Data Sheet: TS.116.R8

www.aep.it

TS - TSA

Cella di carico
Load cell

Accessori *Accessories*

Teste a snodo sferico
Knuckle joints

COMPRESSIONE TRAZIONE
COMPRESSION TENSION

Download on www.aep.it
CE RoHS

OIML R60 Type: TSA
Certificate: R60-2000-GB1-07.03

IP68

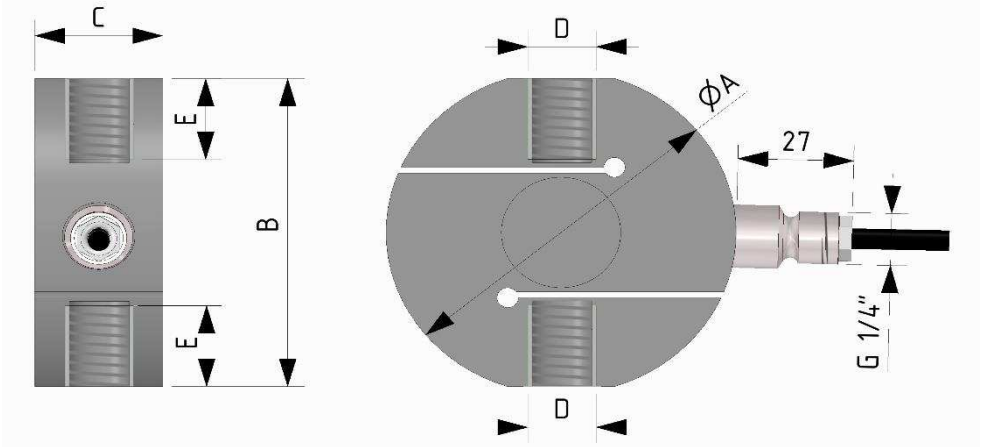
OPZIONE *OPTION* Ex II 2G Ex ib IIC T6 Gb II 2D Ex ib IIIC T70°C Db
Certificate: TÜV CY 18 ATEX 0206102 X

Interamente saldata al LASER
Completely LASER welded

Stabilità a lungo termine
Long term high stability

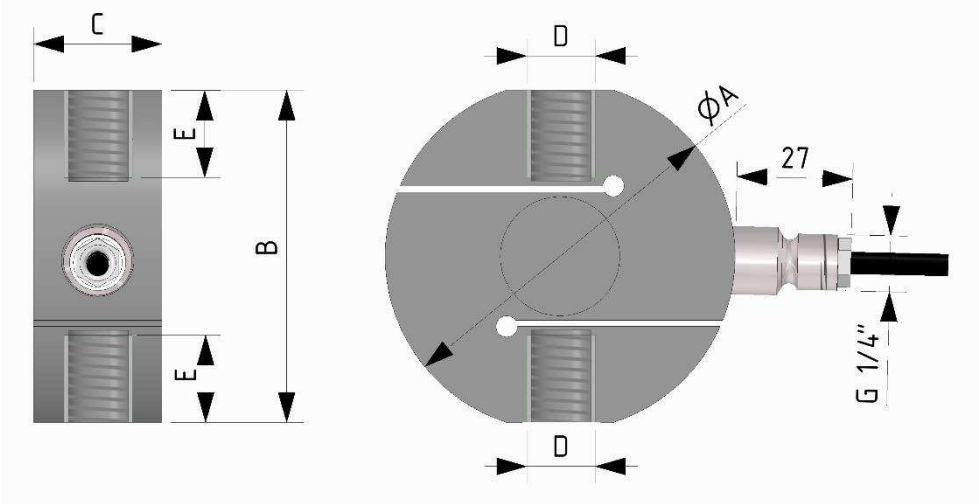
SOLLECITAZIONI DINAMICHE
DYNAMIC STRESSES

Dimensioni *Dimensions* [mm]



