



ISO 9001:2015

บริษัท อินเตอร์ไลน์เทคโนโลยี จำกัด INTERLINE TECHNOLOGY CO.,LTD.



PRODUCT CATALOG

WELDING ELECTRODES & RELATED EQUIPMENT



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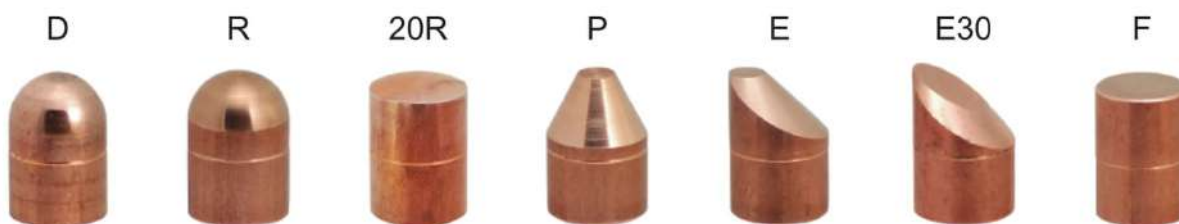
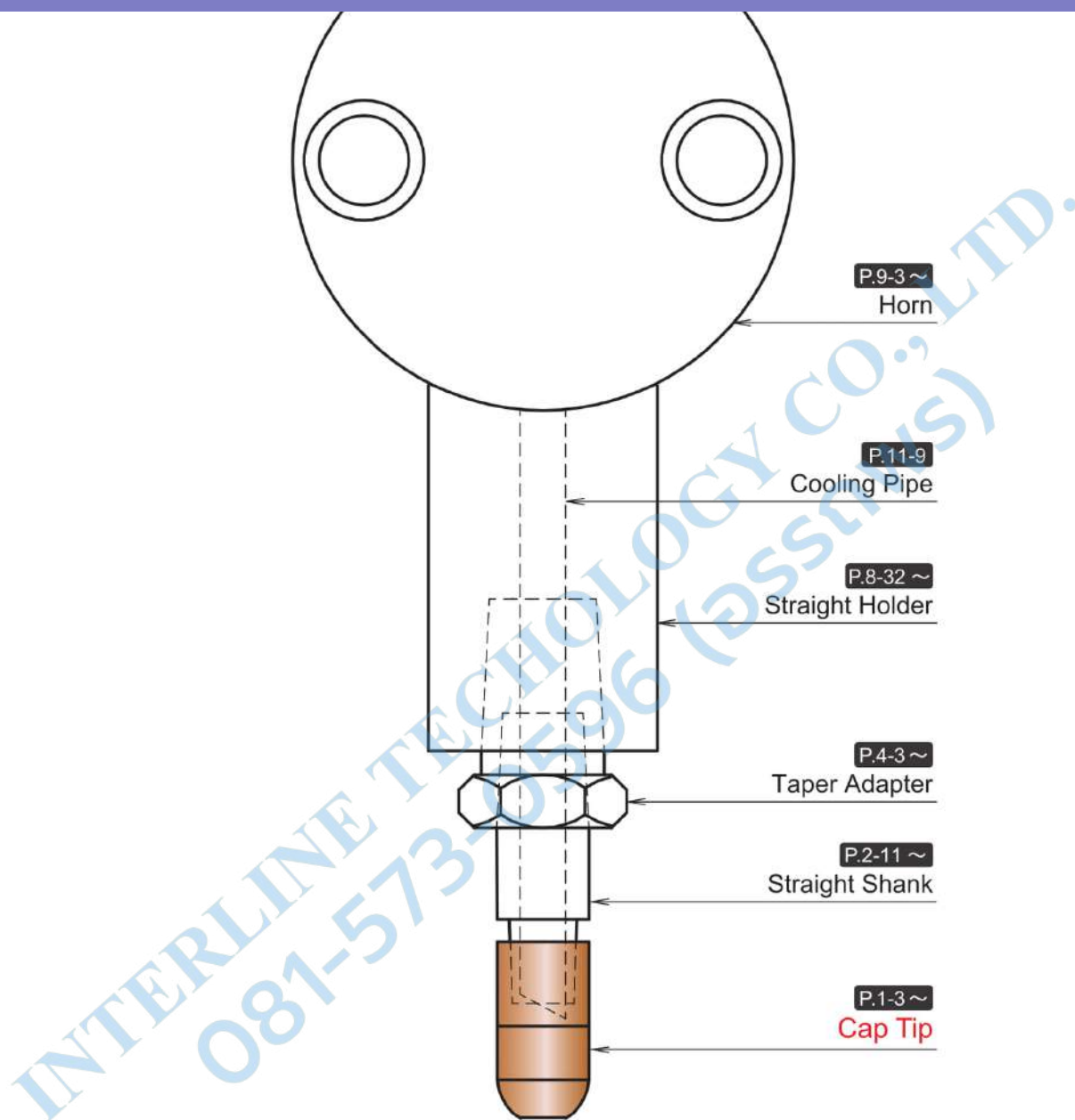
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CAP TIP

1

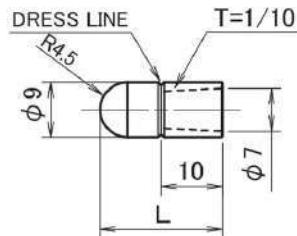


φ9

R Type

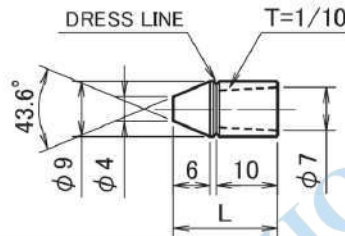


4.5R-0920-C



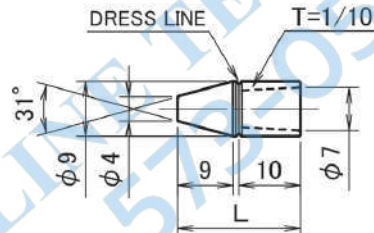
Model No.	L
4.5R-0917-C	17
4.5R-0920-C	20

P Type



Model No.	L
P-0917-C	17

P Type

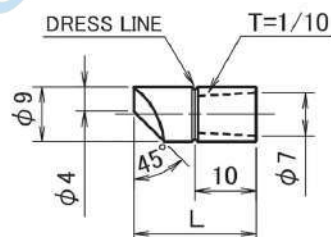


Model No.	L
P-0920-C	20

E Type



E-0920-C

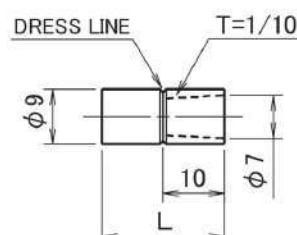


Model No.	L
E-0917-C	17
E-0920-C	20

F Type



F-0920-C



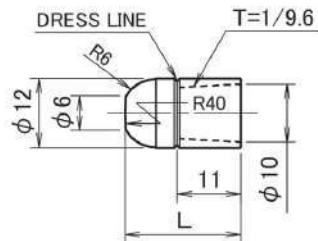
Model No.	L
F-0917-C	17
F-0920-C	20

φ12

D Type



D-1220-C

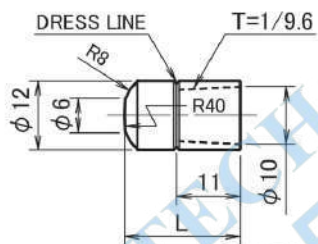


Model No.	L
D-1220-C	20
D-1225-C	25

D8R Type



D8R-1220-C

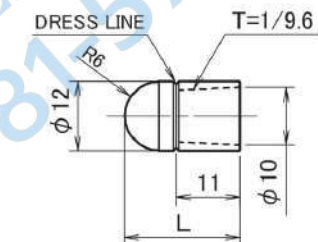


Model No.	L
D8R-1220-C	20
D8R-1225-C	25

R Type



6R-1220-C

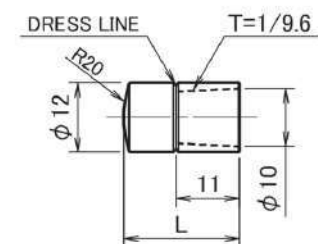


Model No.	L
6R-1220-C	20
6R-1225-C	25

20R Type



20R-1220-C



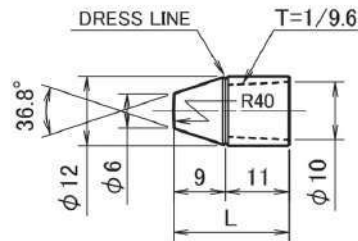
Model No.	L
20R-1220-C	20
20R-1225-C	25

φ12

P Type



P-1220-C

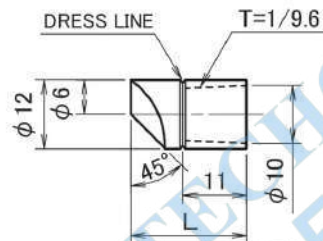


Model No.	L
P-1220-C	20
P-1225-C	25

E Type

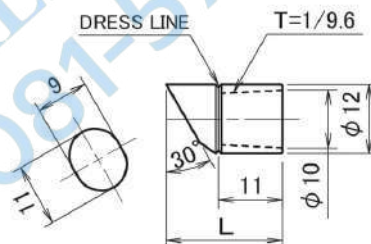


E-1220-C



Model No.	L
E-1220-C	20
E-1225-C	25

E30 Type

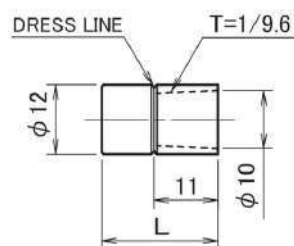


Model No.	L
E30-1220-C	20

F Type



F-1220-C



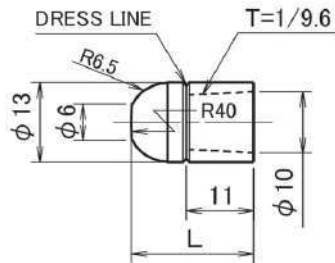
Model No.	L
F-1220-C	20
F-1225-C	25

φ13

D Type



D-1320-C

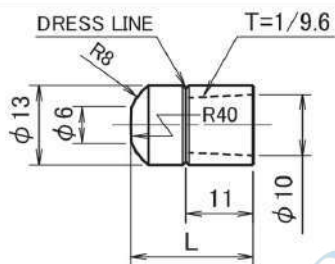


Model No.	L
D-1320-C	20
D-1323-C	23
D-1325-C	25

D8R Type



D8R-1320-C

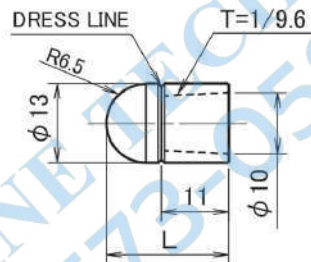


Model No.	L
D8R-1320-C	20
D8R-1323-C	23
D8R-1325-C	25

R Type



6.5R-1320-C

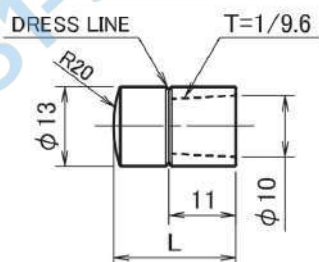


Model No.	L
6.5R-1320-C	20
6.5R-1323-C	23
6.5R-1325-C	25

20R Type



20R-1320-C

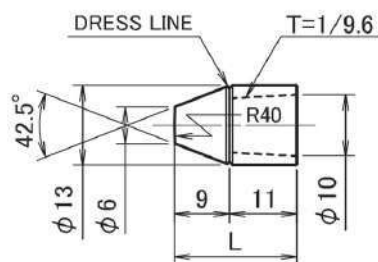


Model No.	L
20R-1320-C	20
20R-1323-C	23
20R-1325-C	25

P Type



P-1320-C



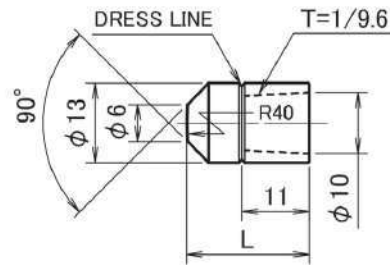
Model No.	L
P-1320-C	20
P-1323-C	23
P-1325-C	25

φ13

P90 Type



P90-1320-C

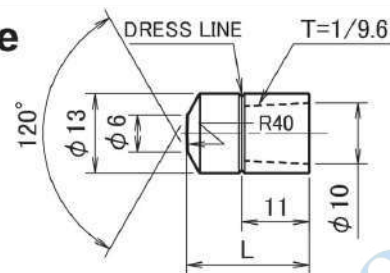


Model No.	L
P90-1320-C	20
P90-1323-C	23
P90-1325-C	25

P120 Type



P120-1320-C

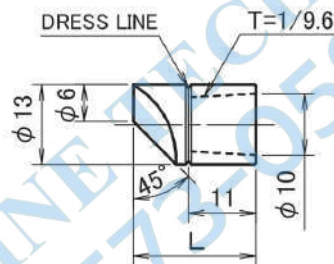


Model No.	L
P120-1320-C	20
P120-1323-C	23
P120-1325-C	25

E Type

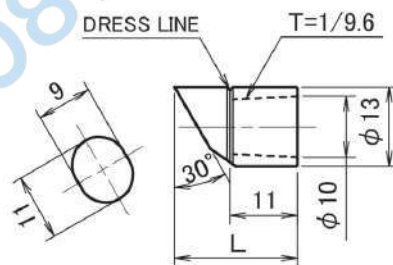


E-1320-C



Model No.	L
E-1320-C	20
E-1323-C	23
E-1325-C	25

E30 Type

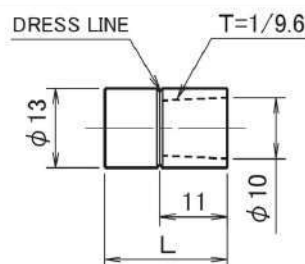


Model No.	L
E30-1320-C	20

F Type



F-1320-C



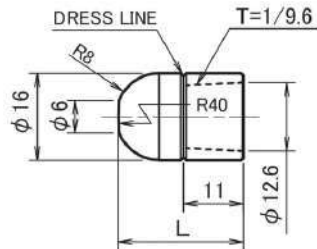
Model No.	L
F-1320-C	20
F-1323-C	23
F-1325-C	25

φ16

D Type



D-1623-C

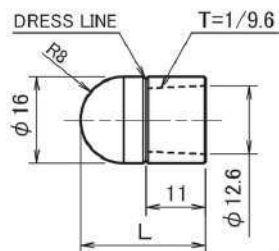


Model No.	L
D-1620-C	20
D-1623-C	23
D-1625-C	25

R Type



8R-1623-C

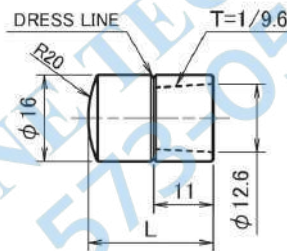


Model No.	L
8R-1620-C	20
8R-1623-C	23
8R-1625-C	25

20R Type



20R-1623-C

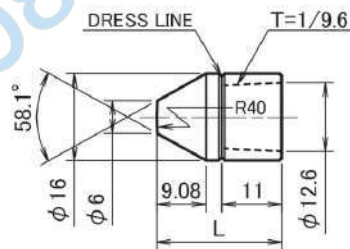


Model No.	L
20R-1623-C	23
20R-1625-C	25

P Type



P-1623-C

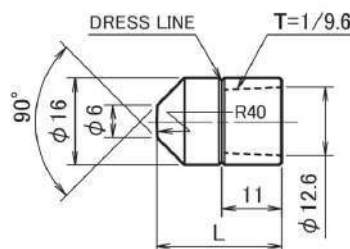


Model No.	L
P-1623-C	23
P-1625-C	25

P90 Type



P90-1623-C



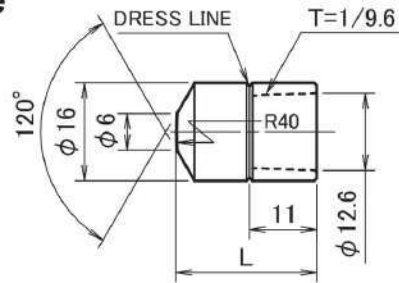
Model No.	L
P90-1623-C	23
P90-1625-C	25

φ16

P120 Type



P120-1623-C

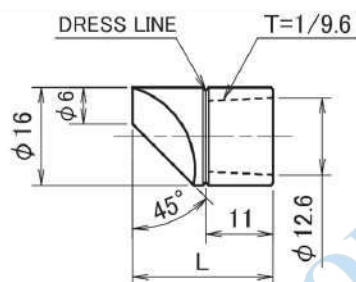


Model No.	L
P120-1623-C	23
P120-1625-C	25

E Type

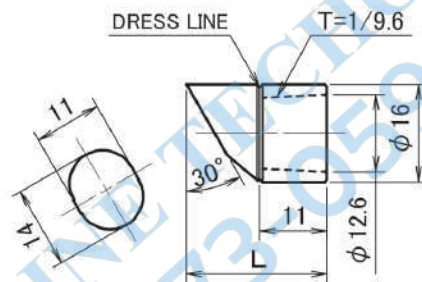


E-1623-C



Model No.	L
E-1623-C	23
E-1625-C	25

E30 Type

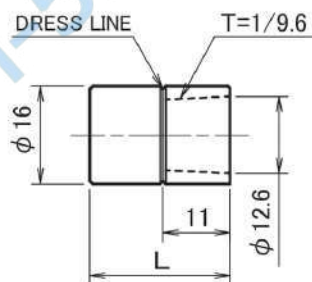


Model No.	L
E30-1623-C	23

F Type

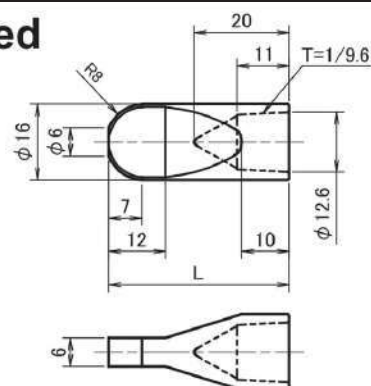


F-1623-C



Model No.	L
F-1623-C	23
F-1625-C	25

Double-sided cut type



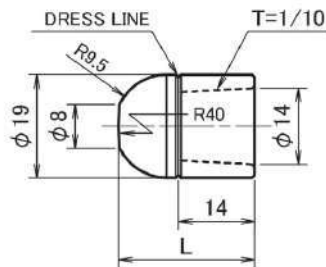
Model No.	L
D-1638-RC6-12-C	38

φ19

D Type



D-1925-C

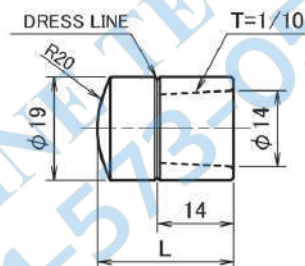


Model No.	L
D-1923-C	23
D-1925-C	25

20R Type



20R-1925-C

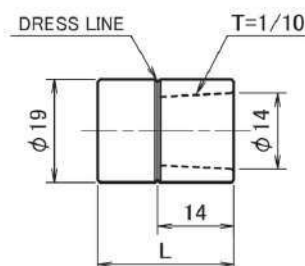


Model No.	L
20R-1923-C	23
20R-1925-C	25

F Type



F-1925-C



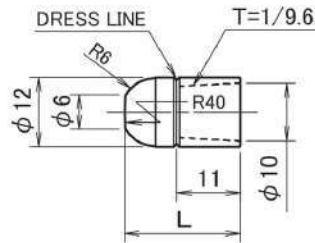
Model No.	L
F-1923-C	23
F-1925-C	25

φ12

D Type



D-1220-D

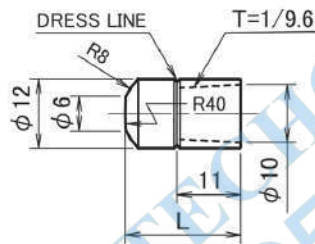


Model No.	L
D-1220-D	20
D-1225-D	25

D8R Type



D8R-1220-D

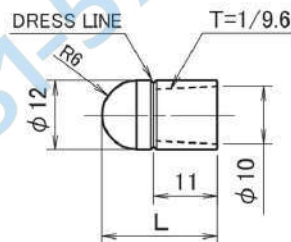


Model No.	L
D8R-1220-D	20
D8R-1225-D	25

R Type



6R-1220-D

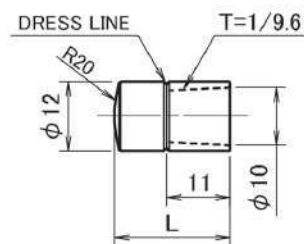


Model No.	L
6R-1220-D	20
6R-1225-D	25

20R Type



20R-1220-D



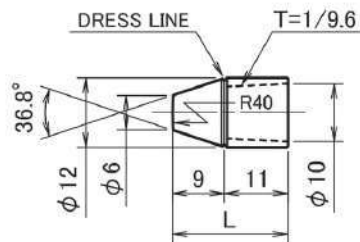
Model No.	L
20R-1220-D	20
20R-1225-D	25

φ12

P Type



P-1220-D

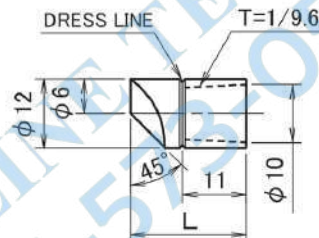


Model No.	L
P-1220-D	20
P-1225-D	25

E Type



E-1220-D

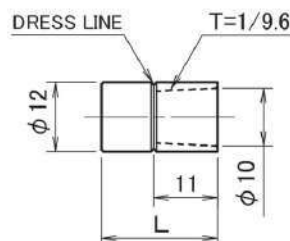


Model No.	L
E-1220-D	20
E-1225-D	25

F Type



F-1220-D



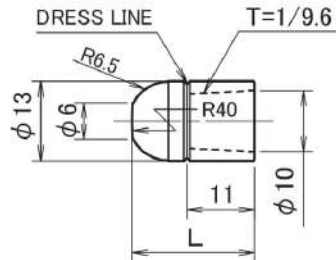
Model No.	L
F-1220-D	20
F-1225-D	25

φ13

D Type



D-1320-D

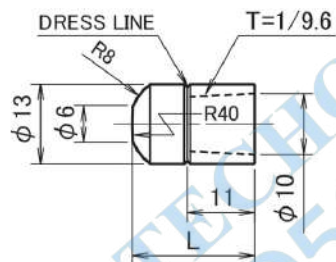


Model No.	L
D-1320-D	20
D-1323-D	23
D-1325-D	25

D8R Type



D8R-1320-D

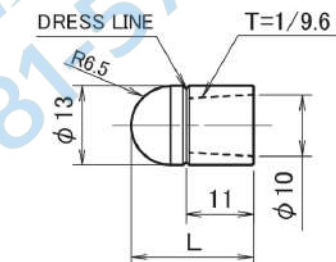


Model No.	L
D8R-1320-D	20
D8R-1323-D	23
D8R-1325-D	25

R Type



6.5R-1320-D

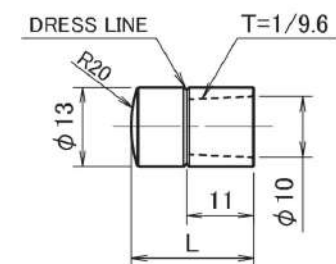


Model No.	L
6.5R-1320-D	20
6.5R-1323-D	23
6.5R-1325-D	25

20R Type



20R-1320-D



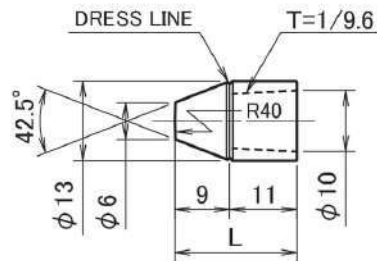
Model No.	L
20R-1320-D	20
20R-1323-D	23
20R-1325-D	25

φ13

P Type



P-1320-D

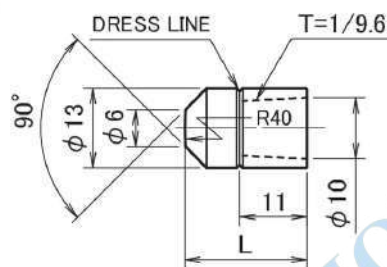


Model No.	L
P-1320-D	20
P-1323-D	23
P-1325-D	25

P90 Type



P90-1320-D

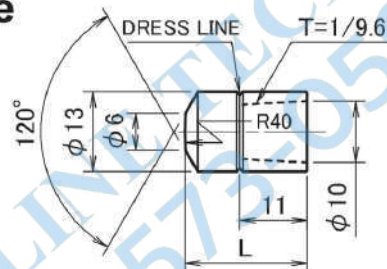


Model No.	L
P90-1320-D	20
P90-1323-D	23
P90-1325-D	25

P120 Type



P120-1320-D

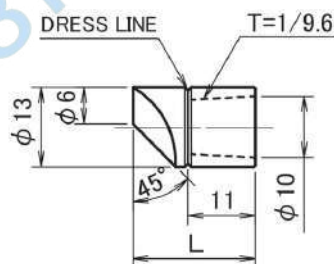


Model No.	L
P120-1320-D	20
P120-1323-D	23
P120-1325-D	25

E Type



E-1320-D

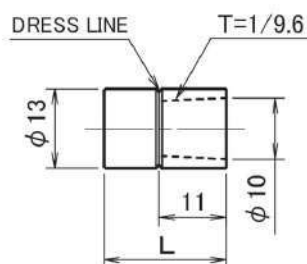


Model No.	L
E-1320-D	20
E-1323-D	23
E-1325-D	25

F Type



F-1320-D



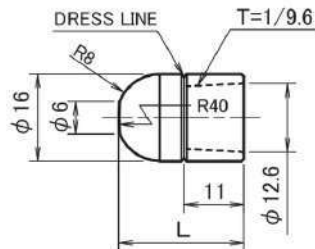
Model No.	L
F-1320-D	20
F-1323-D	23
F-1325-D	25

φ16

D Type



D-1623-D

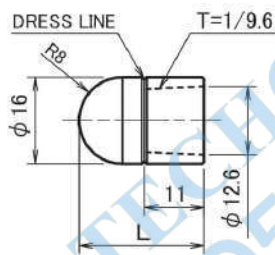


Model No.	L
D-1620-SC-D	20
D-1623-D	23
D-1625-D	25

R Type



8R-1623-D

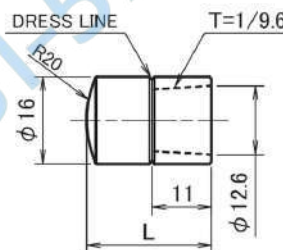


Model No.	L
8R-1620-SC-D	20
8R-1623-D	23
8R-1625-D	25

20R Type



20R-1623-D

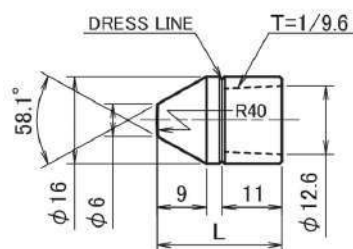


Model No.	L
20R-1620-SC-D	20
20R-1623-D	23
20R-1625-D	25

P Type



P-1623-D



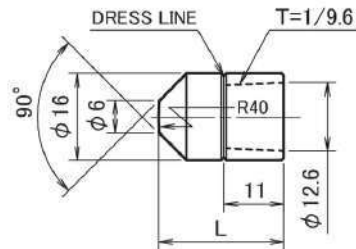
Model No.	L
P-1620-SC-D	20
P-1623-D	23
P-1625-D	25

φ16

P90 Type



P90-1623-D

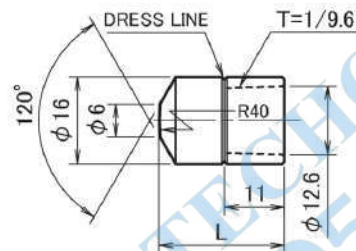


Model No.	L
P90-1620-SC-D	20
P90-1623-D	23
P90-1625-D	25

P120 Type



P120-1623-D

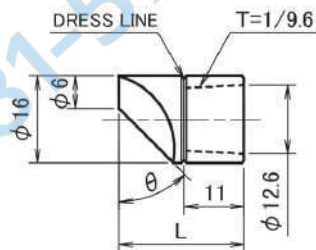


Model No.	L
P120-1620-SC-D	20
P120-1623-D	23
P120-1625-D	25

E Type



E-1623-D

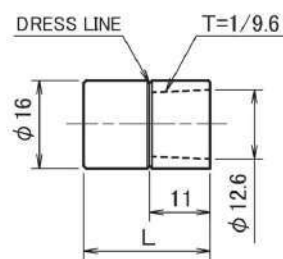


Model No.	θ	L
E-1620-SC-D	40°	20
E-1623-D	45°	23
E-1625-D	45°	25

F Type



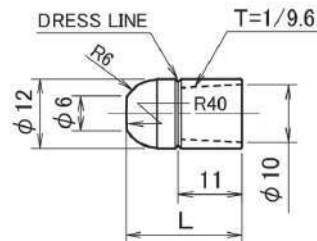
F-1623-D



Model No.	L
F-1620-SC-D	20
F-1623-D	23
F-1625-D	25

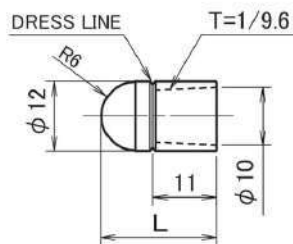
M2 Cap Tip

D Type



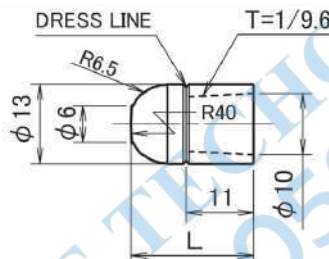
Model No.	L
D-1220-M2	20

R Type



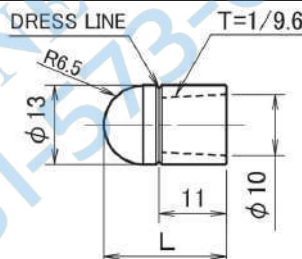
Model No.	L
6R-1220-M2	20

D Type



Model No.	L
D-1320-M2	20

R Type

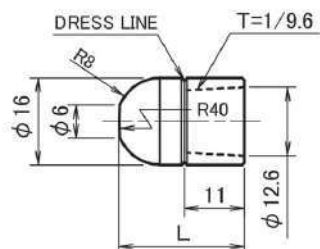


Model No.	L
6.5R-1320-M2	20

D Type



D-1623-M2

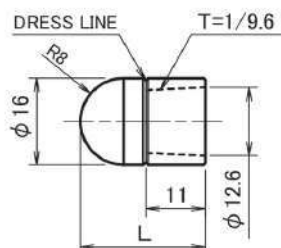


Model No.	L
D-1623-M2	23
D-1625-M2	25

R Type



8R-1623-M2



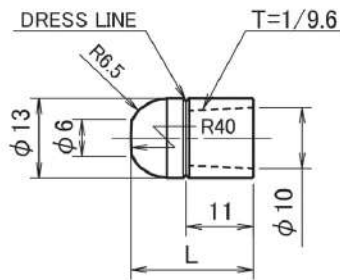
Model No.	L
8R-1623-M2	23
8R-1625-M2	25

$\phi 13$
 $\phi 16$

D Type



D-1320-S



Model No.

L

D-1320-S

20

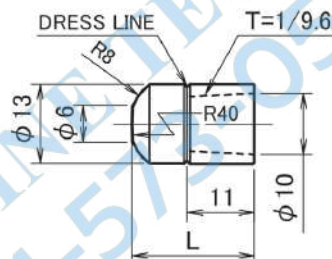
D-1323-S

23

D8R Type



D8R-1320-S



Model No.

L

D8R-1320-S

20

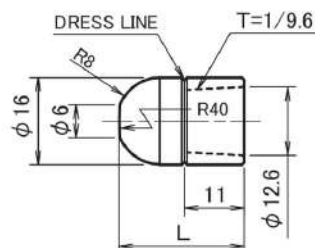
D8R-1323-S

23

D Type



D-1623-S



Model No.

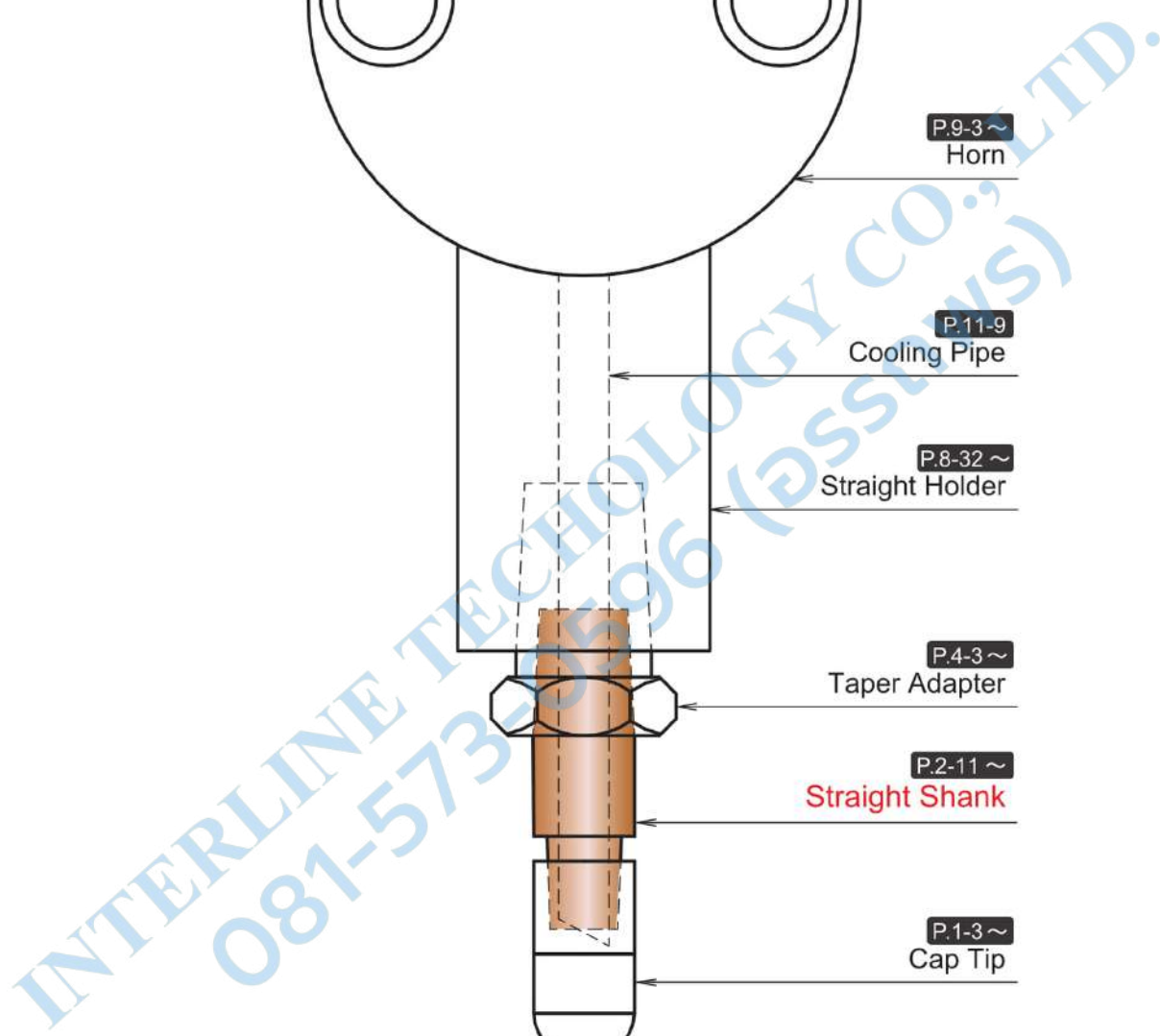
L

D-1623-S

23

D-1625-S

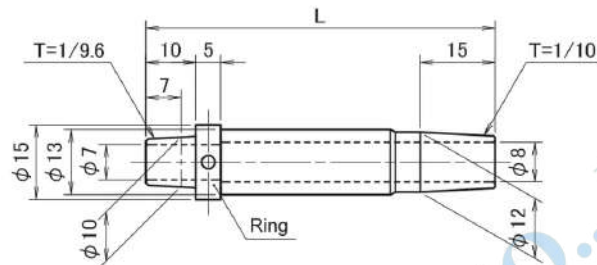
25



$\phi 13$ $\phi 12$ T=1/10



RSS-1370-1



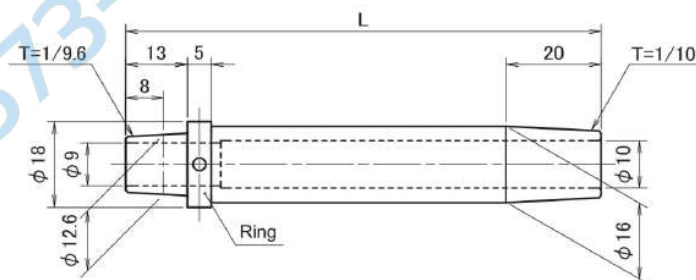
Model No.	L
RSS-1340-1	40
RSS-1345-1	45
RSS-1350-1	50
RSS-1355-1	55

Model No.	L
RSS-1360-1	60
RSS-1365-1	65
RSS-1370-1	70

$\phi 16$ T=1/10



RSS-16100-1



Model No.	L
RSS-1640-1	40
RSS-1645-1	45
RSS-1650-1	50
RSS-1655-1	55
RSS-1660-1	60
RSS-1665-1	65
RSS-1670-1	70

Model No.	L
RSS-1675-1	75
RSS-1680-1	80
RSS-1685-1	85
RSS-1690-1	90
RSS-1695-1	95
RSS-16100-1	100

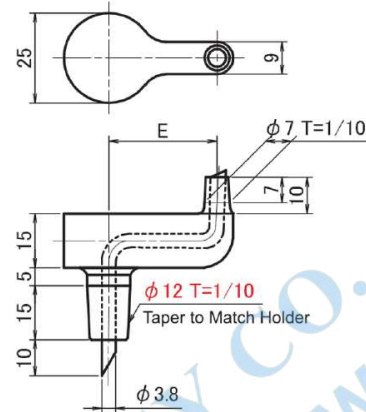
Suitable for $\phi 9$ Cap Tip (90° type)

Taper to Match Holder

$\phi 12$ T=1/10



MPS-50-0712



Model No.	E
MPS-20-0712	20
MPS-30-0712	30
MPS-40-0712	40
MPS-50-0712	50
MPS-60-0712	60

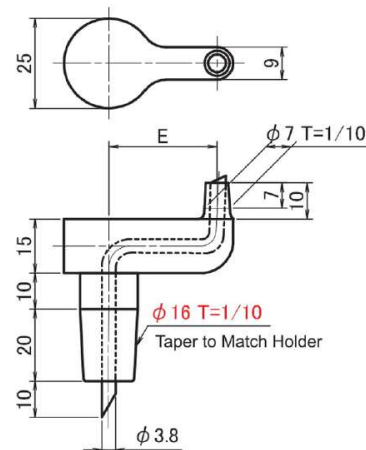
Model No.	E
MPS-70-0712	70
MPS-80-0712	80
MPS-90-0712	90
MPS-100-0712	100

Taper to Match Holder

$\phi 16$ T=1/10



MPS-40-0716



Model No.	E
MPS-20-0716	20
MPS-30-0716	30
MPS-40-0716	40
MPS-50-0716	50
MPS-60-0716	60

Model No.	E
MPS-70-0716	70
MPS-80-0716	80
MPS-90-0716	90
MPS-100-0716	100

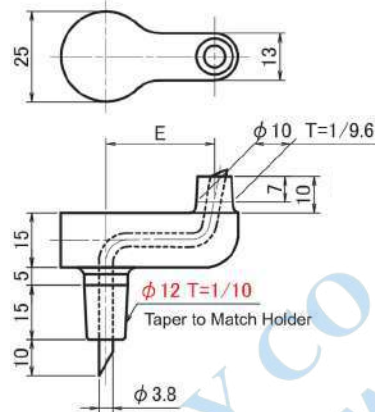
Suitable for $\phi 12 \bullet \phi 13$ Cap Tip (90° type)

Taper to Match Holder

$\phi 12$ T=1/10



MPS-30-1012



Model No.	E
MPS-20-1012	20
MPS-30-1012	30
MPS-40-1012	40
MPS-50-1012	50
MPS-60-1012	60

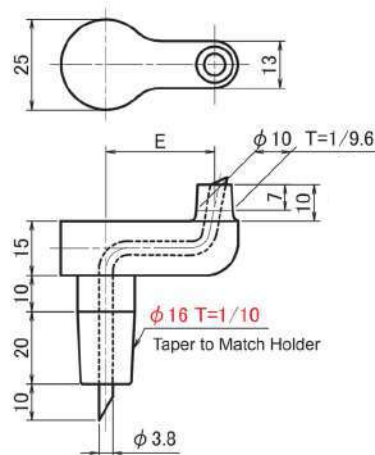
Model No.	E
MPS-70-1012	70
MPS-80-1012	80
MPS-90-1012	90
MPS-100-1012	100

Taper to Match Holder

$\phi 16$ T=1/10



MPS-40-1016



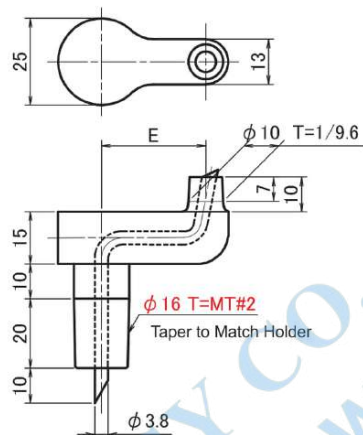
Model No.	E
MPS-20-1016	20
MPS-30-1016	30
MPS-40-1016	40
MPS-50-1016	50
MPS-60-1016	60

Model No.	E
MPS-70-1016	70
MPS-80-1016	80
MPS-90-1016	90
MPS-100-1016	100

Ø 16 T=MT#2



Model No.	E
MPS-20-1016M	20
MPS-30-1016M	30
MPS-40-1016M	40
MPS-50-1016M	50
MPS-60-1016M	60

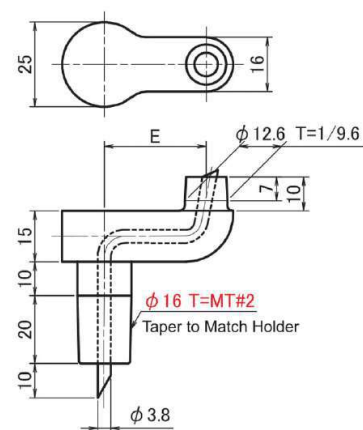


Model No.	E
MPS-70-1016M	70
MPS-80-1016M	80
MPS-90-1016M	90
MPS-100-1016M	100

Ø 16 T=MT#2

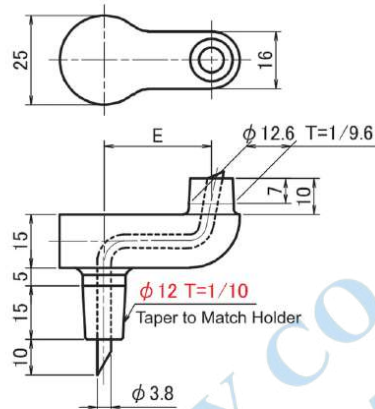


Model No.	E
MPS-20-12616M	20
MPS-30-12616M	30
MPS-40-12616M	40
MPS-50-12616M	50
MPS-60-12616M	60



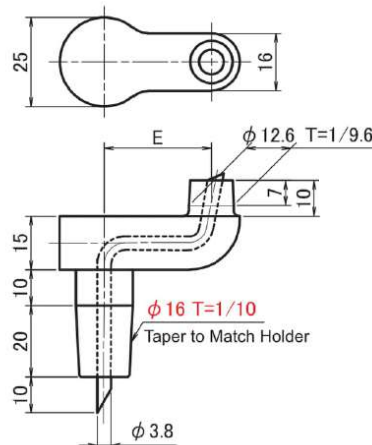
Model No.	E
MPS-70-12616M	70
MPS-80-12616M	80
MPS-90-12616M	90
MPS-100-12616M	100

$\phi 12 \quad T=1/10$



Model No.	E
MPS-70-12612	70
MPS-80-12612	80
MPS-90-12612	90
MPS-100-12612	100

$\phi 16$ T=1/10

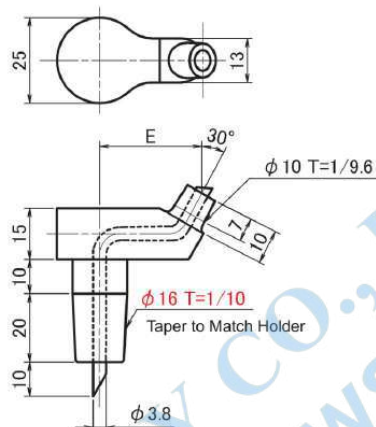


Model No.	E
MPS-70-12616	70
MPS-80-12616	80
MPS-90-12616	90
MPS-100-12616	100

Ø 16 T=1/10



Model No.	E
MPS30-25-1016	25
MPS30-30-1016	30
MPS30-40-1016	40
MPS30-50-1016	50
MPS30-60-1016	60

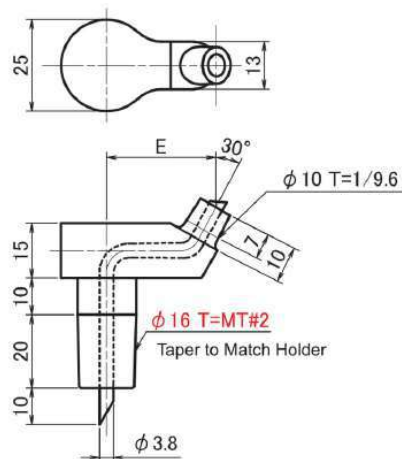


Model No.	E
MPS30-70-1016	70
MPS30-80-1016	80
MPS30-90-1016	90
MPS30-100-1016	100

Ø 16 T=MT#2



Model No.	E
MPS30-25-1016M	25
MPS30-30-1016M	30
MPS30-40-1016M	40
MPS30-50-1016M	50
MPS30-60-1016M	60

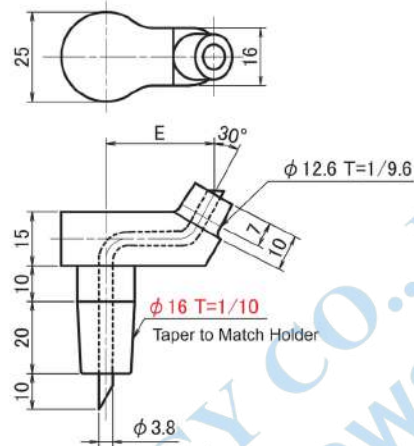


Model No.	E
MPS30-70-1016M	70
MPS30-80-1016M	80
MPS30-90-1016M	90
MPS30-100-1016M	100

Suitable for Cap Tip $\phi 16$

Taper to Match Holder

$\phi 16$ T=1/10

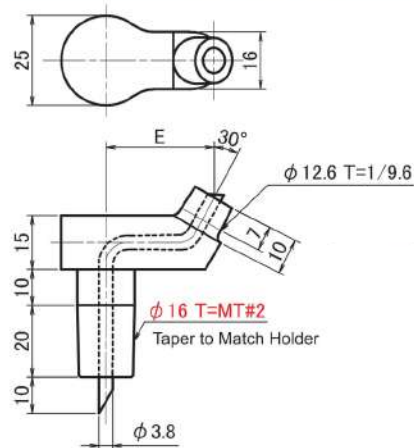


Model No.	E
MPS30-25-12616	25
MPS30-30-12616	30
MPS30-40-12616	40
MPS30-50-12616	50
MPS30-60-12616	60

Model No.	E
MPS30-70-12616	70
MPS30-80-12616	80
MPS30-90-12616	90
MPS30-100-12616	100

Taper to Match Holder

$\phi 16$ T=MT#2

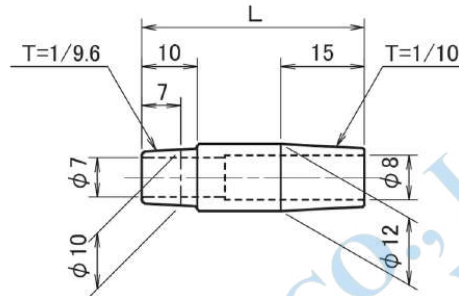


Model No.	E
MPS30-25-12616M	25
MPS30-30-12616M	30
MPS30-40-12616M	40
MPS30-50-12616M	50
MPS30-60-12616M	60

Model No.	E
MPS30-70-12616M	70
MPS30-80-12616M	80
MPS30-90-12616M	90
MPS30-100-12616M	100

$\phi 12$ $\phi 13$

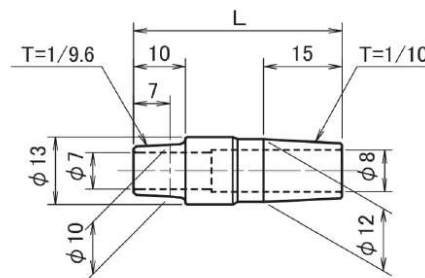
$\phi 12$ T=1/10



Model No.	L
SS-1225-1	25
SS-1230-1	30
SS-1235-1	35
SS-1240-1	40
SS-1245-1	45
SS-1250-1	50
SS-1255-1	55
SS-1260-1	60

Model No.	L
SS-1265-1	65
SS-1270-1	70
SS-1275-1	75
SS-1280-1	80
SS-1285-1	85
SS-1290-1	90
SS-1295-1	95
SS-12100-1	100

$\phi 13$ $\phi 12$ T=1/10



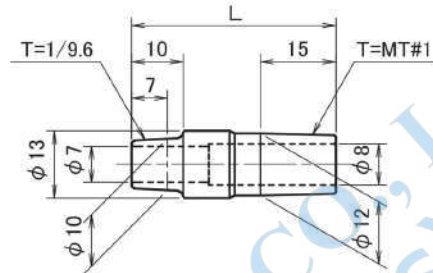
Model No.	L
SS-1335-1	35
SS-1340-1	40
SS-1345-1	45
SS-1350-1	50
SS-1355-1	55
SS-1360-1	60
SS-1365-1	65

Model No.	L
SS-1370-1	70
SS-1375-1	75
SS-1380-1	80
SS-1385-1	85
SS-1390-1	90
SS-1395-1	95
SS-13100-1	100

φ 13

φ 13 φ 12 T=MT#1

SS-1340-2

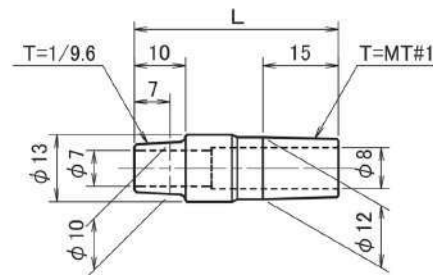


Model No.	L
SS-1325-2	25
SS-1330-2	30
SS-1335-2	35
SS-1340-2	40
SS-1345-2	45
SS-1350-2	50
SS-1355-2	55
SS-1360-2	60

Model No.	L
SS-1365-2	65
SS-1370-2	70
SS-1375-2	75
SS-1380-2	80
SS-1385-2	85
SS-1390-2	90
SS-1395-2	95
SS-13100-2	100

φ 13 φ 12 T=MT#1

SS-1340-2B



Model No.	L
SS-1335-2B	35
SS-1340-2B	40
SS-1345-2B	45
SS-1350-2B	50
SS-1355-2B	55
SS-1360-2B	60
SS-1365-2B	65

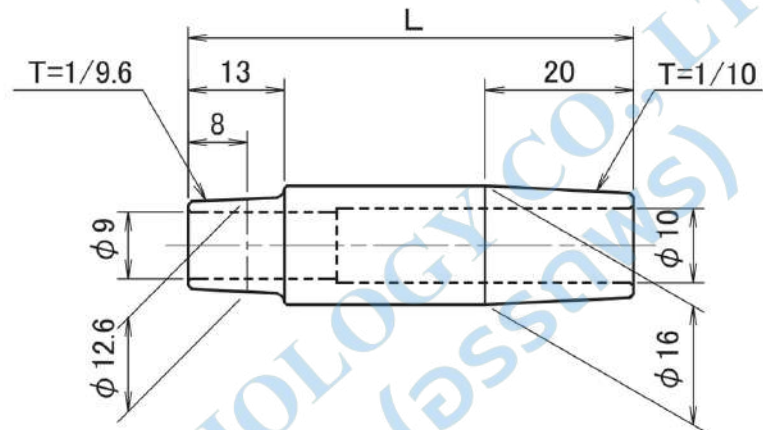
Model No.	L
SS-1370-2B	70
SS-1375-2B	75
SS-1380-2B	80
SS-1385-2B	85
SS-1390-2B	90
SS-1395-2B	95
SS-13100-2B	100

$\phi 16$

$\phi 16$ T=1/10



SS-1660-1



Model No.	L
SS-1630-1	30
SS-1635-1	35
SS-1640-1	40
SS-1645-1	45
SS-1650-1	50
SS-1655-1	55
SS-1660-1	60
SS-1665-1	65
SS-1670-1	70
SS-1675-1	75
SS-1680-1	80
SS-1685-1	85
SS-1690-1	90
SS-1695-1	95

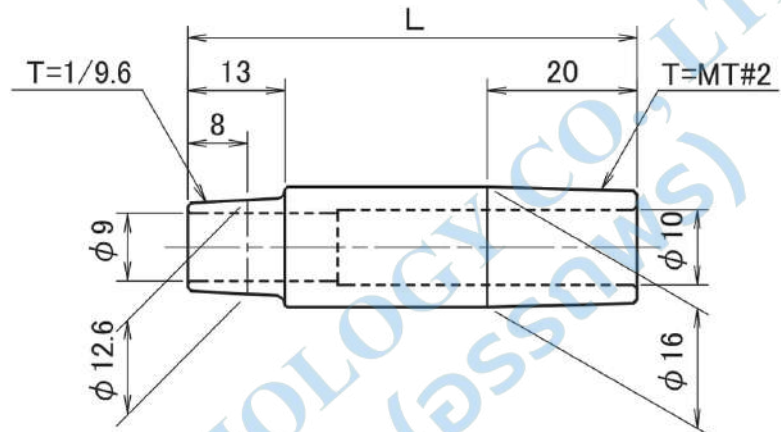
Model No.	L
SS-16100-1	100
SS-16105-1	105
SS-16110-1	110
SS-16115-1	115
SS-16120-1	120
SS-16125-1	125
SS-16130-1	130
SS-16135-1	135
SS-16140-1	140
SS-16145-1	145
SS-16150-1	150
SS-16155-1	155
SS-16160-1	160

φ16

φ16 T=MT#2



SS-1660-2



Model No.	L
SS-1630-2	30
SS-1635-2	35
SS-1640-2	40
SS-1645-2	45
SS-1650-2	50
SS-1655-2	55
SS-1660-2	60
SS-1665-2	65
SS-1670-2	70
SS-1675-2	75
SS-1680-2	80
SS-1685-2	85
SS-1690-2	90
SS-1695-2	95

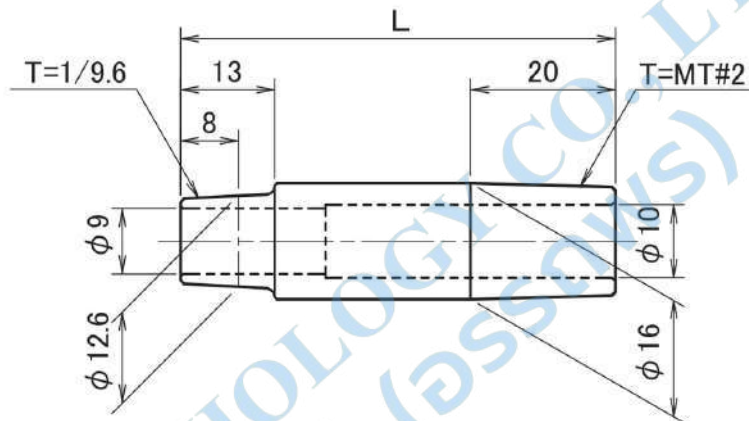
Model No.	L
SS-16100-2	100
SS-16105-2	105
SS-16110-2	110
SS-16115-2	115
SS-16120-2	120
SS-16125-2	125
SS-16130-2	130
SS-16135-2	135
SS-16140-2	140
SS-16145-2	145
SS-16150-2	150
SS-16155-2	155
SS-16160-2	160

φ16

φ16 T=MT#2



SS-1660-2B



Model No.	L
SS-1630-2B	30
SS-1635-2B	35
SS-1640-2B	40
SS-1645-2B	45
SS-1650-2B	50
SS-1655-2B	55
SS-1660-2B	60
SS-1665-2B	65
SS-1670-2B	70
SS-1675-2B	75
SS-1680-2B	80
SS-1685-2B	85
SS-1690-2B	90
SS-1695-2B	95

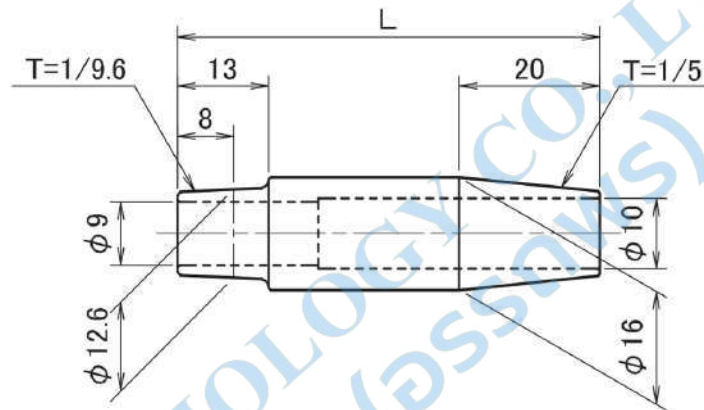
Model No.	L
SS-16100-2B	100
SS-16105-2B	105
SS-16110-2B	110
SS-16115-2B	115
SS-16120-2B	120
SS-16125-2B	125
SS-16130-2B	130
SS-16135-2B	135
SS-16140-2B	140
SS-16145-2B	145
SS-16150-2B	150
SS-16155-2B	155
SS-16160-2B	160

$\phi 16$

$\phi 16$ T=1/5



SS-1660-3



Model No.	L
SS-1640-3	40
SS-1645-3	45
SS-1650-3	50
SS-1655-3	55
SS-1660-3	60
SS-1665-3	65
SS-1670-3	70
SS-1675-3	75
SS-1680-3	80
SS-1685-3	85
SS-1690-3	90
SS-1695-3	95
SS-16100-3	100

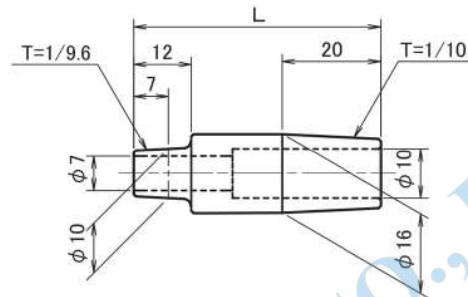
Model No.	L
SS-16105-3	105
SS-16110-3	110
SS-16115-3	115
SS-16120-3	120
SS-16125-3	125
SS-16130-3	130
SS-16135-3	135
SS-16140-3	140
SS-16145-3	145
SS-16150-3	150
SS-16155-3	155
SS-16160-3	160

Suitable for $\phi 12 \bullet \phi 13$ Cap Tips

$\phi 16$ T=1/10



SS10-1640-1



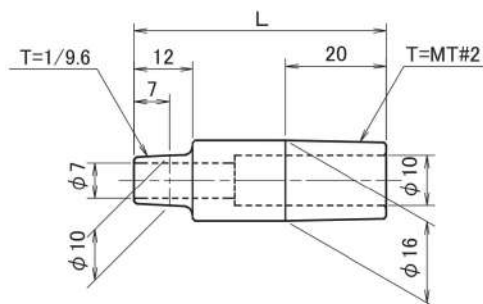
Model No.	L
SS10-1630-1	30
SS10-1635-1	35
SS10-1640-1	40
SS10-1645-1	45
SS10-1650-1	50
SS10-1655-1	55
SS10-1660-1	60
SS10-1665-1	65

Model No.	L
SS10-1670-1	65
SS10-1675-1	70
SS10-1680-1	80
SS10-1685-1	85
SS10-1690-1	90
SS10-1695-1	95
SS10-16100-1	100

$\phi 16$ T=MT#2



SS10-1640-2



Model No.	L
SS10-1630-2	30
SS10-1635-2	35
SS10-1640-2	40
SS10-1645-2	45
SS10-1650-2	50
SS10-1655-2	55
SS10-1660-2	60
SS10-1665-2	65

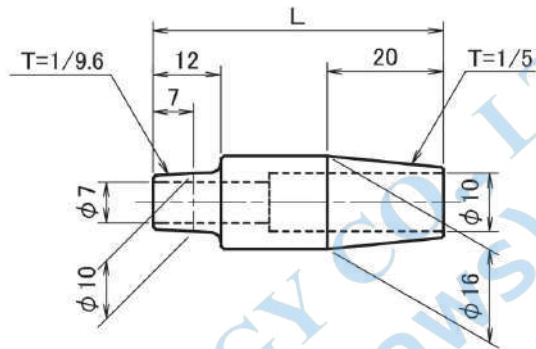
Model No.	L
SS10-1670-2	70
SS10-1675-2	75
SS10-1680-2	80
SS10-1685-2	85
SS10-1690-2	90
SS10-1695-2	95
SS10-16100-2	100

Suitable for $\phi 12 \bullet \phi 13$ Cap Tips

$\phi 16$ T=1/5



SS10-1640-3



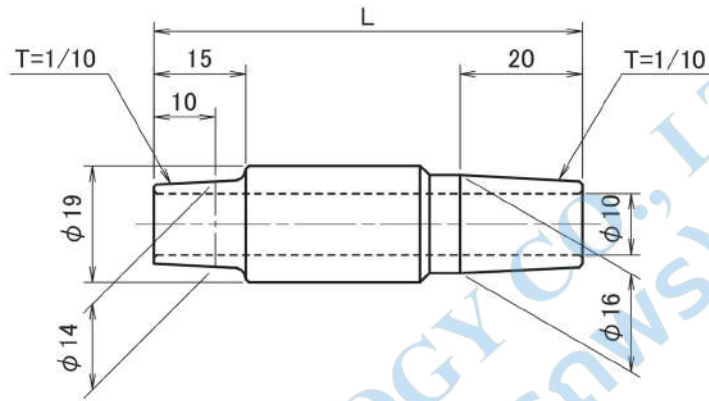
Model No.	L	Model No.	L
SS10-1640-3	40	SS10-1675-3	75
SS10-1645-3	45	SS10-1680-3	80
SS10-1650-3	50	SS10-1685-3	85
SS10-1655-3	55	SS10-1690-3	90
SS10-1660-3	60	SS10-1695-3	95
SS10-1665-3	65	SS10-16100-3	100
SS10-1670-3	70		

Suitable for $\phi 19$ Cap Tips

$\phi 16$ T=1/10



SS14-1970-1

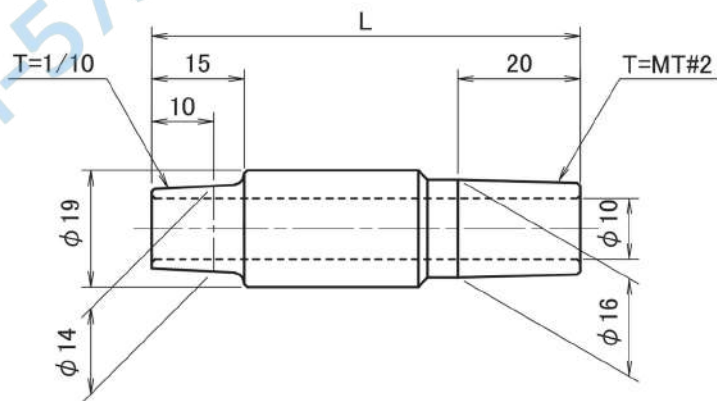


Model No.	L	Model No.	L
SS14-1950-1	50	SS14-1980-1	80
SS14-1960-1	60	SS14-1990-1	90
SS14-1970-1	70	SS14-19100-1	100

$\phi 16$ T=MT#2



SS14-1970-2



Model No.	L	Model No.	L
SS14-1950-2	50	SS14-1980-2	80
SS14-1960-2	60	SS14-1990-2	90
SS14-1970-2	70	SS14-19100-2	100

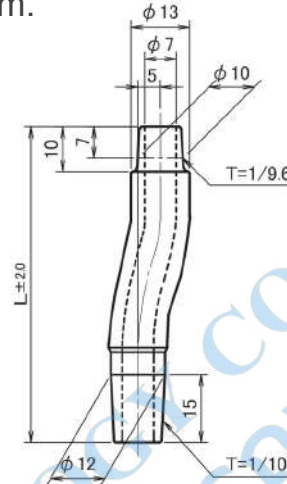
Suitable for $\phi 12 \bullet \phi 13$ Cap Tips

$\phi 13$ ($\phi 12$ T=1/10)

Offset: 5 mm.



BS-1370-5-1



Model No.	L
BS-1370-5-1	70
BS-1375-5-1	75
BS-1380-5-1	80
BS-1385-5-1	85

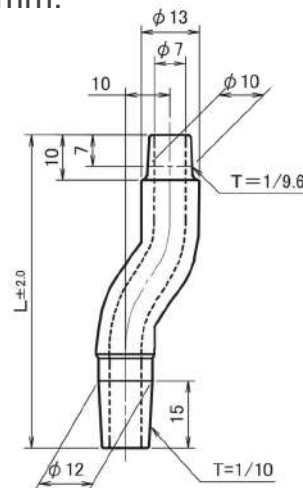
Model No.	L
BS-1390-5-1	90
BS-1395-5-1	95
BS-13100-5-1	100

$\phi 13$ ($\phi 12$ T=1/10)

Offset: 10 mm.



BS-1370-10-1



Model No.	L
BS-1370-10-1	70
BS-1375-10-1	75
BS-1380-10-1	80
BS-1385-10-1	85

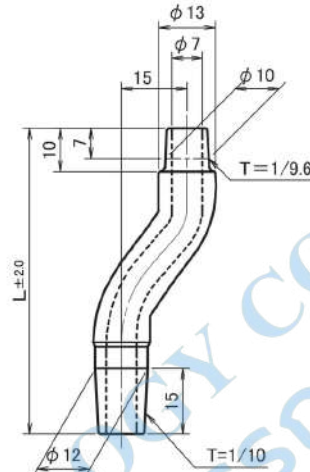
Model No.	L
BS-1390-10-1	90
BS-1395-10-1	95
BS-13100-10-1	100

Suitable for $\phi 12 \bullet \phi 13$ Cap Tips

$\phi 13$ ($\phi 12$ T=1/10) Offset: 15 mm.



BS-1370-15-1



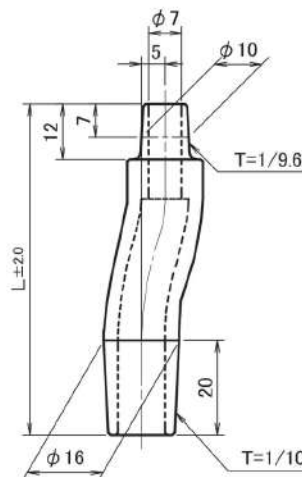
Model No.	L
BS-1370-15-1	70
BS-1375-15-1	75
BS-1380-15-1	80
BS-1385-15-1	85

Model No.	L
BS-1390-15-1	90
BS-1395-15-1	95
BS-13100-15-1	100

$\phi 16$ T=1/10 Offset: 5 mm.



BS10-1670-5-1



Model No.	L
BS10-1670-5-1	70
BS10-1675-5-1	75
BS10-1680-5-1	80
BS10-1685-5-1	85

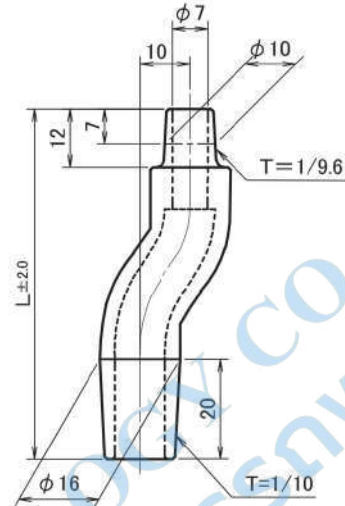
Model No.	L
BS10-1690-5-1	90
BS10-1695-5-1	95
BS10-16100-5-1	100

Suitable for $\phi 12 \bullet \phi 13$ Cap Tips

$\phi 16$ T=1/10 Offset: 10 mm.



BS10-1670-10-1



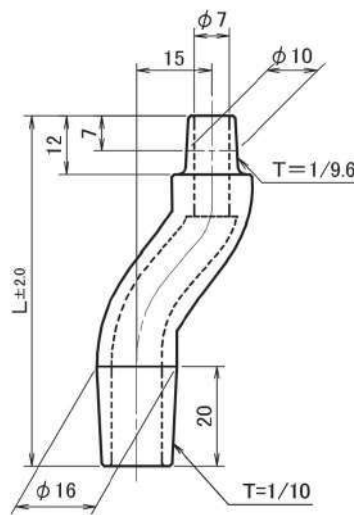
Model No.	L
BS10-1670-10-1	70
BS10-1675-10-1	75
BS10-1680-10-1	80
BS10-1685-10-1	85

Model No.	L
BS10-1690-10-1	90
BS10-1695-10-1	95
BS10-16100-10-1	100

$\phi 16$ T=1/10 Offset: 15 mm.



BS10-1670-15-1



Model No.	L
BS10-1670-15-1	70
BS10-1675-15-1	75
BS10-1680-15-1	80
BS10-1685-15-1	85

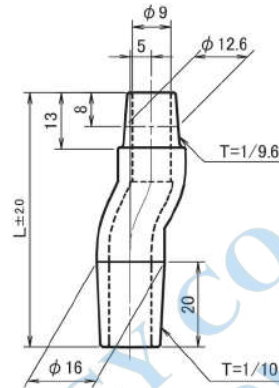
Model No.	L
BS10-1690-15-1	90
BS10-1695-15-1	95
BS10-16100-15-1	100

Suitable for $\phi 16$ Cap Tips

$\phi 16$ T=1/10 Offset: 5 mm.



BS-1660-5-1



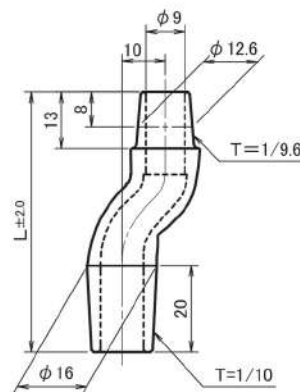
Model No.	L
BS-1650-5-1	50
BS-1655-5-1	55
BS-1660-5-1	60
BS-1665-5-1	65
BS-1670-5-1	70
BS-1675-5-1	75

Model No.	L
BS-1680-5-1	80
BS-1685-5-1	85
BS-1690-5-1	90
BS-1695-5-1	95
BS-16100-5-1	100

$\phi 16$ T=1/10 Offset: 10 mm.



BS-1660-10-1



Model No.	L
BS-1650-10-1	50
BS-1655-10-1	55
BS-1660-10-1	60
BS-1665-10-1	65
BS-1670-10-1	70
BS-1675-10-1	75

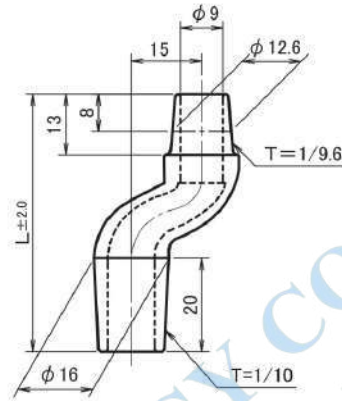
Model No.	L
BS-1680-10-1	80
BS-1685-10-1	85
BS-1690-10-1	90
BS-1695-10-1	95
BS-16100-10-1	100

Suitable for $\phi 16$ Cap Tips

$\phi 16$ T=1/10 Offset: 15 mm.



BS-1660-15-1



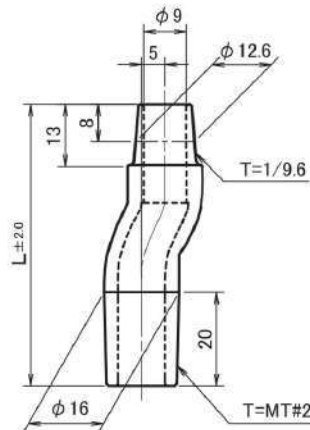
Model No.	L
BS-1650-15-1	50
BS-1655-15-1	55
BS-1660-15-1	60
BS-1665-15-1	65
BS-1670-15-1	70
BS-1675-15-1	75

Model No.	L
BS-1680-15-1	80
BS-1685-15-1	85
BS-1690-15-1	90
BS-1695-15-1	95
BS-16100-15-1	100

$\phi 16$ T=MT#2 Offset: 5 mm.



BS-1660-5-2



Model No.	L
BS-1650-5-2	50
BS-1655-5-2	55
BS-1660-5-2	60
BS-1665-5-2	65
BS-1670-5-2	70
BS-1675-5-2	75

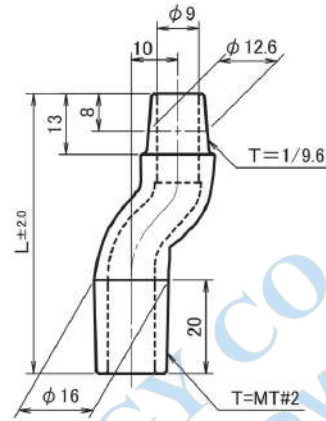
Model No.	L
BS-1680-5-2	80
BS-1685-5-2	85
BS-1690-5-2	90
BS-1695-5-2	95
BS-16100-5-2	100

Suitable for $\phi 16$ Cap Tips

$\phi 16$ T=MT#2 Offset: 10 mm.



BS-1660-10-2



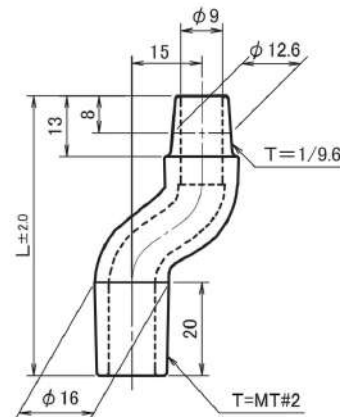
Model No.	L
BS-1650-10-2	50
BS-1655-10-2	55
BS-1660-10-2	60
BS-1665-10-2	65
BS-1670-10-2	70
BS-1675-10-2	75

Model No.	L
BS-1680-10-2	80
BS-1685-10-2	85
BS-1690-10-2	90
BS-1695-10-2	95
BS-16100-10-2	100

$\phi 16$ T=MT#2 Offset: 15 mm.



BS-1660-15-2



Model No.	L
BS-1650-15-2	50
BS-1655-15-2	55
BS-1660-15-2	60
BS-1665-15-2	65
BS-1670-15-2	70
BS-1675-15-2	75

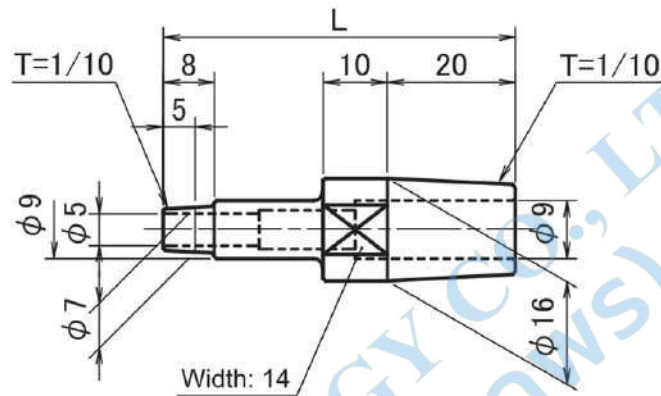
Model No.	L
BS-1680-15-2	80
BS-1685-15-2	85
BS-1690-15-2	90
BS-1695-15-2	95
BS-16100-15-2	100

Suitable for $\phi 9$ Cap Tips, with Carved Dents

$\phi 16$ T=1/10



SS07-09-1675-1B25-SA

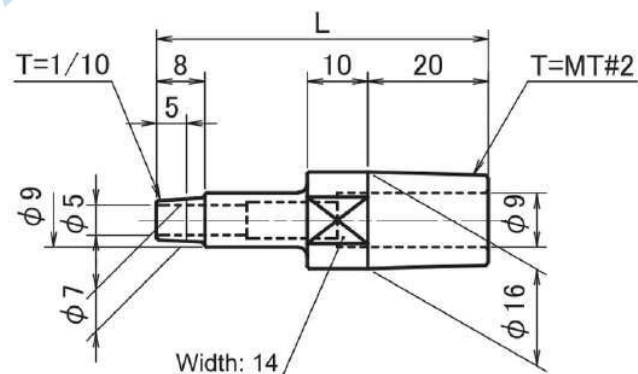


Model No.	L
SS07-09-1645-1B25-SA	45
SS07-09-1655-1B25-SA	55
SS07-09-1675-1B25-SA	75
SS07-09-1695-1B25-SA	95

$\phi 16$ T=MT#2



SS07-09-1675-2B25-SA



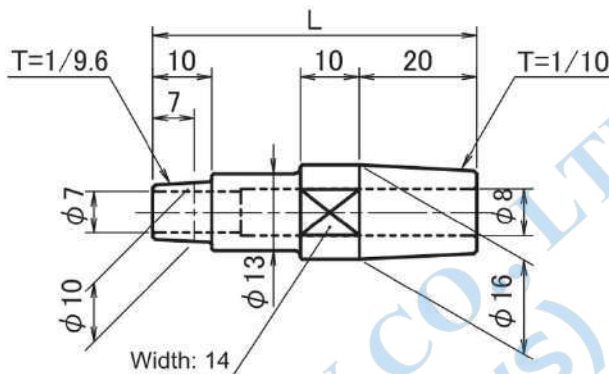
Model No.	L
SS07-09-1645-2B25-SA	45
SS07-09-1655-2B25-SA	55
SS07-09-1675-2B25-SA	75
SS07-09-1695-2B25-SA	95

Suitable for Cap Tips $\phi 12 \bullet \phi 13$ with Carved Dents

$\phi 16$ T=1/10



SS10-13-1675-1B25-SA

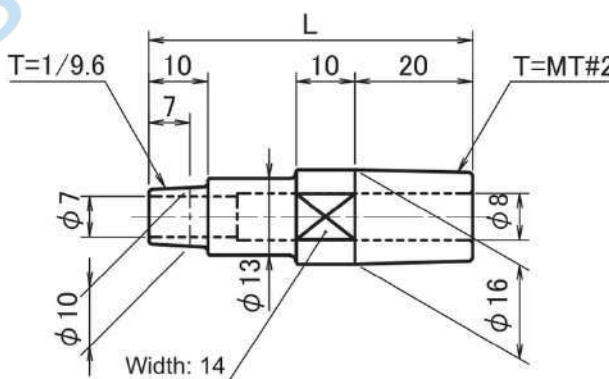


Model No.	L	Model No.	L
SS10-13-1645-1B25-SA	45	SS10-13-16105-1B25-SA	105
SS10-13-1655-1B25-SA	55	SS10-13-16115-1B25-SA	115
SS10-13-1665-1B25-SA	65	SS10-13-16125-1B25-SA	125
SS10-13-1675-1B25-SA	75	SS10-13-16135-1B25-SA	135
SS10-13-1685-1B25-SA	85	SS10-13-16145-1B25-SA	145
SS10-13-1695-1B25-SA	95	SS10-13-16155-1B25-SA	155

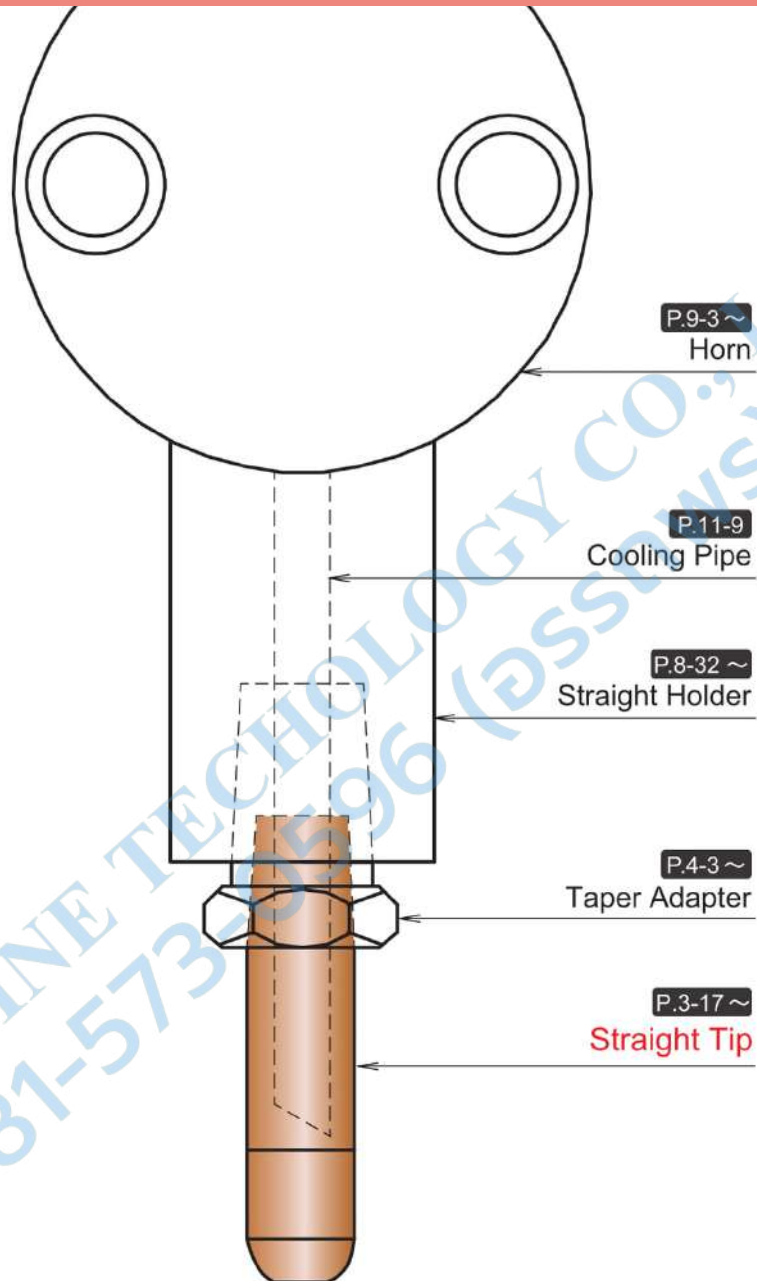
$\phi 16$ T=MT#2



SS10-13-1675-2B25-SA

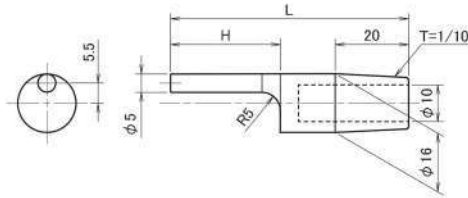


Model No.	L	Model No.	L
SS10-13-1645-2B25-SA	45	SS10-13-16105-2B25-SA	105
SS10-13-1655-2B25-SA	55	SS10-13-16115-2B25-SA	115
SS10-13-1665-2B25-SA	65	SS10-13-16125-2B25-SA	125
SS10-13-1675-2B25-SA	75	SS10-13-16135-2B25-SA	135
SS10-13-1685-2B25-SA	85	SS10-13-16145-2B25-SA	145
SS10-13-1695-2B25-SA	95	SS10-13-16155-2B25-SA	155



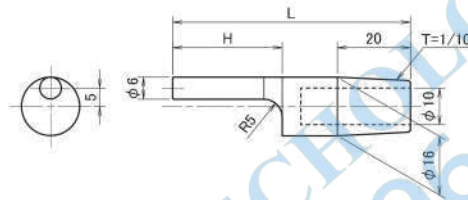
Offset type $\phi 16$ T=1/10

Tip diameter: $\phi 5$



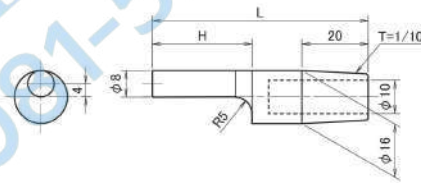
Model No.	H	L
DTE5-1665-30-1	30	65
DTE5-1675-40-1	40	75
DTE5-1685-50-1	50	85

Tip diameter: $\phi 6$



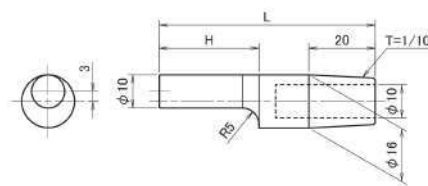
Model No.	H	L
DTE6-1665-30-1	30	65
DTE6-1675-40-1	40	75
DTE6-1685-50-1	50	85

Tip diameter: $\phi 8$



Model No.	H	L
DTE8-1665-30-1	30	65
DTE8-1675-40-1	40	75
DTE8-1685-50-1	50	85

Tip diameter: $\phi 10$



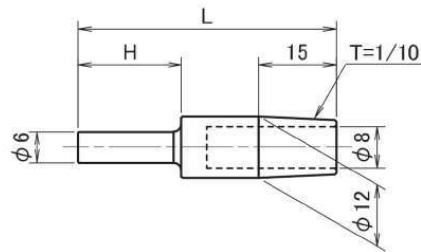
Model No.	H	L
DTE10-1665-30-1	30	65
DTE10-1675-40-1	40	75
DTE10-1685-50-1	50	85

$\phi 12$ T=1/10

Tip diameter: $\phi 6$



DT6-1250-20-1

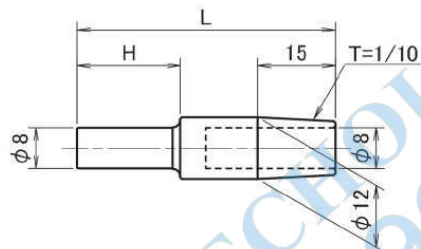


Model No.	H	L
DT6-1250-20-1	20	50
DT6-1260-30-1	30	60
DT6-1270-40-1	40	70

Tip diameter: $\phi 8$



DT8-1250-20-1



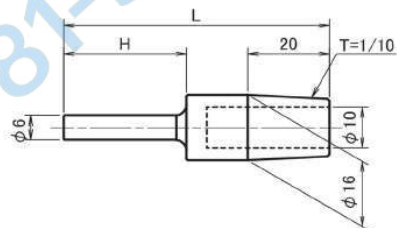
Model No.	H	L
DT8-1250-20-1	20	50
DT8-1260-30-1	30	60
DT8-1270-40-1	40	70

$\phi 16$ T=1/10

Tip diameter: $\phi 6$



DT6-1665-30-1-D

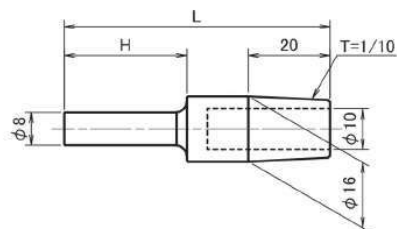


Model No.	H	L
DT6-1665-30-1-D	30	65
DT6-1675-40-1-D	40	75
DT6-1685-50-1-D	50	85

Tip diameter: $\phi 8$



DT8-1665-30-1-D



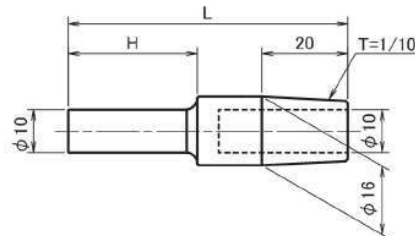
Model No.	H	L
DT8-1665-30-1-D	30	65
DT8-1675-40-1-D	40	75
DT8-1685-50-1-D	50	85

$\phi 16$ T=1/10

Tip diameter: $\phi 10$



DT10-1665-30-1-D

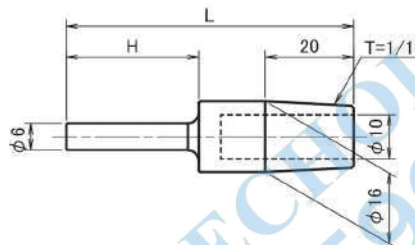


Model No.	H	L
DT10-1665-30-1-D	30	65
DT10-1675-40-1-D	40	75
DT10-1685-50-1-D	50	85

Tip diameter: $\phi 6$



DT6-1665-30-1

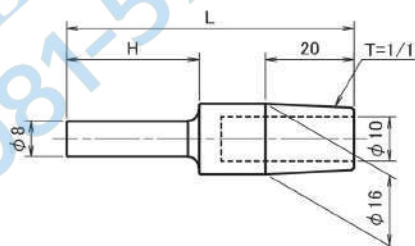


Model No.	H	L
DT6-1665-30-1	30	65
DT6-1675-40-1	40	75
DT6-1685-50-1	50	85

Tip diameter: $\phi 8$



DT8-1665-30-1

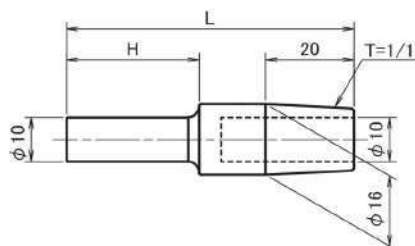


Model No.	H	L
DT8-1665-30-1-D	30	65
DT8-1675-40-1-D	40	75
DT8-1685-50-1-D	50	85

Tip diameter: $\phi 10$



DT10-1665-30-1



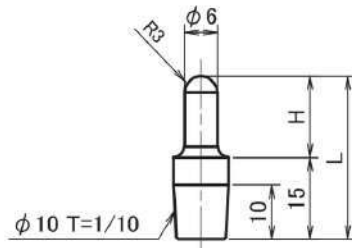
Model No.	H	L
DT10-1665-30-1	30	65
DT10-1675-40-1	40	75
DT10-1685-50-1	50	85

Taper $\phi 10$ T=1/10

Tip diameter: $\phi 6$



DT3R-1030-1

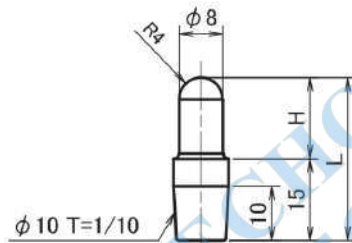


Model No.	H	L
DT3R-1030-1	15	30
DT3R-1035-1	20	35
DT3R-1040-1	25	40

Tip diameter: $\phi 8$



DT4R-1030-1

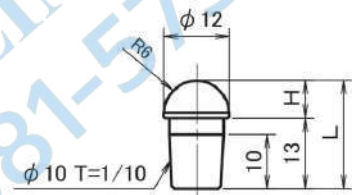


Model No.	H	L
DT4R-1030-1	15	30
DT4R-1035-1	20	35
DT4R-1040-1	25	40

R Type



6R-1220-10-1

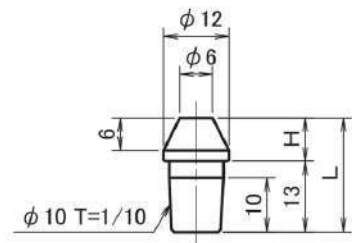


Model No.	H	L
6R-1220-10-1	7	20
6R-1225-10-1	12	25
6R-1230-10-1	17	30

P Type



P-1221-10-1



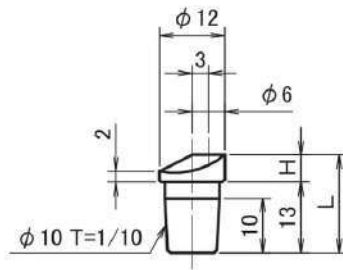
Model No.	H	L
P-1221-10-1	8	21
P-1225-10-1	12	25
P-1230-10-1	17	30

Taper $\phi 10$ T=1/10

E Type



E-1218-10-1

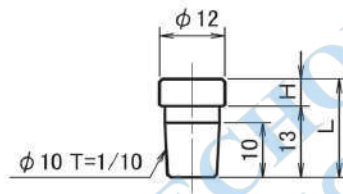


Model No.	H	L
E-1218-10-1	5	18
E-1223-10-1	10	23
E-1228-10-1	15	28
E-1233-10-1	17	30

R Type



F-1218-10-1

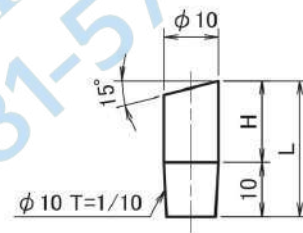


Model No.	H	L
F-1218-10-1	5	18
F-1225-10-1	12	25
F-1230-10-1	17	30

15° Cut Type



K15-1025-1

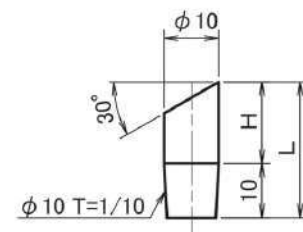


Model No.	H	L
K15-1017-1	7	17
K15-1020-1	10	20
K15-1025-1	15	25
K15-1030-1	20	30

30° Cut Type



K30-1025-1



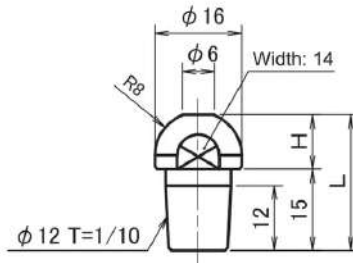
Model No.	H	L
K30-1017-1	7	17
K30-1020-1	10	20
K30-1025-1	15	25
K30-1030-1	20	30

Taper $\phi 12$ T=1/10

D Type



D-1625-12-1

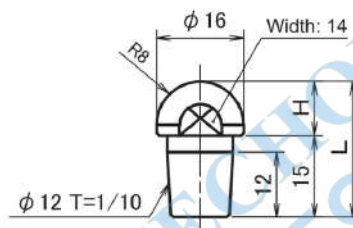


Model No.	H	L
D-1623-12-1	8	23
D-1625-12-1	10	25
D-1630-12-1	15	30
D-1635-12-1	20	35
D-1640-12-1	25	40

R Type



8R-1625-12-1

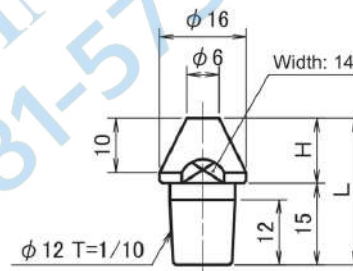


Model No.	H	L
8R-1623-12-1	8	23
8R-1625-12-1	10	25
8R-1630-12-1	15	30
8R-1635-12-1	20	35
8R-1640-12-1	25	40

P Type



P-1627-12-1

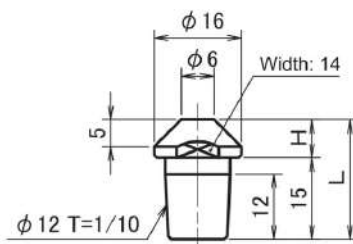


Model No.	H	L
P-1625-12-1	10	25
P-1627-12-1	12	27
P-1630-12-1	15	30
P-1635-12-1	20	35
P-1640-12-1	25	40

C Type



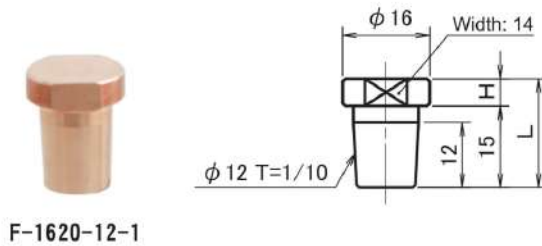
C-1622-12-1



Model No.	H	L
C-1622-12-1	7	22
C-1625-12-1	10	25
C-1630-12-1	15	30
C-1635-12-1	20	35
C-1640-12-1	25	40

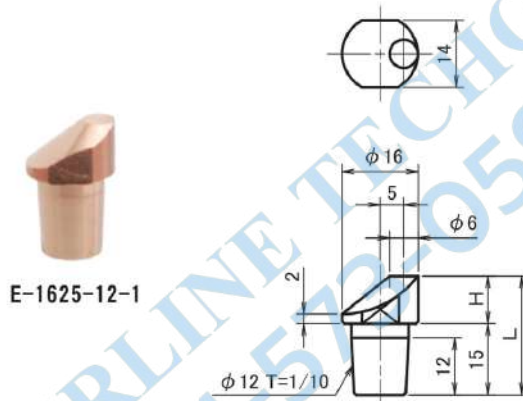
Taper $\phi 12$ T=1/10

F Type



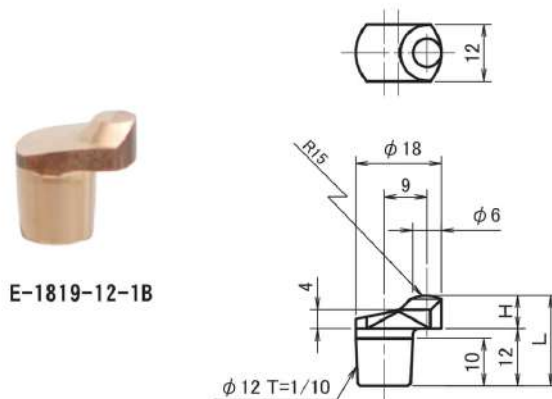
Model No.	H	L
F-1620-12-1	5	20
F-1625-12-1	10	25
F-1630-12-1	15	30
F-1635-12-1	20	35
F-1640-12-1	25	40

E Type (offset: 5 mm.)



Model No.	H	L
E-1620-12-1	5	20
E-1625-12-1	10	25
E-1630-12-1	15	30
E-1635-12-1	20	35
E-1640-12-1	25	40

E Type (offset: 9 mm.)



