

# MegaLine® E5-70 F/F Dx

## S<sub>3</sub> P<sub>2</sub> A<sub>3</sub> C<sub>4</sub> E<sub>3</sub>



**Type:**  
KS-02YS(ST)H 2x(4x2xAWG 23/1 PIMF)

**Category:** 6<sub>A</sub>



**Construction:**

**1 Conductor:** bare copper wire, AWG 23/1

**2 Insulation:** cellular-PE, core-Ø: nominal value 1.4 mm

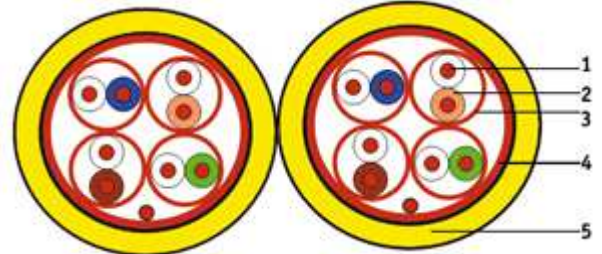
Twisting element: pair

**3 Individual screen:** aluminium-bonded polyester tape

Twisting: 4 pairs

**4 Overall screen:** aluminium-bonded polyester tape, metal side inside, with underlayered tinned copper drain wire

**5 Outer sheath:** halogen-free compound, shape 8 siamese, 2 base elements in parallel



colour code: wh/bl, wh/or, wh/gn, wh/br  
Colour outer sheath: yellow, RAL-1021

printing outer sheath:  
LEONI MegaLine E5-70 F/F 2x4P H SPACE Code 32343 Dca s2 d2 a1 \$Production lot code\$ \$Meter marking\$

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**fire behaviour:**

flame resistance: acc. to IEC 60332-3-24

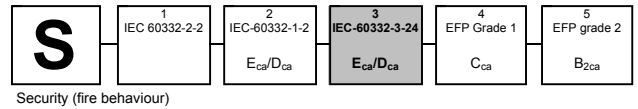
halogen free: acc. to IEC 60754-1/2

smoke density: acc. to IEC 61034-1/2

Acidity: according EN 60754-2

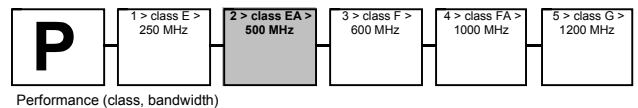
fire load (MJ/m): 1.2 (approx.)

Class: D<sub>ca</sub> s2 d2 a1 according EN 50575 / EN 50399



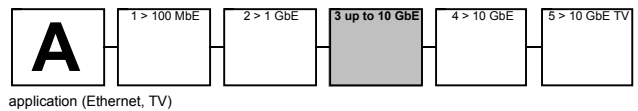
**performance:**

better than Category 6A acc. to EN 50288 and IEC 61156 excellent NEXT, well screen properties (pair- and overall screen), low Skew bandwidth (typical): 700 MHz



**applications:**

Installation cable for generic cabling systems acc. to ISO/IEC 11801 and EN 50173 (3rd edition). Ideal for all applications of class D up to EA up to 10 GbE acc. to IEEE 802.3 an, Cable sharing, VoIP, PoE/PoE+/4PPoE



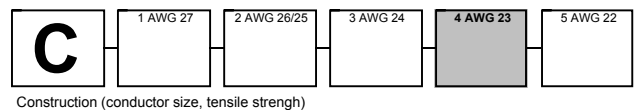
**mechanical characteristics:**

bending radius:  
during laying: 8 x outer diameter (min.)  
acc. to Installation: 4 x outer diameter (min.)

tensile loading (N): 220 (max.)

crush resistance (N/100mm): 1000

impact strength (quantity of impacts): 10



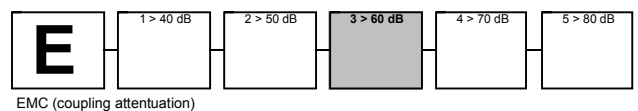
**electromagnetic behaviour:**

transfer impedance at 10 MHz (mOhm/m): 50 (nominal value)

screen attenuation up to 1000 MHz (dB): 60 (nominal value)

coupling attenuation up to 1000 MHz (dB): 70 (nominal value)