TS IN ACCORDANCE

CODE (C2)	CODE (C3)	LOAD	ØA	B	C	D	E	Frequenza naturale *Natural frequency*
CTS6310KC25	CTS6310KC35	**10 kg**	63.5	59.5	22	M12X1.75	12	~ 0.35 kHz
CTS6325KC25	CTS6325KC35	**25 kg**						~ 0.65 kHz
CTS6350KC25	CTS6350KC35	**50 kg**						~ 1.05 kHz
CTS63100KC25	CTS63100KC35	**100 kg**						~ 1.25 kHz
CTS63200KC25	CTS63200KC35	**200 kg**						~ 1.75 kHz
CTS63300KC25	CTS63300KC35	**300 kg**						~ 1.75 kHz
CTS63500KC25	CTS63500KC35	**500 kg**						~ 1.80 kHz
CTS82500KC25	CTS82500KC35	**500 kg**	82	78	30	M16X2	20	~ 2.20 kHz
CTS821TC25	CTS821TC35	**1 t**						~ 2.50 kHz
CTS822TC25	CTS822TC35	**2 t**						~ 2.50 kHz
CTS822T5C25	CTS822T5C35	**2.5t**	82	78	30	M20X1.5	20	~ 3.25 kHz
CTS1025TC25	CTS1025TC35	**5 t**	102	90	45	M24X2	21.5	~ 3.20 kHz
CTS1027T5C25	CTS1027T5C35	**7.5t**						~ 3.00 kHz
CTS12710TC25	CTS12710TC35	**10 t**	127	120	50	M30×2	29	~ 3.25 kHz

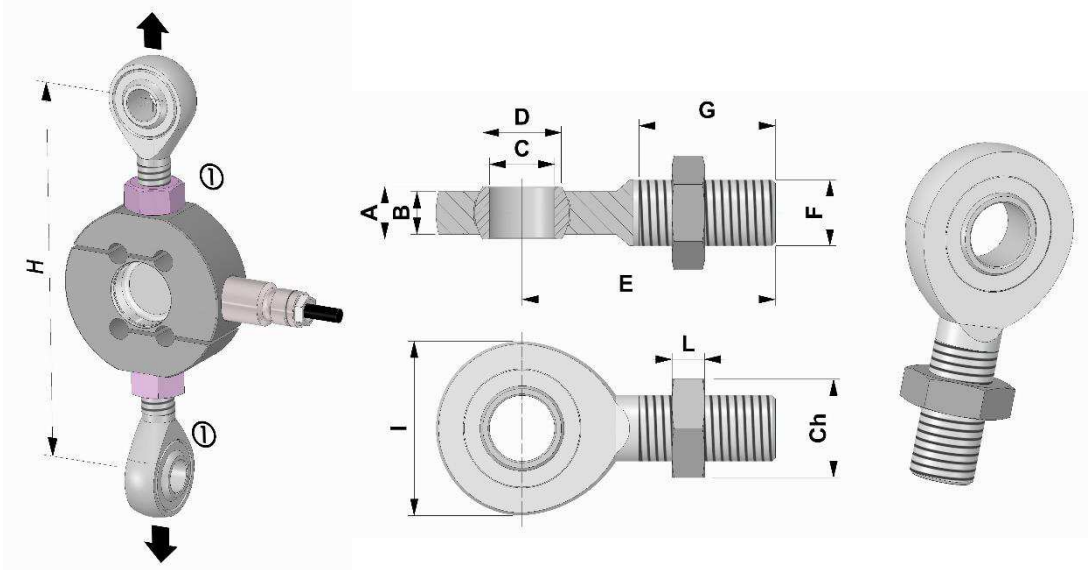


TSA APPROVED

CODE (C2)	CODE (C3)	CODE (C4)	LOAD	ØA	B	C	D	E
CTSA63100KC25	CTSA63100KC35	/	**100 kg**	63.5	59.5	22	M12X1.75	12
CTSA63200KC25	CTSA63200KC35	/	**200 kg**					
CTSA63300KC25	CTSA63300KC35	/	**300 kg**					
CTSA63500KC25	CTSA63500KC35	/	**500 kg**					
CTSA82500KC25	CTSA82500KC35	CTSA82500KC45	**500 kg**	82	78	30	M16X2	20
CTSA821TC25	CTSA821TC35	CTSA821TC45	**1 t**					
CTSA822TC25	CTSA822TC35	CTSA822TC45	**2 t**					
CTSA822T5C25	CTSA822T5C35	CTSA822T5C45	**2.5t**					
CTSA1025TC25	CTSA1025TC35	/	**5 t**	102	90	45	M24X2	21.5
CTSA1027T5C25	CTSA1027T5C35	/	**7.5t**					

Versione omologata solo per applicazioni in trazione / *Approved version only for tension applications*

