

MOULDING SUPPLIES

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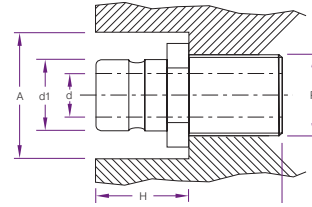
MOULD MAINTENANCE AND SET UP

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Male Brass Connectors

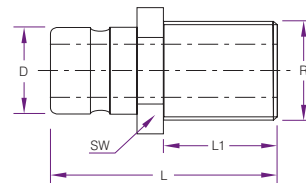


*Also available with internal valve, specify "V".

| Product Code | Series | R (BSPT) | D1 | H | A | L |
|--------------|------------|----------|------|----|----|----|
| CM251 | 200 Series | 1/8 | 9.5 | 17 | 22 | 25 |
| CM252 | | 1/4 | 9.5 | 19 | 26 | 29 |
| CM253 | | 3/8 | 9.5 | 19 | 30 | 30 |
| CM351 | 300 Series | 1/8 | 13.5 | 25 | 26 | 35 |
| CM352* | | 1/4 | 13.5 | 25 | 26 | 35 |
| CM353* | | 3/8 | 13.5 | 26 | 30 | 38 |
| CM354 | | 1/2 | 13.5 | 28 | 37 | 42 |
| CM552 | 500 Series | 1/4 | 20 | 37 | 30 | 41 |
| CM553 | | 3/8 | 20 | 37 | 32 | 41 |
| CM554 | | 1/2 | 20 | 38 | 32 | 39 |
| CM556 | | 3/4 | 20 | 38 | 38 | 45 |

CONNECTOR FITTINGS AND HOSE

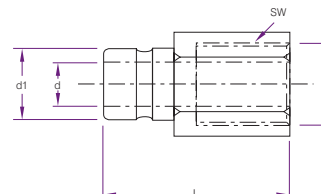
Male Brass/Teflon Connectors



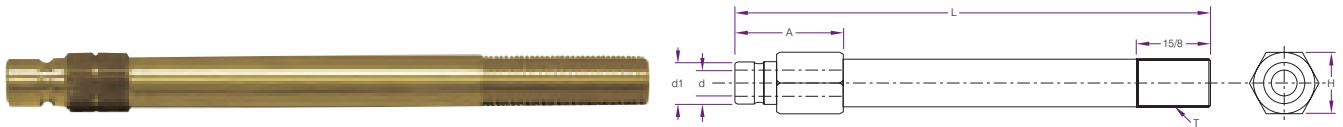
| Product Code | Series | R Thread | D | L | L1 | SW |
|--------------|------------|----------|------|----|----|----|
| CMT251 | 200 Series | 1/8 | 9.5 | 24 | 9 | 13 |
| CMT252 | | 1/4 | 9.5 | 29 | 12 | 16 |
| CMT253 | | 3/8 | 9.5 | 30 | 12 | 19 |
| CMT352 | 300 Series | 1/4 | 13.5 | 34 | 12 | 16 |
| CMT353 | | 3/8 | 13.5 | 34 | 12 | 19 |
| CMT354 | | 1/2 | 13.5 | 39 | 17 | 24 |
| CMT554 | 500 Series | 1/2 | 20 | 44 | 17 | 22 |
| CMT556 | | 3/4 | 20 | 45 | 19 | 29 |

CONNECTOR FITTINGS AND HOSE

Female Brass Connectors



| Product Code | Series | R Thread | d | d1 | L | SW |
|--------------|------------|----------|---|------|----|----|
| CM251F | 200 Series | 1/8 | 6 | 9.5 | 28 | 13 |
| CM252F | | 1/4 | 6 | 9.5 | 32 | 17 |
| CM253F | | 3/8 | 6 | 9.5 | 34 | 19 |
| CM352F | 300 Series | 1/4 | 9 | 13.5 | 37 | 17 |
| CM353F | | 3/8 | 9 | 13.5 | 39 | 19 |
| CM354F | | 1/2 | 9 | 13.5 | 46 | 24 |

**200 Series 1/4 Flow**

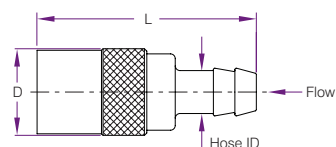
| Product Code | L | T | d | d1 | A |
|--------------|-------|-----|---|----|-------|
| CM251212 | 2 1/2 | 1/8 | 6 | 9 | 11/16 |
| CM2514 | 4 | 1/8 | 6 | 9 | 1 |
| CM251512 | 5 1/2 | 1/8 | 6 | 9 | 1 |
| CM2517 | 7 | 1/8 | 6 | 9 | 1 |
| CM251812 | 8 1/2 | 1/8 | 6 | 9 | 1 |
| CM252212 | 2 1/2 | 1/4 | 6 | 9 | 7/8 |
| CM2524 | 4 | 1/4 | 6 | 9 | 1 1/4 |
| CM252512 | 5 1/2 | 1/4 | 6 | 9 | 1 1/4 |
| CM2527 | 7 | 1/4 | 6 | 9 | 1 1/4 |
| CM252812 | 8 1/2 | 1/4 | 6 | 9 | 1 1/4 |
| CM253212 | 2 1/2 | 3/8 | 6 | 9 | 1 |
| CM2534 | 4 | 3/8 | 6 | 9 | 1 1/4 |
| CM253512 | 5 1/2 | 3/8 | 6 | 9 | 1 1/4 |
| CM2537 | 7 | 3/8 | 6 | 9 | 1 1/4 |

300 Series 3/8 Flow

| Product Code | L | T | d | d1 | A |
|--------------|-------|-----|---|----|-------|
| CM351212 | 2 1/2 | 1/8 | 9 | 13 | 7/8 |
| CM3514 | 4 | 1/8 | 9 | 13 | 1 |
| CM351512 | 5 1/2 | 1/8 | 9 | 13 | 1 |
| CM3517 | 7 | 1/8 | 9 | 13 | 1 |
| CM351812 | 8 1/2 | 1/8 | 9 | 13 | 1 |
| CM352212 | 2 1/2 | 1/4 | 9 | 13 | 7/8 |
| CM3524 | 4 | 1/4 | 9 | 13 | 1 1/4 |
| CM352512 | 5 1/2 | 1/4 | 9 | 13 | 1 1/4 |
| CM3527 | 7 | 1/4 | 9 | 13 | 1 1/4 |
| CM352812 | 8 1/2 | 1/4 | 9 | 13 | 1 1/4 |
| CM35210 | 10 | 1/4 | 9 | 13 | 1 1/4 |
| CM3534 | 4 | 3/8 | 9 | 13 | 1 |
| CM353512 | 5 1/2 | 3/8 | 9 | 13 | 1 1/4 |
| CM3537 | 7 | 3/8 | 9 | 13 | 1 1/4 |
| CM35310 | 10 | 3/8 | 9 | 13 | 1 1/4 |



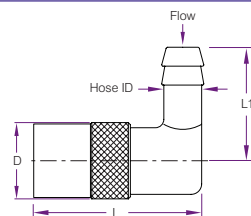
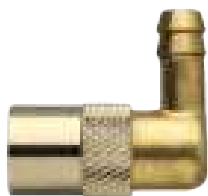
| Product Code | Description |
|--------------|---------------------|
| CM200 | 200 Series Viton |
| CM300-G | 300 Series Viton |
| CM300-R | 300 Series Silicone |
| CM500 | 500 Series Silicone |



| Product Code without Valve | Product Code with Valve | Hose ID | Flow | L | D | Series |
|----------------------------|-------------------------|---------|------|--------|----|--------|
| CM206 | CM206V | 3/8 | 1/4 | 51mm | 17 | 200 |
| CM306 | CM306V | 3/8 | 1/4 | 64mm | 23 | 300 |
| CM308 | CM308V | 1/2 | 3/8 | 66.5mm | 23 | 300 |
| CM308SL | CM308VSL | 1/2 | 3/8 | 73mm | 23 | 300 |
| CM506 | CM506V | 3/4 | 5/8 | 89mm | 30 | 500 |

90° Socket Connectors

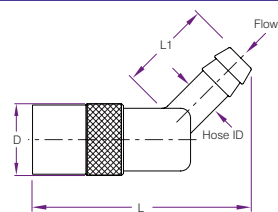
CONNECTOR FITTINGS AND HOSE



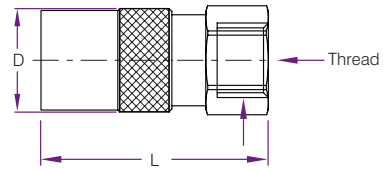
| Product Code without Valve | Product Code with Valve | Hose ID | Flow | L | L1 | D | Series |
|----------------------------|-------------------------|---------|------|------|--------|----|--------|
| CM216 | CM216V | 3/8 | 1/4 | 40mm | 22mm | 17 | 200 |
| CM318 | CM318V | 1/2 | 3/8 | 56mm | 28.5mm | 23 | 300 |
| CM516 | CM516V | 3/4 | 5/8 | 77mm | 32mm | 30 | 500 |

45° Socket Connectors

CONNECTOR FITTINGS AND HOSE



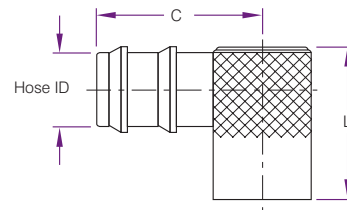
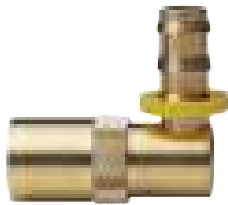
| Product Code without Valve | Product Code with Valve | Hose ID | Flow | L | L1 | D | Series |
|----------------------------|-------------------------|---------|------|--------|------|----|--------|
| CM226 | CM226V | 3/8 | 1/4 | 55.5mm | 22mm | 18 | 200 |
| CM328 | CM328V | 1/2 | 3/8 | 75mm | 25mm | 24 | 300 |
| CM526 | CM526V | 3/4 | 5/8 | 77mm | 30mm | 32 | 500 |



| Product Code without Valve | Product Code with Valve | Thread | L | D | Series |
|----------------------------|-------------------------|--------|----|----|--------|
| CMB200 | CMB300V | 1/4 | 40 | 18 | 200 |
| CMB300 | | 1/4 | 47 | 23 | 300 |
| CMB500 | | 1/2 | 52 | 30 | 500 |

CONNECTOR FITTINGS AND HOSE

Quick Connect Water Jumpers

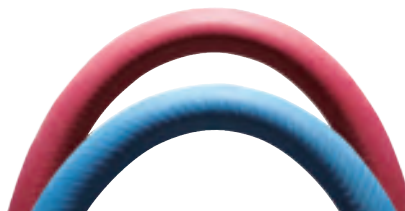


| Product Code without Valve | Hose ID | Flow | L | D | Series |
|----------------------------|---------|--------|--------|-----|--------|
| WJ200-6 | 3/8 | 1 | 1 1/4 | 3/8 | 5/8 |
| WJ300-6 | 3/8 | 1 7/16 | 1 9/16 | 1/2 | 7/8 |
| WJ300-8 | 1/2 | 1 7/16 | 1 9/16 | 1/2 | 7/8 |

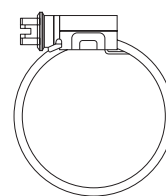
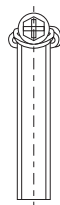
CONNECTOR FITTINGS AND HOSE

Water Hose

Crimping Service Available:
Hose crimped to order
Max 15 bar



| Product Code | I.D. | O.D. | Length | Colour | Bend Radius | Max Temp |
|--------------|------|--------|--------|--------|-------------|----------|
| E10B | 10mm | 16.5mm | 50m | BLUE | 60° | 160° |
| E10R | 10mm | 16.5mm | 50m | RED | 60° | 160° |
| E13B | 13mm | 21mm | 50m | BLUE | 90° | 160° |
| E13R | 13mm | 21mm | 50m | RED | 90° | 160° |
| G13B | 13mm | 21mm | 50m | BLUE | 90° | 100° |
| G13R | 13mm | 21mm | 50m | RED | 90° | 100° |
| G19B | 19mm | 27mm | 30m | BLUE | 110° | 100° |
| G19R | 19mm | 27mm | 30m | RED | 110° | 100° |



Manufactured using a solid stainless steel band with a rolled edge and smooth underside to prevent hose damage and deliver high strength for superior sealing.

| Product Code | Size | Qty in Pack |
|--------------|-------------|-------------|
| HC0816-PKT | 11mm - 16mm | 10 |
| HC1320-PKT | 13mm - 20mm | 10 |
| HC1524-PKT | 16mm - 24mm | 10 |
| HC2238-PKT | 22mm - 38mm | 10 |

Teflon Tape

CONNECTOR FITTINGS AND HOSE



| Product Code | Description |
|--------------|-----------------|
| TEF | 1/2 Teflon Tape |

2 Ear Clips and Pincers

CONNECTOR FITTINGS AND HOSE



| Product Code | Description | Size |
|--------------|-------------|------|
| PS01 | Side Pincer | - |
| EAR15 | ID 13-15 | 7.0 |
| EAR17 | ID 14-17 | 7.0 |
| EAR18 | ID 15-18 | 7.5 |
| EAR20 | ID 17-20 | 7.5 |
| EAR23 | ID 20-23 | 8.5 |
| EAR27 | ID 23-27 | 8.5 |
| EAR28 | ID 25-28 | 9.0 |



| Product | Product Code | D |
|--------------|--------------|----------|
| Hand Crimper | X100 | 10-36 mm |



| Product | Product Code | D | d. | Suits Hose |
|---------|--------------|--------|------|------------|
| Ferrule | C10/17 | 17.5mm | 10mm | G10/E10 |
| Ferrule | C13/22 | 22.5mm | 13mm | G13/E13 |
| Ferrule | C19/29 | 29mm | 19mm | G19/E19 |



| Product Code | Description |
|--------------|--------------------------|
| TFP7-316 | 3/16 Hose to Hose Joiner |
| TFP7-14 | 1/4 Hose to Hose Joiner |
| TFP7-516 | 5/16 Hose to Hose Joiner |
| TFP7-38 | 3/8 Hose to Hose Joiner |
| TFP7-12 | 1/2 Hose to Hose Joiner |
| TFP7-34 | 3/4 Hose to Hose Joiner |



| Product Code | Description |
|--------------|-------------------------------|
| TFP3-31618 | 3/16 Hose Tail x 1/8 Male BSP |
| TFP3-31614 | 3/16 Hose Tail x 1/4 Male BSP |
| TFP3-1418 | 1/4 Hose Tail x 1/8 Male BSP |
| TFP3-1414 | 1/4 Hose Tail x 1/4 Male BSP |
| TFP3-1438 | 1/4 Hose Tail x 3/8 Male BSP |
| TFP3-1412 | 1/4 Hose Tail x 1/2 Male BSP |
| TFP3-51618 | 5/16 Hose Tail x 1/8 Male BSP |
| TFP3-51614 | 5/16 Hose Tail x 1/4 Male BSP |
| TFP3-51638 | 5/16 Hose Tail x 3/8 Male BSP |
| TFP3-51612 | 5/16 Hose Tail x 1/2 Male BSP |
| TFP3-3818 | 3/8 Hose Tail x 1/8 Male BSP |
| TFP3-3814 | 3/8 Hose Tail x 1/4 Male BSP |
| TFP3-3838 | 3/8 Hose Tail x 3/8 Male BSP |
| TFP3-3812 | 3/8 Hose Tail x 1/2 Male BSP |
| TFP3-3834 | 3/8 Hose Tail x 3/4 Male BSP |
| TFP3-1218 | 1/2 Hose Tail x 1/8 Male BSP |
| TFP3-1214 | 1/2 Hose Tail x 1/4 Male BSP |
| TFP3-1238 | 1/2 Hose Tail x 3/8 Male BSP |
| TFP3-1212 | 1/2 Hose Tail x 1/2 Male BSP |
| TFP3-1234 | 1/2 Hose Tail x 3/4 Male BSP |
| TFP3-3438 | 3/4 Hose Tail x 3/8 Male BSP |
| TFP3-3412 | 3/4 Hose Tail x 1/2 Male BSP |
| TFP3-3410 | 3/4 Hose Tail x 1" Male BSP |
| TFP3-1034 | 1" Hose Tail x 3/4 Male BSP |
| TFP3-1010 | 1" Hose Tail x 1" Male BSP |

3-Way Tee Hose Joiner



| Product Code | Description |
|--------------|-----------------------------|
| TFP14-316 | 3/16 3-Way Tee Hose Joiners |
| TFP14-14 | 1/4 3-Way Tee Hose Joiners |
| TFP14-516 | 5/16 3-Way Tee Hose Joiners |
| TFP14-38 | 3/8 3-Way Tee Hose Joiners |
| TFP14-12 | 1/2 3-Way Tee Hose Joiners |
| TFP14-34 | 3/4 3-Way Tee Hose Joiners |



| Product Code | Description |
|--------------|-------------------------------|
| TFP3-31618 | 3/16 Hose Tail x 1/8 Male BSP |
| TFP3-31614 | 3/16 Hose Tail x 1/4 Male BSP |
| TFP3-1418 | 1/4 Hose Tail x 1/8 Male BSP |
| TFP3-1414 | 1/4 Hose Tail x 1/4 Male BSP |
| TFP3-1438 | 1/4 Hose Tail x 3/8 Male BSP |
| TFP3-1412 | 1/4 Hose Tail x 1/2 Male BSP |
| TFP3-51618 | 5/16 Hose Tail x 1/8 Male BSP |
| TFP3-51614 | 5/16 Hose Tail x 1/4 Male BSP |
| TFP3-51638 | 5/16 Hose Tail x 3/8 Male BSP |
| TFP3-51612 | 5/16 Hose Tail x 1/2 Male BSP |
| TFP3-3818 | 3/8 Hose Tail x 1/8 Male BSP |
| TFP3-3814 | 3/8 Hose Tail x 1/4 Male BSP |
| TFP3-3838 | 3/8 Hose Tail x 3/8 Male BSP |
| TFP3-3812 | 3/8 Hose Tail x 1/2 Male BSP |
| TFP3-3834 | 3/8 Hose Tail x 3/4 Male BSP |
| TFP3-1218 | 1/2 Hose Tail x 1/8 Male BSP |
| TFP3-1214 | 1/2 Hose Tail x 1/4 Male BSP |
| TFP3-1238 | 1/2 Hose Tail x 3/8 Male BSP |
| TFP3-1212 | 1/2 Hose Tail x 1/2 Male BSP |
| TFP3-1234 | 1/2 Hose Tail x 3/4 Male BSP |
| TFP3-3438 | 3/4 Hose Tail x 3/8 Male BSP |
| TFP3-3412 | 3/4 Hose Tail x 1/2 Male BSP |
| TFP3-3410 | 3/4 Hose Tail x 1" Male BSP |
| TFP3-1034 | 1" Hose Tail x 3/4 Male BSP |
| TFP3-1010 | 1" Hose Tail x 1" Male BSP |



| Product Code | Description |
|--------------|-------------------------|
| TFP10-3814 | 3/8 Tail 1/4 Female BSP |
| TFP10-1214 | 1/2 Tail 1/4 Female BSP |
| TFP10-1238 | 1/2 Tail 3/8 Female BSP |
| TFP10-1212 | 1/2 Tail 1/2 Female BSP |



| Product Code | Description |
|--------------|------------------------------|
| TF25E-18-90 | 1/8 Male to Female 90° Elbow |
| TF25E-14-90 | 1/4 Male to Female 90° Elbow |
| TF25E-38-90 | 3/8 Male to Female 90° Elbow |
| TF25E-12-90 | 1/2 Male to Female 90° Elbow |

Male Hexagonal Nipples

CONNECTOR FITTINGS AND HOSE



| Product Code | Description |
|--------------|-------------------------------|
| TF27-18 | 1/8 Male BSP Hexagonal Nipple |
| TF27-14 | 1/4 Male BSP Hexagonal Nipple |
| TF27-38 | 3/8 Male BSP Hexagonal Nipple |
| TF27-12 | 1/2 Male BSP Hexagonal Nipple |
| TF27-34 | 3/4 Male BSP Hexagonal Nipple |
| TF27-10 | 1" Male BSP Hexagonal Nipple |

Female to Male BSP Adaptor

CONNECTOR FITTINGS AND HOSE



| Product Code | Description |
|--------------|---|
| TF72-1818 | 1/8F - 1/8M Male to Female BSP Adaptors |
| TF72-1418 | 1/4F - 1/8M Male to Female BSP Adaptors |
| TF72-1414 | 1/4F - 1/4M Male to Female BSP Adaptors |
| TF72-3814 | 3/8F - 1/4M Male to Female BSP Adaptors |
| TF72-3838 | 3/8F - 3/8M Male to Female BSP Adaptors |
| TF72-1214 | 1/2F - 1/4M Male to Female BSP Adaptors |
| TF72-1238 | 1/2F - 3/8M Male to Female BSP Adaptors |
| TF72-1212 | 1/2F - 1/2M Male to Female BSP Adaptors |
| TF72-3412 | 3/4F - 1/2M Male to Female BSP Adaptors |



| Product Code | Description |
|--------------|--|
| TF24-1418 | 1/4 X 1/8 Male to Female Reducing Bush |
| TF24-3818 | 3/8 x 1/8 Male to Female Reducing Bush |
| TF24-3814 | 3/8 x 1/4 Male to Female Reducing Bush |
| TF24-1214 | 1/2 x 1/4 Male to Female Reducing Bush |
| TF24-1238 | 1/2 x 3/8 Male to Female Reducing Bush |
| TF24-3414 | 3/4 x 1/4 Male to Female Reducing Bush |
| TF24-3438 | 3/4 x 3/8 Male to Female Reducing Bush |
| TF24-3412 | 3/4 x 1/2 Male to Female Reducing Bush |
| TF24-1012 | 1 x 1/2 Male to Female Reducing Bush |
| TF24-1034 | 1 x 3/4 Male to Female Reducing Bush |



| Product Code | Description |
|--------------|-----------------------------|
| TF26-18 | 1/8 Female Hexagonal Socket |
| TF26-14 | 1/4 Female Hexagonal Socket |
| TF26-38 | 3/8 Female Hexagonal Socket |
| TF26-12 | 1/2 Female Hexagonal Socket |
| TF26-34 | 3/4 Female Hexagonal Socket |



| Product Code | Description |
|--------------|--|
| TF73-1418 | 1/4M - 1/8M Male to Male Reducing Nipple |
| TF73-3818 | 3/8M - 1/8M Male to Male Reducing Nipple |
| TF73-3814 | 3/8M - 1/4M Male to Male Reducing Nipple |
| TF73-1214 | 1/2M - 1/4M Male to Male Reducing Nipple |
| TF73-1238 | 1/2M - 3/8 Male to Male Reducing Nipple |
| TF73-3438 | 3/4M - 3/8 Male to Male Reducing Nipple |
| TF73-3412 | 3/4M - 1/2M Male to Male Reducing Nipple |



| Product Code | Description |
|--------------|--------------------|
| TF64-18 | 1/8 BSP Taper Plug |
| TF64-14 | 1/4 BSP Taper Plug |
| TF64-38 | 3/8 BSP Taper Plug |
| TF64-12 | 1/2 BSP Taper Plug |
| TF64-34 | 3/4 BSP Taper Plug |
| TF64-10 | 1" BSP Taper Plug |

Female BSP End Caps

CONNECTOR FITTINGS AND HOSE



| Product Code | Description |
|--------------|------------------------|
| TF33-18 | 1/8 Female BSP End Cap |
| TF33-14 | 1/4 Female BSP End Cap |
| TF33-38 | 3/8 Female BSP End Cap |
| TF33-12 | 1/2 Female BSP End Cap |
| TF33-34 | 3/4 Female BSP End Cap |
| TF33-10 | 1" Female BSP End Cap |

3-Way Male BSP Tee

CONNECTOR FITTINGS AND HOSE



| Product Code | Description |
|--------------|------------------------|
| TF50-14 | 1/4 3-Way Male BSP Tee |



BSPT Brass / Stainless

| Product Code | Size | Height |
|--------------|------|--------|
| PP10 | 1/8 | .250 |
| PP20 | 1/4 | .406 |
| PP40 | 3/8 | .406 |
| PP60 | 1/2 | .531 |
| PP80 | 3/4 | .531 |
| PP100 | 1 | .656 |



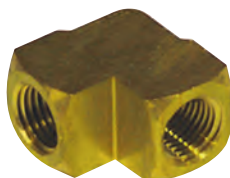
| Product Code | Description |
|--------------|----------------------|
| TF37-14 | 1/4 Female BSP Cross |



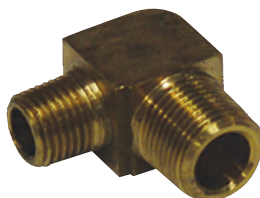
| Product Code | Description |
|--------------|--------------------|
| TF35-18 | 1/8 Female BSP Tee |
| TF35-14 | 1/4 Female BSP Tee |
| TF35-38 | 3/8 Female BSP Tee |
| TF35-12 | 1/2 Female BSP Tee |
| TF35-34 | 3/4 Female BSP Tee |



| Product Code | Description |
|--------------|---------------------------------------|
| TF25E-18-45 | 1/8M - 1/8F Male to Female 45° Elbow |
| TF25E-14-45 | 1/4M - 1/4F Male to Female 45° Elbow |
| TF25E-38-45 | 3/8M - 3/8F Male to Female 45° Elbow |
| TF25E-12-45 | 1/2M - 1/2F Male to Female 45 ° Elbow |



| Product Code | Description |
|--------------|----------------------|
| TF34-18 | 1/8 Female 90° Elbow |
| TF34-14 | 1/4 Female 90° Elbow |
| TF34-38 | 3/8 Female 90° Elbow |
| TF34-12 | 1/2 Female 90° Elbow |
| TF34-34 | 3/4 Female 90° Elbow |



| Product Code | Description |
|--------------|------------------------------------|
| TF48-1818 | M1/8 - M1/8 Male to Male 90° Elbow |
| TF48-1414 | M1/4 - M1/4 Male to Male 90° Elbow |
| TF48-3838 | M3/8 - M3/8 Male to Male 90° Elbow |
| TF48-3814 | M3/8 - M1/4 Male to Male 90° Elbow |



| Product Code | Description |
|--------------|---------------------------------------|
| TF31T8 | 310-Series Snap On with 1/2 Hose Tail |



| Product Code | Description |
|--------------|---|
| TF310-M2 | 310-Series Coupler with 1/8 Male BSP Thread |
| TF310-M4 | 310-Series Coupler with 1/4 Male BSP Thread |
| TF310-M6 | 310-Series Coupler with 3/8 Male BSP Thread |
| TF310-M8 | 310-Series Coupler with 1/2 Male BSP Thread |



| Product Code | Description |
|--------------|---|
| TF310-F4 | 310-Series Coupler with 1/4 Female BSP Thread |
| TF310-F6 | 310-Series Coupler with 3/8 Female BSP Thread |
| TF310-F8 | 310-Series Coupler with 1/2 Female BSP Thread |



| Product Code | Description |
|--------------|--------------------------------------|
| TF310-T4 | T4 310-Series Coupler with Hose Tail |
| TF310-T6 | T6 310-Series Coupler with Hose Tail |
| TF310-T8 | T8 310-Series Coupler with Hose Tail |

