

CONDITIONS OF SALE: GENERAL TERMS

1_ Offers

Offers made by the Vendor Company, whether orally or in writing, are non-binding. Orders forwarded to the Vendor are understood as accepted only if they have been confirmed in writing.

2_ Prices

Unless otherwise agreed, applicable prices are those in force at the time of delivery or when goods are shipped and said prices are understood as goods shipped EXW (ex our factory) with packing costs charged to Buyer.

3_ Deliveries

Delivery terms are only indicative and are not binding on the Vendor. The Vendor Company shall not be held liable for the payment of any compensation whatsoever arising out of direct or indirect losses due to delivery delays or to interrupted deliveries or deliveries made in whole or in part of ordered merchandise.

4_ Shipping

Merchandise, also whenever sold carriage free as a result of special agreements, is always shipped at Buyer's full risk and peril and whenever shipping is organized and paid by ATAG SpA, delivery is understood as street-side at the destination address.

5_ Payment settlement

Unless otherwise agreed, payments are understood as cash on delivery of merchandise or before goods are shipped. In the event of late payments, payments are due in compliance with the agreed settlement terms also in the event of late delivery of merchandise or damage or loss thereto, in whole or in part that occurred during shipping and, likewise, whenever merchandise made available at the Vendor Company is not collected by Buyer. Buyer will be charged interest at a minimum annual rate of 5% above the official bank rate.

6_ Incentives

Any incentives, specifically agreed in writing, accrue and become payable only after all payment of supplies has been fully made in cash.

7_ Tolerance range

Due to Vendor Company's industry requirements, a usage tolerance range is accepted in any case for both finished goods and their single components.

8_ Suspended orders, commitments and payment of incentives – Successful processing of orders

Whenever any of the terms and conditions under the supply agreement are not complied with, in whole or in part, or whenever any change whatsoever is made to the trading name, the company form or ability to trade of the Buyer also in respect of third parties, the Vendor Company

shall be entitled to suspend further deliveries and, likewise, the payment of incentives already accrued and bank wire transfers, etc. Irrespective of the aforementioned circumstances, the Vendor Company shall be entitled to reduce the limits of its credit risk with Buyer, whenever general market conditions may change or events or circumstances of such a nature come about affecting the performance of normal, day-to-day operations of the Vendor Company.

9_ Complaints and disputes

Any complaints regarding the quality, the kind or type of merchandise supplied shall be notified to Vendor in written form by and no later than 8 days from receipt of goods by Buyer. No complaint, without exception, regarding the quality of merchandise, asserted and claimed in any legal action, may not be brought before a court without full payment having been made for the goods to which the claim refers. Complaints regarding the quality of merchandise, whenever said merchandise has been sold as being of quality falling below that of perfectly manufactured goods or merchandise sold subject to special conditions or goods that have been repaired by any other persons will be rejected. Any complaints or disputes regarding single deliveries of merchandise will not release Buyer from his obligation to collect the remaining quantity of goods by and no later than the time established for the order or commitment.

10_ Liability and limits

No warranty is given or implied regarding the use of goods supplied and, consequently, the Vendor Company shall not be held liable on no account whatsoever and no claim to compensation may be made, with the exception of those cases provided under clause 9) above.

11_ Entire agreement

The above terms and conditions include any and all prior understandings and agreements existing between Buyer and Vendor and they supersede any and all oral understandings or any warranty that is in conflict with these terms and conditions. Any warranties and terms and conditions, whether express or implied that are not addressed in the subject matter of the above terms and conditions are deemed excluded.

12_ Jurisdiction

Any legal matter or dispute shall fall within the sole remit and jurisdiction of the Italian judicial authorities of Milan.

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Upon accepting these general terms and conditions of sale, Buyer waives enforceability of his own general purchase terms and conditions, taken in whole or in part.

CONDITIONS OF SALE: TOLERANCES

The following supply specifications are to be considered, where applicable and to the extent not specified in the terms of specifications or technical commercial documents, an integral part of the offer and/or contractual agreements made between ATAG and its Customer and therefore fully accepted.

