

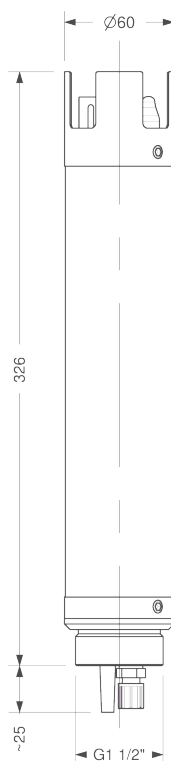
# ammo::lyser™ eco

- ammo::lyser™ II eco: monitors NH<sub>4</sub>-N and temperature
- ammo::lyser™ III eco+pH additionally monitors pH
- ammo::lyser™ III eco+NO<sub>3</sub>-N additionally monitors NO<sub>3</sub>-N
- ammo::lyser™ III eco+Cl- additionally monitors chloride
- ammo::lyser™ IV eco+pH+NO<sub>3</sub>-N additionally monitors pH and NO<sub>3</sub>-N
- ammo::lyser™ VI eco+pH+Cl- additionally monitors pH and chloride

- s::can plug & measure
- measuring principle: ISE (ionselective electrodes) - without potassium compensation
- multiparameter probe
- long term stable, factory precalibrated
- automatic cleaning with compressed air
- unique, non-porous / non-leaking reference electrode for technically unrivalled and consistent performance
- ISE refurbishment - the easy way to minimise maintenance
- easy & quick mounting and measurement directly in the media (InSitu) or in a flow cell (monitoring station)
- operation via s::can terminals & s::can software
- automatic temperature compensation and pH compensation possible
- ideal for surface water, ground water, drinking water and waste water
- minimal maintenance
- life time of ISE: typically 6 month (for applications <1mg/l NH<sub>4</sub>-N), resp. 1 to 2 years (for applications >1mg/l NH<sub>4</sub>-N)
- plug connection or fixed cable

### recommended accessories

part number	article name
B-44	cleaning valve
B-44-2	
C-210-sensor	10 m extension cable for s::can physical probes and s::can ISE probes
F-11-oxi-ammo	carrier oxi::lyser / soli::lyser / s::can ISE probes
F-45-process	process connection 1/4" G
F-48-ammo	ammo::lyser flow-cell (by-pass setup), PVC



technical specification	
measuring principle	ISE
measuring principle detail	NH <sub>4</sub> -N: ionophore membrane pH: non-porous reference electrode NO <sub>3</sub> -N: ionophore membrane Cl <sup>-</sup> : ionophore membrane
measuring range application	1 ... 1000 mg/l NH <sub>4</sub> -N and Cl <sup>-</sup> (factory precalibrated: 1 ... 100 mg/l NH <sub>4</sub> -N)
resolution	NH <sub>4</sub> -N: 0.02 ... 19.99 mg/l NH <sub>4</sub> -N: 20.0 ... 99.9 mg/l NH <sub>4</sub> -N: 100 ... 1000 mg/l T: 0.1 °C
accuracy (standard solution)	NH <sub>4</sub> -N: +/-3% of measuring range or +/-0.5mg/l* (*whichever is greater)
automatic compensation cross sensitivities	E-532-eco-xxx: temp E-532-eco-pH-xxx: temp, pH E-532-eco-NO <sub>3</sub> -N-xxx: temp E-532-eco-NO <sub>3</sub> -N-pH-xxx: temp, pH E-532-eco-CL-xxx: temp E-532-eco-CL-pH-xxx: temp, pH
precalibrated ex-works	all parameters
response time	60 sec.
integration via	con::cube con::lyte con::nect
power supply	10 ... 30 VDC
power consumption (typical)	0.72 W
interface to s::can terminals	sys plug (IP67), RS485
cable length	7.5 m fixed cable (-075) or plug connection (-000)
cable type	PU jacket
housing material	stainless steel 1.4571, POM-C
weight (min.)	2.7 kg
dimensions (Ø x l)	60 x 326 mm
operating temperature	0 ... 60 °C
operating pressure	0 ... 400 mbar
installation / mounting	submersed or in a flow cell
process connection	bayonet
flow velocity	0.01 m/s (min.), 3 m/s (max.)
automatic cleaning	media: compressed air permissible pressure: 2 ... 4 bar air volume: 3 ... 9 l per cleaning duration: 2 ... 10 sec. per cleaning cleaning interval: 30 ... 120 min., depending on application delay: 10 ... 30 sec.
conformity - EMC	EN 50081-1, EN 50082-1, EN 60555-2, EN 60555-3
conformity - safety	EN 61010-1
storage temperature (electrode)	-5 ... 30 °C
storage temperature (sensor)	0 ... 60 °C
protection class (-000)	IP67
protection class (-075)	IP68

