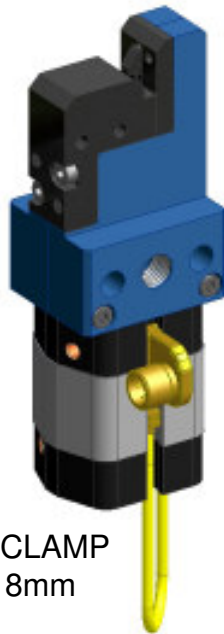
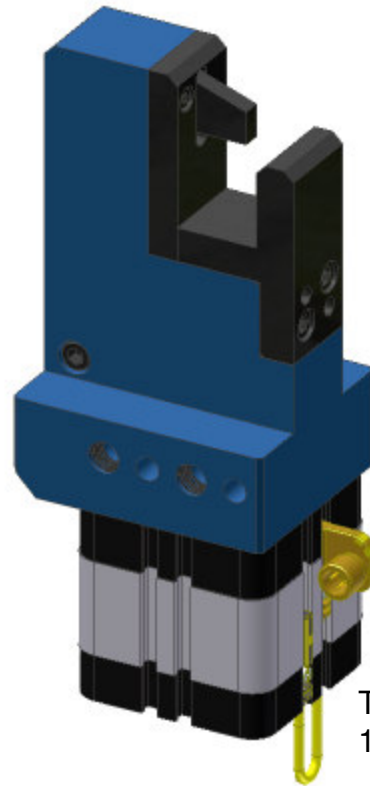


## WEL-GRIP WIRE & TUBE CLAMPS



WIRE CLAMP  
4mm - 8mm



TUBE CLAMP  
12mm - 50mm

### **ENABLES RAPID LOAD / UNLOAD OF FORMED PARTS**

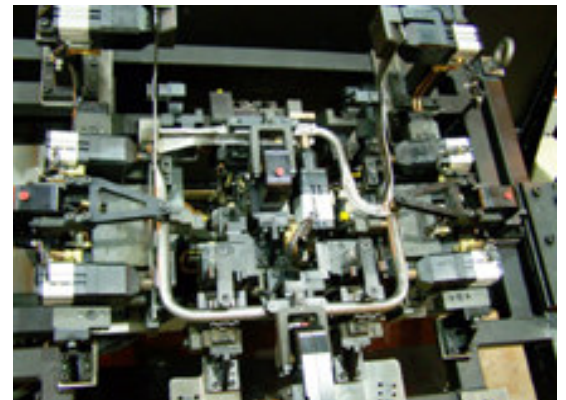
Promote more efficient tool design  
Improve productivity & part quality  
Round or square tubing or wire

### **REDUCE TOOL SIZE & CONGESTION**

Higher throughput  
Reduces floor space usage  
Reduces robot payload requirements  
NAAMS compatible mounting

### **IMPROVES TOOL AVAILABILITY & REDUCES MAINTENANCE**

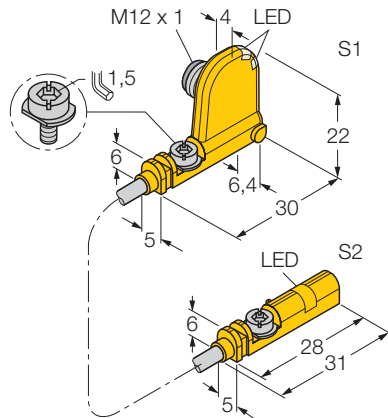
Trouble free operation in aggressive welding environments



**CAD data available at [www.welkerproducts.com](http://www.welkerproducts.com)**

# magnetic field sensor for pneumatic cylinders

## BIM-UNT-0,1-UNT-2AP6X3-H1141



- for T-groove cylinders without mounting accessories
- Optional accessories for mounting on other cylindrical housings.
- One-hand mounting possible
- Direct mounting of fine adjustment and stopper on the sensor
- stable mounting
- Optimum for monitoring two switching points on a cylinder
- No Y-junction required
- magneto-resistive sensor
- 2 x normally open, pnp output
- 4-wire DC, 10...30 VDC

<b>Type</b>	BIM-UNT-0,1-UNT-2AP6X3-H1141
Ident-No.	4685734

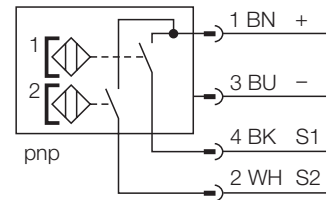
<b>Ambient temperature</b>	-25...+ 70 °C
----------------------------	---------------

