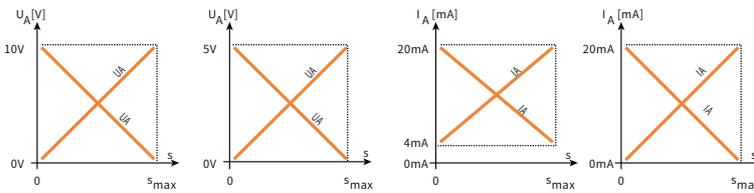




DH-Analog

DH-Series Data Sheet



- + Durust: fully enclosed design with maximum IP68 protection
- + Easy to use, standard signal output, maintenance-free
- + Non-contact measurement, no attrition
- + Miniaturized compact design, more suitable for space limited hydraulic cylinder



Input	Measured data	Position								
	Measurement range	25...4500mm								
Output	Voltage	0...10VDC, 10...0VDC, 0...5VDC, 5...0VDC (Controller min. load impedance >5KΩ)								
	Current	4...20mA, 20...4mA, 0...20mA, 20...0mA (min./max. load 0/750Ω)								
Resolution	Position resolution	16 bit D/A								
	None-Linearity	< ±0.02%F.S. (min. ±50μm)								
	Repeatability	< ±0.002%F.S. (min. ±20μm)								
	Update time	<table border="1"> <thead> <tr> <th>Stroke length</th> <th>≤ 1200mm</th> <th>≤ 2400mm</th> <th>≤ 4500mm</th> </tr> </thead> <tbody> <tr> <td>Update time</td> <td>0.5ms</td> <td>1ms</td> <td>2ms</td> </tr> </tbody> </table>	Stroke length	≤ 1200mm	≤ 2400mm	≤ 4500mm	Update time	0.5ms	1ms	2ms
	Stroke length	≤ 1200mm	≤ 2400mm	≤ 4500mm						
Update time	0.5ms	1ms	2ms							
Temperature coefficient	<30ppm/°C									
Mounting	Mounting position	Any								
	Thread	Metric M18x1.5, metric M20x1.5, 3/4"-16UNF-3A								
Design/ Material	Electronics housing	Stainless steel 304								
	Measuring rod	Stainless steel 304/316L								
	Operating pressure ratings	Φ10 measuring rod : 35MPa (continuous) ,70MPa (peak) Φ7 measuring rod : 30MPa (continuous) ,45MPa (peak)								
Electrical connection	Wiring connection	Straight out cable or 5 pin M12 aviation plug								
	Operating voltage	12VDC...36VDC								
	Polarity protection	Up to -36VDC								
	Overvoltage protection	Up to +36VDC								
	Power consumption	< 50mA (varies with range size)								
	Dielectric strength	500 VDC (DC ground to machine ground)								
Operating conditions	Magnet velocity	Any								
	Operating temperature	-40 ~ 85°C								
	Humidity	90 % relative humidity, no condensation								
	Ingress protection	IP67 (when connector is fitted)/IP68 (straight out cable)								
	Shock	100 g (single shock) IEC standard 60068-2-27								
	Vibration	15g/10...2000 Hz, IEC standard 60068-2-6 (resonant frequencies excluded)								
	EMC	Electromagnetic emission according to EN 61000-6-3 Electromagnetic immunity according to EN 61000-6-2								

ITEM

CATEGORY

PARAMETER

DH- ____ - **RP** - ____
 DH- ____ - **RT** - ____

Straight out cable

Color	● Brown	○ White	● Yellow	● Green
Function	12VDC~36VDC	0 VDC(GND)	Signal circuit	Signal output

DH- ____ - **DP** - ____
 DH- ____ - **DT** - ____

5 pin M12 connector

PIN-Male	1	2	3	4	5
Function	12VDC~36VDC	Signal output	0 VDC(GND)	NC	Signal circuit

View on sensor

ORDER CODE

TECHNOLOGY PERCEIVES THE FUTURE

DH - - - - M- - - -				Output (Output Code)
Thread	Stroke length	Connection type		
M Metric M18x1.5, Rod Φ 10mm	0025...4500mm (5mm increments)	RP/T__	Straight out __m high performance /high temperature cable	
V Metric M20x1.5, Rod Φ 10mm		DP/T__	5 pin M12 connector, with __ m high performance /high temperature cable	
S 3/4"-16UNF-3A, Rod Φ 10mm				
R Metric M18x1.5, Rod Φ 10mm, with M4x6 thread at tail end			(If the cable length is less than two digits, add zeros in front.)	
K Metric M18x1.5, Rod Φ 7mm			(If the avatation plug does not require a cable, please write DP00)	
L 3/4"-16UNF-3A, Rod Φ 7mm				

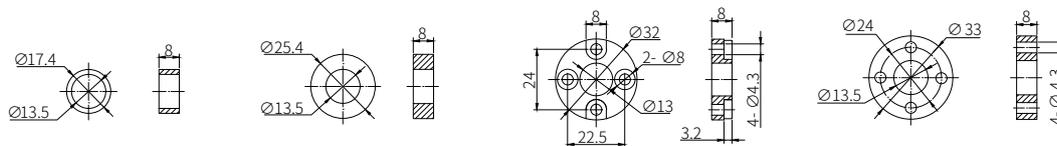
Analog Output Code	[1][2][3]		
	[1][2] Current/Voltage	[3] Magnet	
A0	4...20mA (forward)	V0	0...10V (forward)
A1	20...4mA (reverse)	V1	10...0V (reverse)
A2	0...20mA (forward)	V2	0...5V (forward)
A3	20...0mA (reverse)	V3	5...0V (reverse)
		1	one magnet

Note: forward, data grows larger when the magnet is distant from the electronics housing;
reverse, data grows larger when the magnet approaches the electronics housing.

Model selection	Model: DH-M-0800M-RP05-A01
	Explanation: DH series, integrated pressure resistance outer tube type, mounting thread metric M18x1.5, Φ 10mm measuring rod, stroke length 800mm, straight out 5m high performance cable, 4 to 20mA current output (forward), single magnetic ring.

PARTS SELECTION

TECHNOLOGY PERCEIVES THE FUTURE



Name	Ring magnet	Ring magnet	Ring magnet	Ring magnet
Operating temperature	-40...125°C			
Order code	12-1032	12-1019	12-1024	12-1001

Fitting non-permeable gasket				
Name	Non-permeable gasket	Non-permeable gasket	Non-permeable gasket	Non-permeable gasket
Operating temperature	-40...125°C			
Order code	12-1037	12-1021	12-1025	12-1008



Connector	5 pin M12 female connector	5 pin female connector (90 degree angle)
Name	Integral cable	Integral cable
Cable	5 wire 0.25mm ² shielded cable	5 wire 0.25mm ² shielded cable
Color/Diameter	Orange/ Ø 6	Orange/ Ø 6
End view drawing		
Length	5...30M	5/10/15/20/30M
Order code	16-1035	16-1040

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