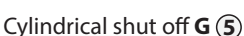




SEZ. D-D

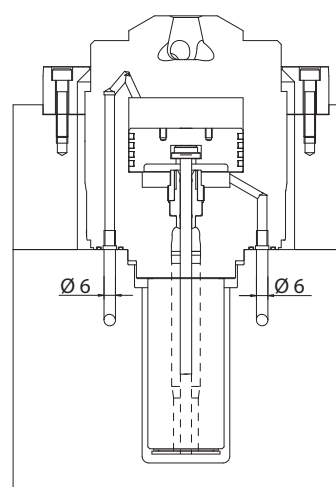
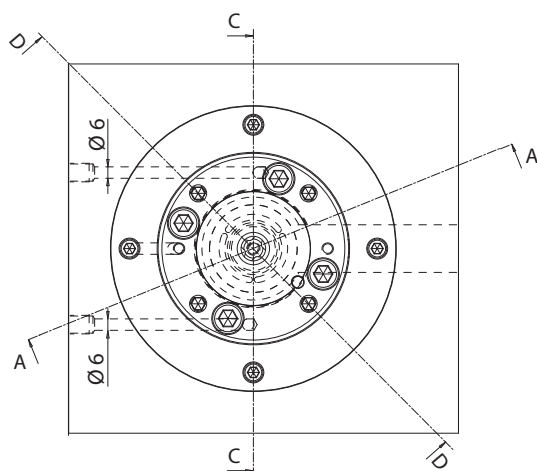


*Chiusura cilindrica* **G**

⑤ Conical shut off N

Chiusura conica N

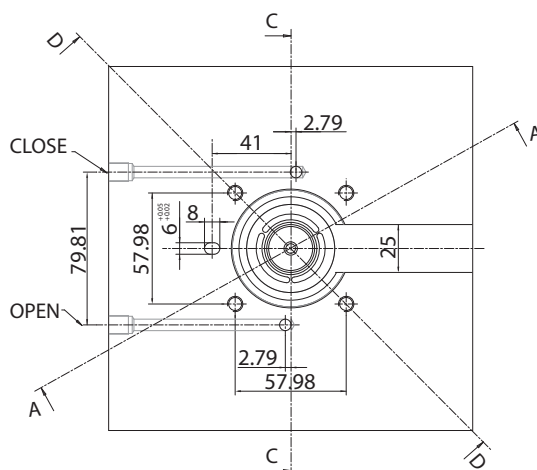
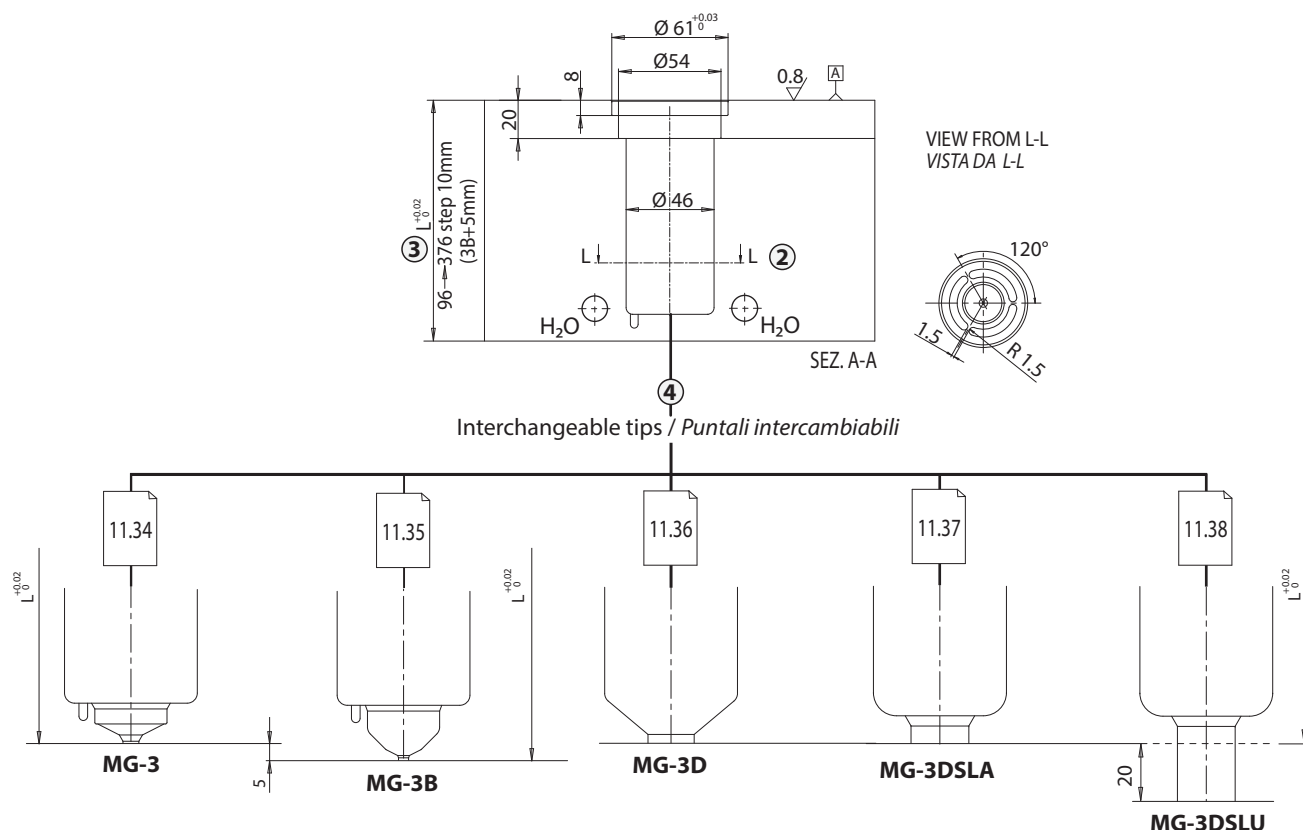
*Idoneo solo per HDPE, LDPE, PP, PS*