310 Series Air Snap on with Male BSP Thread

CONNECTOR FITTINGS AND HOSE



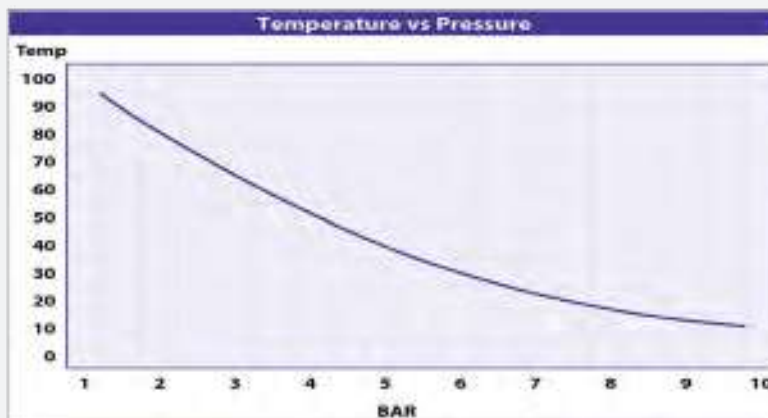
| Product Code | Description |
|--------------|---|
| TF31-M2 | 310-Series Snap On with 1/8 Male BSP Thread |
| TF31-M4 | 310-Series Snap On with 1/4 Male BSP Thread |
| TF31-M6 | 310-Series Snap On with 3/8 Male BSP Thread |
| TF31-M8 | 310-Series Snap On with 1/2 Male BSP Thread |

310 Series Air Snap on with Female BSP Thread

CONNECTOR FITTINGS AND HOSE



| Product Code | Description |
|--------------|---|
| TF31-F4 | 310-Series Snap On with 1/4 Female BSP Thread |
| TF31-F6 | 310-Series Snap On with 3/8 Female BSP Thread |



| Product Code | Dia. | Description | Unit Size |
|-----------------|------|-------------------------|----------------|
| PU04 Hose Black | 4mm | Black Polyurethane Hose | 1 roll = 20mtr |
| PU04 Hose Blue | 4mm | Blue Polyurethane Hose | 1 roll = 20mtr |
| PU05 Hose Blue | 5mm | Blue Polyurethane Hose | 1 roll = 20mtr |
| PU06 Hose Black | 6mm | Black Polyurethane Hose | 1 roll = 20mtr |
| PU06 Hose Blue | 6mm | Blue Polyurethane Hose | 1 roll = 20mtr |
| PU08 Hose Red | 8mm | Red Polyurethane Hose | 1 roll = 30mtr |
| PU08 Hose Black | 8mm | Black Polyurethane Hose | 1 roll = 30mtr |
| PU08 Hose Blue | 8mm | Blue Polyurethane Hose | 1 roll = 30mtr |
| PU10 Hose Red | 10mm | Red Polyurethane Hose | 1 roll = 30mtr |
| PU10 Hose Black | 10mm | Black Polyurethane Hose | 1 roll = 30mtr |
| PU10 Hose Blue | 10mm | Blue Polyurethane Hose | 1 roll = 30mtr |
| PU12 Hose Red | 12mm | Red Polyurethane Hose | 1 roll = 30mtr |
| PU12 Hose Black | 12mm | Black Polyurethane Hose | 1 roll = 30mtr |
| PU12 Hose Blue | 12mm | Blue Polyurethane Hose | 1 roll = 30mtr |



| Product Code | Description |
|--------------|--|
| PB-4-01 | 4mm x 1/8 BSPT Threaded Tee Push Fitting |
| PB-4-02 | 4mm x 1/4 BSPT Threaded Tee Push Fitting |
| PB-5-01 | 5mm x 1/8 BSPT Threaded Tee Push Fitting |
| PB-5-02 | 5mm x 1/4 BSPT Threaded Tee Push Fitting |
| PB-6-01 | 6mm x 1/8 BSPT Threaded Tee Push Fitting |
| PB-6-02 | 6mm x 1/4 BSPT Threaded Tee Push Fitting |
| PB-8-01 | 8mm x 1/8 BSPT Threaded Tee Push Fitting |
| PB-8-02 | 8mm x 1/4 BSPT Threaded Tee Push Fitting |



| Product Code | Description |
|--------------|--|
| PC-04-01 | 4mm x 1/8 BSPT Threaded Straight Push Fitting |
| PC-04-02 | 4mm x 1/4 BSPT Threaded Straight Push Fitting |
| PC-05-01 | 5mm x 1/8 BSPT Threaded Straight Push Fitting |
| PC-05-02 | 5mm x 1/4 BSPT Threaded Straight Push Fitting |
| PC-06-01 | 6mm x 1/8 BSPT Threaded Straight Push Fitting |
| PC-06-02 | 6mm x 1/4 BSPT Threaded Straight Push Fitting |
| PC-08-01 | 8mm x 1/8 BSPT Threaded Straight Push Fitting |
| PC-08-02 | 8mm x 1/4 BSPT Threaded Straight Push Fitting |
| PC-10-02 | 10mm x 1/4 BSPT Threaded Straight Push Fitting |
| PC-12-02 | 12mm x 1/4 BSPT Threaded Straight Push Fitting |

Threaded 90° Push Fittings



| Product Code | Description |
|--------------|---|
| PL-04-01 | 4mm x 1/8 BSPT Threaded 90° Push Fitting |
| PL-04-02 | 4mm x 1/4 BSPT Threaded 90° Push Fitting |
| PL-05-01 | 5mm x 1/8 BSPT Threaded 90° Push Fitting |
| PL-05-02 | 5mm x 1/4 BSPT Threaded 90° Push Fitting |
| PL-06-01 | 6mm x 1/8 BSPT Threaded 90° Push Fitting |
| PL-06-02 | 6mm x 1/4 BSPT Threaded 90° Push Fitting |
| PL-08-01 | 8mm x 1/8 BSPT Threaded 90° Push Fitting |
| PL-08-02 | 8mm x 1/4 BSPT Threaded 90° Push Fitting |
| PL-10-02 | 10mm x 1/4 BSPT Threaded 90° Push Fitting |
| PL-12-02 | 12mm x 1/4 BSPT Threaded 90° Push Fitting |

Tee Push Fittings



| Product Code | Description |
|--------------|----------------------------|
| PE-04 | 4mm O.D. Tube Push Fitting |
| PE-05 | 5mm O.D. Tube Push Fitting |
| PE-06 | 6mm O.D. Tube Push Fitting |
| PE-08 | 8mm O.D. Tube Push Fitting |



| Product Code | Description |
|--------------|-------------------------|
| PY-04 | 4mm O.D. Y Push Fitting |
| PY-05 | 5mm O.D. Y Push Fitting |
| PY-06 | 6mm O.D. Y Push Fitting |
| PY-08 | 8mm O.D. Y Push Fitting |



| Product Code | Description |
|--------------|---------------------------------|
| PUM-004 | 4mm PUM Push-In Tube Connector |
| PUM-006 | 6mm PUM Push-In Tube Connector |
| PUM-008 | 8mm PUM Push-In Tube Connector |
| PUM-0010 | 10mm PUM Push-In Tube Connector |
| PUM-0012 | 12mm PUM Push-In Tube Connector |



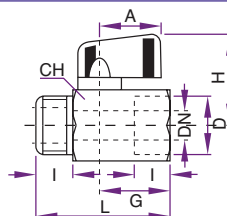
| Product Code | Description |
|--------------|-----------------------------|
| PVM-004 | 4mm PVM Push-In Tube Elbow |
| PVM-006 | 6mm PVM Push-In Tube Elbow |
| PVM-008 | 8mm PVM Push-In Tube Elbow |
| PVM-0010 | 10mm PVM Push-In Tube Elbow |
| PVM-0012 | 12mm PVM Push-In Tube Elbow |



| Product Code | Description |
|--------------|------------------------|
| JBG | Blow Gun (Red) Air Boy |

Mini Ball Valve - Male / Female

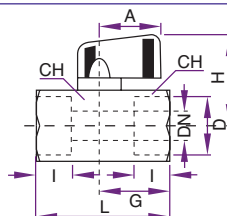
CONNECTOR FITTINGS AND HOSE



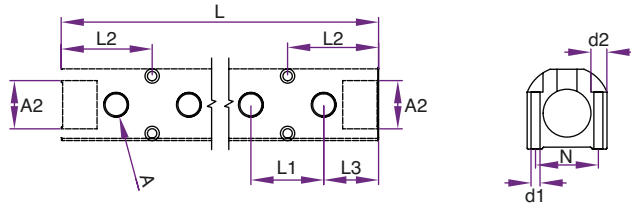
| Part No. | Part No. | D | DN | I | L | G | A | H | CH |
|----------|----------|------|----|----|------|----|------|----|----|
| VMMF02R | VMMF02B | 1/8" | 5 | 10 | 41,5 | 22 | 22,5 | 31 | 21 |
| VMMF04R | VMMF04B | 1/4" | 8 | 11 | 41,5 | 22 | 22,5 | 31 | 21 |
| VMMF06R | VMMF06B | 3/8" | 8 | 11 | 41,5 | 22 | 22,5 | 31 | 21 |
| VMMF08R | VMMF08B | 1/2" | 10 | 13 | 49 | 22 | 22,5 | 31 | 25 |

Mini Ball Valve - Female / Female

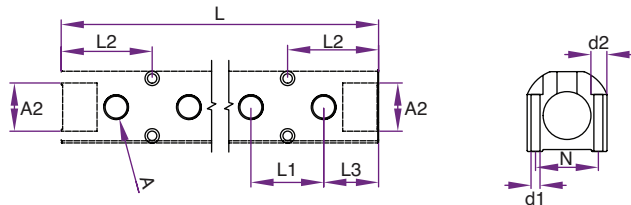
CONNECTOR FITTINGS AND HOSE



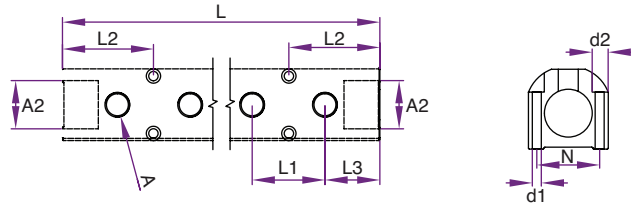
| Part No. | Part No. | D | DN | I | L | G | A | H | CH |
|----------|----------|------|----|----|------|----|------|----|----|
| VM02R | VM02B | 1/8" | 6 | 10 | 41,5 | 22 | 22,5 | 31 | 21 |
| VM04R | VM04B | 1/4" | 8 | 11 | 41,5 | 22 | 22,5 | 31 | 21 |
| VM06R | VM06B | 3/8" | 8 | 11 | 41,5 | 22 | 22,5 | 31 | 21 |
| VM08R | VM08B | 1/2" | 10 | 13 | 49 | 26 | 22,5 | 31 | 25 |



| Part No. | Colour | Ports | A(BSPP) | A2(BSPP) | L2 | L3 | L1 | d1 | d2 | N | L |
|-------------|--------|-------|---------|----------|------|------|------|-----|----|----|-------|
| IM3-4-1/4-R | | 4 | 1/4" | 3/4" | 57,2 | 38,1 | 38,1 | 4,5 | 8 | 31 | 109,5 |
| IM3-4-1/4-B | | 4 | 1/4" | 3/4" | 57,2 | 38,1 | 38,1 | 4,5 | 8 | 31 | 190,5 |
| IM3-6-1/4-R | | 6 | 1/4" | 3/4" | 57,2 | 38,1 | 38,1 | 4,5 | 8 | 31 | 266,7 |
| IM3-6-1/4-B | | 6 | 1/4" | 3/4" | 57,2 | 38,1 | 38,1 | 4,5 | 8 | 31 | 266,7 |
| IM3-8-1/4-R | | 8 | 1/4" | 3/4" | 57,2 | 38,1 | 38,1 | 4,5 | 8 | 31 | 342,9 |
| IM3-8-1/4-B | | 8 | 1/4" | 3/4" | 57,2 | 38,1 | 38,1 | 4,5 | 8 | 31 | 342,9 |



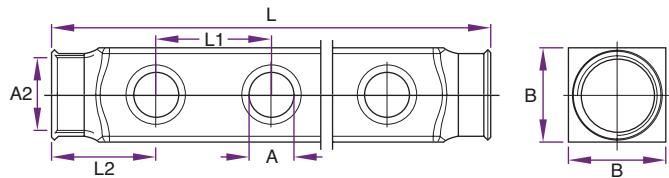
| Part No. | Colour | Ports | A(BSPP) | A2(BSPP) | L2 | L3 | L1 | d1 | d2 | N | L |
|--------------|--------|-------|---------|----------|------|------|------|----|------|------|-------|
| IM4-4-1/4-R | | 4 | 1/4" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 190,5 |
| IM4-4-1/4-B | | 4 | 1/4" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 190,5 |
| IM4-4-3/8-R | | 4 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 228,6 |
| IM4-4-3/8-B | | 4 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 228,6 |
| IM4-6-1/4-R | | 6 | 1/4" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 226,7 |
| IM4-6-1/4-B | | 6 | 1/4" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 226,7 |
| IM4-6-3/8-R | | 6 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 330,2 |
| IM4-6-3/8-B | | 6 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 330,2 |
| IM4-8-1/4-R | | 8 | 1/4" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 342,9 |
| IM4-8-1/4-B | | 8 | 1/4" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 342,9 |
| IM4-8-3/8-R | | 8 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 431,8 |
| IM4-8-3/8-B | | 8 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 431,8 |
| IM4-10-3/8-R | | 10 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 533,4 |
| IM4-10-3/8-B | | 10 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 533,4 |
| IM4-12-3/8-R | | 12 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 635 |
| IM4-12-3/8-B | | 12 | 3/8" | 1" | 63,5 | 38,1 | 38,1 | 7 | 10,5 | 40,6 | 635 |



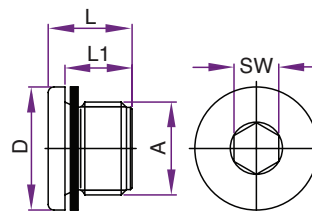
| Part No. | Colour | Ports | A(BSPP) | A2(BSPP) | L2 | L3 | L1 | d1 | d2 | N | L |
|--------------|--------|-------|---------|----------|------|------|------|----|------|----|-------|
| IM6-4-1/2-R | | 4 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 254 |
| IM6-4-1/2-B | | 4 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 254 |
| IM6-6-1/2-R | | 6 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 355,6 |
| IM6-6-1/2-B | | 6 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 355,6 |
| IM6-8-1/2-R | | 8 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 457,2 |
| IM6-8-1/2-B | | 8 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 457,2 |
| IM6-10-1/2-R | | 10 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 558,8 |
| IM6-10-1/2-B | | 10 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 558,8 |
| IM6-12-1/2-R | | 12 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 660,4 |
| IM6-12-1/2-B | | 12 | 1/2" | 1-1/2" | 76,2 | 50,8 | 50,8 | 7 | 10,5 | 57 | 660,4 |

Stainless Steel Manifolds

CONNECTOR FITTINGS AND HOSE



| Part No. | Ports | A (BSPP) | A2 (BSPP) | L | L1 | L2 | B |
|--------------|-------|----------|-----------|-----|----|----|----|
| SSIM4-4-1/2 | 4 | 1/2" | 1" | 240 | 50 | 45 | 40 |
| SSIM4-6-1/2 | 6 | 1/2" | 1" | 340 | 50 | 45 | 40 |
| SSIM4-8-1/2 | 8 | 1/2" | 1" | 440 | 50 | 45 | 40 |
| SSIM4-10-1/2 | 10 | 1/2" | 1" | 540 | 50 | 45 | 40 |
| SSIM4-12-1/2 | 12 | 1/2" | 1" | 640 | 50 | 45 | 40 |
| SSIM5-4-1/2 | 4 | 1/2" | 1-1/4" | 240 | 50 | 45 | 50 |
| SSIM5-6-1/2 | 6 | 1/2" | 1-1/4" | 340 | 50 | 45 | 50 |
| SSIM5-8-1/2 | 8 | 1/2" | 1-1/4" | 440 | 50 | 45 | 50 |
| SSIM5-10-1/2 | 10 | 1/2" | 1-1/4" | 540 | 50 | 45 | 50 |
| SSIM5-12-1/2 | 12 | 1/2" | 1-1/4" | 640 | 50 | 45 | 50 |



* With O-Ring

| Part No. | A | D | L | L1 | SW | VPE |
|----------|---------|----|------|----|----|-----|
| DR3/4 | G3/4" | 32 | 21 | 16 | 12 | 1 |
| DR1 | G1" | 40 | 22,5 | 16 | 17 | 1 |
| DR1-1/2* | G1-1/2" | 55 | 22,5 | 16 | 24 | 1 |

CONNECTOR FITTINGS AND HOSE

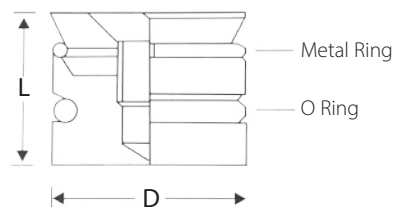
Brackets for Stainless Steel Manifolds



| Part No. | Type |
|--------------|--------|
| SS-Bracket | 1" |
| SS-5-Bracket | 1-1/4" |

CONNECTOR FITTINGS AND HOSE

Threadless Water Plug



| Product Code | Length (L) | Diameter (D) | Temperature Rating |
|--------------|------------|--------------|--------------------|
| TWPM-06 | 10 | 6mm | < 100°C |
| TWPM-08 | 10 | 8mm | < 100°C |
| TWPM-10 | 10 | 10mm | < 100°C |
| TWPM-12 | 12 | 12mm | < 100°C |
| TWPM-14 | 13 | 14mm | < 100°C |
| TWPM-16 | 14 | 16mm | < 100°C |



Hales has a large range of Smartflow® Flow Regulators and can facilitate custom made configurations to order.



MECHANICAL FLOW REGULATORS

Compact solid brass or aluminium construction with Polysulfone windows.

- Temperature rating 115°C
- Anodized corrosion resistance
- Pressure rated to 100 psi (6.89 bar)
- Optional thermometer and pressure gauge
- Liquid-filled pressure gauge also available

FLOW REGULATORS

Inline or manifold mounted

- Leak free design
- Solid Brass Body
- Needle valve control
- Optional Temperature gauge
- Temperature rating to 115°C
- Pressure rated to 150psi (10.34 bar)



HOT WATER/OIL FLOWMETERS

Stainless steel construction to 288°C

- Throughput 6 gpm (us)
- Temperature rating to 288°C
- All stainless steel construction
- Pressure rate to 150 psi (10.34 bar)

TRACER® ELECTRONIC FLOWMETERS

Digital process control, local and remote signal outputs

- All model 3/8" to 2" BSP(P) supply
- 2-418 litres per minute
- Display of Temperature, Flow and BTU's
- Temperature and flow alarms
- Local display, remote alarm*, and variable output*
- Temperature rating to 110°C
- 100 psi (6.89 bar) or 150 psi (10.34 bar) 3/8" only

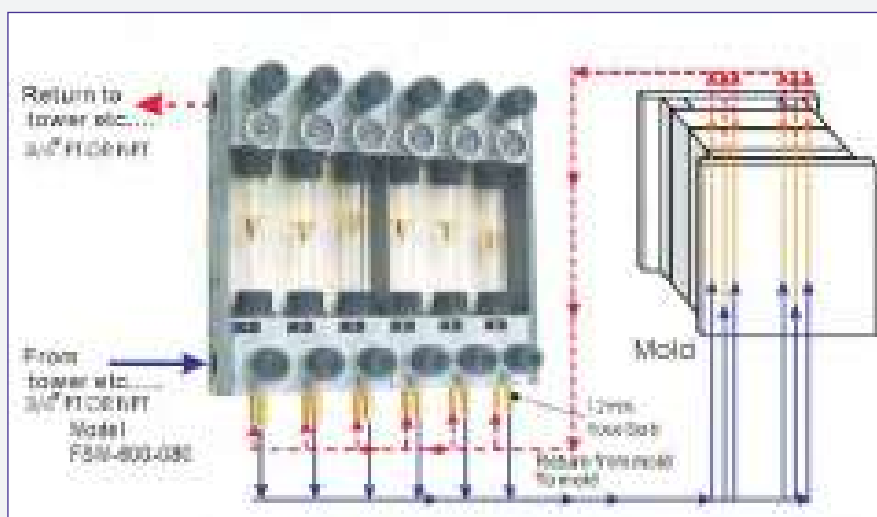
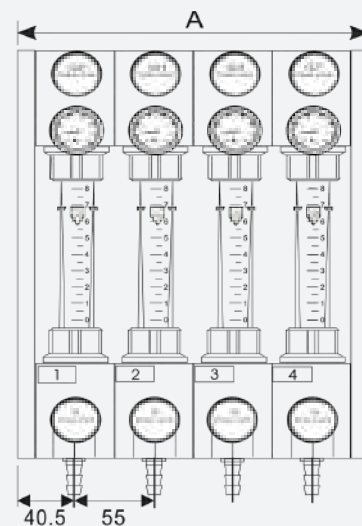
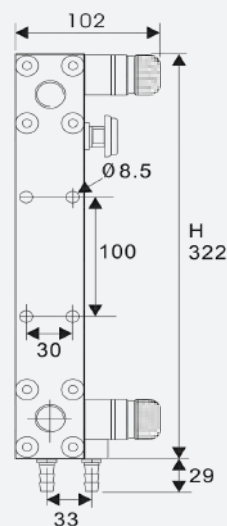


DELTA-Q® MODULAR FLOW REGULATOR

Delta-Q® Modular Flow Regulator is used in conjunction with other Smartflow® components such as threaded end caps, flowmeters, temperature and pressure gauges, Tracer Electronic Flowmeters or Dr. Eddy® Turbulent Flow Indicators. The Delta-Q® Regulator allows full adjustability of flow volume from unrestricted flow to complete shut off using the manual flow control knob.

- Compact size works well in restricted-space locations
- Rugged construction gives years of dependable service
- 210°F (99°C) Temperature Rating allows installation into a wide range of applications
- Common Flowmeter Configurations Stocked to provide same-day delivery in many cases
- No Mounting Restrictions ease installation in any position without extra brackets or hardware
- Leak-Free installation is based on proven flowmeter design





Water Flow Regulator

- Regulates water flow and water outlet temperature
- Individual zones sold separately
- Quality heavy duty construction
- Polyamide nylon flow tube
- Flow meter gauge for each tube
- Water temperature gauge for each tube
- Flow - 8 Lt per Minute per zone

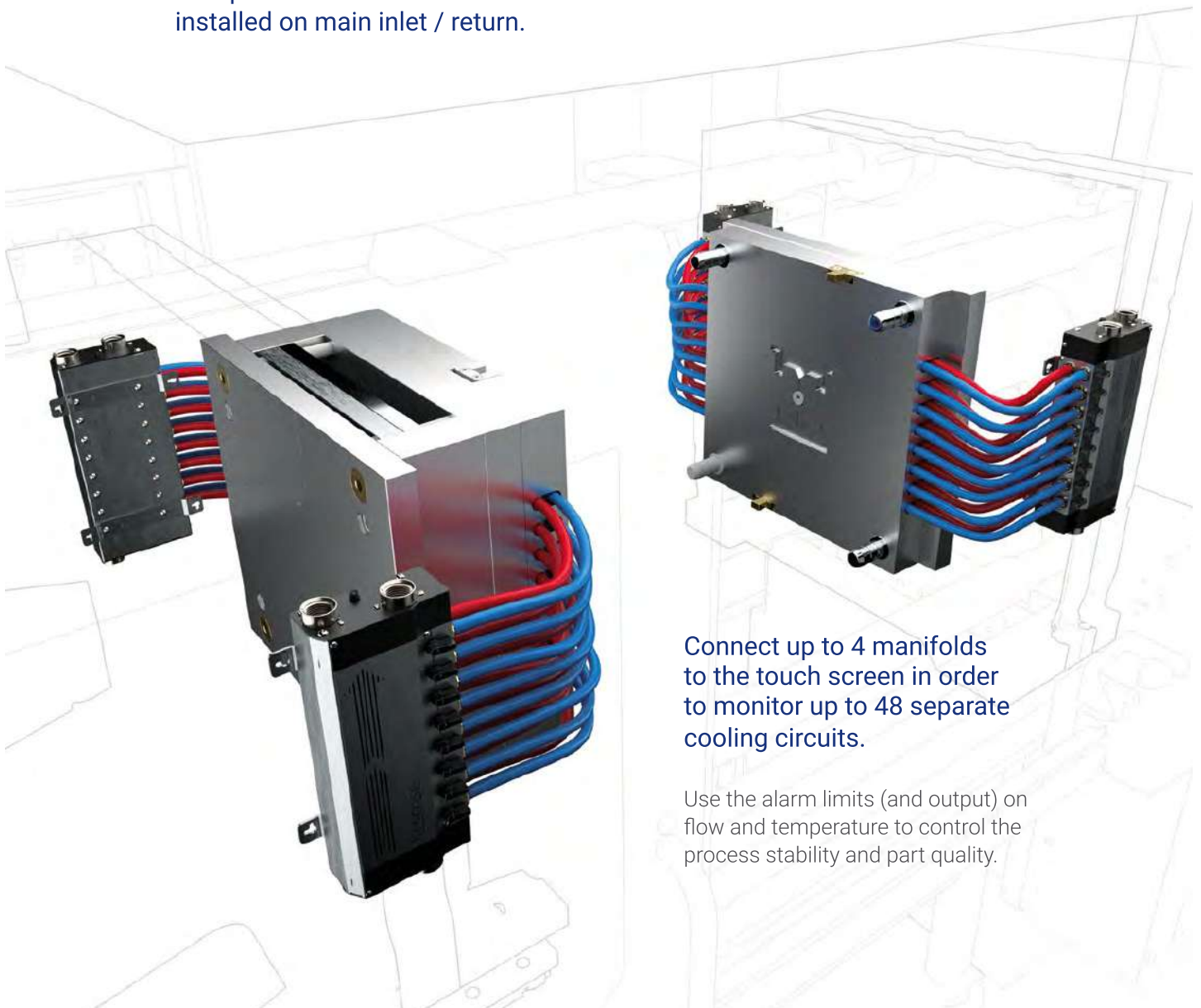
| Product Code | Zones | A (Width mm) | Depth (mm) | Height (mm) |
|--------------|-------|--------------|------------|-------------|
| FSM 100 | 1 | 75 | 105 | 351 |
| FSM 200 | 2 | 130 | 105 | 351 |
| FSM 300 | 3 | 185 | 105 | 351 |
| FSM 400 | 4 | 245 | 105 | 351 |
| FSM 600 | 6 | 358 | 105 | 351 |
| FSM 800 | 8 | 468 | 105 | 351 |
| FSM 1200 | 12 | 690 | 105 | 351 |

flosense® 4.0



MANIFOLD

Complete unit with Pressure sensor installed on main inlet / return.



