

Taplast Technical drawing

Please read before using this document

The neck dimensions shown are those which have generally been found to be functional based on our and industry experience. Because of variability in plastic closure and container finishes materials, however, each closure/finish system should be individually evaluated to ensure it meets applicable performance criteria. Closures and finishes having dimension outside these ranges are also appropriate for use if applicable performance criteria are met.

Therefore the bottle neck drawing is only a recommendation. The framed dimensions and tolerances have to be kept. The bottle neck drawing does not release the bottle maker and the processor from the responsibility of optimising the coordination between the closure according to the valid article drawing and the bottle neck.

So that the cap and neck threads fit well together it is necessary that the two threads (cap - bottle) connect together for one complete turn. We recommend to check it.

Le dimensioni riportate per il collo flacone sono quelle che generalmente sono state trovate funzionali in base alla esperienza nostra e industriale in genere. A causa della variabilità nelle materie plastiche per i tappi e i colli flacone tuttavia, ciascun sistema collo/tappo dovrebbe essere individualmente valutato per assicurare che sia adeguato alle caratteristiche tecniche richieste. Tappi e colli che abbiano dimensioni al di fuori di questi intervalli possono comunque essere utilizzati se ritenete che soddisfino le vostre esigenze.

Pertanto il disegno del collo della bottiglia è soltanto un suggerimento . Le dimensioni riquadrate e le tolleranze devono venire rispettate. Il disegno del collo flacone non esonera il produttore del flacone e il riempitore dalla responsabilità di ottimizzare l'accoppiamento tra il tappo, secondo il disegno valido dell'articolo, e il collo flacone.

Affinché il tappo si accoppi correttamente è necessario che i due filetti (tappo-flacone) si accoppino per un giro completo. Raccomandiamo di controllare.

Las dimensiones reportadas para el cuello de la botella son las que generalmente se han demostrado funcionales con base a nuestra experiencia y de la industria en general. A causa de la variedad del material plástico para los taponos y de las botellas, todavía, cada uno de los sistemas cuello/tapón tendría que ser evaluado para asegurarse que sea adecuado a las características técnicas requeridas.

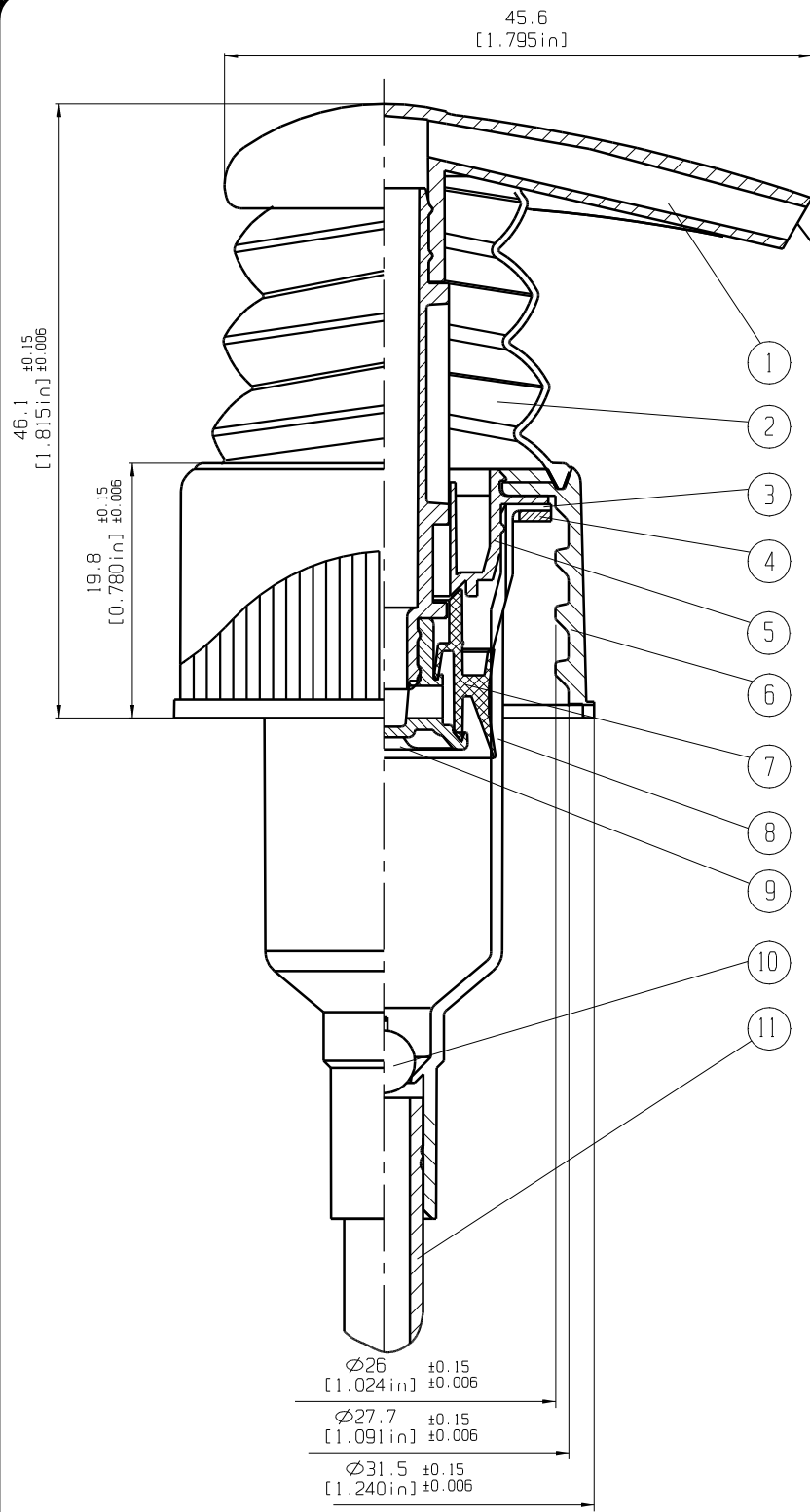
Los taponos y cuellos que tengan dimensiones fuera de estos rangos de todas maneras pueden ser apropiados para ser utilizados si estos satisfacen sus necesidades.

