



VFS60

VFS60 - robust, versatile and perfected for asynchronous motors

SICK
Sensor Intelligence.



Technical data overview

Type	For integration
Communication interface	Incremental
Pulses per revolution	1,000 ... 65,536 (depending on type)
Mechanical interface	Blind hollow shaft, 10 mm Blind hollow shaft, 12 mm Blind hollow shaft, 14 mm Blind hollow shaft, 15 mm Blind hollow shaft, 8 mm Blind hollow shaft, 3/8" Blind hollow shaft, 5/8" Through hollow shaft, 8 mm Through hollow shaft, 10 mm Through hollow shaft, 12 mm Through hollow shaft, 14 mm Through hollow shaft, 15 mm Through hollow shaft, 5/8" 10 mm 12 mm 1/2" 14 mm 15 mm
Connection type	Cable, 8-wire, radial, 0.5 m ¹⁾ Cable, 8-wire, radial, 1.5 m ¹⁾

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

Product description

Motor feedback systems from the VFS60 product family are ideally suited for use in industrial applications under rough conditions, especially for attaching to asynchronous motors. A large number of product variants meets almost all requirements: with through hollow shaft or blind hollow shaft of 8 mm to 15 mm diameter, with plug-in cable connection or pre-assembled male connector at the cable end. This means more mechanical flexibility. In addition, the robust shaft bearing increases the service life while at the same time reducing the servicing and maintenance requirements. The increased bearing distance guarantees a previously unattainable low level of vibration and optimum concentricity, even at maximum operating speed. The product families are allocated to different performance classes. From different defined line counts to a pre-programmed version. Moreover, all the common electrical interfaces are available. TTL, HTL or sine 0.5V_{ss}.

At a glance

- TTL, HTL or sine 0.5 V_{pp} interfaces
- Resolution of up to 65,536 lines per revolution
- Individual programming of the interface, line count and of the zero pulse
- Direct programming via RS485
- Excellent concentricity through large distance between the ball bearings
- Extremely rugged
- Protection class IP65
- Mechanical flexibility through blind hollow shaft and through hollow shafts with diameters of 8 to 15 mm, available with various torque supports
- Temperature range from -30 °C to +100 °C
- Insulated shaft connection through plastic collar possible

Your benefits

- Programmable version for a reduced product variety
- Various programming tools designed to take into account your own programming requirements
- High performance and reliability even in rough ambient conditions
- High vibration resistance and extended temperature range through nickel code disk
- Large ball bearing distances reduce uneven wear and minimize vibration on the motor feedback housing, which increases the motor feedback system's service life
- The "insulated shaft connection" prevents electrical continuity through the bearings of the motor feedback system, thus extending the operating life of the system

Ordering information

Other models and accessories → www.sick.com/VFS60

- **Communication interface:** Incremental TTL RS-422
- **Type:** for integration
- **Operating temperature range:** -30 °C ... +100 °C

Pulses per revolution	Mechanical design	Connection type	Type	Part no.
1,000	Blind hollow shaft	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60E-BJCK01000	1069972
	Through hollow shaft	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-TGAK01000	1060678
1,024	-	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60E-T4AJ01024	1036150
			VFS60E-T5AJ01024	1036129
			VFS60E-T6AJ01024	1036640
			VFS60E-T8AJ01024	1036486
1,024	-	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60E-T8CJ01024	1036488
			Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-T4AK01024
		VFS60B-T4CK01024		1036016
		VFS60B-T5AK01024		1036074
		VFS60B-T5CK01024		1036077
		VFS60B-T7AK01024		1036083
		VFS60B-T7CK01024		1036086
		VFS60B-T8AK01024		1036022
		VFS60B-T8CK01024		1036025
		VFS60E-T4AK01024	1036092	

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

Pulses per revolution	Mechanical design	Connection type	Type	Part no.		
			VFS60E-T4CK01024	1036094		
			VFS60E-T5AK01024	1036098		
			VFS60E-T5CK01024	1036100		
			VFS60E-T7AK01024	1036104		
			VFS60E-T7CK01024	1036106		
			VFS60E-T8AK01024	1036110		
			VFS60E-T8CK01024	1036112		
	Blind hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-BBAJ01024	1059265		
			VFS60B-BHAJ01024	1054143		
			VFS60E-BDCJ01024	1070720		
			VFS60E-BEAJ01024	1062093		
			VFS60E-BECJ01024	1062094		
			VFS60E-BHAJ01024	1036452		
			VFS60E-BHCJ01024	1036455		
		Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-BHCK01024	1050571		
			VFS60E-BEAK01024	1064557		
			VFS60E-BHAK01024	1036453		
			VFS60E-BHCK01024	1036456		
			Through hollow shaft	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-TDCK01024	1065616
					VFS60B-TGCK01024	1036560
					2,000	Through hollow shaft
VFS60E-THAJ02000	1062167					
2,048	-	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-T4AK02048	1036014		
			VFS60B-T4CK02048	1036017		
			VFS60B-T5AK02048	1036075		