SEZ. C-C



## GATE AREA / SEDE UGELLO



| Suffix<br>Suffisso ⑦ | R      |
|----------------------|--------|
| ../R000              | R 0    |
| ../R095              | R 9.5  |
| ../R100              | R 10   |
| ../R105              | R 10.5 |
| ../R110              | R 11   |
| ../R127              | R 12.7 |
| ../R130              | R 13   |
| ../R135              | R 13.5 |
| ../R150              | R 15   |
| ../R155              | R 15.5 |
| ../R160              | R 16   |
| ../R165              | R 16.5 |
| ../R195              | R 19.5 |
| ../R200              | R 20   |
| ../R210              | R 21   |
| ../R220              | R 22   |
| ../R250              | R 25   |
| ../R300              | R 30   |
| ../R350              | R 35   |
| ../R400              | R 40   |
| ../A070              | A 70°  |
| ../A090              | A 90°  |
| ../A120              | A 120° |

Ordering code example / Esempio d'ordine ugello:

| ① | ② | ③ |   | ④ |   | ⑤ |   | ⑥ |   | ⑦ |   | ⑧ |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| M | G | 4 | 6 | 0 | 9 | 6 | - | 3 | B | - | N | - | 3 | 3 | R | 1 | 9 | 5 | - | J | G |

- ① **M G** : Single nozzle with 4 head flow bores (nozzle head) (**MG**) / Tipo monougello con 4 canali di portata nella testa (**MG**)
- M G C** : 1 flowbore (nozzle head) option, optimized for color changes (**MGC**) / Opzione 1 foro nella testa, ottimizzato per cambio colore (**MGC**)
- ② **4 6** : Nozzle Ø (**Ø46**) / Diametro ugello (**Ø46**)
- ③ **0 9 6** : Length (**L=96 nozzle lengths: see table**) / Lunghezza ugello (**L=96 lunghezze ugelli: vedi tabella**)
- ④ **3 B** : Tip type / Tipo puntale (**3-3B-3D-3DSLA-3DSLU**)
- ⑤ **N** : Closure type (**N conical - G cylindrical**) / Tipo chiusura (**N conica - G cilindrica**)
- ⑥ **3 3** : Closing ØDi (**3.3 mm; range: see table**) / Diametro chiusura ØDi (**3.3 mm; range: vedi tabella**)
- ⑦ **R 1 9 5** : Radius (**R=19.5**) / Raggio testa (**R=19.5**)
- ⑧ **J G** : Thermocouple type (**JG grounded - JU insulated**) / Tipo termocoppia (**JG a massa - JU isolata**)

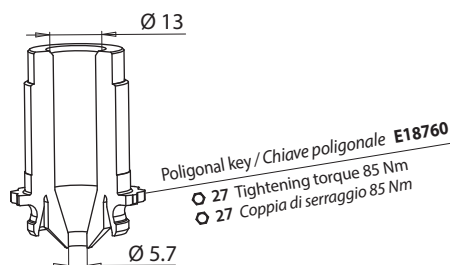


**TYPE MG-3:** The nozzle for injection with shut off valves is suitable for moulding parts where an optimum gate aesthetics is required. It is also suitable for moulding reinforced plastic material with abrasive fillers.

**TIPO MG-3:** Ugello per l'iniezione con gruppo otturazione idoneo allo stampaggio di particolari dove è richiesto un ottimo aspetto estetico del punto di iniezione. E' idoneo anche allo stampaggio di materiali con cariche abrasive.

