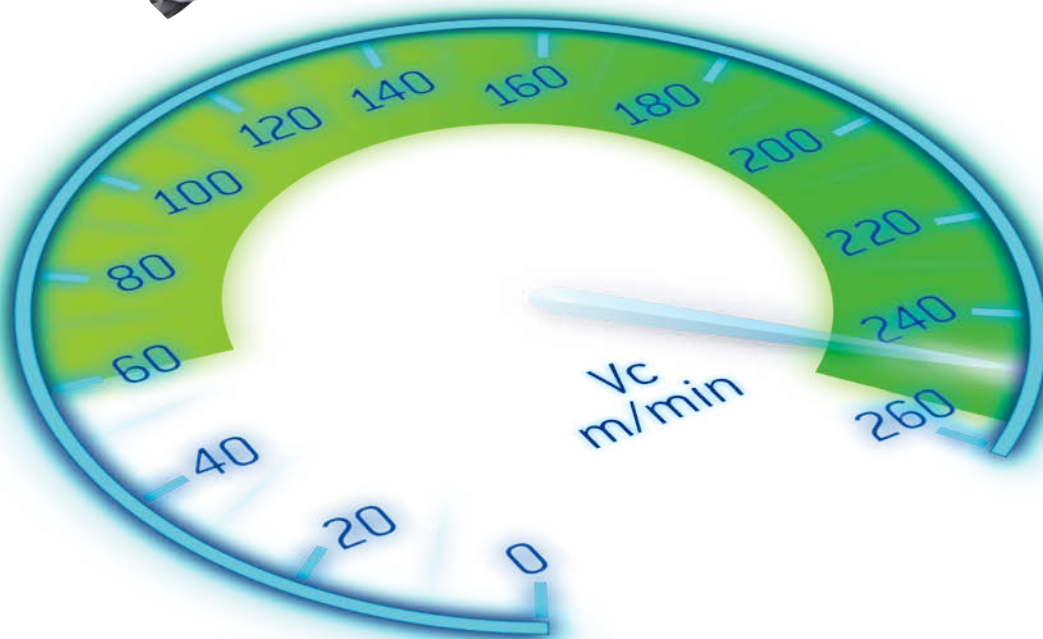


MPS1

WIERTŁO PEŁNOWĘGLIKOWE
O WYSOKIEJ WYDAJNOŚCI

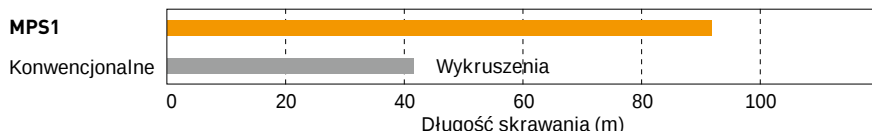




PRZYKŁADY ZASTOSOWAŃ

TEST TRWAŁOŚCI NARZĘDZIA Ø8 MM W STANDARDOWYCH WARUNKACH SKRAWANIA

Materiał obrabiany	DIN C50
Głębokość otworu (mm)	40
Prędkość skrawania Vc (m/min)	120
Posuw na obrót f (mm/obr.)	0.25
Chłodziwo	Emulsja wodno-olejowa
Obrabiarka	Pionowe M/C
Wynik	MPS1 uzyskało 2.5-krotnie większą trwałość.



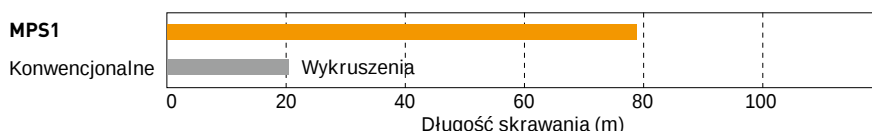
MPS1



Inny producent

TEST TRWAŁOŚCI NARZĘDZIA Ø8 MM W WARUNKACH OBRÓBKI SZYBKOCIOWEJ

Materiał obrabiany	DIN C50
Głębokość otworu (mm)	40
Prędkość skrawania Vc (m/min)	200
Posuw na obrót f (mm/obr.)	0.35
Chłodziwo	Emulsja wodno-olejowa
Obrabiarka	Pionowe M/C
Wynik	MPS1 uzyskało 4-krotnie większą trwałość.



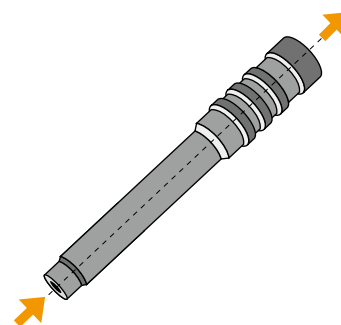
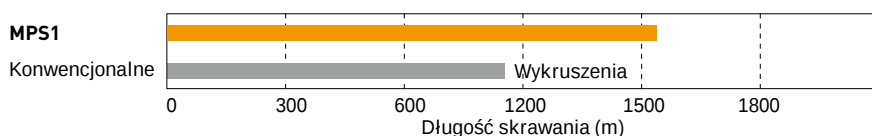
MPS1

Inny producent

WIERTŁA SUPERDŁUGIE

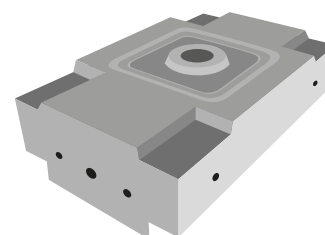
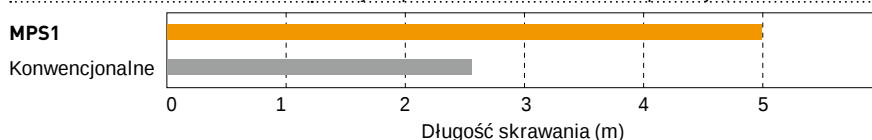
WIERCENIE OTWORU LUFOWEGO

Wiertło	MPS1-0380-L12C
Materiał obrabiany	115MnPb30
Głębokość otworu (m)	45 (12 l/d)
Prędkość skrawania Vc (m/min)	75
Posuw na obrót f (mm/obr.)	0.135
Obrabiarka	Automat tokarski wzdłużny z przesuwym wrzeciennikiem
Wynik	Uzyskano o 36% większą trwałość wiertła MPS1.



WIERCENIE OTWORÓW CHŁODZĄCYCH

Wiertło	MPS1-0800-L30C
Materiał obrabiany	CR7 V-L (stal do pracy na zimno, 1130 N/mm²)
Głębokość otworu (m)	250 (30 l/d)
Prędkość skrawania Vc (m/min)	120
Posuw na obrót f (mm/obr.)	0.35
Obrabiarka	Poziome centrum obróbcze
Wynik	Uzyskano 2-krotnie większą trwałość wiertła MPS1. Odchyłka prostoliniowości osi otworu poniżej 0,15 mm.



MPS1

K

$3 < DC \leq 6$	$6 < DC \leq 10$	$10 < DC \leq 18$	$18 < DC \leq 20$
+ 0.010	+ 0.010	+ 0.005	+ 0.005
- 0.002	- 0.005	- 0.013	- 0.016
0	0	0	0
- 0.012	- 0.015	- 0.018	- 0.021
0	0	0	0
- 0.008	- 0.009	- 0.011	- 0.013

MPS1---S/L-DIN-C

Figure 1 shows a 2D hexagonal lattice structure. The lattice is composed of solid black circles representing atoms. A dashed line forms a hexagonal unit cell. A red arrow points from the center of the unit cell to one of the vertices, representing the lattice vector. The lattice is labeled with 'a' and 'b' axes.

