

FACE DRIVERS for

- **V** Turning
- Grinding



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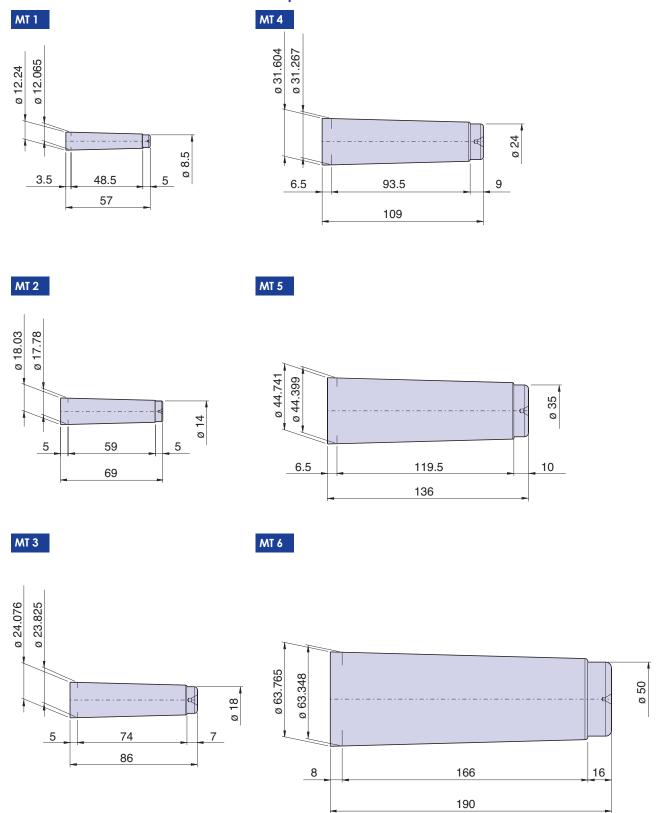
PTM is a leading manufacturer of standard and custom designed workholding products. PTM offers a wide variety of products with emphasis on Live Centers for Turning, Grinding and Gear Cutting, and Dead Centers and Face Drivers for Turning and Grinding. PTM has established its reputation and achieved its success by offering products that ensure **best performance**, **highest accuracy** and **longest life** while keeping prices low.

W Best Performance: Engineered for maximum tool clearance while providing the highest rigidity to the workpiece.

W Highest Accuracy: Utilizing high quality material and components, innovative design and manufacturing practices.

▼ Longest Life: All PTM products are manufactured to the highest standards and where required permanent lubricating grease and specially designed seals are used which guarantees to keep out fines and coolant including high pressure coolant.

Morse Taper Dimensions



All Dimensions: mm

Face Drivers For Turning

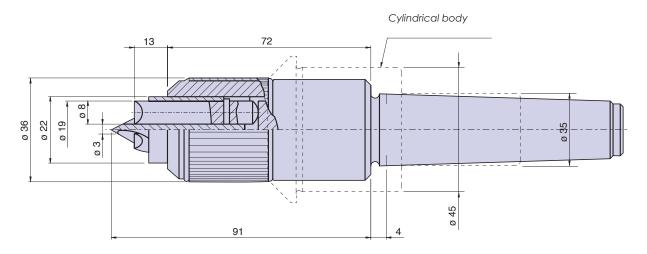




The "T" series face drivers are best used in the mass production of parts since they make it possible to reduce the clamping times in the various turning operations. Their extremely compact shape allows excellent approach of the tool to the workpiece. They ensure safe driving even for parts that are not perfectly squarely cut. When the extended point is fitted it is also possible to machine shafts which have holes in the center.

Working range ø 5 - 30 mm

Type	МО	DEL
T/A	Normal	Extended
3	100103	100113
4	100104	100114
Cylindrical	100105	100115

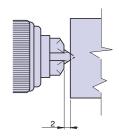


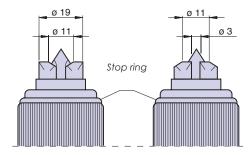
Morse Taper 3	Kg 1.000
Morse Taper 4	Kg 1.150
Cylindrical	Kg 1.000

If a driving tooth becomes worn on the cutting side, it must be turned 180°. Depending on the lesser diameter to be machined, choose the most appropriate driving tooth, as per the diagram.