### TIP GROUP / GRUPPO PUNTALE

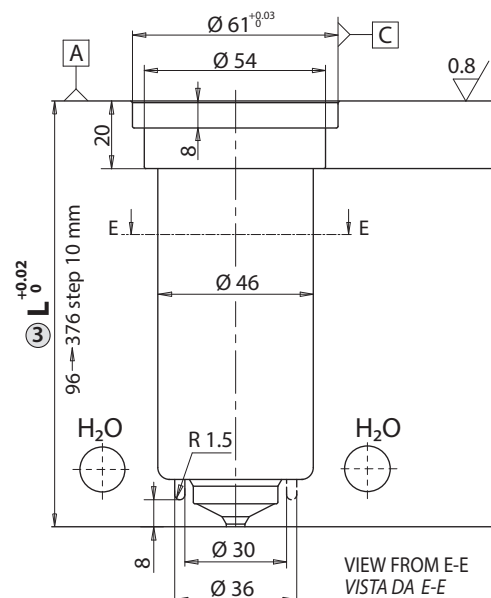
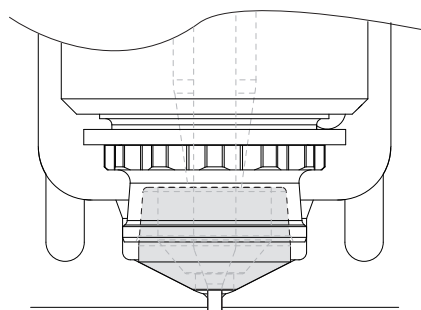
| ④ Type / Tipo | Code / Codice |
|---------------|---------------|
| MG-3          | E21781        |



### COLOUR CHANGE BUSHING / BOCCOLA CAMBIO COLORE

Available upon request / Disponibile su richiesta

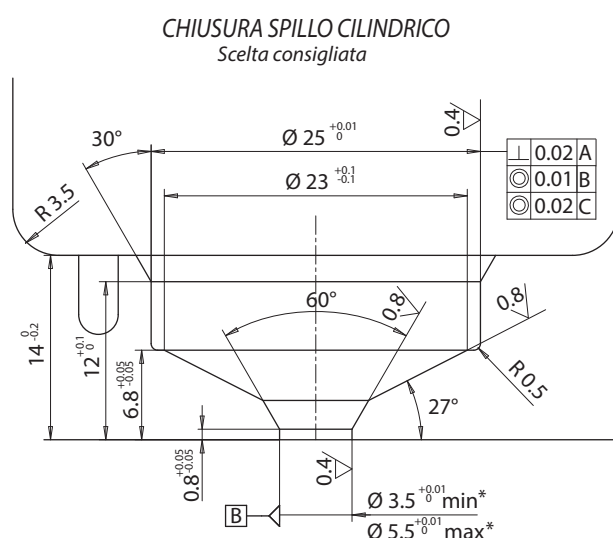
| Type ⑤<br>Tipo | Code<br>Codice |
|----------------|----------------|
| MG46-3         | E21789         |



### GATE AREA / SEDE UGELLO

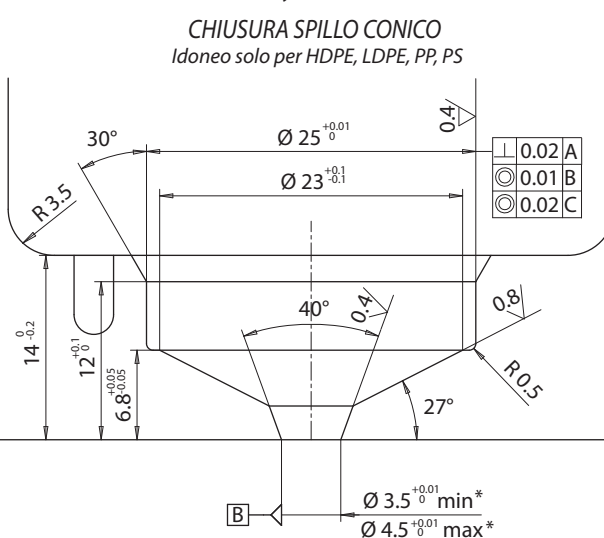
#### CYLINDRIC PIN SHUT OFF CUTOUT Recommended

