



This type of load cell, entirely realized in stainless steel in with the aim of guaranteeing the maximum sturdiness and the use in tough environments, can be employed to measure the loading state of a rod. To be specific, it can be used to determine the tensional state of bolts and tension wires, to control the stringing on walls and rock masses, to define the load transmitted to the basis of the supporting structure, through the installation under the foot of the supporting structure or between 2 elements of the supporting structure.

Typical areas of applications are:

- measure of the fluctuations of bar rods or stranded wires
- diaphragms, bulkheads and containment structures
- tunnels, dams, bridges and viaducts
- rivetting and rock anchoring
- landslides

CELL TYPE	CAPACITY	øA	øD	øB	øC	H
422S4-1250KN	1250 KN	300	272	230	185	40
422S5-1800KN	1800 KN	260	232	190	165	50
422S5-1500KN	1500 KN	260	232	190	165	50
422S5-1250KN	1250 KN	260	232	190	165	50
422S6-1000KN	1000 KN	220	197	155	120	40
422S6-750KN	750 KN	220	197	155	120	40
422S6-500KN	500 KN	220	197	155	120	40
422S7-100KN	100 KN	155	132	91	71	40
422S8-1600KN	1600 KN	220	197	125	100	55
422S9-200KN	200 KN	102	82	50	30	40
422S9-350KN	350 KN	102	82	50	30	40
422S18-200KN	200 KN	168	148	108	87	40
422S17-900KN	900 KN	220	202	141	120	55
422S17-1000KN	1000 KN	220	202	141	120	55
422S10-900kN	900 kN	190	160	110	82	40
422S19-75t	75 t	155	125	91	40	40

