

ROTAPULS

Incremental encoder modules

Series

IM30 • IM31 • IM56



- Low cost encoder modules
- Easy assembly and disc alignment
- Bearingless design



IM56 • IM31

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range:	-40°C +85°C (-40°F +185°F)
Storage temperature range:	-40°C +85°C (-40°F +185°F)
Option:	• Operating temperature range: -40°C +100°C (-40°F +212°F)

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hub:	Ø 3, 4, 5, 6, 6.35, 8 mm
Electrical connections:	pin or 15 cm flat cable

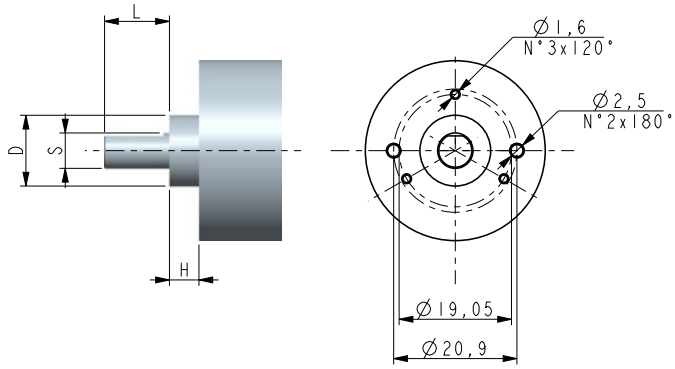
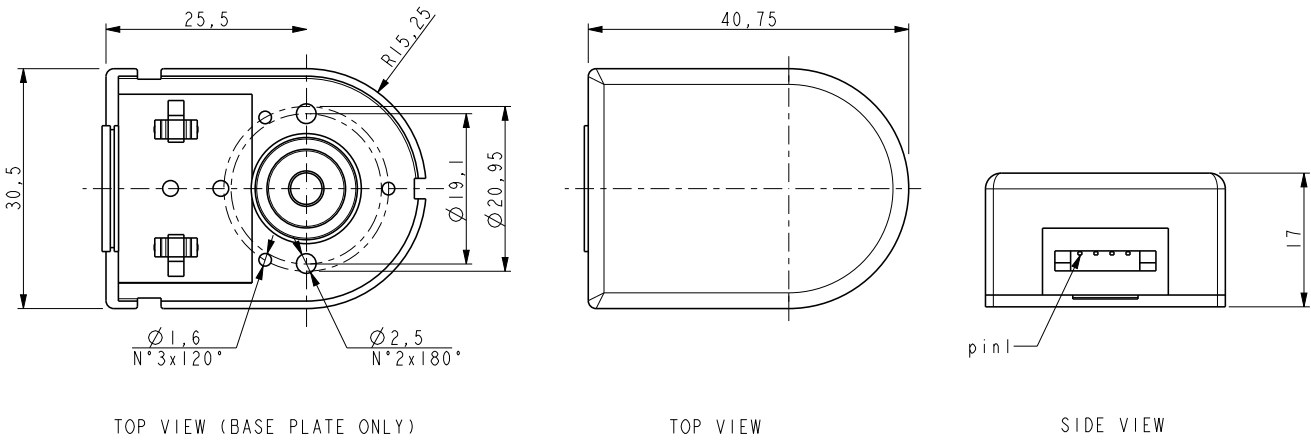
ELECTRICAL SPECIFICATIONS

Resolution (PPR):	IM30: 96, 100, 192, 200, 256, 300, 360, 400, 500, 512 1000, 1024, 1200, 1250 IM31: 50, 100, 200, 256, 360, 400, 500, 512, 1000, 1024 IM56: 1000, 1024, 2000, 2048
Output signals:	IM30: AB 90° ± 8° IM31, IM56: ABO 90° ± 8° (1000, 1024 PPR only AB)
Output circuit:	TTL
Power supply:	+5V ± 10%
Output current (per channel):	5 mA max.
Counting frequency:	IM30: 20 kHz IM31, IM56: 100 kHz max.
Consumption:	60 mA (typical)
Option:	• Line Driver output circuit

