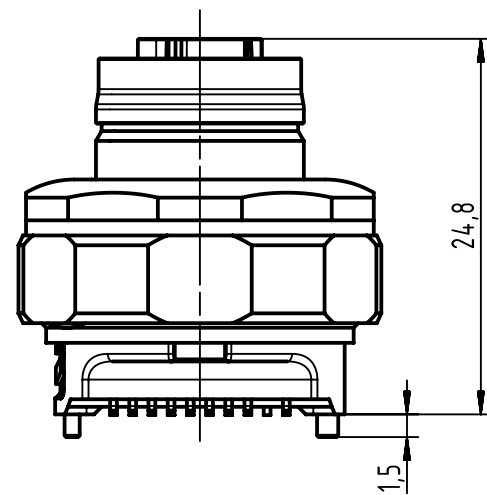
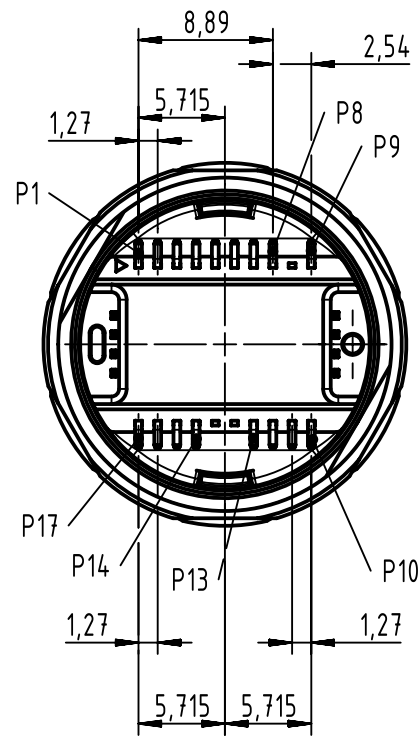
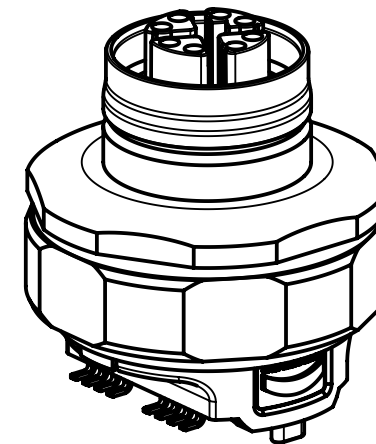
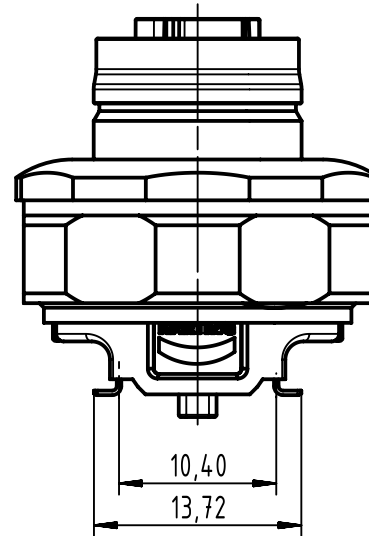
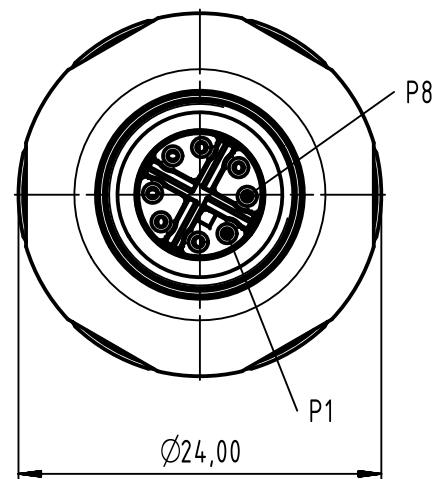




