



# ADROIT6000 & ADROIT6200

## Pressure sensing platform

The ADROIT6000 and ADROIT6200 are high performance, robust pressure measurement devices. Combining the best mechanical properties of micromachined silicon with the latest digital processing capability to offer levels of accuracy, previously unavailable in a device of this type. They offer a full suite of pressure measurement including gauge, absolute and differential references and pressure ranges from 68 mbar to 700 bar.

### Digital and Analogue

By using digital signal processing, the highest levels of performance over temperature are achieved. However, the final stage of processing converts the signal back into a conventional analogue output for easy interfacing to existing infrastructure. Fast ASIC technology ensures response times around 1 ms and fast switch on for pulse power operation. The digital processing also enables the replacement of mechanical adjustment to potentiometers with automatic calibration adjustment using an App.

## Small and Robust

The highest-grade components are designed to withstand high levels of shock, vibration and temperature extremes. Components are welded into a small, convenient, 19 mm or 25 mm diameter to offer best in class performance in the harshest environments.

## Druck Expertise

Druck have used 50 years of experience to design the ADROIT6000 and ADROIT6200. From the silicon processing, through the mechanical construction of the pressure sensing module and electronics design, to the selection of electrical connectors, each component's performance has been optimized to meet your requirements. Our team of experts can help you make the optimum product selection for your application.

## Measurement

### Operating Pressure Ranges

	ADROIT6200	ADROIT6000
Gauge ranges (g)	Zero and non-zero based ranges Upper range Limit (URL): 68 mbar to 70 bar Lower range limit (LRL): -1 to 35 bar Span limit: for gauge depression ranges, Min URL is 0, span needs to be greater than 68 mbar.	Zero and non-zero based ranges Upper range Limit (URL): 68 mbar to 70 bar Lower range limit (LRL): -1 to 35 bar Span limit: for gauge depression ranges, Min URL is 0, span needs to be greater than 68 mbar.
Sealed gauge ranges (sg)	Zero and non-zero based ranges Upper range Limit (URL): 10 bar to 350 bar Lower range limit (LRL): -1 to 200 bar Span limit: Span must be greater than 50 % of the URL	Zero and non-zero based ranges Upper range Limit (URL): 10 bar to 700 bar Lower range limit (LRL): -1 to 350 bar Span limit: Span must be greater than 50 % of the URL
Absolute ranges (a)	Zero and non-zero based ranges Upper range Limit (URL): 344 mbar to 350 bar Lower range limit (LRL): 0 to 175 bar Span limit: Span must be greater than 50 % of the URL.	Zero and non-zero based ranges Upper range Limit (URL): 100 mbar to 700 bar Lower range limit (LRL): 0 to 350 bar Span limit: Span must be greater than 50 % of the URL.
Barometric (b)	Upper range Limit (URL): 1.3 bar Lower range limit (LRL): 350 mbar Span limit: Span must be greater than 350 mbar	Upper range Limit (URL): 1.3 bar Lower range limit (LRL): 350 mbar Span limit: Span must be greater than 350 mbar
Wet-dry differential (WD)	Zero and non-zero based ranges Upper range Limit (URL): 68 mbar to 35 bar Lower range limit (LRL): -1 to 17.5 bar Span limit: Span must be greater than 50 % of the URL.	Zero and non-zero based ranges Upper range Limit (URL): 68 mbar to 35 bar Lower range limit (LRL): -1 to 17.5 bar Span limit: Span must be greater than 50 % of the URL.
Wet-wet differential (WW)	Zero and non-zero based ranges Upper range Limit (URL): 344 mbar to 35 bar Lower range limit (LRL): -1 bar to 17.5 bar Span limit: Span must be greater than 50 % of the URL	Zero and non-zero based ranges Upper range Limit (URL): 344 mbar to 35 bar Lower range limit (LRL): -1 bar to 17.5 bar Span limit: Span must be greater than 50 % of the URL

## Features

- Non-linearity, hysteresis and repeatability to 0.02 % span BSL
- Pressure ranges from 68 mbar to 700 bar (1 to 10000 psi)
- Gauge, Sealed Gauge, Absolute, Barometric and Differential references
- 4-20 mA , 20-4 mA and configurable voltage outputs
- Total error up to 0.1 % span
- Frequency response to 1 kHz
- Stainless steel 316 L construction
- Operating temperature range up to -40 °C to +125 °C and survival from -55 °C to +150 °C
- Hazardous area certifications

## Over-pressure

	ADROIT6200	ADROIT6000
Gauge, Absolute, Sealed Gauge	The following pressure can be applied without causing a shift in calibrated accuracy: 6 x FS for ranges up to 700 mbar 2 x FS for barometric ranges 4 x FS for ranges up to 70 bar 4 x FS for ranges up to 350 bar (700 bar max)	The following pressure can be applied without causing a shift in calibrated accuracy: 1.2 bar for ranges < 300 mbar 4 x FS for ranges 300 mbar to 70 bar (200 bar max) 2 x FS for barometric ranges 1200 bar max for ranges >70 bar (600 bar max for pressure connector options PX, RA and RF, 900 bar max for pressure connector option P69)
Differential WW and WD	For differential versions the negative side must not exceed the positive side by more than: 6 x FS for ranges up to 150 mbar 4 x FS for ranges up to 700 mbar 2 x FS for all other ranges up to a maximum of 15 bar Differential line pressure maximum 70 bar	For differential versions the negative side must not exceed the positive side by more than: 6 x FS for ranges up to 150 mbar 4 x FS for ranges up to 700 mbar 2 x FS for all other ranges up to a maximum of 15 bar Differential line pressure maximum 70 bar