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Pulses per revolution	Mechanical design	Connection type	Type	Part no.
			VFS60B-T5CK02048	1036078
			VFS60B-T7AK02048	1036084
			VFS60B-T7CK02048	1036087
			VFS60B-T8AK02048	1036023
			VFS60B-T8CK02048	1036026
			VFS60E-T4AK02048	1036093
			VFS60E-T4CK02048	1036095
			VFS60E-T5AK02048	1036121
			VFS60E-T5CK02048	1036101
			VFS60E-T7AK02048	1036105
			VFS60E-T7CK02048	1036107
			VFS60E-T8AK02048	1036111
			VFS60E-T8CK02048	1036113
				Blind hollow shaft
VFS60E-BHCJ02048	1068023			
Through hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-TDAJ02048		1060653
		VFS60E-TEAJ02048		1059901
		VFS60E-TGAJ02048		1036655
		Cable, 8-wire, radial, 1.5 m ¹⁾		VFS60E-TGAK02048
VFS60E-THAK02048	1037808			
4,096	Blind hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-BDAJ04096	1060410
8,192	Blind hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-BBAJ08192	1037921
	Through hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-TEAJ08192	1036733
16,384	Blind hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-BEAJ16384	1052952
65,536	Through hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-TBAJ65536	1069902
			VFS60B-THAJ65536	1088087

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

- **Communication interface:** Incremental HTL
- **Type:** for integration
- **Operating temperature range:** -30 °C ... +100 °C

Pulses per revolution	Mechanical design	Connection type	Type	Part no.
1,024	-	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-T8EJ01024	1036116
			VFS60E-T7EJ01024	1036153

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Pulses per revolution	Mechanical design	Connection type	Type	Part no.	
		Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60E-T8EJ01024	1036490	
			VFS60B-T4EK01024	1036019	
			VFS60B-T5EK01024	1036080	
			VFS60B-T7EK01024	1036089	
			VFS60B-T8EK01024	1036028	
			VFS60E-T4EK01024	1036096	
			VFS60E-T5EK01024	1036102	
			VFS60E-T7EK01024	1036108	
			VFS60E-T8EK01024	1036114	
	Blind hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-BHEJ01024	1052292	
			VFS60E-BDEJ01024	1036664	
			VFS60E-BEEJ01024	1068852	
			VFS60E-BHEJ01024	1036458	
		Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-BEEK01024	1058957	
			VFS60E-BGEEK01024	1078859	
	Through hollow shaft	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-BHEK01024	1036459	
			VFS60E-BJEK01024	1053007	
			VFS60B-THEK01024	1063530	
			VFS60E-TGEK01024	1060782	
	2,048	-	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60E-T8EJ02048	1038238
Cable, 8-wire, radial, 1.5 m ¹⁾				VFS60B-T4EK02048	1036020
				VFS60B-T5EK02048	1036081
				VFS60B-T7EK02048	1036090
				VFS60E-T4EK02048	1036097
				VFS60E-T5EK02048	1036103
				VFS60E-T7EK02048	1036109
Blind hollow shaft		Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60E-BEEJ02048	1060582	
			VFS60E-BHEJ02048	1064873	
Through hollow shaft		Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-TGEK02048	1070947	
			VFS60E-TEEK02048	1057915	
4,096		Through hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-TGEJ04096	1065747
8,192		-	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-T5EK08192	1036314
16,384	-	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60B-T8EK16384	1039017	

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

- **Communication interface:** Incremental Sin/Cos
- **Type:** for integration
- **Pulses per revolution:** 1,024
- **Operating temperature range:** -30 °C ... +100 °C

Mechanical design	Connection type	Type	Part no.
Blind hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60B-BDNJ01024	1060409
		VFS60E-BGNJ01024	1060750
		VFS60E-BHNJ01024	1062091
	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60E-BBNK01024	1054741
		VFS60E-BDNK01024	1063824
		VFS60E-BENK01024	1061122
		VFS60E-BGNK01024	1063582
		VFS60E-BHNK01024	1055020
		VFS60E-BJNK01024	1057772
Through hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60E-TBNJ01024	1053483
		VFS60E-TDNJ01024	1057064
		VFS60E-TGNJ01024	1053167
		VFS60E-THNJ01024	1053411
	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60E-TDNK01024	1055606
		VFS60E-TENK01024	1053765
		VFS60E-TGNK01024	1064184
		VFS60E-THNK01024	1053168

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

- **Communication interface:** Incremental TTL HTL
- **Type:** for integration
- **Pulses per revolution:** 1,024
- **Operating temperature range:** -30 °C ... +100 °C

Mechanical design	Connection type	Type	Part no.
-	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60A-T4PK01024	1050768
Blind hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60A-BDPJ01024	1059760
		VFS60A-BGPJ01024	1037006
		VFS60A-BHPJ01024	1061134
	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60A-BDPK01024	1059761
		VFS60A-BEPK01024	1036748
		VFS60A-BHPK01024	1036747
		VFS60A-BJPK01024	1036746

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

Mechanical design	Connection type	Type	Part no.
Through hollow shaft	Cable, 8-wire, radial, 0.5 m ¹⁾	VFS60A-TBPJ01024	1050912
		VFS60A-TDPJ01024	1037366
		VFS60A-TGPJ01024	1037855
		VFS60A-THPJ01024	1051757
	Cable, 8-wire, radial, 1.5 m ¹⁾	VFS60A-TDPK01024	1037729
		VFS60A-TEPK01024	1036750
		VFS60A-TGPK01024	1037112
		VFS60A-THPK01024	1036749
		VFS60A-TJPK01024	1036752

¹⁾ The universal cable connection is positioned so that it is possible to lay it without bends in a radial or axial direction.

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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