Applicazioni *Applications*



① Teste a snodo sferico / *Knuckle joints*

Code:	A	B	C	D	E	F	G	I	L	Ch	H
CACCEM12	10	8	12	14.9	54	M12	28	34	7	19	~134
CACCEM16	14	11	17	20.7	69	M16	36	46	8	24	~170
CACCEM20	16	13	20	24.1	78	M20×1.5	43	53	9	30	~102
CACCEM25	20	17	25	29.3	94	M24×2	53	64	10	36	~235
CACCEM30	22	19	30	34.5	110	M30×2	65	73	12	46	~280

Dimensioni in accordo con ISO 12240-4 Serie E

Dimensions according to ISO 12240-4 series E

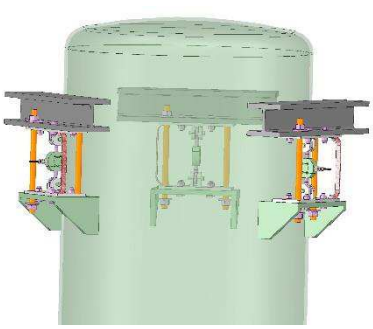
Dati Tecnici — *Technical Data*

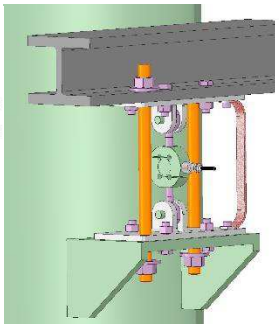
CLASSE DI PRECISIONE: **OIML R60**	*ACCURACY CLASS: **OIML R60***	**C2**	**C3**	**C4**
DIVISIONI LEGALI	*LEGAL DIVISIONS*	2000	3000	4000
CARICO NOMINALE (E_{max})	*NOMINAL LOAD (E_{max})*	$10^{(1)}$ – $25^{(1)}$ – $50^{(1)}$ kg 100 - 200 - 300 - 500 kg 1 - 2 - 2.5 – 5 t 7.5 - $10^{(1)}$ t		500 kg 1-2-2.5 t
INTERVALLO MIN.DI VERIFICA (V_{min})	*MIN. VERIFICATION INTERVAL (V_{min})*	E_{max} / 10000		E_{max}/15000
ERRORE COMBINATO	*COMBINED ERROR*	≤ ±0.023%	≤±0.018%	≤±0.015%
NON RIPETIBILITA'	*NON-REPEATABILITY*	≤ ±0.015%	≤±0.010%	≤±0.010%
RITORNO A ZERO dopo 30 min.	*ZERO RETURN over 30 min.*	≤ ±0.025%	≤±0.015%	≤±0.010%
CREEP al carico nominale:	*CREEP at nominal load:*			
a) dopo 30 min.	*a) over 30 min.*	≤ ±0.025%	≤±0.015%	≤±0.015%
b) dopo 20 e 30 min.	*b) over 20 and 30 min.*	≤ ±0.005%	≤±0.005%	≤±0.003%
EFFETTO DELLA TEMP. (10 °C)	*TEMPERATURE EFFECT (10 °C)*			
a) sullo zero	*a) on zero*	≤±0.028%	≤±0.010%	≤±0.008%
b) sulla sensibilità	*b) on sensitivity*	≤±0.012%	≤±0.010%	≤±0.008%
SENSIBILITA' NOMINALE	*NOMINAL SENSITIVITY*	2 mV/V		
TOLLERANZA DI CALIBRAZIONE	*SENSIVITY TOLERANCE*	≤ ± 0.1 %		
RESISTENZA DI INGRESSO	*INPUT RESISTANCE*	420 ± 20Ω		
RESISTENZA DI USCITA	*OUTPUT RESISTANCE*	350 ± 2Ω		
RESISTENZA DI ISOLAMENTO	*INSULATION RESISTANCE*	> 5 GΩ		
BILANCIAMENTO DI ZERO	*ZERO BALANCE*	≤ ±1 %		
ALIMENTAZIONE DI RIFERIMENTO	*RECOMENDED SUPPLY VOLTAGE*	10 V		
ALIMENTAZIONE NOMINALE	*NOMINAL SUPPLY VOLTAGE*	1-15 V		
ALIMENTAZIONE MAX.	*MAXIMUM SUPPLY VOLTAGE*	18 V		
VALORI MECCANICI LIMITE riferiti al carico nominale:	*MECHANICAL LIMIT values referred to nominal load:*			
a) carico minimo	*a) minimum load*	0 %		
b) carico di servizio	*b) service load*	120 %		
c) carico limite	*c) max permissible load*	150 %		
d) carico di rottura	*d) breaking load*	>300 %		
e) massimo carico trasversale	*e) max transverse load*	100 %		
f) carico dinamico limite	*f) max permissible dynamic load*	50 %		
FRECCIA MAX. AL CARICO NOMINALE	*DISPLACEMENT AT NOMINAL LOAD*	~ 0.2 mm		
TEMPERATURA DI RIFERIMENTO	*REFERENCE TEMPERATURE*	+23 °C		
CAMPO NOMINALE DI TEMP.	*TEMPERATURE NOMINAL RANGE*	-10/+40 °C		
TEMPERATURA DI ESERCIZIO	*SERVICE TEMPERATURE*	-20/+70 °C		
TEMPERATURA DI STOCCAGGIO	*STORAGE TEMPERATURE*	-20/+80 °C		
PESO Ø63.5 mm	*WEIGHT Ø63.5 mm*	~ 0.6 kg		
PESO Ø82 mm	*WEIGHT Ø82 mm*	~ 1.2 kg		
PESO Ø102 mm	*WEIGHT Ø102 mm*	~ 2.6 kg		
PESO Ø127 mm	*WEIGHT Ø127 mm*	~ 4.4 kg		
CLASSE DI PROTEZIONE (EN 60529)	*PROTECTION CLASS (EN 60529)*	**IP68** *(100h at 1m water column)* **IP65** (10, 25, 50 kg *silicon cover)*		
MATERIALE DELLA CELLA	*EXECUTION MATERIAL*	Acciaio Inox / *Stainless Steel*		
LUNGHEZZA CAVO	*CABLE LENGTH*	5 m (*on request* 10 m)		