Numer zamówieniowy		DC	I(d)	OAL	LU	LCF	LH	LF	PL	DCON	DP1021	Typ
	MPS1-0320S-DIN		3	62	14.8	20	26	61.4	0.6	6	☐	3
	MPS1-0320S-DIN-C		3	62	14.8	20	26	61.4	0.6	6	☒	1
	MPS1-0320L-DIN		5	66	19.8	25	30	65.4	0.6	6	☐	3
	MPS1-0320L-DIN-C		5	66	19.8	25	30	65.4	0.6	6	☒	1
NEW	MPS1-0320-PC		2	56	6.9	18.5	22	55	0.5	6	☐	1
	MPS1-0320-L8C		8	83	26.3	40	47	82	0.6	6	☒	1
NEW	MPS1-0320-L10C	3.2	10	87	32.6	44.6	50	86	0.6	6	☐	1
NEW	MPS1-0320-L12C		12	94	39	51.6	57	93	0.6	6	☐	1
NEW	MPS1-0320-L15C		15	104	48.6	61.6	67	103	0.6	6	☐	1
NEW	MPS1-0320-L20C		20	122	64.6	79.6	85	121	0.6	6	☐	1
NEW	MPS1-0320-L25C		25	139	80.6	96.6	102	138	0.6	6	☐	1
NEW	MPS1-0320-L30C		30	157	96.6	114.6	120	156	0.6	6	☐	1
NEW	MPS1-0320-L35C		35	176	112.6	123.6	139	175	0.6	6	☐	1
NEW	MPS1-0320-L40C		40	191	128.6	138.6	154	190	0.6	6	☐	1
	MPS1-0330S-DIN		3	62	14.7	20	26	61.4	0.6	6	☐	3
	MPS1-0330S-DIN-C		3	62	14.7	20	26	61.4	0.6	6	☒	1
	MPS1-0330L-DIN		5	66	20.2	25	30	65.4	0.6	6	☐	3
	MPS1-0330L-DIN-C		5	66	20.2	25	30	65.4	0.6	6	☒	1
NEW	MPS1-0330-PC		2	56	7.1	18.5	21.9	55	0.5	6	☐	1
	MPS1-0330-L8C		8	83	27.1	40	47	82	0.6	6	☒	1
NEW	MPS1-0330-L10C	3.3	10	87	33.6	44.6	50	86	0.6	6	☐	1
NEW	MPS1-0330-L12C		12	94	40.2	51.6	57	93	0.6	6	☐	1
NEW	MPS1-0330-L15C		15	104	50.1	61.6	67	103	0.6	6	☐	1
NEW	MPS1-0330-L20C		20	122	66.6	79.6	85	121	0.6	6	☐	1
NEW	MPS1-0330-L25C		25	139	83.1	96.6	102	138	0.6	6	☐	1
NEW	MPS1-0330-L30C		30	157	99.6	114.6	120	156	0.6	6	☐	1
NEW	MPS1-0330-L35C		35	176	116.1	132.6	139	175	0.6	6	☐	1
NEW	MPS1-0330-L40C		40	191	132.6	148.6	154	190	0.6	6	☐	1
	MPS1-0340S-DIN		3	62	14.5	20	26	61.4	0.6	6	☐	3
	MPS1-0340S-DIN-C		3	62	14.5	20	26	61.4	0.6	6	☒	1
	MPS1-0340L-DIN		5	66	20.0	25	30	65.4	0.6	6	☐	3
	MPS1-0340L-DIN-C		5	66	20.0	25	30	65.4	0.6	6	☒	1
NEW	MPS1-0340-PC		2	56	7.3	18.5	21.79	55	0.5	6	☐	1
	MPS1-0340-L8C		8	83	27.9	40	47	82	0.6	6	☒	1
NEW	MPS1-0340-L10C	3.4	10	87	34.6	44.6	50	86	0.6	6	☐	1
NEW	MPS1-0340-L12C		12	94	41.4	51.6	57	93	0.6	6	☐	1
NEW	MPS1-0340-L15C		15	104	51.6	61.6	67	103	0.6	6	☐	1
NEW	MPS1-0340-L20C		20	122	68.6	79.6	85	121	0.6	6	☐	1
NEW	MPS1-0340-L25C		25	139	85.6	96.6	102	138	0.6	6	☐	1
NEW	MPS1-0340-L30C		30	157	102.6	114.6	120	156	0.6	6	☐	1
NEW	MPS1-0340-L35C		35	176	119.6	132.6	139	175	0.6	6	☐	1
NEW	MPS1-0340-L40C		40	191	136.6	148.6	154	190	0.6	6	☐	1
	MPS1-0350S-DIN		3	62	14.4	20	26	61.4	0.6	6	☐	3
	MPS1-0350S-DIN-C		3	62	14.4	20	26	61.4	0.6	6	☒	1
	MPS1-0350L-DIN		5	66	19.9	25	30	65.4	0.6	6	☐	3
	MPS1-0350L-DIN-C		5	66	19.9	25	30	65.4	0.6	6	☒	1
NEW	MPS1-0350-PC		2	56	7.6	18.6	21.68	55	0.6	6	☒	1
	MPS1-0350-L8C		8	83	28.7	40	47	82	0.6	6	☒	1
NEW	MPS1-0350-L10C	3.5	10	87	35.6	44.6	50	86	0.6	6	☐	1
NEW	MPS1-0350-L12C		12	94	42.6	51.6	57	93	0.6	6	☒	1
NEW	MPS1-0350-L15C		15	104	53.1	61.6	67	103	0.6	6	☒	1
NEW	MPS1-0350-L20C		20	122	70.6	79.6	85	121	0.6	6	☒	1
NEW	MPS1-0350-L25C		25	139	88.1	96.6	102	138	0.6	6	☒	1
NEW	MPS1-0350-L30C		30	157	105.6	114.6	120	156	0.6	6	☒	1
NEW	MPS1-0350-L35C		35	176	123.1	132.6	139	175	0.6	6	☐	1
NEW	MPS1-0350-L40C		40	191	140.6	148.6	154	190	0.6	6	☒	1

Numer zamówieniowy		DC	I(d)	OAL	LU	LCF	LH	LF	PL	DCON	DP1021	Typ
	MPS1-0360S-DIN		3	62	14.3	20	26	61.3	0.7	6	☐	3
	MPS1-0360S-DIN-C		3	62	14.3	20	26	61.3	0.7	6	☒	1
	MPS1-0360L-DIN		5	66	19.8	25	30	65.3	0.7	6	☐	3
	MPS1-0360L-DIN-C		5	66	19.8	25	30	65.3	0.7	6	☒	1
NEW	MPS1-0360-PC		2	56	7.8	20.6	23.57	55	0.6	6	☐	1
	MPS1-0360-L8C		8	88	29.5	45	51	87	0.7	6	☒	1
NEW	MPS1-0360-L10C	3.6	10	93	36.7	50.7	56	92	0.7	6	☐	1
NEW	MPS1-0360-L12C		12	101	43.9	58.7	64	100	0.7	6	☐	1
NEW	MPS1-0360-L15C		15	113	54.7	70.7	76	112	0.7	6	☐	1
NEW	MPS1-0360-L20C		20	133	72.7	90.7	96	132	0.7	6	☐	1
NEW	MPS1-0360-L25C		25	153	90.7	110.7	116	152	0.7	6	☐	1
NEW	MPS1-0360-L30C		30	173	108.7	130.7	136	172	0.7	6	☐	1
NEW	MPS1-0360-L35C		35	193	126.7	143.7	156	192	0.7	6	☐	1
NEW	MPS1-0360-L40C		40	213	144.7	160.7	176	212	0.7	6	☐	1
	MPS1-0370S-DIN		3	62	14.1	20	26	61.3	0.7	6	☐	3
	MPS1-0370S-DIN-C		3	62	14.1	20	26	61.3	0.7	6	☒	1
	MPS1-0370L-DIN		5	66	20.1	26	30	65.3	0.7	6	☐	3
	MPS1-0370L-DIN-C		5	66	20.1	26	30	65.3	0.7	6	☒	1
NEW	MPS1-0370-PC		2	56	8	20.6	23.47	55	0.6	6	☐	1
	MPS1-0370-L8C		8	88	30.4	45	51	87	0.7	6	☒	1
NEW	MPS1-0370-L10C	3.7	10	93	37.7	50.7	56	92	0.7	6	☐	1
NEW	MPS1-0370-L12C		12	101	45.1	58.7	64	100	0.7	6	☐	1
NEW	MPS1-0370-L15C		15	113	56.2	70.7	76	112	0.7	6	☐	1
NEW	MPS1-0370-L20C		20	133	74.7	90.7	96	132	0.7	6	☐	1
NEW	MPS1-0370-L25C		25	153	93.2	110.7	116	152	0.7	6	☐	1
NEW	MPS1-0370-L30C		30	173	111.7	130.7	136	172	0.7	6	☐	1
NEW	MPS1-0370-L35C		35	193	130.2	143.7	156	192	0.7	6	☐	1
NEW	MPS1-0370-L40C		40	213	148.7	160.7	176	212	0.7	6	☐	1
	MPS1-0380S-DIN		3	66	18.0	24	30	65.3	0.7	6	☐	3
	MPS1-0380S-DIN-C		3	66	18.0	24	30	65.3	0.7	6	☒	1
	MPS1-0380L-DIN		5	74	28.0	34	38	73.3	0.7	6	☐	3
	MPS1-0380L-DIN-C		5	74	28.0	34	38	73.3	0.7	6	☒	1
NEW	MPS1-0380-PC		2	56	8.2	20.6	23.36	55	0.6	6	☐	1
	MPS1-0380-L8C		8	88	31.2	45	51	87	0.7	6	☒	1
NEW	MPS1-0380-L10C	3.8	10	93	38.7	50.7	56	92	0.7	6	☐	1
NEW	MPS1-0380-L12C		12	101	46.3	58.7	64	100	0.7	6	☐	1
NEW	MPS1-0380-L15C		15	113	57.7	70.7	76	112	0.7	6	☐	1
NEW	MPS1-0380-L20C		20	133	76.7	90.7	96	132	0.7	6	☐	1
NEW	MPS1-0380-L25C		25	153	95.7	110.7	116	152	0.7	6	☐	1
NEW	MPS1-0380-L30C		30	173	114.7	130.7	136	172	0.7	6	☐	1
NEW	MPS1-0380-L35C		35	193	133.7	150.7	156	192	0.7	6	☐	1
NEW	MPS1-0380-L40C		40	213	152.7	170.7	176	212	0.7	6	☐	1
	MPS1-0390S-DIN		3	66	17.9	24	30	65.3	0.7	6	☐	3
	MPS1-0390S-DIN-C		3	66	17.9	24	30	65.3	0.7	6	☒	1
	MPS1-0390L-DIN		5	74	27.9	34	38	73.3	0.7	6	☐	3
	MPS1-0390L-DIN-C		5	74	27.9	34	38	73.3	0.7	6	☒	1
NEW	MPS1-0390-PC		2	56	8.4	20.6	23.25	55	0.6	6	☐	1
	MPS1-0390-L8C		8	88	32.0	45	51	87	0.7	6	☒	1
NEW	MPS1-0390-L10C	3.9	10	93	39.7	50.7	56	92	0.7	6	☐	1
NEW	MPS1-0390-L12C		12	101	47.5	58.7	64	100	0.7	6	☐	1
NEW	MPS1-0390-L15C		15	113	59.2	70.7	76	112	0.7	6	☐	1
NEW	MPS1-0390-L20C		20	133	78.7	90.7	96	132	0.7	6	☐	1
NEW	MPS1-0390-L25C		25	153	98.2	110.7	116	152	0.7	6	☐	1
NEW	MPS1-0390-L30C		30	173	117.7	130.7	136	172	0.7	6	☐	1
NEW	MPS1-0390-L35C		35	193	137.2	150.7	156	192	0.7	6	☐	1
NEW	MPS1-0390-L40C		40	213	156.7	170.7	176	212	0.7	6	☐	1

