit	58
12 mm	■	■		■	■	■								EAM360R Kit	58
12 mm	■	■	■		■		■	■						EAM580 Kit	58
12 mm	■	■		■	■	■								EAM580R Kit	58
8 mm	■			■	■									EAM500	59
8 mm	■		■											BMSK 55	59
30 mm	■		■		■			■	■					MHAD 50	60
80 mm	■		■					■	■	■				MHAP 100	60
180 mm	■		■					■	■	■				MHAP 200	60
340 mm	■		■					■	■	■				MHAP 400	60



For large shaft diameters

	Hollow shaft (ø max.)	Incremental	Quasi-absolute	TTL/RS422	HTL/ push-pull	HTL-Pi/Power LineDriver	SinCos 1 Vpp	Product family	Page
180 mm	■		■	■	■			MIR 350F	61
3183 mm	■		■	■	■			MIR 3000F	61
340 mm		■	■	■		■		MQR 350F	61
3183 mm		■	■	■	■			MQR 3000F	61



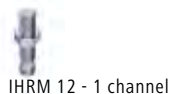
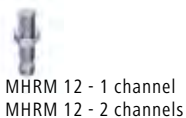
Analog magnetic rotary encoders

	Sensor housing M18x1	Sensor housing rectangular	Angular range 360°	Angular range 270°	Current output	Voltage output	Product family	Page
■			■	■			MDRM 18	62
■		■			■		MDRM 18	62
	■		■	■			MDFM 20	63
	■	■				■	MDFM 20	63



Hall / speed sensors

	Size M12	Size M18	Switching frequency 0...15 kHz	Switching frequency 0...20 kHz	Push-pull output	PNP output	Product family	Page
■		■		■			MHRM 12 - 1 channel	66
■		■		■			MHRM 12 - 2 channels	66
■		■			■		IHRM 12 - 1 channel	66
	■				■		MHRM 18 - 1 channel	66



Programmable encoders

	Size (ø)	Solid shaft	Blind hollow shaft	Through hollow shaft	Configurable parameters	Pulses per revolution	Output signal level	Zero pulse	TTL/RS422	HTL/ push-pull	Pulses per revolution	Product family	Page
58 mm	■	■	■	■					■	■	■	EIL580P	70
80 mm				■					■	■	■	HS35P	71
105 mm	■								■	■	■	PMG 10P	71
115 mm			■	■					■	■	■	HMG 10P	71



For special applications

Encoders for hazardous environments

Size (ø)	Ex II 2G (ATEX/IECEx)	Ex II 2D/2G (ATEX)	Ex II 3D (ATEX)	Incremental	Absolute	Solid shaft	Hollow shaft	Programmable	TTL/RS422	HTL/ push-pull	SinCos 1 Vpp	SSI	CANopen*	Profibus-DP	Product family	Page
120 mm	■			■	■			■	■						EEx OG 9	74
115 mm	■			■	■					■					EEx OG 9 S	74
160 mm	■			■	■	■		■	■						EEx HOG 161	74
58 mm		■		■	■	■		■	■						ExEIL580	74
58 mm		■		■	■	■	■	■	■						ExEIL580P	74
70 mm			■	■	■			■	■						X 700 - incremental	75
70 mm			■	■	■						■				X 700 - SSI	75
70 mm			■	■	■							■			X 700 - CANopen*	75
70 mm			■	■	■								■		X 700 - Profibus-DP	75



Redundant absolute encoders

Size (ø)	Solid shaft	Hollow shaft	Bearingless encoder	Analog redundant	CANopen* redundant	Corrosion protection CX (C5-M)	Product family	Page
28.6 mm	■		■	■			EAM280	76
50 mm		■	■	■			EAM500	76
58 mm	■	■		■	■		EAM580R	76



SIL encoders incremental

Size	SIL3	SIL2	Solid shaft	Hollow shaft	TTL/RS422	HTL/ push-pull	SinCos 1 Vpp	Product family	Page
ø58 mm		■	■		■	■		EIL576S-S	77
ø58 mm	■	■		■				EIL576S-T	77
ø58 mm		■		■	■	■		HOGS 100S	77
100 mm	■			■	■			GMM2xxS	77



