



SHORTSTOPP® 275/500

Plugging System, Sizes: 1-1/2- to 12-inch



Bulletin No: 2020.002.03

Version: 12.2019

Supersedes: 2020.002.02 (12.2009)



■ **SHORTSTOPP®**
Jackscrew Actuator
Plugging: 4" to 12"

■ **SHORTSTOPP®**
Plugging/Completion
Machine
Plugging: 1" to 4"
Completion: 1-1/2" to 12"

Description

The lightweight (37 lbs.) SHORTSTOPP® Plugging/Completion Machine is versatile and easy to operate. When used as a plugging machine, it will plug 1-1/2" at 275 psi and 2" to 4" lines at 500 psi, and can be used on SHORTSTOPP® 300 D Fittings (ASME Class 300). As a completion machine, it has a full range capability of setting 1-1/2" to 12" completion plugs, and will adapt to existing housings in the field.

The SHORTSTOPP® Jackscrew Actuator has the capability of plugging 4" to 12" lines up to 500 psi. This provides an economical way to plug lines that operate in excess of 275 psi. It also adapts to existing housings in the field, and will plug through SHORTSTOPP® 300 D Fittings (ASME Class 300).

Both models provide an efficient and economical means of stopping off mains for repairs, relocations or additions.

Specifications

Maximum working pressure is 500 psi (34.5 bar) @ 100°F (38°C). Maximum working temperature is 180°F (82°C) @ 440 psi (30.3 bar). Pressure ratings are limited to fittings and adapters used.



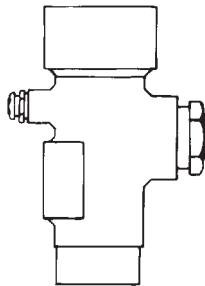
SHORTSTOPP® 275/500 Plugging System

Manual SHORTSTOPP® Plugging Machine

| Size | | Actuator Travel | | Overall Length | | Weight | | Rate of Travel/Revolution | | Part Number |
|-------------|-----------|-----------------|-------|----------------|--------|--------|-----|---------------------------|-------|--------------|
| Inches | DN | Inches | mm | Inches | mm | Lbs. | Kg. | Inches | mm | |
| 1-1/2 to 12 | 40 to 100 | 28 | 711.2 | 44-1/2 | 1130.3 | 39 | 18 | 1/8 | 3.175 | 07-1034-0000 |

Manual SHORTSTOPP® Completion Machine

| Size | | Actuator Travel | | Overall Length | | Weight | | Rate of Travel/Revolution | | Part Number |
|-------------|-----------|-----------------|-------|----------------|--------|--------|-----|---------------------------|-------|--------------|
| Inches | DN | Inches | mm | Inches | mm | Lbs. | Kg. | Inches | mm | |
| 1-1/2 to 12 | 40 to 300 | 28 | 711.2 | 44-1/2 | 1130.3 | 39 | 18 | 1/8 | 3.175 | 07-1034-0000 |

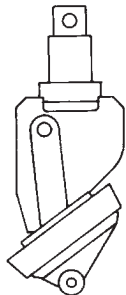


Typical 1-1/2"-3" Housing

Housings

| Size | | Part Number | Max. Working Pressure in psi | Weight | |
|--------|-----|-----------------|------------------------------|--------|------|
| Inches | DN | | | Lbs. | Kg. |
| 1-1/2 | 40 | 08-1746-0000 | 500 | 7 | 3.2 |
| 2 | 50 | 08-1746-0000 | 500 | 7 | 3.2 |
| 3 | 80 | 08-1747-0000 | 500 | 10 | 4.5 |
| 4 | 100 | 08-1748-0000*** | 275* | 28 | 12.7 |
| 4 | 100 | 08-2148-0000 | 500** | 36 | 16.3 |