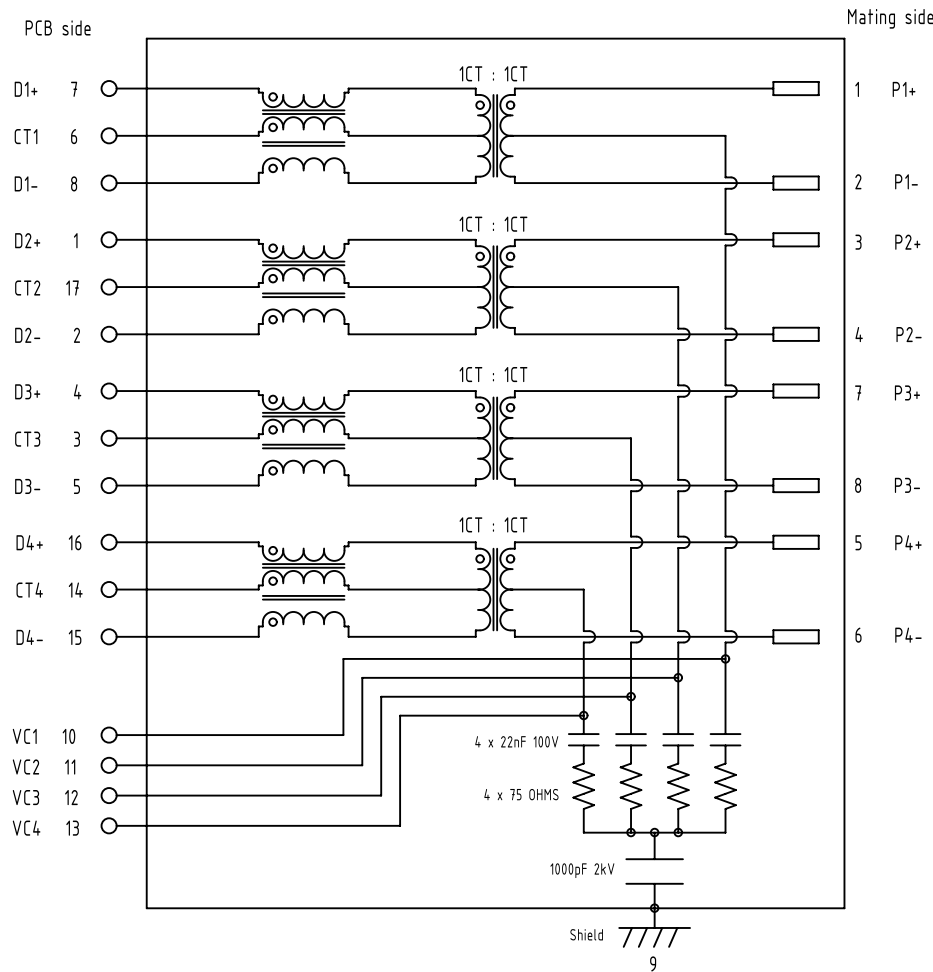
mating face based on
IEC 61076-2-109



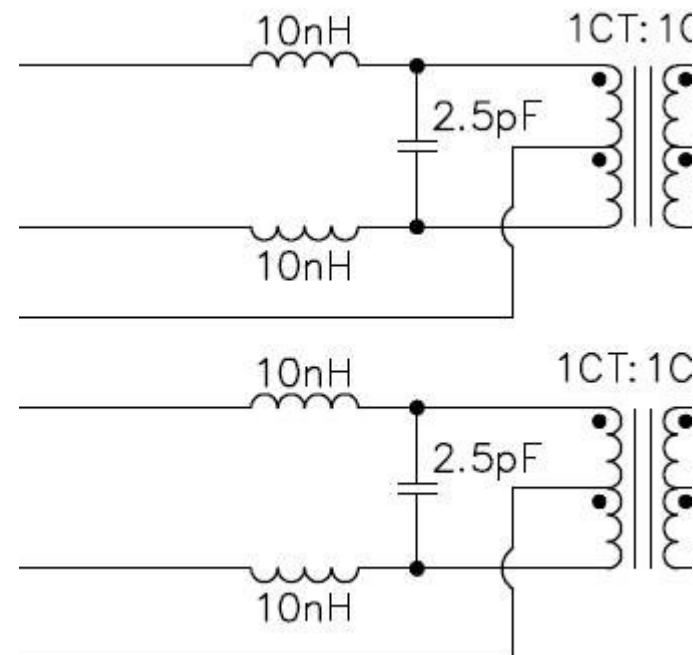
1 PC Packaging
Content: 1 x 21033812823
M12 transformer straight X-coded 10G BASE-T
1 x 21033012006
Front mounting kits

		All Dimensions in mm Original Size DIN A3		Scale 2:1		Free size tol.		Ref.	
								Sub.	
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		Department EL PD				Date 2019-05-30		State Final Release	
HARTING Electronics GmbH D-32339 Espelkamp		Title M12 WITH MAGNETICS X-CODED STRAIGHT POE+ 10GB							Doc-Key / ECM-Nr. 100684225/UGD/004/B 500000152702
		Type TB		Number 21033812825					Rev. B

