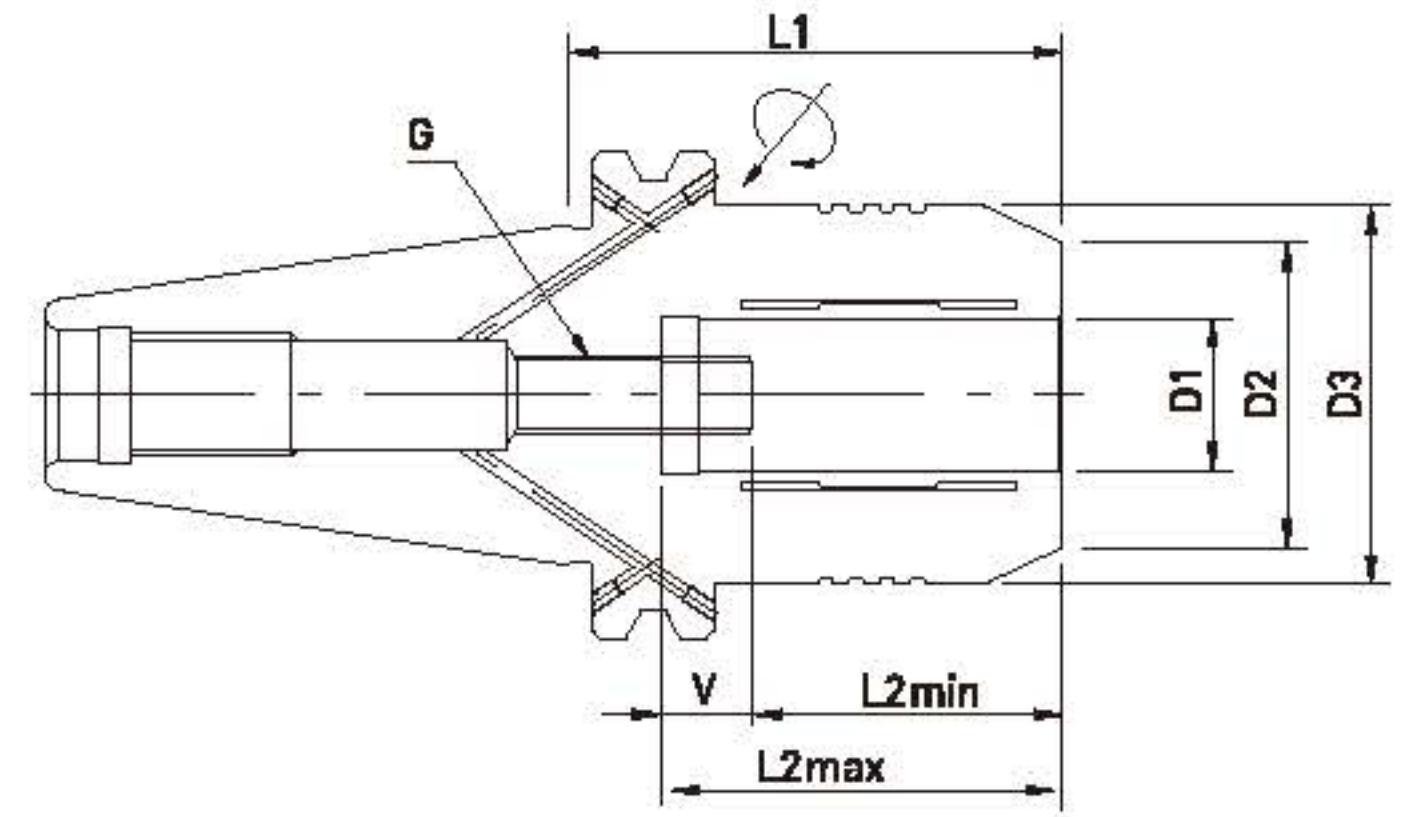


HYDRAULIC CHUCK (Short & Heavy Design)

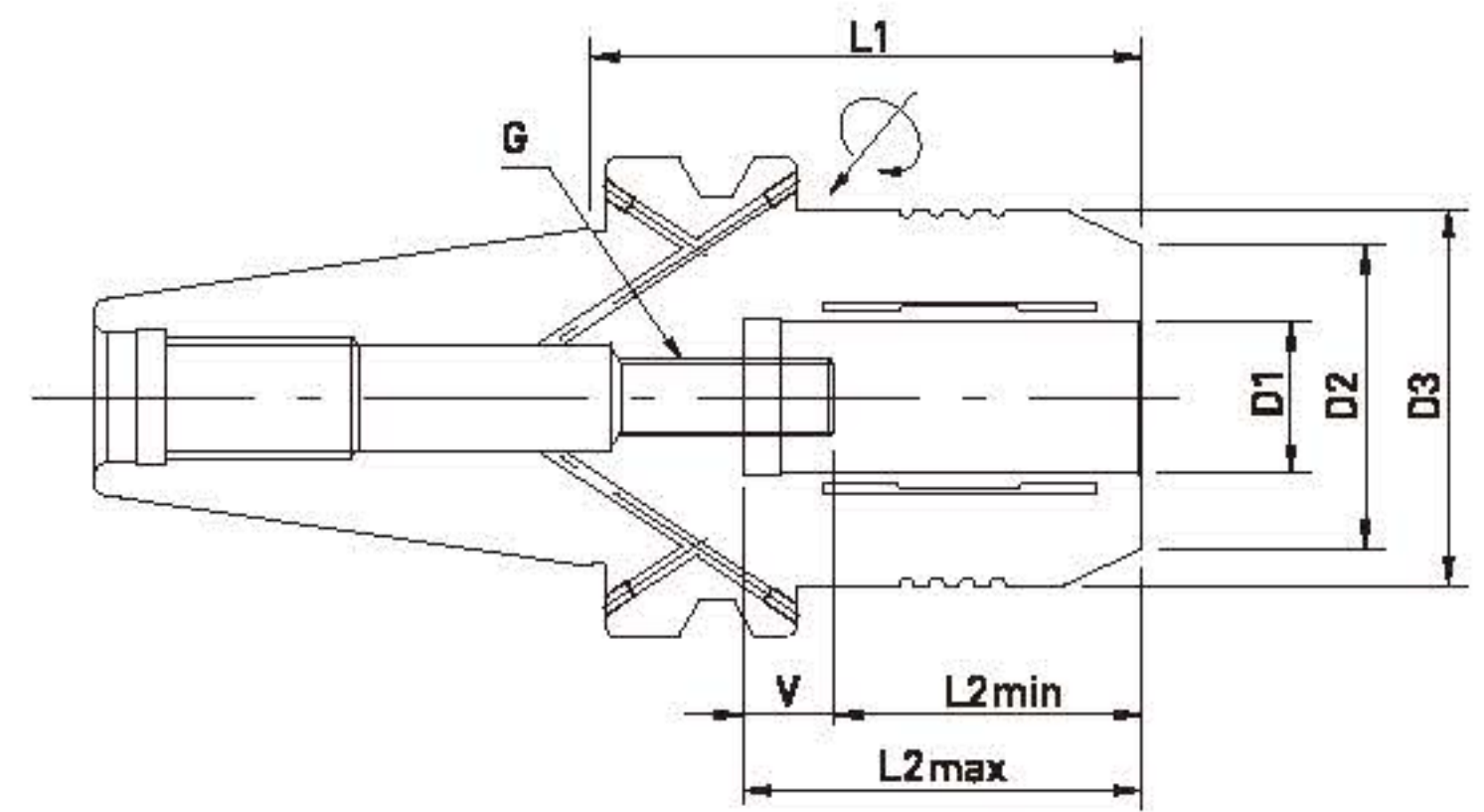
MAS403 BT-JHM(P type)



Taper AT3 T.I.R $\geq 3\mu\text{m}/3\times\text{D}$ Bal./rpm G2.5/20000 Coolant AD, AD/B

CODE NO.		D1	D2	D3	L1	L2max	L2min	V	G
BT30	JHM20P - 85	20	40	44	85	52.5	42.5	10	M 8 X1.0
BT40	JHM20P - 72.5			49.5	72.5				
BT50	JHM32P - 90	32	60	72	90	65	55		M16X1.0

DIN69871 SK-JHM(P type)

