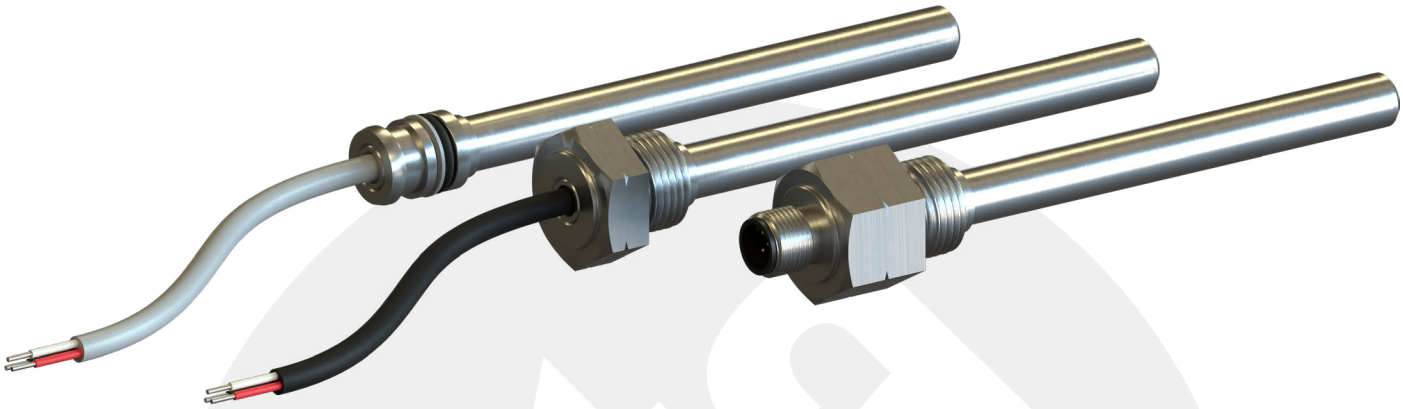
LM SERIES LINEAR TRANSDUCER DATA SHEET

High-Pressure Internally-Mounted Linear Transducers



New for LM Version 3.0

- Increased pressure rating
- Increased maximum stroke
- Improved vibration, shock, and EMC ratings

BENEFITS

- Extremely compact
- Short installation length
- High vibration, shock, and EMC ratings

ENCLOSURE

- Welded stainless steel as standard
- Ø10 mm tube
- 430 bar working pressure rating

PERFORMANCE

- Absolute signal output
- Up to 0.05 mm resolution with 0.2 mm non-linearity
- -40 to +105°C operating temperature
- Up to 5.8 metre stroke
- Solid-state, zero wear