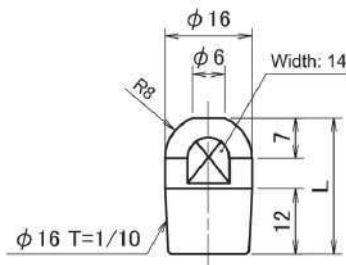
Model No.	H	L
E-1819-12-1B	7	19
E-1822-12-1B	10	22

Taper $\phi 16$ T=1/10

D Type



D-1623-16-1

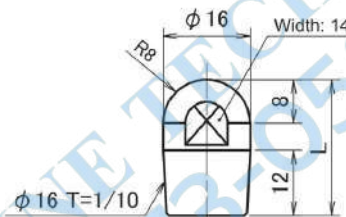


Model No.	L
D-1623-16-1	23
D-1625-16-1	25
D-1630-16-1	30
D-1635-16-1	35
D-1640-16-1	40

R Type



8R-1623-16-1

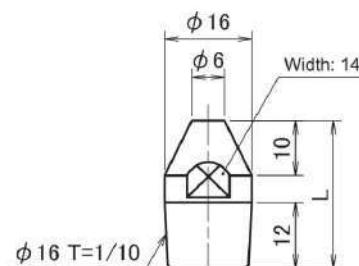


Model No.	L
8R-1623-16-1	23
8R-1625-16-1	25
8R-1630-16-1	30
8R-1635-16-1	35
8R-1640-16-1	40

P Type



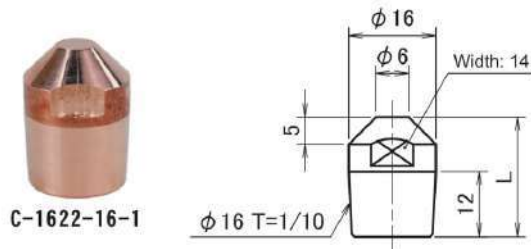
P-1625-16-1



Model No.	L
P-1625-16-1	25
P-1627-16-1	27
P-1630-16-1	30
P-1635-16-1	35
P-1640-16-1	40

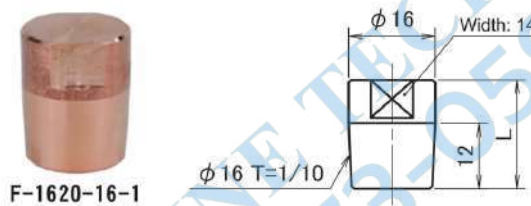
Taper $\phi 16$ T=1/10

C Type



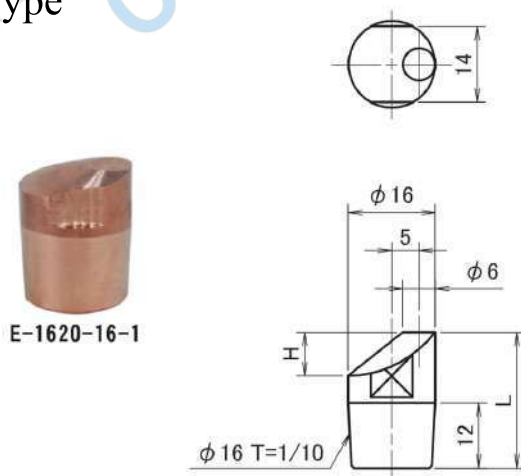
Model No.	L
C-1622-16-1	22
C-1625-16-1	25
C-1630-16-1	30
C-1635-16-1	35
C-1640-16-1	40

F Type



Model No.	L
F-1620-16-1	20
F-1625-16-1	25
F-1630-16-1	30
F-1635-16-1	35
F-1640-16-1	40

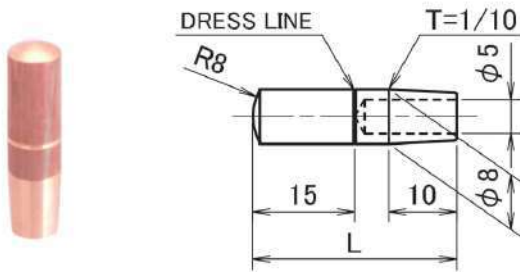
E Type



Model No.	H	L
E-1620-16-1	3	20
E-1625-16-1	8	25
E-1630-16-1	13	30
E-1635-16-1	18	35
E-1640-16-1	23	40

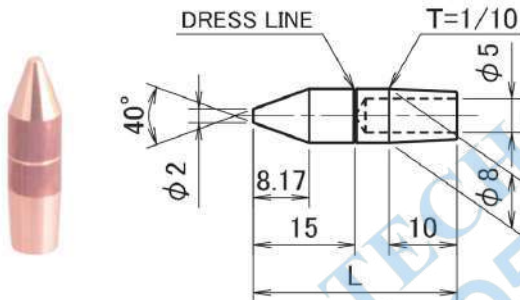
$\phi 8$ T=1/10

R Type (Tip shape: R8)



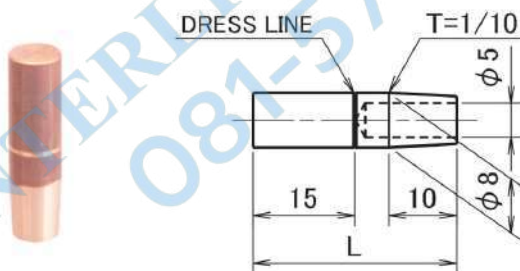
Model No.	L
S8R-0830-1	30

P Type



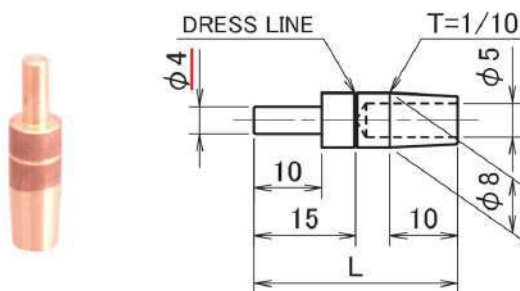
Model No.	L
SP-0830-1	30

F Type



Model No.	L
SF-0830-1	30

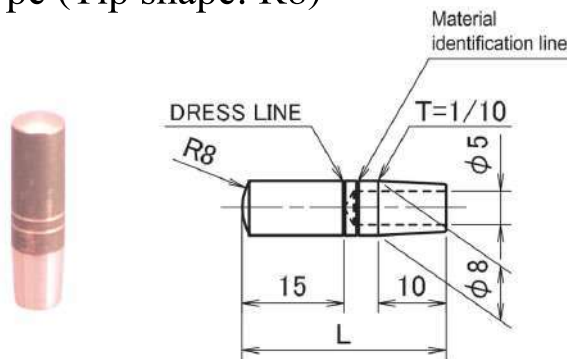
Shoulder Type



Model No.	L
SF4-0830-1	30

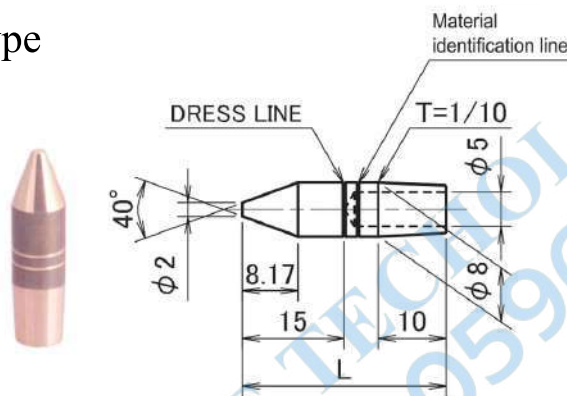
$\phi 8$ T=1/10

R Type (Tip shape: R8)



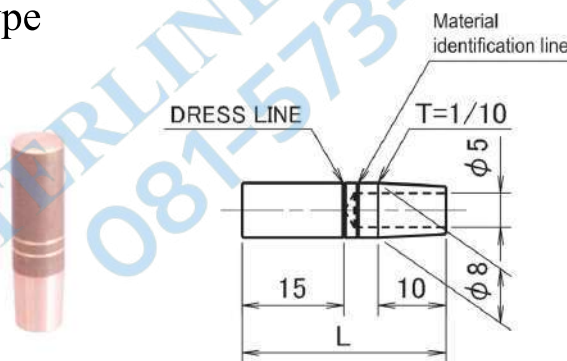
Model No.	L
S8R-0830-1B	30

P Type



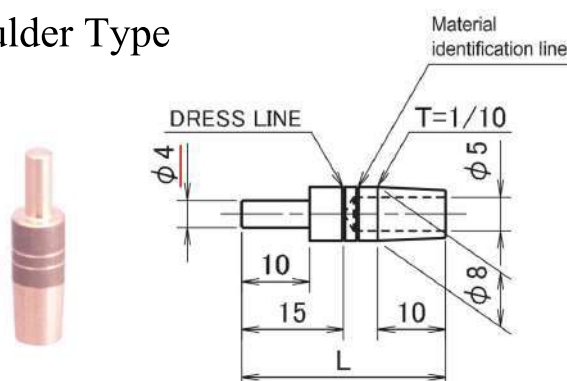
Model No.	L
SP-0830-1B	30

F Type



Model No.	L
SF-0830-1B	30

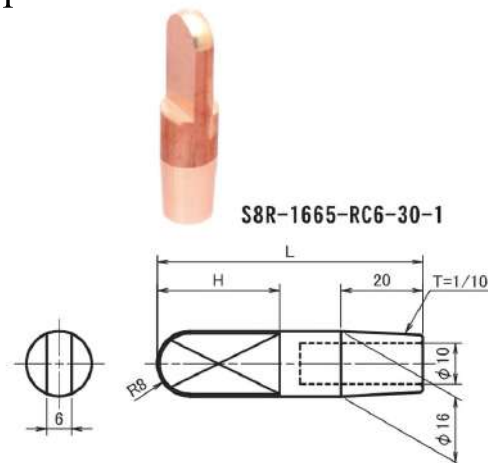
Shoulder Type



Model No.	L
SF4-0830-1B	30

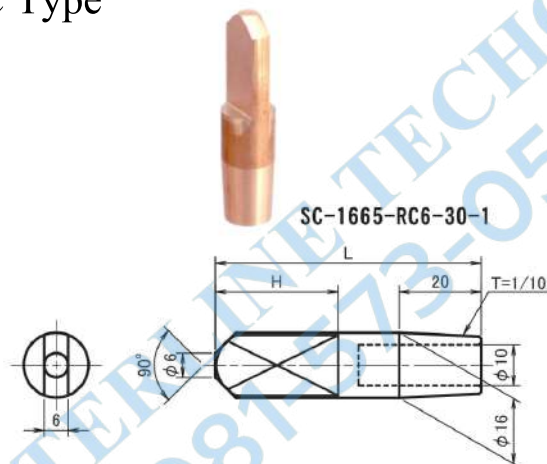
$\phi 16$ T=1/10

R Type



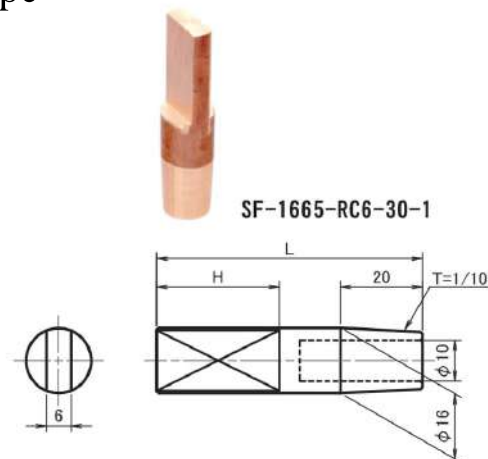
Model No.	H	L
S8R-1665-RC6-30-1	30	65
S8R-1675-RC6-40-1	40	75
S8R-1685-RC6-50-1	50	85

C Type



Model No.	H	L
SC-1665-RC6-30-1	30	65
SC-1675-RC6-40-1	40	75
SC-1685-RC6-50-1	50	85

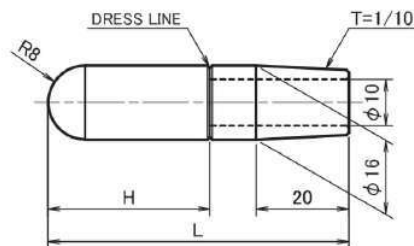
F Type



Model No.	H	L
SF-1665-RC6-30-1	30	65
SF-1675-RC6-40-1	40	75
SF-1685-RC6-50-1	50	85

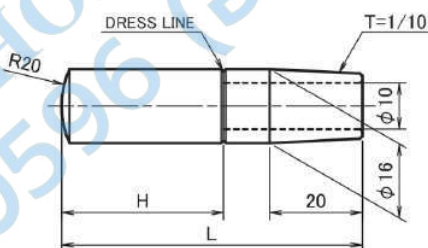
Shallow water hall type $\phi 16$ T=1/10

R Type (Tip shape: R8)



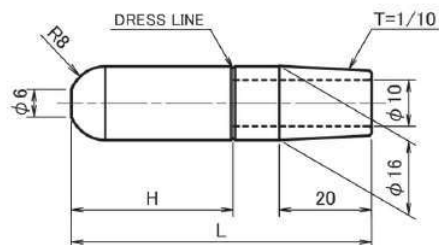
Model No.	H	L
S8R-1665-35-1	35	65
S8R-1675-45-1	45	75
S8R-1685-55-1	55	85

R Type (Tip shape: R20)



Model No.	H	L
S20R-1665-35-1	35	65
S20R-1675-45-1	45	75
S20R-1685-55-1	55	85

D Type



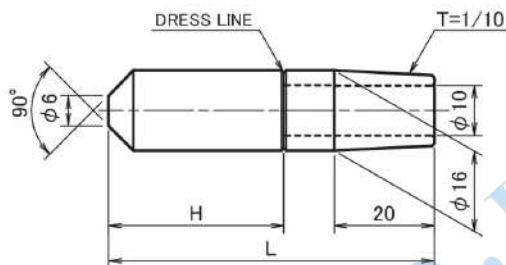
Model No.	H	L
SD-1665-35-1	35	65
SD-1675-45-1	45	75
SD-1685-55-1	55	85

Shallow water hall type $\phi 16$ T=1/10

C Type



SC-1665-35-1

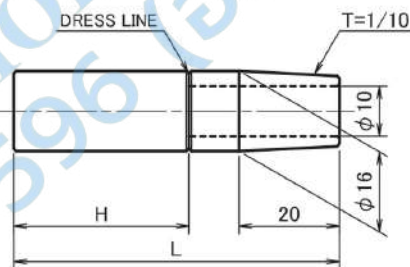


Model No.	H	L
SC-1665-35-1	35	65
SC-1675-45-1	45	75
SC-1685-55-1	55	85

F Type



SF-1665-35-1

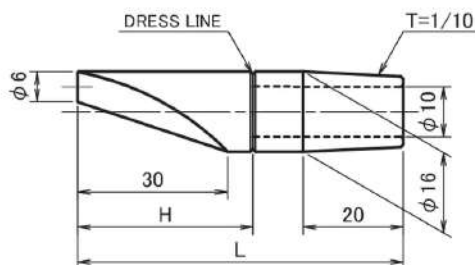


Model No.	H	L
SF-1665-35-1	35	65
SF-1675-45-1	45	75
SF-1685-55-1	55	85

E Type



SE-1665-35-1



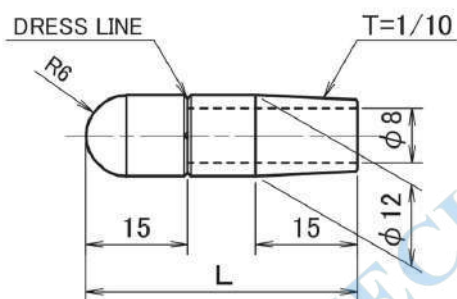
Model No.	H	L
SD-1665-35-1	35	65
SD-1675-45-1	45	75
SD-1685-55-1	55	85

$\phi 12$ T=1/10

R Type



S6R-1240-1

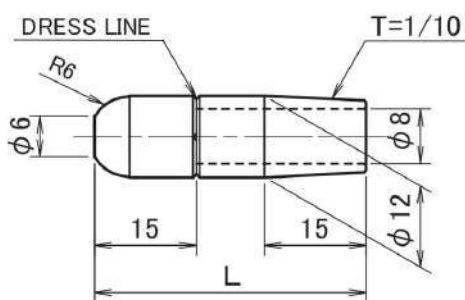


Model No.	L
S6R-1230-1	30
S6R-1235-1	35
S6R-1240-1	40
S6R-1245-1	45
S6R-1250-1	50
S6R-1255-1	55
S6R-1260-1	60
S6R-1265-1	65
S6R-1270-1	70
S6R-1275-1	75
S6R-1280-1	80

D Type



SD-1240-1



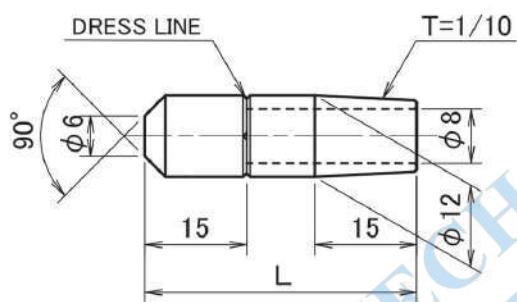
Model No.	L
SD-1230-1	30
SD-1235-1	35
SD-1240-1	40
SD-1245-1	45
SD-1250-1	50
SD-1255-1	55
SD-1260-1	60
SD-1265-1	65
SD-1270-1	70
SD-1275-1	75
SD-1280-1	80

$\phi 12$ T=1/10

C Type



SC-1240-1

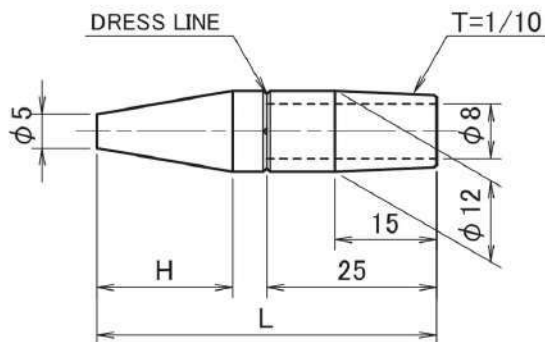


Model No.	L
SC-1230-1	30
SC-1235-1	35
SC-1240-1	40
SC-1245-1	45
SC-1250-1	50
SC-1255-1	55
SC-1260-1	60
SC-1265-1	65
SC-1270-1	70
SC-1275-1	75
SC-1280-1	80

P Long Type



SP5-1250-20-1



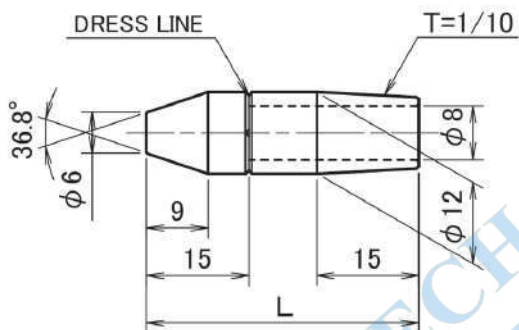
Model No.	H	L
SP5-1250-20-1	20	50
SP5-1260-30-1	30	60
SP5-1270-40-1	40	70

$\phi 12$ T=1/10

P Type



SP-1240-1

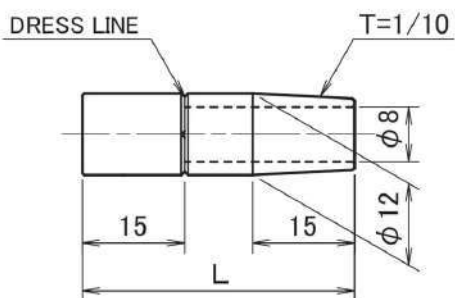


Model No.	L
SP-1230-1	30
SP-1235-1	35
SP-1240-1	40
SP-1245-1	45
SP-1250-1	50
SP-1255-1	55
SP-1260-1	60
SP-1265-1	65
SP-1270-1	70
SP-1275-1	75
SP-1280-1	80

F Type



SF-1240-1



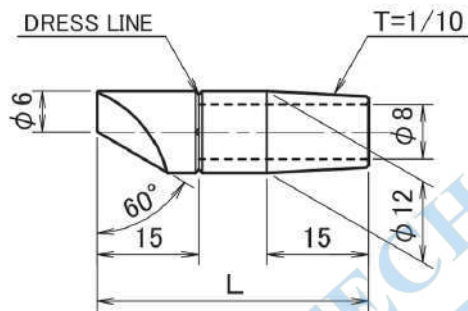
Model No.	L
SF-1230-1	30
SF-1235-1	35
SF-1240-1	40
SF-1245-1	45
SF-1250-1	50
SF-1255-1	55
SF-1260-1	60
SF-1265-1	65
SF-1270-1	70
SF-1275-1	75
SF-1280-1	80

$\phi 12$ T=1/10

E Type



SE-1240-1

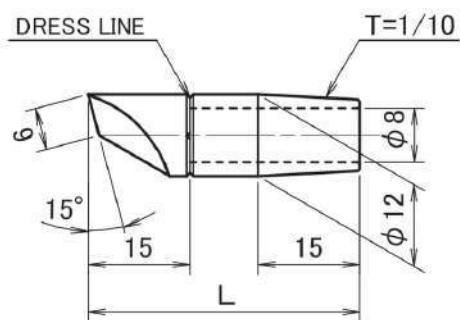


Model No.	L
SE-1230-1	30
SE-1235-1	35
SE-1240-1	40
SE-1245-1	45
SE-1250-1	50
SE-1255-1	55
SE-1260-1	60
SE-1265-1	65
SE-1270-1	70
SE-1275-1	75
SE-1280-1	80

E Type (Cut at an angle of 15°)



SE15-1240-1



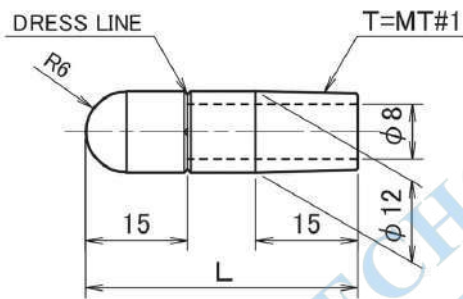
Model No.	L
SE15-1230-1	30
SE15-1235-1	35
SE15-1240-1	40
SE15-1245-1	45
SE15-1250-1	50
SE15-1255-1	55
SE15-1260-1	60
SE15-1265-1	65
SE15-1270-1	70
SE15-1275-1	75
SE15-1280-1	80

$\phi 12$ T=MT#1

R Type



S6R-1240-2

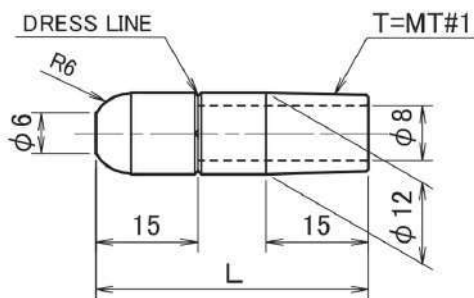


Model No.	L
S6R-1230-2	30
S6R-1235-2	35
S6R-1240-2	40
S6R-1245-2	45
S6R-1250-2	50
S6R-1255-2	55
S6R-1260-2	60
S6R-1265-2	65
S6R-1270-2	70
S6R-1275-2	75
S6R-1280-2	80

D Type



SD-1240-2



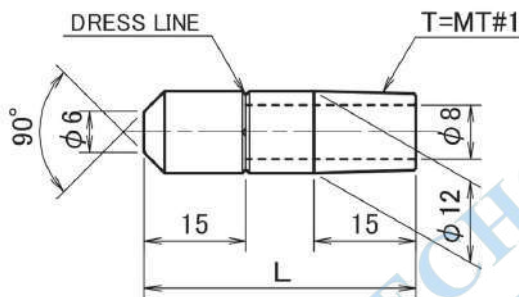
Model No.	L
SD-1230-2	30
SD-1235-2	35
SD-1240-2	40
SD-1245-2	45
SD-1250-2	50
SD-1255-2	55
SD-1260-2	60
SD-1265-2	65
SD-1270-2	70
SD-1275-2	75
SD-1280-2	80

$\phi 12$ T=MT#1

C Type



SC-1240-2

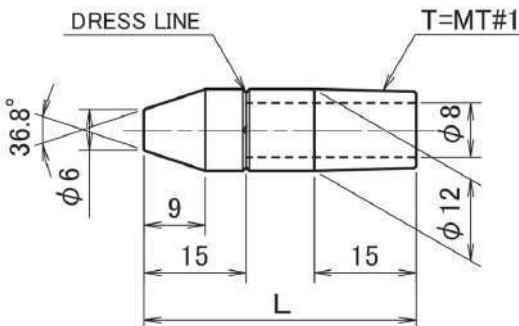


Model No.	L
SC-1230-2	30
SC-1235-2	35
SC-1240-2	40
SC-1245-2	45
SC-1250-2	50
SC-1255-2	55
SC-1260-2	60
SC-1265-2	65
SC-1270-2	70
SC-1275-2	75
SC-1280-2	80

P Type



SP-1240-2



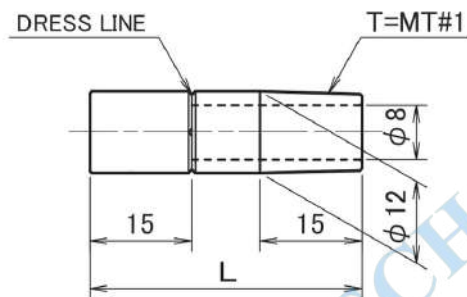
Model No.	L
SP-1230-2	30
SP-1235-2	35
SP-1240-2	40
SP-1245-2	45
SP-1250-2	50
SP-1255-2	55
SP-1260-2	60
SP-1265-2	65
SP-1270-2	70
SP-1275-2	75
SP-1280-2	80

$\phi 12$ T=MT#1

F Type



SF-1240-2

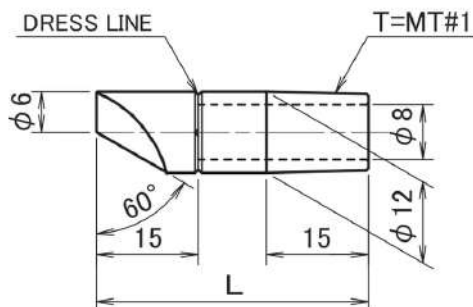


Model No.	L
SF-1230-2	30
SF-1235-2	35
SF-1240-2	40
SC-1245-2	45
SF-1250-2	50
SF-1255-2	55
SF-1260-2	60
SF-1265-2	65
SF-1270-2	70
SF-1275-2	75
SF-1280-2	80

E Type



SE-1240-2



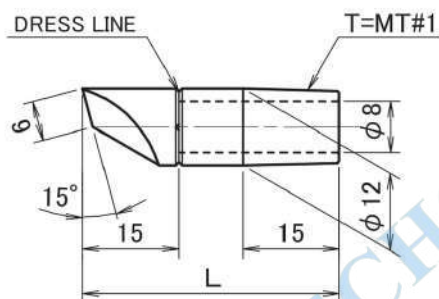
Model No.	L
SE-1230-2	30
SE-1235-2	35
SE-1240-2	40
SE-1245-2	45
SE-1250-2	50
SE-1255-2	55
SE-1260-2	60
SE-1265-2	65
SE-1270-2	70
SE-1275-2	75
SE-1280-2	80

φ12 T=MT#1

E Type (Cut at an angle of 15°)



SE15-1240-2



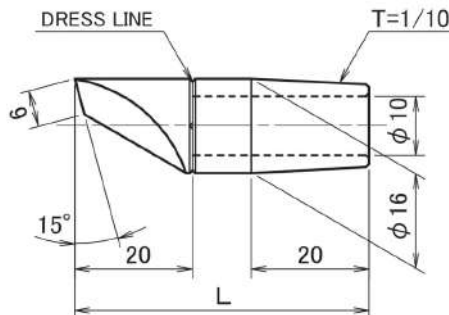
Model No.	L
SE15-1230-2	30
SE15-1235-2	35
SE15-1240-2	40
SE15-1245-2	45
SE15-1250-2	50
SE15-1255-2	55
SE15-1260-2	60
SE15-1265-2	65
SE15-1270-2	70
SE15-1275-2	75
SE15-1280-2	80

φ16 T=1/10

E Type (Cut at an angle of 15°)



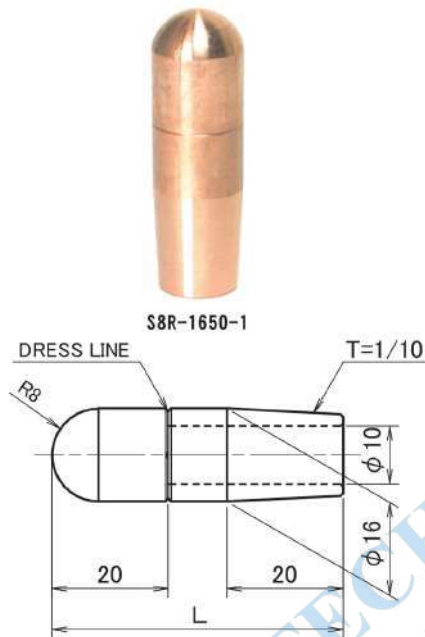
SE15-1650-1



Model No.	L
SE15-1640-1	40
SE15-1645-1	45
SE15-1650-1	50
SE15-1655-1	55
SE15-1660-1	60
SE15-1665-1	65
SE15-1670-1	70
SE15-1680-1	80
SE15-1690-1	90
SE15-16100-1	100

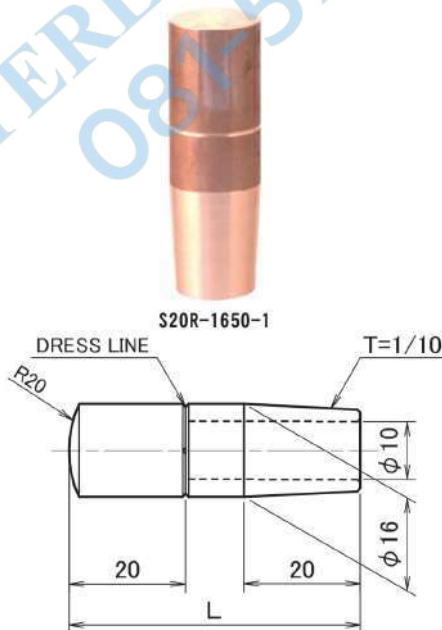
$\phi 16$ T=1/10

R Type (Tip shape: R8)



Model No.	L
S8R-1640-1	40
S8R-1645-1	45
S8R-1650-1	50
S8R-1655-1	55
S8R-1660-1	60
S8R-1665-1	65
S8R-1670-1	70
S8R-1675-1	75
S8R-1680-1	80
S8R-1690-1	90
S8R-16100-1	100

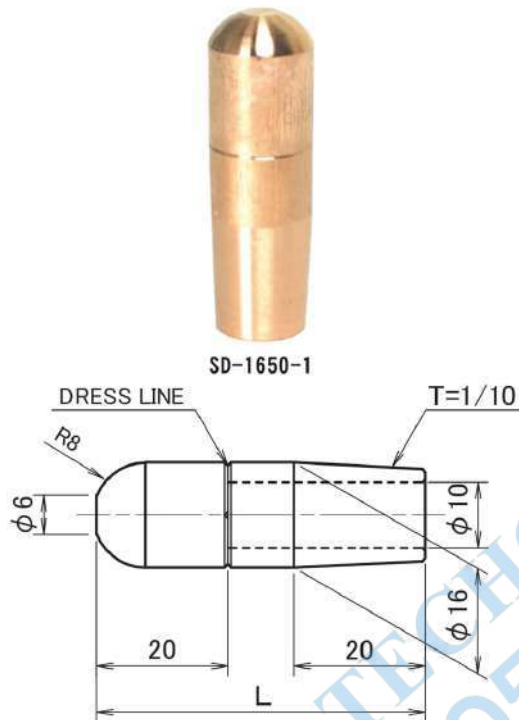
R Type (Tip shape: R20)



Model No.	L
S20R-1640-1	40
S20R-1645-1	45
S20R-1650-1	50
S20R-1655-1	55
S20R-1660-1	60
S20R-1665-1	65
S20R-1670-1	70
S20R-1680-1	80
S20R-1690-1	90
S20R-16100-1	100

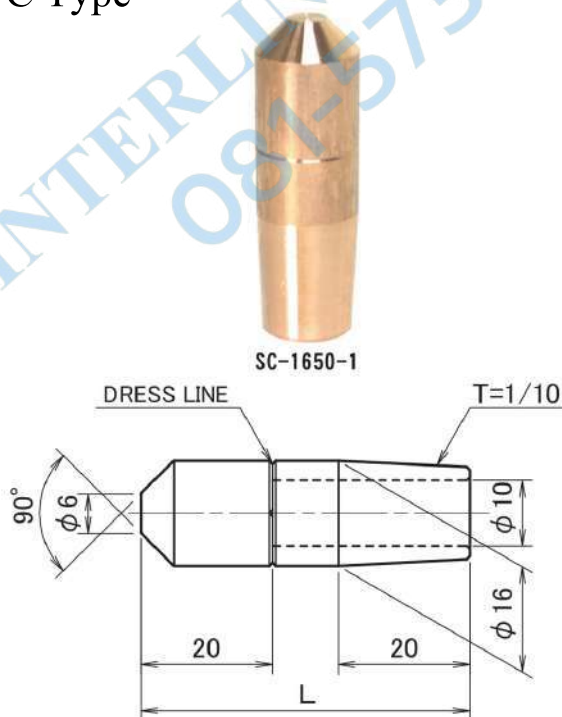
$\phi 16$ T=1/10

D Type



Model No.	L
SD-1640-1	40
SD-1645-1	45
SD-1650-1	50
SD-1655-1	55
SD-1660-1	60
SD-1665-1	65
SD-1670-1	70
SD-1680-1	80
SD-1690-1	90
SD-16100-1	100

C Type



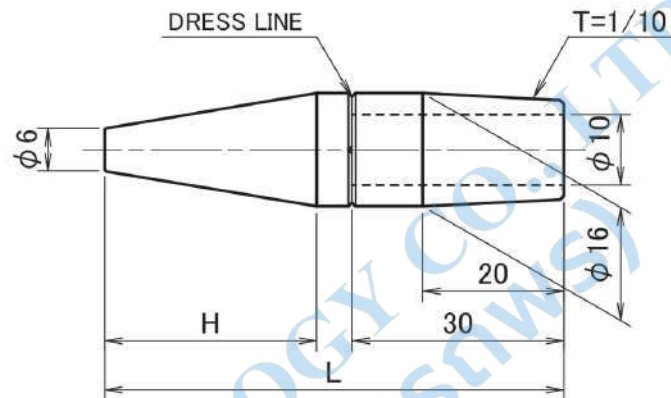
Model No.	L
SC-1640-1	40
SC-1645-1	45
SC-1650-1	50
SC-1655-1	55
SC-1660-1	60
SC-1665-1	65
SC-1670-1	70
SC-1680-1	80
SC-1690-1	90
SC-16100-1	100

$\phi 16$ T=1/10

P Long Type



SP6-1665-30-1

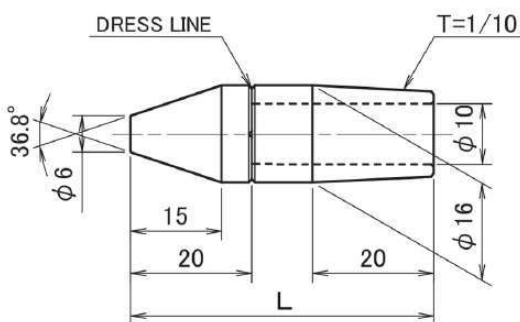


Model No.	H	L
SP6-1665-30-1	30	65
SP6-1675-40-1	40	75
SP6-1685-50-1	50	85

P Type



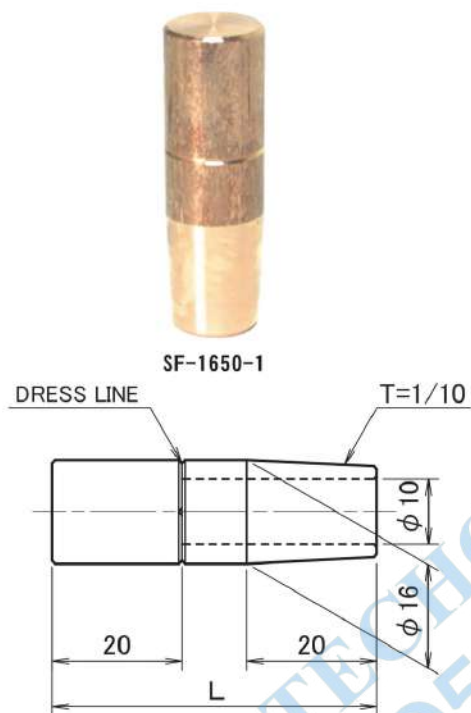
SP-1650-1



Model No.	L
SP-1640-1	40
SP-1645-1	45
SP-1650-1	50
SP-1655-1	55
SP-1660-1	60
SP-1665-1	65
SP-1670-1	70
SP-1680-1	80
SP-1690-1	90
SP-16100-1	100

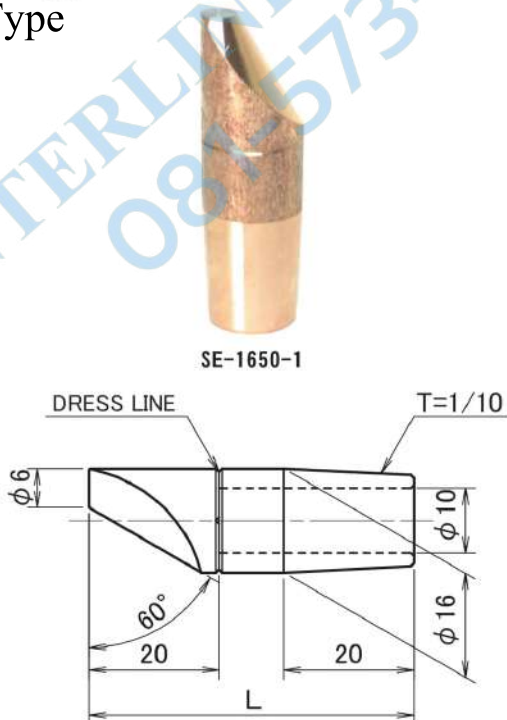
$\phi 16$ T=1/10

F Type



Model No.	L
SF-1640-1	40
SF-1645-1	45
SF-1650-1	50
SF-1655-1	55
SF-1660-1	60
SF-1665-1	65
SF-1670-1	70
SF-1680-1	80
SF-1690-1	90
SF-16100-1	100

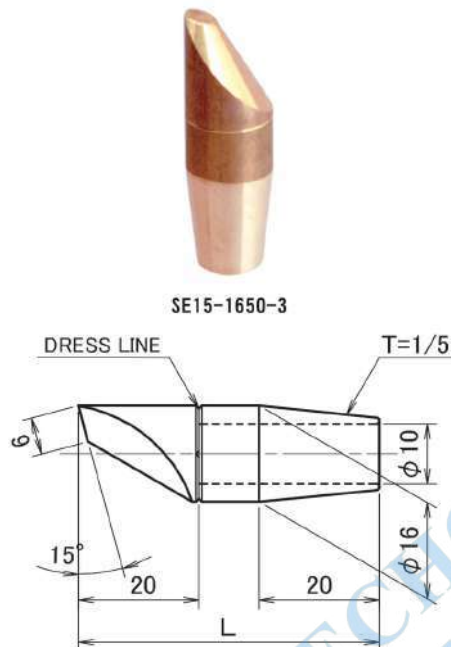
E Type



Model No.	L
SE-1640-1	40
SE-1645-1	45
SE-1650-1	50
SE-1655-1	55
SE-1660-1	60
SE-1665-1	65
SE-1670-1	70
SE-1680-1	80
SE-1690-1	90
SE-16100-1	100

$\phi 16$ T=1/5

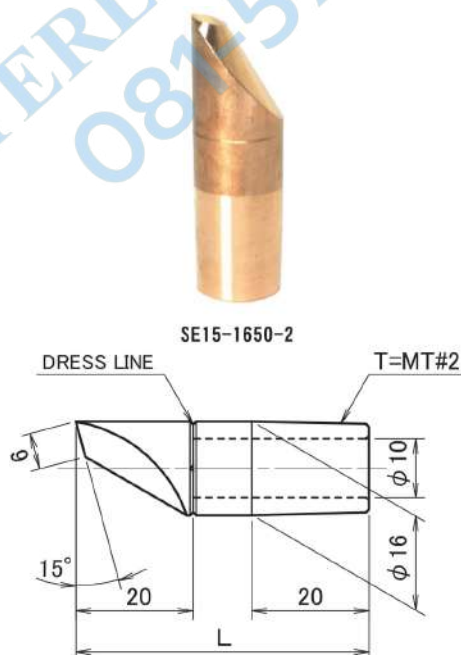
E Type (Cut at an angle of 15°)



Model No.	L
SE15-1650-3	50
SE15-1655-3	55
SE15-1660-3	60
SE15-1665-3	65
SE15-1670-3	70
SE15-1680-3	80
SE15-1690-3	90
SE15-16100-3	100

$\phi 16$ T=MT#2

E Type (Cut at an angle of 15°)



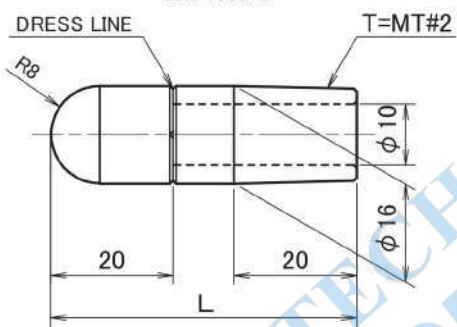
Model No.	L
SE15-1640-2	40
SE15-1645-2	45
SE15-1650-2	50
SE15-1655-2	55
SE15-1660-2	60
SE15-1665-2	65
SE15-1670-2	70

$\phi 16$ T=MT#2

R Type



S8R-1650-2

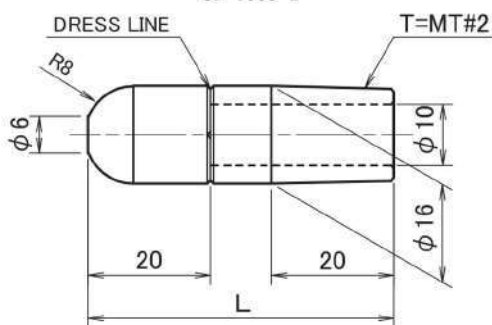


Model No.	L
S8R-1640-2	40
S8R-1645-2	45
S8R-1650-2	50
S8R-1655-2	55
S8R-1660-2	60
S8R-1665-2	65
S8R-1670-2	70

D Type



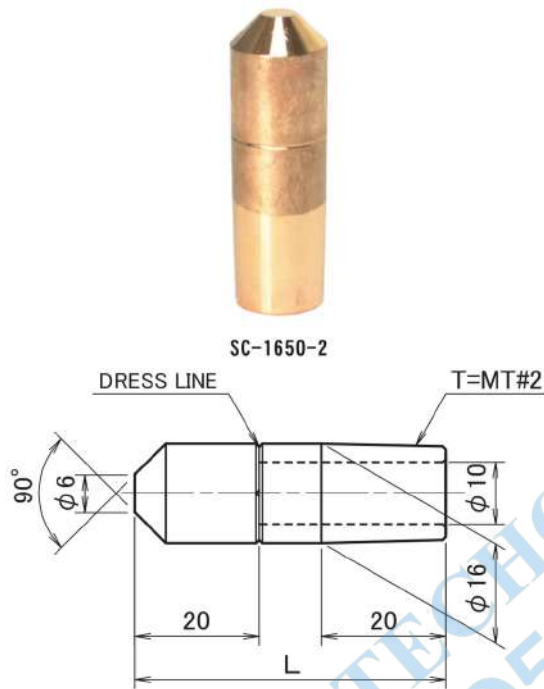
SD-1650-2



Model No.	L
SD-1640-2	40
SD-1645-2	45
SD-1650-2	50
SD-1655-2	55
SD-1660-2	60
SD-1665-2	65
SD-1670-2	70

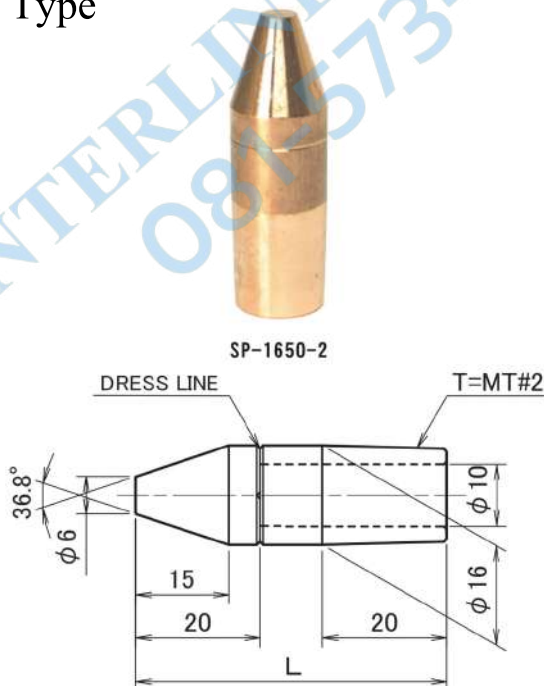
$\phi 16$ T=MT#2

C Type



Model No.	L
SC-1640-2	40
SC-1645-2	45
SC-1650-2	50
SC-1655-2	55
SC-1660-2	60
SC-1665-2	65
SC-1670-2	70

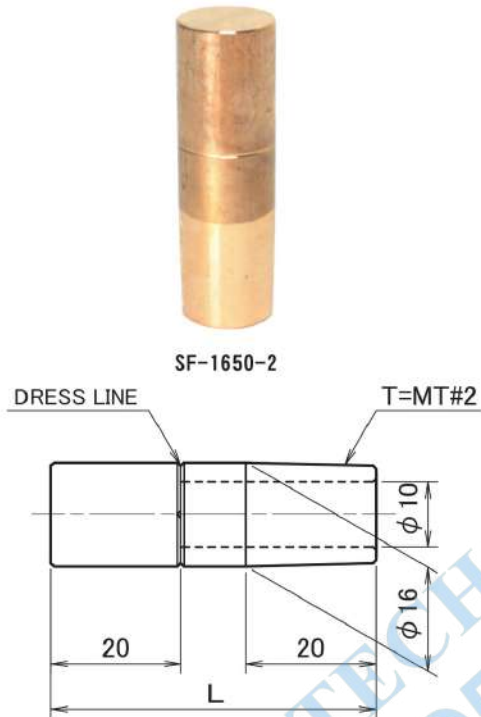
P Type



Model No.	L
SP-1640-2	40
SP-1645-2	45
SP-1650-2	50
SP-1655-2	55
SP-1660-2	60
SP-1665-2	65
SP-1670-2	70

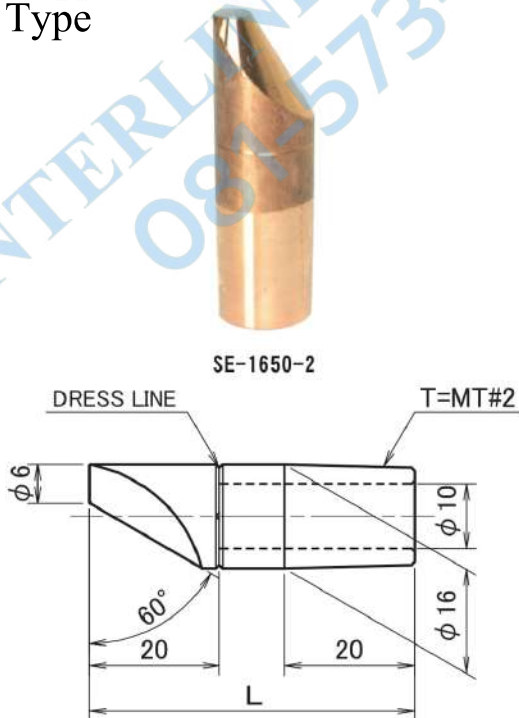
$\phi 16$ T=MT#2

F Type



Model No.	L
SF-1640-2	40
SF-1645-2	45
SF-1650-2	50
SF-1655-2	55
SF-1660-2	60
SF-1665-2	65
SF-1670-2	70

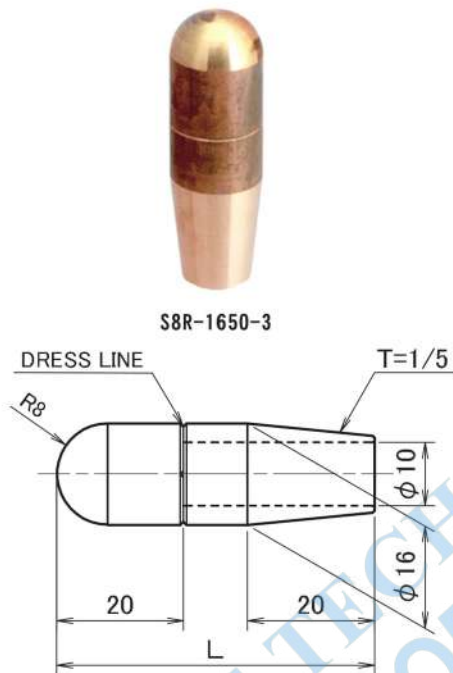
E Type



Model No.	L
SE-1640-2	40
SE-1645-2	45
SE-1650-2	50
SE-1655-2	55
SE-1660-2	60
SE-1665-2	65
SE-1670-2	70

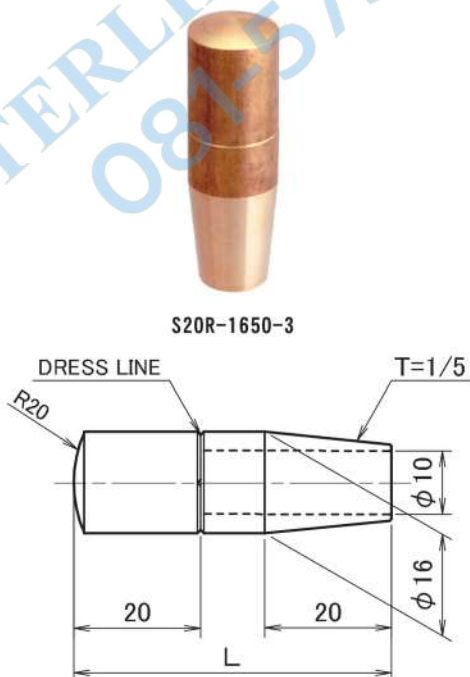
$\phi 16$ T=1/5

R Type (Tip shape: R8)



Model No.	L
S8R-1650-3	50
S8R-1655-3	55
S8R-1660-3	60
S8R-1665-3	65
S8R-1670-3	70
S8R-1680-3	80
S8R-1690-3	90
S8R-16100-3	100

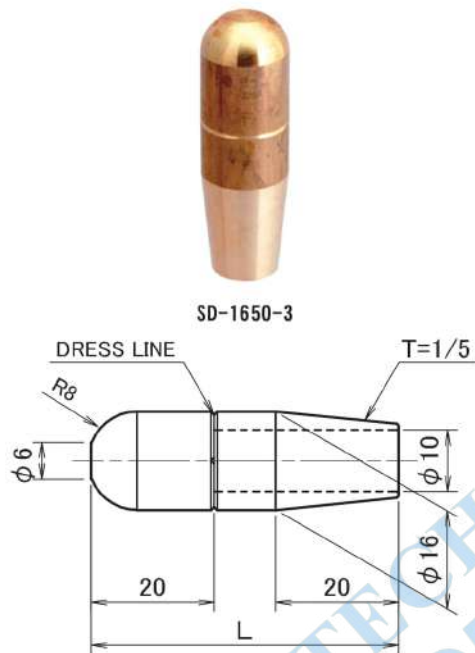
R Type (Tip shape: R20)



Model No.	L
S20R-1650-3	50
S20R-1655-3	55
S20R-1660-3	60
S20R-1665-3	65
S20R-1670-3	70
S20R-1680-3	80
S20R-1690-3	90
S20R-16100-3	100

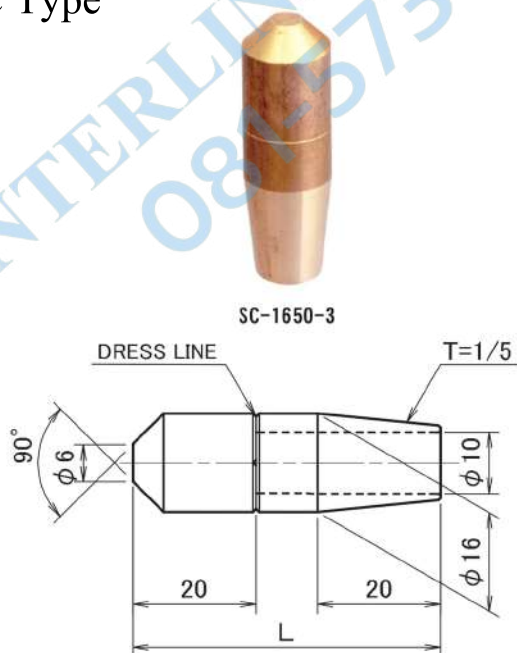
$\phi 16$ T=1/5

D Type



Model No.	L
SD-1650-3	50
SD-1655-3	55
SD-1660-3	60
SD-1665-3	65
SD-1670-3	70
SD-1680-3	80
SD-1690-3	90
SD-16100-3	100

C Type



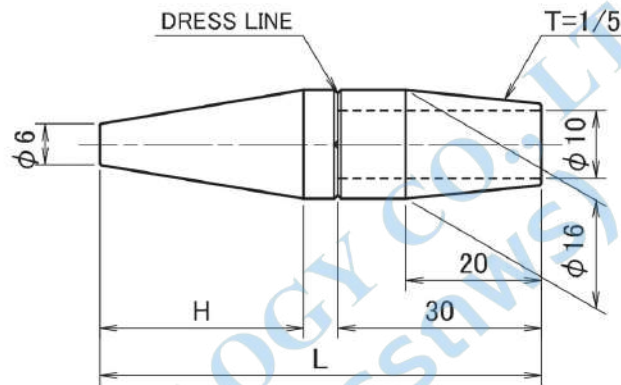
Model No.	L
SC-1650-3	50
SC-1655-3	55
SC-1660-3	60
SC-1665-3	65
SC-1670-3	70
SC-1680-3	80
SC-1690-3	90
SC-16100-3	100

$\phi 16$ T=1/5

P Long Type



SP6-1665-30-3

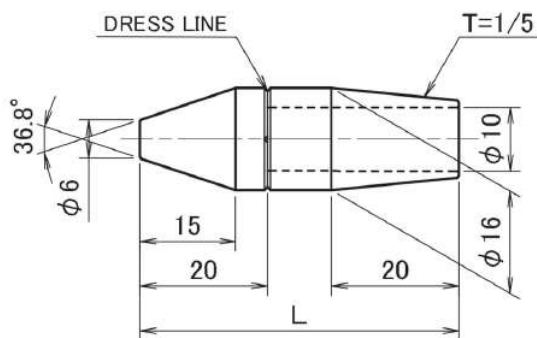


Model No.	H	L
SP6-1665-30-3	30	65
SP6-1675-40-3	40	75
SP6-1685-50-3	50	85

P Type



SP-1650-3



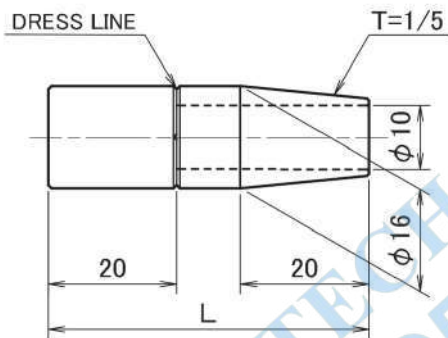
Model No.	L
SP-1650-3	50
SP-1655-3	55
SP-1660-3	60
SP-1665-3	65
SP-1670-3	70
SP-1680-3	80
SP-1690-3	90
SP-16100-3	100

$\phi 16$ T=1/5

F Type



SF-1650-3

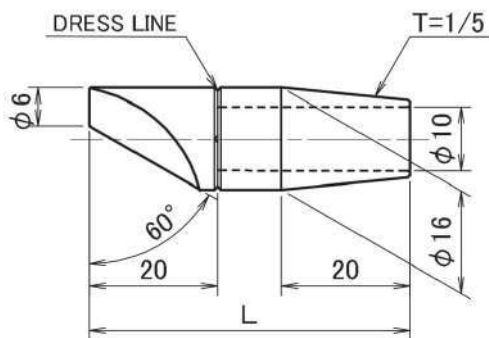


Model No.	L
SF-1650-3	50
SF-1655-3	55
SF-1660-3	60
SF-1665-3	65
SF-1670-3	70
SF-1680-3	80
SF-1690-3	90
SF-16100-3	100

E Type



SE-1650-3



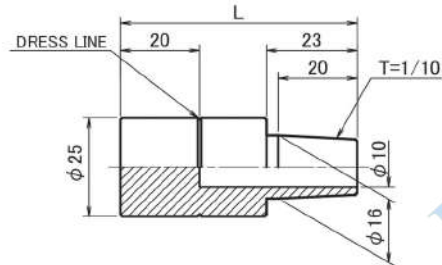
Model No.	L
SE-1650-3	50
SE-1655-3	55
SE-1660-3	60
SE-1665-3	65
SE-1670-3	70
SE-1680-3	80
SE-1690-3	90
SE-16100-3	100

Outer Dia. 25 mm.

φ16 T=1/10



SF-2560-16-1

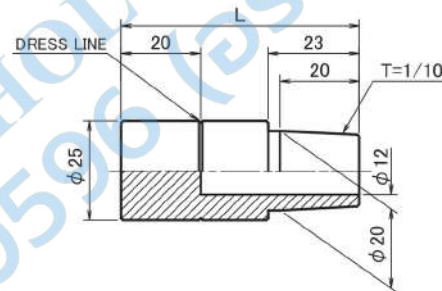


Model No.	L
SF-2550-16-1	50
SF-2560-16-1	60
SF-2570-16-1	70

φ20 T=1/10



SF-2560-20-1

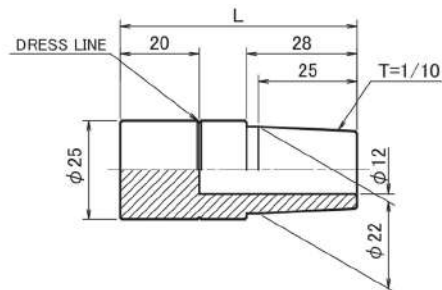


Model No.	L
SF-2550-20-1	50
SF-2560-20-1	60
SF-2570-20-1	70

φ22 T=1/10



SF-2560-22-1



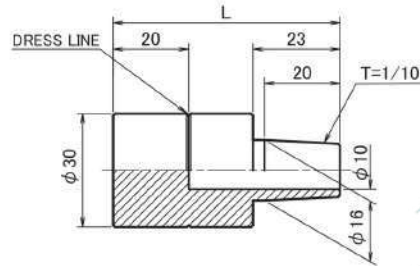
Model No.	L
SF-2550-22-1	50
SF-2560-22-1	60
SF-2570-22-1	70

Outer Dia. 30 mm.

φ16 T=1/10



SF-3060-16-1

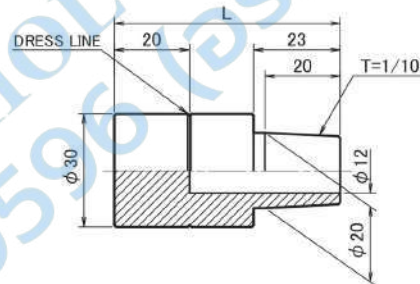


Model No.	L
SF-3050-16-1	50
SF-3060-16-1	60
SF-3070-16-1	70

φ20 T=1/10



SF-3060-20-1

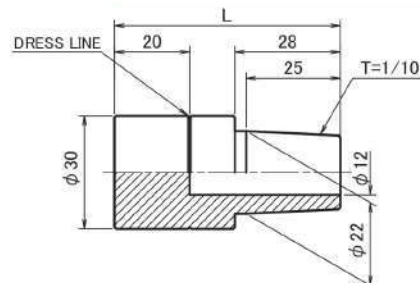


Model No.	L
SF-3050-20-1	50
SF-3060-20-1	60
SF-3070-20-1	70

φ22 T=1/10



SF-3060-22-1



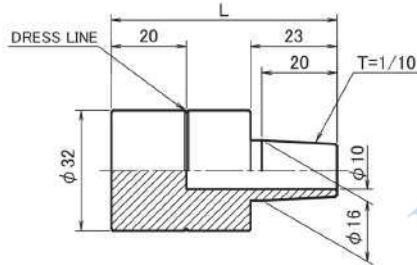
Model No.	L
SF-3050-22-1	50
SF-3060-22-1	60
SF-3070-22-1	70

Outer Dia. 32 mm.

φ16 T=1/10



SF-3260-16-1

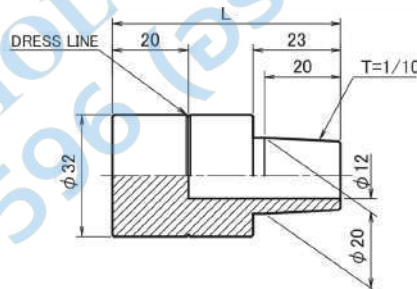


Model No.	L
SF-3250-16-1	50
SF-3260-16-1	60
SF-3270-16-1	70

φ20 T=1/10



SF-3260-20-1

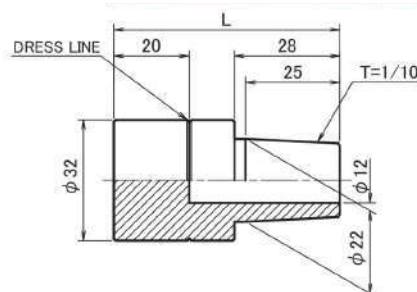


Model No.	L
SF-3250-20-1	50
SF-3260-20-1	60
SF-3270-20-1	70

φ22 T=1/10



SF-3260-22-1



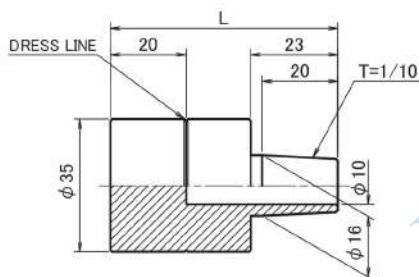
Model No.	L
SF-3250-22-1	50
SF-3260-22-1	60
SF-3270-22-1	70

Outer Dia. 35 mm.

$\phi 16$ T=1/10



SF-3560-16-1

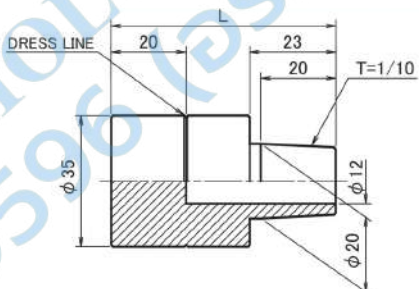


Model No.	L
SF-3550-16-1	50
SF-3560-16-1	60
SF-3570-16-1	70

$\phi 20$ T=1/10



SF-3560-20-1

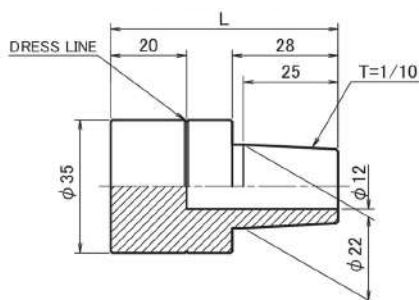


Model No.	L
SF-3550-20-1	50
SF-3560-20-1	60
SF-3570-20-1	70

$\phi 22$ T=1/10



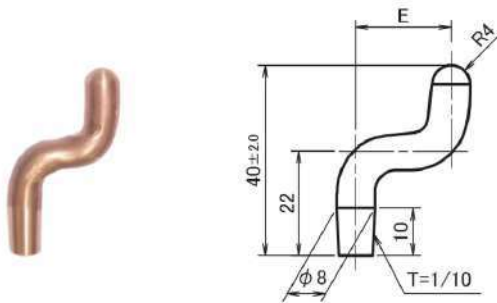
SF-3560-22-1



Model No.	L
SF-3550-22-1	50
SF-3560-22-1	60
SF-3570-22-1	70

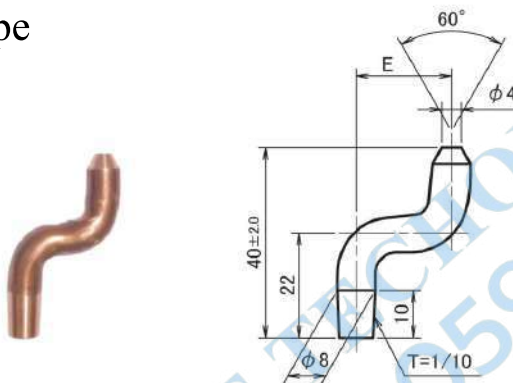
$\phi 8$ T=1/10 (Without Water-cooling)

R Type



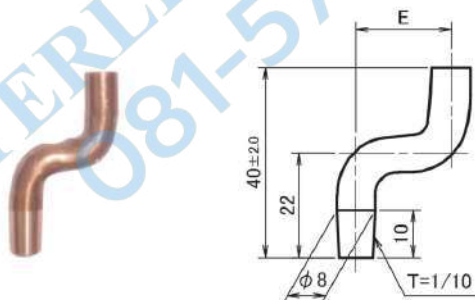
Model No.	E
BR-0840-20-1	20

P Type



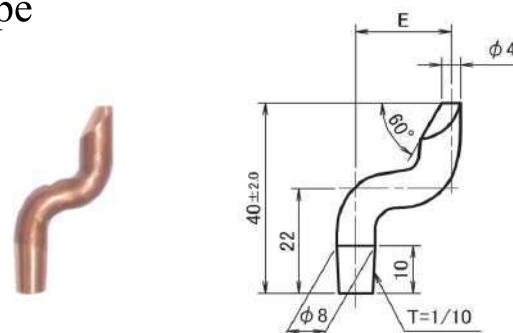
Model No.	E
BP-0840-20-1	20

F Type



Model No.	E
BF-0840-20-1	20

E Type



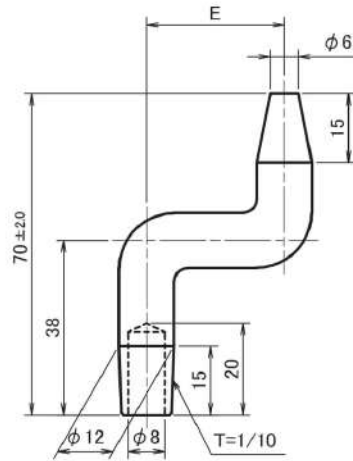
Model No.	E
BE-0840-20-1	20

$\phi 12$ T=1/10

P Type



BP90-1270-50-1

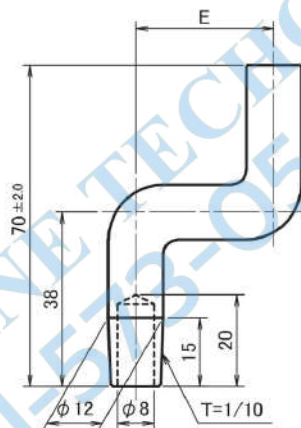


Model No.	E
BP90-1270-30-1	30
BP90-1270-50-1	50

F Type



BF90-1270-50-1

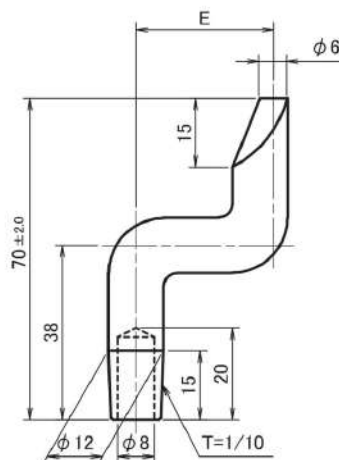


Model No.	E
BF90-1270-30-1	30
BF90-1270-50-1	50

E Type



BE90-1270-50-1



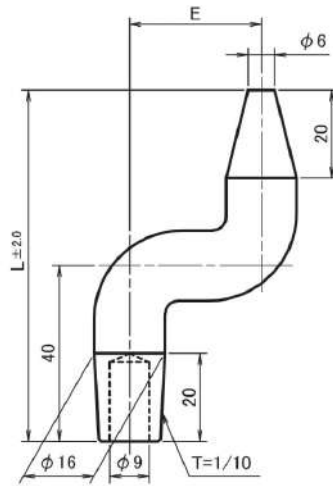
Model No.	E
BE90-1270-30-1	30
BE90-1270-50-1	50

$\phi 16$ T=1/10

P Type



BP90-1680-30-1

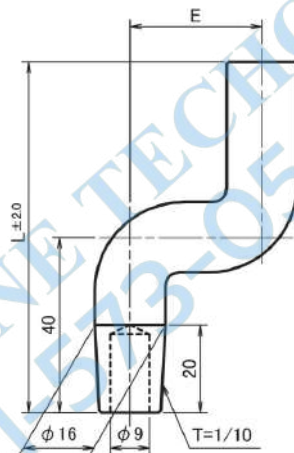


Model No.	H	L
BP90-1680-30-1	30	80
BP90-1690-50-1	50	90

F Type



BF90-1680-30-1

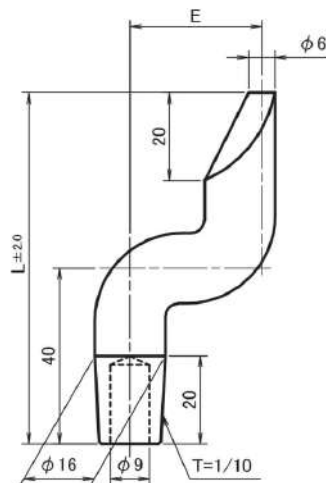


Model No.	H	L
BF90-1680-30-1	30	80
BF90-1690-50-1	50	90

E Type



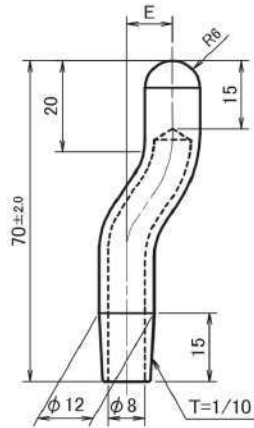
BE90-1680-30-1



Model No.	H	L
BE90-1680-30-1	30	80
BE90-1690-50-1	50	90

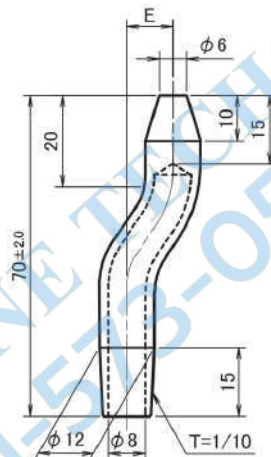
$\phi 12$ T=1/10

R Type



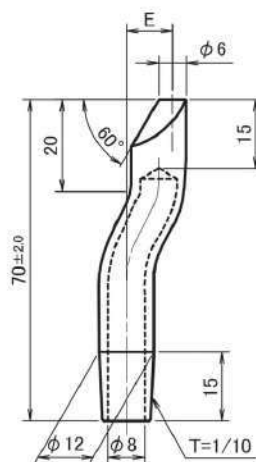
Model No.	E
BR-1270-10-1	10
BR-1270-15-1	15
BR-1270-20-1	20
BR-1270-25-1	25
BR-1270-30-1	30

P Type



Model No.	E
BP-1270-10-1	10
BP-1270-15-1	15
BP-1270-20-1	20
BP-1270-25-1	25
BP-1270-30-1	30

E Type



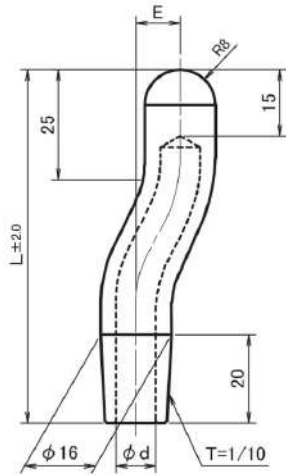
Model No.	E
BE-1270-10-1	10
BE-1270-15-1	15
BE-1270-20-1	20
BE-1270-25-1	25
BE-1270-30-1	30

$\phi 16$ T=1/10

R Type



BR-1680-10-1

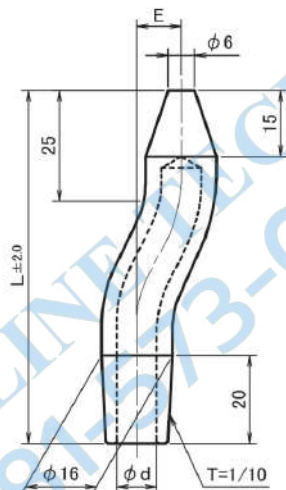


Model No.	E	Ø d	L
BR-1680-10-1	10	Ø 9	80
BR-1680-15-1	15	Ø 9	80
BR-1680-20-1	20	Ø 9	80
BR-1680-25-1	25	Ø 9	80
BR-1680-30-1	30	Ø 9	80
BR-1690-35-1	35	Ø 8	90
BR-1690-40-1	40	Ø 8	90

P Type



BP-1680-10-1

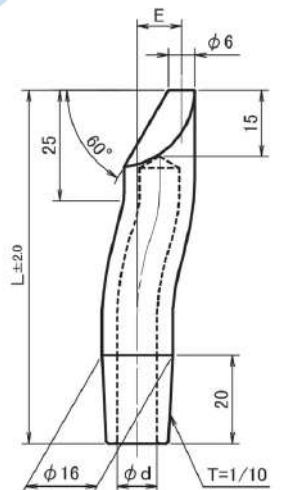


Model No.	E	Ø d	L
BP-1680-10-1	10	Ø 9	80
BP-1680-15-1	15	Ø 9	80
BP-1680-20-1	20	Ø 9	80
BP-1680-25-1	25	Ø 9	80
BP-1680-30-1	30	Ø 9	80
BP-1690-35-1	35	Ø 8	90
BP-1690-40-1	40	Ø 8	90

E Type

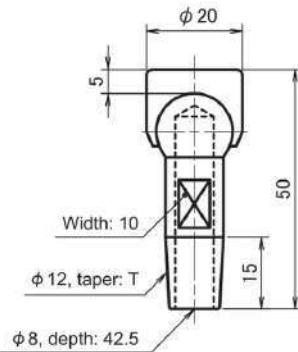


BE-1680-10-1



Model No.	E	Ø d	L
BE-1680-10-1	10	Ø 9	80
BE-1680-15-1	15	Ø 9	80
BE-1680-20-1	20	Ø 9	80
BE-1680-25-1	25	Ø 9	80
BE-1680-30-1	30	Ø 9	80
BE-1690-35-1	35	Ø 8	90
BE-1690-40-1	40	Ø 8	90

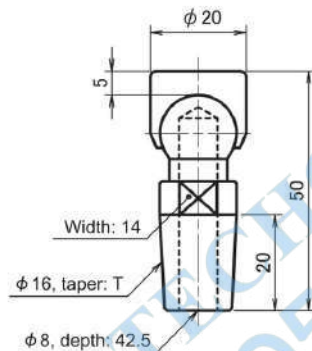
SBC-2050-12-1



φ 20 Outer taper φ 12

Model No.	T
SBC-2050-12-1	1/10
SBC-2050-12-2	MT#1

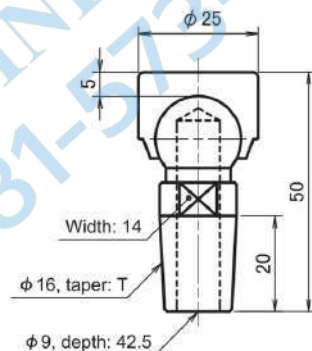
SBC-2050-16-1



φ 20 Outer taper φ 16

Model No.	T
SBC-2050-16-1	1/10
SBC-2050-16-2	MT#2
SBC-2050-16-3	1/5

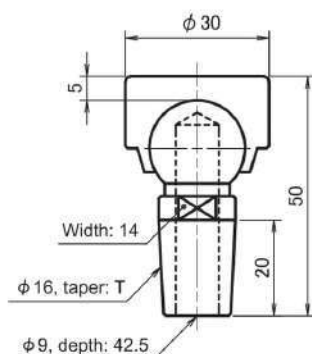
SBC-2550-16-1



φ 25 Outer taper φ 16

Model No.	T
SBC-2550-16-1	1/10
SBC-2550-16-2	MT#2
SBC-2550-16-3	1/5

SBC-3050-16-1

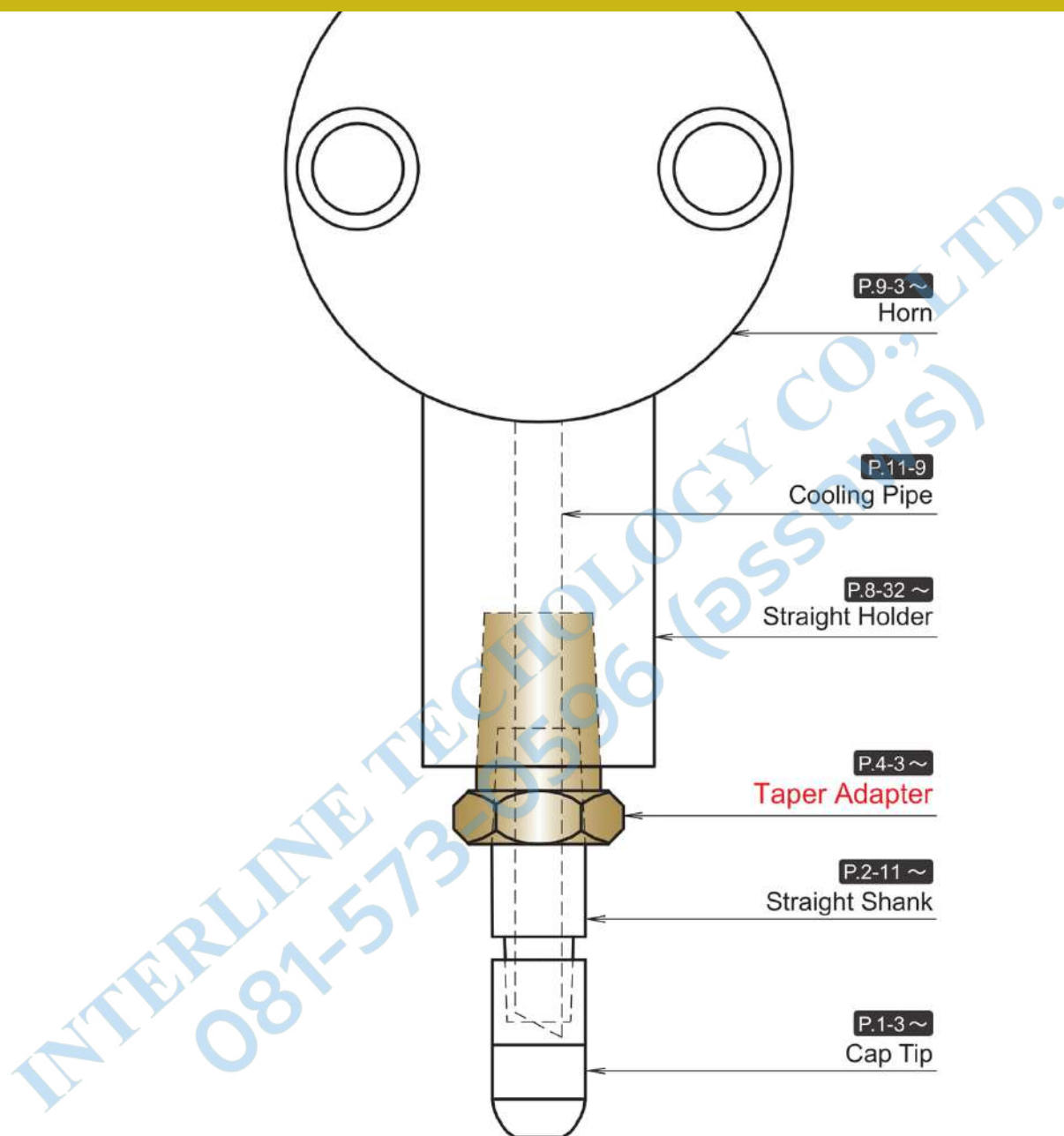


φ 30 Outer taper φ 16

Model No.	T
SBC-3050-16-1	1/10
SBC-3050-16-2	MT#2
SBC-3050-16-3	1/5

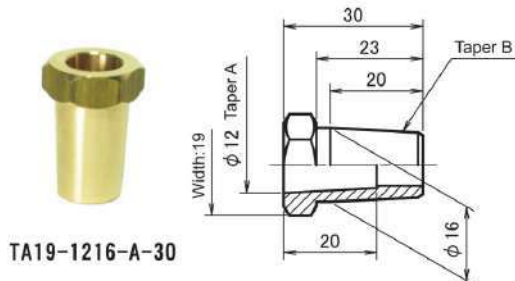
ADAPTERS

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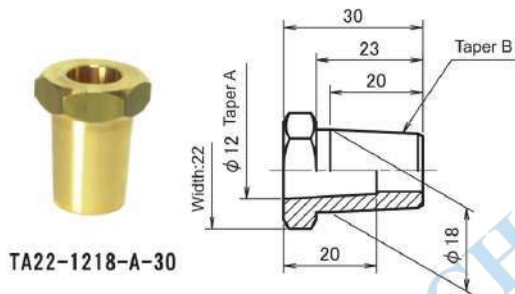
Hexagonal

Outer Taper: $\phi 16$



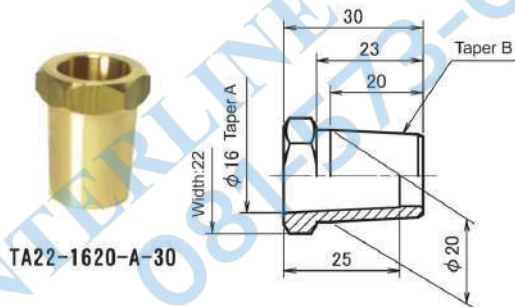
Model No.	A	B
TA19-1216-A-30	1/10	1/10
TA19-1216-B-30	1/10	MT#2
TA19-1216-C-30	1/10	1/5
TA19-1216-D-30	MT#1	MT#2
TA19-1216-E-30	MT#1	1/10
TA19-1216-F-30	MT#1	1/5

Outer Taper: $\phi 18$



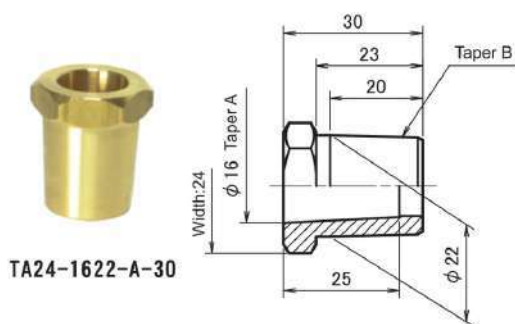
Model No.	A	B
TA22-1218-A-30	1/10	1/10
TA22-1218-B-30	1/10	MT#2
TA22-1218-C-30	1/10	1/5
TA22-1218-D-30	MT#1	MT#2
TA22-1218-E-30	MT#1	1/10
TA22-1218-F-30	MT#1	1/5

Outer Taper: $\phi 20$



Model No.	A	B
TA22-1620-A-30	1/10	1/10
TA22-1620-B-30	1/10	MT#3
TA22-1620-C-30	1/10	1/5
TA22-1620-D-30	MT#2	MT#3
TA22-1620-F-30	MT#2	1/5
TA22-1620-G-30	1/5	1/5
TA22-1620-H-30	1/5	MT#3
TA22-1620-I-30	1/5	1/10

Outer Taper: $\phi 22$



Model No.	A	B
TA24-1622-A-30	1/10	1/10
TA24-1622-B-30	1/10	MT#3
TA24-1622-C-30	1/10	1/5
TA24-1622-D-30	MT#2	MT#3
TA24-1622-F-30	MT#2	1/5
TA24-1622-G-30	1/5	1/5
TA24-1622-H-30	1/5	MT#3
TA24-1622-I-30	1/5	1/10

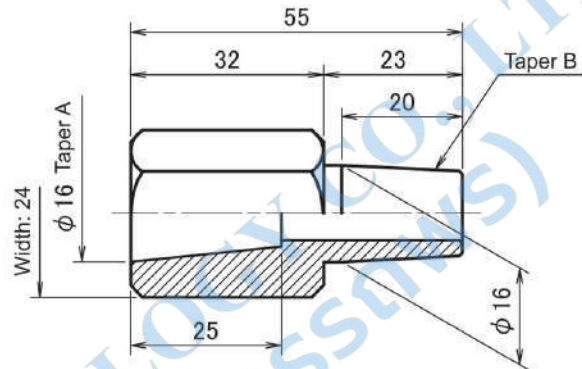
Hexagonal



TA24-1616-I-55

Outer Taper: $\phi 16$

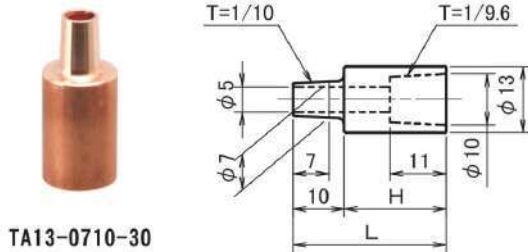
Inner Taper: $\phi 16$



Model No.	A	B
TA24-1616-A-55	1/10	1/10
TA24-1616-B-55	1/10	MT#2
TA24-1616-C-55	1/10	1/5
TA24-1616-D-55	MT#2	MT#2
TA24-1616-E-55	MT#2	1/10
TA24-1616-F-55	MT#2	1/5
TA24-1616-G-55	1/5	1/5
TA24-1616-H-55	1/5	MT#2
TA24-1616-I-55	1/5	1/10

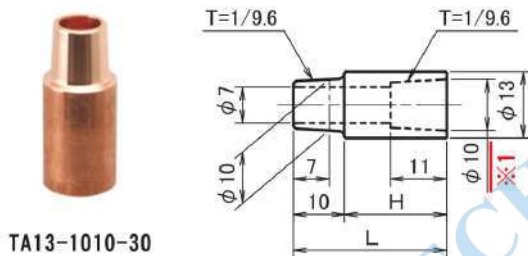
Cap Tip Type

Suitable for $\phi 9$ Cap Tips



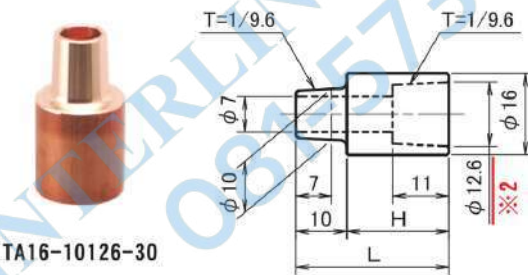
Model No.	H	L
TA13-1710-25	15	25
TA13-1710-30	20	30
TA13-1710-35	25	35
TA13-1710-40	30	40

Suitable for $\phi 12 \cdot \phi 13$ Cap Tips



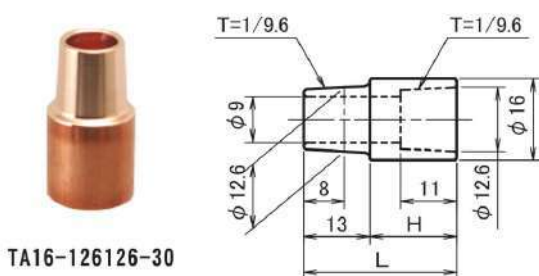
Model No.	H	L
TA13-1010-25	15	25
TA13-1010-30	20	30
TA13-1010-35	25	35
TA13-1010-40	30	40

Suitable for $\phi 12 \cdot \phi 13$ Cap Tips



Model No.	H	L
TA16-106126-25	15	25
TA16-106126-30	20	30
TA16-106126-35	25	35
TA16-106126-40	30	40
TA16-106126-45	35	45
TA16-106126-50	40	50
TA16-106126-55	45	55
TA16-106126-60	50	60

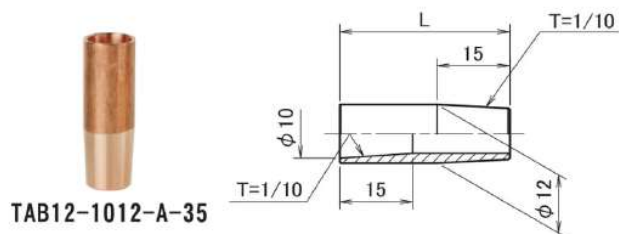
Suitable for $\phi 16$ Cap Tips



Model No.	H	L
TA16-126126-25	12	25
TA16-126126-30	17	30
TA16-126126-35	22	35
TA16-126126-40	27	40
TA16-126126-45	32	45
TA16-126126-50	37	50
TA16-126126-55	42	55
TA16-126126-60	47	60

$\phi 12 \bullet \phi 16$

$\phi 12$ T=1/10



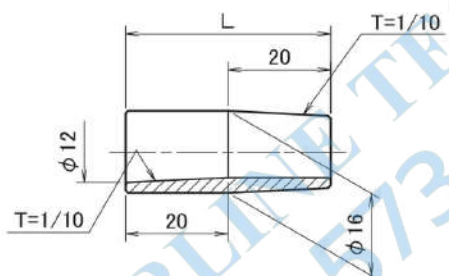
TAB12-1012-A-35

Model No.	L
TAB12-1012-A-25	25
TAB12-1012-A-30	30
TAB12-1012-A-35	35

$\phi 16$ T=1/10



TAB16-1216-A-40

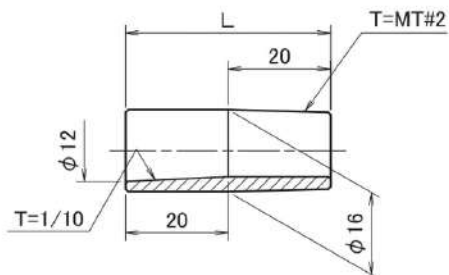


Model No.	L
TAB16-1216-A-30	30
TAB16-1216-A-35	35
TAB16-1216-A-40	40
TAB16-1216-A-45	45
TAB16-1216-A-50	50
TAB16-1216-A-55	55
TAB16-1216-A-60	60
TAB16-1216-A-65	65
TAB16-1216-A-70	70
TAB16-1216-A-75	75
TAB16-1216-A-80	80
TAB16-1216-A-85	85
TAB16-1216-A-90	90

$\phi 16$ T=MT#2



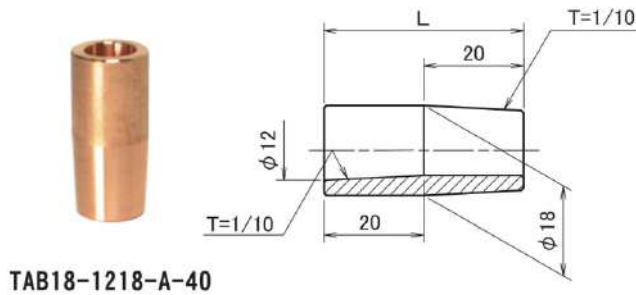
TAB16-1216-B-40



Model No.	L
TAB16-1216-B-30	30
TAB16-1216-B-35	35
TAB16-1216-B-40	40
TAB16-1216-B-45	45
TAB16-1216-B-50	50
TAB16-1216-B-55	55
TAB16-1216-B-60	60
TAB16-1216-B-65	65
TAB16-1216-B-70	70
TAB16-1216-B-75	75
TAB16-1216-B-80	80
TAB16-1216-B-85	85
TAB16-1216-B-90	90

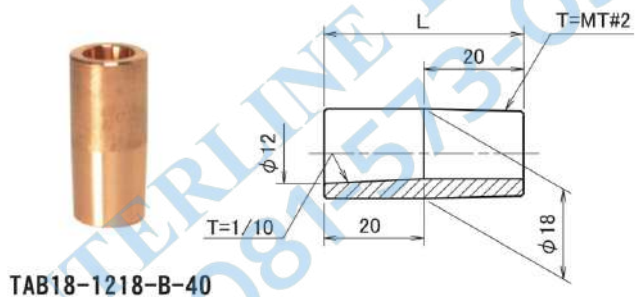
$\phi 18$

$\phi 18$ T=1/10



Model No.	L
TAB18-1218-A-30	30
TAB18-1218-A-35	35
TAB18-1218-A-40	40
TAB18-1218-A-45	45
TAB18-1218-A-50	50
TAB18-1218-A-55	55
TAB18-1218-A-60	60

$\phi 18$ T=MT#2



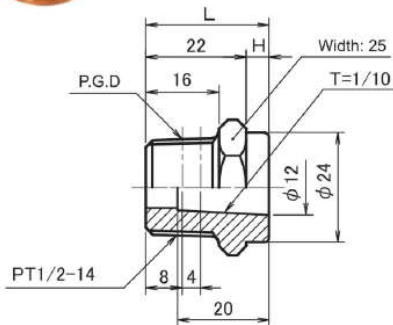
Model No.	L
TAB18-1218-B-30	30
TAB18-1218-B-35	35
TAB18-1218-B-40	40
TAB18-1218-B-45	45
TAB18-1218-B-50	50
TAB18-1218-B-55	55
TAB18-1218-B-60	60

PT Screw

φ12 T=1/10



NNA-12-04-27-1-C

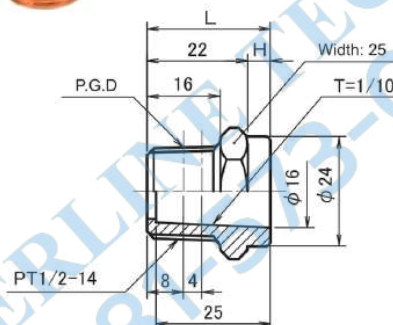


Model No.	H	L
NNA-12-04-22-1-C	0	22
NNA-12-04-27-1-C	5	27
NNA-12-04-32-1-C	10	32
NNA-12-04-37-1-C	15	37

φ16 T=1/10

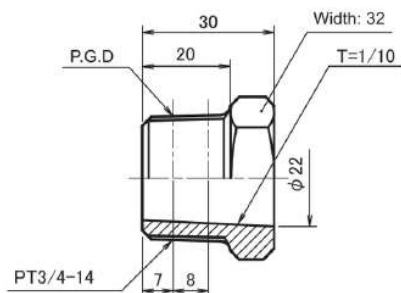


NNA-16-04-27-1-C



Model No.	H	L
NNA-16-04-22-1-C	0	22
NNA-16-04-27-1-C	5	27
NNA-16-04-32-1-C	10	32
NNA-16-04-37-1-C	15	37
NNA-16-04-42-1-C	20	42
NNA-16-04-52-1-C	30	52
NNA-16-04-62-1-C	40	62
NNA-16-04-72-1-C	50	72

φ22 T=1/10



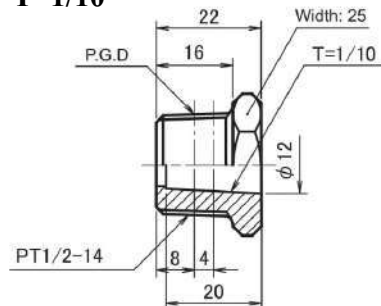
Model No.

NNA-22-06-30-1-C



PT Screw

$\phi 12$ T=1/10

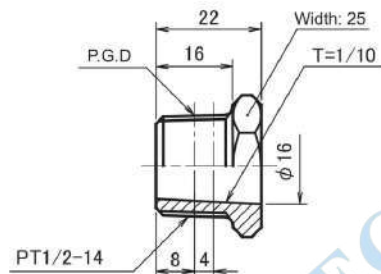


Model No.

NNA-12-04-22-1-B



$\phi 16$ T=1/10

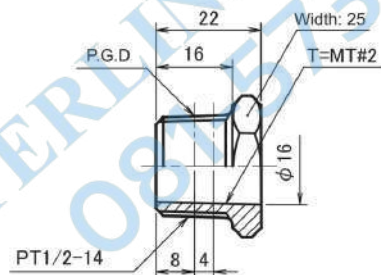


Model No.

NNA-16-04-22-1-B



$\phi 16$ T=MT#2

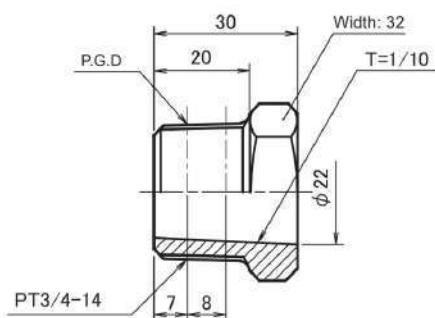


Model No.

NNA-16-04-22-2-B



$\phi 22$ T=1/10



Model No.