CHIUSURA SPILLO CILINDRICO  
Scelta consigliata



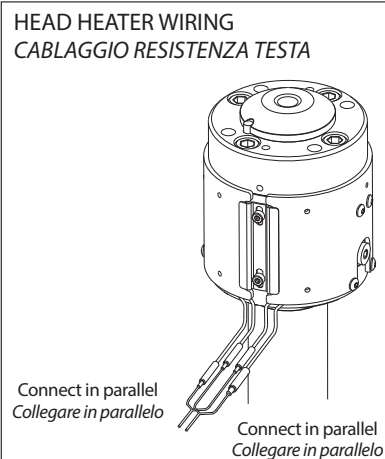
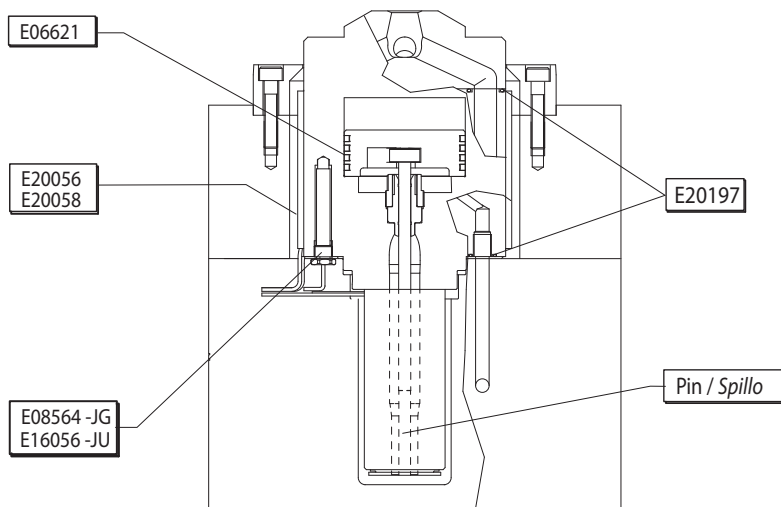
#### CONICAL PIN SHUT OFF CUTOUT Suitable only for HDPE, LDPE, PP, PS

CHIUSURA SPILLO CONICO  
Idoneo solo per HDPE, LDPE, PP, PS



\* Gate diameter must be defined according to injected volume and part wall thickness.

\* Il diametro d'iniezione deve essere definito in funzione del volume iniettato, del materiale termoplastico e dello spessore del pezzo stampato.



REPLACEMENT PARTS / PARTI DI RICAMBIO

| Code / Codice | Description / Descrizione                                |               |                   |                       |
|---------------|----------------------------------------------------------|---------------|-------------------|-----------------------|
| E06621        | Seal 60x3 / Fascia elastica 60x3                         |               |                   |                       |
| E20197        | Compleat set OR / Set completo OR                        |               |                   |                       |
| E20056        | Head heater / Resistenza testa 230 V 700 Watt            | cables / cavi | White / Red-White | Bianco / Rosso-Bianco |
| E20058        | Head heater / Resistenza testa 230 V 700 Watt            | cables / cavi | White / Red-White | Bianco / Rosso-Bianco |
| E08564        | Grounded thermocouple / Termocoppia testa a massa (-JG)  | cables / cavi | Red / Rosso       | TC+                   |
| E16056        | Insulated thermocouple / Termocoppia testa isolata (-JU) | cables / cavi | Blue / Blu        | TC-                   |
| E20060-..     | Needle for nozzle MG Ø46 / Spillo per MG Ø 46            |               |                   |                       |

Ordering NEEDLE code example / Esempio d'ordine SPILLO:

|               |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>E20060</b> | <b>M</b> | <b>G</b> | <b>4</b> | <b>6</b> | <b>0</b> | <b>9</b> | <b>6</b> | <b>-</b> | <b>3</b> | <b>T</b> | <b>-</b> | <b>N</b> | <b>-</b> | <b>3</b> | <b>3</b> |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|

⑪ : Nozzle Ø / Diametro ugello (Ø 46)

⑫ : Length / Lunghezza ugello (L=96 )

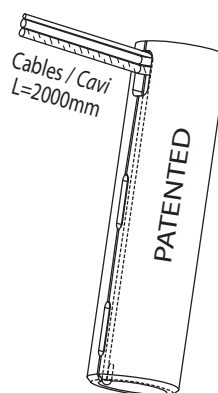
⑬ : Tip type / Tipo puntale (3-3B-3D-3DSLA-3DSLU)

⑭ : Closure type (N conical - G cylindrical) / Tipo chiusura (N conica - G cilindrica)

⑮ : Closing ØDi (3.3 mm) / Diametro chiusura ØDi (3.3 mm)