<b>Operating voltage</b>	10... 30 VDC
Residual ripple	≤ 10 % $U_{SS}$
DC rated operational current	≤ 150 mA
No-load current $I_0$	≤ 30 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage dip at $I_e$	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes / complete
Output function	4-wire, normally open, pnp
Switching frequency	≤ 1 kHz

<b>Housing</b>	rectangular, UNT
Dimensions	30 x 5 x 22 mm
Housing material	plastic, PP
Material active area	plastic, PP
Connection	Connector, M12 x 1
Cable quality	Ø 3, grey, Lif9Y-11Y, PUR, 0.1 m
Cable cross section:	3 x 0.14 mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67

<b>Operating voltage display</b>	LED green
Display switch state	2 x LED yellow / yellow
Included in scope of supply	2x cable clip

### Wiring diagram

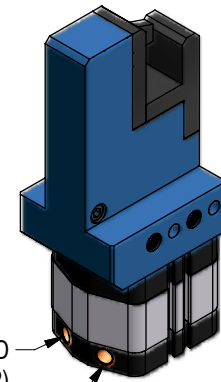
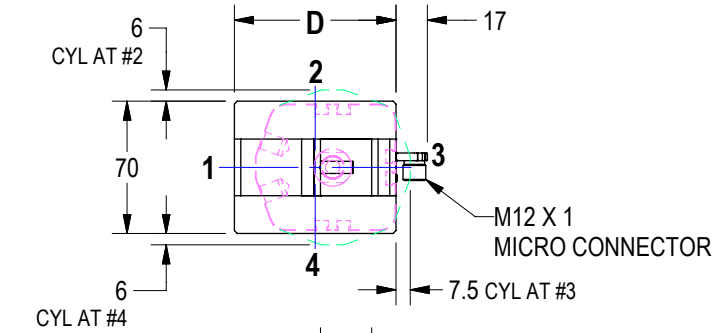


### Functional principle

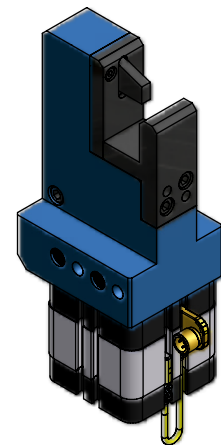
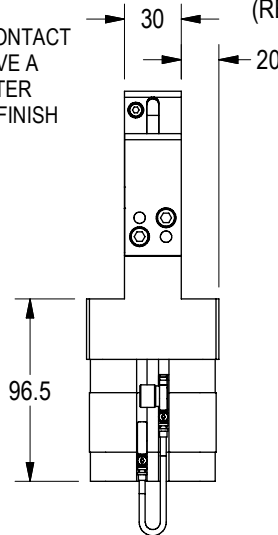
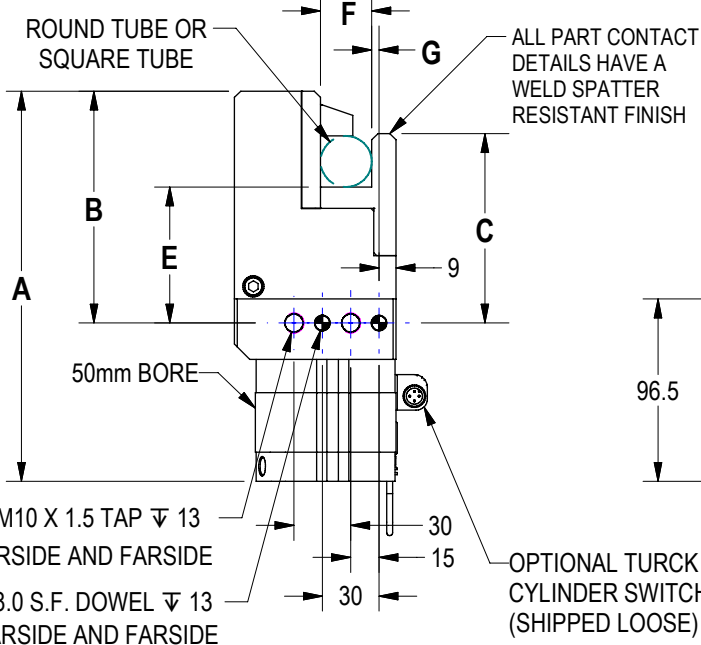
Magnetic field sensors are activated by magnetic fields and are especially suited for piston position detection in pneumatic cylinders. Based on the fact that magnetic fields can permeate non-magnetizable metals, it is possible to detect a permanent magnet attached to the piston through the aluminium wall of the cylinder.