Connect up to 4 manifolds to the touch screen in order to monitor up to 48 separate cooling circuits.

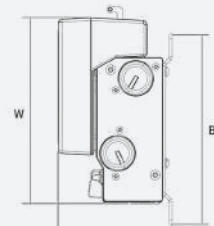
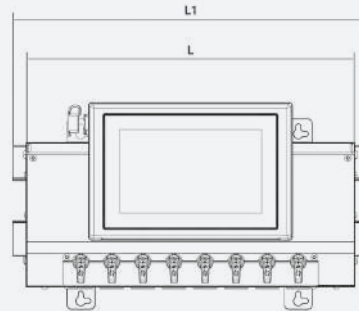
Use the alarm limits (and output) on flow and temperature to control the process stability and part quality.



Flosense® Monitor Provides visibility of key cooling circuit metrics, improves efficiency, enhances productivity and profitability.

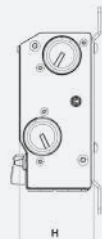
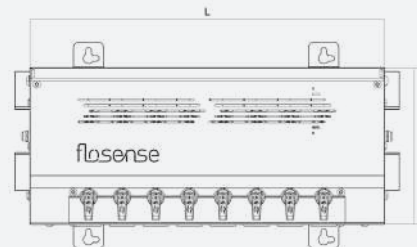
| Product Code | Input | Size | Readability | Voltage | Alarm Output |
|--------------|-------|------|-------------|---------|--------------|
| FS-7100 | 4 | 7,1" | OPC-UA | 12V | yes |

Flosense® Flow Regulator.



| Product Code | Main Thread | Flow Capacity | BSPP In. | Port | L1 | B | Temp |
|--------------|-------------|---------------|----------|------|--------|--------|------|
| FFRM4-1-20 | 1"G | 1-20 l/m | 1/2"G | 4 | 250 mm | 205 mm | 120° |
| FFRM4-2-40 | 1"G | 2-40 l/m | 1/2"G | 4 | 250 mm | 205 mm | 120° |
| FFRM6-1-20 | 1"G | 1-20 l/m | 1/2"G | 6 | 317 mm | 205 mm | 120° |
| FFRM6-2-40 | 1"G | 2-40 l/m | 1/2"G | 6 | 317 mm | 205 mm | 120° |
| FFRM8-1-20 | 1"G | 1-20 l/m | 1/2"G | 8 | 384 mm | 205 mm | 120° |
| FFRM8-2-40 | 1"G | 2-40 l/m | 1/2"G | 8 | 384 mm | 205 mm | 120° |
| FFRM10-1-20 | 1"G | 1-20 l/m | 1/2"G | 10 | 451 mm | 205 mm | 120° |
| FFRM10-2-40 | 1"G | 2-40 l/m | 1/2"G | 10 | 451 mm | 205 mm | 120° |
| FFRM12-1-20 | 1"G | 1-20 l/m | 1/2"G | 12 | 518 mm | 205 mm | 120° |
| FFRM12-2-40 | 1"G | 2-40 l/m | 1/2"G | 12 | 518 mm | 205 mm | 120° |

Flosense® Manifold.



| Product Code | Port | Flow | Height | Length | Width | Max Temp |
|--------------|------|----------|--------|--------|-------|----------|
| F4M4-1-20 | 4 | 1-20 l/m | 72 | 220 | 155 | 120° |
| F4M4HT-1-20 | 4 | 1-20 l/m | 72 | 220 | 155 | 160° |
| F4M4-2-40 | 4 | 2-40 l/m | 72 | 220 | 155 | 120° |
| F4M4HT-2-40 | 4 | 2-40 l/m | 72 | 220 | 155 | 160° |
| F4M6-1-20 | 6 | 1-20 l/m | 72 | 287 | 155 | 120° |
| F4M6HT-1-20 | 6 | 1-20 l/m | 72 | 287 | 155 | 160° |
| F4M6-2-40 | 6 | 2-40 l/m | 72 | 287 | 155 | 120° |
| F4M6HT-2-40 | 6 | 2-40 l/m | 72 | 287 | 155 | 160° |
| F4M8-1-20 | 8 | 1-20 l/m | 72 | 354 | 155 | 120° |
| F4M8HT-1-20 | 8 | 1-20 l/m | 72 | 354 | 155 | 160° |
| F4M8-2-40 | 8 | 2-40 l/m | 72 | 354 | 155 | 120° |
| F4M8HT-2-40 | 8 | 2-40 l/m | 72 | 354 | 155 | 160° |
| F4M10-1-20 | 10 | 1-20 l/m | 72 | 421 | 155 | 120° |
| F4M10HT-1-20 | 10 | 1-20 l/m | 72 | 421 | 155 | 160° |
| F4M10-2-40 | 10 | 2-40 l/m | 72 | 421 | 155 | 120° |
| F4M10HT-2-40 | 10 | 2-40 l/m | 72 | 421 | 155 | 160° |
| F4M12-1-20 | 12 | 1-20 l/m | 72 | 488 | 155 | 120° |
| F4M12HT-1-20 | 12 | 1-20 l/m | 72 | 488 | 155 | 160° |
| F4M12-2-40 | 12 | 2-40 l/m | 72 | 488 | 155 | 120° |
| F4M12HT-2-40 | 12 | 2-40 l/m | 72 | 488 | 155 | 160° |



| Product Code | Description |
|--------------|-------------|
| PIM1BX10 | 10 Amp Unit |

Multi Zone Temperature Control Systems

TEMPERATURE CONTROL AND PLUGS



16 to 48 Zone Mainframes are also available to order • 30 Amp option also available • Modules sold separately.

| Product Code | Description |
|--------------|-------------------|
| MFFMP2 | 2 Zone Mainframe |
| MFFMP3 | 3 Zone Mainframe |
| MFX5 | 5 Zone Mainframe |
| MFX8 | 8 Zone Mainframe |
| MFX12 | 12 Zone Mainframe |

RMA Modular Hot Runner Controllers

TEMPERATURE CONTROL AND PLUGS



RMA Module

- Simultaneous digital setpoint and digital temperature indication.
- Accepts Type J or Type K thermocouple input (jumper selectable).
- Auto-tuning, with adjustable proportional band and rate.
- Bumpless auto/manual transfer.
- CompuStep bakeout feature prevents moisture at start-up.
- Built-in loop break, short, open, and reverse thermocouple protection.
- Jumper-selectable self-start mode.
- Current monitor feature displays average current to load.
- CE-compliant.

| Product Code |
|--------------|
| RMAX15 |



5 pin combination Thermocouple/Power Cable.

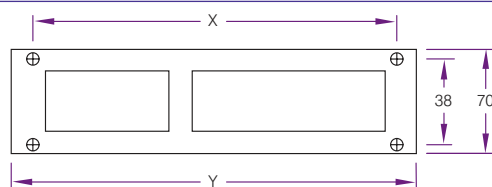
| Product Code | Length |
|--------------|--------|
| MPTC10 | 10' |
| MPTC20 | 20' |



| Product Code | Zones | Length |
|--------------|----------|--------|
| MPC5C10 | 5 Zones | 10' |
| MPC5C20 | 5 Zones | 20' |
| MPC8C10 | 8 Zones | 10' |
| MPC8C20 | 8 Zones | 20' |
| MPC12C10 | 12 Zones | 10' |
| MPC12C20 | 12 Zones | 20' |



| Product Code | Zones | Length |
|--------------|----------|--------|
| TC5C10 | 5 Zones | 10' |
| TC5C20 | 5 Zones | 20' |
| TC8C10 | 8 Zones | 10' |
| TC8C20 | 8 Zones | 20' |
| TC12C10 | 12 Zones | 10' |
| TC12C20 | 12 Zones | 20' |



Mould Mounting Footprint

| Product Code | Zones | X | Y |
|--------------|----------|-------|-------|
| PTC5TB | 5 Zones | 204 | 220 |
| PTC8TB | 8 Zones | 224.6 | 240.5 |
| PTC12TB | 12 Zones | 251.6 | 267.5 |

Thermocouple Connectors

TEMPERATURE CONTROL AND PLUGS



| Product Code | Description | Zones |
|--------------|------------------------------|----------|
| MTC5 | Mould Thermocouple Connector | 5 Zones |
| MTC8 | Mould Thermocouple Connector | 8 Zones |
| MTC12 | Mould Thermocouple Connector | 12 Zones |

Mould Power Input Connectors

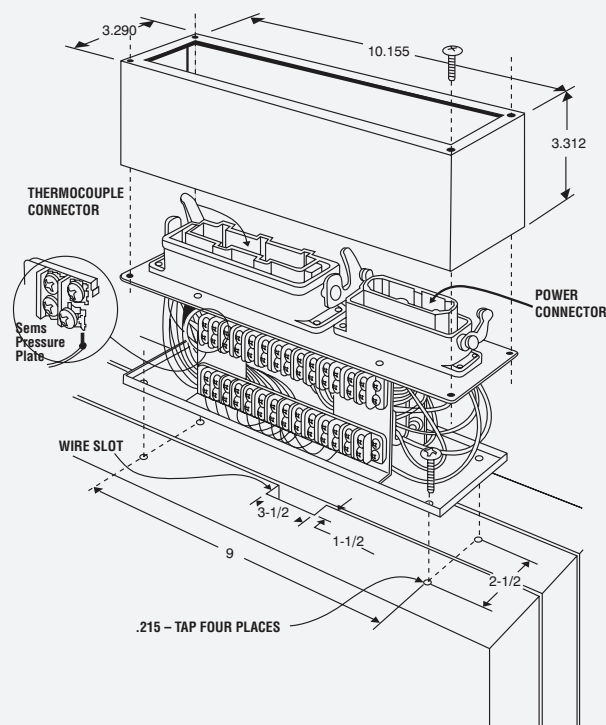
TEMPERATURE CONTROL AND PLUGS



| Product Code | Description | Zones |
|--------------|-----------------------|----------|
| PIC5 | Mould Power Connector | 5 Zones |
| PIC8 | Mould Power Connector | 8 Zones |
| PIC12 | Mould Power Connector | 12 Zones |



1. The terminal blocks are completely prewired to both the Power and Thermocouple Connectors.
2. Terminal blocks are numbered by MOLD ZONE for ease of installation and troubleshooting.
3. Feed the wires from the mold wire slot through the opening(s) in the bottom of the Mold Wiring System. Slide the mold wires under the SEMS pressure plate on the appropriate zone-numbered terminal.
4. The RED and WHITE wires are the THERMOCOUPLE SIDE. Install thermocouple wire from the mold. + (White/upper) -(Red/lower) to the corresponding zone number on the upper and lower terminal blocks.
5. Install the POWER wires on the opposite two terminal blocks marked Power side to corresponding number on the terminal blocks, one to upper and one to lower.
6. Place the cover over the Mold Wiring System and tighten with the four screws supplied.



| Product Code | Zones | Length Y | Width X | Height H | Mounting Hole M1 | Mounting Hole M2 |
|--------------|-------|----------|---------|----------|------------------|------------------|
| PTBC005-A | 005 | 8.66" | 2.75" | 4.50" | 1.500 | 8.031 |
| PTBC008-A | 008 | 9.47" | 2.75" | 4.50" | 1.500 | 8.843 |
| PTBC012-A | 012 | 10.53" | 2.75" | 4.50" | 1.500 | 9.906 |

TEMPERATURE CONTROL AND PLUGS

Module Fuses



| Product Code | Amps |
|--------------|------|
| ABC10 | 10 |
| ABC15 | 15 |



| Product Code | Amps |
|--------------|------|
| HWCC-1 | 15 |
| HWCC-2 | 30 |

Blank Panel



Must be used to cover unused zones in main frames. Supplied with push-pull panel fasteners.

| Product Code |
|--------------|
| MFBP |

Universal Floor Stand



| Product Code | Zones |
|--------------|-------------------------------|
| MFS5812 | Adjustable for 5, 8 & 12 zone |



CKPTM1

Cable, Frame End
5-Pin Combo Mold Power/ Thermocouple Connectors

Product Code

CKPTM-1



CKPTOC1

Frame
5-Pin Combo Mold Power/ Thermocouple Connectors

Product Code

CKPTOC-1



CKPTF1

Cable, Mould-End
5-Pin Combo Mold Power/ Thermocouple Connectors

Product Code

CKPTF-1



CKPTIC1

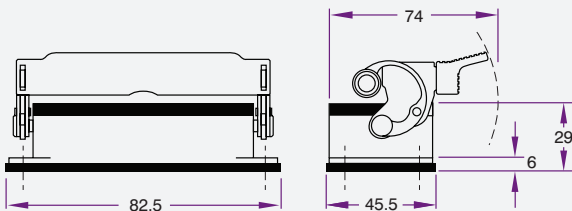
Mould
5-Pin Combo Mold Power/ Thermocouple Connectors

Product Code

CKPTIC-1



CHI 06L

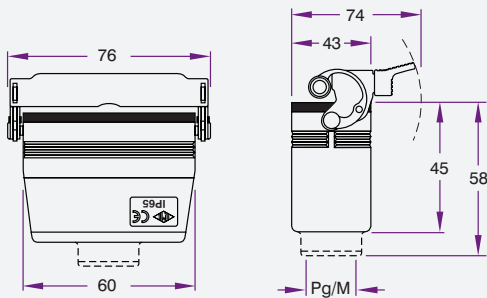


Product Code

CHI06L



MGV 06 LG25



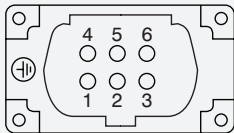
Product Code

MGV06LG25



CNEM 06 T

Male Insert
6 Pin
16 Amp
400 Volt



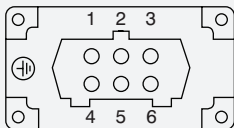
Product Code

CNEM06T



CNEF 06 T

Female Insert
6 Pin
16 Amp
400 Volt

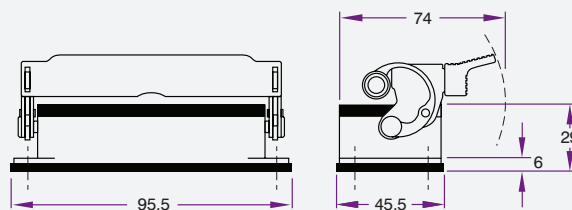


Product Code

CNEF06T



CHI 10 L

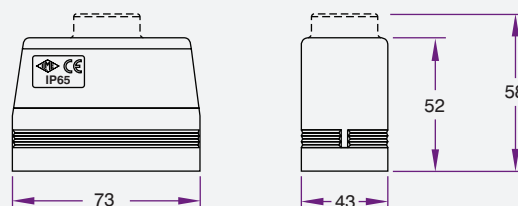


Product Code

CHI10L



MAV 10 L32



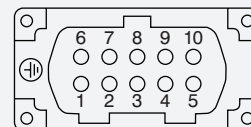
Product Code

MAV10L32



CNEF 10 T

Male Insert
10 Pin
16 Amp
400 Volt



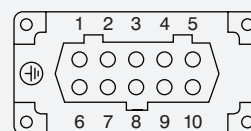
Product Code

CNEF10T



CNEF 10 T

Female Insert
10 Pin
16 Amp
400 Volt

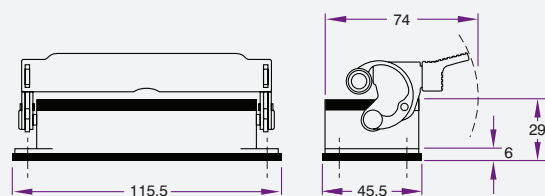


Product Code

CNEF10T



CHI 16 L

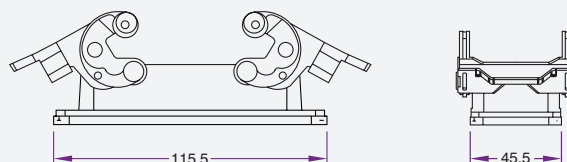


Product Code

CHI16L



CHI 16

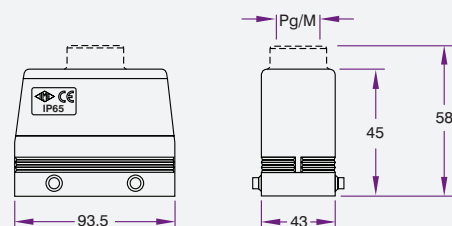


Product Code

CHI16



MHV 16.25

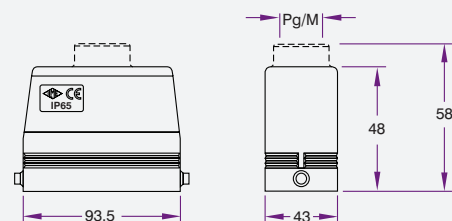


Product Code

MHV16.25



MHV 16 L25

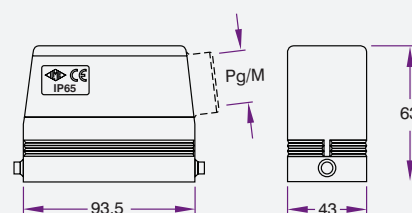


Product Code

MHV16L25



MHO 16 L25

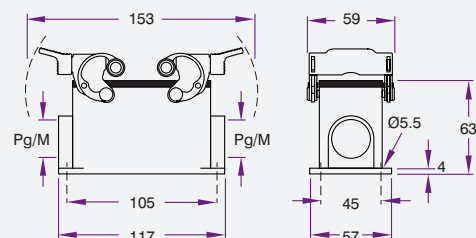


Product Code

MHO16L25



MHP 16.225

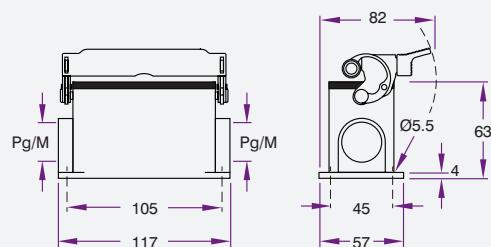


Product Code

MHP16.225



MHP 16 L225



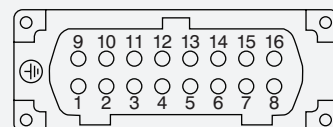
Product Code

MHP16L225



CNEM 16 T

Male Insert 16 Pin 16 Amp 400 Volt



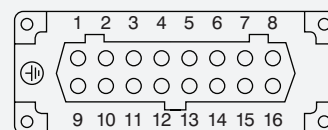
Product Code

CNEM16T



CNEF 16 T

Female Insert 16 Pin 16 Amp 400 Volt



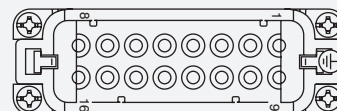
Product Code

CNEF16T



CDAM 16

Male Insert 16 Pin 16 Amp 400 Volt

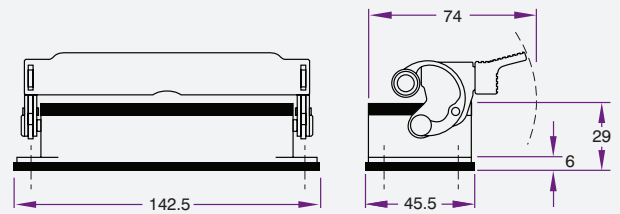


Product Code

CDAM16



CHI 24 L

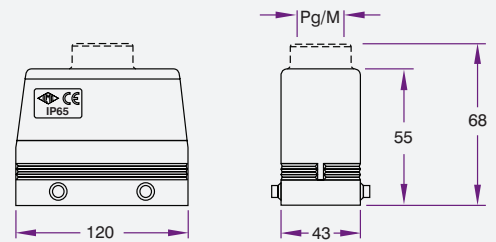


Product Code

CHI24L



MHV 24.32

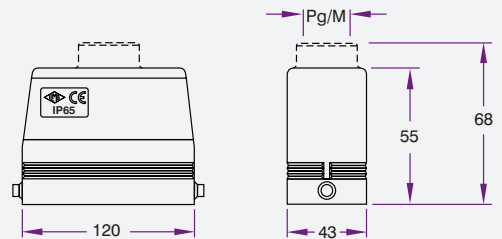


Product Code

MHV24 32



MHV 24 L32

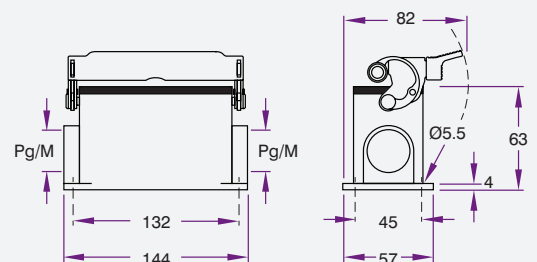


Product Code

MHV24L32



MHP 24 L225

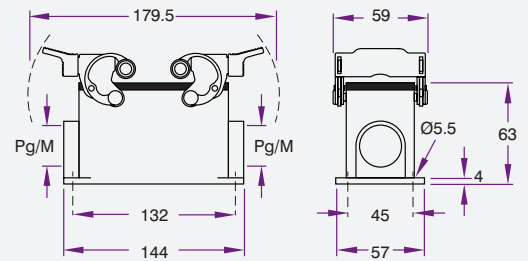


Product Code

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MHP 24.225

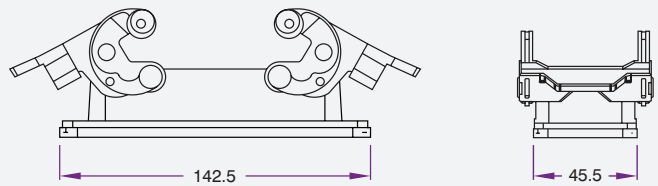


Product Code

MHP24225



CHI 24



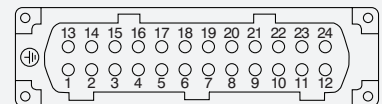
Product Code

CHI24



CNEM 24 T

Male Insert
24 Pin
16 Amp
400 Volt



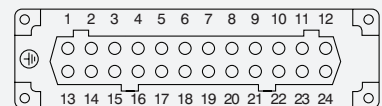
Product Code

CNEM24T



CNEF 24 T

Female Insert
24 Pin
16 Amp
400 Volt

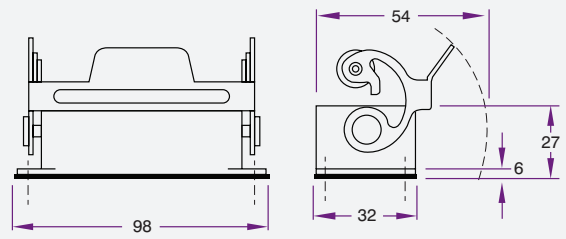


Product Code

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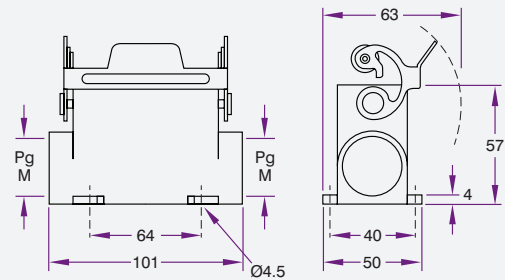
CZI 25 L

**Product Code**

CZI25L



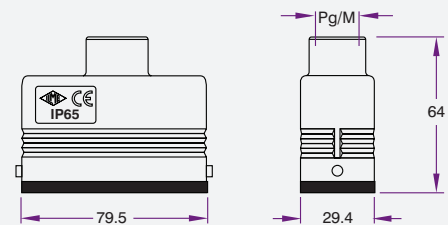
MZAP 25 L225

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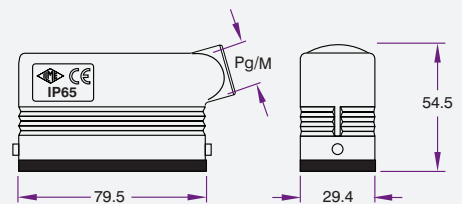
MZAV 25 L25

**Product Code**

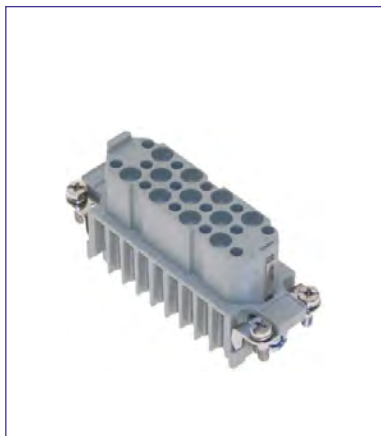
MZAV25L25



MZO 25 L20

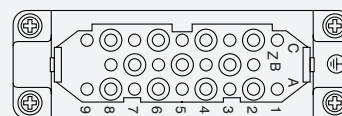
**Product Code**

MZO25L20



CDF 25

Female Insert
25 Pin
10 Amp
250 Volt
(Crimp)

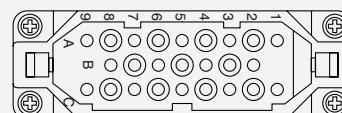


| Product Code | Description |
|--------------|-------------|
| CD25 | Connector |
| CDFA1.5 | Female Pins |



CDM 25

Male Insert
25 Pin
10 Amp
250 Volt
(Crimp)

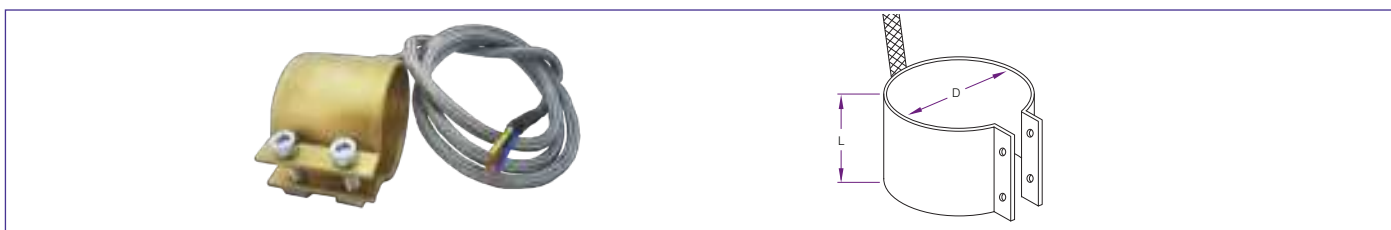


Pins Sold Separately

| Product Code | Description |
|--------------|-------------|
| CDM25 | Connector |
| CDMA1.5 | Male Pins |

