ME.HP 600 Series

MOTIONENCODER

Encoder cables, PUR sheath, Oil Resistant, High Dynamic Application, Halogen Free

HP

HIGH DYNAMIC PERFORMANCE

PUR FRFH	30 ÷ 300 V	-50 °C +80 °C

UL 20963 80 °C -30V
UL 20233 80 °C -300V
E356538

AWM I/II A/B 80 °C - 30V
AWM I/II A/B 80 °C - 300V

CE

LABS Free

ROHS

REACH

APPROVED TYPE APPROVAL SCHEME

UPON REQUEST

DESINA

10 million	**6,5** x O.D.	**600** m / min	**60** m / s²	**≤ 50** N / mm²	**± 30** °/ m	**50** m
CYCLES	MIN. BENDING RADIUS	MAX. SPEED	ACCELERATION MAX.	PULLING FORCE	TORSION	MAX. HORIZ. TRAVEL

DURABILITY IN MECHANICAL & THERMAL CONDITIONS

	m.u.				
CYCLES	*MIL*	0,2	1	5	10
MIN. BENDING RADIUS	*x O.D.*	12	6,5	7,5	10
MAXIMUM SPEED	*m/min*	180	600	300	240
MAXIMUM ACCELERATION	*m/s²*	2,0	50	30	15
PULLING FORCE	*N/mm²*	≤ 50	≤ 20	≤ 20	≤ 20
TORSION	*°/m*	-	± 30	± 30	± 30
MAX. HORIZONTAL TRAVEL	*m*	-	3	15	50
TEMPERATURE	*°C*	-50 / +80	-40 / +80	-40 / +80	-40 / +80

ELECTRICAL PROPERTIES

Test Voltage	4,0 kV x 5 min acc.to EN 50395 Cl. 10.3
Insulation Resistance	≥ 1.0 GΩ x km @ 20 °C acc.to EN 50395 Cl. 8.1
Max. Short Circuit Temperature	160 °C (≤ 1 s)
Operating Voltage	30 ÷ 300 V (UL/CSA)

RESISTANCE TO ENVIRONMENTAL AND AGGRESSIVE CHEMICAL THREATS

OIL RESISTANT · FLAME RETARDANT · COLD RESISTANT · ABRASION RESISTANT · EMC PROTECTED · WATER RESISTANT · UV RESISTANT · MICROBE RESISTANT · OZONE RESISTANT · MUD RESISTANT · HALOGEN FREE

MAIN ADVANTAGES

Ultra-Flexible Tinned Copper Conductors	Long service life even in extreme and robotic motion
Technical Ultra-Low Capacitance PP Insulation	High electrical stability and precision in signal transmission
Composite Shielding with Copper Braid and Polyester Tape	Total EMC protection, even in high-frequency systems
PUR FRHF (Halogen-Free Flame Retardant) Jacket	Exceptional resistance to oils, coolants, UV, abrasion, and chemical agents
Structure Optimized for Severe Motion	Consistent performance in intensive dynamic cycles and multi-axis movements
Stable Operation even at Low Temperatures (-50°C)	Flexibility maintained in cold environments or those with thermal variations
Shielded and Unshielded Versions	Solution suitable for any installation requirement or machine layout
Robust and Flexible Construction	Long service life and reduced machine downtime

Acc.TO: **SIEMENS®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
EDS22X06UP-VE	MC.324062232	2DC00 Plus	(2x2x0.22+1x2x0.34)	7.2	38	
EDSL22X06UP-VE	MC.324062232L	2DC00 Plus	(2x2x0,20+1x2x0,38)	6,9	35	
EDS25P08UP-VE	MC.324162632	1BD11	(8x2x0.18)	7.8	52	
EDS21X12UP-VE	MC.324122232	1BD21	(4x2x0.38+4x0.50)	8.9	80	
EDSI21X12UP-VE	MC.324122232	1BD41	[3x(2x0.14)+4x0.14+2x0.50]	8.8	69	
EDS21X16UP-VE	MC.324162232	1BD51	[3x(2x0.14)+4x0.14+2x0.50+4x0.22]	9.4	84	
EDS25X08UP-VE	MC.324082632	1BD61	(4x2x0.18)	6.4	34	
EDS25P02UP-VE	MC.324042632	1BD71	(2x2x0.18)	5.0	21	
EDS24X12UP-VE	MC.324122432	1BD81	(12x0.22)	6.9	48	