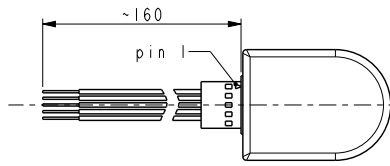
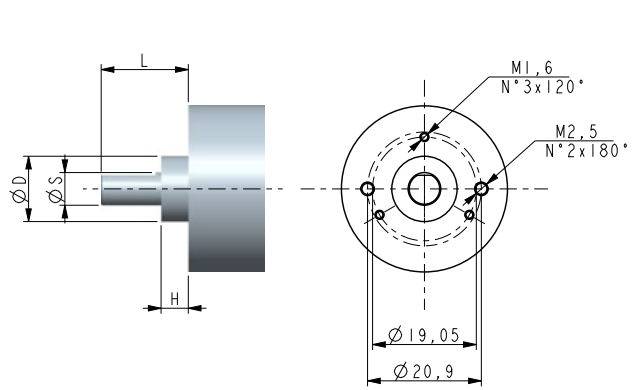
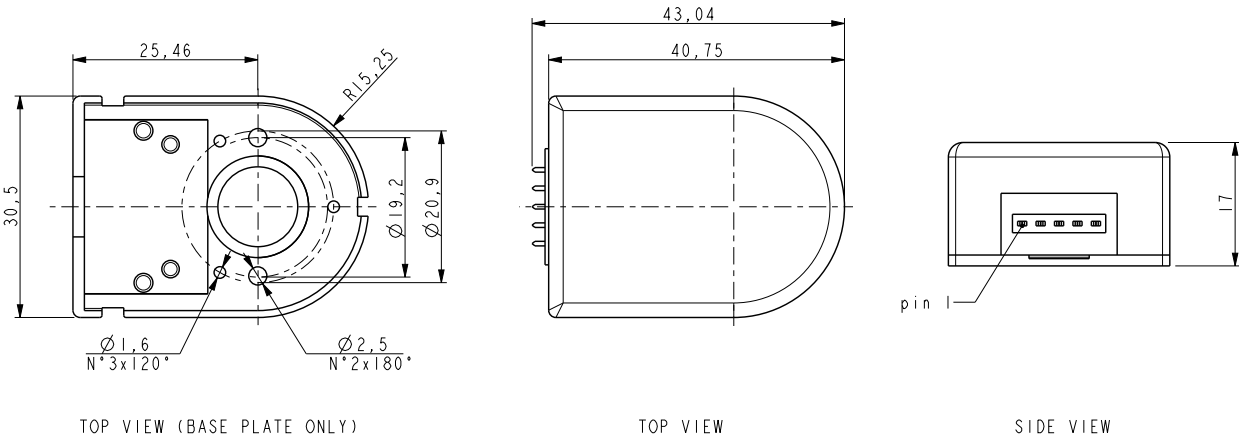
MATERIALS

Housing:	Polyethylene
Hub:	Aluminium or plastic
Disk:	Mylar

Specifications subject to changes without prior notice



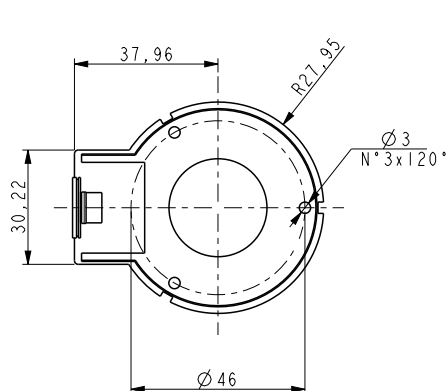
IM30



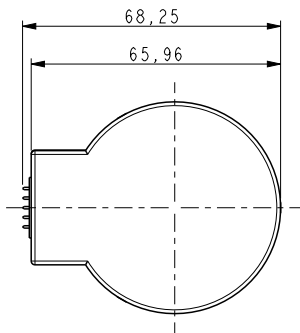
Cable: ~160mm length UL1007/AWG26
 Connector: AMP 103686-4, MOLEX 2695+2759

Voltage (5 pin)		
Pin	Color	Description
1	Black	Ground
2	Yellow	Index
3	White	Channel A
4	Red	DC +5V
5	Green	Channel B