MPS1

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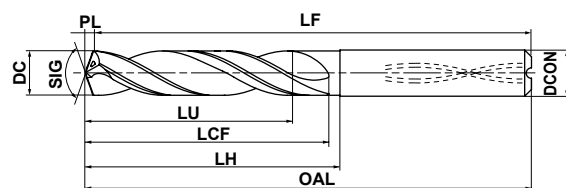
Numer zamówieniowy											
	DC	(U/d)	OAL	LU	LCF	LH	LF	PL	DCON	DP1021	Typ
MPS1-0460S-DIN		3	66	16.9	24	30	65.2	0.8	6	☐	4
MPS1-0460S-DIN-C		3	66	16.9	24	30	65.2	0.8	6	☒	2
MPS1-0460L-DIN		5	74	28.9	36	38	73.2	0.8	6	☐	4
MPS1-0460L-DIN-C		5	74	28.9	36	38	73.2	0.8	6	☒	2
NEW MPS1-0460-PC		2	63	9.9	24.7	28	62	0.7	6	☐	2
MPS1-0460-L8C		8	96	37.8	55	59	95	0.8	6	☒	2
MPS1-0460-L10C	4.6	10	106	46.8	65.8	69	105	0.8	6	☐	2
MPS1-0460-L12C		12	116	56	75.8	79	115	0.8	6	☐	2
MPS1-0460-L15C		15	131	69.8	90.8	94	130	0.8	6	☐	2
MPS1-0460-L20C		20	156	92.8	115.8	119	155	0.8	6	☐	2
MPS1-0460-L25C		25	181	115.8	140.8	144	180	0.8	6	☐	2
MPS1-0460-L30C		30	206	138.8	165.8	169	205	0.8	6	☐	2
MPS1-0460-L35C		35	230	161.8	184.8	193	229	0.8	6	☐	2
MPS1-0460-L40C		40	255	184.8	204.8	218	254	0.8	6	☐	2
MPS1-0465S-DIN		3	66	16.9	24	30	65.2	0.8	6	☐	4
MPS1-0465S-DIN-C		3	66	16.9	24	30	65.2	0.8	6	☒	2
MPS1-0465L-DIN	4.65	5	74	28.9	36	38	73.2	0.8	6	☐	4
MPS1-0465L-DIN-C		5	74	28.9	36	38	73.2	0.8	6	☒	2
MPS1-0470S-DIN		3	66	16.8	24	30	65.1	0.9	6	☐	4
MPS1-0470S-DIN-C		3	66	16.8	24	30	65.1	0.9	6	☒	2
MPS1-0470L-DIN		5	74	28.8	36	38	73.1	0.9	6	☐	4
MPS1-0470L-DIN-C		5	74	28.8	36	38	73.1	0.9	6	☒	2
NEW MPS1-0470-PC		2	63	10.1	24.7	28	62	0.7	6	☐	2
MPS1-0470-L8C		8	96	38.6	55	59	95	0.9	6	☒	2
MPS1-0470-L10C	4.7	10	106	47.9	65.9	69	105	0.9	6	☐	2
MPS1-0470-L12C		12	116	57.3	75.9	79	115	0.9	6	☐	2
MPS1-0470-L15C		15	131	71.4	90.9	94	130	0.9	6	☐	2
MPS1-0470-L20C		20	156	94.9	115.9	119	155	0.9	6	☐	2
MPS1-0470-L25C		25	181	118.4	140.9	144	180	0.9	6	☐	2
MPS1-0470-L30C		30	206	141.9	165.9	169	205	0.9	6	☐	2
MPS1-0470-L35C		35	230	165.4	184.9	193	229	0.9	6	☐	2
MPS1-0470-L40C		40	255	188.9	204.9	218	254	0.9	6	☐	2
MPS1-0480S-DIN		3	66	20.7	28	30	65.1	0.9	6	☐	4
MPS1-0480S-DIN-C		3	66	20.7	28	30	65.1	0.9	6	☒	2
MPS1-0480L-DIN		5	82	36.7	44	46	81.1	0.9	6	☐	4
MPS1-0480L-DIN-C		5	82	36.7	44	46	81.1	0.9	6	☒	2
NEW MPS1-0480-PC		2	63	10.4	24.8	28	62	0.8	6	☐	2
MPS1-0480-L8C		8	96	39.4	55	59	95	0.9	6	☒	2
MPS1-0480-L10C	4.8	10	106	48.9	65.9	69	105	0.9	6	☐	2
MPS1-0480-L12C		12	116	58.5	75.9	79	115	0.9	6	☐	2
MPS1-0480-L15C		15	131	72.9	90.9	94	130	0.9	6	☐	2
MPS1-0480-L20C		20	156	96.9	115.9	119	155	0.9	6	☐	2
MPS1-0480-L25C		25	181	120.9	140.9	144	180	0.9	6	☐	2
MPS1-0480-L30C		30	206	144.9	165.9	169	205	0.9	6	☐	2
MPS1-0480-L35C		35	230	168.9	190.9	193	229	0.9	6	☐	2
MPS1-0480-L40C		40	255	192.9	215.9	218	254	0.9	6	☐	2
MPS1-0490S-DIN		3	66	20.5	28	30	65.1	0.9	6	☐	4
MPS1-0490S-DIN-C		3	66	20.5	28	30	65.1	0.9	6	☒	2
MPS1-0490L-DIN		5	82	36.5	44	46	81.1	0.9	6	☐	4
MPS1-0490L-DIN-C		5	82	36.5	44	46	81.1	0.9	6	☒	2
NEW MPS1-0490-PC		2	63	10.6	24.8	28	62	0.8	6	☐	2
MPS1-0490-L8C		8	96	40.2	55	59	95	0.9	6	☒	2
MPS1-0490-L10C	4.9	10	106	49.9	65.9	69	105	0.9	6	☐	2
MPS1-0490-L12C		12	116	59.7	75.9	79	115	0.9	6	☐	2
MPS1-0490-L15C		15	131	74.4	90.9	94	130	0.9	6	☐	2
MPS1-0490-L20C		20	156	98.9	115.9	119	155	0.9	6	☐	2
MPS1-0490-L25C		25	181	123.4	140.9	144	180	0.9	6	☐	2
MPS1-0490-L30C		30	206	147.9	165.9	169	205	0.9	6	☐	2
MPS1-0490-L35C		35	230	172.4	190.9	193	229	0.9	6	☐	2
MPS1-0490-L40C		40	255	196.9	215.9	218	254	0.9	6	☐	2