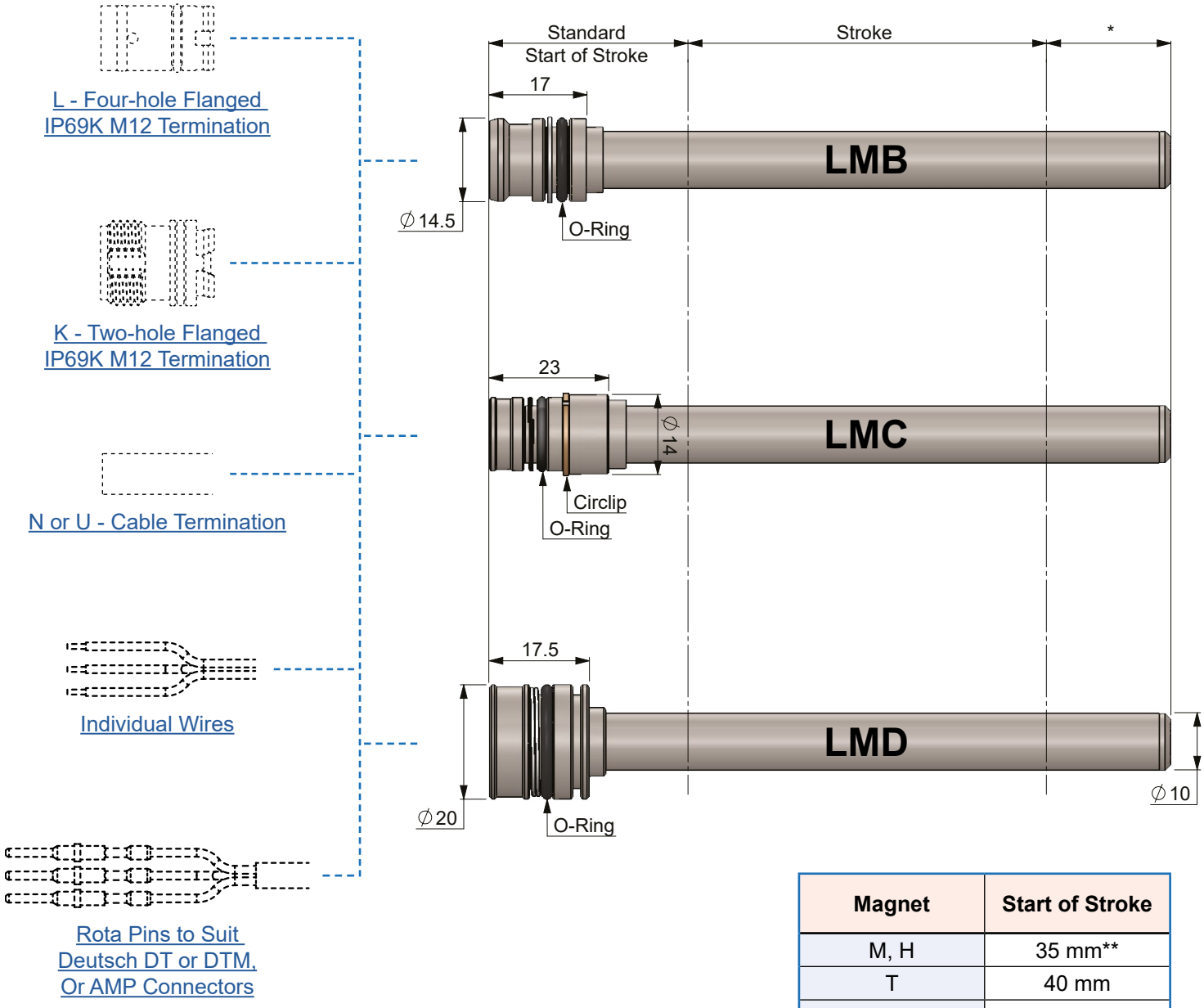
OUTPUTS

- Analog Voltage or Current options
- CANbus SAE J1939, CANopen and ISOBUS
- CANbus with speed and temperature indication

TERMINATION OPTIONS

- Deutsch DT & DTM with Rota un-mated IP69K pins
- Integrated or cable-mounted M12
- PUR or PVC cable
- Individual wires

