

VGS™3010 BF80P



- ▶ Patented COAX® technology
- ▶ Suitable for level adjustment and for uneven or porous surfaces such as corrugated boxes/containers.
- ▶ The soft, flexible lip makes the cup suitable for curved or uneven surfaces and the dual hardness version, PU30/60, is also recommended for rough or rugged surfaces to prevent micro leakage which can occur on plastic or composite work pieces.
- ▶ The green BF80P is suitable for picking up heavier items.
- ▶ Available with two- or three-stage COAX® cartridge MINI. Choose an Si cartridge for extra vacuum flow, a Pi cartridge for high performance at low feed pressure or an Xi cartridge when high flow and deep vacuum is needed.
- ▶ The three-stage cartridge will give extra high initial vacuum flow, which is suitable in high speed applications.
- ▶ Easy installation and flexible positioning with several mounting options.

TECHNICAL DATA

| Description | Unit | Value |
|---------------------|------|-------------------------|
| Feed pressure, max. | MPa | 0.7 |
| Noise level | dBA | 60–74 |
| Temperature range | °C | 10–50 |
| Weight | g | 125–147 |
| Material | | PP, PA, NBR, AL, SS, PU |

VACUUM FLOW

| COAX® Cartridge | Feed pressure MPa | Air consumption NI/s | Vacuum flow (NI/s) at different vacuum levels (-kPa) | | | | | | | | | | | Max vacuum -kPa |
|-----------------|-------------------|----------------------|--|------|------|------|------|------|------|-------|-------|-------|----|-----------------|
| | | | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | | |
| Pi12-2 | 0.314 | 0.44 | 0.68 | 0.60 | 0.44 | 0.27 | 0.19 | 0.14 | 0.10 | 0.060 | 0.030 | — | 90 | |
| Pi12-3 | 0.314 | 0.44 | 1.4 | 0.60 | 0.44 | 0.27 | 0.19 | 0.14 | 0.10 | 0.060 | 0.030 | — | 90 | |
| Si08-2 | 0.60 | 0.44 | 0.77 | 0.67 | 0.51 | 0.33 | 0.23 | 0.16 | 0.12 | 0.08 | — | — | 75 | |
| Si08-3 | 0.60 | 0.44 | 1.34 | 0.73 | 0.55 | 0.35 | 0.23 | 0.17 | 0.13 | 0.08 | — | — | 75 | |
| Xi10-2 | 0.50 | 0.46 | 0.75 | 0.63 | 0.49 | 0.33 | 0.19 | 0.15 | 0.11 | 0.07 | 0.045 | 0.011 | 94 | |
| Xi10-3 | 0.50 | 0.46 | 1.43 | 0.70 | 0.50 | 0.33 | 0.19 | 0.15 | 0.11 | 0.07 | 0.045 | 0.011 | 94 | |

For vacuum flows at other feed pressures, see COAX® Cartridge data sheets.

EVACUATION TIME

| COAX® Cartridge | Feed pressure MPa | Air consumption NI/s | Evacuation time (s/l) to reach different vacuum levels (-kPa) | | | | | | | | | | | Max vacuum -kPa |
|-----------------|-------------------|----------------------|---|------|------|------|-----|-----|-----|-----|-----|---|----|-----------------|
| | | | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | | | |
| Pi12-2 | 0.314 | 0.44 | 0.17 | 0.32 | 0.58 | 1.1 | 1.8 | 2.7 | 4.0 | 6.4 | — | — | 90 | |
| Pi12-3 | 0.314 | 0.44 | 0.08 | 0.23 | 0.49 | 1.0 | 1.7 | 2.6 | 3.9 | 6.3 | — | — | 90 | |
| Si08-2 | 0.60 | 0.44 | 0.14 | 0.31 | 0.55 | 0.9 | 1.4 | 2.1 | 3.1 | — | — | — | 75 | |
| Si08-3 | 0.60 | 0.44 | 0.10 | 0.25 | 0.48 | 0.8 | 1.3 | 2.0 | 2.9 | — | — | — | 75 | |
| Xi10-2 | 0.50 | 0.46 | 0.14 | 0.3 | 0.6 | 1.0 | 1.6 | 2.3 | 3.5 | 5.3 | 8.9 | — | 94 | |
| Xi10-3 | 0.50 | 0.46 | 0.09 | 0.26 | 0.50 | 0.90 | 1.5 | 2.2 | 3.4 | 5.2 | 8.8 | — | 94 | |

For evacuation times at other feed pressures, see COAX® Cartridge data sheets.

LIFTING FORCES & TECHNICAL DATA BF80P

| Material | Lifting force vertical to the surface, N, at vacuum level | | | Lifting force parallel to the surface, N, at vacuum level | | | Volume cm ³ | Min. curve radius mm | Max. vertical movement mm | Weight rubber part g |
|-----------|---|---------|---------|---|---------|---------|---------------------------|-------------------------|------------------------------|-------------------------|
| | 20 -kPa | 60 -kPa | 90 -kPa | 20 -kPa | 60 -kPa | 90 -kPa | | | | |
| PU30°/50° | 73 | 157 | 196 | 54 | 88 | 117 | 40 | 132 | 15 | 53 |
| PU60° | 98 | 225 | 294 | 68 | 127 | 166 | 40 | 132 | 15 | 53 |

ORDERING INFORMATION

| 1. COAX® cartridge | | Code |
|---------------------------------|---|------|
| No COAX® cartridge (slave unit) | | AA |
| b | COAX® cartridge MINI Pi12-2 | AB |
| a | COAX® cartridge MINI Pi12-3 | AC |
| c | COAX® cartridge MINI Pi12-2, non-return valve | AD |
| d | COAX® cartridge MINI Pi12-3, non-return valve | AE |
| b | COAX® cartridge MINI Si08-2 | AF |
| a | COAX® cartridge MINI Si08-3 | AG |
| c | COAX® cartridge MINI Si08-2, non-return valve | AH |
| d | COAX® cartridge MINI Si08-3, non-return valve | AI |
| b | COAX® cartridge MINI Xi10-2 | AJ |
| a | COAX® cartridge MINI Xi10-3 | AK |
| c | COAX® cartridge MINI Xi10-2, non-return valve | AL |
| d | COAX® cartridge MINI Xi10-3, non-return valve | AM |

| 2. Mounting / orientation | | VGS code |
|---------------------------|-----------------------------|----------|
| 4x M4 top, flush mount | | 00 |
| f | M8 16 mm top | 01 |
| g | M8 16 mm right | 02 |
| e | M8 16 mm left | 03 |
| f | M8 27 mm top, profile kit | 04 |
| g | M8 27 mm right, profile kit | 05 |
| e | M8 27 mm left, profile kit | 06 |
| f | M6 22 mm top, profile kit | 07 |
| g | M6 22 mm right, profile kit | 08 |
| e | M6 22 mm left, profile kit | 09 |
| g | Ball joint VGS™3010 right | 11 |
| e | Ball joint VGS™3010 left | 12 |
| g | Lock-pin VGS™3010, right | 13 |
| e | Lock-pin VGS™3010, left | 14 |
| Level compensator LC30 | | 15 |

For more information about LC30 see separate data sheet.

| 3. Suction cup with fitting | | VGS code |
|-----------------------------|--|----------|
| No suction cup | | BA |
| BF80P 30°/50° Shore A | | BD |
| BF80P 60° Shore A | | BE |

| Example | Ordering number |
|--|------------------|
| VGS™3010 BF80P – Pi12-3, M8 27 mm top including profile kit, BF80P 30°/50° Shore A | VGS3010 AC 04 BD |