Numer zamówieniowy												
	DC	U/d	OAL	LU	LCF	LH	LF	PL	DCON	DP1021	Typ	
		MPS1-0500S-DIN	3	66	20.4	28	30	65.1	0.9	6	☐	4
		MPS1-0500S-DIN-C	3	66	20.4	28	30	65.1	0.9	6	☒	2
		MPS1-0500L-DIN	5	82	36.4	44	46	81.1	0.9	6	☐	4
		MPS1-0500L-DIN-C	5	82	36.4	44	46	81.1	0.9	6	☒	2
NEW		MPS1-0500-PC	2	63	10.8	24.8	26	62	0.8	6	☒	2
		MPS1-0500-L8C	8	96	41.0	55	59	95	0.9	6	☒	2
NEW		MPS1-0500-L10C	10	106	50.9	65.9	69	105	0.9	6	☐	2
NEW		MPS1-0500-L12C	12	116	60.9	75.9	79	115	0.9	6	☒	2
NEW		MPS1-0500-L15C	15	131	75.9	90.9	94	130	0.9	6	☒	2
NEW		MPS1-0500-L20C	20	156	100.9	115.9	119	155	0.9	6	☒	2
NEW		MPS1-0500-L25C	25	181	125.9	140.9	144	180	0.9	6	☒	2
NEW		MPS1-0500-L30C	30	206	150.9	165.9	169	205	0.9	6	☒	2
NEW		MPS1-0500-L35C	35	230	175.9	190.9	193	229	0.9	6	☐	2
NEW		MPS1-0500-L40C	40	255	200.9	215.9	218	254	0.9	6	☒	2
		MPS1-0505S-DIN	3	66	20.3	28	30	65.1	0.9	6	☐	4
		MPS1-0505S-DIN-C	3	66	20.3	28	30	65.1	0.9	6	☒	2
		MPS1-0505L-DIN	5	82	36.3	44	46	81.1	0.9	6	☐	4
		MPS1-0505L-DIN-C	5	82	36.3	44	46	81.1	0.9	6	☒	2
		MPS1-0510S-DIN	3	66	20.3	28	30	65.1	0.9	6	☐	4
		MPS1-0510S-DIN-C	3	66	20.3	28	30	65.1	0.9	6	☒	2
		MPS1-0510L-DIN	5	82	36.3	44	46	81.1	0.9	6	☐	4
		MPS1-0510L-DIN-C	5	82	36.3	44	46	81.1	0.9	6	☒	2
NEW		MPS1-0510-PC	2	67	11	26.8	29	66	0.8	6	☐	2
		MPS1-0510-L8C	8	102	41.9	62	65	101	0.9	6	☒	2
NEW		MPS1-0510-L10C	10	113	51.9	72.9	76	112	0.9	6	☐	2
NEW		MPS1-0510-L12C	12	124	62.1	83.9	87	123	0.9	6	☐	2
NEW		MPS1-0510-L15C	15	140	77.4	99.9	103	139	0.9	6	☐	2
NEW		MPS1-0510-L20C	20	168	102.9	127.9	131	167	0.9	6	☐	2
NEW		MPS1-0510-L25C	25	195	128.4	154.9	158	194	0.9	6	☐	2
NEW		MPS1-0510-L30C	30	223	153.9	182.9	186	222	0.9	6	☐	2
NEW		MPS1-0510-L35C	35	249	179.4	203.9	212	248	0.9	6	☐	2
NEW		MPS1-0510-L40C	40	279	204.9	230.9	242	278	0.9	6	☐	2
		MPS1-0520S-DIN	3	66	20.1	28	30	65.1	0.9	6	☐	4
		MPS1-0520S-DIN-C	3	66	20.1	28	30	65.1	0.9	6	☒	2
		MPS1-0520L-DIN	5	82	36.1	44	46	81.1	0.9	6	☐	4
		MPS1-0520L-DIN-C	5	82	36.1	44	46	81.1	0.9	6	☒	2
NEW		MPS1-0520-PC	2	67	11.2	26.8	29	66	0.8	6	☐	2
		MPS1-0520-L8C	8	102	42.7	62	65	101	0.9	6	☒	2
NEW		MPS1-0520-L10C	10	113	52.9	72.9	76	112	0.9	6	☐	2
NEW		MPS1-0520-L12C	12	124	63.3	83.9	87	123	0.9	6	☐	2
NEW		MPS1-0520-L15C	15	140	78.9	99.9	103	139	0.9	6	☐	2
NEW		MPS1-0520-L20C	20	168	104.9	127.9	131	167	0.9	6	☐	2
NEW		MPS1-0520-L25C	25	195	130.9	154.9	158	194	0.9	6	☐	2
NEW		MPS1-0520-L30C	30	223	156.9	182.9	186	222	0.9	6	☐	2
NEW		MPS1-0520-L35C	35	249	182.9	203.9	212	248	0.9	6	☐	2
NEW		MPS1-0520-L40C	40	279	208.9	230.9	242	278	0.9	6	☐	2
		MPS1-0530S-DIN	3	66	20.0	28	30	65	1	6	☐	4
		MPS1-0530S-DIN-C	3	66	20.0	28	30	65	1	6	☒	2
		MPS1-0530L-DIN	5	82	36.0	44	46	81	1	6	☐	4
		MPS1-0530L-DIN-C	5	82	36.0	44	46	81	1	6	☒	2
NEW		MPS1-0530-PC	2	67	11.4	26.8	29	66	0.8	6	☐	2
		MPS1-0530-L8C	8	102	43.5	62	65	101	1	6	☒	2
NEW		MPS1-0530-L10C	10	113	54	73	76	112	1	6	☐	2
NEW		MPS1-0530-L12C	12	124	64.6	84	87	123	1	6	☐	2
NEW		MPS1-0530-L15C	15	140	80.5	100	103	139	1	6	☐	2
NEW		MPS1-0530-L20C	20	168	107	128	131	167	1	6	☐	2
NEW		MPS1-0530-L25C	25	195	133.5	155	158	194	1	6	☐	2
NEW		MPS1-0530-L30C	30	223	160	183	186	222	1	6	☐	2
NEW		MPS1-0530-L35C	35	249	186.5	210	212	248	1	6	☐	2
NEW		MPS1-0530-L40C	40	279	213	241	242	278	1	6	☐	2

Numer zamówieniowy												
	DC	I(d)	OAL	LU	LCF	LH	LF	PL	DCON	DP1021	Typ	
		MPS1-0600S-DIN	3	66	19.1	28	30	64.9	1.1	6	☐	4
		MPS1-0600S-DIN-C	3	66	19.1	28	30	64.9	1.1	6	☒	2
		MPS1-0600L-DIN	5	82	35.1	44	46	80.9	1.1	6	☐	4
		MPS1-0600L-DIN-C	5	82	35.1	44	46	80.9	1.1	6	☒	2
NEW		MPS1-0600-PC	2	67	12.9	28.9	29	66	0.9	6	☒	2
		MPS1-0600-L8C	8	107	49.2	67	70	106	1.1	6	☒	2
NEW		MPS1-0600-L10C	10	119	61.1	79.1	82	118	1.1	6	☐	2
NEW		MPS1-0600-L12C	12	131	73.1	91.1	94	130	1.1	6	☒	2
NEW		MPS1-0600-L15C	15	149	91.1	109.1	112	148	1.1	6	☒	2
NEW		MPS1-0600-L20C	20	179	121.1	139.1	142	178	1.1	6	☒	2
NEW		MPS1-0600-L25C	25	209	151.1	169.1	172	208	1.1	6	☒	2
NEW		MPS1-0600-L30C	30	239	181.1	199.1	202	238	1.1	6	☒	2
NEW		MPS1-0600-L35C	35	268	211.1	229.1	231	267	1.1	6	☐	2
NEW		MPS1-0600-L40C	40	299	241.1	261.1	262	298	1.1	6	☒	2
		MPS1-0605S-DIN	3	79	25.0	34	43	77.9	1.1	8	☐	4
		MPS1-0605S-DIN-C	3	79	25.0	34	43	77.9	1.1	8	☒	2
		MPS1-0605L-DIN	5	91	44.0	53	55	89.9	1.1	8	☐	4
		MPS1-0605L-DIN-C	5	91	44.0	53	55	89.9	1.1	8	☒	2
		MPS1-0610S-DIN	3	79	25.0	34	43	77.9	1.1	8	☐	4
		MPS1-0610S-DIN-C	3	79	25.0	34	43	77.9	1.1	8	☒	2
		MPS1-0610L-DIN	5	91	44.0	53	55	89.9	1.1	8	☐	4
		MPS1-0610L-DIN-C	5	91	44.0	53	55	89.9	1.1	8	☒	2
NEW		MPS1-0610-PC	2	75	13.2	32	35	74	1	8	☐	2
		MPS1-0610-L8C	8	113	50.1	73	76	112	1.1	8	☒	2
NEW		MPS1-0610-L10C	10	126	62.1	86.1	89	125	1.1	8	☐	2
NEW		MPS1-0610-L12C	12	139	74.3	99.1	102	138	1.1	8	☐	2
NEW		MPS1-0610-L15C	15	158	92.6	118.1	121	157	1.1	8	☐	2
NEW		MPS1-0610-L20C	20	191	123.1	151.1	154	190	1.1	8	☐	2
NEW		MPS1-0610-L25C	25	223	153.6	183.1	186	222	1.1	8	☐	2
NEW		MPS1-0610-L30C	30	256	184.1	216.1	219	255	1.1	8	☐	2
NEW		MPS1-0610-L35C	35	287	214.6	241.1	250	286	1.1	8	☐	2
NEW		MPS1-0610-L40C	40	321	245.1	271.1	284	320	1.1	8	☐	2
		MPS1-0620S-DIN	3	79	24.8	34	43	77.9	1.1	8	☐	4
		MPS1-0620S-DIN-C	3	79	24.8	34	43	77.9	1.1	8	☒	2
		MPS1-0620L-DIN	5	91	43.8	53	55	89.9	1.1	8	☐	4
		MPS1-0620L-DIN-C	5	91	43.8	53	55	89.9	1.1	8	☒	2
NEW		MPS1-0620-PC	2	75	13.4	32	35	74	1	8	☐	2
		MPS1-0620-L8C	8	113	50.9	73	76	112	1.1	8	☒	2
NEW		MPS1-0620-L10C	10	126	63.1	86.1	89	125	1.1	8	☐	2
NEW		MPS1-0620-L12C	12	139	75.5	99.1	102	138	1.1	8	☐	2
NEW		MPS1-0620-L15C	15	158	94.1	118.1	121	157	1.1	8	☐	2
NEW		MPS1-0620-L20C	20	191	125.1	151.1	154	190	1.1	8	☐	2
NEW		MPS1-0620-L25C	25	223	156.1	183.1	186	222	1.1	8	☐	2
NEW		MPS1-0620-L30C	30	256	187.1	216.1	219	255	1.1	8	☐	2
NEW		MPS1-0620-L35C	35	287	218.1	241.1	250	286	1.1	8	☐	2
NEW		MPS1-0620-L40C	40	321	249.1	271.1	284	320	1.1	8	☐	2
		MPS1-0630S-DIN	3	79	24.7	34	43	77.9	1.1	8	☐	4
		MPS1-0630S-DIN-C	3	79	24.7	34	43	77.9	1.1	8	☒	2
		MPS1-0630L-DIN	5	91	43.7	53	55	89.9	1.1	8	☐	4
		MPS1-0630L-DIN-C	5	91	43.7	53	55	89.9	1.1	8	☒	2
NEW		MPS1-0630-PC	2	75	13.6	32	35	74	1	8	☐	2
		MPS1-0630-L8C	8	113	51.7	73	76	112	1.1	8	☒	2
NEW		MPS1-0630-L10C	10	126	64.1	86.1	89	125	1.1	8	☐	2
NEW		MPS1-0630-L12C	12	139	76.7	99.1	102	138	1.1	8	☐	2
NEW		MPS1-0630-L15C	15	158	95.6	118.1	121	157	1.1	8	☐	2
NEW		MPS1-0630-L20C	20	191	127.1	151.1	154	190	1.1	8	☐	2
NEW		MPS1-0630-L25C	25	223	158.6	183.1	186	222	1.1	8	☐	2
NEW		MPS1-0630-L30C	30	256	190.1	216.1	219	255	1.1	8	☐	2
NEW		MPS1-0630-L35C	35	287	221.6	248.1	250	286	1.1	8	☐	2
NEW		MPS1-0630-L40C	40	321	253.1	281.1	284	320	1.1	8	☐	2

