

# TURBO-IR-A

## Water Meter

### for Irrigation and Waste Water

### DN50-300; 2"-12"

#### Features and Benefits

- Magnetic drive
- Dry, vacuum sealed register
- Option for "reed switch" sensor
- Register can rotate 360°
- Paddle wheel design prevents jamming and damage due to solid debris
- Easy maintenance
- Can be installed in any orientation
- Low head loss

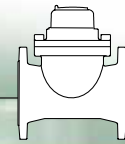
#### Operating Conditions

- **Water temperature:** up to 40°C
- **Pressure rating:** PN16

The TURBO-IR-A uses a multi-blade plastic paddle mounted at the top of the water passage, where disturbance from solids suspended in the water is minimal, permitting accuracy of metering in water containing up to 30% solid debris. Ideal for irrigation and waste water applications.

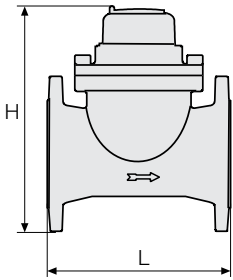


# BERMAD Irrigation



Water Meter for Irrigation and Waste Water

**Turbo-IR-A**



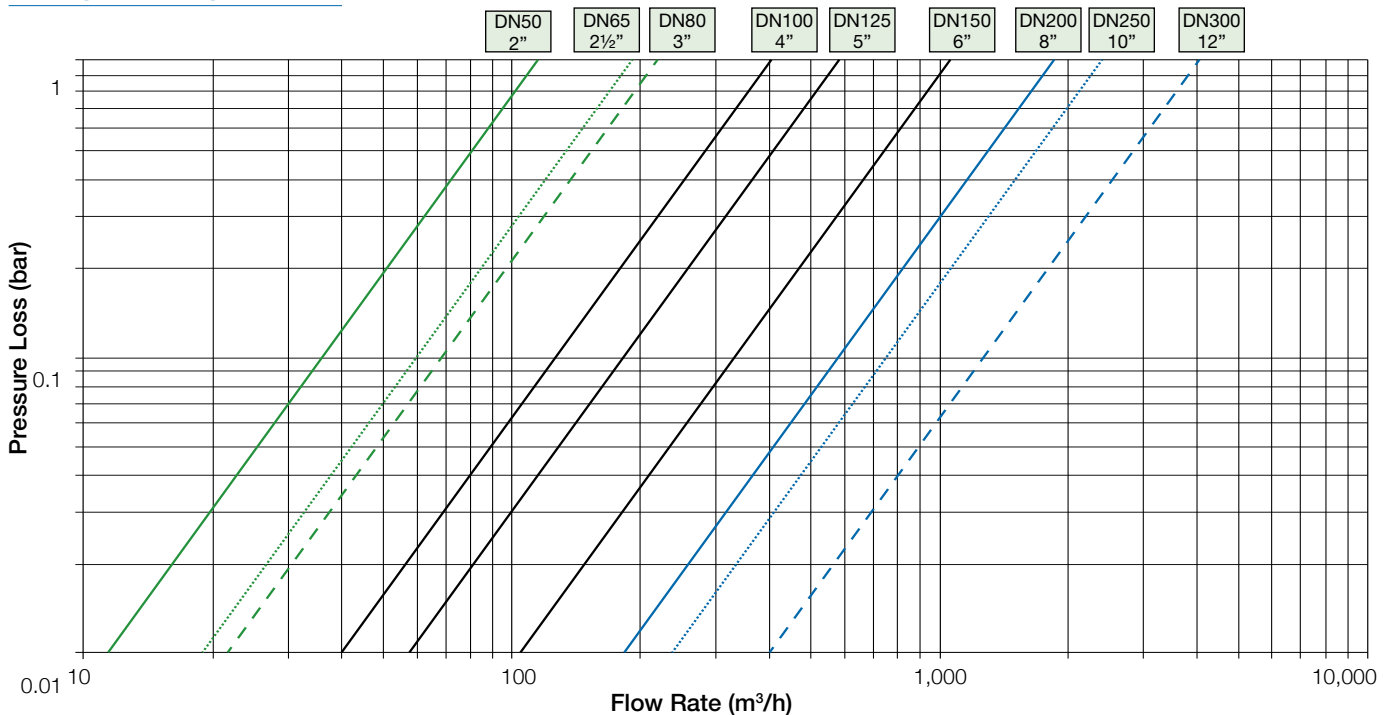
## Dimensions and Weights

Nominal Size	mm	50	65	80	100	125	150	200	250	300
	Inch	2"	2.5"	3"	4"	5"	6"	8"	10"	12"
L, Length (mm)		200	200	225	250	250	300	350	450	500