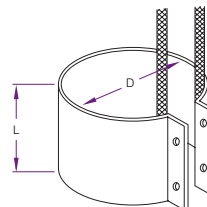
HEATERS AND THERMOCOUPLES

Premium Band Heaters



- Brass tubular sheath
- Tear-resistant connection of power cable
- Standard cable outlet: axial 45°
- Special sizes to order

| Product Code | D | L | Watts |
|--------------|----|----|-------|
| PRMX-2525 | 25 | 25 | 85w |
| PRMX-2535 | 25 | 35 | 125w |
| PRMX-3030 | 30 | 30 | 160w |
| PRMX-3040 | 30 | 40 | 165w |
| PRMX-3050 | 30 | 50 | 275w |
| PRMX-3238 | 32 | 38 | 195w |
| PRMX-3535 | 35 | 35 | 195w |
| PRMX-3540 | 35 | 40 | 195w |
| PRMX-3825 | 38 | 25 | 140w |
| PRMX-3838 | 38 | 38 | 215w |
| PRMX-3850 | 38 | 50 | 300w |
| PRMX-4030 | 40 | 30 | 160w |
| PRMX-4040 | 40 | 40 | 225w |
| PRMX-4060 | 40 | 60 | 305w |
| PRMX-5040 | 50 | 40 | 280w |
| PRMX-5050 | 50 | 50 | 350w |
| PRMX-5060 | 50 | 60 | 420w |
| PRMX-6040 | 60 | 40 | 335w |
| PRMX-6060 | 60 | 60 | 505w |
| PRMX-7035 | 70 | 35 | 505w |



- Low profile flexible leads
- Premium MICA insulation

- Stainless bands
- Welded style made to order

- Other sizes made to order

| Product Code | D | L | Watts |
|--------------|----|----|-------|
| BH2525 | 25 | 25 | 125w |
| BH2538 | 25 | 38 | 150w |
| BH3030 | 30 | 30 | 150w |
| BH3040 | 30 | 40 | 180w |
| BH3075 | 30 | 75 | 300w |
| BH3225 | 32 | 25 | 115w |
| BH3232 | 32 | 32 | 150w |
| BH3238 | 32 | 38 | 180w |
| BH3250 | 32 | 50 | 250w |
| BH3275 | 32 | 75 | 300w |
| BH3538 | 35 | 38 | 200w |
| BH3838 | 38 | 38 | 200w |
| BH3850 | 38 | 50 | 300w |
| BH3875 | 38 | 75 | 400w |
| BH4030 | 40 | 30 | 200w |
| BH4038 | 40 | 38 | 220w |
| BH4060 | 40 | 60 | 300w |
| BH4090 | 40 | 90 | 350w |
| BH5038 | 50 | 38 | 250w |
| BH5050 | 50 | 50 | 400w |
| BH5075 | 50 | 75 | 600w |
| BH6060 | 60 | 60 | 275w |

Custom Band and Barrel Heaters

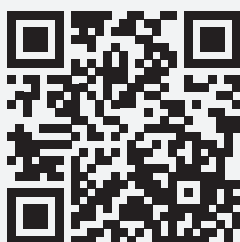
HEATERS AND THERMOCOUPLES



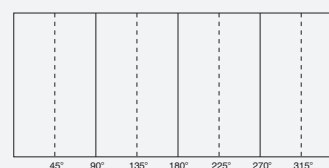
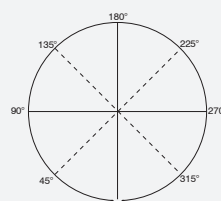
Made to Order

Band and Barrel Heaters made to your requirements.
Ask for our custom heater form to fill in.

Scan this QR Code to Download a Custom Form:

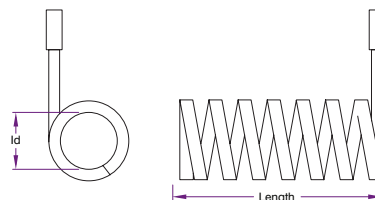


Custom Heaters



Heater Type : Barrel ☐ Nozzle ☐

Construction : 1 pc ☐ 2 pc ☐ Welded ☐ Folded ☐

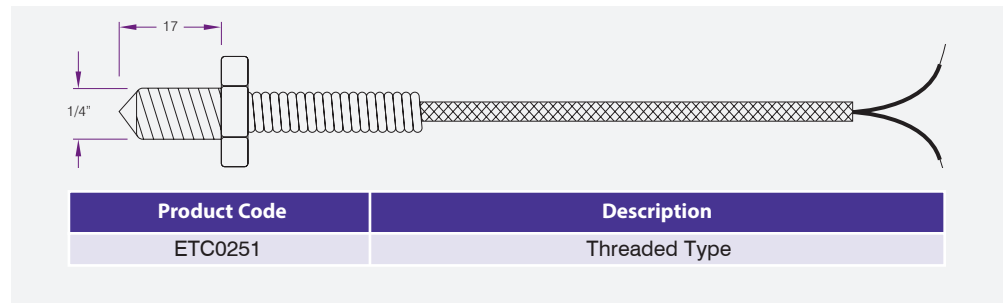


Nozzle Heater Wattage and Length

| Product Code | Length | Watts | Id |
|--------------|--------|-------|------|
| X13045H | 38.8 | 220w | 16 |
| X13055H | 48.8 | 230w | 16 |
| X13065H | 58.8 | 240w | 16 |
| X13075H | 68.8 | 250w | 16 |
| X13095H | 88.8 | 275w | 16 |
| X13115H | 108.8 | 300w | 16 |
| X13145H | 138.8 | 330w | 16 |
| X13175H | 168.8 | 365w | 16 |
| X16045H | 37.8 | 290w | 18.1 |
| X16055H | 47.8 | 310w | 18.1 |
| X16065H | 57.8 | 335w | 18.1 |
| X16075H | 67.8 | 360w | 18.1 |
| X16095H | 87.8 | 385w | 18.1 |
| X16115H | 107.8 | 410w | 18.1 |
| X16145H | 137.8 | 440w | 18.1 |
| X16175H | 167.8 | 475w | 18.1 |
| X19055H | 45.5 | 400w | 21.5 |
| X19065H | 55.3 | 435w | 21.5 |
| X19075H | 65.3 | 470w | 21.5 |
| X19095H | 85.3 | 505w | 21.5 |
| X19115H | 105.3 | 540w | 21.5 |
| X19145H | 135.3 | 575w | 21.5 |
| X19175H | 165.3 | 610w | 21.5 |
| X27075H | 60.4 | 570w | 30.3 |
| X27095H | 80.4 | 680w | 30.3 |
| X27115H | 100.4 | 780w | 30.3 |
| X27145H | 103.4 | 815w | 30.3 |
| X27175H | 160.4 | 850w | 30.3 |
| X27225H | 210.4 | 905w | 30.3 |
| X27275H | 260.4 | 960w | 30.3 |

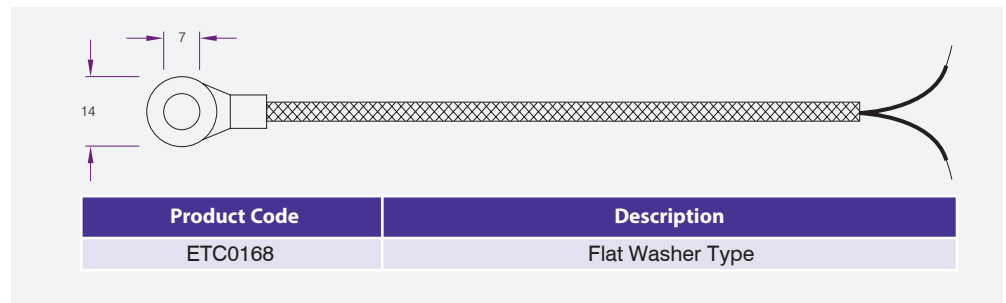


Made to order from stock with and without thermocouple
Manufactured in-house, specify ID and length.



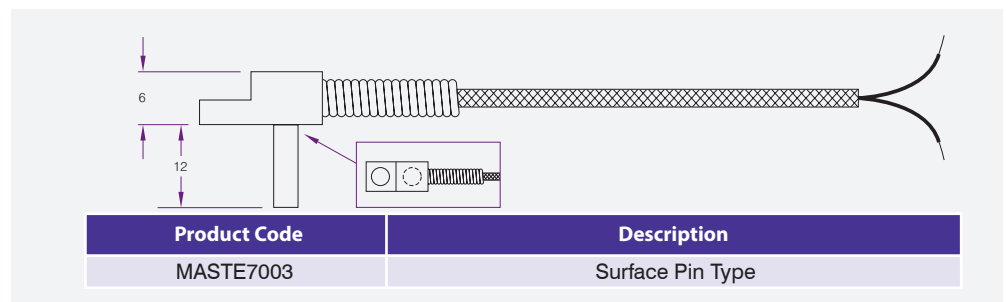
Flat Washer Type Thermocouple

HEATERS AND THERMOCOUPLES



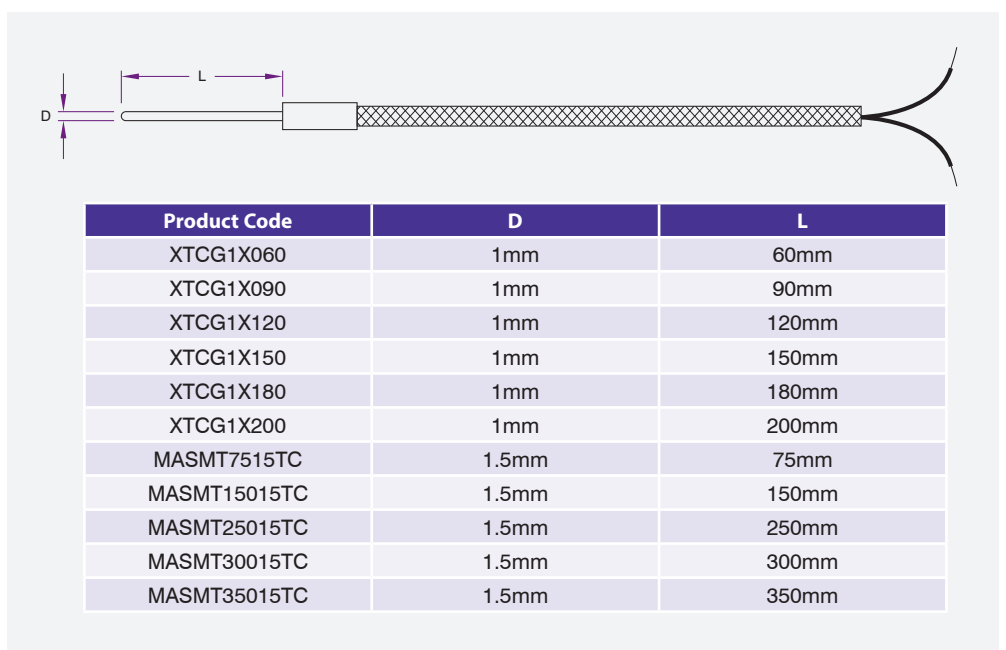
Surface Pin Type Thermocouple

HEATERS AND THERMOCOUPLES



Thermocouples J Type

HEATERS AND THERMOCOUPLES





Reduce Your Power Consumption



UniVest®: For Plastic Processors

UniVest® insulation jackets provide a low-cost solution for reducing energy costs, and shortening start-up time between jobs by retaining heat inside barrels, extruders, dies and hoses. This will lower the ambient temperature in your facility, and lower the overhead cost for equipment operations and air conditioning.

Features

- High temperature strap and buckle fastening system
- PTFE coated exterior
- Withstand temperatures up to 1200°F
- High density ceramic fibre insulation

Benefits

- Improves equipment process
- Protects employees and equipment
- No equipment downtime
- Simple and quick installation
- Reduces energy consumption
- 100% Asbestos free





Strong Wipes With Powerful Cleaner

Foodmax Clean Wipes are strong two-sided cleaning wipes containing a powerful cleaner in a resealable container.

They are suitable to clean equipment, machine parts, work areas, tools, hands, and many other surfaces. Effectively removes heavy pollutants like oil, greases, tar, PU foam, resin, soot, grass stains, paint, ink, marker, toner and graffiti.

| Product Code | Size |
|---------------|------------------|
| FM-CLEANWIPES | Tub of 100 wipes |

Matrix Cut ADE

RELEASES, PROTECTORS AND CLEANERS



Cut ADE Cutting Fluid

For direct application specially formulated for drilling, threading, reaming and severe machining of steel in severe working conditions.

It contains EP additives that avoid welding of tool and part and built-up edge formation thanks to the anti-seize properties.

| Product Code | Product | Size |
|----------------|-------------------------|--------------|
| MAT-CUTADE-050 | Cut ADE - Cutting Fluid | 500ml Bottle |

Type 'A' Grease & Soft Grease - Food Grade

RELEASES, PROTECTORS AND CLEANERS



A certified food-grade lubricant lanolin grease. Acts as anti-seize for threaded rod, shackles, nuts and bolts. Moisture proofs multi-pin plugs and connectors. Stops electrolysis due to dissimilar metal contact. Stops galling of stainless steel and aluminium. Lubricates rubber hoses, o-rings, linkages, pivot pins and bushes. Protects metal fastenings and fittings from corrosion.

| Product Code | Description | Pack Description |
|---------------|--------------------|------------------|
| LANO-TYPEA4L | Lano Type A Grease | 4 Litre |
| LANO-TYPEA1L | Lano Type A Grease | 1 Litre |
| LANO-TYPEA500 | Lano Type A Grease | 500ml Tube |
| LANO-TYPEA20L | Lano Type A Grease | 20 Litre |
| LANO-TYPEA250 | Lano Type A Grease | 250ml Tube |

Heavy Duty (HD) Liquid Lanolin - Food Grade

RELEASES, PROTECTORS AND CLEANERS



A lubricant and corrosion inhibitor. Lubricates and protects high-speed and loadbearing chains (non-flying and non-webbing), wire ropes, slings and pulling cables. Protects all electrical equipment on machinery, including battery terminals, boxes and connectors. Provides long-lasting lubrication of moving parts in highly-corrosive environments. Sprays on as anti-seize.

| Product Code | Description | Pack Description |
|-------------------|----------------|------------------|
| LANO-HEAVYDUTY750 | Lano HD Liquid | 750ml Spray |
| LANO-HEAVYDUTY5L | Lano HD Liquid | 5 Litre |
| LANO-HEAVYDUTY20L | Lano HD Liquid | 20 Litre |
| LANO-HEAVYDUTY400 | Lano HD Liquid | 400gm Aero |



A heavy duty formulation designed to clean injection mould, tools and dies after production runs and prior to commencement of new jobs.

| Product Code | Size |
|--------------|--------------|
| DIE CLEANER | 400g Aerosol |



A heavy duty formulation designed to protect tools, injection moulds and dies from oxidization and rusting during storage in between production runs.

Pentrate tools and mould removes moisture from cavities and mould. Leaves a protective film of lubrication oils and a rust preventative coating.

| Product Code | Size |
|---------------|--------------|
| DIE PROTECTOR | 400g Aerosol |



A proven release agent to prevent sticking in mould cavities

| Product Code | Size |
|----------------|--------------|
| SILICONE MOULD | 300g Aerosol |



A premium quality release agent which enables plastic parts to be printed, painted, hot stamped, vacuum plated and metalised

| Product Code | Size |
|-----------------|--------------|
| PAINTABLE MOULD | 300g Aerosol |

**Zap-Ox Stain Remover**

Removes all rust, oxidation, buildup, stains, weld discoloration and more.

| Product Code | Size |
|--------------|--------------|
| NANO-ZO-16 | 475ml Bottle |



A high-temperature anti-seizing compound with high thermal conductivity for cartridge heaters and nozzle threads.

| Product Code | Size |
|---------------|----------|
| Antiseize-500 | 500g Tin |

**NANO plas Mould Coating**

Releases plastic parts for up to 300,000 cycles, part design dependant.

Reduces cycle times, semi permanent.

| Product Code |
|------------------|
| NANO-FG-10ML-KIT |

**Food Safe Purging it P&P Cream**

P&P Cream™ is specific for the cleaning of screws, cylinders, nozzles, hot runners, extrusion dies, moulds and any metal surface. Removes charred residue, black spots, colored pigments and all left over material deposits, for all thermoplastic and thermosetting.

Working temperature between 70°C and 420°C,

| Product Code | Size |
|--------------|----------------------|
| PURGE | Sachet (Min order 4) |



Food Grade Clear Mould Protect

Anti-corrosion agents provide dismantled dies, moulds and parts with long-term protection against corrosion. This ensures that your mould is always ready for use, maintaining value and efficiency.

Conforms to NSF guidelines.

| Product Code | Size |
|--------------|----------------|
| MPW501FG | 500 ml aerosol |



Food Grade Ejector Pin Lubricant

Ejector Pin Lubricant

Non-soiling lubricants that keep moving parts running smoothly and prevent damage due to breakage and seizing.

| Product Code | Size |
|--------------|--------------|
| MLF500FG | 500g tub |
| MLF080FG | 80g tube |
| MLF501FG | 500 ml spray |



Mould Polish

This superior quality mould polish is perfect for cleaning and polishing steel moulds. It safely and easily removes oxidation, corrosion, stains and rust. It produces a brilliant reflective lustre and leaves an invisible protective coating to ensure a long lasting shine.

| Product Code | Size |
|--------------|----------|
| MCP080 | 80g tube |



Mould Cleaner Wipes

Mould Cleaner Wipes are specifically developed for cleaning and degreasing of mould surfaces.

- Ultra-low linting non-abrasive wipe
- Leaves no residues

| Product Code | Size |
|--------------|-----------------|
| WMC80 | Tub of 80 wipes |

**Copper Anti-Seize Assembly Compound**

Mouldpro Copper Anti-Seize ensures rapid and easy assembly of threaded parts. It allows correct torque to be applied by eliminating thread interference.

| Product Code | Size |
|--------------|----------|
| MCS 500 | 500g tub |
| MCS 80 | 80g tube |

**Green Mould Protect**

Anti-corrosion agents provide dismantled dies, moulds and parts with long-term protection against corrosion. This ensures that your mould is always ready for use, maintaining value and efficiency

| Product Code | Size |
|--------------|----------------|
| MPG 501 | 500 ml aerosol |



The professionals choice. CRC 5.56 multipurpose product has superior penetrating power, that breaks through rust and corrosion while it cleans away scale and dirt. Also available in 175gm, 500m, 1litre, 200 litres

| Product Code | Size |
|--------------|---------------|
| CRC-5.56CAN | 400g Aerosol |
| CRC-5.564LT | 4 Litre Drum |
| CRC-5.5620LT | 20 Litre Drum |



All purpose spill absorber, made from 100% absorbant granules which are effective at absorbing spills and liquids.

Environmentally safe and easy to use 20kg bags.

| Product Code | Size |
|-----------------|----------------------------|
| Halesabsorbclay | All purpose spill absorber |



Extremely good absorption ability and capacity for all types of organic fluids, i.e. motor oils, hydraulic oils, gear oils, organic solvents, diesel oil, petrol, etc.

Sheet

40cm x 50cm

| Product Code | Size |
|-----------------|------------|
| FG-OILSHEET 100 | 100 Sheets |

LUBRICANTS, OILS AND GREASES

PTFE Grease



The ultimate PTFE paste for the assembly of injection mould tools, it also provides excellent anti seize on many types of moving parts.

| Product Code | Description |
|--------------|------------------|
| PROLON-250 | Prolon 250g Tube |
| PROLON-500G | Prolon 500ml Tub |
| PROLON-20KG | Prolon 20kg Tub |

LUBRICANTS, OILS AND GREASES

Foodmax Assembly Paste



Food Grade Anti-Seize Assembly Paste

White, non-toxic, grease-like compound designed for use as an assembly lubricant for lubrication bushes, sliding surfaces and small open plastic or metal gears and anti-seize compound for threaded fasteners, to prevent damage during start up and protect against premature wear during the running-in period.

| Product Code | Description | Pack Description |
|-------------------------|------------------------|------------------|
| FM-ASSEMBLYPASTE-0125 | Foodmax Assembly Paste | 125gm Tube |
| FM-ASSEMBLYPASTE-003 | Foodmax Assembly Paste | 3kg Tub |
| FM-ASSEMBLYPASTE - 0200 | Foodmax Assembly Paste | Aeropack 200ml |



To meet the needs of the new and old machinery, we offer a range of **Hydraulic Oils** perfect for each type of application. Available in zinc and zinc free these oil types will best match your needs.

See our Lubricants Catalogue for complete details.



| Size | Description |
|------------|-------------|
| 20 Litre | Pails |
| 205 Litre | Drums |
| 1000 Litre | Pods |



Our range of **Slideway Oils** are designed to lubricate machine slides and feed mechanisms. With excellent frictional properties, very good slideway adhesion and excellent antiwear properties, these oils can be relied on.

Food and non food types available.

See our Lubricants Catalogue for complete details.



| Size | Description |
|-----------|-------------|
| 20 Litre | Pails |
| 205 Litre | Drums |
| 209 Litre | Drums |



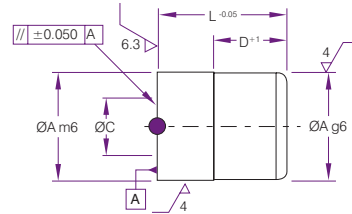
Greases to suit all applications such as slides, bearings, gears and central lubrication systems.

All greases available in food and non food types.

See our Lubricants Catalogue for complete details.



| Size | Description |
|---------|-------------|
| 450g | Cartridges |
| 2 - 5kg | Tubs |
| 18kg | Pails |
| 20kg | Pails |



Materials: INOX. 1.4034
Hardness: 51 ± 3 HRC.
Max. working temp 150°C Patented System

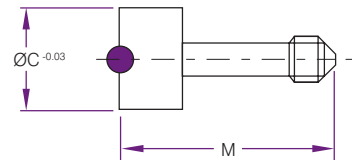
Inner insert is always at the same level as the body of the date stamp.
Wide range of diameters. Only a H7 pocket required for assembly.
No downtime when changing inserts. Internal mechanism guarantees secure replacement of inserts.



| 12 Months | 12 Month + Year | Year | Blank | A | C | D | E | L | N |
|-----------|-----------------|--------------|----------|----|------|----|-----|----|----|
| FA0422SF | FA042212-... | FA042204-... | FA042200 | 4 | 2.2 | 6 | 3.5 | 12 | 4 |
| FA0530SF | FA053012-... | FA053004-... | FA053000 | 5 | 3 | 6 | 3.5 | 12 | 4 |
| FA0632SF | FA063212-... | FA063205-... | FA063200 | 6 | 3.2 | 12 | 4 | 20 | 5 |
| FA0847SF | FA084712-... | FA084705-... | FA084700 | 8 | 4.7 | 12 | 6 | 20 | 5 |
| FA1057SF | FA105712-... | FA105706-... | FA105700 | 10 | 5.7 | 12 | 8 | 20 | 6 |
| FA1267SF | FA126712-... | FA126708-... | FA126700 | 12 | 6.7 | 12 | 10 | 20 | 8 |
| FA1687SF | FA168712-... | FA168710-... | FA168700 | 16 | 8.7 | 12 | 12 | 20 | 10 |
| FA2007SF | FA200712-... | FA200710-... | FA200700 | 20 | 10.7 | 12 | 14 | 20 | 10 |

DATE STAMPS

Date Stamp Inserts



Material: INOX. 1.4034
Hardness: 51 ± 3 HRC.

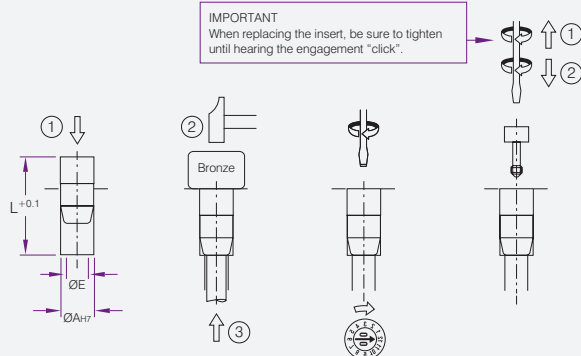
Year + Arrow



Year and Arrow

| Product Code | C | M |
|--------------|------|-----|
| IA2275 . . | 2.2 | 7.5 |
| IA3075 . . | 3 | 7.5 |
| IA3217 . . | 3.2 | 17 |
| IA4717 . . | 4.7 | 17 |
| IA5717 . . | 5.7 | 17 |
| IA6717 . . | 6.7 | 17 |
| IA8717 . . | 8.7 | 17 |
| IA1007 . . | 10.7 | 17 |

IMPORTANT
When replacing the insert, be sure to tighten
until hearing the engagement "click".



Arrow Only



Arrow Only

| Product Code | C | M |
|--------------|------|-----|
| IA2275SF | 2.2 | 7.5 |
| IA3075SF | 3 | 7.5 |
| IA3217SF | 3.2 | 17 |
| IA4717SF | 4.7 | 17 |
| IA5717SF | 5.7 | 17 |
| IA6717SF | 6.7 | 17 |
| IA8717SF | 8.7 | 17 |
| IA1007SF | 10.7 | 17 |



Materials: Stainless Steel

Hardness: 50-55 HRC.