## Containment Pressure

	ADROIT6200	ADROIT6000
Gauge, Absolute, Sealed Gauge, Differential (+ve port)	6x FS to 700 bar maximum	1.5 bar for ranges up to 250 mbar 6 x FS (200 bar max) for ranges from 250 mbar to 70 bar 1200 bar max for ranges > 70 bar (600 bar max for connectors PX, RA and RF, 900 bar max for connector P69)
Differential (-ve port)	Must not exceed positive port by more than 6 x FS (15 bar maximum).	Must not exceed positive port by more than 6 x FS (15 bar maximum).
Hyperbaric pressure	N/A	20 bar maximum, depth version only

## Electrical Parameters

	ADROIT6200	ADROIT6000
Outputs	4-20 mA 20-4 mA 0-5 Volts 3-wire non true-zero* Configurable: 3-wire voltage output versions within the range of 0 to 10 V with the following limitations: Minimum span of 4 V Maximum lower limit elevation equal to the span Examples: Valid 1 to 6 V 0.5 to 4.5 V Invalid 1 to 3 V (span too small) 6 to 10 V (offset too large) Output voltage range can be specified to a resolution of 0.1 V The output will respond to at least 110 % of the applied pressure * Non true-zero, the output will saturate at < 50 mV.	4-20 mA 0-5 Volts 3-wire non true-zero* Configurable: 3-wire voltage output versions within the range of 0 to 10 V with the following limitations: Minimum span of 3.5 V Maximum lower limit elevation equal to the span Examples: Valid 1 to 6 V 0.5 to 4.5 V Invalid 1 to 3 V (span too small) 6 to 10 V (offset too large) Output voltage range can be specified to a resolution of 0.1 V The output will respond to at least 110 % of the applied pressure * Non true-zero, the output will saturate at < 50 mV.

## Supply Requirements

	ADROIT6200	ADROIT6000
4-20 mA output	12-28 Vdc	7-28 Vdc
20-4 mA output	12-28 Vdc	N/A
Voltage output	7-28 Vdc Supply voltage must be 2 V greater than the output voltage selected.	5-16 Vdc Supply voltage must be 1.5 V greater than the output voltage selected.

## Other

	ADROIT6200	ADROIT6000
Insulation	Greater than 100 MΩ at 500 Vdc.	Greater than 100 MΩ at 500 Vdc
Power On Time	From power on to a stable reading within specification less than 30 ms.	From power on to a stable reading within specification less than 30 ms.
Current Consumption	4 to 20 mA output: < 22 mA 20 to 4 mA output < 22mA Voltage output: < 3mA	4 to 20 mA output: < 22 mA Voltage output: < 3mA

## Performance Specification

	ADROIT6200	ADROIT6000
Total Precision (non-linearity, hysteresis, repeatability, thermal effects and zero/span setting)	Premium – 0.1 % Span Improved – 0.2 % Span  Values increase pro-rata for pressure spans less than 1000 mbar and double for barometric ranges.	Premium – 0.1 % Span Improved – 0.2 % Span  Values increase pro-rata for pressure spans less than 1000 mbar and double for barometric ranges.
NLH&R (non-linearity, hysteresis, repeatability) at 23 °C	Premium – 0.02 % Span BSL Improved – 0.04 % Span BSL (BSL – Best Straight Line)  Values increase pro-rata for pressure spans less than 1000 mbar and double for barometric ranges.	Premium – 0.02 % Span BSL Improved – 0.04 % Span BSL (BSL – Best Straight Line)  Values increase pro-rata for pressure spans less than 1000 mbar and double for barometric ranges.
Response Time	Less than 1 ms	Less than 1 ms
Resolution	0.01 % span	0.01 % span
Stability	Long-term stability 0.05 % Span/year typical (0.1 % Span/year max), increasing pro-rata for pressure ranges below 1 bar.	Long-term stability 0.05 % Span/year typical (0.1 % Span/year max), increasing pro-rata for pressure ranges below 1 bar.
Line pressure effects (differential versions only)	Zero Shift <±0.03 % Span/bar of line pressure Span shift <±0.03 % Span/bar of line pressure  Effects increase pro-rata for differential ranges below 700 mbar	Zero Shift <±0.03 % Span/bar of line pressure Span shift <±0.03 % Span/bar of line pressure  Effects increase pro-rata for differential ranges below 700 mbar
Orientation sensitivity	Gauge, absolute, and wet-dry differentials  Units are calibrated mounted pressure connection down. Output will change by less than 1 mbar/g which can be zeroed out during calibration  Wet-wet differentials  Units are calibrated with the positive port down. Output will change by less than 5 mbar/g which can be zeroed out during calibration.	Gauge, absolute, and wet-dry differentials  Units are calibrated mounted pressure connection down. Output will change by less than 1 mbar/g which can be zeroed out during calibration  Wet-wet differentials  Units are calibrated with the positive port down. Output will change by less than 5 mbar/g which can be zeroed out during calibration.