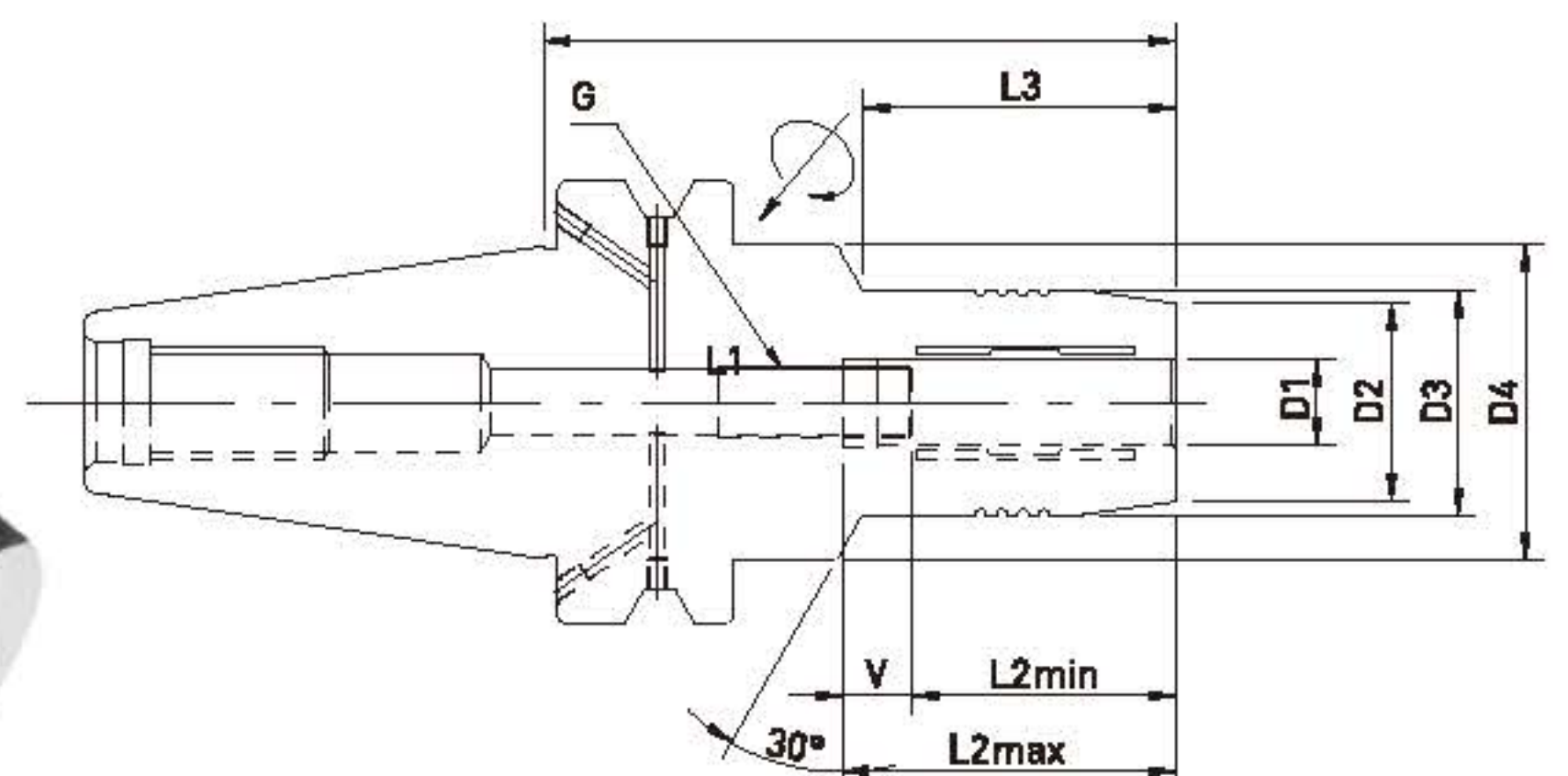


Taper AT3 T.I.R $\geq 3\mu\text{m}/3\times\text{D}$ Bal./rpm G2.5/20000 Coolant AD, AD/B

CODE NO.		D1	D2	D3	L1	L2max	L2min	V	G
SK40	JHM20P - 64.5	20	40	49.5	64.5	52.5	42.5	10	M 8 X1.0
SK50	JHM32P - 81	32	60	72	81	65	55		M16X1.0

HYDRAULIC EXPANSION CHUCK

BT-JHM



Taper AT3 T.I.R $\geq 3\mu\text{m}/3\times\text{D}$ Bal./rpm G2.5/20000 Coolant AD, AD/B

CODE NO.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	G	
BT30	JHM 3 - 70	3	21	24	45	70	24	—	—	30	—	
	JHM 4 - 70	4	22	25			28					
	JHM 5 - 70	5	23	26			32					
	JHM 6 - 70	6	25	28		75	37.5	27.5	10	28	M5X0.8	
	JHM 8 - 70	8	27	30			42.5	32.5		38	M6X1.0	
	JHM10 - 75	10	29	32						36		
	JHM12 - 75	12	31	34						44		
	JHM14 - 85	14	33	36		85	47.5	37.5		90	48	M 8 x1.0
	JHM16 - 90	16	35	38		52.5	42.5	-				
	JHM18 - 90	18	38	41								
	JHM20 - 90	20	40	43	—							

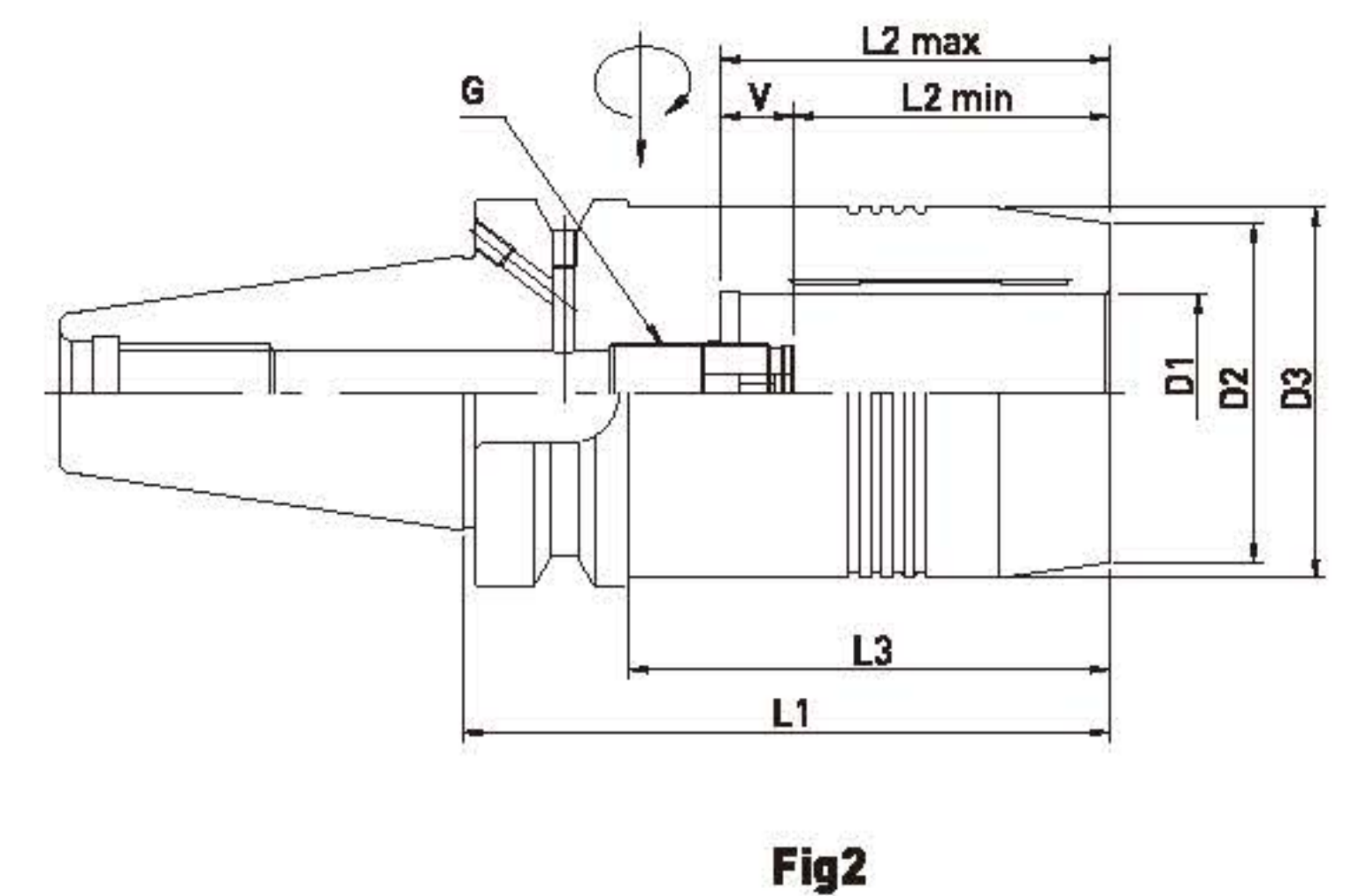
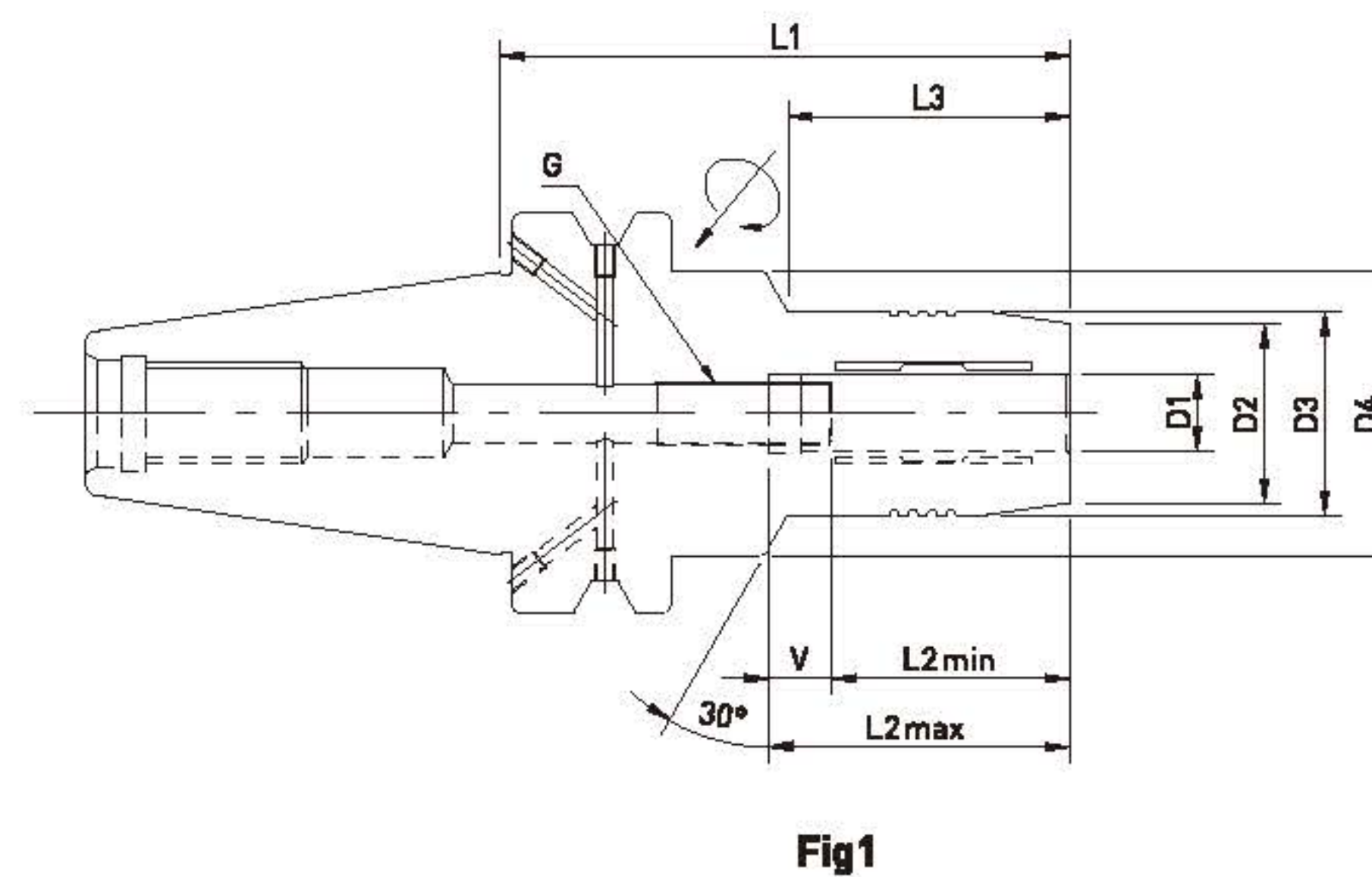
NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6 \sim \varnothing 32$ 의 절삭공구 상크는 톨공차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.
- BT40, SK40, HSK40, HSK50, HSK63 타입의 내경 3 $\varnothing$, 4 $\varnothing$, 5 $\varnothing$ 는 주문제작 가능합니다.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve D12/D20/D32/OD12/OD20/OD32
- Balancing Grade : BT30, BT40, SK40 – G2.5/20,000rpm
BT50, SK50 – G 2.5 / 15,000rpm
- Type of BT40, SK40, HSK40, HSK50, HSK63 with 3 $\varnothing$, 4 $\varnothing$, 5 $\varnothing$ are available depend on request.