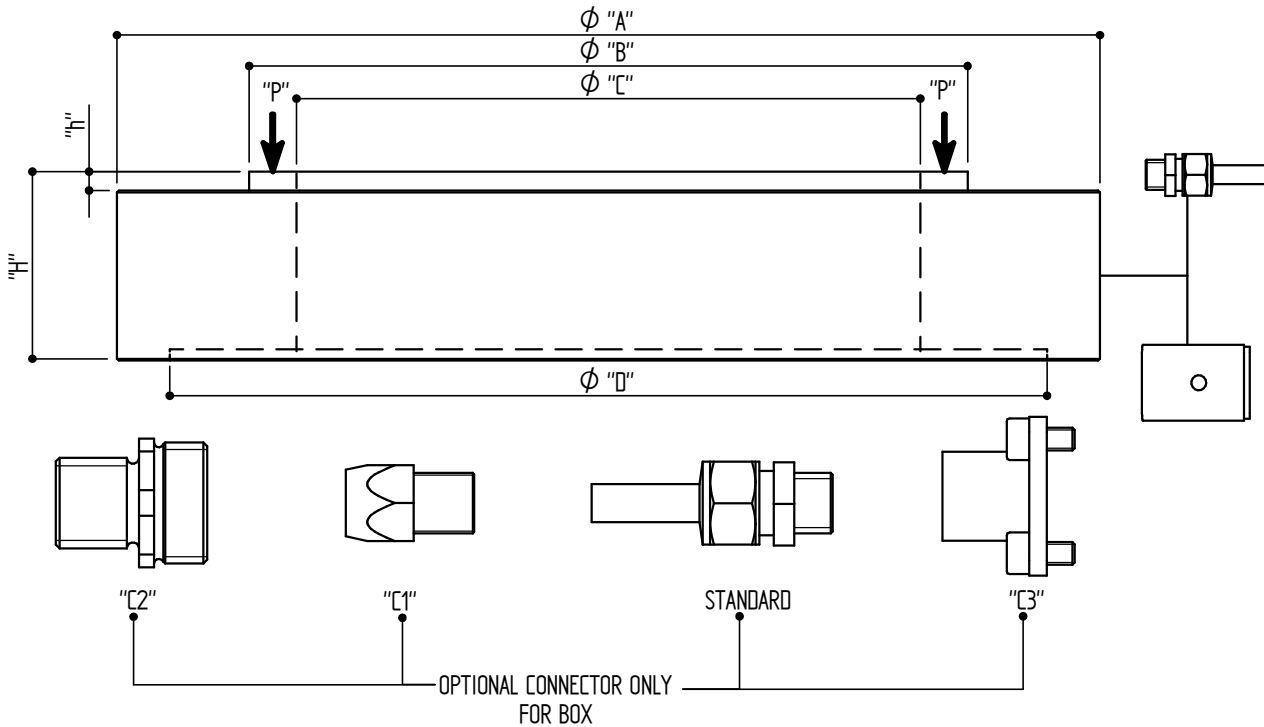


**LOAD CELL
TYPE 422**

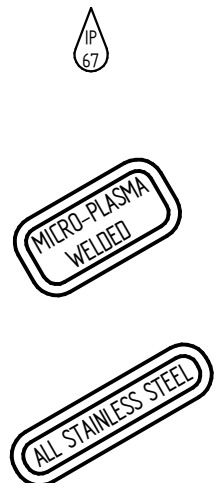
Technical specifications:

<u>METROLOGICAL CHARACTERISTICS</u>	<u>Par.</u>	<u>Un.</u>	
COMBINED ERROR	Fcomb	±%Ln	0,550
NOMINAL LOAD	Ln	kN	100-3000
INITIAL LOAD	Lp	%Ln	10
MAXIMUM LOAD	Ll	%Ln	130
NON-LINEARITY	Flin	±%Ln	0,5
HYSTERESIS ERROR	Fu	±%Ln	0,5
REPEATABILITY ERROR	Fv	±%Ln	0,05
CREEP - 30 MINUTES	Fcr	±%Ln	0,05
NOMINAL TEMPERATURE RANGE	Btn	°C	-10/+40
ZERO TEMPERATURE DRIFT (10+60°C)	TKo	±%Cn	0,1
OUTPUT TEMPERATURE DRIFT (10+60°C)	TKC	±%Cn	0,1
THERMAL GRADIENT		K/h	<5
<u>ELECTRICAL DATA</u>			
NOMINAL OUTPUT	Cn	mV/V	2
NOMINAL OUTPUT TOLERANCE	Dc	±%Ln	0,2
NOMINAL SUPPLY VOLTAGE	Bsu	V	1÷12
MAXIMUM SUPPLY VOLTAGE	Usmax	V	24
INPUT RESISTANCE	Re	W	2000±20%
OUTPUT RESISTANCE	Ra	W	1400±1%
INSULATION RESISTANCE @ 20V	Ris	MW	>2000
ZERO OUTPUT TOLERANCE	Do	±%Cn	2
<u>MECHANICAL DATA</u>			
BREAKING LOAD	Ld	%Ln	>250
MAXIMUM SIDE LOAD	Llq	%Ln	N.A.
DEFLECTION	hn	mm	<0,5
CABLE LENGTH		m	/
WEIGHT		kg	/
<u>ENVIRONMENTAL CONDITIONS</u>			
WORKING TEMPERATURE RANGE	Btn	°C	-40/+80
STORAGE TEMPERATURE RANGE	Bts	°C	-40/+80
HOUSING PROTECTION			IP-68

