

HYDRAULIC LOAD CELLS

Hydraulic load cells are mostly used to measuring loads at the toe or between segments of steel arch tunnel supports. They can also be applicable in pile foundations or pipe struts in open cut excavations.



The cell is composed of two circular plates welded together around the periphery. The narrow gap between the plates is filled with de-aired oil. The cell is connected to a pressure transducer that detects changes in pressure and converts them into an output signal directly proportional to the applied load.

APPLICATIONS

- Monitoring loads at the toe of steel arch tunnel supports
- Monitoring axial load between segments of steel arch tunnel supports
- Monitoring loads in struts
- Measuring loads during pile testing



TECHNICAL SPECIFICATIONS

HYDRAULIC LOAD CELL



Product code	CCI1000KN420 (0-1000 kN)	CCI1900KN420 (0-1900 kN)	CCI3000KN420 (0-3000 kN)
Capacity Ranges	1000 kN	1900 kN	3000 kN
Accuracy	<1% F.S.		
Non-linearity	± 0.5% F.S.		
Signal output	4-20 mA		
Operating temperature range	-30 °C to +100 °C		
Material	Stainless steel		
Ingress protection	IP 68		

Other full scale available on request.

MODEL	CAPACITY (kN)	PAD DIAMETER (mm)	HEIGHT (mm)
CCI1000KN420	1000	150	40
CCI1900KN420	1900	190	40
CCI3000KN420	3000	240	40

ACCESSORIES



C180MT000000

Monitoring tester



LOAD CELL MOUNTED BETWEEN STEEL SUPPORT SEGMENTS

Product specifications described herein are subject to change without notification.

Ingegneria & Controlli Italia S.r.l.

Sede legale
Sedi operative

- TORINO - Via Donati, 14
- TORINO
Interporto Sito km 20+500 Tang. Sud - Prima Strada, 5 - 10043 Orbassano - Tel. 011 3975311 - Fax 011 3493790
- BERGAMO
Via Gramsci, 5 - 24042 Capriate San Gervasio - Tel. 02 92864185 - Fax 02 92864187
- TERAMO
Viale Crispi, 17 - 64100 Teramo - Tel. 0861 411432 - Fax 0861 411442
- ROMA
Via Piave, 15 - 00187 Roma - Tel. 345 53 85 753