## Physical Specifications

	ADROIT6200	ADROIT6000
Mass	60 g approx.	120 g approx.
Pressure media compatibility	Fluids compatible with stainless steel 316L and Hastelloy C276. <i>Not suitable for media that has an oxygen concentration &gt;21 % or other strong oxidizing agents. This product contains materials or fluids that may degrade or combust in the presence of strong oxidizing agents.</i>	Fluids compatible with stainless steel 316L and Hastelloy C276. <i>Not suitable for media that has an oxygen concentration &gt;21 % or other strong oxidizing agents. This product contains materials or fluids that may degrade or combust in the presence of strong oxidizing agents</i>
Enclosure materials	Stainless steel 316L body and depending on choice of connector: Polyurethane cable (metal crimp) - Polyurethane Raychem cable (metal crimp) - Raychem MIL-C-26482 (6 pin Shell size 10) - PBT, Brass H62 (TB temp range). Glass, gold plated nickel (TD temp range) M12x1 Male (4 pin Type A coded) - Nylon 6, Brass H62 (TB temp range) Glass, Alloy 52 (TD temp range) Micro-DIN (9.4 mm pitch) - Nylon 66, Tin plated Brass, Copper Alloy Note: see ordering details for TB and TD temp ranges.	Stainless steel 316L body and depending on choice of connector: Polyurethane cable (plastic gland) - Polyurethane Raychem cable (metal crimp) - Raychem Hytrel depth cable - Hytrel MIL-C-26482 (6 pin Shell size 10) - PBT, Brass H62 (TB temp range). Glass, gold plated nickel (TD temp range) M12x1 Male (4 pin Type A coded) - Nylon 6, Brass H62 (TB temp range) Glass, Alloy 52 (TD temp range) DIN 43650 - Nylon 66, Tin plated Brass, Copper Alloy Note: see ordering details for TB and TC temp ranges.

## Physical Specifications (cont.)

	ADROIT6200	ADROIT6000		
Environmental Protection	Polyurethane cable (metal crimp)	IP65	No connector	N/A
	Raychem cable (metal crimp)	IP65	Cable Gland	IP65
	MIL-C-26482 (6 pin Shell size 10)	IP65/67**	Raychem cable (metal crimp)	IP65
	M12x1 Male (4 pin Type A coded)	IP65/67**	Polyurethane Depth	IP68
	Micro-DIN (9.4 mm pitch)	IP65	Hytrell Depth	IP68
	** Note: IP65 for temperature range -20 °C to +80 °C and IP67 for temperature range -55 °C to +125 °C.		MIL-C-26482 (6-pin shell size 10)	IP65/ IP67*
			DIN 43650 Form A Demountable	IP65
			1/2 NPT Conduit	IP65
			Micro DIN (9.4 mm pitch)	IP65
			M12x1 (4-pin type A coded)	IP65/ IP67*
M20 x 1.5 Female Demountable			IP65	
		* IP67 for sealed gauge, absolute and differential versions only.		
Operating temperature	<p>Polyurethane cable (metal crimp) -40 to 80 °C</p> <p>Raychem cable (metal crimp) -55 to 125 °C</p> <p>MIL-C-26482 (6 pin Shell size 10) -55 °C to maximum compensated temperature*</p> <p>M12x1 Male (4 pin Type A coded) -55 °C to maximum compensated temperature*</p> <p>Micro-DIN (9.4 mm pitch) -40 to 80 °C</p> <p>* Note: Units with a compensated temperature range up to 125 °C will withstand short periods operating at temperatures up to 150 °C. Exposure to temperatures above 125 °C will shorten operating life.</p>	<p>-40 to 80 °C</p> <p>All electrical connector options.</p>		
Vibration and shock	<p>Sinusoidal Vibration to DO-160G Curve W. 5 to 2000 Hz, 30 g peak.</p> <p>Random vibration to DO-160G Cat. R (robust) Curves D1+E1. 10 to 2000 Hz, peak ASD 0.16 g<sup>2</sup>/Hz.</p> <p>Random vibration to BS EN 61373:2010. 5 to 250 Hz, peak ASD 6.12 g<sup>2</sup>/Hz.</p> <p>Shock, 1000 g half-sine for 1 ms.</p>	<p>Sinusoidal Vibration to DO-160G Curve W. 5 to 2000 Hz, 30 g peak, will not affect calibrated accuracy.</p> <p>Shock, 1000 g half-sine for 1 ms, will not affect calibrated accuracy by more than 0.2 % span.</p>		