Outer Insert



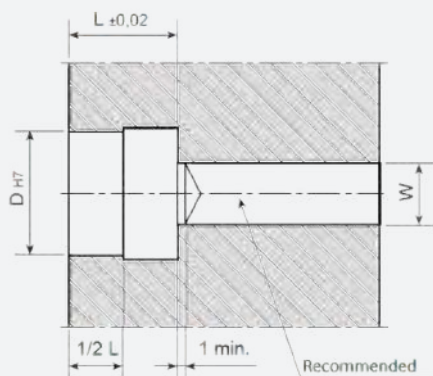
Inner Insert



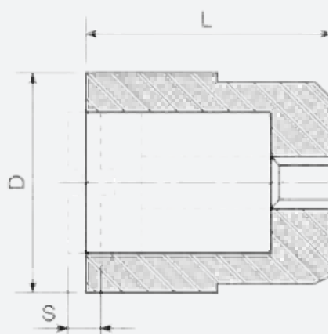
| ØD | Product Code | Product Code | Product Code | Product Code |
|----|--------------|--------------|--------------|--------------|
| 4 | CCM04 | CCA0420AA | CCG04* | CCN04 |
| 5 | CCM05 | CCA0520AA | CCG05* | CCN05 |
| 6 | CCM06 | CCA0620AA | CCG06 | CCN06 |
| 8 | CCM08 | CCA0820AA | CCG08 | CCN08 |
| 10 | CCM10 | CCA1020AA | CCG10 | CCN10 |
| 12 | CCM12 | CCA1220AA | CCG12 | CCN12 |
| 16 | CCM16 | CCA1620AA | CCG16 | CCN16 |
| 20 | CCM20 | CCA2020AA | CCG20 | CCN20 |

| ØD | Product Code | Product Code |
|----|--------------|--------------|
| 4 | ICA0420AA | ICN04 |
| 5 | ICA0620AA** | ICN06** |
| 6 | ICA0620AA | ICN06 |
| 8 | ICA0820AA | ICN08 |
| 10 | ICA1020AA | ICN10 |
| 12 | ICA1220AA | ICN12 |
| 16 | ICA1620AA | ICN16 |
| 20 | ICA2020AA | ICN20 |

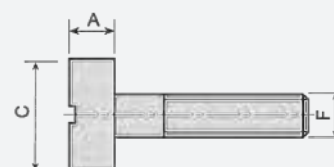
Installation



Outer Insert



Inner Insert



| ØD | L | S | ØW | A | ØC | F |
|----|------|------|-----|-----|-----|-----------|
| 4 | 8*** | 0.25 | 1.4 | 2 | 2.2 | M1X0.25 |
| 5 | 8 | 0.20 | 2 | 2 | 3.1 | M1.6X0.2 |
| 6 | 8 | 0.20 | 2 | 2 | 3.1 | M1.6X0.2 |
| 8 | 10 | 0.25 | 3 | 2.5 | 4.4 | M2.3X0.25 |
| 10 | 12 | 0.35 | 3 | 3 | 5.2 | M2.5X0.35 |
| 12 | 14 | 0.35 | 4 | 3 | 6.2 | M3X0.35 |
| 16 | 14 | 0.35 | 5 | 3.5 | 8.2 | M4X0.35 |
| 20 | 16 | 0.35 | 5 | 4.5 | 11 | M4X0.35 |

* CCG04 & CCG05 have numbers only.

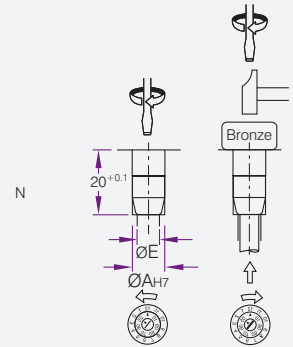
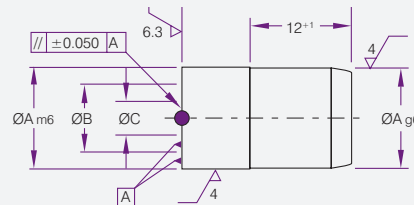
** Inner insert dia.6 valid also for outer insert dia. 5.

*** Special date stamps with D=4mm and L=5mm and inner insert with C=2.1 available on request.



Materials: INOX. 1.4034
Hardness: 51 ± 3 HRC.
Maximum working temperature 100°C .
Patented System

Replaces the need for 2 separate date stamps. No need to machine 2 separate holes. Minimum space required for installation.



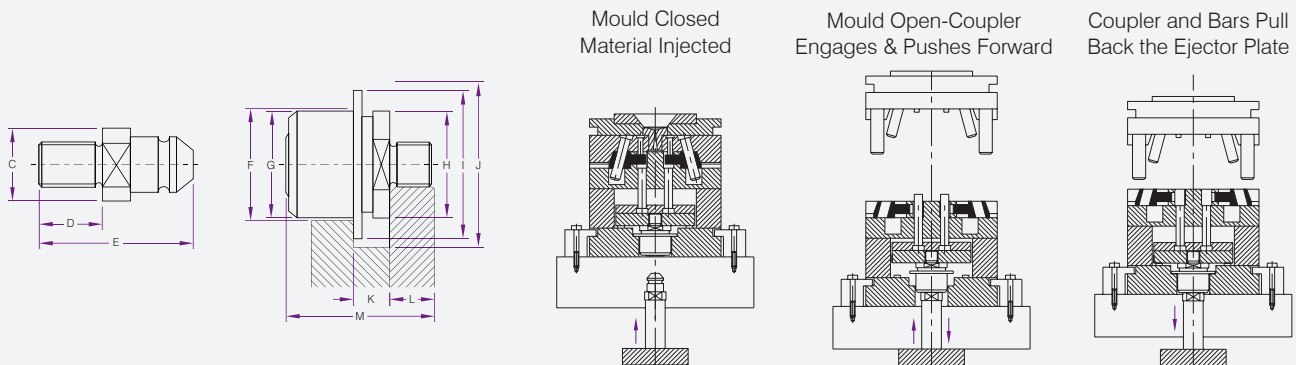
| 12 Month. + Yr | Blank | A | B | C | E | N |
|----------------|----------|----|------|-----|----|----|
| FD080512-.. | FD080500 | 8 | 5.5 | 3 | 6 | 5 |
| FD120812-.. | FD120800 | 12 | 8 | 4 | 10 | 6 |
| FD161012-.. | FD161000 | 16 | 10.5 | 5.3 | 12 | 10 |



A = Diameter/Tolerance = $+.00$
 $-.02$
B = Length/Tolerance = $\pm .03$

| DIA | A | B |
|-------|-----------|-------|
| DY-08 | Dia 8.00 | 10.00 |
| DY-10 | Dia 10.00 | 10.00 |
| DY-12 | Dia 12.00 | 12.00 |
| DY-16 | Dia 16.00 | 14.00 |

| DIA | A | B |
|-------|-----------|-------|
| DM-08 | Dia 8.00 | 10.00 |
| DM-10 | Dia 10.00 | 10.00 |
| DM-12 | Dia 12.00 | 12.00 |
| DM-16 | Dia 16.00 | 14.00 |

**Coupler**

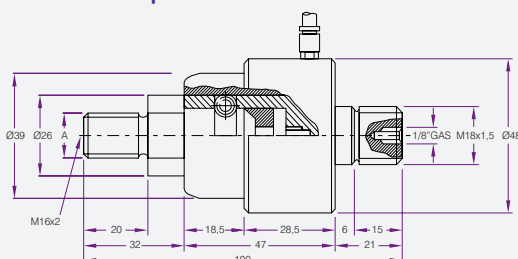
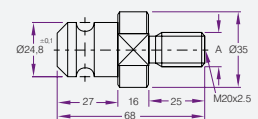
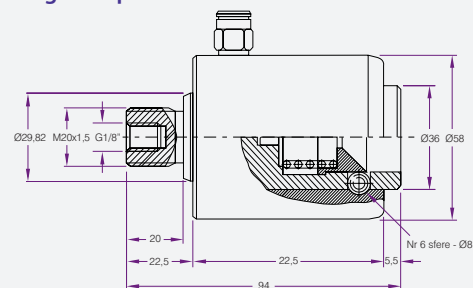
| Product Code | Thread | F | G | H | I | J | K | L | M |
|--------------|---------|----|----|----|----|----|----|----|------|
| 302M12COUP | 12x1.75 | 34 | 32 | 32 | 39 | 43 | 9 | 15 | 42.5 |
| 402M16COUP | 16x1.5 | 40 | 38 | 38 | 48 | 53 | 13 | 15 | 52 |
| 402M162COUP | 16x2 | 40 | 38 | 38 | 48 | 53 | 13 | 15 | 52 |
| 402M20COUP | 20x1.5 | 40 | 38 | 38 | 48 | 53 | 13 | 15 | 52 |
| 412M16COUP | 16x1.5 | 58 | 56 | 52 | 65 | 70 | 17 | 18 | 68 |

Barbs

| Product Code | Thread | C | D | E |
|--------------|---------|------|----|------|
| 301M12BARB | 12x1.75 | 22.8 | 20 | 45.5 |
| 401M16BARB | 16x2 | 25.8 | 20 | 55 |
| 401M20BARB | 20x2.5 | 25.8 | 20 | 55 |
| 411M16BARB | 16x2 | 35 | 35 | 68 |

Air Ejector Couplers

PRODUCTION ACCESSORIES

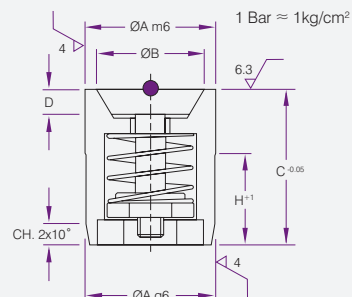
**Standard Coupler****Large Coupler**

| Product Code | Description |
|--------------|------------------|
| QKAC18 | Standard Coupler |
| QKAC20 | Large Coupler |



Material: INOX. 1.4034
Hardened 51 ± 3 HRC.
Working pressure: 1.5-6 BARS.

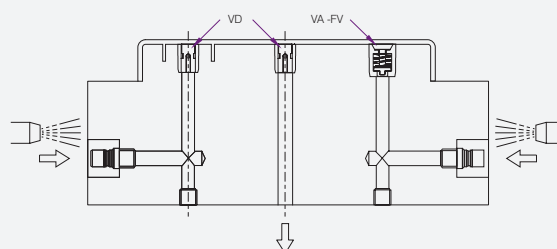
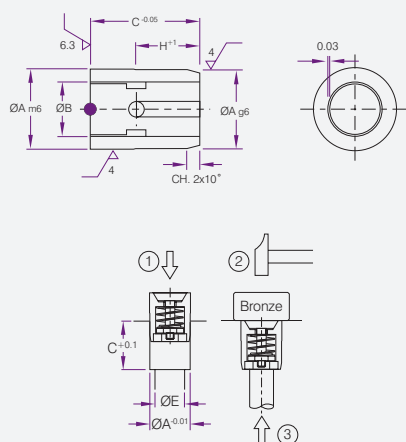
Helps part ejection with air.



| Product Code | A | B | C | D | E | H |
|--------------|----|-----|----|-----|----|----|
| VA050412 | 5 | 3 | 12 | 1.5 | 4 | 7 |
| VA065212 | 6 | 5.2 | 12 | 1.5 | 4 | 7 |
| VA086512 | 8 | 6.5 | 12 | 1.5 | 4 | 7 |
| VA100812 | 10 | 8 | 12 | 2 | 8 | 7 |
| VA121012 | 12 | 10 | 12 | 2.5 | 10 | 7 |
| VA161320 | 16 | 13 | 20 | 3 | 12 | 12 |
| VA201720 | 20 | 17 | 20 | 3.5 | 16 | 12 |

PRODUCTION ACCESSORIES

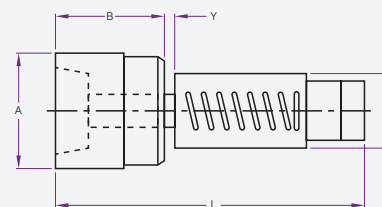
Double Valve



| Product Code | A | B | C | E | H |
|--------------|----|----|----|---|----|
| VD080512 | 8 | 5 | 12 | 4 | 7 |
| VD100612 | 10 | 6 | 12 | 5 | 7 |
| VD120812 | 12 | 8 | 12 | 7 | 7 |
| VD161020 | 16 | 10 | 20 | 9 | 12 |



High Pressure Air Valve
Stainless spring designed for fast cycles
Max temperature 130°C



| Product Code | A | B | C | L | Y |
|--------------|----|----|----|------|-----|
| OIVA01N | 8 | 11 | 6 | 24 | 1,0 |
| OIVA02N | 12 | 18 | 8 | 34 | 1,0 |
| OIVA03N | 18 | 22 | 12 | 45,5 | 1,0 |

Bernzomatic

PRODUCTION ACCESSORIES



| Product Code | Description |
|--------------|----------------------|
| TS4000TK | High Heat Torch Kit |
| 1811120 | Map Pro Gas Cylinder |
| ST2200T | Micro Flame Torch |
| BF55 | Fuel Cylinder |

Hopper Magnets

PRODUCTION ACCESSORIES



| Product Code | Length | Width | Height | Type |
|--------------|--------|-------|--------|----------------------|
| HM-5R | 120 | 112 | 90 | Round Type - 5 Bars |
| HM-5S | 120 | 112 | 90 | Square Type - 5 Bars |
| HM-7R | 180 | 175 | 75 | Round Type - 7 Bars |
| HM-7S | 180 | 175 | 75 | Square Type - 7 Bars |
| HM-9R | 230 | 218 | 75 | Round Type - 9 Bars |
| HM-9S | 230 | 218 | 75 | Square Type - 9 Bars |

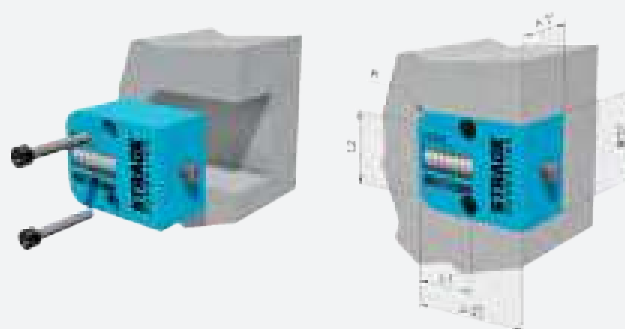
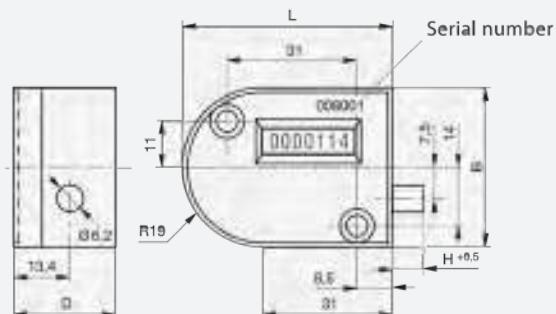
STRACK®
NORMALIEN



Cycle counters positively monitor mold activity, validate process monitoring data and assist mold maintenance procedures

| Product Code | L | B | D | H |
|--------------|----|----|------|-----|
| Z5260 | 50 | 38 | 24.5 | 7.5 |

| Product Code | B | A | L | L1 | L2 | R | S |
|--------------|----|----|----|----|----|---|---------|
| Z5263 | 38 | 26 | 48 | 24 | 28 | 8 | Min 3.5 |



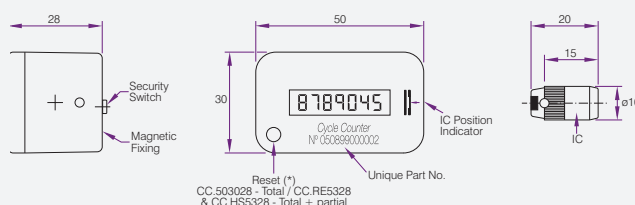
PRODUCTION ACCESSORIES

Cumsa High Speed Cycle Counters

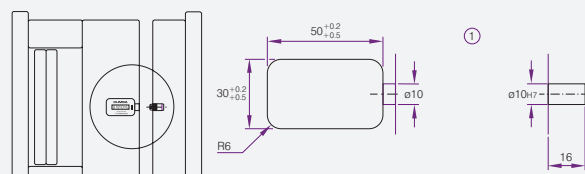
CUMSA
INNOVATIVE SOLUTIONS
FOR YOUR MOLDS



This unit contains an electronic circuit which counts the number of cycles made & checks the exact total life time of the mould. To determine how many shots a mould made when out sourced. Predicts preventive maintenance. Available with partial reset. The unique part number for each counter gives a guarantee and a planning aid to the moulder. Any tampering is shown in the screen.

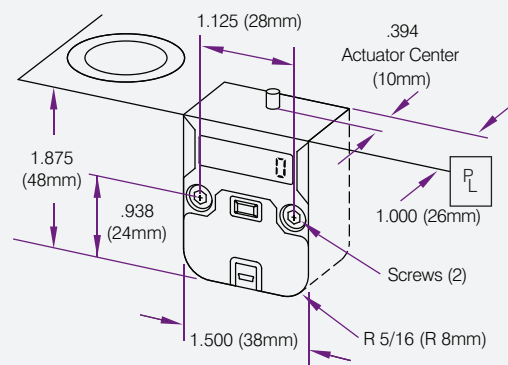


| Product Code | Cycles/min | Battery |
|--------------|------------|---------------|
| CC.HS5328 | Up to 500 | ER 14250 ½ AA |





- 7-digit LCD display with a push button to move through the display modes
- 4GB Flash drive for file storage and 4+ year battery within monitor
- Water resistant with an ingress protection rating of IP52
- Maximum temperature: 190° F (90° C)
- Dimensional compatibility with Progressive's mechanical CounterViews
- Mini USB connectivity for data retrieval with cables sold separately



507288

Cycle Count
Total cycles for the life of the mould is presented on the main screen of the CvE Monitor

EFF 93

Efficiency Percentage
The percentage of time that the mould has been actively cycling vs being idle

CYE 8.7

Cycle Time
Since the first production cycle, the cycle time is shown in seconds for the life of the mould.

EFFr 96

Efficiency Percentage-Recent
The percentage of time the mould has been active in the past 25,000 cycles.

CYEr 9.6

Cycle Time-Recent
Cycle time for the past 25,000 cycles

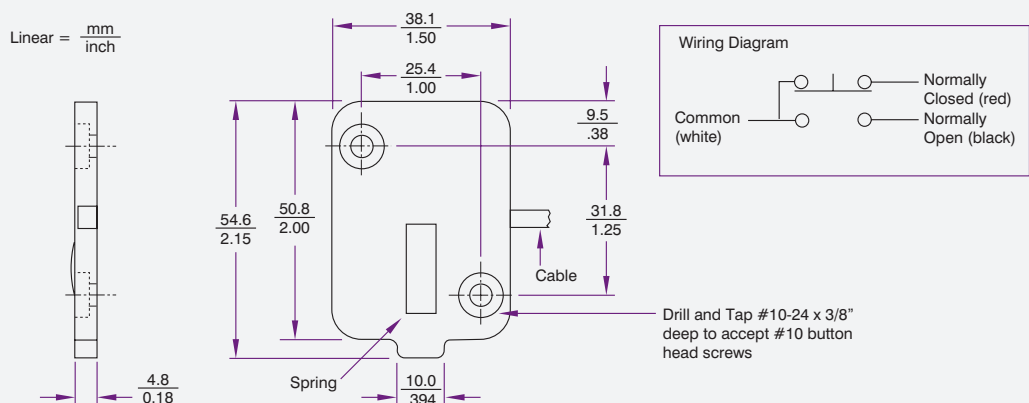
RES 1259

Cycle Count Rest
A separate counter that can be reset to 0 for interim monitoring of cycles when pressed and held

FLASHdr

Embedded Flash Drive
Users can utilize the 4GB flash drive on the CvE Monitor by connecting the device to a PC using an industry-standard mini USB cable, sold on the next page. Users press the button to get to the flash drive mode and then the storage area is represented on the PC by a new drive letter

| Product Code | Description |
|--------------|---|
| CVE | CvE Monitor v2 mould Maker/moulder version including #8-32 x 1" SHCS (2) and M4 x 25mm SHCS (2) |
| CVE-INT | Internal Extension Rod (8"/200mm) including a hex key for CvE Monitor set screw removal. |
| CVE-EXT | External Mounting Block including #8-32 x 1" SHCS (2) and M4 x 25mm SHCS (2) |



Smartflow Thinswitch is designed to verify ejector plate return. The Thinswitch helps prevent accidental mould close in injection moulding applications by providing a position switch that is tied to the injection moulding machine control. Two switches can be used in series for larger moulds to ensure the ejector plate return, preventing costly mould damage.

Mount inside ejector housing and wire to machine controls. Use for core slides or any place where space is limited. The Thinswitch Limit Switch is designed for use in very low power mould protection control circuits. It is not intended to switch heavy loads in power applications such as relay or solenoid coils.

Features and Benefits

- Over 10 million cycle life
- Adjustable actuation between .187" and .250" from the mould base.
- 3/16" thick design fits snugly behind the ejector plate between the rest buttons
- Stripped and tinned 6 ft. wire leads
- Mounting screws and wire clips included
- Includes: Switch, Wire Clips, #10-24 Button Head Screws, Allen Wrench and Instructions.

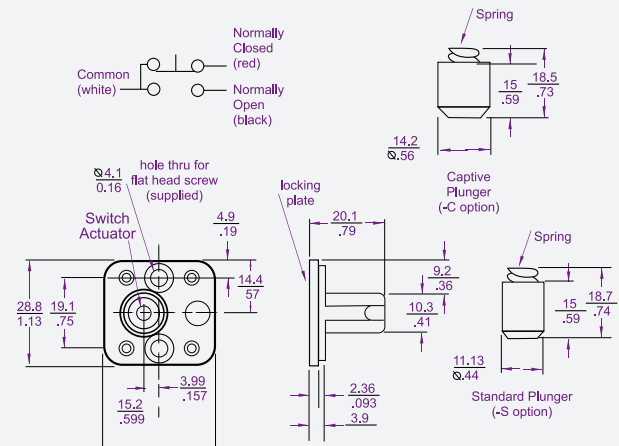
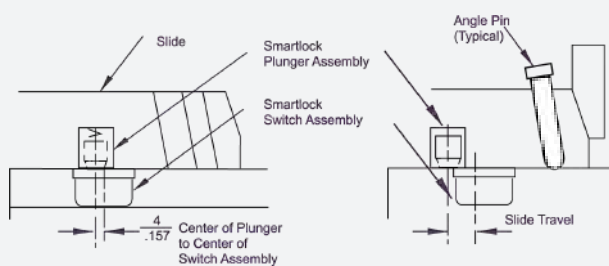
Specifications

| | |
|--------------------|--|
| Electrical | |
| 250VAC: | 5 Amps resistive 4 Amps inductive |
| 28VDC (sea level): | 5 Amps resistive 4 Amps inductive |
| Switching: | SPDT |
| Materials | |
| Body: | Fibreglass-reinforced nylon |
| Dome: | Polyurethane |
| Back Cover: | Polyester film |
| Wire Leads: | 22ga stranded. 3-conductor, shield cable, 6ft. (1.8m) long, ends stripped and tinned |

| Product Code | Description | Max Temp. |
|--------------|----------------|----------------|
| T-222 | Standard Model | 175°F / 79.4°C |

**Smartlock® Core slide retainer & limit switch**

- Over 10 million cycle life · Temperature max. 79.4°C @ 2 A load
- 17-27 pounds holding force
- Superior flush mounted switch
- Optional High Temperature model max. 121.1°C @ 3.5 A load



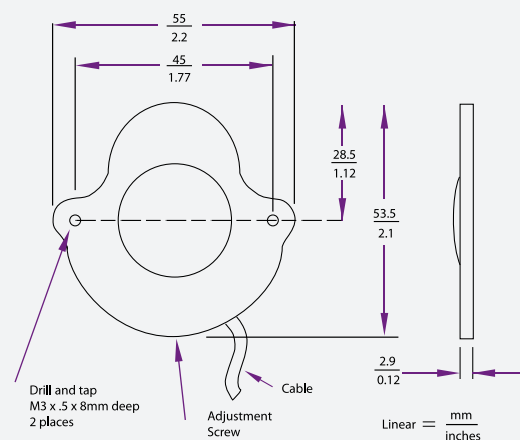
| Product Code | Description | Max Temp. |
|--------------|-------------|-----------|
| SL-222 | Smart Lock | |

Global Thinswitch

PRODUCTION ACCESSORIES

**The Global Thinswitch®**

- Liquid resistant · Over 14 million cycle life
- Only 3 or 4mm Thick · Temperature max. 79.4°C @ 70 mA load
- 2 minute fitting (No milling necessary)



| Product Code | Description | Max Temp. |
|--------------|-------------------|-----------|
| TW-222-LR | Global Thinswitch | |



| Product Code | Description |
|--------------|---|
| TSK | 145mm Long Disposable Fixed Knife Blade |

PRODUCTION ACCESSORIES

Work Finisher Ceramic Knives



Small and large Work Finishers offer deburring of hard plastics, without the possibility of cutting your hand.

| Product Code | Description |
|--------------|---------------------------|
| WF620 | Small Work Finisher Knife |
| WF1540 | Large Work Finisher Knife |

PRODUCTION ACCESSORIES

Deburring Tools - Rapid Burr



12mm hexagonal painted handle and S10 Blade.
Steel housing for long life of handle.
Blade is replaceable.

| Product Code | Description |
|--------------|-------------|
| NRB1005 | Rapid Burr |

PRODUCTION ACCESSORIES

Deburring Tools - Teddy Burr



Designed for hard to reach locations.
Holds 2.6mm blades.
8mm painted hexagonal aluminum handle and N1 blade.
Blade is replaceable.

| Product Code | Description |
|--------------|-------------|
| NTB1000 | Teddy Burr |

PRODUCTION ACCESSORIES

Deburring Tools - Liza Burr



Double end blade holder to utilize both N and S blades.
Telescopes from 20-110 mm with N Blades.
20-94 mm with S Blades.
Includes: Uni-handle, SN-holder, N1 & N2 blades.

| Product Code | Description |
|--------------|-------------|
| NLB1000 | Liza Burr |



Disposable tool.
A handy pocket clip is a standard feature of this tool.
Includes: S10 blade mounted in an 8mm painted hexagonal aluminum handle.

| Product Code | Description |
|--------------|---------------------|
| NEO1015 | Disposable Edge Off |

Deburring Tools - Rapid Burr

PRODUCTION ACCESSORIES

**Noga Burr 3**

Will do almost all deburring jobs. Includes: NG-1 handle, S10, S20 and S35 blades.