SPARE PARTS MG - RICAMBI MG

| L   | Type 3B<br>Tipo 3B | Heater code<br>Codice resistenza | Watt | Thermocouple<br>Codice termocoppia ugello |                                |
|-----|--------------------|----------------------------------|------|-------------------------------------------|--------------------------------|
|     |                    |                                  |      | grounded - a massa<br>.. - JG             | insulated - isolata<br>.. - JU |
| 96  | 101                | E15521                           | 480  | E05505-F46                                | E16037-F46                     |
| 106 | 111                | E15522                           | 480  |                                           |                                |
| 116 | 121                | E15147                           | 540  |                                           |                                |
| 126 | 131                | E15148                           | 540  |                                           |                                |
| 136 | 141                | E15149                           | 540  |                                           |                                |
| 146 | 151                | E15150                           | 580  | E15206-F46                                | E16771-F46                     |
| 156 | 161                | E15151                           | 580  |                                           |                                |
| 166 | 171                | E15152                           | 580  |                                           |                                |
| 176 | 181                | E15153                           | 640  |                                           |                                |
| 186 | 191                | E15154                           | 640  |                                           |                                |
| 196 | 201                | E15155                           | 640  | E15223-F46                                | E16772-F46                     |
| 206 | 211                | E15156                           | 720  |                                           |                                |
| 216 | 221                | E15157                           | 720  |                                           |                                |
| 226 | 231                | E15158                           | 720  |                                           |                                |
| 236 | 241                | E15159                           | 760  |                                           |                                |
| 246 | 251                | E15160                           | 760  | E15224-F46                                | E16773-F46                     |
| 256 | 261                | E15161                           | 760  |                                           |                                |
| 266 | 271                | E15162                           | 790  |                                           |                                |
| 276 | 281                | E15163                           | 790  |                                           |                                |
| 286 | 291                | E15164                           | 790  |                                           |                                |
| 296 | 301                | E15165                           | 810  | E15225-F46                                | E16774-F46                     |
| 306 | 311                | E15166                           | 810  |                                           |                                |
| 316 | 321                | E15167                           | 810  |                                           |                                |
| 326 | 331                | E15168                           | 840  |                                           |                                |
| 336 | 341                | E15169                           | 840  |                                           |                                |
| 346 | 351                | E15170                           | 840  | E15226-F46                                | E16775-F46                     |
| 356 | 361                | E15171                           | 880  |                                           |                                |
| 366 | 371                | E15172                           | 880  |                                           |                                |
| 376 | 381                | E15173                           | 880  |                                           |                                |



| Suffix<br>Suffisso | Description<br>Descrizione                                                          |
|--------------------|-------------------------------------------------------------------------------------|
| .. - JG            | Grounded thermocouple with J type calibration<br>Termocoppia ugello a massa tipo J  |
| .. - JU            | Insulated thermocouple with J type calibration<br>Termocoppia ugello isolata tipo J |

| HEATER / RESISTENZA                        |       |
|--------------------------------------------|-------|
| White / Red-White<br>Bianco / Rosso-Bianco | 230 V |
| THERMOCOUPLE<br>TERMOCOPPIA                |       |
| Red / Rosso                                | TC+   |
| Blue / Blu                                 | TC-   |

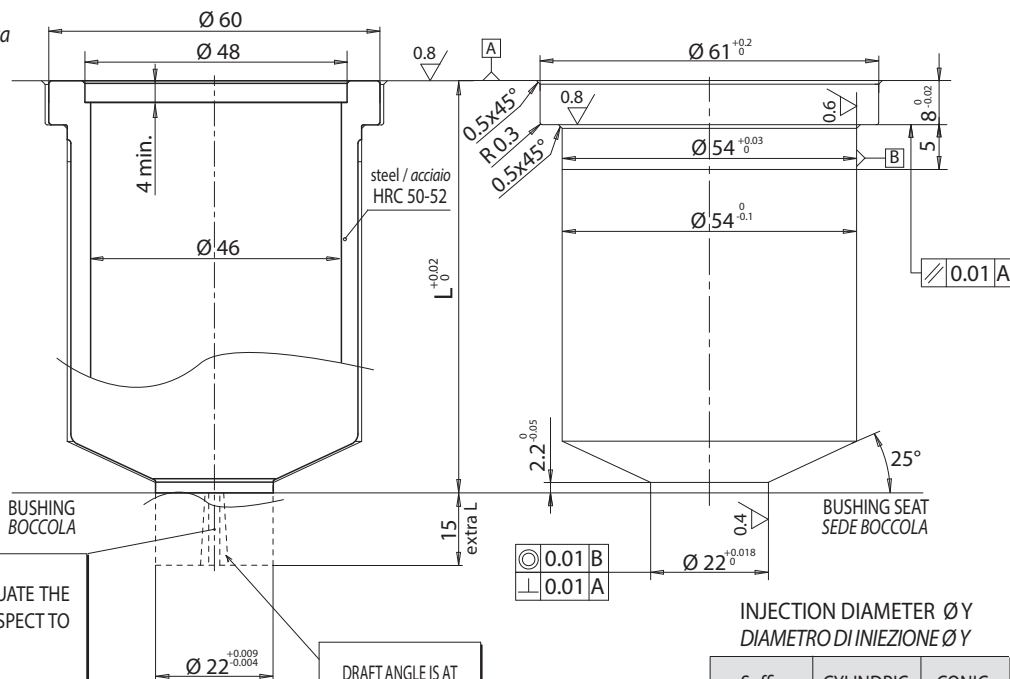
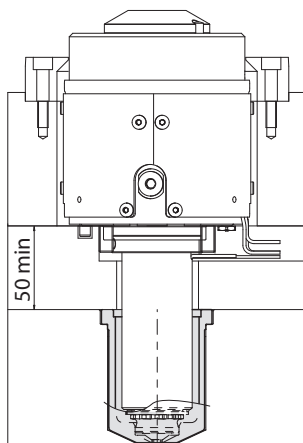
| Description / Descrizione                          | Code / Codice |
|----------------------------------------------------|---------------|
| Stop thermocouple ring<br>Anello ferma termocoppia | <b>E18746</b> |

