
INTERNATIONAL STANDARD



721

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Rock drilling — Integral stems

Forage des roches — Fleurets monoblocs

First edition — 1974-07-01

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 82 has reviewed ISO Recommendation R 721, and found it suitable for transformation. International Standard ISO 721 therefore replaces ISO Recommendation R 721-1968.

ISO Recommendation R 721 was approved by the Member Bodies of the following countries :

Australia	Hungary	South Africa, Rep. of
Belgium	India	Spain
Brazil	Japan	Sweden
Chile	Korea, Rep. of	Turkey
Czechoslovakia	Netherlands	United Kingdom
Egypt, Arab Rep. of	New Zealand	U.S.S.R.
France	Poland	Yugoslavia.
Germany	Portugal	

No Member Body expressed disapproval of the Recommendation.

The Member Body of the following country disapproved the transformation of ISO/R 721 into an International Standard :

Canada

Rock drilling — Integral stems

1 SCOPE AND FIELD OF APPLICATION

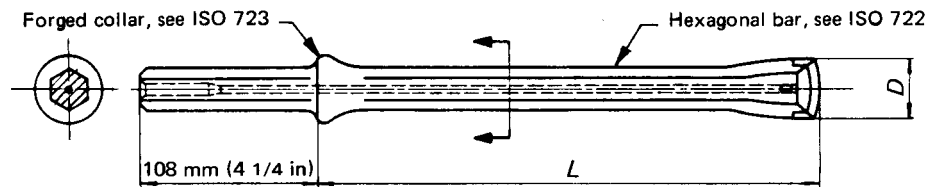
This International Standard fixes the dimensions of integral stems used for rock drilling.

2 REFERENCES

ISO 722, *Rock drilling — Hollow hexagonal drill-steels in bar form.*

ISO 723, *Rock drilling — Forged collared shanks and chuck bushings for hollow hexagonal drill-steels.*

3 INTEGRAL STEMS 19 mm (3/4 in) HEXAGON WITH FORGED COLLARED SHANK



L min.		D mm (in) + 0,3 mm (+ 0.012 in) - 0,1 mm (- 0.004 in)											
m	ft in	35 (1.378)	34 (1.339)	33 (1.299)	32 (1.260)	30 (1.181)	29 (1.142)	28 (1.102)	27 (1.063)	26 (1.024)	25 (0.984)	24,5 (0.965)	24 (0.945)
0,4	1 4	X					X						
0,6	2								X				
0,8	2 7		X					X					
1,2	3 11					X			1)	X			
1,6	5 3			X					X				
1,8	5 11										X		
2,4	7 10				X		X			X			
3,2	10 6										X		
3,6	11 10							X					
4	13 1												X
4,8	15 9								X				
6	19 8									X			
7,2	23 7										X		
8,4	27 7											X	
9,6	31 6												X

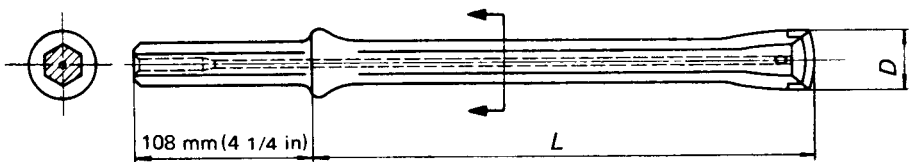
1) Supplementary stems.

Crosses (X) within thick-lined frames indicate series of preferred combinations of bit gauge (D) and length (L). Small crosses indicate further standardized series.

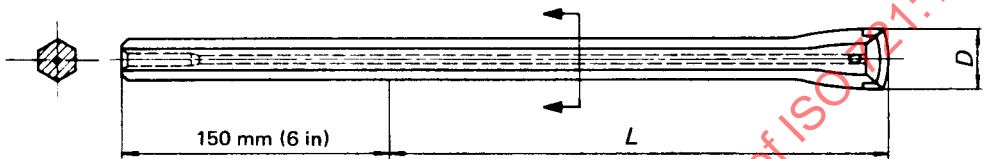
NOTE – Where it is impossible to use the recommended combinations of bit gauges (D) and lengths (L), the bit gauges and lengths from the table should nevertheless be used in different combinations.

4 INTEGRAL STEMS 22 mm (7/8 in) HEXAGON

Forged collared shank



Plain shank



L min.		D mm (in) $+ 0,3$ mm $(+ 0.012$ in) $- 0,1$ mm $(- 0.004$ in)												
m	ft in	40 (1.575)	39 (1.535)	38 (1.496)	37 (1.457)	36 (1.417)	35 (1.378)	34 (1.339)	33 (1.299)	32 (1.260)	31 (1.220)	30 (1.181)	29 (1.142)	28 (1.102)
0,4	1 4							X						
0,5	1 8									1)				
0,6	2						X							
0,8	2 7	X						X	X					
1,2	3 11	1)						X		X				
1,6	5 3		X						X		X			
1,8	5 11								X					
2	6 7											X		
2,4	7 10			X						X				
3,2	10 6				X						X			
4	13 1					X						X		
4,8	15 9						X						X	
5,6	18 4							X						1)
6,4	21								X					

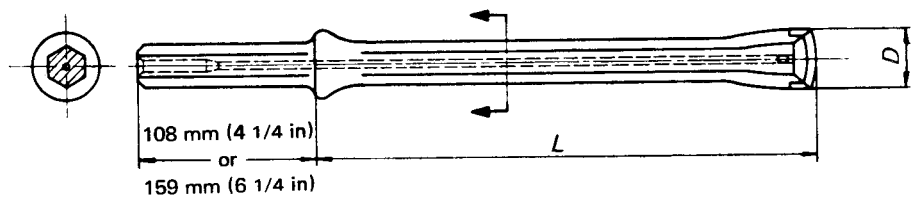
1) Supplementary stems.

Crosses (X) within thick-lined frames indicate series of preferred combinations of bit gauge (D) and length (L). Small crosses indicate further standardized series.

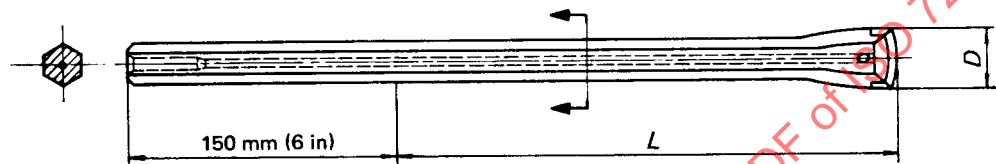
NOTE – Where it is impossible to use the recommended combinations of bit gauges (D) and lengths (L), the bit gauges and lengths from the table should nevertheless be used in different combinations.

5 INTEGRAL STEMS 25 mm (1 in) HEXAGON

Forged collared shank



Plain shank



L min.		D mm (in) + 0,3 mm (+ 0,012 in) - 0,1 mm (- 0,004 in)									
m	ft in	42 (1,654)	41 (1,614)	40 (1,575)	39 (1,535)	38 (1,496)	37 (1,457)	36 (1,417)	35 (1,378)	34 (1,339)	33 (1,299)
0,8	2 7	X						X			
1,6	5 3		X						X		
2,4	7 10			X						X	
3,2	10 6				X						X
4	13 1					X					
4,8	15 9						X				
5,6	18 4							X			
6,4	21								X		

Crosses (X) within thick-lined frames indicate series of preferred combinations of bit gauge (D) and length (L).

NOTE — Where it is impossible to use the recommended combinations of bit gauges (D) and lengths (L), the bit gauges and lengths from the table should nevertheless be used in different combinations.