NNA-22-06-30-1-B

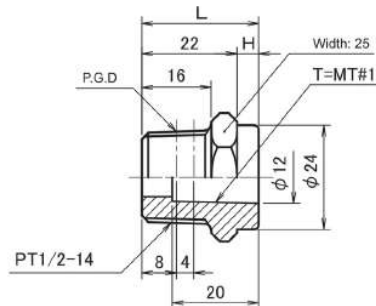


PT Screw

φ12 T=MT#1



NNA-12-04-27-2-C

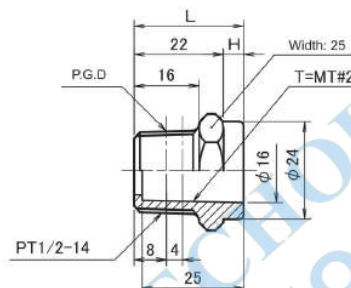


Model No.	H	L
NNA-12-04-22-2-C	0	22
NNA-12-04-27-2-C	5	27
NNA-12-04-32-2-C	10	32
NNA-12-04-37-2-C	15	37

φ16 T=MT#2



NNA-16-04-27-2-C



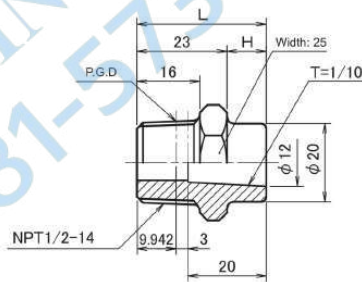
Model No.	H	L
NNA-16-04-22-2-C	0	22
NNA-16-04-27-2-C	5	27
NNA-16-04-32-2-C	10	32
NNA-16-04-37-2-C	15	37
NNA-16-04-42-2-C	20	42
NNA-16-04-52-2-C	30	52
NNA-16-04-62-2-C	40	62
NNA-16-04-72-2-C	50	72

NPT Screw

φ12 T=1/10



TNA-12-04-33-1-C

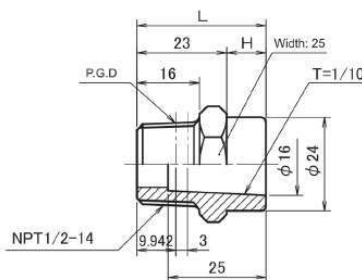


Model No.	H	L
TNA-12-04-23-1-C	0	23
TNA-12-04-33-1-C	10	33
TNA-12-04-43-1-C	20	43
TNA-12-04-53-1-C	35	53
TNA-12-04-73-1-C	50	73

φ16 T=1/10



TNA-16-04-33-1-C



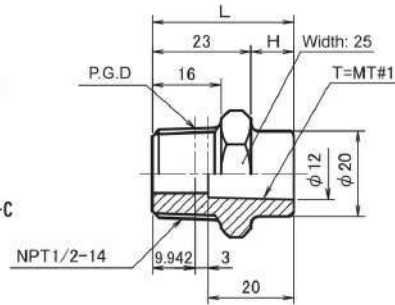
Model No.	H	L
TNA-16-04-23-1-C	0	23
TNA-16-04-33-1-C	10	33
TNA-16-04-43-1-C	20	43
TNA-16-04-53-1-C	35	53
TNA-16-04-73-1-C	50	73

NPT Screw

Ø12 T=MT#1



TNA-12-04-33-2-C

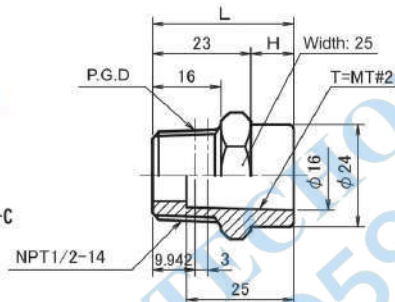


Model No.	H	L
TNA-12-04-23-2-C	0	23
TNA-12-04-33-2-C	10	33
TNA-12-04-43-2-C	20	43
TNA-12-04-53-2-C	35	53
TNA-12-04-73-2-C	50	73

Ø16 T=MT#2

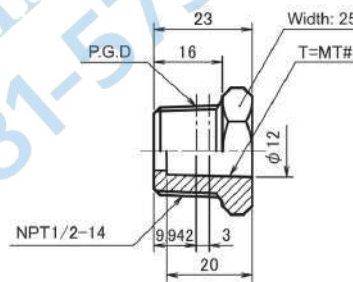


TNA-16-04-33-2-C



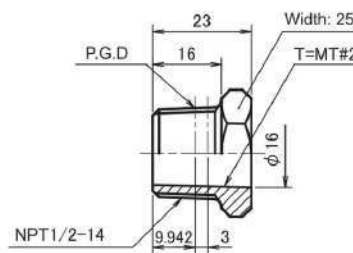
Model No.	H	L
TNA-16-04-23-2-C	0	23
TNA-16-04-33-2-C	10	33
TNA-16-04-43-2-C	20	43
TNA-16-04-53-2-C	35	53
TNA-16-04-73-2-C	50	73

Ø12 T=MT#1



Model No.
TNA-12-04-23-2-B

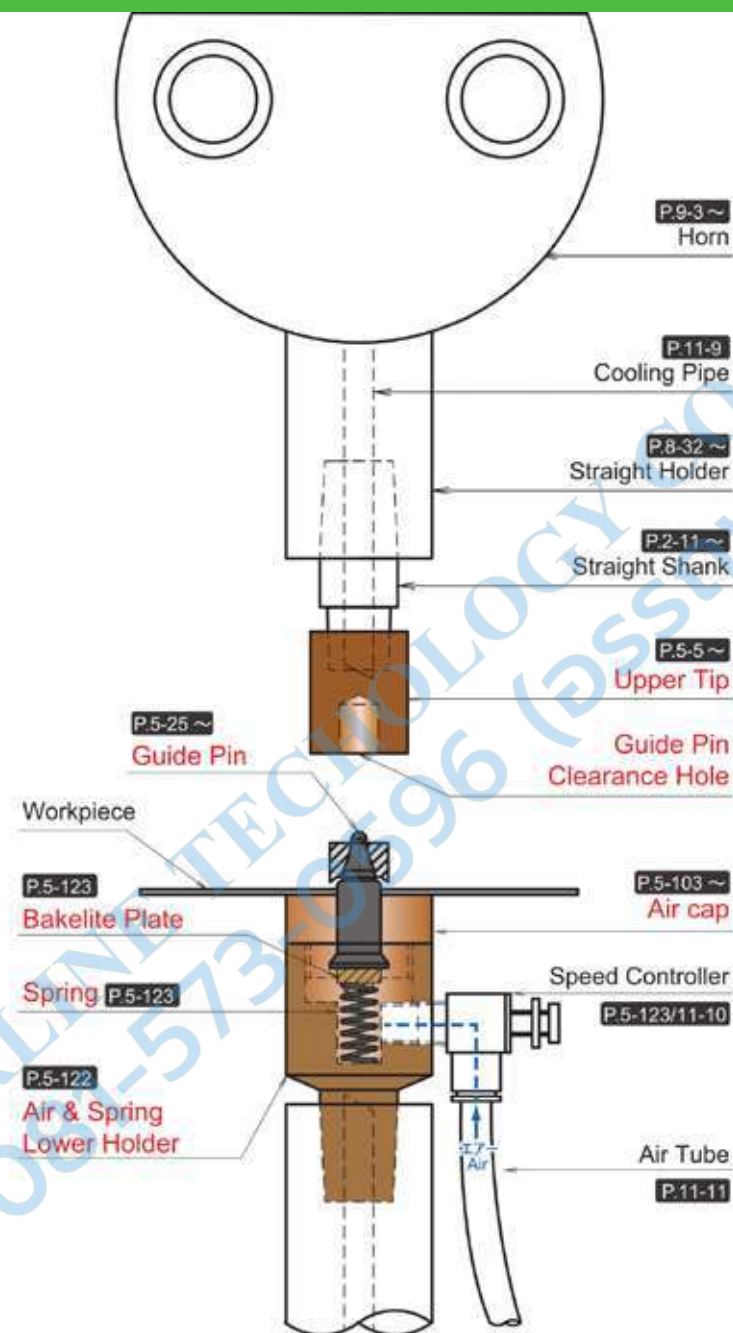
Ø16 T=MT#2



Model No.
TNA-16-04-23-2-B

ELECTRODES FOR NUT WELDING

98



RM-15 ~ Examples of combination of Lower Electrodes for Nut Welding.

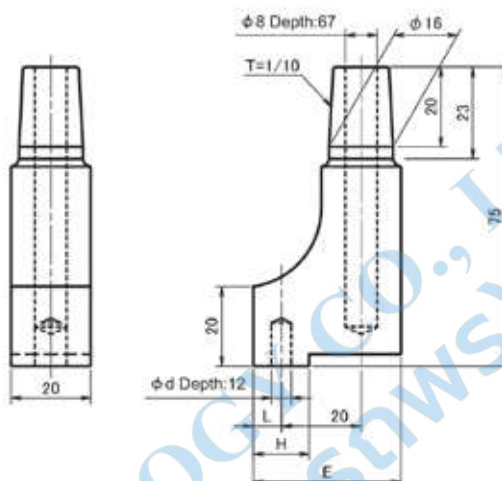


MISSING-PART PREVENTION
CAP TIP FOR NUT WELDING
New



P.5-21

M5 · M6 · M8



Model No.	NUT	ϕd	L	H	E
PU-U5-20-2075-0507-1	M5	5	7	14	37
PU-U6-20-2075-0608-1	M6	6	8	16	38
PU-U8-20-2075-0810-1	M8	8	10	20	40

Example of use



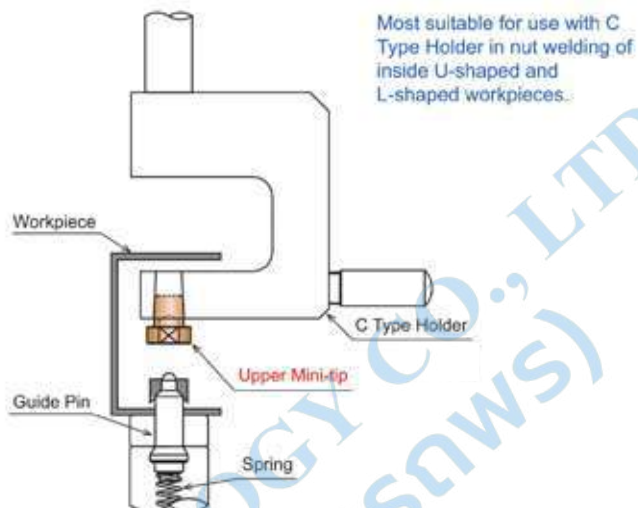
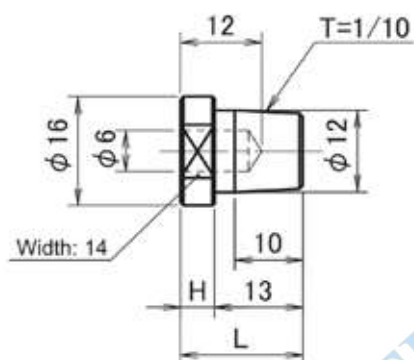
Suitable for nut welding of the edge of workpieces.

Since there is no deflection during pressurization, welding quality is stable.

M6



PN-U6-1618-1



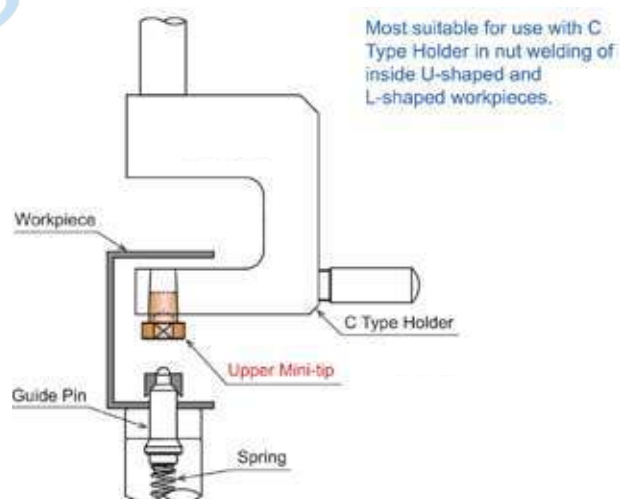
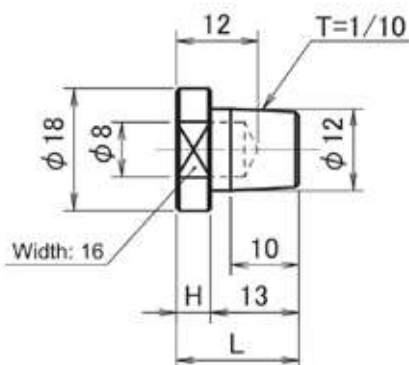
Most suitable for use with C Type Holder in nut welding of inside U-shaped and L-shaped workpieces.

Model No.	H	L
PU-U6-1618-1	5	18
PU-U6-1620-1	7	20
PU-U6-1623-1	10	23

M8



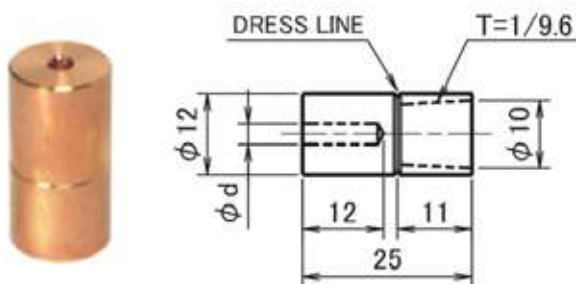
PN-U8-1818-1



Most suitable for use with C Type Holder in nut welding of inside U-shaped and L-shaped workpieces.

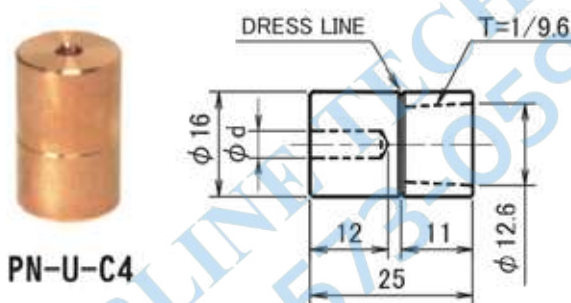
Model No.	H	L
PU-U8-1818-1	5	18
PU-U8-1820-1	7	20
PU-U8-1823-1	10	23

M3



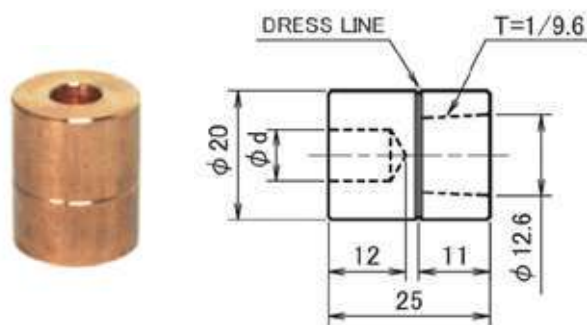
Model No.	NUT	ϕd
PN-U-C3	M3	3

M4 · M5 · M6



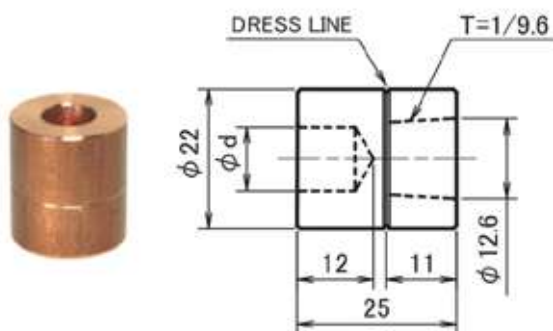
Model No.	NUT	ϕd
PN-U-C4	M4	4
PN-U-C5	M5	5
PN-U-C6	M6	6

M8



Model No.	NUT	ϕd
PN-U-C8	M8	8

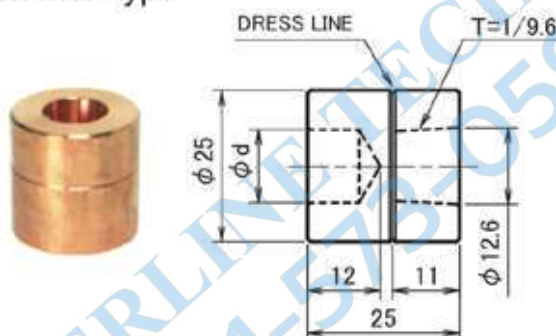
M10



Model No.	NUT	ϕd
PN-U-C10	M10	10

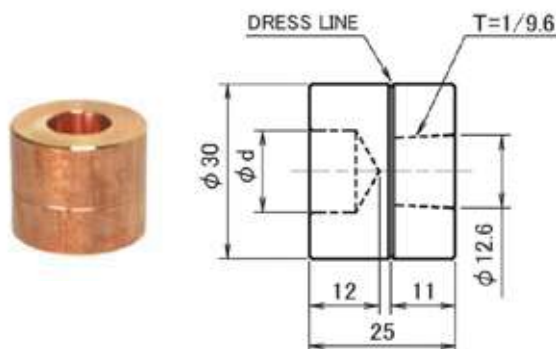
M12 · 7/16

Common type



Model No.	NUT	ϕd
PN-U-C127	M12 · 7/16	12

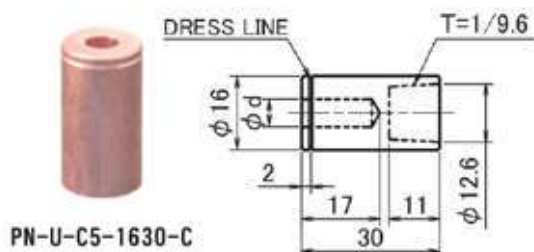
M14



Model No.	NUT	ϕd
PN-U-C14	M14	14

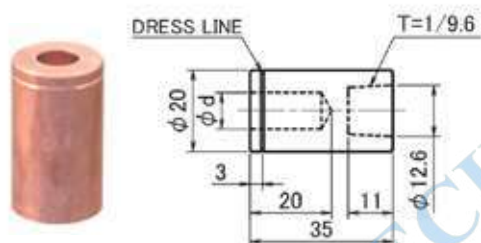
Deep clearance hole Type (Suitable for Nut Welding navi/Slide Unit too)

M15 · M6



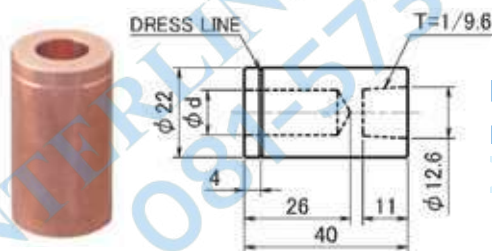
Model No.	NUT	Base hole diameter of work	ϕd
PN-U-C5-1630-C	M5	$\phi 6$	6
PN-U-C6-1630-C	M6	$\phi 7$	7

M8



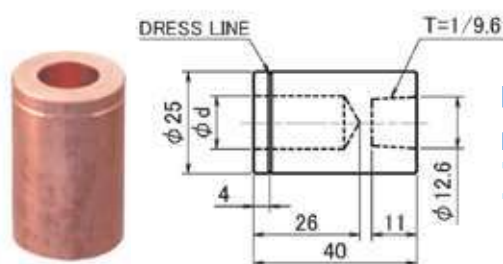
Model No.	NUT	Base hole diameter of work	ϕd
PN-U-C8-2035-C	M8	$\phi 9$	9

M10



Model No.	NUT	Base hole diameter of work	ϕd
PN-U-C10-2140-C	M10	$\phi 11$	11

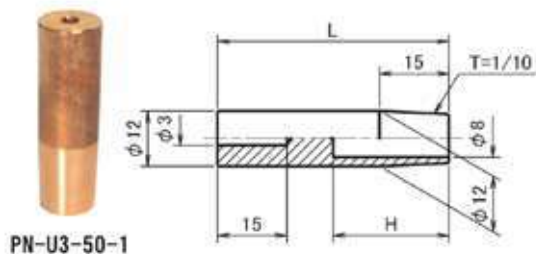
M12 · 7/16 Common type



Model No.	NUT	Base hole diameter of work	ϕd
PN-U-C127-2540-C	M12 · 7/16	$\phi 13$	13

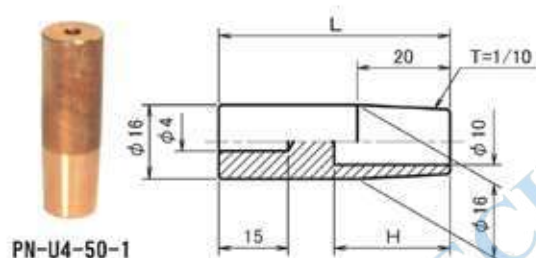
$T=1/10$

M3 $\phi 12$



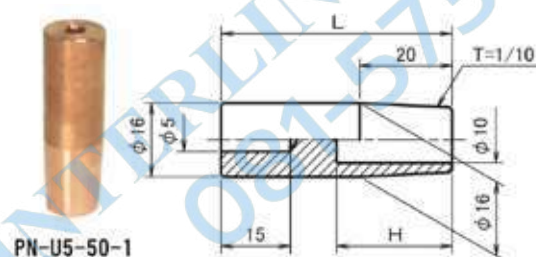
Model No.	NUT	H	L
PN-U3-50-1	M3	25	50
PN-U3-60-1	M3	35	60
PN-U3-70-1	M3	45	70

M4 $\phi 16$



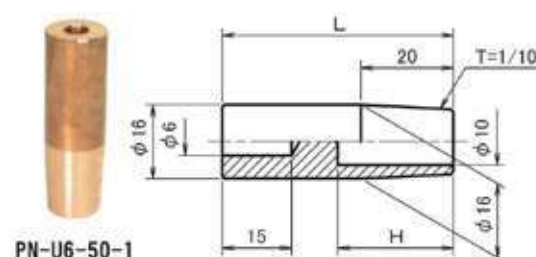
Model No.	NUT	H	L
PN-U4-50-1	M4	25	50
PN-U4-60-1	M4	35	60
PN-U4-70-1	M4	45	70

M5 $\phi 16$



Model No.	NUT	H	L
PN-U5-50-1	M5	25	50
PN-U5-60-1	M5	35	60
PN-U5-70-1	M5	45	70

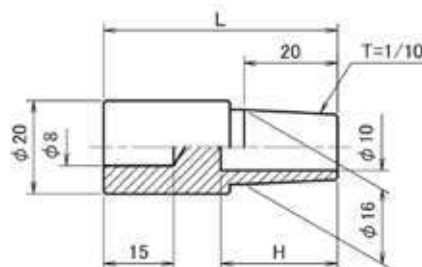
M6 $\phi 16$



Model No.	NUT	H	L
PN-U6-50-1	M6	25	50
PN-U6-60-1	M6	35	60
PN-U6-70-1	M6	45	70

φ16 T=1/10**M8**

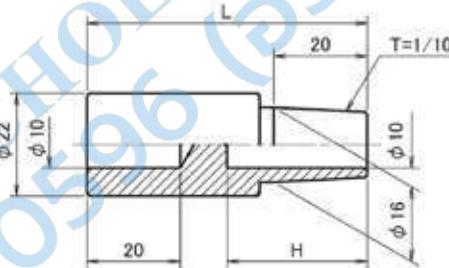
PN-U8-50-1



Model No.	NUT	H	L
PN-U8-50-1	M8	25	50
PN-U8-60-1	M8	35	60
PN-U8-70-1	M8	45	70

M10

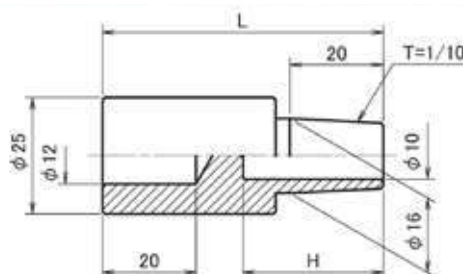
PN-U10-60-1



Model No.	NUT	H	L
PN-U10-60-1	M10	30	60
PN-U10-70-1	M10	40	70
PN-U10-80-1	M10	50	80

M12 · 7/16**Common type**

PN-U127-60-1



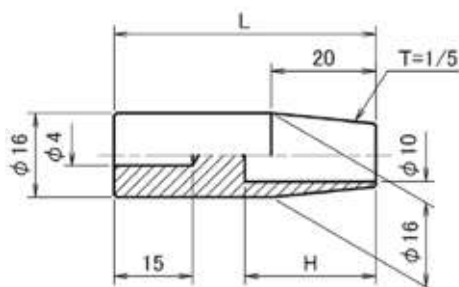
Model No.	NUT	H	L
PN-U127-60-1	M12 · 7/16	30	60
PN-U127-70-1	M12 · 7/16	40	70
PN-U127-80-1	M12 · 7/16	50	80

$\phi 16$ T=1/5

M4



PN-U4-50-3

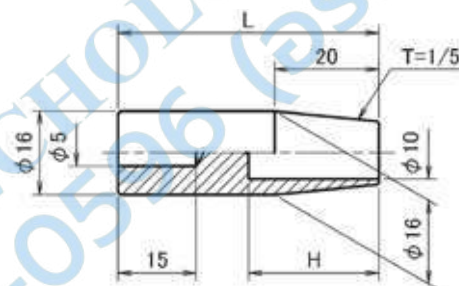


Model No.	NUT	H	L
PN-U4-50-3	M4	25	50
PN-U4-60-3	M4	35	60
PN-U4-70-3	M4	45	70

M5



PN-U5-50-3

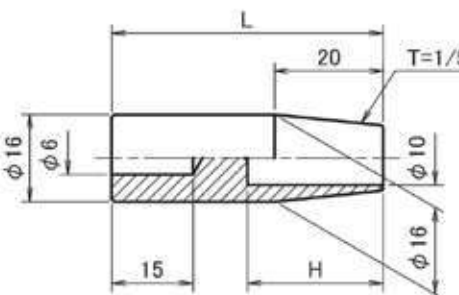


Model No.	NUT	H	L
PN-U5-50-3	M5	25	50
PN-U5-60-3	M5	35	60
PN-U5-70-3	M5	45	70

M6



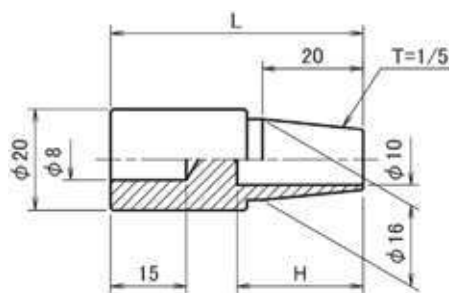
PN-U6-50-3



Model No.	NUT	H	L
PN-U6-50-3	M6	25	50
PN-U6-60-3	M6	35	60
PN-U6-70-3	M6	45	70

φ16 T=1/5**M8**

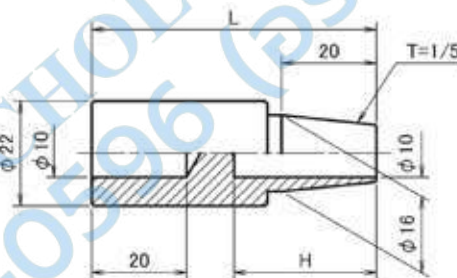
PN-U8-50-3



Model No.	NUT	H	L
PN-U8-50-3	M8	25	50
PN-U8-60-3	M8	35	60
PN-U8-70-3	M8	45	70

M10

PN-U10-60-3



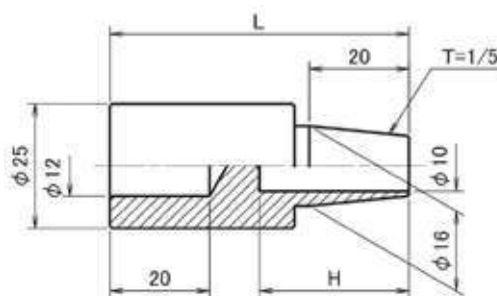
Model No.	NUT	H	L
PN-U10-60-3	M10	30	60
PN-U10-70-3	M10	40	70
PN-U10-80-3	M10	50	80

M12 · 7/16

Common type

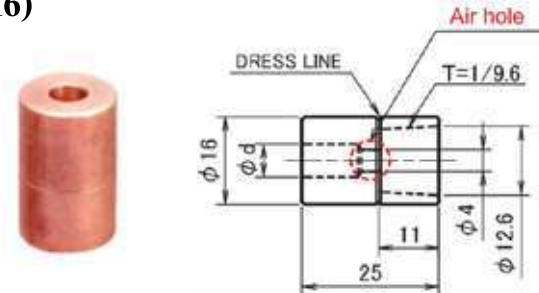


PN-U127-60-3



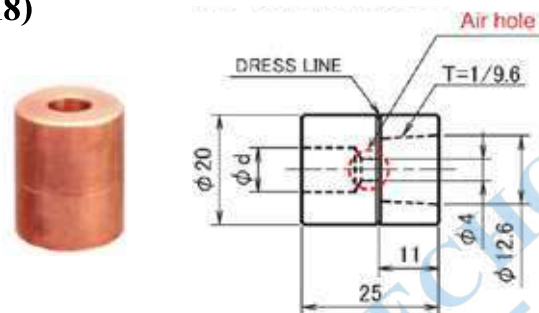
Model No.	NUT	H	L
PN-U127-60-3	M12 · 7/16	30	60
PN-U127-70-3	M12 · 7/16	40	70
PN-U127-80-3	M12 · 7/16	50	80

Cap tip with air blow hole (M6)



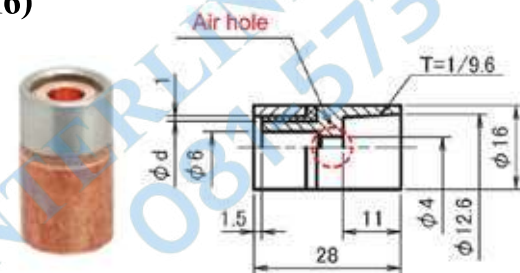
Model No.	NUT	ϕd
AB-PN-U-C6-4	M6	6

Cap tip with air blow hole (M8)



Model No.	NUT	ϕd
AB-PN-U-C8-4	M8	8

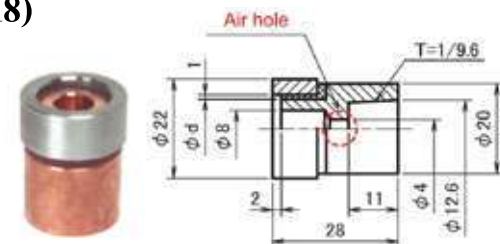
Missing-part prevention Cap Tip with air blow hole (M6)



AB-PN-K16-C6-10-4

Model No.	NUT	ϕd	A
AB-PN-K16-C6-10-4	M6	10	11
AB-PN-K16-C6-11-4	M6	11	12
AB-PN-K16-C6-12-4	M6	12	13

Missing-part prevention Cap Tip with air blow hole (M8)



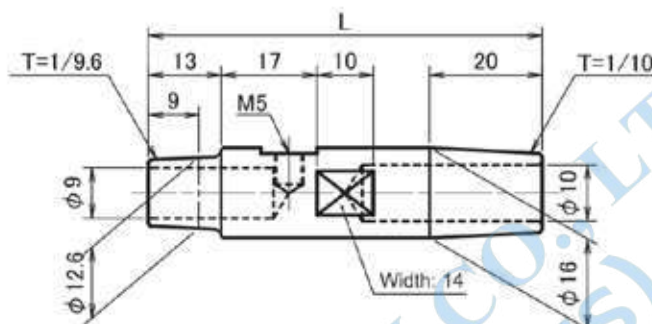
AB-PN-K-C8-13-4

Model No.	NUT	ϕd	A
AB-PN-K-C8-13-4	M8	13	14
AB-PN-K-C8-14-4	M8	14	15
AB-PN-K-C8-15-4	M8	15	16

Straight Shank with air blow hole

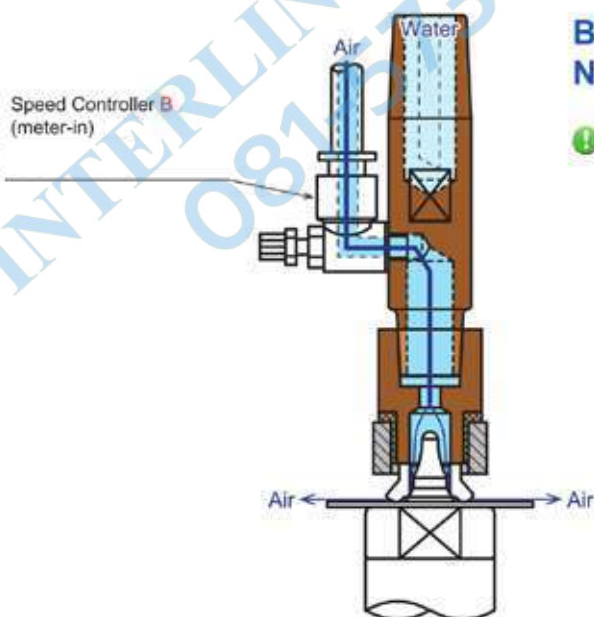


AB-SS-1670-1-M5-SA



Model No.	L
AB-SS-1670-1-M5-SA	70
AB-SS-1680-1-M5-SA	80
AB-SS-1690-1-M5-SA	90
AB-SS-16100-1-M5-SA	100

Example of use

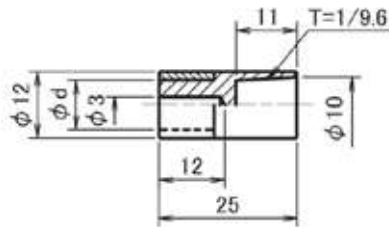


By air blow from upper electrode, Nut screw part is spatter-resistant!

- ! - To turn on/off air blow, it need to control relay and electromagnetic valve.
(It's an optional extra. Please attach it by yourself.)
- We recommend you mounting an Air Cut valve, even if a control device doesn't work because air flows all times.

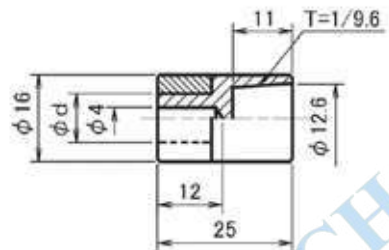
Suitable for Square Nut

M3



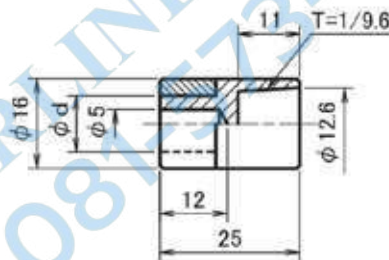
Model No.	NUT	ϕd	A
PN-G-C3-9	M3	9	10

M4



Model No.	NUT	ϕd	A
PN-G-C4-9	M4	9	10

M5

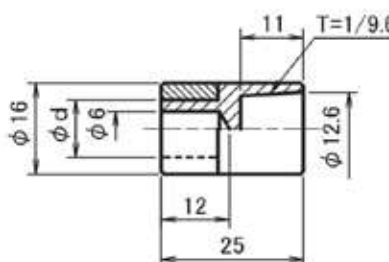


Model No.	NUT	ϕd	A
PN-G-C5-10	M5	10	11

M6



PN-G-C6-10



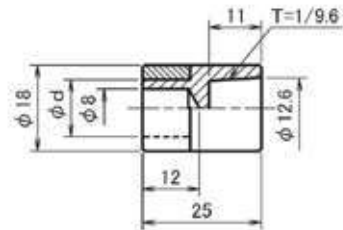
Model No.	NUT	ϕd	A
PN-G-C6-10	M6	10	11
PN-G-C6-11	M6	11	12
PN-G-C6-12	M6	12	13

Suitable for Square Nut

M8



PN-G-C8-12

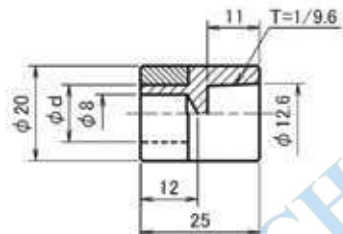


Model No.	NUT	ϕd	A
PN-G-C8-12	M8	12	13
PN-G-C8-13	M8	13	14
PN-G-C8-15	M8	15	16

M8 $\phi 20$ type

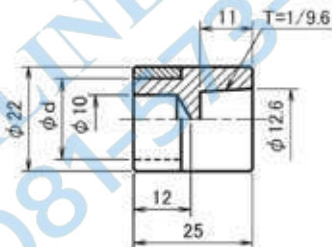


PN-G20-C8-15



Model No.	NUT	ϕd	A
PN-G20-C8-12	M8	12	13
PN-G20-C8-13	M8	13	14
PN-G20-C8-14	M8	14	15
PN-G20-C8-15	M8	15	16

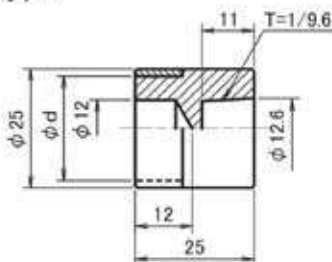
M10



Model No.	NUT	ϕd	A
PN-G-C10-17	M10	17	18

M12 · 7/16

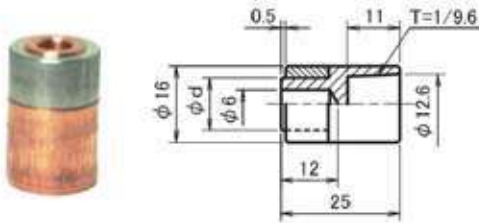
Common type



Model No.	NUT	ϕd	A
PN-G-C127-22	M12 · 7/16	22	23

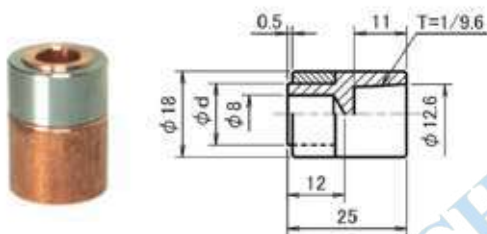
Suitable for Hexagonal Nut

M6



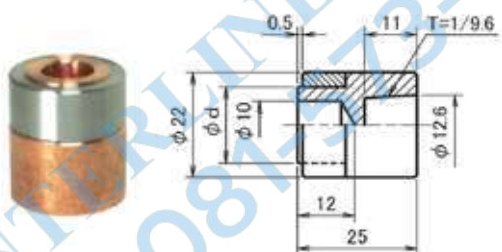
Model No.	NUT	ϕd	A
6PN-G-C6-11	M6	11	12

M8



Model No.	NUT	ϕd	A
6PN-G-C8-13	M8	13	14

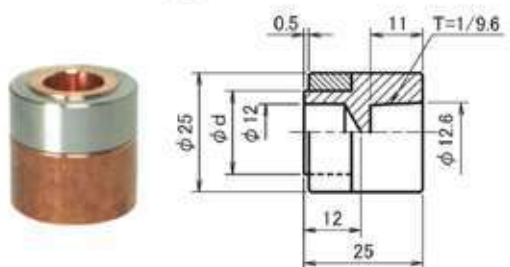
M10



Model No.	NUT	ϕd	A
6PN-G-C10-16	M10	16	17

M12·7/16

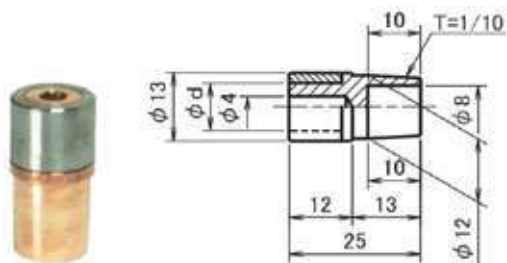
Common type



Model No.	NUT	ϕd	A
6PN-G-C127-17.5	M12·7/16	17.5	18.5

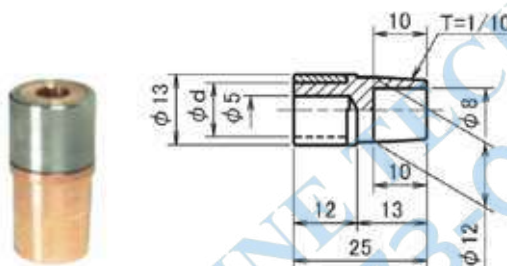
Suitable for Square Nut

M4



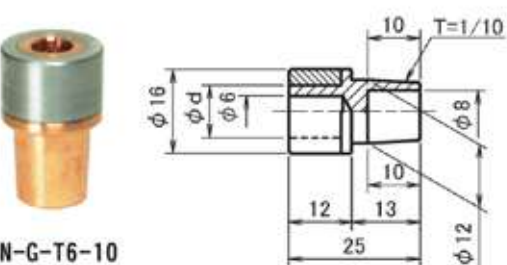
Model No.	NUT	ϕd	A
PN-G-T4-9	M4	9	10

M5



Model No.	NUT	ϕd	A
PN-G-T5-10	M5	10	11

M6



PN-G-T6-10

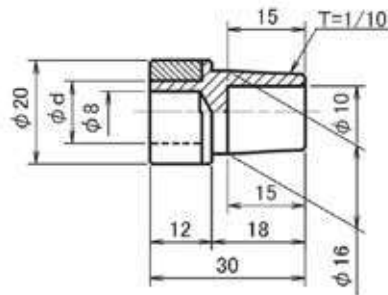
Model No.	NUT	ϕd	A
PN-G-T6-10	M6	10	11
PN-G-T6-11	M6	11	12
PN-G-T6-12	M6	12	13

Suitable for Square Nut

M8

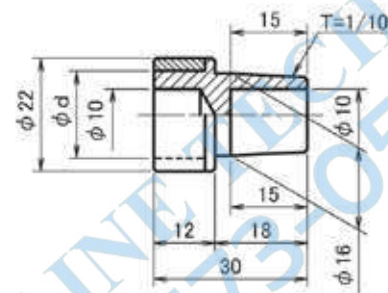


PN-G-T8-12



Model No.	NUT	ϕd	A
PN-G-T8-12	M8	12	13
PN-G-T8-13	M8	13	14
PN-G-T8-15	M8	15	16

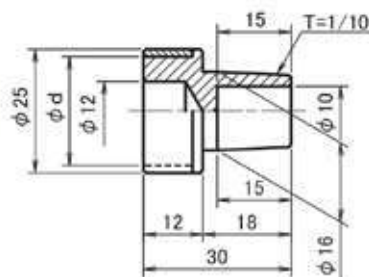
M10



Model No.	NUT	ϕd	A
PN-G-T10-17	M10	17	18

M12 · 7/16

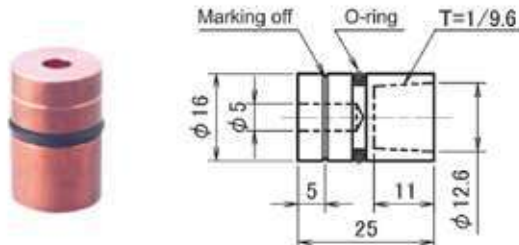
Common type



Model No.	NUT	ϕd	A
PN-G-T127-22	M12 · 7/16	22	23

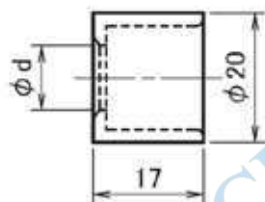
Suitable for Square Nut (Cap tip Polishing Type)

Cap tip with O-ring for M5



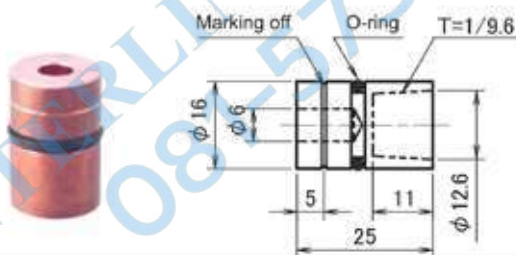
Model No.	NUT
PN-U5-C1625-C	M5

Insulation Collar



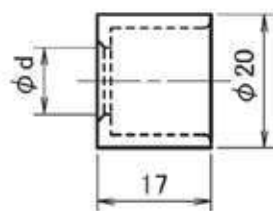
Model No.	NUT	ϕd	A
PN-U5-P1620-10-17	M5	10	9
PN-U5-P1620-10.5-17	M5	10.5	9.5
PN-U5-P1620-11-17	M5	11	10
PN-U5-P1620-11.5-17	M5	11.5	10.5
PN-U5-P1620-12-17	M5	12	11

Cap tip with O-ring for M6



Model No.	NUT
PN-U6-C1625-C	M6

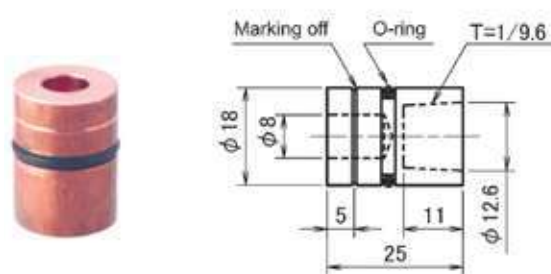
Insulation Collar



Model No.	NUT	ϕd	A
PN-U6-P1620-12-17	M6	12	11
PN-U6-P1620-12.5-17	M6	12.5	11.5
PN-U6-P1620-13-17	M6	13	12
PN-U6-P1620-13.5-17	M6	13.5	12.5
PN-U6-P1620-14-17	M6	14	13

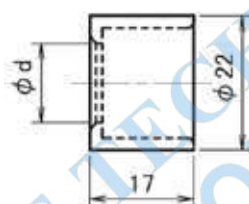
Suitable for Square Nut (Cap tip Polishing Type)

Cap tip with O-ring for M8



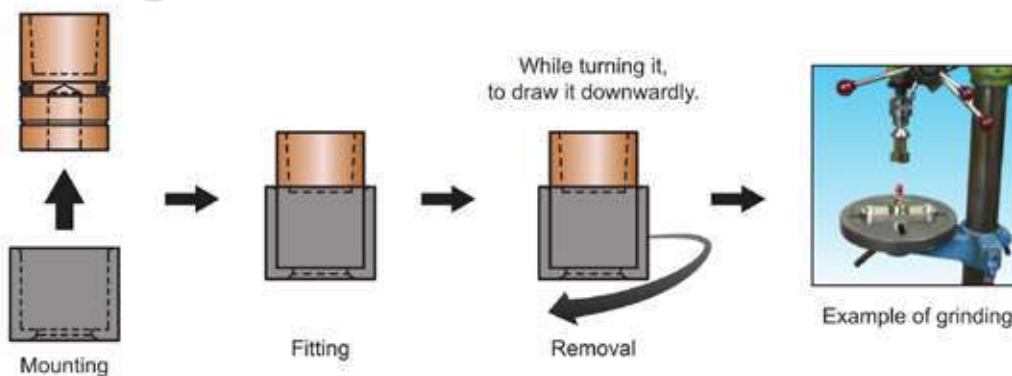
Model No.	NUT
PN-U8-C1825-C	M8

Insulation Collar



Model No.	NUT	ϕd	A
PN-U8-P1822-14-17	M8	14	13
PN-U8-P1822-14.5-17	M8	14.5	13.5
PN-U8-P1822-15-17	M8	15	14
PN-U8-P1822-15.5-17	M8	15.5	14.5
PN-U8-P1822-16-17	M8	16	15

Desorption usage example

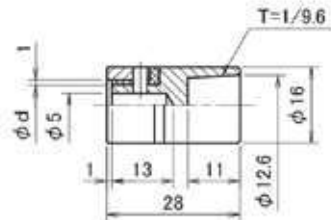


Suitable for Square Nut

M5



PN-K-C5-8.5

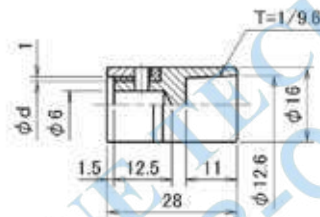


Model No.	NUT	ϕd	A
PN-K-C5-8.5	M5	8.5	9.5
PN-K-C5-9	M5	9	10

M6



PN-K16-C6-10

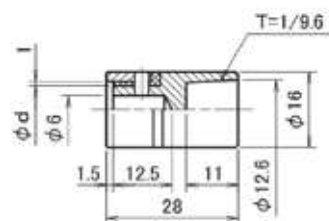


Model No.	NUT	ϕd	A
PN-K16-C6-10	M6	10	11
PN-K16-C6-11	M6	11	12
PN-K16-C6-12	M6	12	13

M6 New



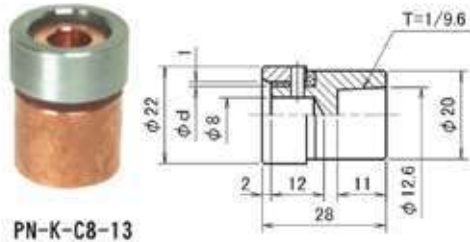
PN-K16-C6-10-B



Model No.	NUT	ϕd	A
PN-K16-C6-10-B	M6	10	11
PN-K16-C6-11-B	M6	11	12
PN-K16-C6-12-B	M6	12	13

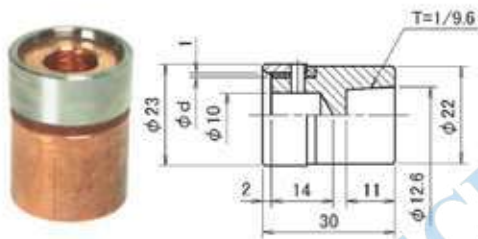
Suitable for Square Nut

M8



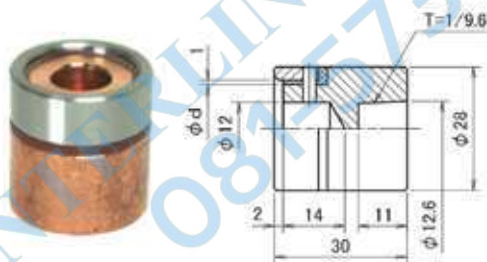
Model No.	NUT	ϕd	A
PN-K-C8-12	M8	12	13
PN-K-C8-13	M8	13	14
PN-K-C8-14	M8	14	15
PN-K-C8-15	M8	15	16

M10



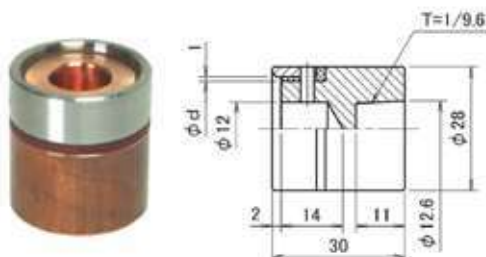
Model No.	NUT	ϕd	A
PN-K-C10-17	M10	17	18

M12



Model No.	NUT	ϕd	A
PN-K-C12-20	M12	20	21

7/16



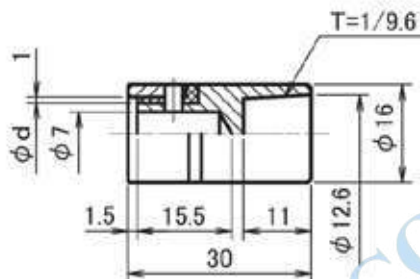
Model No.	NUT	ϕd	A
PN-K-C7/16-21.5	7/16	21.5	22.5

Suitable for Slide Unit for Square Nut

M6



PN-KS16-C6-10

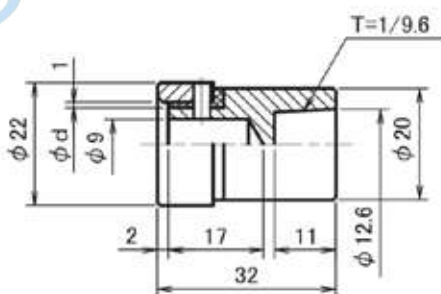


Model No.	NUT	ϕd	A
PN-KS16-C6-10	M6	10	11
PN-KS16-C6-11	M6	11	12
PN-KS16-C6-12	M6	12	13

M8



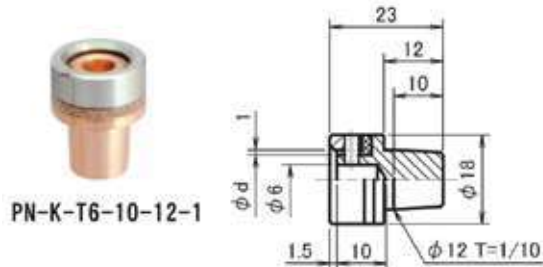
PN-KS-C8-13



Model No.	NUT	ϕd	A
PN-KS-C8-13	M8	13	14
PN-KS-C8-15	M8	15	16

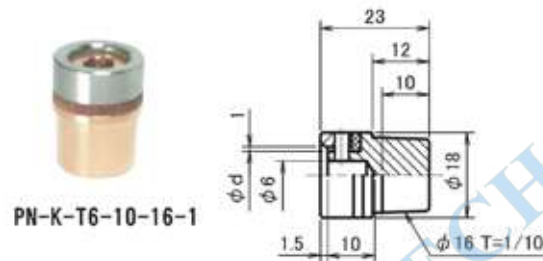
Suitable for Square Nut

M6 $\phi 12$ T=1/10



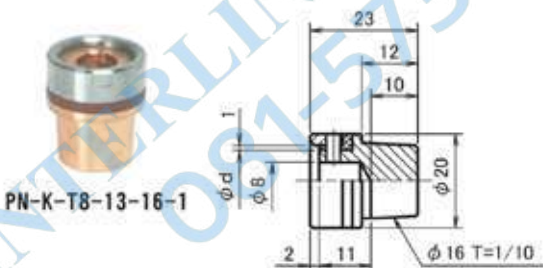
Model No.	NUT	ϕd	A
PN-K-T6-10-12-1	M6	10	11
PN-K-T6-11-12-1	M6	11	12
PN-K-T6-12-12-1	M6	12	13

M6 $\phi 16$ T=1/10



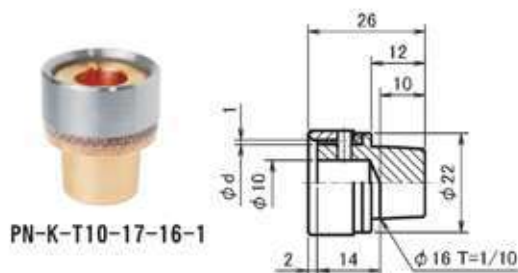
Model No.	NUT	ϕd	A
PN-K-T6-10-16-1	M6	10	11
PN-K-T6-11-16-1	M6	11	12
PN-K-T6-12-16-1	M6	12	13

M8 $\phi 16$ T=1/10



Model No.	NUT	ϕd	A
PN-K-T8-13-16-1	M8	13	14
PN-K-T8-15-16-1	M8	15	16

M10 $\phi 16$ T=1/10

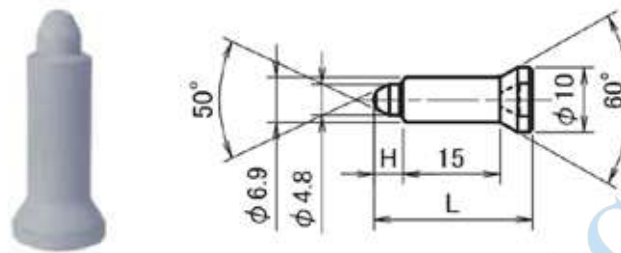


Model No.	NUT	ϕd	A
PN-K-T10-17-16-1	M10	17	18

Suitable for Square Nut

M6

Base hole diameter of work : $\phi 7$



Model No.	H	L
PND-A6-6.9-4.5-GS	4.2	24.5

G-guide Pin

G-guide Pin is ceramic guide pin chiefly made of silicon nitride.

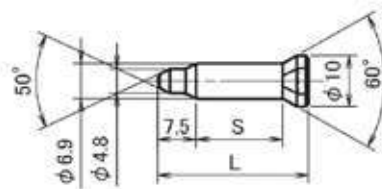
- It is very hard, and highly resistant to high temperatures.
- It provides excellent electrical isolation, no electrical corrosion, and long life.
- No spatter adhesion. Prevents nuts from sticking.
- Resource saving!! Cost saving!! Stabilizing weld quality!! Increasing operation efficiency!!



Air Type, Tapered Shoulder

M6

Base hole diameter of work : $\phi 7$

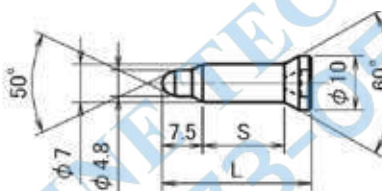


PNDT-A6-6.9-15-GS

Model No.	S	L
PNDT-A6-6.9-15-GS	15	27.5
PNDT-A6-6.9-17-GS	17	29.5

M6

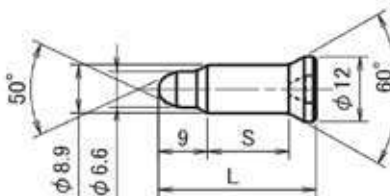
Base hole diameter of work : $\phi 7.1$



Model No.	S	L
PNDT-A6-7.0-15-GS	15	27.5

M8

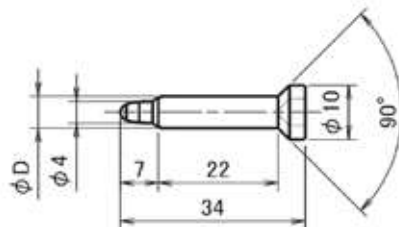
Base hole diameter of work : $\phi 9$



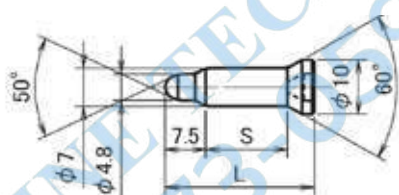
PNDT-A8-8.9-15-GS

Model No.	S	L
PNDT-A8-8.9-15-GS	15	29.0
PNDT-A8-8.9-17-GS	17	31.0

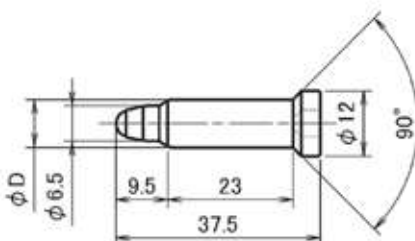
Long Shouldered Type

M5Base hole diameter of work : $\phi 6$ 

Model No.	ϕd
PNDT-5P-5.8-6-GS	5.8

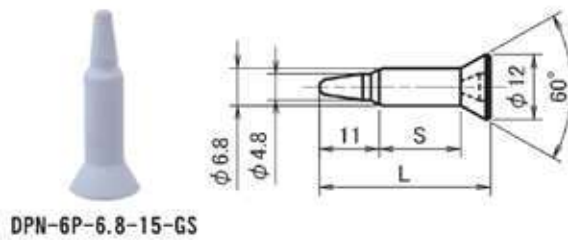
M6Base hole diameter of work : $\phi 7$ 

Model No.	ϕd
PNDT-6P-6.8-7-GS	6.8

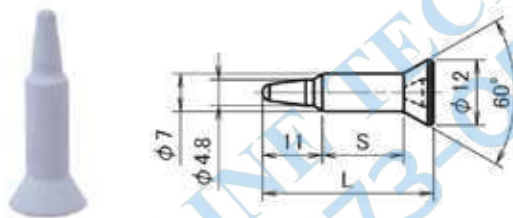
M8Base hole diameter of work : $\phi 9$ 

Model No.	ϕd
PNDT-8P-8.8-8-GS	8.8

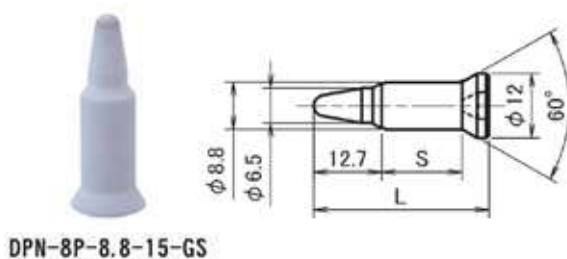
Air Type, Center-Misalignment Prevention, Shouldered

M6Base hole diameter of work : $\phi 7$ 

Model No.	S	L
DPN-6P-6.8-15-GS	15	31.5
DPN-6P-6.8-17-GS	17	33.5

M6Base hole diameter of work : $\phi 7.2$ 

Model No.	S	L
DPN-6P-7.0-GS	15	31.5

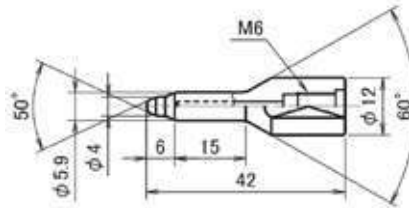
M8Base hole diameter of work : $\phi 9$ 

Model No.	S	L
DPN-8P-8.8-15-GS	15	32.7
DPN-8P-8.8-17-GS	17	33.5

Suitable for Robo-navi, Tapered Shoulder

M5

Base hole diameter of work : $\phi 6$

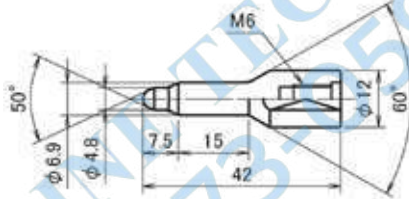


Model No.

PNDT-5PS-5.9-GS-N

M6

Base hole diameter of work : $\phi 7$

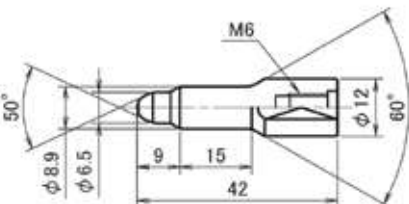


Model No.

PNDT-6PS-6.9-15-GS-N

M8

Base hole diameter of work : $\phi 9$



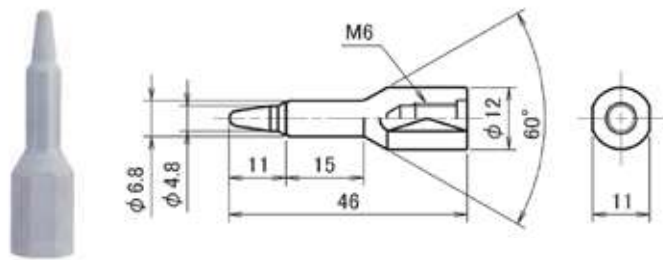
Model No.

PNDT-8PS-8.9-15-GS-N

**Suitable for Slide Unit,
Center-Misalignment Prevention, Shouldered**

M6

Base hole diameter of work : $\phi 7$

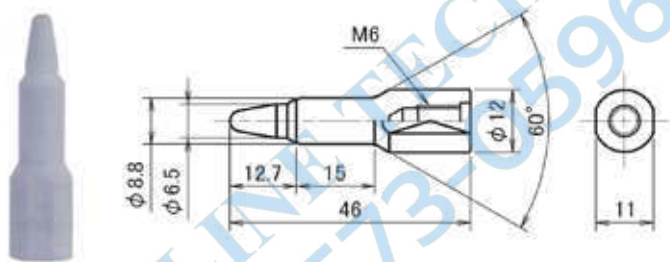


Model No.

DPN-6PS-6.8-GS-N

M8

Base hole diameter of work : $\phi 9$

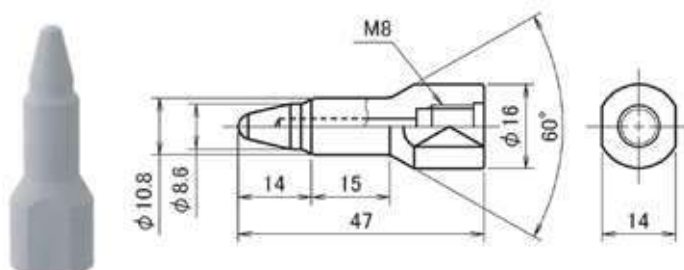


Model No.

DPN-8PS-8.8-GS-N

M10

Base hole diameter of work : $\phi 11$



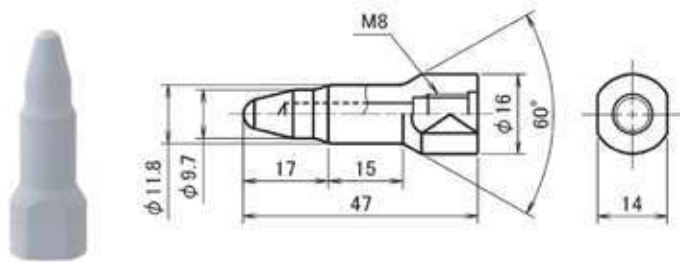
Model No.

DPN-10PS-10.8-GS-N

Suitable for Slide Unit, Center-Misalignment Prevention, Shouldered

7/16

Base hole diameter of work : $\phi 12$

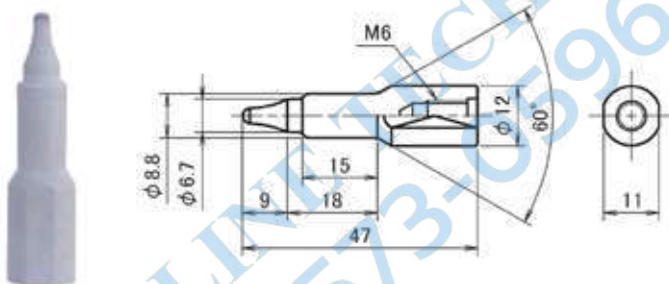


Model No.

DPN-7/16PS-11.8-GS-N

M6/M8

Base hole diameter of work : $\phi 7 / \phi 9$

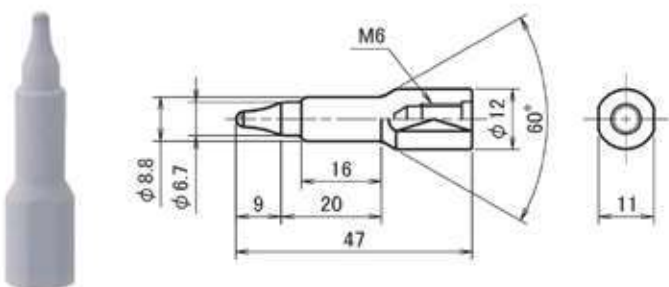


Model No.

DPN-6/8PS-6.7/8.8-GS-N

M6/M8

Base hole diameter of work : $\phi 7 / \phi 9$



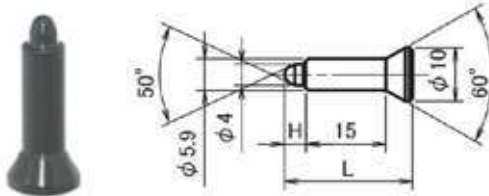
Model No.

DPN-6/8PS-6.7/8.8-16-GS-N

Air Type, Shouldered

M5

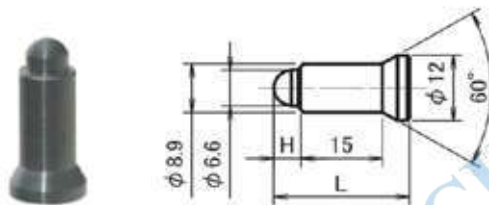
Base hole diameter of work : $\phi 6$



Model No.	H	L
PND-A5-5.9-4-S	4	24

M8

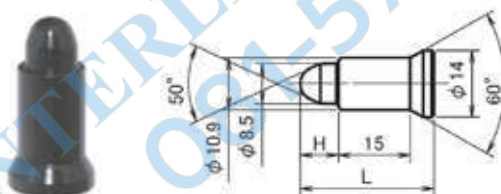
Base hole diameter of work: $\phi 9$



Model No.	H	L
PND-A8-8.9-5-S	5	25

M10

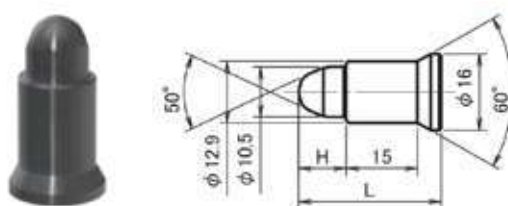
Base hole diameter of work : $\phi 11$



Model No.	H	L
PND-A10-10.9-8-S	8	28

M12

Base hole diameter of work : $\phi 13$

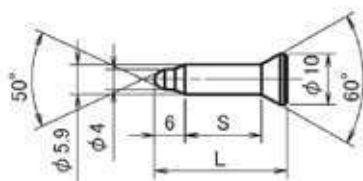


Model No.	H	L
PND-A12-12.9-10-S	10	30

Air Type, Tapered Shouldered

M5

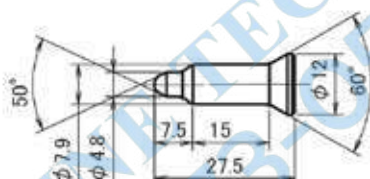
Base hole diameter of work : $\phi 6$



Model No.	S	L
PNDT-A5-5.9-15-S	15	26.0
PNDT-A5-5.9-17-S	17	28.0

M6

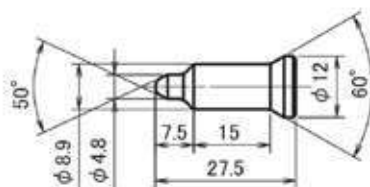
Base hole diameter of work: $\phi 8$



Model No.
PNDT-A6-7.9-5.5-S

M6

Base hole diameter of work: $\phi 9$

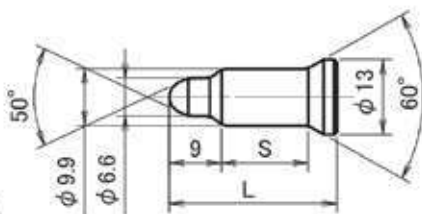


Model No.
PNDT-A6-8.9-5.5-S

Air Type, Tapered Shouldered

M8

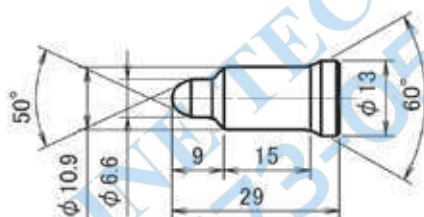
Base hole diameter of work : $\phi 10$



Model No.	S	L
PNDT-A8-9.9-15-S	15	29.0
PNDT-A8-9.9-17-S	17	31.0

M8

Base hole diameter of work: $\phi 11$

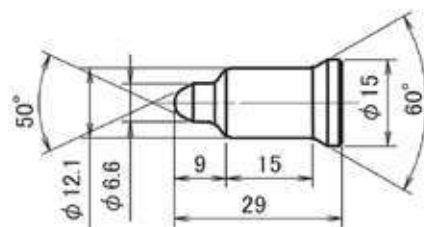


Model No.

PNDT-A8-10.9-7-S

M8

Base hole diameter of work: $\phi 12.2$



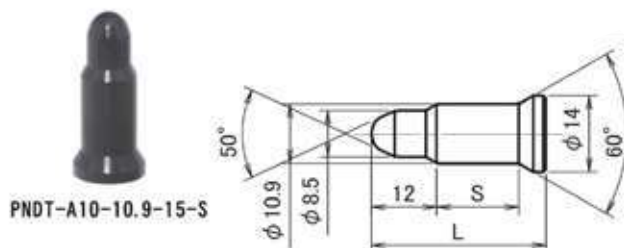
Model No.

PNDT-A8-12.1-7-S

Air Type, Tapered Shouldered

M10

Base hole diameter of work : $\phi 11$

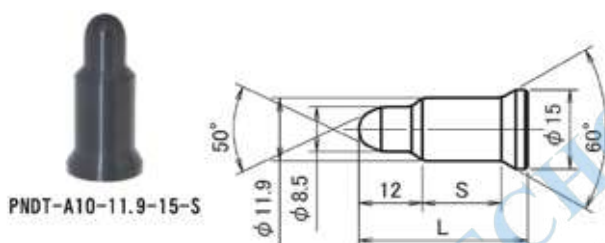


PNDT-A10-10.9-15-S

Model No.	S	L
PNDT-A10-10.9-15-S	15	32.0
PNDT-A10-10.9-17-S	17	34.0

M10

Base hole diameter of work: $\phi 12$

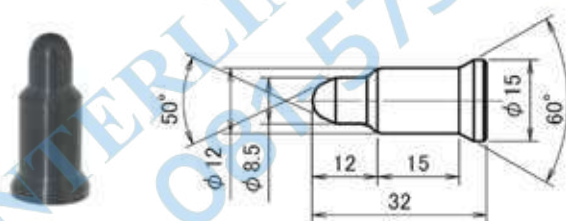


PNDT-A10-11.9-15-S

Model No.	S	L
PNDT-A10-11.9-15-S	15	32.0
PNDT-A10-11.9-17-S	17	34.0

M10

Base hole diameter of work: $\phi 12.1$

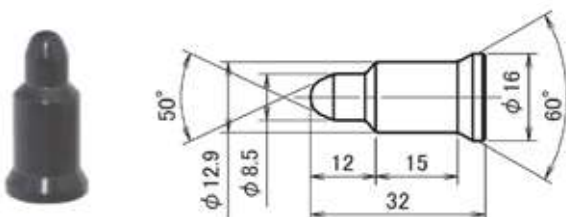


Model No.

PNDT-A10-12.0-10-S

M10

Base hole diameter of work: $\phi 13$



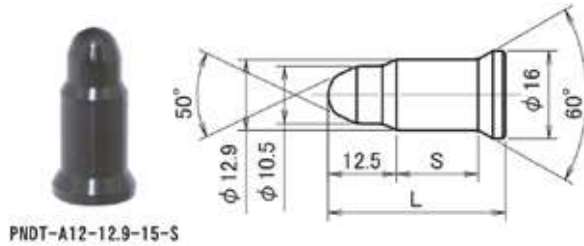
Model No.

PNDT-A10-12.9-10-S

Air Type, Tapered Shoulder

M12

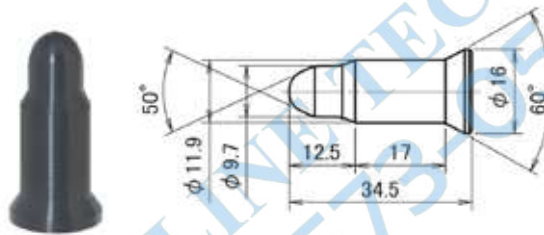
Base hole diameter of work : $\phi 13$



Model No.	S	L
PNDT-A12-12.9-15-S	15	32.5
PNDT-A12-12.9-17-S	17	34.5

7/16

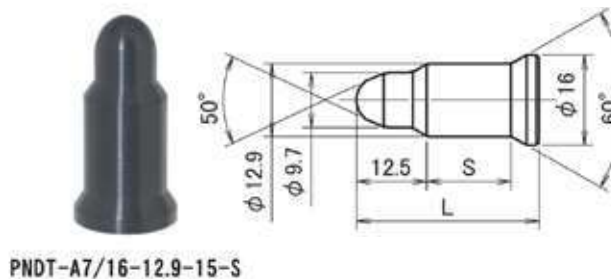
Base hole diameter of work : $\phi 12$



Model No.
PNDT-A7/16-11.9-17-S

7/16

Base hole diameter of work : $\phi 13$

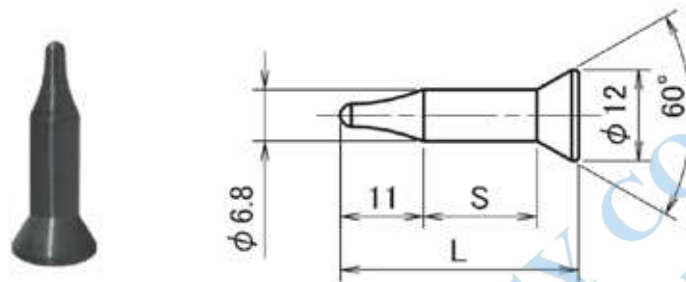


Model No.	S	L
PNDT-A7-12.9-15-S	15	32.5
PNDT-A7-12.9-17-S	17	34.5

Air Type, Standard Type

M6

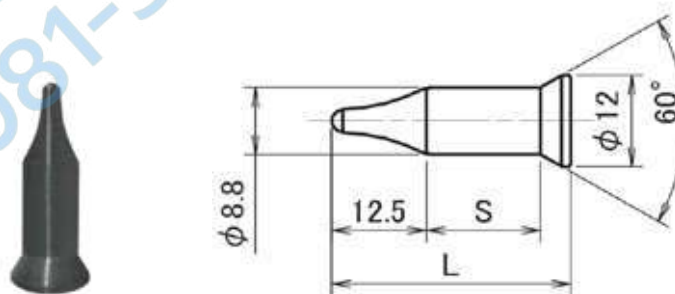
Base hole diameter of work : $\phi 7$



Model No.	S	L
PN-6P-6.8-15-S	15	31.5

M8

Base hole diameter of work : $\phi 9$

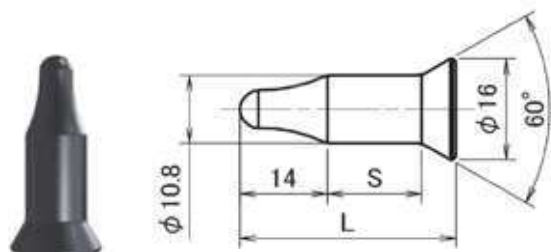


Model No.	S	L
PN-8P-8.8-15-S	15	31.5

Air Type, Standard Type

M10

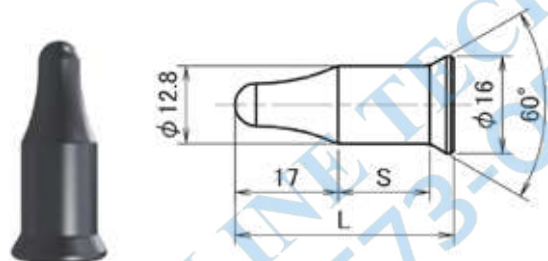
Base hole diameter of work : $\phi 11$



Model No.	S	L
PN-10P-10.8-15-S	15	34.5

M12 · 7/16

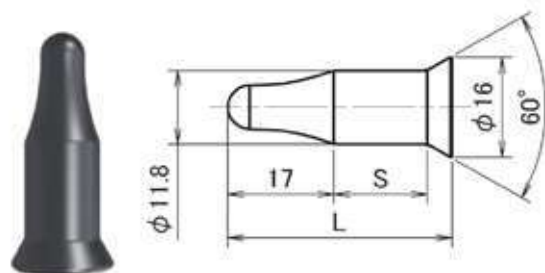
Base hole diameter of work : $\phi 13$



Model No.	S	L
PN-127P-12.8-15-S	15	36

7/16

Base hole diameter of work : $\phi 12$

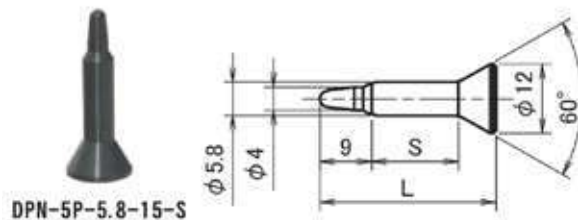


Model No.	S	L
PN-7/16P-11.8-15-S	15	36

Air Type, Center-Misalignment Prevention, Shouldered

M5

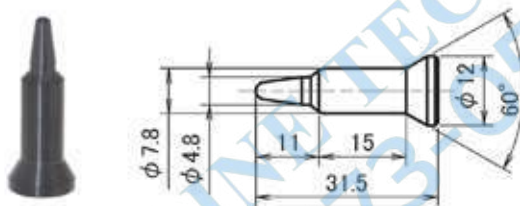
Base hole diameter of work : $\phi 6$



Model No.	S	L
DPN-5P-5.8-15-S	15	30.5
DPN-5P-5.8-17-S	17	32.5

M16

Base hole diameter of work : $\phi 8$

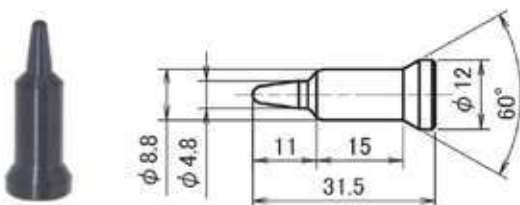


Model No.

DPN-6P-7.8-S

M6

Base hole diameter of work : $\phi 9$



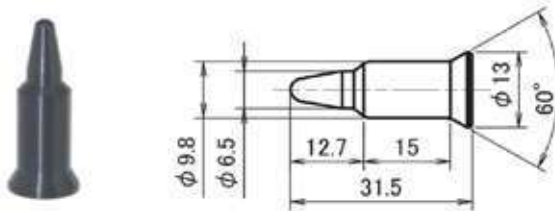
Model No.

DPN-6P-8.8-S

Air Type, Center-Misalignment Prevention, Shouldered

M8

Base hole diameter of work : $\phi 10$

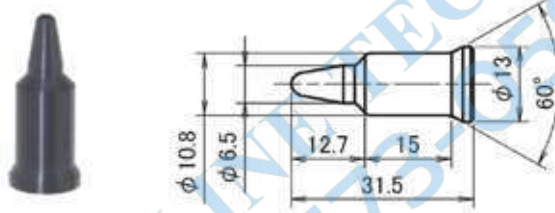


Model No.

DPN-8P-9.8-S

M8

Base hole diameter of work : $\phi 11$

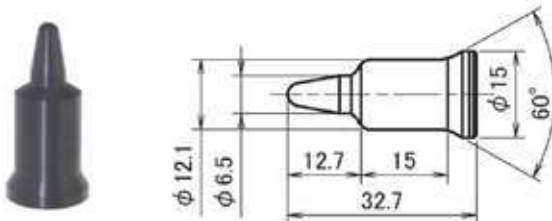


Model No.

DPN-8P-10.8-S

M8

Base hole diameter of work : $\phi 12.2$



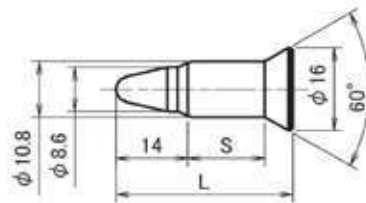
Model No.

DPN-6P-12.1-S

Air Type, Center-Misalignment Prevention, Shouldered

M10

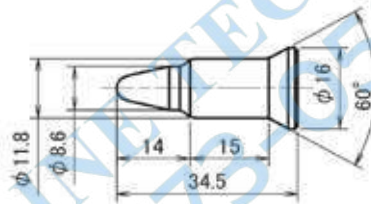
Base hole diameter of work : $\phi 11$



Model No.	S	L
DPN-10P-10.8-15-S	15	34.5
DPN-10P-10.8-17-S	17	36.5

M10

Base hole diameter of work : $\phi 12$

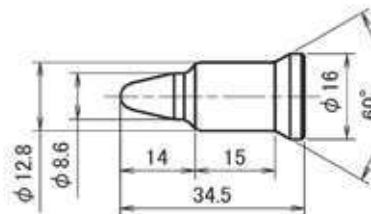


Model No.

DPN-10P-11.8-S

M10

Base hole diameter of work : $\phi 13$



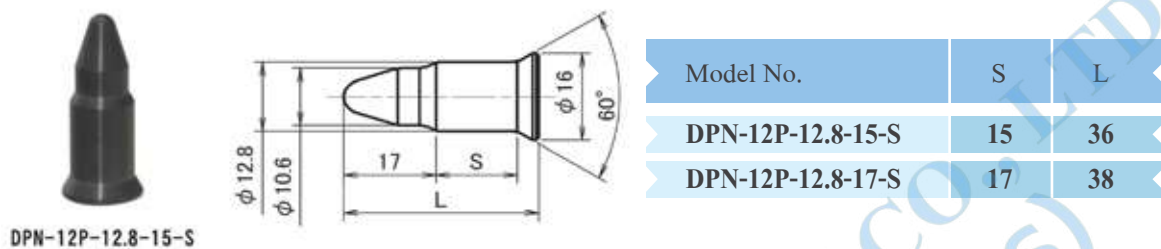
Model No.

DPN-10P-12.8-S

Air Type, Center-Misalignment Prevention, Shouldered

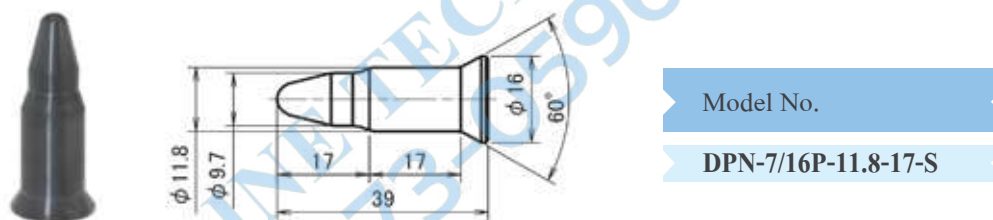
M12

Base hole diameter of work : $\phi 13$



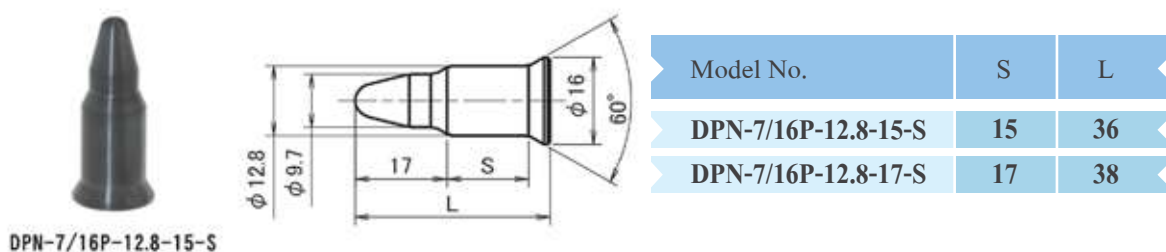
7/16

Base hole diameter of work : $\phi 12$



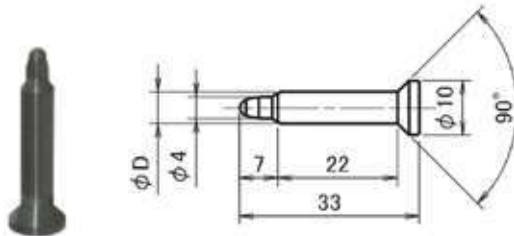
7/16

Base hole diameter of work : $\phi 13$



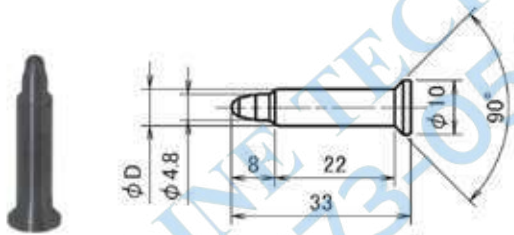
Long Shouldered Type

M5



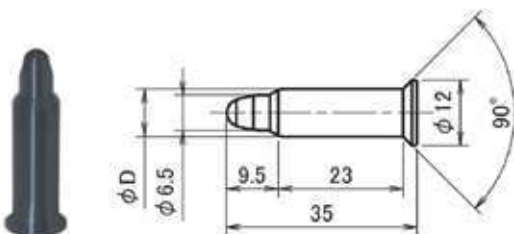
Model No.	ϕD
PNDT-5P-5.8-6-S	5.8

M6



Model No.	ϕD
PNDT-6P-6.8-7-S	6.8

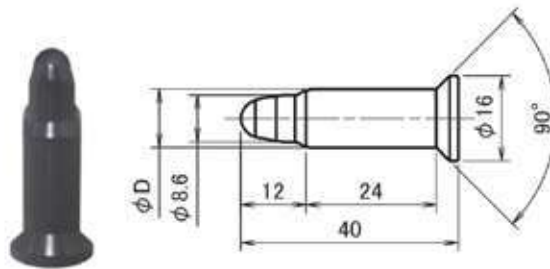
M8



Model No.	ϕD
PNDT-8P-8.8-8-S	8.8

Long Shouldered Type

M10



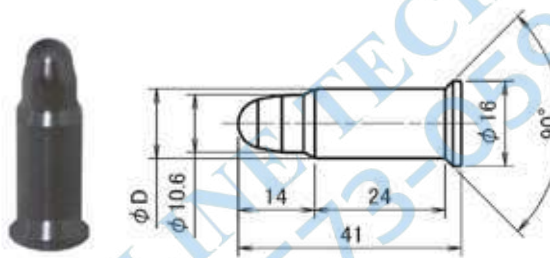
Model No.

 ϕD

PNDT-10P-10.8-10-S

10.8

M12



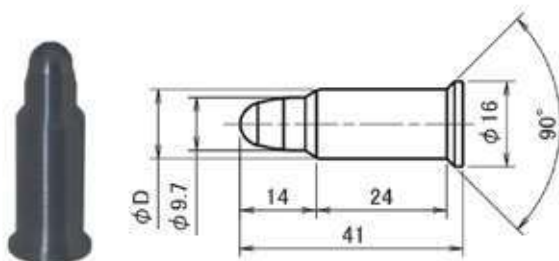
Model No.

 ϕD

PNDT-12P-12.8-12-S

12.8

7/16



Model No.

 ϕD

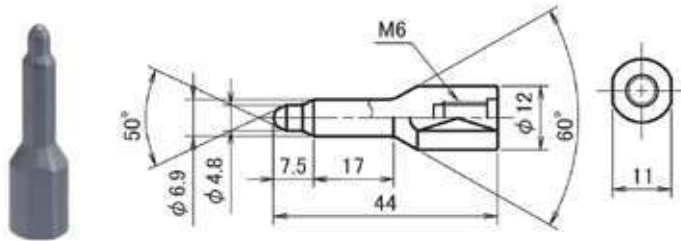
PNDT-7/16P-12.8-12-S

12.8

Suitable for Robo-navi, Tapered Shoulder

M6

Base hole diameter of work : $\phi 7$

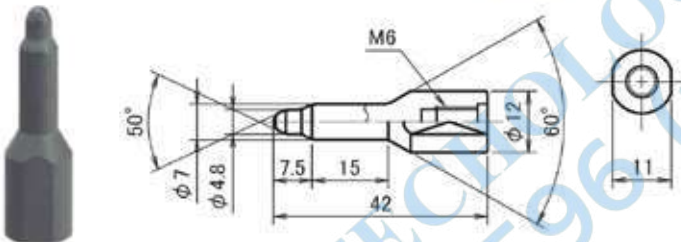


Model No.

PNDT-6PS-6.9-17-S-N

M6

Base hole diameter of work : $\phi 7.1$

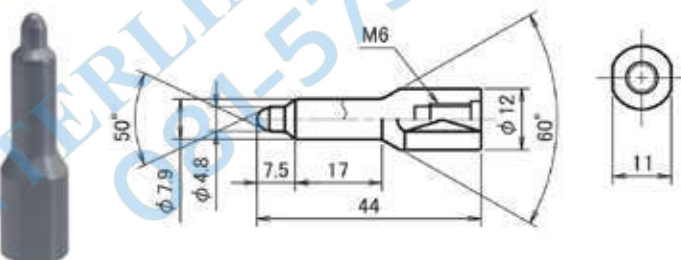


Model No.

PNDT-6PS-7.0-15-S-N

M6

Base hole diameter of work : $\phi 8$

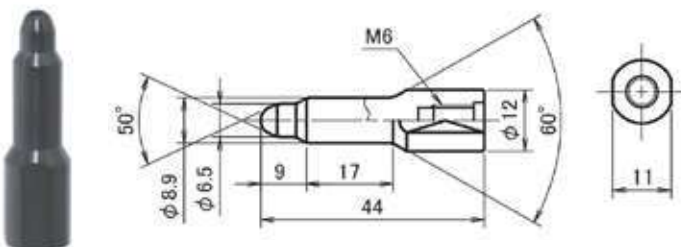


Model No.

PNDT-6PS-7.9-17-S-N

M8

Base hole diameter of work : $\phi 9$



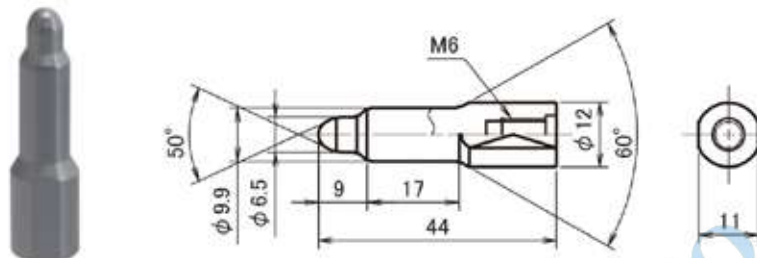
Model No.

PNDT-8PS-8.9-17-S-N

Suitable for Robo-navi, Tapered Shoulder

M8

Base hole diameter of work : $\phi 10$

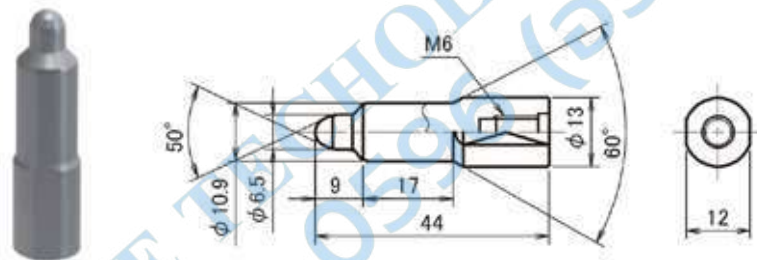


Model No.

PNDT-8PS-9.9-17-S-N

M8

Base hole diameter of work : $\phi 11$

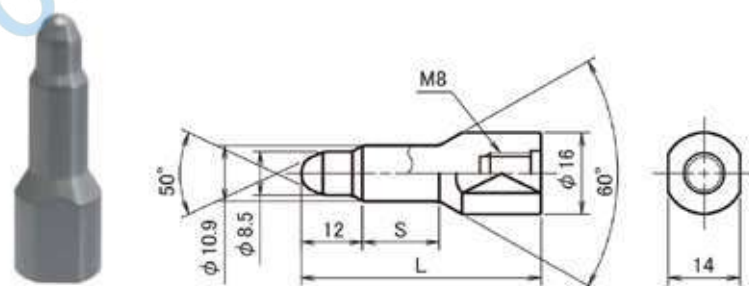


Model No.

PNDT-8PS-10.9-17-S-N

M10

Base hole diameter of work : $\phi 11$



PNDT-10PS-10.9-17-S-N

Model No.

S

L

DPN-10PS-10.9-15-S-N

15

47.0

DPN-10PS-10.9-17-S-N

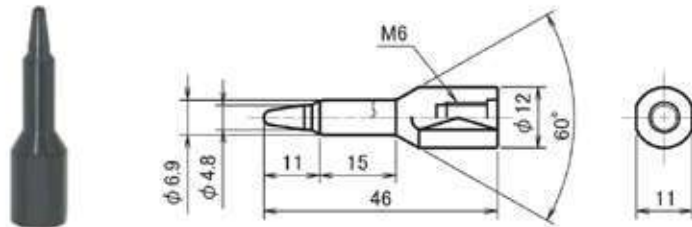
17

49.0

Suitable for Robo-navi, Center-Misalignment Prevention, Shouldered

M6

Base hole diameter of work : $\phi 7.1$

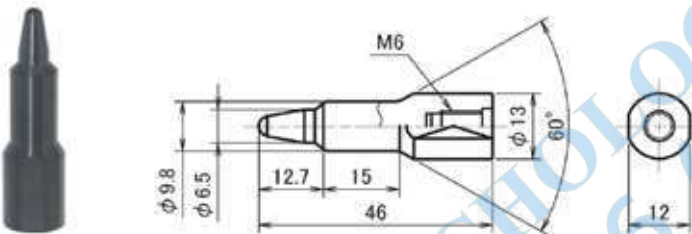


Model No.

DPN-6PS-6.9-S-N

M8

Base hole diameter of work : $\phi 10$

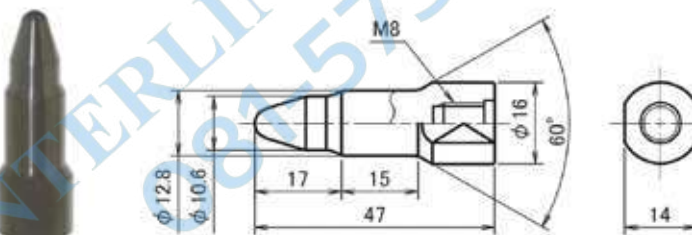


Model No.

DPN-8PS-9.8-S-N

M12

Base hole diameter of work : $\phi 13$

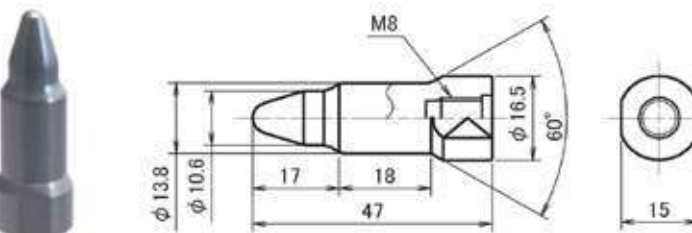


Model No.

DPN-12PS-12.8-S-N

M12

Base hole diameter of work : $\phi 14$



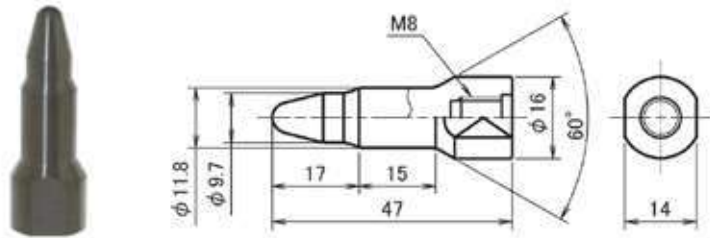
Model No.

DPN-12PS-13.8-S-N

Suitable for Robo-navi, Center-Misalignment Prevention, Shouldered

7/16

Base hole diameter of work : $\phi 12$

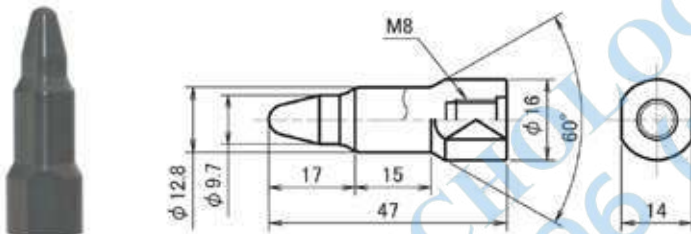


Model No.

DPN-7/16PS-11.8-S-N

7/16

Base hole diameter of work : $\phi 13$

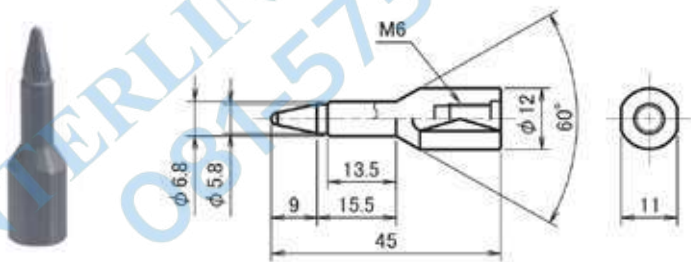


Model No.

DPN-7/16PS-12.8-S-N

M5/M6

Base hole diameter of work : $\phi 6/\phi 7$

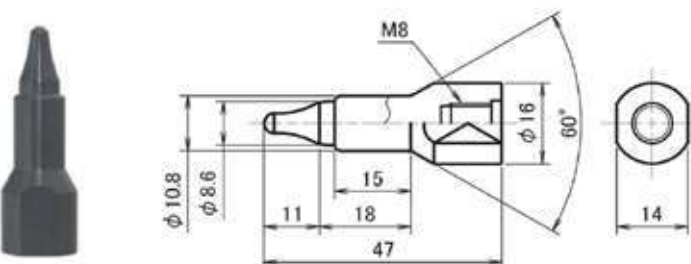


Model No.

DPN-5/6PS-5.8/6.8-S-N

M8/M10

Base hole diameter of work : $\phi 9/\phi 11$



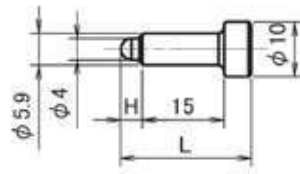
Model No.

