HONEYWELL OTTER FLEX EXPANDER

I Tradition Meets Technology

The human foot is created for mobility. Honeywell Otter Flex has combined Honeywell's latest technological innovations and Otter's renowned German quality into a modern design to provide superior protection, comfort and fit, ensuring an easy and natural flexing motion. With incorporated technological inventions, Honeywell Otter Flex safety shoes offer excellent shock absorption, providing a personalized fit and foot support while maintaining flexibility. Benefit from great slip and antistatic resistance, no matter if you work indoor or outdoor, in rough work conditions. Rely on your durable, good-quality safety shoes and quickly notice when your shoes wear off with their unique indicators.



EXPANDER S1 SRC ESD

- Composite fiberglass toecap
- Low-cut sandal
- High quality Nubuck leather and durable textile fabric upper
- Durable, breathable lining
- PU/TPU outsole
- Wear off indicators
- EN 61340-5-1:2016 ESD marking (electrical resistance)
- EN ISO 20345:2011 S1 SRC ESD
- DGUV 112-191 coming soon

STANDARD COMPLIANCE? DARE FOR MORE.

Protective footwear must comply with EN standards and applicable norms for worker safety within various professional fields. Tests* have shown that Honeywell Otter Flex shoes perform better than required, providing enhanced protection, durability, breathability and comfort.

MORE PROTECTION

- 242.87% more tear strength than the level required by the standard. The outsole recorded a value of 27.43 kilonewton meters (kN/m), compared to 8 kN/m, the level required by the standard.
- 7.57% more impact resistance. Expander has an impact resistance of 15.06 millimetres (mm) (42 left & 42 right), up against the level required by the standard, of 14 mm.
- 9.37% more slip resistance SRA** (flat). Expander has a slip resistance of 0.35, compared to the standard level of 0.32.
- 25% more slip resistance SRA (heel).
 Expander provides slip resistance level of 0.35, exceeding the standard level of 0.28.

- **11.11%** more slip resistance SRB*** (flat). Expander has a slip resistance value of 0.20 up against the level required by the standard of 0.18.
- **15.38%** more slip resistance SRB (heel). Expander has a slip resistance of 0.15, exceeding the standard level of 0.13.

MORE DURABLE LINING

- **173.33%** more tear strength than the standard for Expander, unit is N, standard is 15, Honeywell value is 41.
- **3,065%** more water permeability than the standard for Expander, unit is mg/ (cm².h), standard is 2, Honeywell value is 63.3.
- **2,431.5%** more water coefficient than the standard for Expander, unit is mg/ cm², standard is 20, Honeywell value is 506.3.

MORE BREATHABLE UPPER

- **50%** more tear strength than the standard for Expander, unit is N, standard is 120, Honeywell value is 180.
- **875%** more water permeability than the standard for Expander, unit is mg/ (cm².h), standard is 0.8, Honeywell value is 7.8.
- 45.33% more water coefficient than the standard for Expander, unit is mg/cm², standard is 15, Honeywell value is 66.8.



*) The values reflect the EN ISO 20345:2011 standard test results for the Expander style performed on EU size 42 samples.
**) Silp resistant soles are tested on a ceramic tile wetted with dilute soap solution.
***) Silp resistant soles are tested on smooth steel with glycerol.

200 J COMPOSITE TOECAP

- 50% lighter than steel
- Amagnetic insulation

SOLE

- 3 wear-off indicators on the outer layer
- Heel shock absorption system
- PU comfort layer
- TPU outsole
- Wide, deep and self-cleaning relief providing anti-slip resistance
- On steel floor: 0.15 heel (minimum standard 0.13)
- Flat: 0.20 (minimum standard 0.18)
- On ceramic floor: 0.35 heel (minimum standard 0.28)
- Flat: 0.35 (minimum standard 0.32)
- Energy absorption capacity >20 J
- Abrasion resistance: loss in volume <150 mm³ (under a 10 Newtons (1 kg) load)
- Elongation at break: 650%
- Resistance to repeated flexion optimized: >30,000
- Flexometer tested standard: >30,000
- Resistance to fuel oil

TECHNICAL SPECIFICATIONS AND STANDARDS:

- European Regulation: (EU) 2016/425*
- Standard: EN ISO 20345:2011**
- Standard: EN 61340-5-1:2016
- Quality assurance: ISO 9001 Version 2015
- Marking: S1 SRC ESD
- Average weight for 1 shoe 42 size: 580 g

*) <u>https://osha.europa.eu/en/safety-and-health-legislation</u> **) <u>https://www.iso.org/home.html</u>

OUTSOLE SLIP RESISTANCE PERFORMANCE				
MARKING	SURFACE	LUBRICANT	FRICTION FACTOR: FLAT	
SRA	Ceramic plates	Sodium lauryl sulfate	0.35 (minimum requirement 0.32)	
SRB	Steel	Glycerol	0.20 (mimimum standard 0.18)	
SRC	Meets requirements of the above 2 tests (SRA plus SRB)			

ORDERING INFORMATION				
DESCRIPTION	REF.	SIZE		
Expander S1 SRC ESD	65 516 28	35-49		