HYDRAULIC EXPANSION CHUCK

MAS403 BT-JHM



Taper AT3

T.I.R $\geq 3\mu\text{m}/3\text{x}\text{D}$

Bal./rpm G2.5/20000

Coolant AD, AD/B

mm

CODE NO.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	G	Type
BT40	JHM 6 - 65	6	25	28	50	65	37.5	27.5	10	23	M5X0.8	Fig1
	JHM 6 - 90					90				44		
	JHM 6 - 140					140				44		
	JHM 8 - 65	8	27	30		65				23	M6X1.0	
	JHM 8 - 90					90				39		
	JHM 8 - 140					140				44		
	JHM 10 - 65	10	29	32		65	23	M6X1.0				
	JHM 10 - 90					90	44					
	JHM 10 - 140					140	44					
	JHM 12 - 65	12	31	34		65	23			M6X1.0		
	JHM 12 - 90					90	44					
	JHM 12 - 140					140	44					
	JHM 14 - 65	14	33	36		65	23	M8X1.0				
	JHM 14 - 90					90	48					
	JHM 14 - 140					140	48					
	JHM 16 - 65	16	35	38		65	23			M8X1.0		
	JHM 16 - 90					90	48					
	JHM 16 - 140					140	48					
	JHM 18 - 75	18	38	41		75	30	M16X1.0				
	JHM 18 - 90					90	48					
	JHM 18 - 140					140	48					
	JHM 20 - 75	20	40	43	75	30	M16X1.0					
	JHM 20 - 90				90	48						
	JHM 20 - 140				140	48						
	JHM 25 - 100	25	53	57	100	61		51	73	M16X1.0	Fig2	
	JHM 25 - 135				135	65		55	108			
	JHM 32 - 105	32	58	63	105				-			
	JHM 32 - 135				135			-				

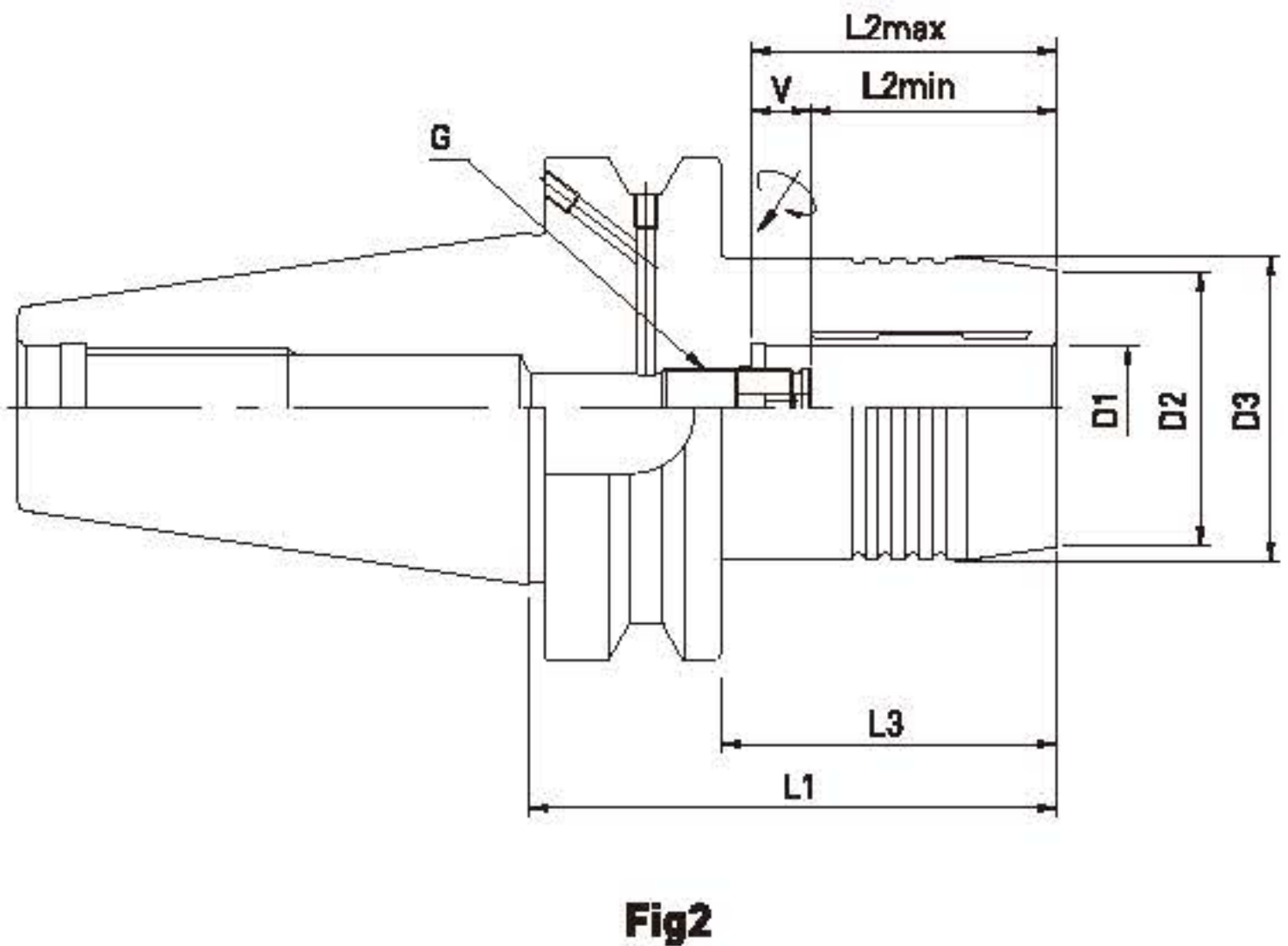
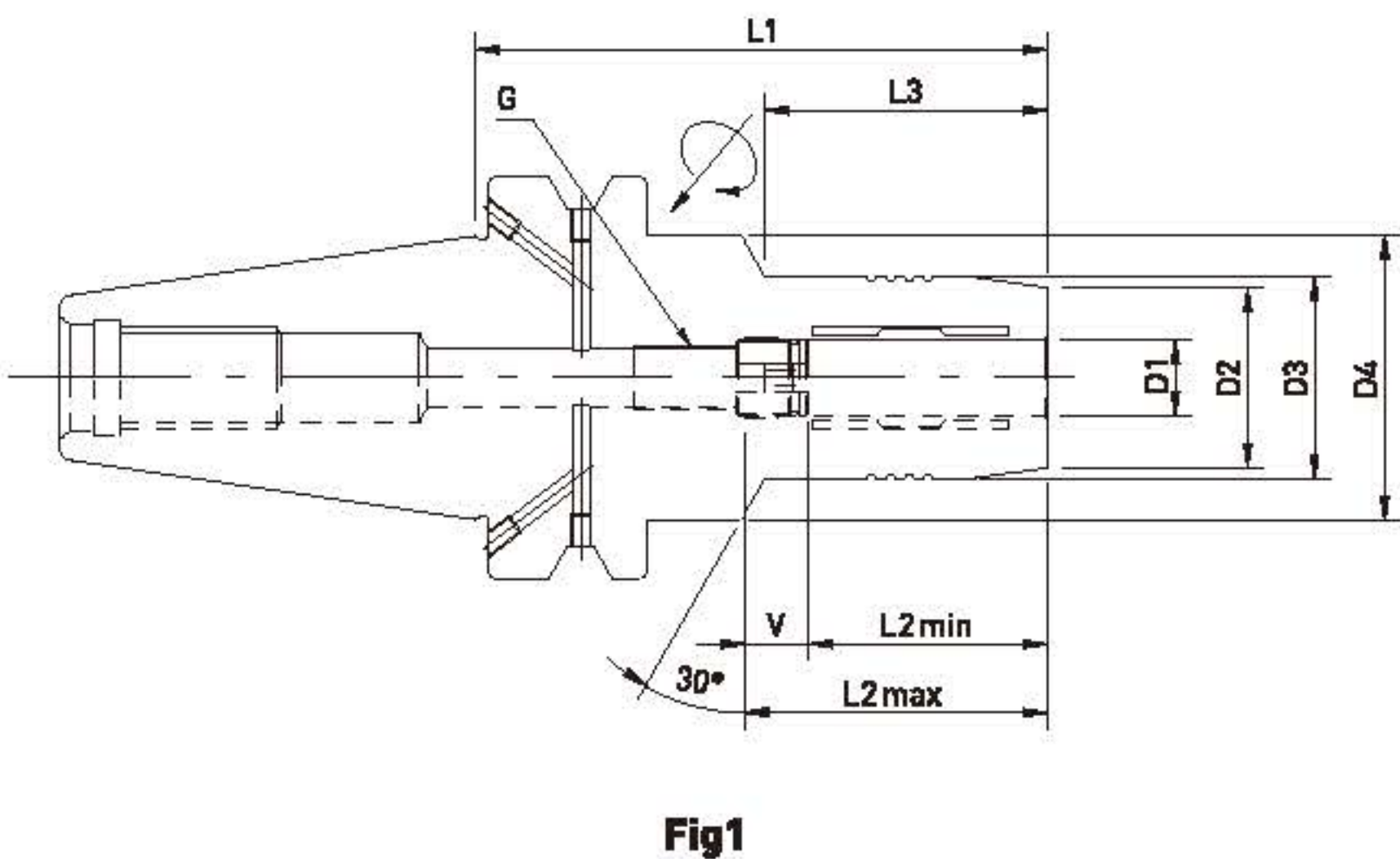
NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6 \sim \varnothing 32$ 의 절삭공구 상크는 톨공차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve
D12/D20/D32/OD12/OD20/OD32