DPN-8/10PS-8.6/10.8-S-N

Spring Type, Shouldered

M5

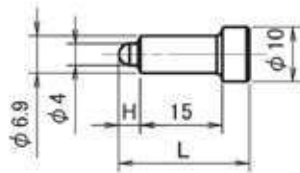
Base hole diameter of work : $\phi 6$



Model No.	NUT	H	A
PND-S5-5.9-4-A	M5	4	24

M5

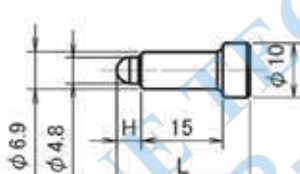
Base hole diameter of work : $\phi 7$



Model No.	NUT	H	A
PND-S5-6.9-4-A	M5	4	24

M6

Base hole diameter of work : $\phi 7$

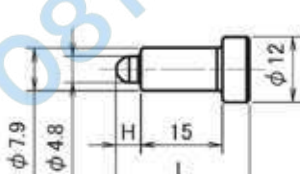


PND-S6-6.9-4.5-A

Model No.	NUT	H	A
PND-S6-6.9-4.5-A	M6	4.5	24.5
PND-S6-6.9-5.5-A	M6	5.5	25.5

M6

Base hole diameter of work : $\phi 8$

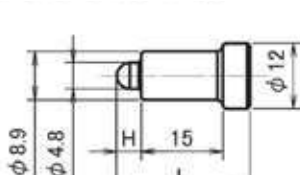


PND-S6-7.9-4.5-A

Model No.	NUT	H	A
PND-S6-7.9-4.5-A	M6	4.5	24.5
PND-S6-7.9-5.5-A	M6	5.5	25.5

M6

Base hole diameter of work : $\phi 9$



PND-S6-8.9-4.5-A

Model No.	NUT	H	A
PND-S6-8.9-4.5-A	M6	4.5	24.5
PND-S6-8.9-5.5-A	M6	5.5	25.5

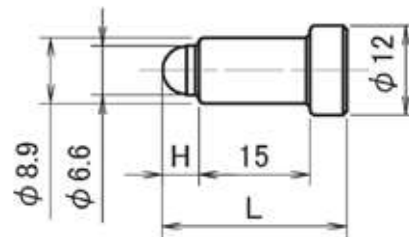
Spring Type, Shouldered

M8

Base hole diameter of work : $\phi 9$



PND-S8-8.9-5-A



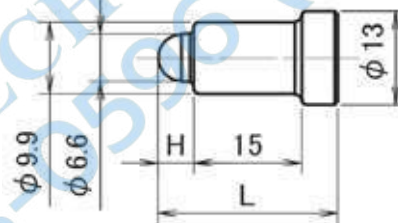
Model No.	NUT	H	L
PND-S8-8.9-5-A	M8	5	25
PND-S8-8.9-6.5-A	M8	6.5	26.5

M8

Base hole diameter of work : $\phi 10$



PND-S8-9.9-5-A



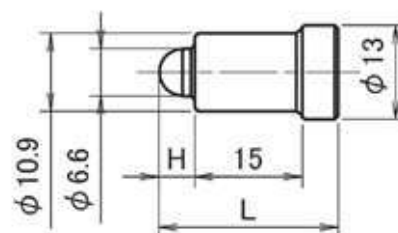
Model No.	NUT	H	L
PND-S8-9.9-5-A	M8	5	25
PND-S8-9.9-6.5-A	M8	6.5	26.5

M8

Base hole diameter of work : $\phi 11$



PND-S8-10.9-5-A



Model No.	NUT	H	L
PND-S8-10.9-5-A	M8	5	25
PND-S8-10.9-6.5-A	M8	6.5	26.5

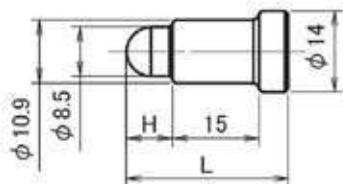
Spring Type, Shouldered

M10

Base hole diameter of work : $\phi 11$



PND-S10-10.9-8-A



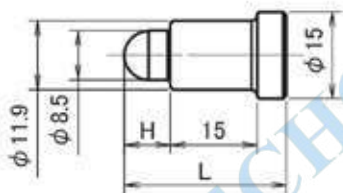
Model No.	NUT	H	L
PND-S10-10.9-8-A	M10	8	28
PND-S10-10.9-10-A	M10	10	30

M10

Base hole diameter of work : $\phi 12$



PND-S10-11.9-8-A



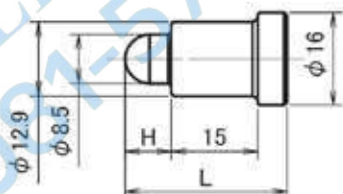
Model No.	NUT	H	L
PND-S10-11.9-8-A	M10	8	28
PND-S10-11.9-10-A	M10	10	30

M10

Base hole diameter of work : $\phi 13$



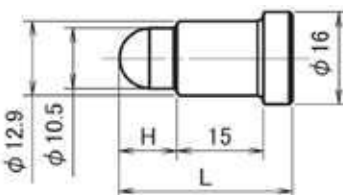
PND-S10-12.9-8-A



Model No.	NUT	H	L
PND-S10-12.9-8-A	M10	8	28
PND-S10-12.9-10-A	M10	10	30

M12

Base hole diameter of work : $\phi 13$

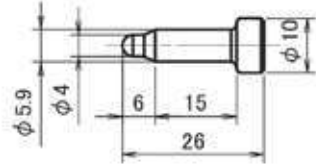


Model No.	NUT	H	L
PND-S12-12.9-10-A	M12	10	30

Spring Type, Tapered Shoulder

M5

Base hole diameter of work : $\phi 6$



Model No.

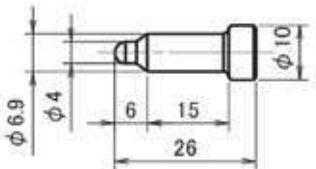
NUT

PNDT-S5-5.9-4-A

M5

M5

Base hole diameter of work : $\phi 7$



Model No.

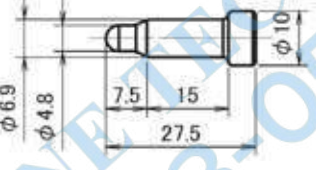
NUT

PNDT-S5-6.9-4-A

M5

M6

Base hole diameter of work : $\phi 7$



Model No.

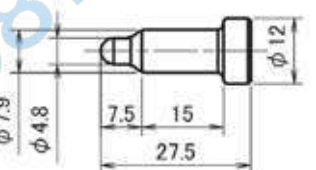
NUT

PNDT-S6-6.9-5.5-A

M6

M6

Base hole diameter of work : $\phi 8$



Model No.

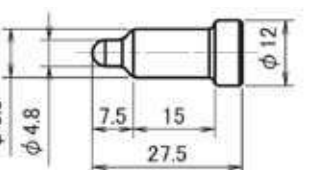
NUT

PNDT-S6-7.9-5.5-A

M6

M6

Base hole diameter of work : $\phi 9$



Model No.

NUT

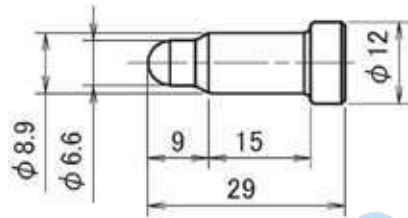
PNDT-S6-8.9-5.5-A

M6

Spring Type, Tapered Shouldered

M8

Base hole diameter of work : $\phi 9$

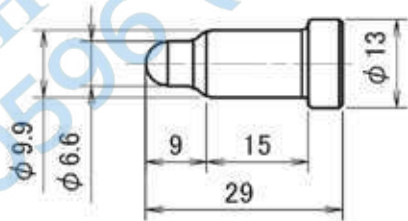


Model No. NUT

PNDT-S8-8.9-7-A M8

M8

Base hole diameter of work : $\phi 10$

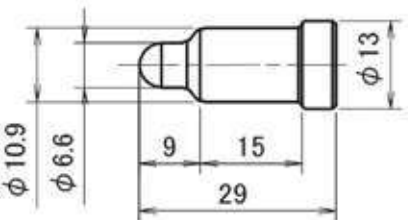


Model No. NUT

PNDT-S8-9.9-7-A M8

M8

Base hole diameter of work : $\phi 11$



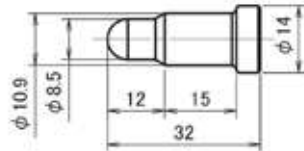
Model No. NUT

PNDT-S8-10.9-7-A M8

Spring Type, Tapered Shoulder

M10

Base hole diameter of work : $\phi 11$



Model No.

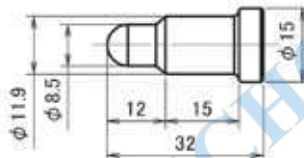
NUT

PNDT-S10-10.9-10-A

M10

M10

Base hole diameter of work : $\phi 12$



Model No.

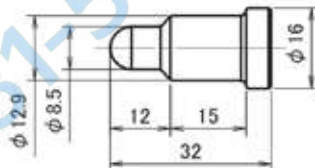
NUT

PNDT-S10-11.9-10-A

M10

M10

Base hole diameter of work : $\phi 13$



Model No.

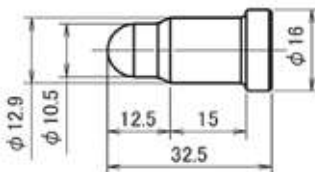
NUT

PNDT-S10-12.9-10-A

M10

M12

Base hole diameter of work : $\phi 13$



Model No.

NUT

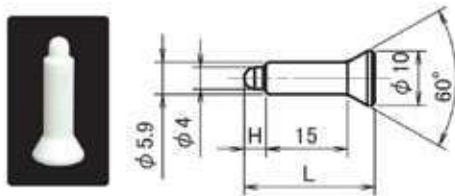
PNDT-S12-12.9-10-A

M10

Air Type, Shouldered

M5

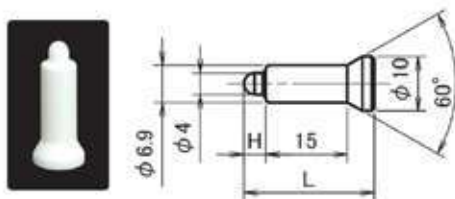
Base hole diameter of work : $\phi 6$



Model No.	NUT	H	L
PND-A5-5.9-4-A	M5	4	24

M5

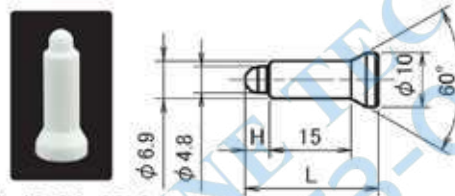
Base hole diameter of work : $\phi 7$



Model No.	NUT	H	L
PND-A5-6.9-4-A	M5	4	24

M6

Base hole diameter of work : $\phi 7$

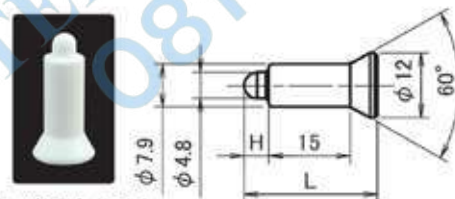


PND-A6-6.9-4.5-A

Model No.	NUT	H	L
PND-A6-6.9-4.5-A	M6	4.5	24.5
PND-A6-6.9-5.5-A	M6	5.5	25.5

M6

Base hole diameter of work : $\phi 8$

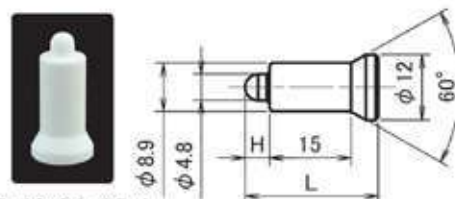


PND-A6-7.9-4.5-A

Model No.	NUT	H	L
PND-A6-7.9-4.5-A	M6	4.5	24.5
PND-A6-7.9-5.5-A	M6	5.5	25.5

M6

Base hole diameter of work : $\phi 9$



PND-A6-8.9-4.5-A

Model No.	NUT	H	L
PND-A6-8.9-4.5-A	M6	4.5	24.5
PND-A6-8.9-5.5-A	M6	5.5	25.5

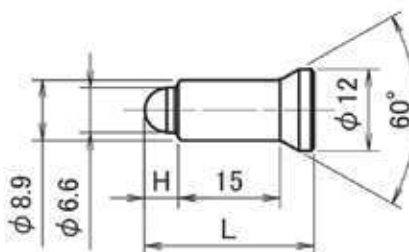
Air Type, Shouldered

M8

Base hole diameter of work : $\phi 9$



PND-A8-8.9-5-A



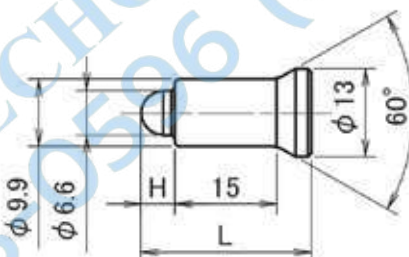
Model No.	NUT	H	L
PND-A8-8.9-5-A	M8	5	25
PND-A 8-8.9-6.5-A	M8	6.5	26.5

M8

Base hole diameter of work : $\phi 10$



PND-A8-9.9-5-A



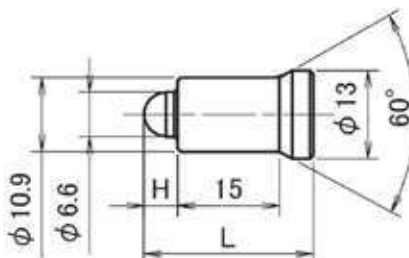
Model No.	NUT	H	L
PND-A8-9.9-5-A	M8	5	25
PND-A8-9.9-6.5-A	M8	6.5	26.5

M8

Base hole diameter of work : $\phi 11$



PND-A8-10.9-5-A



Model No.	NUT	H	L
PND-A8-10.9-5-A	M8	5	25
PND-A8-10.9-6.5-A	M8	6.5	26.5

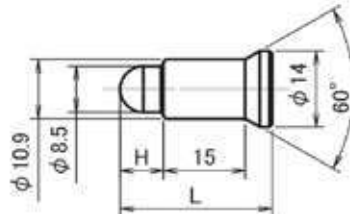
Air Type, Shouldered

M10

Base hole diameter of work : $\phi 11$



PND-A10-10.9-8-A



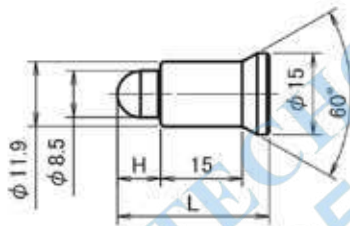
Model No.	NUT	H	L
PND-A10-10.9-8-A	M10	8	28
PND-A10-10.9-10-A	M10	10	30

M10

Base hole diameter of work : $\phi 12$



PND-A10-11.9-8-A



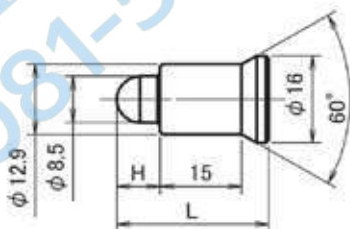
Model No.	NUT	H	L
PND-A10-11.9-8-A	M10	8	28
PND-A10-11.9-10-A	M10	10	30

M10

Base hole diameter of work : $\phi 13$



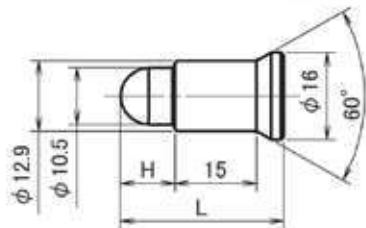
PND-A10-12.9-8-A



Model No.	NUT	H	L
PND-A10-12.9-8-A	M10	8	28
PND-A10-12.9-10-A	M10	10	30

M12

Base hole diameter of work : $\phi 13$

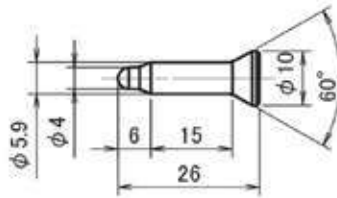


Model No.	NUT	H	L
PND-A12-12.9-8-A	M12	10	30

Air Type, Shouldered

M5

Base hole diameter of work : $\phi 6$

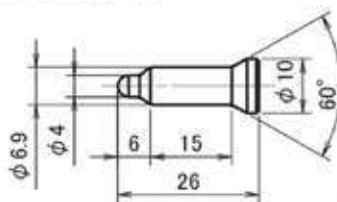


Model No. NUT

PNDT-A5-5.9-4-A M5

M5

Base hole diameter of work : $\phi 7$

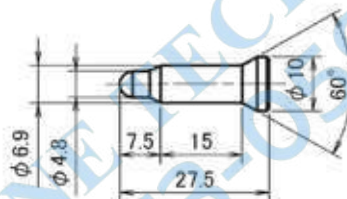


Model No. NUT

PNDT-A5-6.9-4-A M5

M6

Base hole diameter of work : $\phi 7$

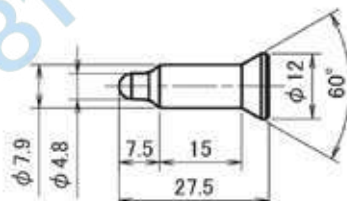


Model No. NUT

PNDT-A6-6.9-5.5-A M6

M6

Base hole diameter of work : $\phi 8$

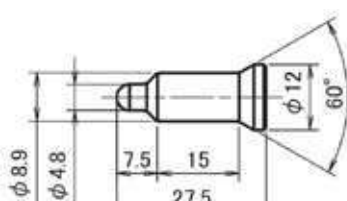


Model No. NUT

PNDT-A6-7.9-5.5-A M6

M6

Base hole diameter of work : $\phi 9$



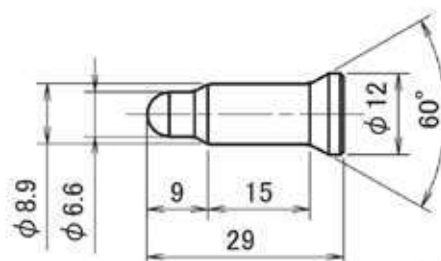
Model No. NUT

PNDT-A6-8.9-5.5-A M6

Air Type, Tapered Shouldered

M8

Base hole diameter of work : $\phi 9$

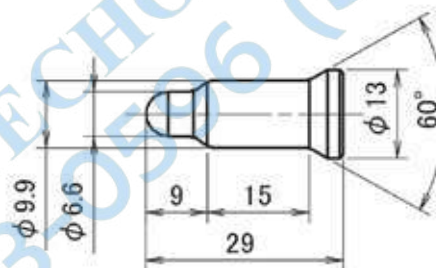


Model No.	NUT
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PNDT-A8-8.9-7-A	M8
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M8

Base hole diameter of work : $\phi 10$

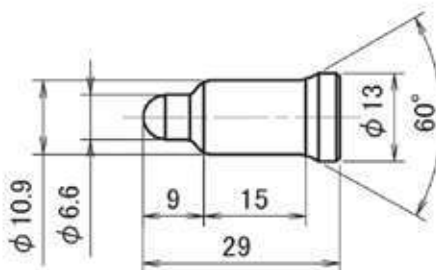


Model No.	NUT
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PNDT-A8-9.9-7-A	M8
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M8

Base hole diameter of work : $\phi 11$



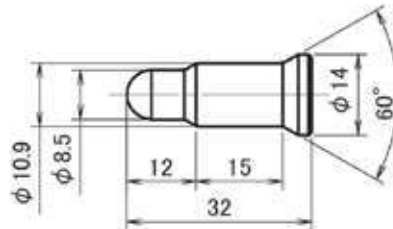
Model No.	NUT
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PNDT-A8-10.9-7-A	M8
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Air Type, Tapered Shoulder

M10

Base hole diameter of work : $\phi 11$



Model No.

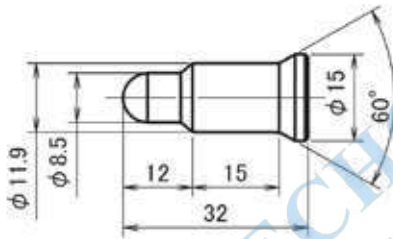
NUT

PNDT-A10-10.9-10-A

M10

M10

Base hole diameter of work : $\phi 12$



Model No.

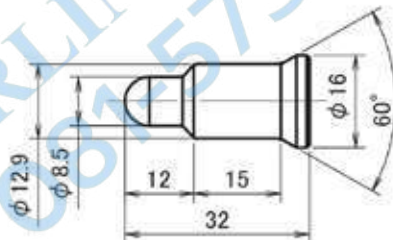
NUT

PNDT-A10-11.9-10-A

M10

M10

Base hole diameter of work : $\phi 13$



Model No.

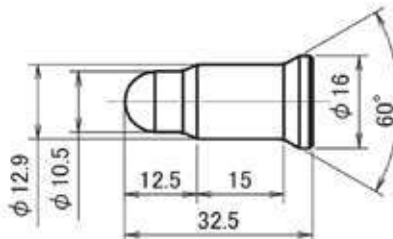
NUT

PNDT-A10-12.9-10-A

M10

M12

Base hole diameter of work : $\phi 13$



Model No.

NUT

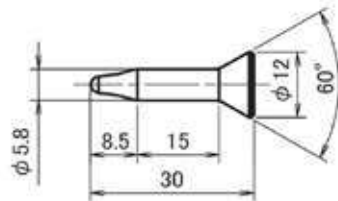
PNDT-A12-12.9-10-A

M12

Air Type, Standard Type

M5

Base hole diameter of work : $\phi 6$

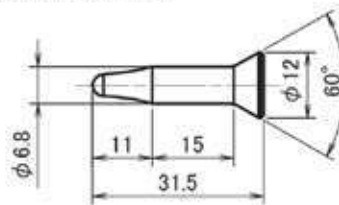


Model No. NUT

PN-5P-5.8-A M5

M5

Base hole diameter of work : $\phi 7$

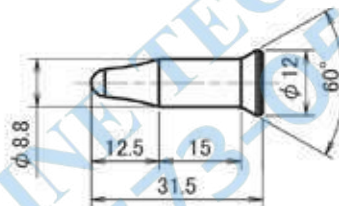


Model No. NUT

PN-6P-6.8-A M6

M8

Base hole diameter of work : $\phi 9$

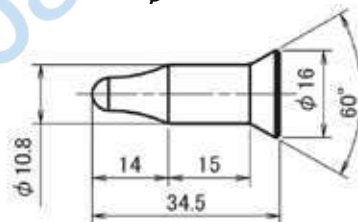


Model No. NUT

PN-8P-8.8-A M8

M10

Base hole diameter of work : $\phi 11$

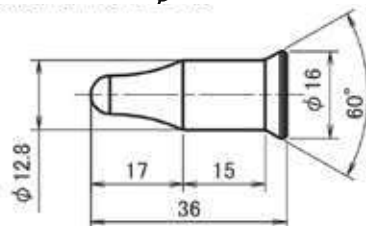


Model No. NUT

PN-10P-10.8-A M10

M12 7/16

Base hole diameter of work : $\phi 13$



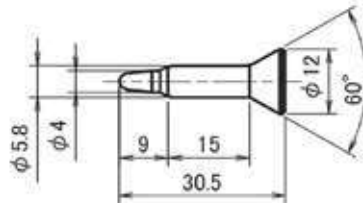
Model No. NUT

PN-127P-12.8-A M12 · 7/16

Air Type, Center-Misalignment Prevention, Shouldered

M5

Base hole diameter of work : $\phi 6$

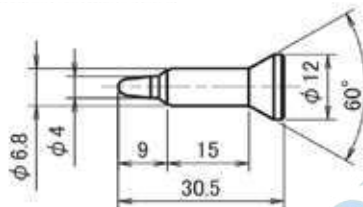


Model No. NUT

DPN-5P-5.8-A M5

M5

Base hole diameter of work : $\phi 7$

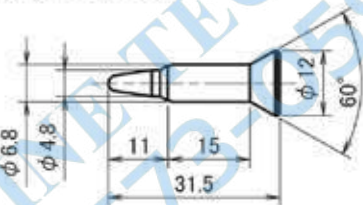


Model No. NUT

DPN-5P-6.8-A M5

M6

Base hole diameter of work : $\phi 7$

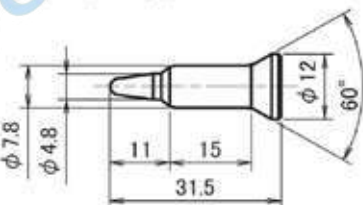


Model No. NUT

DPN-6P-6.8-A M6

M6

Base hole diameter of work : $\phi 8$

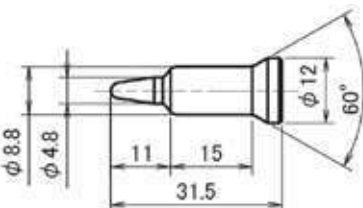


Model No. NUT

DPN-6P-7.8-A M6

M6

Base hole diameter of work : $\phi 9$



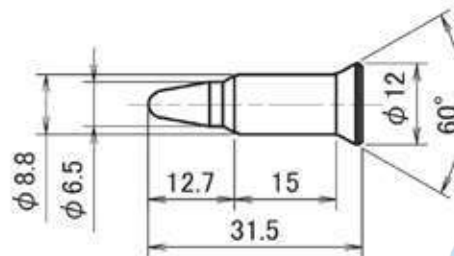
Model No. NUT

DPN-6P-8.8-A M6

Air Type, Center-Misalignment Prevention, Shouldered

M8

Base hole diameter of work : $\phi 9$



Model No.

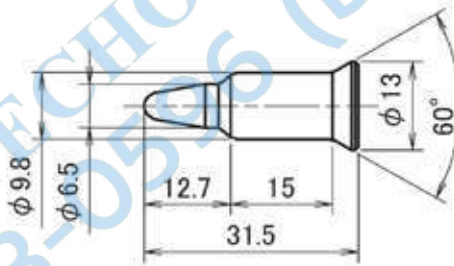
NUT

PND-8P-8.8-A

M8

M8

Base hole diameter of work : $\phi 10$



Model No.

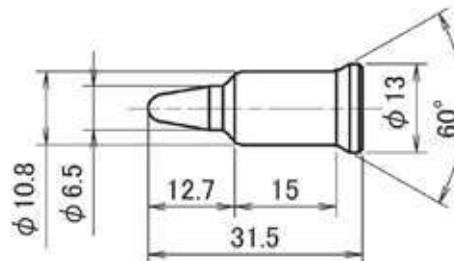
NUT

PND-8P-9.8-A

M8

M8

Base hole diameter of work : $\phi 11$



Model No.

NUT

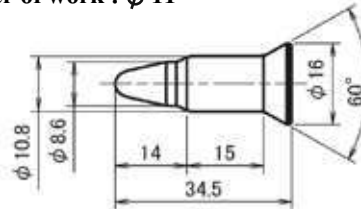
PND-8P-10.8-A

M8

Air Type, Center-Misalignment Prevention, Shouldered

M10

Base hole diameter of work : $\phi 11$

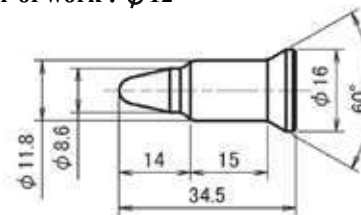


Model No. NUT

DPN-10P-10.8-A M10

M10

Base hole diameter of work : $\phi 12$

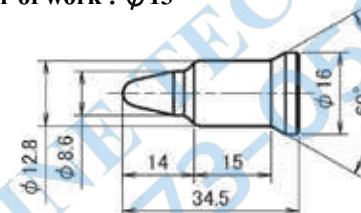


Model No. NUT

DPN-10P-11.8-A M10

M10

Base hole diameter of work : $\phi 13$

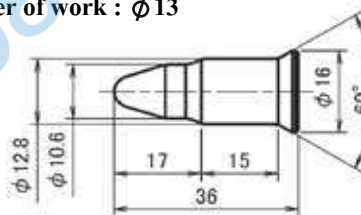


Model No. NUT

DPN-10P-12.8-A M10

M12

Base hole diameter of work : $\phi 13$

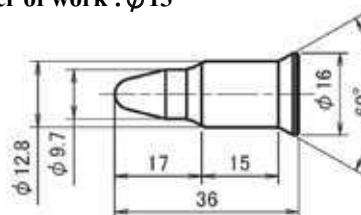


Model No. NUT

DPN-12P-12.8-A M12

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Base hole diameter of work : $\phi 13$

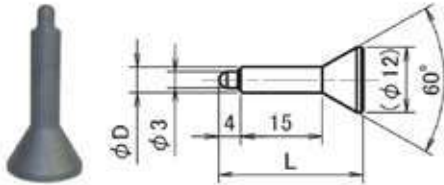


Model No. NUT

DPN-7/16P-12.8-A 7/16

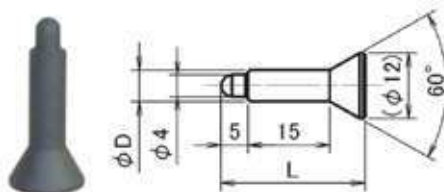
Air Type, Shouldered

M4



Model No.	NUT	ϕD	L
PND-A4-4.8-4-K	M4	4.8	26.5

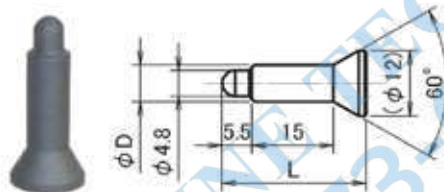
M5



PND-A5-5.8-5-K

Model No.	NUT	ϕD	L
PND-A5-5.8-5-K	M5	5.8	26.5
PND-A5-6.8-5-K	M5	6.8	26.5

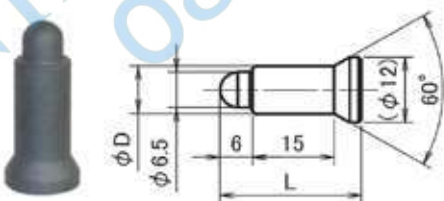
M6



PND-A6-6.8-5.5-K

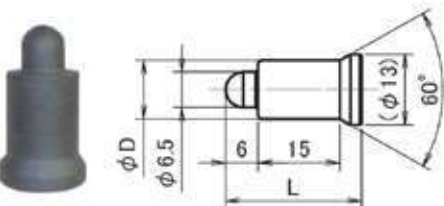
Model No.	NUT	ϕD	L
PND-A6-6.8-5.5-K	M6	6.8	26.5
PND-A6-8.8-5.5-K	M6	8.8	25.5

M8



Model No.	NUT	ϕD	L
PND-A8-8.8-6-K	M8	8.8	26

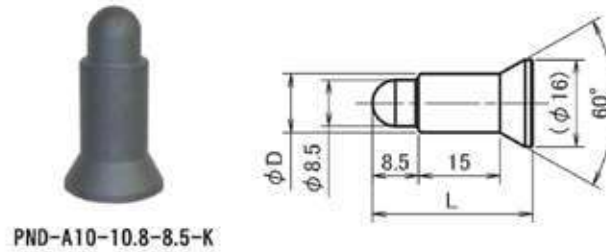
M8



Model No.	NUT	ϕD	L
PND-A8-10.8-6-K	M8	10.8	25

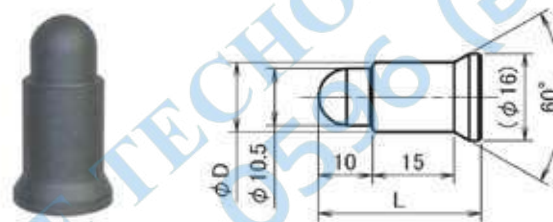
Air Type, Shouldered

M10



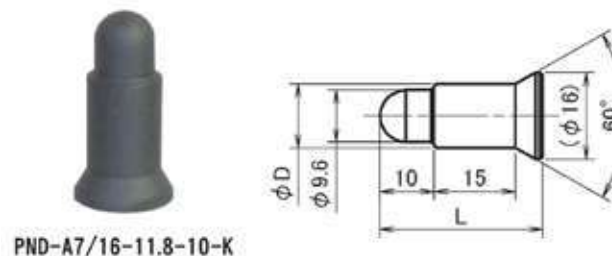
Model No.	NUT	ϕD	L
PND-A10-10.8-8.5-K	M10	10.8	29.5
PND-A10-12.8-8.5-K	M10	12.8	28.5

M12



Model No.	NUT	ϕD	L
PND-A12-12.8-10-K	M12	12.8	30

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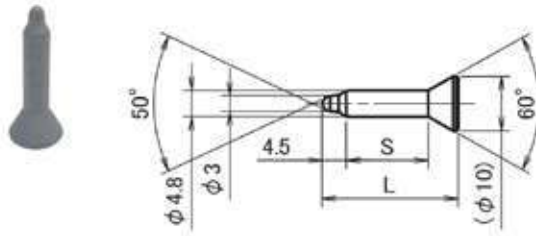


Model No.	NUT	ϕD	L
PND-A7/16-11.8-10-K	7/16	11.8	30
PND-A7/16-12.8-10-K	7/16	12.8	30

Air Type, Tapered Shoulder

M4

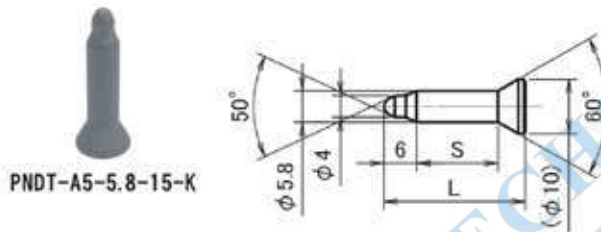
Base hole diameter of work : $\phi 5$



Model No.	S	L
PNDT-A4-4.8-15-K	15	25.0

M5

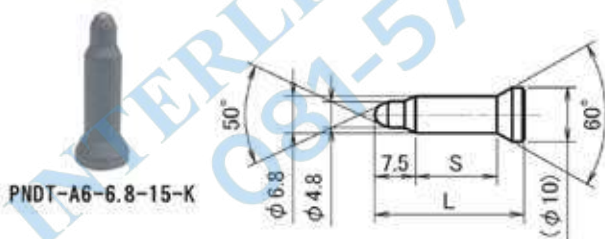
Base hole diameter of work : $\phi 6$



Model No.	S	L
PNDT-A5-5.8-15-K	15	26.0
PNDT-A5-5.8-17-K	17	28.0

M6

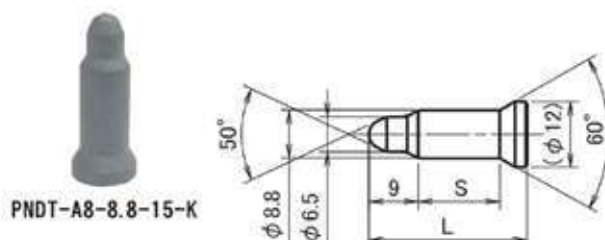
Base hole diameter of work : $\phi 7$



Model No.	S	L
PNDT-A6-6.8-15-K	15	27.5
PNDT-A6-6.8-17-K	17	29.5

M8

Base hole diameter of work : $\phi 9$

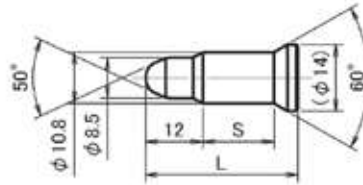


Model No.	S	L
PNDT-A8-8.8-15-K	15	29.0
PNDT-A8-8.8-17-K	17	31.0

Air Type, Tapered Shoulder

M10

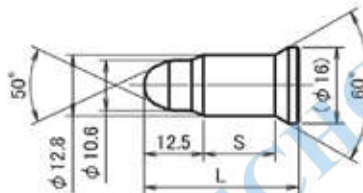
Base hole diameter of work : $\phi 11$



Model No.	S	L
PNDT-A10-10.8-15-K	15	32.0
PNDT-A10-10.8-17-K	17	34.0

M12

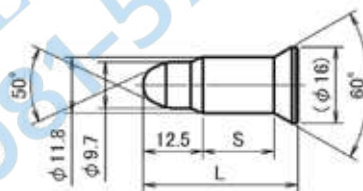
Base hole diameter of work : $\phi 13$



Model No.	S	L
PNDT-A12-12.8-15-K	15	32.5
PNDT-A12-12.8-17-K	17	34.5

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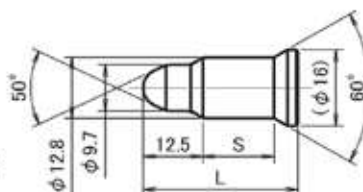
Base hole diameter of work : $\phi 12$



Model No.	S	L
PNDT-A7/16-11.8-15-K	15	32.5
PNDT-A7/16-11.8-17-K	17	34.5

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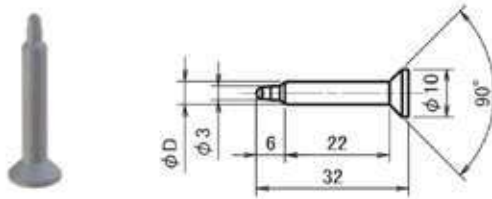
Base hole diameter of work : $\phi 13$



Model No.	S	L
PNDT-A7/16-12.8-15-K	15	32.5
PNDT-A7/16-12.8-17-K	17	34.5

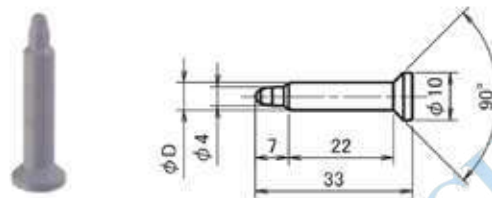
Long Shouldered Type

M4



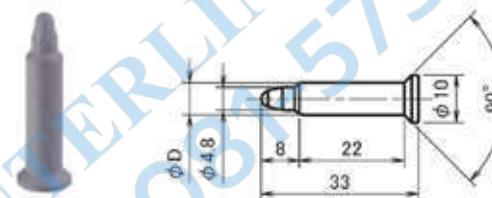
Model No.	ϕD
PNDT-4P-4.8-5-K	4.8

M5



Model No.	ϕD
PNDT-5P-5.8-6-K	5.8

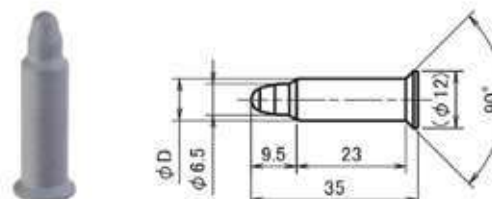
M6



PNDT-6P-6.8-7-K

Model No.	ϕD
PNDT-6P-6.8-7-K	6.8
PNDT-6P-7.8-7-K	7.8

M8

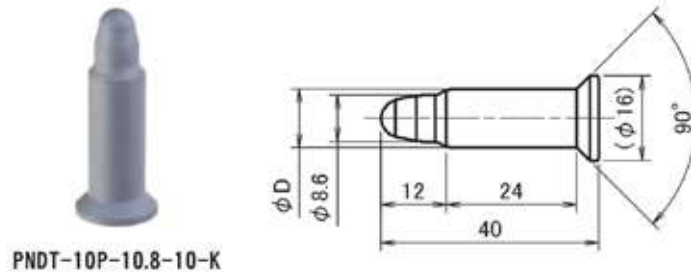


PNDT-8P-8.8-8-K

Model No.	ϕD
PNDT-8P-8.8-8-K	8.8
PNDT-8P-9.8-8-K	9.8

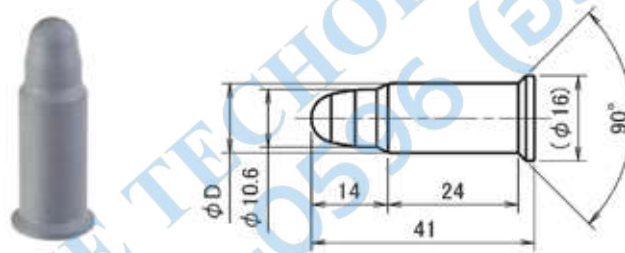
Long Shouldered Type

M10



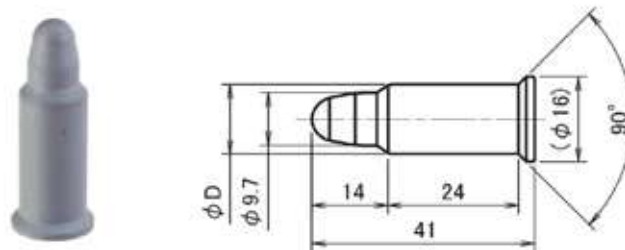
Model No.	φD
PNDT-10P-10.8-10-K	10.8
PNDT-10P-11.8-10-K	11.8

M12



Model No.	φD
PNDT-12P-12.8-12-K	12.8

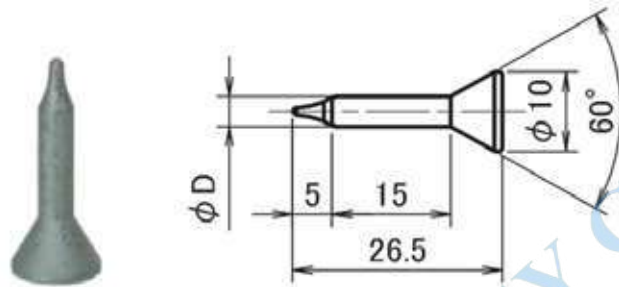
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Model No.	φD
PNDT-7/16P-12.8-12-K	12.8

Standard Type

M3



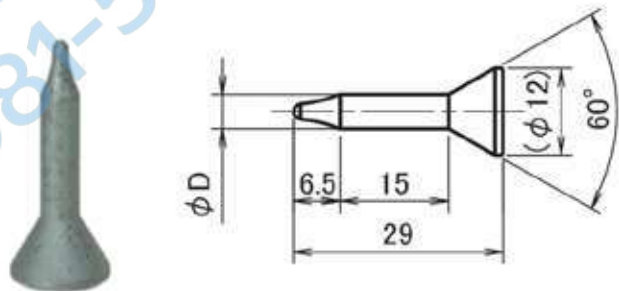
Model No.

ϕD

PN-3P-3.8-K

3.8

M3



Model No.

ϕD

PN-4P-4.8-K

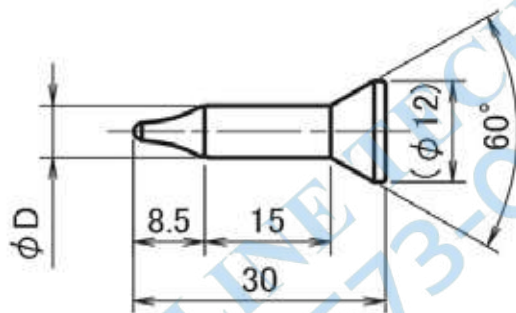
4.8

Standard Type

M5



PN-5P-6.2-K



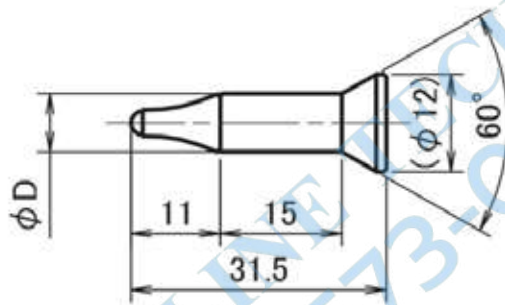
Model No.	φD
PN-5P-5.3-K	5.3
PN-5P-5.4-K	5.4
PN-5P-5.5-K	5.5
PN-5P-5.6-K	5.6
PN-5P-5.7-K	5.7
PN-5P-5.8-K	5.8
PN-5P-5.9-K	5.9
PN-5P-6.0-K	6.0
PN-5P-6.1-K	6.1
PN-5P-6.2-K	6.2
PN-5P-6.3-K	6.3
PN-5P-6.4-K	6.4
PN-5P-6.5-K	6.5
PN-5P-6.6-K	6.6
PN-5P-6.7-K	6.7
PN-5P-6.8-K	6.8
PN-5P-6.9-K	6.9
PN-5P-7.0-K	7.0
PN-5P-7.1-K	7.1
PN-5P-7.2-K	7.2
PN-5P-7.3-K	7.3
PN-5P-7.4-K	7.4
PN-5P-7.5-K	7.5
PN-5P-7.6-K	7.6
PN-5P-7.7-K	7.7
PN-5P-7.8-K	7.8
PN-5P-7.9-K	7.9
PN-5P-8.0-K	8.0

Standard Type

M6



PN-6P-7.2-K



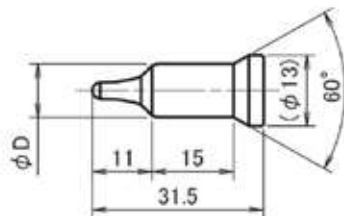
Model No.	ØD
PN-6P-6.4-K	6.4
PN-6P-6.5-K	6.5
PN-6P-6.6-K	6.6
PN-6P-6.7-K	6.7
PN-6P-6.8-K	6.8
PN-6P-6.9-K	6.9
PN-6P-7.0-K	7.0
PN-6P-7.1-K	7.1
PN-6P-7.2-K	7.2
PN-6P-7.3-K	7.3
PN-6P-7.4-K	7.4
PN-6P-7.5-K	7.5
PN-6P-7.6-K	7.6
PN-6P-7.7-K	7.7
PN-6P-7.8-K	7.8
PN-6P-7.9-K	7.9
PN-6P-8.0-K	8.0
PN-6P-8.1-K	8.1
PN-6P-8.2-K	8.2
PN-6P-8.3-K	8.3
PN-6P-8.4-K	8.4
PN-6P-8.5-K	8.5
PN-6P-8.6-K	8.6
PN-6P-8.7-K	8.7
PN-6P-8.8-K	8.8
PN-6P-8.9-K	8.9
PN-6P-9.0-K	9.0
PN-6P-9.1-K	9.1
PN-6P-9.2-K	9.2
PN-6P-9.3-K	9.3
PN-6P-9.4-K	9.4

Standard Type

M6



PN-6P-9.8-K

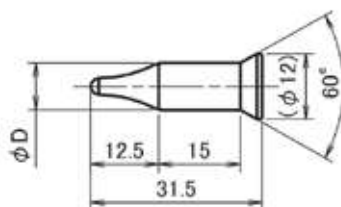


Model No.	φD
PN-6P-9.5-K	9.5
PN-6P-9.6-K	9.6
PN-6P-9.7-K	9.7
PN-6P-9.8-K	9.8
PN-6P-9.9-K	9.9
PN-6P-10.0-K	10.0

M8



PN-8P-8.6-K



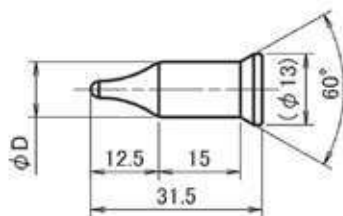
Model No.	φD
PN-8P-8.4-K	8.4
PN-8P-8.5-K	8.5
PN-8P-8.6-K	8.6
PN-8P-8.7-K	8.7
PN-8P-8.9-K	8.9
PN-8P-9.0-K	9.0
PN-8P-9.1-K	9.1
PN-8P-9.2-K	9.2
PN-8P-9.3-K	9.3
PN-8P-9.4-K	9.4

Standard Type

M8



PN-8P-10.2-K

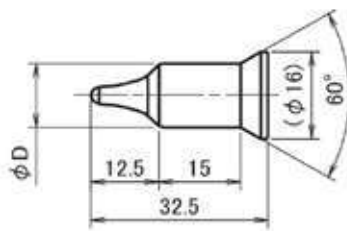


Model No.	φD
PN-8P-9.5-K	9.5
PN-8P-9.6-K	9.6
PN-8P-9.7-K	9.7
PN-8P-9.8-K	9.8
PN-8P-9.9-K	9.9
PN-8P-10.0-K	10.0
PN-8P-10.1-K	10.1
PN-8P-10.3-K	10.3
PN-8P-10.4-K	10.4
PN-8P-10.5-K	10.5
PN-8P-10.6-K	10.6
PN-8P-10.7-K	10.7
PN-8P-10.8-K	10.8
PN-8P-10.9-K	10.9

M8



PN-8P-11.8-K



Model No.	φD
PN-8P-11.0-K	11.0
PN-8P-11.1-K	11.1
PN-8P-11.2-K	11.2
PN-8P-11.3-K	11.3
PN-8P-11.4-K	11.4
PN-8P-11.5-K	11.5
PN-8P-11.6-K	11.6
PN-8P-11.7-K	11.7
PN-8P-11.8-K	11.8
PN-8P-11.9-K	11.9
PN-8P-12.0-K	12.0
PN-8P-12.1-K	12.1
PN-8P-12.2-K	12.2
PN-8P-12.3-K	12.3
PN-8P-12.4-K	12.4
PN-8P-12.5-K	12.5

Standard Type

M10

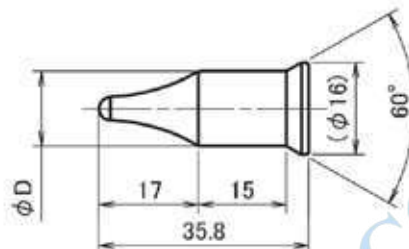


Model No.	ϕD
PN-10P-10.5-K	10.5
PN-10P-10.6-K	10.6
PN-10P-10.7-K	10.7
PN-10P-10.8-K	10.8
PN-10P-10.9-K	10.9
PN-10P-11.0-K	11.0
PN-10P-11.2-K	11.2
PN-10P-11.3-K	11.3
PN-10P-11.4-K	11.4
PN-10P-11.5-K	11.5
PN-10P-11.6-K	11.6
PN-10P-11.7-K	11.7
PN-10P-11.8-K	11.8
PN-10P-11.9-K	11.9
PN-10P-12.0-K	12.0
PN-10P-12.1-K	12.1
PN-10P-12.2-K	12.2
PN-10P-12.3-K	12.3
PN-10P-12.4-K	12.4
PN-10P-12.5-K	12.5
PN-10P-12.6-K	12.6
PN-10P-12.7-K	12.7
PN-10P-12.8-K	12.8
PN-10P-12.9-K	12.9
PN-10P-13.0-K	13.0
PN-10P-13.1-K	13.1
PN-10P-13.2-K	13.2
PN-10P-13.3-K	13.3
PN-10P-13.4-K	13.4
PN-10P-13.5-K	13.5
PN-10P-13.6-K	13.6
PN-10P-13.7-K	13.7
PN-10P-13.8-K	13.8

Standard Type

M12·7/16

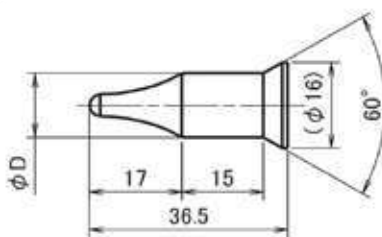
Base hole diameter of work : $\phi 13$



Model No.	ϕD
PN-4P-4.8-K	4.8

7/16

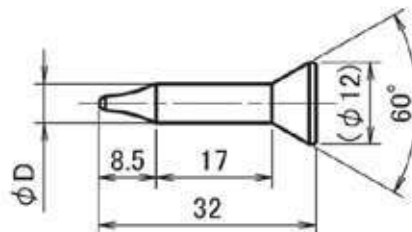
Base hole diameter of work : $\phi 12$



Model No.	ϕD
PN-7/16P-11.8-K	11.8

Long Type

M5



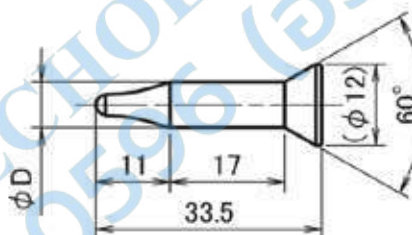
Model No.

 ϕD

PN-5P-5.8-17-K

5.8

M6



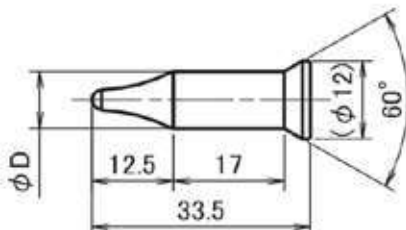
Model No.

 ϕD

PN-6P-6.8-17-K

6.8

M8



Model No.

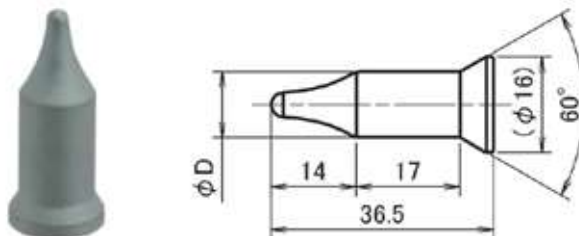
 ϕD

PN-8P-8.8-17-K

8.8

Long Type

M10

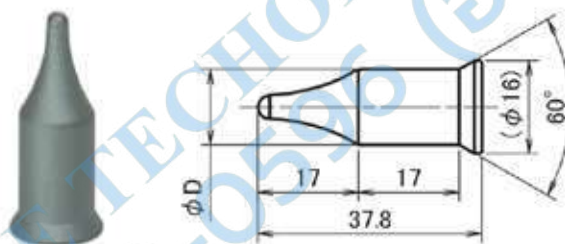


Model No.	ϕD
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PN-10P-10.8-17-K	10.8
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M12 · 7/16

Base hole diameter of work : $\phi 13$

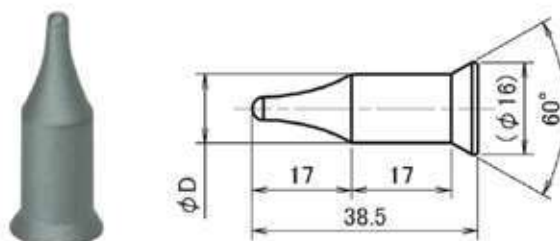


Model No.	ϕD
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PN-127P-12.8-17-K	12.8
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7/16

Base hole diameter of work : $\phi 12$

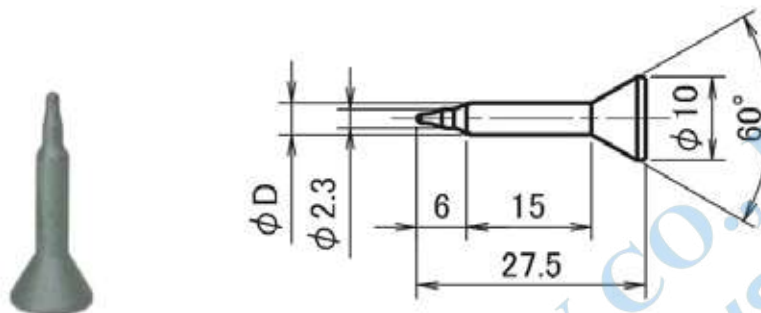


Model No.	ϕD
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PN-7/16P-11.8-17-K	11.8
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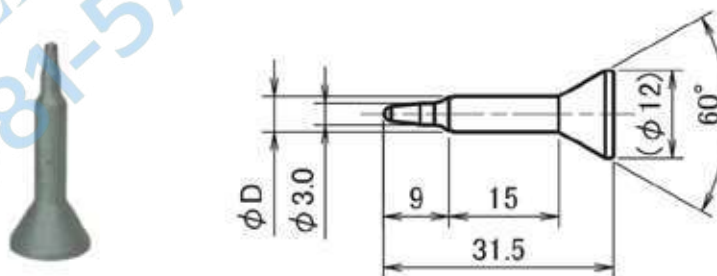
Center-Misalignment Prevention, Shouldered Type

M3



Model No.	ϕD
DPN-3P-3.8-K	3.8

M4



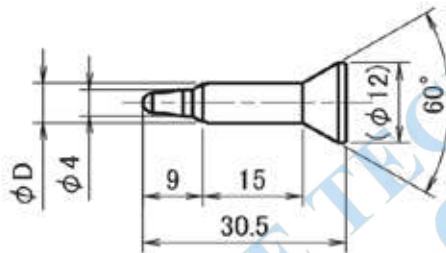
Model No.	ϕD
DPN-4P-4.8-K	4.8

Center-Misalignment Prevention, Shouldered Type

M5



DPN-5P-6.0-K



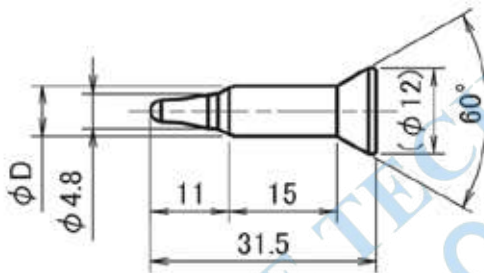
Model No.	φD
DPN-5P-5.3-K	5.3
DPN-5P-5.4-K	5.4
DPN-5P-5.5-K	5.5
DPN-5P-5.6-K	5.6
DPN-5P-5.7-K	5.7
DPN-5P-5.8-K	5.8
DPN-5P-5.9-K	5.9
DPN-5P-6.0-K	6.0
DPN-5P-6.1-K	6.1
DPN-5P-6.2-K	6.2
DPN-5P-6.3-K	6.3
DPN-5P-6.4-K	6.4
DPN-5P-6.5-K	6.5
DPN-5P-6.6-K	6.6
DPN-5P-6.7-K	6.7
DPN-5P-6.8-K	6.8
DPN-5P-6.9-K	6.9
DPN-5P-7.0-K	7.0
DPN-5P-7.1-K	7.1
DPN-5P-7.2-K	7.2
DPN-5P-7.3-K	7.3
DPN-5P-7.4-K	7.4
DPN-5P-7.5-K	7.5
DPN-5P-7.6-K	7.6
DPN-5P-7.7-K	7.7
DPN-5P-7.8-K	7.8
DPN-5P-7.9-K	7.9
DPN-5P-8.0-K	8.0

Center-Misalignment Prevention, Shouldered Type

M6



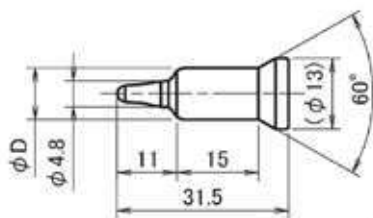
DPN-6P-7.0-K



Model No.	φD
DPN-6P-6.4-K	6.4
DPN-6P-6.5-K	6.5
DPN-6P-6.6-K	6.6
DPN-6P-6.7-K	6.7
DPN-6P-6.8-K	6.8
DPN-6P-6.9-K	6.9
DPN-6P-7.0-K	7.0
DPN-6P-7.1-K	7.1
DPN-6P-7.2-K	7.2
DPN-6P-7.3-K	7.3
DPN-6P-7.4-K	7.4
DPN-6P-7.5-K	7.5
DPN-6P-7.6-K	7.6
DPN-6P-7.7-K	7.7
DPN-6P-7.8-K	7.8
DPN-6P-7.9-K	7.9
DPN-6P-8.0-K	8.0
DPN-6P-8.1-K	8.1
DPN-6P-8.2-K	8.2
DPN-6P-8.3-K	8.3
DPN-6P-8.4-K	8.4
DPN-6P-8.5-K	8.5
DPN-6P-8.6-K	8.6
DPN-6P-8.7-K	8.7
DPN-6P-8.8-K	8.8
DPN-6P-8.9-K	8.9
DPN-6P-9.0-K	9.0
DPN-6P-9.1-K	9.1
DPN-6P-9.2-K	9.2
DPN-6P-9.3-K	9.3
DPN-6P-9.4-K	9.4

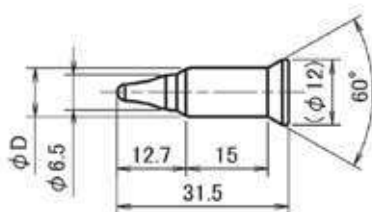
Center-Misalignment Prevention, Shouldered Type

M6



Model No.	φD
DPN-6P-9.5-K	9.5
DPN-6P-9.6-K	9.6
DPN-6P-9.7-K	9.7
DPN-6P-9.8-K	9.8
DPN-6P-9.9-K	9.9
DPN-6P-10.0-K	10.0

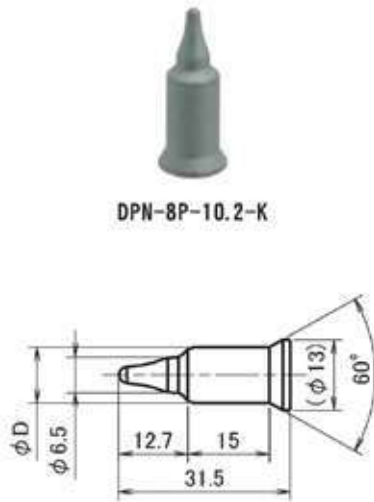
M8



Model No.	φD
DPN-8P-8.4-K	8.4
DPN-8P-8.5-K	8.5
DPN-8P-8.6-K	8.6
DPN-8P-8.7-K	8.7
DPN-8P-8.8-K	8.8
DPN-8P-8.9-K	8.9
DPN-8P-9.0-K	9.0
DPN-8P-9.1-K	9.1
DPN-8P-9.2-K	9.2
DPN-8P-9.3-K	9.3
DPN-8P-9.4-K	9.4

Center-Misalignment Prevention, Shouldered Type

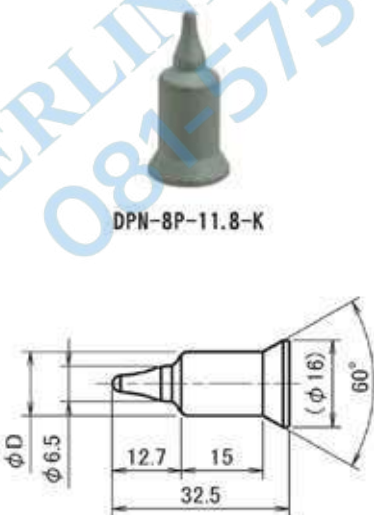
M8



DPN-8P-10.2-K

Model No.	φD
DPN-8P-9.5-K	9.5
DPN-8P-9.6-K	9.6
DPN-8P-9.7-K	9.7
DPN-8P-9.8-K	9.8
DPN-8P-9.9-K	9.9
DPN-8P-10.0-K	10.0
DPN-8P-10.1-K	10.1
DPN-8P-10.2-K	10.2
DPN-8P-10.3-K	10.3
DPN-8P-10.4-K	10.4
DPN-8P-10.5-K	10.5
DPN-8P-10.6-K	10.6
DPN-8P-10.7-K	10.7
DPN-8P-10.8-K	10.8
DPN-8P-10.9-K	10.9

M8



DPN-8P-11.8-K

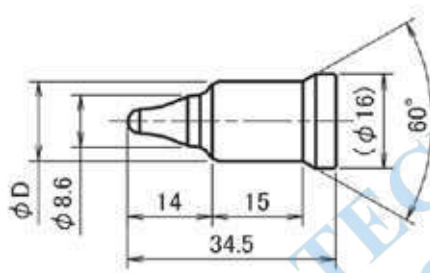
Model No.	φD
DPN-8P-11.0-K	11.0
DPN-8P-11.1-K	11.1
DPN-8P-11.2-K	11.2
DPN-8P-11.3-K	11.3
DPN-8P-11.4-K	11.4
DPN-8P-11.5-K	11.5
DPN-8P-11.6-K	11.6
DPN-8P-11.7-K	11.7
DPN-8P-11.8-K	11.8
DPN-8P-11.9-K	11.9
DPN-8P-12.0-K	12.0
DPN-8P-12.1-K	12.1
DPN-8P-12.2-K	12.2
DPN-8P-12.3-K	12.3
DPN-8P-12.4-K	12.4
DPN-8P-12.5-K	12.5

Center-Misalignment Prevention, Shouldered Type

M10



DPN-10P-13.2-K



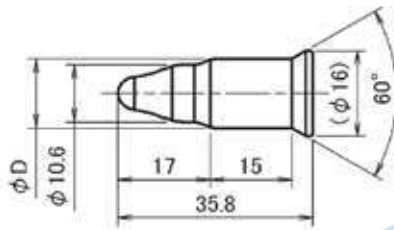
Model No.	φD
DPN-10P-10.5-K	10.5
DPN-10P-10.6-K	10.6
DPN-10P-10.7-K	10.7
DPN-10P-10.8-K	10.8
DPN-10P-10.9-K	10.9
DPN-10P-11.0-K	11.0
DPN-10P-11.1-K	11.1
DPN-10P-11.2-K	11.2
DPN-10P-11.3-K	11.3
DPN-10P-11.4-K	11.4
DPN-10P-11.5-K	11.5
DPN-10P-11.6-K	11.6
DPN-10P-11.7-K	11.7
DPN-10P-11.8-K	11.8
DPN-10P-11.9-K	11.9
DPN-10P-12.0-K	12.0
DPN-10P-12.1-K	12.1
DPN-10P-12.2-K	12.2
DPN-10P-12.3-K	12.3
DPN-10P-12.4-K	12.4
DPN-10P-12.5-K	12.5
DPN-10P-12.6-K	12.6
DPN-10P-12.7-K	12.7
DPN-10P-12.8-K	12.8
DPN-10P-12.9-K	12.9
DPN-10P-13.0-K	13.0
DPN-10P-13.1-K	13.1
DPN-10P-13.2-K	13.2
DPN-10P-13.3-K	13.3
DPN-10P-13.4-K	13.4
DPN-10P-13.5-K	13.5
DPN-10P-13.6-K	13.6
DPN-10P-13.7-K	13.7
DPN-10P-13.8-K	13.8

Center-Misalignment Prevention, Shouldered Type

M12



Model No.	ϕD
DPN-12P-12.8-K	12.8

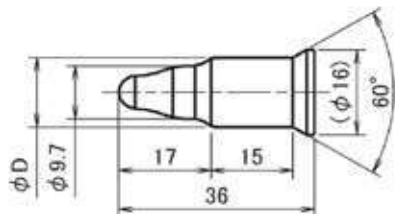


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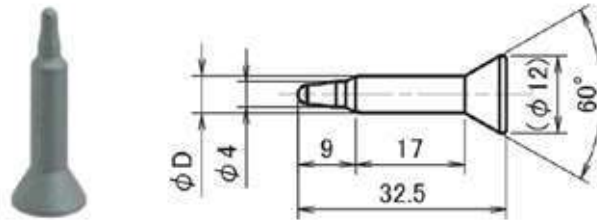
DPN-7/16P-12.8-K

Model No.	ϕD
DPN-7/16P-11.8-K	11.8
DPN-7/16P-12.8-K	12.8



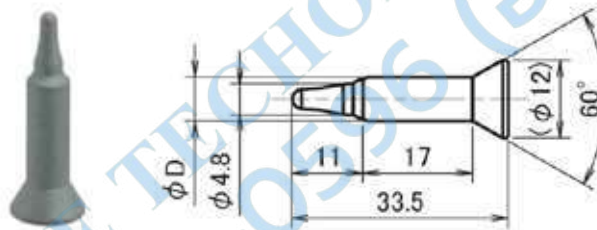
Center-Misalignment Prevention, Shouldered Type

M5



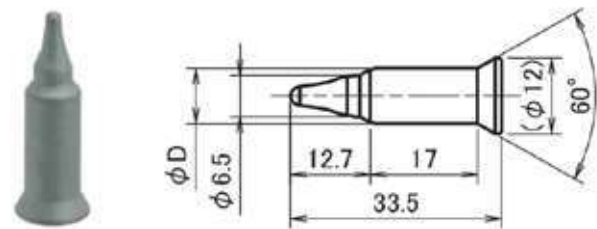
Model No.	ϕD
DPN-5P-5.8-17-K	5.8

M6



Model No.	ϕD
DPN-6P-6.8-17-K	6.8

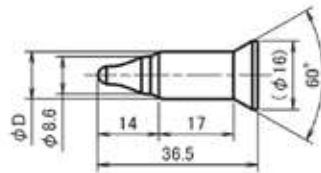
M8



Model No.	ϕD
DPN-8P-8.8-17-K	8.8

Center-Misalignment Prevention, Shouldered Type

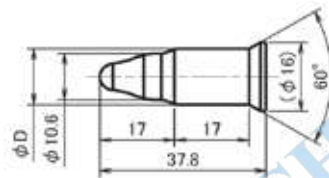
M10



Model No.	ϕD
DPN-10P-10.8-17-K	10.8

M12

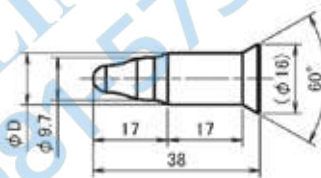
Base hole diameter of work : $\phi 13$



Model No.	ϕD
DPN-12P-12.8-17-K	12.8

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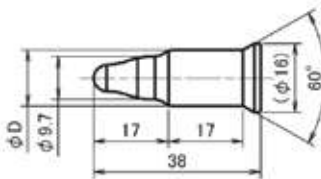
Base hole diameter of work : $\phi 12$



Model No.	ϕD
DPN-7/16P-11.8-17-K	11.8

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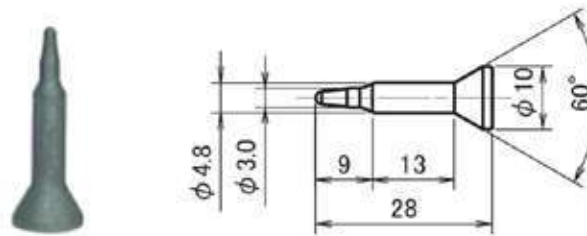
Base hole diameter of work : $\phi 13$



Model No.	ϕD
DPN-7/16P-12.8-17-K	12.8

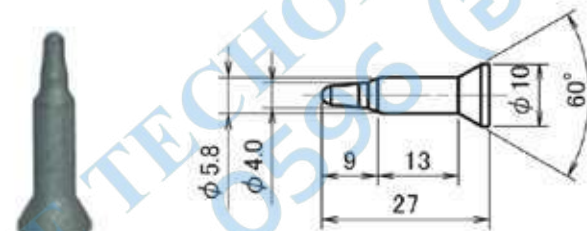
Suitable for $\phi 20$ Slim Type Inner Water-Cooling Holder

M4



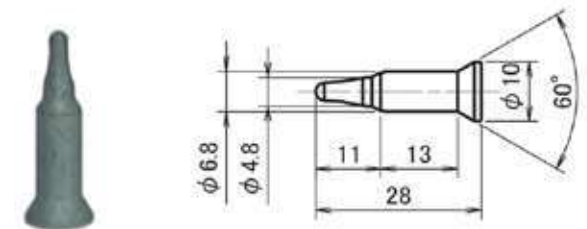
Model No.	NUT
DPN20-4P	M4

M5



Model No.	NUT
DPN20-5P	M5

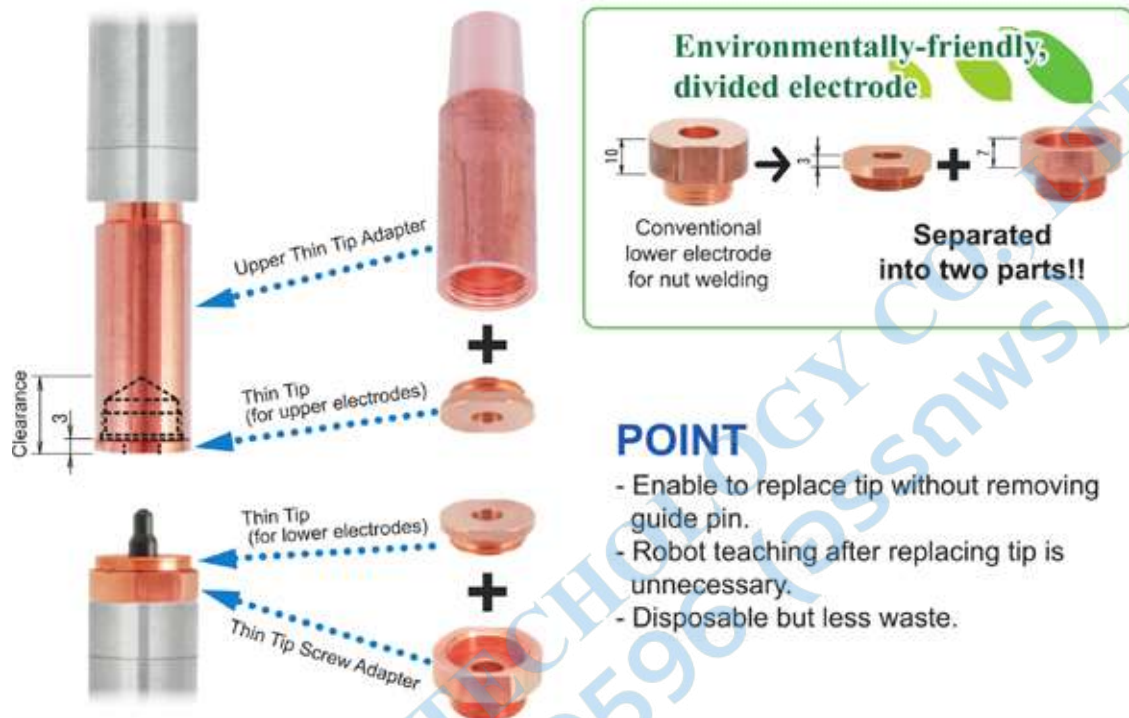
M6



Model No.	NUT
DPN20-6P	M6

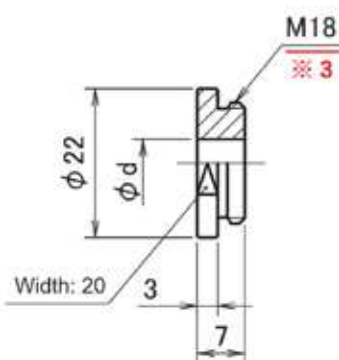
For Lower Electrodes

Example of use



φ22 (M4 · M5 · M6 · M8) ※ 3 Thread diameter: M18

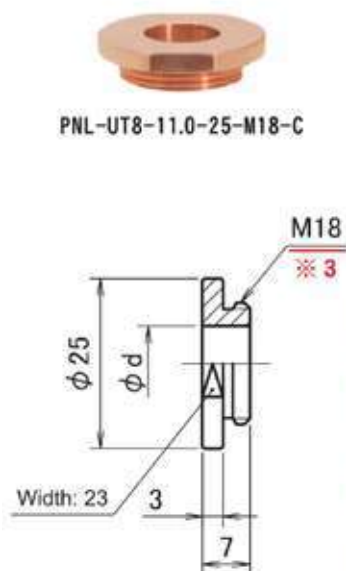
PNL-UT6-7.0-22-M18-C



Model No.	NUT	φd
PNL-UT4-5.0-22-M18-C	M4	5.0
PNL-UT5-6.0-22-M18-C	M5	6.0
PNL-UT5-7.0-22-M18-C	M5	7.0
PNL-UT6-7.0-22-M18-C	M6	7.0
PNL-UT6-8.0-22-M18-C	M6	8.0
PNL-UT6-9.0-22-M18-C	M6	9.0
PNL-UT8-9.0-22-M18-C	M8	9.0
PNL-UT8-10.0-22-M18-C	M8	10.0
PNL-UT8-11.0-22-M18-C	M8	11.0

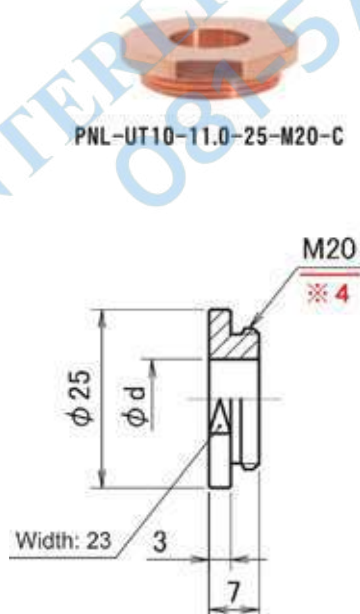
For Lower Electrodes

φ25 (M4 · M5 · M6 · M8) ※ 3 Thread diameter: M18



Model No.	NUT	φd
PNL-UT4-5.0-22-M18-C	M4	5.0
PNL-UT5-6.0-22-M18-C	M5	6.0
PNL-UT5-7.0-22-M18-C	M5	7.0
PNL-UT6-7.0-22-M18-C	M6	7.0
PNL-UT6-8.0-22-M18-C	M6	8.0
PNL-UT6-9.0-22-M18-C	M6	9.0
PNL-UT8-9.0-22-M18-C	M8	9.0
PNL-UT8-10.0-22-M18-C	M8	10.0
PNL-UT8-11.0-22-M18-C	M8	11.0

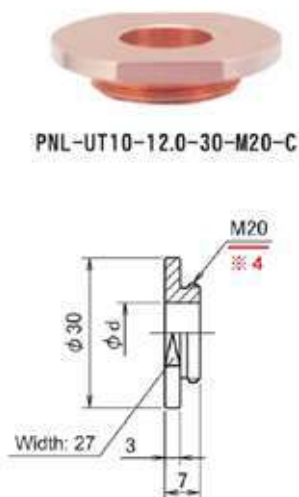
φ25 (M5 · M6 · M8 · M10 · M12 · M12 · 7/16) ※ 4 Thread diameter: M20



Model No.	NUT	φd
PNL-UT5-6.0-25-M20-C	M5	6.0
PNL-UT6-7.0-25-M20-C	M6	7.0
PNL-UT6-8.0-25-M20-C	M6	8.0
PNL-UT6-9.0-25-M20-C	M6	9.0
PNL-UT8-9.0-25-M20-C	M8	9.0
PNL-UT8-10.0-25-M20-C	M8	10.0
PNL-UT10-11.0-25-M20-C	M10	11.0
PNL-UT10-12.0-25-M20-C	M10	12.0
PNL-UT10-13.0-25-M20-C	M10	13.0
PNL-UT127-13.0-25-M20-C	M12 · 7/16	13.0

For Lower Electrodes

$\phi 30$ (M8 · M10 · M12 · 7/16) ※ 4 Thread diameter: M20



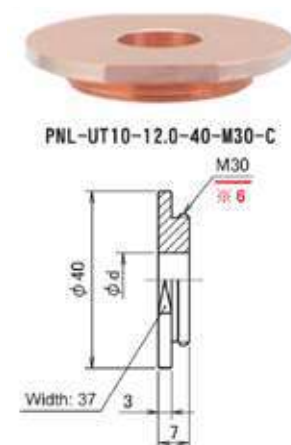
Model No.	NUT	ϕd
PNL-UT8-9.0-30-M20-C	M8	9.0
PNL-UT8-10.0-30-M20-C	M8	10.0
PNL-UT8-11.0-30-M20-C	M8	11.0
PNL-UT10-11.0-30-M20-C	M10	11.0
PNL-UT10-12.0-30-M20-C	M10	12.0
PNL-UT10-13.0-30-M20-C	M10	13.0
PNL-UT7/16-12.0-30-M20-C	7/16	12.0
PNL-UT127-13.0-30-M20-C	M12 · 7/16	13.0
PNL-UT12-14.0-30-M20-C	M12	14.0

$\phi 35$ (M10 · M12 · 7/16) ※ 5 Thread diameter: M25



Model No.	NUT	ϕd
PNL-UT10-11.0-35-M25-C	M10	11.0
PNL-UT10-12.0-35-M25-C	M10	12.0
PNL-UT10-13.0-35-M25-C	M10	13.0
PNL-UT127-13.0-35-M25-C	M12 · 7/16	13.0
PNL-UT12-14.0-35-M25-C	M12	14.0

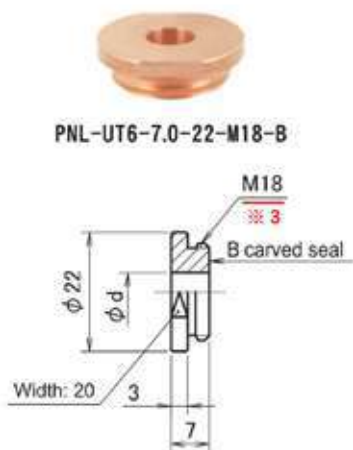
$\phi 40$ (M10 · M12 · 7/16) ※ 6 Thread diameter: M30



Model No.	NUT	ϕd
PNL-UT10-11.0-40-M30-C	M10	11.0
PNL-UT10-12.0-40-M25-C	M10	12.0
PNL-UT10-13.0-40-M25-C	M10	13.0
PNL-UT127-13.0-40-M25-C	M12 · 7/16	13.0
PNL-UT12-14.0-40-M25-C	M12	14.0

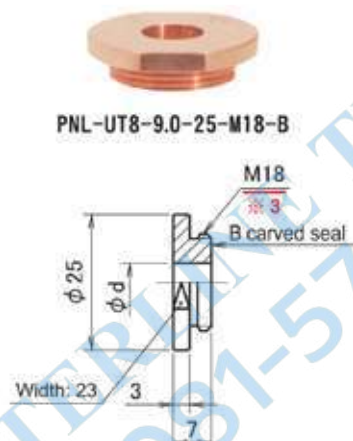
Beryllium Copper For Lower Electrodes

$\phi 22$ (M6 · M8) ※ 3 Thead diameter: M18



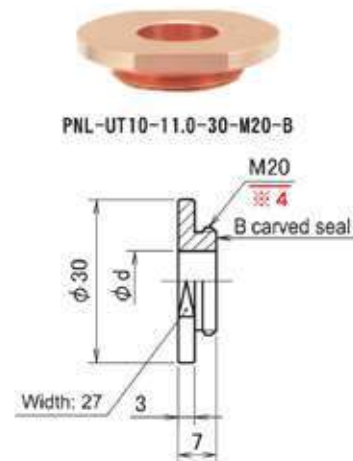
Model No.	NUT	ϕd
PNL-UT6-7.0-22-M18-B	M6	7.0
PNL-UT8-9.0-22-M18-B	M8	9.0

$\phi 25$ (M6 · M8) ※ 3 Thead diameter: M18



Model No.	NUT	ϕd
PNL-UT6-7.0-25-M18-B	M6	7.0
PNL-UT8-9.0-25-M18-B	M8	9.0

$\phi 30$ (M10 · M12 · 7/16) ※ 4 Thead diameter: M20



Model No.	NUT	ϕd
PNL-UT10-11.0-30-M20-B	M10	11.0
PNL-UT127-13.0-30-M20-B	M12 · 7/16	13.0

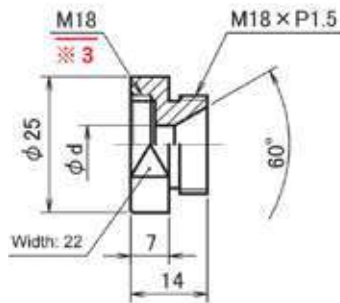
For Lower Electrodes

Suitable for Air Pins

φ25 (M4 · M5 · M6 · M8) ※ 3 Thread diameter: M18



PNL-UA6-7.0-25-M18-C



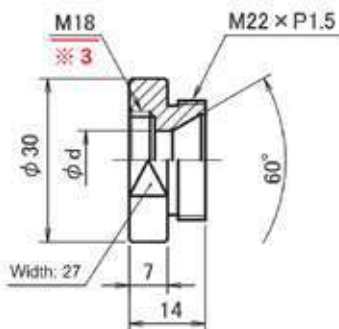
Model No.	NUT	φd
PNL-UA4-5.0-25-M18-C	M4	7.0
PNL-UA5-6.0-25-M18-C	M5	6.0
PNL-UA5-7.0-25-M18-C	M5	7.0
PNL-UA6-7.0-25-M18-C	M6	7.0
PNL-UA6-7.2-25-M18-C	M6	7.2
PNL-UA6-8.0-25-M18-C	M6	8.0
PNL-UA6-9.0-25-M18-C	M6	9.0
PNL-UA8-9.0-25-M18-C	M8	9.0
PNL-UA8-10.0-25-M18-C	M8	10.0
PNL-UA8-11.0-25-M18-C	M8	11.0

Suitable for Air Pins

φ30 (M5 · M6 · M8) ※ 3 Thread diameter: M18



PNL-UA8-11.0-30-M18-C



Model No.	NUT	φd
PNL-UA5-6.0-30-M18-C	M5	6.0
PNL-UA5-7.0-30-M18-C	M5	7.0
PNL-UA6-7.0-30-M18-C	M6	7.0
PNL-UA6-8.0-30-M18-C	M6	8.0
PNL-UA6-9.0-30-M18-C	M6	9.0
PNL-UA6-9.0-30-M18-C	M8	9.0
PNL-UA8-10.0-30-M18-C	M8	10.0
PNL-UA8-11.0-30-M18-C	M8	11.0

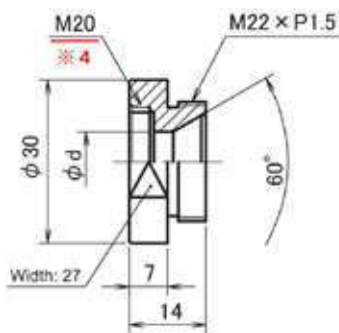
For Lower Electrodes

Suitable for Air Pins

φ30 (M5 · M6 · M8 · M10 · M12 · 7/16) ※4 Thread diameter: M20



PNL-UA10-11.0-30-M20-C



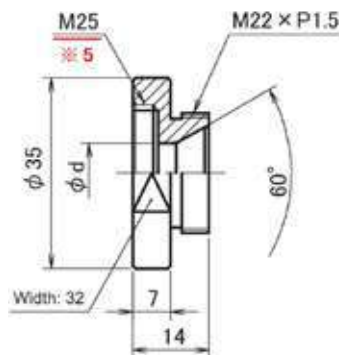
Model No.	NUT	φd
PNL-UA5-6.0-30-M20-C	M5	6.0
PNL-UA6-7.0-30-M20-C	M6	7.0
PNL-UA6-8.0-30-M20-C	M6	8.0
PNL-UA6-9.0-30-M20-C	M6	9.0
PNL-UA8-9.0-30-M20-C	M8	9.0
PNL-UA8-10.0-30-M20-C	M8	10.0
PNL-UA8-11.0-30-M20-C	M8	11.0
PNL-UA10-11.0-30-M20-C	M10	11.0
PNL-UA10-12.0-30-M20-C	M10	12.0
PNL-UA10-13.0-30-M20-C	M10	13.0
PNL-UA7/16-12.0-30-M20-C	7/16	12.0
PNL-UA127-13.0-30-M20-C	M12 · 7/16	13.0
PNL-UA12-14.0-30-M20-C	M12	14.0

Suitable for Air Pins

φ35 (M10 · M12 · 7/16) ※5 Thread diameter: M25



PNL-UA10-11.0-35-M25-C



Model No.	NUT	φd
PNL-UA10-11.0-35-M25-C	M10	11.0
PNL-UA10-12.0-35-M25-C	M10	12.0
PNL-UA10-13.0-35-M25-C	M10	13.0
PNL-UA127-13.0-35-M25-C	M12 · 7/16	13.0
PNL-UA12-14.0-35-M25-C	M12	14.0

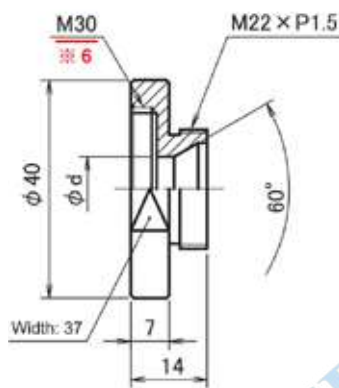
For Lower Electrodes

Suitable for Air Pins

φ 40 (M10 · M12 · 7/16) ※ 6 Thread diameter: M30



PNL-UA10-12.0-40-M30-C

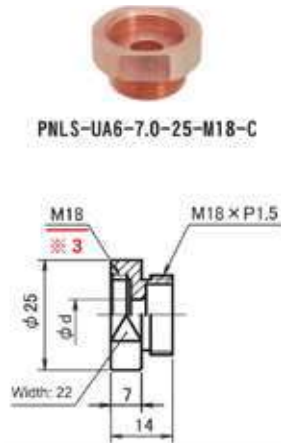


Model No.	NUT	φd
PNL-UA10-11.0-40-M30-C	M10	11.0
PNL-UA10-12.0-40-M30-C	M10	12.0
PNL-UA10-13.0-40-M30-C	M10	13.0
PNL-UA127-13.0-40-M30-C	M12 · 7/16	13.0
PNL-UA12-14.0-40-M30-C	M12	14.2

For Lower Electrodes

Suitable for Shouldered Pins

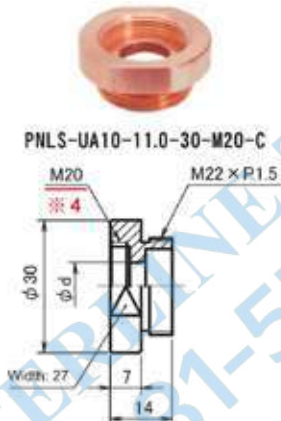
φ 25 (M5 · M6 · M8) ※3 Thread diameter: M18



Model No.	NUT	φd
PNLS-UA5-6.0-25-M18-C	M5	6.0
PNLS-UA5-7.0-25-M18-C	M5	7.0
PNLS-UA6-7.0-25-M18-C	M6	7.0
PNLS-UA6-8.0-25-M18-C	M6	8.0
PNLS-UA6-9.0-25-M18-C	M6	9.0
PNLS-UA8-9.0-25-M18-C	M8	9.0
PNLS-UA8-10.0-25-M18-C	M8	10.0
PNLS-UA8-11.0-25-M18-C	M8	11.0

Suitable for Shouldered Pins

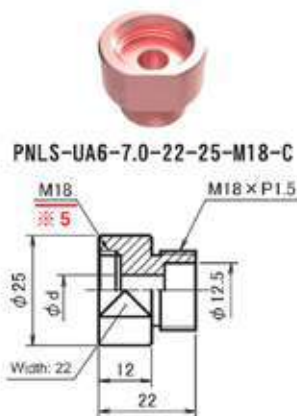
φ 30 (M10 · M12) ※4 Thread diameter: M20



Model No.	NUT	φd
PNLS-UA10-11.0-30-M20-C	M10	11.0
PNLS-UA10-12.0-30-M20-C	M10	12.0
PNLS-UA10-13.0-30-M20-C	M10	13.0
PNLS-UA12-13.0-30-M20-C	M12	13.0

Suitable for Shouldered Long Pins

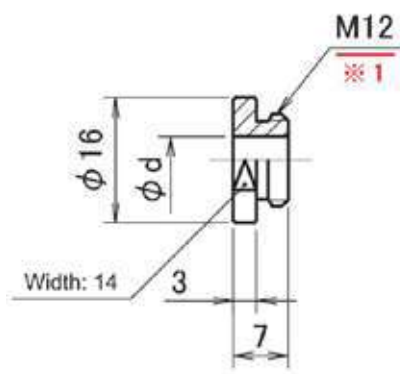
φ 25 (M4 · M5 · M6 · M8) ※5 Thread diameter: M18



Model No.	NUT	φd
PNLS-UA4-5.0-22-25-M18-C	M4	5.0
PNLS-UA5-6.0-22-25-M18-C	M5	6.0
PNLS-UA6-7.0-22-25-M18-C	M6	7.0
PNLS-UA8-9.0-22-25-M18-C	M8	9.0

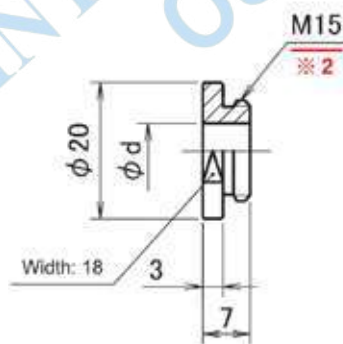
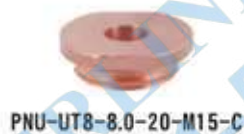
For Upper Electrodes

φ16 (M4 · M5 · M6) ※1 Thread diameter: M12



Model No.	NUT	φd
PNU-UT4-4.0-16-M12-C	M6	4.0
PNU-UT4-5.0-16-M12-C	M8	5.0
PNU-UT5-5.0-16-M12-C	M5	5.0
PNU-UT5-6.0-16-M12-C	M5	6.0
PNU-UT5-5.0-16-M12-C	M6	6.0
PNU-UT6-7.0-16-M12-C	M6	7.0

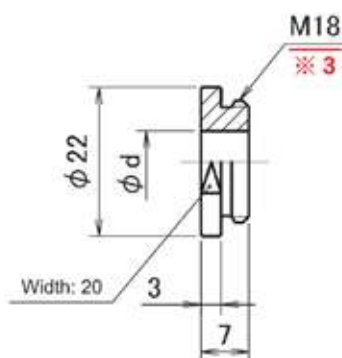
φ20 (M5 · M6 · M8) ※2 Thread diameter: M15



Model No.	NUT	φd
PNU-UT5-5.0-20-M15-C	M5	5.0
PNU-UT5-6.0-20-M15-C	M5	6.0
PNU -UT6-6.0-20-M15-C	M6	6.0
PNU-UT6-7.0-20-M15-C	M6	7.0
PNU-UT8-8.0-20-M15-C	M8	8.0
PNU-UT8-9.0-20-M12-C	M8	9.0
PNU-UT8-10.0-20-M15-C	M8	10.0

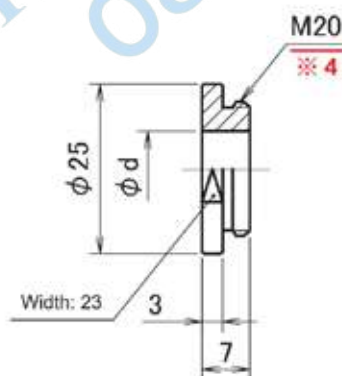
For Upper Electrodes

$\phi 22$ (M8 · M10) ※ 3 Thead diameter: M18



Model No.	NUT	ϕd
PNU-UT8-9.0-22-M18-C	M8	9.0
PNL-UT8-10.0-22-M18-C	M8	10.0
PNL-UT8-11.0-22-M18-C	M8	11.0
PNL-UT10-10.0-22-M18-C	M10	10.0
PNL-UT10-11.0-22-M18-C	M10	11.0
PNL-UT10-12.0-22-M18-C	M10	12.0
PNL-UT10-13.0-22-M18-C	M10	13.0

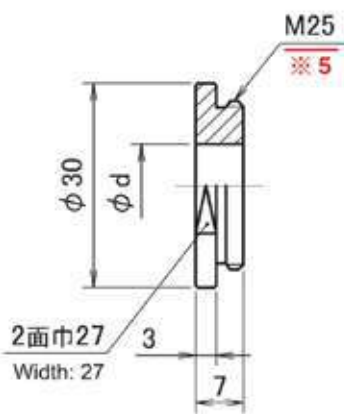
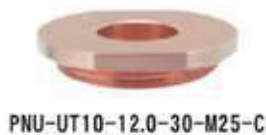
$\phi 25$ (M8 · M10 · M12 · 7/16) ※ 4 Thead diameter: M20



Model No.	NUT	ϕd
PNL-UT8-11.0-25-M20-C	M8	11.0
PNL-UT10-11.0-25-M20-C	M10	11.0
PNL-UT10-12.0-25-M20-C	M10	12.0
PNL-UT10-13.0-25-M20-C	M10	13.0
PNL-UT127-13.0-25-M20-C	M12 · 7/16	13.0

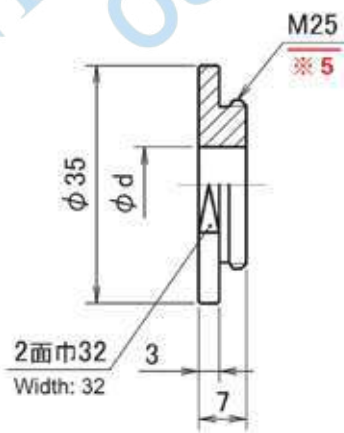
For Upper Electrodes

φ30 (M10 · M12 · 7/16) ※ 5 Thead diameter: M25



Model No.	NUT	φd
PNU-UT10-11.0-30-M25-C	M10	11.0
PNL-UT10-12.0-30-M25-C	M10	12.0
PNL-UT10-13.0-30-M25-C	M10	13.0
PNL-UT127-13.0-30-M25-C	M12 · 7/16	13.0
PNL-UT12-14.0-30-M25-C	M12	14.0
PNL-UT12-15.0-30-M25-C	M12	15.0

φ35 (M10 · M12 · 7/16) ※ 5 Thead diameter: M25

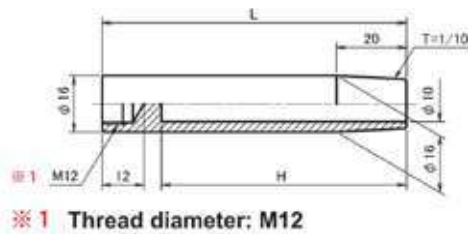


Model No.	NUT	φd
PNU-UT10-11.0-35-M25-C	M10	11.0
PNL-UT10-12.0-35-M25-C	M10	12.0
PNL-UT10-13.0-35-M25-C	M10	13.0
PNL-UT127-13.0-35-M25-C	M12 · 7/16	13.0
PNL-UT12-14.0-35-M25-C	M12	14.0
PNL-UT12-15.0-35-M25-C	M12	15.0

φ16 (M4 · M5 · M6)



PNU-UA1687-M12-1

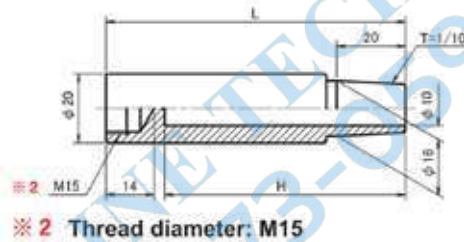


Model No.	H	L
PNU-UA1667-M12-1	50	67
PNU-UA1687-M12-1	70	87

φ20 (M5 · M6 · M8)



PNU-UA2087-M15-1

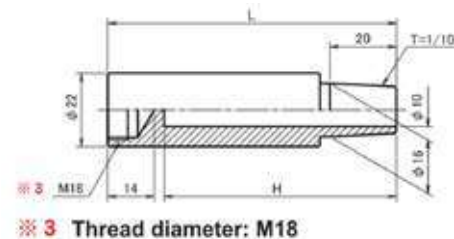


Model No.	H	L
PNU-UA2067-M15-1	50	67
PNU-UA2087-M15-1	70	87

φ22 (M8 · M10)

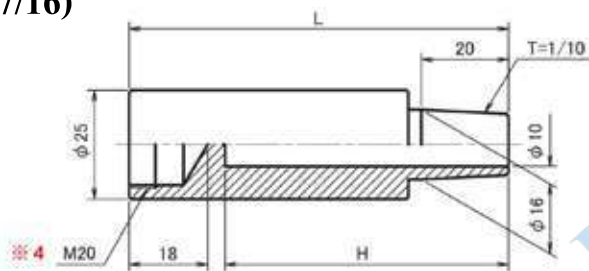


PNU-UA2287-M18-1



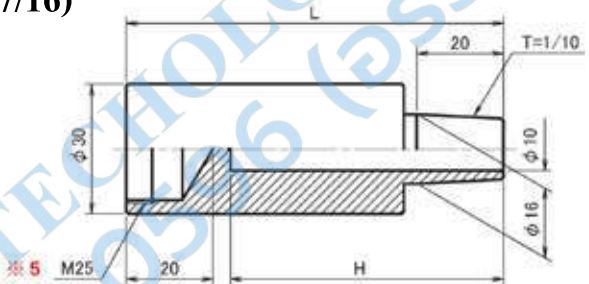
Model No.	H	L
PNU-UA2267-M18-1	50	67
PNU-UA2287-M18-1	70	87

φ25 (M8 · M10 · M12 · 7/16)



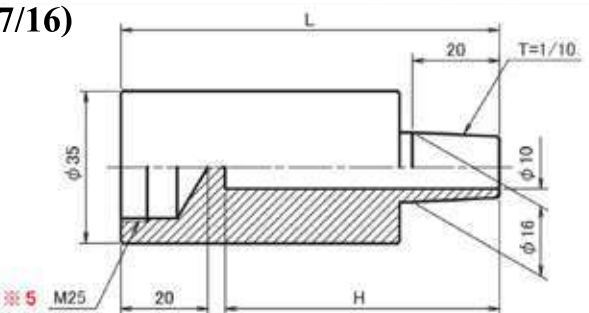
Model No.	H	L
PNU-UA2567-M20-1	45	67
PNU-UA2587-M20-1	65	87

φ30 (M8 · M10 · M12 · 7/16)



Model No.	H	L
PNU-UA3067-M25-1	43	67
PNU-UA3087-M25-1	63	87

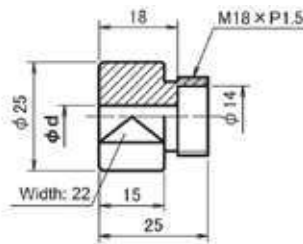
φ35 (M8 · M10 · M12 · 7/16)



Model No.	H	L
PNU-UA3567-M25-1	43	67
PNU-UA3587-M25-1	63	87

Long Type

M4



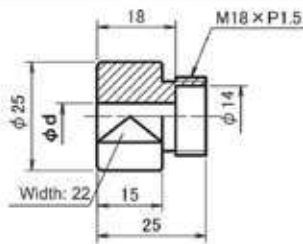
Model No.

