

B]n\_chU b]bYbUgHJ`qj]fY[i`Urcf]n`bU]Y`ja`]n`cXb]a`hU\_ca`Xc`j`\_`4`bc`&\$\$  
a VUřzg`dfYtc`ca`bU]Y`(`\_[`#`]b`df]dUXUc`ja`]]Ufbcgfb]a`]bUdfUj`Ua`]nUVi`Hbž  
dfcdUb`U]b4`b]na`Yg]!`8`cdc`b]c`5`%

Low-pressure, non adjustable regulators having a maximum outlet pressure of less than or equal to 200 mbar, with a capacity of less than or equal to 4 kg/h, and their associated safety devices for butane, propane or their mixtures

Festeingestellte Druckregelgeräte mit einem Höchstreglerdruck bis einschließlich 200 mbar, und einem Durchfluss bis einschließlich 4 kg/h für Butan, Propan und deren Gemische sowie die dazugehörige Sicherheitseinrichtungen

SIST EN 12864:2002/A1:2004

Détendeurs a réglage fixe, a pression de détente maximale inférieure ou égale a 200 mbar, de débit inférieur ou égal a 4 kg/h, et leurs dispositifs de sécurité associés pour butane, propane ou leurs mélanges

**Ta slovenski standard je istoveten z: EN 12864:2001/A1:2003**

**ICS:**

23.060.40

**SIST EN 12864:2002/A1:2004**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 12864:2002/A1:2004

<https://standards.iteh.ai/catalog/standards/sist/2f2c2c60-fabb-4866-a9c4-4d6aff07fe73/sist-en-12864-2002-a1-2004>

ICS 23.060.40

English version

Low-pressure, non adjustable regulators having a maximum outlet pressure of less than or equal to 200 mbar, with a capacity of less than or equal to 4 kg/h, and their associated safety devices for butane, propane or their mixtures

Détendeurs à réglage fixe, à pression de détente maximale inférieure ou égale à 200 mbar, de débit inférieur ou égal à 4 kg/h, et leurs dispositifs de sécurité associés pour butane, propane ou leurs mélanges

Festeingestellte Druckregelgeräte mit einem Höchstreglerdruck bis einschließlich 200 mbar, und einem Durchfluss bis einschließlich 4 kg/h für Butan, Propan und deren Gemische sowie die dazugehörige Sicherheitseinrichtungen

This amendment A1 modifies the European Standard EN 12864:2001; it was approved by CEN on 27 June 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

## Foreword

This amendment EN 12864:2001/A1:2003 to EN 12864:2001 has been prepared by Technical Committee CEN /TC 181 "Dedicated liquefied petroleum gas appliances", the secretariat of which is held by AFNOR.

This amendment to the European Standard EN 12864 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This Amendment to the European Standard **EN 12864:2001** shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

This Amendment modifies EN 12864:2001. It has been prepared to take into account the commentaries received during the formal vote on EN 12864 and to amend the figures of annexes G and H.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 12864:2002/A1:2004

<https://standards.iteh.ai/catalog/standards/sist/2f2c2c60-fabb-4866-a9c4-4d6aff07fe73/sist-en-12864-2002-a1-2004>

## 2 Normative references

Add the following references :

- EN 560                      *Gas welding equipment \_ Hose connections for equipment for welding, cutting and allied processes.*
- EN ISO 8434-1            *Metallic tube connections for fluid power and general use - Part 1: 24° compression fittings (ISO 8434-1:1994).*

## 3 Terms and definitions

Add the following terms and definitions:

### 3.3.5

#### minimal admitted pressure

$p_{Mg}$

minimal value of the outlet pressure supplied by the regulator for all values of the inlet pressure and all values of the flow rate

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

### 3.3.6

#### maximal admitted pressure

[SIST EN 12864:2002/A1:2004](https://standards.iteh.ai/catalog/standards/sist/2f2c2c60-fabb-4866-a9c4-4d6aff07fe73/sist-en-12864-2002-a1-2004)