H, Height (mm)		252	262	280	290	303	333	386	442	494
Weight (kg)		10.5	11.8	15.5	17.5	19.5	30.5	42.5	60	82.5

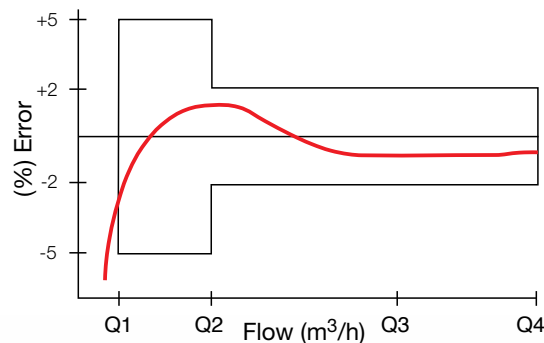
## Metrological Data

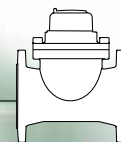
	Accuracy	DN50 2"	DN65 2½"	DN80 3"	DN100 4"	DN125 5"	DN150 6"	DN200 8"	DN250 10"	DN300 12"
Qmin (Minimum flow), m³/h	±5%	2.8	4	6	10	14	20	36	48	64
Qt (Transitional flow), m³/h	±2%	10.5	15	22.5	37.5	52.5	75	135	180	240
Qn (Permanent flow), m³/h	±2%	35	50	75	125	175	250	450	600	800
Qmax (Peak flow, short time), m³/h	±2%	70	100	150	250	350	500	900	1200	1600
Min reading unit (m3)		0.01	0.01	0.01	0.01	0.01	0.1	0.1	1	1
Max register capacity (m3)		999999	999999	999999	999999	999999	999999	999999	999999	999999
$Kv=Q/\sqrt{\Delta p}$		115	192	219	402	584	1059	1826	2373	4017

## Turbo-IR-A Flow Chart



## Accuracy Curve





### Reed Switch Assembly

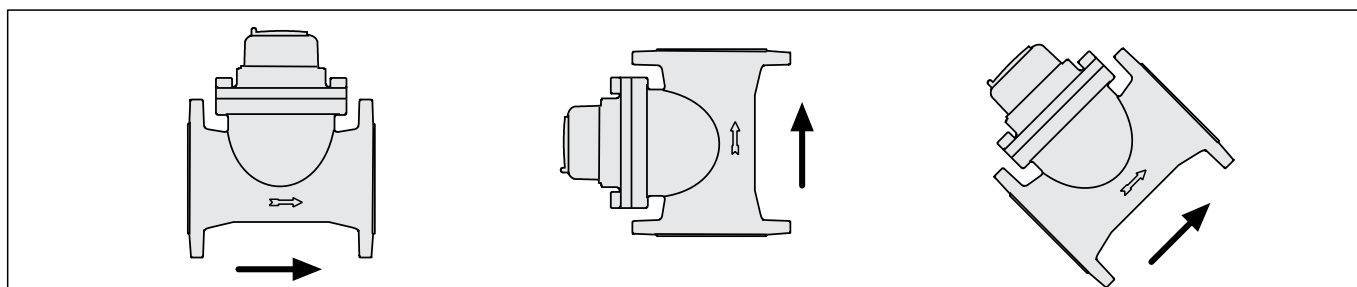
- The Reed Switch pulser consists of plastic housing with a Reed Switch
- Cable: 2 core, 1.5m length
- Reed Switch: single
- Electrical Data:
  - Switching Voltage:** 24 AV/DC max.
  - Switching Current:** 0.01A max.