HYDRAULIC EXPANSION CHUCK

MAS403 BT-JHM



Taper AT3 T.I.R $\geq 3\mu\text{m}/3\text{x}\text{D}$ Bal./rpm G2.5/15000 Coolant AD, AD/B mm

CODE NO.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	G	Type								
BT50	JHM 6 - 90	6	25	28	50	90	37.5	27.5	10	32	M5X0.8	Fig1								
	JHM 6 - 120					120				44										
	JHM 6 - 140					140														
	JHM 8 - 90	8	27	30		90				37.5	27.5		32	M6X1.0						
	JHM 8 - 120					120							40							
	JHM 8 - 140					140							44							
	JHM 10 - 90	10	29	32		90	42.5	32.5		32	M6X1.0									
	JHM 10 - 120					120				44										
	JHM 10 - 140					140														
	JHM 12 - 90	12	31	34		90	47.5	37.5		32			M6X1.0							
	JHM 12 - 120					120				44										
	JHM 12 - 140					140														
	JHM 14 - 90	14	33	36		90				52.5	42.5				32	M8X1.0				
	JHM 14 - 120					120									44					
	JHM 14 - 140					140														
	JHM 16 - 90	16	35	38		90	52.5	42.5					32	M8X1.0						
	JHM 16 - 120					120							48							
	JHM 16 - 140					140														
	JHM 18 - 90	18	38	41		90				52.5	42.5		32			M8X1.0				
	JHM 18 - 120					120							48							
	JHM 18 - 140					140														
	JHM 20 - 90	20	40	43		90	52.5	42.5					32	M8X1.0						
	JHM 20 - 120					120							48							
	JHM 20 - 140					140														
	JHM 25 - 105	25	53	57	-	105				61	51		67			M16X1.0	Fig2			
	JHM 25 - 150					150							112							
	JHM 32 - 115	32	58	63		115				65	55		77							
	JHM 32 - 150					150	112													

NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6\sim\varnothing 32$ 의 절삭공구 상크는 톨공 차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve $\text{D12/D20/D32/OD12/OD20/OD32}$

HYDRAULIC EXPANSION CHUCK

DIN69871 SK-JHM

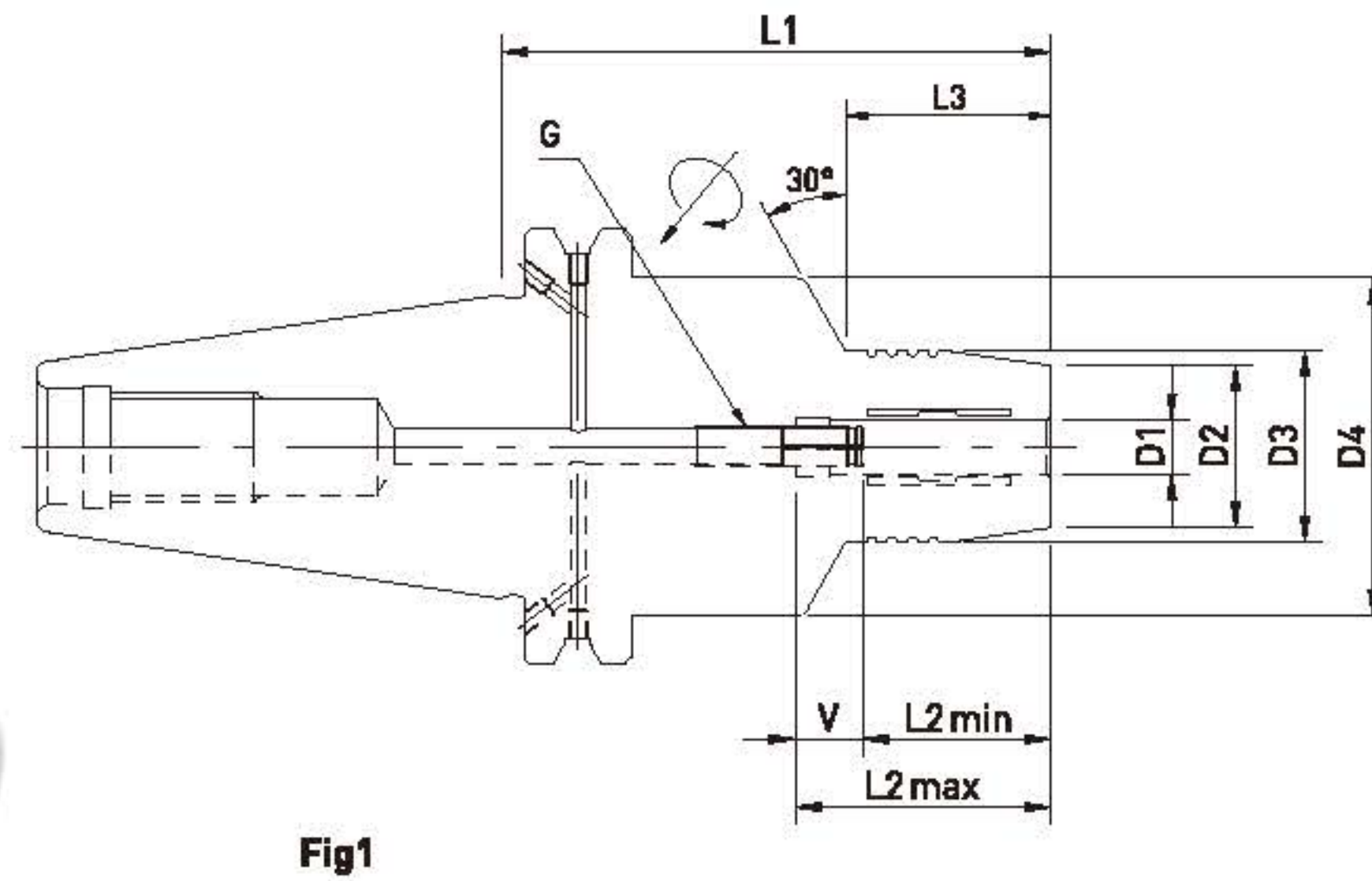
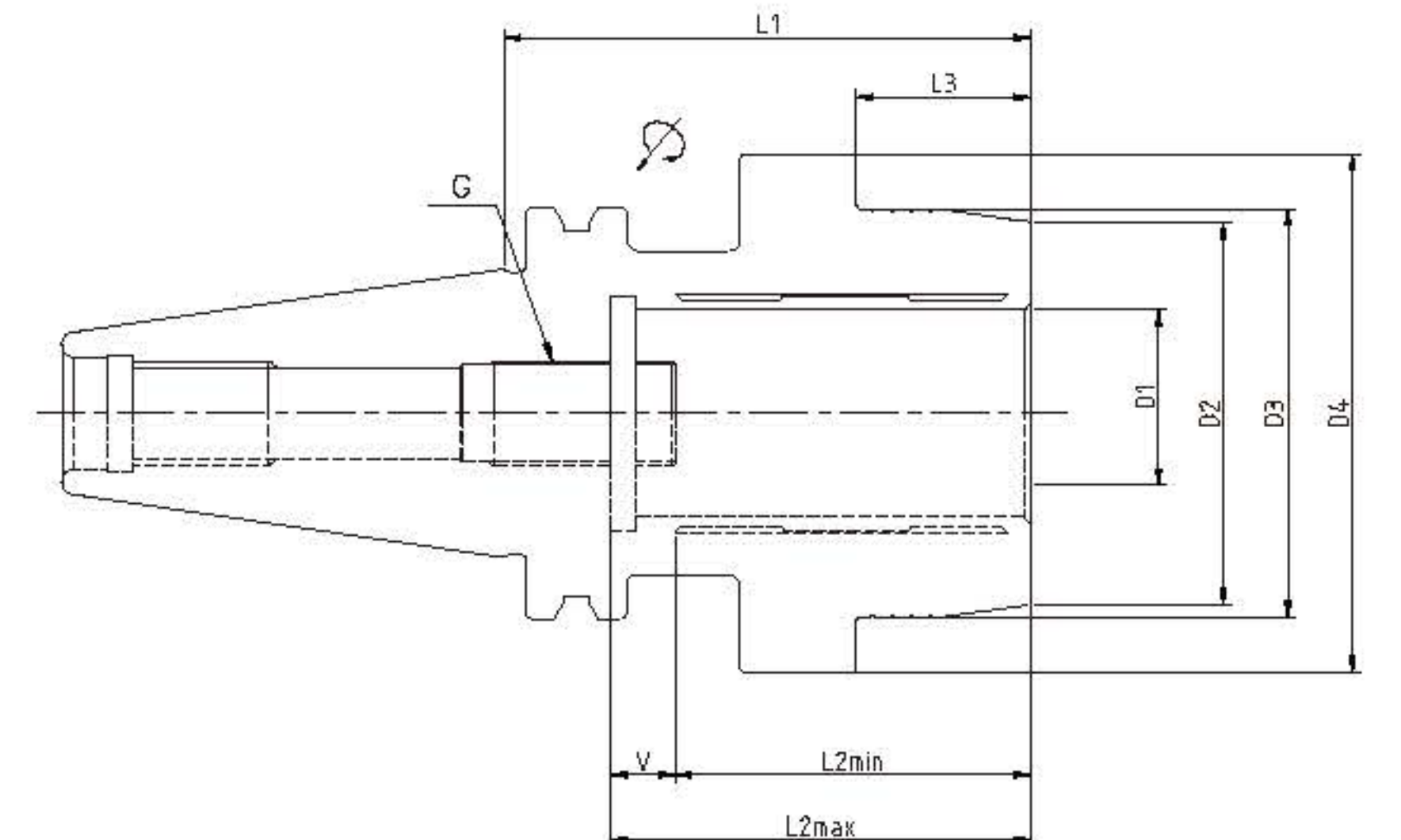