* ASME Class 150
 ** ASME Class 300
 *** For use with 07-1034-0000



Typical 1-1/2"-3" Plugging Head

Plugging Heads

| Size | | Part Number | Max. Working Pressure in psi | Weight | |
|--------|-----|--------------|------------------------------|--------|-----|
| Inches | DN | | | Lbs. | Kg. |
| 1-1/2 | 40 | 08-1741-0000 | 275 | 1 | .5 |
| 2 | 50 | 08-2252-0000 | 500 | 2 | 1 |
| 3 | 80 | 08-2253-0000 | 500 | 4 | 1.8 |
| 4 | 100 | 08-1744-0000 | 500 | 9 | 4 |

Sealing Cups Used With 1-1/2" through 4" Plugging Machine



Cup

| Size | | Part Number | Max. Working in psi | Pipe Dimensions | | | |
|--------|-----|--------------|---------------------|--------------------------------|-----|------------|-----|
| Inches | DN | | | Maximum ID | | Minimum ID | |
| Inches | DN | | | Inches | mm | Inches | mm |
| 1-1/2 | 40 | 08-0114-0015 | 275 | 1.625 | 41 | 1.562 | 40 |
| 2 | 50 | 08-0947-0002 | 275 | 2.104 | 53 | 2.062 | 52 |
| 2 | 50 | 08-3425-0002 | 500 | 2.104 | 53 | 2.062 | 52 |
| 3 | 80 | 08-0947-0003 | 275 | 3.187 | 81 | 3.062 | 78 |
| 3 | 80 | 08-2253-0005 | 500 | 3.187 | 81 | 3.062 | 78 |
| 4 | 100 | 08-0947-0004 | 275 | 4.25 | 108 | 4.015 | 102 |
| 4 | 100 | 08-0036-0005 | 500 | Specify pipe ID when ordering. | | | |



SHORTSTOPP® 275/500 Plugging System

Manual SHORTSTOPP® Jackscrew Actuator

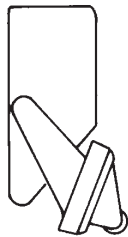
| Size | | Actuator Travel | | Overall Length | | Weight | | Rate of Travel/Revolution | | Part Number |
|---------|------------|-----------------|------|----------------|------|--------|-----|---------------------------|----|--------------|
| Inches | DN | Inches | mm | Inches | mm | Lbs. | Kg. | Inches | mm | |
| 4 to 12 | 100 to 300 | 48 | 1219 | 64-1/8 | 1629 | 140 | 64 | 1/8 | 3 | 08-0940-0000 |

Plugging Housings*

| Size | | Class 150 | | Weight | | Class 300 | | Weight | |
|--------|-----|--------------|------------------------------|--------|-----|--------------|------------------------------|--------|-----|
| Inches | DN | Part Number | Max. Working Pressure in psi | Lbs. | Kg. | Part Number | Max. Working Pressure in psi | Lbs. | Kg. |
| 4 | 100 | 08-0941-0000 | 275 | 48 | 22 | 08-2143-0000 | 500 | 51 | 23 |
| 6 | 150 | 08-0942-0000 | 275 | 75 | 34 | 08-2144-0000 | 500 | 81 | 37 |
| 8 | 200 | 08-0943-0000 | 275 | 96 | 43 | 08-2145-0000 | 500 | 141 | 64 |
| 10 | 250 | 08-0944-0000 | 275 | 156 | 71 | 08-2146-0000 | 500 | 207 | 94 |
| 12 | 300 | 08-0945-0000 | 275 | 221 | 100 | 08-2147-0000 | 500 | 297 | 135 |

*4" through 12" plugging machine housings also can function as completion housings to set 4" through 12" completion plugs with use of an 06-7264-0000 adapter plate.