# BUSHING AND SPACER MG-3 Ø 46 / BOCCOLA E DISTANZIALE MG-3 Ø 46



## • BUSHING / BOCCOLA

Execution upon request / Eseguita su richiesta



### EXECUTION UPON REQUEST:

THERMOPLAY RESERVES THE RIGHT TO EVALUATE THE FEASIBILITY OF THE GATE DIAMETER WITH RESPECT TO THE EXTRA LENGTH.

### ESECUZIONE SU RICHIESTA:

THERMOPLAY SI RISERVA IN FASE D'ORDINE DI VALUTARE LA FATTIBILITÀ DEL DIAMETRO DEL FORO RISPETTO ALL'ALTEZZA DELL'EXTRALUNGHEZZA

DRAFT ANGLE IS AT CUSTOMERS CHARGE  
SFOMATURA A CURA DEL CLIENTE

INJECTION DIAMETER Ø Y  
DIAMETRO DI INIEZIONE Ø Y

| Suffix<br>Suffisso | CYLINDRIC<br>CILINDRICO | CONIC<br>CONICO |
|--------------------|-------------------------|-----------------|
| 35                 | 3.5                     | 3.5             |
| 36                 | 3.6                     | 3.6             |
| 37                 | 3.7                     | 3.7             |
| 38                 | 3.8                     | 3.8             |
| 39                 | 3.9                     | 3.9             |
| 40                 | 4.0                     | 4.0             |
| 41                 | 4.1                     | 4.1             |
| 42                 | 4.2                     | 4.2             |
| 43                 | 4.3                     | 4.3             |
| 44                 | 4.4                     | 4.4             |
| 45                 | 4.5                     | 4.5             |
| 46                 | 4.6                     | --              |
| 47                 | 4.7                     | --              |
| 48                 | 4.8                     | --              |
| 49                 | 4.9                     | --              |
| 50                 | 5.0                     | --              |
| 51                 | 5.1                     | --              |
| 52                 | 5.2                     | --              |
| 53                 | 5.3                     | --              |
| 54                 | 5.4                     | --              |
| 55                 | 5.5                     | --              |

| Type<br>Tipo            | Code/suffix<br>Codice/suffisso | L  | Type<br>Tipo | Code/suffix<br>Codice/suffisso | L+ExtraL |
|-------------------------|--------------------------------|----|--------------|--------------------------------|----------|
| CYLINDRIC<br>CILINDRICO | E15529/ØY                      | 76 |              | E15531/ØY                      | 76+15    |
|                         | E15233/ØY                      | 96 |              | E15234/ØY                      | 96+15    |
| CONIC<br>CONICO         | E15530/ØY                      | 76 |              | E15532/ØY                      | 76+15    |
|                         | E15235/ØY                      | 96 |              | E15236/ØY                      | 96+15    |

### Ordering code example:

E15529/35 = Bushing for nozzles type MG3; Bushing for nozzle total length (L) 76 mm, without extra length and with injection hole 3.5 mm.

### Esempio d'ordine:

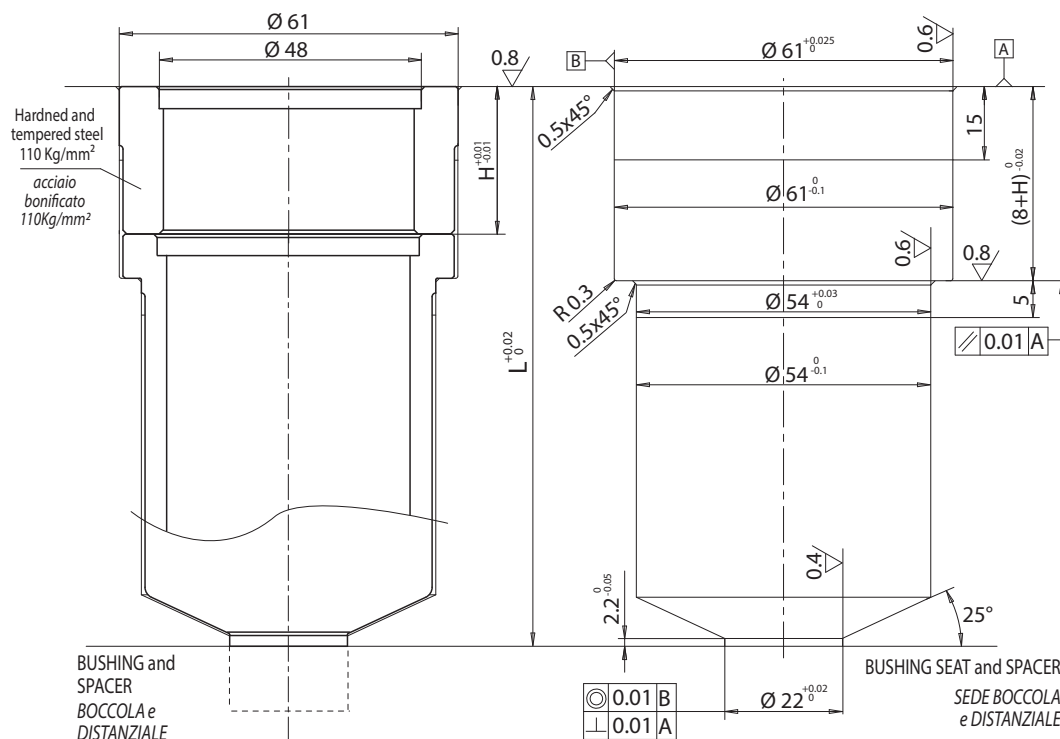
E15529/35 = Boccola portaugello per ugelli tipo MG3; altezza totale (L) 76 mm, senza extralunghezza e con foro d'iniezione Ø 3.5 mm.

