

Datasheet

Torque Sensor

DRFS ¼"-W-S

Torque ranges from 1 Nm to 20 Nm

with hex drive and identification
of angle rotation

for the documentation
in the screwing technique
according to DIN EN ISO 9000 ff



- universal attachment to standard electric screwdrivers
- rigid connection between sensor and screwdriver
- lockable in any position, thus easy handling
- maintenance-free due to non-contact measured value transmission
- high accuracy through frequency modulation and DMS principle
- high interference immunity due to amplified active signal
- integrated chip for sensor detection in conjunction with evaluation unit GMV2 and ValueMasterBase

Torque Ranges

DRFS ¼" -w-S (Nm)	Mechanical overload
1 2 5 10 12	100 %
15	70 %
20	30 %

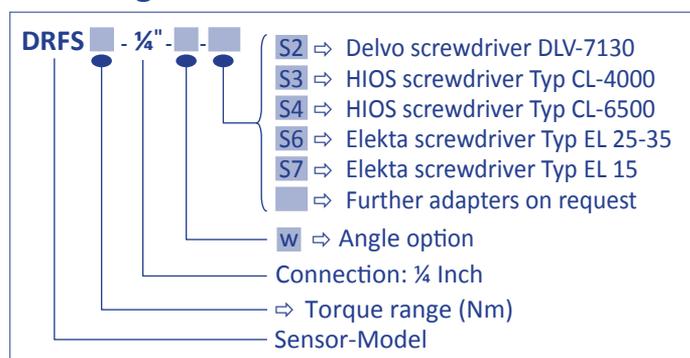
Electrical Specifications DRFS

Supply voltage:	12 V DC ± 10 %
Power consumption:	< 200 mA
Rise time 10-90 %:	1 ms (1 kHz)
Voltage output:	0 to ± 5 V
Internal resistance:	100 Ω
Ripple:	< 100 mVpp
Nonlinearity:	< 0,15 %
Hysteresis:	< 0,1 %
Deviation at zero point:	≤ ± 100 mV
Operating temperature:	0 - 60 °C
Compensated temperature range:	5 - 45 °C
Temperature error	
Zero point:	0,02 % / K
Sensitivity:	0,01 % / K
Max rev.:	8000 min ⁻¹
Weight approx.:	250 g
Protection:	IP 40
Connection:	2,5m cable with 12pin- connector
Calibration: Factory certificate with 25% steps cw. Other calibrations upon request.	

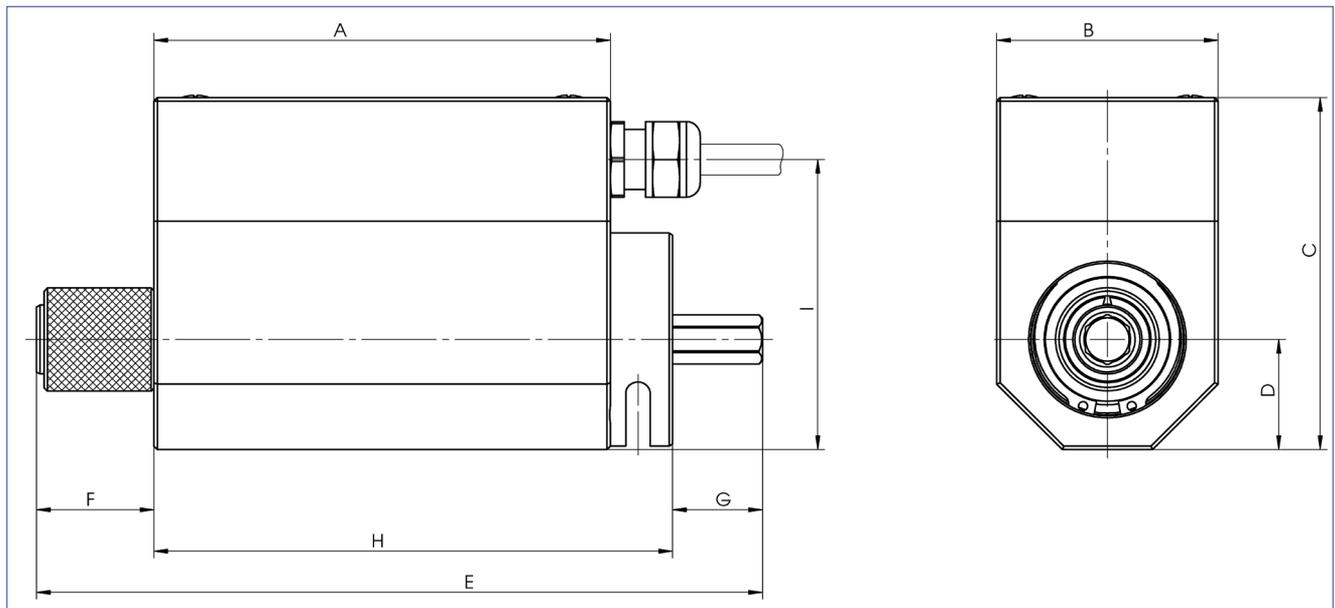
Angle option (w)

Max. rev.:	3000 min ⁻¹
Output:	open-collector
Internal pull up:	10 kΩ (5 V level)
External pull up:	24 V max
I _{max} :	20 mA
Pulses / rev.:	360
Resolution:	1°
Detection of direction of rotation:	2 Imp. 90° Phase shift Channel A clockwise of the drive side leading

Ordering Code



Mechanical Dimensions DRFS



1/4" Hexagonal drive DIN 3126 (ISO standard 1973-1975) Size E / F with quick-coupling,

Mechanical Values

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	Weight approx. (g)
DRFS 1/4"-w-S	66	32	51	16	105	17	30	75	42	280

General tolerances DIN 2768-m

Available Accessories

Supply and display unit: ValueMasterBase
GMV2
ValueView

Cables