# WEL-GRIP TUBE CLAMP ORDER SHEET



EXTEND  
(CLAMP)  
RETRACT  
(RETRACT)



2X M10 X 1.5 TAP  $\nabla$  13  
NEARSIDE AND FARSIDE  
2X Ø8.0 S.F. DOWEL  $\nabla$  13  
NEARSIDE AND FARSIDE  
(NAAMS COMPLIANT MOUNTING)

OPTIONAL TURCK  
CYLINDER SWITCH  
(SHIPPED LOOSE)

-PROPER GROUNDING OF TOOL IS REQUIRED  
IN A WELD ENVIRONMENT OR MOUNTING OF  
COMPONENT MUST BE INSULATED  
-NO FLOW CONTROLS REQUIRED  
-LARGER SIZES AVAILABLE

MODEL	A	B	C	D	E	F	G
WTB1XXXM 1200	191.5	107.7	92.73	75.5	77.44	12.13	18.88
WTB1XXXM 1500	191.5	107.7	92.73	75.5	74.44	15.13	15.87
WTB1XXXM 1800	191.5	107.7	92.73	75.5	71.44	18.13	12.87
WTB1XXXS0500	191.5	107.7	92.73	75.5	76.74	12.83	18.17
WTB1XXXS0625	191.5	107.7	92.73	75.5	73.57	16.00	15.00
WTB1XXXS0750	191.5	107.7	92.73	75.5	70.39	19.18	11.82
WTB2XXXM 2100	206.5	122.7	100.23	85.5	77.99	21.13	9.87
WTB2XXXM 2400	206.5	122.7	100.23	85.5	74.99	24.13	6.87
WTB2XXXM 2700	206.5	122.7	100.23	85.5	71.99	27.13	3.87
WTB2XXXS0875	206.5	122.7	100.23	85.5	76.76	22.35	8.65
WTB2XXXS1000	206.5	122.7	100.23	85.5	73.59	25.53	5.48
WTB2XXXS1125	206.5	122.7	100.23	85.5	70.41	28.70	2.30
WTB3XXXM 3000	221.5	137.7	107.73	95.5	81.01	30.10	10.90
WTB3XXXM 3300	221.5	137.7	107.73	95.5	78.01	33.10	7.90
WTB3XXXM 3600	221.5	137.7	107.73	95.5	75.01	36.10	4.90
WTB3XXXS1250	221.5	137.7	107.73	95.5	79.26	31.85	9.15
WTB3XXXS1375	221.5	137.7	107.73	95.5	76.09	35.03	5.97
WTB3XXXS1500	221.5	137.7	107.73	95.5	72.91	38.20	2.80
WTB4XXXM 3900	236.5	152.7	119.73	118.2	88.41	39.10	1.90
WTB4XXXM 4200	236.5	152.7	119.73	118.2	85.41	42.10	1.10
WTB4XXXM 4500	236.5	152.7	119.73	118.2	82.40	45.10	4.10
WTB4XXXM 4800	236.5	152.7	119.73	118.2	79.40	48.10	7.10
WTB4XXXM 5000	236.5	152.7	119.73	118.2	79.40	48.10	7.10
WTB4XXXS1625	236.5	152.7	119.73	118.2	86.13	41.38	0.38
WTB4XXXS1750	236.5	152.7	119.73	118.2	82.95	44.55	3.55
WTB4XXXS1875	236.5	152.7	119.73	118.2	79.78	47.73	6.73
WTB4XXXS2000	236.5	152.7	119.73	118.2	76.60	50.90	9.90

**WTB 1 P 1 1 M 1200 A**

**Model**  
**Diameter Group**  
1 1 = .50"- .75", 12-18mm  
2 2 = .88"-1.12", 21-27mm  
3 3 = 1.25"-1.50", 30-36mm  
4 4 = 1.62"-2.00", 42-48mm  
**Cylinder Type**  
P Pneumatic Compact  
**Port Type**  
1 1=1/8 NPT, 2=1/8G  
**Port Location**  
1 1, 2, 3, 4  
**Tube Type**  
M Metric Tube Diameter  
S Std. Tube Diameter (english)  
**Tube Diameter** (See Chart for Std Diameters)  
1200 12.00mm - 50.00mm  
0500 0500 (.50") - 2000 (2.00")  
**Switch Type**  
A A=Turck Cylinder Switch, X=None

**ORDER EXAMPLE**  
METRIC: WTB1P11M1200A  
STANDARD: WTB3P11S1500A (DO NOT SCALE DRAWING)  
(english)