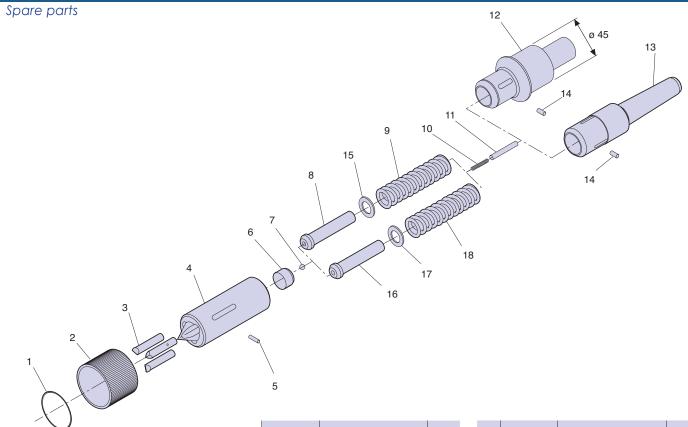
The extended model is 10 mm longer.

Fitting the point 10103P with teeth 1010P, larger size centers can be machined.



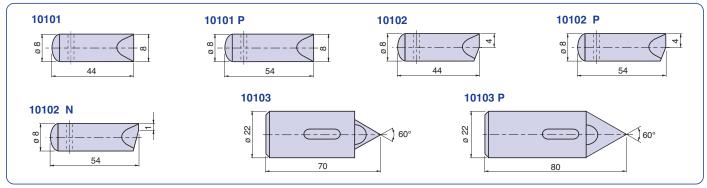


5



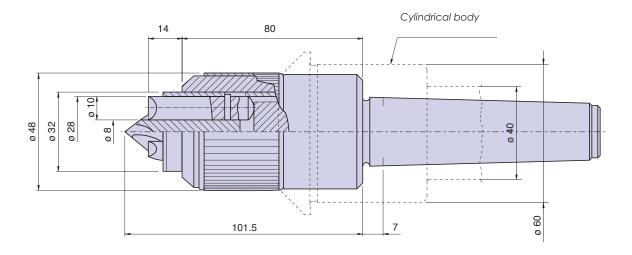
	MODEL	PART	QTY
1	160032001	Ring	1
2	1001002	Cover	1
3	10101 - P 10102 - P	Driving teeth	3
4	10103 10103-P	Point	1
5	170003001	Pin	3
6	1001003	Disk	1
7	110006001	Ball	1
8	1001004	Pin	1
9	1001005	Spring	1

10	170004003	Spring	1
11	170004004	Pin	1
12	1001008	Cylindrical body	1
13	1001006 1001007	Morse Taper 3-4 body	1
14	170005001	Pin	1
15	1001001	Spacer	1
16	1001009	Pin	1
17	1001010	Spacer	1
18	1001011	Spring	1



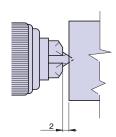
Working range ø 18 - 40 mm

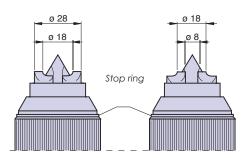
Type	MODEL		
T/B	Normal	Extended	
3	120203	120213	
4	120204	120214	
Cylindrical	120207	120217	