Numer zamówieniowy											
	DC	I(d)	OAL	LU	LCF	LH	LF	PL	DCON	DP1021	Typ
	MPS1-0640S-DIN	3	79	24.6	34	43	77.8	1.2	8	☐	4
	MPS1-0640S-DIN-C	3	79	24.6	34	43	77.8	1.2	8	☒	2
	MPS1-0640L-DIN	5	91	43.6	53	55	89.8	1.2	8	☐	4
	MPS1-0640L-DIN-C	5	91	43.6	53	55	89.8	1.2	8	☒	2
NEW	MPS1-0640-PC	2	75	13.8	32	35	74	1	8	☐	2
	MPS1-0640-L8C	8	113	52.5	73	76	112	1.2	8	☒	2
NEW	MPS1-0640-L10C	10	126	65.2	86.2	89	125	1.2	8	☐	2
NEW	MPS1-0640-L12C	12	139	78	99.2	102	138	1.2	8	☐	2
NEW	MPS1-0640-L15C	15	158	97.2	118.2	121	157	1.2	8	☐	2
NEW	MPS1-0640-L20C	20	191	129.2	151.2	154	190	1.2	8	☐	2
NEW	MPS1-0640-L25C	25	223	161.2	183.2	186	222	1.2	8	☐	2
NEW	MPS1-0640-L30C	30	256	193.2	216.2	219	255	1.2	8	☐	2
NEW	MPS1-0640-L35C	35	287	225.2	248.2	250	286	1.2	8	☐	2
NEW	MPS1-0640-L40C	40	321	257.2	281.2	284	320	1.2	8	☐	2
	MPS1-0650S-DIN	3	79	24.4	34	43	77.8	1.2	8	☐	4
	MPS1-0650S-DIN-C	3	79	24.4	34	43	77.8	1.2	8	☒	2
	MPS1-0650L-DIN	5	91	43.4	53	55	89.8	1.2	8	☐	4
	MPS1-0650L-DIN-C	5	91	43.4	53	55	89.8	1.2	8	☒	2
NEW	MPS1-0650-PC	2	75	14	32	35	74	1	8	☒	2
	MPS1-0650-L8C	8	113	53.3	73	76	112	1.2	8	☒	2
NEW	MPS1-0650-L10C	10	126	66.2	86.2	89	125	1.2	8	☐	2
NEW	MPS1-0650-L12C	12	139	79.2	99.2	102	138	1.2	8	☒	2
NEW	MPS1-0650-L15C	15	158	98.7	118.2	121	157	1.2	8	☒	2
NEW	MPS1-0650-L20C	20	191	131.2	151.2	154	190	1.2	8	☒	2
NEW	MPS1-0650-L25C	25	223	163.7	183.2	186	222	1.2	8	☒	2
NEW	MPS1-0650-L30C	30	256	196.2	216.2	219	255	1.2	8	☒	2
NEW	MPS1-0650-L35C	35	287	228.7	248.2	250	286	1.2	8	☐	2
NEW	MPS1-0650-L40C	40	321	261.2	281.2	284	320	1.2	8	☒	2
	MPS1-0660S-DIN	3	79	24.3	34	43	77.8	1.2	8	☐	4
	MPS1-0660S-DIN-C	3	79	24.3	34	43	77.8	1.2	8	☒	2
	MPS1-0660L-DIN	5	91	43.3	53	55	89.8	1.2	8	☐	4
	MPS1-0660L-DIN-C	5	91	43.3	53	55	89.8	1.2	8	☒	2
NEW	MPS1-0660-PC	2	75	14.2	35	37	74	1	8	☐	2
	MPS1-0660-L8C	8	118	54.2	78	81	117	1.2	8	☒	2
NEW	MPS1-0660-L10C	10	132	67.2	92.2	95	131	1.2	8	☐	2
NEW	MPS1-0660-L12C	12	146	80.4	106.2	109	145	1.2	8	☐	2
NEW	MPS1-0660-L15C	15	167	100.2	127.2	130	166	1.2	8	☐	2
NEW	MPS1-0660-L20C	20	202	133.2	162.2	165	201	1.2	8	☐	2
NEW	MPS1-0660-L25C	25	237	166.2	197.2	200	236	1.2	8	☐	2
NEW	MPS1-0660-L30C	30	272	199.2	232.2	235	271	1.2	8	☐	2
NEW	MPS1-0660-L35C	35	306	232.2	267.2	269	305	1.2	8	☐	2
NEW	MPS1-0660-L40C	40	341	265.2	301.2	304	340	1.2	8	☐	2
	MPS1-0670S-DIN	3	79	24.2	34	43	77.8	1.2	8	☐	4
	MPS1-0670S-DIN-C	3	79	24.2	34	43	77.8	1.2	8	☒	2
	MPS1-0670L-DIN	5	91	43.2	53	55	89.8	1.2	8	☐	4
	MPS1-0670L-DIN-C	5	91	43.2	53	55	89.8	1.2	8	☒	2
NEW	MPS1-0670-PC	2	75	14.5	35.1	37	74	1.1	8	☐	2
	MPS1-0670-L8C	8	118	55.0	78	81	117	1.2	8	☒	2
NEW	MPS1-0670-L10C	10	132	68.2	92.2	95	131	1.2	8	☐	2
NEW	MPS1-0670-L12C	12	146	81.6	106.2	109	145	1.2	8	☐	2
NEW	MPS1-0670-L15C	15	167	101.7	127.2	130	166	1.2	8	☐	2
NEW	MPS1-0670-L20C	20	202	135.2	162.2	165	201	1.2	8	☐	2
NEW	MPS1-0670-L25C	25	237	168.7	197.2	200	236	1.2	8	☐	2
NEW	MPS1-0670-L30C	30	272	202.2	232.2	235	271	1.2	8	☐	2
NEW	MPS1-0670-L35C	35	306	235.7	267.2	269	305	1.2	8	☐	2
NEW	MPS1-0670-L40C	40	341	269.2	301.2	304	340	1.2	8	☐	2

MPS1



Numer
zamówieniowy

Typ

Numer
zamówieniowy

DC

(U/d)