Por consiguiente el diseño del cuello de la botella es solo una recomendación. Las dimensiones y las tolerancias se deben mantener.

El diseño del cuello de la botella, no exonera al fabricante de la botella y al embotellador de la responsabilidad de un óptimo acoplamiento entre el tapón , según el diseño técnico válido del artículo y el cuello de la botella.

Para que el tapón se acople correctamente es necesario que los dos hilos de la rosca (tapón-botella) se acoplen para obtener una vuelta completa. Recomendamos comprobarlo.

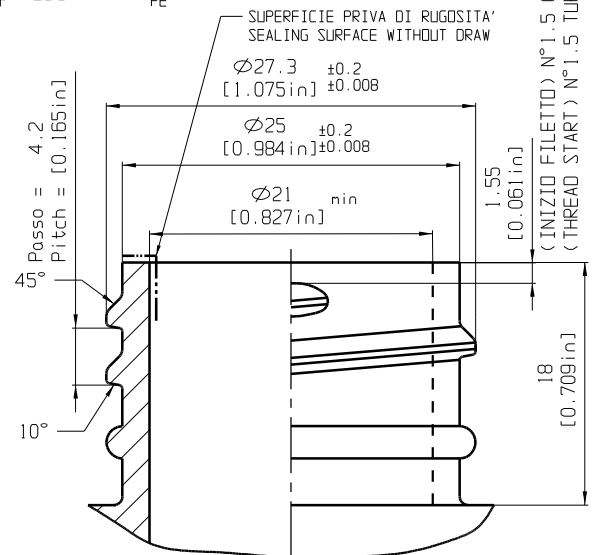
Rev. 12.11r04



	STANDARD VALUE	UNITS	
Dosage	2.5	cm ³	100% (water)
Dispensing force	3 - 3.5	Kg	100% (water)
Prining	< 4 strokes	—	100% (water)

3.5 x 6

- 1 Beccuccio Actuator
- 2 Soffietto Bellows
- 3 Ghiera Rotating ring
- 4 Guarnizione Liner
- 5 Pistoncino Piston
- 6 Tappo Cap
- 7 Membrano Membrane
- 8 Corpo Body
- 9 Supporto Plug
- 10 Sfera $\varnothing 4.75$ Ball $\varnothing 4.75$
- 11 Pescante Dip tube



