

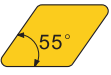

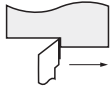




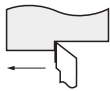



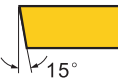


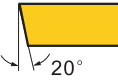
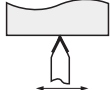

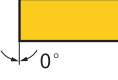



cutting tools

Suportes de torneamento

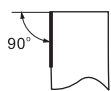

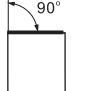
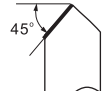

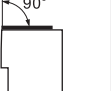
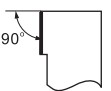
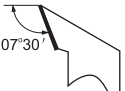



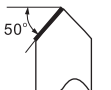
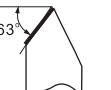
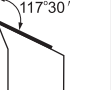
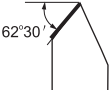
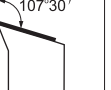
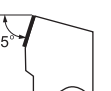

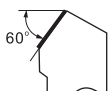


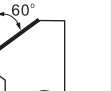
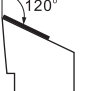
External turning tools code key

Nomeclatura das ferramentas de torneamento externo

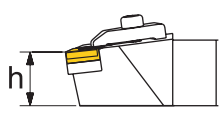
Clamping system Sistema de fixação	Inserts shape Formato da pastilha		Inserts clearance angle Ângulo de folga da pastilha	Cutting direction Direção de corte
 P – Hole clamping P – Sistema de fixação de alavanca	 C	 D	 B	 L - Left hand L - Mão esquerda
 M – Top and hole clamping M – Sistema de fixação composta	 R	 S	 C	 R - Right hand R - Mão direita
 S – Screw clamping S – Sistema de fixação por parafuso	 T	 V	 D	
 C – Top clamping C – Sistema de fixação por placa	 W		 E	 N - Neutral N - Neutro
 D – Double clamping D – Sistema de fixação de face dupla			 N	
			 P	



P C L N L

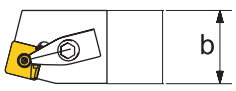
Tool holder style and approach angle Formato do suporte e ângulo de aproximação							
A	B	C	D	E	F	G	H
							
J	K	L	M	N	O	P	Q
							
R	S	T	U	V	W	X	
							

Nose height (mm)
Altura da ponta da aresta de corte(mm)



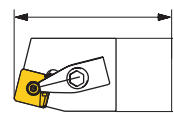
Code	Height
Código	Altura
12	12
16	16
20	20
25	25
32	32
40	40
50	50

Width of toolholder (mm)
Largura do suporte (mm)








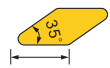

Code	Width
Código	Largura
12	12
16	16
20	20
25	25
32	32
40	40
50	50

Length of toolholder (mm)
Comprimento do suporte (mm)



Code	Length
Código	Comprimento
H	100
K	125
M	150
P	170
Q	180
R	200
S	250
T	300

25 25 M 12

Length of cutting edge Comprimento da aresta de corte							
Inserts shape Formato da pastilha	C	D	R	S	T	V	W
							
Inscribed circle (mm) Círculo inscrito (mm)	Length of cutting edge(mm) Comprimento da aresta de corte(mm)						
5.556	---	---	---	---	09	---	---
6.350	06	07	---	---	11	---	---
9.525	09	11	09	09	16	16	06
12.700	12	15	12	12	22	22	08
15.875	16	19	15	15	27	---	---
19.050	19	---	19	19	33	---	---
25.400	25	---	25	25	44	---	---
32.000	---	---	32	---	---	---	---

Internal turning tools code key
 Nomeclatura de ferramentas de furo interno

Toolholders type Tipo de suporte		Diameter of toolholder Diâmetro do haste	Length of toolholder Comprimento do haste	Clamping system Sistema de fixação	Inserts shape Formato da pastilha	
Code Código	Type Tipo					
A	Steel toolholder with oil-hole Haste de aço com furo de refrigeração			P – Hole clamping P – Sistema de fixação de alavanca		
C	Cemented carbide toolholder Haste de metal duro	Code Diameter Código Diâmetro	Code Length Código Comprimento			
		08 08	H 100	M – Top and hole clamping M – Sistema de fixação composta		
		10 10	K 125			
E	Cemented carbide toolholder with oil-hole Haste de metal duro com furo de refrigeração	16 16	M 150			
		20 20	N 160	S – Screw S – Sistema de fixação por parafuso		
S	Steel toolholder Haste de aço	25 25	Q 180			
		32 32	R 200			
		40 40	S 250	C – Top C – Sistema de fixação por placa		
X	Special inserts is applied Aplicações às pastilhas especiais	50 50	T 300			
			U 350			
			V 400			

S 16 R - S D U

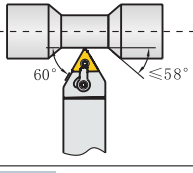
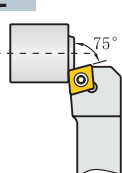
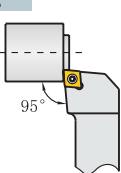
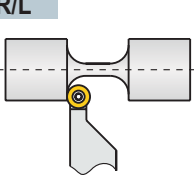
Tool holder style and approach angle Formato do suporte e ângulo de aproximação							
A	B	C	D	E	F	G	H
J	K	L	M	N	O	P	Q
R	S	T	U	V	W	X	

Inserts clearance angle Ângulo de folga da pastilha	Cutting direction Direção de corte	Options of Manufacturer Opção de Fabricantes
B	 L - Left hand L - Mão esquerda	D Increase offset f size+1.0mm Aumento de compensação de F + 1.0 mm
C		E Increase offset f size+2.0mm Aumento de compensação de F + 2.0 mm
D	 R - Right hand R - Mão direita	R Round shank Haste redonda
E		W Wedge clamping Cunha de fixação
N		X Back boring Furo traseiro
P		

