

GENERAL CHARACTERISTICS

In a metal enclosure a plastic turbine is arranged in sapphire cups and provides flow-dependent revolutions which are magnetically detected by an externally arranged Hall sensor.

- * high accuracy
- * high pressure duty

Male thread G3/4A brass/stainless steel



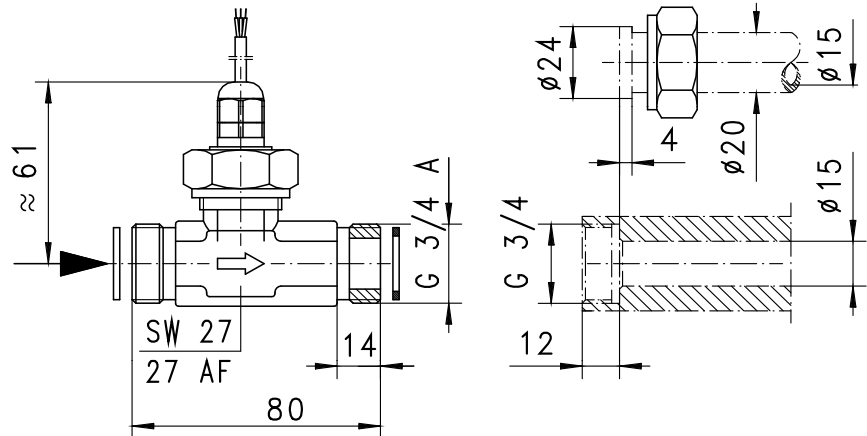
TTH-020AM040R

TECHNICAL DATA

	G	Type	PN bar	Qmax. recom. l/min H ₂ O	metering range l/min (1-5mm ² /s)	weight kg
brass	G 3/4 A	TTH-020AM040.	300	40	2 - 40	0.5
stainless steel	G 3/4 A	TTH-020AK040.	300	40	2 - 40	0.5

linearity	±1% of measured value
reproducibility	±0.2%
signal generation	from 0.3 l/min
resolution	1.2 ml/pulse 855 pulse/litre
media temperature	max. 80°C
max. particles	0.5mm
pressure loss	0.2bar at 10l/min. 0.6bar at 20l/min. 1.3bar at 30l/min. 2.4bar at 40l/min.

Customer-related installation.
Cap nut (only for TTH-020AM)
and seal belong to instrument consignment.

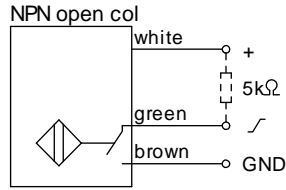


MATERIALS

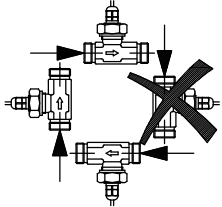
	TTH-020AM	TTH-020AK
housing	brass	stainless steel 1.4571
cap nut	brass	no standard components
turbine	ULTEM PEI	ULTEM PEI
magnetic	hardferrite	hardferrite
shaft	stainless steel	stainless steel
bearing	sapphire / hardferrite	sapphire / hardferrite
seal	viton	viton

ELECTRICAL DATA

hall-Sensor square sensor NPN open col
voltage 4.5..24 V DC
load 10 mA
cable 1.5 metre
protection class IP 65



MOUNTING POSITION



10 x diam. as smoothing section on inlet and outlet

METERING SUBSTANCES



water



stainless steel design TTH-020AK for aggressive liquids



oil up to 5mm²/s

NOMENCLATURE

TTH-	020	A	M	040	M	basic type specification
	020					● nominal diameter DN 20 - G3/4A
		A				● male thread
			M			● brass design
			K			● stainless steel design
				040		● metering range 2 - 40 l/min
					M	● exit NPN OC
					E	● exit by local electronic (e.g. omni-TTH)
Accessories PLUS						⊕ EX amplifier EEV1 product information 80.1.EEV1. Counter EEZ904 product information 83.1.EEZ904.

COMBINATIONS

transformers

- omni local electronic unit, 2xNPN and PNP switch
4(0)..20mA output, with flashing LED, program ring
- Flex switching and frequency exit, 0..10V or 4..20mA, pnp, npn
- ESA1 electronic monitoring unit
- ESK2 2 switchpoints - supply 24 V DC
- ESK3 1 switchpoint - supply 230 V AC
conceived for safety-relevant applications
- EFFS switch output
- EFFI current output 4(0)..20mA
- EFFF frequency output



All technical changes reserved

●BASIC Standard ○BASIC Programme option □VARIO Special option ⊕ PLUS Accessories ✗not recommendable