Tolerances External CROSS SECTION of FREE EXTRUDED products

With reference to **ISO 3302-1**, the tolerance classes that have been applied are:

- E2 Class** - Regular sections (round, rectangular, tubing)
- E3 Class** - Drawing sections (profile for porthole, drawn to "comma", to "U" and others) and for all expanded
- E1 Class** - Only on request

Nominal Dimension		Class E1	Class E2	Class E3
<i>from mm</i>	<i>up to mm</i>	\pm mm	\pm mm	\pm mm
0	2,5	0,20	0,35	0,50
2,5	4,0	0,25	0,40	0,70
4,0	6,3	0,35	0,50	0,80
6,3	10	0,40	0,70	1,00
10	16	0,50	0,80	1,30
16	25	0,70	1,00	1,60
25	40	0,80	1,30	2,00
40	63	*	1,60	2,50
63	100	*	2,00	3,20

CUTTING tolerances on LENGTHS unless other arrangements on extruded RUBBER PRODUCTS

With reference to **ISO 3302-1 L3**, the tolerance classes that have been applied are:

Nominal Dimension		Tolerance ISO 3302-1 L3
<i>from mm</i>	<i>up to mm</i>	\pm mm
0	40	1,60
40	63	2,00
63	100	2,50
100	160	3,20
160	250	4,00
250	400	5,00
400	630	6,30
630	1000	10,00
1000	1600	12,50
1600	2500	16,00
2500	4000	20,00
4000	-	0,50%

CUTTING tolerances on LENGTHS unless other arrangements on extruded PLASTIC PRODUCTS

With reference to **DIN 16941-3B**, the tolerances that have been applied are:

Nominal Dimension		Tolerance DIN 16941-3B
<i>from mm</i>	<i>up to mm</i>	\pm mm
0	400	5,0
400	1000	10,0
1000	2500	20,0
2500	6000	30,0
6000	-	2%

CONDITIONS OF SALE: TOLERANCES

Permissible tolerances for specific MOULDED RUBBER PRODUCTS

As for moulded products, as well as for extruded products, there are specific regulations that govern and justify the use of dimensional tolerances suitable for the purposes and for the characteristics of the material used.

ATAG spa uses and recommends to respect the standard **UNI ISO 3302-M** dimensional tolerances on moulded products of complex shapes.

A distinction exists among 4 tolerance class, from **M1** = High Precision to **M4** = Basic.

Depending on the direction of moulding, the regulation also distinguishes between dimensions associated with the **F** mould and the measurements of the bi-component adhesion system associated with the mould closed **C**.

Specific moulded products made of technical rubber are normally tolerated on the basis of **M3** class.

Fixed dimensions - F Tolerance

They are not subject to deformations such as those caused by the burr thickness or by lateral moves of different parts of the mould (top and bottom parts or centering systems).

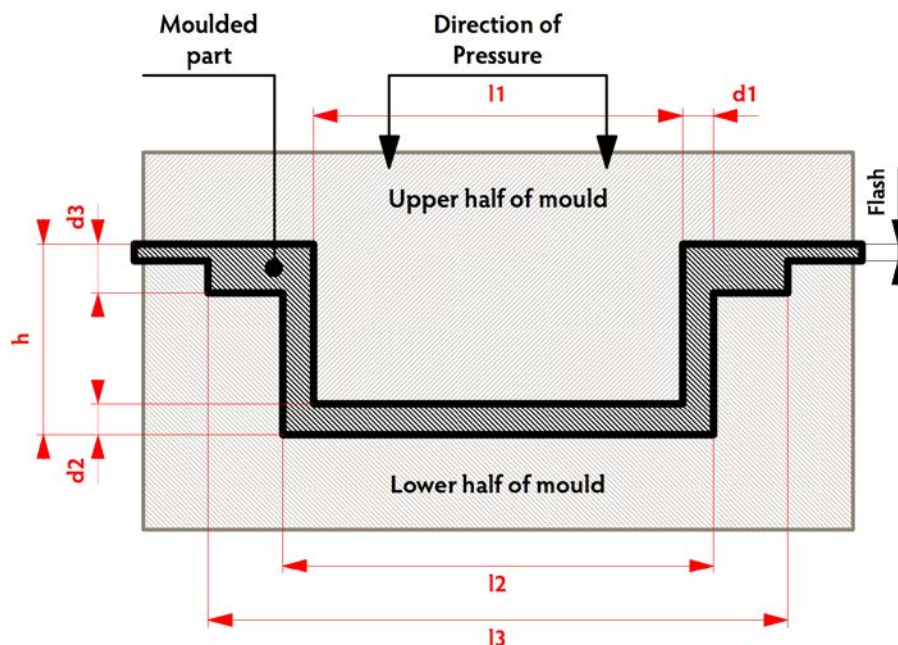
See dimensions **l1**, **l2** and **l3**.