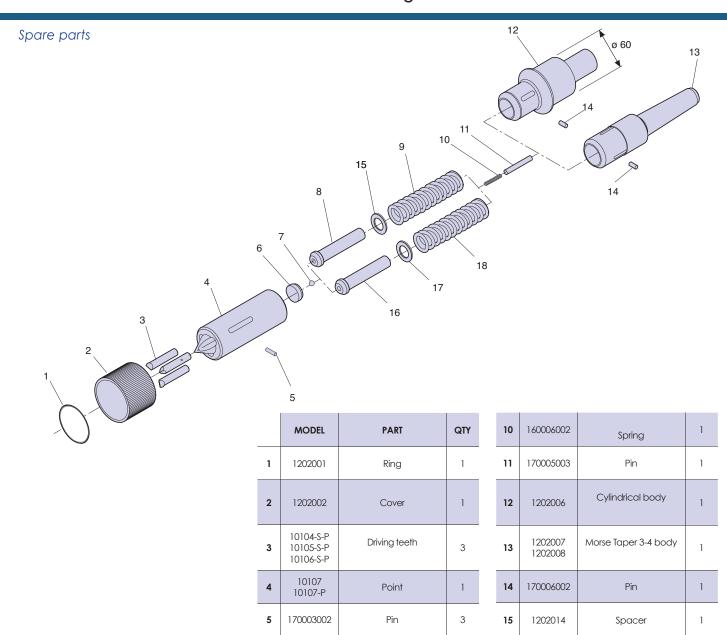


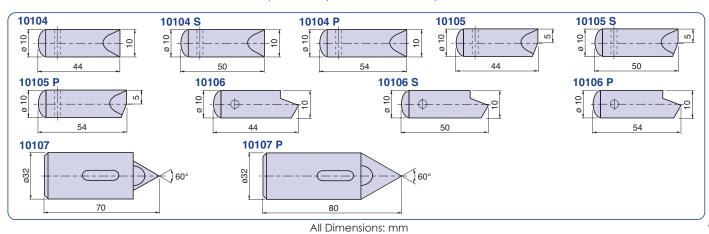
Morse Taper 3	Kg 1.500
Morse Taper 4	Kg 2.000
Cylindrical	Kg 1.850

If a driving tooth becomes worn on the cutting side, it must be turned 180°. Depending on the lesser diameter to be machined, choose the most appropriate driving tooth, as per the diagram.