Accelerazione di gravità g=9.80434 m/s^2 / *Acceleration* of gravity *g=9.80434 m/s^2*

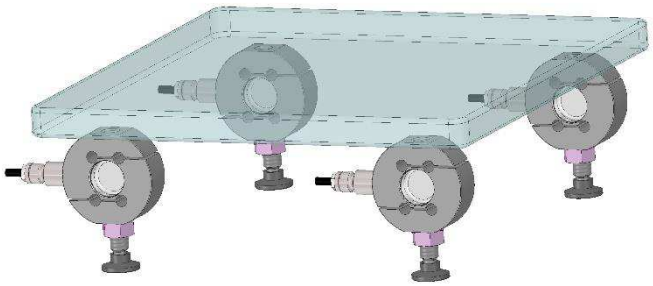
$^{(1)}$ Opzione ATEX **NON** disponibile / *ATEX option **NOT** available.*

Esempi d'installazione — *Examples of installation*





Silos a 3 punti di appoggio in TRAZIONE
Silo with 3 TENSION supporting points.



Piattaforma a 4 punti di appoggio con piedi snodati.
Platform with 4 supporting points with jointed feet.

OPZIONI — *OPTIONS*

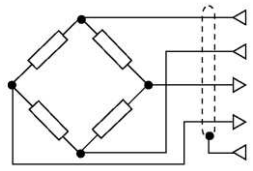
Da acquistare separatamente — *To be purchased separately*

	CODE	[2] OPZIONE	[2] *OPTION*
	***CONNM12MF***	Uscita diretta connettore **M12**	*Direct output connector **M12***
	***CONNM12FV5***	CONNETTORE **M12x1** femmina 5 poli dritto completo di **CAVO** PVC costampato schermato lunghezza 3 m.	*Female 5 poles straight **M12x1** CONNECTOR complete PVC molded **CABLE**, shielded, length 3 m.*
	***CRT***	Rapporto di taratura. Compressione o Trazione.	*Calibration Report.* *Compression or TENSION*

[2] Opzione **NON** disponibile nelle versioni **ATEX** e **OMOLOGATE**.
*Option **NOT** available in **ATEX** and **APPROVED** versions.*

Collegamenti Elettrici — *Electrical Connections*

USCITA STANDARD: cavo schermato PVC 105°C, Ø 5.2 mm a 4× Ø 0.35mm^2 conduttori stagnati.
***STANDARD OUTPUT**: PVC 105°C shielded cable, Ø 5.2mm with 4× Ø 0.35mm^2 tinned conductors.*

Load cell	OUTPUT	CABLE	CAVO	M12 [2] (*optional*)
	EXCITATION + EXCITATION - OUTPUT + OUTPUT - ----------	*Red* *Black* *White* *Yellow* *Shield*	**Rosso** **Nero** **Bianco** **Giallo** **Schermo**	**1** **3** **2** **4** **5**

Schermo collegato al corpo del trasduttore.
Shield connected to the body of the transducer.