<https://standards.iteh.ai/catalog/standards/sist/2f2c2c60-fabb-4866-a9c4-4d6aff07fe73/sist-en-12864-2002-a1-2004>

$p_{Mp}$

maximal value of the outlet pressure supplied by the regulator for all values of the inlet pressure and all values of the flow rate between the pilot rate and the guaranteed rate

### 5.3.4.1 General

Replace the first paragraph by the following :

"The regulator shall be fitted with a corrosion and gas resistant filter situated on the regulator inlet upstream of the valve pad. The filter mesh shall not exceed the recommended dimensions for the 125 opening in accordance with ISO 565, or exceed 0,14 mm diameter in case of perforated sheet."

In a) add a new point 4) as follow :

"4) for connections made with a rotating nut using a seal the backward movement of the nut shall be sufficient to expose the seal completely."

### 5.4.3.1 Strength of the connection/regulator assembly

Replace a) 1) by the following :

"a) non threaded hose connections

- 1) a torque of at least 30 N·m in one direction (verification not required for one piece connection and for freely rotating connections);"

The other points are not modified.

7.2.3 Mechanical strength of connections

Replace Table 5 by the following:

Table 5 - Mechanical strength tests for the regulator assembly mounted on its cylinder valve (self closing valve or manual valve)

Test diagram	Type of inlet connection		
	Force	Threaded	Quick connection
	T F F1	20 N·m 400 N	15 N·m 500 N 400 N
	T F F1	20 N·m 400 N	15 N·m 500 N 400 N
	T F F1	30 N·m 400 N	30 N·m 500 N 400 N
	T1 T2 F F1	30 N·m 20 N·m 400 N	30 N·m 15 N·m 500 N 400 N

Key : Regulator fixing point T, T1, T2 Torque F, Tensile strength, F1, Bending strength

Valve

T and T2 are not applied if the regulator is freely turning on its cylinder valve.

## 8.2 Marking of the regulator

Replace the first sentence by:

"The regulator shall carry in a durable, compatible with its life time, legible and visible fashion the following information :"

Add the new following paragraph before the last one:

"It is recommended to mark, in a durable, compatible with its life time, legible and visible fashion, on the regulator the type of its connections (inlet/outlet) i.e "G.52 / H.1"

## 8.4 Instructions for use and maintenance

Replace the sixth dash by the following :

"- If any, a description of the operation of the safety devices (see annexes A and B) ;"

Add the following dashes:

"- an information relating to the type of the connections inlet/outlet of the regulator;

- a warning on the necessity to check the compatibility with the connections of equipment's fitted upstream (i.e cylinder valve) and downstream (i.e flexible hose) of the regulator."

## Annex D

# iTeh STANDARD PREVIEW (standards.iteh.ai)

### D.3.2.1

Replace the paragraph by the following:

"The high pressure hose (metallic, rubber, ...) used to connect the regulator fixed onto the wall of the vehicle shall comply with the characteristics set out in prEN 1763<sup>1</sup>."

### D.3.3.2.2

Replace the paragraph by the following :

"If the caravan regulator is designed to be fixed onto a wall of the vehicle, its inlet connection shall be either a threaded 3/8" male left hand connection (type G.11 as described in annex G) or a threaded M 20 x 1,5 male connection (type G.13 as described in annex G) or DN 8 and DN 10 compressing fittings (type G.15 as described in annex G)."

### D.3.3.3.1

Replace the paragraph by the following :

"If the caravan regulator is connected directly to the cylinder, its outlet connection shall be either a threaded 1/4" male left connection (type H.4 as described in annex H) or a threaded M 20 x 1,5 male connection (type H.1 as described in annex H)."

### D.3.3.3.2

Replace the paragraph by the following :

"If the caravan regulator is designed to be fixed onto a wall of the vehicle, its outlet connection shall be either a threaded 3/8" female right hand connection (type H.6 as described in annex H) or a threaded M 20 x 1,5 male

---

<sup>1</sup> In preparation

## EN 12864:2001/A1:2003 (E)

connection (type H.1 as described in annex H) or DN 8 and DN 10 compressing fittings (type H.9 as described in annex H).”

