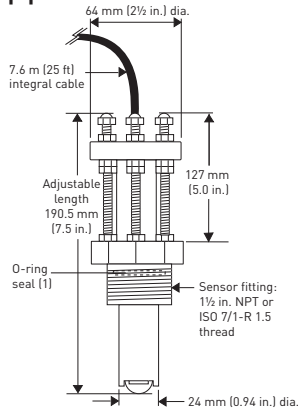
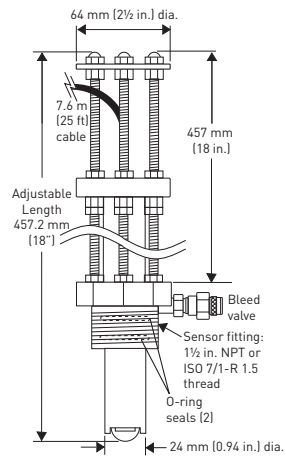


Dimensions

2540 High Performance Flow Sensor for 1½ to 24 in. pipes



2540 Hot-Tap for 1½ to 36 in. pipes



Model 2540

Ordering Notes

Installation fittings and Hot-Tap valves are customer supplied.

Application Tips

- For systems with components of more than one material, the maximum temperature/pressure specification must always be referenced to the component with the lowest rating.
- Use the Conduit Adapter Kit to protect the cable-to-sensor connection when used in outdoor environments.
- Sensor electronics can be easily replaced by 3-2541.260-1 or 3-2541.260-2.

Please refer to **Wiring, Installation, and Accessories** sections for more information.

Specifications

General

Operating Range:
0.1 to 6 m/s (0.3 to 20 ft/s)

Pipe size range:

- Standard Version:
DN40 to DN600 (1½ to 24 in.)
- Hot-Tap Version:
DN40 to DN900 (1½ to 36 in.)

Sensor Fitting Options:

- 1½ in. NPT threads
- ISO 7/1-R 1.5 threads

Linearity: ±1% of full range

Repeatability: ±0.5% of full range

Min. Reynolds Number Required: 4500

Wetted Materials

- Body: 316 stainless steel (1.4401)
- Fitting: 316 stainless steel (1.4401)
- Fitting O-rings: FPM, optional EPR (EPDM)
- Rotor: 17-4 SS Alloy
- Rotor Pin:
Tungsten Carbide GRP 1 (standard)
stainless steel (optional)
- Retainers (2): 316 stainless steel (1.4401)
- Rotor Bearings (2): Rulon® B (Fluoroloy B/PTFE)

Electrical

Frequency: 15 Hz per ft/s nominal

Power: 5 to 24 VDC ±10%,
regulated, 1.5 mA max.

Electrical continued

Output Type: Open collector, sinking,
max 10.0 mA

Cable Length: 7.6 m (25 ft), can be
extended up to 300 m
(1,000 ft)

Cable Type: 2-conductor twisted-pair
with shield, 22AWG

Max. Temperature/Pressure Rating

- Sensor with standard FPM sensor fitting O-rings:
17 bar @ 82 °C (250 psi @ 180 °F)
- Sensor with optional EPR (EPDM) sensor fitting O-rings:
17 bar @ 100 °C (250 psi @ 212 °F)

See Temperature and Pressure graphs for more information.

Operating Temperature:
-18 °C to 100 °C (0 °F to 212 °F)

Shipping Weight

3-2540-1/-2/-1S/-2S: 1.79 kg 3.9 lb
3-2540-3/-4/-3S/-4S: 2.15 kg 4.7 lb

Standards and Approvals

- CE
- RoHS compliant
- Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management

Ordering Information

Sensor Part Number	
3-2540	Stainless Steel High Performance flow sensor with removable electronics
	Mounting Option - Choose One
-1	1½ inch NPT thread
-2	1½ inch ISO thread
-3	1½ inch NPT thread, Hot-Tap design*
-4	1½ inch ISO thread, Hot-Tap design*
	Rotor Pin Material
-	Tungsten Carbide
-S	Stainless Steel
3-2540	-1 Example Part Number

*Must use 3-1500.663 Hot-Tap installation tool (ordered separately)

Mfr. Part No.	Code	Mfr. Part No.	Code
3-2540-1	198 840 035	3-2540-1S	159 001 501
3-2540-2	198 840 036	3-2540-2S	159 001 502
3-2540-3	198 840 037	3-2540-3S	159 001 503
3-2540-4	198 840 038	3-2540-4S	159 001 504

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-1500.663	198 820 008	Hot-Tap Installation Tool (see Installation for more info)
1220-0021	198 801 186	O-ring, FPM (2 required per sensor)
1224-0021	198 820 006	O-ring, EPR (EPDM) (2 required per sensor)
1228-0021	198 820 007	O-ring, FFPM (2 required per sensor)
3-2540.320	198 820 040	Rotor kit, 2540 Peek Bearing (old version)
3-2540.321	159 000 623	Rotor kit, 2540 Tungsten Carbide Pin (new version since January 1, 2000)
3-2540.322	159 000 864	Rotor kit, stainless steel pin and rotor
P52504-3	159 000 866	Rotor pin, Tungsten Carbide
P52504-4	159 000 867	Rotor pin, 316 SS
P52503	198 820 013	Bearing, Rulon® B (Fluoroloy B/PTFE)
P52527	159 000 481	Retainers, SS (1.4401)
3-2541.260-1	159 000 849	Standard replacement electronics module
3-2541.260-2	159 000 850	Hot-Tap replacement electronics module
5523-0222	159 000 392	Cable (per foot), 2 cond. w/shield, 22 AWG
P51589	159 000 476	Conduit adapter kit
P31934	159 000 466	Conduit cap