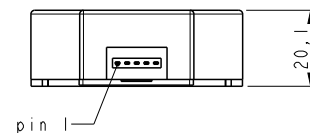
IM31



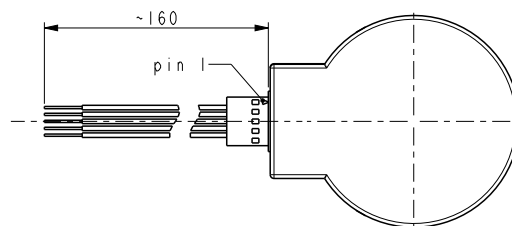
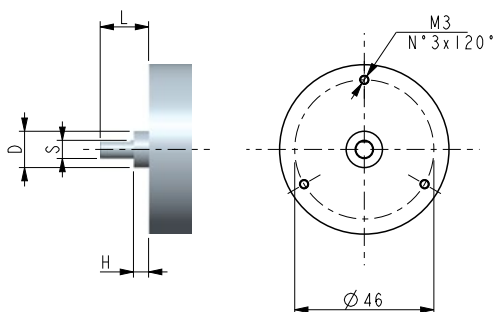
TOP VIEW (BASE PLATE ONLY)



TOP VIEW



SIDE VIEW



Cable: ~160mm length UL1007/AWG26
 Connector: AMP 103686-4, MOLEX 2695+2759

Voltage (5 pin)		
Pin	Color	Description
1	Black	Ground
2	Yellow	Index
3	White	Channel A
4	Red	DC +5V
5	Green	Channel B

Order code

IM30	-	X Ⓐ	-	XXXX Ⓑ	X Ⓒ	X Ⓓ	XX Ⓔ	X Ⓕ	X Ⓖ	/Sxxx Ⓗ
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Ⓐ OUTPUT CIRCUITS N = TTL Ⓑ RESOLUTION See electrical specifications	Ⓒ OUTPUT SIGNALS B = AB Ⓓ POWER SUPPLY 1 = +5Vdc ±5%	Ⓔ SHAFT DIAMETER 3 = 3 mm 4 = 4 mm 5 = 5 mm 6 = 6 mm P6 = 6.35 mm - 1/4" 8 = 8 mm	Ⓕ HUB STYLE A = Aluminium hub (standard) P = Push on hub Ⓖ OPERATING TEMPERATURE RANGE T = -40°C +85°C (-40°F +185°F) K = -40°C +100°C (-40°F +212°F)	Ⓗ CUSTOM VERSION
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Order code

IM31	-	X Ⓐ	-	XXXX Ⓑ	X Ⓒ	X Ⓓ	XX Ⓔ	X Ⓕ	X Ⓖ	/Sxxx Ⓗ
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Ⓐ OUTPUT CIRCUITS N = TTL (AB0) L = Line Driver (AB0 /AB0) Ⓑ RESOLUTION See electrical specifications	Ⓒ OUTPUT SIGNALS Z = AB0 Ⓓ POWER SUPPLY 1 = +5Vdc ±5%	Ⓔ SHAFT DIAMETER 3 = 3 mm 4 = 4 mm 5 = 5 mm 6 = 6 mm P6 = 6.35 mm - 1/4" 8 = 8 mm	Ⓕ HUB STYLE A = Aluminium hub (standard) P = Push on hub Ⓖ OPERATING TEMPERATURE RANGE T = -40°C +85°C (-40°F +185°F) K = -40°C +100°C (-40°F +212°F)	Ⓗ CUSTOM VERSION
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Order code

IM56	-	X Ⓐ	-	XXXX Ⓑ	X Ⓒ	X Ⓓ	XX Ⓔ	X Ⓕ	X Ⓖ	/Sxxx Ⓗ
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Ⓐ OUTPUT CIRCUITS N = TTL (AB0) L = Line Driver (AB0 /AB0) Ⓑ RESOLUTION See electrical specifications	Ⓒ OUTPUT SIGNALS Z = AB0 Ⓓ POWER SUPPLY 1 = +5Vdc ±5% Ⓔ SHAFT DIAMETER 8 = 8 mm	Ⓕ HUB STYLE A = Aluminium hub (standard) P = Push on hub Ⓖ OPERATING TEMPERATURE RANGE T = -40°C +85°C (-40°F +185°F) K = -40°C +100°C (-40°F +212°F)	Ⓗ CUSTOM VERSION
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