INTERNALLY-MOUNTED OPTIONS



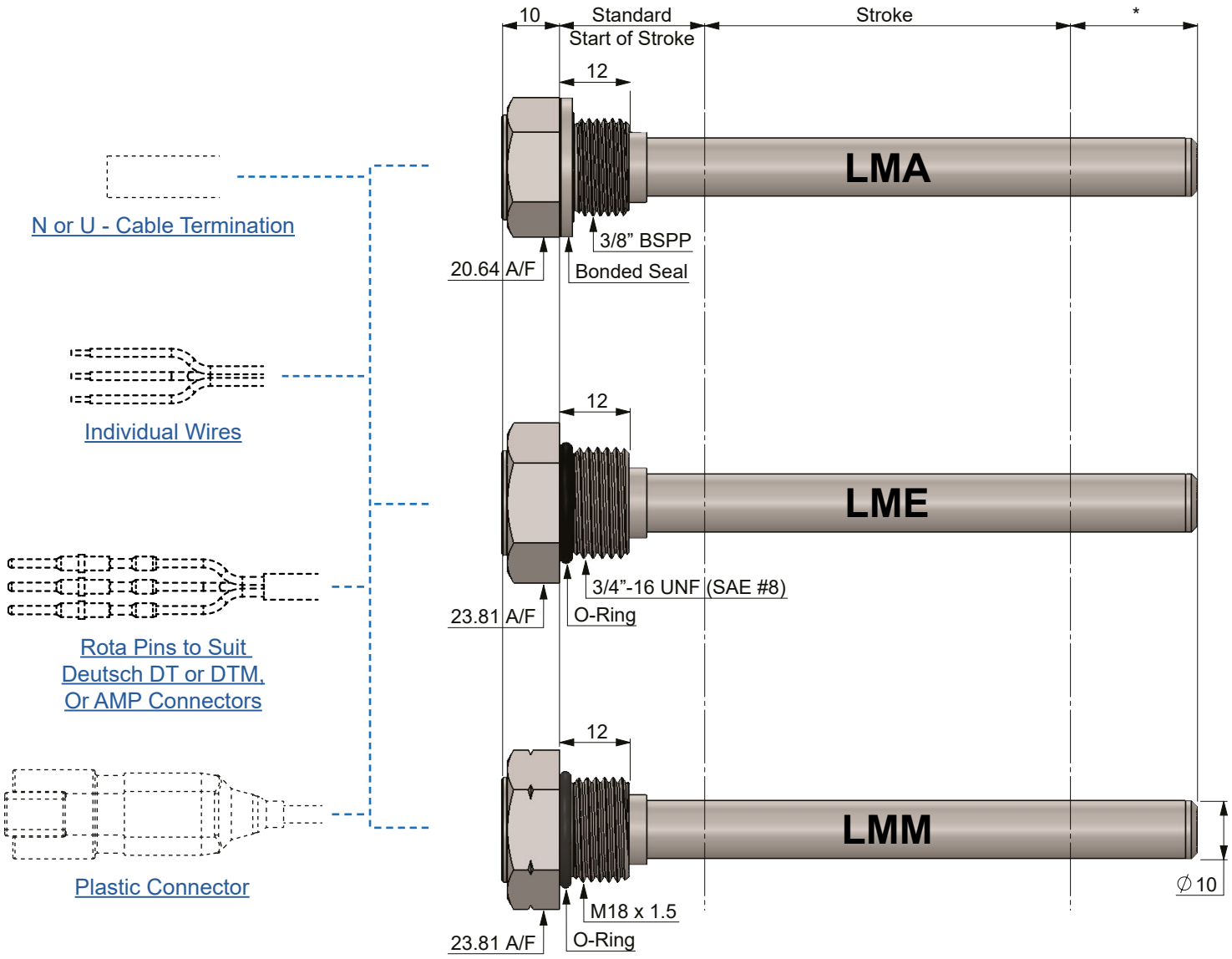
Magnet	Start of Stroke
M, H	35 mm**
T	40 mm
CT	42 mm
AT, ET	45 mm
AW, CW	65 mm

For Electrical Termination Options, Magnet Options, Machining Details, and Standard Performance Data, please see the LA Catalogue.

1 - Standard start of stroke measured to centreline of magnet.
* - Please contact Rota for this dimension.
** - Start of stroke is 2 mm shorter for strokes under 208 mm.