## • SPACER / DISTANZIALE

| Spacer code<br>Codice distanziale | H   |
|-----------------------------------|-----|
| E15237                            | 10  |
| E15238                            | 20  |
| E15239                            | 30  |
| E15240                            | 40  |
| E15241                            | 50  |
| E15242                            | 60  |
| E15243                            | 70  |
| E15244                            | 80  |
| E15245                            | 90  |
| E15246                            | 100 |
| E15247                            | 110 |
| E15248                            | 120 |
| E15249                            | 130 |
| E15250                            | 140 |
| E15251                            | 150 |
| E15252                            | 160 |
| E15253                            | 170 |
| E15254                            | 180 |
| E15255                            | 190 |
| E15256                            | 200 |
| E15257                            | 210 |
| E15258                            | 220 |
| E15259                            | 230 |
| E15260                            | 240 |
| E15261                            | 250 |
| E15262                            | 260 |

Add the necessary spacer code to the bushing code to obtain the correct length.

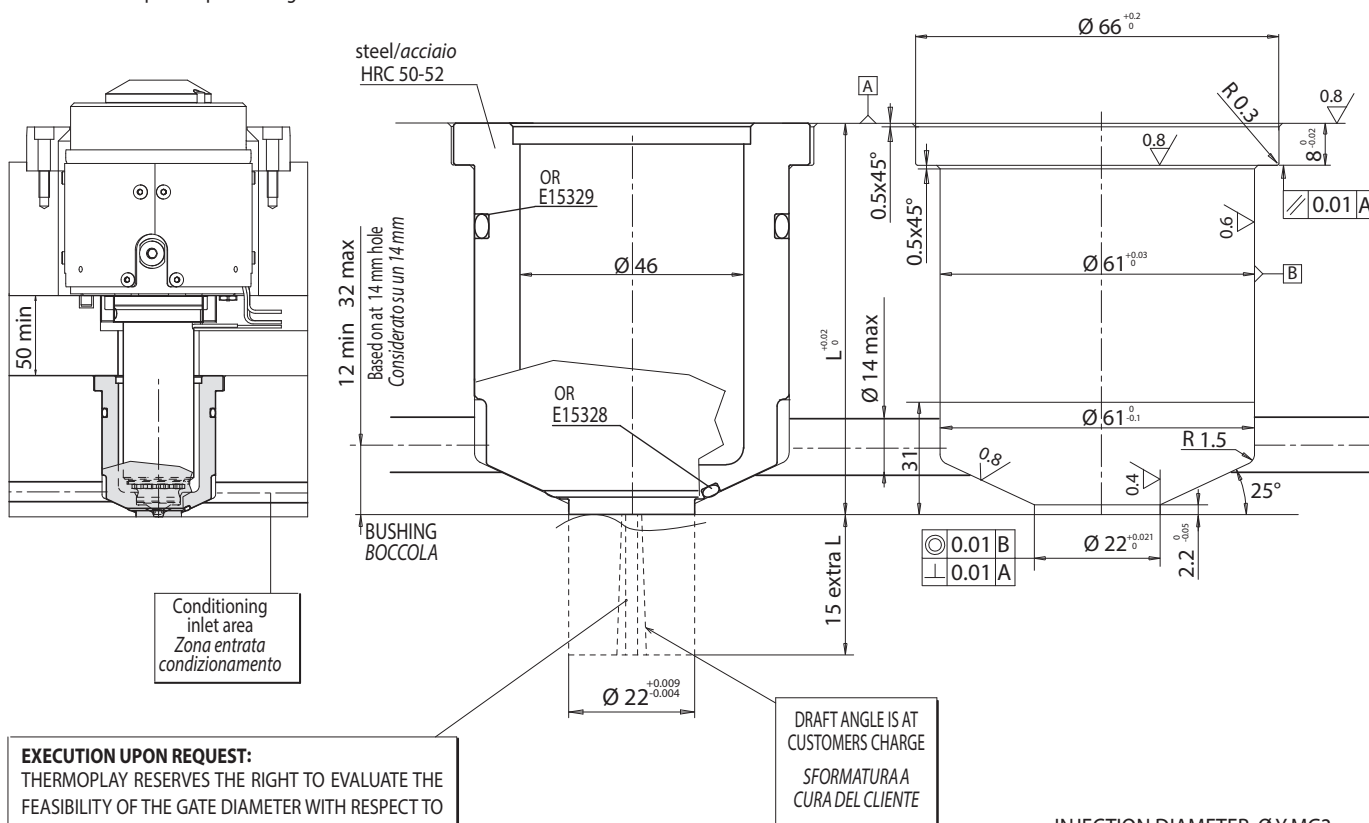
Composizione boccola + distanziale: aggiungere ai codici delle boccole il distanziale sotto specificato per poter raggiungere la lunghezza necessaria.





