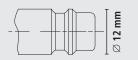
Industrial Quick Connect Couplings

Series ESI single shut-off

DN 7.8

Plug Profile (original size)



















- Collar version: protection for valve body
- High flow rates with low pressure drop due to patented OptiFlow by LUDECKE® valve technology
- Suitable for low vacuum at low couple force compared to all other compatible products
- For compressed air supply in industry and handcrafts, we recommend direct use at tool
- Also interchangeable with plug profile ES DN 7.2

Material

- Body, valve body: Brass MS 58 nickel-plated
- Valve: Brass MS 58 plain
- Sleeve, plug: Hardened steel nickel-plated
- Seals: NBR (other sealing materials on request)
- Springs: Stainless steel 1.4310
 Balls: Stainless steel 1.4034

Max. Working Pressure	Temperature	DN	Thread	Flow Rate	Operation	Type of Valve	Media	Area	9
PN 35 bar	-20°C – +100°C	7.8	ISO 228/DIN EN 10226	2000 l/min	One-hand	Single shut-off	Air/Others	Europe	Coupl. 5 / Plug 10
	•								

Couplings with tape	Couplings with tapered male thread (thread coated)										
Thread connection	L	SW	D	L1	Weight	Type No.					
R 1/4 m	60	19	24	11	98	ESI 14 A					
R 3/8 m	61	19	24	12	97	ESI 38 A					
R 1/2 m	64	22	24	15	114	ESI 12 A					

Couplings with para	Couplings with parallel female thread										
Thread connection	L	SW	D	L1	Weight	Type No.					
G 1/4 f	56	19	24	10	116	ESI 14 I					
G 3/8 f	56	19	24	10	107	ESI 38 I					
G 1/2 f	58	24	24	12	125	ESI 12 I					

Couplings with hos	e barb					
Hose connection	L	SW	D	L1	Weight	Type No.
Hose i.D. 6	73	19	24	25	95	ESI 6 T
Hose i.D. 8	73	19	24	25	97	ESI 8 T
Hose i.D. 9	73	19	24	25	98	ESI 9 T
Hose i.D. 10	73	19	24	25	97	ESI 10 T
Hose i.D. 13	73	19	24	25	101	ESI 13 T

For hose clips type ZOS (@ page 130), type HS (@ page 131) or crimping ferrules type LPH (@ page 133)

Couplings with sque	Couplings with squeeze nut										
Hose connection	L	SW	D	SW1	Weight	Type No.					
Hose 5x8	64	19	24	14	110	ESI 58 TQ					
Hose 6x8	64	19	24	14	110	ESI 6 TQ					
Hose 6.5x10	69	19	24	17	126	ESI 6510 TQ					
Hose 8x10	69	19	24	19	134	ESI 8 TQ					
Hose 8x12	68	19	24	19	129	ESI 812 TQ					
Hose 9x13	70	19	24	19	130	ESI 913 TQ					

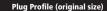
Couplings with squ	Couplings with squeeze nut and spring guard										
Hose connection	L	SW	D	SW1	Weight	Type No.					
Hose 5x8	150	19	24	14	124	ESI 58 TQF					
Hose 6x8	150	19	24	14	123	ESI 6 TQF					
Hose 6.5x10	170	19	24	17	152	ESI 6510 TQF					
Hose 8x10	170	19	24	19	162	ESI 8 TQF					
Hose 8x12	144	19	24	19	156	ESI 812 TQF					
Hose 9x13	170	19	24	19	162	ESI 913 TQF					

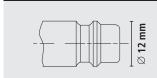


Industrial Quick Connect Couplings

single shut-off Series ESI

DN 7.8





Plugs with tapered	Plugs with tapered male thread (thread coated)									
Thread connection	L	SW	L1	L2	Weight	Type No.				
R 1/8 m	33	13	9	20	14	ESI 18 NARS				
R 1/4 m	35	14	11	20	18	ESI 14 NARS				
R 3/8 m	36	17	12	20	23	ESI 38 NARS				
R 1/2 m	40	22	15	20	47	ESI 12 NARS				



Plugs with parallel male thread									
Thread connection	L	SW	L1	L2	Weight	Type No.			
G 1/8 m	33	13	9	20	14	ESI 18 NAS			
G 1/4 m	35	14	11	20	18	ESI 14 NAS			
G 3/8 m	36	17	12	20	23	ESI 38 NAS			
G 1/2 m	40	22	15	20	47	ESI 12 NAS			



Plugs with parallel	Plugs with parallel female thread										
Thread connection	L	SW	L1	L2	Weight	Type No.					
G 1/8 f	32	13	9	20	16	ESI 18 NIS					
G 1/4 f	33	17	10	20	24	ESI 14 NIS					
G 3/8 f	33	19	10	20	25	ESI 38 NIS					
G 1/2 f	35	24	12	20	40	ESI 12 NIS					



Hose connection L D L1 L2 Weight Type No. Hose i.D. 6 44 12 24 20 13 ESI 6 SS Hose i.D. 8 44 12 24 20 18 ESI 8 SS Hose i.D. 9 44 12 24 20 16 ESI 9 SS Hose i.D. 10 44 12 24 20 18 ESI 10 SS Hose i.D. 13 44 15 23 20 26 ESI 13 SS	Plugs with hose	Plugs with hose barb										
Hose i.D. 8 44 12 24 20 18 ESI 8 SS Hose i.D. 9 44 12 24 20 16 ESI 9 SS Hose i.D. 10 44 12 24 20 18 ESI 10 SS	Hose connection	L	D	L1	L2	Weight	Type No.					
Hose i.D. 9 44 12 24 20 16 ESI 9 SS Hose i.D. 10 44 12 24 20 18 ESI 10 SS	Hose i.D. 6	44	12	24	20	13	ESI 6 SS					
Hose i.D. 10 44 12 24 20 18 ESI 10 SS	Hose i.D. 8	44	12	24	20	18	ESI 8 SS					
	Hose i.D. 9	44	12	24	20	16	ESI 9 SS					
Hose i.D. 13 44 15 23 20 26 ESI 13 SS	Hose i.D. 10	44	12	24	20	18	ESI 10 SS					
	Hose i.D. 13	44	15	23	20	26	ESI 13 SS					