Subject to reasonable modifications due to technical advances

THREAD-MOUNTED OPTIONS



Magnet	Start of Stroke
M, H	25 mm**
T	30 mm
CT	32 mm
AT, ET	35 mm
AW, CW	55 mm

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1 - Standard start of stroke measured to centreline of magnet.
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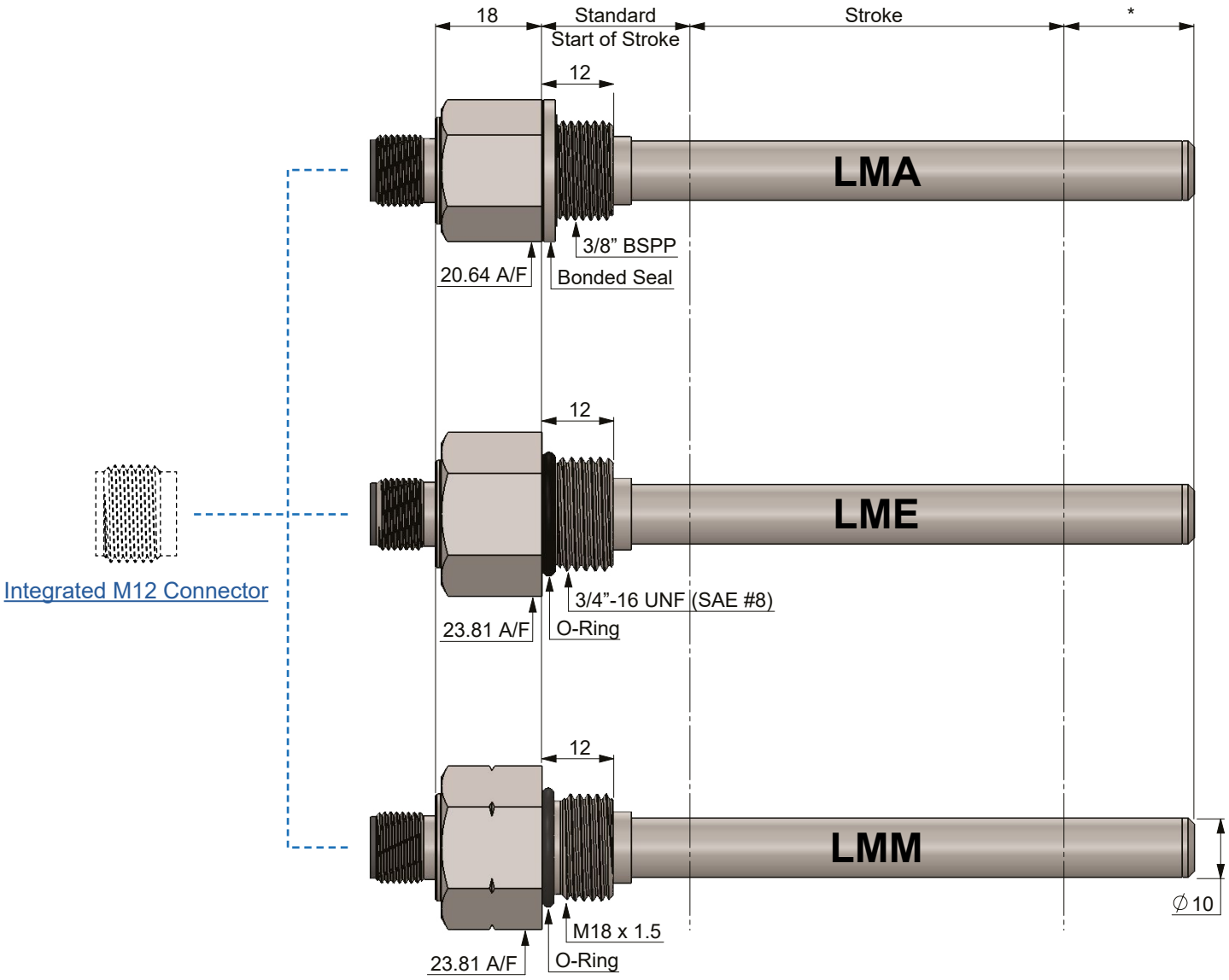
THREAD-MOUNTED OPTIONS WITH INTEGRATED M12 CONNECTOR



Magnet	Start of Stroke
M, H	25 mm**
T	30 mm
CT	32 mm
AT, ET	35 mm
AW, CW	55 mm

For Electrical Termination Options, Magnet Options, Machining Details, and Standard Performance Data, please see the LA Catalogue.

1 - Standard start of stroke measured to centreline of magnet.
* - Please contact Rota for this dimension.
** - Start of stroke is 2 mm shorter for strokes under 208 mm.