Closing dimensions - C Tolerance

They are dimensions that can tolerate alterations due to variation of thickness in different parts of the moulding.

See dimensions **d1**, **d2**, **d3**, and **h**.

Nominal Dimension		Class M1 (high precision)		Class M2 (precision)		Class M3 (commercial)		Class M4 (basic)
from mm	up to mm	F	C	F	C	F	C	F and C
0	4	± 0,08	± 0,10	± 0,10	± 0,15	± 0,25	± 0,40	± 0,50
4	6,3	± 0,10	± 0,12	± 0,15	± 0,20	± 0,25	± 0,40	± 0,50
6,3	10	± 0,10	± 0,15	± 0,20	± 0,20	± 0,30	± 0,50	± 0,70
10	16	± 0,15	± 0,20	± 0,20	± 0,25	± 0,40	± 0,60	± 0,80
16	25	± 0,20	± 0,20	± 0,25	± 0,35	± 0,50	± 0,80	± 1,00
25	40	± 0,20	± 0,25	± 0,35	± 0,40	± 0,60	± 1,00	± 1,30
40	63	± 0,25	± 0,35	± 0,40	± 0,50	± 0,80	± 1,30	± 1,60
63	100	± 0,35	± 0,40	± 0,50	± 0,70	± 1,00	± 1,60	± 2,00
100	160	± 0,40	± 0,50	± 0,70	± 0,80	± 1,30	± 2,00	± 2,50
160	-	± 0,3%	± 0,4%	± 0,5%	± 0,7%	± 0,8%	± 1,3%	± 1,5%



CONDITIONS OF SALE: TOLERANCES

Permissible tolerances on SEALING RINGS (O-RINGS)

With reference to **DIN 3771** that follows the directions of the international standard **ISO 3601**, we have developed tables of tolerance and of geometric and surface finish to establish the acceptance limits.

Diameter tolerances of O-ring section are shown in **Table 1**, while **Table 2** shows those related to the internal diameter.

The tolerance values specified in Tables 1 and 2 make reference to samples made of nitrile-butadiene rubber (NBR) compound with a hardness of 70 IRHD; this kind of compound was taken as a reference for the drafting of standards.

Table 3 lists the various defects and limit values. The standard specifies two levels of acceptability:

- **N Quality level** – for applications in the various sectors of industry
- **S Quality level** - for special applications requiring high design values match and where even small defects can affect safety.

The flaws identified by the standard are due to problems that can arise during the O-rings moulding:

- Shape variation
- offset
- Dimension variation
- Imperfect combined junction
- Excessive shrinkage.

Tabella 1 Ø O-RING Section		Permitted tolerance mm
from mm	up to mm	
0	2,20	± 0,08
2,21	3,10	± 0,09
3,11	4,42	± 0,10
4,43	6,15	± 0,13
6,16	7,50	± 0,15
7,51	9,00	± 0,18
9,01	11,00	± 0,21
11,01	13,50	± 0,25

Tabella 2 Inner Ø O-RING		Permitted tolerance mm
from mm	up to mm	
1,80	6,30	± 0,13
6,70	11,20	± 0,16
11,80	21,20	± 0,19
22,40	40,00	± 0,95%
41,20	80,00	± 0,86%
82,50	160,00	± 0,78%
165,00	300,00	± 0,74%
300,00	650,00	± 0,67%
670,00	910,00	± 0,60%
910,00	1180,00	± 0,55%