For hose clips type ZOS (@ page 130), type HS (@ page 131) or crimping ferrules type LPH (@ page 133)

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SW1 SW	1
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Plugs with squeez	Plugs with squeeze nut									
Hose connection	L	SW	L1	SW1	Weight	Type No.				
Hose 5x8	40	14	20	14	29	ESI 58 SQ				
Hose 6x8	40	14	20	14	29	ESI 6 SQ				
Hose 6.5x10	44	17	20	17	45	ESI 6510 SQ				
Hose 8x10	44	19	20	19	55	ESI 8 SQ				
Hose 8x12	46	19	20	19	57	ESI 812 SQ				
Hose 9x13	44	19	20	19	50	ESI 913 SQ				



Plugs with squeeze nut and spring guard										
Hose connection	L	SW	L1	SW1	Weight	Type No.				
Hose 5x8	126	14	20	14	42	ESI 58 SQF				
Hose 6x8	127	14	20	14	42	ESI 6 SQF				
Hose 6.5x10	145	17	20	17	71	ESI 6510 SQF				
Hose 8x10	121	19	20	19	79	ESI 8 SQF				
Hose 8x12	123	19	20	19	84	ESI 812 SQF				
Hose 9x13	146	19	20	19	83	ESI 913 SQF				





OptiFlow-LineEnergy-Efficient Quick Connect Couplings



Compressed air - an expensive media?

Despite many advantages, compressed air has a reputation for being a costly media — in many cases, this is not true. When using the right components, an energy-efficient operation is possible.

Energy performance is reduced by the following:

- Standard valves with large surface area
- Too small dimensioned hose or tubing
- Too small dimensioned connections
- · Insufficient capacity in networks or compressed air systems
- Excess humidity

This leads to:

- High pressure drop
- High energy consumption of compressor
- Reduced productivity
- Damages to systems/ tools

The **LUDECKE OptiFlow-Line** offers energy-optimised coupling systems which achieve higher flow rates and significantly reduce energy consumption. This in turn leads to decreasing energy costs as well as increasing durability and lifetime of machines and tools.

By continuously improving our development and production processes, we ensure that our quick connect couplings are permanently revised and performance optimised. In this way, we guarantee sustainable and efficient operation.

Find out more about the **LUDECKE** sustainability strategies in our Green Company Report (www.ludecke.com).

LUDECKE OptiFlow-Line

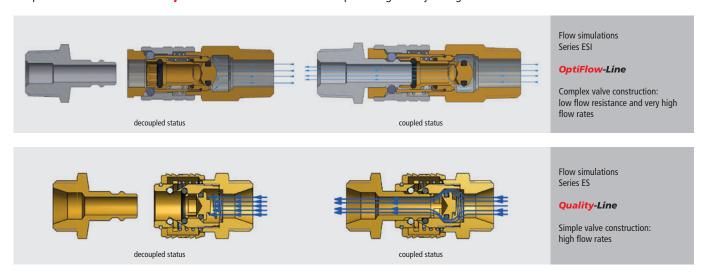
- \bullet Patented OptiFlow by $\textbf{LUDECKE}^{\otimes}$ valve technology
- Extremely high flow rates
- Low pressure drop
- High durability
- Great operational safety and best sealing characteristics





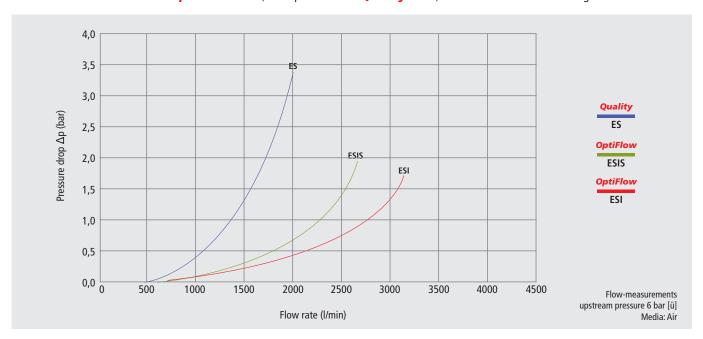
Flow Simulation - Comparison

The products of the **LUDECKE OptiFlow-Line** have a valve with optimised geometry for higher flow rates.



Comparison Chart of Flow Rates

The flow rates of the **LUDECKE OptiFlow-Line** (in comparison to the **Quality-Line**) are summarized in the following chart.



Different Sizes and Versions

The **LUDECKE OptiFlow-Line** is made up of different series.

Industrial Quick Connect Couplings		Industrial Quick Connect Couplings	Safety Quick Connect Couplings						
Series: ESI DN 7.8	Series: ESIG DN 10	Series: ESG DN 19	Series: ESIS DN 7.8	Series: ESI DN 7.8	Series: ESIK DN 7.8	Series: ESI1A DN 7.4 ESI2A DN 7.4	Series: ESIFK DN 7.8		
			HE & ZOOM		Lupecse -	WO SAID			