### D.5

*Replace the first paragraph with:*

“In addition to the information specified in clause 8 of this standard, the marking and packaging of the caravan regulator shall include the marking “caravan(e)” and its instructions shall include a warning of the type "Solely for use in caravans and motor caravans".”

*Rewrite the second paragraph as follows:*

“The instructions of the caravan regulator shall include the following warning : "This regulator is not suitable for mobile homes".”

### Annex E

*Table E.1 : In the third column, last line replace : “Method A 1,82 mN/m<sup>2</sup>” by “Method A 1,80 MPa”*

### Annex G

*Replace annex G by the following :*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 12864:2002/A1:2004

<https://standards.iteh.ai/catalog/standards/sist/2f2c2c60-fabb-4866-a9c4-4d6aff07fe73/sist-en-12864-2002-a1-2004>



## Annex G (normative)

### Inlet connections

The various types of threaded and non threaded connections used in the various countries are given in Table G.1 and G.2. Figures G.1 to G.49 (see 5.3.4.1 footnote 1) show the types of threaded inlets, Figures G.50 to G.99 (see 5.3.4.1 footnote 1) show the types of non threaded inlet connections.

**Table G.1 - Threaded inlet connections used in the various countries**

Type  Figure Country code <sup>a</sup>	Threaded connections																
	G.1	G.2	G.3	G.4	G.5	G.6	G.7	G.8	G.9	G.10	G.11	G.12	G.13	G.15	G.19	G.20	G.21
AT	x		x	x	x							x					
BE			x														
CH		x	x										x				
CZ			x														
DE			x	x	x						x	x		x	x	x	
DK			x	x	x												
ES			x														x
FI			x	x													
FR		x	x										x				
GB			x				x	x									
GR	x		x														
IE			x					x									
IS			x														
IT	x		x														
LU			x														
NL			x														
NO			x						x	x							
PT			x						x	x							
SE			x														

<sup>a</sup> Country codes are in accordance with EN ISO 3166-1.

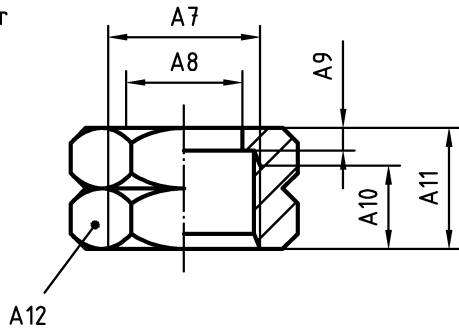
Table G.2 - Non-threaded inlet connections used in the various countries (see 5.3.4.1)

Type Figure Country code <sup>a</sup>	Non-threaded connections											
	G.50	G.51	G.52	G.53	G.54	G.55	G.56	G.57	G.58	G.59	G.60	G.61
AT							x					
BE												
CH												
CZ												
DE												
DK	x	x	x	x	x		x					
ES							x					
FI												
FR			x				x	x		x		
GB			x	x	x					x		
GR			x		x	x			x			
IE			x				x			x		
IS												
IT			x		x	x			x			
LU												
NL												
NO							x					
PT			x		x		x			x	x	x
SE							x					

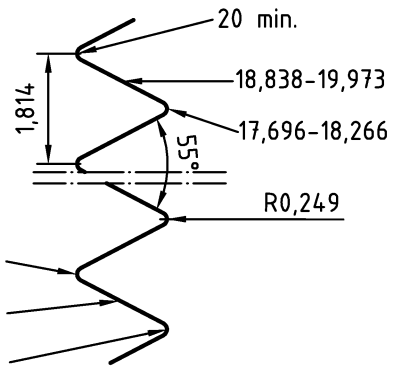
<sup>a</sup> Country codes are in accordance with EN ISO 3166-1.