OAL

LU

LCF

LH

LF

PL

DCON

DP1021

Typ



NEW	MPS1-0860-PC	2	85	18.6	41.4	43	84	1.4	10	☐	2
	MPS1-0860-L8C	8	145	70.6	100	104	143	1.6	10	☒	2
NEW	MPS1-0860-L10C	10	163	87.6	118.6	122	161	1.6	10	☐	2
NEW	MPS1-0860-L12C	12	181	104.8	136.6	140	179	1.6	10	☐	2
NEW	MPS1-0860-L15C	15	208	130.6	163.6	167	206	1.6	10	☐	2
NEW	MPS1-0860-L20C	20	253	173.6	208.6	212	251	1.6	10	☐	2
NEW	MPS1-0860-L25C	25	298	216.6	253.6	257	296	1.6	10	☐	2
NEW	MPS1-0860-L30C	30	342	259.6	298.6	301	340	1.6	10	☐	2
NEW	MPS1-0860-L35C	35	387	302.6	343.6	346	385	1.6	10	☐	2
NEW	MPS1-0860-L40C	40	436	345.6	391.6	395	434	1.6	10	☐	2
	MPS1-0870S-DIN	3	88	33.5	46	48	86.4	1.6	10	☐	4
	MPS1-0870S-DIN-C	3	88	33.5	46	48	86.4	1.6	10	☒	2
	MPS1-0870L-DIN	5	102	47.5	60	62	100.4	1.6	10	☐	4
	MPS1-0870L-DIN-C	5	102	47.5	60	62	100.4	1.6	10	☒	2
NEW	MPS1-0870-PC	2	85	18.8	41.4	43	84	1.4	10	☐	2
	MPS1-0870-L8C	8	145	71.4	100	104	143	1.6	10	☒	2
NEW	MPS1-0870-L10C	10	163	88.6	118.6	122	161	1.6	10	☐	2
NEW	MPS1-0870-L12C	12	181	106	136.6	140	179	1.6	10	☐	2
NEW	MPS1-0870-L15C	15	208	132.1	163.6	167	206	1.6	10	☐	2
NEW	MPS1-0870-L20C	20	253	175.6	208.6	212	251	1.6	10	☐	2
NEW	MPS1-0870-L25C	25	298	219.1	253.6	257	296	1.6	10	☐	2
NEW	MPS1-0870-L30C	30	342	262.6	298.6	301	340	1.6	10	☐	2
NEW	MPS1-0870-L35C	35	387	306.1	343.6	346	385	1.6	10	☐	2
NEW	MPS1-0870-L40C	40	436	349.6	391.6	395	434	1.6	10	☐	2

MPS1

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Numer zamówieniowy													DP1021		
	DC	(U/d)	OAL	LU	LCF	LH	LF	PL	DCON					Typ	
MPS1-1260S-DIN		3	107	41.4	60	62	104.7	2.3	14					4	
MPS1-1260S-DIN-C		3	107	41.4	60	62	104.7	2.3	14					2	
MPS1-1260L-DIN		5	124	58.4	77	79	121.7	2.3	14					4	
MPS1-1260L-DIN-C		5	124	58.4	77	79	121.7	2.3	14					2	
NEW MPS1-1260-PC	12.6	2	103	27.2	53	54	102	2	14					2	
MPS1-1260-L8C		8	195	103.4	145	149	192	2.3	14					2	
MPS1-1260-L10C		10	220	128.3	171.3	174	218	2.3	14					2	
NEW MPS1-1260-L12C		12	246	153.5	197.3	200	244	2.3	14					2	
NEW MPS1-1260-L15C		15	285	191.3	236.3	239	283	2.3	14					2	
NEW MPS1-1260-L20C		20	350	254.3	301.3	304	348	2.3	14					2	
MPS1-1270S-DIN		3	107	41.3	60	62	104.7	2.3	14					4	
MPS1-1270S-DIN-C		3	107	41.3	60	62	104.7	2.3	14					2	
MPS1-1270L-DIN		5	124	58.3	77	79	121.7	2.3	14					4	
MPS1-1270L-DIN-C		5	124	58.3	77	79	121.7	2.3	14					2	
NEW MPS1-1270-PC	12.7	2	104	27.4	53	55	102	2	14					2	
MPS1-1270-L8C		8	195	104.2	145	149	192	2.3	14					2	
NEW MPS1-1270-L10C		10	220	129.3	171.3	174	218	2.3	14					2	
NEW MPS1-1270-L12C		12	246	154.7	197.3	200	244	2.3	14					2	
NEW MPS1-1270-L15C		15	285	192.8	236.3	239	283	2.3	14					2	
NEW MPS1-1270-L20C		20	350	256.3	301.3	304	348	2.3	14					2	
MPS1-1280S-DIN		3	107	41.1	60	62	104.7	2.3	14					4	
MPS1-1280S-DIN-C		3	107	41.1	60	62	104.7	2.3	14					2	
MPS1-1280L-DIN		5	124	58.1	77	79	121.7	2.3	14					4	
MPS1-1280L-DIN-C		5	124	58.1	77	79	121.7	2.3	14					2	
NEW MPS1-1280-PC	12.8	2	104	27.6	53	55	102	2	14					2	
MPS1-1280-L8C		8	195	105.1	145	149	192	2.3	14					2	
NEW MPS1-1280-L10C		10	220	130.3	171.3	174	218	2.3	14					2	
NEW MPS1-1280-L12C		12	246	155.9	197.3	200	244	2.3	14					2	
NEW MPS1-1280-L15C		15	285	194.3	236.3	239	283	2.3	14					2	
NEW MPS1-1280-L20C		20	350	258.3	301.3	304	348	2.3	14					2	
MPS1-1290S-DIN		3	107	41.0	60	62	104.7	2.3	14					4	
MPS1-1290S-DIN-C		3	107	41.0	60	62	104.7	2.3	14					2	
MPS1-1290L-DIN		5	124	58.0	77	79	121.7	2.3	14					4	
MPS1-1290L-DIN-C		5	124	58.0	77	79	121.7	2.3	14					2	
NEW MPS1-1290-PC	12.9	2	104	27.8	53	55	102	2	14					2	
MPS1-1290-L8C		8	195	105.9	145	149	192	2.3	14					2	
NEW MPS1-1290-L10C		10	220	131.3	171.3	174	218	2.3	14					2	
NEW MPS1-1290-L12C		12	246	157.1	197.3	200	244	2.3	14					2	
NEW MPS1-1290-L15C		15	285	195.8	236.3	239	283	2.3	14					2	
NEW MPS1-1290-L20C		20	350	260.3	301.3	304	348	2.3	14					2	
MPS1-1300S-DIN		3	107	40.9	60	62	104.6	2.4	14					4	
MPS1-1300S-DIN-C		3	107	40.9	60	62	104.6	2.4	14					2	
MPS1-1300L-DIN		5	124	57.9	77	79	121.6	2.4	14					4	
MPS1-1300L-DIN-C		5	124	57.9	77	79	121.6	2.4	14					2	
NEW MPS1-1300-PC	13	2	104	28	53	55	102	2	14					2	
MPS1-1300-L8C		8	195	106.7	145	149	192	2.4	14					2	
NEW MPS1-1300-L10C		10	220	132.4	171.4	174	218	2.4	14					2	
NEW MPS1-1300-L12C		12	246	158.4	197.4	200	244	2.4	14					2	
NEW MPS1-1300-L15C		15	285	197.4	236.4	239	283	2.4	14					2	
NEW MPS1-1300-L20C		20	350	262.4	301.4	304	348	2.4	14					2	
MPS1-1310S-DIN		3	107	40.7	60	62	104.6	2.4	14					4	
MPS1-1310S-DIN-C		3	107	40.7	60	62	104.6	2.4	14					2	
MPS1-1310L-DIN		5	124	57.7	77	79	121.6	2.4	14					4	
MPS1-1310L-DIN-C		5	124	57.7	77	79	121.6	2.4	14					2	
NEW MPS1-1310-PC	13.1	2	109	28.3	56.1	59	107	2.1	14					2	
MPS1-1310-L8C		8	201	107.5	151	155	198	2.4	14					2	
NEW MPS1-1310-L10C		10	227	133.4	178.4	181	225	2.4	14					2	
NEW MPS1-1310-L12C		12	254	159.6	205.4	208	252	2.4	14					2	
NEW MPS1-1310-L15C		15	294	198.9	245.4	248	292	2.4	14					2	
NEW MPS1-1310-L20C		20	362	264.4	313.4	316	360	2.4	14					2	