Noga Burr 5

Same as Noga Burr 3 but with 2 extra blades. Suitable for coarse to extra fine deburring operations. Includes: NG-1 handle, S10, S20, S35, S101 and S202 blades

| Product Code | Description |
|--------------|--|
| NNG1003 | Handle, S10, S20 and S35 blades |
| NNG1005 | Handle, S20, S35, S101 and S202 blades |

S101 Blades

PRODUCTION ACCESSORIES



For fine edges on all materials

| Product Code | Angle | Quantity |
|--------------|-------|----------|
| NBK1010 | 40 | 10 pack |

N1 Blades

PRODUCTION ACCESSORIES



Works best on steel, aluminium and plastic

| Product Code | Angle | Quantity |
|--------------|-------|----------|
| NBN1010 | 40 | 10 pack |

S10 Blades

PRODUCTION ACCESSORIES



Works best on steel, aluminium and plastic

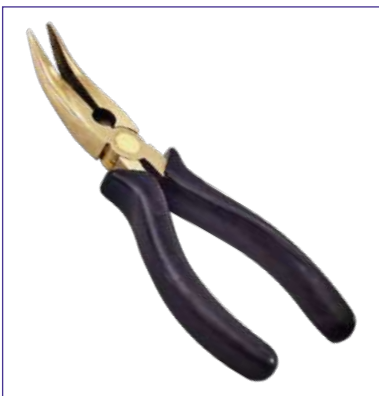
| Product Code | Angle | Quantity |
|--------------|-------|----------|
| NBS1010 | 40 | 10 pack |



| Product Code | Size | Diameter | Weight | Length |
|--------------|------|----------|--------|--------|
| TH210 | 1 | 32 mm | 710 g | 270 mm |
| TH212 | 2 | 38 mm | 1070 g | 305 mm |
| TH214 | 3 | 44 mm | 1600 g | 305 mm |
| TH216 | 4 | 50 mm | 2380 g | 355 mm |

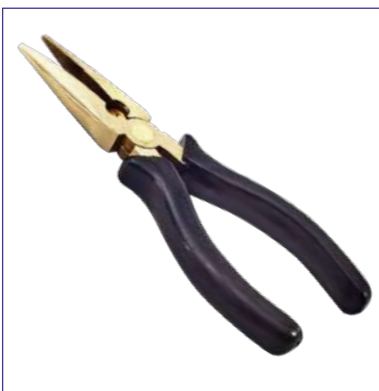


| Product Code | Blade Width | Blade Length | Total Length |
|--------------|-------------|--------------|---------------|
| BSC125L | 1"/25mm | 7"/177mm | 10 3/4"/273mm |
| BSC125 | 1 1/4"/32mm | 4"/100mm | 8"/200mm |
| BSC200 | 2"/50mm | 4"/100mm | 8"/200mm |



High quality bronze pliers, reduce risk of damaging the mould.
Angled for hard to reach places.

| Product Code | Size |
|--------------|----------|
| BC60 | 6"/150mm |
| BC90 | 9"/230mm |



High quality bronze pliers, reduce risk of damaging the mould.

| Product Code | Size |
|--------------|----------|
| BL60 | 6"/150mm |
| BL90 | 9"/230mm |

**125mm Sprue Snips**

Total Length: 130mm
 Blade Length: 19mm
 Usable Blade Opening at Tip: 13.5mm
 Usable Blade Opening at Base: 5.5mm

| Product Code | Description |
|--------------|--------------|
| MCTS125 | Model: 125mm |

**150mm Sprue Snips**

Total Length: 155mm
 Blade Length: 21mm
 Usable Blade Opening at Tip: 16mm
 Usable Blade Opening at Base: 6mm

| Product Code | Description |
|--------------|--------------|
| MCTS150 | Model: 150mm |

**180mm Sprue Snips**

Total Length: 185mm
 Blade Length: 25mm
 Spring Type Coil

| Product Code | Description |
|--------------|--------------|
| MCTS180 | Model: 180mm |

**Flat/Angled Back Sprue Snips**

| Product Code | Description |
|--------------|------------------------------------|
| MC160S | Flat Back Japanese Quality Snips |
| MC170S | Angled Back Japanese Quality Snips |



| METRIC | | | | | | |
|--------|----------|----------|----------|----------|-----------|-----------|
| Length | M2 | M3 | M4 | M5 | M6 | M8 |
| 5 | | UCAP3M05 | UCAP4M05 | | | |
| 6 | | UCAP3M06 | UCAP4M06 | UCAP5M06 | | |
| 8 | | UCAP3M08 | UCAP4M8 | UCAP5M08 | UCAP6M08 | |
| 10 | | UCAP3M10 | UCAP4M10 | UCAP5M10 | UCAP6M10 | UCAP8M10 |
| 12 | UCAP2M12 | UCAP3M12 | UCAP4M12 | UCAP5M12 | UCAP6M12 | UCAP8M12 |
| 16 | | UCAP3M16 | UCAP4M16 | UCAP5M16 | UCAP6M16 | UCAP8M16 |
| 20 | | UCAP3M20 | UCAP4M20 | UCAP5M20 | UCAP6M20 | UCAP8M20 |
| 25 | | UCAP3M25 | UCAP4M25 | UCAP5M25 | UCAP6M25 | UCAP8M25 |
| 30 | | UCAP3M30 | UCAP4M30 | UCAP5M30 | UCAP6M30 | UCAP8M30 |
| 35 | | UCAP3M35 | UCAP4M35 | UCAP5M35 | UCAP6M35 | UCAP8M35 |
| 40 | | | UCAP4M40 | UCAP5M40 | UCAP6M40 | UCAP8M40 |
| 45 | | | UCAP4M45 | UCAP5M45 | UCAP6M45 | UCAP8M45 |
| 50 | | | UCAP4M50 | UCAP5M50 | UCAP6M50 | UCAP8M50 |
| 55 | | | | UCAP5M55 | UCAP6M55 | UCAP8M55 |
| 60 | | | | UCAP5M60 | UCAP6M60 | UCAP8M60 |
| 65 | | | | UCAP5M65 | UCAP6M65 | UCAP8M65 |
| 70 | | | | UCAP5M70 | UCAP6M70 | UCAP8M70 |
| 75 | | | | | UCAP6M75 | UCAP8M75 |
| 80 | | | | UCAP5M80 | UCAP6M80 | UCAP8M80 |
| 85 | | | | | | |
| 90 | | | | UCAP5M90 | UCAP6M90 | UCAP8M90 |
| 95 | | | | | | |
| 100 | | | | | UCAP6M100 | UCAP8M100 |
| 110 | | | | | UCAP6M110 | UCAP8M110 |
| 120 | | | | | UCAP6M120 | UCAP8M120 |
| 130 | | | | | | UCAP8M130 |
| 140 | | | | | UCAP6M140 | UCAP8M140 |
| 150 | | | | | | UCAP8M150 |
| 160 | | | | | | UCAP8M160 |
| 180 | | | | | | UCAP8M180 |

More Sizes next page



| METRIC | | | | | |
|--------|------------|------------|------------|------------|-----------|
| Length | M10 | M12 | M14 | M16 | M18 |
| 10 | UCAP10M10 | | | | |
| 12 | UCAP10M12 | UCAP12M12 | | | |
| 16 | UCAP10M16 | UCAP12M16 | | | |
| 20 | UCAP10M20 | UCAP12M20 | | | |
| 25 | UCAP10M25 | UCAP12M25 | UCAP14M25 | UCAP16M25 | |
| 30 | UCAP10M30 | UCAP12M30 | UCAP14M30 | UCAP16M30 | |
| 35 | UCAP10M35 | UCAP12M35 | UCAP14M35 | UCAP16M35 | |
| 40 | UCAP10M40 | UCAP12M40 | UCAP14M40 | UCAP16M40 | |
| 45 | UCAP10M45 | UCAP12M45 | UCAP14M45 | UCAP16M45 | |
| 50 | UCAP10M50 | UCAP12M50 | UCAP14M50 | UCAP16M50 | UCAP18M50 |
| 55 | UCAP10M55 | UCAP12M55 | UCAP14M55 | UCAP16M55 | |
| 60 | UCAP10M60 | UCAP12M60 | UCAP14M60 | UCAP16M60 | |
| 65 | UCAP10M65 | UCAP12M65 | UCAP14M65 | UCAP16M65 | |
| 70 | UCAP10M70 | UCAP12M70 | UCAP14M70 | UCAP16M70 | |
| 75 | UCAP10M75 | UCAP12M75 | UCAP14M75 | UCAP16M75 | |
| 80 | UCAP10M80 | UCAP12M80 | UCAP14M80 | UCAP16M80 | |
| 90 | UCAP10M85 | UCAP12M90 | UCAP14M90 | UCAP16M90 | |
| 100 | UCAP10M90 | UCAP12M100 | UCAP14M100 | UCAP16M100 | |
| 110 | UCAP10M95 | UCAP12M110 | UCAP14M110 | UCAP16M110 | |
| 120 | UCAP10M100 | UCAP12M120 | UCAP14M120 | UCAP16M120 | |
| 130 | UCAP10M110 | UCAP12M130 | UCAP14M130 | UCAP16M130 | |
| 140 | UCAP10M120 | UCAP12M140 | UCAP14M140 | UCAP16M140 | |
| 150 | UCAP10M130 | UCAP12M150 | UCAP14M150 | UCAP16M150 | |
| 160 | UCAP10M140 | UCAP12M160 | UCAP14M160 | UCAP16M160 | |
| 170 | UCAP10M150 | UCAP12M170 | UCAP14M170 | UCAP16M170 | |
| 180 | UCAP10M160 | UCAP12M180 | UCAP14M180 | UCAP16M180 | |
| 190 | UCAP10M180 | UCAP12M200 | UCAP14M190 | UCAP16M190 | |
| 200 | UCAP10M200 | UCAP12M220 | UCAP14M200 | UCAP16M200 | |
| 220 | | UCAP12M240 | UCAP14M220 | UCAP16M220 | |
| 230 | | UCAP12M250 | UCAP14M230 | | |
| 240 | | UCAP12M240 | | UCAP16M240 | |
| 250 | | UCAP12M250 | UCAP14M250 | UCAP16M250 | |
| 260 | | | | UCAP16M260 | |
| 280 | | | | | |
| 300 | | | UCAP14M220 | UCAP16M300 | |
| 320 | | | UCAP14M240 | | |
| 340 | | | UCAP14M250 | | |

More Sizes next page



| METRIC | | | | | | |
|--------|------------|------------|------------|------------|------------|------------|
| Length | M20 | M22 | M24 | M27 | M30 | M36 |
| 12 | | | | | | |
| 16 | | | | | | |
| 20 | | | | | | |
| 25 | | | | | | |
| 30 | UCAP20M30 | | | | | |
| 35 | UCAP20M35 | | | | | |
| 40 | UCAP20M40 | | UCAP24M40 | | | |
| 45 | UCAP20M45 | | UCAP24M45 | | | |
| 50 | UCAP20M50 | | UCAP24M50 | | | |
| 55 | UCAP20M55 | | UCAP24M55 | | | |
| 60 | UCAP20M60 | | UCAP24M60 | | | |
| 65 | UCAP20M65 | | UCAP24M65 | | | |
| 70 | UCAP20M70 | | UCAP24M70 | | | |
| 75 | UCAP20M75 | | UCAP24M75 | | | |
| 80 | UCAP20M80 | | UCAP24M80 | UCAP27M80 | UCAP27M80 | UCAP36M80 |
| 90 | UCAP20M90 | | UCAP24M90 | UCAP27M90 | UCAP27M90 | UCAP36M90 |
| 100 | UCAP20M100 | | UCAP24M100 | UCAP27M100 | UCAP27M100 | UCAP36M100 |
| 110 | UCAP20M110 | UCAP22M110 | UCAP24M110 | UCAP27M110 | UCAP27M110 | UCAP36M110 |
| 120 | UCAP20M120 | | UCAP24M120 | UCAP27M120 | UCAP27M120 | UCAP36M120 |
| 130 | UCAP20M130 | UCAP22M130 | UCAP24M130 | | UCAP27M130 | UCAP36M130 |
| 140 | UCAP20M140 | | UCAP24M140 | UCAP27M140 | UCAP27M140 | UCAP36M140 |
| 150 | UCAP20M150 | | UCAP24M150 | UCAP27M150 | UCAP27M150 | UCAP36M150 |
| 160 | UCAP20M160 | | UCAP24M160 | | UCAP27M160 | |
| 170 | | | | | | |
| 180 | UCAP20M180 | | UCAP24M180 | UCAP27M180 | UCAP27M180 | UCAP36M180 |
| 190 | | | | | | |
| 200 | UCAP20M200 | | UCAP24M200 | UCAP27M200 | UCAP27M200 | UCAP36M200 |
| 220 | UCAP20M220 | | UCAP24M220 | | UCAP27M220 | |
| 230 | | | | | | |
| 240 | UCAP20M240 | | UCAP24M240 | | UCAP27M240 | UCAP36M240 |
| 250 | | | | | | |
| 260 | UCAP20M260 | | UCAP24M260 | | UCAP27M260 | UCAP36M260 |
| 280 | UCAP20M280 | | UCAP24M280 | | UCAP27M280 | UCAP36M280 |
| 300 | UCAP20M300 | | UCAP24M300 | | UCAP27M300 | UCAP36M300 |
| 320 | | | UCAP24M320 | | UCAP27M320 | |
| 340 | | | UCAP24M340 | | UCAP27M340 | |
| 360 | | | | | UCAP27M360 | |

**Some sizes available in:**

Threads: UNC, UNF, BSF

Sizes: 7/16, 7/8, 1 1/4, 1 1/2 also available

| IMPERIAL | | | | | |
|----------|----------|------------|-----------|------------|-----------|
| Length | 1/8 | 3/16 | 1/4 | 5/16 | 3/8 |
| 3/8 | UCAP1838 | UCAP31638 | UCAP1438 | UCAP51638 | |
| 1/2 | UCAP1812 | UCAP31612 | UCAP1412 | UCAP51612 | UCAP3812 |
| 5/8 | | UCAP31658 | UCAP1458 | UCAP51658 | UCAP3858 |
| 1/4 | | UCAP31614 | UCAP1414 | | |
| 3/4 | UCAP1834 | UCAP31634 | UCAP1434 | UCAP51634 | UCAP3834 |
| 7/8 | | | UCAP1478 | UCAP51678 | |
| 1 | UCAP181 | UCAP3161 | UCAP141 | UCAP5161 | UCAP381 |
| 1 1/4 | | UCAP316114 | UCAP14114 | UCAP516114 | UCAP38114 |
| 1 1/2 | | UCAP316112 | UCAP14112 | UCAP51614 | UCAP38112 |
| 1 3/4 | | UCAP316134 | UCAP14134 | UCAP516134 | UCAP38134 |
| 2 | | UCAP3162 | UCAP142 | UCAP5162 | UCAP382 |
| 2 1/4 | | | UCAP14214 | UCAP516214 | UCAP38214 |
| 2 1/2 | | UCAP316212 | UCAP14212 | UCAP516212 | UCAP38212 |
| 2 3/4 | | | UCAP14234 | UCAP516234 | UCAP38234 |
| 3 | | | UCAP143 | UCAP5163 | UCAP383 |
| 3 1/4 | | | UCAP14314 | UCAP516314 | UCAP38314 |
| 3 1/2 | | | UCAP14312 | UCAP516312 | UCAP38312 |
| 4 | | | UCAP144 | UCAP5164 | UCAP384 |
| 4 1/2 | | | | UCAP516412 | UCAP38412 |
| 5 | | | | | UCAP385 |
| 5 1/2 | | | | | UCAP38512 |
| 6 | | | | | UCAP386 |

v

More Sizes next page



Some sizes available in: Threads: UNC, UNF, BSF. Sizes: 7/16, 7/8, 1 1/4, 1 1/2 also available

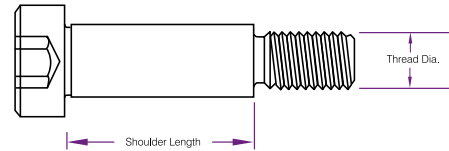
| IMPERIAL | | | | |
|----------|-----------|-----------|-----------|----------|
| Length | 1/2 | 5/8 | 3/4 | 1" |
| 1/2 | | UCAP1258 | UCAP1234 | |
| 5/8 | UCAP1258 | | | |
| 3/4 | UCAP1234 | | | |
| 1 | UCAP121 | UCAP581 | | |
| 1 1/4 | UCAP12114 | UCAP58114 | UCAP34114 | |
| 1 1/2 | UCAP12112 | UCAP58112 | UCAP34112 | UCAP1112 |
| 1 3/4 | UCAP12134 | UCAP58134 | UCAP34134 | |
| 2 | UCAP122 | UCAP582 | UCAP342 | UCAP12 |
| 2 1/4 | UCAP12214 | UCAP58214 | UCAP34214 | |
| 2 1/2 | UCAP12212 | UCAP58212 | UCAP34212 | UCAP1212 |
| 2 3/4 | UCAP12234 | | | |
| 3 | UCAP123 | UCAP583 | UCAP343 | UCAP13 |
| 3 1/4 | UCAP12314 | | | |
| 3 1/2 | UCAP12312 | UCAP58312 | UCAP34312 | UCAP1312 |
| 4 | UCAP124 | UCAP584 | UCAP344 | UCAP14 |
| 4 1/2 | UCAP12412 | UCAP58412 | UCAP34412 | |
| 5 | UCAP125 | UCAP585 | UCAP345 | UCAP15 |
| 5 1/2 | UCAP12512 | UCAP58512 | UCAP34512 | |
| 6 | UCAP126 | UCAP586 | UCAP346 | UCAP16 |
| 6 1/2 | UCAP12612 | UCAP58612 | UCAP34612 | |
| 7 | UCAP127 | UCAP587 | UCAP347 | UCAP17 |
| 8 | UCAP128 | UCAP588 | UCAP348 | UCAP18 |
| 9 | | | UCAP349 | UCAP19 |

MOULD MAINTENANCE AND SET UP

Steel Pressure Plugs



| Product Code | Size | Height |
|--------------|------|--------|
| UPLUG18 | 1/8 | .382 |
| UPLUG14 | 1/4 | .503 |
| UPLUG38 | 3/8 | .559 |
| UPLUG12 | 1/2 | .691 |
| UPLUG58 | 5/8 | .731 |
| UPLUG34 | 3/4 | .815 |
| UPLUG1 | 1 | .998 |



| METRIC | | | | | | | |
|--------|-----------------------------|----------|----------|-----------|------------|--------------|------------|
| Length | Shoulder Dia. (Thread Dia.) | | | | | | |
| | 6mm (M5) | 8mm (M6) | 10 (M8) | 12 (M10) | 16mm (M12) | 20mm (vvM16) | 24mm (M20) |
| 10 | USS6M10 | | | | | | |
| 12 | USS6M12 | USS8M12 | USS10M12 | | | | |
| 16 | USS6M16 | USS8M16 | USS10M16 | USS12M16 | | | |
| 20 | USS6M20 | USS8M20 | USS10M20 | USS12M20 | USS16M20 | | |
| 25 | USS6M25 | USS8M25 | USS10M25 | USS12M25 | | | |
| 30 | USS6M30 | USS8M30 | USS10M30 | USS12M30 | USS16M30 | | |
| 35 | | USS8M35 | | | | | |
| 40 | USS6M40 | USS8M40 | USS10M40 | USS12M40 | USS16M40 | USS20M40 | |
| 50 | USS6M50 | USS8M50 | USS10M50 | USS12M50 | USS16M50 | USS20M50 | USS24M50 |
| 60 | USS6M60 | USS8M60 | USS10M60 | USS12M60 | USS16M60 | USS20M60 | USS24M60 |
| 70 | | USS8M70 | USS10M70 | USS12M70 | USS16M70 | USS20M70 | USS24M70 |
| 80 | | USS8M80 | USS10M80 | USS12M80 | USS16M80 | USS20M80 | USS24M80 |
| 90 | | | | USS12M90 | USS16M90 | USS20M90 | USS24M90 |
| 100 | | | | USS12M100 | USS16M100 | USS20M100 | USS24M100 |
| 120 | | | | USS12M120 | USS16M120 | USS20M120 | USS24M120 |
| 140 | | | | USS12M140 | | | |

| IMPERIAL | | | | | | |
|----------|-----------------|-----------|----------|----------|----------|----------|
| Length | Thread BSW, UNC | | | | | |
| | 1/4 | 5/16 | 3/8 | 1/2 | 5/8 | 3/4 |
| 3/8 | USS1438 | USS51638 | | | | |
| 1/2 | USS1412 | USS51612 | USS3812 | USS1212 | | |
| 5/8 | | USS51658 | USS3858 | USS1258 | | |
| 3/4 | USS1434 | USS51634 | USS3834 | USS1234 | | |
| 1 | USS141 | USS5161 | USS381 | USS121 | | |
| 1 1/4 | USS14114 | USS516114 | USS38114 | USS12114 | USS58114 | |
| 1 1/2 | USS14112 | USS516112 | USS38112 | USS12112 | USS58112 | USS34112 |
| 1 3/4 | | USS516134 | USS38134 | USS12134 | USS58134 | USS34134 |
| 2 | USS142 | USS5162 | USS382 | USS122 | USS582 | USS342 |
| 2 1/4 | | USS516214 | USS38214 | USS12214 | USS58214 | USS34214 |
| 2 1/2 | | USS516212 | USS38212 | USS12212 | USS58212 | USS34212 |
| 2 3/4 | | | USS38234 | USS12234 | USS58234 | USS34234 |
| 3 | | | USS383 | USS123 | USS583 | USS343 |
| 3 1/4 | | | USS38314 | USS12314 | | |
| 3 1/2 | | | USS38312 | USS12312 | USS58312 | USS34312 |
| 4 | | | USS384 | USS124 | USS584 | USS344 |
| 4 1/2 | | | | USS12412 | USS58412 | USS34412 |
| 4 1/4 | | | | USS34414 | | |
| 5 | | | | USS125 | USS585 | USS345 |
| 6 | | | | | | USS346 |



| Product Code | Mould Height | Max. Width | Package |
|--------------|--------------|------------|-------------------|
| SG-1 | 20 cm | 55 cm | (set of 2 pieces) |
| SG-2 | 30 cm | 55 cm | (set of 2 pieces) |
| SG-3 | 40 cm | 55 cm | (set of 2 pieces) |
| SG-4 | 50 cm | 55 cm | (set of 2 pieces) |
| SG-5 | 60 cm | 55 cm | (set of 2 pieces) |

PRODUCTION ACCESSORIES

Vacuum Cups



Vacuum Cup Type Selection Guide - Scan The QR Code For More Information

Flat Cups

The flat suction cups provide accuracy in load gripping and speeds up the cycle process on flat surfaces.

1,5 Bellow Cups

The 1,5 bellow cups combine the advantages of the flat suction cups with the flexibility of bellows for high-speed applications.

2,5 Bellow Cups The suction cups with 2,5 bellow are recommended for gripping products with un-even surfaces.



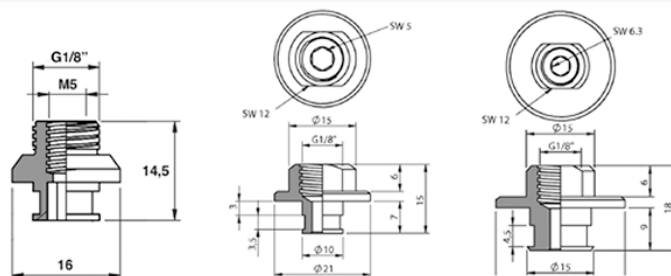
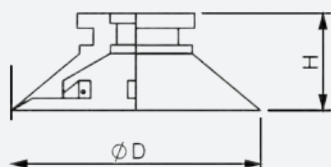
| Application | Silicone | FlexTemp HT | Multiflex |
|----------------------------------|----------------|----------------|---------------|
| Ozone resistance | ✓✓✓ | ✓✓ | ✓✓✓ |
| Oil resistance | ✓ | ✓✓✓ | ✓✓ |
| Wear resistance | ✓✓ | ✓✓ | ✓✓✓ |
| Tensile strength (lifting force) | ✓ | ✓ | ✓✓✓ |
| Leaves marks on products | ✓ | ✓✓ | ✓✓✓ |
| Temperature resistance | -70 to + 200°C | -40 to + 160°C | -20 to + 80°C |
| Shore hardness | 30-60° | 60° | 30-60° |

The holding force of the suction cups increases proportionally with the difference between the ambient pressure and the pressure inside the cup.