 ϕd

PN-C4-5.0-15-C

5.0

M5



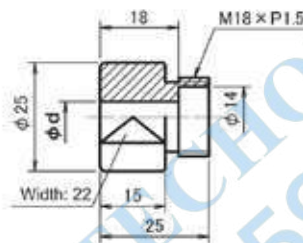
Model No.

 ϕd

PN-C5-6.0-15-C

6.0

M6



Model No.

 ϕd

PN-C6-7.0-15-C

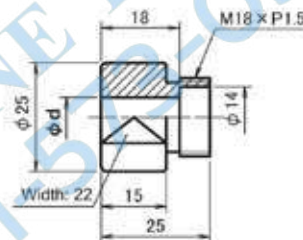
7.0

PN-C6-8.0-15-C

8.0

PN-C6-7.0-15-C

M8



Model No.

 ϕd

PN-C8-9.0-15-C

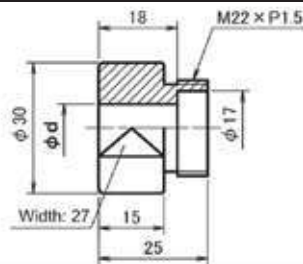
9.0

PN-C8-10.0-15-C

10.0

PN-C8-9.0-15-C

M10



Model No.

 ϕd

PN-C10-11.0-15-C

11.0

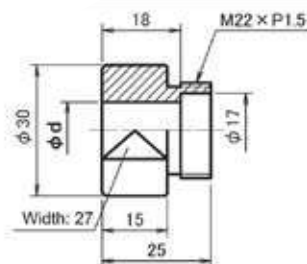
PN-C10-12.0-15-C

12.0

PN-C10-11.0-15-C

M12 · 7/16

Common type



Model No.

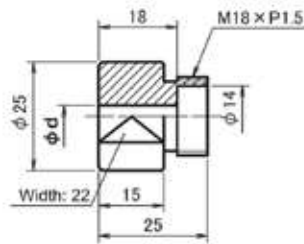
 ϕd

PN-C127-13.0-15-C

13.0

Long Type

M4



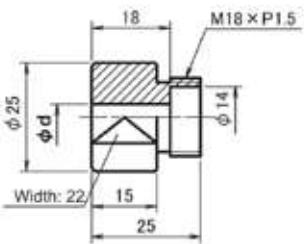
Model No.

ϕd

PN-C4-5.0-15-B

5.0

M5



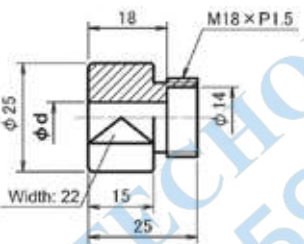
Model No.

ϕd

PN-C5-6.0-15-B

6.0

M6



Model No.

ϕd

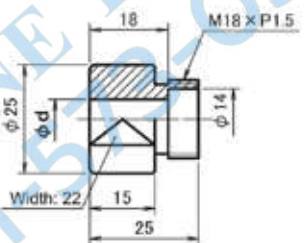
PN-C6-7.0-15-B

7.0

PN-C6-8.0-15-B

8.0

M8



Model No.

ϕd

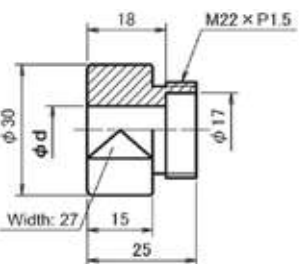
PN-C8-9.0-15-B

9.0

PN-C8-10.0-15-B

10.0

M10



Model No.

ϕd

PN-C10-11.0-15-B

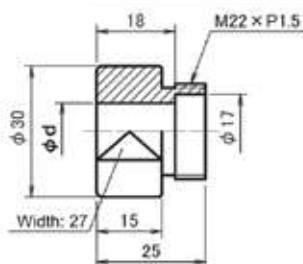
11.0

PN-C10-12.0-15-B

12.0

M12 · 7/16

Common type



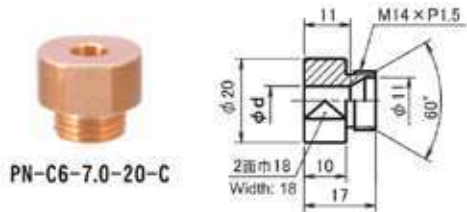
Model No.

ϕd

PN-C127-13.0-15-B

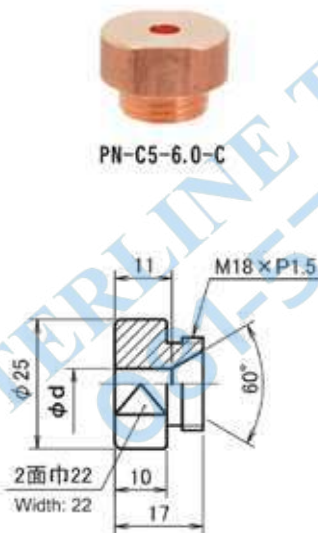
13.0

φ25 M4・M5・M6



Model No.	NUT	φd
PN-C4-5.0-20-C	M4	5
PN-C5-6.0-20-C	M5	6
PN-C6-7.0-20-C	M6	7

φ25 M4・M5・M6



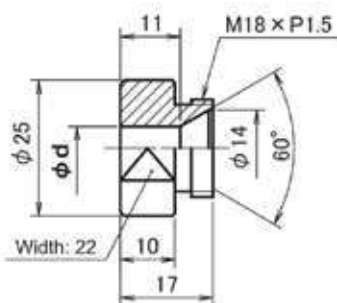
Model No.	NUT	φd
PN-C3-4.0-C	M3	4.0
PN-C4-5.0-C	M4	5.0
PN-C5-5.4-C	M5	5.4
PN-C5-5.5-C	M5	5.5
PN-C5-5.6-C	M5	5.6
PN-C5-5.7-C	M5	5.7
PN-C5-5.8-C	M5	5.8
PN-C5-5.9-C	M5	5.9
PN-C5-6.0-C	M5	6.0
PN-C5-6.1-C	M5	6.1
PN-C5-6.2-C	M5	6.2
PN-C5-6.3-C	M5	6.3
PN-C5-6.4-C	M5	6.4
PN-C5-6.5-C	M5	6.5
PN-C5-6.6-C	M5	6.6
PN-C5-6.7-C	M5	6.7
PN-C5-6.8-C	M5	6.8
PN-C5-6.9-C	M5	6.9
PN-C5-7.0-C	M5	7.0
PN-C5-7.1-C	M5	7.1
PN-C5-7.2-C	M5	7.2
PN-C5-7.3-C	M5	7.3
PN-C5-7.4-C	M5	7.4
PN-C5-7.5-C	M5	7.5

φ25

M5



PN-C5-8.0-C

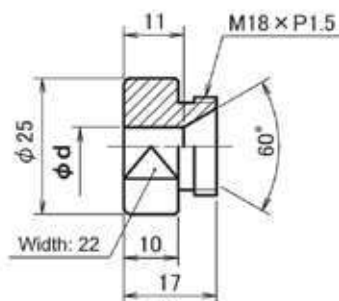


Model No.	φd
PN-C5-7.6-C	7.6
PN-C5-7.7-C	7.7
PN-C5-7.8-C	7.8
PN-C5-7.9-C	7.9
PN-C5-8.0-C	8.0
PN-C5-8.1-C	8.1
PN-C5-8.2-C	8.2

M6



PN-C6-7.0-C



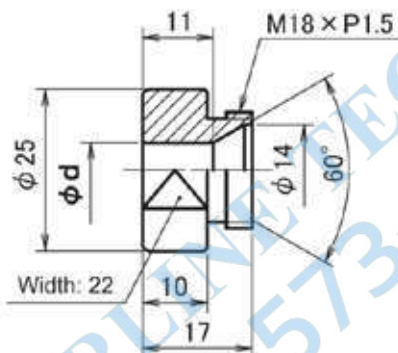
Model No.	φd
PN-C6-6.5-C	6.5
PN-C6-6.6-C	6.6
PN-C6-6.7-C	6.7
PN-C6-6.8-C	6.8
PN-C6-6.9-C	6.9
PN-C6-7.0-C	7.0
PN-C6-7.1-C	7.1
PN-C6-7.2-C	7.2
PN-C6-7.3-C	7.3
PN-C6-7.4-C	7.4
PN-C6-7.5-C	7.5

φ25

M6



PN-C6-10.0-C



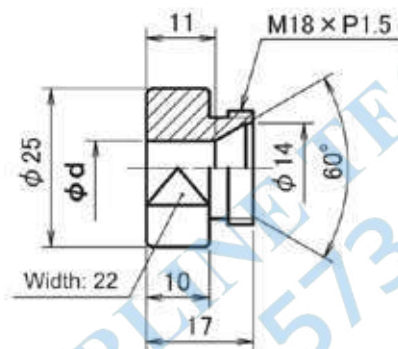
Model No.	φd
PN-C6-7.6-C	7.6
PN-C6-7.7-C	7.7
PN-C6-7.8-C	7.8
PN-C6-7.9-C	7.9
PN-C6-8.0-C	8.0
PN-C6-8.1-C	8.1
PN-C6-8.2-C	8.2
PN-C6-8.3-C	8.3
PN-C6-8.4-C	8.4
PN-C6-8.5-C	8.5
PN-C6-8.6-C	8.6
PN-C6-8.7-C	8.7
PN-C6-8.8-C	8.8
PN-C6-8.9-C	8.9
PN-C6-9.0-C	9.0
PN-C6-9.1-C	9.1
PN-C6-9.2-C	9.2
PN-C6-9.3-C	9.3
PN-C6-9.4-C	9.4
PN-C6-9.5-C	9.5
PN-C6-9.6-C	9.6
PN-C6-9.7-C	9.7
PN-C6-9.8-C	9.8
PN-C6-9.9-C	9.9
PN-C6-10.0-C	10.0
PN-C6-10.1-C	10.1
PN-C6-10.2-C	10.2

φ25

M8



PN-C8-11.0-C



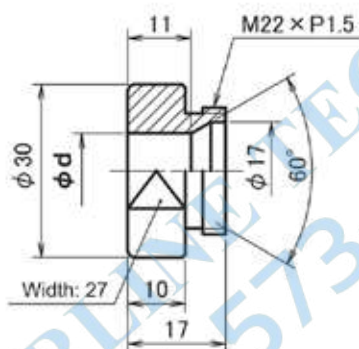
Model No.	φd
PN-C8-8.5-C	8.5
PN-C8-8.6-C	8.6
PN-C8-8.7-C	8.7
PN-C8-8.8-C	8.8
PN-C8-8.9-C	8.9
PN-C8-9.0-C	9.0
PN-C8-9.1-C	9.1
PN-C8-9.2-C	9.2
PN-C8-9.3-C	9.3
PN-C8-9.4-C	9.4
PN-C8-9.5-C	9.5
PN-C8-9.6-C	9.6
PN-C8-9.7-C	9.7
PN-C8-9.8-C	9.8
PN-C8-9.9-C	9.9
PN-C8-10.0-C	10.0
PN-C8-10.1-C	10.1
PN-C8-10.2-C	10.2
PN-C8-10.3-C	10.3
PN-C8-10.4-C	10.4
PN-C8-10.5-C	10.5
PN-C8-10.6-C	10.6
PN-C8-10.7-C	10.7
PN-C8-10.8-C	10.8
PN-C8-10.9-C	10.9
PN-C8-11.0-C	11.0

φ30

M10



PN-C10-13.0-30-C

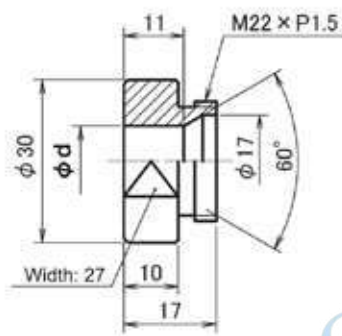


Model No.	φd
PN-C10-10.6-30-C	10.6
PN-C10-10.7-30-C	10.7
PN-C10-10.8-30-C	10.8
PN-C10-10.9-30-C	10.9
PN-C10-11.0-30-C	11.0
PN-C10-11.1-30-C	11.1
PN-C10-11.2-30-C	11.2
PN-C10-11.3-30-C	11.3
PN-C10-11.4-30-C	11.4
PN-C10-11.5-30-C	11.5
PN-C10-11.6-30-C	11.6
PN-C10-11.7-30-C	11.7
PN-C10-11.8-30-C	11.8
PN-C10-11.9-30-C	11.9
PN-C10-12.0-30-C	12.0
PN-C10-12.1-30-C	12.1
PN-C10-12.2-30-C	12.2
PN-C10-12.3-30-C	12.3
PN-C10-12.4-30-C	12.4
PN-C10-12.5-30-C	12.5
PN-C10-12.6-30-C	12.6
PN-C10-12.7-30-C	12.7
PN-C10-12.8-30-C	12.8
PN-C10-12.9-30-C	12.9
PN-C10-13.0-30-C	13.0
PN-C10-13.1-30-C	13.1
PN-C10-13.2-30-C	13.2
PN-C10-13.3-30-C	13.3
PN-C10-13.4-30-C	13.4
PN-C10-13.5-30-C	13.5
PN-C10-13.6-30-C	13.6
PN-C10-13.7-30-C	13.7
PN-C10-13.8-30-C	13.8
PN-C10-13.9-30-C	13.9
PN-C10-14.0-30-C	14.0

φ30

M12·7/16

Base hole diameter of work : φ13



Model No.

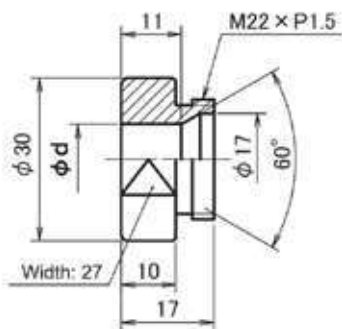
φd

PN-C127-13.0-30-C

13.0

7/16

Base hole diameter of work : φ12



Model No.

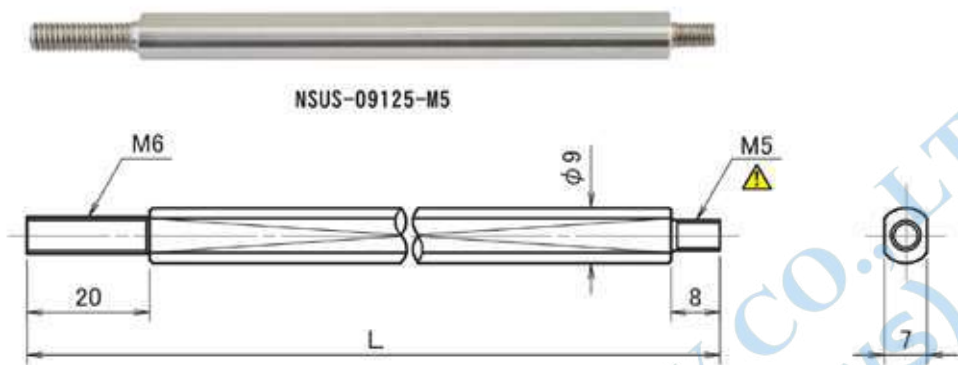
φd

PN-C7/16-12.0-30-C

12.0

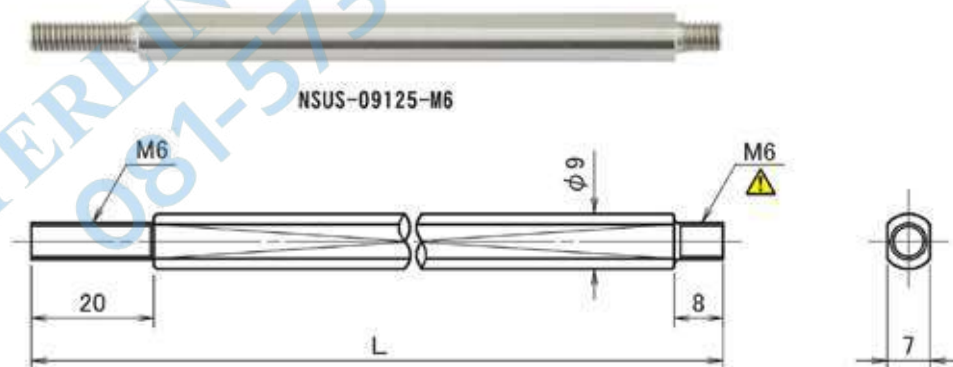
Shaft

φ25 single type (M5/M6) & double type (M4/M5, M5/M6)



Model No.	Suitable Slide Unit	L
NSUS-09125-M5	NUS-SHP-25150/NSU-WHP-25150	125
	NUS-S-25150-MH/NSU-W-25150-MH	
NSUS-09175-M5	NUS-SHP-25200/NSU-WHP-25200	175
	NUS-S-25200-MH/NSU-W-25200-MH	
NSUS-09225-M5	NUS-SHP-25250/NSU-WHP-25250	225
	NUS-S-25250-MH/NSU-W-25250-MH	

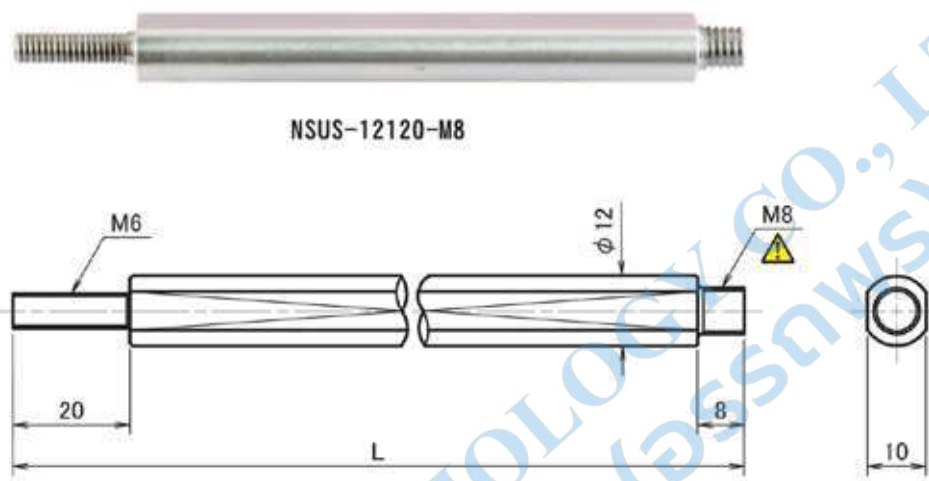
φ25 single type (M8) & double type (M6/M8)



Model No.	Suitable Slide Unit	L
NSUS-09125-M6	NUS-SHP-25150/NSU-WHP-25150	125
	NUS-S-25150-MH/NSU-W-25150-MH	
NSUS-09175-M6	NUS-SHP-25200/NSU-WHP-25200	175
	NUS-S-25200-MH/NSU-W-25200-MH	
NSUS-09225-M6	NUS-SHP-25250/NSU-WHP-25250	225
	NUS-S-25250-MH/NSU-W-25250-MH	

Shaft

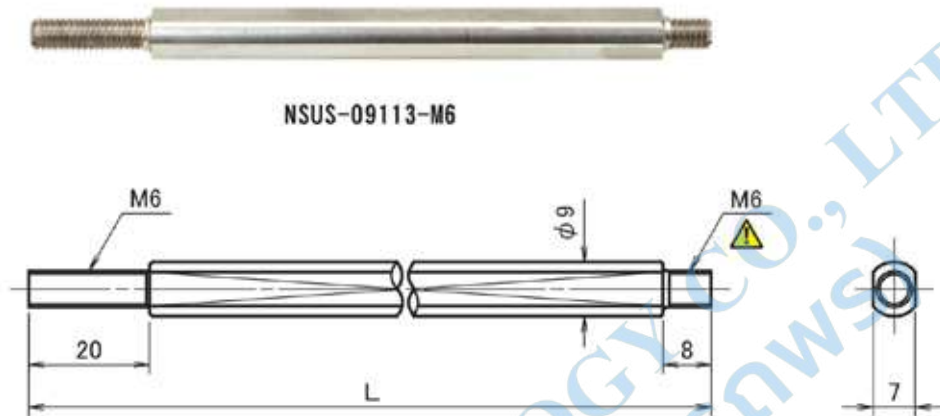
φ 32 single type (M10 , M12 , 7/16)
double type (M8/M10,M10/M12, M10/7/16)



Model No.	Suitable Slide Unit	L
NSUS-12120-M8	NUS-S-32150-MH/NSU-W-32150-MH	120
NSUS-12170-M8	NUS-S-32200-MH/NSU-W-32200-MH	170
NSUS-12220-M8	NUS-S-32250-MH/NSU-W-32250-MH	220

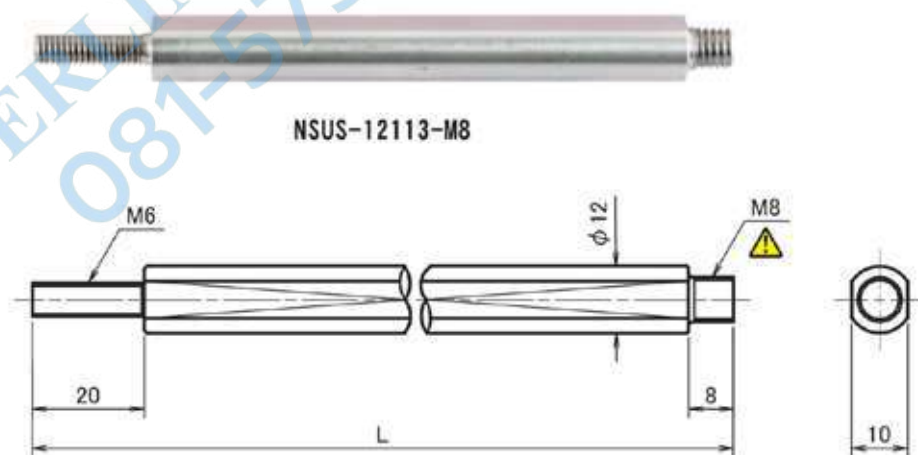
Shaft

$\phi 25$ single type (M4 , M5 , M6 , M8) &
double type (M4/M5,M5/M6, M6/M8)



Model No.	Suitable Slide Unit for Robo-navi	L
NSUS-09113-M6	RN-NSU-SHP-25150/RN-NSU-WHP-25150	113
NSUS-09163-M6	RN-NSU-SHP-25200/RN-NSU-WHP-25200	163
NSUS-09213-M6	RN-NSU-SHP-25250/RN-NSU-WHP-25250	213

$\phi 32$ single type (M10 , M12 , 7/16) &
double type (M8/M10,M10/M12, M10/7/16)

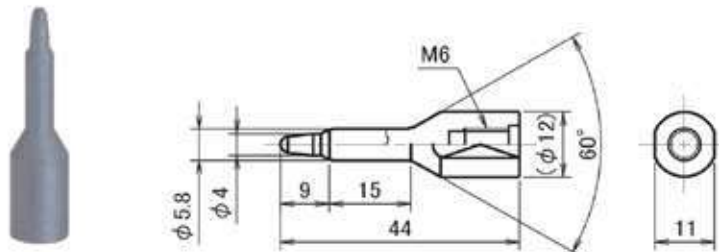


Model No.	Suitable Slide Unit for Robo-navi	L
NSUS-12113-M8	RN-NSU-SHP-32150/RN-NSU-WHP-32150	113
NSUS-12163-M8	RN-NSU-SHP-32200/RN-NSU-WHP-32200	163
NSUS-12213-M8	RN-NSU-SHP-32250/RN-NSU-WHP-32250	213

Suitable for Rabo-navi
Center-Misalignment Prevention, Shouldered

M5

Base hole diameter of work : $\phi 6$

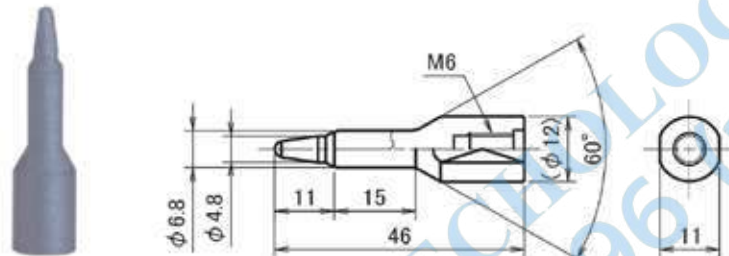


Model No.

DPN-5PS-5.8-K-N

M6

Base hole diameter of work : $\phi 7$

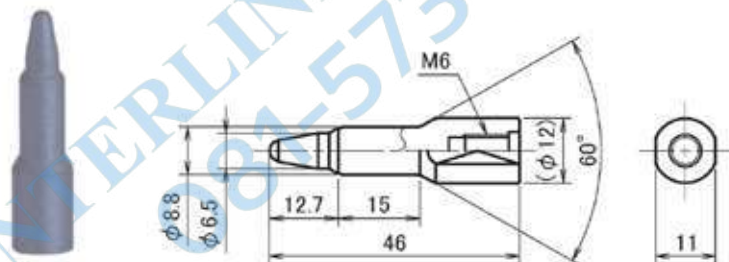


Model No.

DPN-6PS-6.8-K-N

M8

Base hole diameter of work : $\phi 9$

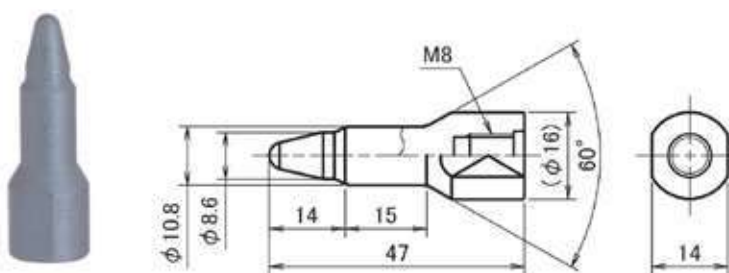


Model No.

DPN-8PS-8.8-K-N

M10

Base hole diameter of work : $\phi 11$



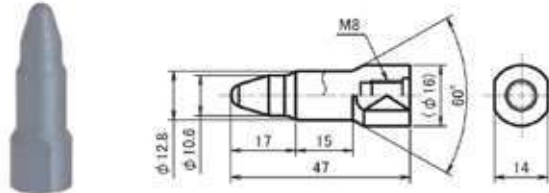
Model No.

DPN-10PS-10.8-K-N

Suitable for Rabo-navi
Center-Misalignment Prevention, Shouldered

M12

Base hole diameter of work : $\phi 13$

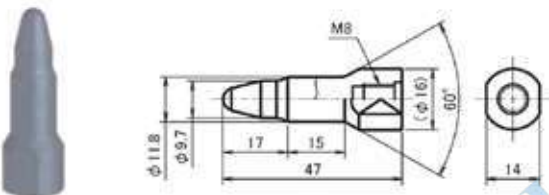


Model No.

DPN-12PS-12.8-K-N

7/16

Base hole diameter of work : $\phi 12$

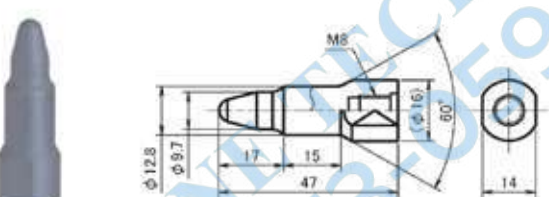


Model No.

DPN-7/16PS-11.8-K-N

7/16

Base hole diameter of work : $\phi 13$

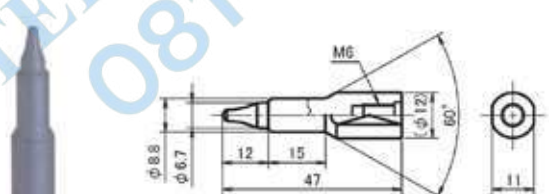


Model No.

DPN-7/16PS-12.8-K-N

M6 / M8

Base hole diameter of work : $\phi 7 / \phi 9$

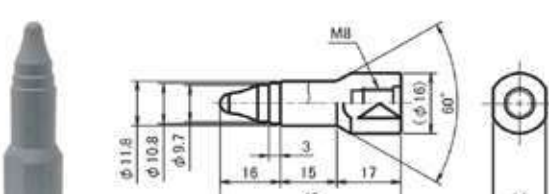


Model No.

DPN-6/8PS-6.7/8.8-K-N

M10 · 7/16

Base hole diameter of work : $\phi 11 / \phi 12$

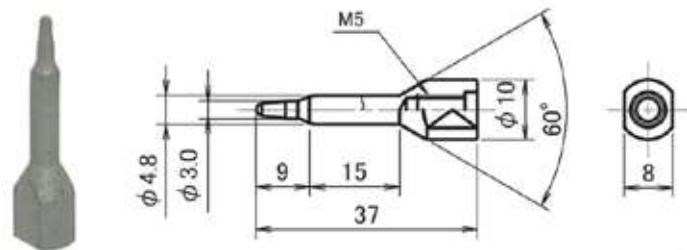


Model No.

DPN-10/716PS-10.8/11.8-K-N

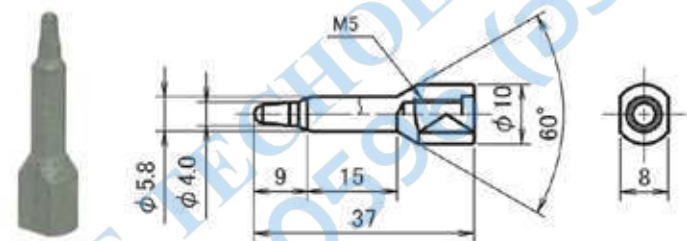
Suitable for $\phi 20$ Slim Type Slide Unit

M4



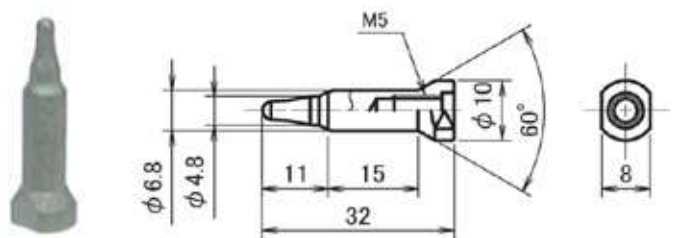
Model No.	NUT
DPN20-4PS-15-N	M4

M5



Model No.	NUT
DPN20-5PS-15-N	M5

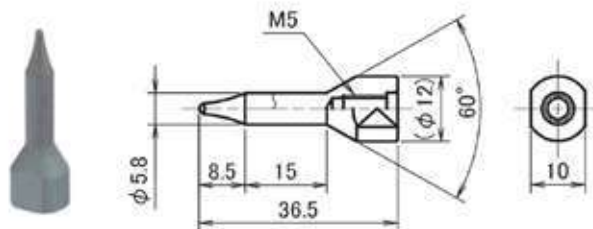
M6



Model No.	NUT
DPN20-6PS-15-N	M6

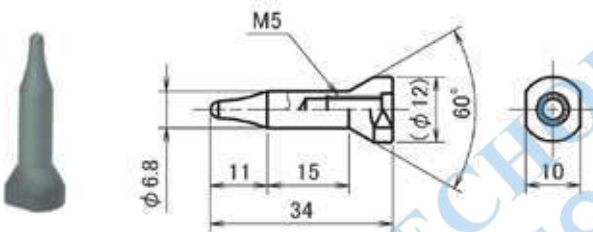
Suitable for Slide Unit

M5



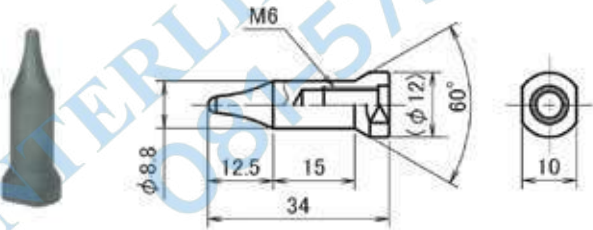
Model No.	NUT
PN-5PS-N	M5

M6



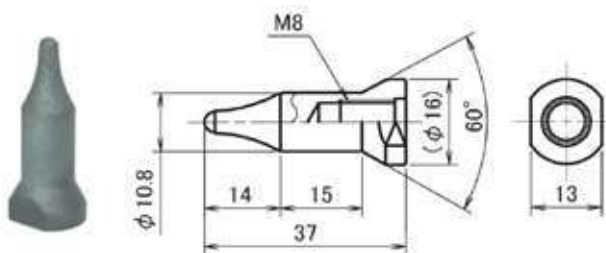
Model No.	NUT
PN-6PS-N	M6

M8



Model No.	NUT
PN-8PS-N	M8

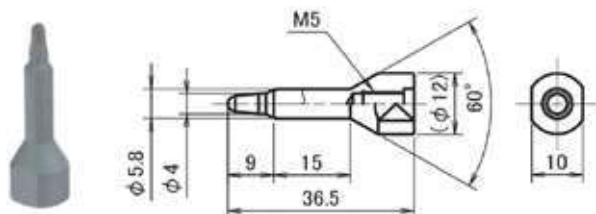
M10



Model No.	NUT
PN-10PS-N	M10

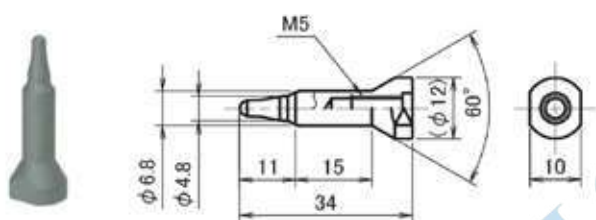
Suitable for Slide Unit

M5



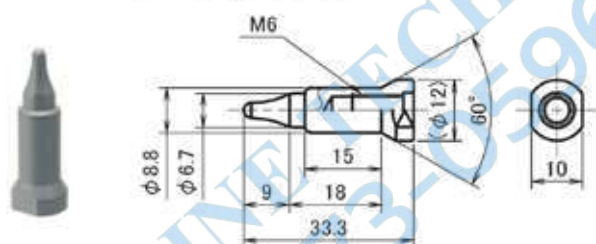
Model No.	NUT
DPN-5PS-N	M5

M6



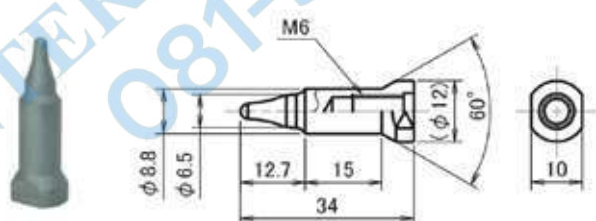
Model No.	NUT
DPN-6PS-N	M6

M6/M8 For multiple use



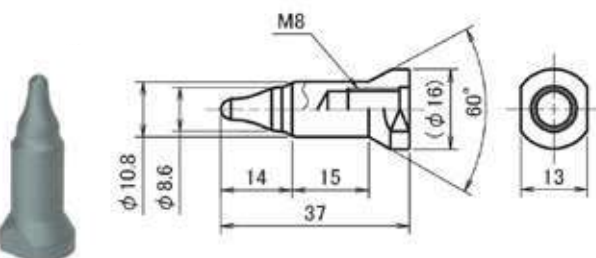
Model No.	NUT
DPN-6/8PS-N	M6/M8

M8



Model No.	NUT
DPN-8PS-N	M8

M10

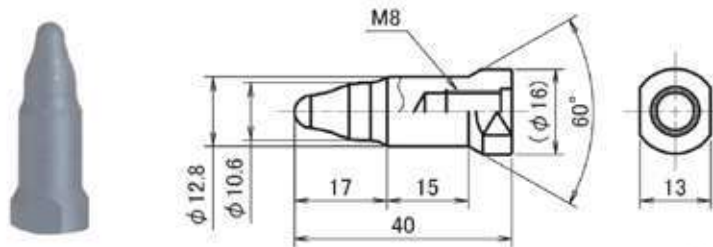


Model No.	NUT
DPN-10PS-N	M10

Suitable for Slide Unit

M12

Base hole diameter of work : $\phi 13$

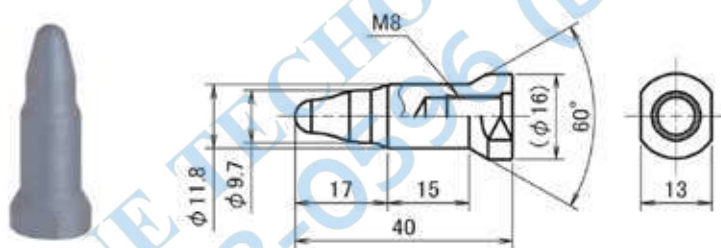


Model No.

DPN-12PS-N

7/16

Base hole diameter of work : $\phi 12$

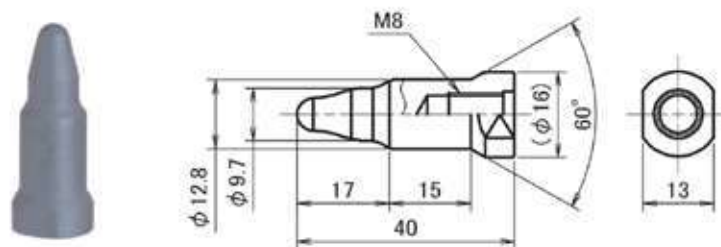


Model No.

DPN-7/16PS-11.8-N

7/16

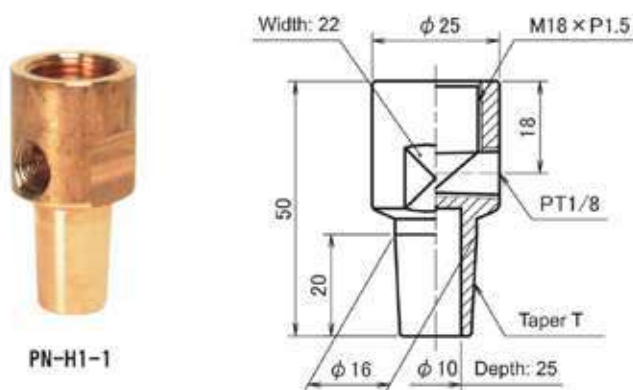
Base hole diameter of work : $\phi 13$



Model No.

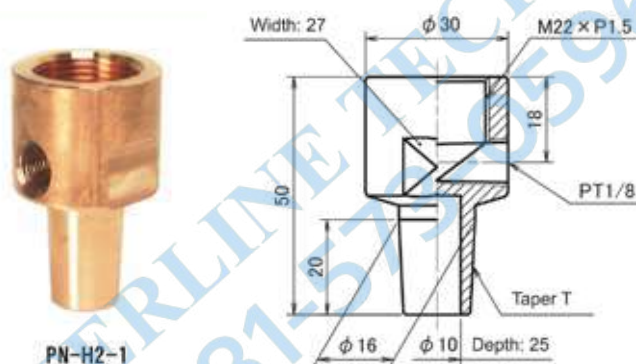
DPN-7/16PS-12.8-N

φ25 (M3 , M4 , M5 , M6 , M8)



Model No.	T
PN-H1-1	1/10
PN-H1-2	MT#2
PN-H1-3	1/5

φ30 (M5 , M6 , M8 , M10 , M12 · 7/16)



Model No.	T
PN-H2-1	1/10
PN-H2-2	MT#2
PN-H2-3	1/5

Example of use

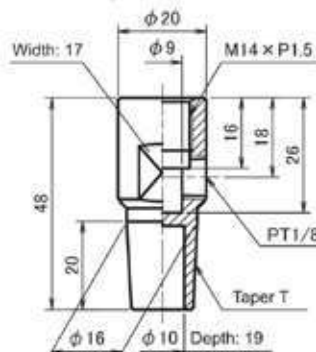


Air & Spring Lower Holder for Nut Welding

φ20 (M4 · M5 · M6)



PN-SH3-1

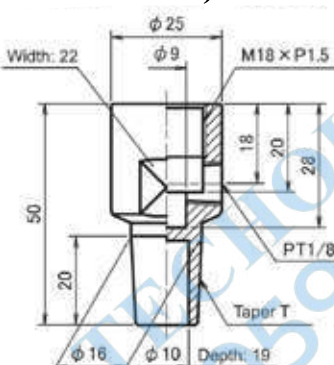


Model No.	T
PN-SH3-1	1/10
PN-SH3-2	MT#2
PN-SH3-3	1/5

φ25 (M3 · M4 · M5 · M6 · M8)



PN-SH1-1

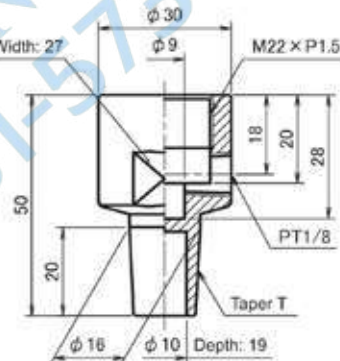


Model No.	T
PN-SH1-1	1/10
PN-SH1-2	MT#2
PN-SH1-3	1/5

φ30 (M5 · M6 · M8 · M10 · M12 · 7/16)

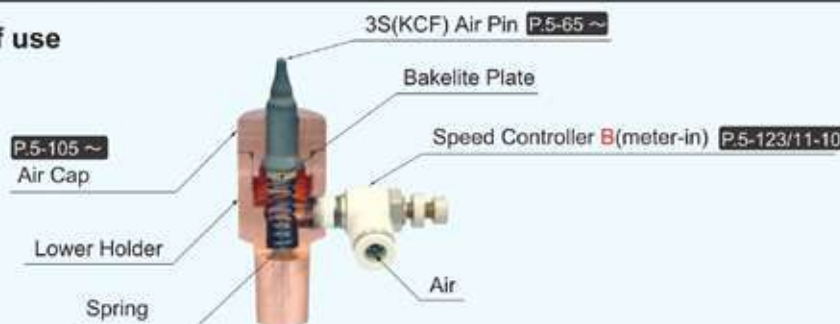


PN-SH2-1

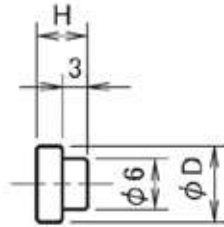


Model No.	T
PN-SH2-1	1/10
PN-SH2-2	MT#2
PN-SH2-3	1/5

EX Example of use

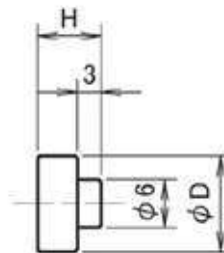


Bakelite Plate for Spring



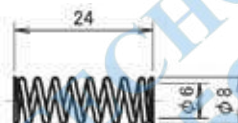
Model No.	H	ϕd
BU-609-6	6	9

Bakelite Plate for Spring



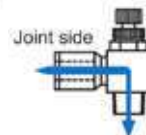
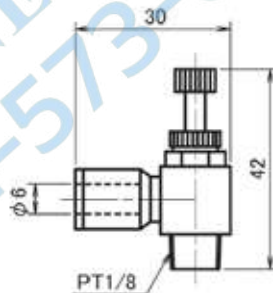
Model No.	H	ϕd
BU-612-8	8	12

Spring



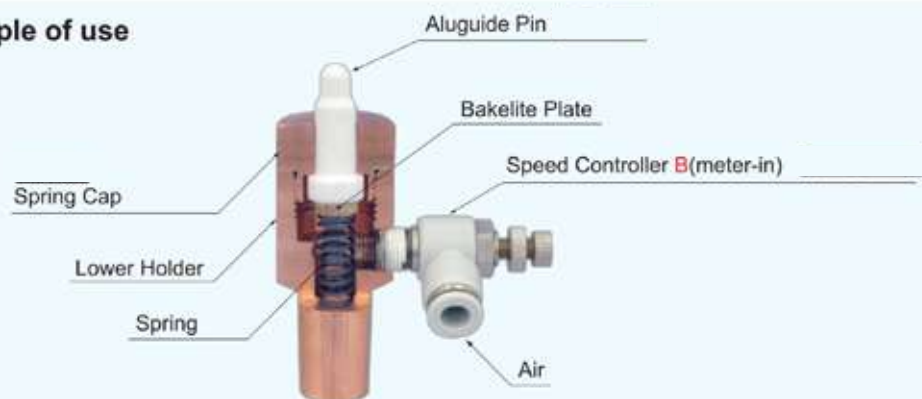
Model No.
SP-68-24

Speed Controller B (meter-in)



Model No.
PSL-601B

Example of use

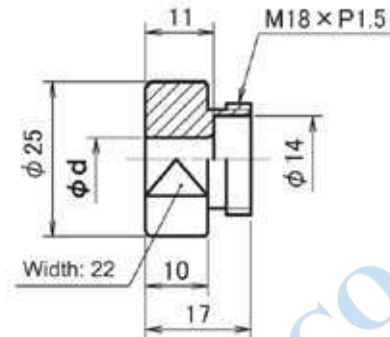


Spring Type

φ25 (M5 · M6 · M8)



PNS-C8-9.0-C

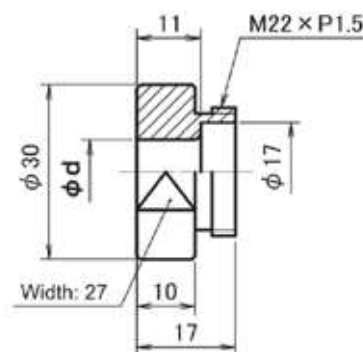


Model No.	NUT	φd
PNS-C5-6.0-C	M5	6
PNS-C5-7.0-C	M5	7
PNS-C6-7.0-C	M6	7
PNS-C6-8.0-C	M6	8
PNS-C6-9.0-C	M6	9
PNS-C8-9.0-C	M8	9
PNS-C8-10.0-C	M8	10
PNS-C8-11.0-C	M8	11

φ30 (M10 · M12)



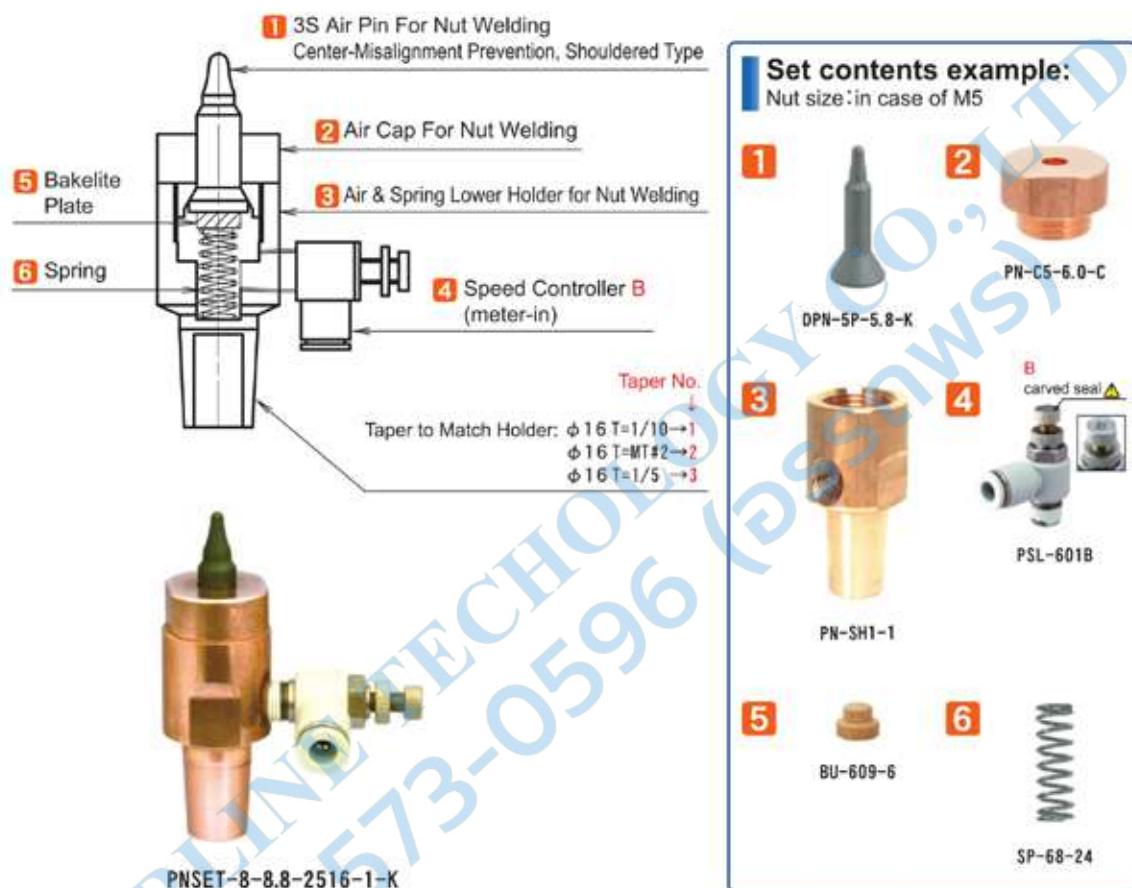
PNS-C10-11.0-C



Model No.	NUT	φd
PNS-C10-11.0-C	M10	11
PNS-C10-12.0-C	M10	12
PNS-C10-13.0-C	M10	13
PNS-C12-13.0-C	M12	13

3S(KCF) Air Pin Type

Nut-shaped: Square Nut · Hexagonal Nut · Nut for Hexagonal Ring (Pilot)
Suitable for workpieces thinner than 2.6 mm



Model No.	Nut Shape	NUT	Pilot hole φd	Guide Pin hole φd
PNSET-4-4.8-2516-1-K	Square Nut Hexagonal Nut	M4	5.0	4.8
PNSET-5-5.8-2516-1-K		M5	6.0	5.8
PNSET-6-6.8-2516-1-K		M6	7.0	6.8
PNSET-8-8.8-2516-1-K		M8	9.0	8.8
PNSET-10-10.8-3016-1-K		M10	11.0	10.8
PNSET-12-12.8-3016-1-K		M12	13.0	12.8
PNSET-P5-6.8-2516-1-K	Nut for Ring (for Pilot)	M5	7.0	6.8
PNSET-P6-8.8-2516-1-K		M6	9.0	8.8
PNSET-P8-10.8-2516-1-K		M8	11.0	10.8
PNSET-P10-12.8-3016-1-K		M10	13.0	12.8

About navi (2)

Specification Comparison

Type	For manual operation Air cylinder specification Platen-navi	For manual operation Handy-navi	For robots Robo-navi Single	For robots Robo-navi Double
Item				
Lower Unit size (WxDxH)	45 x 65 x 140	50 x 41 x 427	50 x 41 x 449	96 x 147 x 423
Controller size (WxDxH)	82 x 51 x 166	82 x 51 x 166	86 x 90 x 205	86 x 90 x 205
Weight	Approx. 1.68 kg	Approx. 1.84 kg	Approx. 3.2 kg	Approx. 5.0 kg
Condition for starting	1 for each workpiece	1 for each workpiece	15/31 (option)	15/31 (option)
Automatic reference point setting	○	○	○	○
Overlapped nuts (outside exclusive jig required)	○	○	○	○
Guide pin drive	Air cylinder	Air cylinder	Air cylinder	Air cylinder
Cooling method	Inner water-cooling	Inner water-cooling	Inner water-cooling	Inner water-cooling
Power on-off	○	○	○	○
Incorrect nut setting output	○ (OK/NG)	○ (OK/NG)	○ (OK/NG)	○ (OK/NG)
Set value accuracy (mm)	0.01	0.01	0.01	0.01
Buzzer sound	○	○	○	○

Choose the best combination to suit your operation environment!!

Robo-navi-Platen
Air cylinder specification



Handy-Robo-navi-Single



Robo-navi-Handy

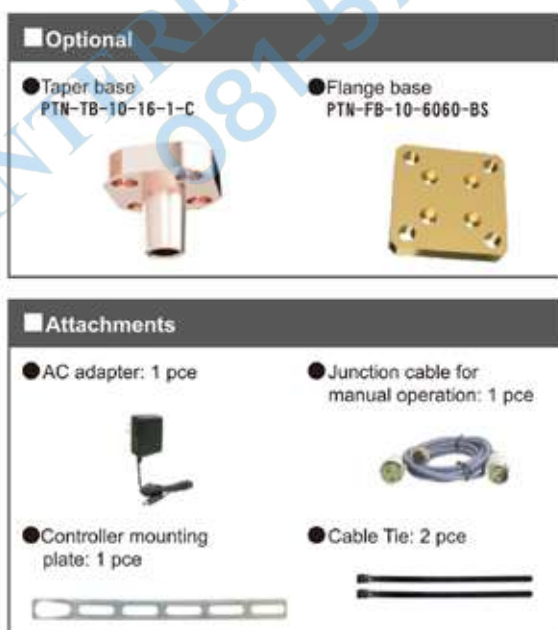


Suitable for manual operation (Air cylinder specification)

φ25 (M4 · M5 · M6 · M8)



Palm-sized



Model No.	NUT
PTN2-3070-M18-M4	M4
PTN2-3070-M18-M5	M5
PTN2-3070-M18-M6	M6
PTN2-3070-M18-M8	M8

Suitable for manual operation (Air cylinder specification)

φ30 (M10 · M12 · 7/16)

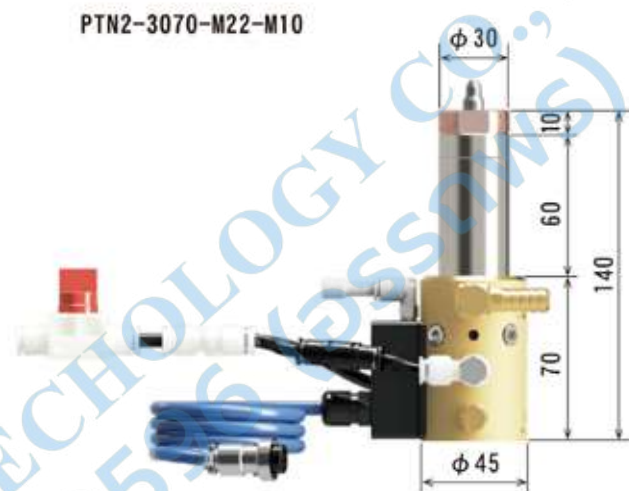


Palm-sized

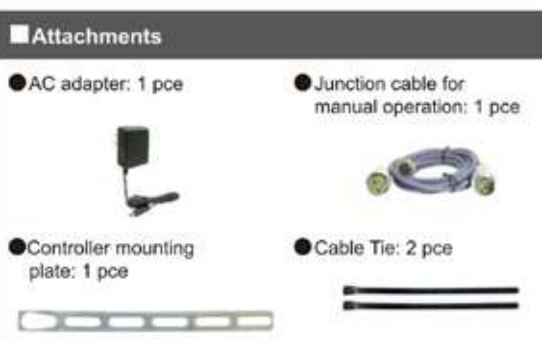


Weight: 0.34kg
• CE marking acquisition

PTN2-3070-M22-M10



Weight: 1.34 kg



Model No.	NUT
PTN2-3070-M22-M10	M10
PTN2-3070-M22-M12	M5
PTN2-3070-M22-7/16	7/16

Slim Type for Manual Operation

φ20 (M4 · M5 · M6)



Slim and compact body.



HN2-S-20150-M6

Weight: 0.34 kg
CE marking acquisition

Feel free to contact us for any questions about our products, price, and lead time.



Model No.	NUT	L	Overall length
HN2-S-20150-M4	M4	140	427
HN2-S-20150-M5	M5	140	427
HN2-S-20150-M6	M6	140	427
HN2-S-20200-M4	M4	190	477
HN2-S-20200-M5	M5	190	477
HN2-S-20200-M6	M6	190	477
HN2-S-20250-M4	M4	240	527
HN2-S-20250-M5	M5	240	527
HN2-S-20250-M6	M6	240	527

Suitable for manual operation

φ25 (M4 · M5 · M6 · M8)



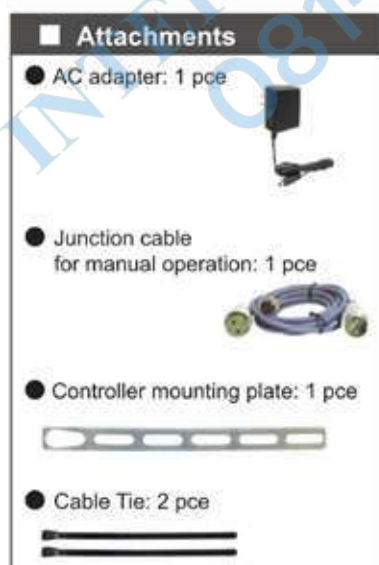
All-purpose manual type!



Weight: 0.34 kg
CE marking acquisition



Feel free to contact us for
any questions about our products,
price, and lead time.



Model No.	NUT	L	Overall length
HN2-S-25150-M4	M4	140	427
HN2-S-25150-M5	M5	140	427
HN2-S-25150-M6	M6	140	427
HN2-S-25150-M8	M8	140	427
HN2-S-25200-M4	M4	190	477
HN2-S-25200-M5	M5	190	477
HN2-S-25200-M6	M6	190	477
HN2-S-25200-M8	M8	190	477
HN2-S-25250-M4	M4	240	527
HN2-S-25250-M5	M5	240	527
HN2-S-25250-M6	M6	240	527
HN2-S-25250-M8	M8	240	527

Suitable for manual operation

φ32 (M10 · M12 · 7/16)

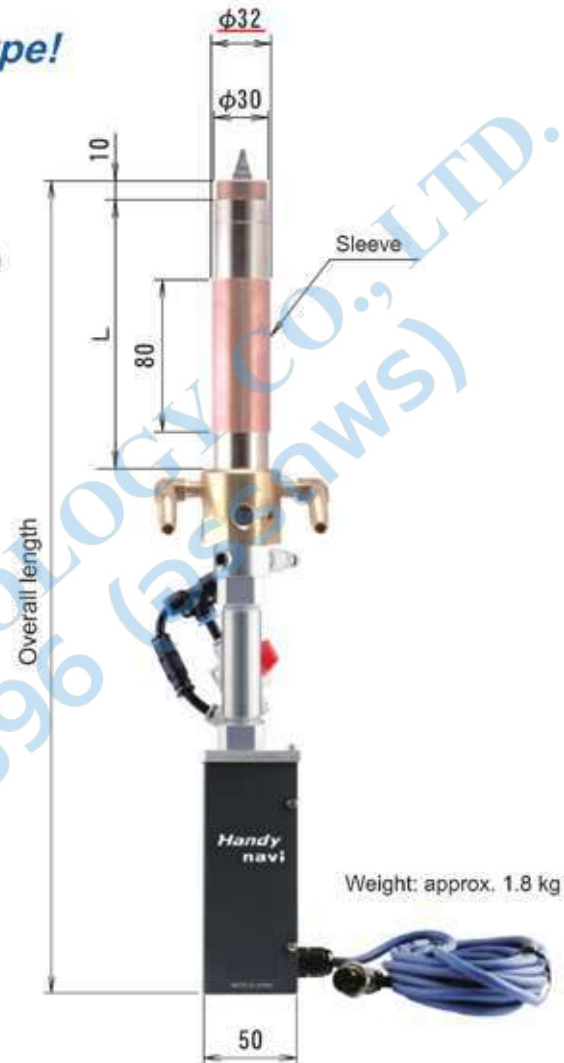


All-purpose manual type!



Weight: 0.34 kg
CE marking acquisition

HN2-S-32150-M10



Weight: approx. 1.8 kg

Feel free to contact us for any questions about our products, price, and lead time.



Model No.	NUT	L	Overall length
HN2-S-32150-M10	M10	140	427
HN2-S-32150-M12	M12	140	427
HN2-S-32150-7/16	7/16	140	427
HN2-S-32200-M10	M10	190	477
HN2-S-32200-M12	M12	190	477
HN2-S-32200-7/16	7/16	190	477
HN2-S-32250-M10	M10	240	527
HN2-S-32250-M12	M12	240	527
HN2-S-32250-7/16	7/16	240	527

Suitable for robots and automated machinery

φ25 (M4 · M5 · M6 · M8)



Perfectly suits automated
production lines!!

RN2-SHP-25150-M8

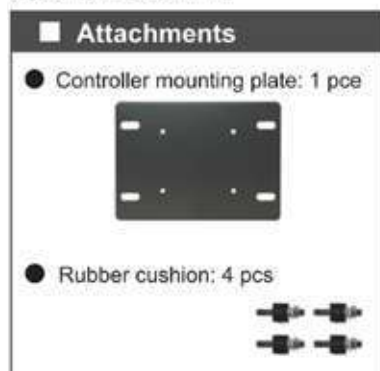


Weight: 1.4 kg

CE marking acquisition



Feel free to contact us for
any questions about our products,
price, and lead time.



Model No.	NUT	L	Overall length
RN2-SHP-25150-M4	M4	140	449
RN2-SHP-25150-M5	M5	140	449
RN2-SHP-25150-M6	M6	140	449
RN2-SHP-25150-M8	M8	140	449
RN2-SHP-25200-M4	M4	190	499
RN2-SHP-25200-M5	M5	190	499
RN2-SHP-25200-M6	M6	190	499
RN2-SHP-25200-M8	M8	190	499
RN2-SHP-25250-M4	M4	240	549
RN2-SHP-25250-M5	M5	240	549
RN2-SHP-25250-M6	M6	240	549
RN2-SHP-25250-M8	M8	240	549

Suitable for robots and automated machinery

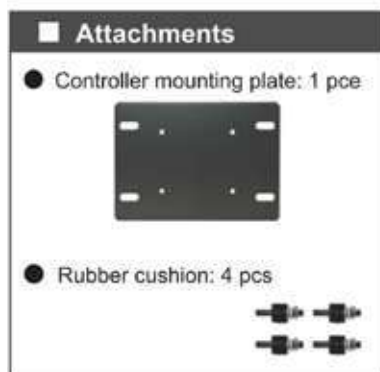
φ 32 (M10 · M12 · 7/16)



*Perfectly suits automated
production lines!!*



Feel free to contact us for
any questions about our products,
price, and lead time.



Model No.	NUT	L	Overall length
RN2-SHP-32150-M10	M10	140	449
RN2-SHP-32150-M12	M12	140	449
RN2-SHP-32150-7/16	7/16	140	449
RN2-SHP-32200-M10	M10	190	499
RN2-SHP-32200-M12	M12	190	499
RN2-SHP-32200-7/16	7/16	190	499
RN2-SHP-32250-M10	M10	240	549
RN2-SHP-32250-M12	M12	240	549
RN2-SHP-32250-7/16	7/16	240	549

Suitable for robots and automated machinery

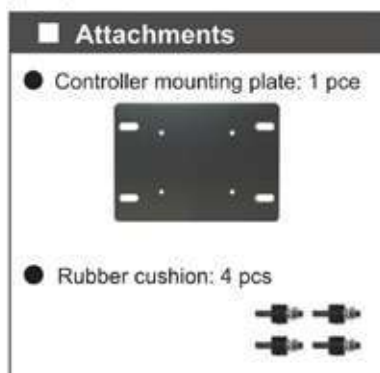
φ25 (M4/M5 • M5/M6 • M6/M8)



Two types of nut detection and welding on a single navi.



Feel free to contact us for any questions about our products, price, and lead time.



Model No.	NUT	L	Overall length
RN-WHP-25150-M4/M5	M4/M5	140	423
RN-WHP-25150-M5/M6	M5/M6	140	423
RN-WHP-25150-M6/M8	M6/M8	140	423
RN-WHP-25200-M4/M5	M4/M5	190	473
RN-WHP-25200-M5/M6	M5/M6	190	473
RN-WHP-25200-M6/M8	M6/M8	190	473
RN-WHP-25250-M4/M5	M4/M5	240	523
RN-WHP-25250-M5/M6	M5/M6	240	523
RN-WHP-25250-M6/M8	M6/M8	240	523

Suitable for robots and automated machinery

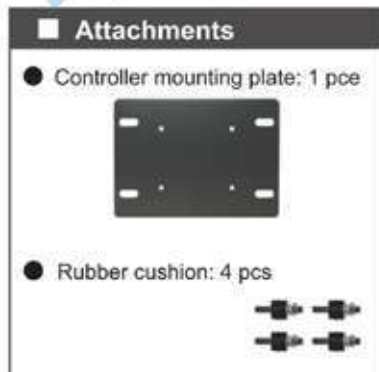
φ32 (M8/M10 · M10/M12 · M10/7/16)



Two types of nut detection and welding on a single navi.



Feel free to contact us for any questions about our products, price, and lead time.



Model No.	NUT	L	Overall length
RN-WHP-32150-M8/M10	M8/M10	140	423
RN-WHP-32150-M10/M12	M10/M12	140	423
RN-WHP-32150-M10/7/16	M10/7/16	140	423
RN-WHP-32200-M8/M10	M8/M10	190	473
RN-WHP-32200-M10/M12	M10/M12	190	473
RN-WHP-32200-M10/7/16	M10/7/16	190	473
RN-WHP-32250-M8/M10	M8/M10	240	523
RN-WHP-32250-M10/M102	M5/M6	240	523
RN-WHP-32250-M10/7/16	M10/7/16	240	523

For use with manual operation and automated machinery

Detection accuracy is 0.01 mm.



■ Attachments	
● Fixed bracket: 1 pce	• Cap bolt with washer M6×15 2 pcs • M4×12 4 pcs
● Movable bracket: 1 pce	• Cap bolt with washer M6×15 2 pcs
● Intermediate bracket: 1 pce	• Cap bolt with washer M6×15 2 pcs
● Dog plate: 1 pce	• Cap bolt with washer M6×15 2 pcs

Model No.

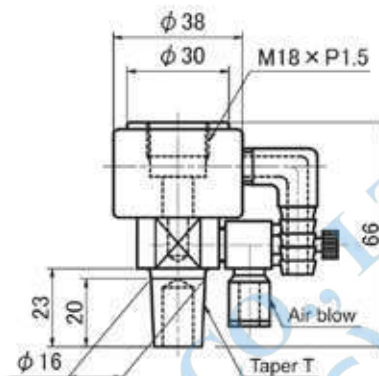
UPN-60

■ Attachments	
● AC adapter: 1 pce	● Junction cable for manual operation: 1 pce
● Controller mounting plate: 1 pce	
● Cable Tie: 2 pcs	

$\phi 25$ (M4 · M5 · M6 · M8) Interference Prevention Type



PN-WJ2-H1-1
Right side

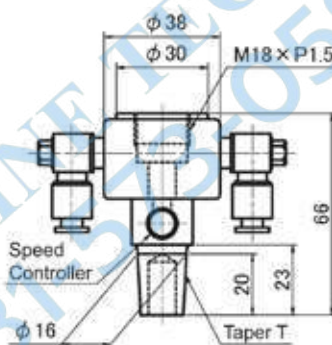


Model No.	T
PN-WJ2-H1-1	1/10
PN-WJ2-H1-2	MT#2
PN-WJ2-H1-3	1/5

$\phi 25$ (M4 · M5 · M6 · M8)



PN-WJ-H1-1

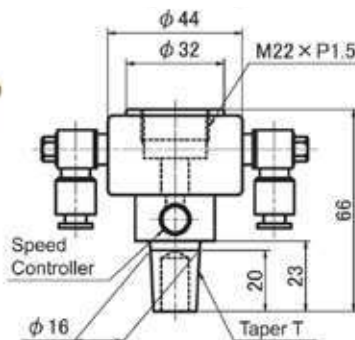


Model No.	T
PN-WJ-H1-1	1/10
PN-WJ-H1-2	MT#2
PN-WJ-H1-3	1/5

$\phi 30$ (M10 · M12 · 7/16)



PN-WJ-H2-1



Model No.	T
PN-WJ-H2-1	1/10
PN-WJ-H2-2	MT#2
PN-WJ-H2-3	1/5

φ25 Air Cap Specification

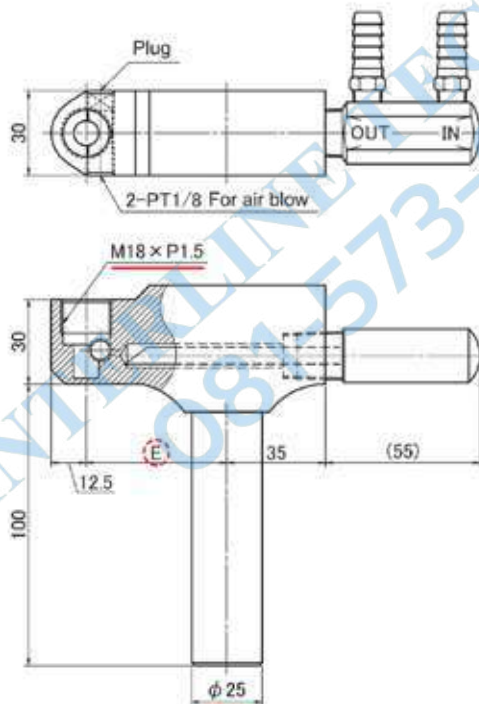
φ25

*To provide a
deep nut welding !!*

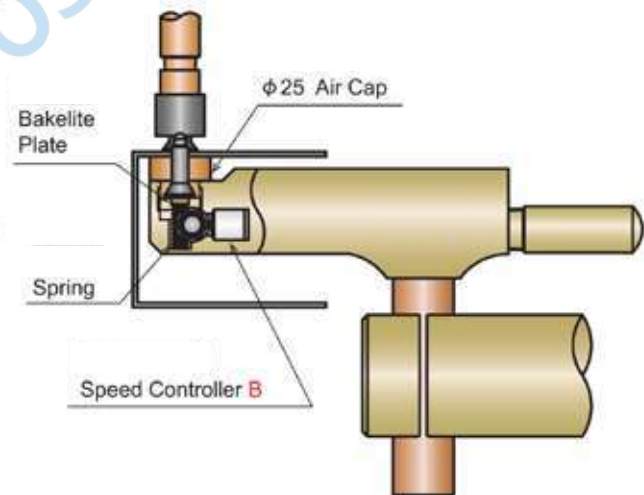


PN-LHH-2550-M18

Model No.	E
PN-LHH-2550-M18	50
PN-LHH-2575-M18	75
PN-LHH-25100-M18	100



Example of use



L TYPE HOLDER HIGH POWER 800 FOR NUT WELDING

234

φ32 Air Cap Specification

φ32

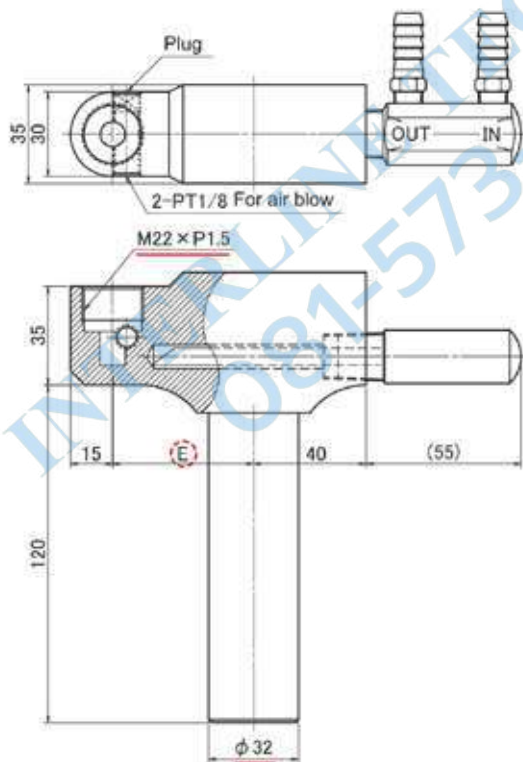
Nut : M5 · M6 · M8
M10 · M12 · M7/16

*To provide a
deep nut welding !!*

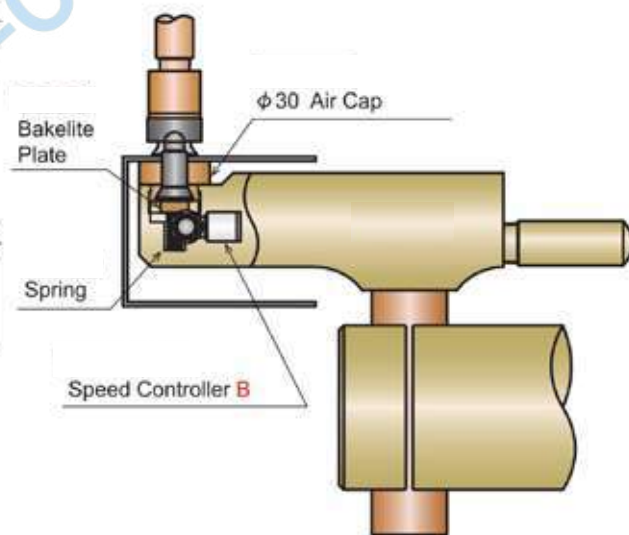


PN-LHP800-32100-M22

Model No.	E
PN-LHH800-3250-M22	50
PN-LHH800-3275-M22	75
PN-LHH800-32100-M22	100
PN-LHH800-32125-M22	125
PN-LHH800-32150-M22	150



Example of use

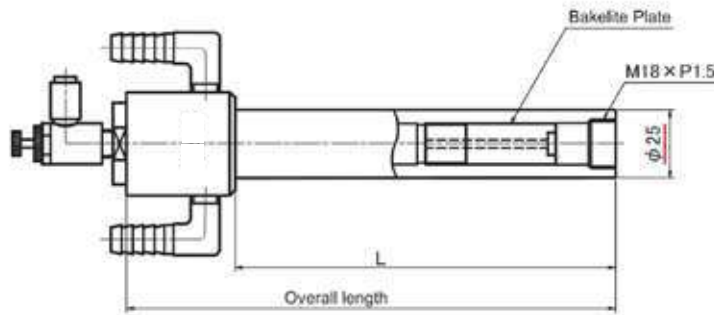


INNER WATER-COOLING HOLDER FOR NUT WELDING

235

Suitable for Manual work

φ25 (M4 · M5 · M6 · M8)



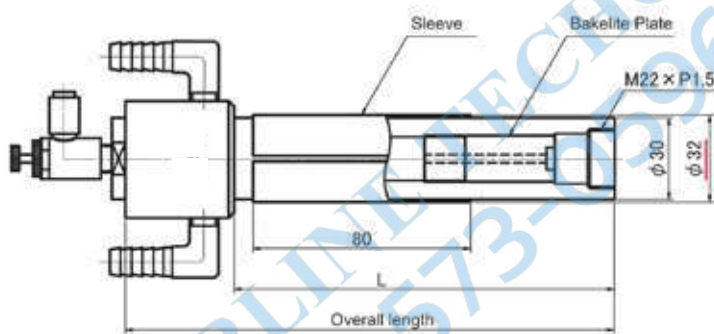
*Inner water-cooling system
cools to the end of the electrode!*



NCH-25150-MH

Model No.	L	Overall length
NCH-25150-MH	140	180
NCH-25200-MH	190	230
NCH-25250-MH	240	280

φ32 (M10 · M12 · 7/16)



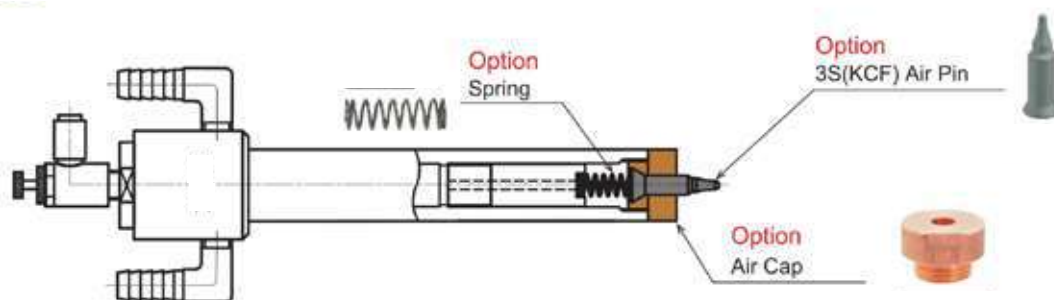
*Inner water-cooling system
cools to the end of the electrode!*



NCH-32150-MH

Model No.	L	Overall length
NCH-32150-MH	140	180
NCH-32200-MH	190	230
NCH-32250-MH	240	280

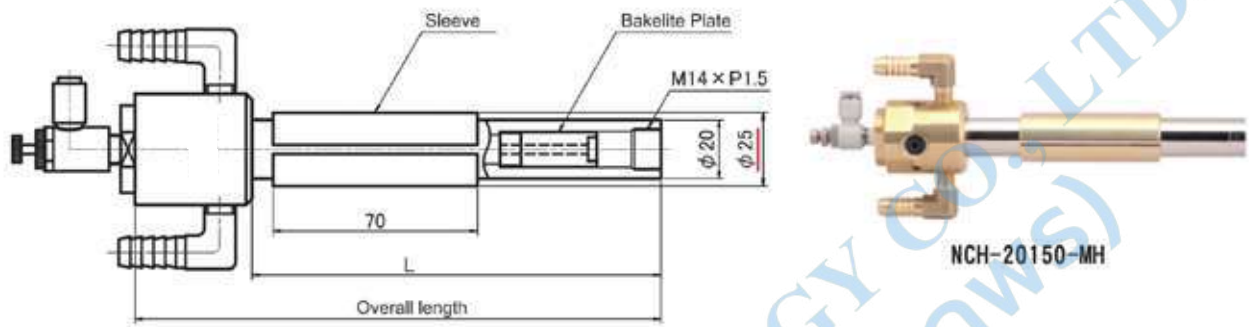
Example of use



Suitable for Manual work

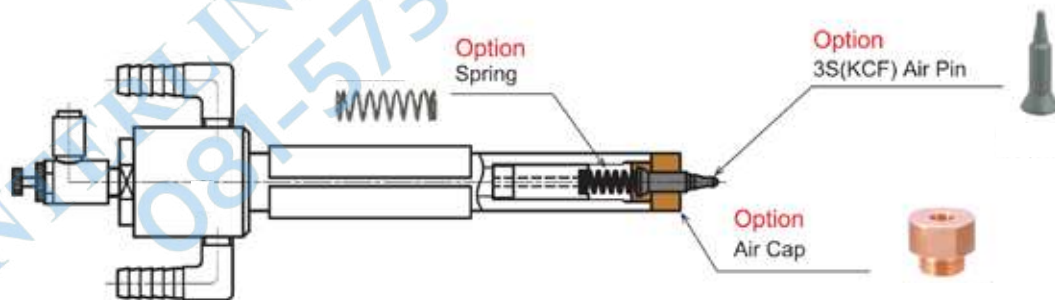
φ20 Slim Type (M4 · M5 · M6)

*Inner water-cooling system
cools to the end of the electrode!*



Model No.	L	Overall length
NCH-20150-MH	140	180
NCH-20200-MH	190	230
NCH-20250-MH	240	280

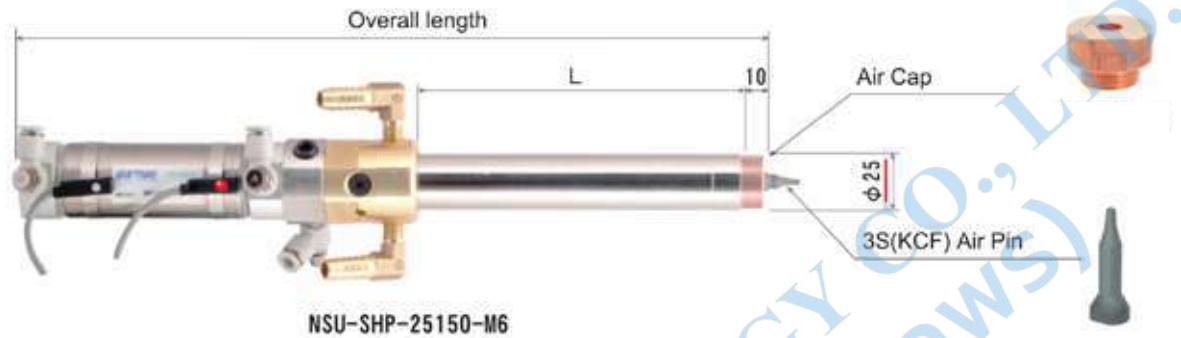
Example of use



Hight-Power Type

φ25 Single

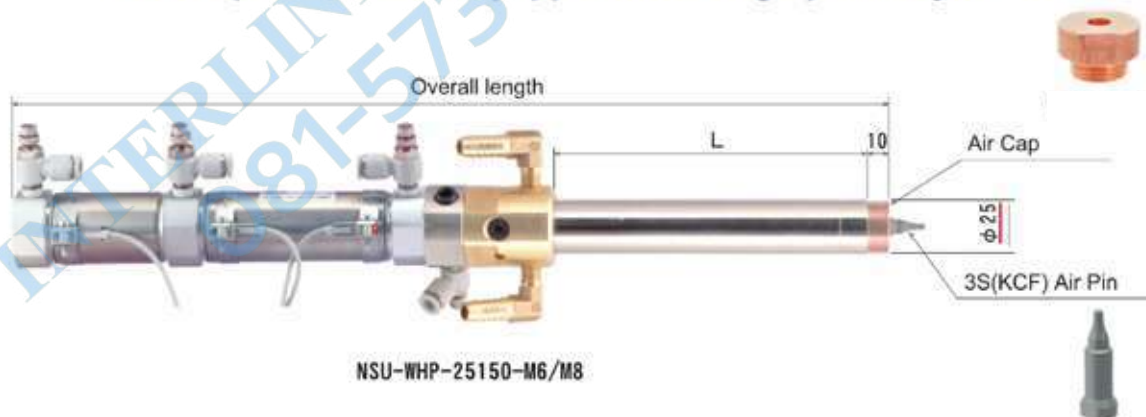
No scraping!
100% operation rate! Equipped with a high-power cylinder.



Model No.	☐ NUT size	L	Overall length
NSU-SHP-25150- ☐	M4 · M5 · M6 · M8	140	323
NSU-SHP-25200- ☐	M4 · M5 · M6 · M8	190	373
NSU-SHP-25250- ☐	M4 · M5 · M6 · M8	240	423

φ25 Double

No scraping!
100% operation rate! Equipped with a high-power cylinder.