Stainless steel encoders / incremental

Size (ø)	Stainless steel 1.4305	Stainless steel 1.4404	Solid shaft	Hollow shaft	TTL/RS422	HTL/ push-pull	SinCos 1 Vpp	Product family	Page
58 mm	■		■	■	■			GE333	78
58 mm	■		■	■	■			GE355	78
58 mm		■	■	■	■			GF355	78
68 mm	■		■	■	■			ITD21 A4 Y65	78
89 mm	■		■	■	■			ITD 41 A4 Y141	78
89 mm	■		■	■	■			ITD 42 A4 Y141	78



Stainless steel encoders / absolute

Size (ø)	Stainless steel 1.4305	Stainless steel 1.4404	Stainless steel 1.4435	Solid shaft	SSI	CANopen*	Profibus-DP	SAE J1939	EtherNet/IP	Profinet	Product family	Page
58 mm		■	■	■	■						GE244	79
58 mm	■			■	■						GE404	79
58 mm	■			■		■	■	■	■		GEMMW	79
58 mm	■			■		■	■	■	■		GEMMH	79
58 mm	■			■	■	■	■				BMMV 58 hermetic	79
58 mm	■			■		■	■	■	■		BMMV 58 hermetic	79



For special applications

Offshore encoders

Size (ø)	Incremental	Absolute Singleturn	Absolute Multiturn	Solid shaft	Hollow shaft	TTL/RS422	HTL-PIPower LineDriver	SinCos 1 Vpp	SSI / SSI + Incremental	CANopen*	DeviceNet	EtherCAT / EtherNet/IP	Profinet	Profibus-DP	Product family	Page
115 mm	■		■	■	■										POG 10	80
105 mm	■			■	■	■									HOG 10	80
105 mm	■			■	■	■									HOG 11	80
130 mm	■			■	■	■									HOG 131	80
100 mm	■			■	■	■	■								MHGE 100	80
813 mm	■			■	■	■	■								MHGE 800	80
58 mm		■	■					■							GM400-C	81
58 mm		■	■					■							GM401-C	81
58 mm		■	■					■							GOM2H-C	81
58 mm	■			■				■							GOA2H-C	81
105 mm	■	■		■				■	■	■	■	■	■	■	HMG 10	81
115 mm	■	■	■					■	■	■	■	■	■	■	PMG 10	81



Inclination sensors

Size	Sensing range 1-dim. / 0...360°	Sensing range 2-dim. / max. ±90°	Analog	CANopen*	SAE J1939	Corrosions protection CX (C5-M)	ISO 13849 compliant firmware	Dynamic inclination sensors	Product family	Page
45 mm	■	■	■	■					GIM140R	84
48 mm	■	■	■	■					GIM500R	84
62 mm	■	■		■			■		GIM741R	85



Acceleration sensors

Size	Redundant	SIL2/PL approval	Analog	CANopen*	Product family	Page
55 mm		■	■		GAM900	85
55 mm	■	■	■	■	GAM900S	85



Distance measurement

Cable transducers

Size	Measuring length	Absolute	SSI	Analog / redundant	CANopen* / redundant	DeviceNet	Profibus-DP / SAE J1939	EtherCAT / EtherNet/IP	Powerlink / Profinet	Product family	Page
88 mm	4.7 m	■		■	■					GCA3	88
88 mm	7.8 m	■		■	■					GCA5	88
126 mm	8 m	■		■	■					GCA8	88
126 mm	12 m	■		■	■					GCA12	88
222 mm	20 m	■		■	■					GCA20	88
58 mm	2.1 m	■	■		■	■	■	■	■	GCA2	89
96 mm	3 m	■	■		■	■	■	■	■	GCA4	89
115 mm	15 m	■	■		■	■	■	■	■	GCA15	89
200 mm	50 m	■	■		■	■	■	■	■	GCA50	89



Lineare magnetic encoders / measuring wheel encoder

Product family	Page	Product family	Page	Product family	Page
MIL10	90	MA20	91	EIL580P	91