Dimensions in millimetres  
 Dimensions en millimètres  
 Abmessung in Millimeter

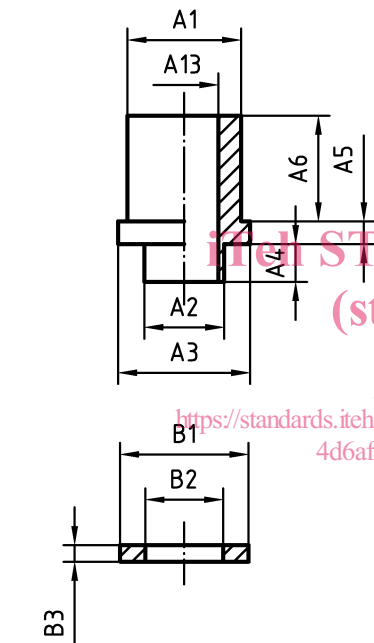
Regulator  
 Détendeur  
 Regler



Nut  
 Ecrou  
 Mutter



Screw  
 Vis  
 Bolzen



Connector  
 Connecteur

Entnahmestutzen

A1=  $\phi$  14,80- $\phi$  15

A2=  $\phi$  10,5- $\phi$  10,6

A3=  $\phi$  17,4- $\phi$  17,54

A4= 4,8-5,2

A5= 2,9-3,1

A6= 14 min

A7= 20x1,814 L.H. iso228-1

A8=  $\phi$  15,15- $\phi$  15,26

A9= 2,9-3,1

A10= 11 min

A11= 15,8-16,2

A12= 25 A/F

A13= 8,4 max.