ALL QUOTES ARE EXPRESSED IN MM (INCH)

F	UPDATED MATERIALS CODE	CASARA R.	12/11/2004
E	PLUG FROM PP TO PE-BALL FROM PP TO POM	LOBBA P.	11-05-2004
D	PUSHING PRESSURE DIVENTA DISPENSING FORCE E 4 TIMES DIVENTA 4 STROKES	LOBBA P.	07-08-2003
N°	MODIFICA/REVISION	VERIFICA/VERIFY	DATA/DATE

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DENOMINAZIONE/DENOMINATION

"ONDA" ALL PLASTIC PUMP 2.5cc
FREE ROTATING CAP NECK STD. SP 28/410

ART./ PR.

229/410

DIS.N° FILE	229_410	MATERIALE MATERIAL	PESO WEIGHT	10.8 g	SCALA SCALE	2:1	DIS.TO DRAWN BY	MG	DATA DATE	15/02/99
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taplast	TITLE: ARTICLE 229410		
	TECHNICAL SHEET	Code: SPNPSA30	Revision: 02

INDEX

1. MATERIAL SPECIFICATIONS
2. QUALITY SPECIFICATIONS

Rev	Date	Written by:	Verified and Approved by:	Revision Description
00	11/20/2003	Elena De Angelis	Angelo Dori	First Emission.
01	11/05/2004	Lobba Paolo	Angelo Dori	Pushing pressure from 25-30 to 30-35N, overriding torque from 4.5 to 7lb*in, plug material from PP to Pe, ball material from PP to POM
02	11/03/2005	Lobba Paolo	Angelo Dori	bellow material from LDPE to TPE, updated dip tube retention force

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1. MATERIAL SPECIFICATIONS

	Name	Material		Name	Material
1	Actuator	PP	7	Body	PP
2	Bellows	TPE			PE
3	Rotating ring	PP	8	Ball	POM
4	Piston	PP	9	Plug	PE
5	Cap	PP	10	Dip tube	LDPE
6	Membrane	LDPE	11	Master batch	EVA

2. QUALITY SPECIFICATIONS

	ITEMS	QUALITY STANDARDS	TEST METHOD
1	Appearance	No abrasive cut, no dirty surfaces uniform colour tone, no breakage or damaging	Visual check
2	Materials	Refer to std pages	
3	Weight	Nominal 10.80±0.50g without dip tube	
4	Dimensions	Refer to Taplast drawing 229410	
5	Dip tube length	xx±2mm (xx±0,08in)	
6	Dip tube Bending	<15mm; dip tube length <150mm <20mm; dip tube length 151÷200mm <25mm; dip tube length 201÷300mm <0,6in; dip tube length <5,9in <0,8in; dip tube length 6÷7,9in <1,0in; dip tube length 8÷12in	
7	Volume dispensed	2.5±20%ml	
8	Strokes to prime	Equal or less than 4 times with water	Manual strokes, with dip tube length <150mm (6in)
9	Suction depression	> 15KPa	
10	Durability	> 2000ml consecutive times without liquid > 2000ml with water	- 30 strokes per min for 67min, without liquid. After the test pump must function regularly - 15 strokes per min for 1h with water. After the test pump must function regularly
11	Override torque	> 0,77N*m (7.0lb*in)	Torque meter: torque to rotate the dispensing nozzle beyond the stops
12	Pushing pressure	30÷35N (6.7÷7.6lb)	After lock released, use a dynamometer on dispensing nozzle at ?50mm/min rate
13	Leakage	No leakage detected after laid upside-down for 24 hours at 20°C	Liquid: water, cap screwed at 12lb*in
14	Vacuum leakage	No leakage detected	Pressure -500mb for 60sec
15	Load resistance	Top load > 30kg (Top load > 67lb) Traction load >15kg (Traction load >33lb)	- Press downward the nozzle in locked position with dynamometer at ? 50mm/min rate - Use dynamometer to lift a locked pump by nozzle head at ? 50mm/min rate
16	Drop resistance	No damage for 1 drop	Simulated dropping by means of driven sledge. Total weight (bottle+closures) 500g, drop height 1,5m
17	Dip tube retention force	>10 N (>2,2 lb)	
18	Orientation	None	