Fig1



Taper AT3

T.I.R $\geq 3\mu\text{m}/3\times\text{D}$

Bal./rpm G2.5/20000

Coolant AD, AD/B

mm

CODE NO.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	G	Type					
SK40	JHM 6 - 65	6	25	28	50	65	37.5	27.5	10	23	M5X0.8	Fig1					
	JHM 6 - 80.5					80.5				44							
	JHM 6 - 110					110				23	M6X1.0						
	JHM 8 - 65	8	27	30		65				44							
	JHM 8 - 80.5					80.5				23							
	JHM 8 - 110					110				44							
	JHM10 - 65	10	29	32		65	42.5	32.5		23	M6X1.0						
	JHM10 - 80.5					80.5				44							
	JHM10 - 110					110				23							
	JHM12 - 65	12	31	34		65	47.5	37.5		23			M6X1.0				
	JHM12 - 80.5					80.5				44							
	JHM12 - 110					110				30							
	JHM14 - 75	14	33	36		75				52.5		42.5		44	M8X1.0		
	JHM14 - 80.5					80.5								30			
	JHM14 - 110					110								48			
	JHM16 - 75	16	35	38		75	52.5	42.5					30	M8X1.0			
	JHM16 - 80.5					80.5							48				
	JHM16 - 110					110							30				
	JHM18 - 75	18	38	41		75				52.5	42.5	30	M8X1.0				
	JHM18 - 80.5					80.5						48					
	JHM18 - 135					135						30					
	JHM20 - 75	20	40	43		75	52.5	42.5				30				M8X1.0	
	JHM20 - 80.5					80.5						48					
	JHM20 - 110					110						30					
	JHM25 - 80.5	25	53	57		66				80.5	61.0	51.0	26		M16X1.0		Fig2
	JHM32 - 80.5	32	60	63		80					65.0	55.0	26				

NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6 \sim \varnothing 32$ 의 절삭공구 상크는 톨공 차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve
D12/D20/D32/OD12/OD20/OD32

HYDRAULIC EXPANSION CHUCK

DIN69871 SK-JHM(P type)