## Physical Specifications (cont.)

	ADROIT6200	ADROIT6000						
Regulatory Compliance	<p>RoHS Directive 2011/65/EU</p> <p>Pressure Equipment Directive 2014/68/EU Sound Engineering Practice</p> <p>EMC Directive 2014/30/EU</p> <p>BS EN 61326-1: 2013: Electrical Equipment for Measurement, Control and Laboratory Use</p> <p>BS EN 61326-2-3: 2013: Particular Requirements for Pressure Transducers</p> <p>BS EN 50121-3-2: 2016+A1: 2019: Railway applications</p> <ul style="list-style-type: none"> <li>• Electromagnetic compatibility</li> <li>• Rolling stock</li> <li>• Apparatus. 4-20 mA version only.</li> </ul>	<p>RoHS Directive 2011/65/EU</p> <p>Pressure Equipment Directive 2014/68/EU Sound Engineering Practice</p> <p>EMC Directive 2014/30/EU</p> <p>BS EN 61326-1: 2013: Electrical Equipment for Measurement, Control and Laboratory Use</p> <p>BS EN 61326-2-3: 2013: Particular Requirements for Pressure Transducers</p> <p><b>Canada</b></p> <table border="1"> <tr> <td>Canadian Electrical Code C22.1 Section 18</td> <td>           CSA-C22.2 NO. 157: R2016            CAN/CSA-C22.2 NO. 60079-0: 2015            CAN/CSA-C22.2 NO. 60079-11: 2014            CAN/CSA-C22.2 NO. 61010-1: 2012            CSA-C22.2 NO. 60529: 2010            CSA-C22.2 NO. 94.1: 2015            CSA-C22.2 NO. 94.2: 2015            ANSI/ISA-12.27.01: 2003         </td> </tr> <tr> <td>Canadian Registration Number (CRN)</td> <td>           0F18611.513467890YTN for full range pressures <math>\leq 350</math> bar (5075 psi).            0F13828.2 for full range pressures <math>\leq 70</math> bar (1015 psi).         </td> </tr> </table> <p><b>United States</b></p> <table border="1"> <tr> <td>National Electrical Code NFPA 70. Articles 500 &amp; 505</td> <td>           FM 3600: 2018            FM 3610: 2018            FM 3810: 2005            ANSI/ISA 60079-0: 2013            ANSI/ISA 60079-11: 2014            ANSI/IEC 60529: 2004            ANSI/ISA-12.27.01: 2003         </td> </tr> </table>	Canadian Electrical Code C22.1 Section 18	CSA-C22.2 NO. 157: R2016 CAN/CSA-C22.2 NO. 60079-0: 2015 CAN/CSA-C22.2 NO. 60079-11: 2014 CAN/CSA-C22.2 NO. 61010-1: 2012 CSA-C22.2 NO. 60529: 2010 CSA-C22.2 NO. 94.1: 2015 CSA-C22.2 NO. 94.2: 2015 ANSI/ISA-12.27.01: 2003	Canadian Registration Number (CRN)	0F18611.513467890YTN for full range pressures $\leq 350$ bar (5075 psi). 0F13828.2 for full range pressures $\leq 70$ bar (1015 psi).	National Electrical Code NFPA 70. Articles 500 & 505	FM 3600: 2018 FM 3610: 2018 FM 3810: 2005 ANSI/ISA 60079-0: 2013 ANSI/ISA 60079-11: 2014 ANSI/IEC 60529: 2004 ANSI/ISA-12.27.01: 2003
Canadian Electrical Code C22.1 Section 18	CSA-C22.2 NO. 157: R2016 CAN/CSA-C22.2 NO. 60079-0: 2015 CAN/CSA-C22.2 NO. 60079-11: 2014 CAN/CSA-C22.2 NO. 61010-1: 2012 CSA-C22.2 NO. 60529: 2010 CSA-C22.2 NO. 94.1: 2015 CSA-C22.2 NO. 94.2: 2015 ANSI/ISA-12.27.01: 2003							
Canadian Registration Number (CRN)	0F18611.513467890YTN for full range pressures $\leq 350$ bar (5075 psi). 0F13828.2 for full range pressures $\leq 70$ bar (1015 psi).							
National Electrical Code NFPA 70. Articles 500 & 505	FM 3600: 2018 FM 3610: 2018 FM 3810: 2005 ANSI/ISA 60079-0: 2013 ANSI/ISA 60079-11: 2014 ANSI/IEC 60529: 2004 ANSI/ISA-12.27.01: 2003							
Hazardous Area Certification	N/A	<p><b>ATEX, IECEx</b></p> <p>Ex ia IIC T4 Ga (-40 °C <math>\leq</math> T<sub>a</sub> <math>\leq</math> +80 °C)</p> <p>Ex ia I Ma (-40 °C <math>\leq</math> T<sub>a</sub> <math>\leq</math> +80 °C)</p> <p><b>FM, FMc (Divisions)</b></p> <p>IS Class I, Division 1, Groups ABCD T4 (-40 °C <math>\leq</math> T<sub>a</sub> <math>\leq</math> +80 °C)</p> <p><b>FM, FMc (Zones)</b></p> <p>Class I, Zone 0, AEx/Ex ia IIC T4 (-40 °C <math>\leq</math> T<sub>a</sub> <math>\leq</math> +80 °C)</p>						

