

## DR-T Series

### Rodless Linear Position Transducer



#### DESCRIPTION

The DR-T Series Rodless Linear Position Transducer allows for a large misalignment of shafts and housing, while providing quiet operation with smooth, clean signal output.

The vibration-damped element helps eliminate bounce in most high vibration environments. Wiper carrier guides extruded to the full length of the housing and extended side bearings provide smooth operation under most severe side load or misalignment conditions.

Precious metal wipers are aimed at providing high performance, low noise and no oxidation. MystR® technology provides greater than 100 million dither operations for excellent durability. The rugged, ribbed housing is designed for use in most industrial environments.

#### FEATURES

- Vibration-damped element
- Extruded wiper carrier guides
- Extended side bearings
- Precious metal wipers
- Greater than 100 million dither operations
- Ribbed housing
- High dc level output
- Absolute continuous measurement
- IP56/NEMA 4
- Class I, II, III; Division 1; Group A, B, C, D, E, F, G
- CE approved

The DR-T Series has high dc level output for working with simple controllers and absolute continuous measurement for accurate position at power-up.

IP56/NEMA 4 shaft seals protect internal components from environments and the product is intrinsically safe for Class I, II, III; Division 1; Group A, B, C, D, E, F, G.

This long lasting, rodless, side-sealed transducer may be used to replace rodless potentiometer in contaminated applications.

#### POTENTIAL APPLICATIONS

- Injection molding machines
- Printing presses
- Meat packing equipment
- Drill presses
- Woodworking machines
- Cranes
- Front-end loaders
- Scales
- Semiconductor processing

# DR-T Series

## SPECIFICATIONS

Characteristic	Parameter
Theoretical electrical travel	101,6 to mm 1270 mm [4.0 in to 50 in]
Independent linearity	0.1% from 0% to 100% of theoretical electrical travel
Total resistance	see order guide
Resistance tolerance	±20%
Insulation resistance	1000 MOhm at 500 Vdc
Dielectric strength	1000 Vrms
Operating temperature	-65 °C to 105 °C [-85 °F to 221 °F]
Resolution	infinite
Maximum applied voltage	75.0 Vdc
Vmax.	30 V
Imax.	100 mA
Ci	0 µF
Li	0 mH
Recommended wiper current	<1 µA
Electrical connection	DIN 43650 connector or equivalent
Total mechanical travel	106 mm to 1275 mm [4.2 in to 50.2 in]
Starting force	0,45 kg [1.0 lb]
Total weight	0,36 kg to 2,2 kg [0.8 lb to 4.9 lb]
Vibration	20 g rms/0,75 mm, 5 Hz to 2 kHz
Shock	50 g 11 ms half sine
Backlash	0,025 mm [0.001 in]
Repeatability	0,01 mm [0.0004]
Life	>100 million dither operations
Sealing	IP56/NEMA 4 Class I, II, III; Division 1; Group A, B, C, D, E, F, G
Approvals	CE pending

### CAUTION

#### PRODUCT DAMAGE

- Do not use excessive wiper current.
- Maintain zero shaft side load to achieve maximum product life.

**Failure to comply with these instructions may result in product damage.**

### NOTICE

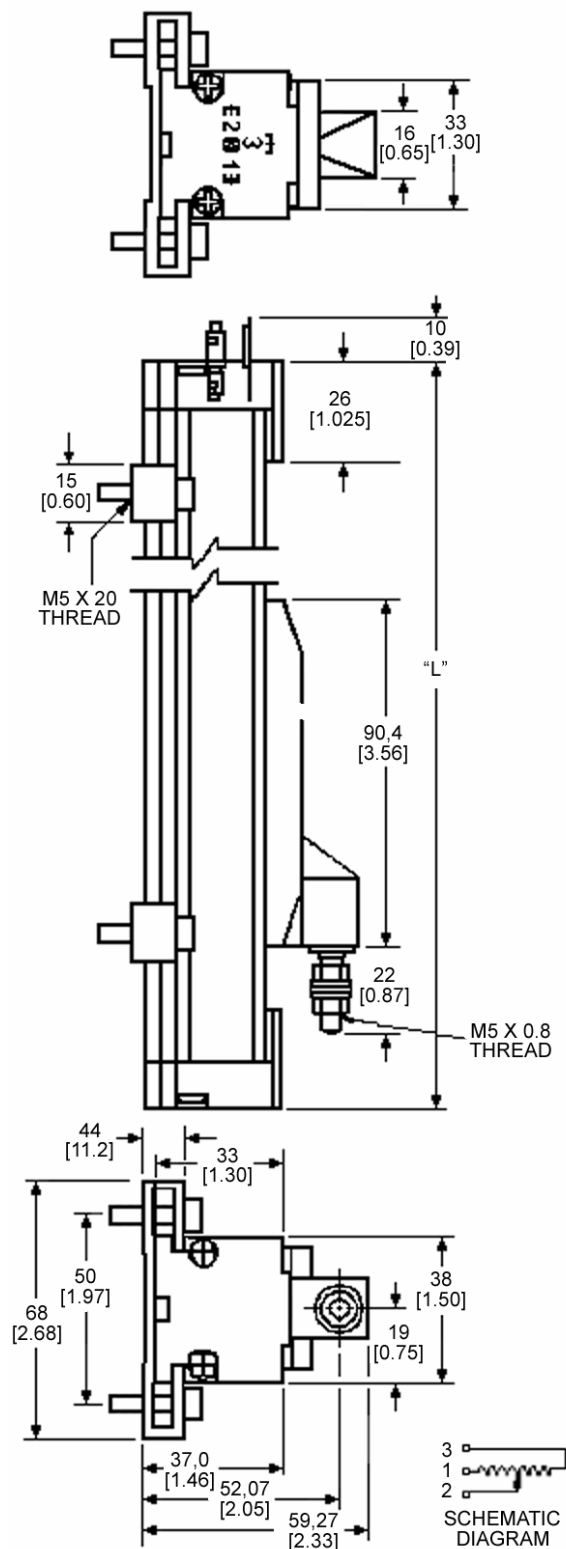
Do not test on an Ohm meter on the Rx 1 scale or other current devices.