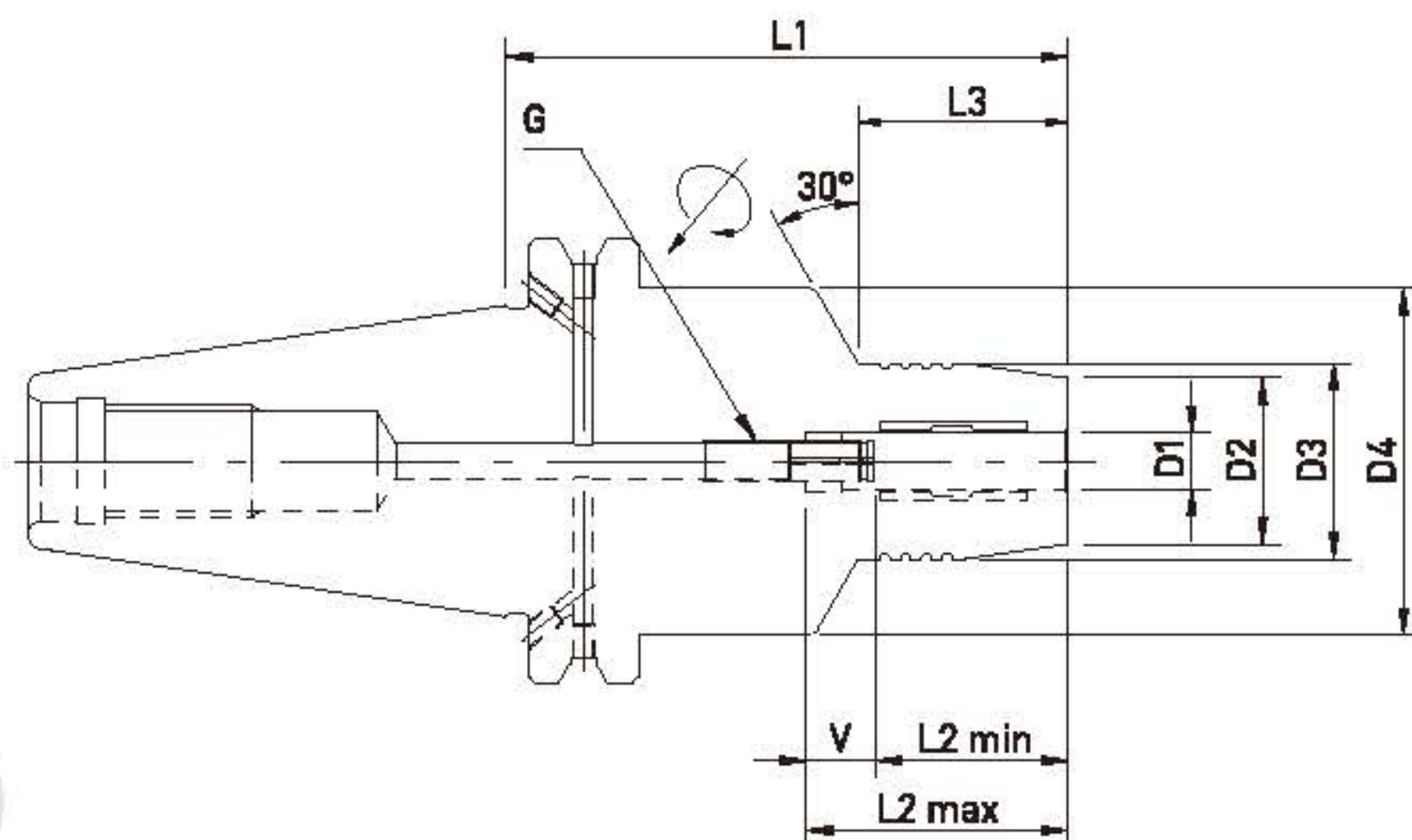


Fig1

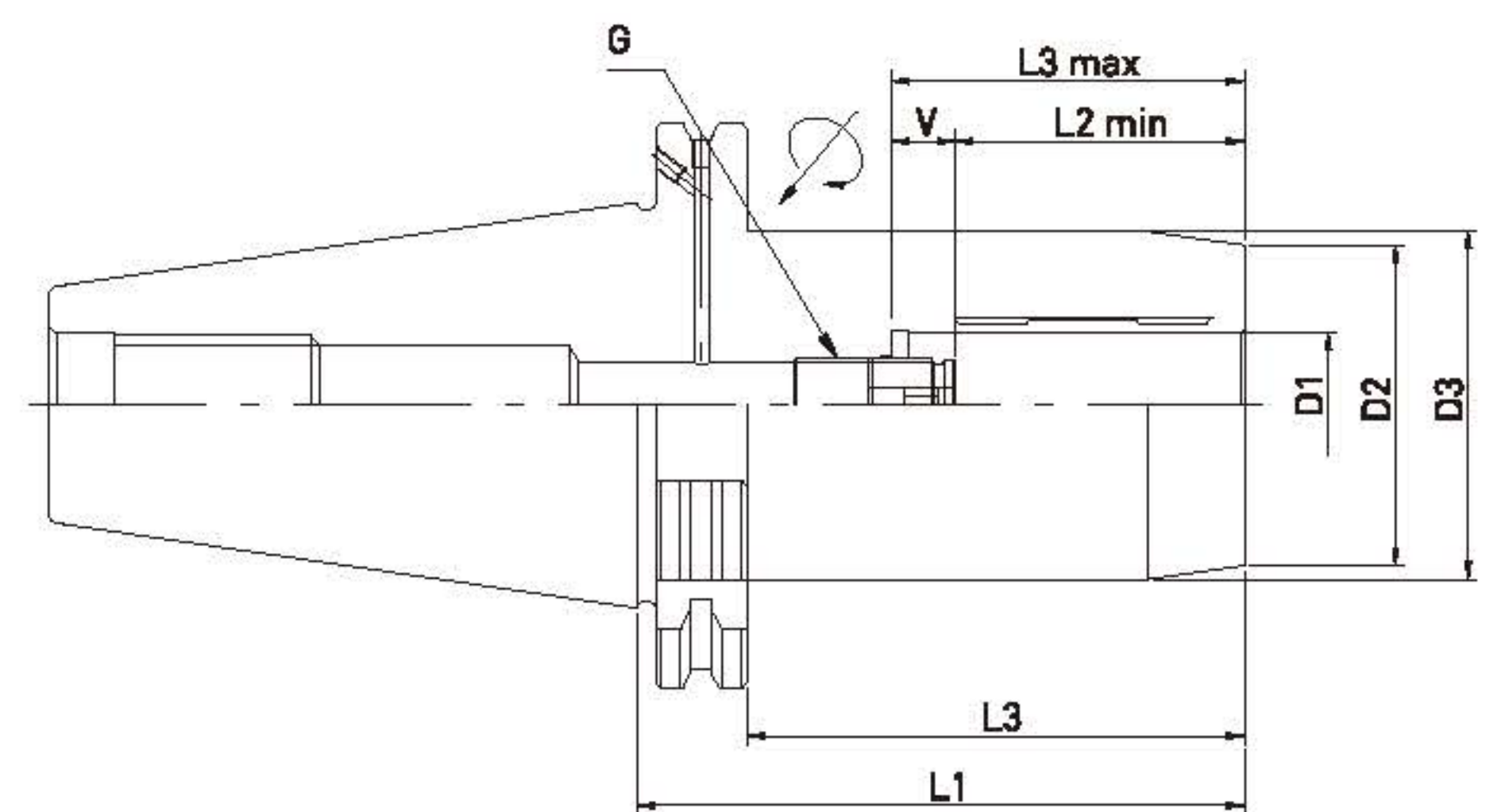


Fig2

Taper

AT3

T.I.R

$\geq 3\mu\text{m}/3\text{x}D$

Bal./rpm

G2.5/15000

Coolant

AD, AD/B

mm

CODE NO.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	G	Type		
SK50	JHM 6 - 90	6	25	28	50	90	37.5	27.5	10	44	M5X0.8	Fig1		
	JHM 6 - 140					140				44				
	JHM 8 - 90	8	27	30		90				42.5	32.5		44	M6X1.0
	JHM 8 - 140					140							44	
	JHM10 - 90	10	29	32		90	47.5	37.5		44	M6X1.0			
	JHM10 - 140					140				44				
	JHM12 - 90	12	31	34		90				44				
	JHM12 - 140					140				44				
	JHM14 - 90	14	33	36		90	47	M8X1.0						
	JHM14 - 140					140				47				
	JHM16 - 90	16	35	38		90	52.5			42.5			48	
	JHM16 - 140					140							48	
	JHM18 - 90	18	38	41		90					48			
	JHM18 - 140					140					48			
	JHM20 - 80.5	20	40	43		80.5	61.0			51.0	44			
	JHM20 - 90					90					48			
	JHM20 - 110				110	48								
	JHM20 - 140				140	48								
	JHM25 - 105	25	53	57	-	105	65.0	55.0	85.9	M16X1.0				
	JHM25 - 140					140			120.9					
	JHM32 - 115	32	58	63		115	M16X1.0							
	JHM32 - 140					140								

NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6 \sim \varnothing 32$ 의 절삭공구 상크는 톨공차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve
D12/D20/D32/OD12/OD20/OD32