Disk

Ball

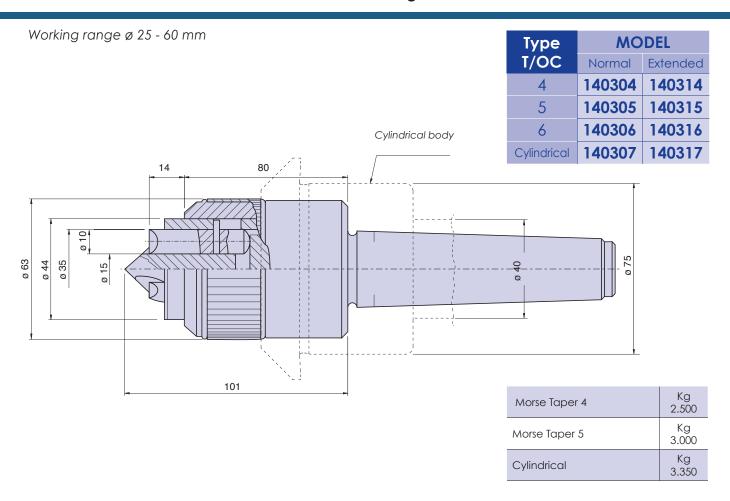
Pin

Spring

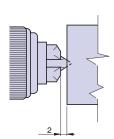
Pin

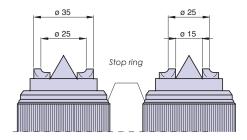
Spacer

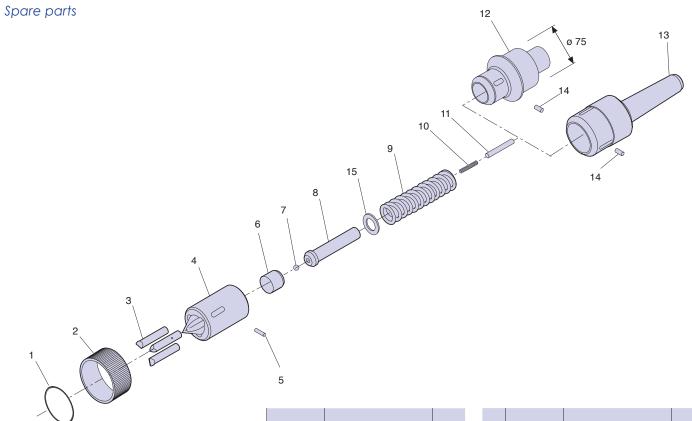
Spring



To improve workpiece gripping, the driving tooth must be used following the diagram, i.e. rotated by 180° according to the diameter of the part being machined. On request special or cylindrical couplings for self-centering chucks can be provided.

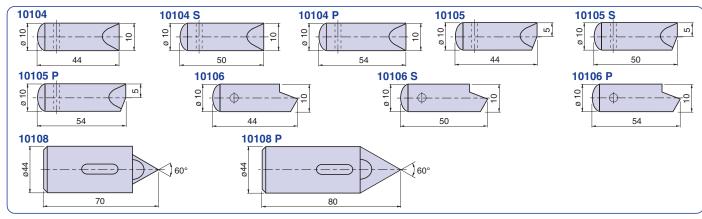






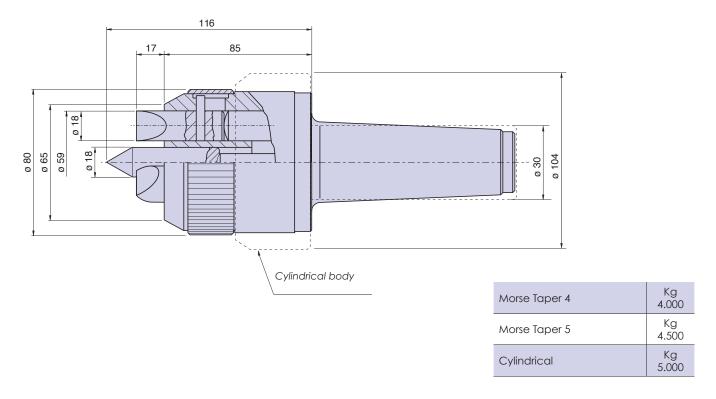
	MODEL	PART	QTY
1	1403001	Ring	1
2	1403002	Cover	1
3	10104-S-P 10105-S-P 10106-S-P	Driving teeth	3
4	10108 10108-P	Point	1
5	170003002	Pin	3
6	1403003	Disk	1
7	110008001	Ball	1

8	1403004	Pin	1
9	1403005	Spring	1
10	170006001	Spring	1
11	170005003	Pin	1
12	1403006	Cylindrical body	1
13	1403007 1403008 1403009	Morse Taper 4-5-6 body	1
14	170006002	Pin	1
15	1403010	Spacer	1



Working range ø 41 - 110 mm

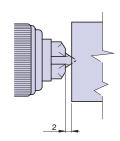
Туре	MODEL		
T/C	Normal	Extended	
4	160404	160414	
5	160405	160415	
Cylindrical	160407	160417	