The holding force of a suction pad is calculated with the formula:

$$F = \Delta p \times A$$

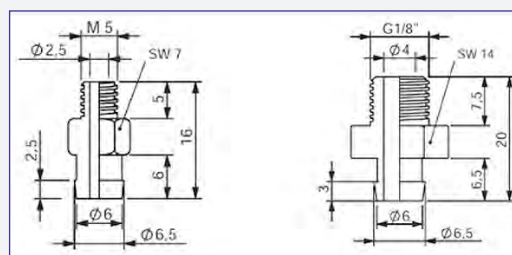
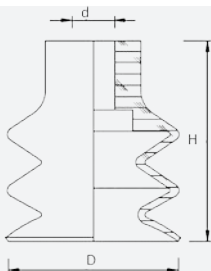
F = Holding force.
 Δp = Difference between ambient pressure and pressure of the system.
A = Effective suction area (the effective area of a suction pad under vacuum).



| Product Code | Product Code | Holding Force | ØD | H | Retaining Ring No. | Product Code | Product Code | Product Code |
|--------------|--------------|---------------|----|------|--------------------|--------------|--------------|--------------|
| Silicone | TempFlex HT | | | | | Fitting | Fitting | Fitting |
| F20S | F20HT | 0,5 | 22 | 8 | R.011 | F250 | | |
| F25S | F25HT | 1 | 28 | 9 | R.011 | F250 | | |
| F30S | F30HT | 1.5 | 32 | 10 | R.011 | F250 | | |
| F40S | F40HT | 2 | 42 | 13 | R.012 | | F251 | |
| F50S | F50HT | 3 | 53 | 17.5 | R.013 | | | F252 |

Bellow Vacuum Cups - 2,5 Bellow, Ø5-Ø25 mm

PRODUCTION ACCESSORIES

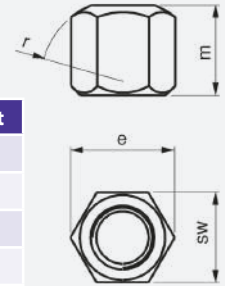


| Product Code | Product Code | Bellow | D | d | H | Product Code | Product Code |
|--------------|--------------|--------|----|-----|----|--------------|--------------|
| Silicone | TempFlex HT | | | | | M5 Fitting | 1/8 Fitting |
| CL-2.5-5-S | CL-2.5-5-HT | 2,5 | 5 | 4 | 14 | 130.013 | 130.003 |
| CL-2.5-7-S | CL-2.5-7-HT | 2,5 | 7 | 3.8 | 14 | 130.013 | 130.003 |
| CL-2.5-9-S | CL-2.5-9-HT | 2,5 | 9 | 4.2 | 15 | 130.013 | 130.003 |
| CL-2.5-12-S | CL-2.5-12-HT | 2,5 | 12 | 5 | 21 | 130.013 | 130.003 |
| CL-2.5-14-S | CL-2.5-14-HT | 2,5 | 14 | 4 | 23 | 130.013 | 130.003 |
| CL-2.5-20-S | CL-2.5-20-HT | 2,5 | 20 | 5 | 22 | 130.013 | 130.003 |
| CL-2.5-25-S | CL-2.5-25-HT | 2,5 | 25 | 5 | 34 | 130.013 | 130.003 |



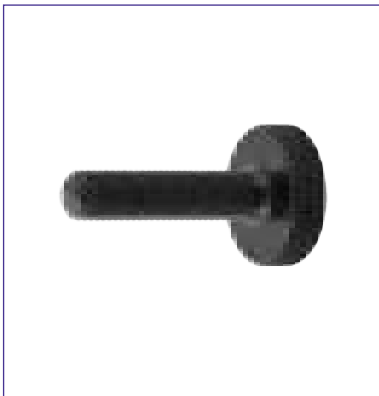
- Hardened
- Black Coating

| Product Code | SW | e | m | r | Weight |
|--------------|-------|---------|-------|-------|--------|
| MC-HN-M12 | 19 mm | 21.9 mm | 18 mm | 17 mm | 25 g |
| MC-HN-M16 | 24 mm | 27.7 mm | 24 mm | 22 mm | 55 g |
| MC-HN-M20 | 30 mm | 34.6 mm | 30 mm | 27 mm | 110 g |
| MC-HN-M24 | 36 mm | 41.5 mm | 36 mm | 32 mm | 190 g |



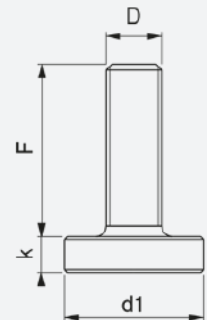
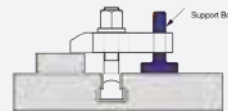
MOULD MAINTENANCE AND SET UP

Clamp Support Bolt



- Black Coating

| Product Code | d1 | k | Weight |
|---------------|-------|-------|--------|
| MC-SB-M12x50 | 36 mm | 10 mm | 110 g |
| MC-SB-M16x62 | 45 mm | 13 mm | 240 g |
| MC-SB-M20x62 | 50 mm | 13 mm | 320 g |
| MC-SB-M24x116 | 50 mm | 14 mm | 555 g |



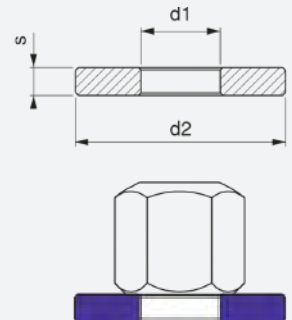
MOULD MAINTENANCE AND SET UP

Thick Washer



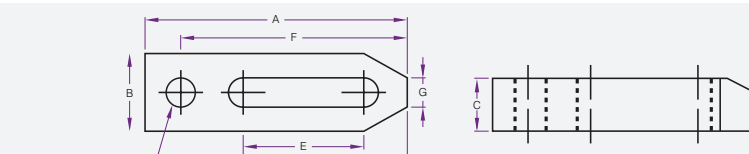
- Hardened
- Black Coating

| Product Code | d1 | d2 | s | Weight |
|--------------|-------|-------|------|--------|
| MC-TW-M12 | 13 mm | 35 mm | 5 mm | 30 g |
| MC-TW-M16 | 17 mm | 45 mm | 6 mm | 60 g |
| MC-TW-M20 | 21 mm | 50 mm | 6 mm | 70 g |
| MC-TW-M24 | 25 mm | 60 mm | 8 mm | 140 g |



MOULD MAINTENANCE AND SET UP

Slotted Clamps



| Product Code | Model | A | B | C | D | E | F | G | H |
|--------------|-------------|-----|----|----|-----|-----|-----|----|-------|
| MC12 | M12 x 100mm | 100 | 32 | 19 | 71 | 43 | 88 | 13 | M12 |
| MC16 | M16 x 150mm | 150 | 37 | 25 | 100 | 60 | 130 | 17 | M16 |
| MC20 | M20 x 200mm | 200 | 50 | 32 | 114 | 82 | 185 | 21 | M20 |
| MC25 | M25 x 250mm | 250 | 70 | 45 | 157 | 100 | 224 | 27 | 1"BSW |



Sprue Radius Cutter - a tipped radius cutter ensures a smooth, precise fit between machine nozzle and the sprue.

- Material: HSS

| Product Code | Description |
|--------------|--|
| SRC48 | The a tipped radius cutter ensures a smooth, precise fit between your machine nozzle and the sprue |

Boat Clamps

MOULD MAINTENANCE AND SET UP



| Product Code | Attachment Bolt Size | Overall Length |
|--------------|----------------------|----------------|
| BC12 | 12mm | 100mm |
| BC16 | 16mm | 125mm |
| BC20 | 20mm | 160mm |
| BC24 | 24mm | 200mm |

Pressure Test Kit

MOULD MAINTENANCE AND SET UP



- Pressure test unit - for easy leakage test of mould circuits
- Supplied with connecting hose and water tank

| Product Code | Pressure |
|--------------|----------|
| MP60 | 0-60 bar |

Allen Keys (Hexagon Wrench)

MOULD MAINTENANCE AND SET UP



| Metric | 1.5 | 2 | 2.5 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 17 | 19 | 22 | 24 | 27 | 32 | | |
|------------------|------|------|------|------|-----|------|------|------|------|-----|------|-----|------|-----|------|-----|-----|-----|---|
| A/F mm Short Arm | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | | | | | |
| A/F mm Long Arm | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | | |
| Imperial | 1/16 | 5/64 | 3/32 | 7/64 | 1/8 | 9/64 | 5/32 | 3/16 | 7/32 | 1/4 | 5/16 | 3/8 | 7/16 | 1/2 | 9/16 | 5/8 | 3/4 | 7/8 | 1 |
| Short Arm | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |
| Long Arm | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ | ◆ |



| Product Code | Description |
|-------------------------|--|
| BONDHUS-HEX-METRIC | 9 PCS SET (LONG): 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10MM |
| BONDHUS-HEX-IMPERIAL | 13 PCS SET (LONG): 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8" |
| BONDHUS-B-END-METRIC | 9 PCS SET: 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10MM |
| BONDHUS-B-END-IMPERIAL | 13 PCS SET: 0.050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4, 5/16, 3/8" |
| BONDHUS-T-HANDLE-METRIC | 8 PCS SET WITH STAND: 2, 2.5, 3, 4, 5, 6, 8, 10MM |

MOULD MAINTENANCE AND SET UP

Sprue Reamers



| Product Code | Code Number | Taper Degrees | Flute | | | Overall Length |
|--------------|-------------|---------------|------------|------------|--------|----------------|
| | | | Small Dia. | Large Dia. | Length | |
| CRS1202 | 1/2 | 2 | .120" | .300" | 5" | 7" |
| CRS1203 | 1/3 | 3 | .120" | .390" | 5" | 7" |
| CRS1204 | 1/4 | 4 | .120" | .470" | 5" | 7" |
| CRS1205 | 1/5 | 5 | .120" | .560" | 5" | 7" |
| CRS1802 | 2/2 | 2 | .180" | .430" | 7" | 9" |
| CRS1803 | 2/3 | 3 | .180" | .550" | 7" | 9" |
| CRS1804 | 2/4 | 4 | .180" | .670" | 7" | 9" |

MOULD MAINTENANCE AND SET UP

Diamond Paste



| Product Code | Micron Size | Mesh Concentration | Colour | Recommendations |
|--------------|-------------|--------------------|-------------|--------------------------------------|
| DP01 | 1 | 14,000 | Light Blue | For the finest finish on all tooling |
| DP03 | 3 | 8,000 | Green | Commercial finish for most tooling |
| DP06 | 6 | 3,000 | Yellow | |
| DP09 | 9 | 18,000 | Red | |
| DP15 | 15 | 12,000 | Light Brown | First stage on all materials |
| DP30 | 30 | 750 | Dark Brown | |
| DP45 | 45 | 325 | Purple | |
| DP60 | 60 | 250 | Orange | Stock removed |

**Bob (FB) - Medium Grade Felt**

| Product Code | Size Diameter | Length | Shank |
|--------------|---------------|--------|-------|
| FB1414 | 1/4 | 1/4 | 1/8 |
| FB14516 | 1/4 | 5/16 | 1/8 |
| FB1212 | 1/2 | 1/2 | 1/8 |
| FB121 | 1/2 | 1 | 1/8 |
| FB3434 | 3/4 | 3/4 | 1/8 |
| FB11 | 1 | 1 | 1/4 |

Cone (FC) - Medium Grade Felt

| Product Code | Size Diameter | Length | Shank |
|--------------|---------------|--------|-------|
| FC14 | 1/4 | 5/8 | 1/8 |
| FC24 | 3/8 | 7/8 | 1/8 |
| FC12 | 1/2 | 1 | 1/8 |
| FC58 | 5/8 | 1 1/4 | 1/8 |

Economy Air Grinder & Pad Grinder

MOULD MAINTENANCE AND SET UP



| Product Code | Description | Type |
|--------------|---------------------|------------|
| LDG5202 | Economy Air Grinder | Straight |
| Product Code | Description | Type |
| LDG7101 | Pad Grinder | 120° Angle |

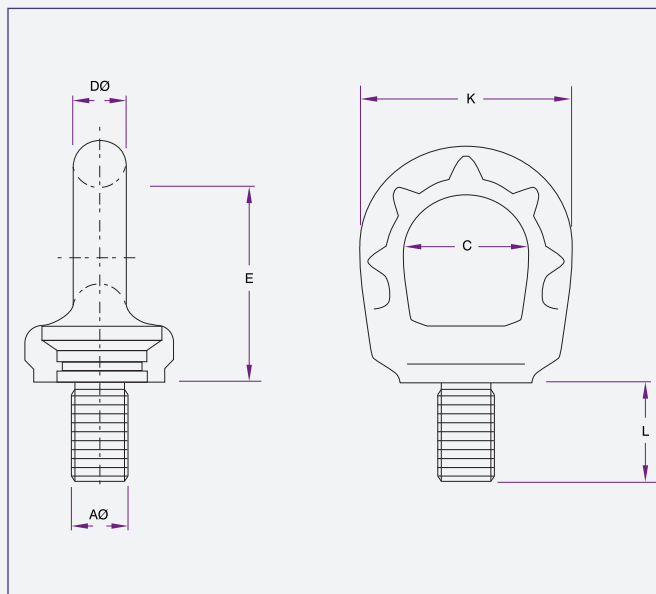
Wet and Dry Sheets

MOULD MAINTENANCE AND SET UP



| Product Code | Description |
|--------------|-------------|
| WD0080 | 80# |
| WD0100 | 100# |
| WD0120 | 120# |
| WD0150 | 150# |
| WD0180 | 180# |
| WD0220 | 220# |
| WD0240 | 240# |

| Product Code | Description |
|--------------|-------------|
| WD0280 | 280# |
| WD0320 | 320# |
| WD0400 | 400# |
| WD0500 | 500# |
| WD0600 | 600# |
| WD0800 | 800# |
| WD1000 | 1000# |
| WD1200 | 1200# |



Manufactured in Australia

- Forged from high tensile alloy steel
- Tempered
- Electromagnetic crack detection to AS1171
- Hi-visibility powder coating to AS4506
-

WLL (Working Load Limit)

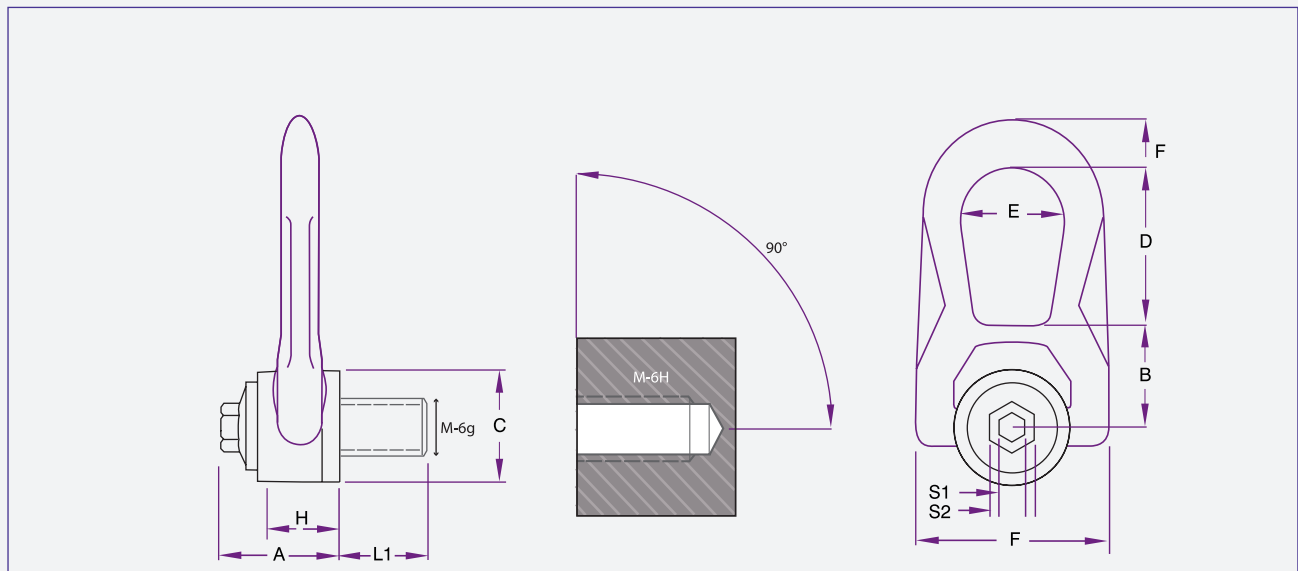
- Each eyebolt is clearly stamped with the permitted F2 WLL.
- F2 WLL - indicates safe use for non-axial lifts.
- F1 WLL - indicates loads which are in line with the axis of the threaded end of the eyebolt.
- F1 WLL allows up to four (4) times higher lifting capacity whilst maintaining a 6:1 design factor of safety
- More sizes available on request

| METRIC | | | | | | | | | | |
|--------------|-----|-----------------------|-----------------------|----|----|----|----|----|----------------|-----------------------|
| Product Code | AØ | SF 5:1 WLL F1 t | SF 4:1 WLL F2 t | C | D | E | K | L | Torque (Nm) | Net Weight (kg) |
| EYE10-G10 | M10 | 1t | 0.4t | 30 | 11 | 43 | 55 | 15 | 14 | 0.23 |
| EYE12-G10 | M12 | 2t | 0.75t | 30 | 11 | 43 | 55 | 18 | 22 | 0.23 |
| EYE16-G10 | M16 | 4t | 1.5t | 34 | 14 | 49 | 64 | 24 | 60 | 0.38 |
| EYE20-G10 | M20 | 6t | 2.3t | 39 | 16 | 56 | 69 | 30 | 105 | 0.60 |
| EYE24-G10 | M24 | 8t | 3.2t | 50 | 19 | 71 | 86 | 36 | 182 | 1.10 |

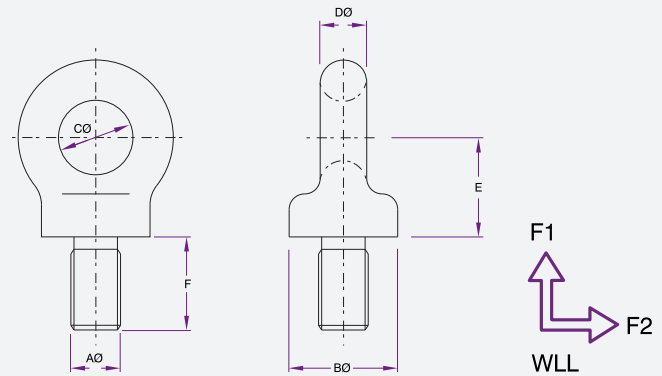


European Quality

- Higher working load limits
- Full double swivel action giving greater flexibility and functionality
- Customisation of thread types and bolt lengths available in Australia
- Easier to use in more applications
- Eliminates the issues of offset loading with other swivel lifting points
- More sizes available on request



| METRIC | | | | | | | | | | | | | | | | |
|--------------|-------------|-----------------------|-----------------------|----------------|----|----|----|----|----|----|----|----|-----|-----|----------------|-----------------------|
| Product Code | Dia. Ø | SF 5:1 WLL F1 t | SF 4:1 WLL F2 t | Standard L1 | S1 | S2 | A | B | C | D | E | F | G | H | Torque (Nm) | Net Weight (kg) |
| EYE08-DSR | M8 (x1.25) | 0.40 | 0.50 | 15 | 8 | 16 | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9.5 | 6 | 0.3 |
| EYE10-DSR | M10 (x1.5) | 0.70 | 0.90 | 18 | 8 | 16 | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9.5 | 10 | 0.3 |
| EYE12-DSR | M12 (x1.75) | 1.05 | 1.30 | 21 | 8 | 16 | 33 | 30 | 30 | 38 | 27 | 14 | 53 | 9.5 | 15 | 0.3 |
| EYE16-DSR | M16 (x2) | 2.00 | 2.30 | 27 | 8 | 20 | 45 | 40 | 45 | 53 | 38 | 17 | 76 | 13 | 50 | 0.9 |
| EYE20-DSR | M20 (x2.5) | 2.50 | 2.50 | 30 | 8 | 20 | 45 | 40 | 45 | 53 | 38 | 17 | 76 | 13 | 100 | 0.9 |
| EYE22-DSR | M22 (x2.5) | 3.50 | 4.50 | 33 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 115 | 19 | 120 | 2.6 |
| EYE24-DSR | M24 (x3) | 4.40 | 5.50 | 36 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 115 | 19 | 160 | 2.6 |
| EYE27-DSR | M27 (x3) | 5.70 | 6.00 | 40 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 115 | 19 | 200 | 2.7 |
| EYE30-DSR | M30 (x3.5) | 6.00 | 6.30 | 45 | 14 | 24 | 62 | 55 | 60 | 83 | 55 | 25 | 115 | 19 | 250 | 2.7 |



Manufactured using only heat certified Australian Steel
WLL (Working Load Limit)

- Each eyebolt is clearly stamped with the permitted F2 WLL.
- F2 WLL - indicates safe use for non-axial lifts.
- F1 WLL - indicates loads which are in line with the axis of the threaded end of the eyebolt.
- F1 WLL allows up to four (4) times higher lifting capacity whilst maintaining a 6:1 design factor of safety

| METRIC | | | | | | | | | |
|--------------|-----|-------------|-------------|-----|----|----|----|----|--------------------|
| Product Code | AØ | WLL F1 t | WLL F2 t | BØ | CØ | DØ | E | F | Net Weight (kg) |
| EYE10 | M10 | 0.25t | 0.06t | 21 | 14 | 9 | 19 | 17 | 0.06 |
| EYE12 | M12 | 0.4t | 0.1t | 28 | 18 | 11 | 24 | 21 | 0.15 |
| EYE16 | M16 | 0.8t | 0.2t | 35 | 23 | 14 | 31 | 27 | 0.28 |
| EYE20 | M20 | 1.6t | 0.4t | 42 | 30 | 16 | 35 | 38 | 0.46 |
| EYE24 | M24 | 2.5t | 0.62t | 57 | 38 | 22 | 48 | 42 | 1.10 |
| EYE30 | M30 | 4t | 1t | 71 | 49 | 27 | 65 | 52 | 2.10 |
| EYE36 | M36 | 6.3t | 1.57t | 87 | 53 | 35 | 73 | 64 | 3.70 |
| EYE42 | M42 | 8t | 2t | 102 | 66 | 40 | 90 | 76 | 6.30 |

| IMPERIAL | | | | | | | | | |
|--------------|------|-------------|-------------|----|----|----|----|----|--------------------|
| Product Code | AØ | WLL F1 t | WLL F2 t | BØ | CØ | DØ | E | F | Net Weight (kg) |
| EYEI24 | 3/8" | 0.25 | 0.06 | 21 | 14 | 9 | 19 | 17 | 0.06 |
| EYEI32 | 1/2" | 0.4 | 0.1 | 28 | 18 | 11 | 24 | 21 | 0.15 |
| EYEI40 | 5/8" | 0.8 | 0.2 | 35 | 23 | 14 | 31 | 27 | 0.28 |
| EYEI48 | 3/4" | 1.6 | 0.4 | 42 | 30 | 16 | 35 | 38 | 0.46 |
| EYEI56 | 7/8" | 2 | 0.5 | 50 | 32 | 20 | 41 | 41 | 0.85 |
| EYEI64 | 1" | 2.5 | 0.62 | 57 | 38 | 22 | 48 | 42 | 1.10 |



Mastip™ recognises that the manifold is a vital part of the complete Hot Runner System and therefore designs every system to meet customer’s requirements including detailed designs for:

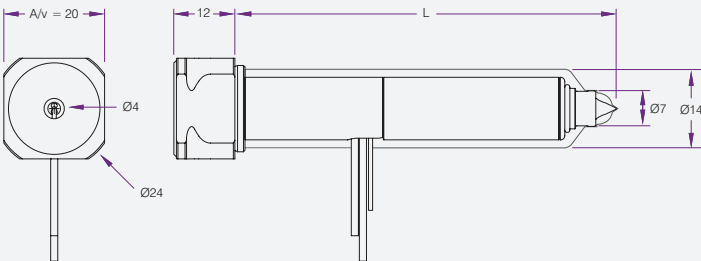
- Even part/cavity filling
- Balanced material flow
- Even heat profile
- Ideal for technical materials and fast colour changes

From single cavity to high cavity or multi material, thermal or valve gating, we can supply a system to suit your requirements. See pages 96-99 for more information.



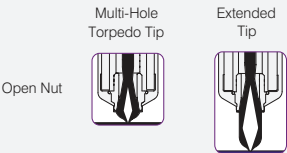
MJ Nozzles - Multi Cavity Only

HOT RUNNER & CONTROL

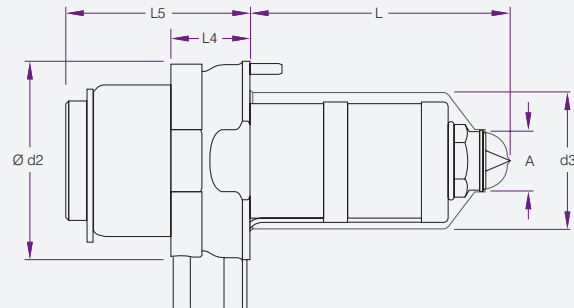


Only suitable for manifold applications

Gating Options

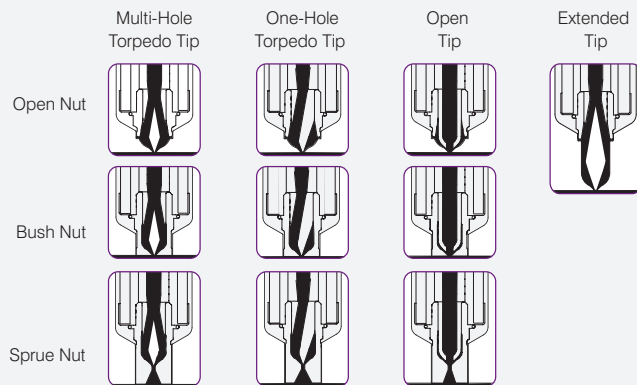


| Product Code | Description |
|--------------|-------------|
| L | 75 |
| | 95 |
| | 115 |
| | 130 |
| | 145 |
| | 175 |

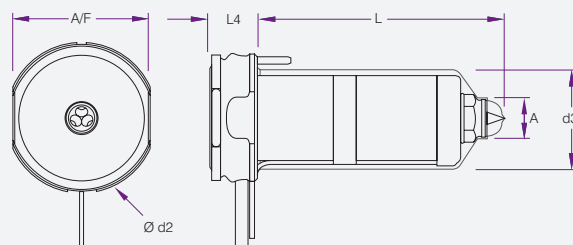


With two heaters the SX nozzle is perfectly suited for all single nozzle applications. Independently controlled heater zones provide uniform temperature distribution along the length of the nozzle, making it ideal to process difficult plastics.

Gating Options

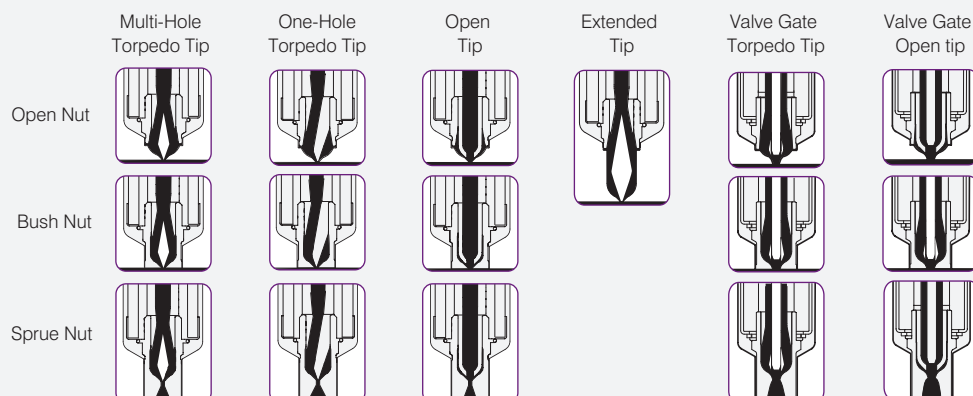


| | 13 Series | 16 Series | 19 Series | 27 Series |
|----|-----------|-----------|-----------|-----------|
| L | 45 | 45 | | |
| | 55 | 55 | 55 | |
| | 65 | 65 | 65 | |
| | 75 | 75 | 75 | 75 |
| | 95 | 95 | 95 | 95 |
| | 115 | 115 | 115 | 115 |
| | | | 145 | 145 |
| | | | 175 | 175 |
| | | | | 225 |
| | | | | 275 |
| L4 | 18 | 18 | 20 | 25 |
| L5 | 44 | 44 | 46 | 50 |
| d2 | 40 | 40 | 50 | 50 |
| d3 | 27 | 30 | 33 | 43 |
| A | 10 | 12 | 15 | 23 |

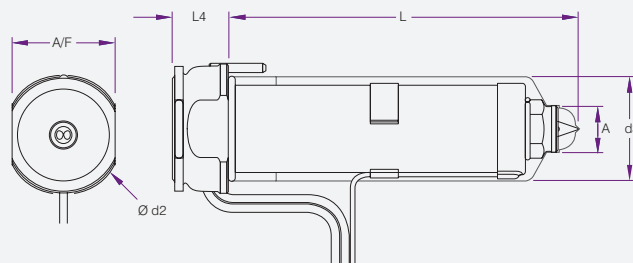


BX nozzle is designed to provide a cost sensitive solution to single & multicavity applications.

