

Torque Transducer

## DRFS

Torque ranges from 0,5 to 20 Nm

Hexagonal drive

suitable for motor vehicle,  
test bench and assembly technology

suitable for pulse tool

optional angle function



### Features DRFS

- No service needed because of contactless data acquisition
- High accuracy due to frequency modulation and strain gage technology
- Single power supply
- High noise immunity due to amplified active signal
- integrated sensor-detection chip for use with GMV2 analyzer



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*Transducer Specialists...*

appmeas.co.uk | info@appmeas.co.uk | +44 (0) 118 981 7339

## Measuring Range

DRFS (Nm)	Overload (%)
1   2   5   10   12	100
15	70
20	30

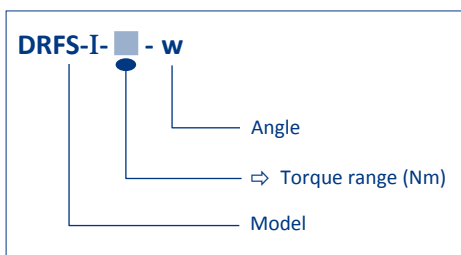
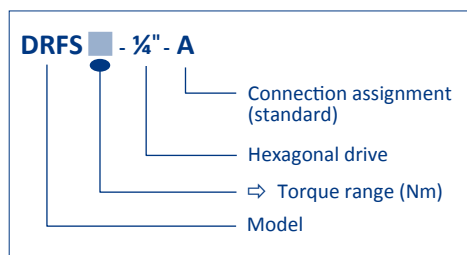
DRFS-I-w (Nm, with angle function)	Overload (%)
0,5   1   2   5	100
10	80
20	10

## Electrical Specifications

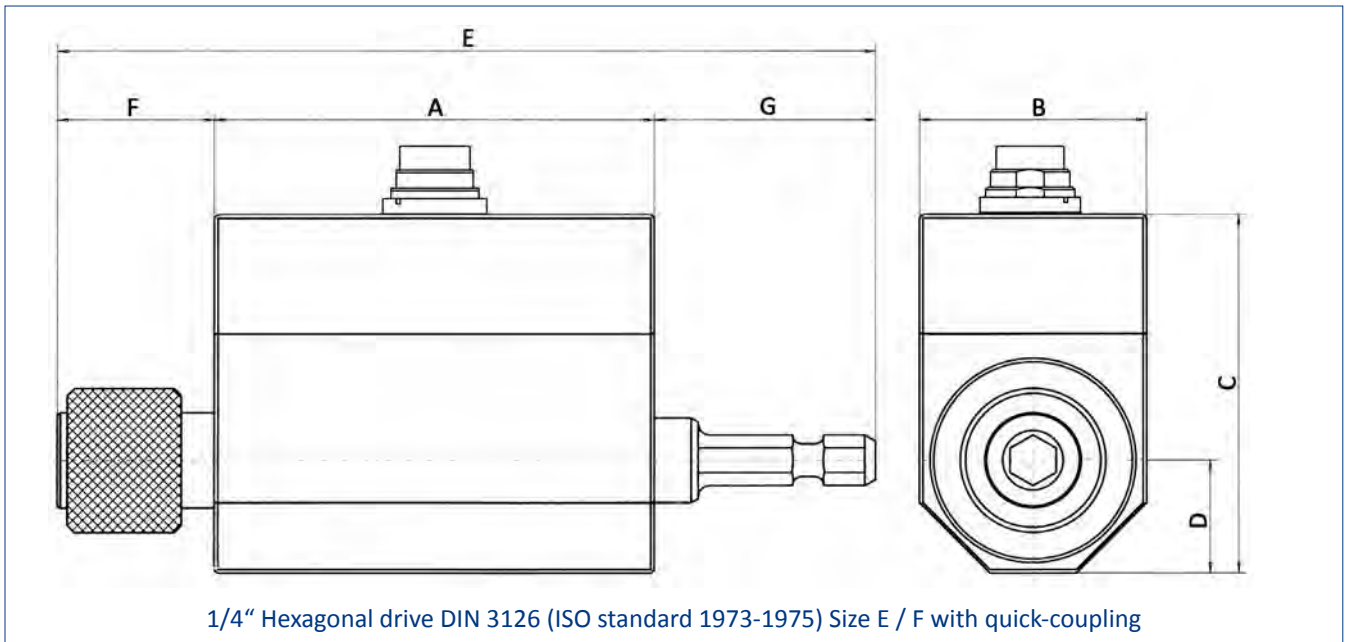
Supply voltage:	12 V DC $\pm$ 10 %
Current consumption:	< 200 mA
Rise time 10-90 %:	1 ms (1 kHz)
Voltage output:	0 to $\pm$ 5 V
Internal resistance:	100 $\Omega$
Ripple:	< 100 mVss
Nonlinearity:	< 0,15 %
Hysteresis:	< 0,1 %
Deviation at zero point:	$\leq \pm$ 100 mV
Operating temperature:	0 - 60 °C
Compensated temperature range:	5 - 45 °C
Temperature error	
Zero point:	0,02 / K
Sensitivity:	0,01 / K
max rev. (DRFS):	10.000 min <sup>-1</sup>
Internal protection:	IP 40 (DIN 40050)
Connection:	12pin-connector
Calibration: Works certificate with 25% steps cw. Other calibrations on request.	

Angle / DRFS-I-w	
max rev.:	3000 min <sup>-1</sup>
Output:	open-collector
Internal pull up:	10 k $\Omega$ (5 V Pegel)
External pull up:	24 V max.
I <sub>max</sub> :	20 mA
Pulses / rev.:	360
Resolution:	1°
Detection of direction of rotation:	2 pulses 90° phase shift Channel A leading for clockwise rotation of drive end

## Ordering Code System



## Mechanical dimensions



## Mechanical values

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Weight approx (g)
<b>DRFS</b>	62	32	51	16	115	22	31	300
<b>with angle function</b>								
<b>DRFS-I-w</b>	66	32	51	16	114	17	30	280

General tolerances DIN 2768-m

## Available Accessories

Supply and display unit: ValueMasterBase  
GMV2  
ValueView

Cables



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