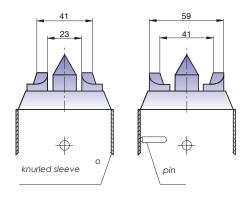


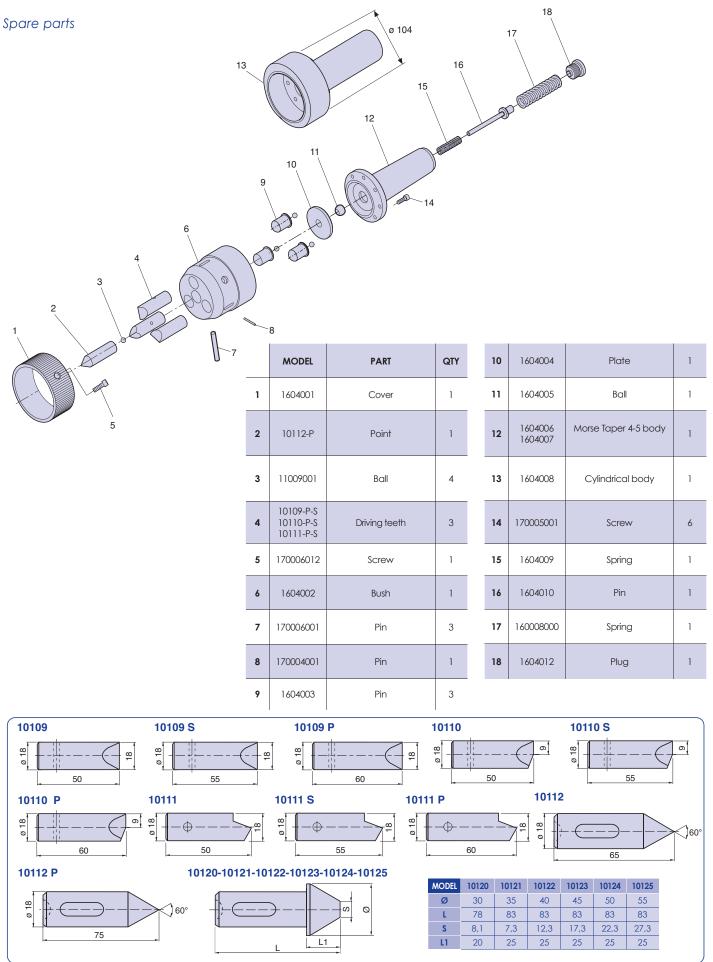
If a driving tooth becomes worn on the cutting side, it must be turned 180°.

Depending on the lesser diameter to be machined, choose the most appropriate driving tooth, as per the diagram.

On request special or cylindrical couplings for self-centering chucks can be provided.







Face Driver Operation

For correct operation of the driver and for perfect grip on the piece, follow the indications given below.

TYPE T/A

For a working range from \varnothing 11 to \varnothing 5 For a working range from \varnothing 30 to \varnothing 11

TYPE T/B

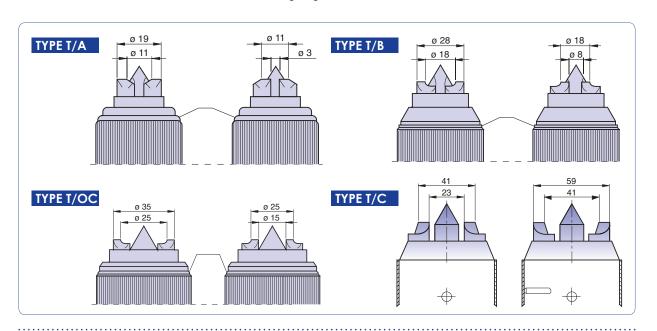
For a working range from \emptyset 28 to \emptyset 18 For a working range from \emptyset 40 to \emptyset 28

TYPE T/C

For a working range from \emptyset 25 to \emptyset 35 For a working range from \emptyset 35 to \emptyset 60

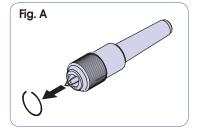
TYPE T/OC

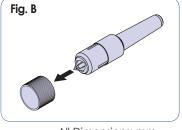
For a working range from \emptyset 41 to \emptyset 59 For a working range from \emptyset 59 to \emptyset 110

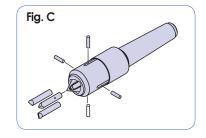


To obtain the above values, remove the stop ring and the knurled sleeve (Fig. A-B). Remove the pins and the driving teeth (Fig. C).

Turn the driving teeth according to the required type in the diagram and replace all the removed parts, greasing the sliding housings, preferably with heatproof grease.









MAINTENANCE OR REPLACEMENT OF THE DRIVING TOOTH IN FACE DRIVERS

The face drivers have an operating range that goes from \emptyset 5 mm to \emptyset 110 mm, depending on the model and the driving tooth used.