HYDRAULIC EXPANSION CHUCK

DIN69893 HSK / A-JHM

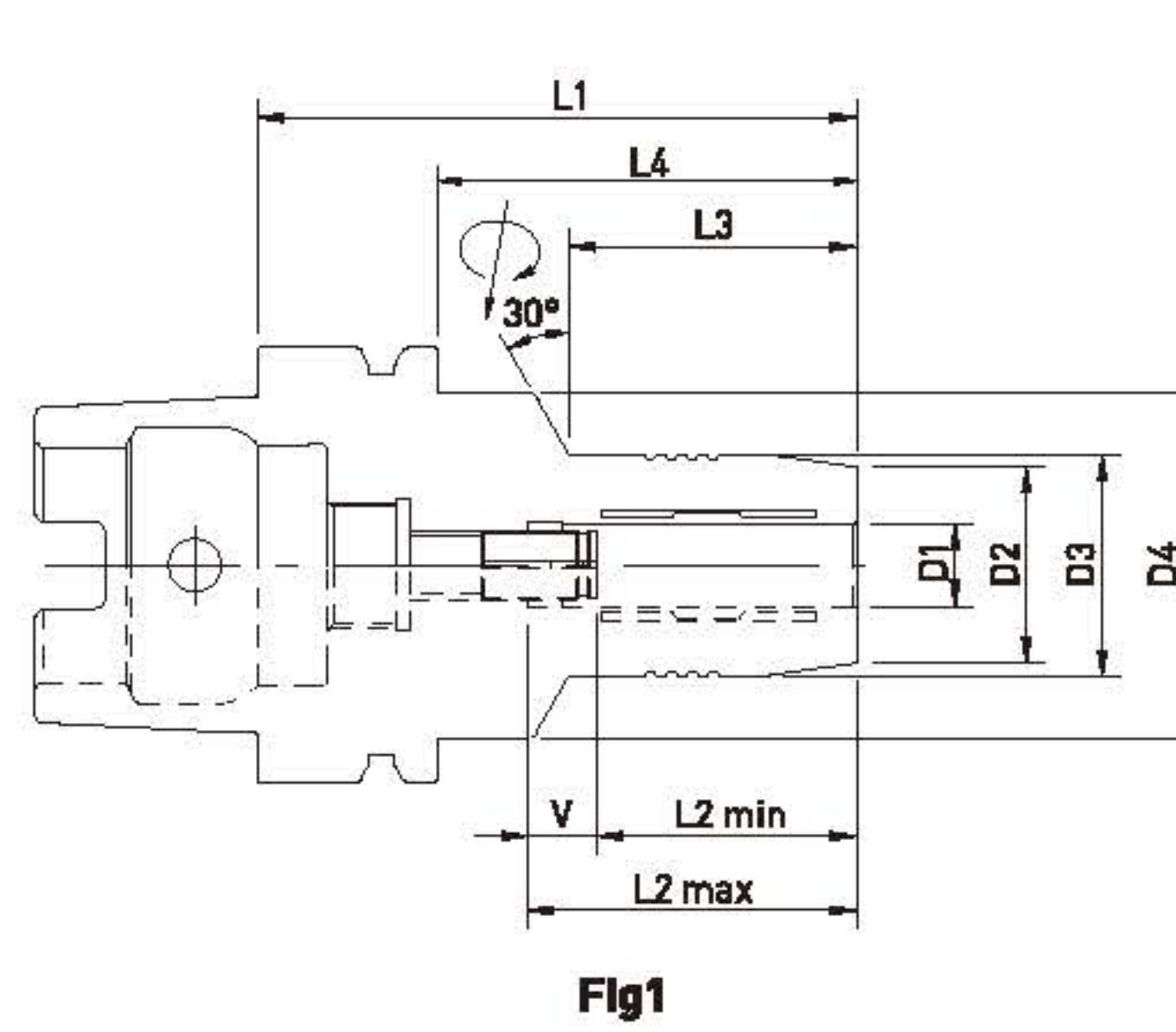


Fig1

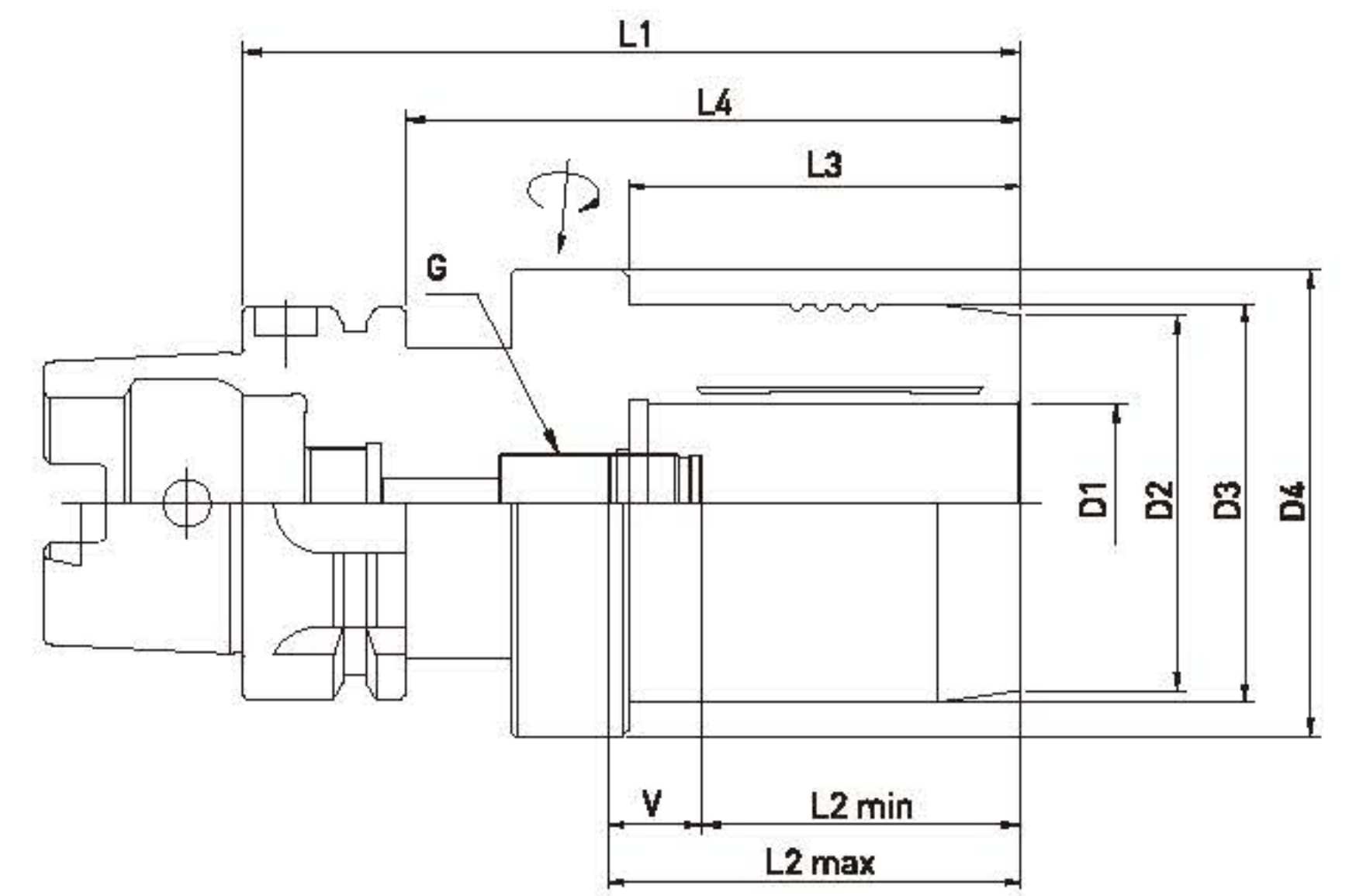


Fig2

Taper

AT3

T.I.R

≥3μm/3xD

Bal./rpm

G2.5/20000

Coolant

AD

mm

Code No.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	Type							
HSK40A	JHM 6 - 70	6	25	28	34	70	37.5	27.5	10	28	50	M5X0.8	Fig1							
	JHM 8 - 70	8	27	30		75	42.5	32.5		34	55	M6X1.0								
	JHM10 - 75	10	29	32		85	47.5	37.5		-	65									
	JHM12 - 85	12	31	34																
HSK50A	JHM 6 - 70	6	25	28	40	70	37.5	27.5		28	44	M5X0.8	Fig1							
	JHM 8 - 70	8	27	30		80	42.5	32.5		34	54	M6X1.0								
	JHM10 - 80	10	29	32		85	47.5	37.5		44	59									
	JHM12 - 85	12	31	34																
	JHM14 - 85	14	33	36	60	90	52.5	42.5		30	64		Fig2							
	JHM16 - 90	16	35	38						-		Fig1								
	JHM18 - 90	18	38	41						-										
	JHM20 - 90	20	40	42						-										
HSK63A	JHM 6 - 70	6	25	28	50	70	37.5	27.5		24	44	M5X0.8	Fig1							
	JHM 8 - 70	8	27	30		80	42.5	32.5		35	54	M6X1.0								
	JHM10 - 80	10	29	32		85	47.5	37.5		40	59									
	JHM12 - 85	12	31	34								90		52.5	42.5	46	64	M8X1.0		
	JHM14 - 85	14	33	36		47														
	JHM16 - 90	16	35	38		48														
	JHM18 - 90	18	38	41																
	JHM20 - 90	20	40	43		63	120	61	51	59	94	M16x1.0	Fig2							
	JHM25 - 120	25	53	57	75	125	65	55	63	99										
	HSK100A	JHM 6 - 75	6	25	28	54	75	37.5	27.5	26	46	M5X0.8	Fig1							
JHM 8 - 75		8	27	30	50	90	42.5	32.5	42	61	M6X1.0									
JHM10 - 90		10	29	32		95	47.5	37.5	47	66										
JHM12 - 95		12	31	34							100	52.5		42.5	53	71	M8 x1.0			
JHM14 - 95		14	33	36		105														
JHM16 - 100		16	35	38			63	110	61	51								62	81	M8 x1.0
JHM18 - 100		18	38	41																
JHM20 - 105		20	40	43																
JHM25 - 110		25	53	57																
JHM32 - 110		32	58	63																

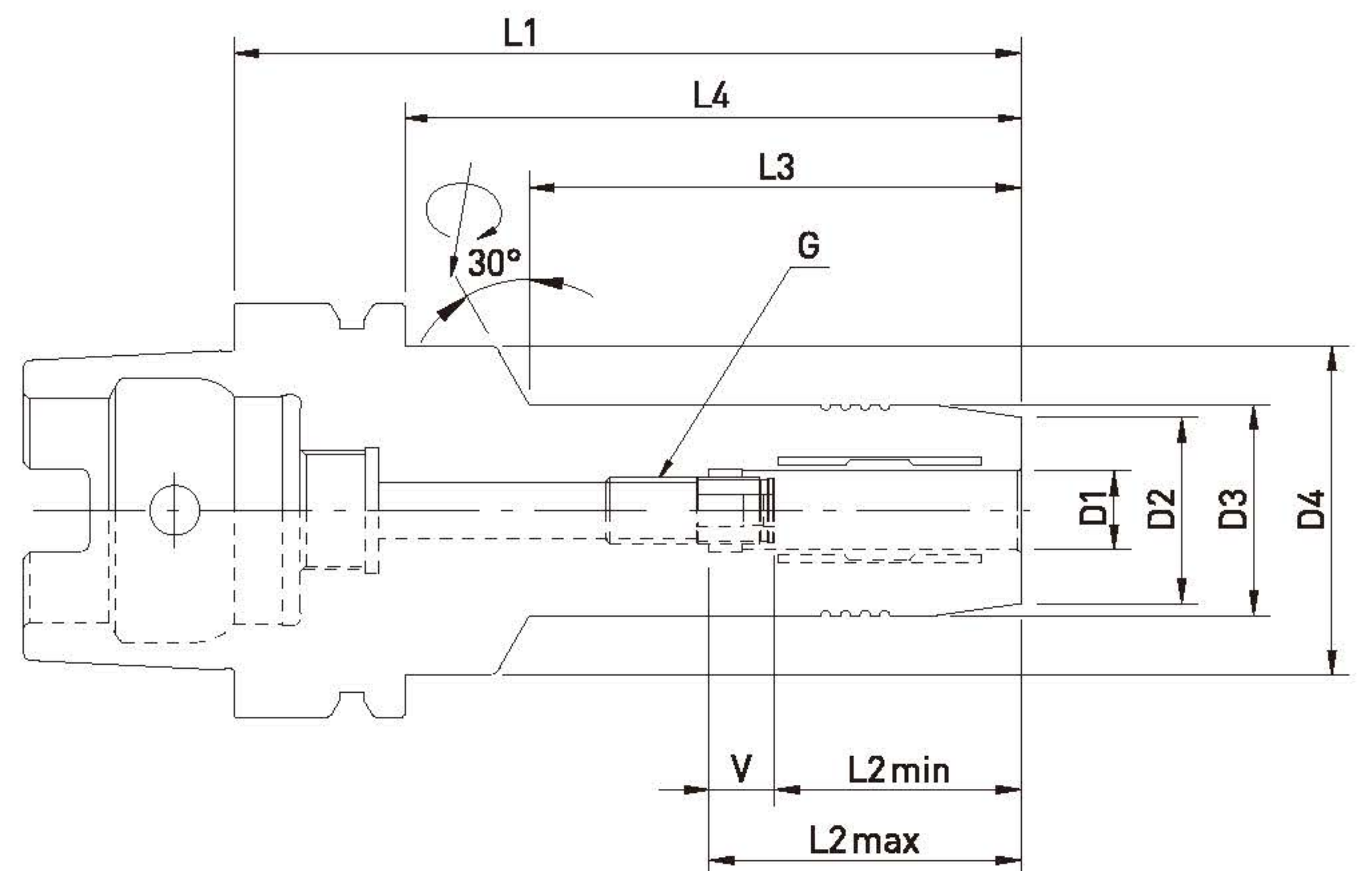
NOTE

- 유압척에 절삭공구 Chucking시에 Ø6~Ø32의 절삭공구 상크는 톨공차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 Ø12, Ø20, Ø32형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve
D12/D20/D32/OD12/OD20/OD32
- Balancing Grade : HSK40, 50, 63 – G2.5/20,000rpm
HSK100 – G2.5/15,000rpm

HYDRAULIC EXPANSION CHUCK

DIN69893 HSK / A-JHM



Taper AT3

T.I.R $\geq 3\mu\text{m}/3\text{xD}$

Bal./rpm G2.5/20000

Coolant AD

mm

Code No.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G
HSK63A	JHM 6 - 150	6	25	28	50	150	37.5	27.5	10	103	124	M5X0.8
	JHM 6 - 200					200				103	174	
	JHM 8 - 150	8	27	30		150				104	124	M6X1.0
	JHM 8 - 200					200				104	174	
	JHM10 - 150	10	29	32		150	42.5	32.5		104	124	M6X1.0
	JHM10 - 200					200	104	174				
	JHM12 - 150	12	31	34		150	47.5	37.5		105	124	
	JHM12 - 200					200				105	174	
	JHM14 - 150	14	33	36		150				105	124	
	JHM14 - 200					200				105	174	
	JHM16 - 150	16	35	38		150	52.5	42.5		106	124	M8x1.0
	JHM16 - 200					200				106	174	
	JHM18 - 150	18	38	41		150				107	124	
	JHM18 - 200					200				107	174	
	JHM20 - 150	20	40	43		150	52.5	108		124	M8x1.0	
	JHM20 - 200					200		108		174		