Numer zamówieniowy														
	DC	(U/d)	OAL	LU	LCF	LH	LF	PL	DCON	DP1021	Typ			
MPS1-1320S-DIN		3	107	40.6	60	62	104.6	2.4	14		4			
MPS1-1320S-DIN-C		3	107	40.6	60	62	104.6	2.4	14		2			
MPS1-1320L-DIN		5	124	57.6	77	79	121.6	2.4	14		4			
MPS1-1320L-DIN-C		5	124	57.6	77	79	121.6	2.4	14		2			
NEW MPS1-1320-PC	13.2	2	109	28.5	56.1	59	107	2.1	14		2			
MPS1-1320-L8C		8	201	108.3	151	155	198	2.4	14		2			
NEW MPS1-1320-L10C		10	227	134.4	178.4	181	225	2.4	14		2			
NEW MPS1-1320-L12C		12	254	160.8	205.4	208	252	2.4	14		2			
NEW MPS1-1320-L15C		15	294	200.4	245.4	248	292	2.4	14		2			
NEW MPS1-1320-L20C		20	362	266.4	313.4	316	360	2.4	14		2			
MPS1-1330S-DIN		3	107	40.5	60	62	104.6	2.4	14		4			
MPS1-1330S-DIN-C		3	107	40.5	60	62	104.6	2.4	14		2			
MPS1-1330L-DIN		5	124	57.5	77	79	121.6	2.4	14		4			
MPS1-1330L-DIN-C		5	124	57.5	77	79	121.6	2.4	14		2			
NEW MPS1-1330-PC	13.3	2	109	28.7	56.1	59	107	2.1	14		2			
MPS1-1330-L8C		8	201	109.2	151	155	198	2.4	14		2			
NEW MPS1-1330-L10C		10	227	135.4	178.4	181	225	2.4	14		2			
NEW MPS1-1330-L12C		12	254	162	205.4	208	252	2.4	14		2			
NEW MPS1-1330-L15C		15	294	201.9	245.4	248	292	2.4	14		2			
NEW MPS1-1330-L20C		20	362	268.4	313.4	316	360	2.4	14		2			
MPS1-1340S-DIN		3	107	40.3	60	62	104.6	2.4	14		4			
MPS1-1340S-DIN-C		3	107	40.3	60	62	104.6	2.4	14		2			
MPS1-1340L-DIN		5	124	57.3	77	79	121.6	2.4	14		4			
MPS1-1340L-DIN-C		5	124	57.3	77	79	121.6	2.4	14		2			
NEW MPS1-1340-PC	13.4	2	109	28.9	56.1	59	107	2.1	14		2			
MPS1-1340-L8C		8	201	110.0	151	155	198	2.4	14		2			
NEW MPS1-1340-L10C		10	227	136.4	178.4	181	225	2.4	14		2			
NEW MPS1-1340-L12C		12	254	163.2	205.4	208	252	2.4	14		2			
NEW MPS1-1340-L15C		15	294	203.4	245.4	248	292	2.4	14		2			
NEW MPS1-1340-L20C		20	362	270.4	313.4	316	360	2.4	14		2			
MPS1-1350S-DIN		3	107	40.2	60	62	104.5	2.5	14		4			
MPS1-1350S-DIN-C		3	107	40.2	60	62	104.5	2.5	14		2			
MPS1-1350L-DIN		5	124	57.2	77	79	121.5	2.5	14		4			
MPS1-1350L-DIN-C		5	124	57.2	77	79	121.5	2.5	14		2			
NEW MPS1-1350-PC	13.5	2	109	29.1	56.1	59	107	2.1	14		2			
MPS1-1350-L8C		8	201	110.8	151	155	198	2.5	14		2			
NEW MPS1-1350-L10C		10	227	137.5	178.5	181	225	2.5	14		2			
NEW MPS1-1350-L12C		12	254	164.5	205.5	208	252	2.5	14		2			
NEW MPS1-1350-L15C		15	294	205	245.5	248	292	2.5	14		2			
NEW MPS1-1350-L20C		20	362	272.5	313.5	316	360	2.5	14		2			
MPS1-1360S-DIN		3	107	40.1	60	62	104.5	2.5	14		4			
MPS1-1360S-DIN-C		3	107	40.1	60	62	104.5	2.5	14		2			
MPS1-1360L-DIN		5	124	57.1	77	79	121.5	2.5	14		4			
MPS1-1360L-DIN-C		5	124	57.1	77	79	121.5	2.5	14		2			
NEW MPS1-1360-PC	13.6	2	109	29.3	56.1	56	107	2.1	14		2			
MPS1-1360-L8C		8	206	111.6	156	160	203	2.5	14		2			
NEW MPS1-1360-L10C		10	233	138.5	184.5	187	231	2.5	14		2			
NEW MPS1-1360-L12C		12	261	165.7	212.5	215	259	2.5	14		2			
NEW MPS1-1360-L15C		15	303	206.5	254.5	257	301	2.5	14		2			
NEW MPS1-1360-L20C		20	373	274.5	324.5	327	371	2.5	14		2			
MPS1-1370S-DIN		3	107	39.9	60	62	104.5	2.5	14		4			
MPS1-1370S-DIN-C		3	107	39.9	60	62	104.5	2.5	14		2			
MPS1-1370L-DIN		5	124	56.9	77	79	121.5	2.5	14		4			
MPS1-1370L-DIN-C		5	124	56.9	77	79	121.5	2.5	14		2			
NEW MPS1-1370-PC	13.7	2	109	29.6	56.2	56	107	2.2	14		2			
MPS1-1370-L8C		8	206	112.4	156	160	203	2.5	14		2			
NEW MPS1-1370-L10C		10	233	139.5	184.5	187	231	2.5	14		2			
NEW MPS1-1370-L12C		12	261	166.9	212.5	215	259	2.5	14		2			
NEW MPS1-1370-L15C		15	303	208	254.5	257	301	2.5	14		2			
NEW MPS1-1370-L20C		20	373	276.5	324.5	327	371	2.5	14		2			

MPS1

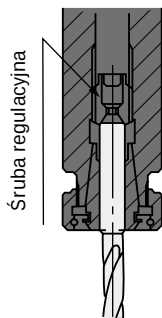
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ZALECANE PARAMETRY OBRÓBK