## Connections ADROIT6200

Electrical Connection	Option Code	Connections	4-20 mA	Voltage Output
Polyurethane Cable	1	Red	+ve Supply	+ve Supply
		Yellow	-	+ve Output
		Blue	-	-
		White	-ve Supply	0V Common
		Orange	-	-
		Black	-	-
		Cable Screen	Case	Case
Raychem Cable	2	Red	+ve Supply	+ve Supply
		White	-	+ve Output
		Green	-	-
		Blue	-ve Supply	0V Common
		Black	-	-
		Cable Screen	Case	Case
MIL-C-26482	6	A	+ve Supply	+ve Supply
		B	-ve Supply	+ve Output
		C	-	-
		D	-ve Supply	0V Common
		E	-	-
		F	-	-
Micro-DIN (9.4 mm pitch)	D	1	+ve Supply	+ve Supply
		2	-ve Supply	0V Common
		3	-	+ve Output
		E	Case	Case
MIL-C-26482 Alt Wiring	E	A	-	+ve Supply
		B	-	0V Common
		C	-	+ve Output
		D	-	0V Common
		E	-	-
		F	-	-
M12x1 Male 4-pin	G	1	+ve Supply	+ve Supply
		2	-	+ve Output
		3	-ve Supply	0V Common
		4	-	-
M12x1 Male 4-pin Alt Wiring	W	1	+ve Supply	+ve Supply
		2	-ve Supply	0V Common
		3	-	-
		4	-	+ve Output

## Connections ADROIT6000

Electrical Connection	Option Code	Connections	4-20 mA	Voltage Output
Molex Plug/Flying Leads No Backend Assembly	0	1 / Red	+ve Supply	+ve Supply
		2 / Yellow	-	+ve Output
		3 / Green	-	-
		4 / Blue	-ve Supply	0V Common
		5 / Orange	-	-
		6 / Black	-	-
MIL-C-26482 Bayonet	6	A	+ve Supply	+ve Supply
		B	-ve Supply	+ve Output
		C	-	-
		D	-	0V Common
		E	-	-
		F	-	-
MIL-C-26482 Bayonet US-Style	E	A	+ve Supply	+ve Supply
		B	-	0V Common
		C	-	+ve Output
		D	-ve Supply	-
		E	-	-
		F	-	-
DIN - All Forms	7, D	1	+ve Supply	+ve Supply
		2	-ve Supply	0V Common
		3	-	+ve Output
			-	-
Cable	1, 3, 4, C	Red	+ve Supply	+ve Supply
		Yellow	-	+ve Output
		Blue	-	-
		White	-ve Supply	0V Common
		Orange	-	-
		Black	-	-
		Screen	-	-
Raychem Cable	2	Red	+ve Supply	+ve Supply
		White	-	+ve Output
		Green	-	-
		Blue	-ve Supply	0V Common
		Black	-	-
		Screen	-	-
M12x1 4-pin	G	1	+ve Supply	+ve Supply
		2	-	+ve Output
		3	-ve Supply	0V Common
		4	-	-
M20 x 1.5 Demountable	R	+ve	+ve Supply	-
		-ve	-ve Supply	-

### Availability:

Approval Code	Electrical Connector Code											
	0	1	2	3	4	6	7	C	D	E	G	R
H1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
H2	Y	N	Y	Y	Y	Y	N	Y	N	Y	Y	N
H6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
HA	Y	N	Y	Y	Y	Y	N	Y	N	Y	Y	N
HS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

# ADROIT6200 Ordering Information

## 1. Select model number

**Product Series**

ADROIT6 ADROIT6200

**Diameter and Material**

2 19 mm stainless steel

**Electrical Connector**

1 Polyurethane Cable (metal crimp)

2 Raychem Cable (metal crimp)

6 MIL-C-26482 Bayonet **Note 1**

D Micro DIN (9.4 mm Pitch) **Note 2**

E MIL-C-26482 Bayonet alternative wiring **Note 1**

G M12 x 1 4-Pin **Note 1**

W M12 x 1 4-Pin alternative wiring **Note 1**

**Electronics Option**

2 4 to 20 mA

4 0 to 5 Volts 3-wire

5 Configurable Voltage 3-wire

R 20 to 4 mA

**Compensated Temperature Range**

TB -20 to +80 °C

TD -40 to +125 °C **Note 3**

**Accuracy**

A2 Improved

A3 Premium **Note 4**

**Calibration**

CD Total Precision and Zero and Span Data

**Hazardous Area Approval**

H0 None

**Pressure Connector**

PA G1/4 Female

PB G1/4 Male Flat

PC G1/4 Male 60° Int Cone

PE 1/4 NPT Female

PF 1/4 NPT Male

PG 1/8 NPT Male

PJ M14 x 1.5 60° Int Cone

PK M12 x 1 Int Cone

PS 1/4 Swagelok Bulkhead **Note 7**

PT G1/4 Male Flat Long

P14 M8 X 1 Male **Note 7**

P18 M10 X 1 Male

P22 7/16-20 UNF Male 74° Ext Cone

P33 7/16-20 UNF Female

P60 M12 x 1.5 Int. Cone **Note 7**

P61 G1/4 Female with Wire Lock **Note 5 Note 7**

RA 1/4 VCR Female **Note 7**

RC G1/4 Male Flat Cross Bore **Note 5**

RF 1/4 VCR Male **Note 7**

RQ NW16 Flange **Note 6 Note 7**

RZ 1/4-28 UNF LH THD 58° Cone **Note 5 Note 7**

ADROIT6 2 6 2 - TB - A2 - CD - H0 - PA (Example Configuration)

Note 1: Mating connector not supplied. (see Accessories, section 3).

Note 2: Mating connector supplied. (see Accessories, section 3).

Note 3: TD compensated range is only available for connector options 2, 6, G or W.