Subject to reasonable modifications due to technical advances

HOW TO ORDER

LM	B	0500	AT	0.3	A	R	-	-	N	0.5	1234

LM Series Linear Transducer

Mounting Configuration
A = 3/8" BSPP
B = M5-M6 Grubscrew
C = Clip-in
D = M5-M6 Grubscrew
E = 3/4"-16 UNF (SAE #8)
M = M18 x 1.5

Stroke (mm)

Magnet
AT = 0.3 mm resolution - high speed
AW = 0.3 mm resolution - very high speed
CT = 2.0 mm resolution - high speed
CW = 2.0 mm resolution - very high speed
ET = 0.3 mm resolution - high speed
H = 0.05 mm (CANbus) or 0.1 mm (analog) resolution
M = 0.3 mm resolution
R = Remote magnets - various resolutions
T = 0.3 mm resolution
*For non-magnetic housing please contact Rota

Signal Resolution
0.05, 0.1, 0.2, 0.3, 0.5, 2.0 mm

Output Signal

A	= Current 4 to 20 mA (3-Wire)	(13 to 32 V Input)
B	= Current 4 to 20 mA (3-Wire)	(10 to 18 V Input)
BU	= Current 4 to 20 mA & Voltage 1.0 to 5.0 V	(10 - 30 V Input)
C	= Voltage 0.5 to 3.5 V	(4 to 10 V Input)
F	= Voltage 0.25 to 4.75 V	(9 to 32 V Input)
G	= Voltage 0.5 to 4.5 V	(9 to 32 V Input)
H	= Voltage 0.5 to 10.0 V	(13 to 32 V Input)
J	= CANbus SAE J1939	(9 to 32 V Input)
L	= Voltage 0.5 to 4.5 V	(5 to 10 V Input)
O	= CANopen	(9 to 32 V Input)
P	= P.W.M 500Hz	(9 to 32 V Input)
R	= Voltage 0.5 to 4.75 V	(9 to 32 V Input)
T	= Current 4 to 20 mA (2-Wire)	(11 to 28 V Input)
V	= Voltage 0.5 to 5.0 V	(9 to 32 V Input)
Z	= ISOBUS	(9 to 32 V Input)

Optional
R = Reversible signal (analogue outputs only)

Unique Transducer Calibration Number

Cable Length (m)
Standard lengths (±5 mm tol.):
0.15, 0.3, 0.5, 1.0, 1.5, 2.0

Electrical Termination
J = Integrated M12 Connector
K = M12 Connector (2-hole flange, 304 St Steel) [LMD only]
L = M12 Connector (4-holes flange, 304 St Steel) [LMB, LMC only]
N = PVC Cable
U = PUR Cable
W = Individual Wires

Optional - Plastic Connectors
2RT = Deutsch DT04-2P with Rota contacts
3RT = Deutsch DT04-3P with Rota contacts
4RT = Deutsch DT04-4P with Rota contacts
6RT = Deutsch DT04-6P with Rota contacts
2RM = Deutsch DTM04-2P with Rota contacts
3RM = Deutsch DTM04-3P with Rota contacts
4RM = Deutsch DTM04-4P with Rota contacts
6RM = Deutsch DTM04-6P with Rota contacts
2RP = AMP 282104-1 with Rota contacts
3RP = AMP 282105-1 with Rota contacts
4RP = AMP 282106-1 with Rota contacts
5RP = AMP 282107-1 with Rota contacts
6RP = AMP 282108-1 with Rota contacts
4BH = M12 (Moulded) - 4 pin [PUR cable only]
5BH = M12 (Moulded) - 5 pin [PUR cable only]
4MH = M12 (Screw-terminals) - 4 pin [LMB, LMC, LMD only]
5MH = M12 connector (Screw-terminals) - 5 pin [LMB, LMC, LMD only]

Optional - Calibration Options
L = 'End of stroke' signal positions factory set at Rota
Q = Quick calibration