Seal

Joint

Dichtung

B1=  $\phi$  16,8- $\phi$  17

B2=  $\phi$  10,2- $\phi$  10,4

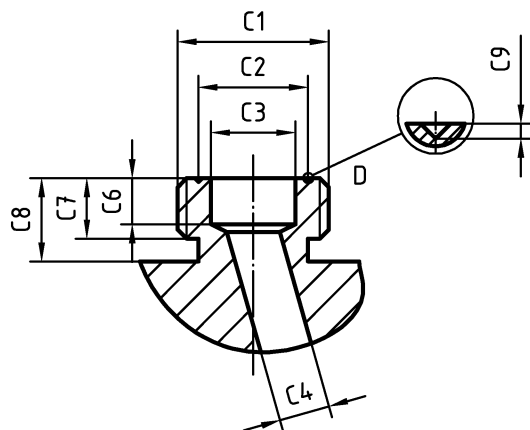
B3= 2,0-2,2

NBR or equivalent

ou équivalent

oder gleichwertig

EN 549 A2/H3



Valve

Robinet

Ventil

C1= 20 x 1,814 L.H. iso228-1

C2=  $\phi$  14,3- $\phi$  14,7

C3=  $\phi$  11,1- $\phi$  11,3

C4=  $\phi$  6,8- $\phi$  7,2

C5= R0,3-R0,7

C6= 6,0-6,3

C7= 8,0-8,5

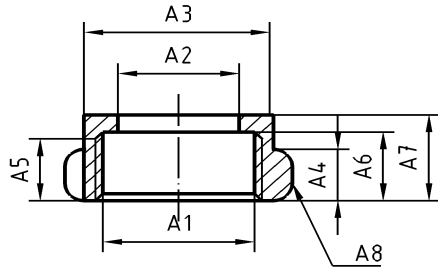
C8= 11 min

C9= 0,5 90°

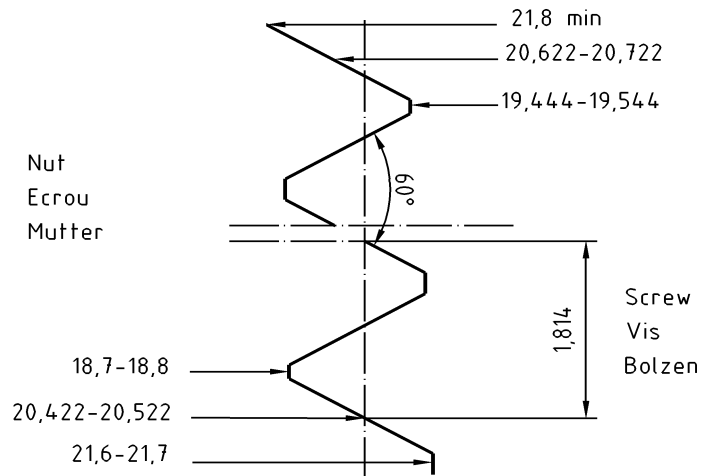
Figure G.1 - Threaded connection 20 x 1,814 L.H

Regulator  
Détendeur  
Regler

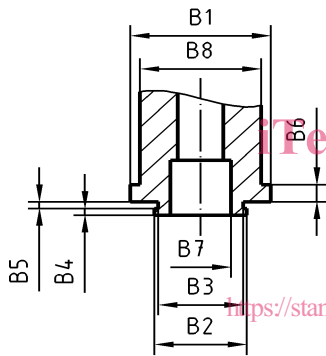
Dimensions in millimetres  
Dimensions en millimètres  
Abmessung in Millimeter



Nut  
Ecrou  
Mutter

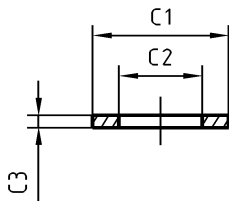


Screw  
Vis  
Bolzen



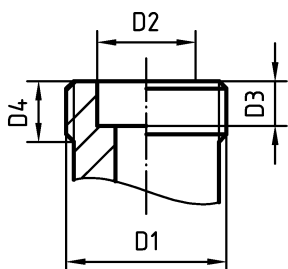
Connector  
Connecteur  
Entnahmestutzen  
B1=  $\phi$  18,5 -  $\phi$  18,7  
B2=  $\phi$  12,2 -  $\phi$  12,3  
B3=  $\phi$  11,1 -  $\phi$  11,3  
B4= 0,9-1,0  
B5= 2-2,2  
B6= 2,4-2,6  
B7= 9,0 max.  
B8=A2 -0,3

Nut  
Ecrou  
Mutter  
A1=21,8  $\times$  1,814 L.H.  
A2=  $\phi$  16 max.  
A3=  $\phi$  24,6 min.  
A4= 7,5 min.  
A5= 7,5-8,1  
A6= 9,9-10,5  
A7= 12,5 min.  
A8= 5 Rips equi-spaced  
5 Ailettes équidistantes  
5 Aquidistante Flugel

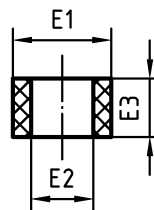


Seal - Black  
Joint - Noir  
Dichtung - Schwarz  
C1=  $\phi$  17,7-  $\phi$  18,0  
C2=  $\phi$  10,7-  $\phi$  11,0  
C3= 1,7-2,0

NBR or equivalent  
ou équivalent  
oder gleichwertig  
EN 549 A2/H3



Valve  
Robinet  
Ventil  
D1= 21,7  $\times$  1,814 L.H.  
D2=  $\phi$  13-  $\phi$  13,1  
D3= 7,8-8,0  
D4= 8,6-8,7