Gating Options

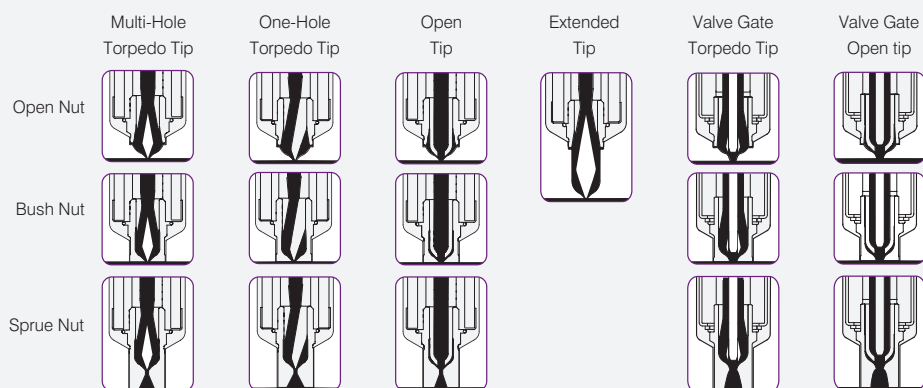


| | 13 Series | 16 Series | 19 Series | 27 Series |
|-----|-----------|-----------|-----------|-----------|
| L | 45 | 45 | | |
| | 55 | 55 | 55 | |
| | 65 | 65 | 65 | |
| | 75 | 75 | 75 | 75 |
| | 95 | 95 | 95 | 95 |
| | 115 | 115 | 115 | 115 |
| | 145 | 145 | 145 | 145 |
| | 175 | 175 | 175 | 175 |
| | | | | 225 |
| A | 10 | 12 | 15 | 23 |
| A/F | 31 | 34 | 36 | 45 |
| d2 | 34 | 38 | 40 | 50 |
| d3 | 27 | 30 | 33 | 43 |
| L4 | 12 | 12 | 15 | 20 |



Low moulding temperature and pressure, excellent temperature consistency and front loading capabilities, that's the Mastip MX nozzle, specifically designed for multi cavity manifold systems and hot halves. The MX nozzle is suited for small to medium applications in all types of markets. It is able to process a wide range of plastics, from the easy ethylenes to tough engineering resins.

Gating Options



| | 13 Series | 16 Series | 19 Series |
|-----|-----------|-----------|-----------|
| L | 45 | 45 | |
| | 55 | 55 | 55 |
| | 65 | 65 | 65 |
| | 75 | 75 | 75 |
| | 95 | 95 | 95 |
| | 115 | 115 | 115 |
| | 145 | 145 | 145 |
| | 175 | 175 | 175 |
| A/F | 24 | 26 | 36 |
| d2 | 28 | 30 | 40 |
| d3 | 22.9 | 24.9 | 31.5 |
| L4 | 12 | 12 | 15 |
| A | 10 | 12 | 15 |

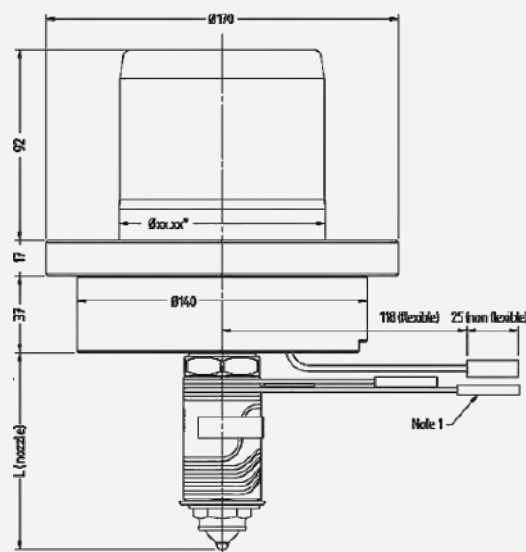
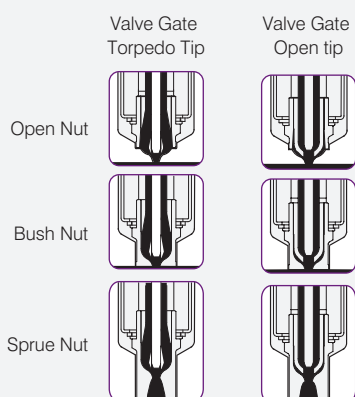


Sporting an extremely compact design, the VeriShot™ system greatly reduces mold height requirements as it doubles as a locating ring housing the mechanics. This ensures perfect alignment between mold and machine platens.

VeriShot™ is compatible with TX16, TX19 and TX27 FlowLoc™ nozzles, which screw directly into the lower manifold providing a secure, leak-proof solution.

- Stainless Steel construction for maximum service life
- Reduced mould height at 54mm+ nozzles.
- Location ring can be sized to your requirement

Gating Options

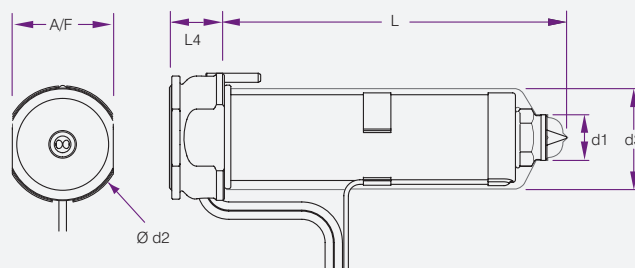
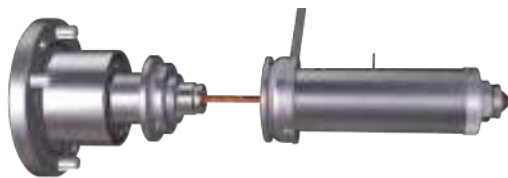


FlowLoc Nozzle Compatibility

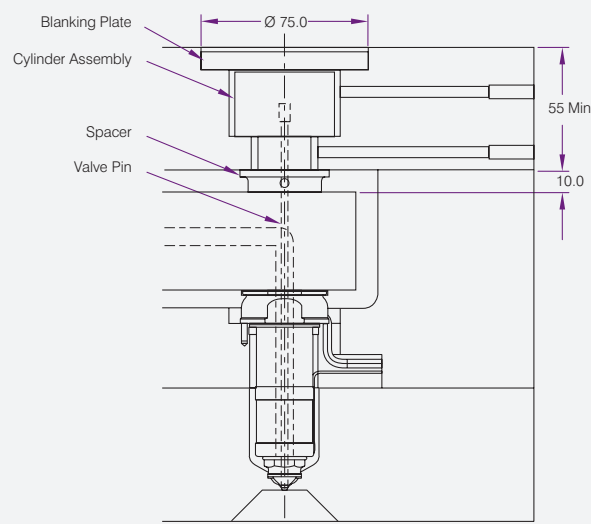
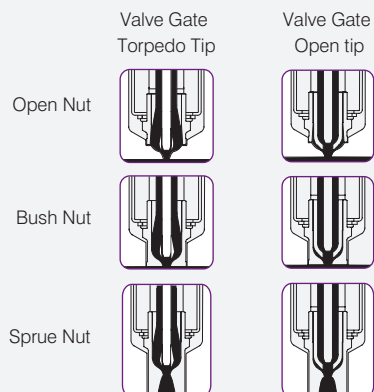
| | 16 Series | 19 Series | 27 Series |
|---|-----------|-----------|-----------|
| L | 75 | 75 | 75 |
| | 85 | 85 | 85 |
| | 95 | 95 | 95 |
| | 105 | 105 | 105 |
| | 115 | 115 | 115 |
| | 130 | 130 | 130 |
| | 145 | 145 | 145 |
| | 160 | 160 | 160 |
| | 175 | 175 | 175 |
| | 200 | 200 | 200 |
| | — | 225 | 225 |
| | — | 250 | 250 |
| | — | 275 | 275 |
| | — | 300 | 300 |
| | — | — | 350 |
| | — | — | 400 |
| | — | — | 450 |

Valve Gate Assembly

| | 16 Series | 19 Series | 27 Series |
|----------------|-----------|-----------|-----------|
| Model | SVG | SVG | SVG |
| Actuation Type | Pneumatic | Pneumatic | Pneumatic |
| Pin Size | 2.5 | 3.0 | 5.0 |
| Stroke | 10 | 10 | 10 |



Gating Options

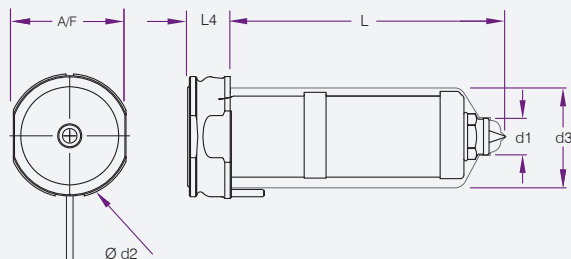
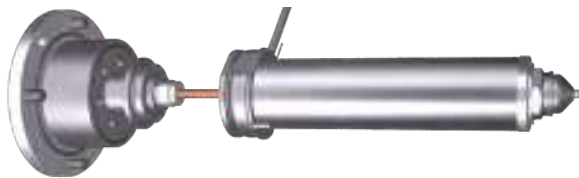


Valve Gate Assembly

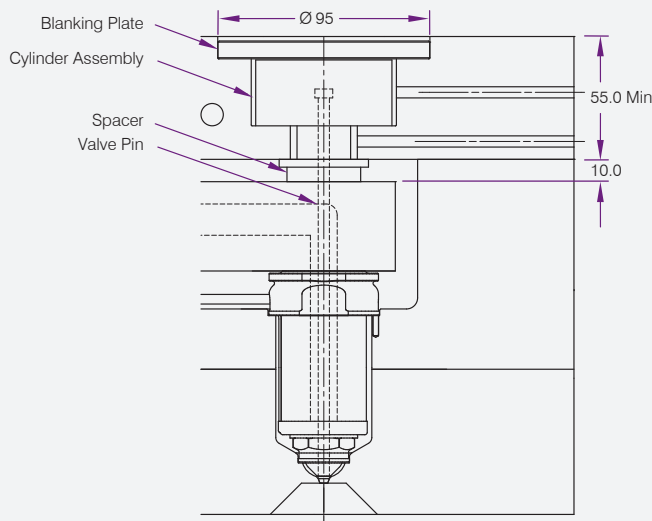
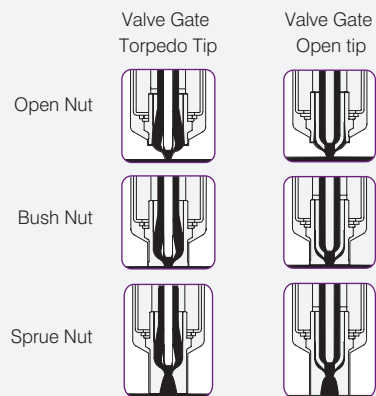
| | 13 Series * MX / BX | 16 Series MX / BX | 19 Series MX / BX | 27 Series BX |
|----------------|---------------------|-------------------|-------------------|--------------|
| Model | MVG40 - 2.0 | MVG40 - 2.5 | MVG40 - 3.0 | MVG40 - 5.0 |
| Actuation Type | Pneumatic | Pneumatic | Pneumatic | Pneumatic |
| Pin Size | 2.0 | 2.5 | 3.0 | 5.0 |
| Stroke | 10 | 10 | 10 | 10 |

| | 13 Series | | 16 Series | | 19 Series | | 27 Series |
|-----|-----------|-----|-----------|-----|-----------|-----|-----------|
| | MX | BX | MX | BX | MX | BX | BX |
| L | 45 | 45 | 45 | 45 | | | |
| | 55 | 55 | 55 | 55 | 55 | 55 | |
| | 65 | 65 | 65 | 65 | 65 | 65 | |
| | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| | 115 | 115 | 115 | 115 | 115 | 115 | 115 |
| | 145 | 145 | 145 | 145 | 145 | 145 | 145 |
| A/F | 24 | 31 | 26 | 34 | 36 | 36 | 45 |
| d1 | 10 | 10 | 12 | 12 | 15 | 15 | 23 |
| d2 | 28 | 34 | 30 | 38 | 40 | 40 | 50 |
| d3 | 22.9 | 27 | 24.9 | 30 | 31.5 | 33 | 43 |
| L4 | 12 | 12 | 12 | 12 | 15 | 15 | 20 |

* 13 Series available in open nut and open tip only



Gating Options



| Valve Gate Assembly | |
|---------------------|--------------|
| | 27 Series BX |
| Model | MVG55 - 5.0 |
| Actuation Type | Pneumatic |
| Pin Size | 5.0 |
| Stroke | 10 |

| | 27 Series |
|-----|-----------|
| | Bx |
| L | 75 |
| | 95 |
| | 115 |
| | 145 |
| | 175 |
| | 225 |
| | 275 |
| A/F | 40 |
| d1 | 23 |
| d2 | 50 |
| d3 | 43 |
| L4 | 10 |

mastip™
hot runner solutions



Manifold systems to suit all your moulding requirements

Mastip's experienced teams can design and manufacture manifold systems to suit all your moulding requirements. All Mastip manifolds are designed to deliver a uniform melt to each nozzle, ensuring cavity-to-cavity consistency. This is achieved through natural balancing of the flow channels and ensuring constant temperature profiles are maintained across the manifold block. Small cavity or high cavity systems, simple single level or complex multi-level stack systems, thermal gate or valve gate systems, Mastip can provide you with a Manifold system to meet your requirements in standard high quality mould base steel or stainless steel plates.

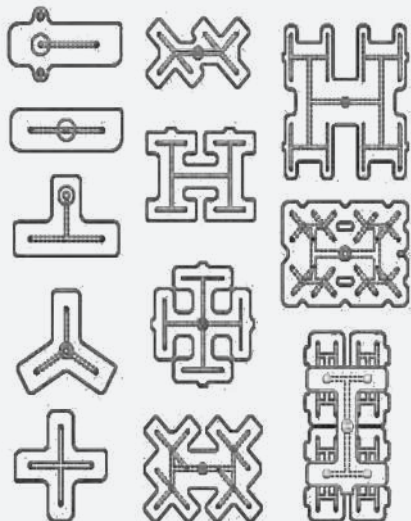
Scan this QR code to go to website for further information:



Standard Layouts, Exceptional Results

Mastip has an extensive range of standard or customized manifold designs that ensure cavity-to-cavity consistency through the normal or theological balancing of flow channels.

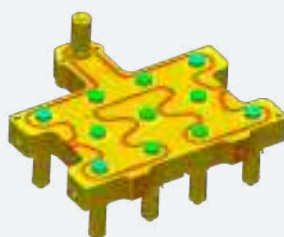
Each manifold incorporates durable, high quality components that deliver fast cycle times, precise gate control and superior quality parts.



Durable, Long-lasting Components

All manifolds are equipped with superior components including pressed-in heaters, ceramic connectors and high quality mould base or stainless steel plates, enabling them to perform under the most demanding applications and conditions.

Mastip's manifold range is further complimented by the industry leading X-Range nozzles and the extensive range of tip and nut combinations to deliver high performing, durable solutions able to meet the demands of the most abrasive and difficult to mould resins.



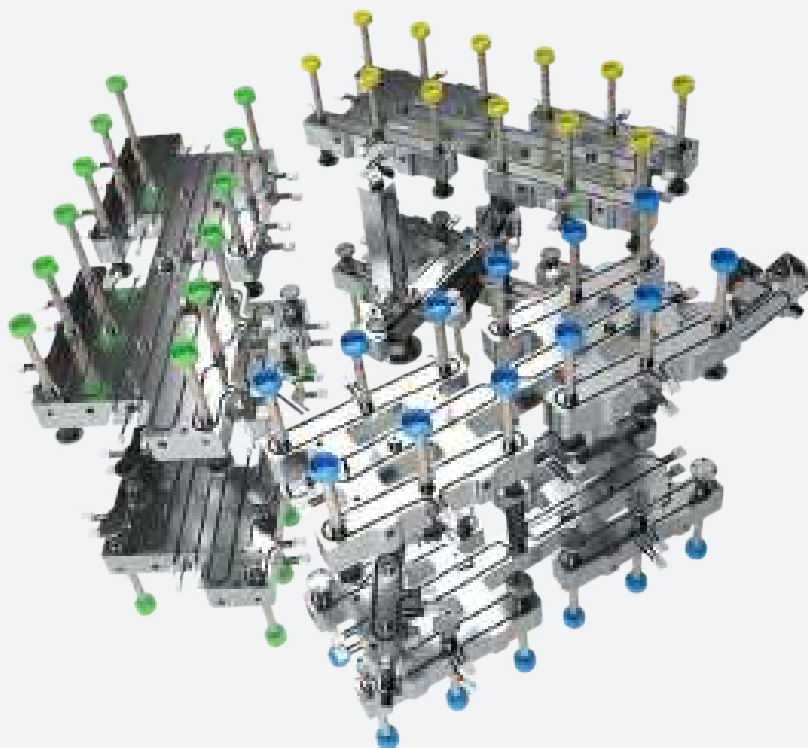
Designed, Manufactured and Tested

Every manifold goes through extensive design and analysis to ensure the following:

- optimised melt delivery
- improved production efficiencies
- perfect cavity-to-cavity filling
- excellent gate quality



mastip™
hot runner solutions



High cavity single or multi-level systems

Mastip's expert teams can design and manufacture high cavity single or multi-level systems, with thermal or valve gates. Our systems are designed and manufactured to the highest level of quality, delivering a uniform melt to each nozzle, ensuring cavity-to-cavity consistency. This is achieved through natural balancing of the flow channels and ensuring constant temperature profiles are maintained across the manifold block. Mastip can provide you with a Manifold system to meet your requirements in standard high quality mould base steel or stainless steel plates.

Scan this QR code to go to website for further information:



Designed, Manufactured and Tested

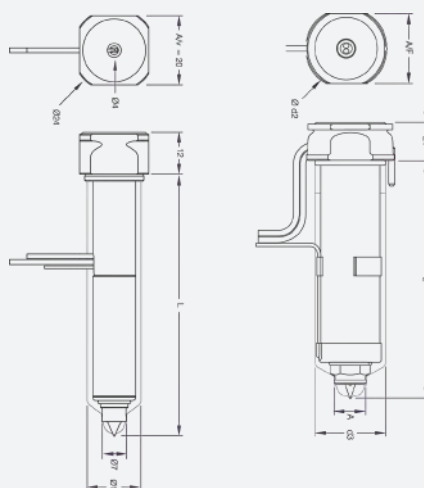
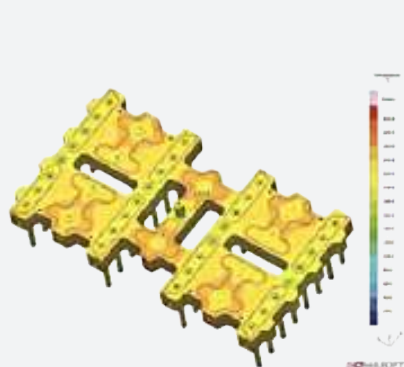
Every high-cavity manifold goes through extensive design and analysis to ensure the following:

- optimise melt delivery
- balanced cavity-to-cavity filling
- excellent gate quality
- optimise thermal profile

Incorporating M-Series Multi-Cavity Nozzles

Specifically designed for multi-cavity systems, the MX and MJ nozzle series are simple to install, front-loading for ease of servicing and ideal for close-pitch gating due to small gate pocket requirements.

MX and MJ nozzles have superior thermal insulation and precise temperature control to optimise cycle times and are available in sizes ranging from 45-175 mm.



Guaranteed to Perform

Mastip Hot Half systems are backed by a 3 year leak-proof guarantee, available in thermal or valve gate configurations and delivered as a complete solution to integrate seamlessly into your mould.

Include a Meticom Temperature Controller with your Hot Half System order and we will extend the warranty on the Mastip Hot Half System from 3 to 5 years.

See page 10 for more information

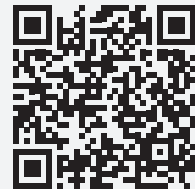




From Simple to Technically Advanced Multi-Material Systems

Mastip has extensive experience in supplying solutions for multi-material and multi-colour applications. Whether it is over moulding soft grips or different colours on single part, Mastip has the technology and technical expertise to develop the right multi-material hot runner solution for your needs. From simple high cavity plastic packaging to technically advanced components such as structural and engineering parts for the automotive industry, incorporating Mastip's multi-material systems into your mould can simplify your production, deliver quality parts and save you time and money on your product assembly.

Scan this QR code to go to website for further information.



Unique Designs for Multi-Component Moulding

Multi-material moulding is a common way to create parts with two or more types of material in order to provide stability, functionality or aesthetic appeal over traditional single type material parts. Common examples of this include razor and toothbrush handle grips.

Often referred to as multi-shot, co-injection or over-moulding, multi-material solutions are typically uniquely designed systems providing an effective and cost-efficient way to produce custom parts requiring multiple types of material or colours in a single mould.



Designed, Tested and Supported

Mastip works closely with our customers to design customised solutions that solve their unique requirements for multi-material moulding.

Each system is supplied with installation and mould recommendations and backed by our global service and support network.



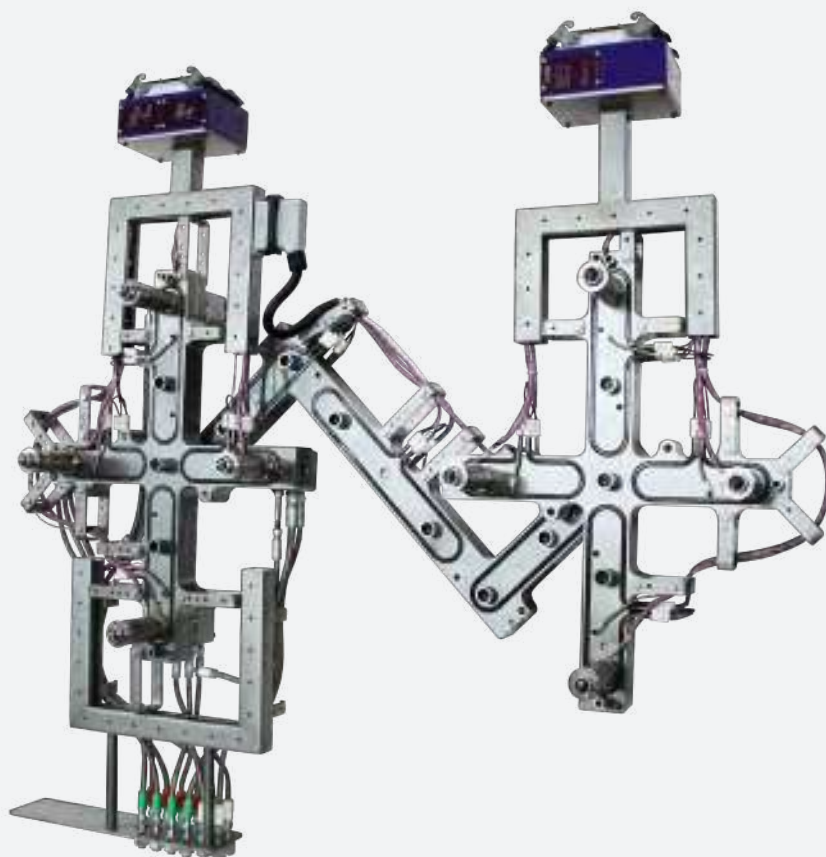
Durable, Long-lasting Components

All manifolds are equipped with superior components including pressed-in heaters, ceramic connectors and high quality mould base or stainless steel plates, enabling them to perform under the most demanding applications and conditions.

Mastip's manifold range is further complimented by the industry leading X-Range nozzles and the extensive range of tip and nut combinations to deliver high performing, durable solutions able to meet the demands of the most abrasive and difficult to mould resins.



mastip™
hot runner solutions



Ready ▶ Set ▶ Inject

Following on from the ground breaking success of Mastip's Nexus Thermal Gate we are proud to introduce the **Nexus Valve Gate with Cylix actuation.**

Mastip's next generation Nexus™ Systems are delivered Pre-Assembled and Pre-Wired as a complete turn-key solution for quick and simple installation.

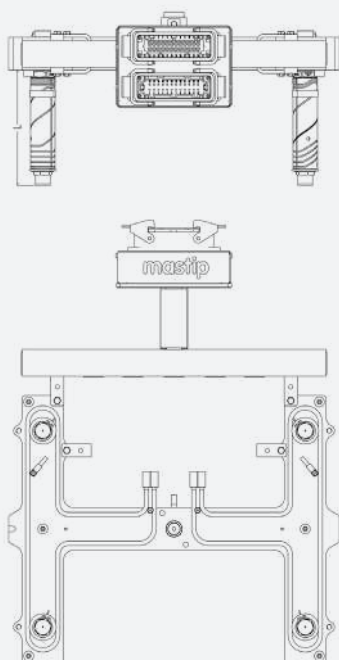
Both the Nexus Thermal Gate and the Nexus Valve Gate Systems incorporate the advanced leak protection of FlowLoc™ Technology.

Scan this QR code to go to website for further information



Nexus™ systems are designed for fast, simple installation out of the box without requiring any further assembly

Nexus™ systems feature fully customisable frames, electrical connections, tip and nut options and nozzle lengths to suit your application requirements.



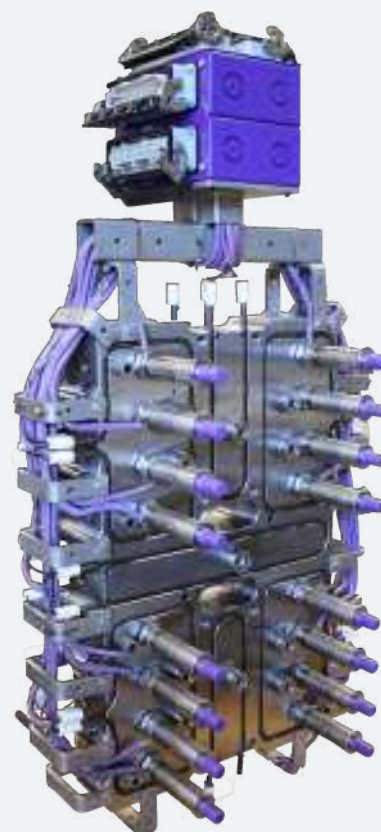
Cylix™ Valve Gate Actuation

The Cylix™ Cylinder features Pneumatic Valve actuation in a thermally stabilized system mounted directly to the manifold. With the ability to adjust valve pin height and incorporating long life seals and bearings, it is the optimal solution for precise control of your moulding requirements.

Nexus™ System with FlowLoc™ Nozzle

The FlowLoc nozzle range features a threaded base that attaches to the manifold providing a secure, leak-proof operation. With advanced heating technology, the FlowLoc delivers superior thermal performance for a wide moulding window

**All measurements are in millimetres.
* Further nozzle lengths are available on request**



**GLOBAL STRENGTH
LOCAL KNOWLEDGE**



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