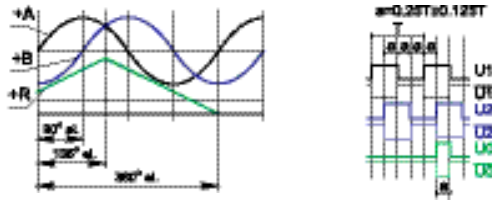




## ELECTRICAL DATA

VERSION	MPO-VP $\sim$ 1 Vpp	MPO-TT $\square$ TTL
Power supply	+5 V $\pm$ 5% < 120 mA	+5 V $\pm$ 5% / < 120 mA
Light source	LED	LED
Resolution	Depends on external subdividing electronics	0,2; 0,1 $\mu$ m (after 4-fold dividing in subsequent electronics)
Incremental signals	Differential sine +A/-A and +B/-B Amplitude at 120 $\Omega$ load: - A = 0.6-1.2 V - B = 0.6-1.2 V	Differential square-wave U1/ $\overline{U1}$ and U2/ $\overline{U2}$ . Signal levels at 20 mA load current: - low (logic "0") $\leq$ 0.5 V - high (logic "1") $\geq$ 2.4 V
Reference signal	One quasi-triangular +R and its complementary -R per revolution. Signals magnitude at 120 $\Omega$ load - R = 0.2-0.8 V (usable component)	One differential square-wave U0/ $\overline{U0}$ per revolution. Signal levels at 20 mA load current: - low (logic "0") < 0.5 V - high (logic "1") > 2.4 V
Maximum operating frequency	50 kHz	50x kHz, when interpolation factor is 1, 2, 5, 10 1000 kHz when interpolation factor is 25, 50
Direction of signals	B+ lags A+at reading head displacement from left to right	U2 lags U1 at reading head displacement from left to right
Standard cable length	3 m, without connector	3 m, without connector
Maximum cable length	25 m	25 m

Output signals



Note: If cable extension is used the power supply conductor section should not be smaller than 0.5 mm<sup>2</sup>.

## ACCESSORIES

CONNECTORS FOR CABLE	B12	C9	C12	D9	D15	RS10	ONC
	12-pin round connector	12-pin round connector	12-pin round connector	9-pin flat connector	15-pin flat connector	10-pin round connector	10-pin round connector

## ORDER FORM

MPO - XXX - XXXX - X / XXX - XX - X / X - X

OUTPUT SIGNALS AND RESOLUTION:	MEASURING LENGTH:	REFERENCE MARKS:	ACCURACY:	CABLE OR CONNECTOR OUTLET:	CABLE LENGTH:	CONNECTOR TYPE:	MOUNTING SPAR:
A - Sinusoidal AV - Sinusoidal F01 - TTL 0.1 $\mu$ m F02 - TTL 0.2 $\mu$ m	0070 - 70mm 0520 - 520mm .... 1240 - 2040mm	N - none RI S - standard M - every 50 mm K - distance coded Ln/XXX - nRI with 50-fold steps /XXX distance of the first RI from the beginning of ML, mm	03 - $\pm$ 3 $\mu$ m 05 - $\pm$ 5 $\mu$ m	S - version S (cable outlet) C - version C (connector outlet)	01 - 1m 02 - 2m 03 - 3m ... CP01 - 1m armoured CP02 - 2m armoured CP03 - 3m armoured ...	W - without connector B12 - round, 12 pins C9 - round, 9 pins C12 - round, 12 pins D9 - flat, 9 pins D15 - flat, 15 pins RS10 - round, 10 pins ONC - round, 10 pins	M - with mounting spar W - without mounting spar
ORDER EXAMPLE:		1) MPO-F10-0420-L1/100-05-C-03/W					

Features and specifications subject change without notice.

For more information about this or any of our products please contact us at sales@newall.com or visit www.newall.com

North America +1 614 771 0213  
Europe +44 (0) 116 264 2730  
China +82 21 2306 1560  
Taiwan +886-2-27602006 #2570