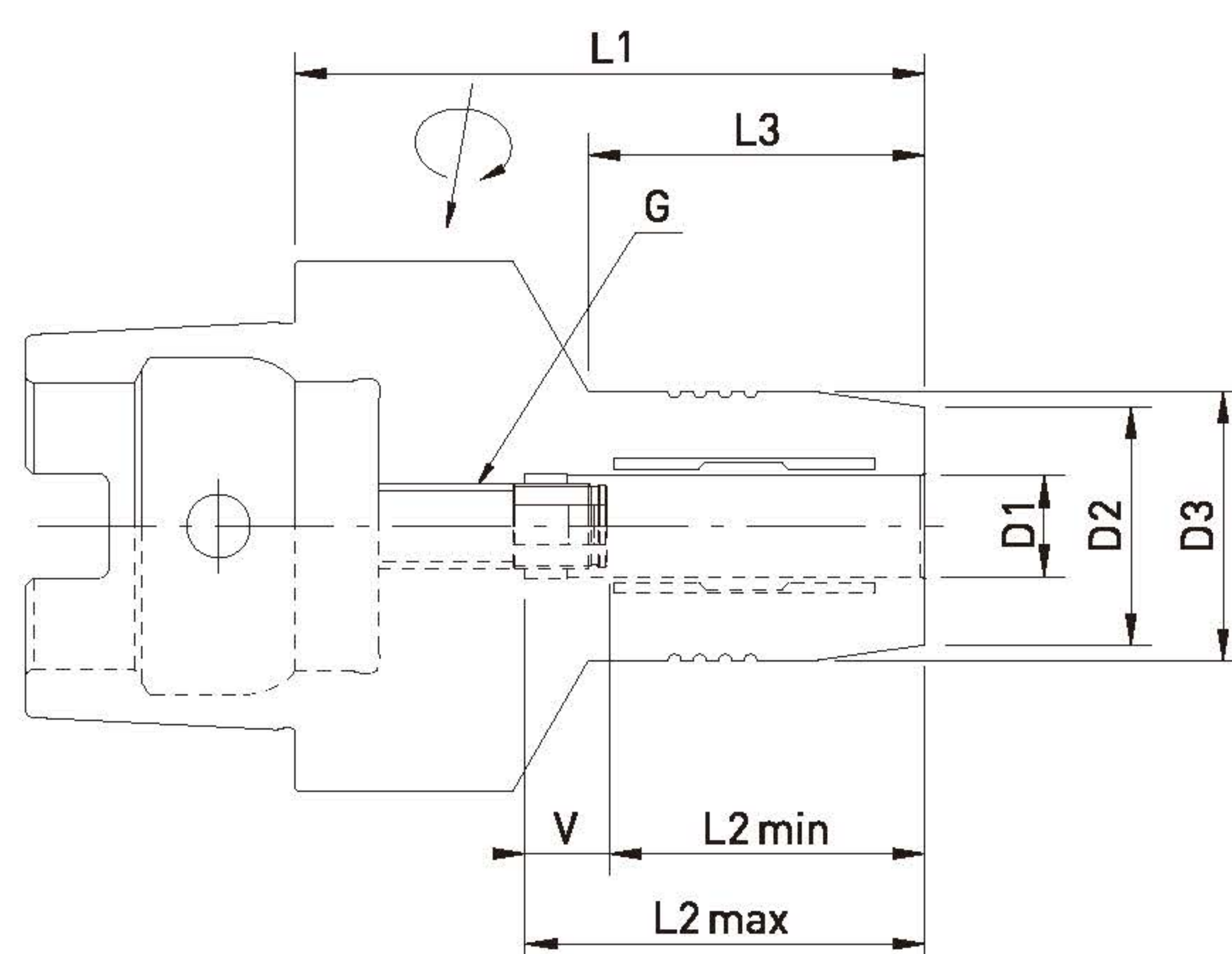
NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6 \sim \varnothing 32$ 의 절삭공구 상크는 톨공차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve
D12/D20/D32/OD12/OD20/OD32

HYDRAULIC EXPANSION CHUCK

DIN69893 HSK / C-JHM



Taper AT3

T.I.R $\geq 3\mu\text{m}/3\text{xD}$

Bal./rpm G2.5/20000

Coolant AD

mm

CODE No.		D1	D2	D3	L1	L2max	L2min	V	L3	G
HSK40C	JHM 6 - 60	6	25	28	60	37.5	27.5	10	35	M5X0.8
	JHM 8 - 60	8	27	30					36	M6X1.0
	JHM10 - 65	10	29	32	65	42.5	32.5		41	
	JHM12 - 70	12	31	34	70	47.5	37.5		47	M6X1.0
HSK50C	JHM 6 - 60	6	25	28	60	37.5	27.5		30	M5X0.8
	JHM 8 - 60	8	27	30					30	M6X1.0
	JHM10 - 65	10	29	32	75	42.5	32.5		35	M6X1.0
	JHM12 - 75	12	31	34					44	
	JHM14 - 75	14	33	36					46	
	JHM16 - 80	16	35	38	80	52.5	42.5		51	M8x1.0
	JHM18 - 80	18	38	41					51	
	JHM20 - 80	20	40	43					52	

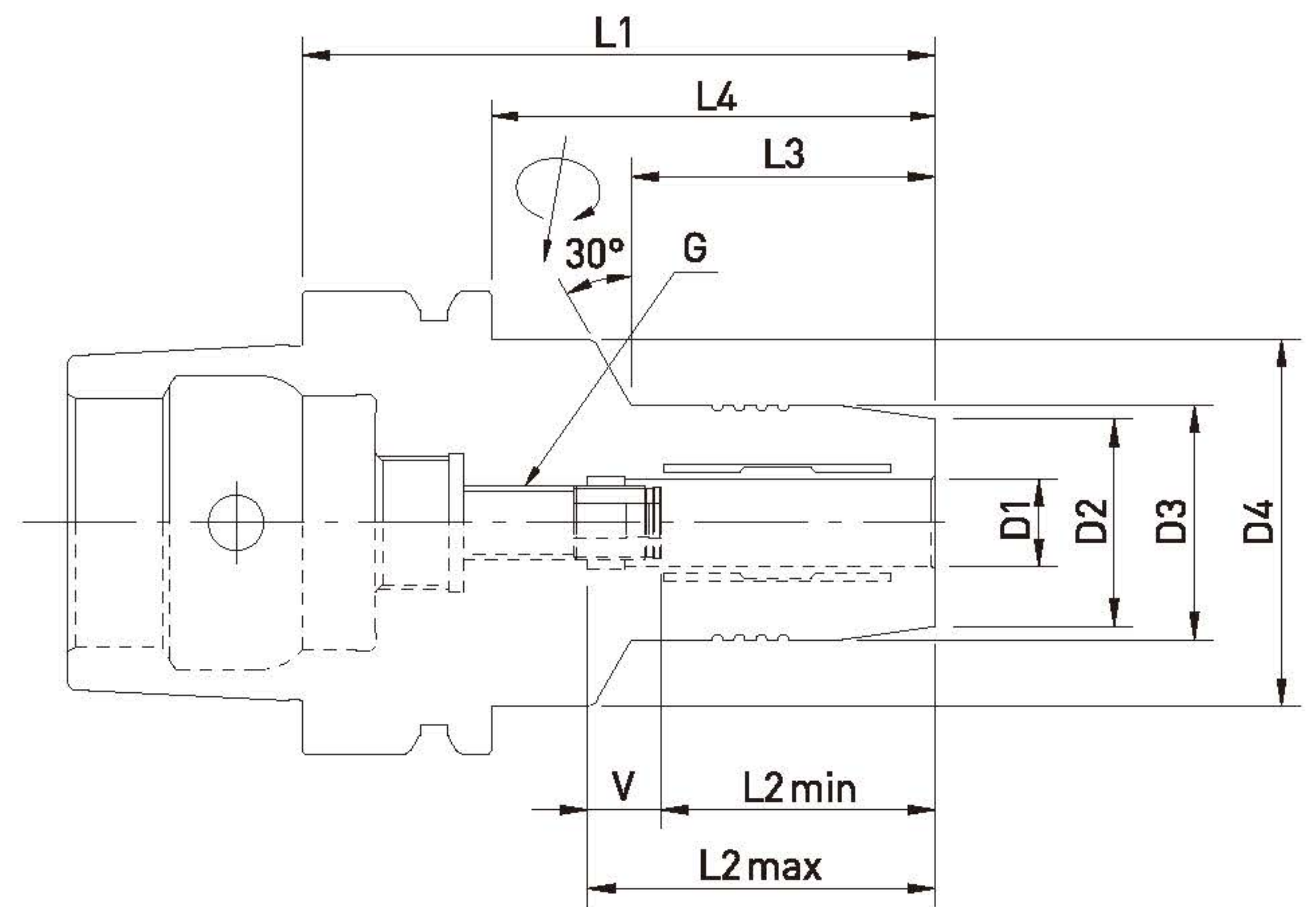
NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6 \sim \varnothing 32$ 의 절삭공구 상크는 톨공차 h6 안에 들어오는 절삭공구를 사용
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(inner bore) size can reducible by using reduction sleeve
D12/D20/D32/OD12/OD20/OD32

HYDRAULIC EXPANSION CHUCK

DIN69893 HSK / E-JHM



Taper AT3

T.I.R $\geq 3\mu\text{m}/3\text{xD}$

Bal./rpm G2.5/20000

Coolant AD

mm

CODE NO.		D1	D2	D3	D4	L1	L2max	L2min	V	L3	L4	G	
HSK40E	JHM 6 - 75	6	25	28	34	75	37.5	27.5	10	28	55	M5X0.8	
	JHM 8 - 70	8	27	30		70					50		
	JHM10 - 75	10	29	32		75	42.5	32.5		34	55		
	JHM12 - 85	12	31	34		85	47.5	37.5		-	65	M5X0.8	
HSK50E	JHM 6 - 70	6	25	28	40.0	70	37.5	27.5		10	28	44	M5X0.8
	JHM 8 - 70	8	27	30									M6X1.0
	JHM10 - 80	10	29	32		80	42.5	32.5			34	54	M6X1.0
	JHM12 - 85	12	31	34		85	47.5	37.5			44	59	
	JHM16 - 90	16	35	38	60	90	52.5	42.5			30	64	
	JHM20 - 90	20	40	42	-						-		

NOTE

- 유압척에 절삭공구 Chucking시에 $\varnothing 6 \sim \varnothing 32$ 의 절삭공구 상크는 틀공차 h6 안에 들어오는 절삭공구를 사용.
- 유압척 $\varnothing 12$, $\varnothing 20$, $\varnothing 32$ 형 사용시에는 D or OD Collet을 이용하여 다양한 사이즈의 절삭공구를 사용할 수 있음.

- Tolerance of cutting tool shank should be configured within h6
- ID(Inner bore) size can reducible by using reduction sleeve
D12/D20/D32/OD12/OD20/OD32