Subject to modification without notice



	SINGLE BRIDGE				DOUBLE BRIDGE							
	CABLE GLAND		M12 CONNECTOR		CABLE GLAND		M12 CONNECTOR					
mV/V OUTPUT	CEI 2035 PUR SHIELDED CABLE 4x0.35mm ² LENGTH				PUR CABLE 8x0.125mm ² LENGTH							
	LIGHTBLUE	+SUPPLY	PIN 1	LIGHTBLUE +SUPPLY	BRIDGE 1	GREEN	+SUPPLY	BRIDGE 1	PIN 1	GREEN	+SUPPLY	
	BLACK	-SUPPLY	2	BLACK -SUPPLY		YELLOW	-SUPPLY		2	YELLOW	-SUPPLY	
	RED	+SIGNAL	3		GREY	-SIGNAL	3	PINK	-SIGNAL	4	GREY	-SIGNAL
	WHITE	-SIGNAL	4	RED +SIGNAL	LIGHTBLUE	+SUPPLY	5	BROWN	+SUPPLY	5	PINK	+SUPPLY
		5	WHITE -SIGNAL	BROWN	-SUPPLY	4	RED	-SIGNAL	8	BROWN	-SIGNAL	
4-20 mA OUTPUT	CEI 2035 PUR SHIELDED CABLE 8x0.125mm ² LENGTH				PUR CABLE 8x0.125mm ² LENGTH							
	LIGHTBLUE	+SUPPLY	PIN 1	BLUE +SUPPLY	BRIDGE 1	GREEN	+SUPPLY	BRIDGE 1	PIN 1	GREEN	+SUPPLY	
	BROWN	-SUPPLY	2	BROWN -SUPPLY		YELLOW	-SUPPLY		2	YELLOW	-SUPPLY	
	GREY	+4-20mA	3	GREY mA	GREY	mA	7	GREY	mA	1	GREY	mA
			4		LIGHTBLUE	+SUPPLY	5		5			
		5		BROWN	-SUPPLY	4	BLUE	+SUPPLY	4	BLUE	+SUPPLY	
				RED	mA	8	BROWN	-SUPPLY	8	BROWN	-SUPPLY	
CAN OPEN	CEI 2035 PUR SHIELDED CABLE 8x0.125mm ² LENGTH				PUR CABLE 8x0.125mm ² LENGTH							
	LIGHTBLUE	+SUPPLY	PIN 1	BLUE +SUPPLY	BRIDGE 1	GREEN	+SUPPLY	BRIDGE 1	PIN 1	GREEN	+SUPPLY	
	BROWN	-SUPPLY	2	BROWN -SUPPLY		YELLOW	-SUPPLY		2	YELLOW	-SUPPLY	
	RED	CAN H	3		GREY	CAN H	7	GREY	CAN H	1	GREY	CAN H
			4	RED CAN H	PINK	CAN L	5	PINK	CAN L	5	PINK	CAN L
		5	WHITE CAN L	LIGHTBLUE	+SUPPLY	4	BLUE	+SUPPLY	4	BLUE	+SUPPLY	
				BROWN	-SUPPLY	8	BROWN	-SUPPLY	8	BROWN	-SUPPLY	
				RED	CAN H	3	RED	CAN H	3	RED	CAN H	
				WHITE	CAN L	5	WHITE	CAN L	6	WHITE	CAN L	



CODE FOR ORDERING WITH BOX

422 X X X X

TYPE ————
"C1" M8 CONNECTOR
"C2" M12 CONNECTOR
"C3" SOURIAU CONNECTOR
"DP" DOUBLE AND INDEPENDENT CIRCUIT OF MEASURE
"MA" 4-20 mA OUTPUT
"CO" CAN OPEN OUTPUT
CIA 404

NOMINAL LOAD

CODE FOR ORDERING STANDARD CONNECTOR

422 X X X X

TYPE ————
"C1" M8 CONNECTOR
"DP" DOUBLE AND INDEPENDENT CIRCUIT OF MEASURE
"MA" 4-20 mA OUTPUT
"CO" CAN OPEN OUTPUT
CIA 404

NOMINAL LOAD

NOTE: THE DOUBLE SIGNAL OUTPUT IS NOT ALWAYS REALIZABLE, BECAUSE IT DEPENDS ON THE LOAD CELL DIMENSION. WE WILL CARRY FATTIBILITY TEST BEFORE CONFIRMATION