#### municipal WWTP aeration

		concentration ranges and sensor/probe type for this application				
		NH <sub>4</sub> -N [mg/l]	NO <sub>3</sub> -N [mg/l]	pH [pH]	temperature [°C]	part number
ammo::lyser™ II eco (NH <sub>4</sub> -N, temp)	min.	0.3			0	E-532-eco-000 / -075
	max.	30			60	
ammo::lyser™ III eco+NO <sub>3</sub> -N (NH <sub>4</sub> -N, temp, NO <sub>3</sub> -N)	min.	0.3	0		0	E-532-eco-NO <sub>3</sub> -N-000 / -075
	max.	30	200		60	
ammo_lyser_III_eco_pH (NH <sub>4</sub> -N, Temp, pH)	min.	0.3		2	0	E-532-eco-pH-000 / -075
	max.	30		12	60	
ammo::lyser™ IV eco+NO <sub>3</sub> -N+pH (NH <sub>4</sub> -N, temp, NO <sub>3</sub> -N, pH)	min.	0.3	0	2	0	E-532-eco-NO <sub>3</sub> -N-pH-000 / -075
	max.	30	200	12	60	

#### municipal WWTP effluent

		concentration ranges and sensor/probe type for this application					
		NH <sub>4</sub> -N [mg/l]	NO <sub>3</sub> -N [mg/l]	pH [pH]	Cl <sup>-</sup> [mg/l]	temperature [°C]	part number
ammo::lyser™ II eco (NH <sub>4</sub> -N, temp)	min.	0.1				0	E-532-eco-000 / -075
	max.	10				60	
ammo::lyser™ III eco+Cl <sup>-</sup> (NH <sub>4</sub> -N, temp, Cl <sup>-</sup> )	min.	0.1			0	0	E-532-eco-CL-000 / -075
	max.	10			100	60	
ammo::lyser™ III eco+NO <sub>3</sub> -N (NH <sub>4</sub> -N, temp, NO <sub>3</sub> -N)	min.	0.1	0			0	E-532-eco-NO <sub>3</sub> -N-000 / -075
	max.	10	100			60	
ammo::lyser™ III eco+pH (NH <sub>4</sub> -N, temp, pH)	min.	0.1		4		0	E-532-eco-pH-000 / -075
	max.	10		10		60	
ammo::lyser™ IV eco+Cl <sup>-</sup> (NH <sub>4</sub> -N, temp, Cl <sup>-</sup> , pH)	min.	0.1		4	0	0	E-532-eco-CL-pH-000 / -075
	max.	10		10	100	60	
ammo::lyser™ IV eco+NO <sub>3</sub> -N+pH (NH <sub>4</sub> -N, temp, NO <sub>3</sub> -N, pH)	min.	0.1	0	4		0	E-532-eco-NO <sub>3</sub> -N-pH-000 / -075
	max.	10	100	10		60	

#### municipal WWTP influent

		concentration ranges and sensor/probe type for this application					
		NH <sub>4</sub> -N [mg/l]	NO <sub>3</sub> -N [mg/l]	pH [pH]	Cl <sup>-</sup> [mg/l]	temperature [°C]	part number
ammo::lyser™ II eco (NH <sub>4</sub> -N, temp)	min.	10				0	E-532-eco-000 / -075
	max.	1000				60	
ammo::lyser™ III eco+Cl <sup>-</sup> (NH <sub>4</sub> -N, temp, Cl <sup>-</sup> )	min.	10			0	0	E-532-eco-CL-000 / -075
	max.	1000			500	60	
ammo::lyser™ III eco+NO <sub>3</sub> -N (NH <sub>4</sub> -N, temp, NO <sub>3</sub> -N)	min.	10	0			0	E-532-eco-NO <sub>3</sub> -N-000 / -075
	max.	1000	500			60	
ammo::lyser™ III eco+pH (NH <sub>4</sub> -N, temp, pH)	min.	10		2		0	E-532-eco-pH-000 / -075
	max.	1000		12		60	
ammo::lyser™ IV eco+Cl <sup>-</sup> (NH <sub>4</sub> -N, temp, Cl <sup>-</sup> , pH)	min.	10		2	0	0	E-532-eco-CL-pH-000 / -075
	max.	1000		12	500	60	
ammo::lyser™ IV eco+NO <sub>3</sub> -N+pH (NH <sub>4</sub> -N, temp, NO <sub>3</sub> -N, pH)	min.	10	0	2		0	E-532-eco-NO <sub>3</sub> -N-pH-000 / -075
	max.	1000	500	12		60	