Segregation class according EN 50174-2: c



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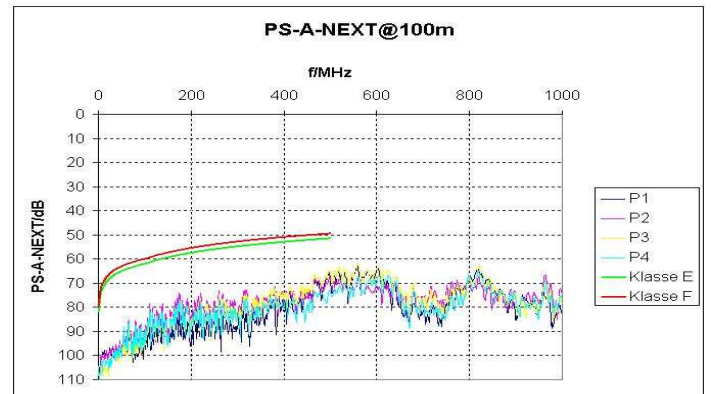
# LEONI

**Type:**

KS-02YS(ST)H 2x(4x2xAWG 23/1 PIMF)


**Electrical characteristics at 20°C:**

conductor resistance (Ohm/km):	82 (max.)
insulation resistance (GOhm x km):	5 (min.)
mutual capacitance (pF/m):	42 (approx.)
capacitance unbalance (e) (pF/km):	1100 (approx.)
velocity of propagation (c):	0.80 (approx.)
phase delay (ns/100m):	417 (approx.)
delay skew at 100 MHz (ns/100m):	7 (approx.)
characteristic impedance at 100 MHz (Ohm):	100±5
test voltage U <sub>eff</sub> (V):	1000
operating voltage (V):	125 (max.)



frequenz MHz	attenuation dB/100m		NEXT dB		PS-NEXT dB		ACR dB@100m		PS-ACR dB@100m		ACR-F dB@100m		PSACR-F dB@100m		RL dB	
	typ.	Cat.6 <sub>A</sub> max.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*	typ.	Cat.6 <sub>A</sub> min.*
1	1,9	2,1	95	75,3	92	72,3	93	73,2	90	70,2	91	68	88	65	25,1	-
10	5,2	5,9	90	60,3	87	57,3	85	54,4	82	51,4	96	48	93	45	35,2	25
100	17,7	19,1	75	45,3	72	42,3	57	26,2	54	23,2	90	28	87	25	37,2	20,1
200	26,4	27,6	68	40,8	65	37,8	42	13,2	39	10,2	78	22	75	19	31,1	18
250	29,9	31,1	66	39,3	63	36,3	36	8,3	33	5,3	75	20	72	17	29,5	17,3
300	31,9	34,3	65	38,1	62	35,1	33	3,9	30	,9	72	18,5	69	15,5	28,3	17,3
450	38,9	42,7	63	35,5	60	32,5	24	-7,2	21	-10,2	69	14,9	66	11,9	26,7	17,3
500	41,2	45,3	61	34,8	58	31,8	20	-10,4	17	-13,4	66	14	63	11	26,3	17,3
600	46,2	-	57	-	54	-	11	-	8	-	60	-	57	-	25,8	-
700	51,4	-	54	-	51	-	3	-	0	-	56	-	53	-	-	-

\* EN 50288-10-1(2013)/EN 50288-5-1(2004)/IEC 61156-5(2009)

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**Chemical characteristics:**

Free of hazardous substances acc. to RoHS 2011/65/EU

**Thermal characteristics:**

 Temperature range for fixed installation  
 Temperature range for mobile operation

 -20°C up to +60°C  
 0°C up to +50°C

**certificate and approbation:**

quality seal with production control:

Link Performance:

test certificate:

conform to LVD (2014/35/EU)

Conform to CPR (EU/305/2011)

GHMT PVP

LEONI MegaLine® systems and further commercial plug-in connector

acc. to DIN 55350-18-4.2.1 bzw. EN 10204



Article Number:	Presentation (m)	Size:	Outer diameter (mm):	weight (kg/km):	copper sales factor (kg/km):	colour of outer sheath:
LKD7KS600230000	<b>general</b>					
LK97KS600230050	500	2x4P	7.5 x 15.2 (approx.)	120 (approx.)	47	yellow, RAL-1021
LK97KS600230100	1000					