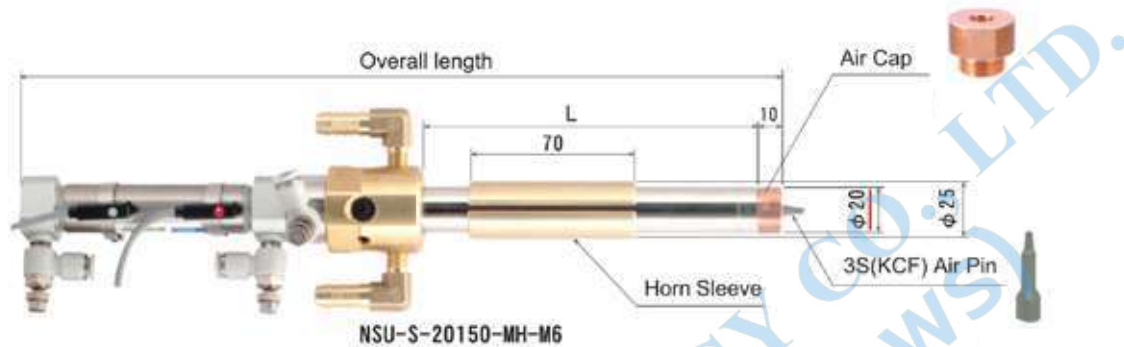


Model No.	☐ NUT size	L	Overall length
NSU-WHP-25150- ☐	M4/M5 · M5/M6 · M6/M8	140	398
NSU-WHP-25200- ☐	M4/M5 · M5/M6 · M6/M8	190	448
NSU-WHP-25250- ☐	M4/M5 · M5/M6 · M6/M8	240	498

Slim Type

φ20 Single

*With the plated holder: Conductivity is higher!
Weld quality is more stable! Space saving!*



Model No.	□ NUT size	L	Overall length
NSU-S-20150-MH-□	M4 · M5 · M6	140	319
NSU-S-20200-MH-□	M4 · M5 · M6	190	369
NSU-S-20250-MH-□	M4 · M5 · M6	240	419

φ20 Double

*With the plated holder: Conductivity is higher!
Weld quality is more stable! Suitable for 2 nut sizes!*



Model No.	□ NUT size	L	Overall length
NSU-W-20150-MH-□	M4/M5 · M5/M6	140	397
NSU-W-20200-MH-□	M4/M5 · M5/M6	190	447
NSU-W-20250-MH-□	M4/M5 · M5/M6	240	497

Single Type

φ20

*With the plated holder: Conductivity is higher!
Weld quality is more stable!*

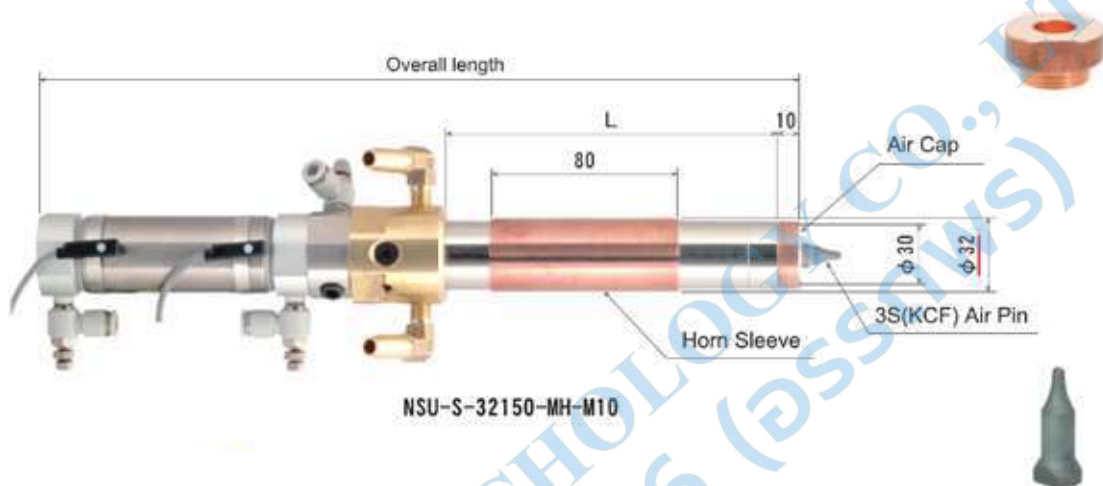


Model No.	NUT	L	Overall length
NSU-S-25150-MH-M4	M4	140	319
NSU-S-25150-MH-M5	M5	140	319
NSU-S-25150-MH-M6	M6	140	319
NSU-S-25150-MH-M8	M8	140	319
NSU-S-25200-MH-M4	M4	190	369
NSU-S-25200-MH-M5	M5	190	369
NSU-S-25200-MH-M6	M6	190	369
NSU-S-25200-MH-M8	M8	190	369
NSU-S-25250-MH-M4	M4	240	419
NSU-S-25250-MH-M5	M5	240	419
NSU-S-25250-MH-M6	M6	240	419
NSU-S-25250-MH-M8	M8	240	419

Single Type

φ32

*With the plated holder: Conductivity is higher!
Weld quality is more stable!*

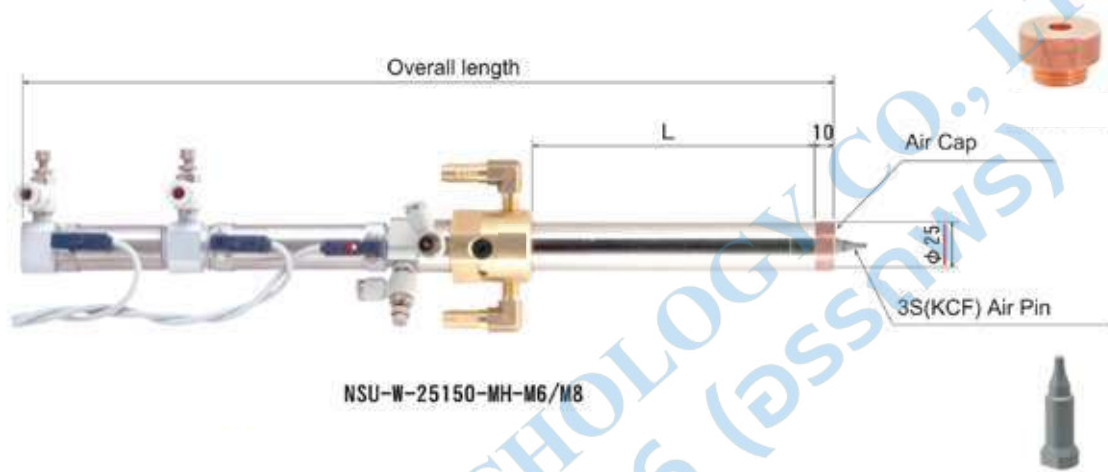


Model No.	NUT	L	Overall length
NSU-S-32150-MH-M10	M10	140	323
NSU-S-32150-MH-M12	M12	140	323
NSU-S-32150-MH-7/16	7/16	140	323
NSU-S-32200-MH-M10	M10	190	373
NSU-S-32200-MH-M12	M12	190	373
NSU-S-32200-MH-7/16	7/16	190	373
NSU-S-32250-MH-M10	M10	240	423
NSU-S-32250-MH-M12	M12	240	423
NSU-S-32250-MH-7/16	7/16	240	423

Double Type

φ25

*With the plated holder: Conductivity is higher!
Weld quality is more stable!*

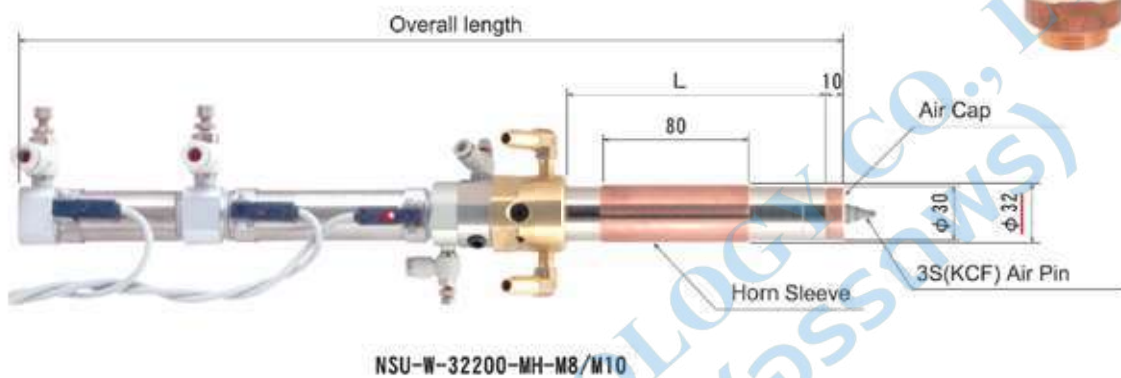


Model No.	NUT	L	Overall length
NSU-W-25150-MH-M4/M5	M4/M5	140	397
NSU-W-25150-MH-M5/M6	M5/M6	140	397
NSU-W-25150-MH-M6/M8	M6/M8	140	397
NSU-W-25200-MH-M4/M5	M4/M5	190	447
NSU-W-25250-MH-M5/M6	M5/M6	190	447
NSU-W-25200-MH-M6/M8	M6/M8	190	447
NSU-W-25250-MH-M5/M6	M4/M5	240	497
NSU-W-25250-MH-M5/M6	M5/M6	240	497
NSU-W-25250-MH-M6/M8	M5/M8	240	497

Double Type

φ32

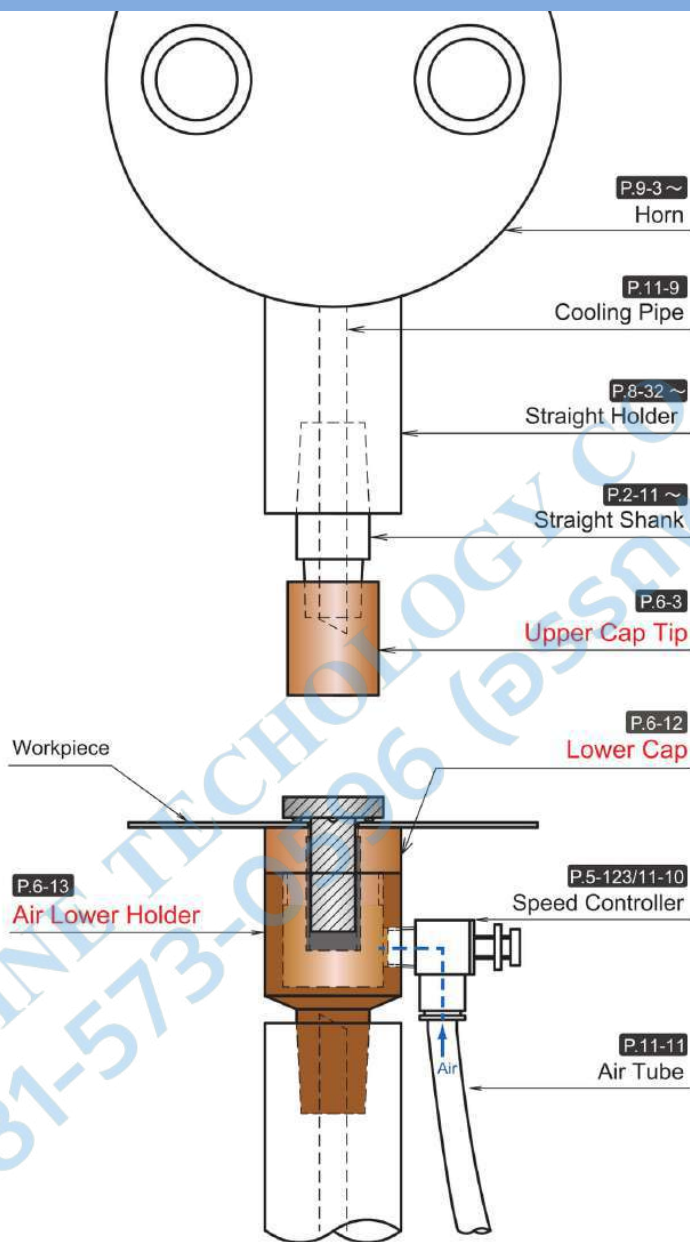
*With the plated holder: Conductivity is higher!
Weld quality is more stable!*



Model No.	NUT	L	Overall length
NSU-W-32150-MH-M8/M10	M8/M10	140	398
NSU-W-32150-MH-M10/M12	M10/M12	140	398
NSU-W-32150-MH-M10/7/16	M10/7/16	140	398
NSU-W-32200-MH-M8/M10	M8/M10	190	448
NSU-W-32200-MH-M10/M12	M10/M12	190	448
NSU-W-32200-MH-M10/7/16	M10/7/16	190	448
NSU-W-32250-MH-M8/M10	M8/M10	240	498
NSU-W-32250-MH-M10/M12	M10/M12	240	498
NSU-W-32250-MH-M10/7/16	M10/7/16	240	498

ELECTRODES FOR BOLT WELDING

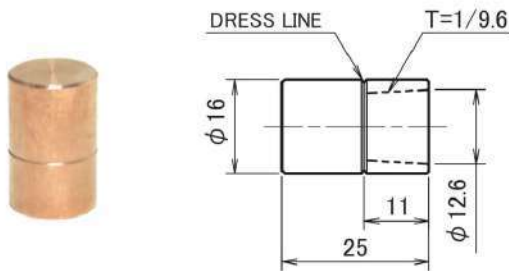
243



UPPER CAP TIP FOR BOLT WELDING

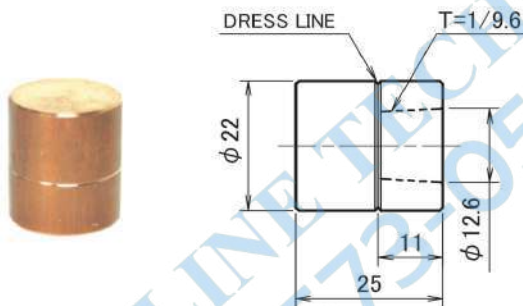
244

M4·M5·M6 Common type



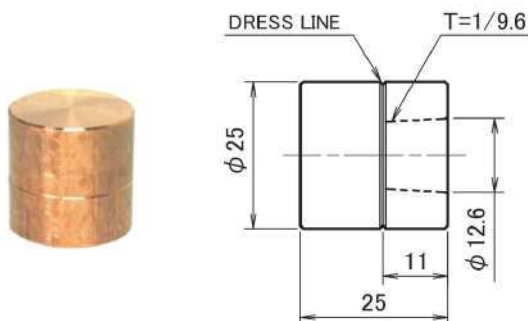
Model No.	BOLT
PB-U-C456	M4·M5·M6

M8·M10 Common type



Model No.	BOLT
PB-U-C810	M8·M10

M12·7/16 Common type



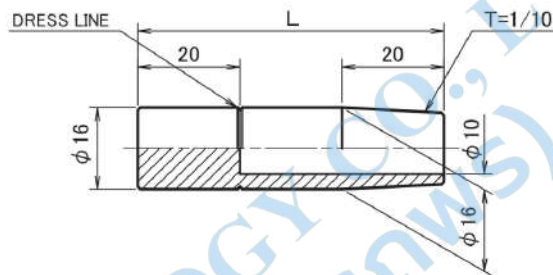
Model No.	BOLT
PB-U-C127	M12·7/16

M4·M5·M6 Common type



PB-U456-60-1

Model No.	BOLT	L
PB-U456-60-1	M4·M5·M6	60
PB-U456-70-1	M4·M5·M6	70
PB-U456-80-1	M4·M5·M6	80

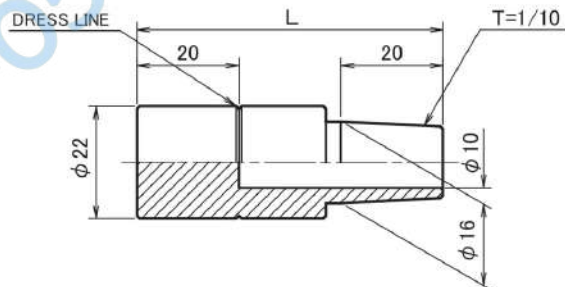


M8·M10 Common type



PB-U810-60-1

Model No.	BOLT	L
PB-U810-60-1	M8·M10	60
PB-U810-70-1	M8·M10	70
PB-U810-80-1	M8·M10	80

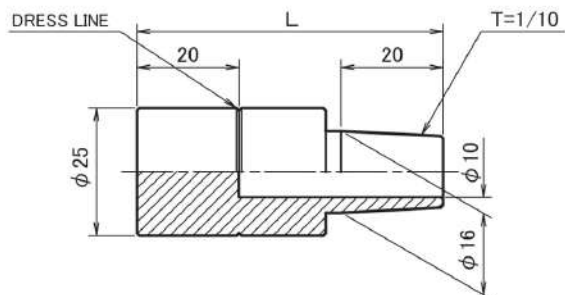


M12·7/16 Common type



PB-U127-60-1

Model No.	BOLT	L
PB-U127-60-1	M12·7/16	60
PB-U127-70-1	M12·7/16	70
PB-U127-80-1	M12·7/16	80



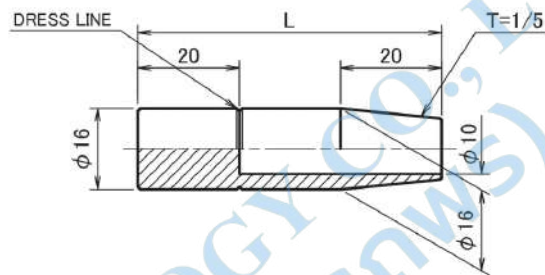
T=1/5

M4·M5·M6 Common type



PB-U456-60-3

Model No.	BOLT	L
PB-U456-60-3	M4·M5·M6	60
PB-U456-70-3	M4·M5·M6	70
PB-U456-80-3	M4·M5·M6	80

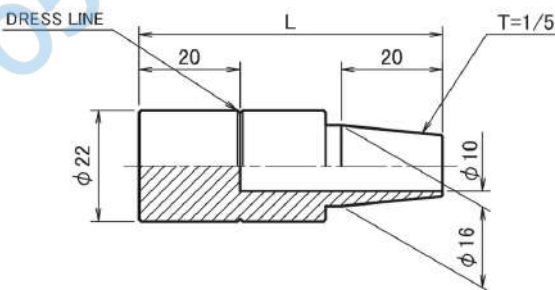


M8·M10 Common type



PB-U810-60-3

Model No.	BOLT	L
PB-U810-60-3	M8·M10	60
PB-U810-70-3	M8·M10	70
PB-U810-80-3	M8·M10	80

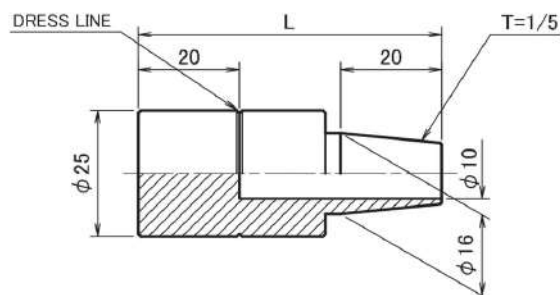


M12·7/16 Common type



PB-U127-60-3

Model No.	BOLT	L
PB-U127-60-3	M12·7/16	60
PB-U127-70-3	M12·7/16	70
PB-U127-80-3	M12·7/16	80



LOWER TIP FOR BOLT WELDING

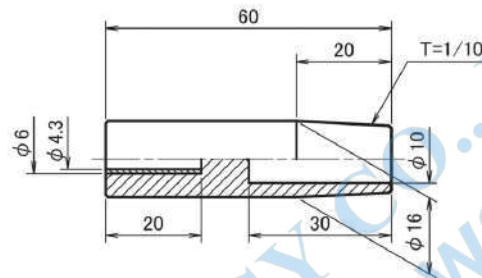
247

Standard Type

M4 T=1/10



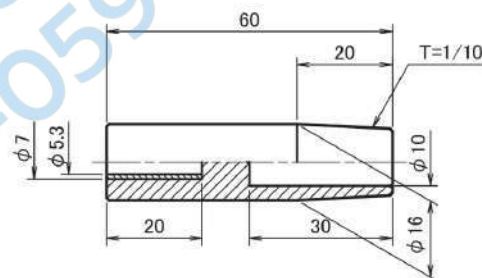
Model No.	BOLT
PB-K4-1660-1	M4



M5 T=1/10



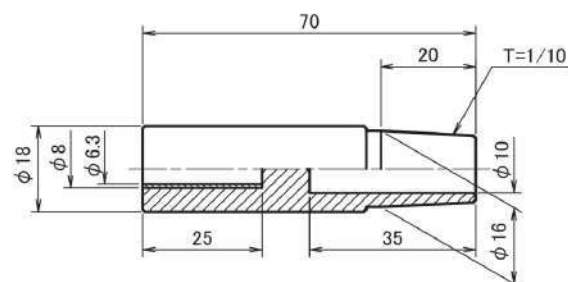
Model No.	BOLT
PB-K5-1660-1	M5



M6 T=1/10



Model No.	BOLT
PB-K6-1870-1	M6



LOWER TIP FOR BOLT WELDING

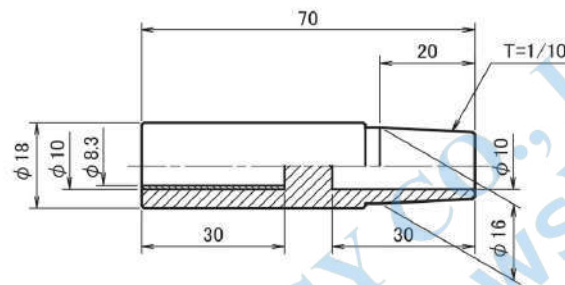
248

Standard Type

M8 T=1/10



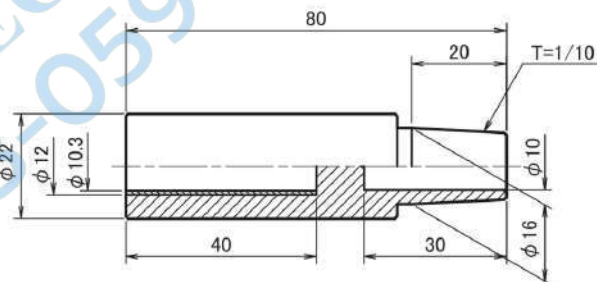
Model No.	BOLT
PB-K8-1870-1	M8



M10 T=1/10



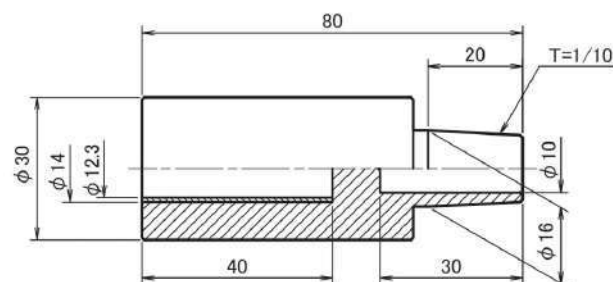
Model No.	BOLT
PB-K10-2280-1	M10



M12 T=1/10



Model No.	BOLT
PB-K12-3080-1	M12



LOWER TIP FOR BOLT WELDING

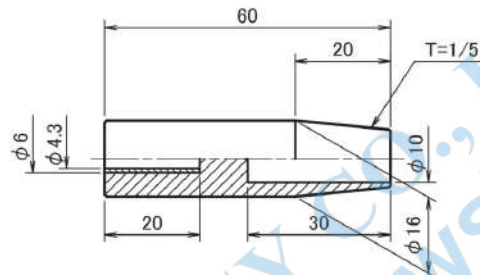
249

Standard Type

M4 T=1/5



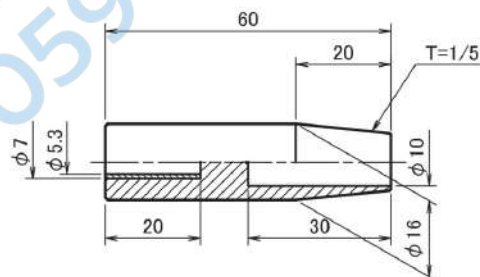
Model No.	BOLT
PB-K4-1660-3	M4



M5 T=1/5



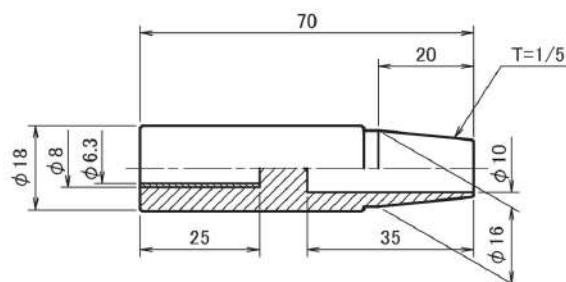
Model No.	BOLT
PB-K5-1660-3	M5



M6 T=1/5



Model No.	BOLT
PB-K6-1870-3	M6



LOWER TIP FOR BOLT WELDING

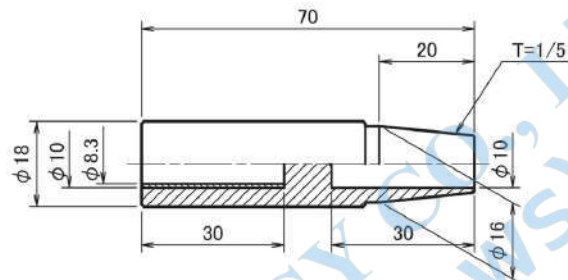
250

Standard Type

M8 T=1/5



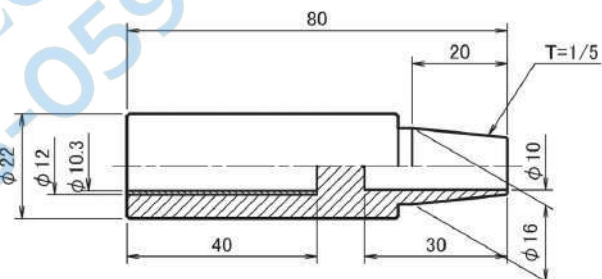
Model No.	BOLT
PB-K8-1870-3	M8



M10 T=1/15



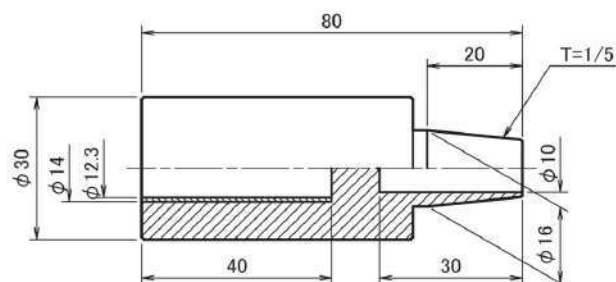
Model No.	BOLT
PB-K10-2280-3	M10



M12 T=1/5



Model No.	BOLT
PB-K12-3080-3	M12

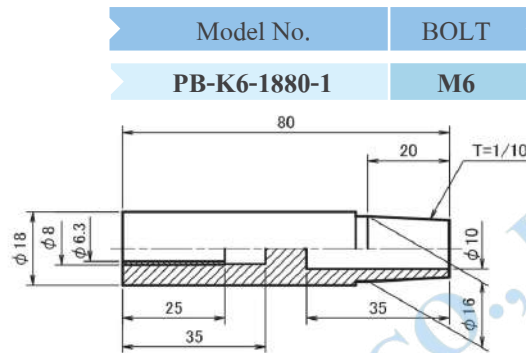


LOWER TIP FOR BOLT WELDING

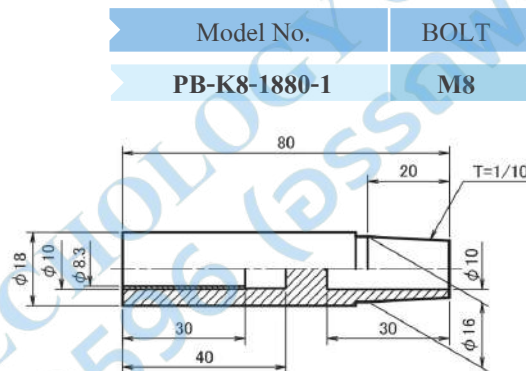
251

Suitable for Irregularly Long Bolts

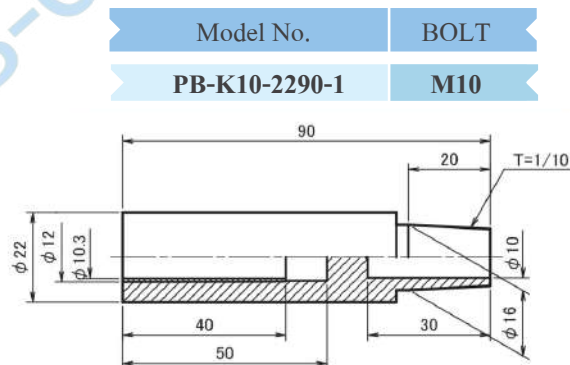
M6 T=1/10



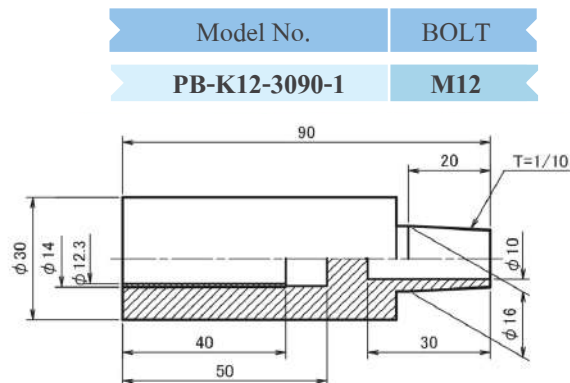
M8 T=1/10



M10 T=1/10



M10 T=1/10

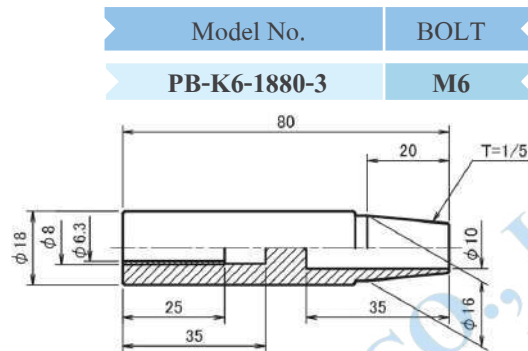


LOWER TIP FOR BOLT WELDING

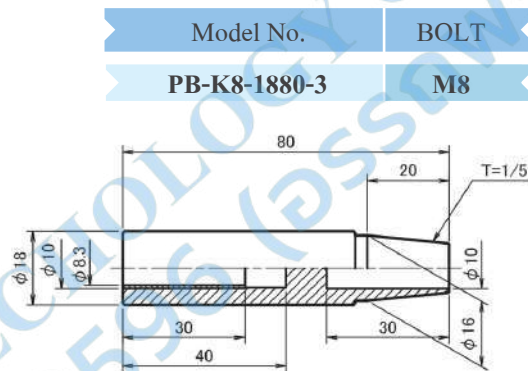
252

Suitable for Irregularly Long Bolts

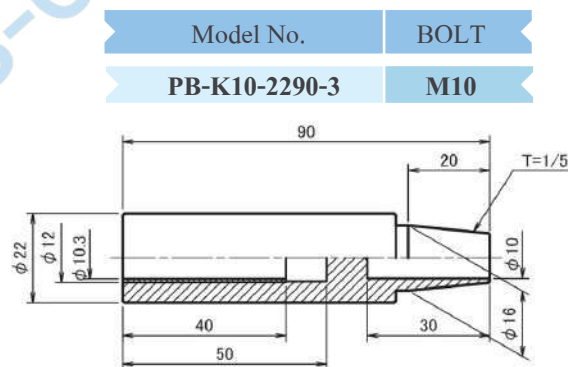
M6 T=1/5



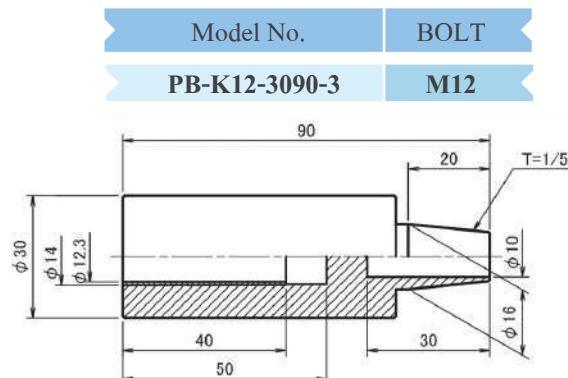
M8 T=1/5



M10 T=1/5



M12 T=1/5

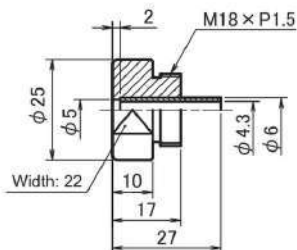


LOWER TIP FOR BOLT WELDING

253

Replaceable Cap

M4



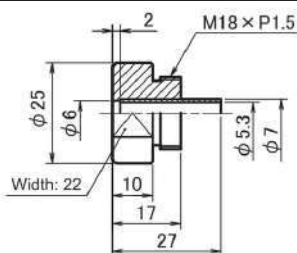
Model No.

BOLT

PB-KC4-2527

M4

M5



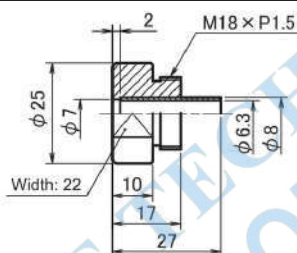
Model No.

BOLT

PB-KC5-2527

M5

M6



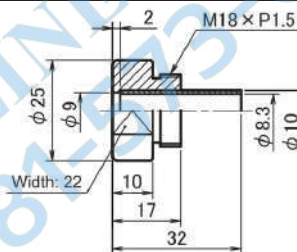
Model No.

BOLT

PB-KC6-2527

M6

M8



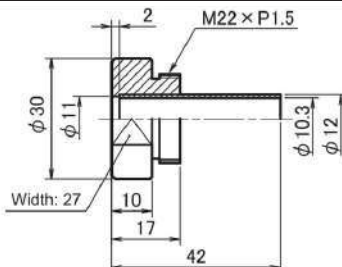
Model No.

BOLT

PB-KC8-2532

M8

M10



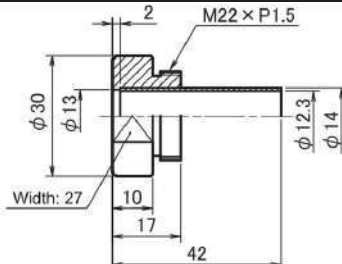
Model No.

BOLT

PB-KC10-3042

M10

M12



Model No.

BOLT

PB-KC12-3042

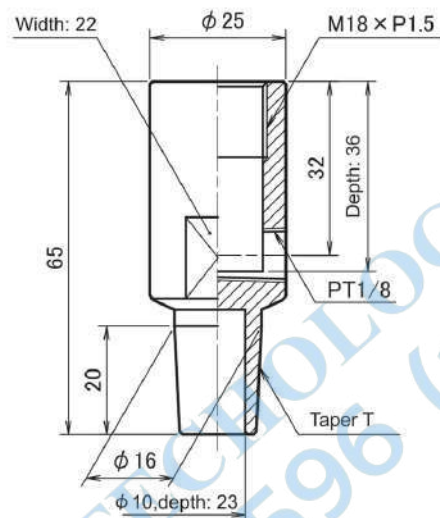
M12

For Air Lower Cap

M4 • M5 • M6 • M8



PB-H1-65-1



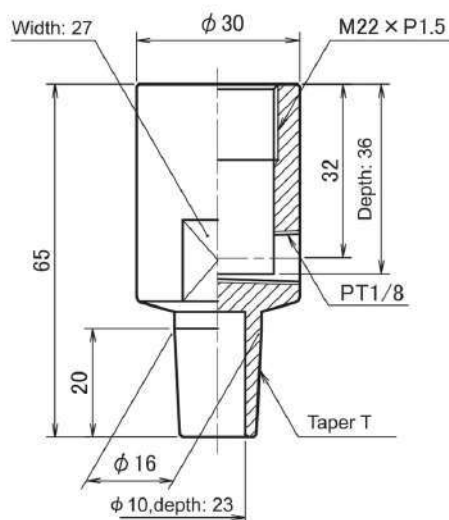
Lower Cap



M10 • M12



PB-H2-65-1

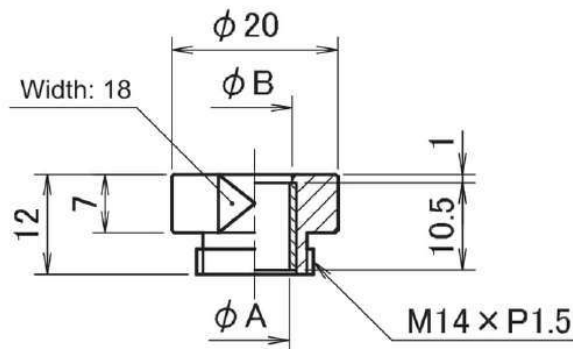


Lower Cap



Suitable for M4 • M5 • M6 • M8

Cap for Bolt Welding

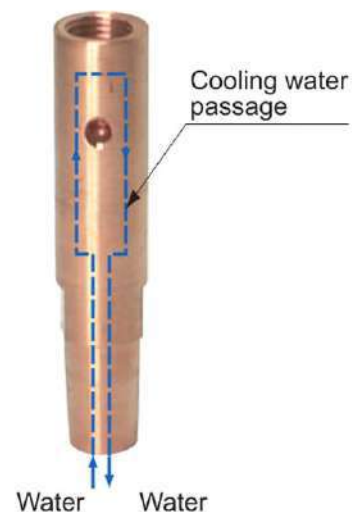
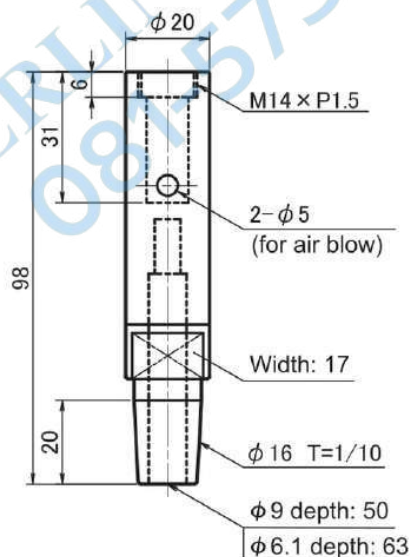


Model No.	BOLT	ϕA	ϕB
PBC-M4-C	M4	4.3	5
PBC-M5-C	M5	5.3	6
PBC-M6-C	M6	6.3	7
PBC-M8-C	M8	8.3	9



Inner Water-Cooling Electrode Holder (Common type)

Model No.
PBCH20-98-1

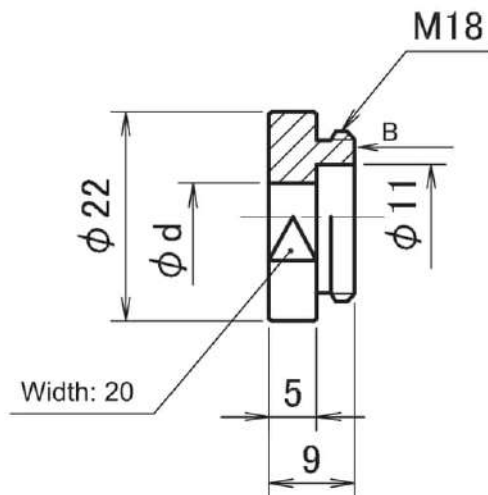


THIN TIP/THIN TIP SCREW ADAPTER FOR BOLT WELDING

256

For Lower Electrodes

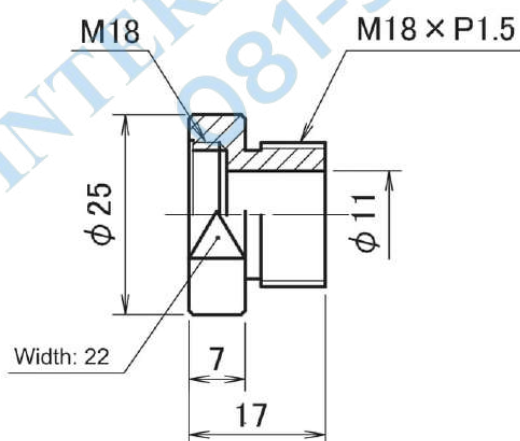
Thin tip for bolt welding $\phi 22$ (M6/M8)
Thread diameter: M18



Model No.	BOLT	ϕd
PBL-UT6-7.0-22-5-M18-B	M6	7.0
PBL-UT8-9.0-22-5-M18-B	M8	9.0



**Thin tip screw adapter for bolt welding
 $\phi 25$ (M6/M8) Thread diameter: M18**

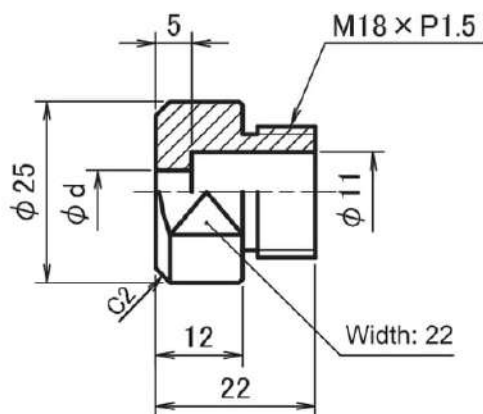


Model No.	BOLT
PBL-UA68-11-25-M18-C	M6 • M6

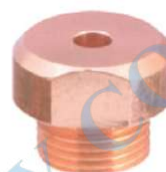


Suitable for Bolt-navi (Manual operation/Robot) / Slide Unit

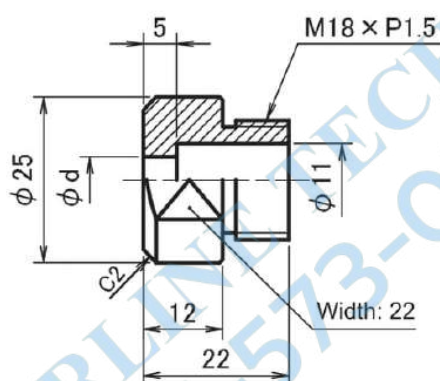
M5



Model No.	φ d
PB-C5-6.0-12-25-C	6



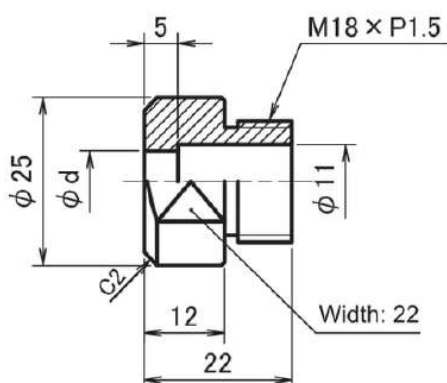
M6



Model No.	φ d
PB-C6-7.0-12-25-C	7



M8

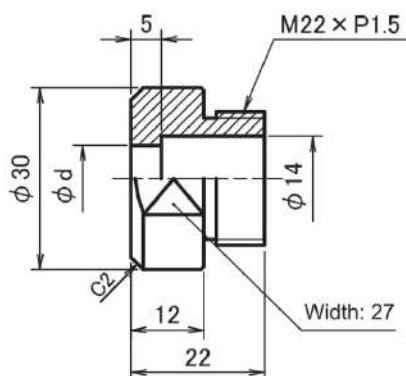


Model No.	φ d
PB-C8-9.0-12-25-C	9

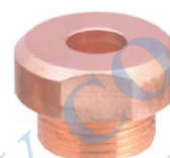


Suitable for Bolt-navi (Manual operation/Robot) / Slide Unit

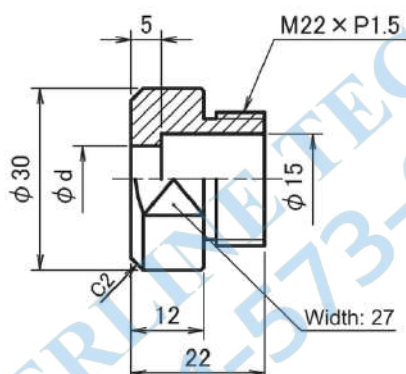
M10



Model No.	ϕd
PB-C10-11.0-12-30-C	11



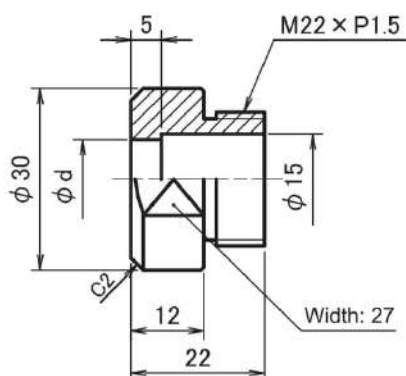
M10



Model No.	ϕd
PB-C10-11.0-12-15-30-C	11



M12

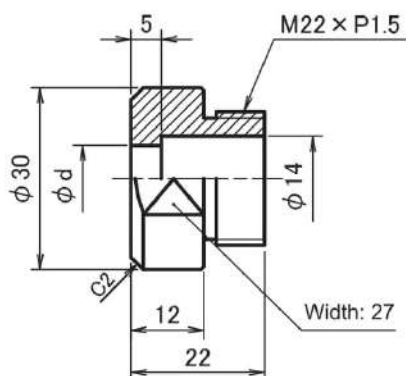


Model No.	ϕd
PB-C10-13.0-12-15-30-C	13

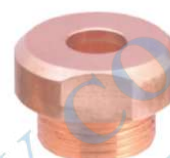


Suitable for Bolt-navi (Manual operation/Robot) / Slide Unit

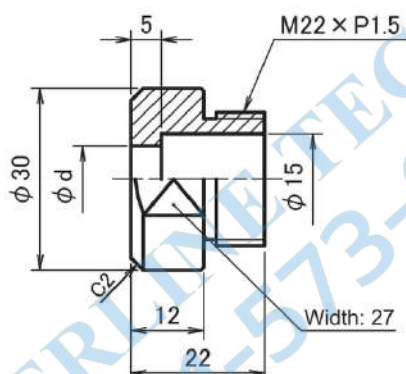
M10



Model No.	Ø d
PB-C10-11.0-12-30-C	11



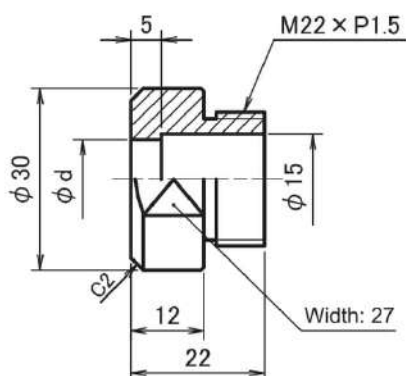
M10



Model No.	Ø d
PB-C10-11.0-12-15-30-C	11



M12

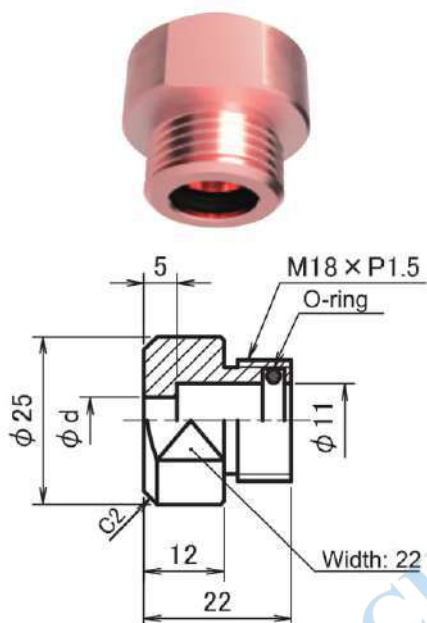


Model No.	Ø d
PB-C10-13.0-12-15-30-C	13



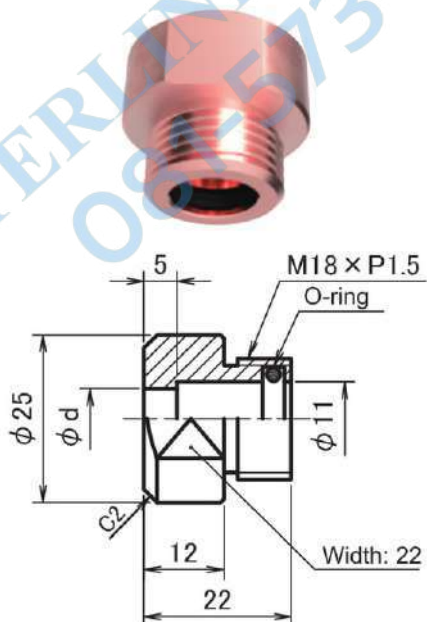
Suitable for Handy-navi Bolt use

M6 $\phi 25$



Model No.	ϕd
NV-PB-C6-7.0-12-25-C	7

M8 $\phi 25$



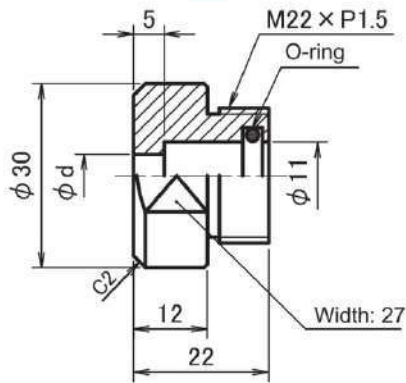
Model No.	ϕd
NV-PB-C8-9.0-12-25-C	9

AIR CAP FOR BOLT WELDING MADE FOR NAVI USE

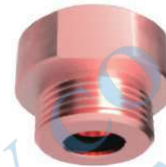
261

Suitable for Handy-navi-Bolt and Platen-navi-Bolt use

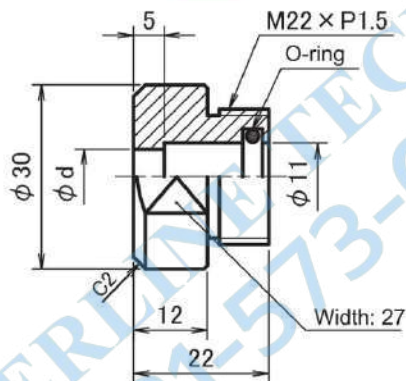
M6 $\phi 30$



Model No.	ϕd
NV-PB-C6-7.0-12-30-C	7



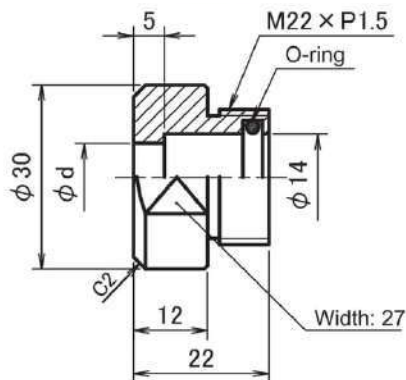
M8 $\phi 30$



Model No.	ϕd
NV-PB-C8-9.0-12-30-C	9



M10 $\phi 30$



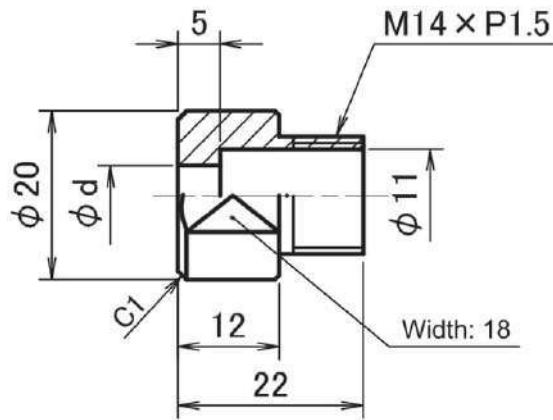
Model No.	ϕd
NV-PB-C10-11.0-12-30-C	11



Ø 20 Slim type

Air Cap for Bolt Welding

M5 • M6 • M8



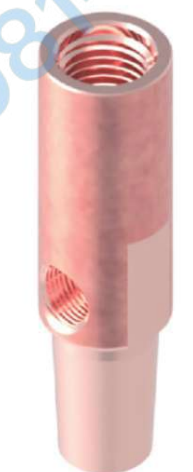
Model No.	Ø d
PB-C5-6.0-12-20-C	6.0
PB-C6-7.0-12-20-C	7.0
PB-C8-9.0-12-20-C	9.0



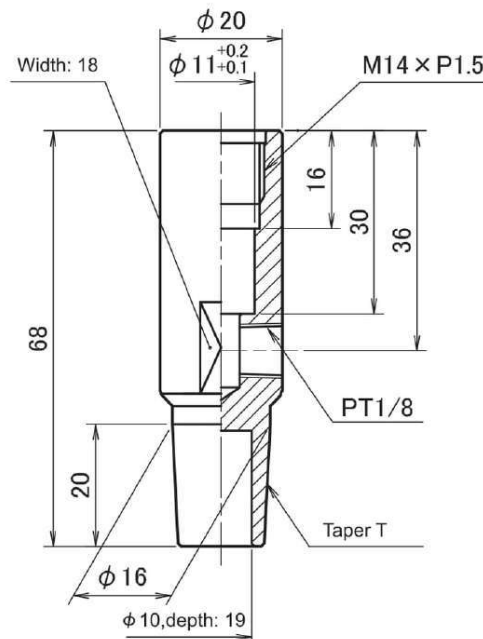
Air Cap for Bolt Welding

M5 • M6 • M8

Model No.	T
PB-PH3-68-AC-1	1/10
PB-PH3-68-AC-2	MT#2
PB-PH3-68-AC-3	1/5

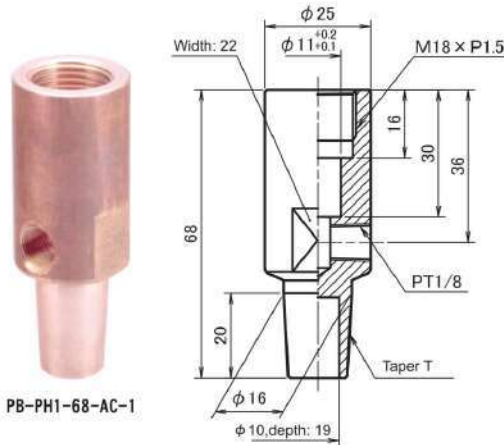


PB-PH3-68-AC-1



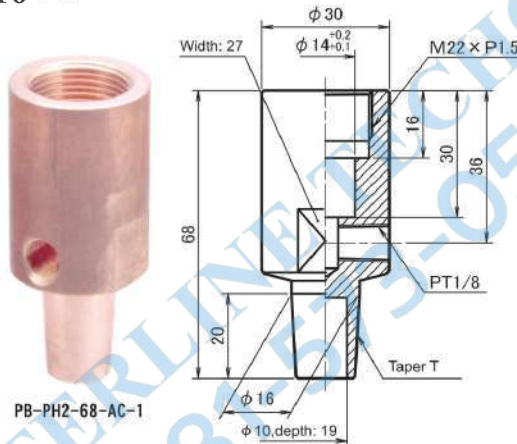
Air Cap/Thin Tip for Bolt Welding Specification

M5 • M6 • M8



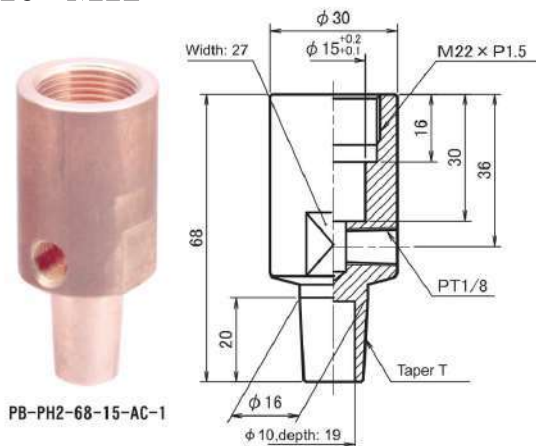
Model No.	T
PB-PH1-68-AC-1	1/10
PB-PH1-68-AC-2	MT#2
PB-PH1-68-AC-3	1/5

M10



Model No.	T
PB-PH2-68-AC-1	1/10
PB-PH2-68-AC-2	MT#2
PB-PH2-68-AC-3	1/5

M10 • M12



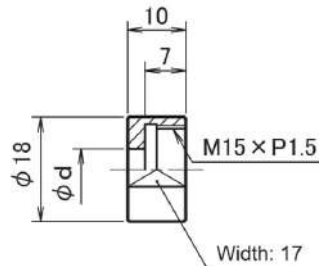
Model No.	T
PB-PH2-68-15-AC-1	1/10
PB-PH2-68-15-AC-2	MT#2
PB-PH2-68-15-AC-3	1/5

Lower Electrode Cap

ø18



PB18-C6-C

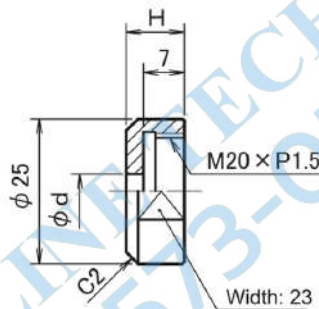


Model No.	BOLT	ø d
PB18-C4-C	M4	5
PB18-C5-C	M5	6
PB18-C6-C	M6	7
PB18-C8-C	M8	9

ø25



PB-C5

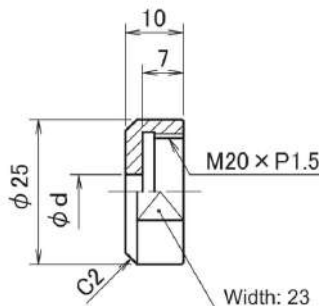


Model No.	BOLT	ø d	H
PB-C5	M5	6	10
PB-C6	M6	7	10
PB-C8	M8	9	10
PB-C5-12	M5	6	12
PB-C6-12	M6	7	12
PB-C8-12	M8	9	12

ø25



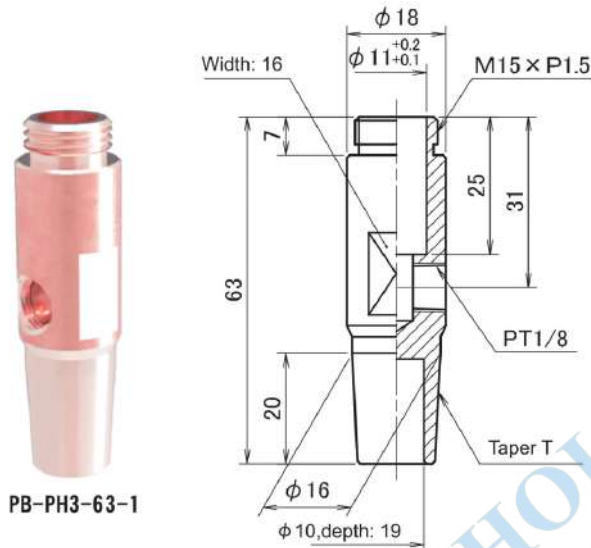
PB-C5-C



Model No.	BOLT	ø d
PB-C4-C	M4	5
PB-C5-C	M5	6
PB-C6-C	M6	7
PB-C8-C	M8	9

For $\phi 18$ Lower Electrode Cap

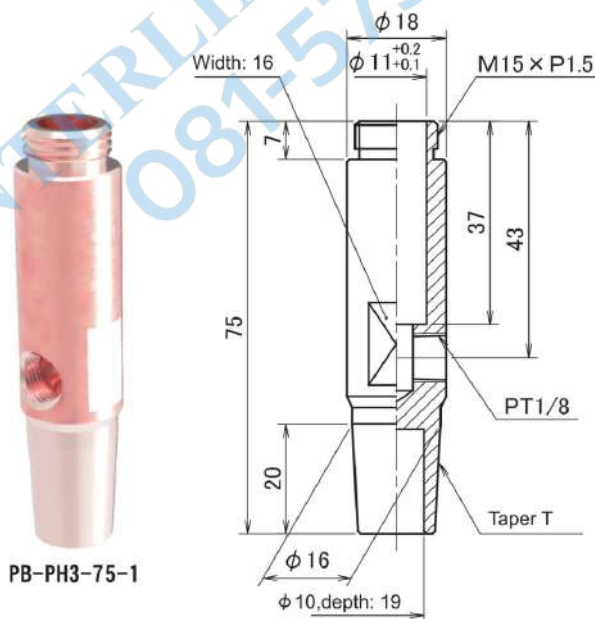
For Pipe 25 mm Long, Out Dia. 11 mm
M6 • M8



PB-PH3-63-1

Model No.	T
PB-PH3-63-1	1/10
PB-PH3-63-2	MT#2
PB-PH3-63-3	1/5

For Pipe 37 mm Long, Out Dia. 11 mm
M4 • M5 • M6 • M8

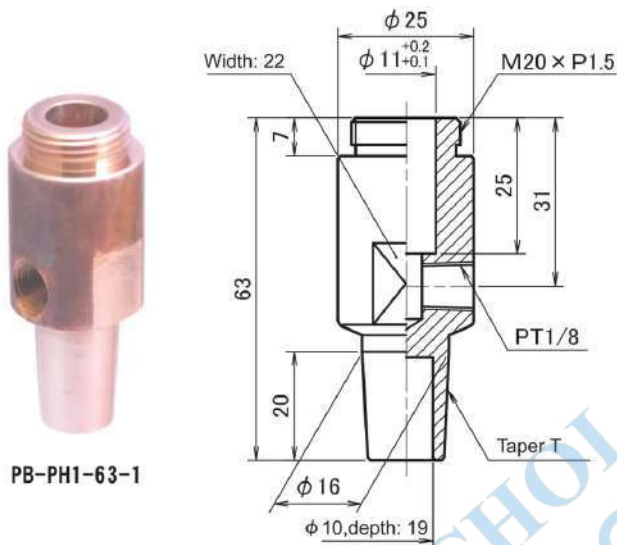


PB-PH3-75-1

Model No.	T
PB-PH3-75-1	1/10
PB-PH3-75-2	MT#2
PB-PH3-75-3	1/5

For $\phi 25$ Lower Electrode Cap

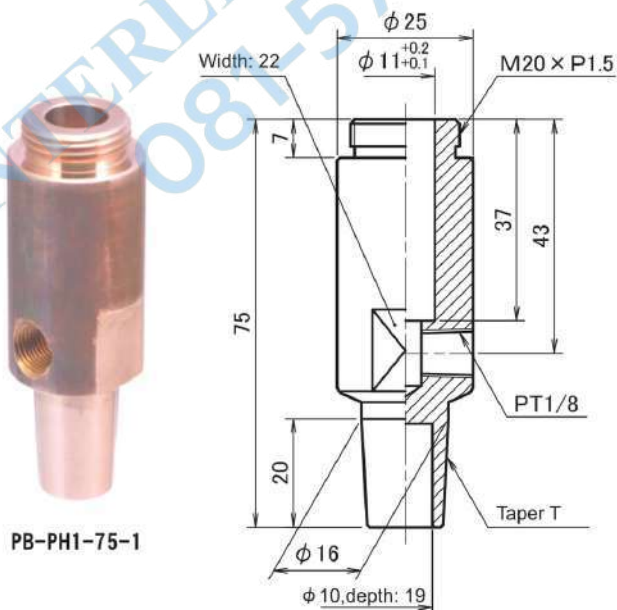
For Pipe 25 mm Long, Out Dia. 11 mm
M6 • M8



PB-PH1-63-1

Model No.	T
PB-PH1-63-1	1/10
PB-PH1-63-2	MT#2
PB-PH1-63-3	1/5

For Pipe 37 mm Long, Out Dia. 11 mm
M4 • M5 • M6 • M8



PB-PH1-75-1

Model No.	T
PB-PH1-75-1	1/10
PB-PH1-75-2	MT#2
PB-PH1-75-3	1/5

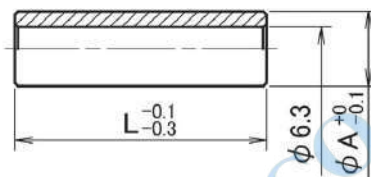
G-guide Pipe

M6



PB-P6-1137-GS

Model No.	BOLT	ϕA	L
PB-P6-1125-GS	M6	11	25
PB-P6-1137-GS	M6	11	37

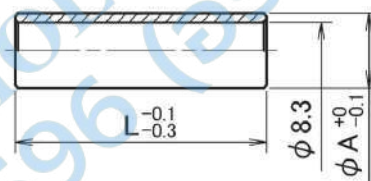


M8



PB-P8-1137-GS

Model No.	BOLT	ϕA	L
PB-P8-1125-GS	M8	11	25
PB-P8-1137-GS	M8	11	37

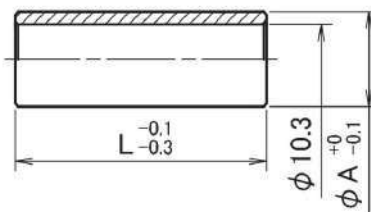


M10



PB-P10-1437-GS

Model No.	BOLT	ϕA	L
PB-P10-1425-GS	M10	14	25
PB-P10-1437-GS	M10	14	37



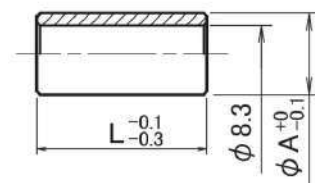
Siliguide Pipe

M6



PB-P8-1225-S

Model No.	BOLT	ϕA	L
PB-P8-1225-S	M8	12	25
PB-P8-1237-S	M8	12	37

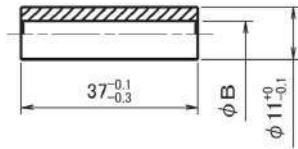


M4 • M5 • M6 • M8 • M10 • M12

Aluguide Pipe



PB-P6-A

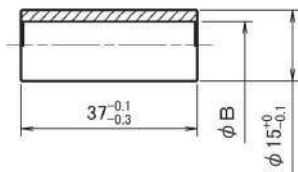


Model No.	BOLT	Ø B
PB-P4-A	M4	4.2
PB-P5-A	M5	5.2
PB-P6-A	M6	6.2
PB-P8-A	M8	8.2

Aluguide Pipe



PB-P10-A

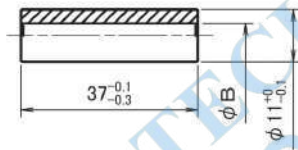


Model No.	BOLT	Ø B
PB-P10-A	M10	10.2
PB-P12-A	M12	10.2

3S Pipe



PB-P8-K

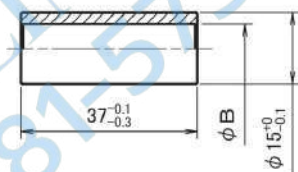


Model No.	BOLT	Ø B
PB-P4-K	M4	4.2
PB-P5-K	M5	5.2
PB-P6-K	M6	6.2
PB-P8-K	M8	8.2

3S Pipe



PB-P12-K

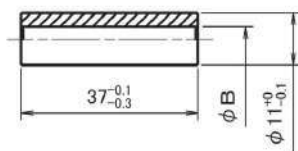


Model No.	BOLT	Ø B
PB-P10-K	M10	10.2
PB-P12-K	M12	12.2

Bakelite Pipe



PB-P6-NB

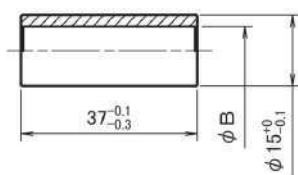


Model No.	BOLT	Ø B
PB-P4-NB	M4	4.2
PB-P5-NB	M5	5.2
PB-P6-NB	M6	6.2
PB-P8-NB	M8	8.2

Bakelite Pipe



PB-P10-NB



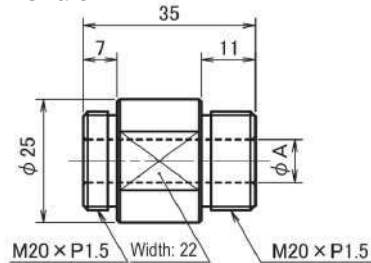
Model No.	BOLT	Ø B
PB-P10-NB	M10	10.2
PB-P12-NB	M12	12.2

M4 • M5 • M6 • M8 • M10 • M12

Electrode Holder



PB-H56

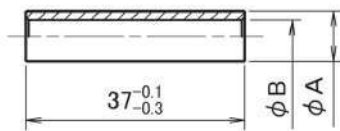


Model No.	BOLT	̕A
PB-H56	M5•M6	8.7
PB-H8	M8	10.7

Pipe



PB-P5

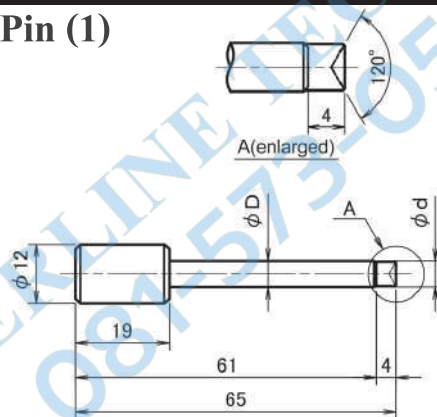


Model No.	BOLT	̕A	̕B
PB-P5	M5	8.5	5.5
PB-P6	M6	8.5	6.5
PB-P8	M8	10.5	8.5

Guide Pin (1)



PB-G5

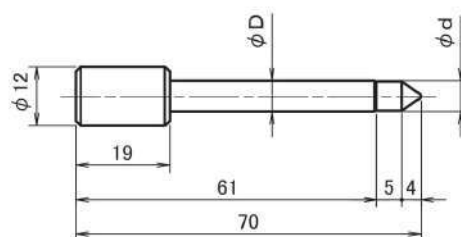


Model No.	BOLT	̕D	̕d
PB-G5	M5	5.3	5
PB-G6	M6	6.3	6
PB-G8	M8	8.3	8

Guide Pin (2)



PB-G6-A



Model No.	BOLT	̕D	̕d
PB-G6-A	M6	6.3	6
PB-G8-A	M8	8.3	8

Platen-navi-Bolt

Suitable for manual operation

(Manual work specification) Air cylinder specification

Ø 30 (M5 • M6 • M8)

Ø 25 Air Cap for Bolt Welding Made for Navi Use



Suitable for bolts with a length of
15 to 35 mm below the head.



Model No.	BOLT
PTNB2-30110-M18-M5	M5
PTNB2-30110-M18-M6	M6
PTNB2-30110-M18-M8	M8

Platen-navi-Bolt

Suitable for manual operation

(Manual work specification) Air cylinder specification

Ø 30 (M10)

Ø 30 Air Cap for Bolt Welding Made for Navi Use



Suitable for bolts with a length of
15 to 35 mm below the head.



Model No.	BOLT
PTNB2-30110-M22-M10	M10

Suitable for manual operation (Manual work specification)

Ø 25 (M6 • M8) Air cap with O-ring specification.



To set a bolt
by manual work!



Model No.	BOLT	L	Overall length
HNB2-S-25150-ACO-M6	M6	140	429
HNB2-S-25150-ACO-M8	M8	140	429
HNB2-S-25200-ACO-M6	M6	190	479
HNB2-S-25200-ACO-M8	M8	190	479
HNB2-S-25250-ACO-M6	M6	240	529
HNB2-S-25250-ACO-M8	M8	240	529

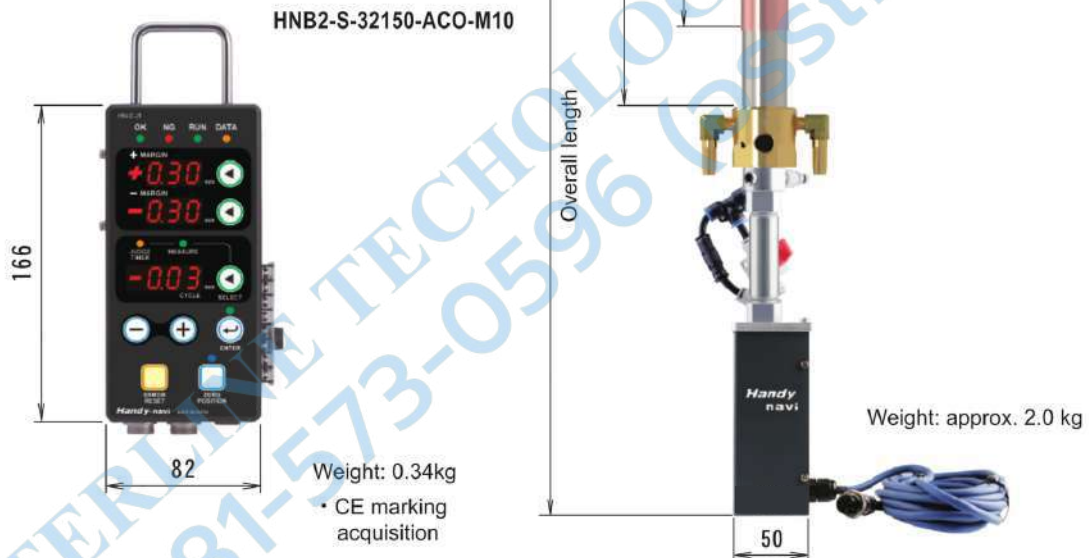
Handy-navi-Bolt

Suitable for manual operation (Manual work specification)

Ø 32 (M10) Air cap with O-ring specification.



**To set a bolt
by manual work!**



Model No.	BOLT	L	Overall length
HNB2-S-32150-ACO-M10	M10	140	429
HNB2-S-32200-ACO-M10	M10	190	479
HNB2-S-32250-ACO-M10	M10	240	529

Suitable for manual operation (Manual work specification)

Ø 25 (M6 • M8) Water jacket and intermediate adapter specification



To set a bolt
by manual work!



Model No.	BOLT	L	Overall length
HNB2-S-25150-AC-M6	M6	140	470
HNB2-S-25150-AC-M8	M8	140	470
HNB2-S-25200-AC-M6	M6	190	520
HNB2-S-25200-AC-M8	M8	190	520
HNB2-S-25250-AC-M6	M6	240	570
HNB2-S-25250-AC-M8	M8	240	570

Suitable for manual operation (Manual work specification)

Ø 32 (M10)



To set a bolt
by manual work!



Model No.	BOLT	L	Overall length
HNB2-S-32150-AC-M10	M10	140	470
HNB2-S-32200-AC-M10	M10	190	520
HNB2-S-32250-AC-M10	M10	240	570

Suitable for manual operation (Bolt feeder specification)

Ø 25 (M6 • M8)



To set a bolt
by bolt feeder!



Model No.	BOLT	L	Overall length
HRNB2-SHP-25150-AC-M6	M6	140	451
HRNB2-SHP-25150-AC-M8	M8	140	451
HRNB2-SHP-25200-AC-M6	M6	190	501
HRNB2-SHP-25200-AC-M8	M8	190	501
HRNB2-SHP-25250-AC-M6	M6	240	551
HRNB2-SHP-25250-AC-M8	M8	240	551

Suitable for manual operation (Bolt feeder specification)

Ø 32 (M10)



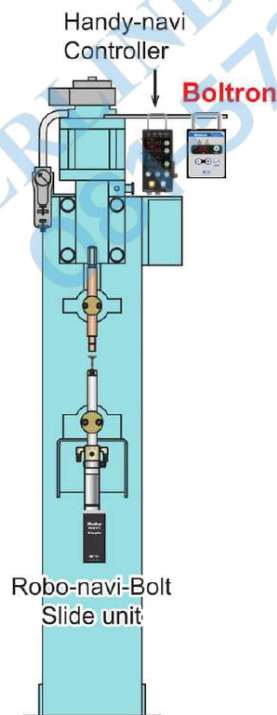
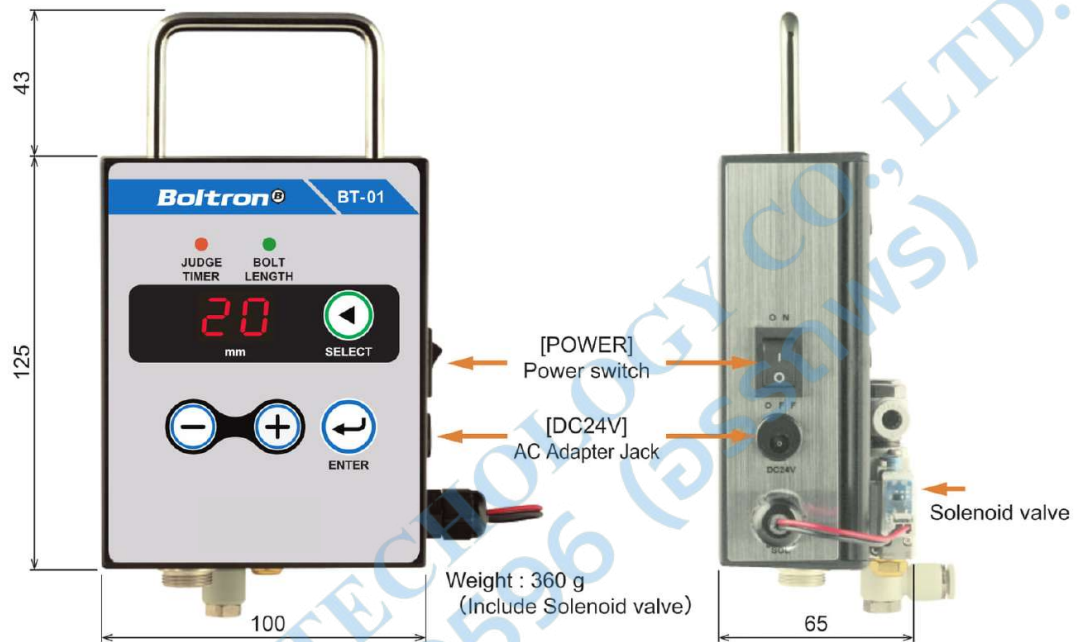
*To set a bolt
by bolt feeder!*



Model No.	BOLT	L	Overall length
HRNB2-SHP-32150-AC-M10	M10	140	451
HRNB2-SHP-32200-AC-M10	M10	190	501
HRNB2-SHP-32250-AC-M10	M10	240	551

Boltron®

Control rising timing of guide pin!!



Model No.	Weight (g)
BT-01	360

Robo-navi-Bolt

Suitable for robot and automated machinery
(Bolt Feeder specification)

Ø 25 (M6 • M8)



*Perfectly suits automated
production lines!!*

RNB2-SHP-25150-AC-M8



Weight: 1.4 kg

• CE marking acquisition



Model No.	BOLT	L	Overall length
RNB2-SHP-25150-AC-M6	M6	140	451
RNB2-SHP-25150-AC-M8	M8	140	451
RNB2-SHP-25200-AC-M6	M6	190	501
RNB2-SHP-25200-AC-M8	M8	190	501
RNB2-SHP-25250-AC-M6	M6	240	551
RNB2-SHP-25250-AC-M8	M8	240	551

Robo-navi-Bolt

Suitable for robot and automated (Bolt feeder specification)

Ø 32 (M10)



Perfectly suits automated production lines!!

RNB2-SHP-32150-AC-M10



Weight: 1.4 kg
• CE marking acquisition



Model No.	BOLT	L	Overall length
RNB2-SHP-32150-AC-M10	M10	140	451
RNB2-SHP-32200-AC-M10	M10	190	501
RNB2-SHP-32250-AC-M10	M10	240	551

WATER JACKET HOLDER FOR BOLT WELDING

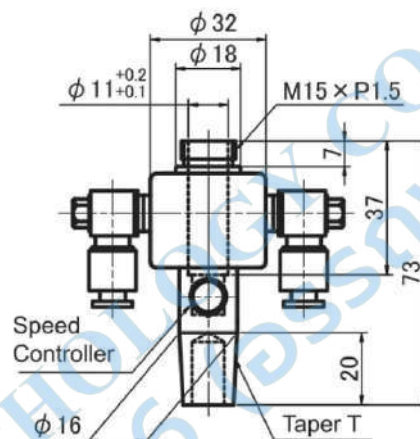
281

M4 • M5 • M6 • M8

Ø 18 Slim Type



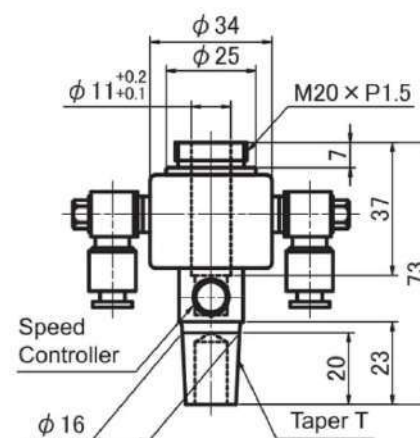
PB-WJ-H18-1



Ø 25



PB-WJ-H1-1



HIGH POWER L TYPE HOLDER FOR BOLT WELDING

282

Ø 25 Lower Cap For Bolt Welding Specification

Holder diameter: Ø 25

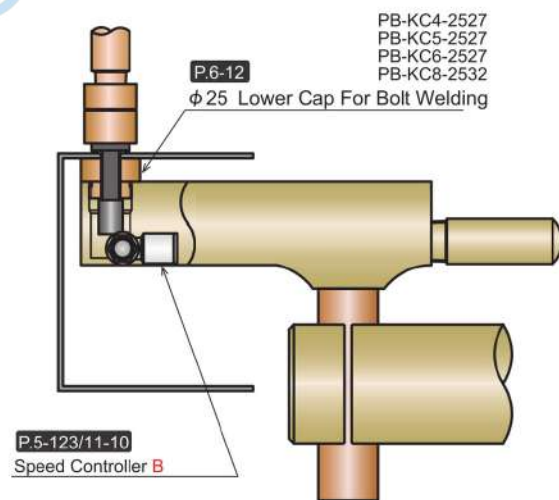
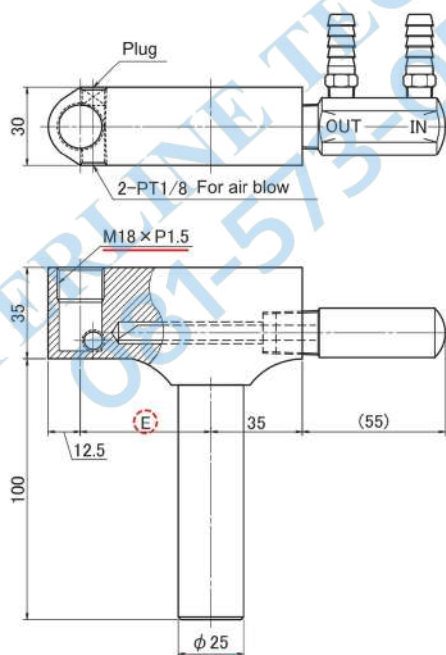
Bolt: M4 • M5 • M6 • M8

*To provide
a deep bolt welding !!*



PB-LHH-2550-M18

Model No.	E
PB-LHH-2550-M18	50
PB-LHH-2575-M18	75
PB-LHH-25100-M18	100



L TYPE HOLDER HIGH POWER 800 FOR BOLT WELDING

283

Ø 30 Lower Cap For Bolt Welding Specification

Holder diameter: Ø 32

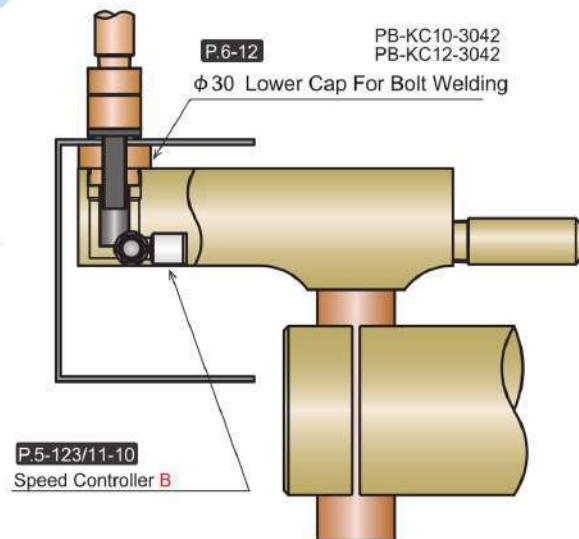
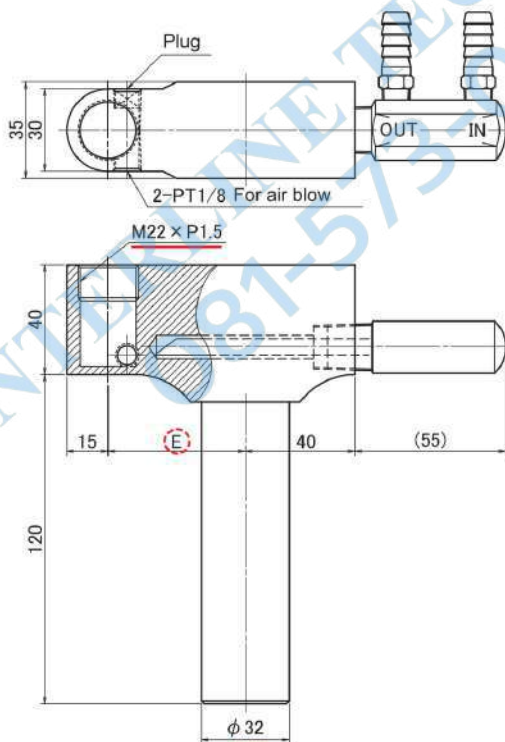
Bolt: M10 • M12

*To provide
a deep bolt welding !!*



PB-LHP800-3250-M22

Model No.	E
PB-LHP800-3250-M22	50
PB-LHP800-3275-M22	75
PB-LHP800-32100-M22	100
PB-LHP800-32125-M22	125
PB-LHP800-32150-M22	150



INNER WATER-COOLING HOLDER FOR BOLT WELDING

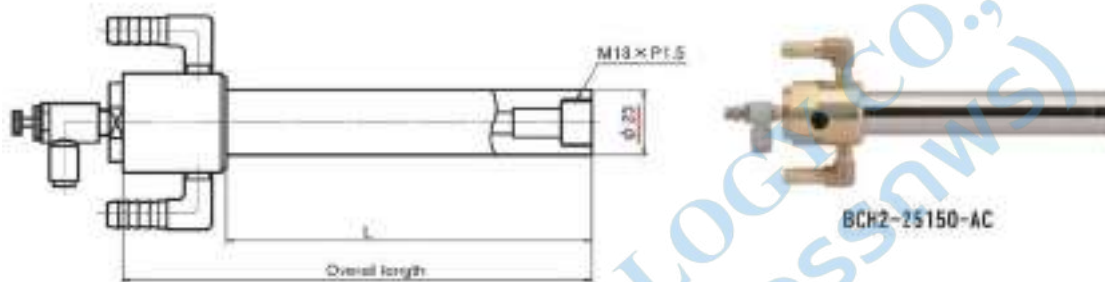
284

Suitable for manual Work Air Cap Specification

Ø 25 (M5 • M6 • M8)

Inner water-cooling system cools to the end of the electrode!

Model No.	L	Overall length
BCH2-25150-AC	140	180
BCH2-25200-AC	190	230
BCH2-25250-AC	240	280



Ø 32 (M10)

Inner water-cooling system cools to the end of the electrode!

Model No.	L	Overall length
BCH2-32150-AC	140	180
BCH2-32200-AC	190	230
BCH2-32250-AC	240	280



Air cap Specification

Ø 25

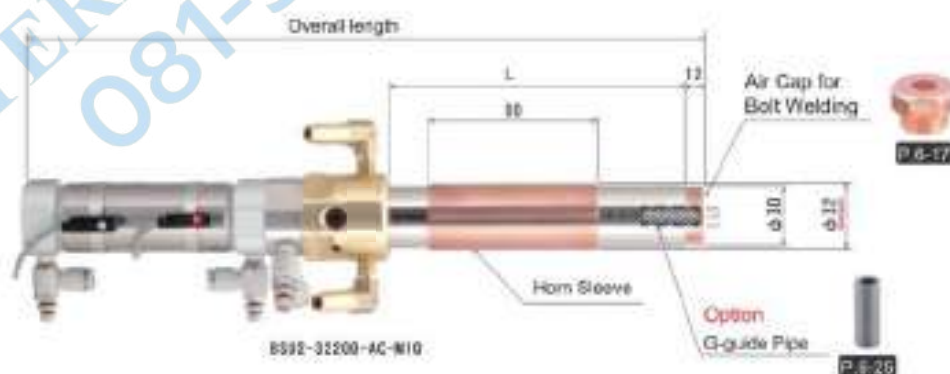
Plated holder is spatter-resistant!



Model No.	BOLT	L	Overall length
BSU2-25150-AC-M6	M6	140	321
BSU2-25150-AC-M8	M8	140	321
BSU2-25200-AC-M6	M6	190	371
BSU2-25200-AC-M8	M8	190	371
BSU2-25250-AC-M6	M6	240	421
BSU2-25250-AC-M8	M8	240	421

Ø 32

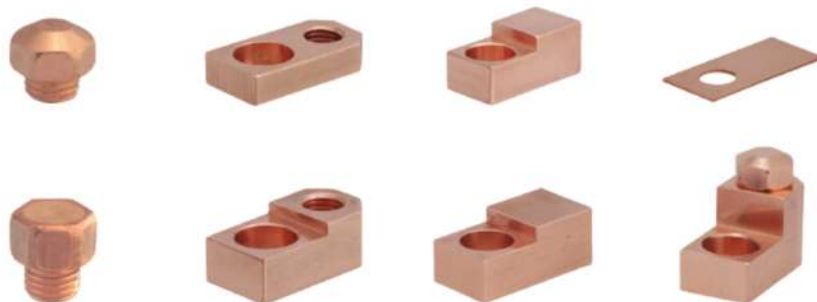
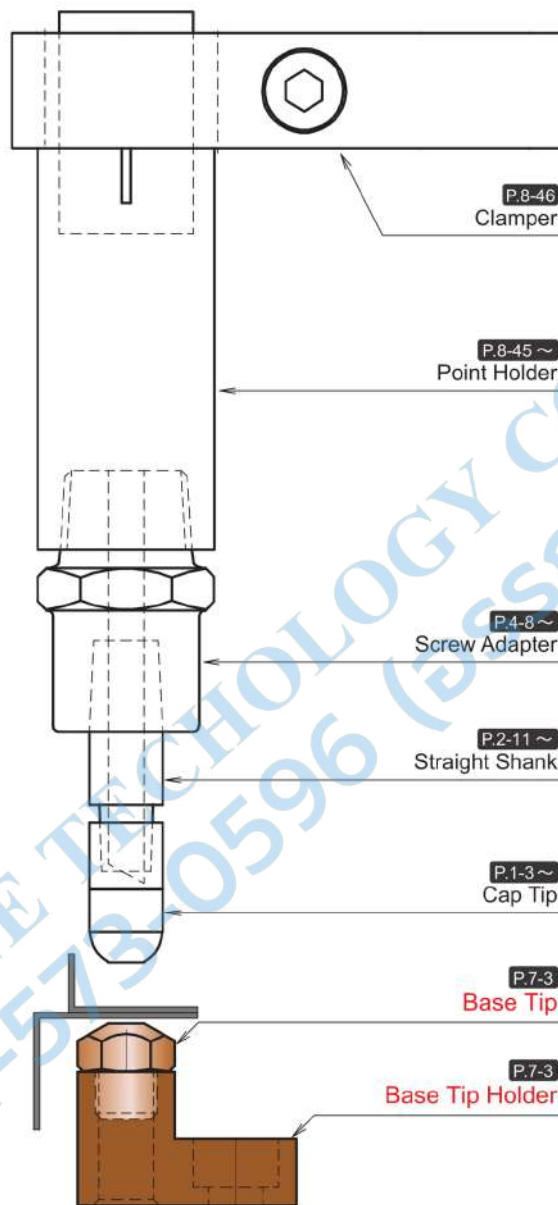
Plated holder is spatter-resistant!



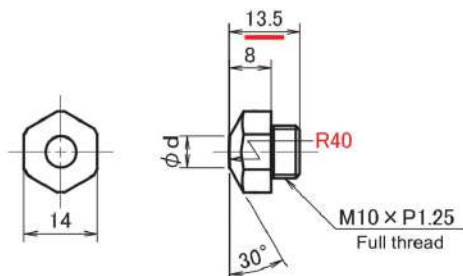
Model No.	BOLT	L	Overall length
BSU2-32150-AC-M10	M10	140	325
BSU2-32200-AC-M10	M10	190	375
BSU2-32250-AC-M10	M10	240	425

INSERT ELECTRODES

286



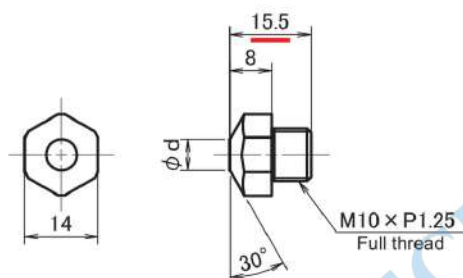
Base Tip (Type R40)



Model No.	Ø d
NK-1614-6-R40	6



Base Tip



Model No.	Ø d
NK-1616-6	6
NK-1616-8	8
NK-1616-F	16

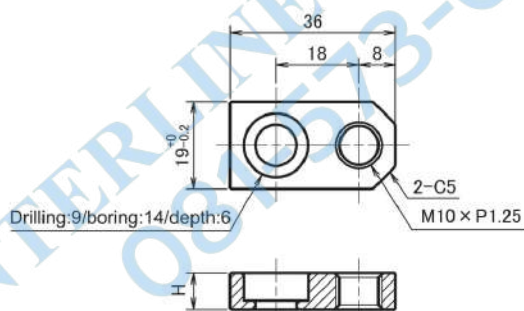


NK-1616-6

NK-1616-8

NK-1616-F

Base Tip Holder Type A

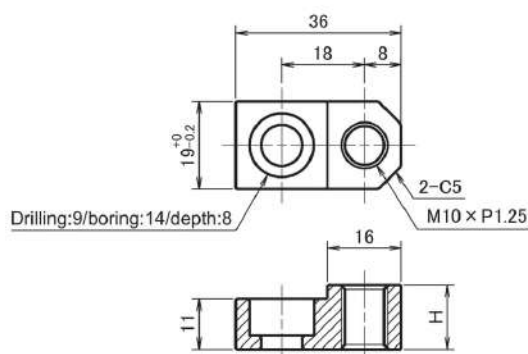


Model No.	H
NI-A-8	8
NI-A-11	11



NI-A-8

Base Tip Holder Type B

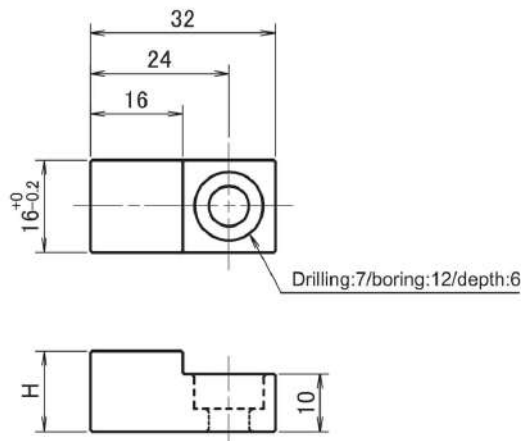


Model No.	H
NI-B-14	14
NI-B-17	17
NI-B-22	22



NI-B-14

16x32

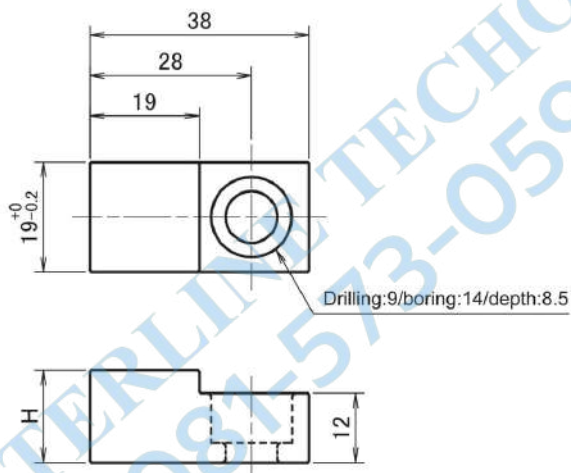


Model No.	H
IN-16-14	14
IN-16-18	18
IN-16-19	19



IN-16-14

19x38

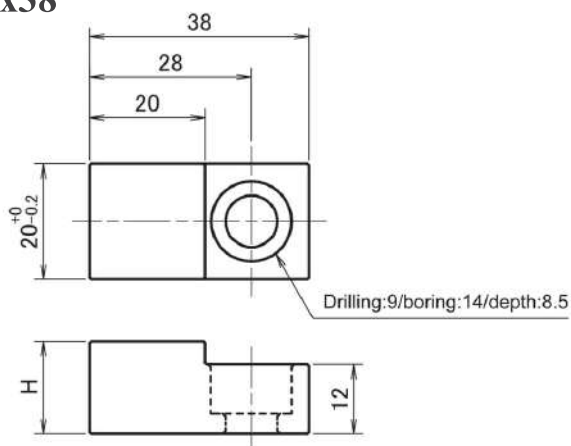


Model No.	H
IN-19-16	16
IN-19-19	19



IN-19-16

20x38

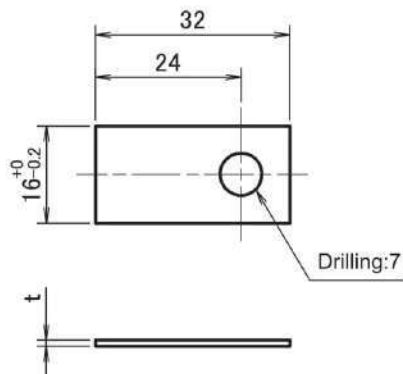


Model No.	H
IN-20-16	16
IN-20-19	19
IN-20-20	20



IN-20-16

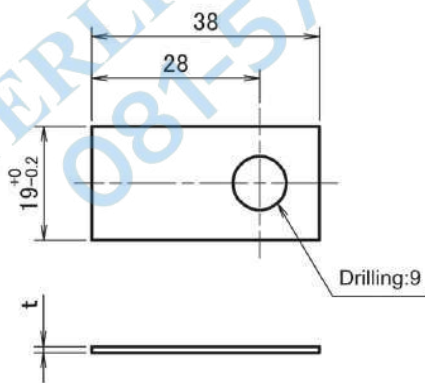
16x32



Model No.	t
SM-16-0.5	0.5



19x38

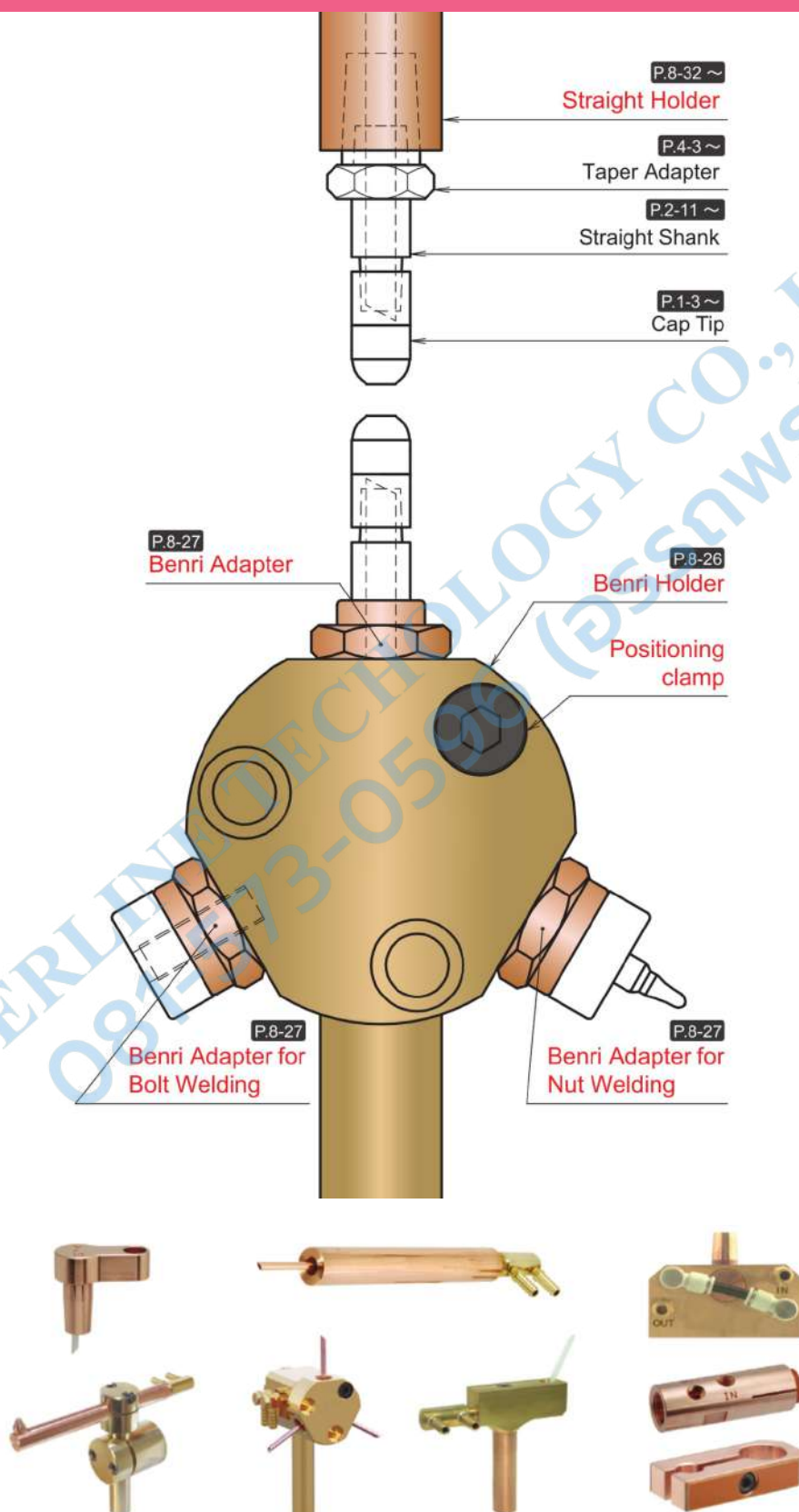


Model No.	t
SM-19-0.5	0.5
SM-19-1.0	1.0



SM-19-1.0

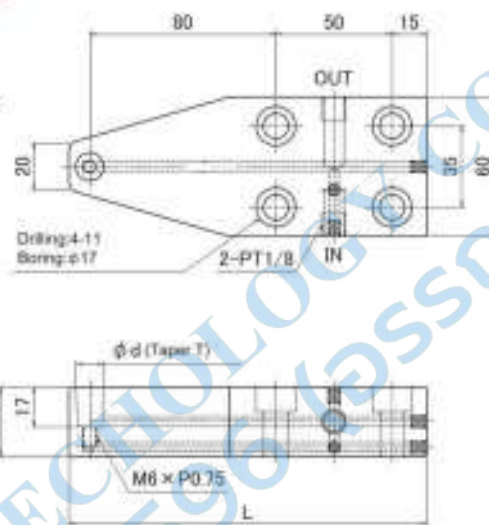
HOLDERS



Block Holder



KH-3060154-12-1



Model No.

 $\varnothing d$

T

L

KH-3060154-12-1

12

1/10

154

KH-3060156-16-1

16

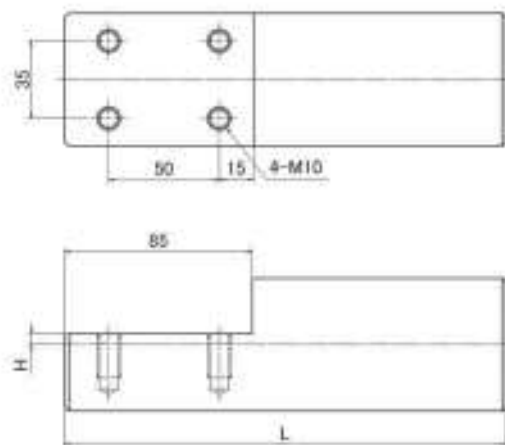
1/10

156

Horn



KH-80200-26



Model No.

 $\varnothing D$

L

H

KH-60200-5

60

200

5

KH-60250-5

60

250

5

KH-70200-18

70

200

18

KH-70250-18

70

250

18

KH-80200-26

80

200

26

KH-80250-26

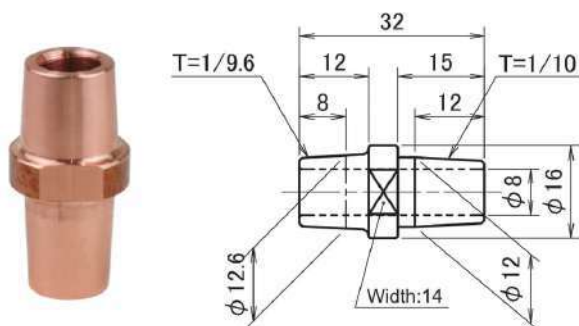
80

250

26

Shank for Block Holder

φ16 φ12 T=1/10

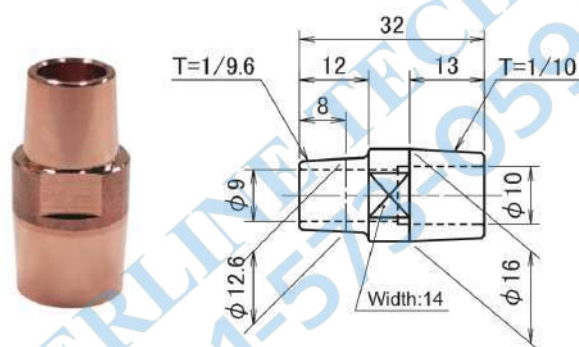


Model No.

KH-SS-1632-12-1B-SA

Shank for Block Holder

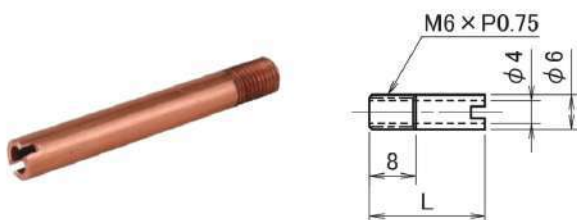
φ16 φ12 T=1/10



Model No.

KH-SS-1632-16-1B-SA

Cooling Pipe



Model No.

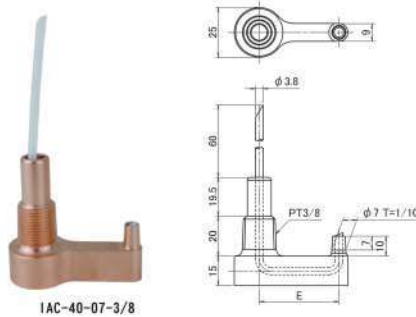
L

PC6-45-SL

45

Inner Adapter

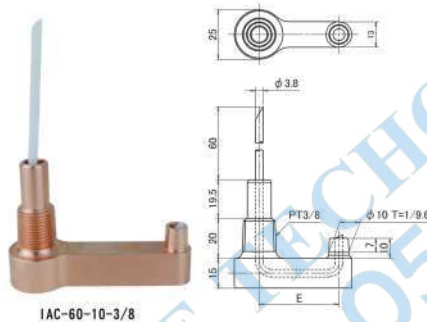
Suitable for $\phi 9$ Cap tips



IAC-40-07-3/8

Model No.	E
IAC-40-07-3/8	40
IAC-50-07-3/8	50
IAC-60-07-3/8	60
IAC-70-07-3/8	70

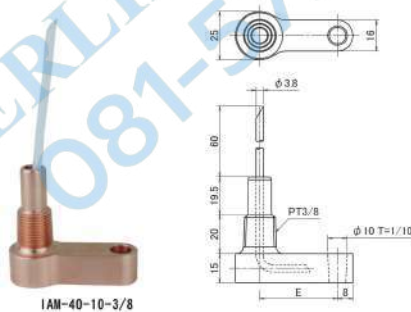
Suitable for $\phi 12 \cdot \phi 13$ Cap tips



IAC-60-10-3/8

Model No.	E
IAC-40-10-3/8	40
IAC-50-10-3/8	50
IAC-60-10-3/8	60
IAC-70-10-3/8	70

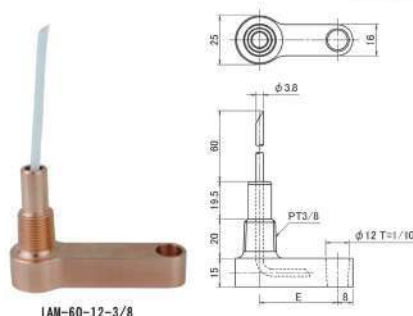
Suitable for $\phi 10 \cdot \phi 12$ Mini tips



IAM-40-10-3/8

Model No.	E
IAM-40-10-3/8	40
IAM-50-10-3/8	50
IAM-60-10-3/8	60
IAM-70-10-3/8	70

Suitable for $\phi 16$ Mini tips



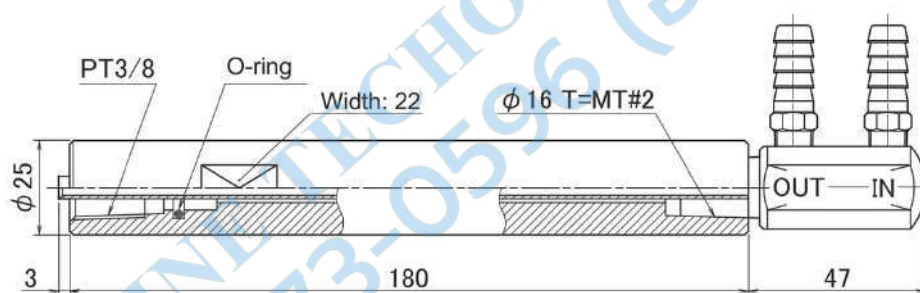
IAM-60-12-3/8

Model No.	E
IAM-40-12-3/8	40
IAM-50-12-3/8	50
IAM-60-12-3/8	60
IAM-70-12-3/8	70

Inner Holder

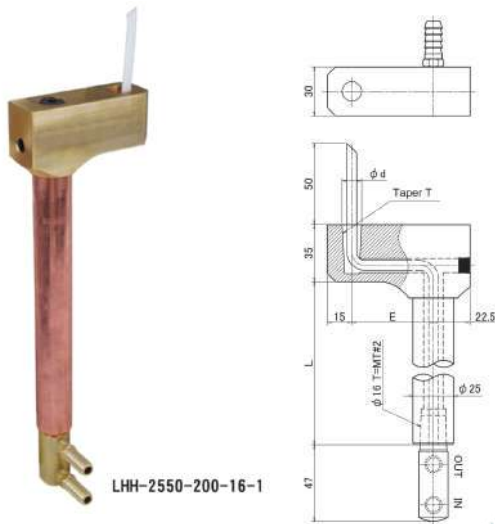
Model No.