C R 07

Length of cutting edge Comprimento da aresta de corte							
Inserts shape Formato da pastilha	C	D	R	S	T	V	W
Inscribed circle (mm) Círculo inscrito (mm)	Length of cutting edge(mm)			Comprimento da aresta de corte(mm)			
5.556	---	---	---	---	09	---	---
6.350	06	07	---	---	11	---	---
9.525	09	11	09	09	16	16	06
12.700	12	15	12	12	22	22	08
15.875	16	19	15	15	27	---	---
19.050	19	---	19	19	33	---	---
25.400	25	---	25	25	44	---	---

Turning toolholders overview
 Apresentação dos suportes de torneamento
 External Turning tools
 Ferramentas de torneamento externo

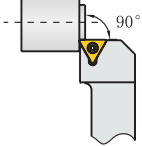
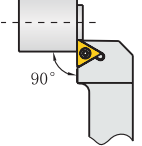
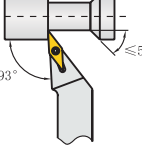
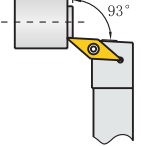
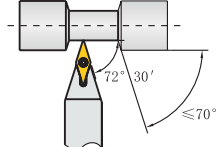
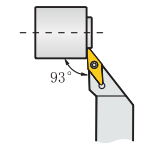
<p>MCLNR/L Kr=95</p> 	<p>MCBNR/L Kr=75</p> 	<p>MCGNR/L Kr=90</p> 	<p>MDJNR/L Kr=93</p> 
<p>MSBNR/L Kr=75</p> 	<p>MSKNR/L Kr=75</p> 	<p>MSSNR/L Kr=45</p> 	<p>MTBNR/L Kr=75</p> 
<p>MTENN Kr=60</p> 	<p>MTFNR/L Kr=90</p> 	<p>MTGNR/L Kr=90</p> 	<p>MTJNR/L Kr=93</p> 
<p>MVJNR/L Kr=93</p> 	<p>MVQNR/L Kr=117 30'</p> 	<p>MVVNN Kr=72 30'</p> 	<p>MVUNR/L Kr=93</p> 
<p>MWLNR/L Kr=95</p> 	<p>SCACR/L Kr=90</p> 	<p>SCBCR/L Kr=75</p> 	<p>SCFCR/L Kr=90</p> 
<p>SCKCR/L Kr=75</p> 	<p>SCLCR/L Kr=95</p> 	<p>SCMCN Kr=50</p> 	<p>SDACR/L Kr=90</p> 
<p>SDJCR/L Kr=93</p> 	<p>SDNCN Kr=62 30'</p> 	<p>SRACR/L</p> 	<p>SRDCN</p> 
<p>SSBCR/L Kr=75</p> 	<p>SSDCN Kr=45</p> 	<p>SSKCR/L Kr=75</p> 	<p>SSSCR/L Kr=45</p> 

Turning toolholders overview

Apresentação dos suportes de torneamento

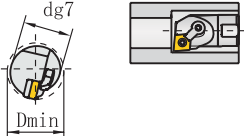
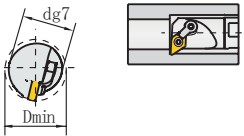

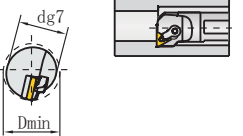

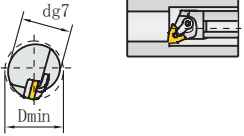
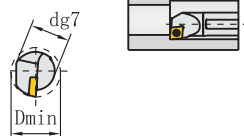
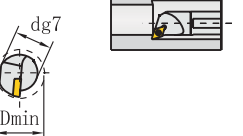
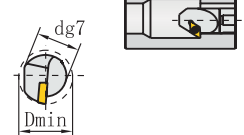
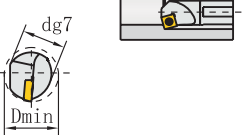


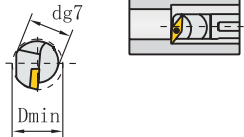
External Turning tools

Ferramentas de torneamento externo

<p>STFCR/L Kr=90</p> 	<p>STGCR/L Kr=90</p> 	<p>SVJ□R/L Kr=93</p> 	<p>SVU□R/L Kr=93</p> 
<p>SVVBN Kr=72 30'</p> 	<p>SVJBR/L Kr=93</p> 		

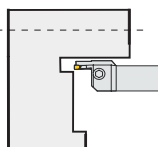
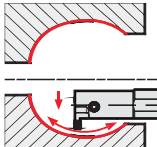
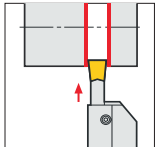
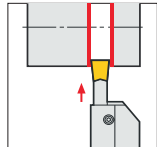
Internal turning tools

Ferramentas de torneamento interno

<p>MCLNR/L</p> 	<p>MDUNR/L</p> 	<p>MSKNR/L</p> 	<p>MTFNR/L</p> 
<p>MVUNR/L</p> 	<p>MWLNR/L</p> 	<p>SCLCL/R</p> 	<p>SDQCL/R</p> 
<p>SDUCL/R</p> 	<p>SSKCL/R</p> 	<p>SSSCR/L</p> 	<p>STFCL/R</p> 
<p>SVUNL/R</p> 			

Grooving tools

Ferramentas de ranhura

<p>MGEHR/L</p> 	<p>MGIVR/L</p> 	<p>ZQ</p> 	<p>SPH</p> 
---	---	---	---