

# C4

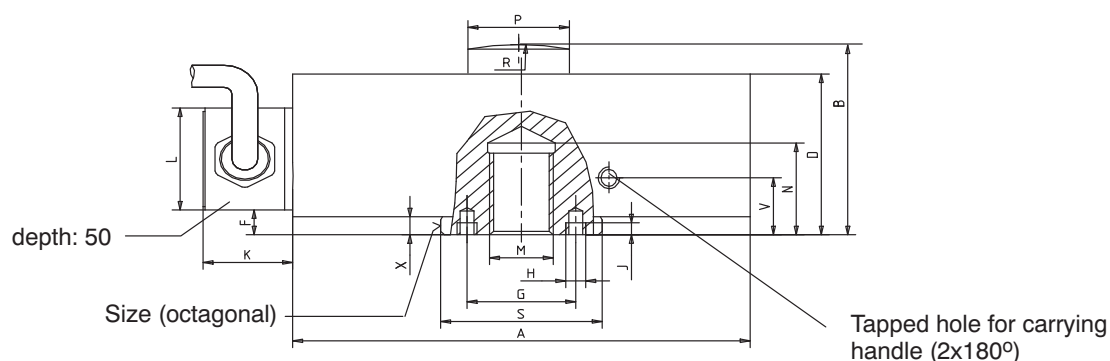
## Force Standard



### Special features

- Nominal forces 20 kN ... 500 kN
- Classification option by device classes with DKD calibration certificate according to ISO 376
- Good long-term stability

Dimensions (in mm; 1 mm= 0.03937 inches)



Type	Ø A	B	D	F	G	H	J	M	N	R	Ø S <sub>f7</sub>	V	X	a.f.	K	L	Ø P <sub>-0.1</sub>
C4/20 kN	115	54.5	47	7.3				M16	27	60	40		5.3	38			25
C4/50 kN	120	60.2	55	10.2	-	-	-	M20x1.5	28	160	48		8.2	45	22	30	26
C4/100 kN	146	74.2	69	12.2				M30x2	37	300	62		10.2	59			40
C4/200 kN	180	94.2	89	13.1	68	M6	6	M39x2	45	300	76		11.1	73			50
C4/500 kN	275	159	145	21	118	M8	8	M72x4	87	400	140	35	20	134	32	43	64

# Specifications

Type	C4						
Data according to VDI standards 2638							
Nominal force	$F_{nom}$	kN	20	50	100	200	500
possible classification according to ISO 376 in conjunction with DKD calibration certificate			0.5				1
<b>Nominal sensitivity</b>	$C_{nom}$	mV/V	2				
rel. sensitivity deviation	$d_c$	%	0.1				
zero signal tolerance	$d_{s,0}$	%	0.5				
rel. zero point compensation (zero signal return)	$f_0$	%	< ±0.02				
<b>Rel. range (0.2<math>F_{nom}</math> to <math>F_{nom}</math>) at:</b>							
unchanged mounting position, typically	$b_{rg}$	%	0.02				
different mounting positions, typically	$b_{rv}$	%	0.03				
<b>Hysteresis (0.2<math>F_{nom}</math> to <math>F_{nom}</math>)</b>	$u$	%	0.1				0.3
<b>Linearity deviation</b>	$d_{lin}$	%	0.02				0.03
<b>Effect of temperature on sensitivity/10 K</b> by reference to nominal sensitivity	$TK_c$	%	0.01				
<b>Effect of temperature on zero signal/10 K</b> by reference to nominal sensitivity	$TK_0$	%	0.015				
<b>Effect of transverse forces (Transverse forces 10 % <math>F_{nom}</math>)<sup>1)</sup></b>	$d_Q$	%	0.03				
<b>Effect of eccentricity per mm</b>	$d_E$	%	0.01	0.005			
<b>Ambient pressure influence on zero signal per 10mBar</b>	$p_{KQ}$	%	0.015	0.006	0.004	0.002	0.001
<b>Rel. creep over 30 min</b>	$d_{crF+E}$	%	0.02				
<b>Input resistance</b>	$R_e$	Ω	>345				
<b>Output resistance</b>	$R_a$	Ω	356 ± 0.3				
<b>Isolation resistance</b>	$R_{is}$	Ω	>5·10 <sup>9</sup>				
<b>Reference excitation voltage</b>	$V_{ref}$	V	5				
<b>Operating range of the excitation voltage</b>	$B_{U,G}$	V	0.5 ... 12				
<b>Nominal temperature range</b>	$B_{t,nom}$	°C	+10...+40				
<b>Operating temperature range</b>	$B_{t,G}$	°C	-30...+85				
<b>Storage temperature range</b>	$B_{t,S}$	°C	-50...+85				
<b>Reference temperature</b>	$t_{ref}$	°C	+23				
<b>Max. operational force</b>	( $F_G$ )	%	150				
<b>Limit force</b>	( $F_L$ )	%	150				
<b>Breaking force</b>	( $F_B$ )	%	250				
<b>Static lateral limit force</b>	( $F_Q$ )	%	30				
<b>Nominal displacement</b>	$S_{nom}$	mm	0.2		0.25	0.28	0.45
<b>Fundamental resonance frequency</b>	$f_G$	kHz	4.1	4.5	3.4	3.6	2.5
<b>Weight</b>		kg	1.8	2.4	5.5	11.2	42
<b>Rel. permissible vibrational stress</b>	$F_{rb}$	%	70				50
<b>Cable length, six-wire connection</b>		m	6				
<b>Degree of protection to DIN EN 60529</b>			IP67				

<sup>1)</sup> corresponds to load introduction point



## Pin assignment

### Six-wire connection



Cable shielding, connected to housing

#### Regional Distributor



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