IHL-25180-3/8



Interference Avoidance Type

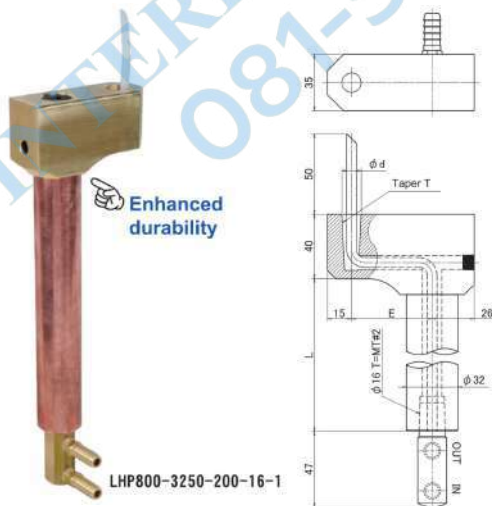
φ 25 High Power L Type Hoder



Model No.	L	E	Ø d	T
LHH-2550-150-12-1	150	50	12	1/10
LHH-2550-200-12-1	200	50	12	1/10
LHH-2550-150-16-1	150	50	16	1/10
LHH-2550-200-16-1	200	50	16	1/10

Model No.	L	E	Ø d	T
LHH-2575-150-12-1	150	50	12	1/10
LHH-2575-200-12-1	200	75	12	1/10
LHH-2575-150-16-1	150	75	16	1/10
LHH-2575-200-16-1	200	75	16	1/10

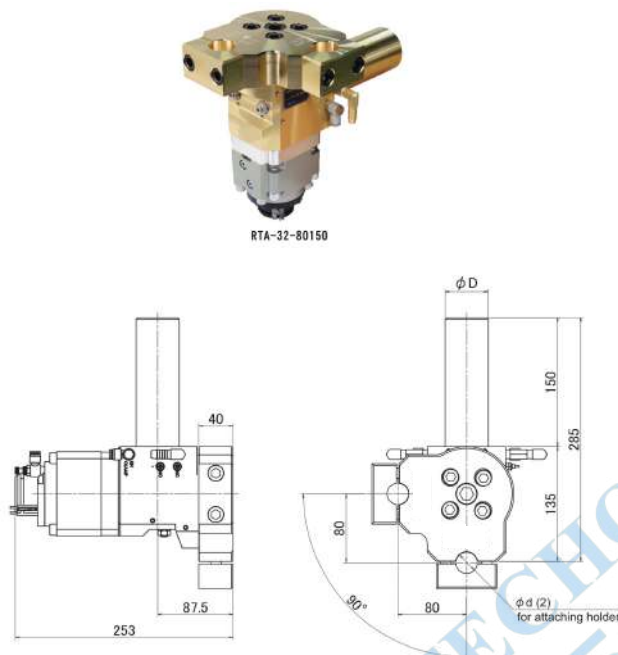
φ 32 L Type Hoder High Power 800



Model No.	L	E	Ø d	T
LHP800-3250-150-12-1	150	50	12	1/10
LHP800-3250-200-12-1	200	50	12	1/10
LHP800-3250-150-16-1	150	50	16	1/10
LHP800-3250-200-16-1	200	50	16	1/10

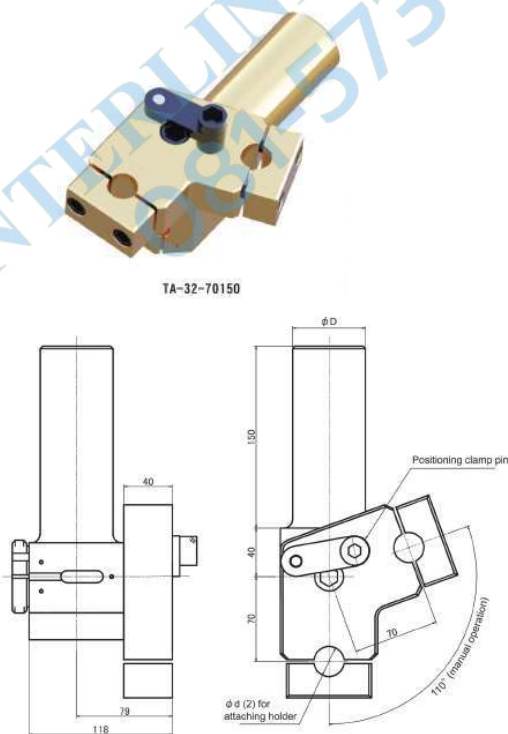
Model No.	L	E	Ø d	T
LHP800-3275-150-12-1	150	75	12	1/10
LHP800-3275-200-12-1	200	75	12	1/10
LHP800-3275-150-16-1	150	75	16	1/10
LHP800-3275-200-16-1	200	75	16	1/10

ROBOT-TWIN ARM



Model No.	Ø D	Ø d
RTA-25-50150	50	25
RTA-25-50150	55	25
RTA-25-50150	60	25
RTA-25-50150	70	25
RTA-25-50150	80	25
RTA-32-50150	50	32
RTA-32-50150	55	32
RTA-32-50150	60	32
RTA-32-50150	70	32
RTA-32-50150	80	32

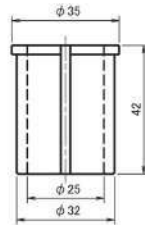
TWIN ARM



Model No.	Ø D	Ø d
TA-25-50150	50	25
TA-25-55150	55	25
TA-25-60150	60	25
TA-25-70150	70	25
TA-25-80150	80	25
TA-32-50150	50	32
TA-32-55150	55	32
TA-32-60150	60	32
TA-32-70150	70	32
TA-32-80150	80	32

Optional Extras

Flanged Sleeve



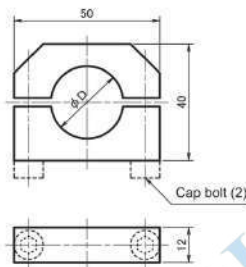
Model No.

TS-2532-42

Stopper



TA-S-25



Model No.

Ø D

TA-S-25

25

TA-S-32

32

Proximity sensor (Normal open)



Model No.

Maker

E2E-S05S12-WC-C1 2M

OMRON

Proximity sensor (Normal close)



Model No.

Maker

E2E-S05S12-WC-C2 2M

OMRON

Proximity Switch



Dog

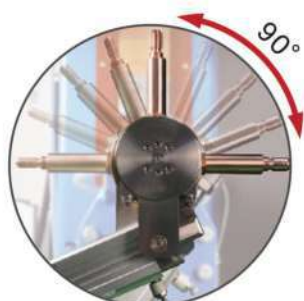
Positioning clamp pin

Model No.

Maker

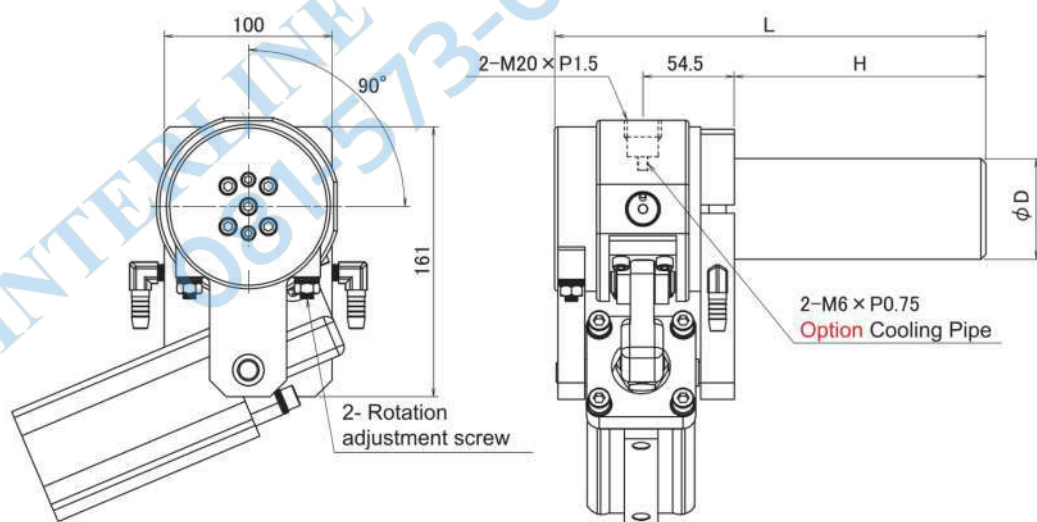
E2EC-C3D1

OMRON



Automatically rotates 90 degrees.

Model No.	ØD	H	L	Weight
RTA-50-150	50	150	257	10.8kg
RTA-50-200	50	200	307	11.6kg
RTA-50-250	50	250	357	12.4kg
RTA-55-150	55	150	257	11.3kg
RTA-55-200	55	200	307	12.4kg
RTA-55-250	55	250	357	13.4kg
RTA-60-150	60	150	257	12.2kg
RTA-60-200	60	200	307	13.5kg
RTA-60-250	60	250	357	14.7kg
RTA-70-150	70	150	257	13.6kg
RTA-70-200	70	200	307	15.3kg
RTA-70-250	70	250	357	16.9kg
RTA-80-150	80	150	257	15.1kg
RTA-80-200	80	200	307	17.4kg
RTA-80-250	80	250	357	19.5kg

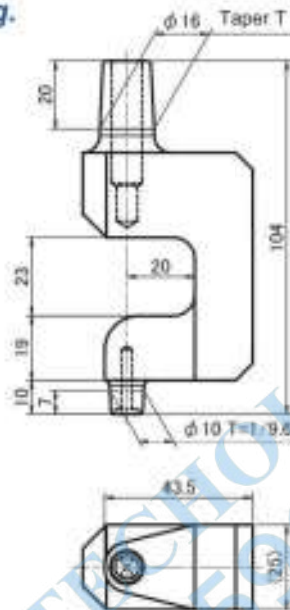


For Spot/For Nut/Bolt Welding

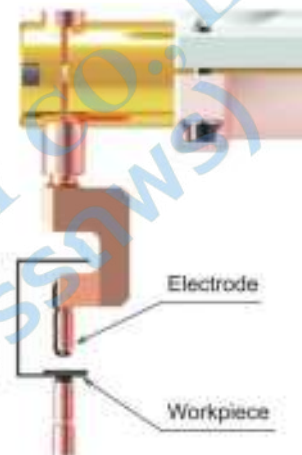
Suitable for Male Taper

($\phi 10$ T=1/9.6)

*Reduce deflection
at the time of pressing.*



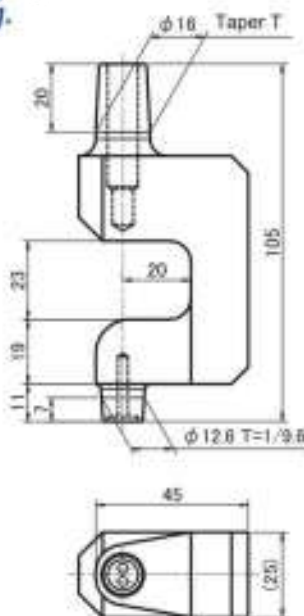
Model No.	T
CMHO-20-23-1016-1	1/10



Suitable for Male Taper

($\phi 12.6$ T=1/9.6)

*Reduce deflection
at the time of pressing.*



Model No.	T
CMHO-20-23-12616-1	1/10

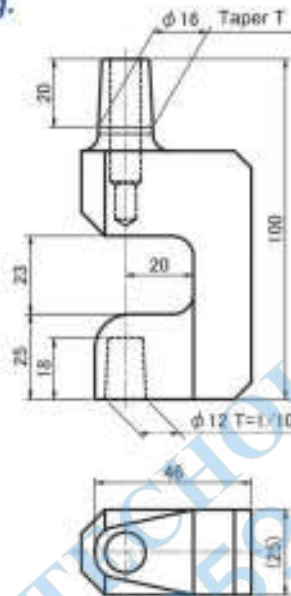


For Spot/For Nut/Bolt Welding

Suitable for Male Taper

($\phi 12$ T=1/10)

*Reduce deflection
at the time of pressing.*



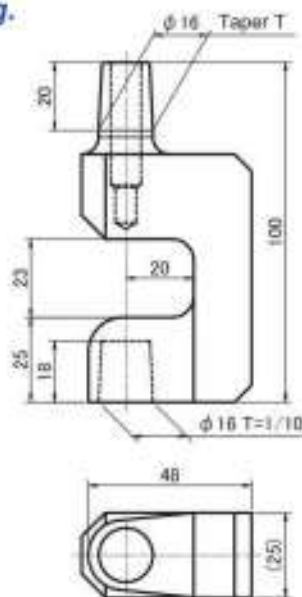
Model No.	T
CMHM-20-23-1216-1	1/10



Suitable for Male Taper

($\phi 16$ T=1/10)

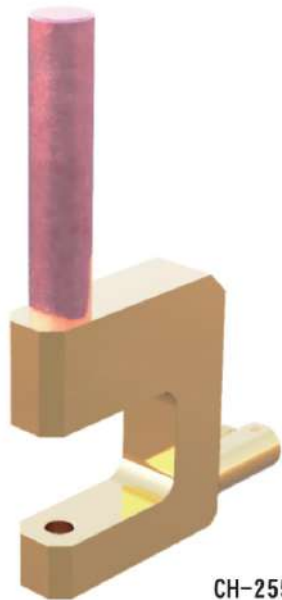
*Reduce deflection
at the time of pressing.*



Model No.	T
CMHM-20-23-1616-1	1/10

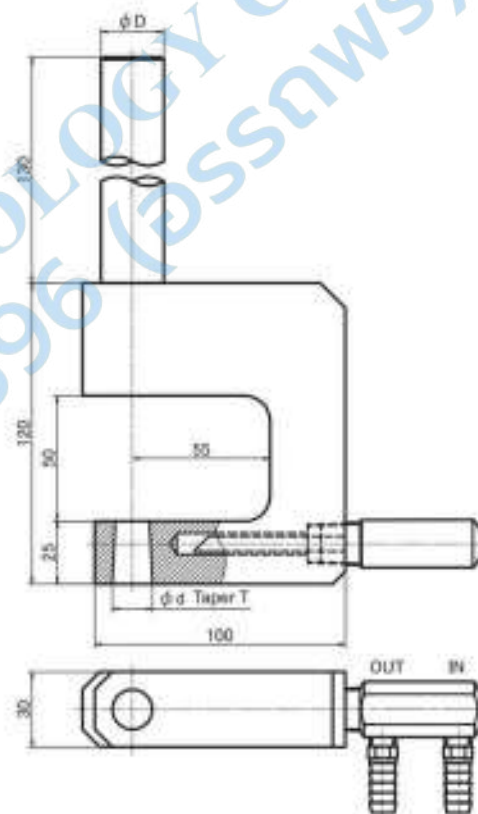
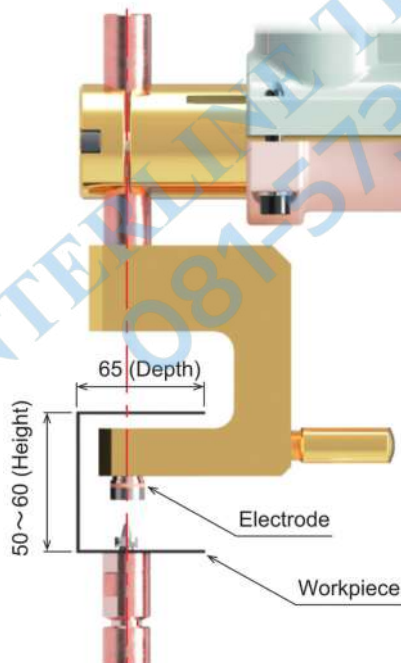


For Nut/Bolt Welding



CH-2550-55-16-1

Model No.	ØD	Ød	T
CH-2550-55-12-1	25	12	1/10
CH-2550-55-16-1	25	16	1/10
CH-3250-55-12-1	32	12	1/10
CH-3250-55-16-1	32	16	1/10



90° Type

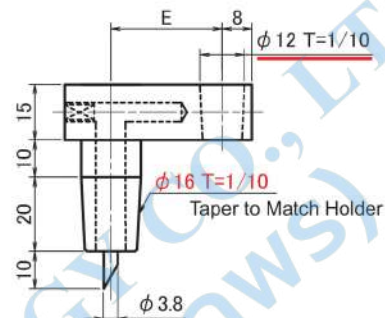
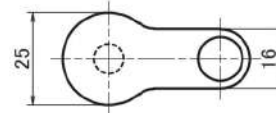
Taper to Match Holder

$\phi 16$ T=1/10

Alternative to Bent Tip



MPH-30-1216-10



Model No.	E
MPH-20-1216-10	20
MPH-30-1216-10	30
MPH-40-1216-10	40
MPH-50-1216-10	50
MPH-60-1216-10	60

Model No.	E
MPH-70-1216-10	70
MPH-80-1216-10	80
MPH-90-1216-10	90
MPH-100-1216-10	100

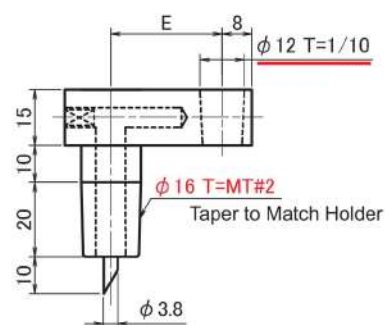
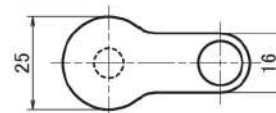
Taper to Match Holder

$\phi 16$ T=MT#2

Alternative to Bent Tip



MPH-60-1216M-10



Model No.	E
MPH-20-1216M-10	20
MPH-30-1216M-10	30
MPH-40-1216M-10	40
MPH-50-1216M-10	50
MPH-60-1216M-10	60

Model No.	E
MPH-70-1216M-10	70
MPH-80-1216M-10	80
MPH-90-1216M-10	90
MPH-100-1216M-10	100

90° Type

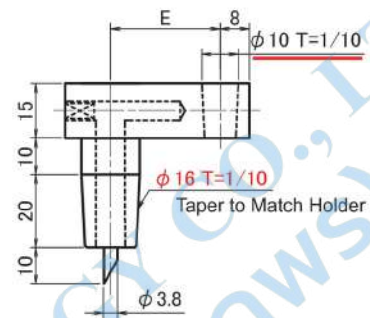
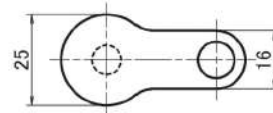
Taper to Match Holder

$\phi 16$ T=1/10

Alternative to Bent Tip



MPH-60-1016-10



Model No.	E
MPH-20-1016-10	20
MPH-30-1016-10	30
MPH-40-1016-10	40
MPH-50-1016-10	50
MPH-60-1016-10	60

Model No.	E
MPH-70-1016-10	70
MPH-80-1016-10	80
MPH-90-1016-10	90
MPH-100-1016-10	100

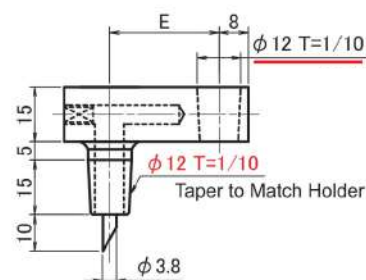
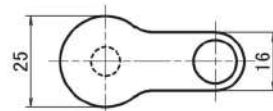
Taper to Match Holder

$\phi 12$ T=1/10

Alternative to Bent Tip



MPH-40-1212



Model No.	E
MPH-20-1212	20
MPH-30-1212	30
MPH-40-1212	40
MPH-50-1212	50
MPH-60-1212	60

Model No.	E
MPH-70-1212	70
MPH-80-1212	80
MPH-90-1212	90
MPH-100-1212	100

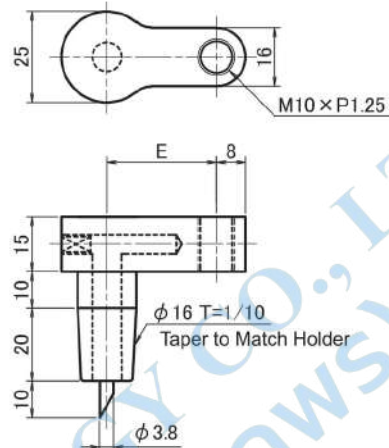
90° Type

(suitable for Base Tips)

Alternative to Bent Tip



MPH-50-M1016-10



Model No.	E
MPH-20-M1016-10	20
MPH-30-M1016-10	30
MPH-40-M1016-10	40
MPH-50-M1016-10	50
MPH-60-M1016-10	60

Model No.	E
MPH-70-M1016-10	70
MPH-80-M1016-10	80
MPH-90-M1016-10	90
MPH-100-M1016-10	100

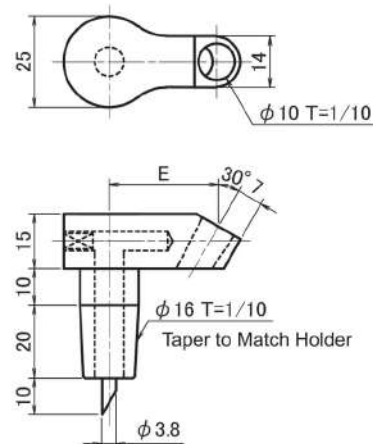
30° Type

(suitable for 30° Cut Tips)

Alternative to Bent Tip



MPH30-30-1016-10



Model No.	E
MPH30-25-1016-10	20
MPH30-30-1016-10	30
MPH30-40-1016-10	40
MPH30-50-1016-10	50
MPH30-60-1016-10	60

Model No.	E
MPH30-70-1016-10	70
MPH30-80-1016-10	80
MPH30-90-1016-10	90
MPH30-100-1016-10	100

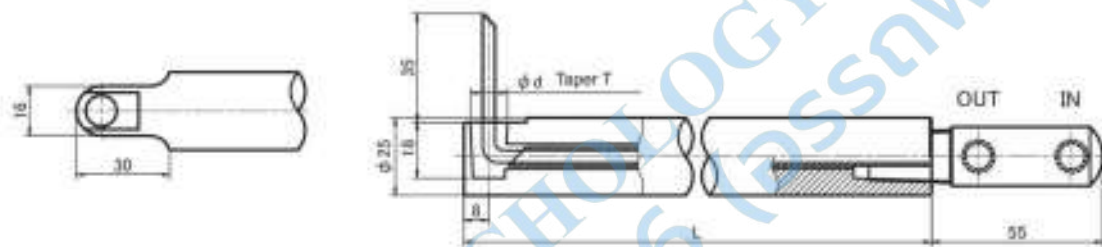
Shank Specification

90° Type



TTH90-SS-25250-12-1

Model No.	Ø d	T	L
TTH90-SS-25200-12-1	12	1/10	200
TTH90-SS-25250-12-1	12	1/10	250
TTH90-SS-25300-12-1	12	1/10	300
TTH90-SS-25350-12-1	12	1/10	350

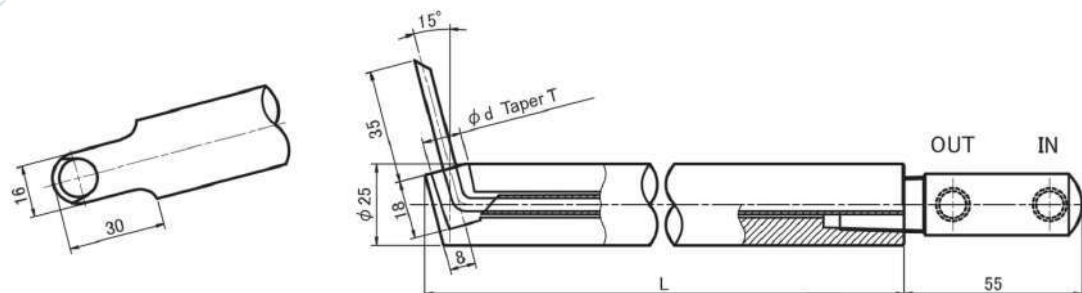


15° Type



TTH15-SS-25250-12-1

Model No.	Ø d	T	L
TTH15-SS-25200-12-1	12	1/10	200
TTH15-SS-25250-12-1	12	1/10	250
TTH15-SS-25300-12-1	12	1/10	300
TTH15-SS-25350-12-1	12	1/10	350

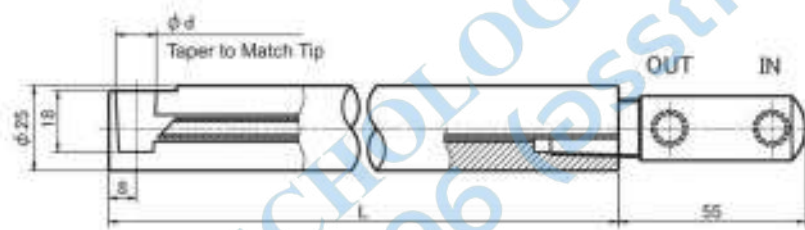


Shank Specification

90° Type



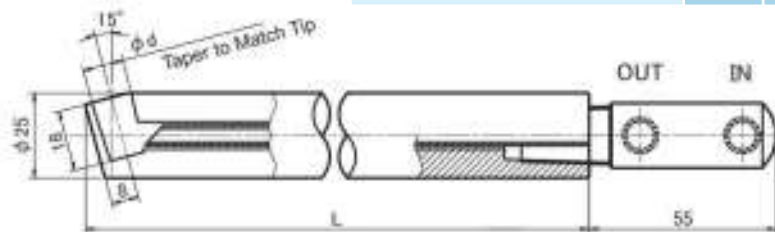
Model No.	Ø d	T	L
TTH90-25200-10-1	10	1/10	200
TTH90-25200-12-1	12	1/10	200
TTH90-25250-10-1	10	1/10	250
TTH90-25250-12-1	12	1/10	250
TTH90-25300-10-1	10	1/10	300
TTH90-25300-12-1	12	1/10	300
TTH90-25350-10-1	10	1/10	350
TTH90-25350-12-1	12	1/10	350



15° Type



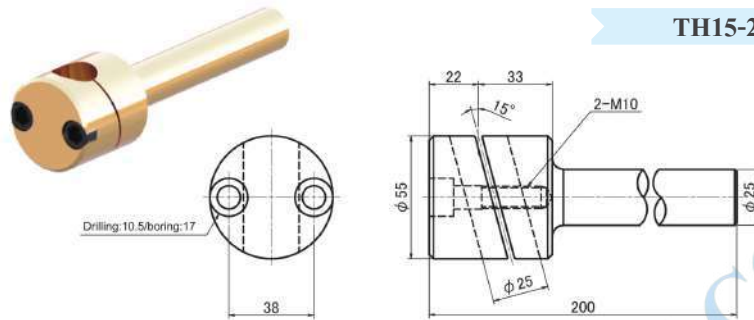
Model No.	Ø d	T	L
TTH15-25200-10-1	10	1/10	200
TTH15-25200-12-1	12	1/10	200
TTH15-25250-10-1	10	1/10	250
TTH15-25250-12-1	12	1/10	250
TTH15-25300-10-1	10	1/10	300
TTH15-25300-12-1	12	1/10	300
TTH15-25350-10-1	10	1/10	350
TTH15-25350-12-1	12	1/10	350



φ25 T type holder with 15° angle

Model No.

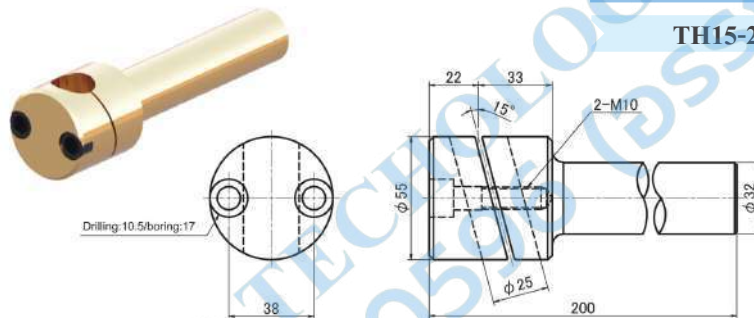
TH15-2525-55200



φ32 T type holder with 15° angle

Model No.

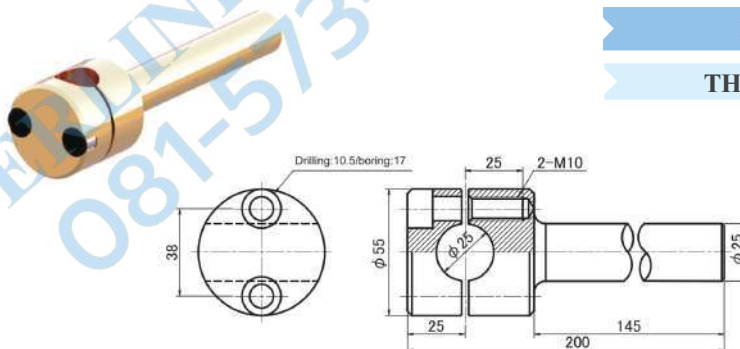
TH15-2532-55200



φ25

Model No.

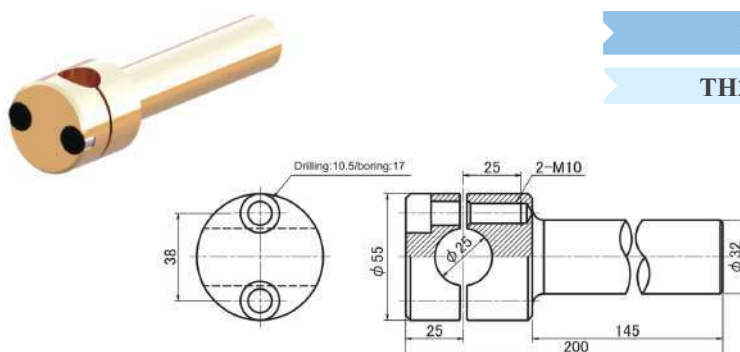
TH25-25-55200



φ32

Model No.

TH25-32-55200

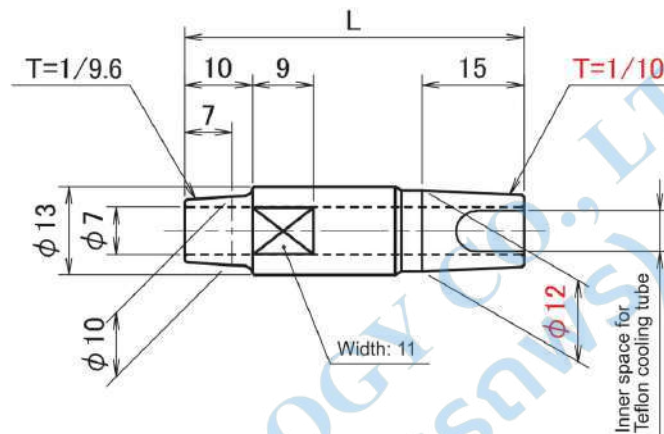


Suitable for cap tips $\phi 12 \cdot \phi 13$

Taper to match holder $\phi 12$ $T=1/10$



TTH-SS-1340-12-1B-SA



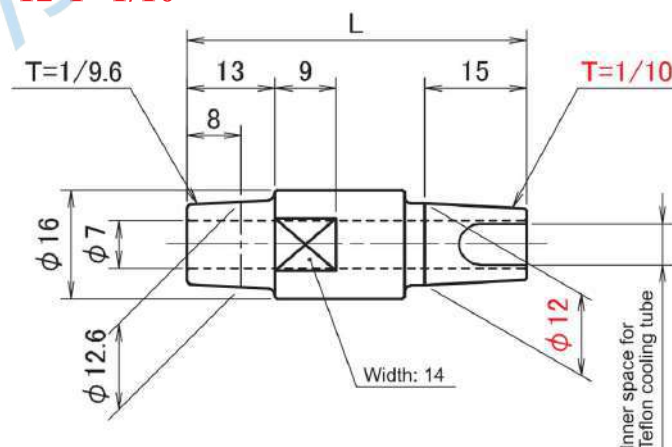
Model No.	L
TTH-SS-1335-12-1B-SA	35
TTH-SS-1340-12-1B-SA	40
TTH-SS-1345-12-1B-SA	45
TTH-SS-1350-12-1B-SA	50

Suitable for cap tips $\phi 16$

Taper to match holder $\phi 12$ $T=1/10$

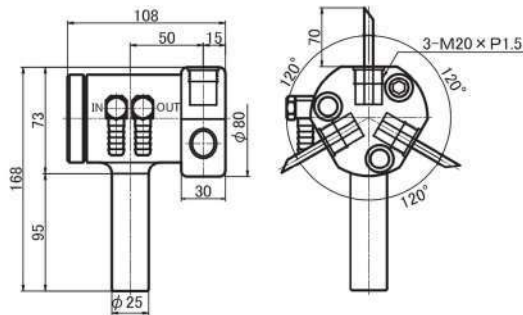


TTH-SS-1640-12-1B-SA



Model No.	L
TTH-SS-1635-12-1B-SA	35
TTH-SS-1640-12-1B-SA	40
TTH-SS-1645-12-1B-SA	45
TTH-SS-1650-12-1B-SA	50

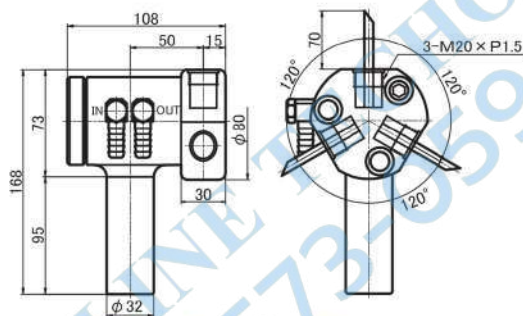
φ 25 (L Type)



Model No.

BHL-25-3W

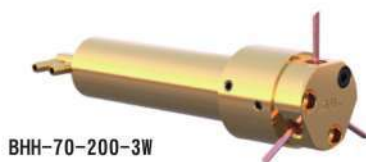
φ 32 (L Type)



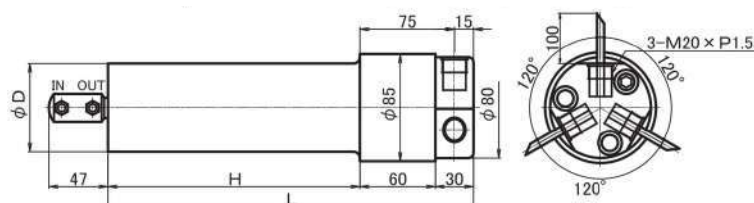
Model No.

BHL-32-3W

φ 60 • φ 70 • φ 80 (Horn Type)



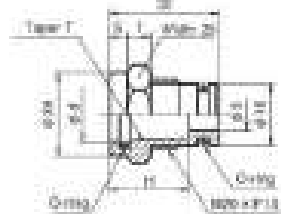
Model No.	Ø D	H	L
BHH-60-150-3W	60	150	240
BHH-60-200-3W	60	200	290
BHH-70-150-3W	70	150	240
BHH-70-200-3W	70	200	290
BHH-80-150-3W	80	150	240
BHH-80-200-3W	80	200	290



Benri Adapter

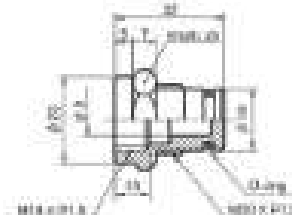


BA20-16-1



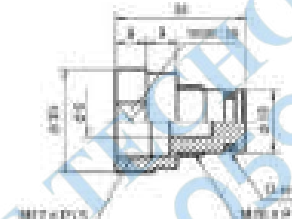
Model No.	Ø D	H	L
BA20-12-1	12	1/10	20
BA20-12-2	12	MT#1	20
BA20-16-1	16	1/10	23
BA20-16-2	16	MT#2	23

Benri Adapter for Nut Welding M4 • M5 • M6 • M8



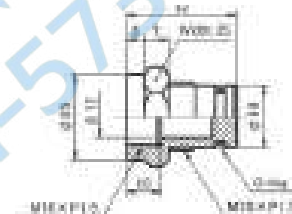
Model No.
NBA20-M18

Benri Adapter for Bolt Welding M10 • M12 • 7/6



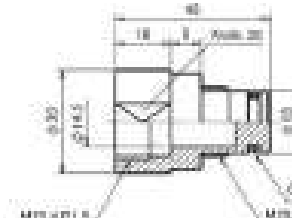
Model No.
NBA20-M22

Benri Adapter for Bolt Welding M4 • M5 • M6 • M8



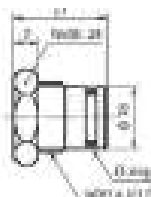
Model No.
BBA20-M18

Benri Adapter for Bolt Welding M10 • M12



Model No.
BBA20-M22

Benri Plug (For water leakage prevention)



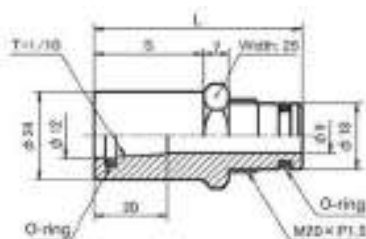
Model No.
BP20

Long Type

φ 12 T=1/10



BA20-57-12-1

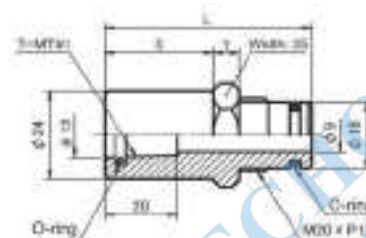


Model No.	S	L
BA20-57-12-1	30	57
BA20-77-12-1	50	77
BA20-97-12-1	70	97

φ 12 T=MT#1



BA20-57-12-2

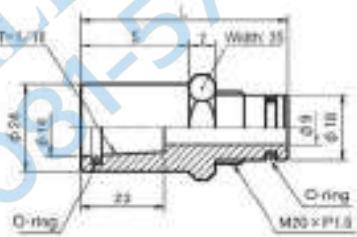


Model No.	S	L
BA20-57-12-2	30	57
BA20-77-12-2	50	77
BA20-97-12-2	70	97

φ 16 T=1/10



BA20-57-16-1

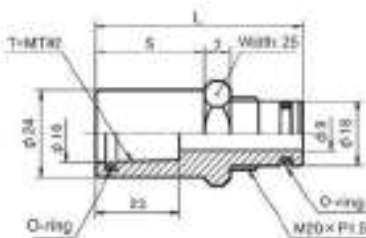


Model No.	S	L
BA20-57-16-1	30	57
BA20-77-16-1	50	77
BA20-97-16-1	70	97

φ 16 T=MT#2



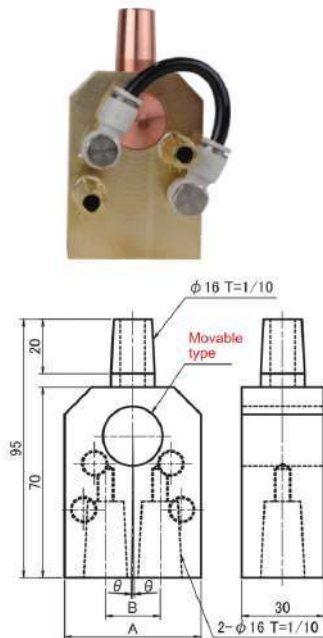
BA20-57-16-2



Model No.	S	L
BA20-57-16-2	30	57
BA20-77-16-2	50	77
BA20-97-16-2	70	97

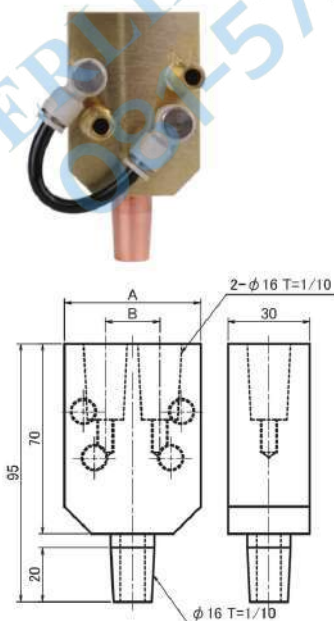
Tip spacing 20mm

For Upper Electrodes (Movable type)



Model No.	A	B	Θ
ASU161-20-16-1	50	20	0.5°

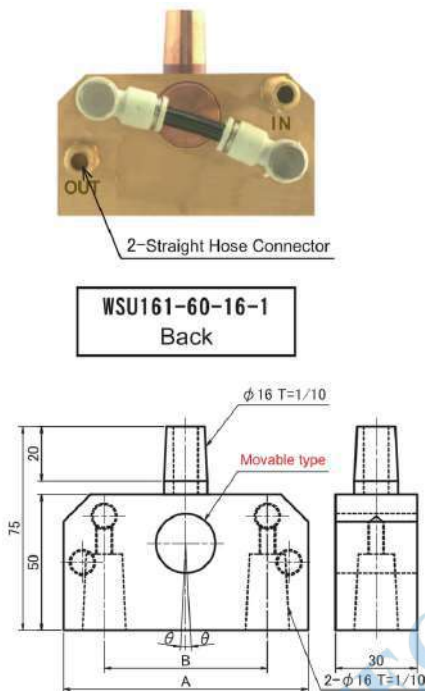
For Lower Electrodes (Fixed type)



Model No.	A	B
WSL161-20-16-1	50	20

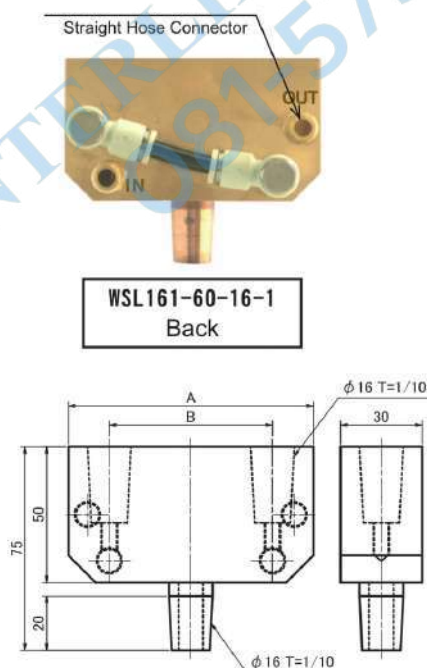
Tip spacing 30mm~150mm

For Upper Electrodes (Movable type)



Model No.	A	B	Θ
ASU161-30-16-1	60	30	1.5°
ASU161-40-16-1	70	40	3°
ASU161-50-16-1	80	50	3°
ASU161-60-16-1	90	60	3°
ASU161-70-16-1	100	70	2°
ASU161-80-16-1	110	80	2°
ASU161-90-16-1	120	90	2°
ASU161-100-16-1	130	100	2°
ASU161-110-16-1	140	110	1.5°
ASU161-120-16-1	150	120	1.5°
ASU161-130-16-1	160	130	1.5°
ASU161-140-16-1	170	140	1.5°
ASU161-150-16-1	180	150	1.5°

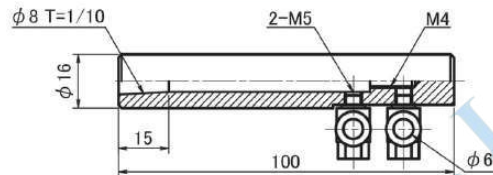
For Lower Electrodes (Fixed type)



Model No.	A	B
WSL161-30-16-1	60	30
WSL161-40-16-1	70	40
WSL161-50-16-1	80	50
WSL161-60-16-1	90	60
WSL161-70-16-1	100	70
WSL161-80-16-1	110	80
WSL161-90-16-1	120	90
WSL161-100-16-1	130	100
WSL161-110-16-1	140	110
WSL161-120-16-1	150	120
WSL161-130-16-1	160	130
WSL161-140-16-1	170	140
WSL161-150-16-1	180	150

$\phi 8$ T=1/10

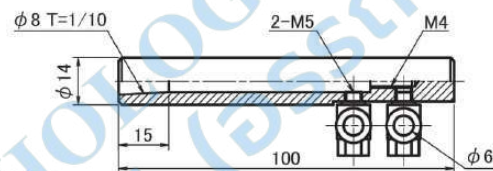
$\phi 16$ (Water-cooling)



Model No.

SHL-16100-8-1

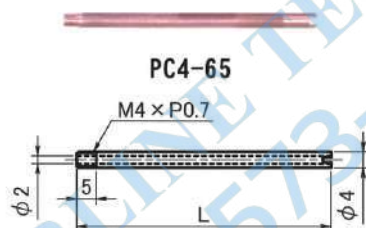
$\phi 14$ (Water-cooling)



Model No.

SHL-14100-8-1

$\phi 4$ Cooling Pipe



PC4-65

Model No.

Usage

L

PC4-65

Bent tip

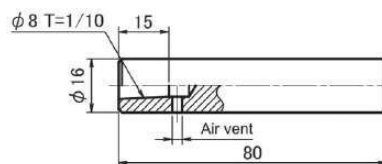
65

PC4-80

Straight tip

80

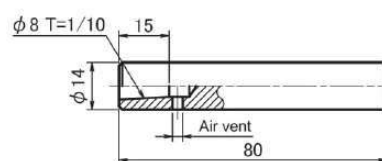
$\phi 16$ (Without Water-cooling)



Model No.

SHL-1680-8-1

$\phi 14$ (Without Water-cooling)



Model No.

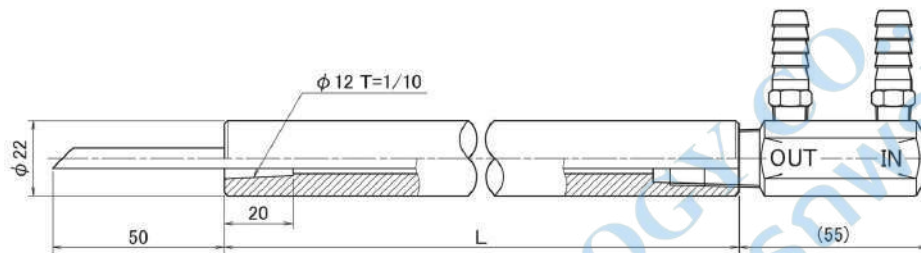
SHL-1480-8-1

$\phi 22$

$\phi 12$ T=1/10



SHL-22150-12-1

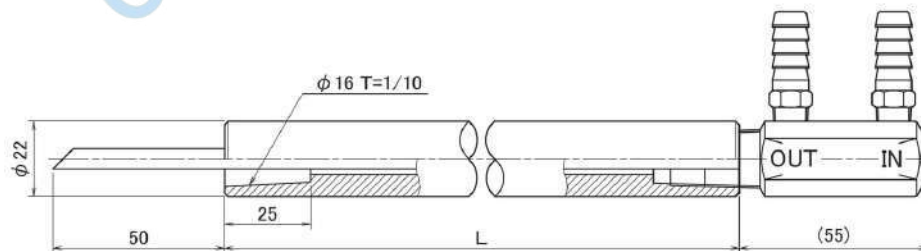


Model No.	L	Model No.	L
SHL-2270-12-1	70	SHL-22200-12-1	200
SHL-22100-12-1	100	SHL-22250-12-1	250
SHL-22150-12-1	150		

$\phi 16$ T=1/10



SHL-22150-16-1



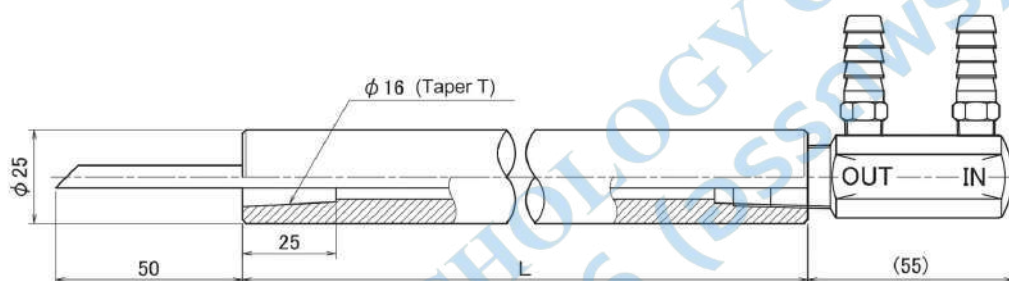
Model No.	L	Model No.	L
SHL-2270-16-1	70	SHL-22200-16-1	200
SHL-22100-16-1	100	SHL-22250-16-1	250
SHL-22150-16-1	150		

φ 25

φ 16 T=1/10 • MT#2 • 1/5



SHL-25150-1



Model No.	L	T
SHL-2550-1	50	1/10
SHL-2560-1	60	1/10
SHL-2570-1	70	1/10
SHL-2580-1	80	1/10
SHL-2590-1	90	1/10
SHL-25100-1	100	1/10
SHL-25150-1	150	1/10
SHL-25200-1	200	1/10
SHL-25250-1	250	1/10
SHL-25300-1	300	1/10
SHL-25350-1	350	1/10
SHL-25400-1	400	1/10

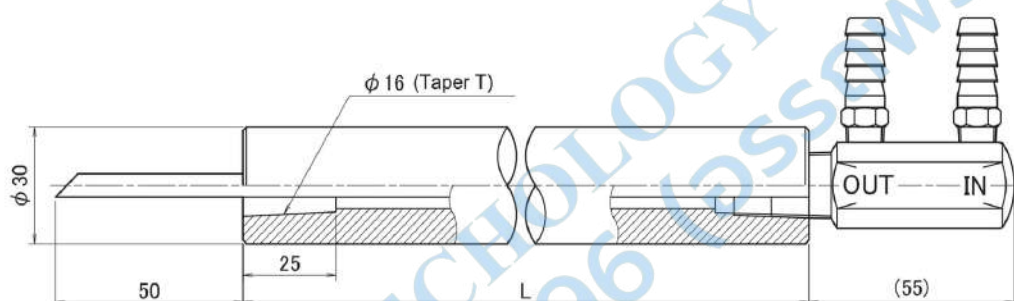
Model No.	L	T
SHL-25100-2	100	MT#2
SHL-25150-2	150	MT#2
SHL-25200-2	200	MT#2
SHL-25250-2	250	MT#2
SHL-25300-2	300	MT#2
SHL-25350-2	350	MT#2
SHL-25400-2	400	MT#2
SHL-25100-3	100	1/5
SHL-25150-3	150	1/5
SHL-25200-3	200	1/5
SHL-25250-3	250	1/5
SHL-25300-3	300	1/5

φ 30

φ 16 T=1/10 • MT#2 • 1/5



SHL-30150-1



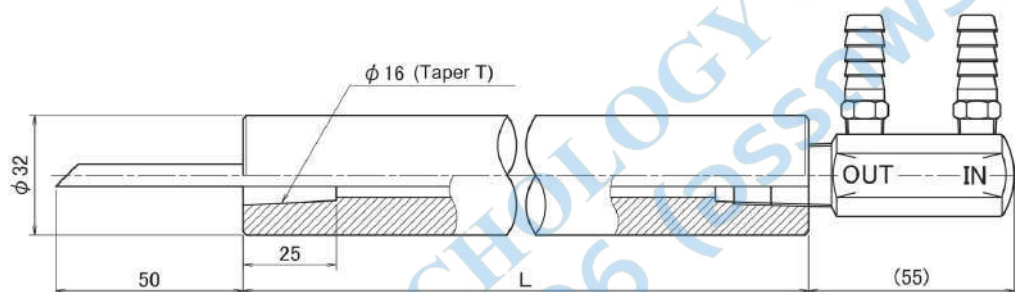
Model No.	L	T
SHL-30100-1	100	1/10
SHL-30150-1	150	1/10
SHL-30200-1	200	1/10
SHL-30250-1	250	1/10
SHL-30300-1	300	1/10
SHL-30350-1	350	1/10
SHL-30100-2	100	MT#2
SHL-30150-2	150	MT#2
SHL-30200-2	200	MT#2
SHL-30250-2	250	MT#2
SHL-30300-2	300	MT#2
SHL-30350-2	350	MT#2
SHL-30100-3	100	1/5
SHL-30150-3	150	1/5
SHL-30200-3	200	1/5
SHL-30250-3	250	1/5
SHL-30300-3	300	1/5

φ 32

φ 16 T=1/10 • MT#2 • 1/5



SHL-32150-1



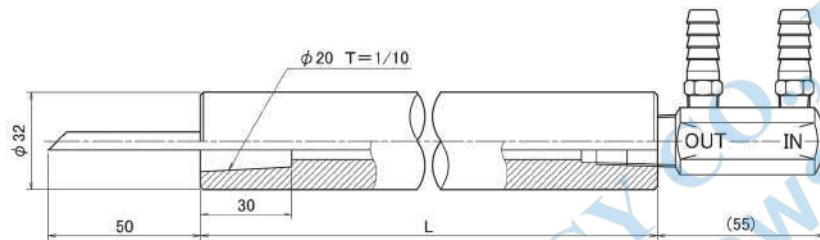
Model No.	L	T
SHL-32100-1	100	1/10
SHL-32150-1	150	1/10
SHL-32200-1	200	1/10
SHL-32250-1	250	1/10
SHL-32300-1	300	1/10
SHL-32350-1	350	1/10
SHL-32100-2	100	MT#2
SHL-32150-2	150	MT#2
SHL-32200-2	200	MT#2
SHL-32250-2	250	MT#2
SHL-32300-2	300	MT#2
SHL-32350-2	350	MT#2
SHL-32100-3	100	1/5
SHL-32150-3	150	1/5
SHL-32200-3	200	1/5
SHL-32250-3	250	1/5
SHL-32300-3	300	1/5

$\phi 32$

$\phi 20$ T=1/10



SHL-32150-20-1

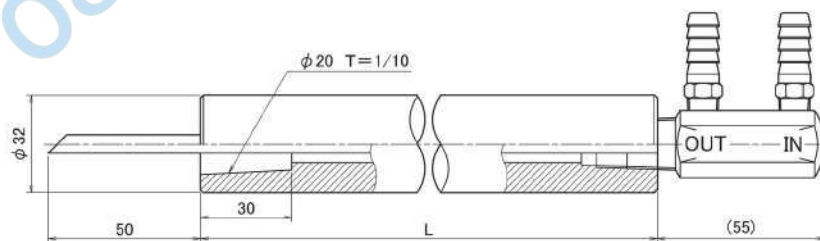


Model No.	L
SHL-32100-20-1	100
SHL-32150-20-1	150
SHL-32200-20-1	200
SHL-32250-20-1	250
SHL-32300-20-1	300

$\phi 22$ T=1/10



SHL-32150-20-1



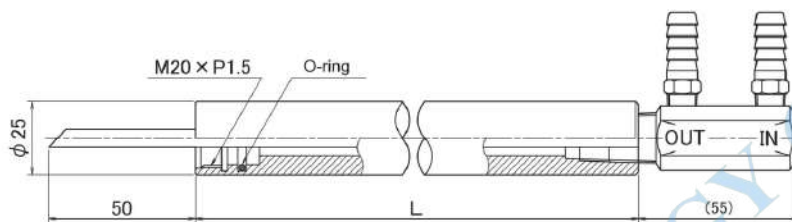
Model No.	L
SHL-32100-22-1	100
SHL-32150-22-1	150
SHL-32200-22-1	200
SHL-32250-22-1	250
SHL-32300-22-1	300

φ 25



RHL-25250

Model No.	L
RHL-25250	250
RHL-25300	300

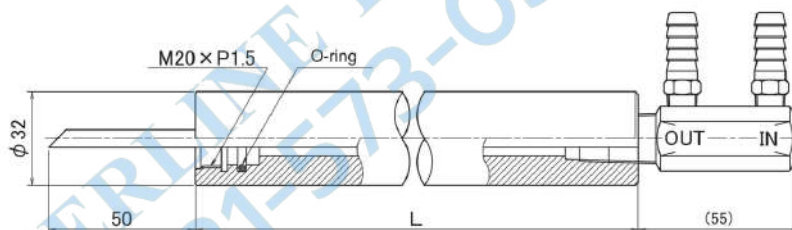


φ 32



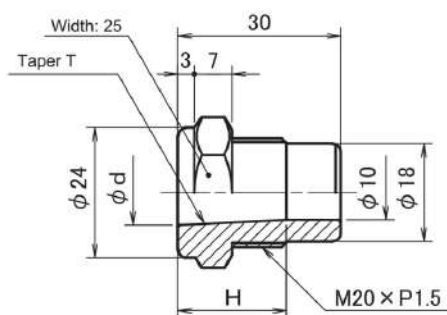
RHL-32250

Model No.	L
RHL-32250	250
RHL-32300	300



φ Robot Screw Adapter

Model No.	Ø d	T	H
RHA20-12-1	12	1/10	20
RHA20-12-2	12	MT#1	20
RHA20-16-1	16	1/10	25
RHA20-16-2	16	MT#2	25
RHA20-16-3	16	1/5	25



RHA20-12-1

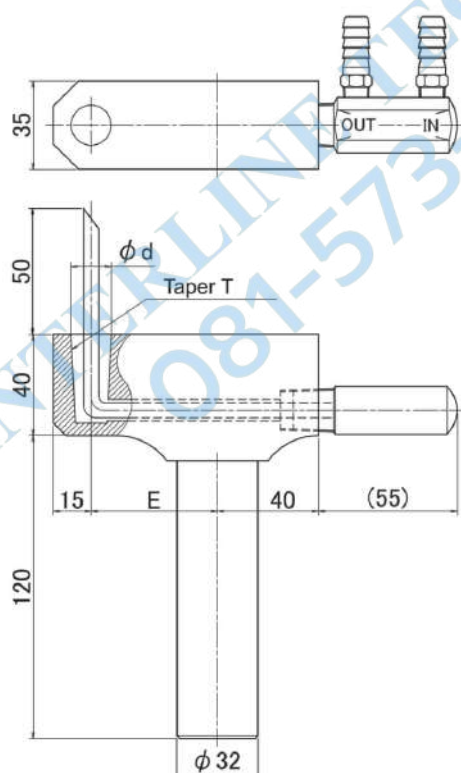
90° Type

φ 32

Split structure enables
higher endurance



LHP800-32150-16-1



Model No.	E	Ø d	T
LHP800-3250-12-1	50	12	1/10
LHP800-3250-16-1	50	16	1/10
LHP800-3250-16-2	50	16	MT#2

Model No.	E	Ø d	T
LHP800-3275-12-1	75	12	1/10
LHP800-3275-16-1	75	16	1/10
LHP800-3275-16-2	75	16	MT#2

Model No.	E	Ø d	T
LHP800-32100-12-1	100	12	1/10
LHP800-32100-16-1	100	16	1/10
LHP800-32100-16-2	100	16	MT#2

Model No.	E	Ø d	T
LHP800-32125-12-1	125	12	1/10
LHP800-32125-16-1	125	16	1/10
LHP800-32125-16-2	125	16	MT#2

Model No.	E	Ø d	T
LHP800-32150-12-1	150	12	1/10
LHP800-32150-16-1	150	16	1/10
LHP800-32150-16-2	150	16	MT#2

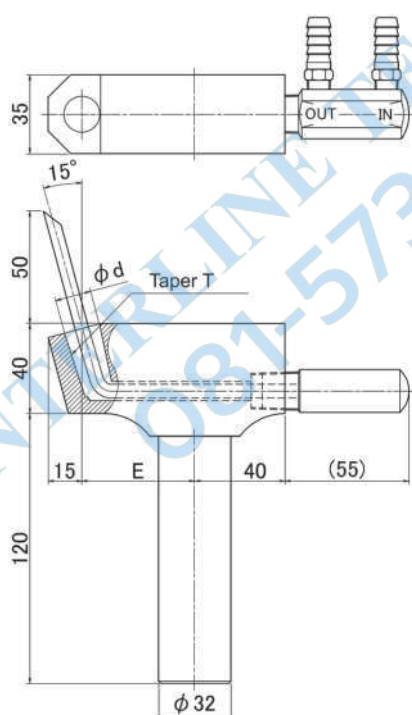
15° Type

φ 32

Split structure enables
higher endurance



LHP800-15-32150-16-1



Model No.	E	Ø d	T
LHP800-15-3250-12-1	50	12	1/10
LHP800-15-3250-16-1	50	16	1/10

Model No.	E	Ø d	T
LHP800-15-3275-12-1	75	12	1/10
LHP800-15-3275-16-1	75	16	1/10

Model No.	E	Ø d	T
LHP800-15-32100-12-1	100	12	1/10
LHP800-15-32100-16-1	100	16	1/10

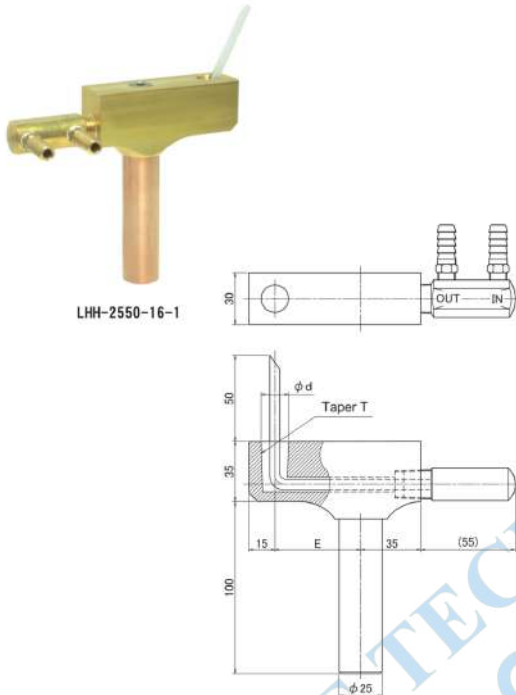
Model No.	E	Ø d	T
LHP800-15-32125-12-1	125	12	1/10
LHP800-15-32125-16-1	125	16	1/10

Model No.	E	Ø d	T
LHP800-15-32150-12-1	150	12	1/10
LHP800-15-32150-16-1	150	16	1/10

90° Type

φ 25

Split structure enables higher endurance



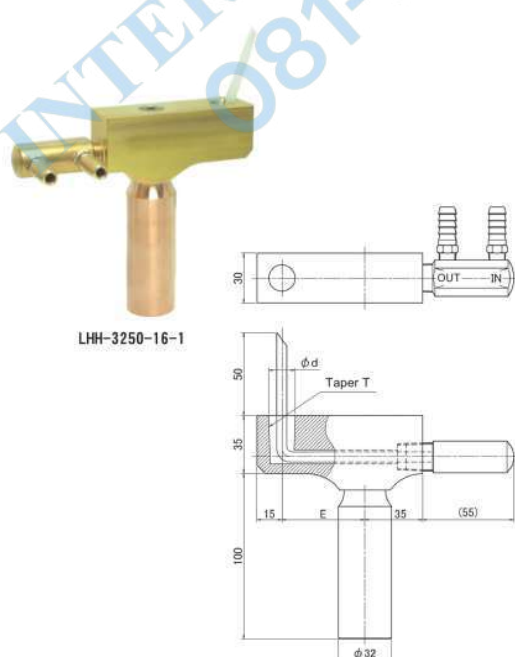
Model No.	E	Ø d	T
LHH-2550-12-1	50	12	1/10
LHH-2550-16-1	50	16	1/10
LHH-2550-16-2	50	16	MT#2
LHH-2550-16-3	50	16	1/5

Model No.	E	Ø d	T
LHH-2575-12-1	75	12	1/10
LHH-2575-16-1	75	16	1/10
LHH-2575-16-2	75	16	MT#2
LHH-2575-16-3	75	16	1/5

Model No.	E	Ø d	T
LHH-25100-12-1	100	12	1/10
LHH-25100-16-1	100	16	1/10
LHH-25100-16-2	100	16	MT#2
LHH-25100-16-3	100	16	1/5

φ 32

Split structure enables higher endurance



Model No.	E	Ø d	T
LHH-3250-12-1	50	12	1/10
LHH-3250-16-1	50	16	1/10
LHH-3250-16-2	50	16	MT#2
LHH-3250-16-3	50	16	1/5

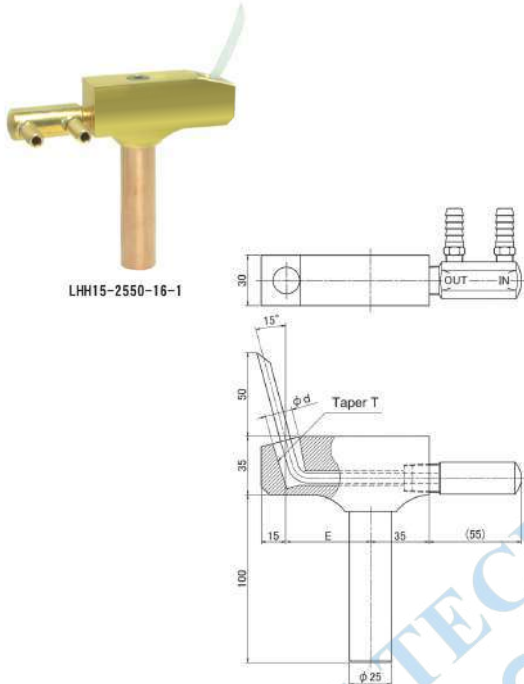
Model No.	E	Ø d	T
LHH-3275-12-1	75	12	1/10
LHH-3275-16-1	75	16	1/10
LHH-3275-16-2	75	16	MT#2
LHH-3275-16-3	75	16	1/5

Model No.	E	Ø d	T
LHH-32100-12-1	100	12	1/10
LHH-32100-16-1	100	16	1/10
LHH-32100-16-2	100	16	MT#2
LHH-32100-16-3	100	16	1/5

15° Type

φ 25

Split structure enables higher endurance



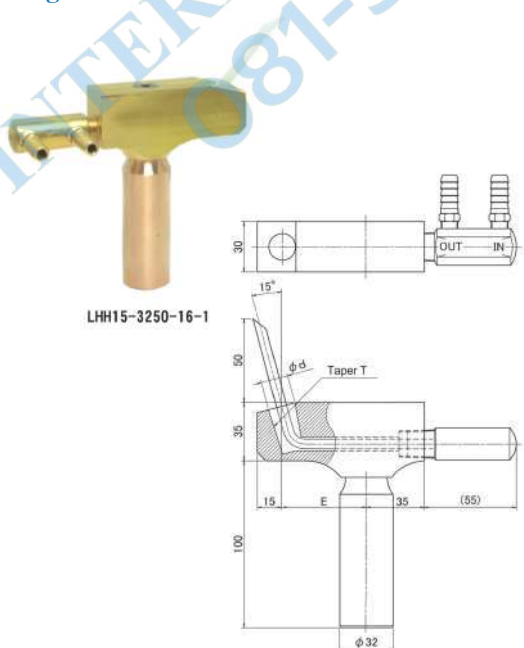
Model No.	E	Ø d	T
LHH15-2550-12-1	50	12	1/10
LHH15-2550-16-1	50	16	1/10
LHH15-2550-16-2	50	16	MT#2
LHH15-2550-16-3	50	16	1/5

Model No.	E	Ø d	T
LHH15-2575-12-1	75	12	1/10
LHH15-2575-16-1	75	16	1/10
LHH15-2575-16-2	75	16	MT#2
LHH15-2575-16-3	75	16	1/5

Model No.	E	Ø d	T
LHH15-25100-12-1	100	12	1/10
LHH15-25100-16-1	100	16	1/10
LHH15-25100-16-2	100	16	MT#2
LHH15-25100-16-3	100	16	1/5

φ 32

Split structure enables higher endurance



Model No.	E	Ø d	T
LHH15-3250-12-1	50	12	1/10
LHH15-3250-16-1	50	16	1/10
LHH15-3250-16-2	50	16	MT#2
LHH15-3250-16-3	50	16	1/5

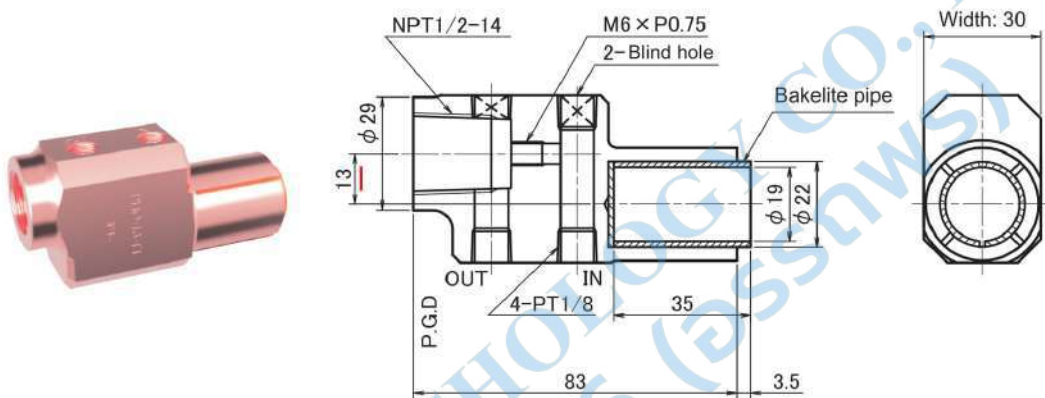
Model No.	E	Ø d	T
LHH15-3275-12-1	75	12	1/10
LHH15-3275-16-1	75	16	1/10
LHH15-3275-16-2	75	16	MT#2
LHH15-3275-16-3	75	16	1/5

Model No.	E	Ø d	T
LHH15-32100-12-1	100	12	1/10
LHH15-32100-16-1	100	16	1/10
LHH15-32100-16-2	100	16	MT#2
LHH15-32100-16-3	100	16	1/5

NPT Screw (Offset: 13mm)

Model No.

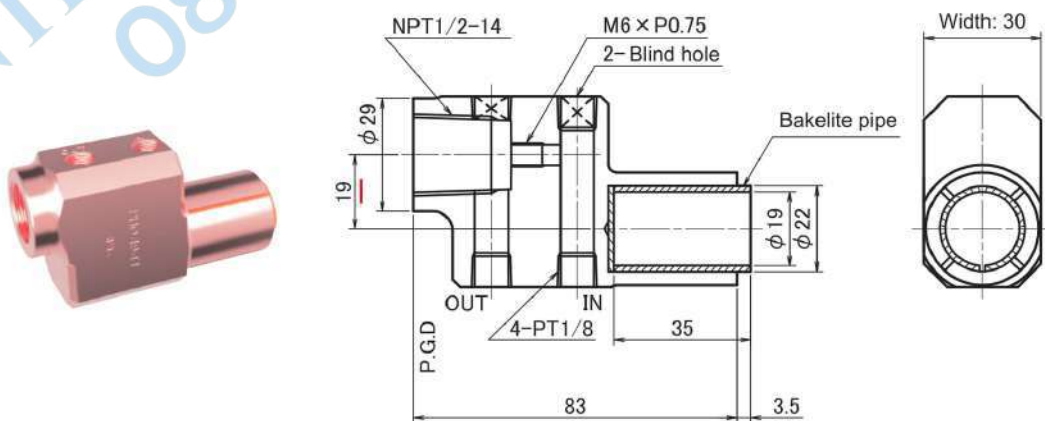
PH-13-T1



NPT Screw (Offset: 19mm)

Model No.

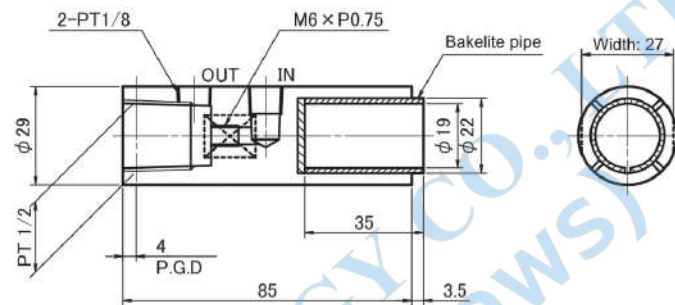
PH-19-T1



Point Holder

Model No.

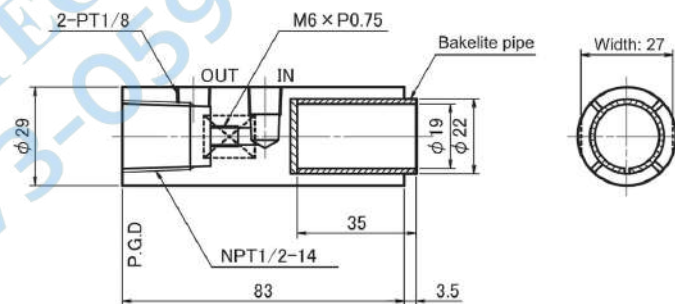
PH-N1



Point Holder

Model No.

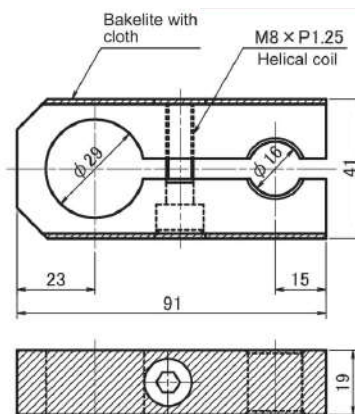
PH-T1



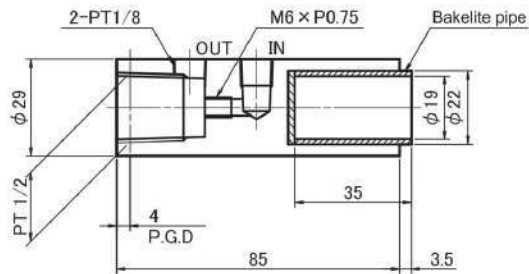
Clamper

Model No.

PK-194191



PT Screw

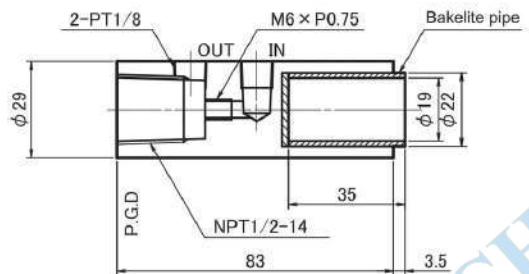


Model No.

PH-PT1/2-85



NPT Screw

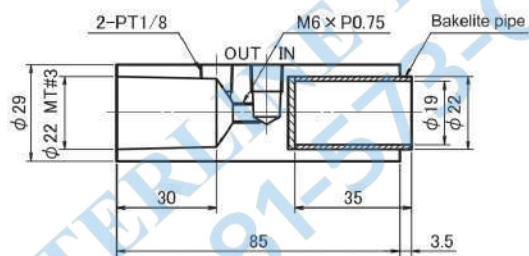


Model No.

PH-NPT1/2-83



Ø 22 T=MT#3

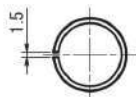
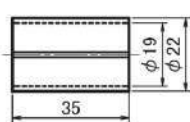


Model No.

PH-22MT-85



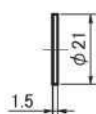
Bakelite Pipe



Model No.

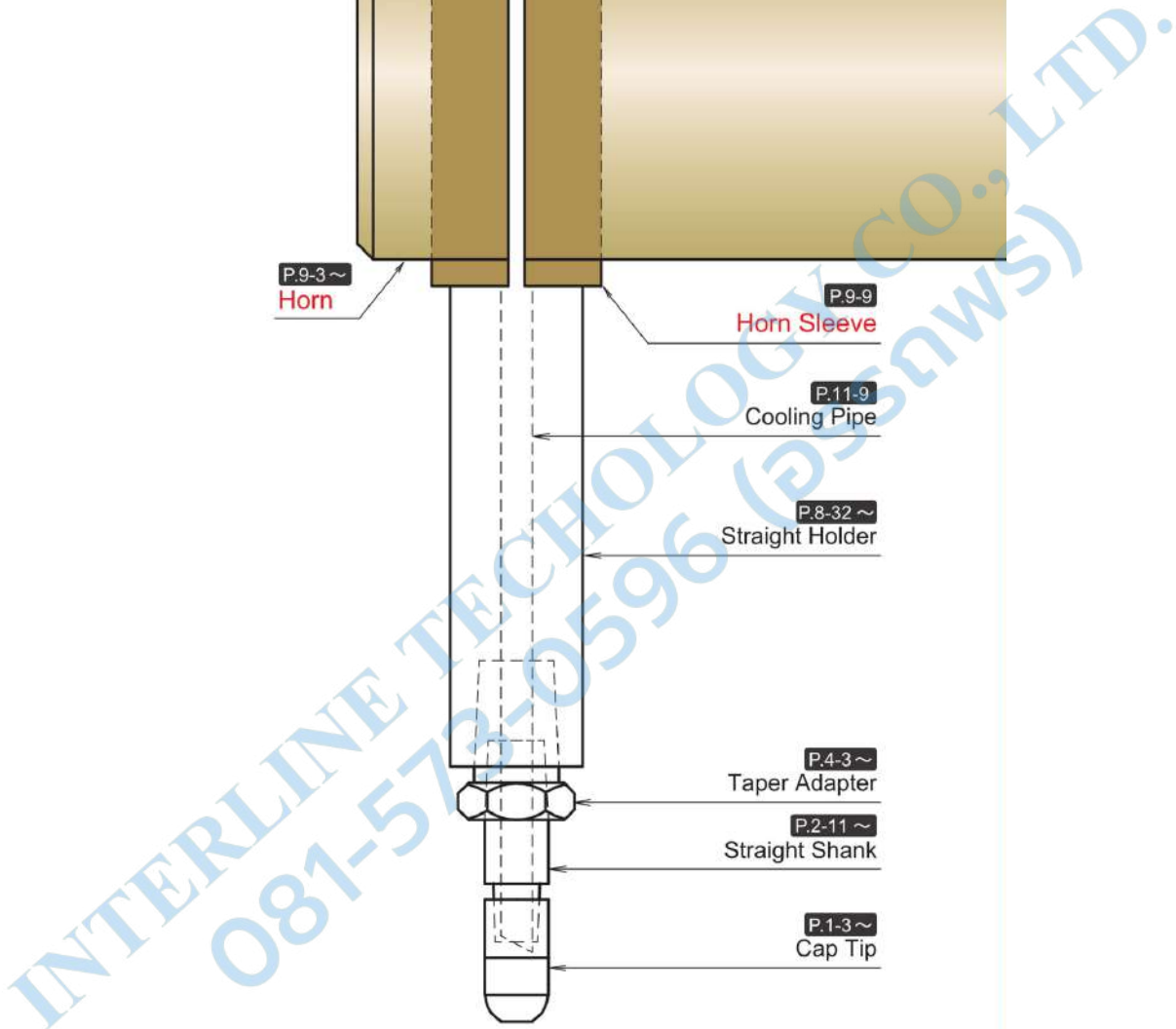
PH-BP-2219-35

Bakelite Washer



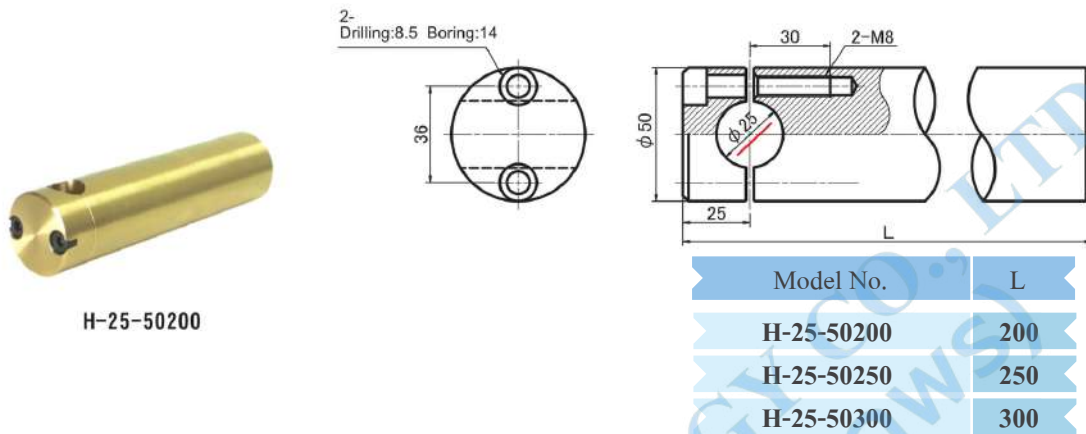
Model No.

PH-W-21-1.5

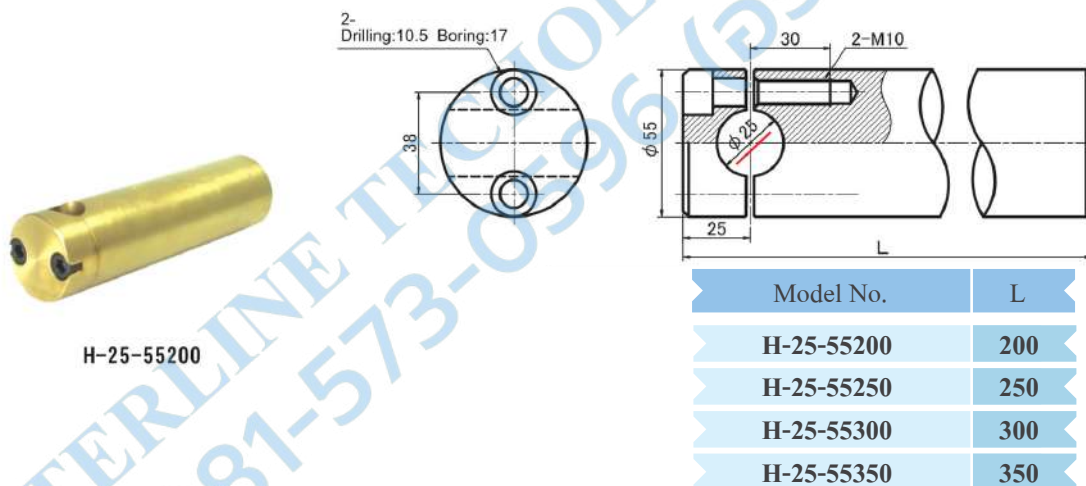


Suitable for Stationary Spot Welding Machines

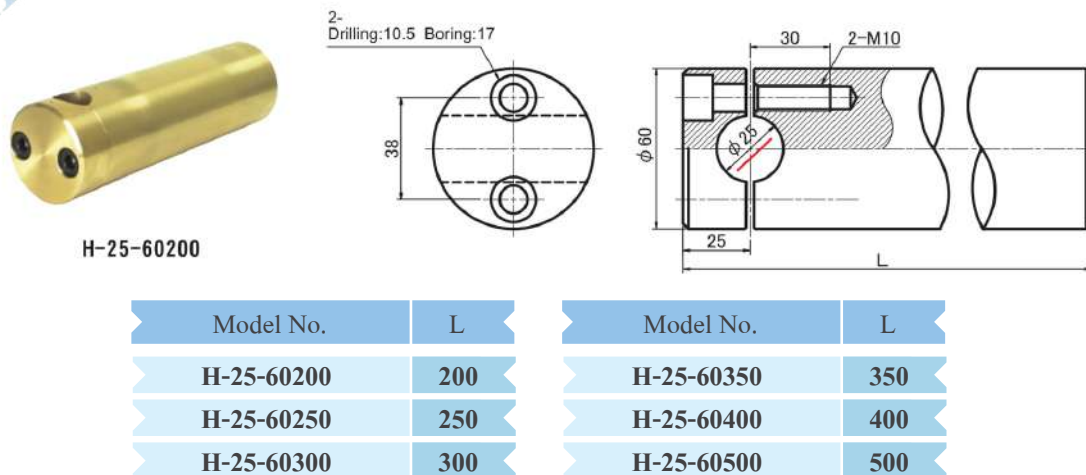
$\phi 50$ Holder diameter: $\phi 25$



$\phi 55$ Holder diameter: $\phi 25$

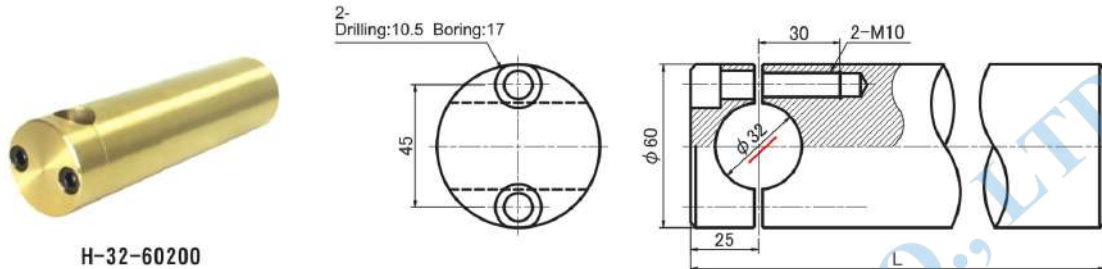


$\phi 60$ Holder diameter: $\phi 25$



Suitable for Stationary Spot Welding Machines

φ 60 Holder diameter: φ 32

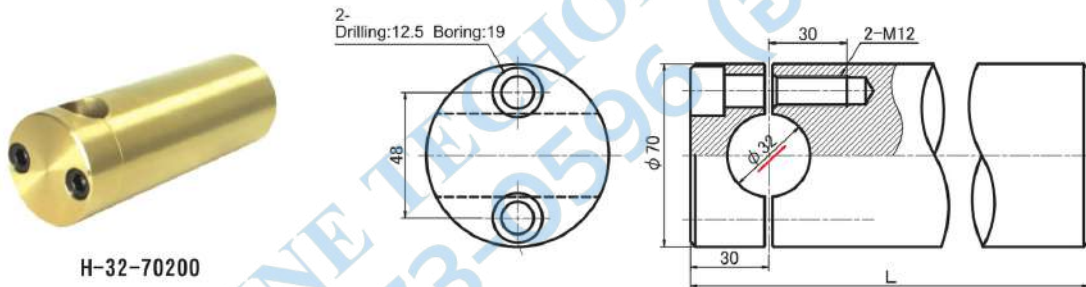


H-32-60200

Model No.	L
H-32-60200	200
H-32-60250	250
H-32-60300	300

Model No.	L
H-32-60350	350
H-32-60400	400
H-32-60500	500

φ 70 Holder diameter: φ 32

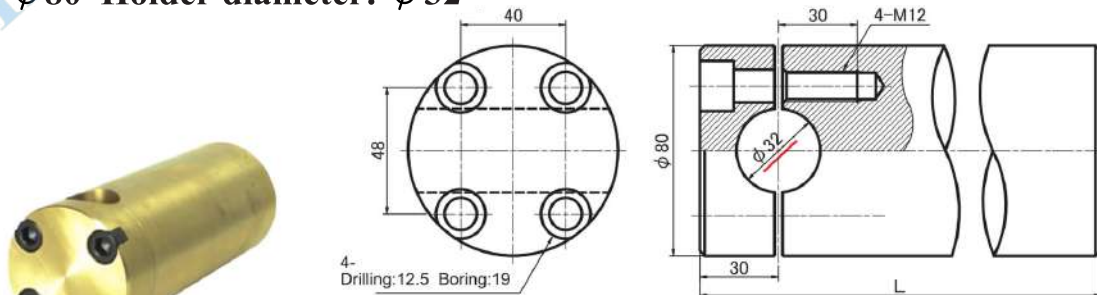


H-32-70200

Model No.	L
H-32-70200	200
H-32-70250	250
H-32-70300	300

Model No.	L
H-32-70350	350
H-32-70400	400

φ 80 Holder diameter: φ 32

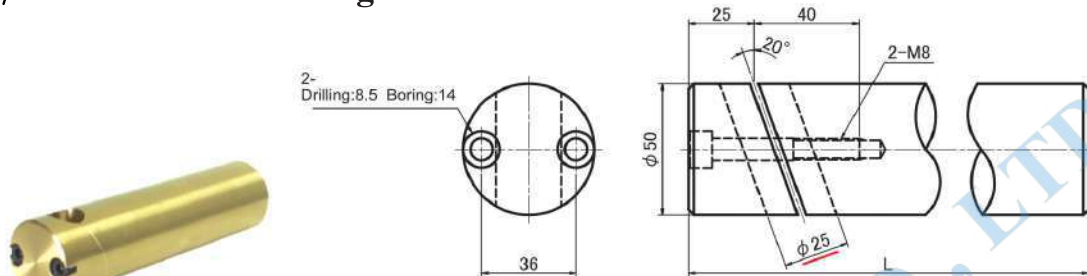


H-32-80200

Model No.	L
H-32-80200	200
H-32-80250	250
H-32-80300	300

Suitable for Stationary Spot Welding Machines

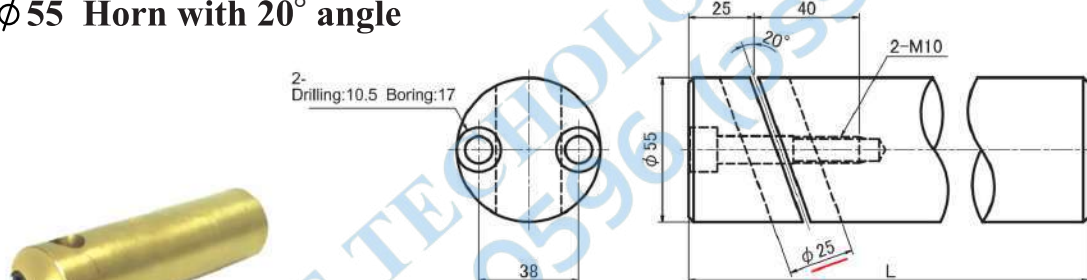
φ 50 Horn with 20° angle



H20-25-50200

Model No.	L
H20-25-50200	200
H20-25-50250	250
H20-25-50300	300

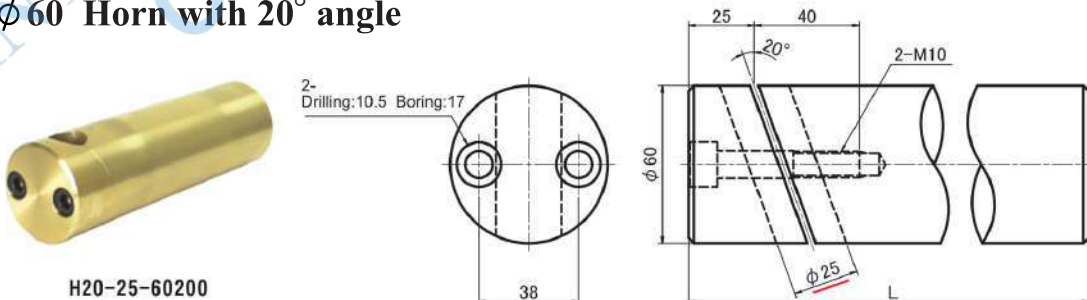
φ 55 Horn with 20° angle



H20-25-55200

Model No.	L
H20-25-55200	200
H20-25-55250	250
H20-25-55300	300
H20-25-55350	350

φ 60 Horn with 20° angle

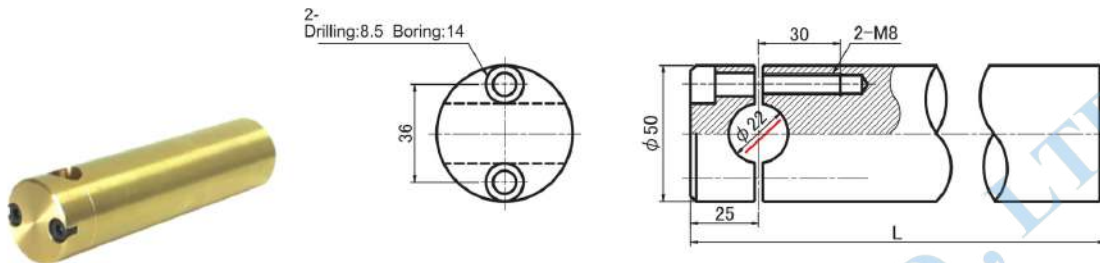


H20-25-60200

Model No.	L	Model No.	L
H20-25-60200	200	H20-25-60350	350
H20-25-60250	250	H20-25-60400	400
H20-25-60300	300	H20-25-60500	500

Suitable for Stationary Spot Welding Machines

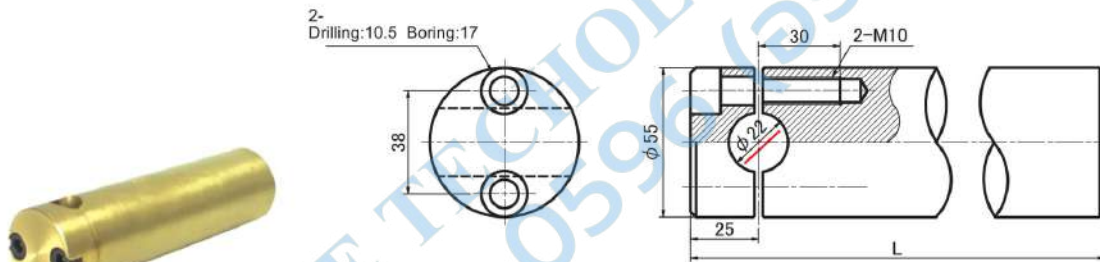
$\phi 50$ Holder diameter: $\phi 22$



H-22-50200

Model No.	L
H-22-50200	200
H-22-50250	250
H-22-50300	300

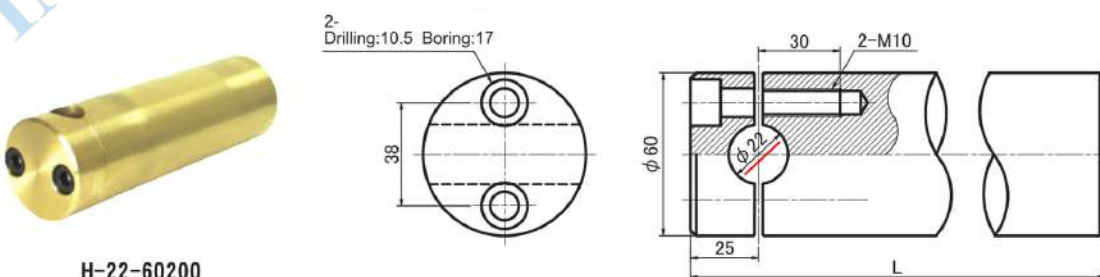
$\phi 55$ Holder diameter: $\phi 22$



H-22-55200

Model No.	L
H-22-55200	200
H-22-55250	250
H-22-55300	300
H-22-55350	350

$\phi 60$ Holder diameter: $\phi 22$



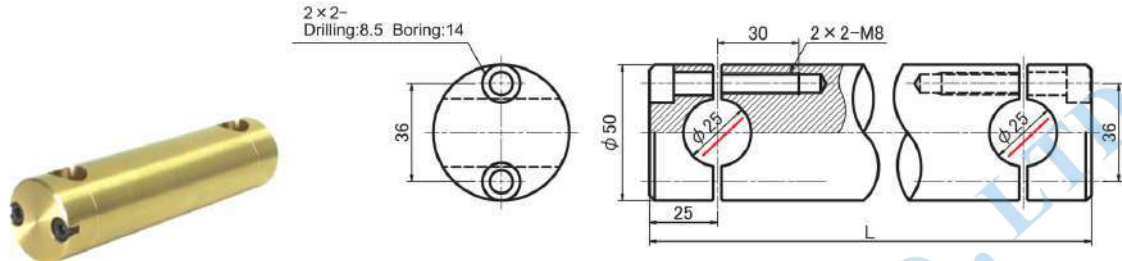
H-22-60200

Model No.	L
H-22-60200	200
H-22-60250	250
H-22-60300	300

Model No.	L
H-22-60350	350
H-22-60400	400
H-22-60500	500

Suitable for Stationary Spot Welding Machines

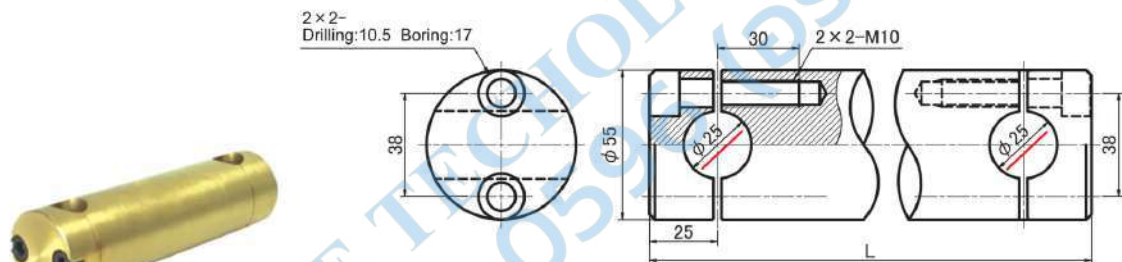
φ 50 Horn with both end hole



H-25-25-50200

Model No.	L
H-25-25-50200	200
H-25-25-50250	250
H-25-25-50300	300

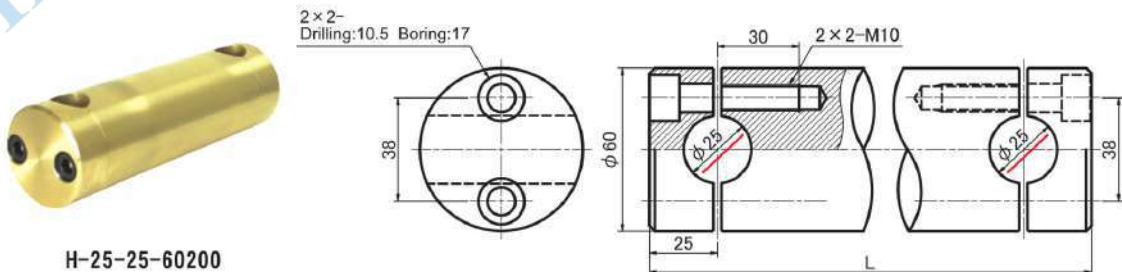
φ 55 Horn with both end hole



H-25-25-55200

Model No.	L
H-25-25-55200	200
H-25-25-55250	250
H-25-25-55300	300
H-25-25-55350	350

φ 60 Horn with both end hole

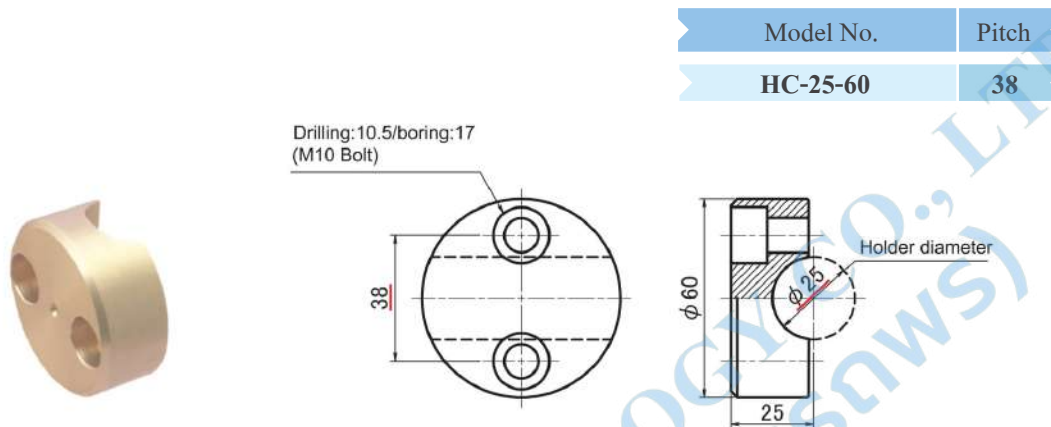


H-25-25-60200

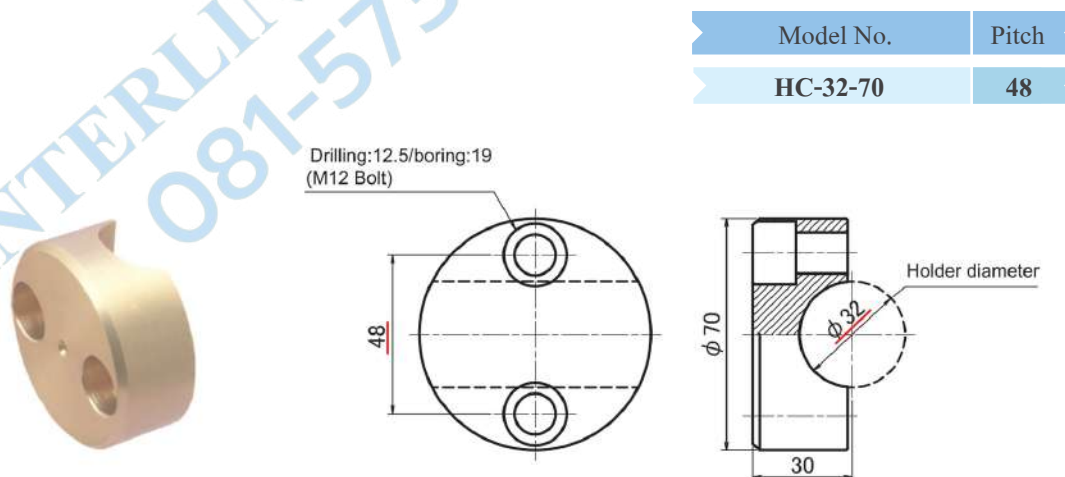
Model No.	L	Model No.	L
H-25-25-60200	200	H-25-25-60350	350
H-25-25-60250	250	H-25-25-60400	400
H-25-25-60300	300	H-25-25-60500	500