DC	L x DC		P			M	K		
			Stal	Stal węglowa Stal stopowa		Stal nierdzewna	Żeliwo	Żeliwo sferoidalne	
			≤ 180 HB	180–250 HB	280–350 HB		≤ 350 MPa	≤ 450 MPa	≤ 800 MPa
3	3–8	Vc m/min	100 (60–150)	90 (60–140)	80 (50–110)	40 (20–50)	90 (60–100)	80 (50–90)	60 (40–80)
		f mm/obr.	0.15 (0.1–0.2)	0.15 (0.1–0.19)	0.12 (0.1–0.14)	0.08 (0.06–0.12)	0.15 (0.1–0.2)	0.12 (0.08–0.16)	0.09 (0.06–0.12)
	10–25	Vc m/min	90 (40–110)	90 (40–110)	80 (40–90)	40 (20–60)	90 (40–110)	90 (40–110)	
		f mm/obr.	0.17 (0.1–0.24)	0.17 (0.1–0.24)	0.15 (0.09–0.22)	0.07 (0.05–0.09)	0.19 (0.11–0.26)	0.17 (0.1–0.24)	
	30–40	Vc m/min	75 (40–95)	75 (40–85)	65 (40–75)	30 (20–50)	75 (45–95)	30 (20–50)	
		f mm/obr.	0.14 (0.08–0.19)	0.14 (0.08–0.19)	0.15 (0.07–0.18)	0.06 (0.04–0.07)	0.15 (0.09–0.21)	0.14 (0.08–0.19)	
4	3–8	Vc m/min	120 (70–170)	100 (70–160)	90 (60–120)	40 (30–50)	100 (70–110)	90 (60–100)	70 (50–90)
		f mm/obr.	0.19 (0.12–0.25)	0.18 (0.12–0.24)	0.15 (0.12–0.18)	0.09 (0.07–0.13)	0.21 (0.12–0.3)	0.17 (0.1–0.24)	0.13 (0.08–0.18)
	10–25	Vc m/min	90 (40–110)	90 (40–110)	80 (40–90)	40 (20–60)	90 (40–110)	90 (40–110)	
		f mm/obr.	0.2 (0.12–0.3)	0.2 (0.12–0.3)	0.18 (0.11–0.27)	0.08 (0.06–0.1)	0.22 (0.13–0.33)	0.2 (0.12–0.3)	
	30–40	Vc m/min	75 (40–95)	75 (40–85)	65 (40–75)	30 (20–50)	75 (45–95)	30 (20–50)	
		f mm/obr.	0.16 (0.1–0.24)	0.16 (0.1–0.24)	0.18 (0.09–0.22)	0.06 (0.05–0.08)	0.18 (0.1–0.26)	0.16 (0.1–0.24)	
5	3–8	Vc m/min	130 (80–190)	110 (80–180)	90 (70–140)	40 (30–50)	110 (80–130)	90 (70–120)	70 (60–100)
		f mm/obr.	0.23 (0.15–0.3)	0.22 (0.15–0.29)	0.19 (0.15–0.22)	0.11 (0.08–0.16)	0.25 (0.15–0.35)	0.21 (0.14–0.28)	0.17 (0.12–0.22)
	10–25	Vc m/min	90 (40–110)	90 (40–110)	80 (40–90)	40 (20–60)	90 (40–110)	90 (40–110)	
		f mm/obr.	0.25 (0.15–0.35)	0.25 (0.15–0.35)	0.22 (0.14–0.32)	0.1 (0.07–0.12)	0.28 (0.17–0.39)	0.25 (0.15–0.35)	
	30–40	Vc m/min	75 (40–95)	75 (40–85)	65 (40–75)	30 (20–50)	75 (45–95)	30 (20–50)	
		f mm/obr.	0.2 (0.12–0.28)	0.2 (0.12–0.28)	0.22 (0.11–0.26)	0.08 (0.06–0.1)	0.22 (0.13–0.31)	0.2 (0.12–0.28)	
6	3–8	Vc m/min	140 (90–210)	120 (90–190)	100 (80–150)	50 (40–70)	120 (90–140)	100 (80–130)	80 (70–110)
		f mm/obr.	0.27 (0.18–0.35)	0.26 (0.18–0.33)	0.22 (0.18–0.25)	0.14 (0.11–0.18)	0.29 (0.18–0.4)	0.25 (0.16–0.34)	0.2 (0.14–0.26)
	10–25	Vc m/min	110 (70–120)	100 (60–110)	90 (40–110)	50 (20–60)	100 (60–110)	100 (60–110)	
		f mm/obr.	0.27 (0.17–0.37)	0.24 (0.15–0.33)	0.24 (0.15–0.33)	0.12 (0.08–0.16)	0.3 (0.19–0.41)	0.27 (0.17–0.37)	
	30–40	Vc m/min	90 (40–110)	80 (40–90)	75 (40–85)	40 (20–60)	90 (60–110)	40 (30–60)	
		f mm/obr.	0.22 (0.14–0.3)	0.22 (0.14–0.3)	0.24 (0.12–0.26)	0.1 (0.06–0.13)	0.24 (0.15–0.33)	0.22 (0.14–0.3)	
8	3–8	Vc m/min	160 (100–240)	140 (100–220)	120 (90–170)	50 (40–70)	140 (100–160)	120 (90–150)	100 (80–130)
		f mm/obr.	0.3 (0.2–0.4)	0.29 (0.2–0.38)	0.24 (0.2–0.27)	0.15 (0.12–0.2)	0.33 (0.2–0.45)	0.28 (0.18–0.38)	0.23 (0.16–0.3)
	10–25	Vc m/min	110 (70–120)	100 (60–110)	90 (40–110)	50 (20–60)	100 (60–110)	100 (60–110)	
		f mm/obr.	0.3 (0.2–0.4)	0.3 (0.2–0.4)	0.27 (0.18–0.36)	0.14 (0.1–0.17)	0.33 (0.22–0.44)	0.3 (0.2–0.4)	
	30–40	Vc m/min	90 (40–110)	80 (40–90)	75 (40–85)	40 (20–50)	90 (60–100)	40 (30–60)	
		f mm/obr.	0.24 (0.16–0.32)	0.24 (0.16–0.32)	0.27 (0.14–0.29)	0.11 (0.08–0.14)	0.26 (0.18–0.35)	0.24 (0.16–0.32)	
10	3–8	Vc m/min	170 (100–250)	150 (100–230)	130 (90–180)	50 (40–70)	150 (100–170)	130 (90–160)	110 (80–140)
		f mm/obr.	0.33 (0.2–0.45)	0.32 (0.2–0.43)	0.25 (0.2–0.3)	0.16 (0.12–0.22)	0.35 (0.2–0.5)	0.29 (0.18–0.4)	0.24 (0.16–0.32)
	10–25	Vc m/min	110 (70–120)	100 (60–110)	90 (40–110)	50 (20–60)	100 (60–110)	100 (60–110)	
		f mm/obr.	0.32 (0.22–0.42)	0.32 (0.22–0.42)	0.29 (0.2–0.38)	0.15 (0.12–0.18)	0.35 (0.24–0.46)	0.32 (0.22–0.42)	
	30–40	Vc m/min	90 (40–110)	80 (40–90)	75 (40–95)	40 (20–50)	90 (60–100)	40 (30–60)	
		f mm/obr.	0.26 (0.18–0.34)	0.26 (0.18–0.34)	0.29 (0.16–0.3)	0.12 (0.1–0.14)	0.28 (0.19–0.37)	0.26 (0.18–0.34)	
12	3–8	Vc m/min	180 (100–250)	160 (100–230)	140 (90–180)	50 (40–70)	160 (100–170)	140 (90–160)	110 (80–140)
		f mm/obr.	0.35 (0.2–0.5)	0.34 (0.2–0.48)	0.27 (0.2–0.34)	0.18 (0.14–0.24)	0.4 (0.2–0.6)	0.31 (0.18–0.44)	0.25 (0.16–0.34)
	10–25	Vc m/min	130 (90–150)	120 (80–140)	100 (60–110)	60 (25–65)	120 (90–140)	120 (90–140)	
		f mm/obr.	0.34 (0.24–0.44)	0.34 (0.24–0.44)	0.3 (0.22–0.4)	0.17 (0.14–0.19)	0.37 (0.26–0.48)	0.34 (0.24–0.44)	
	30–40	Vc m/min	105 (55–125)	95 (55–105)	80 (40–100)	50 (20–60)	105 (65–115)	50 (40–70)	
		f mm/obr.	0.27 (0.19–0.35)	0.27 (0.19–0.35)	0.3 (0.18–0.32)	0.14 (0.11–0.15)	0.3 (0.21–0.38)	0.27 (0.19–0.35)	
16	3–8	Vc m/min	180 (100–250)	160 (100–230)	140 (90–180)	50 (40–70)	160 (100–170)	140 (90–160)	110 (80–140)
		f mm/obr.	0.38 (0.2–0.55)	0.36 (0.2–0.52)	0.28 (0.2–0.36)	0.19 (0.15–0.26)	0.43 (0.2–0.65)	0.33 (0.18–0.48)	0.27 (0.16–0.38)
	10–25	Vc m/min	130 (90–150)	120 (80–140)	100 (60–110)	60 (25–65)	120 (90–140)	120 (90–140)	
		f mm/obr.	0.36 (0.26–0.46)	0.36 (0.26–0.46)	0.32 (0.23–0.41)	0.17 (0.14–0.19)	0.4 (0.29–0.48)	0.36 (0.26–0.46)	
20	3–8	Vc m/min	180 (100–250)	160 (100–230)	140 (90–180)	50 (40–70)	160 (100–170)	140 (90–160)	110 (80–140)
		f mm/obr.	0.4 (0.2–0.6)	0.39 (0.2–0.57)	0.3 (0.2–0.4)	0.21 (0.16–0.28)	0.45 (0.2–0.7)	0.35 (0.18–0.52)	0.28 (0.16–0.4)

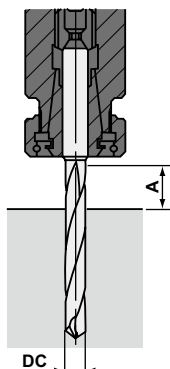
WSKAZÓWKI EKSPLOATACYJNE

TRZYMANIE WIERTŁA



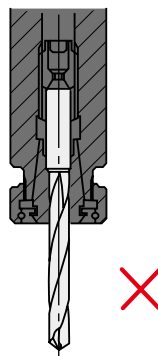
Uchwyt wiertarski z tuleją samozaciskową i łożyskiem oporowym trzyma wiertło bezpiecznie.

DŁUGOŚĆ WIERTŁA



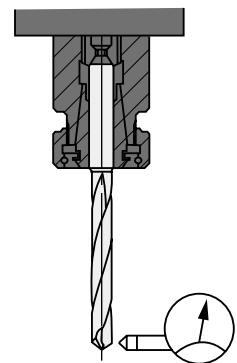
$$A \geq DC \times 1.5$$

INSTALACJA WIERTŁA



Nie zaciskać na rowkach.

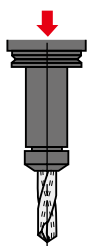
TOLERANCJA INSTALACJI



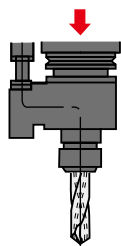
Bicie < 0.03 mm

CHŁODZENIE WEWNĘTRZNE

Przelotowe doprowadzanie chłodziwa.



Obrotowe doprowadzanie chłodziwa



Ciśnienie doprowadzania chłodziwa wynosi około 0.5–1MPa (<ø5:2–3MPa).

EKSPLOATACJA CHŁODZIWA

① Małe cząstki opiłków będą zatykały kanał doprowadzenia chłodziwa wiertła o małej średnicy. Profilaktycznie należy zawsze używać filtra z drobnej siateczki.

② Cząstki brudu i kurzu łączą się z olejem w używanym chłodziwie i uniemożliwiają jego skuteczny przepływ. Zalecana jest regularna wymiana chłodziwa.

CIEŃKI ELEMENT OBRABIANY

W przypadku ugięcia

Należy podeprzeć obrabiany element

OBROBKA PRZERYWANA

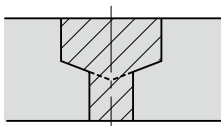
Jeden proces

① Należy obniżyć posuw w czasie wiercenia przerywanego.

Wymagana jest obróbka wstępna

② Przed wierceniem należy obrobić powierzchnię czołową za pomocą freza palcowego.

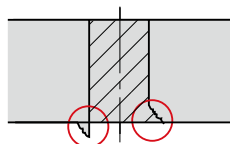
OTWORY STOPNIOWANE



① Podzielić proces na dwa zabiegi.
② Najpierw wywiercić otwór o większej średnicy.

*Na zamówienie może być wyprodukowane narzędzie do fazki i powierzchni czołowej.

ZADZIORY I WYKRUSZANIE OBRABIANEGO ELEMENTU



① Należy zmniejszyć posuw o 50% na wyjściu otworu.
② Wykonać fazkę 45°.
③ Zmienić kąt tego punktu.