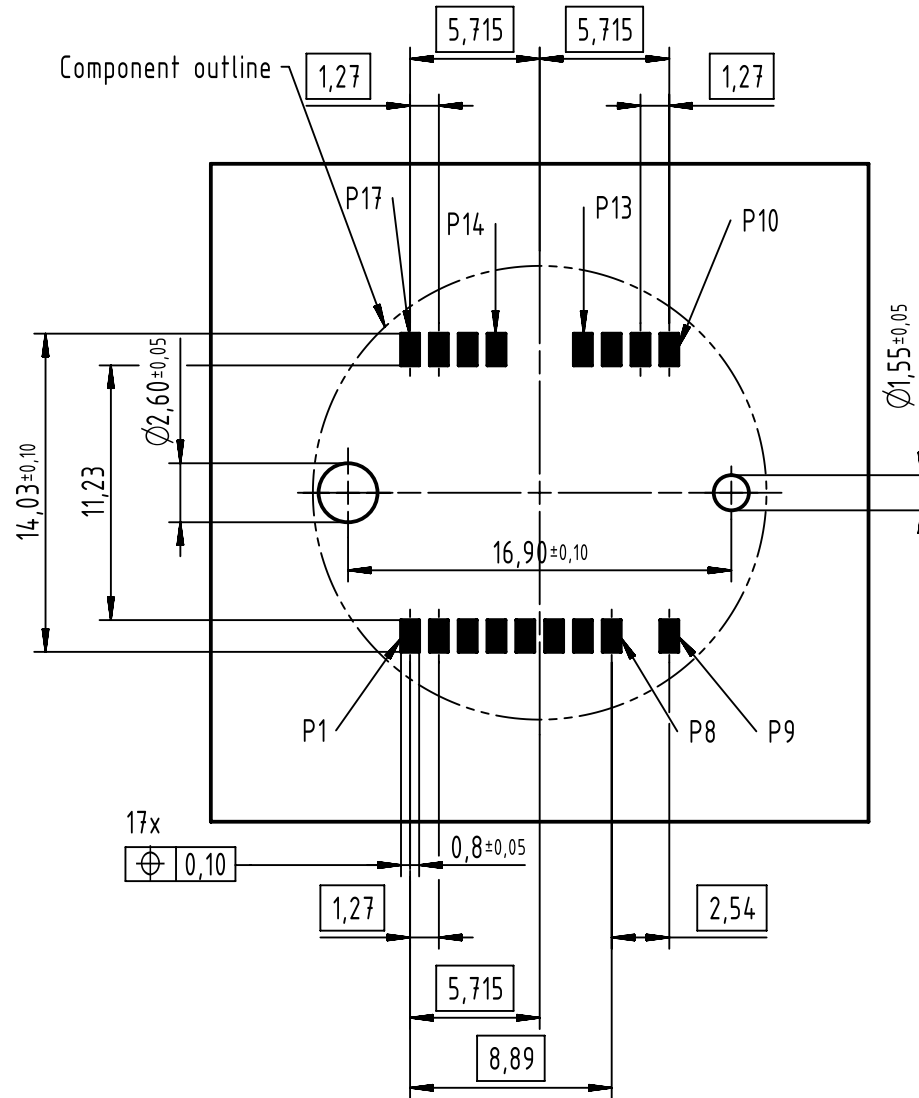
Schematic



Detail A



Recommended PCB layout



Electrical Characteristics @+25°C unless otherwise noted
Meets IEEE802.3 specification
RoHS compliant

Parameter	Specification/ Limit Values
Operating Temperature	-40°C - +85°C
Turn Ratio (+/- 2%)	1CT : 1CT
Current Capacity Pins 1-8/ VC1-VC4	750mA
OCL	min 120µH @ 100KHz , 100mV with 18mA bias current
Isolation (Input- Output)	2.25kV VDC , for 60sec. min
	0.1MHz < f ≤ 500 MHz
Insertion Loss	3.1 db
Return Loss	5 db
Crosstalk	23 db
CMRR	20 db
CDMR	20 db

NOTE: 1. f is the frequency in MHz

2. The Product has been tested for DC isolation. HARTING assumes no liability or obligation for AC isolation testing.

3. Please note that the M12 Magnetics connector generates less high frequency losses (1-3GHz) compared to an RJ45 with magnetics. In combination with Chipsets that require high frequency losses to pass the PSD test, it is recommended to add a Lowpass filtering network to the M12 10G Magnetics PCB-side for 10GBASE-t signalling (see Detail A)

	All Dimensions in mm Original Size DIN A3		Scale 2:1	Free size tol.		Ref.
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	HARTING Electronics GmbH D-32339 Espelkamp		Type TB	Number 21033812825		Rev. B Page 2/2