

KR80



Description

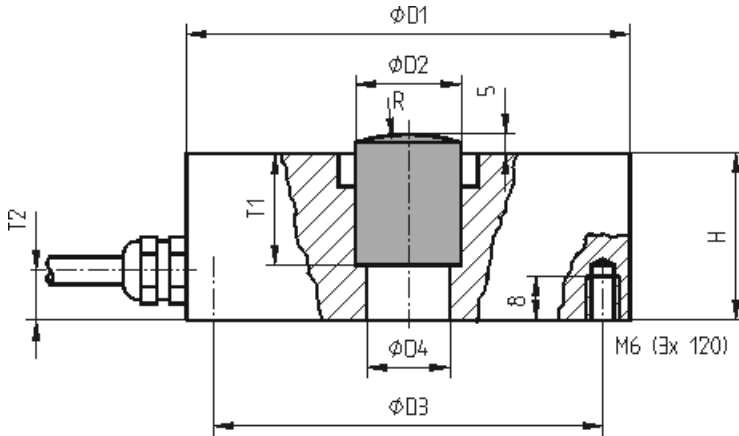
The load cell KR80 is a precision load cell in cylindrical design. It is hermetically sealed by means of welding and available in a calibratable design according to the European requirements OIML R-60 up to class C6. It stands out thanks to its particularly low measurement path of just 0.1mm.

The environmental protection is IP 66.

Force transmission is realised by a cylindrical load knob that has to be inserted into the hole $\varnothing 2$.

Optionally pendular bases for applications in weighing technology can be installed.

Dimensions



	0,25 t ... 1 t	2 t ... 5 t	10 t
H	25	30	35
D1	80	80	95
D2	19	19	28,1
D3	70	70	83
D4	M10	15 ^{H7}	24,9
T1	15	20	14,8
T2	9,5	8,5	10,0
R	80	100	100

Technical Data - Version 250kg

Force sensor

Type	load cell
Force direction	Compression
Rated force Fx	250 kg
Force introduction	Load button
Operating force	150 %FS
Material	Stainless steel
Height	25 mm
Length or Diameter	80 mm
Breaking force	300 %Fn

Electrical Data

Input resistance	1110 Ohm
Tolerance input resistance	50 Ohm
Output resistance	1025 Ohm
Tolerance output resistance	25 Ohm
Insulation resistance	>5x10 ⁹ Ohm
Rated output	2 mV/V / FS

Connection Data

Connection type	4 conductor open
Cable length	3 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-50 ... 80 °C
Environmental protection	IP66

Technical Data - Version 500kg

Force sensor

Type	load cell
Force direction	Compression
Rated force Fx	500 kg
Force introduction	Load button
Operating force	150 %FS
Material	Stainless steel
Height	25 mm
Length or Diameter	80 mm
Breaking force	300 %Fn

Electrical Data

Input resistance	1110 Ohm
Tolerance input resistance	50 Ohm
Output resistance	1025 Ohm
Tolerance output resistance	25 Ohm
Insulation resistance	>5x10 ⁹ Ohm
Rated output	2 mV/V / FS

Connection Data

Connection type	4 conductor open
Cable length	3 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-50 ... 80 °C
Environmental protection	IP66

Technical Data - Version 1t

Force sensor

Type	load cell
Force direction	Compression
Rated force Fx	1 t
Force introduction	Load button
Operating force	150 %FS
Material	Stainless steel
Height	25 mm
Length or Diameter	80 mm
Breaking force	300 %Fn

Electrical Data

Input resistance	1110 Ohm
Tolerance input resistance	50 Ohm
Output resistance	1025 Ohm
Tolerance output resistance	25 Ohm
Insulation resistance	>5x10 ⁹ Ohm
Rated output	2 mV/V / FS

Connection Data

Connection type	4 conductor open
Cable length	3 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-50 ... 80 °C
Environmental protection	IP66

Technical Data - Version 2t

Force sensor

Type	load cell
Force direction	Compression
Rated force Fx	2 t
Force introduction	Load button
Operating force	150 %FS
Material	Stainless steel
Height	25 mm
Length or Diameter	80 mm
Breaking force	300 %Fn

Electrical Data

Input resistance	1110 Ohm
Tolerance input resistance	50 Ohm
Output resistance	1025 Ohm
Tolerance output resistance	25 Ohm
Insulation resistance	>5x10 ⁹ Ohm
Rated output	2 mV/V / FS

Connection Data

Connection type	4 conductor open
Cable length	5 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-50 ... 80 °C
Environmental protection	IP66

Technical Data - Version 3.5t

Force sensor

Type	load cell
Force direction	Compression
Rated force Fx	3.5 t
Force introduction	Load button
Operating force	150 %FS
Material	Stainless steel
Height	25 mm
Length or Diameter	80 mm
Breaking force	300 %Fn

Electrical Data

Input resistance	1110 Ohm
Tolerance input resistance	50 Ohm
Output resistance	1025 Ohm
Tolerance output resistance	25 Ohm
Insulation resistance	>5x10 ⁹ Ohm
Rated output	2 mV/V / FS

Connection Data

Connection type	4 conductor open
Cable length	5 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-50 ... 80 °C
Environmental protection	IP66

Technical Data - Version 5t

Force sensor

Type	load cell
Force direction	Compression
Rated force Fx	5 t
Force introduction	Load button
Operating force	150 %FS
Material	Stainless steel
Height	25 mm
Length or Diameter	80 mm
Breaking force	300 %Fn

Electrical Data

Input resistance	1110 Ohm
Tolerance input resistance	50 Ohm
Output resistance	1025 Ohm
Tolerance output resistance	25 Ohm
Insulation resistance	>5x10 ⁹ Ohm
Rated output	2 mV/V / FS

Connection Data

Connection type	4 conductor open
Cable length	5 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-50 ... 80 °C
Environmental protection	IP66

Technical Data - Version 10t

Force sensor

Type	load cell
Force direction	Compression
Rated force Fx	10 t
Force introduction	Load button
Operating force	150 %FS
Material	Stainless steel
Height	35 mm
Length or Diameter	95 mm
Breaking force	300 %Fn

Electrical Data

Input resistance	1110 Ohm
Tolerance input resistance	50 Ohm
Output resistance	1025 Ohm
Tolerance output resistance	25 Ohm
Insulation resistance	>5x10 ⁹ Ohm
Rated output	2 mV/V / FS

Connection Data

Connection type	4 conductor open
Cable length	3 m

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-30 ... 70 °C
Storage temperature range f	-50 ... 80 °C
Environmental protection	IP66





Pin Configuration

Symbol	Description	Wire colour
+Us	positive bridge supply	pink
-Us	negative bridge supply	grey
+Ud	positive bridge output	brown
-Ud	negative bridge output	white

*Pressure load: positive output signal.
Shield- transparent.*

accessories

Description	Description
	KR80-Lastknopf xt
	Calibration Factory calibration certificate for force to 200 kN in accordance with DIN EN ISO / IEC 17025 for test materials monitoring according to Certificate kn/200/5 DIN ISO 9001: 2008 with 5 load levels and 3 series of measurements.