Plugging Heads



Typical 6" Plugging Head

| Size | | Weight | | | |
|--------|-----|--------------|------------------------------|------|-----|
| Inches | DN | Part Number | Max. Working Pressure in psi | Lbs. | Kg. |
| 4 | 100 | 08-1630-0000 | 500 | 7 | 3 |
| 6 | 150 | 08-1908-0000 | 500 | 24 | 11 |
| 8 | 200 | 08-1909-0000 | 500 | 44 | 20 |
| 10 | 250 | 08-1910-0000 | 500 | 88 | 40 |
| 12 | 300 | 08-1911-0000 | 500 | 150 | 68 |

Sealing Cups Used With 4" through 12" Plugging Machine



Cup

| Size | | Pipe Dimensions | | Part Number | Max. Working in psi | Maximum ID | | Minimum ID | |
|--------|-----|-----------------|-------|--------------|---------------------|--------------------------------|-------|------------|--|
| Inches | DN | Inches | mm | | | Inches | mm | | |
| 4 | 100 | 4.25 | 108 | 08-0947-0004 | 275 | 4.015 | 102 | | |
| 4 | 100 | | | 08-0036-0005 | 500 | Specify pipe ID when ordering. | | | |
| 6 | 150 | 6.125 | 156 | 08-0947-0006 | 275 | 6.062 | 154 | | |
| 6 | 150 | 6.312 | 160 | 08-0948-0006 | 275 | 6.187 | 157 | | |
| 6 | 150 | | | 08-0040-0005 | 500 | Specify pipe ID when ordering. | | | |
| 8 | 200 | 8 | 203.2 | 08-0947-0008 | 275 | 7.968 | 202.7 | | |
| 8 | 200 | 8.343 | 212 | 08-0948-0008 | 275 | 8.062 | 205 | | |
| 8 | 200 | | | 08-0246-0005 | 500 | Specify pipe ID when ordering. | | | |
| 10 | 250 | 10.125 | 257 | 08-0947-0010 | 275 | 10.015 | 254 | | |
| 10 | 250 | 10.375 | 264 | 08-0948-0010 | 275 | 10.187 | 259 | | |
| 10 | 250 | | | 08-0247-0005 | 500 | Specify pipe ID when ordering. | | | |
| 12 | 300 | 12.343 | 314 | 08-0947-0012 | 275 | 11.937 | 303 | | |
| 12 | 300 | | | 08-0248-0005 | 500 | Specify pipe ID when ordering. | | | |



SHORTSTOPP® 275/500 Plugging System

SHORTSTOPP® Plugging/Completion Machine — Part Number 07-1034-0000

For 1-1/2" to 4" sizes, the actuator functions as a plugging machine. This same actuator also functions as a completion machine for sizes 1-1/2" to 12". In sizes 1-1/2" to 4", the plugging housings also serve as completion machine housings, without need for adapter plates (see page 2).

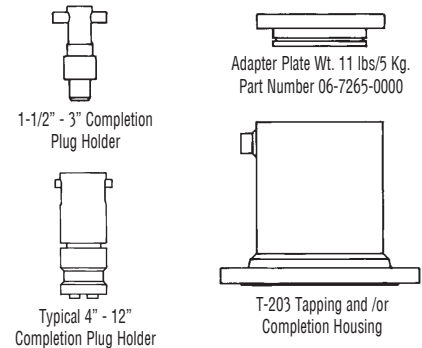
Housings and Adapters

When used with the proper adapter plate, these plugging housings and T-203 adapters can be used with the plugging/completion machine to set 4" to 12" plugs.

1-1/2" through 12" Completion Plug Holders

| Size | | | Weight | |
|-----------|-----------|--------------|--------|-----|
| Inches | DN | Part Number | Lbs. | Kg. |
| 1-1/2 - 3 | 40 - 80 | 07-0974-0000 | 1 | .5 |
| 4 - 8 | 100 - 200 | 07-0334-0000 | 2 | 1 |
| 10 - 12 | 250 - 300 | 07-0335-0000 | 2-1/2 | 1.5 |

NOTE: Completion plug setting pressure limited to pressure rating of completion machine.



