

## Chemical resistance of cables

All data is for a temperature of +20 °C

Cable designations



ÖLFLEX® SMART 108, ÖLFLEX® CLASSIC 100, 110, 115 CY, 100 BK, 110 BK, 110 CY BK, ÖLFLEX® 2YSLCY, 9YSLCY, ÖLFLEX® EB, EB CY, SF, UNITRONIC® 100, 100 CY	ÖLFLEX® FD 90, FD 90 CY, ÖLFLEX® 140, 140 CY, TRAY II CY, ÖLFLEX® CHAIN 809, 809 CY, 809 SC, 809 SC CY, ÖLFLEX® CHAIN TM, ÖLFLEX® CHAIN TM CY, ÖLFLEX® 150, 150 CY, 191, 191 CY, ÖLFLEX® FD 891/891 CY, TRAY II, ÖLFLEX® SERVO 719 CY, ÖLFLEX® SERVO 719, ÖLFLEX® SERVO 728 CY, ÖLFLEX® SERVO 7DSL, ÖLFLEX® SERVO FD 781 CY, ÖLFLEX® CONTROL TM/TM CY	ÖLFLEX® CLASSIC 100 SY, ÖLFLEX® CLASSIC 100 CY, ÖLFLEX® CLASSIC 110 SY, 110 CY, ÖLFLEX® FD CLASSIC 810, 810 CY	ÖLFLEX® CLASSIC 400 P, 400 CP, 415 CP, 440 P, 440 CP, 408 P, 409 P, 450 P, 500 P, 540 CP, 540 P, 550 P, ÖLFLEX® PETRO C HFR, ÖLFLEX® SERVO FD 796 P, 796 CP, 798 CP, FD 7DSL, CLASSIC 810 P, 810 CP, 855 P, 855 CP, 865 CP, ÖLFLEX® FD 891 P, ÖLFLEX® CHAIN 808 P, 808 CP, ÖLFLEX® CHAIN 896 P, ÖLFLEX® CHAIN 90 P, ÖLFLEX® CHAIN 90 CP, ÖLFLEX® Robot 900, F1, ÖLFLEX® CRANE PUR, UNITRONIC® LYD11Y, UNITRONIC® FD P, UNITRONIC® FD CP, UNITRONIC® FD CP (FP), HITRONIC® with PUR sheath, UNITRONIC® PUR, SERVO cable as per SIEMENS® FX8 PLUS Standard	ÖLFLEX® CRANE round and flat	ÖLFLEX® LIFT T, LIFT S, ÖLFLEX® CRANE 2S, ÖLFLEX® LIFT F, ÖLFLEX® SF, Single-core products LIFY, LIFY 1 kV	ÖLFLEX® HEAT 105, ÖLFLEX® CHAIN PN	ÖLFLEX® HEAT 180	ÖLFLEX® HEAT 205/260
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### Inorganic chemicals

Alums, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Aluminium salts, any concentration	☒	☒	☒	☒	☒	☒	☒	☒
Ammonia, aqueous, 10% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Ammonium acetate, aqueous, any concentration	☒	☒	☒	☒	☒	☒	☒	☒
Ammonium carbonate, aqueous, any concentration	☒	☒	☒	☒	☒	☒	☒	☒
Ammonium chloride, aqueous, any concentration	☒	☒	☒	☒	☒	☒	☒	☒
Barium salts, any concentration	☒	☒	☒	☒	☒	☒	☒	☒
Boric acid, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Calcium chloride, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Calcium nitrate, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Chromium salts, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Potassium carbonate, aqueous (potash)	☒	☒	☒	☒	☒	☒	☒	☒
Potassium chlorate, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Potassium chloride, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Potassium dichromate, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Potassium iodide, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Potassium nitrate, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Potassium permanganate, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Potassium sulphate, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Copper salts, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Magnesium salts, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Sodium bicarbonate, aqueous (natron)	☒	☒	☒	☒	☒	☒	☒	☒
Sodium bisulphite, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Sodium chloride, aqueous (table salt)	☒	☒	☒	☒	☒	☒	☒	☒
Sodium thiosulphate, aqueous (fixing salt)	☒	☒	☒	☒	☒	☒	☒	☒
Nickel salts, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Phosphoric acid, 50% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Mercury, 100% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Mercury salts, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Nitric acid, 30% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Hydrochloric acid, concentrated	☒	☒	☒	☒	☒	☒	☒	☒
Sulphur, 100% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Sulphur dioxide, gaseous	☒	☒	☒	☒	☒	☒	☒	☒
Carbon disulphide	☒	☒	☒	☒	☒	☒	☒	☒
Hydrogen sulphide	☒	☒	☒	☒	☒	☒	☒	☒
Sea water	☒	☒	☒	☒	☒	☒	☒	☒
Silver salts, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Hydrogen peroxide, 3% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Zinc salts, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Tin(II) chloride	☒	☒	☒	☒	☒	☒	☒	☒

### Organic chemicals

Ethanol, 100% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Formic acid, 30% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Petrol	☒	☒	☒	☒	☒	☒	☒	☒
Succinic acid, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Acetic acid, 20% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Hydraulic oil	☒	☒	☒	☒	☒	☒	☒	☒
Isopropanol, 100% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Machinery oil	☒	☒	☒	☒	☒	☒	☒	☒
Methanol, 100% concentration	☒	☒	☒	☒	☒	☒	☒	☒
Oxalic acid, aqueous, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒
Cutting oil	☒	☒	☒	☒	☒	☒	☒	☒
Plant-based oils + fats	☒	☒	☒	☒	☒	☒	☒	☒
Tartaric acids, aqueous	☒	☒	☒	☒	☒	☒	☒	☒
Citric acid	☒	☒	☒	☒	☒	☒	☒	☒