TURBO-IR-A Size	Reed Switch Pulse		
	1 Pulse for Each		
	100 Liter	1m <sup>3</sup>	10m <sup>3</sup>
2"-5"; DN50-125	X	X	
6"-12"; DN150-300		X	X
Order Code	S3	S2	S1

\* Pulse combinations are available according to "pulse rate table"

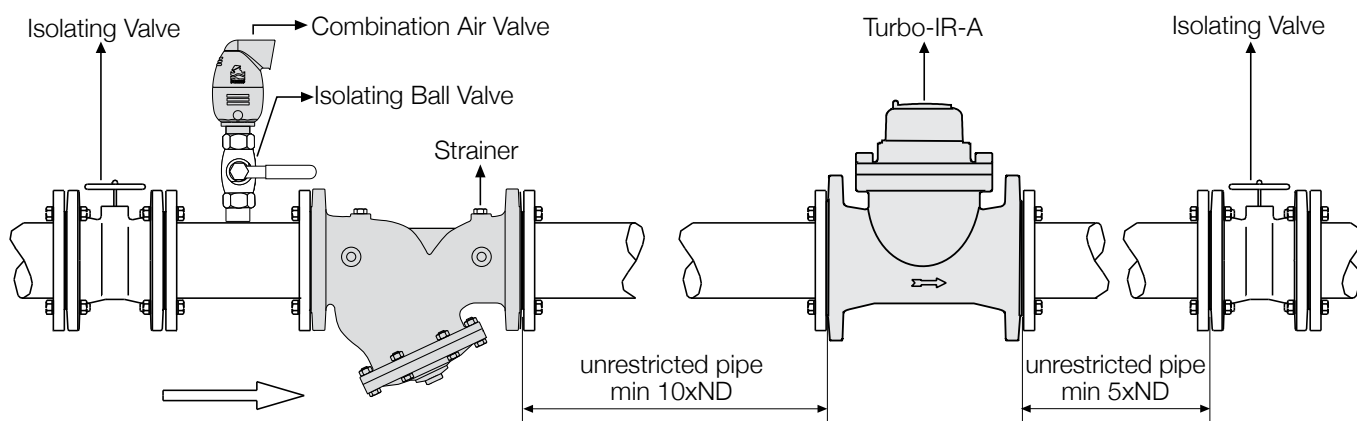
### Installation

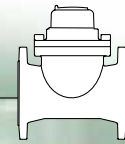
- The water meter can be installed in any orientation without interfering with metrological performance.
- Be sure to install so that water flow follows direction of arrow on water meter.



- To avoid turbulence that may interfere with accurate measurement, it is recommended to have 10 diameters of straight pipe upstream and 5 diameters downstream of water meter.
  - Prior to installation, flush the line to remove debris.
- ter Meters must be filled with water to operate accurately and reliably. Its recommended to install a Combination Air Release valve upstream from the Water Meter.