Suitable for Stationary Spot Welding Machines

$\phi 60$ Holder diameter: $\phi 25$



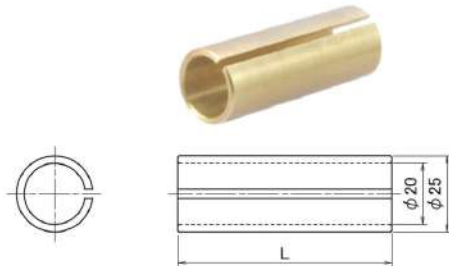
$\phi 70$ Holder diameter: $\phi 32$



Suitable for Stationary Spot Welding Machines

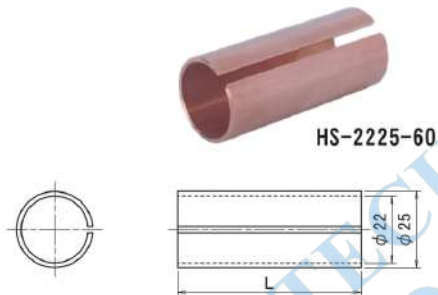
Horn Sleeve

suitable for $\phi 20$ Slim Type



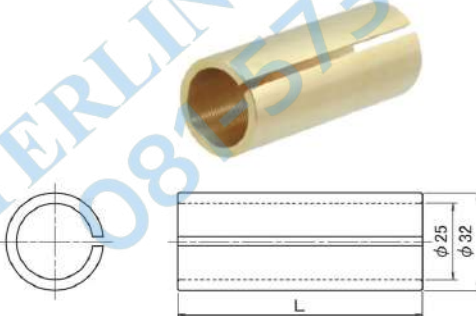
Model No.	L
HS-2025-70	70

Horn Sleeve



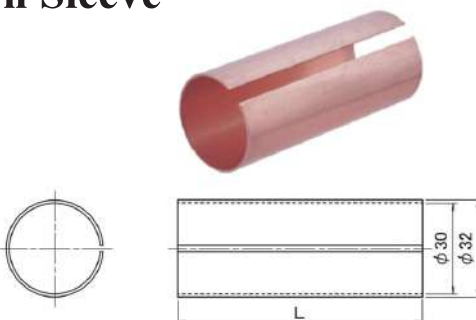
Model No.	L
HS-2225-50	50
HS-2225-55	55
HS-2225-60	60
HS-2225-70	70
HS-2225-80	80

Horn Sleeve



Model No.	L
HS-2532-80	80

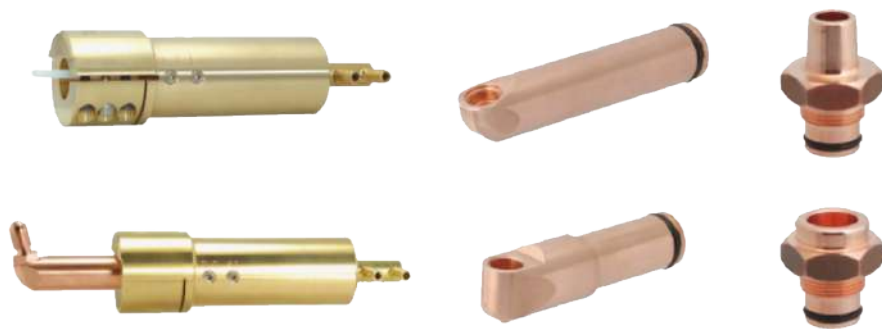
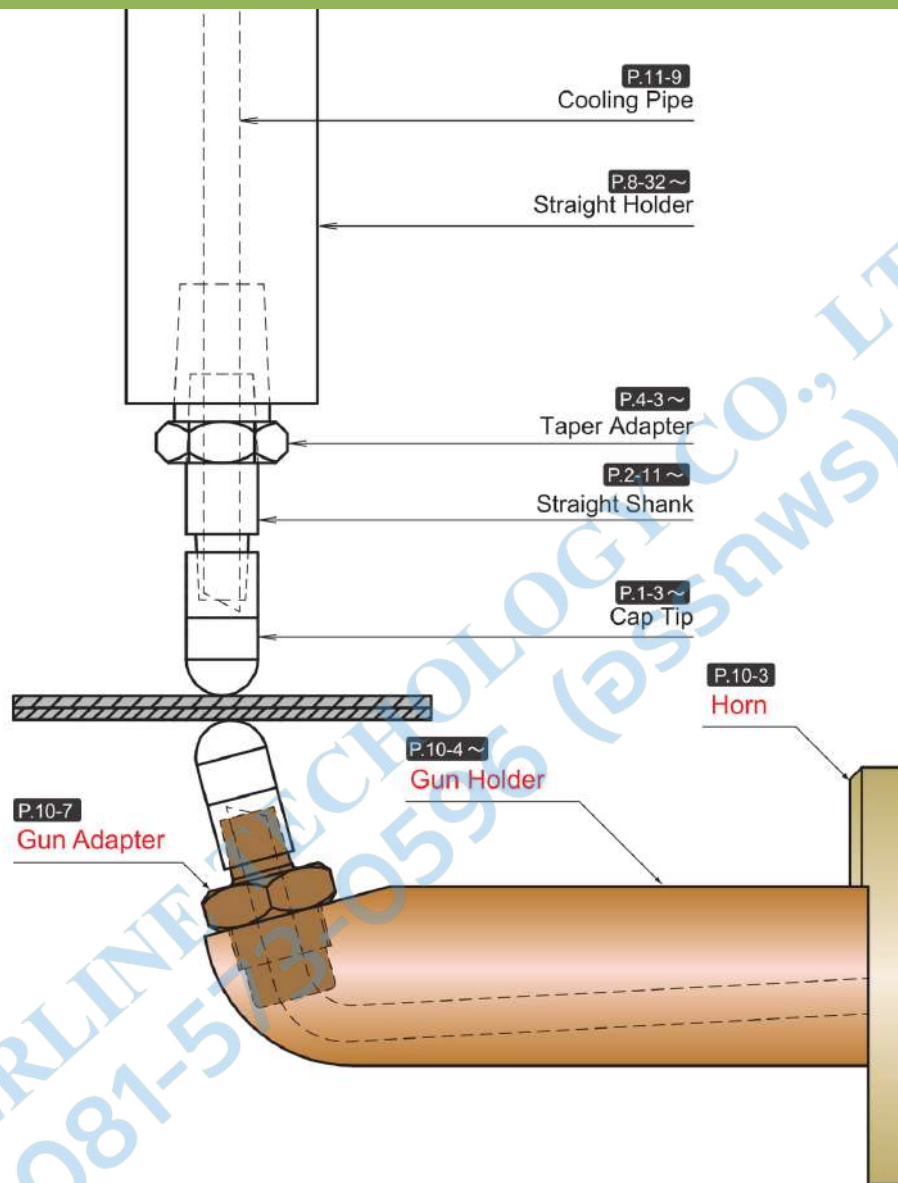
Horn Sleeve



Model No.	L
HS-3032-80	80

HORN HOLDERS

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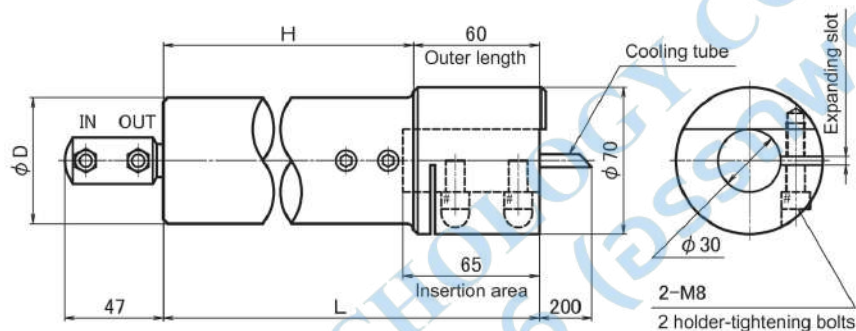
Horn

φ 55 • φ 60



HH-30-60200

Model No.	φ D	H	L
HH-30-55200	55	140	200
HH-30-55250	55	190	250
HH-30-60200	60	140	200
HH-30-60250	60	190	250

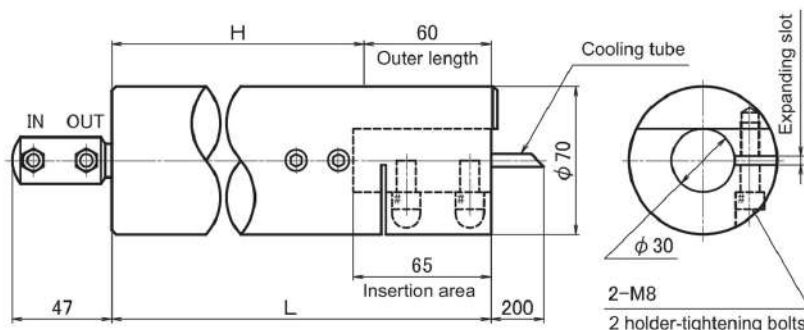


φ 70



HH-30-70200

Model No.	H	L
HH-30-70200	140	200
HH-30-70250	190	250



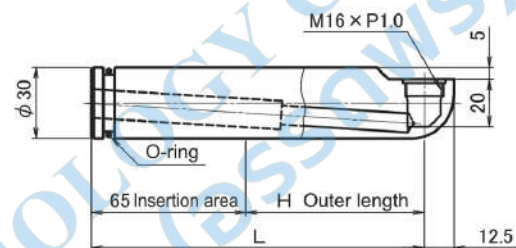
Gun Holder

Suitable for Gun Adapters
(90°)

Model No.	H	L
GH90-30-140-M16	75	140
GH90-30-165-M16	100	165
GH90-30-190-M16	125	190



GH90-30-140-M16

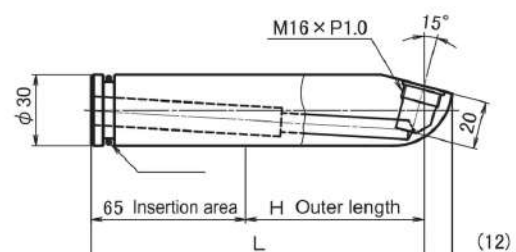


Suitable for Gun Adapters
(90°)

Model No.	H	L
GH15-30-140-M16	75	140
GH15-30-165-M16	100	165
GH15-30-190-M16	125	190



GH15-30-140-M16



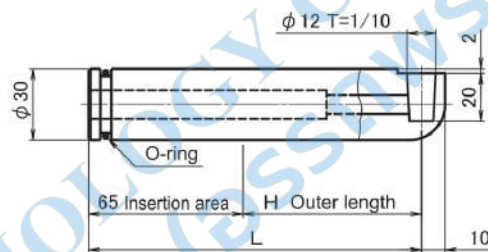
Gun Holder

Suitable for Tips
(90°)

Model No.	H	L
GH90-30-140-1	75	140
GH90-30-165-1	100	165
GH90-30-190-1	125	190
GH90-30-215-1	150	215



GH90-30-140-1

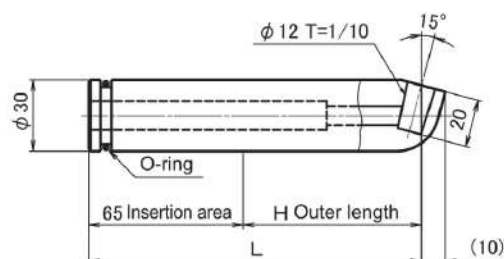


Suitable for Tips
(15°)

Model No.	H	L
GH15-30-140-1	75	140
GH15-30-165-1	100	165
GH15-30-190-1	125	190
GH15-30-215-1	150	215



GH15-30-140-1



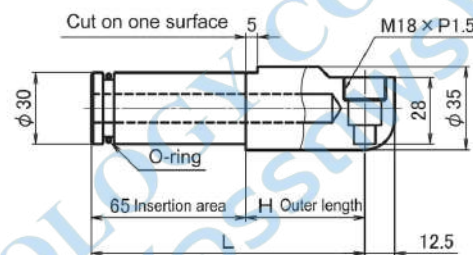
Gun Holder

**Suitable for Nut Welding
(M4 • M5 • M6 • M8)**

Model No.	H	L
GH90-30-115-M18	50	115
GH90-30-140-M18	75	140
GH90-30-165-M18	100	165



GH90-30-115-M18

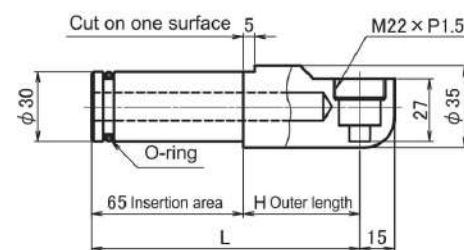


**Suitable for Nut Welding
(M10 • M12 • 7/16)**

Model No.	H	L
GH90-30-115-M22	50	115
GH90-30-140-M22	75	140
GH90-30-165-M22	100	165

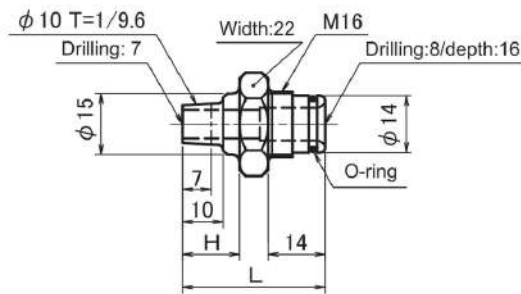


GH90-30-115-M22



Gun Adapter

Suitable for $\phi 12 \bullet \phi 13$ Cap Tips

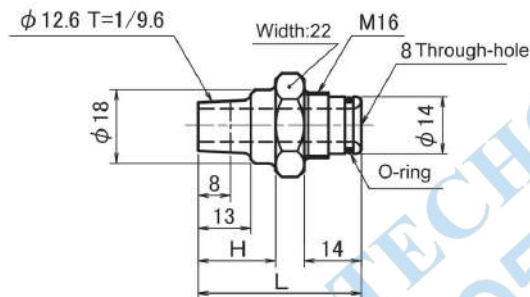


Model No.	H	L
GA16-10-31	10	31
GA16-10-35	14	35



GA16-10-31

Suitable for $\phi 16$ Cap Tips

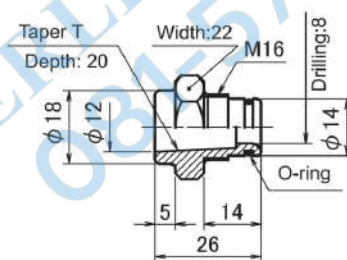


Model No.	H	L
GA16-12.6-34	13	34
GA16-12.6-40	19	40



GA16-12.6-34

Suitable for $\phi 12 \bullet \phi 13$ Shanks & Tips

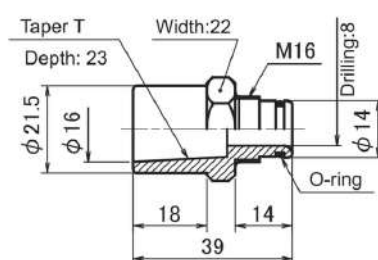


Model No.	H
GA16-12-1	1/10
GA16-12-2	MT#1



GA16-12-1

Suitable for $\phi 16$ Shanks & Tips



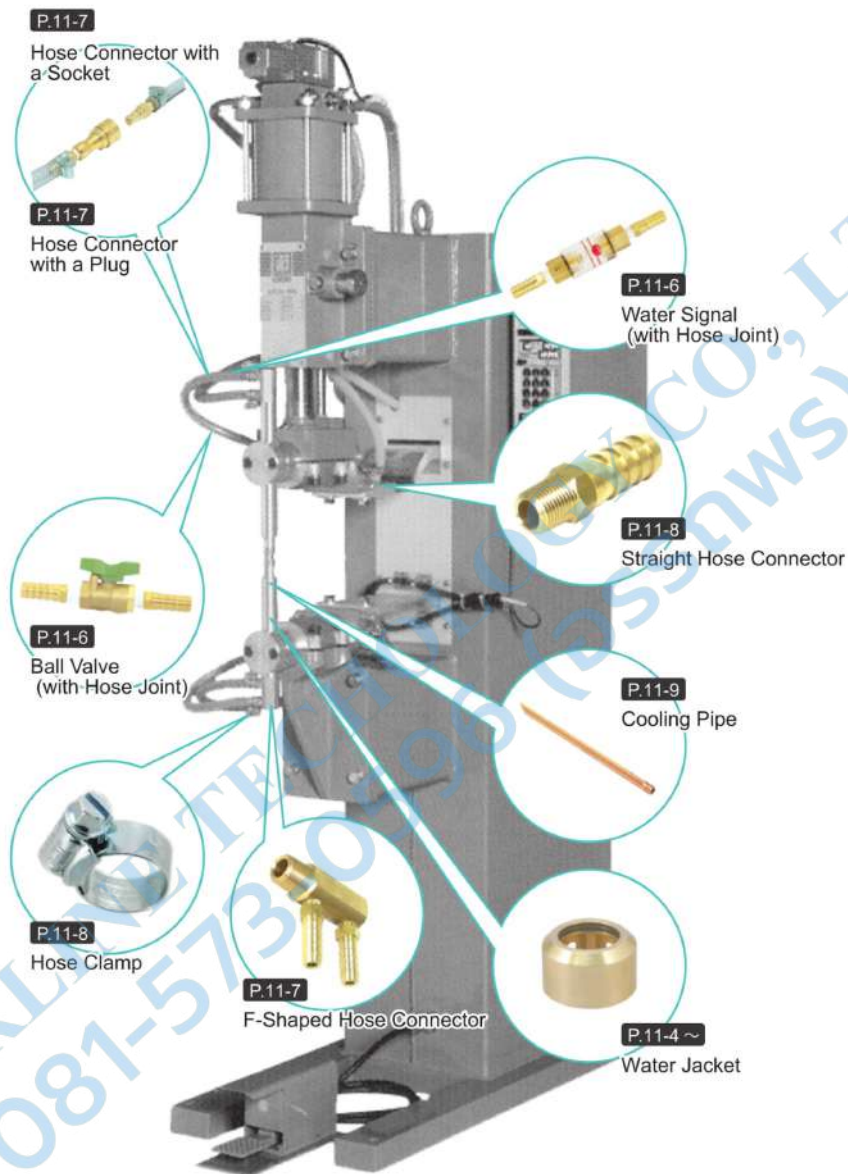
Model No.	T
GA16-16-1	1/10
GA16-16-2	MT#2



GA16-16-1

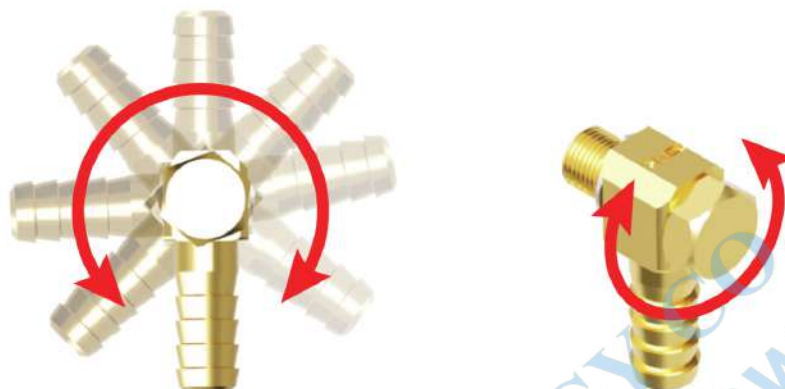
ELECTRODE ACCESSORIES

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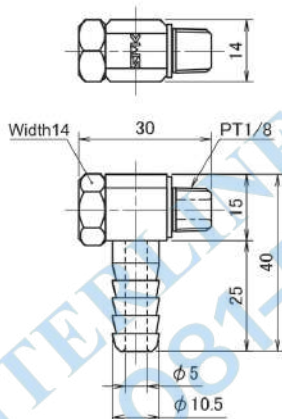
Rotary hose connector

Hose connector rotates 360°



Easy to change and adjust direction of the hose.

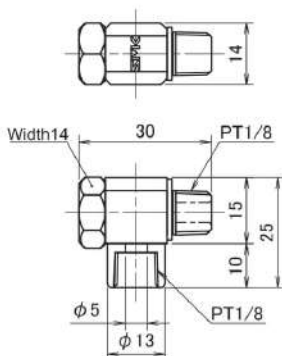
Integrated hose connector



Model No.

RHG-1/8

Separated hose connector



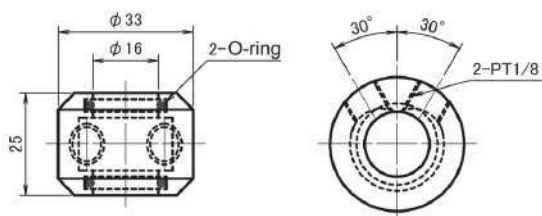
Model No.

RHGS-1/8

Water Jacket**Round Type $\phi 16$**

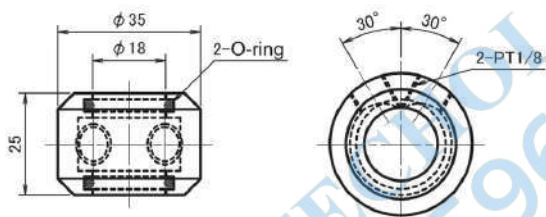
Model No.

MCN-WJ-3325-16

**Round Type $\phi 18$**

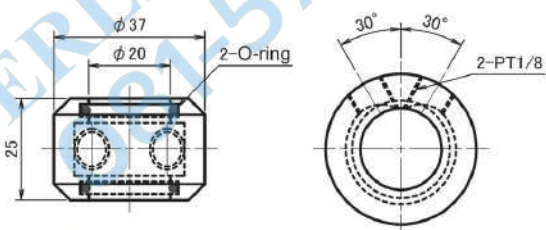
Model No.

MCN-WJ-3525-18

**Round Type $\phi 20$**

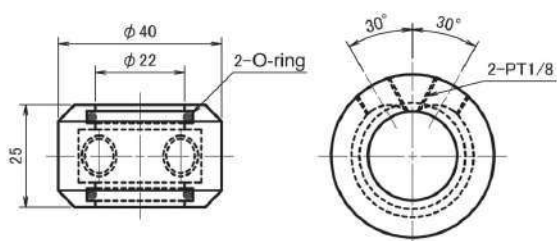
Model No.

MCN-WJ-3725-20

**Round Type $\phi 22$**

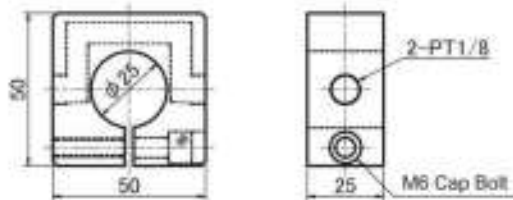
Model No.

MCN-WJ-4025-22



Water Jacket

Round Type $\phi 25$

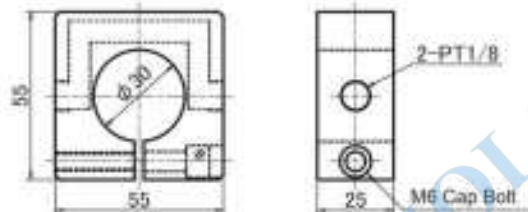


Model No.

WJ-5050-25



Round Type $\phi 30$

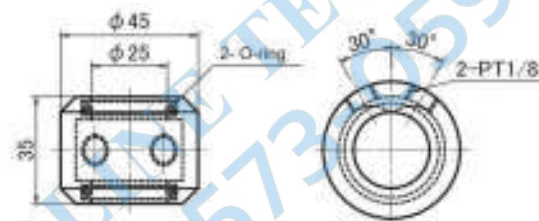


Model No.

WJ-5555-30



Round Type $\phi 25$

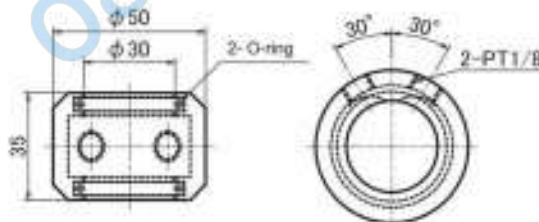


Model No.

MCN-WJ-4535-25



Round Type $\phi 30$

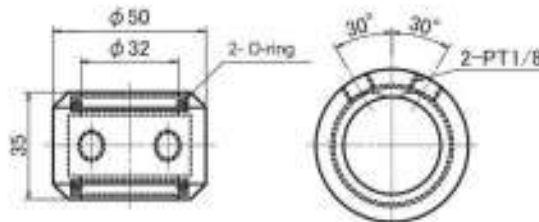


Model No.

MCN-WJ-5035-30



Round Type $\phi 32$



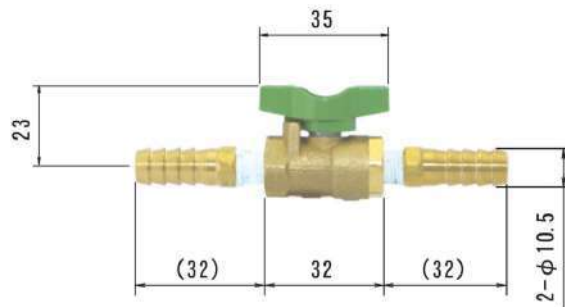
Model No.

MCN-WJ-5035-32



Cooling water related parts

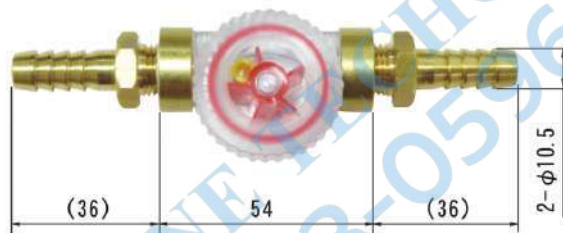
Ball Valve (with Hose Joint)



Model No.

TKT-6A-HG

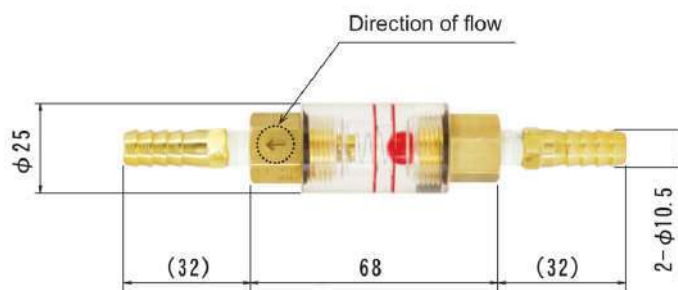
Flow monitor (with Hose Joint)



Model No.

FM-R

Water Signal (with Hose Joint)

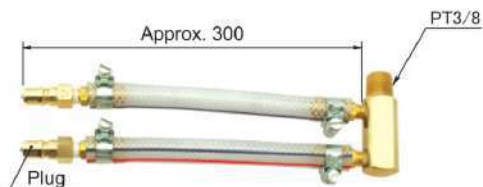


Model No.

MK25-1T-HG

Cooling water related parts

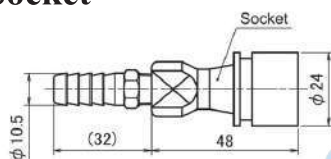
F-Shaped Hose Connector with a Plug



Model No.

PFH-3/8

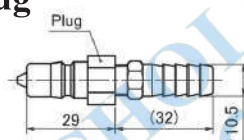
Hose Connector with a Socket



Model No.

SHG-1/8

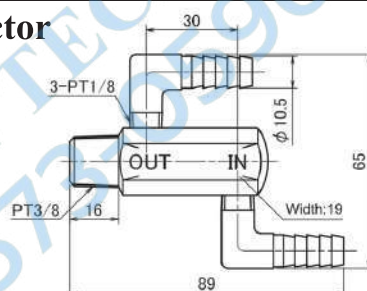
Hose Connector with a Plug



Model No.

PHG-1/8

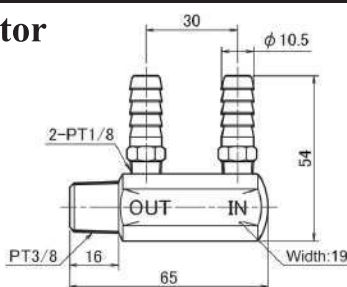
Y-Shaped Hose Connector



Model No.

YH-3/8

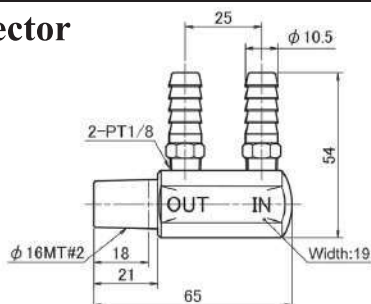
F-Shaped Hose Connector



Model No.

FH-3/8

F-Shaped Hose Connector



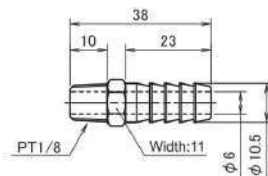
Model No.

FH- φ16MT

Cooling water related parts

Straight Hose Connector

(PT1/8)



Model No.

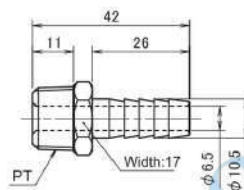
FG-1/8

Straight Hose Connector

(PT1/4 • 3/8)



HG-3/8



Model No.

PT

HG-1/4

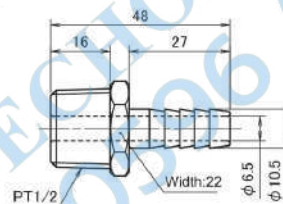
1/4

HG-3/8

3/8

Straight Hose Connector

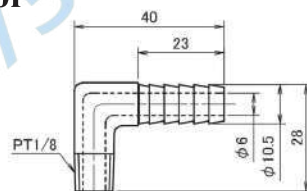
(PT1/2)



Model No.

HG-1/2

L-Straight Hose Connector



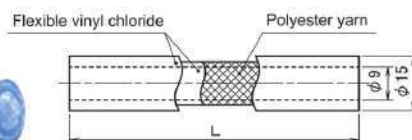
Model No.

LHG-1/8

Braided Hose



BH-0915-3M



Model No.

L(m)

BH-0915-3M

3

BH-0915-5M

5

BH-0915-10M

10

BH-0915-20M

20

Hose Clamp



Model No.

Hose diameter

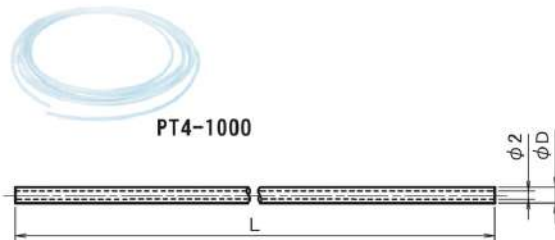
HB-15

φ10~φ16

Cooling water related parts

Teflon Cooling Tube

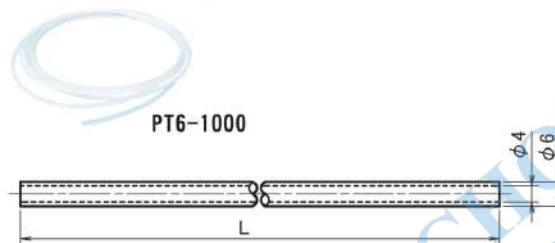
(heat-resistant)



Model No.	H	L
PT-3.8-1000	3.8	1000
PT-3.8-2000	3.8	2000
PT4-1000	4	1000
PT4-2000	4	2000

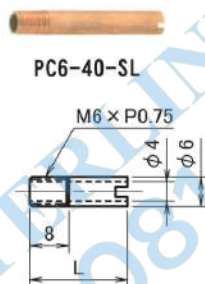
Teflon Cooling Tube

(heat-resistant)



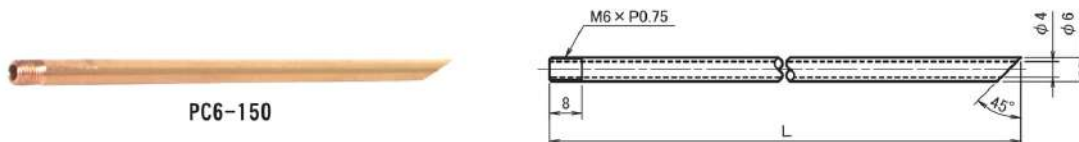
Model No.	L
PT6-1000	1000
PT6-2000	2000
PT6-3000	3000
PT6-4000	4000
PT6-5000	5000

Cooling Pipe



Model No.	L	Model No.	L
PC6-20-SL	20	PC6-40-SL	40
PC6-25-SL	25	PC6-45-SL	45
PC6-30-SL	30	PC6-50-SL	50
PC6-35-SL	35		

Cooling Pipe



Model No.	L	Model No.	L	Model No.	L
PC6-100	100	PC6-300	300	PC6-500	500
PC6-150	150	PC6-350	350	PC6-550	550
PC6-200	200	PC6-400	400	PC6-600	600
PC6-250	250	PC6-450	450		

Air-related parts

Speed Controller A (meter-out)



Model No.

PSL-601A

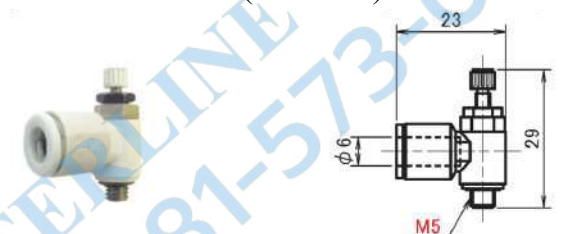
Speed Controller B (meter-in)



Model No.

PSL-601B

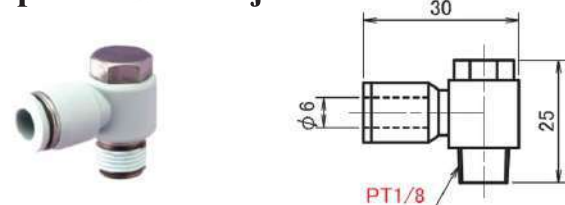
Speed Controller B (meter-in)



Model No.

AS1211F-M5-06A

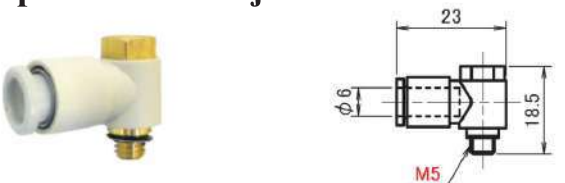
L-shaped one-touch joint



Model No.

PH-601

L-shaped one-touch joint

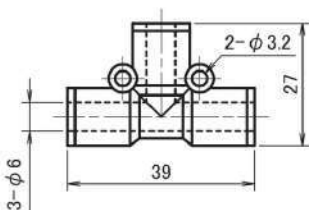


Model No.

KQ2V06-M5A

Air-related parts

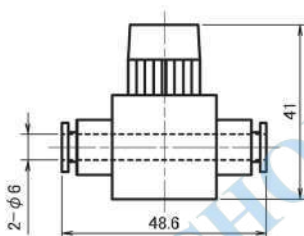
T-shaped one-touch joint



Model No.

PE-6

Air-bleed Valve



Model No.

VHK3A-06F-06FR

Pressure Gauge



GS-40



Model No.

φ D

L

PT

GS-40

42

38.5

1/8

GS-50

52

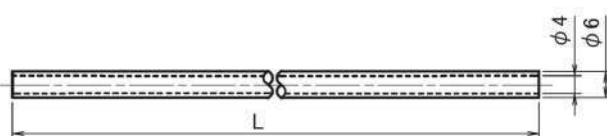
44.5

1/4

Air Tube



PPT6-2000



Model No.

L

PCT6-2000

2000

PCT6-3000

3000

PCT6-4000

4000

PCT6-5000

5000

Work Supplies

Cutting Paste/Parts Brush Set



+



① Cutting Paste
(Net weight 100g)

② Parts Brush
(Horse Hair)

Model No.

CP-PBHH-SET

Glass-cloth Adhesive Tape



Model No.

188UL-25

Conductive Grease



Model No.

GR-50

Seal Tape



Model No.

13-5M

ELECTRODE FOR ARC WELDING

353



Mamecon Tips for Arc Welding (CO₂ / MIG / MAG)

Mamecon Tip (CrCu)



C12

Wire diameter mm	Model No.
φ 0.6	C06
φ 0.8	C08
φ 0.9	C09
φ 1.0	C10
φ 1.2	C12
φ 1.4	C14
φ 1.6	C16

Super Mamecon Tip (ZrCrCu)



M12

Wire diameter mm	Model No.
φ 0.6	M06
φ 0.8	M08
φ 0.9	M09
φ 1.0	M10
φ 1.2	M12
φ 1.4	M14
φ 1.6	M16

Ultra Mamecon Tip (BeCu50)



B12

Wire diameter mm	Model No.
φ 0.6	B06
φ 0.8	B08
φ 0.9	B09
φ 1.0	B10
φ 1.2	B12
φ 1.4	B14
φ 1.6	B16

Mamecon Tips for Arc Welding (CO₂ / MIG / MAG)

Brass Mamecon Adapter



Suitable for L=45



Suitable for L=40.5



Wire diameter mm	Model No.	Model No.
φ 0.6	N06	D06
φ 0.8	N08	D08
φ 0.9	N09	D09
φ 1.0	N10	D10
φ 1.2	N12	D12
φ 1.4	N14	D14
φ 1.6	N16	D16

Chromium Copper Mamecon Adapter



Suitable for L=45



Suitable for L=40.5



Wire diameter mm	Model No.	Model No.
φ 0.6	N06C	D06C
φ 0.8	N08C	D08C
φ 0.9	N09C	D09C
φ 1.0	N10C	D10C
φ 1.2	N12C	D12C
φ 1.4	N14C	D14C
φ 1.6	N16C	D16C

Mamecon Tips for Arc Welding (CO₂ / MIG / MAG)

Robot Mamecon Adapter

N12PR56



Suitable for L=45

D12PR56



Suitable for L=40.5



Wire diameter mm	Model No.	Model No.
φ 0.8	N08PR56	D08PR56
φ 0.9	N09PR56	D09PR56
φ 1.0	N10PR56	D10PR56
φ 1.2	N12PR56	D12PR56

Brass Long Mamecon Adapter

L12



Suitable for L=69.5



Wire diameter mm	Model No.
φ 0.6	L06
φ 0.8	L08
φ 0.9	L09
φ 1.0	L10
φ 1.2	L12
φ 1.4	L14
φ 1.6	L16

Contact Tip

L=45mm



CTP-N1245-C

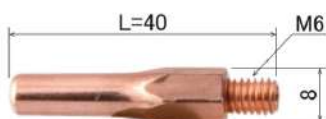


Wire diameter mm	Model No.
φ 0.8	CTP-NO845-C
φ 0.9	CTP-NO945-C
φ 1.0	CTP-N1045-C
φ 1.2	CTP-N1245-C

L=40mm



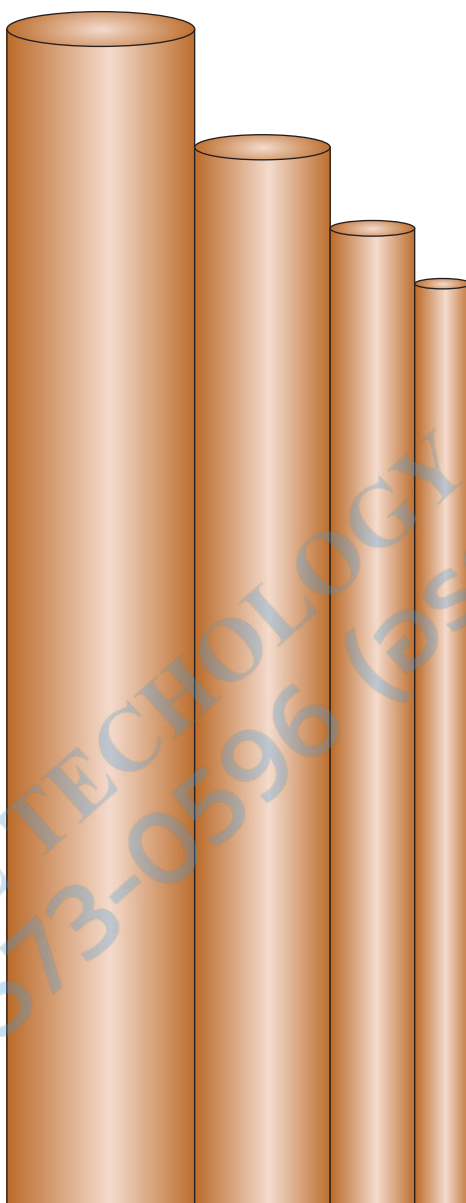
CTP-D1240-C



Wire diameter mm	Model No.
φ 0.9	CTP-DO940-C
φ 1.0	CTP-D1040-C
φ 1.2	CTP-D1240-C

ELECTRODE MATERIALS

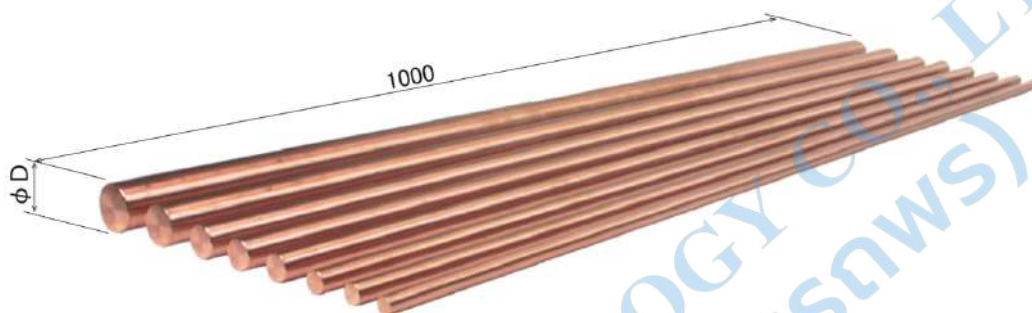
358



CHROMIUM COPPER ROUND BAR

359

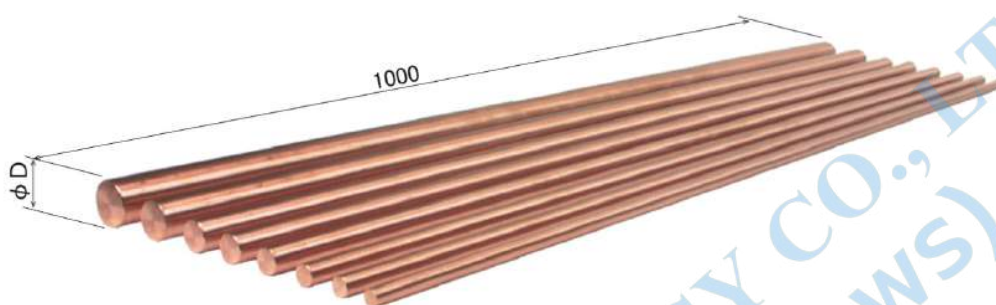
High quality electrode material



Model No.	φ D
CD-31000	φ 3
CD-41000	φ 4
CD-51000	φ 5
CD-61000	φ 6
CD-71000	φ 7
CD-81000	φ 8
CD-91000	φ 9
CD-101000	φ 10
CD-121000	φ 12
CD-131000	φ 13
CD-161000	φ 16

Model No.	φ D
CD-181000	φ 18
CD-191000	φ 19
CD-201000	φ 20
CD-221000	φ 22
CD-251000	φ 25
CD-281000	φ 28
CD-301000	φ 30
CD-321000	φ 32
CD-351000	φ 35
CD-401000	φ 40
CD-451000	φ 45

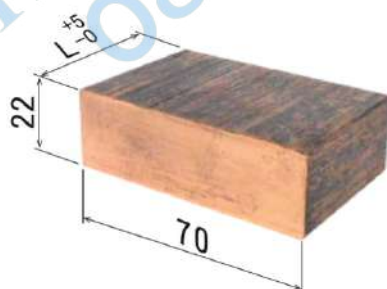
Alumina Dispersion Strengthened Copper Round Bar



Model No.	φ D
DD-31000	φ 3
DD-41000	φ 4
DD-51000	φ 5
DD-61000	φ 6
DD-81000	φ 8
DD-101000	φ 10

Model No.	φ D
DD-121000	φ 12
DD-131000	φ 13
DD-161000	φ 16
DD-191000	φ 19
DD-221000	φ 22
DD-271000	φ 27

Alumina Dispersion Strengthened Copper Square Bar (black finish)

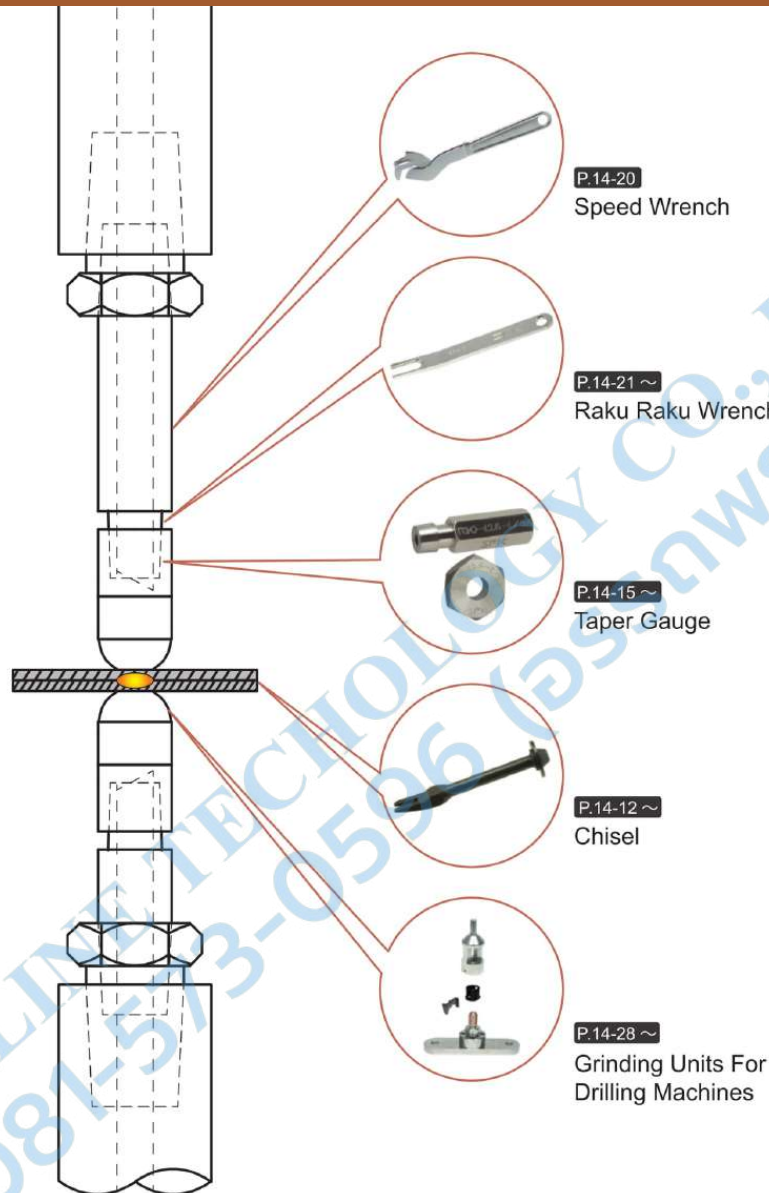


DF-22-70-45

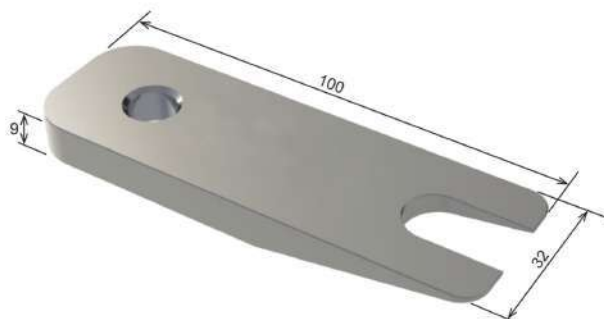
Model No.	L
DF-22-70-45	45
DF-22-70-50	50

WELDING ACCESSORIES

361

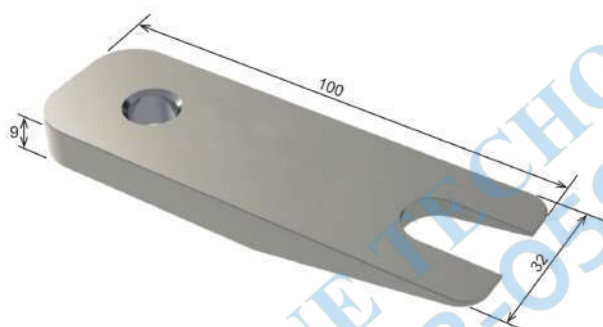


Taper $\phi 12$



Model No.	Tip diameter
TRW-12	$\phi 12$

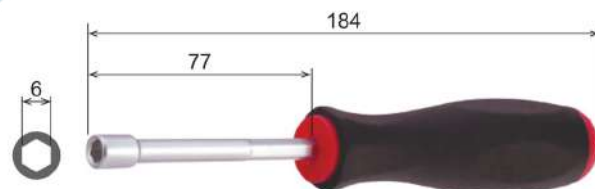
Taper $\phi 16$



Model No.	Tip diameter
TRW-16	$\phi 16$

WELDING ACCESSORIES

Box Driver



Model No.	Width (mm)
BN-6M	6



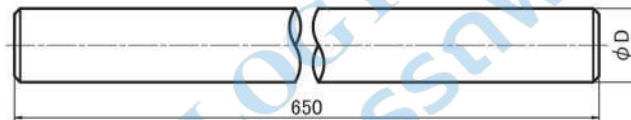
CENTER FINDER ROD FOR SPOT WELDING MACHINE

363

Straight Type



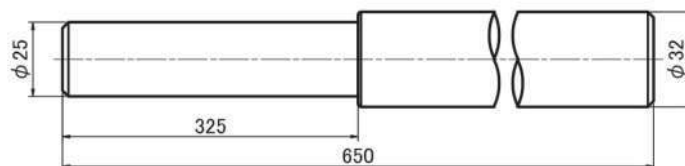
Model No.	ϕ D
CR-25-650	25
CR-32-650	32



Shouldered Type ϕ 25- ϕ 32

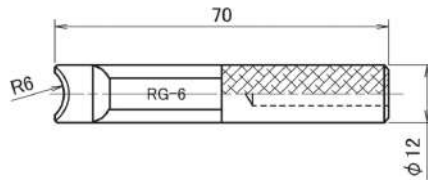


Model No.
CR-2532-650



Versatile Type

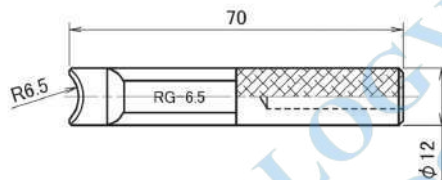
R 6



Model No.

RG-6

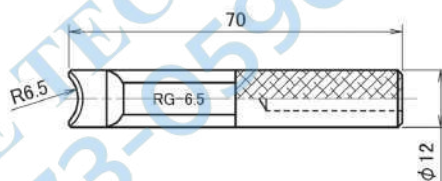
R 6.5



Model No.

RG-6.5

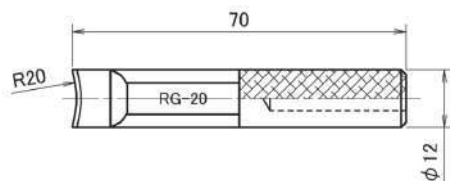
R 8



Model No.

RG-8

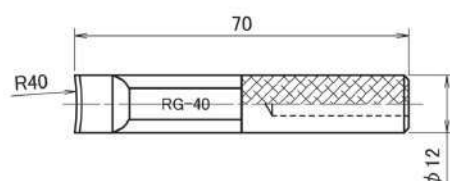
R 20



Model No.

RG-20

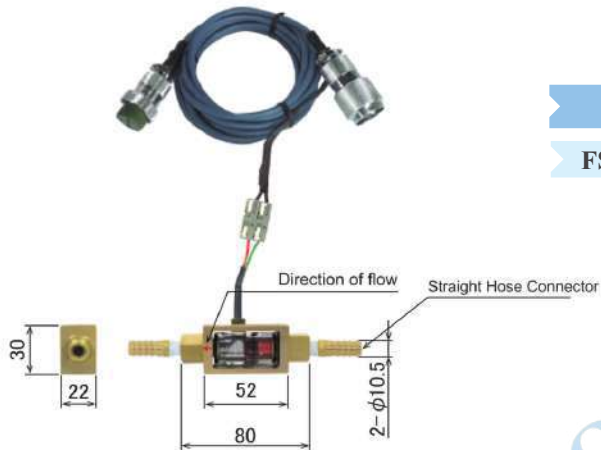
R 40



Model No.

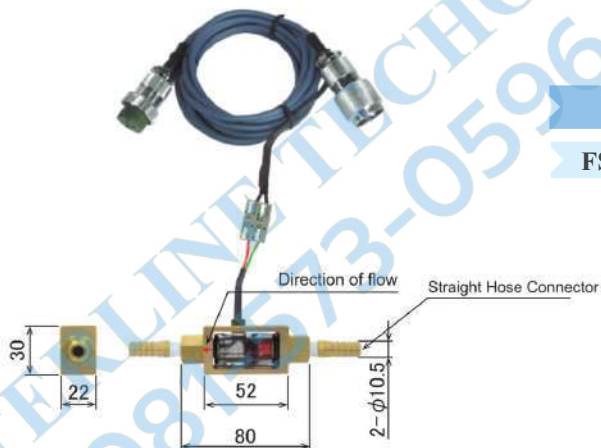
RG-40

Number of metal connertor pin 2P



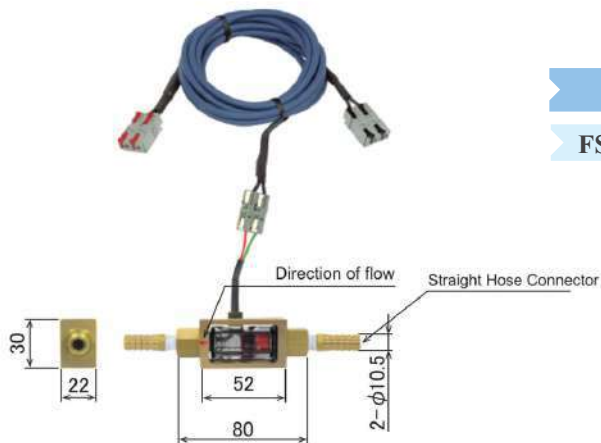
Model No.	Switch flow rate (L/min)
FS20-1-1.0-2P	1.0

Number of metal connertor pin 3P



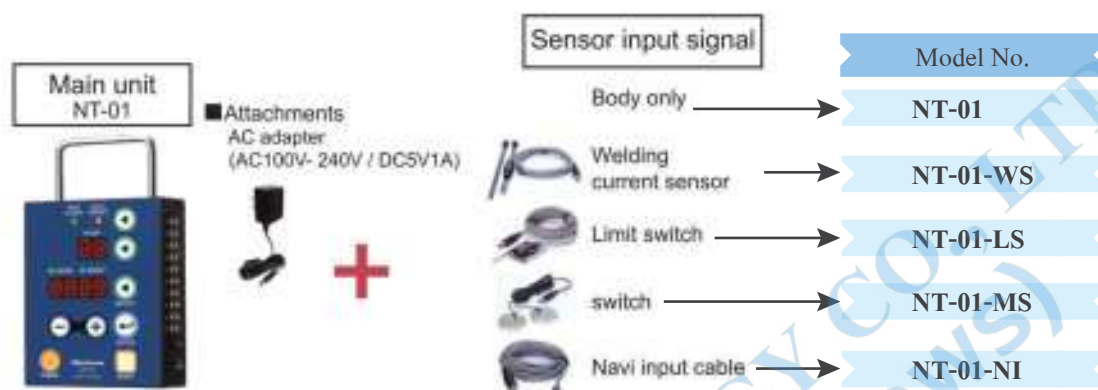
Model No.	Switch flow rate (L/min)
FS20-1-1.0-3P	1.0

Screwless terminal SQ

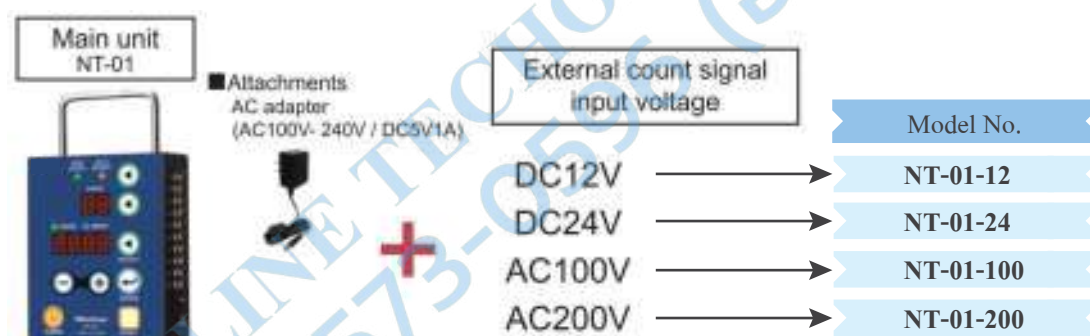


Model No.	Switch flow rate (L/min)
FS20-1-1.0-SQ	1.0

Main unit & sensor input system



Main unit & External count signal input system

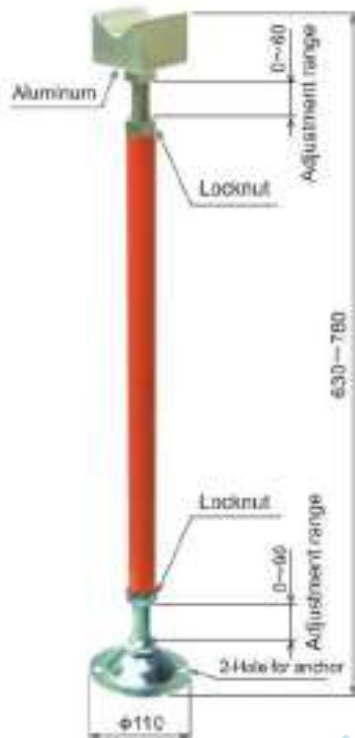


Options



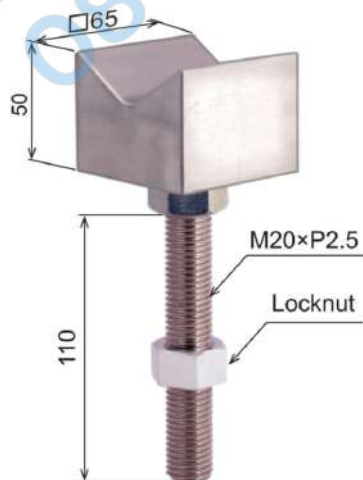
Product name	Model No.
1 Welding current sensor	NT-WS
2 Limit switch	NT-LS
3 Magnet switch	NT-MS
4 Navi input cable	NT-NI
5 Navitron Junction cable	NT-NJ
6 AC adapter	NT-AD
7 Mounting plate/Cable Tie	HNA-003B
8 Mounting Magnet sheet	NT-MG

Spot Welding Machine Deflection Preventing Stand



Model No.	Horn diameter
TN-630-780	$\phi 40 \sim \phi 80$

Horn Supporter



Model No.	Horn diameter
TN-HS-5065-M20	$\phi 40 \sim \phi 80$

Flanged Chisel

For thick plates

Flanged Super Chisel



Model No.

T-30250-P

For thick plates

Flanged Super Chisel



Model No.

T-20250-P

For medium thick plates

Flanged Chisel



Model No.

T-16250-P

For sheet metal

Flanged Chisel



Model No.

T-10250-P

Chisel

For thick plates

Super Chisel



Model No.

T-32240

For thick plates

Super Chisel



Model No.

T-22240

For medium thick plates

Chisel



Model No.

T-16250

For sheet metal

Chisel



Model No.

T-10250

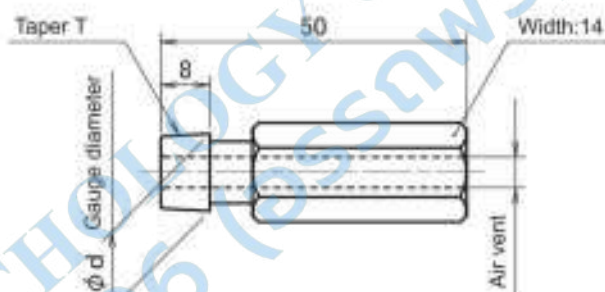
Ø 12•Ø 13•Ø 16 Cap Tip type

Male Taper Gauge for Cap Tip



TGO-12.6-1/9.6

Model No.	Tip diameter	φd	T
TGO-10-1/9.6	φ12•φ13	10	1/9.6
TGO-10-1/10	φ12•φ13	10	1/10
TGO-12.6-1/9.6	φ 16	12.6	1/9.6
TGO-12.6-1/10	φ 16	12.6	1/10
TGO-12.7-1/10	φ 16	12.7	1/10

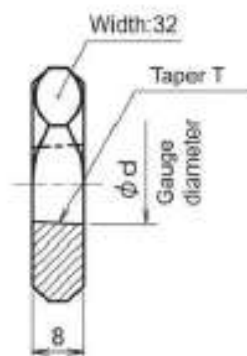


Female Taper Gauge for Shank



TGM-12.6-1/9.6

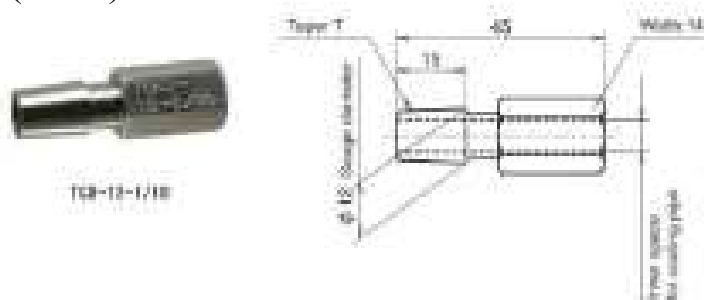
Model No.	Tip diameter	φd	T
TGM-10-1/9.6	φ12•φ13	10	1/9.6
TGM-10-1/10	φ12•φ13	10	1/10
TGM-12.6-1/9.6	φ 16	12.6	1/9.6
TGM-12.6-1/10	φ 16	12.6	1/10
TGM-12.7-1/10	φ 16	12.7	1/10



Ø 12 All-purpose type

Male Taper Gauge

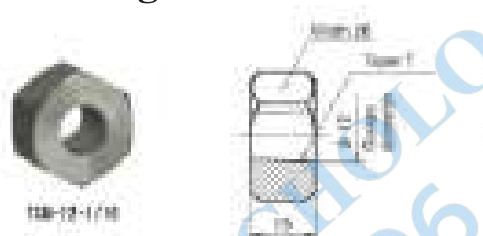
(Ø 12)



Model No.	T
TGO-12-1/10	1/10
TGO-12-MT#1	MT#1

Female Taper Gauge

(Ø 12)

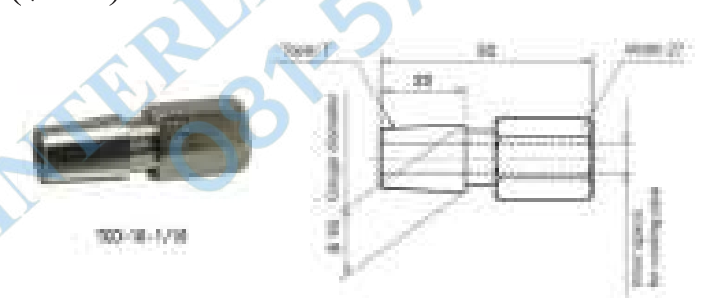


Model No.	T
TGM-12-1/10	1/10
TGM-12-MT#1	MT#1

Ø 16 All-purpose type

Male Taper Gauge

(Ø 16)



Model No.	T
TGO-16-1/10	1/10
TGO-16-MT#2	MT#2
TGO-16-1/5	1/5

Female Taper Gauge

(Ø 16)



Model No.	T
TGM-16-1/10	1/10
TGM-16-MT#2	MT#2
TGM-16-1/5	1/5

14x18



Model No.

UTS-1418

20x23



Model No.

UTS-2023

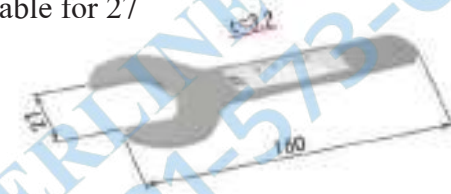
22x27 For Screw Adapters



Model No.

UTS-2227

27 Suitable for 27



Model No.

UTS-0027

32x37xT3



Model No.

UTS-3237-T3

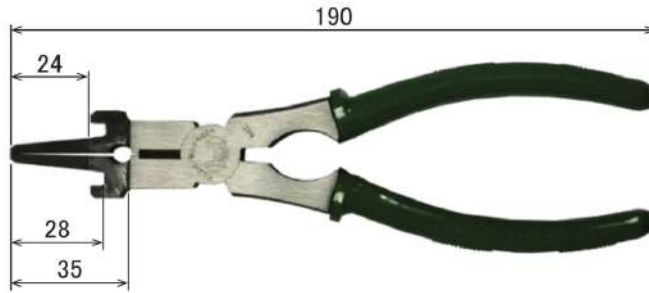
32x37xT6 For Screw Adapters



Model No.

UTS-3237-T6

10 tools in one

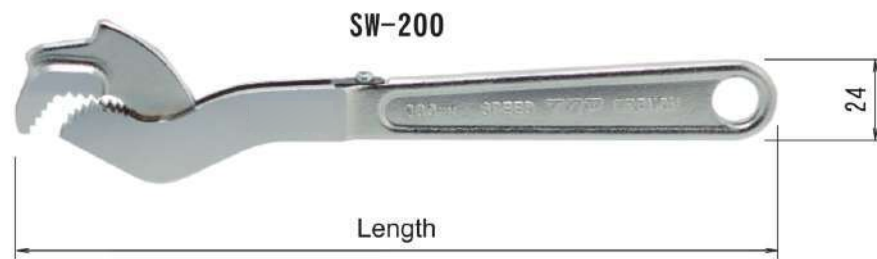


Model No.	Length (mm)
MO-03	190

PLIER FOR CO WELDING MACHINE

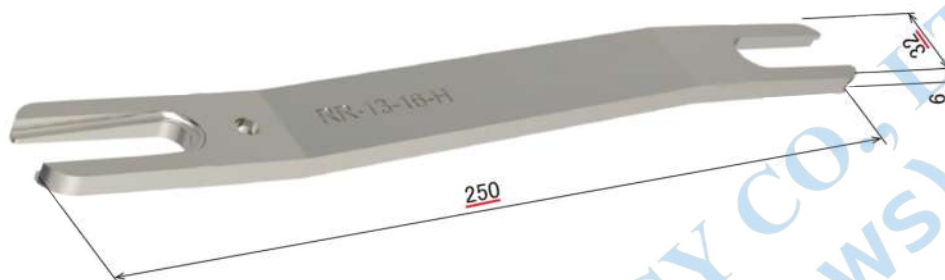
Speed Wrench

Model No.	Tip diameter	Length (mm)
SW-200	φ 9 ~ φ 25	210
SW-250	φ15 ~ φ35	257
SW-300	φ19 ~ φ43	309



For $\phi 12 \cdot \phi 13 / \phi 16$ Cap Tip

Model No.	Tip diameter
RR-13-16-H	$\phi 12 \cdot \phi 13 / \phi 16$



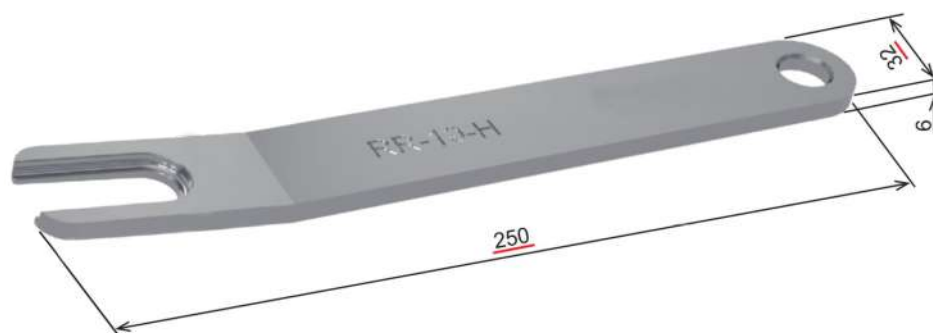
For $\phi 16$ Cap Tip

Model No.	Tip diameter
RR-16-H	$\phi 16$



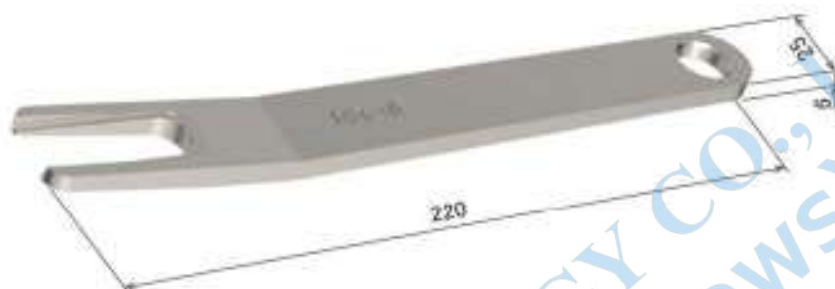
For $\phi 19$ Cap Tip (Taper $\phi 14$)

Model No.	Tip diameter
RR-19-H	$\phi 19$



For $\varnothing 16$ Cap Tip

Model No.	Tip diameter
RR-16	$\varnothing 16$



For $\varnothing 12 \cdot \varnothing 13$ Cap Tip

Model No.	Tip diameter
RR-13	$\varnothing 12 \cdot \varnothing 13$



For $\varnothing 9$ Cap Tip

Model No.	Tip diameter
RR-09	$\varnothing 9$



Air-Cooling Cable 300 sq Type FF



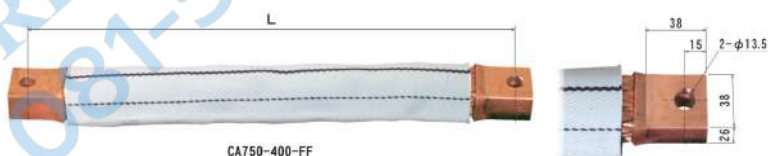
Model No.	L	Model No.	L
CA300-400-FF	400	CA300-600-FF	600
CA300-450-FF	450	CA300-650-FF	650
CA300-500-FF	500	CA300-700-FF	700
CA300-550-FF	550	CA300-750-FF	750

Air-Cooling Cable 500 sq Type FF



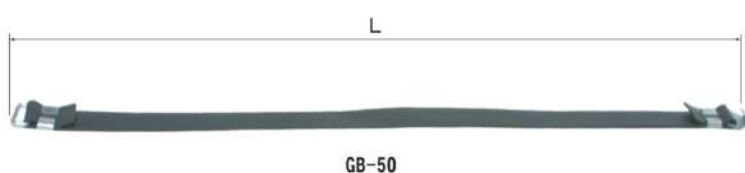
Model No.	L	Model No.	L
CA500-400-FF	400	CA500-600-FF	600
CA500-450-FF	450	CA500-650-FF	650
CA500-500-FF	500	CA500-700-FF	700
CA500-550-FF	550	CA500-750-FF	750

Air-Cooling Cable 750 sq Type FF



Model No.	L	Model No.	L
CA750-400-FF	400	CA750-600-FF	600
CA750-450-FF	450	CA750-650-FF	650
CA750-500-FF	500	CA750-700-FF	700
CA750-550-FF	550	CA750-750-FF	750

Rubber Band



Model No.	L
GB-35	350
GB-50	500
GB-80	800

Hand Tip Dresser



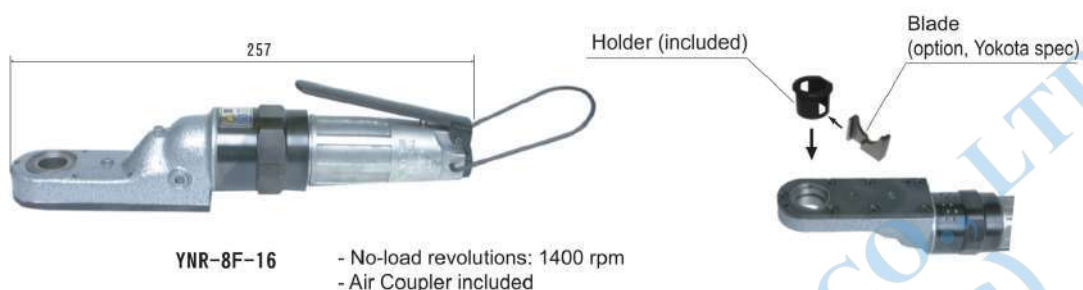
Model No.	Tip diameter	Weight (g)
ETD-18F-09	φ 9	1.65
ETD-18F-12	φ 12	1.65
ETD-18F-13	φ 13	1.65
ETD-18F-16	φ 16	1.65

Clamp Plate



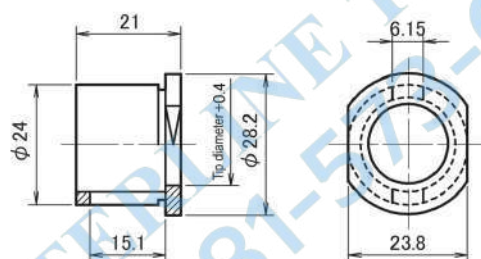
Model No.	Tip diameter
No121-13-M	φ 12 • φ 13
No121-16-M	φ 16

Hand Tip Dresser



Model No.	Tip diameter	Weight (g)
YNR-8F-12	φ 12	1.2
YNR-8F-13	φ 13	1.2
YNR-8F-16	φ 16	1.2

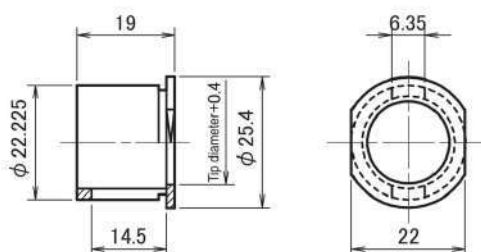
Holder



TD-16HE

Model No.	Tip diameter
TD-09HE	φ 9
TD-12HE	φ 12
TD-13HE	φ 13
TD-16HE	φ 16

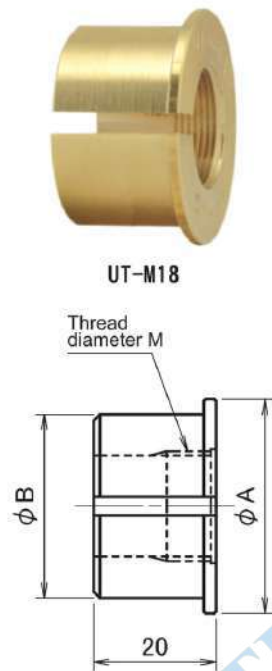
Holder



TD-16HY

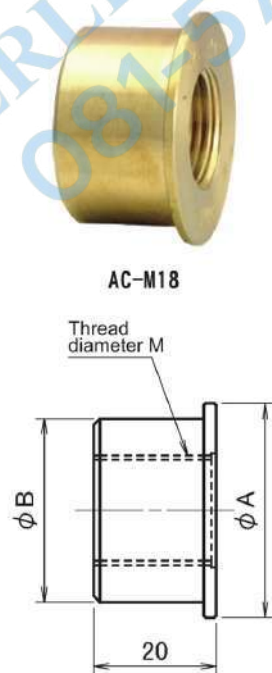
Model No.	Tip diameter
TD-12HY	φ 12
TD-13HY	φ 13
TD-16HY	φ 16

Grinding Tool for Thin Tip



Model No.	Tip diameter	ϕA	ϕB
UT-M12	12	35	30
UT-M15	15	35	30
UT-M18	18	35	30
UT-M20	20	35	30
UT-M25	25	40	35

Grinding Tool for Air Cap



Model No.	Tip diameter	ϕA	ϕB
AC-M18	18	35	30
AC-M20	20	35	30
AC-M22	22	40	35

Suitable for Lower Electrode



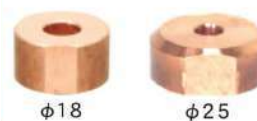
Model No.	Tip diameter
TDU-PB18-M15	$\phi 18$
TDU-PB25-M20	$\phi 25$

Product name	Model No.
1 Upper body	TDU-U30F
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W

Part name	Model No.	Tip diameter
2 Holder	TD-18-25HE	$\phi 18$
2 Holder	TD-25HE	$\phi 25$
3 Adapter	TDU-PB18-A	$\phi 18$
5 Adapter	TDU-PB25-A	$\phi 25$



Grindable products



Suitable for $\phi 19$ Cap Tips



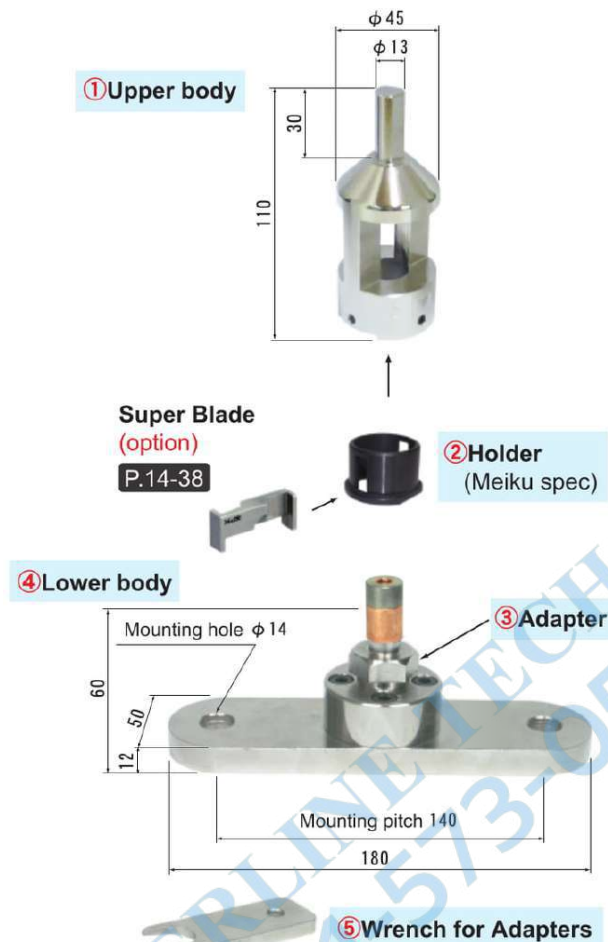
Model No.	Tip diameter
TDU-CT19	$\phi 19$

Product name	Model No.
1 Upper body	TDU-U25F
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W

Part name	Model No.	Tip diameter
2 Holder	TD-19-25HE	$\phi 19$
3 Adapter	TDU-CT19A	$\phi 19$



Suitable for Upper Cap Tips and Inverse-Welding Prevention Cap Tips



Model No.	Tip diameter
TDU-UT-16	φ 16
TDU-UT-18	φ 18
TDU-UT-20	φ 20
TDU-UT-22	φ 22
TDU-UT-25	φ 25

Product name	Model No.
1 Upper body	TDU-U25F
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W

Part name	Model No.	Tip diameter
2 Holder	TD-16-25HE	φ 16
2 Holder	TD-18-25HE	φ 18
2 Holder	TD-20-25HE	φ 20
2 Holder	TD-22-25HE	φ 22
2 Holder	TD-25HE	φ 25
3 Adapter	TDU-CT16A	φ 16

③ Adapter



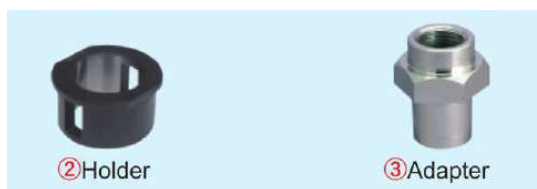
Common use for $\phi 25/\phi 30$ Air Caps



Model No.	Tip diameter
TDU-AC30-25-M18	$\phi 25$
TDU-AC30-30-M22	$\phi 30$

Product name	Model No.
1 Upper body	TDU-U30F
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W

Part name	Model No.	Tip diameter
2 Holder	TD-25-30HE	$\phi 25$
2 Holder	TD-30-30HE	$\phi 30$
3 Adapter	TDU-AC25-A	$\phi 25$
3 Adapter	TDU-AC30-A	$\phi 30$



Suitable for $\phi 25$ Air Caps



Model No.	Tip diameter
TDU-AC25-M18	$\phi 25$

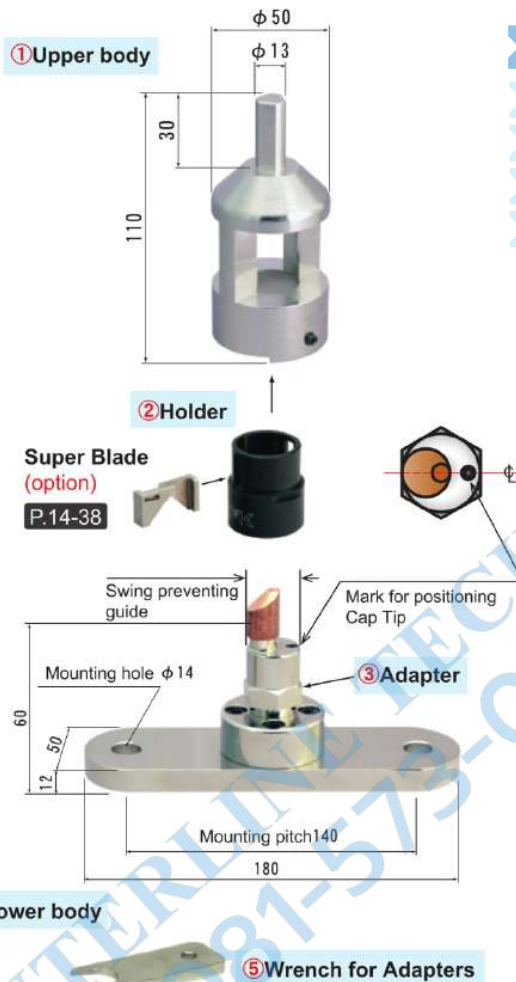
Product name	Model No.
1 Upper body	TDU-U25F
2 Holder	TD-25HE
4 Lower body	TDU-LM18-M



OFFSET CAP TIP GRINDING UNITS FOR DRILLING MACHINES

385

Ø9・Ø12・Ø13・Ø16 Suitable for Offset Cap Tips (E Type)



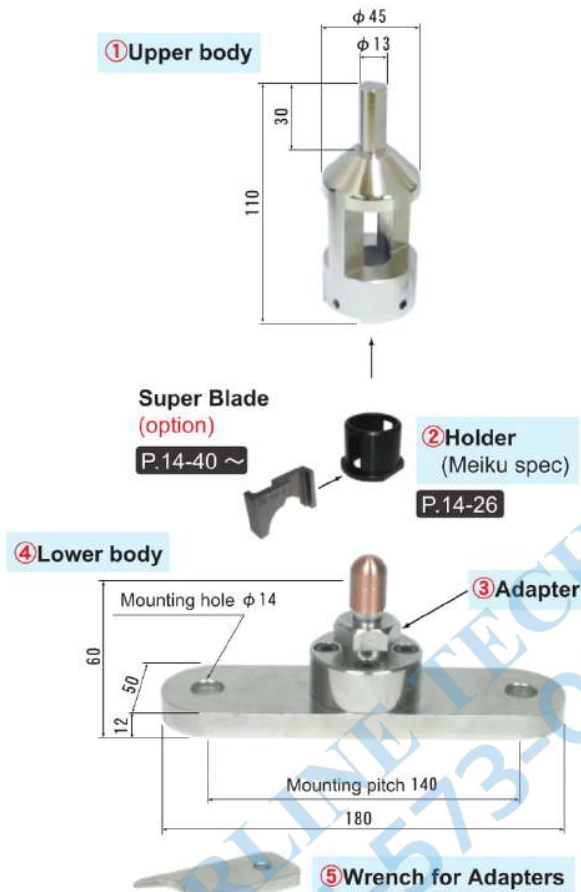
Model No.	Tip diameter	Tip diameter
TDU-E-4-CT09	Ø 9x20	Ø 4
TDU-E-6-CT12	Ø 12x20~25	Ø 6
TDU-E-6-CT13	Ø 13x20~25	Ø 6
TDU-E-6-CT16	Ø 16x23~25	Ø 6

Product name	Model No.
1 Upper body	TDU-U30F
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W

Part name	Model No.	Tip diameter
2 Holder	TD-4-09HE-30	Ø 9
2 Holder	TD-6-12HE-30	Ø 12
2 Holder	TD-6-13HE-30	Ø 13
2 Holder	TD-6-16HE-30	Ø 16
3 Adapter	TDU-CT4-09A	Ø 9
3 Adapter	TDU-CT6-12A	Ø 12
3 Adapter	TDU-CT6-13A	Ø 13
3 Adapter	TDU-CT6-16A	Ø 16



Suitable for Cap Tips



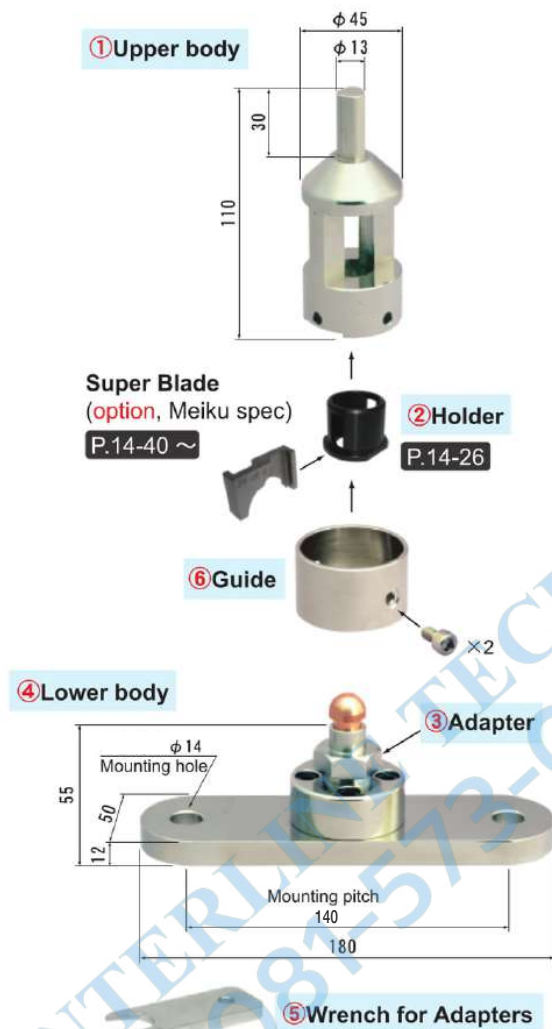
Model No.	Tip diameter
TDU-CT09	φ9
TDU-CT12	φ12
TDU-CT13	φ13
TDU-CT16	φ16

Product name	Model No.
1 Upper body	TDU-U
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W

Part name	Model No.	Tip diameter
3 Adapter	TDU-CT09A	φ9
3 Adapter	TDU-CT13A	φ12 • φ13
3 Adapter	TDU-CT16A	φ16



Suitable for Mini Tips



Model No.	Tip diameter	T
TDU-MT16-12-1	$\phi 16$	$\phi 12 \times 1/10$

Product name	Model No.
1 Upper body	TDU-U
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W
6 Guide	TDU-TG-16

Part name	Model No.	Tip diameter	T
3 Adapter	TDU-MT16-12A-1	$\phi 16$	$\phi 12 \times 1/10$

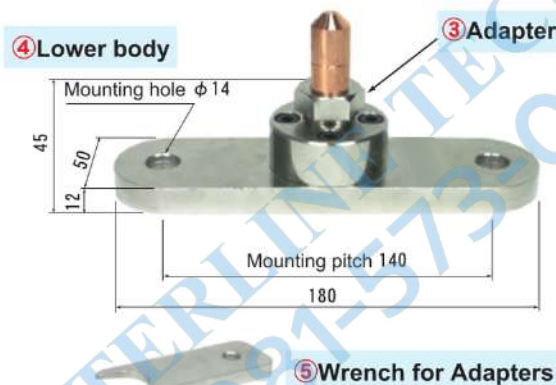


Suitable for Straight Tips



Model No.	Tip diameter	T
TDU-ST12-1	φ12	1/10
TDU-ST12-2	φ12	MT#1
TDU-ST16-1	φ16	1/10
TDU-ST16-2	φ16	MT#2
TDU-ST16-3	φ16	1/5

Product name	Model No.
1 Upper body	TDU-U
4 Lower body	TDU-L
5 Wrench for Adapters	TDU-W

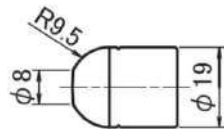
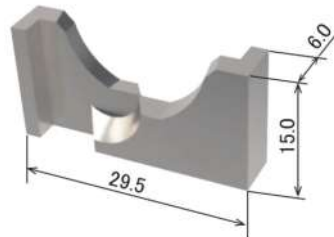


Part name	Model No.	Tip diameter	T
3 Adapter	TDU-ST12A-1	φ12	1/10
3 Adapter	TDU-ST12A-2	φ12	MT#1
3 Adapter	TDU-ST16A-1	φ16	1/10
3 Adapter	TDU-ST16A-2	φ16	MT#2
3 Adapter	TDU-ST16A-3	φ16	1/5



Super Blade

Suitable for $\phi 19$ D Type Cup Tips



Model No.

Tip diameter

8-9.5R-19E-S

$\phi 19$

For aluminum welding and others
(R80•R100•R120•R150)

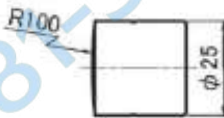


Model No.

Tip diameter

80R-25E-S

$\phi 16 \sim \phi 25$

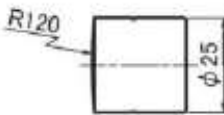


Model No.

Tip diameter

100R-25E-S

$\phi 16 \sim \phi 25$

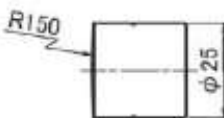


Model No.

Tip diameter

120R-25E-S

$\phi 16 \sim \phi 25$



Model No.

Tip diameter

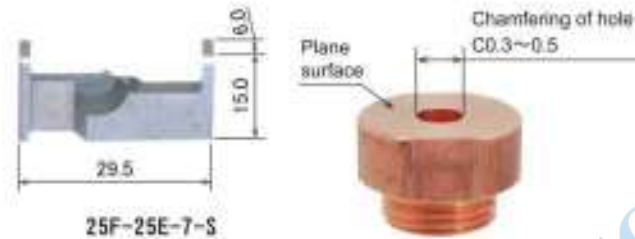
150R-25E-S

$\phi 16 \sim \phi 25$

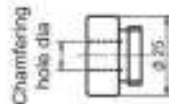
Super Blade

Suitable for $\phi 25$ Air Cup

(Chamfering of plane surface and hole)



25F-25E-7-S



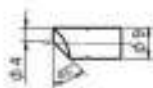
Model No.	Tip diameter
25F-25E-7-S	$\phi 7$
25F-25E-9-S	$\phi 9$

$\phi 25$ (Plane surface grinding)

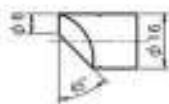


Model No.	Tip diameter
25F-25E-S	$\phi 25$

Suitable for Offset Cap Tips (E Type)



Model No.	Tip diameter
E-4-90-09-S	$\phi 9$

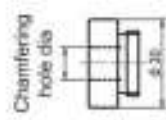
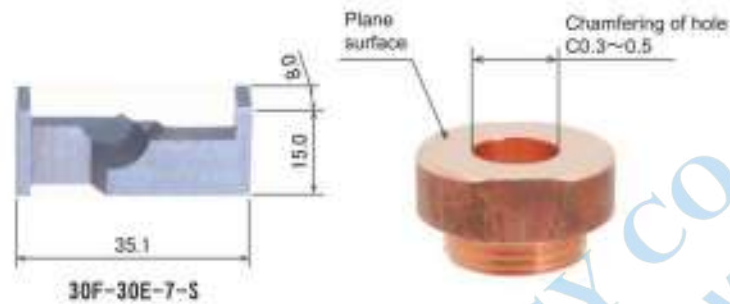


Model No.	Tip diameter
E-6-90-16-S	$\phi 12 \cdot \phi 13 \cdot \phi 16$

Super Blade

Suitable for $\phi 30$ Air Cup

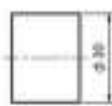
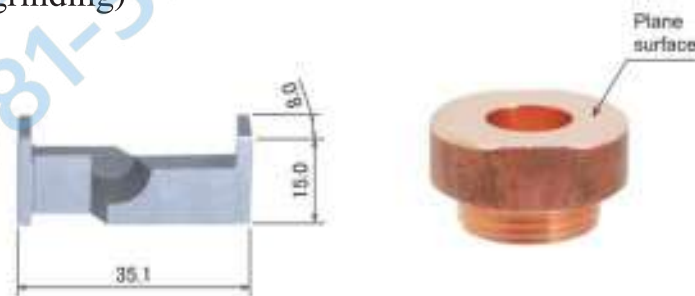
(Chamfering of plane surface and hole)



Model No.	Tip diameter
30F-30E-7-S	$\phi 7$
30F-30E-9-S	$\phi 9$
30F-30E-11-S	$\phi 11$
30F-30E-13-S	$\phi 13$

Common use for $\phi 25/\phi 30$

(Plane surface grinding)



Model No.	Tip diameter
30F-30E-S	$\phi 25 \cdot \phi 30$

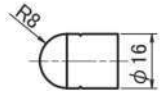
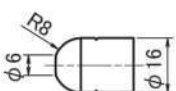
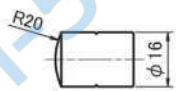
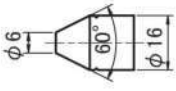
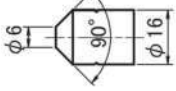
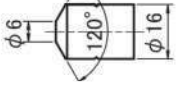
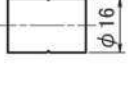
Suitable for ETD-18 series
Suitable for Tip Grinding Unit



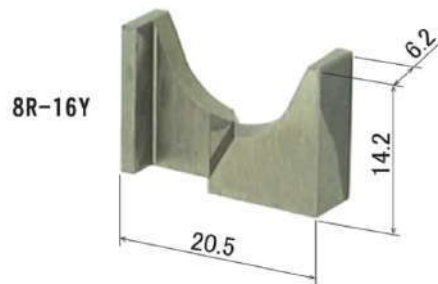
		Model No.	Tip diameter
		4.5-09E	φ9
		Model No.	Tip diameter
		6R-12E	φ9 • φ12
		Model No.	Tip diameter
		6-6R-12E	φ9 • φ12
		Model No.	Tip diameter
		40R-4-6R-12E	φ9 • φ12
		Model No.	Tip diameter
		40R-5-6R-12E	φ9 • φ12
		Model No.	Tip diameter
		40R-6-6R-12E	φ9 • φ12
		Model No.	Tip diameter
		6.5R-13E	φ9 • φ12 • φ13
		Model No.	Tip diameter
		6-6.5R-13E	φ9 • φ12 • φ13
		Model No.	Tip diameter
		40R-6-6.5R-13E	φ9 • φ12 • φ13

Suitable for ETD-18 series
Suitable for Tip Grinding Unit



		Model No.	Tip diameter
		8R-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		6-8R-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		40R-6-8R-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		8-8R-16E	$\phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		20R-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		6-60-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		6-90-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		6-120-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$
		Model No.	Tip diameter
		16F-16E	$\phi 9 \bullet \phi 12 \bullet \phi 13 \bullet \phi 16$

Suitable for YNR-8F



		Model No.	Tip diameter
		6R-12Y	φ 12
		Model No.	Tip diameter
		6.5R-13Y	φ 12 • φ 13
		Model No.	Tip diameter
		6-6.5R-13Y	φ 12 • φ 13
		Model No.	Tip diameter
		40R-6-6.5R-13Y	φ 12 • φ 13
		Model No.	Tip diameter
		8R-16Y	φ 12 • φ 13 • φ 16
		Model No.	Tip diameter
		6-8R-16Y	φ 12 • φ 13 • φ 16
		Model No.	Tip diameter
		40R-6-8R-16Y	φ 12 • φ 13 • φ 16
		Model No.	Tip diameter
		6-60-16Y	φ 12 • φ 13 • φ 16
		Model No.	Tip diameter
		6-90-16Y	φ 12 • φ 13 • φ 16



ISO 9001:2015

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