Note 4: Premium Accuracy is not available if TD compensated temperature range is selected.

Note 5: This connection is only available on pressure ranges between ≥ 10 bar and ≤ 350 bar.

Note 6: This connection is only available on pressure ranges up to < 10 bar.

Note 7: This connection is not available with differential pressure ranges.



# ADROIT6000 Ordering Information

## 1. Select model number

<p><b>Product Series</b> ADROIT6</p>	<p>ADROIT6000</p>	<p><b>Diameter and Material</b> 0 25 mm stainless steel</p>	<p><b>Electrical Connector</b> 0 None 1 Cable Gland Vented Cable 2 Raychem Cable 3 Polyurethane Depth Cable 4 Hytrel Depth Cable 6 MIL-C-26482 Bayonet <b>Note 1</b> 7 DIN 43650 Demountable <b>Note 2</b> C 1/2 NPT Conduit Vented Cable D Micro DIN (9.4mm Pitch) <b>Note 2</b> E MIL-C-26482 Alternative wiring <b>Note 1</b> G M12 x 1 4-Pin <b>Note 1</b> R M20 x 1.5 Female Demountable</p>	<p><b>Electronics Option</b> 2 4 to 20 mA 4 0 to 5 Volts 3-wire 5 Configurable Voltage 3-wire</p>	<p><b>Compensated Temperature Range</b> TB -20 to +80 °C TC -40 to +80 °C</p>	<p><b>Accuracy</b> A2 Improved A3 Premium <b>Note 8</b></p>	<p><b>Calibration</b> CD Total Precision and Zero and Span Data</p>	<p><b>Hazardous Area Approval</b> <b>Note 3</b> H1 IECEx/ATEX IS Group IIC H2 IECEx/ATEX IS Group I H6 C&amp;US IS Groups IIC/ABCD HA IECEx/ATEX IS (H1+H2) HS IECEx/ATEX/C&amp;US IS (H1+H6)</p>	<p><b>Pressure Connector</b> PA G1/4 Female <b>Note 4</b> PB G1/4 Male Flat PC G1/4 Male 60° Int Cone PE 1/4 NPT Female <b>Note 4</b> PF 1/4 NPT Male PG 1/8 NPT Male PH M20 x 1.5 Male (3mm Bore) PJ M14 x 1.5 60 ° Int Cone PK M12 x 1 Int Cone PL 7/16-20 UNJF Male 74° Ext PN G1/NPT Male <b>Note 4</b> PQ G1/4 Quick Connect PR 1/2 NPT Male <b>Note 4</b> PS 1/4 Swagelok Bulkhead PT G1/4 Male Flat Long PU 7/16-20 UNF Long 37° Flare Tip <b>Note 4</b> P58 7/16-20 UNF Autoclave <b>Note 4/6</b> P69 ASI098-04 Type E <b>Note 9</b> PV 7/16-20 UNJF Female <b>Note 4</b> PW Depth Cone (G1/4 Female) PX 7/16-20 UNF Male Short Flat <b>Note 4/5</b> PY 3/8-24 UNJF PZ M10 x 1.0 80° Int Cone RA 1/4 VCR Female <b>Note 4/5</b> RB G1/4 Male Flat-Snubber RC G1/4 Male Flat Cross Bore RD M12 x 1 74° Ext Wirelock <b>Note 4/7</b> RE Quick Release Male RF 1/4 VCR Male <b>Note 4/5</b> RJ M20 x 1.5 Male (8mm Bore) RQ NW16 Flange RT 1/8-27 NPT Female RU R3/8 Male RV R1/4 Male RW G1/4 Male with Nipple</p>					
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓					
ADROIT6	0	7	2	-	TB	-	A2	-	CD	-	HI	-	PA	<b>(Example Configuration)</b>

Note 1: Mating connector not supplied. (see Accessories, section 3).

Note 2: Mating connector supplied. (see Accessories, section 3).

Note 3: see table on page 10 for electrical connector options availability with hazardous area certifications.

Note 4: Select one of these pressure connectors for pressure ranges over 70 bar

Note 5: RA, RF and PX connectors limited to < 500 bar

Note 6: High pressure P58 connector is made available for pressure ranges 500 to 700 bar only

Note 7: High pressure RD connector is made available for pressure ranges > 70 bar to < 350 bar only.

Note 8: A3 premium accuracy only available with TB temperature range

Note 9: Pressure connector P69 is limited to 520 bar

## 2. State pressure range and units:

e.g. 0 to 10 bar, -5 to +5 psi

Unit options are:

Symbol	Description
bar	bar
mbar	millibar
psi	pounds/sq. inch
Pa	Pascal
hPa	hectoPascal
kPa	kiloPascal
MPa	MegaPascal
mmH <sub>2</sub> O	mm water
cmH <sub>2</sub> O	cm water
mH <sub>2</sub> O	metres water
inH <sub>2</sub> O	inches water
ftH <sub>2</sub> O	feet water
mmHg	mm mercury
inHg	inches mercury
kgf/cm <sup>2</sup>	kg force/sq. cm
atm	atmosphere
Torr	torr

## 3. State pressure reference:

e.g. gauge

Reference options are:

- gauge
- absolute
- barometric
- sealed gauge
- wet-dry differential
- wet-wet differential

## 4. Electrical Connector options 1, 2, 3, 4 and C: State cable length and units:

Integer values only in ft or m.