- ☒ no or slight reaction = good resistance
- ☒ slight to moderate reaction = moderate resistance
- ☒ moderate to strong reaction = low/no resistance

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	Cable designations									
	Halogen-free cables, NHXMH, J-H(ST)H, ÖLFLEX® 130 H, 135 CH, 130 H BK 0.6/1 KV, 135 CH BK 0.6/1 KV, UNITRONIC® LIHH, LIHCH, LIHCH(TP)	HITRONIC® fibre-optic cables	UNITRONIC® FD, FD CY, UNITRONIC® LIYY, LIYY(TP), UNITRONIC® LI2YCY(TP), LI2YCY PIME, ETHERLINE® LAN	J-Y(ST)Y, JE-Y(ST)Y, JE-LIYY, J2Y(ST)Y, J-Y, JE-Y	Coaxial cables (PE), A-2Y(L)2Y, A-2YF(L)2Y, HITRONIC® with PE sheath	ESUY copper earthing cable, X00V3-D	ÖLFLEX® CRANE NSHTÖU, NSGAFÖU; H01N2-D, ÖLFLEX® CRANE VS (N)SHÖU, H05RN-F, H07RN-F, 07RN8-F	LIY single cores, H05V-K, H07V-K, LIY, LIYF 1 KV, Multi-Standard SC 1, Multi-Standard SC 2.1, Multi-Standard SC 2.2	H05RR-F	ÖLFLEX® ROBUST 200, 210, 215 C, ÖLFLEX® ROBUST FD, ROBUST FD C, UNITRONIC® ROBUST, ROBUST C, ETHERLINE® ROBUST

	Halogen-free cables	HITRONIC® fibre-optic cables	UNITRONIC® LAN	J-Y(ST)Y	Coaxial cables	ESUY copper earthing cable	ÖLFLEX® CRANE	LIY single cores	H05RR-F	ÖLFLEX® ROBUST
<b>Inorganic chemicals</b>										
Alums, cold-saturated concentration	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Aluminium salts, any concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Ammonia, aqueous, 10% concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Ammonium acetate, aqueous, any concentration		☒	☒	☒	☒	☒	✖	☒	✖	☒
Ammonium carbonate, aqueous, any concentration		☒	☒	☒	☒	☒	☒	☒	☒	☒
Ammonium chloride, aqueous, any concentration		☒	☒	☒	☒	☒	☒	☒	☒	☒
Barium salts, any concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Boric acid, aqueous	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Calcium chloride, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Calcium nitrate, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Chromium salts, aqueous, cold-saturated concentration		☒	☒	☒	☒	☒	☒	☒	☒	✖
Potassium carbonate, aqueous (potash)		☒	☒	☒	☒	☒	☒	☒	☒	☒
Potassium chlorate, aqueous, cold-saturated concentration		☒	☒	☒	☒	☒	✖	☒	☒	☒
Potassium chloride, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Potassium dichromate, aqueous		☒	☒	☒	☒	☒	☒	☒	☒	☒
Potassium iodide, aqueous	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Potassium nitrate, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Potassium permanganate, aqueous		✖	✖	✖	☒	✖	☒	☒	☒	☒
Potassium sulphate, aqueous	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Copper salts, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Magnesium salts, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Sodium bicarbonate, aqueous (natron)		☒	☒	☒	☒	☒	☒	☒	☒	☒
Sodium bisulphite, aqueous		☒	☒	☒	☒	☒	☒	☒	☒	☒
Sodium chloride, aqueous (table salt)	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Sodium thiosulphate, aqueous (fixing salt)		☒	☒	☒	☒	☒	☒	☒	☒	☒
Nickel salts, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Phosphoric acid, 50% concentration		☒	☒	☒	☒	☒	☒	☒	☒	☒
Mercury, 100% concentration	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Mercury salts, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Nitric acid, 30% concentration	✖	☒	☒	☒	✖	☒	☒	☒	☒	☒
Hydrochloric acid, concentrated	✖	☒	☒	☒	✖	☒	☒	☒	☒	☒
Sulphur, 100% concentration	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Sulphur dioxide, gaseous		☒	☒	☒	☒	☒	☒	☒	☒	☒
Carbon disulphide	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Hydrogen sulphide		☒	☒	☒	☒	☒	☒	☒	☒	☒
Sea water	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Silver salts, aqueous	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Hydrogen peroxide, 3% concentration		☒	☒	☒	☒	☒	☒	☒	☒	☒
Zinc salts, aqueous	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Tin(II) chloride	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
<b>Organic chemicals</b>										
Ethanol, 100% concentration	✖	✖	✖	✖	☒	✖	☒	✖	☒	☒
Formic acid, 30% concentration	✖	✖	✖	✖	☒	✖	☒	✖	☒	☒
Petrol	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Succinic acid, aqueous, cold-saturated concentration		☒	☒	☒	☒	☒	☒	☒	☒	☒
Acetic acid, 20% concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Hydraulic oil	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Isopropanol, 100% concentration		☒	☒	☒	☒	☒	☒	☒	☒	☒
Machinery oil	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Methanol, 100% concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Oxalic acid, aqueous, cold-saturated concentration	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Cutting oil	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Plant-based oils + fats	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Tartaric acids, aqueous	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒
Citric acid	✖	☒	☒	☒	☒	☒	☒	☒	☒	☒

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ÖLFLEX®  
 UNITRONIC®  
 ETHERLINE®  
 HITRONIC®  
 EPIC®  
 SKINTOP®  
 SILVYN®  
 FLEXIMARK®  
 ACCESSORIES  
 APPENDIX