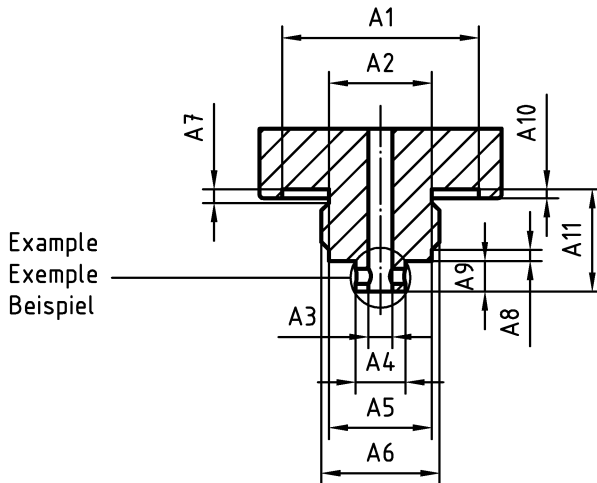


Seal  
Joint  
Dichtung  
E1=  $\phi$  13,35-  $\phi$  13,65  
E2=  $\phi$  8-  $\phi$  8,4  
E3= 7,5-7,8  
NBR  
EN 549 A2/H3

Figure G.2 - Threaded connection 21,7  $\times$  1,814 L.H. - 60° - Hand tightened

Regulator  
Détendeur  
Regler

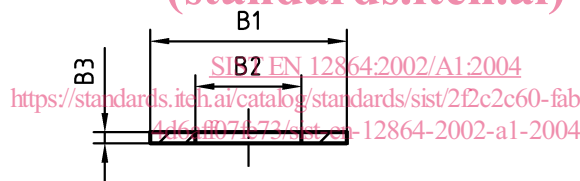
Dimensions in millimetres  
Dimensions en millimètres  
Abmessung in Millimeter



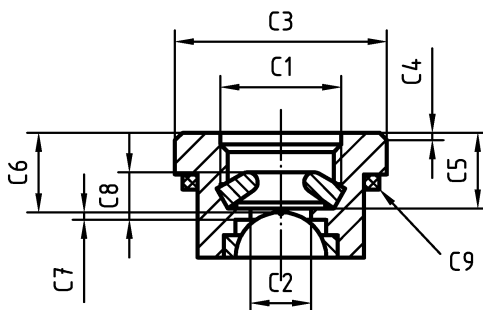
Example  
Exemple  
Beispiel

Connector  
Connecteur  
Entnahmestutzen  
A1 =  $\phi 27-\phi 27,21$   
A2 =  $\phi 13,9-\phi 14,1$   
A3 =  $\phi 3,0-\phi 3,2$   
A4 =  $\phi 6,4-\phi 6,6$   
A5 =  $\phi 13,7-\phi 13,9$   
A6 = M16x1,5-6g  
A7 = 1,6-1,8  
A8 = 1,4-1,6  
A9 = 3,9-4,1  
A10 = 1,2-1,4  
A11 = 13,4-13,6

iTeh STANDARD PREVIEW  
(standards.iteh.ai)



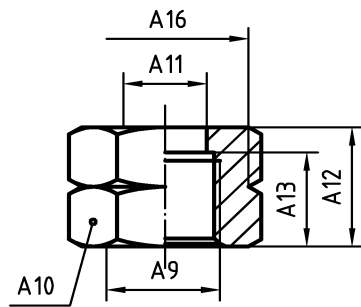
Seal  
Joint  
Dichtung  
B1 =  $\phi 25,7-\phi 26,3$   
B2 =  $\phi 14,0-\phi 14,6$   
B3 =  $\phi 1,35-\phi 1,65$   
NBR or equivalent  
ou équivalent  
oder gleichwertig  
EN 549 A2 / H3



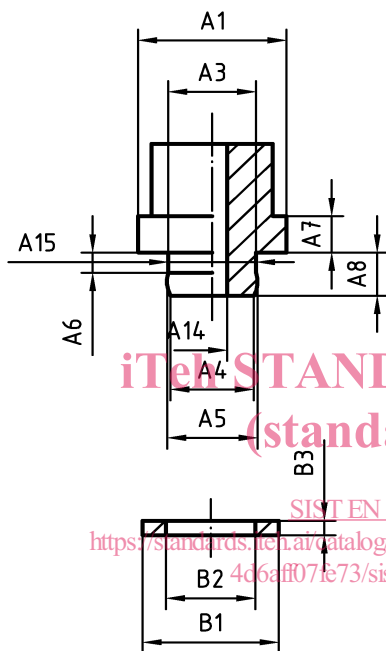
Valve  
Robinet  
Ventil  
C1 = M16x1,5-6H  
C2 =  $\phi 8,4-\phi 8,6$   
C3 =  $\phi 26,5-\phi 27,3$   
C4 = 1 x 45°  
C5 = 10,3-10,5  
C6 = 10,20-10,60  
C7 = 1 min.  
C8 = 5,4-5,9  
C9 = Metal gasket  
Joint métallique  
Metallische Dichtung