- Minimum cable length: 1 m (3 ft)
- Maximum cable length: 3 m (10 ft)

## 5. Electronics option 5: State output at minimum and maximum pressure:

e.g. output 0.5 to 4.5 V

Examples:

- ADROIT62G2-TB-A3-CD-H0-PB 0 to 6 bar gauge
- ADROIT6225-TD-A2-CD-H0-PA 0 to 100 bar Sealed Gauge, 2 m, 1 to 6 V
- ADROIT6064-TB-A2-CD-HI-PE 0 to 700 bar Absolute

## Accessories (to be ordered as separate line items)

### 1. ADROIT Interface box part number: ADROIT-Interface

The interface is used with a Windows-based PC or an Android device (laptop, tablet or phone). It enables the user to make small adjustment to the zero and span settings of the sensor for calibration purposes. It is supplied with a USB lead to USB-C or USB-A.

### 2. Test leads

Set of 2 off 4 mm leads and crocodile clips for connection to the ADROIT sensor are available.

Part Number: 209-359. 2 sets are required for calibration.

### 3. Mating connectors

- For MIL-C-26482 Bayonet Part Number 163-009 (not considered suitable for use in hazardous areas)
- For M12 x 1 4-Pin Part Number 149M7393-1
- For Micro DIN (9.4 mm Pitch) Part Number 192-257-01 (one supplied with each sensor)

### 4. Cable Assemblies

A made up electrical connector with a length of cable terminated in solder tinned wires. Not considered suitable for use in hazardous areas.

#### (1) Select Part Number

##### Main Product

UNIKCABLE	Cable Assembly
	Electrical Connector
	6 MIL-C-26482 Bayonet
	D Micro DIN (9.4 mm Pitch)
	7 DIN 43650
	G M12 x 1 4-Pin
	Cable
	1 Polyurethane Cable
	2 Raychem Cable
UNIKCABLE - 6 - 2 (Example Part Number)	

#### (2) State Cable length and units (Integer value only)

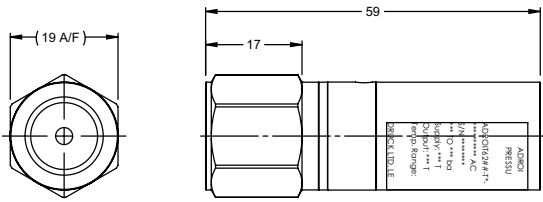
Minimum length 1 m (3 ft)

Maximum length 200 m (600 ft)

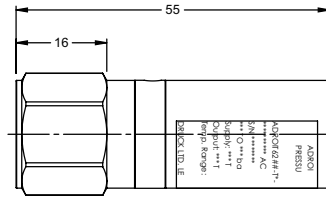
**Example:** UNIKCABLE-6-2, 5 m



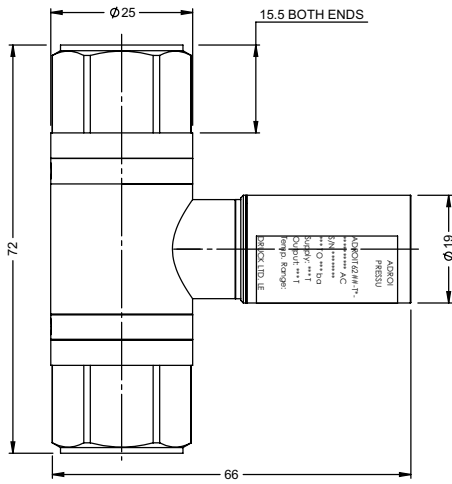
# ADROIT6200 Drawings



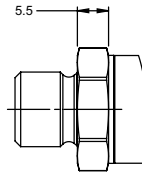
**LOW PRESSURE CONSTRUCTION**  
(PRESSURE RANGES: <10 bar)



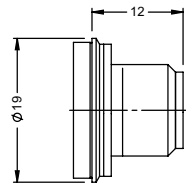
**MEDIUM PRESSURE CONSTRUCTION**  
(PRESSURE RANGES: ≥10 bar to ≤350 bar)



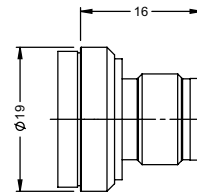
**WET/WET & WET/DRY DIFFERENTIAL CONSTRUCTION**