Acc.TO: **BOSCH-REXROTH®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
EDS17X10UP-A	MC.325101732	INK 0209	(4x2x0.25+2x1.0)	8.8	74	
EDS21X10UP-A	MC.325103232	INK 0448	(4x2x0.25+2x0.50)	8.5	70	
EDSI21X09UP-A	MC.325093232	INK 0208	(9x0.50)	8.8	75	
EDSI17X16UP-A	MC.325161732	INK 0532	[4x1.0+4x2x0.14+(4x0.14)]	9.7	81	

Acc.TO: **FANUC®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
EDSF21X07UP-VE	MC.327072132	LX66L-0003-0462	(1x2x0.18+5x0.50)	7.8	45	
EDSF21X09UP-VE	MC.327092132	LX66L-0003-0461	(2x2x0.18+5x0.50)	7.8	47	
EDSF21X12UP-VE	MC.327132132	LX66L-0003-0312	(3x2x0.18+6x0.50)	8.7	77	
EDSF17X12UP-VE	MC.327121732	LX66L-0003-0401	(3x2x0.18+6x1.0)	8.7	88	
EDSF21X16UP-VE	MC.327162132	LX66L-0003-0369	(5x2x0.18+6x0.50)	8.7	84	
EDSF21X10UP-VE	MC.327102132	LX66L-0003-0482	(4x2x0.22+2x0.50)	7.6	72	
EDSF24P10UP-VE	MC.327102432		(10x2x0.22)	9.0	60	
EDSF28P10UP-VE	MC.327102832	LX66L-0003-0283	(10x2x28AWG)	6.0	30	

EPLAN
All the codes are available in the EPLAN PLAN8 System (use the EPLAN code in the relevant column).

SPAC CAVI
All the codes are available in the SPAC CAVI system (use MotionCables item code).

Acc.TO: **LENZE®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
EDSL17Z10UP-VE	MC.326101732		4x(2x0.14)+(2x1.0)	11.2	68	
EDSL26Z09UP-VE	MC.326092632		3x(2x0.14)+(3x0.14)	9.2	42	
EDSL21Z14UP-VE	MC.326142132		3x(2x0.14)+(4x0.14)+2x(2x0.50)	12.0	79	

Acc.TO: **HEIDENHAIN®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
EDS21X08UP-VE	MC.328082132		[3x(2x0.14)+2x(1x0.50)]	8.4	64	
EDSH17X08UP-VE	MC.328082132		[3x(2x0.14)+2x(1x1.0)]	9.1	69	
EDSH21X12UP-VE	MC.328082132		(4x2x0.14+4x0.50)	8.5	50	
EDSH21X16UP-VE	MC.328082132		[4x2x0.14+(4x0.14)+4x0.50]	8.3	58	

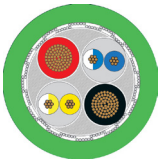
Acc.TO: **YASKAWA®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
EDS22X09UP-VE	MC.332092232		(3x2x0.35+3G0.50)	9.0	50	
EDSY22P02UP-VE	MC.332042232		(2x2x0.34)	7.0	30	
LDS22P03UP-VE	MC.332062232		(3x2x0.34)	7.5	42	

Acc.TO: **SCHNEIDER-ELAU®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
EDS22X08UP-VE	MC.334083232		(3x2x0.14+2x0.34)	7.0	29	
EDSE21X08UP-VE	MC.334082132		(3x2x0.25+2x0.50)	8.3	44	

Acc.TO: **OMRON®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
						
EDS21X06UP-VE	MC.328062132		(2x2x0.25+2x0.50)	6.5	33	
EDS17X06UP-VE	MC.328061732		(2x2x0.25+2x1.0)	7.6	43	

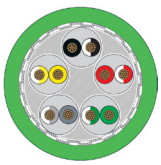
Acc.TO: **B&R®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
						
EDSP21X12UP-VE	MC.333122132		(5x2x0.14+2x0.50)	7.8	52	

Acc.TO: **CONTROL-TECHNIQUES®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
						
EDSC17X16UP-VE	MC.330161732		[6x2x0.34+1x(2x0.34)+1x2x1.0)]	6.9	48	

Acc.TO: **ROCKWELL®**

MotionCables Code	EPlan Code	OEM Code	Formation	⌀	Cu	DATA SHEET
			mm²	mm	kg/km	
						
EDSR22P05UP-VE	MC.331102232		(5x2x0.35)	8.7	75	