# • COOLING BUSHING / BOCCOLA CONDIZIONATA

Execution upon request / Eseguita su richiesta



## EXECUTION UPON REQUEST:

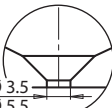
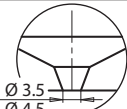
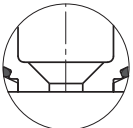
THERMOPLAY RESERVES THE RIGHT TO EVALUATE THE FEASIBILITY OF THE GATE DIAMETER WITH RESPECT TO THE EXTRA LENGTH.

## ESECUZIONE SU RICHIESTA:

THERMOPLAY SI RISERVA IN FASE D'ORDINE DI VALUTARE LA FATTIBILITÀ DEL DIAMETRO DEL FORO RISPETTO ALL' ALTEZZA DELL'EXTRALUNGHEZZA

## INJECTION DIAMETER Ø Y MG3 DIAMETRO DI INIEZIONE Ø Y MG3

| Suffix<br>Suffisso | CYLINDRIC<br>CILINDRICO | CONIC<br>CONICO |
|--------------------|-------------------------|-----------------|
| 35                 | 3.5                     | 3.5             |
| 36                 | 3.6                     | 3.6             |
| 37                 | 3.7                     | 3.7             |
| 38                 | 3.8                     | 3.8             |
| 39                 | 3.9                     | 3.9             |
| 40                 | 4.0                     | 4.0             |
| 41                 | 4.1                     | 4.1             |
| 42                 | 4.2                     | 4.2             |
| 43                 | 4.3                     | 4.3             |
| 44                 | 4.4                     | 4.4             |
| 45                 | 4.5                     | 4.5             |
| 46                 | 4.6                     | --              |
| 47                 | 4.7                     | --              |
| 48                 | 4.8                     | --              |
| 49                 | 4.9                     | --              |
| 50                 | 5.0                     | --              |
| 51                 | 5.1                     | --              |
| 52                 | 5.2                     | --              |
| 53                 | 5.3                     | --              |
| 54                 | 5.4                     | --              |
| 55                 | 5.5                     | --              |

|    | Type<br>Tipo            | Code/suffix<br>Codice/suffisso | L  | Type<br>Tipo                                                                        | Code/suffix<br>Codice/suffisso | L+ExtraL |
|----|-------------------------|--------------------------------|----|-------------------------------------------------------------------------------------|--------------------------------|----------|
| 3  | CYLINDRIC<br>CILINDRICO | E15533/ØY                      | 76 |  | E15535/ØY                      | 76+15    |
|    |                         | E15276/ØY                      | 86 |                                                                                     | E15277/ØY                      | 86+15    |
|    | CONIC<br>CONICO         | E15534/ØY                      | 76 |  | E15536/ØY                      | 76+15    |
|    |                         | E15278/ØY                      | 86 |                                                                                     | E15279/ØY                      | 86+15    |
| 3D |                         | E15610                         | 76 |  | --                             | --       |
|    |                         | E15284                         | 86 |                                                                                     |                                |          |

## Ordering code example:

E15533/40 = Cooling bushing for nozzles type 3 total length (L) 76 mm, without extra length and with cylindric injection hole 4.0 mm.

## Esempio ordine:

E15533/40 = Boccola porta ugello condizionata per ugello tipo 3 chiusura cilindrica lunghezza totale L=76 mm senza extralunghezza e con foro di iniezione 4.0 mm.

Spacers are not provided with cooling bushes.  
Available lengths are 76 and 86 as mentioned above.  
Le boccole portaugello condizionate sono prive di distanziali e vengono fornite alle lunghezze 76 e 86 mm.