

Inclination sensors (analog)														page 1/2				rev3.3 20190129			
Family	QG30 E/H series			QG40 E/H series			QG40N				QG40N Redundant		QG65 / QG76 analog								
Measuring range	±10°	±30°	±90°	±10°	±30°	±90°	±10°	±30°	±90°	360°	±90°	360°	±10°	±30°	±90°	360°					
Number of axis	1			2			2		1		1		2		1						
Centering function	no			no			yes				yes		yes								
Functional safety	no			no			no				full redundant		no								
Output format	4-20mA 0.5-4,5V			4-20mA 0.5-4,5V			4-20mA / 0.5-4,5V				4-20mA		4-20mA / 0.5-4,5V (also CAN: see page 2)								
Output bandwidth	0 - 10Hz			0 - 10Hz			0 - 10Hz				0 - 10 Hz		0 - 10Hz								
Output function	sinus curve			sinus curve			lineair				lineair		lineair								
Resolution	E-series: 0,03° H-series: 0,01°			E-series: 0,03° H-series: 0,01°			0,1°				0,1°		0,01°								
Accuracy (typ. @20°C)	0,3°	0,6°	0,9° (-45° .. +45°)	0,3°	0,6°	0,9° (-45° .. +45°)	0,5°				0,5°		0,04°	0,05°	0,09° (-60 .. +60°)	0,07°					
	offset error excluded, 1° typ.			offset error excluded, 1° typ.																	
Temperature coefficient (typ.)	E-series: 0,02°/K H-series 0,01°/K			E-series: 0,02°/K H-series 0,01°/K			0,04°/K				0,04°/K		0,005°/K								
Housing material	Plastic PBTP			Plastic PBTP			Plastic PBTP				Plastic PBTB		QG65: Reinforced plastic with steel fiber QG76: Stainless steel								
Size	30x30x15mm			40x40x25mm			40x40x25mm				40x40x25		QG65: 60x50x27mm QG76: 70x60x33mm								
Temperature range	-25 .. +85°C			-40 .. +85°C			-40 .. +85°C				-25 .. +80°C		-40 .. +85°C								
Protection class	IP67			IP67, IP69K			IP67, IP69K				IP67		QG65: IP67 QG76: IP67, IP69K (IP68 with gland/cable)								
Certification	CE			CE, UL			CE, UL				CE		QG65: CE, Automotive EMC, optional UL QG76: CE, Automotive EMC, UL								
Programmable	no			no			Yes, with optional configurator				no		Yes, with optional configurator								
Connection standard	PVC cable 2m			M12 5-pole male			M12 5-pole male				2m PUR cable		M12 male 8p								
Options:	Different output formats (i.e. 0-10V), bandwidths, ranges, cables, connectors etc.																				

Inclination sensors (CAN)										page 2/2			rev3.2 20190129		
Family	QG65 / QG76 CANopen			QG65N / QG76N CANopen			QG65N / QG76N CANopen Safety SIL CL 2/PLd								
Measuring range	±30°	±90°	360°	±30°	±90°	360°	±30°	±90°	360°						
Number of axis	2		1	2		1	2		1						
Switching output	no			no			no								
Centering function	yes (CAN object dictionary)			yes (CAN object dictionary)			yes (CAN object dictionary)								
Functional safety	no			no			SIL CL 2 / PLd								
Output format	CANopen			CANopen			CANopen & CANopen Safety								
Output bandwidth	0 - 10Hz			0 - 20Hz			0 - 20Hz								
Output function	lineair			lineair			lineair								
Resolution	0,01°			0,05°			0,05°								
Accuracy (typ. @20°C)	0,05°	0,09° (-60 . . +60°)	0,07°	0,15°			0,15°								
Temperature coefficient (typ.)	0,005°/K			0,01°/K			0,01°/K								
Housing material	QG65: Reinforced plastic steel fiber filled QG76: Stainless steel														
Size	QG65: 60x50x27mm QG76: 70x60x33mm														
Temperature range	-40 . . +85°C														
Protection class	QG65: IP67 QG76: IP67, IP69K (IP68 with gland/cable)														
Certification	QG65: CE, Automotive EMC, optional UL QG76: CE, Automotive EMC, UL			QG65: CE, Automotive EMC, E4 type approval, optional UL QG76: CE, Automotive EMC, E4 type approval, UL			QG65: CE / Automotive EMC, optional: UL QG76: CE, Automotive EMC, UL								
Programmable	Yes, via CAN object dictionary														
Connection standard	M12 5p male & female (internal T-junction)														
Options:	Different CAN default settings, cable with gland, connectors etc.														