## ELECTRICAL TRAVEL TABLE

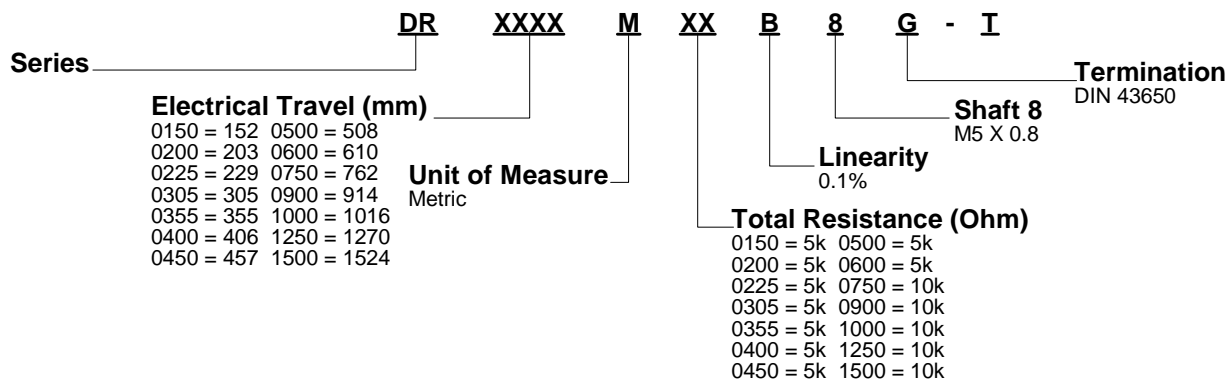
Model Code	Electrical Travel	Total Resistance	Housing Length "L"	Estimated Weight
0150	152 mm [5.98 in]	5 kOhm ±20%	300 mm [11.81 in]	545 g [19.22 oz]
0200	203 mm [7.99 in]	5 kOhm ±20%	352 mm [13.86 in]	641 g [22.61 oz]
0225	229 mm [9.02 in]	5 kOhm ±20%	376 mm [14.80 in]	685 g [24.16 oz]
0305	305 mm [12.01 in]	5 kOhm ±20%	452 mm [17.80 in]	823 g [29.03 oz]
0355	355 mm [13.98 in]	5 kOhm ±20%	514 mm [20.24 in]	936 g [33.02 oz]
0400	406 mm [15.98 in]	5 kOhm ±20%	554 mm [21.81 in]	1008 g [35.56 oz]
0450	457 mm [17.99 in]	5 kOhm ±20%	605 mm [23.82 in]	1101 g [38.84 oz]
0500	508 mm [20.00 in]	5 kOhm ±20%	656 mm [25.83 in]	1194 g [42.12 oz]
0600	610 mm [24.02 in]	5 kOhm ±20%	757 mm [29.80 in]	1378 g [48.61 oz]
0750	762 mm [30.00 in]	10 kOhm ±20%	910 mm [35.83 in]	1656 g [58.42 oz]
0900	914 mm [35.98 in]	10 kOhm ±20%	1063 mm [41.85 in]	1932 g [68.15 oz]
1000	1016 mm [40.00 in]	10 kOhm ±20%	1164 mm [45.83 in]	2147 g [75.73 oz]
1250	1270 mm [50.00 in]	10 kOhm ±20%	1418 mm [55.83 in]	2683 g [94.74 oz]
1500	1524 mm [60.00 in]	10 kOhm ±20%	1672 mm [65.83 in]	3220 g [113.58 oz]

# Rodless Linear Position Transducer

MOUNTING DIMENSIONS (For reference only. mm/[in])



## ORDER GUIDE



**Note:** Other lengths available on request, contact factory for detail.

### **WARNING**

#### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

#### **WARRANTY/REMEDY**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

### **WARNING**

#### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

#### **SALES AND SERVICE**

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

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