Figure G.3 - Threaded connection M16 x 1,5 R.H

Regulator  
Détendeur  
Regler



Dimensions in millimetres  
Dimensions en millimètres  
Abmessung in Millimeter



Connector  
Connecteur  
Entnahmestutzen

- A1 =  $\phi 18,8-19,2$
- A3 =  $\phi 11,3-11,7$
- A4 =  $\phi 10,8-11,2$
- A5 =  $\phi 11,89-12,0$
- A6 = 1,7-1,9
- A7 = 4,9-5,1
- A8 = 5,9-6,1
- A9 = 21,8 x 1/1,814 L.H. ISO 228-1
- A10= 30 A/F
- A11=  $\phi 16,15-\phi 16,26$
- A12= 21,0-21,3
- A13= 16,0-16,3
- A14= 8 max.

A15=  $\sqrt{Ra\ 3,2}$   
A16= 30,0-30,1

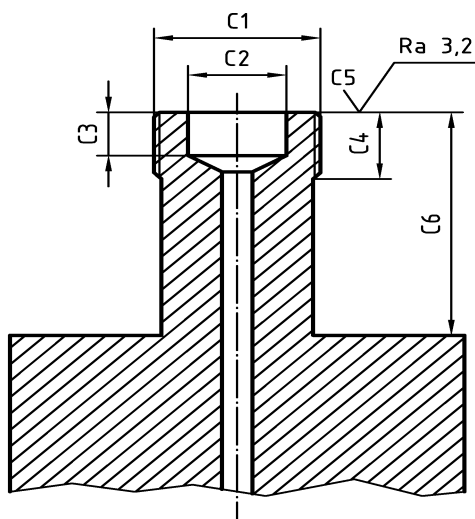
Seal  
Joint  
Dichtung

- B1 =  $\phi 19,8-\phi 19,2$
- B2 =  $\phi 11,6-\phi 12$
- B3 = 4,9-2,1

NBR  
or equivalent  
ou équivalent  
oder gleichwertig

EN 549 A2 / H3

or aluminium or polyamide  
ou aliminium ou polyamide  
oder Aluminium oder Polyamid