### Installation Recommendation

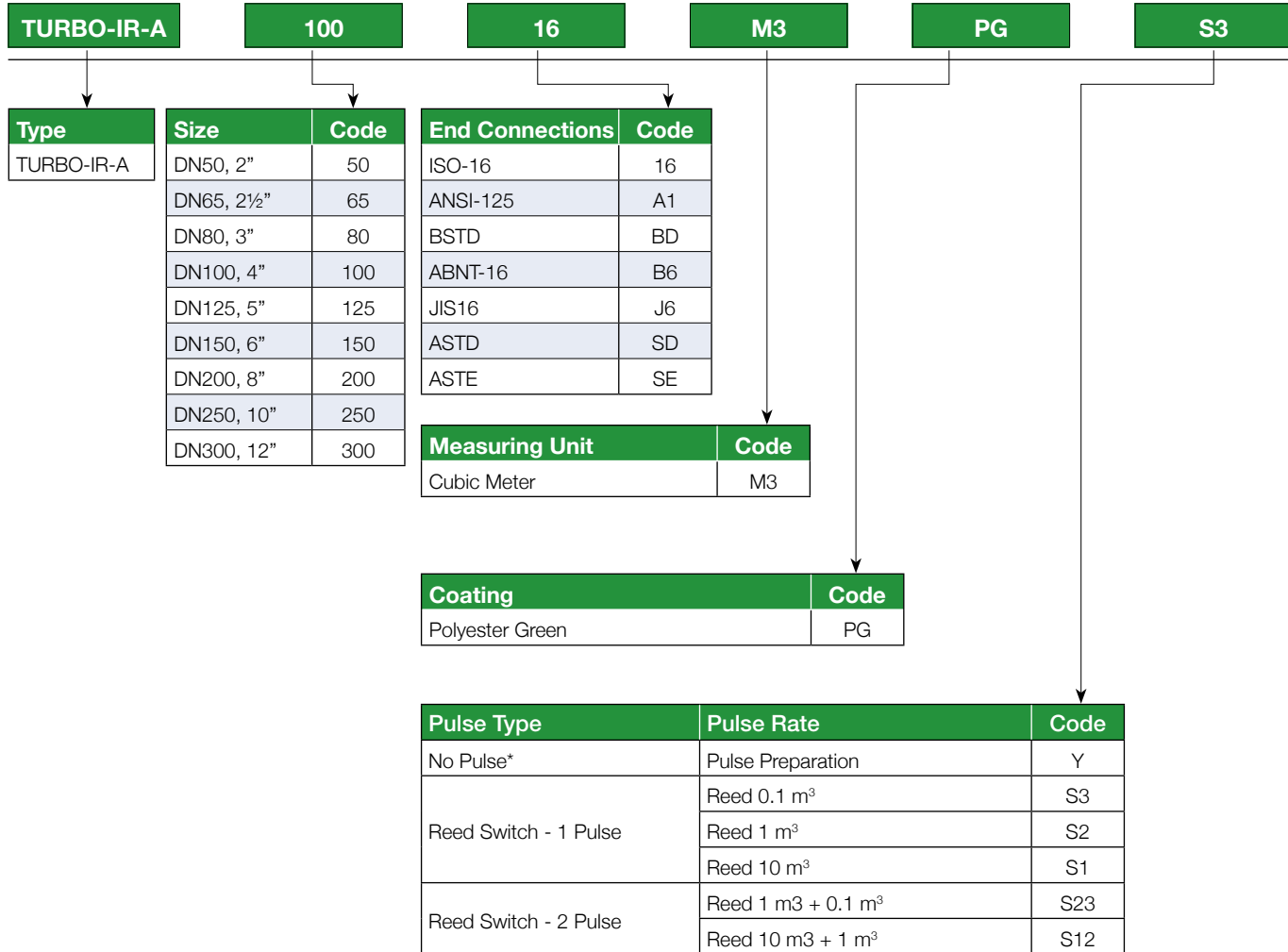




## How to Order

Please specify the requested water meter in the following sequence: (for more options, refer to Ordering Guide)

**Example: TURBO-IR-A – 100 – 16 – M3 – PG – S3**



\* When ordering "No Pulse" (Pulse Preparation) write "Y" & the possible future Pulse Rate  
**Example:** Turbo-IR-A-3"-16-PG-M3-Y/S3

Additional information available in Bermad IOM for Turbo-IR-A