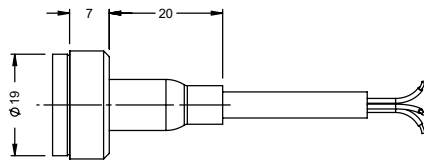
**MALE PRESSURE CONNECTION**



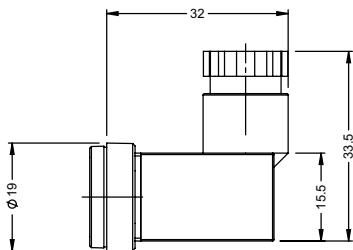
**HIGH TEMP (TD) M12x1 4-PIN**



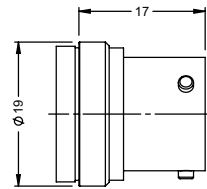
**STANDARD TEMP (TB) M12x1 4-PIN**



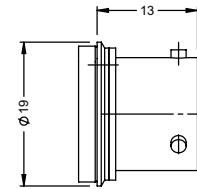
**POLYURETHANE/RAYCHEM CABLE**



**MICRO DIN (9.4 mm PITCH)**

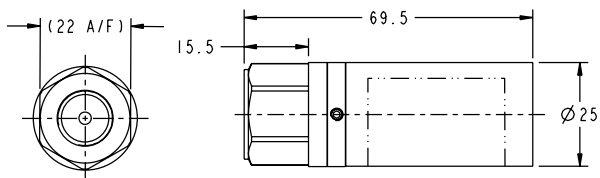


**STANDARD TEMP (TB) MIL-C-26482 BAYONET**

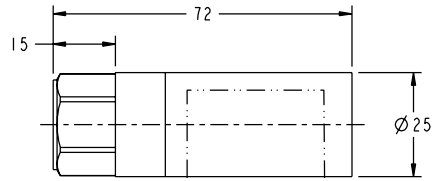


**HIGH TEMP (TD) MIL-C-26482 BAYONET**

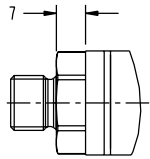
# ADROIT6000 Drawings



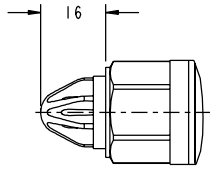
LOW/MEDIUM PRESSURE CONSTRUCTION  
(ALL RANGES:  $\leq 70$  bar)



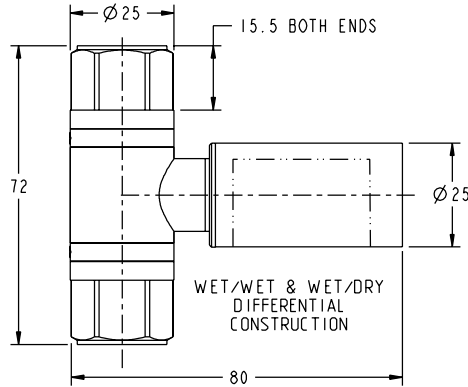
HIGH PRESSURE CONSTRUCTION  
(ALL RANGES:  $> 70$  bar TO  $\leq 700$  bar)



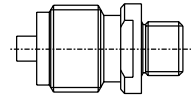
MALE PRESSURE CONNECTION<sup>[2]</sup>



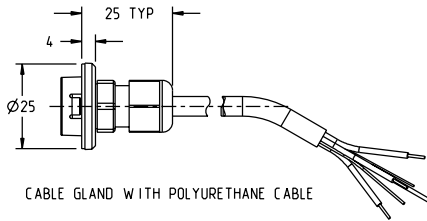
DEPTH CONE  
PRESSURE ADAPTOR<sup>[2]</sup>



WET/WET & WET/DRY  
DIFFERENTIAL  
CONSTRUCTION

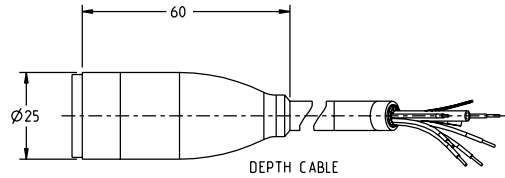


OPTIONAL PRESSURE  
ADAPTOR<sup>[2]</sup>

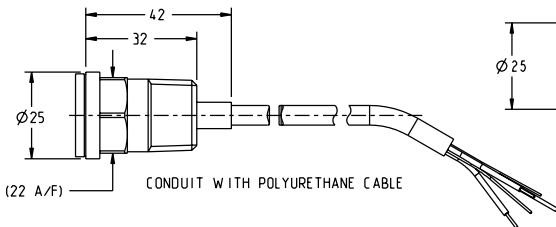


CABLE GLAND WITH POLYURETHANE CABLE

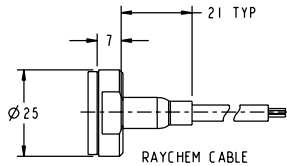
ELECTRICAL CONNECTION OPTIONS  
(REFER TO PAGE 3 FOR DETAILS)



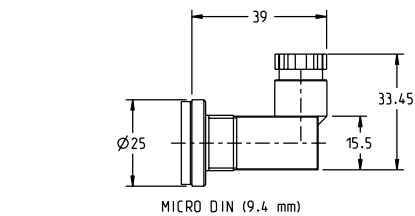
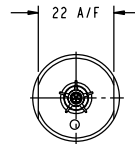
DEPTH CABLE



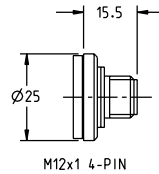
CONDUIT WITH POLYURETHANE CABLE



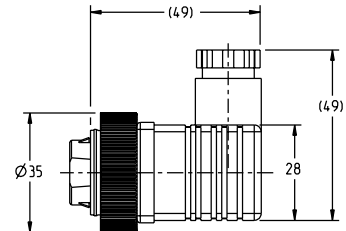
RAYCHEM CABLE



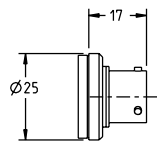
MICRO DIN (9.4 mm)



M12x1 4-PIN



DIN 43650 FORM A



BAYONET MIL-C-26482