In case of wear, the driving tooth can be rotated by 180° and re-used (see catalog). However, this rotation could change the diameter of the operating range.

The period between maintenance (with any replacement of driving tooth) depends on the use of the driver and the material processed.

A driving tooth can be sharpened to a maximum of 2 mm below its original size.

REPLACEMENT OF CENTRAL POINT IN FACE DRIVERS

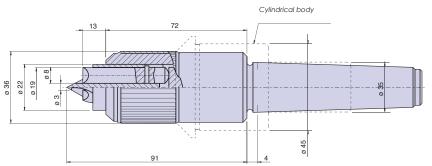
The face drivers have a spring loaded point.

The replacement is straightforward and does not require any special tools, just grasp it by hand and remove it from the seat.

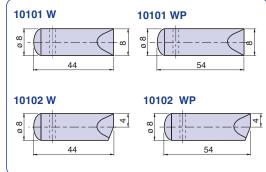
Under no circumstances must the rear spring-tensioning cap be adjusted.

Face Drivers Grinding

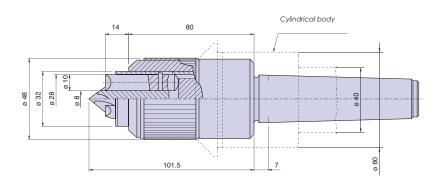
TYPE T/AW



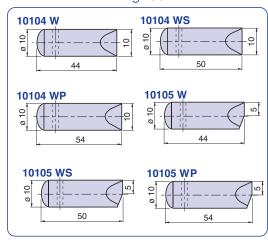
Driving teeth



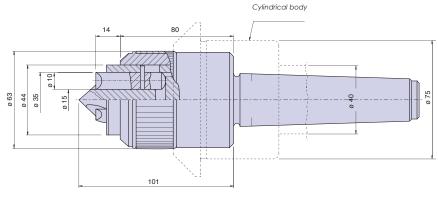
TYPE T/BW



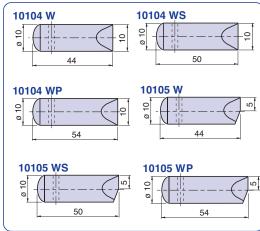
Driving teeth



TYPE T/OCW

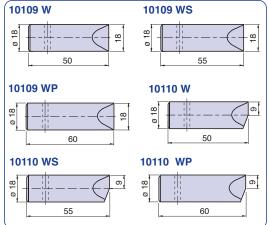


Driving teeth

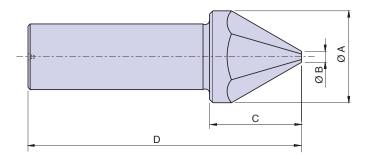


TYPE T/CW 116 85 Cylindrical body

Driving teeth

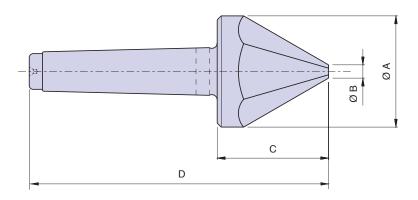


Cylindrical pipe driving center in special fully hardened steel



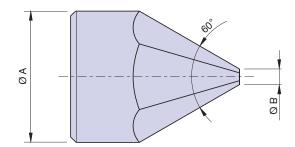
СМ	ØA	ØB	С	D	Model
Cylindrical	42	5	42	125	0528000
Cylindrical	60	15	47	130	0528010

Conical pipe driving center in special fully hardened steel



CM	ØA	ØB	С	D	Model
2	42	5	42	113	0528002
3	42	5	42	130	0528003
4	42	5	42	153	0528004
5	42	5	44	180	0528005

Fully hardened steel driving center for conical pipes of large dimensions



ØA	ØB	Model
70	20	05281070
115	65	05281115
160	110	05281160
200	150	05281200
245	195	05281245