Table 3 type of defect	Graphical representation	Dimension	N level ds (mm) DIN 3771 part 1					S level ds (mm) DIN 3771 part 2				
			1,80	2,65	3,55	5,30	7,00	1,80	2,65	3,55	5,30	7,00
			Maximum extent									
Offset and variation of form		e	0,08	0,10	0,13	0,15	0,15	0,08	0,08	0,10	0,12	0,13
Imperfect junction area and offset combined into a single flaw		f	0,10	0,12	0,14	0,16	0,18	0,10	0,10	0,13	0,15	0,15
Excessive shrinkage		g	0,18	0,27	0,36	0,53	0,70	0,10	0,15	0,20	0,20	0,30
		h	0,08	0,08	0,10	0,10	0,13	0,08	0,08	0,10	0,10	0,13
Excessive deburring			Variations of the circular section are permitted if the flattening causes no passage in the rounding and if tolerances are intact									
Luder' Lines (radial lines are not allowed)		j	0,05 x inner Ø, or *					0,03 x inner Ø, or *				
		k	1,50	1,50	6,50	6,50	6,50	1,50	1,50	5,00	5,00	5,00
Depressions in the coupling area		l	0,60	0,80	1,00	1,30	1,70	0,15	0,25	0,40	0,63	1,00
		m	0,08	0,08	0,10	0,10	0,13	0,08	0,08	0,10	0,10	0,13
Foreing bodies			Not permitted									

* The minimum value of the two

CONDITIONS OF SALE: TOLERANCES

Tolerances of internal Ø in MANDREL hoses unless otherwise agreed

With reference to the **UNI EN ISO 1307:1997**, the applied tolerances on MANDREL hoses internal Ø are:

INNER Ø nominal dimensions		Tolerance UNI EN ISO 1307:1997
from mm	up to mm	mm
4	10	± 0,40
13	20	± 0,60
	25	± 1,80
32	40	± 1,00
50	63	± 1,20
76	80	± 1,40
100	142	± 1,60
150	190	± 2,00
200	225	± 2,50
250	-	± 3,00

Tolerances of Thickness in RUBBER SHEETS unless otherwise agreed

THICKNESS nominal dimensions		Thickness	Width	Length
from mm	up to mm	± mm	mm	mm
0	1,5	± 0,20	± 10% *	-0 / +400
2,0	3,0	± 0,30	± 30,0	-0 / +400
4,0	6,0	± 0,50	± 30,0	-0 / +400
7,0	8,0	± 0,80	± 30,0	-0 / +400
10,0	15,0	± 1,00	± 30,0	-0 / +400
15,0	50,0	± 2,00	± 30,0	-0 / +400
50,0		± 2,50	± 10% *	-0 / +400

Tolerances of internal Ø in LONG LENGTH RUBBER hoses unless otherwise agreed

With reference to the **UNI EN ISO 1307:1997**, the applied tolerances on internal Ø of hoses of length from 20 to 100 m. are:

INNER Ø nominal dimensions		Tolerance UNI EN ISO 1307:1997
from mm	up to mm	mm
0	6	± 0,60
6,1	20	± 0,80
20,1	25	± 1,20
25,1	40	± 1,60

PROPER GOODS STORAGE

A proper goods storage preserves the original quality of the product before its use.

Improper storage may cause a change in physical-performance properties, that is, changes that normally occur over time due to employment and normal ageing, can be accelerated by individual factors, or by a combination of them, even just keeping the goods in a warehouse. The impoverishing factors are temperature, UV and humidity.

Optimal temperatures for storage are generally between 10° C and 25° C. If possible, stored materials must not be subjected to temperatures above 40° C or below 0° C. Many materials stored in warehouses with below-freezing temperatures need special precautions when handled.

Heat sources, acids, salt spray fogs, solvents and conditions of high or low humidity should also be avoided.

The relative humidity must not preferably exceed 65%.

Proper storage should take place in dark or at least half-light rooms, avoiding in particular direct sunlight or intense artificial light.

If the storage rooms have windows or glazed areas, these must be shielded.