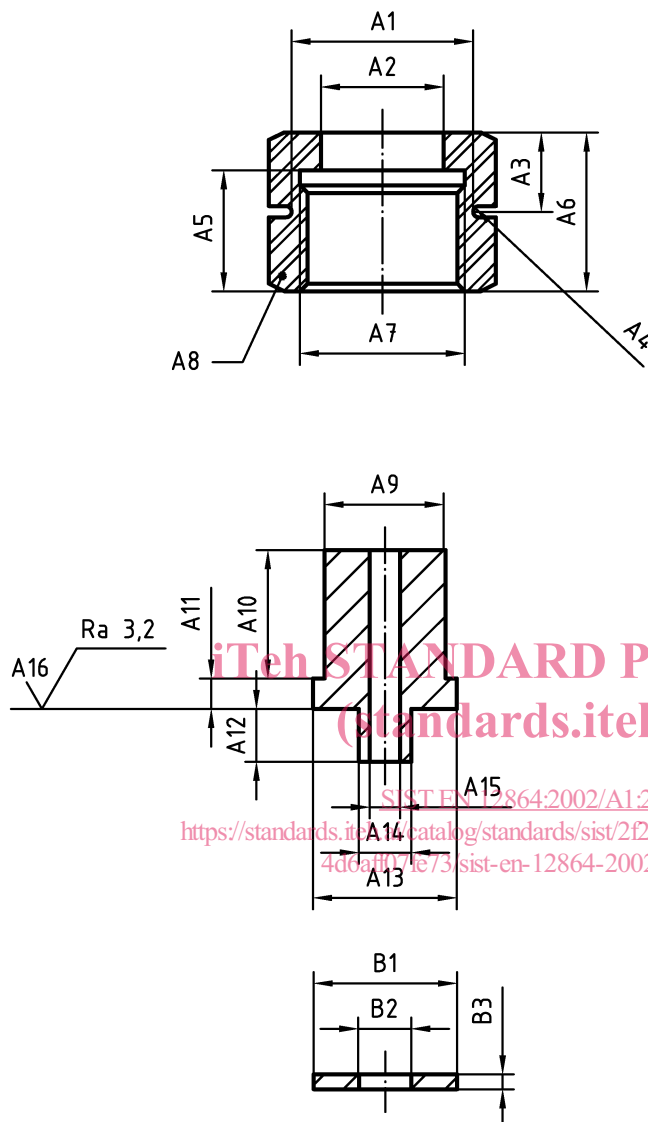
Valve  
Robinet  
Ventil

- C1 = 21,8 x 1,814 L.H. ISO228-1
- C2 =  $\phi 12,7-\phi 13,3$
- C3 = 6,8-7,2
- C4 = 9 min.
- C5 = Ra 3,2
- C6 = 11,5 min.

Figure G.4 - Threaded connection 21,8 x 1,814 L.H - 55° - Spanner tightened

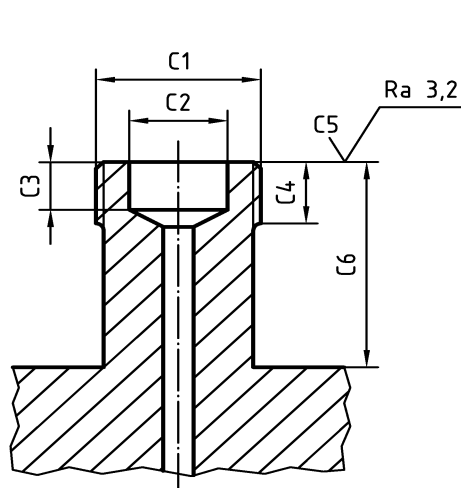
Regulator  
Détendeur  
Regler

Dimensions in millimetres  
Dimensions en millimètres  
Abmessung in Millimeter



Connector  
Connecteur  
Entnahmestutzen  
A1=  $\phi 29,8-\phi 30$   
A2=  $\phi 16,15-\phi 16,26$   
A3= 10,3-10,7  
A4= R 0,75  
A5= 16,0-16,3  
A6= 21,0-21,3  
A7= 21,8x1,814 L.H. ISO 228-1  
A8= 30 A/F  
A9=  $\phi 15,84-15,95$   
A10= 17 min.  
A11= 3,9-4,1  
A12= 6,8-7,2  
A13=  $\phi 18,8-\phi 19,2$   
A14=  $\phi 6,92-\phi 6,96$   
A15=  $\phi 3,9-\phi 4,1$   
A16= Ra 3,2

Seal  
Joint  
Dichtung  
B1=  $\phi 18,8-\phi 19,2$   
B2=  $\phi 6,9-\phi 6,95$   
B3= 1,9-2,1  
Polyamide  
Also fits G12 valve  
Se monte aussi sur la valve G12  
Auch für Ventil G12



identical to G4  
identique à G4  
gleich G4

Valve  
Robinet  
Ventil  
C1= 21,8 x 1,814 L.H. ISO 228-1  
C2=  $\phi 12,7-\phi 13,3$   
C3= 6,8-7,2  
C4= 9 min.  
C5= Ra3,2  
C6= 11,5 min.

Figure G.5 - Threaded connection 21,8 x 1,814 L.H - 55°- Spanner tightened