Adapter plate only needed when used with the plugging/completion machine (07-1034-0000) on 4" through 12" T-203 Tapping Machine Adapters.

T-203 Tapping Machine Adapters*

| Size | | | Class 150 | Weight | | Class 300 | Weight | | |
|--------|-----|--------------|---------------------|--------|-----|--------------|---------------------|------|-----|
| Inches | DN | Part Number | Max. Working in psi | Lbs. | Kg. | Part Number | Max. Working in psi | Lbs. | Kg. |
| 4 | 100 | 06-1542-0000 | 275 | 29 | 13 | 06-7370-0000 | 720 | 38 | 17 |
| 6 | 150 | 06-1543-0000 | 275 | 43 | 20 | 06-7371-0000 | 720 | 65 | 30 |
| 8 | 200 | 06-1544-0000 | 275 | 67 | 30 | 06-7372-0000 | 720 | 95 | 43 |
| 10 | 250 | 06-1545-0000 | 275 | 95 | 43 | 06-7373-0000 | 720 | 140 | 64 |
| 12 | 300 | 06-1546-0000 | 275 | 160 | 73 | 06-7374-0000 | 720 | 205 | 93 |

*T-203 Tapping Machine adapters also function as completion housings to set 4" through 12" completion plugs with use of an 06-7265-0000 adapter plate.

Side Outlet Pluggers — Maximum Working Pressure is 275 psi

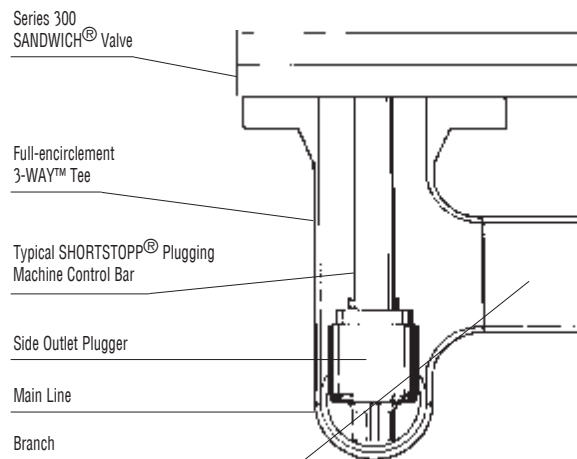
1-1/2" through 4" using Plugging/Completion Machine

| Size | | Part Number | Weight | | Spare Seals |
|--------|-----|--------------|--------|-----|--------------|
| Inches | DN | | Lbs. | Kg. | Part Number |
| 1-1/2 | 40 | 08-1871-0000 | 1.5 | .7 | 08-1871-0002 |
| 2 | 50 | 08-1872-0000 | 2.2 | 1 | 08-0976-0002 |
| 3 | 80 | 08-1873-0000 | 5 | 2 | 08-0977-0002 |
| 4 | 100 | 08-1874-0000 | 12 | 5 | 08-0928-0002 |

4" through 12" using Jackscrew Actuator

| | | | | | |
|----|-----|--------------|----|----|--------------|
| 4 | 100 | 08-0928-0000 | 12 | 5 | 08-0928-0002 |
| 6 | 150 | 08-0929-0000 | 24 | 11 | 08-0929-0002 |
| 8 | 200 | 08-0930-0000 | 38 | 17 | 08-0930-0002 |
| 10 | 300 | 08-0931-0000 | 67 | 30 | 08-0931-0002 |
| 12 | 350 | 08-0932-0000 | 95 | 43 | 08-0932-0002 |

Side Outlet Plugging Option



The side outlet plunger can be installed on the end of either SHORTSTOPP Plugging Machine and is used on TDW 3-WAY Tees™ and Spherical 3-WAY Tees™ to plug the tapped hole in the main line. This stops flow into the side outlet, permitting maintenance work on the branch connection.